#### **RUUD LIGHTING DIRECT**

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# A New Way of Doing Business

The **ALL NEW ruudlightingdirect.com** website enhances the best customer service in the industry with the latest technology to help find what you need **FAST**.

Easily find the products and technical information you are looking for with our expanded search capabilities and simple navigation.

Contact a friendly customer service representative for assistance at **(800) 236-7000** 









Our great product offering is at your fingertips. Visit **www.ruudlightingdirect.com** today!



**2011 CATALOG** 

**POLES & TENONS** 

**EXIT & EMERGENCY** 

REPLACEMENT LAMPS

**INDIRECT** 

CANOPY & PARKING STRUCTURE



...ONE CALL AWAY

# AN EXTENSION OF YOUR TEAM

# For More than 25 Years

For more than 25 years, our **DIRECT-SELL MODEL** has proven to be the **SIMPLEST** and most **EFFICIENT** method of partnering with customers. Buying direct makes things fast and simple. With no middleman mark-ups, you get the best quality commercial-grade lighting products and best value for your money.

As an extension of your team, it's our goal to make sure you have everything you need for your lighting project in the following ways:

- LOWER, contractor-direct pricing
- Live, customer service reps take your call in **30 SECONDS OR LESS** (on average)
- Answers to your questions directly from our EXPERTS
- Web-based tools for **EASY ACCESS** to product information
- QUALITY, commercial-grade product solutions
- Online shopping 24/7

Our team of experts is always available to help you manage your lighting projects, saving you time and money. Our free services include:









#### **VALUE ENGINEERING**

Specify equal product at a better price to make sure you're getting the most value for your money

#### LAYOUT ASSISTANCE

Customized lighting layouts designed to meet IES recommended guidelines

#### PRODUCT ASSISTANCE

Match and select the right products to your specific job or application

Product information is available 24/7 at www.ruudlightingdirect.com

# **HAVE A QUESTION?**

Call **(800) 236-7000** to speak with a Customer Service Representative or Application Engineer.

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INTRODUCTION 2-5 6-23 **SECURITY** Full Cutoff Wall Pack • Glass Refractor Wall Pack • Glass-Lensed Wall Pack • Translucent Lens Security Light • Wide Throw Security Light Deep Shield Security Light • Up/Down Security Light • Forward Throw Security Light • Round Bollard **HIGH & LOW BAY** 24-51 Linear Fluorescent High Bay • Slim Economy Fluorescent High Bay • Lensed Fluorescent High Bay • Wet Listed Fluorescent Aluminum High Bay • Prismatic High Bay • Compact, Medium and Jumbo Low Bay • Shallow Low Bay **FLOOD & AREA** 52-91 Economy Flood · Compact Economy Flood · Sign Uplight · Standard Floodlight · Forward Throw Floodlight · Spotlight · Narrow Spotlight Wide Throw Area Light • Forward Throw Area Light • Wedge Area Light • Vertical-Lamp Area Light • Aviator Area Light • AeroDome Area Light **POLES & TENONS** 92-101 Premium Straight Square Steel Poles • Round Tapered Steel & Aluminum Poles Square Internal Mount Tenons • Round External Mount Tenons • Pole & Fixture EPA Information **CANOPY & PARKING STRUCTURE** 102-109 Canopy Light • Recessed Canopy Light • Vertical-Lamp Parking Structure • Up/Down Parking Structure • Translucent Lens Parking Structure 110-113 **EXIT & EMERGENCY** Plastic LED Exit Sign • Low Profile Emergency Light • Wet Listed Emergency Light • Emergency Light Emergency Light & LED Exit Sign • Wet Listed Remote Head **INDIRECT** 114-121 Indirect Linear Fluorescent • HID Forward Throw Indirect Light 122-129 REPLACEMENT LAMPS Linear Fluorescent • Compact Fluorescent • MR16 • Quartz Halogen • PAR Halogen Probe Start Metal Halide • Pulse Start Metal Halide • High Pressure Sodium

TECHNICAL DATA

130-137

Warranty Information • Lighting Application Guidelines • Ballast Line Current Data • Lamp Information

# ORDER PRODUCT ONLINE

# In 5 Easy Steps



We've designed our website to be in step with your needs as you complete your transactions. New Web tools are designed to help you purchase products online quickly and easily. Follow these five easy steps to shop Ruud Lighting Direct 24/7 at www.ruudlightingdirect.com:

## 1. LOGIN



#### FOR EXISTING WEB CUSTOMERS

From the homepage, click on **LOGIN** button at the top of the page. You will then be taken to the log in screen. Enter your "Email Address" and "Password" under the **REGISTERED CUSTOMERS** section located on the left hand side of the page.

#### **FOR NEW WEB CUSTOMERS**

From the homepage, click on the **NEED A LOGIN? CALL 800-236-7000 OR CLICK HERE TO REQUEST A LOGIN** link at the top right corner of the page. You will then be taken to the **LOGIN REQUEST** screen. Click on "Register" and fill out the form with your personal information in the appropriate fields and submit.

A friendly customer service representative will contact you to confirm your account within one business day. You will then be able to login as an existing web customer.

## 2. START SHOPPING



Once you've logged in, start shopping for products:

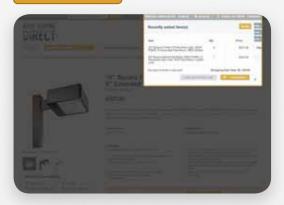
- **A.** Use the easy Search Keyword or Catalog # box, or
- **B.** Shop By Category using the scroll down menu at the top of the page, or
- **C.** Click on the product category icons on the homepage to refine your search

## 3. ADD TO CART



Select the product(s) and quantity and select **ADD TO CART**. A confirmation box will appear letting you know the selection(s) were added to your cart. You can also add accessories to the quote by selecting the accessory and clicking **ADD ACCESSORIES TO CART**.

## 4. CHECKOUT



Once you are done choosing the products for your order, click on **CHECKOUT** in the top right corner of any web page. Alternatively, you can click on your Shopping Cart in the top right corner of any web page for a snapshot of your cart. Click on the **CHECKOUT** button to proceed.

#### 5. ORDER REVIEW





Review your order to ensure accuracy. Click **EDIT CART** to modify any existing quantities, or add additional products to your order. When you have reviewed your order, hit **PLACE ORDER**.

#### YOUR ORDER HAS BEEN RECEIVED!

Thank you for your order! You will receive an order confirmation email with details of your order and a link to track its progress. **CONTINUE SHOPPING** the great selection of Ruud Lighting Direct products, or logout when complete by clicking **LOGOUT** next to your name at the top of any web page.

# ...ONE CLICK AWAY

# **COLORFAST DELTAGUARD®**

# Our Exclusive Finishing System



Quality products deserve a quality finish with the only 7-year warranty in the industry. Our Colorfast DeltaGuard finish limited warranty provides that the finish will be free from material cracking, peeling, excessive fading or corrosion defects under normal use and service for seven years.





#### **OUR 16-STEP TOTAL FINISHING SYSTEM INCLUDES:**

- Meticulous cleaning that removes all surface contaminants
- Pretreatment that chemically etches the metal surface for superior paint adhesion
- Electro-deposited epoxy primer that provides unmatched corrosion resistance
- Baked-on ultra-durable topcoat that offers superior protection against UV radiation
- Computerized control and quality assurance system
- ISO 9001-2000 Quality Standard registration
- Use of environmentally safe materials throughout the finishing process

# **COLORFAST DELTAGUARD TOPCOAT**

The baked-on, ultra-durable powder topcoat is key to a durable and colorfast finish.

The DeltaGuard process offers unmatched performance in durability and color retention and delivers:

- » Ultraviolet light resistance
- » Corrosion resistance
- » Hard surfacing
- » Chemical resistance
- » Superior adhesion
- » Excellent color retention

#### **DELTAGUARD MAKES THE DIFFERENCE!**



The same 3-mil thickness of powder was applied to each of these two pole section samples. Each was scored and exposed to a salt-fog test for 2,500 hours.

# AVAILABLE FINISHES



BRONZE





# RECYCLING YOUR LAMPS

# One Easy Way to Help Our Environment

Each year in the U.S., more than 670 million mercury-containing lamps end up in landfills or worse, are incinerated. These discarded lamps can release approximately two to four tons of mercury into the environment. When released, mercury can contaminate water sources, organisms, and eventually affect the food chain.

# EASY PROCEDURES FOR HANDLING USED LAMPS

- Store used lamps in packaging that prevents breakage
- Handle lamps in a way that prevents breakage
- Educate employees on the proper procedures for handling lamps
- Spent lamps can be stored up to one year before sending to a recycler.

  Mark the packaging with the earliest date the lamps were placed into storage.
- Shipments must be shipped directly to universal waste handlers
- Neither the facility nor the transporters may dispose of, dilute, or treat mercury-containing lamps



Fluorescent and HID lamps contain mercury. Dispose of these lamps according to local, state or federal laws. Visit www.lamprecycle.org for state and local regulations, locating recycling centers in your area, and EPA clean up and disposal recommendations for mercury containing lamps.

Contact Ruud Lighting Direct at (800) 236-7000 with any additional questions.



		DESCRIPTION	AVAILABLE WATTAGES AND LAMP TYPES	DISTRIBUTION PATTERN	PAGE NUMBER
	GWC SERIES	Full Cutoff Wall Pack	50W - 400W HID 57W - 70W CFL		Page 9
WALL PACK	GWP SERIES	Glass Refractor Wall Pack	50W - 400W HID		Page 10
	W0 SERIES	Glass-Lensed Wall Pack	50W - 400W HID	1000	Page 11
	E1 SERIES	Rectangular Translucent Lens Security Light	50W - 100W HID 13W - 42W CFL 60W INC		Page 12
SOFFIT	SE1 SERIES	Square Translucent Lens Security Light	50W - 150W HID		Page 13
	SS SERIES	Shallow Square Translucent Lens Security Light	21W - 38W CFL		Page 14





# **WALL PACK**

The GWC and GWP are excellent choices for general security lighting applications. With an EZ Mount system, installation is fast and simple. The fixtures are designed for extreme resistance to weather and insect infiltration. The recommended mounting height is 8-30 feet above grade depending on

wattage. The GWC with IES Full Cutoff classification provides controlled forward throw illumination and eliminates glare and light spill. This is the best option for meeting local anti-glare ordinances. The WO Series is versatile and perfect for general security applications

			DESCRIPTION	AVAILABLE WATTAGES AND LAMP TYPES	DISTRIBUTION PATTERN	PAGE NUMBER
	No.	E3 SERIES	Rectangular Wide Throw Security Light	50W - 100W HID		Page 15
WIDE THROW	-	SE3 SERIES	Square Wide Throw Security Light	50W - 150W HID 26W - 57W CFL		Page 16
		E8 SERIES	Rectangular Deep Shield Security Light	50W - 100W HID 13W - 42W CFL 60W INC	100	Page 17
UP/DOWN		E5 SERIES	Rectangular Up/Down Security Light	50W HID 13W – 42W CFL 60W INC	ni e	Page 18
uP/D		SE5 SERIES	Square Up/Down Security Light	50W - 150W HID 26W - 57W CFL		Page 19
FORWARD THROW	19 "	E4 SERIES	Rectangular Forward Throw Security Light	50W – 70W HID 13W – 42W CFL 60W INC	*	Page 20
FORWAR		SE4 SERIES	Square Forward Throw Security Light	50W – 100W HID 26W – 57W CFL		Page 21
BOLLARD		HC SERIES	Round Bollard	50W – 100W HID 26W – 42W CFL	- 5	Page 22



# **BOLLARD**

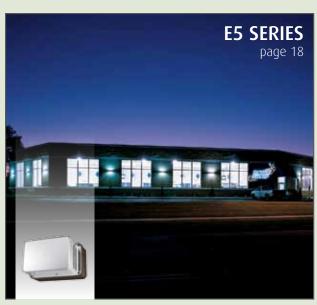
Bollard fixtures achieve great low-level lighting results and add a touch of style. Pathway fixtures are commonly used for walkways or around parking areas or landscaped grounds.





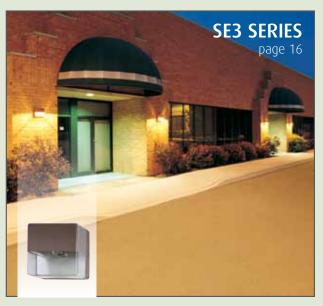
## **SOFFIT**

Soffit fixtures provide uniform light levels in all directions and are perfect for lighting corridors or entryways.



# **UP/DOWN**

Up/Down provides controlled uplight and downlight with side cutoff. This hourglass pattern is perfect for accenting architectural features.



# **WIDE THROW**

Wide throw pattern fixtures create a wall wash that brilliantly illuminates the side of any building. They provide security light levels for walkways or planters within two mounting heights of the building. With excellent lateral distribution from left to right, this is the best light pattern for maximizing spacing between fixtures.



# **FORWARD THROW**

Forward throw fixtures put a greater emphasis on forward throw while providing enough down light to sufficiently brighten a building.







#### **DISTRIBUTION PATTERN**



For more detailed photometric information, please see this fixture's spec sheet available online at **www.ruudlightingdirect.com** 

# GWC SERIES by DIRECT

#### **FULL CUTOFF WALL PACK**

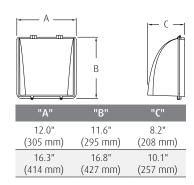
The Full Cutoff Wall Pack provides excellent cutoff illumination, ease of installation and serviceability. Designed for extreme resistance to weather or insect infiltration. The GWC Series is available through 400 watts and meets IES Full Cutoff Classification.

**APPLICATIONS:** General security lighting, full cutoff requirements

#### LAMP INCLUDED

HOUSING SIZE	CATALOG NUMBER
12"	MGWC0405-M
12"	MGWC0407-M
12"	MGWC0410-M
12"	MGWC0615-M
16"	GWC0625-M
16"	GWC0632-M
16"	GWC0640-M
12"	MGWC0505-D
12"	MGWC0507-M
12"	MGWC0510-M
12"	MGWC0515-M
16"	GWC0525-M
16"	GWC0540-M
16"	GWC0257-U
16"	GWC0270-U
	12" 12" 12" 12" 16" 16" 16" 12" 12" 16" 16" 16" 16" 16" 16"







for Wet Locations

## **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(50-150W HPS, 12" housing only)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
Canada 347V Ballast (50W HPS only)	6		
480V Ballast			
(70W and 100W PSMH only)	5		
(250W-400W PSMH & 250W-400W HPS only)	5		
(70W and 100W HPS only)	5		
(150W PSMH & 150W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(50W-100W PSMH and 50W-150W HPS only)	T		
(150W-400W PSMH and 250W & 400W HPS only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor or CFL)			
(delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell			
(277V Reactor, 120V, 277V, 208V, 240V or 347V)	27, 1, 2, 3, 4 or 6	Р	

#### FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Uneven Surface Mounting Plate	WM-GW	
Emergency Egress Battery Pack (57W CFL only, remote mounted)	EFBP2-D13	

SEE PAGE 23 FOR MORE INFORMATION ABOUT THESE ACCESSORIES



#### **DISTRIBUTION PATTERN**



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com

# GWP SERIES by DIRECT

# **GLASS REFRACTOR WALL PACK**

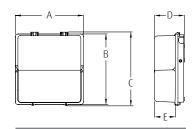
The Glass Refractor Wall Pack is a perfect choice for general security lighting applications that call for a higher wattage, glass-lensed wall pack. It provides superior ease of installation and serviceability, is designed for extreme resistance to weather and insect infiltration and is available through 400 watts.

**APPLICATIONS:** General security lighting

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
50W PSMH	12"	MGWP0405-M
70W PSMH	12"	MGWP0407-M
100W PSMH	12"	MGWP0410-M
150W PSMH	12"	MGWP0615-M
250W PSMH	16"	GWP0625-M
320W PSMH <b>₽</b>	16"	GWP0632-M
400W PSMH <b>₽</b>	16"	GWP0640-M
50W HPS	12"	MGWP0505-D
70W HPS	12"	MGWP0507-M
100W HPS	12"	MGWP0510-M
150W HPS	12"	MGWP0515-M
250W HPS	16"	GWP0525-M
400W HPS	16"	GWP0540-M

PReduced envelope lamp. ED28 for 320W and 400W PSMH.



"A"	"B"	"C"
12.0"	11.6"	12.3"
(305 mm)	(295 mm)	(312 mm)
16.3"	16.9"	17.6"
(414 mm)	(429 mm)	(447 mm)
"D"	"E"	

U	
5.5"	3.3"
(140 mm)	(84 mm)
7.2"	5.0"
(182 mm)	(128 mm)



## **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(50-150W HPS, 12" housing only)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
Canada 347V Ballast (50W HPS only)	6		
480V Ballast			
(70W and 100W PSMH only)	5		
(250W-400W PSMH & 250W-400W HPS only)	5		
(70W and 100W HPS only)	5		
(150W PSMH & 150W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(50W-100W PSMH and 50W-150W HPS only)	T		
(150W-400W PSMH and 250W & 400W HPS only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell			
(277V Reactor, 120V, 277V, 208V, 240V or 347V)	27, 1, 2, 3, 4 or 6	Р	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER
	Uneven Surface Mounting Plate	WM-GW
The state of the s	Wire Guard 12" Housing 16" Housing	FWG-MW FWG-W

SEE PAGE 23 FOR MORE INFORMATION ABOUT THESE ACCESSORIES



A Minimum of 150°C Supply Conductors Are Required.

#### DISTRIBUTION PATTERN



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com

# WO SERIES by DIRECT



#### **GLASS-LENSED WALL PACK**

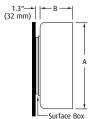
The Glass-Lensed Wall Pack is a perfect choice for general security lighting applications and features a clear tempered glass lens. It provides superior ease of installation and serviceability, is designed for extreme resistance to weather and insect infiltration and is available through 400 watts. **NOTE:** Suitable to embed in poured concrete (see restrictions below).

**APPLICATIONS:** General security lighting

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER	
50W PSMH	12"	MW0405-M	
70W PSMH	12"	MW0407-M	
100W PSMH	12"	MW0410-M	
150W PSMH	12"	MW0615-M	
250W PSMH	16"	W0625-M	
320W PSMH <b>♥</b>	16"	W0632-M	
400W PSMH <b>₽</b>	16"	W0640-M	
50W HPS	12"	MW0505-D	
70W HPS	12"	MW0507-M	
100W HPS	12"	MW0510-M	
150W HPS	12"	MW0515-M	
250W HPS	16"	W0525-M	
400W HPS	16"	W0540-M	





"A"	"B"
12" Square	5.0"
(305 mm)	(127 mm)
16" Square	6.5"
(406 mm)	(165 mm)



WALL MOUNT ONLY Embedded Installation, option "E"





#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(50-150W HPS, 12" housing only)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
Canada 347V Ballast			
(50W HPS only)	6		
480V Ballast			
(70W and 100W PSMH only)	5		
(250W-400W PSMH & 250W-400W HPS only)	5		
(70W and 100W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(50W-100W PSMH and 50W-150W HPS only)	T		
(150W-400W PSMH and 250W & 400W HPS only)	T		
Embedded (up to 100W in 12" housing,			
up to 250W in 16" housing)		E	
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
<b>Quartz Standby<sup>†</sup></b> (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell <sup>†</sup>			
(277V Reator, 120, 277, 208, 240, or 347V)	27, 1, 2, 3, 4 or 6	Р	
External Photocell <sup>†</sup> (480V)	5	Р	
Tamperproof Lens Fasteners		J	
† Not available with "E" option			

## FIELD-INSTALLED ACCESSORIES

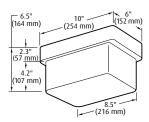
DESCRIPTION	CATALOG NUMBER
<b>Wire Guard</b> 12" Housing 16" Housing	FWG-12 FWG-16
Polycarbonate Vandal Shield 12" Housing 16" Housing	LS-12 LS-16
Surface Mounting Box <sup>≜</sup> 12" and 16" Housing	SB-16
Wall Wash/Glare Shield 12" Housing 16" Housing	WWS-12 WWS-16
Tamperproof Screwdriver	TPS-1

♣For 12" 150W & 16" 320W-400W fixtures, SB-16 is required when mounting to combustible surface

SEE PAGE 23 FOR MORE INFORMATION ABOUT THESE ACCESSORIES



#### **'B' HOUSING DIMENSION**



For 50W dual-volt, 70W & 100W HPS with quad-volt or tri-volt, 50W HPS 347V, and all PSMH fixtures, the housing depth is 3" (76 mm), and the overall fixture depth is 7.2" (183 mm).

#### **DISTRIBUTION PATTERN**



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com

# E1 SERIES by DIRECT

## RECTANGULAR TRANSLUCENT LENS SECURITY LIGHT

The white polycarbonate lens diffuses glare and provides uniform light levels in all directions. NOTE: The 50-watt MH and 70-watt HPS fixtures with suffix "G" are supplied with a glass insert to allow operation in the wall-mounted position.

**APPLICATIONS:** Corridors, entryways and soffits

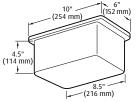
#### **HID** OF **CFL LAMP INCLUDED**

LAMP WATTAGE	HOUSING DIMENSION	MOUNTING POSITION	CATALOG NUMBER
50W PSMH <sup>4</sup>	В В	Ceiling/Soffit Wall	E1405-M E1405-MG
70W PSMH	В	Ceiling/Soffit	E1407-M
50W HPS	В	Any	E1505-1
70W HPS▲	В В	Ceiling/Soffit Wall	E1507-1 E1507-1G
100W HPS	В	Ceiling/Soffit	E1510-1
13W CFL	А	Any	E1213-UL
26/32/42W CFL*	В	Any	E1242-UL
60W Incandescent ▶	А	Any	E1106-1

- Fixtures with suffix "G" are supplied with a glass insert to allow operation in the wall-mounted position.
- Specify lamp wattage for included lamp. Consult factory for discrete wattage labeling to meet state and/or local regulations where applicable.
- Incandescent lamp **NOT** included. 60-watt maximum.

#### 'A' HOUSING DIMENSION









#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
Dual-volt Ballast (120/277V)(50W HPS only)	D		
Canada 347V Ballast			
(50W HPS only)	6		
(26/32/42W CFL only)	6L		
Quad-volt Ballast (120/208/240/277V)			
(70W and 100W HPS only)	M		
Canada Tri-volt Ballast (120/277/347V)			
(50W & 70W PSMH only)	T		
(70W & 100W HPS only)	T		
High Power Factor Ballast			
(HID only, standard on CFL)		Н	
Button Photocell			
(For 13W CFL & 60W Incandescent, use ESB-7(a)P)			
(P=HID only, LP=CFL only)			
(120V, 277V, 208V, 240V or 347V)	1, 2, 3, 4 or 6	P or LP	
Tamperproof Lens Fasteners		J	

#### FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Surface Mounting Box	ESB-7	
Surface Mounting Box with Photocell Specify Voltage (a) 1=120V, 2=277V	ESB-7 <mark>(a)</mark> P	
Tamperproof Screwdriver	TPS-1	

SEE PAGE 23 FOR MORE INFORMATION ABOUT THESE ACCESSORIES



# SE1 SERIES by RUUD LIGHTING DIRECT

# **SQUARE TRANSLUCENT LENS SECURITY LIGHT**

The white polycarbonate lens diffuses glare and provides uniform light levels in all directions.

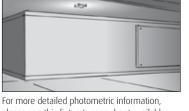
**APPLICATIONS:** Corridors, entryways and soffits



"A"	"B"
8" Square	4.1"
(203 mm)	(104 mm)
12" Square	5.0"
(305 mm)	(127 mm)

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	MOUNTING POSITION	CATALOG NUMBER	
50W PSMH	8"	Ceiling/Soffit/Wall	SE1405-M	
70W PSMH	8"	Ceiling/Soffit/Wall	SE1407-M	
100W PSMH	12"	Ceiling/Soffit/Wall	SE1410-M	
150W PSMH	12"	Ceiling/Soffit	SE1615-M	
50W HPS	8"	Any	SE1505-1	
70W HPS	8"	Ceiling/Soffit/Wall	SE1507-1	
100W HPS	12"	Ceiling/Soffit/Wall	SE1510-M	
150W HPS	12"	Ceiling/Soffit/Wall	SE1515-M	



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com

**DISTRIBUTION PATTERN** 



Quick Mount, option "B"





for Wet Locations Quick Mount (option B) is listed for Damp Locations

## **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(100-150W HPS, 12" housing only)	1		
Dual-volt Ballast (120/277V)(50W HPS only)	D		
277V Reactor Ballast (150W PSMH only)	27		
Canada 347V Ballast (50W HPS only)	6		
<b>Quad Volt Ballast</b> (120/208/240/277V) (70W HPS only)	M		
Canada Tri-volt Ballast (120/277/347V) (50W-100W PSMH, 100W & 150W HPS only) (150W PSMH only) (70W HPS only)	T T		
High Power Factor Ballast (standard on 12") (For 8" housing only except 50W PSMH, 50W HPS with 347V & 70W HPS with tri-volt ballast)		Н	
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
Dual Fuse (208V or 240V) (n/a Canada)	3 or 4	F	
<b>Button Photocell</b> (277V Reactor, 120V, 277V, 208V, 240V or 347V)	27, 1, 2, 3, 4 or 6	Р	
Quick Mount <sup>♠</sup> (12" housing only)		В	
Tamperproof Lens Fasteners		J	
Quartz Standby (n/a 277V reactor) (includes 100W Q lamp) (8" has non-delay-relay, 12" has delay-relay) (not available with Fuse option in 8" housing)		Q	

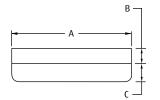
 $<sup>\</sup>begin{tabular}{l} \blacksquare$  UL listed for damp locations

## FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Tamperproof Screwdriver	TPS-1	

SEE PAGE 23 FOR MORE INFORMATION ABOUT THIS ACCESSORY





"A"	"B"	"C"
8" Square	1.6"	1.4"
(203 mm)	(41 mm)	(36 mm)
10" Square (254 mm)	1.9" (48 mm)	2.0" (51 mm)

# SS SERIES by DIRECT

# SHALLOW SQUARE TRANSLUCENT SECURITY LIGHT

SS Series fixtures feature a low profile (minimal depth to the product) polycarbonate lens. The internal reflector is finished with a diffuse white powder coat and provides high fixture efficacy. The translucent lens provides uniform illumination so fixtures can be used in horizontal or vertical mountings in a wide variety of applications. Meets Americans with Disability Act Accessibility Guidelines (ADAAG) with a depth less than four inches.

**APPLICATIONS:** Corridors, entryways and soffits

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	MOUNTING POSITION	CATALOG NUMBER
21W Fluorescent	8"	Ceiling/Soffit/Wall	SS0221-1LW
28W Fluorescent	10"	Ceiling/Soffit/Wall	SS0228-ULW
38W Fluorescent	10"	Ceiling/Soffit/Wall	SS0238-ULW

#### **DISTRIBUTION PATTERN**



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com





**Emergency Ballast options** 

#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Ballast (21W only)	2		
<b>120V Emergency Ballast</b> (28W & 38W only)	1EML		
277V Emergency Ballast (38W only)	2EML		
Button Photocell (120V or 277V)	1LPW or 2LPW		
Fuse		F	
Tamperproof Lens Fasteners		J	

<sup>▲</sup> UL listed for damp locations

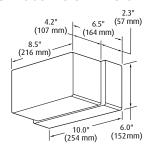
#### FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
Tamperproof Screwdriver	TPS-1
CEE DAGE 32 FOR MODE INFORM	ATION ADOLLT THIS ACCESSORY

SEE PAGE 23 FOR MORE INFORMATION ABOUT THIS ACCESSORY



#### **'B' HOUSING DIMENSION**



For 50W dual-volt, 70W & 100W HPS with quad-volt or tri-volt, 50W HPS 347V, and all PSMH fixtures, the housing depth is 3" (76 mm), and the overall fixture depth is 7.2" (183 mm).

#### **DISTRIBUTION PATTERN**



For more detailed photometric information, please see this fixture's spec sheet available online at **www.ruudlightingdirect.com** 

# E3 SERIES by DIRECT

#### **RECTANGULAR WIDE THROW SECURITY LIGHT**

The reflector and polycarbonate lens direct light downward to wash the wall below and to the sides of the fixture. The wide distribution permits maximum spacing between fixtures. E3 Series optics are also available for vertical mounting.

**APPLICATIONS:** Accent lighting, general security lighting

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING DIMENSION	MOUNTING POSITION	CATALOG NUMBER	
50W PSMH	В	Wall Downlight	E3405-M	
70W PSMH	В	Wall Downlight	E3407-M	
50W HPS	В	Any	E3505-1	
70W HPS	В	Wall Downlight	E3507-1	
100W HPS	В	Wall Downlight	E3510-1	



Vertical Mounting, option "R"







#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
Dual-volt Ballast (120/277V)(50W HPS only)	D		
Canada 347V Ballast (50W HPS only)	6		
<b>Quad-volt Ballast</b> (120/208/240/277V) (70W and 100W HPS only)	M		
Canada Tri-volt Ballast (120/277/347V) (50W & 70W PSMH only) (70W & 100W HPS only)	T T		
High Power Factor Ballast		Н	
<b>Button Photocell</b> (120V, 277V, 208V, 240V or 347V)	1, 2, 3, 4 or 6	Р	
Bronze Color Shroud		BS	
Gold Color Shroud		GS	
Tamperproof Lens Fasteners		J	
<b>Vertical Mounting</b> (Not available when both HPF and Photocell supplied)		R	

#### FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
Surface Mounting Box	ESB-7
Tamperproof Screwdriver	TPS-1

SEE PAGE 23 FOR MORE INFORMATION ABOUT THESE ACCESSORIES



"A"	"B"
8" Square (203 mm)	4.1"
(203 11111)	(104 mm)
12" Square	5.0"
(305 mm)	(127 mm)

#### **DISTRIBUTION PATTERN**



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com

# SE3 SERIES by DIRECT

# **SQUARE WIDE THROW SECURITY LIGHT**

The reflector directs light downward to wash the wall below and to the sides of the fixture. The polycarbonate lens and extra-wide cutoff distribution provides glare control and permits maximum spacing between fixtures (recommended spacing is four times mounting height).

**APPLICATIONS:** Accent lighting, general security lighting

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	MOUNTING POSITION	CATALOG NUMBER	
50W PSMH	8"	Wall Downlight	SE3405-M	
70W PSMH	8"	Wall Downlight	SE3407-M	
100W PSMH	12"	Wall Downlight	SE3410-M	
150W PSMH	12"	Wall Downlight	SE3615-M	
50W HPS	8"	Any	SE3505-1	
70W HPS	8"	Wall Downlight	SE3507-1	
100W HPS	12"	Wall Downlight	SE3510-M	
150W HPS	12"	Wall Downlight	SE3515-M	
26/32/42W CFL	12"	Any	SE3242-UL	
57W CFL	12"	Any	SE3257-UL	

Specify lamp wattage for included lamp. Consult factory for discrete wattage labeling to meet state and/or local regulations where applicable.



for Wet Locations

## FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(100-150W HPS, 12" housing only)	1		
Dual-volt Ballast (120/277V)(50W HPS only)	D		
277V Reactor Ballast (150W PSMH only)	27		
Canada 347V Ballast (50W HPS only)	6		
Canada 347V Electronic Ballast (CFL only)	6L		
<b>Quad Volt Ballast</b> (120/208/240/277V) (70W HPS only)	M		
Canada Tri-volt Ballast (120/277/347V) (50W-100W PSMH, 100W & 150W HPS only) (150W PSMH only) (70W HPS only)	T T		
High Power Factor Ballast (standard on 12") (For 8" housing only except 50W PSMH, 50W HPS with 347V & 70W HPS with tri-volt ballast)		н	
Single Fuse (277V Reactor, 120V, 277V, or 347V) (F=HID only, LF=CFL only)	27, 1, 2 or 6	F or LF	
<b>Dual Fuse</b> (208V or 240V) (n/a Canada) (F=HID only, LF=CFL only)	3 or 4	F or LF	
Button Photocell (P=HID only, LP=CFL only) (277V Reactor, 120V, 277V, 208V, 240V or 347V)	27, 1, 2, 3, 4 or 6	PorIP	
Tamperproof Lens Fasteners	21, 1, 2, 3, 4 01 0	r UI Lr	
Quartz Standby (n/a 277V reactor or CFL) (includes 100W Q lamp) (8" has non-delay-relay, 12" has delay-relay) (not available with Fuse option in 8" housing)		Q	

## FIELD-INSTALLED ACCESSORIES

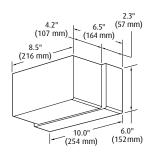
DESCRIPTION	CATALOG NUMBER	
Tamperproof Screwdriver	TPS-1	

SEE PAGE 23 FOR MORE INFORMATION ABOUT THIS ACCESSORY

Spec sheets and photometric files are available at www.ruudlightingdirect.com



#### **'B' HOUSING DIMENSION**



For 50W dual-volt, 70W & 100W HPS with quad-volt or tri-volt, 50W HPS 347V, and all PSMH fixtures, the housing depth is 3" (76 mm), and the overall fixture depth is 7.2" (183 mm).

#### **DISTRIBUTION PATTERN**



For more detailed photometric information, please see this fixture's spec sheet available online at **www.ruudlightingdirect.com** 



## **RECTANGULAR DEEP SHIELD SECURITY LIGHT**

The E8 features a polycarbonate lens and provides front brightness shielding without sacrificing wide light distribution.

**APPLICATIONS:** Accent lighting, over entrances and general security lighting

#### HID of CFL LAMP INCLUDED

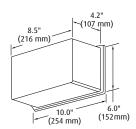
LAMP WATTAGE	HOUSING DIMENSION	MOUNTING POSITION	CATALOG NUMBER	
50W PSMH	В	Wall Downlight	E8405-M	
70W PSMH	В	Wall Downlight	E8407-M	
50W HPS	В	Any	E8505-1	
70W HPS	В	Wall Downlight	E8507-1	
100W HPS	В	Wall Downlight	E8510-1	
13W CFL	А	Any	E8213-UL	
26/32/42W CFL	В	Any	E8242-UL	
60W Incandescent <sup>▼</sup>	А	Any	E8106-1	

Specify lamp wattage for included lamp. Consult factory for discrete wattage labeling to meet state and/or local regulations where applicable.

#### 'A' HOUSING DIMENSION



Shown with Bronze Color Shroud, option "BS"







#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
Dual-volt Ballast (120/277V)(50W HPS only)	D		
Canada 347V Ballast			
(50W HPS only)	6		
(26/32/42W CFL only)	6L		
Quad-volt Ballast (120/208/240/277V)			
(70W and 100W HPS only)	M		
Canada Tri-volt Ballast (120/277/347V)			
(50W & 70W PSMH only)	T		
(70W & 100W HPS only)	T		
High Power Factor Ballast			
(HID only, standard on CFL)		Н	
Button Photocell			
(For 13W CFL & 60W Incandescent, use ESB-7(a)P)			
(P=HID only, LP=CFL only)			
(120V, 277V, 208V, 240V or 347V)	1, 2, 3, 4 or 6	P or LP	
Bronze Color Shroud		BS	
Gold Color Shroud		GS	
Tamperproof Lens Fasteners		J	

#### FIELD-INSTALLED ACCESSORIES

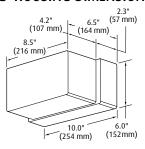
DESCRIPTION	CATALOG NUMBER	
Surface Mounting Box	ESB-7	
Surface Mounting Box with Photocell Specify Voltage (a) 1=120V, 2=277V	ESB-7 <b>(a)</b> P	
Tamperproof Screwdriver	TPS-1	
 CEE DAGE 33 FOR MORE INFORMATION	LADOUT TUECE ACCEC	CODIFC

SEE PAGE 23 FOR MORE INFORMATION ABOUT THESE ACCESSORIES

<sup>▼</sup> Incandescent lamp **NOT** included. 60-watt maximum.



#### **'B' HOUSING DIMENSION**



For 50W dual-volt, 70W & 100W HPS with quad-volt or tri-volt, 50W HPS 347V, and all PSMH fixtures, the housing depth is 3" (76 mm), and the overall fixture depth is 7.2" (183 mm).

#### DISTRIBUTION PATTERN



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com

# E5 SERIES by DIRECT

# **RECTANGULAR UP/DOWN SECURITY LIGHT**

The polycarbonate lens and optics provide controlled uplight and downlight with side cutoff. E5 Series optics are also available for vertical mounting.

**APPLICATIONS:** Architectural accent lighting

#### HID OF CFL LAMP INCLUDED

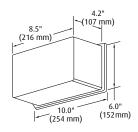
LAMP WATTAGE	HOUSING DIMENSION	MOUNTING POSITION	CATALOG NUMBER	
50W PSMH <sup>▲</sup>	В	Wall	E5405-MG	
50W HPS	В	Any	E5505-1	
13W CFL	А	Any	E5213-UL	
26/32/42W CFL <sup>▼</sup>	В	Any	E5242-UL	
60W Incandescent▶	А	Any	E5106-1	

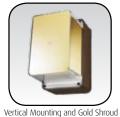
- Supplied with a glass insert to allow operation in the wall-mounted position.
- $^{ullet}$  Specify lamp wattage for included lamp. Consult factory for discrete wattage labeling to meet state and/or local regulations where applicable.
- Incandescent lamp **NOT** included. 60-watt maximum.

#### 'A' HOUSING DIMENSION









options "R" and "GS"





#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
Dual-volt Ballast (120/277V)(50W HPS only)	D		
Canada 347V Ballast			
(50W HPS only)	6		
(26/32/42W CFL only)	6L		
Canada Tri-volt Ballast (120/277/347V)			
(50W PSMH only)	T		
High Power Factor Ballast			
(HID only, standard on CFL)		Н	
Button Photocell			
(For 13W CFL & 60W Incandescent, use ESB-7(a)P)			
(P=HID only, LP=CFL only)			
(120V, 277V, 208V, 240V or 347V)	1, 2, 3, 4 or 6	P or LP	
Bronze Color Shroud		BS	
Gold Color Shroud		GS	
Tamperproof Lens Fasteners		J	
Vertical Mounting (When using in HID, not			
available when both HPF and Photocell supplied)		R	

#### FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Surface Mounting Box	ESB-7	
Surface Mounting Box with Photocell Specify Voltage (a) 1=120V, 2=277V	ESB-7 <b>(a)</b> P	
Tamperproof Screwdriver	TPS-1	

SEE PAGE 23 FOR MORE INFORMATION ABOUT THESE ACCESSORIES



#### 8" Square 4.1" (203 mm) (104 mm) 12" Square 5.0"

(305 mm)

(127 mm)

#### **DISTRIBUTION PATTERN**



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com

# SE5 SERIES by DIRECT

# **SQUARE UP/DOWN SECURITY LIGHT**

The polycarbonate lens and optics within the SE5 Series provide good lateral distribution and aesthetically appealing wall brightness.

**APPLICATIONS:** Architectural accent lighting

#### LAMP INCLUDED

50W PSMH         8"         Wall         SE5405-M           70W PSMH         8"         Wall         SE5407-M           100W PSMH         12"         Wall         SE5410-M           150W PSMH         12"         Wall         SE5615-M	LAMP WATTAGE	HOUSING SIZE	MOUNTING POSITION	CATALOG NUMBER	
100W PSMH 12" Wall SE5410-M	50W PSMH	8"	Wall	SE5405-M	
	70W PSMH	8"	Wall	SE5407-M	
150W PSMH 12" Wall SE5615-M	100W PSMH	12"	Wall	SE5410-M	
	150W PSMH	12"	Wall	SE5615-M	
50W HPS 8" Wall SE5505-1	50W HPS	8"	Wall	SE5505-1	
70W HPS 8" Wall SE5507-1	70W HPS	8"	Wall	SE5507-1	
100W HPS 12" Wall SE5510-M	100W HPS	12"	Wall	SE5510-M	
150W HPS 12" Wall SE5515-M	150W HPS	12"	Wall	SE5515-M	
26/32/42W CFL 12" Any SE5242-UL	26/32/42W CFL	12"	Any	SE5242-UL	
57W CFL 12" Any SE5257-UL	57W CFL	12"	Any	SE5257-UL	

Specify lamp wattage for included lamp. Consult factory for discrete wattage labeling to meet state and/or local regulations where applicable.





#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(100W-150W HPS, 12" housing only)	1		
Dual-volt Ballast (120/277V)(50W HPS only)	D		
277V Reactor Ballast (150W PSMH only)	27		
Canada 347V Ballast (50W HPS only)	6		
Canada 347V Electronic Ballast (CFL only)	6L		
Quad Volt Ballast (120/208/240/277V)			
(70W HPS only)	M		
Canada Tri-volt Ballast (120/277/347V)			
(50W-100W PSMH, 100W & 150W HPS only)	T		
(150W PSMH only)	T		
(70W HPS only)	T		
<b>High Power Factor Ballast</b> (standard on 12") (For 8" housing only except 50W PSMH, 50W HPS			
with 347V & 70W HPS with tri-volt ballast)		Н	
Single Fuse (277V Reactor, 120V, 277V, or 347V)			
(F=HID only, LF=CFL only)	27, 1, 2 or 6	F or LF	
Dual Fuse (208V or 240V) (n/a Canada)			
(F=HID only, LF=CFL only)	3 or 4	F or LF	
Button Photocell			
(277V Reactor, 120V, 277V, 208V, 240V or 347V)			
(P=HID, LP=CFL only)	27, 1, 2, 3, 4 or 6	P or LP	
Tamperproof Lens Fasteners		J	
Quartz Standby (n/a 277V reactor or CFL)			
(includes 100W Q lamp)			
(8" has non-delay-relay, 12" has delay-relay)			
(not available with Fuse option in 8" housing)		Q	

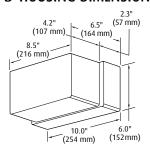
#### FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Tamperproof Screwdriver	TPS-1	

SEE PAGE 23 FOR MORE INFORMATION ABOUT THIS ACCESSORY



#### **'B' HOUSING DIMENSION**



For 50W dual-volt, 70W & 100W HPS with quad-volt or tri-volt, 50W HPS 347V, and all PSMH fixtures, the housing depth is 3" (76 mm), and the overall fixture depth is 7.2" (183 mm).

#### DISTRIBUTION PATTERN



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com

# E4 SERIES by DIRECT

## RECTANGULAR FORWARD THROW SECURITY LIGHT

The reflector and polycarbonate lens project light out and away from the fixture.

**APPLICATIONS:** Accent lighting, general security lighting

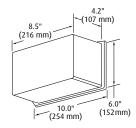
#### HID of CFL LAMP INCLUDED

LAMP WATTAGE	HOUSING DIMENSION	MOUNTING POSITION	CATALOG NUMBER
50W PSMH	В	Wall Downlight	E4405-M
70W PSMH	В	Wall Downlight	E4407-M
50W HPS	В	Any	E4505-1
70W HPS	В	Wall Downlight	E4507-1
13W CFL	А	Any	E4213-UL
26/32/42W CFL	В	Any	E4242-UL
60W Incandescent▼	А	Any	E4106-1

Specify lamp wattage for included lamp. Consult factory for discrete wattage labeling to meet state and/or local regulations where applicable.

#### 'A' HOUSING DIMENSION









## **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
Dual-volt Ballast (120/277V)(50W HPS only)	D		
Canada 347V Ballast			
(50W HPS only)	6		
(26/32/42W CFL only)	6L		
Quad-volt Ballast (120/208/240/277V)			
(70W HPS only)	M		
Canada Tri-volt Ballast (120/277/347V)			
(50W & 70W PSMH only)	T		
(70W HPS only)	T		
High Power Factor Ballast			
(HID only, standard on CFL)		Н	
Button Photocell			
(For 13W CFL & 60W Incandescent, use ESB-7(a)P)			
(P=HID only, LP=CFL only)			
(120V, 277V, 208V, 240V or 347V)	1, 2, 3, 4 or 6	P or LP	
Bronze Color Shroud		BS	
Gold Color Shroud		GS	
Tamperproof Lens Fasteners		J	

## FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
Surface Mounting Box	ESB-7
Surface Mounting Box with Photocell Specify Voltage (a) 1=120V, 2=277V	ESB-7 <b>(a)</b> P
Tamperproof Screwdriver	TPS-1

SEE PAGE 23 FOR MORE INFORMATION ABOUT THESE ACCESSORIES

<sup>▼</sup> Incandescent lamp **NOT** included. 60-watt maximum.



"A"	"B"
8" Square	4.1"
(203 mm)	(104 mm)
12" Square	5.0"
(305 mm)	(127 mm)

#### **DISTRIBUTION PATTERN**



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com

# SE4 SERIES by RUUD LIGHTING DIRECT

# **SQUARE FORWARD THROW SECURITY LIGHT**

The reflector and polycarbonate lens project light out and away from the fixture.

**APPLICATIONS:** Accent lighting, general security lighting

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	MOUNTING POSITION	CATALOG NUMBER	
50W PSMH	8"	Wall Downlight	SE4405-M	
70W PSMH	12"	Wall Downlight	SE4407-M	
100W PSMH	12"	Wall Downlight	SE4410-M	
50W HPS	8"	Any	SE4505-1	
70W HPS	12"	Wall Downlight	SE4507-M	
100W HPS	12"	Wall Downlight	SE4510-M	
26/32/42W CFL <sup>4</sup>	12"	Any	SE4242-UL	
57W CFL	12"	Any	SE4257-UL	

Specify lamp wattage for included lamp. Consult factory for discrete wattage labeling to meet state and/or local regulations where applicable.







## **FACTORY-INSTALLED OPTIONS**

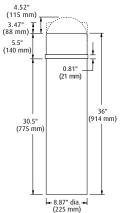
DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast (70W & 100W HPS only)	1		
Dual-volt Ballast (120/277V)(50W HPS only)	D		
Canada 347V Ballast (50W HPS only)	6		
Canada 347V Electronic Ballast (CFL only)	6L		
Canada Tri-volt Ballast (120/277/347V) (PSMH & 70W-100W HPS only)	T		
High Power Factor Ballast (standard on 12") (For 8" housing only except 50W PSMH, 50W HPS with 347V)		Н	
Single Fuse (277V Reactor, 120V, 277V, or 347V) (F=HID only, LF=CFL only)	27, 1, 2 or 6	F or LF	
<b>Dual Fuse</b> (208V or 240V) (n/a Canada) (F=HID only, LF=CFL only)	3 or 4	F or LF	
Photocell (P=HID only, LP=CFL only) (277V Reactor, 120V, 277V, 208V, 240V or 347V)	27, 1, 2, 3, 4 or 6	P or LP	
Tamperproof Lens Fasteners		J	
Quartz Standby (n/a 277V reactor or CFL) (includes 100W Q lamp) (8" has non-delay-relay, 12" has delay-relay) (not available with Fuse option in 8" housing)		Q	

## FIELD-INSTALLED ACCESSORIES

Tamperproof Screwdriver	ALOG MBER
	S-1

SEE PAGE 23 FOR MORE INFORMATION ABOUT THIS ACCESSORY





#### **DISTRIBUTION PATTERN**



For more detailed photometric information, please see this fixture's spec sheet available online at www.ruudlightingdirect.com



#### **ROUND BOLLARD**

The exclusive optical system of the clear lens HC Series has a 70° main beam, which provides uniform distribution with low brightness at spacings up to 40 feet.

**APPLICATIONS:** Walkways, landscaped grounds

#### LAMP INCLUDED

LAMP WATTAGE	ROUND BOLLARD	DOME TOP	EXTENDED FLAT TOP
50W PSMH	HC405-M	HCD405-M	HCF405-M
70W PSMH	HC407-M	HCD407-M	HCF407-M
100W PSMH	HC410-M	HCD410-M	HCF410-M
50W HPS	HC505-D	HCD505-D	HCF505-D
70W HPS	HC507-M	HCD507-M	HCF507-M
100W HPS	HC510-M	HCD510-M	HCF510-M
26/32/42W CFL	HC242-UL	HCD242-UL	HCF242-UL

<sup>△</sup> Specify lamp wattage for included lamp. Consult factory for discrete wattage labeling to meet state and/or local regulations where applicable.











HCF—Extended Flat Top



180° Shielded Clear Lens. option "A"

# FACTORY-INSTALLED OPTIONS

us for Wet Locations

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX
Canada 347V Ballast (50W HPS only)	6	
Canada Tri-volt Ballast (120/277/347V) (PSMH & 70W-100W HPS only)	T	
<b>Single Fuse</b> (120V, 277V, or 347V)	1, 2 or 6	F
Dual Fuse (208V or 240V) (n/a Canada)	3 or 4	F
Button Photocell (120V, 277V, 208V, 240V or 347V) (P=HID, LP=CFL)	1, 2, 3, 4 or 6	P or LP
180° Shielded Clear Lens		A
Tamperproof Lens Fasteners		J
<b>Polycarbonate Lens</b> (HC Series only, standard on HCD & HCF)		V

## FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
Internal Louver	HCL
Tamperproof Screwdriver	TPS-1

SEE PAGE 23 FOR MORE INFORMATION ABOUT THESE ACCESSORIES

# **SECURITY** Accessories



#### E SERIES - SURFACE BOX



For use on all ceiling or wall mounted Rectangular Security lights, where surface wiring is required. It is die-cast aluminum, and is standard with our exclusive Colorfast DeltaGuard® finish, featuring an E-coat epoxy primer with bronze ultra-durable powder topcoat. Five tapped and plugged knockouts are available to feed 1/2" conduit. Measures 10" x 6" x 1.25".

#### CATALOG #

ESB-7



For W0 Series fixtures. Steel guard provides protection to optical system of any outdoor or square commercial fixture with 12" or 16" housing. Attaches easily to lens frame with supplied #8 fasteners. Finished with an acrylic black E-coat paint. 1" (25 mm) space between wires.

CATALOG #	HOUSING	
FWG-12	12"	
FWG-16	16"	

#### SURFACE BOX WITH PHOTOCELL



Same as ESB-7 Surface Box but includes installed photocell. Specify voltage when ordering.

#### CATALOG #

ESB-7(a)P

1=120V, 2=277V

#### TAMPERPROOF SCREWDRIVER



For use with the E, HC, SE, SS and W0 Series fixtures with Tamperproof Lens Fasteners.

#### CATALOG #

TPS-1

# INTERNAL LOUVER - BOLLARD

The internal louver fits within the HC Series Round Bollard and can be used in areas where sharp cutoff is desired such as walkways or entryways. The louver is die-cast aluminum and features our exclusive DeltaGuard® finish using a black e-coat epoxy primer with ultra-durable powder topcoat. Measures 8.386" diameter x 4.75" tall.

#### CATALOG #

HCL

#### POLYCARBONATE VANDAL SHIELD



For W0 Series fixtures. Clear polycarbonate shield 0.118" (3 mm) thick provides protection to optical system of any size floodlight or commercial fixture. Attaches easily to lens frame with supplied #8 fasteners.

CAT. #	HOUSING	DEPTH	
LS-12	12"	2"	
LS-16	16"	2.5"	

#### WO SERIES – SURFACE BOX



For W0 Series fixtures. This die-cast aluminum box has five threaded and closed 1/2" conduit entries for surface wiring. Supplied with our Colorfast DeltaGuard® finish with a black ultradurable powder topcoat. Four #8-32 threaded stud and hex nuts included for ease of installation. Measures 11.3"L x 8"W x 1.3"H (286 x 203 x 32 mm). NOTE: For 12" 150W & 16" 320W-400W fixtures, SB-16 is required when mounting to combustible surface.

#### CATALOG #

SB-16

#### WALL WASH / GLARE SHIELD



The diffuse aluminum shield is designed for use with W0 Series fixtures. It redirects light downward to wash the wall below and to the sides of the fixture. #8 fasteners are supplied for easy attachment of the shield to the lens frame. Exterior is finished with an acrylic black paint.

CAT. #	HOUSING	DEPTH	
WWS-12	12"	2.07"	
WWS-16	16"	2.75"	

#### **GWP SERIES - WIRE GUARD**



For MGWP and GWP Series. Steel quard provides protection to optical system. Attaches easily around lens frame with supplied #8 stainless steel screws. A black acrylic E-coat finish is standard.

CATALOG #	HOUSING	
FWG-MW	12"	
FWG-W	16"	

#### UNEVEN SURFACE MOUNTING PLATE



For MGWC, GWC, MGWP and GWP Series. Use to prevent water entry into the fixture through the back box due to uneven gasket sealing. Measures 9.69"L x 7.31"H. Edges have a 0.172" flange. **NOTE:** An uneven surface is any irregular surface including but not limited to: brick, stucco, corrugated (ribbed) metal, and architectural soffits less than 7" wide.

#### CATALOG #

WM-GW

# **EMERGENCY EGRESS REMOTE-MOUNTED BATTERY PACK**



For GWC Series fixtures with a 57-watt CFL lamp.

CATALOG # EFBP2-D13

# **LINEAR FLUORESCENT**



		DESCRIPTION	AVAILABLE WATTAGES AND LAMP TYPES	TYPICAL MOUNTING HEIGHT	PAGE NUMBER
	H SERIES 2-LAMP	2-lamp Linear Fluorescent High Bay	32W T8 54W T5H0	10'-18' Å	Page 29
STANDARD	H SERIES 4-LAMP	4-lamp Linear Fluorescent High Bay	32W T8 54W T5H0	10'-30' Å	Pages 30-31
	H SERIES 6-LAMP	6-lamp Linear Fluorescent High Bay	32W T8 54W T5H0	12'-40' Å	Pages 32-33
ECONOMY	HN SERIES 6-LAMP	6-lamp Slim Economy Fluorescent High Bay	32W T8 54W T5H0	25'-40'+ ^	Page 34
ECON	HN SERIES 8-LAMP	8-lamp Slim Economy Fluorescent High Bay	32W T8 54W T5H0	25'-40'+ ^	Page 35
LENSED	HE SERIES 4-LAMP	4-lamp Lensed Fluorescent High Bay	32W T8 54W T5H0	10'-30'	Page 36
LEN	HE SERIES 6-LAMP	6-lamp Lensed Fluorescent High Bay	32W T8 54W T5H0	12'-40'	Page 37
STED	HS SERIES 2-LAMP (4-F00T)	4-foot Wet Listed Fluorescent	32W T8 54W T5H0	8'-20'	Page 38
WET LISTED	HT SERIES 4-LAMP (8-FOOT)	8-foot Wet Listed Fluorescent	32W T8 54W T5H0	8'-30'	Page 39

<sup>&</sup>lt;sup>♠</sup> Use white or prismatic reflectors if fixture brightness or glare is a concern.

#### AMBIENT TEMPERATURE LIMITS (UL RATING)

LAMP	STANDARD PRODUCT	-EB OPTION
2 Lamp T5H0	55°C / 131°F	45°C / 113°F
2 Lamp T8	45°C / 113°F	35°C / 95°F
4 Lamp T5H0	55°C / 131°F	45°C / 113°F
4 Lamp T8	45°C / 113°F	35°C / 95°F
6 Lamp T5H0	45°C / 113°F	35°C / 95°F
6 Lamp T8	45°C / 113°F	35°C / 95°F
8 Lamp T5H0	35°C / 95°F	35°C / 95°F
8 Lamp T8	35°C / 95°F	35°C / 95°F

# **HID HIGH & LOW BAY**



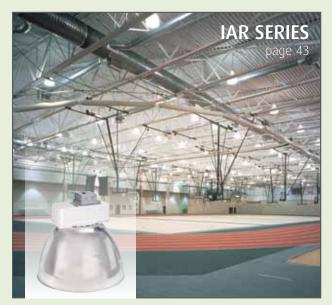
			DESCRIPTION	AVAILABLE WATTAGES	TYPICAL MOUNTING HEIGHT▲	PAGE NUMBER
		IA SERIES	16" Aluminum High Bay	150W - 1000W HID	15'-30' +	Page 41
HIGH BAY	A	IAP SERIES	16" Prismatic High Bay	150W - 400W HID	12'-20'	Page 42
	Ô	IAR SERIES	22" Prismatic High Bay (25" for 750W & 1000W)	250W - 1000W HID	12'-30' +	Page 43
	5	IC SERIES	16" Compact Low Bay	150W - 400W HID	14'-25'	Page 44
LOW BAY	5	ICM SERIES	22" Medium Low Bay	150W - 400W HID	12'-25'	Page 45
	1	ICJ SERIES	28" Jumbo Low Bay	150W - 400W HID	10'-20'	Page 46
LOW BAY		FC SERIES	Shallow Low Bay	70W - 150W HID	8'-18'	Page 47
SHALLOW LOW BAY		FP SERIES	Shallow Prismatic Low Bay	70W - 150W HID	8'-18'	Page 48

<sup>▲</sup> See page 132 in our Technical Data section for height recommendations based on fixture wattage.



# LINEAR FLUORESCENT

Linear Fluorescent fixtures offer a unique, energy saving alternative to HID high bay lighting. Fluorescent fixtures deliver comparable light levels and use about 50% less energy. Available with either T5HO or T8 lamps in 2-, 4- or 6-lamp configurations and a variety of optical systems, fixtures can be tailored to meet the goals of your project. To reduce glare with excellent lamp image cutoff, mount H Series products perpendicular to aisles. Typical applications include industrial, commercial and retail projects.



# **HID HIGH BAY**

For high to medium ceiling heights, High Bay fixtures offer outstanding performance and value. There are several lamp options including PSMH, MH and HPS and three reflector systems available to help you customize the right fixture for your project. Our High Bay fixtures are the perfect choice for a wide range of commercial and retail applications.



## SLIM ECONOMY FLUORESCENT

Perfect for warehouse and industrial applications, the HN Series is available in 6- and 8-lamp configurations, delivers excellent performance and energy efficiency. For optimal performance mount HN Series parallel to aisles. The fixture complies with NFPA and Factory Mutual codes.



# **HID LOW BAY**

For low to medium ceiling heights, our Low Bay fixtures provide uniform light distribution with low brightness. Their excellent optical distribution make them an ideal choice for industrial, commercial or retail applications.

# **AVAILABLE OPTIONS**

#### WET LISTED HID HIGH & LOW BAYS

Our HID High and Low Bay fixtures are constructed from die-cast aluminum to allow for greater heat dissipation and exceptional performance. Our reflectors are totally enclosed with full silicone gasketing at connection to fixture and between lens and frame. The reflector system is designed for effective brightness control and delivers efficiencies as high as 96%. Wet listed fixtures are an excellent choice for environments with heavy spray-downs such as produce storage centers, dairy barns, misting zones and other commercial locations.





Reflector and Lens are IP65

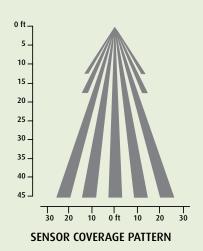
#### **IPC SERIES TYPICAL CUTAWAY**



# 2-LEVEL INTEGRATED SENSOR

Studies have shown the average warehouse aisle is occupied less than 20% of the time. Our optional 2-level control turns off two, four or all lamps within the fixture, reducing total energy usage by up to **85%**.

Our 2-level control uses an integrated 360° motion sensor that can be integrated into the EZ Bay Plus®, H, or HN Series fixtures. The sensor uses an external two-position switch and adjustable time delay (from 30 seconds to 20 minutes). Two lamp and 347-volt fixtures are pre-wired for "all on/all off" operation. A dual-switching option allows for hard-wired individual ballast switching. Automatic switching, programmed switching, and manual switching controls are available. Two-level is a simple and effective way to maximize energy efficiency and reduce cost. Fixtures that are capable of supporting the 2-level sensor are designated by the  $\bigcirc$  symbol.



# PREMIUM LAMPS & BALLASTS

Ruud Lighting is pleased to offer premium T8 lamps and ballasts with select linear fluorescent fixtures. Premium high efficiency UltraMax® ballasts from GE® have a ballast factor of 1.18. The optional premium GE lamp is the extra-life, high lumen XL/SPX lamp. The combination of the UltraMax® ballast and the XL/SPX high lumen premium lamp meet or exceed all Consortium of Energy Efficiency (CEE) specifications and are suitable for most federal, state and utility rebate programs.



# **USING 50% TO 80% MORE ENERGY THAN YOU SHOULD BE?**

Understanding the environmental benefits of fluorescent lighting

If energy efficiency is your main goal, fluorescent luminaires are a viable solution. Because fluorescent lamps are more efficient at creating light, they generate less heat saving as much as 50 to 80 percent in energy consumption compared to incandescent lamps and 75 percent versus high-intensity discharge lamps (HID).

Energy savings, rebate incentives and lower cost of ownership are great ways to motivate customers to switch to fluorescent lamps. If that's still not enough, there are a number of environmental aspects that we could all benefit from.



#### LESS AIR, WATER AND SOIL POLLUTION

Replacing one incandescent lamp with a compact fluorescent lamp in each household in the U.S. is a pollution reduction equivalent to removing one million cars from our highways.



#### **LESS LANDFILL WASTE**

Since fluorescent lamps last 10 times longer than incandescent and most components are recyclable, it means that less waste is put into landfills.



#### REDUCED GREENHOUSE GAS EMISSIONS

When we reduce energy production, we also lower the amount of carbon dioxide  $(CO_2)$  or greenhouse gases released into the air.  $CO_2$  is a product of producing energy.



#### **LESS FOSSIL FUELS USED**

Higher energy usage has caused a depletion of coal, used by coal-fired plants to create electricity.



#### **ENVIRONMENTAL AWARENESS**

Making your customers aware of how they can help the environmental efforts by changing to fluorescent lamps empowers them to become part of the bigger solution.

Balancing the needs of building occupants with the goals or requirements of your lighting project can be tricky. You can certainly build a great case to retrofit from HID sources to fluorescent lamps by reinforcing efficiency, energy savings, versatility, high quality of light and all the environmental advantages.

For assistance with creating a lighting layout or selecting the appropriate fluorescent fixture, call our Application Engineers at

(800) 236-7000





ALL FIXTURES COME WITH TWO WIRE-FORM HANGERS FOR MOUNTING

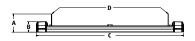
# H SERIES by DIRECT

#### 2-LAMP LINEAR FLUORESCENT HIGH BAY

Fixtures feature a die-formed steel housing. T5HO fixture is supplied with programmed-start electronic ballast. T8 fixture is supplied with a high-ballast-factor, instant-start electronic ballast. Available reflectors include super specular aluminum (95% reflectance) or clear acrylic prismatic. Premium lamp option includes long life, higher lumen lamps. Meets 2008 NEC Article 410.130(G) and CEC ballast disconnect requirements. **NOTE**: Mount fixtures a minimum distance of 7.5" below ceiling. Prismatic reflectors not for use in gymnasiums or machine shops.

**APPLICATIONS:** Warehouse, industrial, commercial, retail projects

#### **DIMENSIONS**



**A**=6.0" (152 mm), **B**=3.5" (89 mm), **C**=49.3" (125 cm), **D**=Minimum distance between hangers is 39.4" (100 cm) Fixture is 12.5" (317.5 mm) wide.



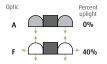
for Damp Locations



#### LAMPS INCLUDED

	LAMP WATTAGE	HARD WIRE	WITH 6' CORD & PLUG
$\odot$	(2) 32W T8	H1A2X32-U <b>(b)</b>	H2A2X32- <b>(a)(b)</b>
$\Theta$	(2) 32W T8	H1F2X32-U <b>(b)</b>	H2F2X32- <b>(a)(b)</b>
$\odot$	(2) 54W T5H0	H1A2X54-U <b>(b)</b>	H2A2X54- <b>(a)(b)</b>
$\odot$	(2) 54W T5H0	H1F2X54-U <b>(b)</b>	H2F2X54- <b>(a)(b)</b>

# OPTICAL CONFIGURATIONS



#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
BALLAST CHOICES FOR HARD WIRE			
<b>480V</b> (T5HO only)	5		
Canada 347V	6		
BALLAST CHOICES WITH 6' CORD & PLUG (a	)		
120V	1		
277V	2		
208V	3		
240V	4		
<b>480V</b> (T5HO only)	5		
Canada 347V	6		
2-Level Integrated Motion Sensor			
T5HO (120-277V, 347V, 480V)		K	
T8 (120-277V) (uses program start ballast)		K	
Housing for use with Plug-N-Go			
Emergency Ballast <sup>♠</sup> (120 or 277V only)	1 or 2	EB	
High Reflectance White Reflector			
(A optical configuration only)		W	
Lamp Color Temperature (b)			
3500K		3	
4100K		4	
5000K		5	

Order emergency ballast from FIELD-INSTALLED ACCESSORIES

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
*	Locking-type Receptacle (120V, 4-wire EB option)	L14-20R	
-	Locking-type Receptacle (208- or 240V)	L6-15R	
	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Receptacle (277V, 4-wire EB option)	L16-20R	
	Locking-type Receptacle (Canada 347V)	L37*20R	
	Locking-type Receptacle (480V)	L8-20R	
	5-foot Safety Cable	SC-5	
1	(Order 2 if using to mount fixture)		
	Wire Guard	H-WG2	
	(Grid pattern of wires is 2" x 2.5")		
	Plug-N-Go Emergency Ballast▼		
	T8: 800 Lumens (120- or 277V)	H-EB800D	
	T8: 1350 Lumens (120- or 277V)	H-EB1400D	
	T8: 3000 Lumens (120- or 277V)	H-EB3000D	
	Consult factory for T5HO lumen data		

Fixture must be ordered with option "EB" from **FACTORY-INSTALLED OPTIONS** 

SEE PAGES 50-51 FOR MORE INFORMATION ABOUT THESE ACCESSORIES



ALL FIXTURES COME WITH TWO WIRE-FORM HANGERS FOR MOUNTING

# H SERIES by DIRECT

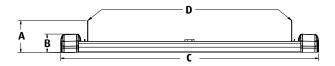
#### 4-LAMP LINEAR FLUORESCENT HIGH BAY

Fixtures feature a die-formed steel housing. T5HO fixture is supplied with programmed-start electronic ballast. T8 fixture is supplied with a high-ballast-factor, instant-start electronic ballast. Available reflectors include super specular aluminum (95% reflectance) or clear acrylic prismatic. Premium lamp option includes long life, higher lumen lamps. Meets 2008 NEC Article 410.130(G) and CEC ballast disconnect requirements. **NOTE**: Mount fixtures a minimum distance of 7.5" below ceiling. Prismatic reflectors not for use in gymnasiums or machine shops.

**APPLICATIONS:** Warehouse, industrial, commercial, retail projects

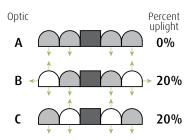


#### **DIMENSIONS**



A=6.0" (152 mm), B=3.5" (89 mm), C=49.3" (125 cm), D=Minimum distance between hangers is 39.4" (100 cm). Fixture is 21.0" (533 mm) wide with 4.3" (108 mm) spacing between lamps.

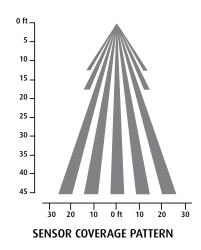
#### **OPTICAL CONFIGURATIONS**



# 2-LEVEL INTEGRATED SENSOR

Studies have shown the average warehouse aisle is occupied less than 20% of the time. Our optional 2-level control turns off two, four or all lamps within the fixture, **reducing** total energy usage by up to **85%**.

Our 2-level control uses an integrated 360° motion sensor that can be integrated directly into the fixture. The sensor uses an external two-position switch and adjustable time delay (from 30 seconds to 20 minutes). Two lamp and 347-volt fixtures are pre-wired for "all on/all off" operation. A dual-switching option allows for hard-wired individual ballast switching. Automatic switching, programmed switching, and manual switching controls are available. Two-level is a simple and effective way to maximize energy efficiency and reduce cost. Fixtures that are capable of supporting the 2-level sensor are designated by the  $\bigcirc$  symbol.



## PREMIUM LAMPS & BALLASTS

Ruud Lighting is pleased to offer premium T8 lamps and ballasts with select linear fluorescent fixtures. Premium high efficiency UltraMax® ballasts from GE® have a ballast factor of 1.18. The optional premium GE lamp is the extra-life, high lumen XL/SPX lamp. The combination of the UltraMax® ballast and the XL/SPX high lumen premium lamp meet or exceed all Consortium of Energy Efficiency (CEE) specifications and are suitable for most federal, state and utility rebate programs.



Spec sheets and photometric files are available at www.ruudlightingdirect.com

#### LAMPS INCLUDED

		CATALOG				
WA	TTAGE	NUMBER				
HARD W	TRE					
(4) 32W T	8 F	I1A4X32-U <b>(b)</b>				
(4) 32W T	8 F	11B4X32-U <b>(b)</b>				
(4) 32W T	8 F	11C4X32-U <b>(b)</b>				
(4) 54W T	5H0 H	I1A4X54-U <b>(b)</b>				
	5HO F	11B4X54-U <b>(b)</b>				
<b>○</b> (4) 54W T	5H0 F	11C4X54-U <b>(b)</b>				
6' CORD 8	r PLUG					
(4) 32W T	8 H:	2A4X32- <b>(a)(b)</b>				
(4) 32W T	8 H:	2B4X32- <b>(a)(b)</b>				
(4) 32W T	8 H	2C4X32- <b>(a)(b)</b>				
(4) 54W T	5HO H:	2A4X54- <b>(a)(b)</b>				
	5HO H:	2B4X54- <b>(a)(b)</b>				
(4) 54W T	5HO H	2C4X54- <b>(a)(b)</b>				
2-LEVEL I	NTEGRATED MOTION SE	ENSOR (ADD "K" AFTE	er catalog number su	FFIX TO DENOTE MOTION S	SENSOR OPTION)	
T8 (120-2	77V) (uses program sta	rt ballast)	<u> </u>			
→ T5H0 (12	0-277V, 347V [Canada d	nly], 480V)				

## **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO						
BALLAST CHOICES FOR HARD WIRE							
<b>480V</b> (T5HO only)	5						
Canada 347V	6						
BALLAST CHOICES WITH 6' CORD & PLUG (a)							
120V	1						
277V	2						
208V	3						
240V	4						
<b>480V</b> (T5HO only)	5						
Canada 347V	6						
Dual Switching (120V Cord & Plug)	1	D					
<b>Dual Switching</b> (277V Cord & Plug)	2	D					
Dual Switching (without cord)		D					
Housing for use with Plug-N-Go Emergency Ballast (120 or 277V only)	1 or 2	EB					
<b>High Reflectance White Reflector</b> (A, B, C, G AND H optical configurations only)		W					
Lamp Color Temperature (b)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
3500K		3					
4100K		4					
5000K		5					
Premium XL/SPX T8 Lamps by GE® (Replace "X" with "P". Example: H1A4X32-U4 beautiful terms of the control of the	comes H1A4 <b>P</b> 32-U	J4)					

<sup>▲</sup> Order emergency ballast from **FIELD-INSTALLED ACCESSORIES** 

WIRING FOR **DUAL SWITCHING** 

Fixture is factory wired as follows: **18 & T5HO**: Circuit 1 - 2 lamps Circuit 2 - 2 lamps

## FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
***	Locking-type Rec. (120V, 4-wire D or EB option)	L14-20R	
and a	Locking-type Receptacle (208- or 240V)	L6-15R	
	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Rec. (277V, 4-wire D or EB option)	L16-20R	
	Locking-type Receptacle (Canada 347V)	L37±20R	
	Locking-type Receptacle (480V)	L8-20R	
	5-foot Safety Cable	SC-5	
17	(Order 2 if using to mount fixture)		
	Lens Kit	H-LK4	
	Wire Guard	H-WG4	
	(Grid pattern of wires is 2" x 2.5")		
	Plug-N-Go Emergency Ballast▼		
	T8: 800 Lumens (120- or 277V)	H-EB800D	
4	T8: 1350 Lumens (120- or 277V)	H-EB1400D	
	T8: 3000 Lumens (120- or 277V)	H-EB3000D	
	Consult factory for T5HO lumen data		

SEE PAGES 50-51 FOR MORE INFORMATION ABOUT THESE ACCESSORIES



ALL FIXTURES COME WITH TWO WIRE-FORM HANGERS FOR MOUNTING



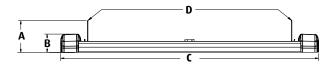
#### 6-LAMP LINEAR FLUORESCENT HIGH BAY

Fixtures feature a die-formed steel housing. T5HO fixture is supplied with programmed-start electronic ballast. T8 fixture is supplied with a high-ballast-factor, instant-start electronic ballast. Available reflectors include super specular aluminum (95% reflectance) or clear acrylic prismatic. Premium lamp option includes long life, higher lumen lamps. Meets 2008 NEC Article 410.130(G) and CEC ballast disconnect requirements. **NOTE**: Mount fixtures a minimum distance of 7.5" below ceiling. Prismatic reflectors not for use in gymnasiums or machine shops.

**APPLICATIONS:** Warehouse, industrial, commercial, retail projects

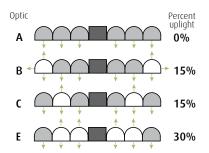


#### **DIMENSIONS**



A=6.0" (152 mm), B=3.5" (89 mm), C=49.3" (125 cm), D=Minimum distance between hangers is 39.4" (100 cm). Fixture is 29.5" (749 mm) wide with 4.3" (108 mm) spacing between lamps.

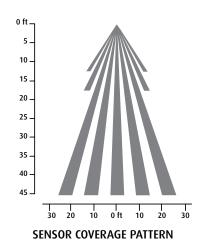
#### **OPTICAL CONFIGURATIONS**



## 2-LEVEL INTEGRATED SENSOR

Studies have shown the average warehouse aisle is occupied less than 20% of the time. Our optional 2-level control turns off two, four or all lamps within the fixture, **reducing** total energy usage by up to **85%**.

Our 2-level control uses an integrated 360° motion sensor that can be integrated directly into the fixture. The sensor uses an external two-position switch and adjustable time delay (from 30 seconds to 20 minutes). Two lamp and 347-volt fixtures are pre-wired for "all on/all off" operation. A dual-switching option allows for hard-wired individual ballast switching. Automatic switching, programmed switching, and manual switching controls are available. Two-level is a simple and effective way to maximize energy efficiency and reduce cost. Fixtures that are capable of supporting the 2-level sensor are designated by the  $\bigcirc$  symbol.



## PREMIUM LAMPS & BALLASTS

Ruud Lighting is pleased to offer premium T8 lamps and ballasts with select linear fluorescent fixtures. Premium high efficiency UltraMax® ballasts from GE® have a ballast factor of 1.18. The optional premium GE lamp is the extra-life, high lumen XL/SPX lamp. The combination of the UltraMax® ballast and the XL/SPX high lumen premium lamp meet or exceed all Consortium of Energy Efficiency (CEE) specifications and are suitable for most federal, state and utility rebate programs.



Spec sheets and photometric files are available at www.ruudlightingdirect.com

#### LAMPS INCLUDED

LAMP WATTAGE	CATALOG NUMBER				
HARD WIRE	NOMBER				
(6) 32W T8	H1A6X32-U <b>(b)</b>				
(6) 32W T8	H1B6X32-U <b>(b)</b>				
(6) 32W T8	H1C6X32-U <b>(b)</b>				
(6) 32W T8	H1E6X32-U <b>(b)</b>				
(6) 54W T5H0	H1A6X54-U <b>(b)</b>				
(6) 54W T5HO	H1B6X54-U <b>(b)</b>				
(6) 54W T5HO	H1C6X54-U <b>(b)</b>				
(6) 54W T5H0	H1E6X54-U <b>(b)</b>				
6' CORD & PLUG					
(6) 32W T8	H2A6X32- <b>(a)(b)</b>				
(6) 32W T8	H2B6X32- <b>(a)(b)</b>				
(6) 32W T8	H2C6X32- <b>(a)(b)</b>				
(6) 32W T8	H2E6X32- <b>(a)(b)</b>				
(6) 54W T5H0	H2A6X54- <b>(a)(b)</b>				
(6) 54W T5HO	H2B6X54- <b>(a)(b)</b>				
(6) 54W T5H0	H2C6X54- <b>(a)(b)</b>				
(6) 54W T5HO	H2E6X54- <b>(a)(b)</b>				
2-LEVEL INTEGRATED M	OTION SENSOR (ADD "K" AF	TER CATALOG NUMBER S	SUFFIX TO DENOTE MOTION	SENSOR OPTION)	
T8 (120-277V) (uses pro	ogram start ballast)				
T5HO (120-277V, 347V [	Canada only], 480V)				

## **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX				
BALLAST CHOICES FOR HARD WIRE						
<b>480V</b> (T5HO only)	5					
Canada 347V	6					
BALLAST CHOICES WITH 6' CORD & PLUG (a)						
120V	1					
277V	2					
208V	3					
240V	4					
<b>480V</b> (T5HO only)	5					
Canada 347V	6					
Dual Switching (120V Cord & Plug)	1	D				
Dual Switching (277V Cord & Plug)	2	D				
<b>Dual Switching</b> (without cord)		D				
Housing for use with Plug-N-Go						
Emergency Ballast <sup>♠</sup> (120 or 277V only)	1 or 2	EB				
High Reflectance White Reflector						
(A, B, C, D and E optical configurations only)		W				
Lamp Color Temperature (b)						
3500K		3				
4100K		4				
5000K		5				
Premium XL/SPX T8 Lamps by GE® (Replace "X" with "P". Example: H1A6X32-U4 bec	Premium XL/SPX T8 Lamps by GE® (Replace "X" with "P". Example: H1A6X32-U4 becomes H1A6P32-U4)					

<sup>▲</sup> Order emergency ballast from **FIELD-INSTALLED ACCESSORIES** 

WIRING FOR DUAL SWITCHING

Fixture is factory wired as follows: **T8**: Circuit 1 – 3 lamps **T5H0**: Circuit 1 – 4 lamps Circuit 2 – 3 lamps Circuit 2 – 2 lamps

## FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER				
	Locking-type Receptacle (120V)	L5-15R				
** <b>a</b> ~	<b>Locking-type Rec.</b> (120V, 4-wire D or EB option)	L14-20R				
7	Locking-type Receptacle (208- or 240V)	L6-15R				
	Locking-type Receptacle (277V)	L7-15R				
	<b>Locking-type Rec.</b> (277V, 4-wire D or EB option)	L16-20R				
	Locking-type Receptacle (Canada 347V)	L37*20R				
	Locking-type Receptacle (480V)	L8-20R				
	5-foot Safety Cable	SC-5				
17	(Order 2 if using to mount fixture)					
	Lens Kit	H-LK6				
	Wire Guard	H-WG6				
	(Grid pattern of wires is 2" x 2.5")					
	Plug-N-Go Emergency Ballast <sup>▼</sup>					
	T8: 800 Lumens (120- or 277V)	H-EB800D				
	T8: 1350 Lumens (120- or 277V)	H-EB1400D				
	T8: 3000 Lumens (120- or 277V)	H-EB3000D				
	Consult factory for T5HO lumen data					
Fixture must be ordered with option "EB" from <b>FACTORY-INSTALLED OPTIONS</b>						

SEE PAGES 50-51 FOR MORE INFORMATION ABOUT THESE ACCESSORIES



#### ALL FIXTURES COME WITH TWO **WIRE-FORM HANGERS FOR MOUNTING**

#### DIMENSIONS



**A**=6.0" (152 mm), **B**=3.3" (83 mm), C=48.8" (124 cm), D=Minimum distance between hangers is 39.4" (100 cm). Fixture is 24" (610 mm) wide.





# HN SERIES by DIRECT



#### 6-LAMP SLIM ECONOMY FLUORESCENT HIGH BAY

Fixtures feature a die-formed galvanized steel housing. T5HO fixture is supplied with programmed-start electronic ballast. T8 fixture is supplied with a high-ballast-factor, instant-start electronic ballast. The fixture is supplied with high-efficiency specular aluminum (95% reflectance) reflectors for narrow distribution. Premium lamp option includes long life, higher lumen lamps. Meets 2008 NEC Article 410.130(G) and CEC ballast disconnect requirements. **NOTE**: Mount fixtures a minimum distance of 7.5" below ceiling.

**APPLICATIONS:** Warehouse, industrial, commercial, retail projects and aisles

#### LAMPS INCLUDED

	LAMP WATTAGE	CATALOG NUMBER					
	HARD WIRE						
$\odot$	(6) 32W T8	HN16X32-U <b>(b)</b>					
$\odot$	(6) 54W T5HO	HN16X54-U <b>(b)</b>					
	6' CORD & PLUG						
$\bigcirc$	(6) 32W T8	HN26X32- <b>(a)(b)</b>					
$\bigcirc$	(6) 54W T5H0	HN26X54- <b>(a)(b)</b>					
	2-LEVEL INTEGRATED A	MOTION SENSOR (ADD	" <b>K</b> " AFTER CATAI	LOG NUMBER SU	IFFIX TO DENOTE	MOTION SENSO	R OPTION)
$\odot$	T8 (120-277V) (uses pr	ogram start ballast)					
$\odot$	T5HO (120-277V, 347V	[Canada only], 480V)					

#### **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX				
BALLAST CHOICES FOR HARD WIRE						
<b>480V</b> (consult factory for T8)	5					
Canada 347V	6					
BALLAST CHOICES WITH 6' CORD & PLUG (a)						
120V	1					
277V	2					
208V	3					
240V	4					
<b>480V</b> (T5HO only)	5					
Canada 347V	6					
Dual Switching (120V Cord & Plug)	1	D				
Dual Switching (277V Cord & Plug)	2	D				
<b>Dual Switching</b> (without cord)		D				
Housing for use with Plug-N-Go						
Emergency Ballast (120 or 277V only)	1 or 2	EB				
High Reflectance White Reflector		W				
Lamp Color Temperature (b)						
3500K		3				
4100K		4				
5000K		5				
Premium XL/SPX T8 Lamps by GE® (Replace "X" with "P". Example: HN16X32-U4 bec	Premium XL/SPX T8 Lamps by GE® (Replace "X" with "P". Example: HN16X32-U4 becomes HN16P32-U4)					

Order emergency ballast from FIELD-INSTALLED ACCESSORIES

#### **DUAL SWITCHING WIRING**

Fixture is factory wired as follows: **T8**: Circuit 1 – 3 lamps **T5H0**: Circuit 1 – 4 lamps Circuit 2 – 3 lamps Circuit 2 – 2 lamps

## FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
*	Locking-type Rec. (120V, 4-wire D or EB option)	L14-20R	
	Locking-type Receptacle (208- or 240V)	L6-15R	
	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Rec. (277V, 4-wire D or EB option)	L16-20R	
	Locking-type Receptacle (Canada 347V)	L37*20R	
	Locking-type Receptacle (480V)	L8-20R	
	5-foot Safety Cable	SC-5	
17	(Order 2 if using to mount fixture)		
	Wire Guard	H-WG6N	
	(Grid pattern of wires is 2.375" x 2.375")		
	Plug-N-Go Emergency Ballast <sup>▼</sup>		
E Company of the Comp	T8: 800 Lumens (120- or 277V)	H-EB800D	
	T8: 1350 Lumens (120- or 277V)	H-EB1400D	
	T8: 3000 Lumens (120- or 277V)	H-EB3000D	
	Consult factory for T5HO lumen data		

Fixture must be ordered with option "EB" from FACTORY-INSTALLED OPTIONS

SEE PAGES 50-51 FOR MORE INFORMATION ABOUT THESE ACCESSORIES



## ALL FIXTURES COME WITH TWO WIRE-FORM HANGERS FOR MOUNTING

#### **DIMENSIONS**



**A**=6.0" (152 mm), **B**=3.3" (83 mm), **C**=48.8" (124 cm), **D**=Minimum distance between hangers is 39.4" (100 cm). Fixture is 24" (610 mm) wide.





# HN SERIES by DIRECT

#### 8-LAMP SLIM ECONOMY FLUORESCENT HIGH BAY

Fixtures feature a die-formed galvanized steel housing. T5HO fixture is supplied with programmed-start electronic ballast. T8 fixture is supplied with a high-ballast-factor, instant-start electronic ballast. The fixture is supplied with high-efficiency specular aluminum (95% reflectance) reflectors for narrow distribution. Premium lamp option includes long life, higher lumen lamps. Meets 2008 NEC Article 410.130(G) and CEC ballast disconnect requirements. **NOTE**: Mount fixtures a minimum distance of 7.5" below ceiling.

**APPLICATIONS:** Warehouse, industrial, commercial, retail projects and aisles

#### LAMPS INCLUDED

	LAMP WATTAGE	CATALOG NUMBER					
	HARD WIRE						
$\bigcirc$	(8) 32W T8	HN18X32-U <b>(b)</b>					
$\bigcirc$	(8) 54W T5H0	HN18X54-U <b>(b)</b>					
	6' CORD & PLUG						
$\bigcirc$	(8) 32W T8	HN28X32- <b>(a)(b)</b>					
$\bigcirc$	(8) 54W T5H0	HN28X54- <b>(a)(b)</b>					
	2-LEVEL INTEGRATED	MOTION SENSOR (ADD	" <b>K</b> " AFTER CATAI	log number su	IFFIX TO DENOTE	MOTION SENSO	R OPTION)
$\bigcirc$	T8 (120-277V) (uses	program start ballast)					
$\bigcirc$	T5HO (120-277V, 347	V [Canada only], 480V)					

#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
BALLAST CHOICES WITH 6' CORD & PLUG (a)			
120V	1		
277V	2		
208V	3		
240V	4		
Dual Switching (120V Cord & Plug)	1	D	
Dual Switching (277V Cord & Plug)	2	D	
<b>Dual Switching</b> (without cord)		D	
Housing for use with Plug-N-Go			
Emergency Ballast (120 or 277V only)	1 or 2	EB	
High Reflectance White Reflector		W	
Lamp Color Temperature (b)			
3500K		3	
4100K		4	
5000K		5	
Premium XL/SPX T8 Lamps by GE® (Replace "X" with "P". Example: HN18X32-U4 bed	comes HN18 <b>P</b> 32-	U4)	

Order emergency ballast from FIELD-INSTALLED ACCESSORIES

#### **DUAL SWITCHING WIRING**

Fixture is factory wired as follows: **T8 & T5HO**: Circuit 1 - 4 lamps Circuit 2 - 4 lamps

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
*	Locking-type Rec. (120V, 4-wire D or EB option)	L14-20R	
	Locking-type Receptacle (208- or 240V)	L6-15R	
	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Rec. (277V, 4-wire D or EB option)	L16-20R	
	<b>5-foot Safety Cable</b> (Order 2 if using to mount fixture)	SC-5	
	<b>Wire Guard</b> (Grid pattern of wires is 2.375" x 2.375")	H-WG6N	
	Plug-N-Go Emergency Ballast <sup>▼</sup>		
	T8: 800 Lumens (120- or 277V)	H-EB800D	
	T8: 1350 Lumens (120- or 277V)	H-EB1400D	
	T8: 3000 Lumens (120- or 277V)	H-EB3000D	
	Consult factory for T5HO lumen data		

Fixture must be ordered with option "EB" from **FACTORY-INSTALLED OPTIONS** 



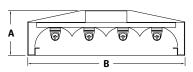


#### 4-LAMP LENSED FLUORESCENT HIGH BAY

Designed for industrial and commercial applications where a lensed fixture is required. Features die-formed, 20-gauge cold rolled steel housing and cover. The lensed linear fixture provides a high-efficient alternative to HID systems. Choose from T5HO or T8 lamps. Fixture is supplied with electronic universal ballast and aluminum reflector (with 95% reflectance). T5HO fixture features programmed, rapid-start ballast and T8 features instant-start ballast. Meets 2008 NEC Article 410.130(G) and CEC ballast disconnect requirements.

**APPLICATIONS:** Industrial or commercial projects requiring a lensed unit.

#### **DIMENSIONS**



**A**=4.8" (122 mm), **B**=15" (381 mm) Fixture is 48" (121 cm) long.



#### ORDER LAMPS SEPARATELY

LAMP WATTAGE	HARD WIRE	WITH 6' 18/3 WHIP
(4) 32W T8	HE14X3201	HE24X3201
(4) 54W T5H0	HE14X5401	HE24X5401

#### CONSULT FACTORY FOR NEW CATALOG NUMBER IF CHOOSING FACTORY-INSTALLED OPTIONS BELOW.

#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	
Universal Ballast (120V-277V)	
Canada 347V Ballast	
480V Ballast	
Fusing (1 per fixture, 120 or 277V only)	
<b>Motion Sensor</b> (120, 277 or 480V only) (n/a 347V)	
Emergency Ballast - T5H0 Fixtures EM-1 ballast without whip (one lamp in emergency mode, 700 lumens) (120 or 277V only)	
EM-1 ballast with 6' 18/4 whip (one lamp in emergency mode, 700 lumens) (120 or 277V only)	
EM-2 ballast without whip (one lamp in emergency mode, 1250 lumens) (120 or 277V only)	
EM-2 ballast with 6' 18/4 whip (one lamp in emergency mode, 1250 lumens) (120 or 277V only)	
Emergency Ballast - T8 Fixtures EM-1 ballast without whip (one lamp in emergency mode, 500-600 lumens) (120 or 277V only)	
EM-1 ballast with 6' 18/4 whip (one lamp in emergency mode, 500-600 lumens) (120 or 277V only)	
EM-2 ballast without whip (two lamps in emergency mode, 1350 lumens) (120 or 277V only)	
EM-2 ballast with 6' 18/4 whip (two lamps in emergency mode, 1350 lumens) (120 or 277V only)	
Wire Guard	

#### FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
5-foot Safety Cable		
(Use 2 if using to mount fixture)	SC-5	
Chain Hanger Assembly		
(Includes 2-42" chains and 2 V-hanger hooks)	*JCH	



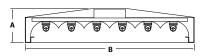
# HE SERIES by DIRECT

#### 6-LAMP LENSED FLUORESCENT HIGH BAY

Designed for industrial and commercial applications where a lensed fixture is required. Features die-formed, 20-gauge cold rolled steel housing and cover. The lensed linear fixture provides a high-efficient alternative to HID systems. Choose from T5HO or T8 lamps. Fixture is supplied with electronic universal ballast and aluminum reflector (with 95% reflectance). T5HO fixture features programmed, rapid-start ballast and T8 features instant-start ballast. Meets 2008 NEC Article 410.130(G) and CEC ballast disconnect requirements.

**APPLICATIONS:** Industrial or commercial projects requiring a lensed unit.

#### **DIMENSIONS**



**A**=4.8" (122 mm), **B**=24" (610 mm) Fixture is 48" (121 cm) long.



#### ORDER LAMPS SEPARATELY

LAMP WATTAGE	HARD WIRE	WITH 6' 18/3 WHIP
(6) 32W T8	HE16X3201	HE26X3201
(6) 54W T5H0	HE16X5401	HE26X5401

#### CONSULT FACTORY FOR NEW CATALOG NUMBER IF CHOOSING FACTORY-INSTALLED OPTIONS BELOW.

#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	
Universal Ballast (120V-277V)	
Canada 347V Ballast	
480V Ballast	
Fusing (1 per fixture, 120 or 277V only)	
<b>Motion Sensor</b> (120, 277 or 480V only) (n/a 347V)	
Emergency Ballast - T5H0 Fixtures EM-1 ballast without whip (one lamp in emergency mode, 700 lumens) (120 or 277V only)	
EM-1 ballast with 6' 18/4 whip (one lamp in emergency mode, 700 lumens) (120 or 277V only)	
EM-2 ballast without whip (one lamp in emergency mode, 1250 lumens) (120 or 277V only)	
EM-2 ballast with 6' 18/4 whip (one lamp in emergency mode, 1250 lumens) (120 or 277V only)	
Emergency Ballast - T8 Fixtures EM-1 ballast without whip (one lamp in emergency mode, 500-600 lumens) (120 or 277V only)	
EM-1 ballast with 6' 18/4 whip (one lamp in emergency mode, 500-600 lumens) (120 or 277V only)	
EM-2 ballast without whip (two lamps in emergency mode, 1350 lumens) (120 or 277V only)	
EM-2 ballast with 6' 18/4 whip (two lamps in emergency mode, 1350 lumens) (120 or 277V only)	
Wire Guard	

#### FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
5-foot Safety Cable (Use 2 if using to mount fixture)	SC-5	
Chain Hanger Assembly		
(Includes 2-42" chains and 2 V-hanger hooks)	*JCH	



# HS SERIES by DIRECT

#### 4-FOOT WET-LISTED FLUORESCENT

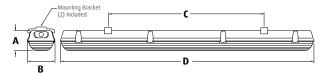
HS Series fixtures are suitable for low to medium mounting heights. The housing is a one-piece molded, impact resistant, UV stabilized, fiberglass-reinforced polyester. The ballast tray requires no tools to remove for servicing and the retaining clips and two nylon safety straps provide easy hands-free wiring. Snap-on mounting brackets are supplied with each fixture to eliminate the need to drill into the housing. Ceiling or soffit mounted. Meets 2008 NEC Article 410.130(G) and CEC ballast disconnect requirements.

APPLICATIONS: Areas where dust and humidity are present. Ideal for canopies, dock areas, food processing areas or any other non-hazardous environment.

#### LAMPS INCLUDED

LAMP WATTAGE	HARD WIRE	WITH 6' CORD
(2) 32W T8	HS14V2X32-U <b>(b)</b>	HS24V2X32-U <b>(b)</b>
(2) 54W T5H0	HS14V2X54-U <b>(b)</b>	HS24V2X54-U <b>(b)</b>

#### **DIMENSIONS**



**A**=3.8" (97 mm), **B**=5.5" (140 mm), **C**=31.5" (80 cm), **D**=50.3" (128 cm)







#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
BALLAST CHOICES			
<b>480V</b> (T5HO only)	5		
Canada 347V	6		
Dual Switching (with cord) Dual Switching (without cord)		D D	
Fuse			
Single Fuse (120, 277 or 347V)	1, 2 or 6	F	
Double Fuse (208, 240 or 480V) (n/a Canada)	3, 4 or 5	F	
Stainless Steel Latches		S	
Lamp Color Temperature (b)			
3500K		3	
4100K		4	
5000K		5	
Premium XL/SPX T8 Lamps by GE® (Replace "X" with "P". Example: HS14V2X32-U4 becomes HS14V2P32-U4)			

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
Co	Wet Location Fitting (1/2" conduit entry)	HS-WLF1/2	
	Aircraft Cable Mounting Kit (stainless steel) (Includes 2 5' aircraft cables and 2 bail hooks. Order 1 per 4' fixture)	HS-ACMTK5	



# HT SERIES by DIRECT

#### 8-FOOT WET-LISTED FLUORESCENT

HT Series fixtures are suitable for low to medium mounting heights. The housing is a one-piece molded, impact resistant, UV stabilized, fiberglass-reinforced polyester. The ballast tray requires no tools to remove for servicing and the retaining clips and two nylon safety straps provide easy hands-free wiring. Snap-on mounting brackets are supplied with each fixture to eliminate the need to drill into the housing. Ceiling or soffit mounted. Meets 2008 NEC Article 410.130(G) and CEC ballast disconnect requirements.

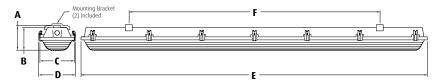
**NOTE:** \$75 handling charge applies when ordering less than four fixtures.

**APPLICATIONS:** Areas where dust and humidity are present. Ideal for canopies, dock areas, food processing areas or any other non-hazardous environment.

#### **LAMPS INCLUDED**

LAMP WATTAGE	HARD WIRE	WITH 6' CORD
(4) 32W T8	HT18A4X32-U <b>(b)</b>	HT28A4X32-U <b>(b)</b>
(4) 54W T5H0	HT18A4X54-U <b>(b)</b>	HT28A4X54-U <b>(b)</b>

#### **DIMENSIONS**



**A**=4.9" (124 mm), **B**=4.5" (114 mm), **C**=6.8" (171 mm)

**D**=7.4" (187 mm), **E**=100.0" (254 cm)

F=Variable spacing to meet mounting surface needs







#### **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
BALLAST CHOICES			
<b>480V</b> (T5HO only)	5		
Canada 347V	6		
<b>Dual Switching</b> (with cord)		D	
<b>Dual Switching</b> (without cord)		D	
Fuse			
Single Fuse (120, 277 or 347V)	1, 2 or 6	F	
Double Fuse (208, 240 or 480V) (n/a Canada)	3, 4 or 5	F	
Stainless Steel Latches		S	
Lamp Color Temperature (b)			
3500K		3	
4100K		4	
5000K		5	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
Co	Wet Location Fitting (1/2" conduit entry)	HS-WLF1/2	
	Aircraft Cable Mounting Kit (stainless steel) (Includes 2 5' aircraft cables and 2 bail hooks. Order 1 per 8' fixture)	HT-ACMTK5	

## WHEN IS IT BEST

## To Use a Low Bay Fixture?

Typically, low bay lighting is an ideal choice for industrial, commercial or retail applications. It's always a good idea to consult an Application Engineer to provide a beneficial recommendation for your lighting project. Application Engineers utilize ceiling height and other project-specific variables such as type of mounting, ballast design, and optical system to determine what fixture will work best within the area for the task at hand. Ideally, a low bay installation should mate fixture, lamp type and wattage with a desirable mounting height and consistent spacing to ensure maximum lighting uniformity and optical distribution.

## WHAT LAMP STYLES ARE AVAILABLE?

#### **LINEAR FLUORESCENT LAMPS**



Linear fluorescent is available in two main models—T5HO and T8 with a varying number of lamps per fixture. Linear fluorescent products can be purchased with high-

efficiency specular aluminum or high-reflectance white reflectors. They are capable of providing comparable light levels with less brightness, due mostly to their longer linear shape and reduced output per lamp. High reflectance white reflectors are typically recommended for lower mounting heights where more uniform light distribution and reduced glare is desired. Fluorescent lamps retain as much as 95 % of their initial lumen output at 40 % of rated life whereas HID lamp lumens can be anywhere from 60 to 85 % of initial at 40 % of rated lamp life.

#### HIGH-INTENSITY DISCHARGE (HID) LAMPS



IC Series with 16.6" diameter reflector, page 44

HID lamps emit light from a capsule of gas rather than a filament. The main variable you need to consider with an HID fixture is the aperture size, generally ranging from 16 to 30 inches in diameter. Typically, a wider aperture diameter creates a wider distribution

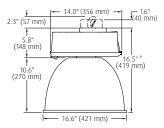
that allows for greater spacing criteria with less source brightness. In addition, the lower the mounting height the more likely a wider diameter low bay will work best.

For assistance with creating a lighting layout or selecting the appropriate low bay fixture, call our Application Engineers at

(800) 236-7000



A Minimum 105°C Supply Conductors Are Required for HSB Mount NOT FOR USE IN DWELLINGS.



NOTE: \* 1000W MH uses a spacer between the reflector and the housing, adding 2" (51 mm) to overall fixture height.



for Damp

## IA SERIES by DIRECT



#### 16" ALUMINUM HIGH BAY

The IA Series fixture is designed to control glare and is a good option for a variety of commercial and retail applications. The sealed die-cast aluminum housing with aluminum reflector provides more than 80% efficiency. Select from a variety of lamp types and wattages through 1000W, ballast options and mounts. Wet listed fixture option available.

**APPLICATIONS:** Commercial or retail projects where controlling glare is important.

#### **LAMP INCLUDED**

	LAMP WATTAGE	CATALOG # HSB MOUNT	CATALOG # HCP MOUNT
	150W PSMH	IA1615-M0	IA2615- <b>(a)</b> 0
$\bigcirc$	250W PSMH	IA1625-M0	IA2625- <b>(a)</b> 0
$\odot$	320W PSMH <b>₽</b>	IA1632-M0	IA2632- <b>(a)</b> 0
$\bigcirc$	400W PSMH	IA1640-M0	IA2640- <b>(a)</b> 0
	750W PSMH <sup>▲</sup>	IA1675-MN	IA2675- <b>(a)</b> N
	1000W PSMH <b>₽</b>	IA1699-MEN	IA2699- <b>(a)</b> EN
	1000W MH <sup>▼</sup>	IA1499-MN	IA2499- <b>(a)</b> N
	150W HPS	IA1515-M	IA2515- <b>(a)</b>
	250W HPS	IA1525-M	IA2525- <b>(a)</b>
	400W HPS	IA1540-M	IA2540- <b>(a)</b>
	_		



- S-rated lamp, open-rated not available; specify enclosed if required. See Options.
- S-rated lamp, specify open-rated lamp if required. See Options.



HINGED SPLICE



HOOK, CORD & PLUG

**SEE PAGE 49 FOR MORE INFORMATION ABOUT THESE MOUNTINGS** 

#### WET LISTED OPTION

EZ Bay Plus Wet Listed fixtures are an excellent choice for environments with heavy spray-downs such as produce storage centers, dairy barns, misting zones and other commercial locations. Our reflectors are totally enclosed with full silicone gasketing at connection to fixture and between lens and frame

To order replace "I" prefix with "IP" and add "E" lens suffix. 400W maximum.

Example: IA1625-MO becomes IPA1625-ME



**EYEBOLT** & CORD



c(UL)us for Wet Locations

#### FACTORY-INSTALLED OPTIONS

	DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
•	BALLAST CHOICES FOR HINGED SPLICE BOX			
	277V Reactor (PSMH only)	27		
	<b>480V</b> (150W HPS only) (MH, PSMH, and 250W-400W HPS only)	5 5		
	Canada Tri-volt (120/277/347V) (150W HPS only) (MH, PSMH, and 250W-400W HPS only)	T T		
	BALLAST CHOICES FOR HOOK, CORD & PLUG (	a)		
	277V Reactor ballast (PSMH only)	27		
	120V, 277V, 208V, or 240V	1, 2, 3 or 4		
	<b>480V</b> (150W HPS only) (MH, PSMH, and 250W-400W HPS only)	5 5		
	Canada 347V	6		
	<b>Single Fuse</b> (277V reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
	<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
•	<b>2-Level Integrated Sensor</b> (120, 277, 208, 240, 480, or 347V) (n/a 277V Reactor)	1, 2, 3, 4, 5 or 6	K	
	Quartz Standby (delay-relay type) (includes 100W Q lamp) (n/a 277V Reactor)		Q	
	Flat Glass Lens <sup>1</sup> (Standard on 1000W PSMH) 750W PSMH, 1000W MH, HPS ( BT37 reduced envelope lamp on MH & PSMH)		E	
	(150W - 400W PSMH only)		change O to E	
	Adjustable Neck Housing (standard on 750W-1000W PSMH & 1000W MH)		N	
	Open-rated lamp (1000W MH only)		0	
	Optical Chamber Air Filter (for use only with "E" lens options)		В	
	Wire Guard (750W PSMH, 1000W MH, HPS only) (use only with "E" Flat Glass Lens) (see Accessories for fixture with no lens)		W	
	† Available for use on Wet Listed fixtures. No adder	for "E" lens on Wet	Listed fixtures.	

#### FIELD-INSTALLED ACCESSORIES

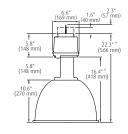
	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
*	Locking-type Receptacle (208- or 240V)	L6-15R	
4	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Receptacle (Canada 347V)	L37*20R	
	Locking-type Receptacle (480V)	L8-20R	
	Power Hook (for use with HCP mount)	PH- <b>(a)</b>	
	(120V, 277V or 277V Reactor, 208V, 240V)	(1, 2, 3, 4)	
	Power Hook (480V)	PH-5	
	Power Hook (Canada 347V)	PH±6	
1100	Safety Cable with Hang-Fast, Galvanized	SC-5	
Mo	Safety Cable with Hang-Fast, Stainless (Wet Listed)	SC-5C	
	(Cable is 5' /1.5 m)		
	Wire Guard (for fixture with no lens)	WG-A	
	Wise Coast with Palessa Occasion	MC VOC	
	Wire Guard with Relamp Opening (for fixture with no lens)	WG-A/OC	
† Available for u	se on Wet Listed fixtures.		

SEE PAGES 50-51 FOR MORE INFORMATION ABOUT THESE ACCESSORIES

#### **ADJUSTABLE NECK OPTION**

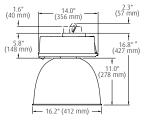
STANDARD ON 750W & 1000W PSMH and 1000W MH

NOTE: \* 1000W MH, use a spacer between the reflector and the housing, adding 2" (51 mm) to overall fixture height.





A Minimum 105°C Supply Conductors Are Required for HSB Mount NOT FOR USE IN DWELLINGS.



 ${f NOTE}$ : \* 400W PSMH uses a spacer between the reflector and the housing, adding 2" (51 mm) to overall fixture height.

# IAP SERIES by DIRECT



#### **16" PRISMATIC HIGH BAY**

The IAP Series fixture is the perfect choice for commercial and retail applications. The sealed die-cast aluminum housing with clear acrylic prismatic reflector delivers more than 90% efficiency and approximately 15% uplight. Select from a variety of lamp types and wattages through 400W, ballast options and mounts. NOTE: Enclosure not available higher than 250 watts. Consult factory if using in environment with industrial cutting fluids.

**APPLICATIONS:** Commercial or retail projects.

#### LAMP INCLUDED

LAMP WATTAGE	CATALOG # HSB MOUNT	CATALOG # HCP MOUNT
150W PSMH	IAP1615-M0	IAP2615- <b>(a)</b> 0
250W PSMH	IAP1625-M0	IAP2625- <b>(a)</b> 0
320W PSMH <b>₽</b>	IAP1632-M0	IAP2632- <b>(a)</b> 0
400W PSMH	IAP1640-M0	IAP2640- <b>(a)</b> 0
150W HPS	IAP1515-M	IAP2515- <b>(a)</b>
250W HPS	IAP1525-M	IAP2525- <b>(a)</b>
400W HPS	IAP1540-M	IAP2540- <b>(a)</b>
	WATTAGE  150W PSMH  250W PSMH  320W PSMH  400W PSMH  150W HPS  250W HPS	WATTAGE HSB MOUNT  150W PSMH IAP1615-M0  250W PSMH IAP1625-M0  320W PSMH





HINGED SPLICE



SEE PAGE 49 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS** 



All PSMH fixtures are supplied with open-rated lamps and sockets

#### FACTORY-INSTALLED OPTIONS

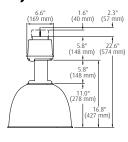
DESCRIPTION	CHANGE SUFFIX TO		
BALLAST CHOICES FOR HINGED SPLICE E	юх		
277V Reactor (PSMH only)	27		
<b>480V</b> (150W HPS only)	5		
(PSMH & 250W-400W HPS only)	5		
Canada Tri-volt (120/277/347V) (150W HPS	′′		
(PSMH & 250W-400W HPS only)	T		
BALLAST CHOICES FOR HOOK, CORD & P			
277V Reactor ballast (PSMH only)	27		
120V, 277V, 208V, or 240V	1, 2, 3 or 4		
<b>480V</b> (150W HPS only)	5		
(PSMH & 250W-400W HPS only)	5		
Canada 347V	6	_	
Single Fuse (277V reactor, 120V, 277V or 347			
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
<b>2-Level Integrated Sensor</b> (120, 277, 208, 240, 480, or 347V) (n/a 277V Rea	ctor) 1, 2, 3, 4, 5 or	6 K	
Quartz Standby (delay-relay type)	1, 2, 3, 4, 3 0	0 K	
(includes 100W Q lamp) (n/a 277V Reactor)		Q	
Prismatic Acrylic Drop Lens 250W HPS max (n/a with "W" option) 250W PSMH max (n/a with "W" option)		A change 0 to A	
Flat Acrylic Lens 250W HPS max 250W PSMH max		E change 0 to E	
Conical Acrylic Drop Lens 250W HPS max (n/a with "W" option) 250W PSMH max (n/a with "W" option)		Y change 0 to Y	
Adjustable Neck Housing		N	
<b>Optical Chamber Air Filter</b> (250W max) (for use only with "A", "E" or "Y" lens options)		В	
<b>Wire Guard</b> (use only with "E" Flat Acrylic Lens (see Accessories for fixture with no lens)	5)	W	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
*	Locking-type Receptacle (208- or 240V)	L6-15R	
<b>**</b> **	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Receptacle (Canada 347V)	L37*20R	
	Locking-type Receptacle (480V)	L8-20R	
	Power Hook (for use with HCP mount)	PH- <b>(a)</b>	
	(120V, 277V or 277V Reactor, 208V, 240V)	(1, 2, 3, 4)	
	Power Hook (480V)	PH-5	
	Power Hook (Canada 347V)	PH*6	
	Safety Cable with Hang-Fast (Cable is 5' /1.5 m)	SC-5	
	Wire Guard (for fixture with no lens)	WG-AP	
	Wire Guard with Relamp Opening (for fixture with no lens)	WG-AP/OC	

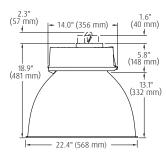
SEE PAGES 50-51 FOR MORE INFORMATION ABOUT THESE ACCESSORIES

#### **ADJUSTABLE NECK OPTION**





A Minimum 105°C Supply actors Are Required for HSB Mount NOT FOR USE IN DWELLINGS.



# IAR SERIES by DIRECT



## 22"/25" PRISMATIC HIGH BAY

The IAR Series fixture is an ideal choice for a variety of commercial and retail applications. The sealed die-cast aluminum housing with clear acrylic prismatic reflector provides more than 90% efficiency and approximately 15% uplight. Select from a variety of lamp types and wattages through 1000W, ballast options and mounts. NOTE: Enclosure not available higher than 400 watts. Consult factory if using in environment with industrial cutting fluids.

**APPLICATIONS:** Commercial or retail projects.

#### LAMP INCLUDED

LAMP WATTAGE	CATALOG # HSB MOUNT	CATALOG # HCP MOUNT
250W PSMH	IAR1625-M0	IAR2625- <b>(a)</b> 0
320W PSMH <b>₽</b>	IAR1632-M0	IAR2632- <b>(a)</b> 0
400W PSMH	IAR1640-M0	IAR2640- <b>(a)</b> 0
750W PSMH <sup>▲▼</sup>	IAR1675-MN	IAR2675- <b>(a)</b> N
1000W MH	IAR1499-MN	IAR2499- <b>(a)</b> N
250W HPS	IAR1525-M	IAR2525- <b>(a)</b>
400W HPS	IAR1540-M	IAR2540- <b>(a)</b>
	WATTAGE  250W PSMH  320W PSMH   400W PSMH  750W PSMH  1000W MH  250W HPS	WATTAGE         HSB MOUNT           250W PSMH         IAR1625-M0           320W PSMH         IAR1632-M0           400W PSMH         IAR1640-M0           750W PSMH <sup>↑</sup> IAR1675-MN           1000W MH         IAR1499-MN           250W HPS         IAR1525-M



S-rated lamp, open-rated not available; wattage too high for enclosure



HINGED SPLICE



HOOK, CORD &

SEE PAGE 49 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS** 



All PSMH fixtures are supplied with open-rated lamps and sockets

#### FACTORY-INSTALLED OPTIONS

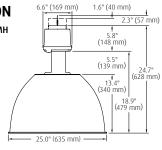
DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
BALLAST CHOICES FOR HINGED SPLICE BOX			
277V Reactor (PSMH only)	27		
480V	5		
Canada Tri-volt (120/277/347V)	T		
BALLAST CHOICES FOR HOOK, CORD & PLUG	(a)		
277V Reactor ballast (PSMH only)	27		
120V, 277V, 208V, or 240V	1, 2, 3 or 4		
480V	5		
Canada 347V	6		
<b>Single Fuse</b> (277V reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
<b>2-Level Integrated Sensor</b> (120, 277, 208, 240, 480, or 347V) (n/a 277V Reactor)	1, 2, 3, 4, 5 or 6	K	
<b>Quartz Standby</b> (delay-relay type) (includes 100W Q lamp) (n/a 277V Reactor)		Q	
Prismatic Acrylic Drop Lens 400W HPS max (n/a with "W" option) 400W PSMH max (n/a with "W" option)		A change 0 to A	
Flat Acrylic Lens 400W HPS max 400W PSMH max		E change 0 to E	
Conical Acrylic Drop Lens 400W HPS max (n/a with "W" option) 400W PSMH max (n/a with "W" option)		Y change 0 to Y	
Adjustable Neck Housing (standard on 750W PSMH & 1000W MH)		N	
Open-rated lamp (1000W MH only)		0	
Optical Chamber Air Filter (250W max) (for use only with "A", "E" or "Y" lens options)		В	
Wire Guard (use only with "E" Flat Acrylic Lens) (see Accessories for fixture with no lens)		W	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
**	Locking-type Receptacle (208- or 240V)	L6-15R	
<b>W</b> 7	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Receptacle (Canada 347V)	L37*20R	
	Locking-type Receptacle (480V)	L8-20R	
	Power Hook (for use with HCP mount)	PH- <b>(a)</b>	
	(120V, 277V or 277V Reactor, 208V, 240V)	(1, 2, 3, 4)	
	Power Hook (480V)	PH-5	
	Power Hook (Canada 347V)	PH*6	
ILCon	Safety Cable with Hang-Fast	SC-5	
	(Cable is 5' /1.5 m)		
	Wire Guard (for fixture with no lens)	WG-AR	
	(n/a with 750W PSMH or 1000W MH)		
	Wire Guard with Relamp Opening	WG-AR/OC	
	(for fixture with no lens)		
	(n/a with 750W PSMH or 1000W MH)		

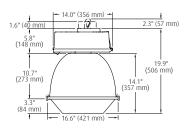
SEE PAGES 50-51 FOR MORE INFORMATION ABOUT THESE ACCESSORIES





<sup>▼ 25&</sup>quot; diameter reflector and Adjustable Neck (option "N") are standard





# IC SERIES by DIRECT

#### 16" COMPACT LOW BAY

The Compact Low Bay features an acrylic refractor that is injection molded with a prismatic design to soften and disperse light from the reflector for maximum efficiency and glare control. Choose from a variety of high-power factor ballasts, mogul-base lamps up to 400W, and mountings. Wet listed fixture option is available.

**APPLICATIONS:** Low to medium mounting heights, commercial or retail projects.

#### LAMP INCLUDED

	LAMP WATTAGE	CATALOG # HSB MOUNT	CATALOG # HCP MOUNT
	150W PSMH	IC1615-M	IC2615- <b>(a)</b>
•	250W PSMH	IC1625-M	IC2625- <b>(a)</b>
•	320W PSMH <b></b>	IC1632-M	IC2632- <b>(a)</b>
•	400W PSMH	IC1640-M	IC2640- <b>(a)</b>
	150W HPS	IC1515-M	IC2515- <b>(a)</b>
	250W HPS	IC1525-M	IC2525- <b>(a)</b>
	400W HPS	IC1540-M	IC2540- <b>(a)</b>

Reduced envelope lamp. ED28 for 320W PSMH.



HINGED SPLICE BOX



HOOK, CORD & PLUG

**SEE PAGE 49 FOR MORE INFORMATION ABOUT THESE MOUNTINGS** 

#### WET LISTED OPTION

EZ Bay Plus Wet Listed fixtures are an excellent choice for environments with heavy spray-downs such as produce storage centers, dairy barns, misting zones and other commercial locations. Our reflectors are totally enclosed with full silicone gasketing at connection to fixture and between lens and frame

To order replace "I" prefix with "IP". Example: IC1625-M becomes IPC1625-M



**EYEROIT** & CORD



c(UL)us for Wet Locations

for Damp

Locations

#### FACTORY-INSTALLED OPTIONS

All PSMH fixtures are supplied with

open-rated lamps and sockets

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
BALLAST CHOICES FOR HINGED SPLICE BOX			
277V Reactor (PSMH only)	27		
<b>480V</b> (150W HPS only) (PSMH & 250W-400W HPS only)	5 5		
Canada Tri-volt (120/277/347V) (150W HPS only) (PSMH & 250W-400W HPS only)	T T		
BALLAST CHOICES FOR HOOK, CORD & PLUG (	a)		
277V Reactor ballast (PSMH only)	27		
120V, 277V, 208V, or 240V	1, 2, 3 or 4		
<b>480V</b> (150W HPS only) (PSMH & 250W-400W HPS only)	5 5		
Canada 347V	6		
<b>Single Fuse</b> (277V reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
<b>2-Level Integrated Sensor</b> (120, 277, 208, 240, 480, or 347V) (n/a 277V Reactor)	1, 2, 3, 4, 5 or 6	K	
Quartz Standby <sup>1</sup> (delay-relay type) (includes 100W Q lamp) (n/a 277V Reactor)		Q	
Polycarbonate Prismatic Drop Lens		V	
† Available for use on Wet Listed fixtures.			

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
*	Locking-type Receptacle (208- or 240V)	L6-15R	
4	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Receptacle (Canada 347V)	L37*20R	
	Locking-type Receptacle (480V)	L8-20R	
	Power Hook (for use with HCP mount)	PH- <b>(a)</b>	
	(120V, 277V or 277V Reactor, 208V, 240V)	(1, 2, 3, 4)	
	Power Hook (480V)	PH-5	
	Power Hook (Canada 347V)	PH*6	
	Safety Cable with Hang-Fast, Galvanized	SC-5	
190	Safety Cable with Hang-Fast, Stainless (Wet Listed)	SC-5C	
	(Cable is 5' /1.5 m)		
† Available for u	se on Wet Listed fixtures.		



# 14.0" (356 mm) 10.8" (273 mm)

# ICM SERIES by DIRECT

#### 22" MEDIUM LOW BAY

The Medium Low Bay provides diffuse light distribution without glare where high illumination is needed. The acrylic refractor lens disperses light evenly and controls glare. Choose from a variety of high-power factor ballasts, mogul-base lamps up to 400W, and mountings. Wet listed fixture option is available.

**APPLICATIONS:** Low heights, commercial or retail projects.

#### LAMP INCLUDED

	LAMP WATTAGE	CATALOG # HSB MOUNT	CATALOG # HCP MOUNT
	150W PSMH	ICM1615-M	ICM2615- <b>(a)</b>
$\bigcirc$	250W PSMH	ICM1625-M	ICM2625- <b>(a)</b>
$\bigcirc$	320W PSMH 🎙	ICM1632-M	ICM2632- <b>(a)</b>
$\bigcirc$	400W PSMH	ICM1640-M	ICM2640- <b>(a)</b>
	150W HPS	ICM1515-M	ICM2515- <b>(a)</b>
	250W HPS	ICM1525-M	ICM2525- <b>(a)</b>
	400W HPS	ICM1540-M	ICM2540 <b>-(a)</b>
	_		

Reduced envelope lamp. ED28 for 320W PSMH.



HINGED SPLICE ROX



H00K, CORD & PLUG

SEE PAGE 49 FOR MORE INFORMATION ABOUT THESE MOUNTINGS

#### WET LISTED OPTION

EZ Bay Plus Wet Listed fixtures are an excellent choice for environments with heavy spray-downs such as produce storage centers, dairy barns, misting zones and other commercial locations. Our reflectors are totally enclosed with full silicone gasketing at connection to fixture and between lens and frame.

To order replace "I" prefix with "IP". Example: ICM1625-M becomes IPCM1625-M



**EYEBOLT** & CORD





### FACTORY-INSTALLED OPTIONS

CUL US for Damp Locations

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
BALLAST CHOICES FOR HINGED SPLICE BOX			
277V Reactor (PSMH only)	27		
<b>480V</b> (150W HPS only) (PSMH & 250W-400W HPS only)	5 5		
Canada Tri-volt (120/277/347V) (150W HPS only) (PSMH & 250W-400W HPS only)	T T		
BALLAST CHOICES FOR HOOK, CORD & PLUG	(a)		
277V Reactor ballast (PSMH only)	27		
120V, 277V, 208V, or 240V	1, 2, 3 or 4		
<b>480V</b> (150W HPS only) (PSMH & 250W-400W HPS only)	5 5		
Canada 347V	6		
<b>Single Fuse</b> (277V reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
<b>2-Level Integrated Sensor</b> (120, 277, 208, 240, 480, or 347V) (n/a 277V Reactor)	1, 2, 3, 4, 5 or 6	K	
Quartz Standby (delay-relay type) (includes 100W Q lamp) (n/a 277V Reactor)		Q	
Polycarbonate Prismatic Drop Lens		V	
† Available for use on Wet Listed fixtures.			

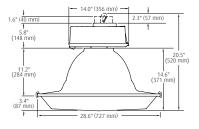
All PSMH fixtures are supplied with

open-rated lamps and sockets

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
***	Locking-type Receptacle (208- or 240V)	L6-15R	
	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Receptacle (Canada 347V)	L37*20R	
	Locking-type Receptacle (480V)	L8-20R	
	Power Hook (for use with HCP mount)	PH- <b>(a)</b>	
	(120V, 277V or 277V Reactor, 208V, 240V)	(1, 2, 3, 4)	
	Power Hook (480V)	PH-5	
	Power Hook (Canada 347V)	PH±6	
ILCon	Safety Cable with Hang-Fast, Galvanized	SC-5	
10	Safety Cable with Hang-Fast, Stainless (Wet Listed) (Cable is 5' /1.5 m)	SC-SC	
† Available for u	use on Wet Listed fixtures.		
	SEE DAGE 51 FOR MORE INFORMATION AROL	IT THESE ACC	ECCUDIEC





# ICJ SERIES by RUUD LIGHTING DIRECT

### 28" JUMBO LOW BAY

The ICJ Low Bay provides efficient, symmetric light distribution for warehouses, aisle lighting and applications where high illumination levels are required. The acrylic refractor is injection molded with a prismatic design to soften and disperse light from the reflector for maximum efficiency and glare control. Choose from a variety of high-power factor ballasts, mogul-base lamps up to 400W, and mountings. Wet listed fixture option is available.

**APPLICATIONS:** Lowest mounting heights, commercial or retail projects.

#### LAMP INCLUDED

	LAMP WATTAGE	CATALOG # HSB MOUNT	CATALOG # HCP MOUNT
	150W PSMH	ICJ1615-M	ICJ2615- <b>(a)</b>
)	250W PSMH	ICJ1625-M	ICJ2625- <b>(a)</b>
)	320W PSMH 🎙	ICJ1632-M	ICJ2632- <b>(a)</b>
)	400W PSMH	ICJ1640-M	ICJ2640- <b>(a)</b>
	150W HPS	ICJ1515-M	ICJ2515- <b>(a)</b>
	250W HPS	ICJ1525-M	ICJ2525- <b>(a)</b>
	400W HPS	ICJ1540-M	ICJ2540- <b>(a)</b>

Reduced envelope lamp, FD28 for 320W PSMH.



HINGED SPLICE BOX



HOOK. CORD & PLUG

**SEE PAGE 49 FOR MORE INFORMATION ABOUT THESE MOUNTINGS** 

#### WET LISTED OPTION

EZ Bay Plus Wet Listed fixtures are an excellent choice for environments with heavy spray-downs such as produce storage centers, dairy barns, misting zones and other commercial locations. Our reflectors are totally enclosed with full silicone gasketing at connection to fixture and between lens and frame.

To order replace "I" prefix with "IP". Example: ICJ1625-M becomes IPCJ1625-M



**EYEBOLT** & CORD



#### us for Damp Locations

All PSMH fixtures are supplied with open-rated lamps and sockets

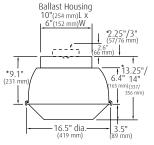
#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
BALLAST CHOICES FOR HINGED SPLICE BOX	JOITIN TO	JOHA	_
277V Reactor (PSMH only)	27		
<b>480V</b> (150W HPS only) (PSMH & 250W-400W HPS only)	5 5		
Canada Tri-volt (120/277/347V) (150W HPS only) (PSMH & 250W-400W HPS only)	T T		
BALLAST CHOICES FOR HOOK, CORD & PLUG	(a)		
277V Reactor ballast (PSMH only)	27		
120V, 277V, 208V, or 240V	1, 2, 3 or 4		
<b>480V</b> (150W HPS only) (PSMH & 250W-400W HPS only)	5 5		
Canada 347V	6		
<b>Single Fuse</b> (277V reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
2-Level Integrated Sensor (120, 277, 208, 240, 480, or 347V) (n/a 277V Reactor)	1, 2, 3, 4, 5 or 6	K	
Quartz Standby <sup>†</sup> (delay-relay type) (includes 100W Q lamp) (n/a 277V Reactor)		Q	
† Available for use on Wet Listed fixtures.			

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
***	Locking-type Receptacle (208- or 240V)	L6-15R	
	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Receptacle (Canada 347V)	L37*20R	
	Locking-type Receptacle (480V)	L8-20R	
	Power Hook (for use with HCP mount)	PH- <b>(a)</b>	
	(120V, 277V or 277V Reactor, 208V, 240V)	(1, 2, 3, 4)	
	Power Hook (480V)	PH-5	
	Power Hook (Canada 347V)	PH±6	
11.000	Safety Cable with Hang-Fast, Galvanized	SC-5	
100	Safety Cable with Hang-Fast, Stainless (Wet Listed)	SC-5C	
	(Cable is 5' /1.5 m)		
† Available for u	ise on Wet Listed fixtures.		





\*Dimension varies with voltage and lamp type (consult factory).

# FC SERIES by DIRECT

#### **SHALLOW LOW BAY**

The FC Series is part of our line of Mini Industrial lights designed for low mounting heights. An acrylic drop prismatic refractor lens disperses the light while reducing apparent brightness. Three mounting options are available; Slide Splice Box (SSB), Hook, Cord and Plug (HCP), and Direct Mount for installation over a recessed junction box. Select from a variety of ballast and lamp options.

**APPLICATIONS:** Warehouse, aisle lighting or general commercial and industrial projects

#### LAMP INCLUDED

LAMP WATTAGE	CATALOG # SSB MOUNT	CATALOG # HCP MOUNT	CATALOG # DIRECT MNT
70W PSMH	FC1407-M	FC2407- <b>(a)</b>	FC3407-M
100W PSMH	FC1410-M	FC2410- <b>(a)</b>	FC3410-M
150W PSMH	FC1615-M	FC2615- <b>(a)</b>	FC3615-M
70W HPS	FC1507-1	FC2507-1	FC3507-1
100W HPS	FC1510-1	FC2510-1	FC3510-1
150W HPS	FC1515-1	FC2515-1	FC3515-1



SLIDE SPLICE BOX



HOOK, CORD & PLUG



DIRECT MOUNT

SEE PAGE 49 FOR MORE INFORMATION ABOUT THESE MOUNTINGS



for Damp Locations All PSMH fixtures are supplied with open-rated lamps and sockets

#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
BALLAST CHOICES FOR HINGED SPLICE BOX			
Quad-volt (120/208/240/277V) (HPS only)	M		
Canada Tri-volt (120/277/347V) (PSMH only)	T		
(MH only)	T		
(HPS only)	T		
BALLAST CHOICES FOR HOOK, CORD & PLUG	(a)		
BALLAST CHOICES FOR HOOK, CORD & PLUG (120V, 277V, 208V, or 240V (PSMH & MH only)	1, 2, 3 or 4		
,	T T		
120V, 277V, 208V, or 240V (PSMH & MH only)	1, 2, 3 or 4		
120V, 277V, 208V, or 240V (PSMH & MH only) 277V, 208V, or 240V (HPS)	1, 2, 3 or 4 2, 3 or 4		
120V, 277V, 208V, or 240V (PSMH & MH only) 277V, 208V, or 240V (HPS) Canada 347V (PSMH only)	1, 2, 3 or 4 2, 3 or 4 6		

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
+-	Locking-type Receptacle (208- or 240V)	L6-15R	
	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Receptacle (Canada 347V)	L37*20R	
	Power Hook (for use with HCP mount)	PH- <b>(a)</b>	
	(120V, 277V or 277V Reactor, 208V, 240V)	(1, 2, 3, or 4)	
	Power Hook (Canada 347V)	PH±6	
	Surface Mounting Box	ESB-7WH	

SEE PAGE 51 FOR MORE INFORMATION ABOUT THESE ACCESSORIES

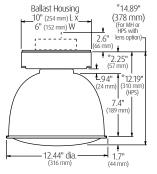


## **SHALLOW PRISMATIC LOW BAY**

FP SERIES by DIRECT

The FP Series is part of our line of Mini Industrial lights designed for low mounting heights. An acrylic prismatic reflector disperses the light while reducing apparent brightness. Three mounting options are available; Slide Splice Box (SSB), Hook, Cord and Plug (HCP), and Direct Mount for installation over a recessed junction box. Select from a variety of ballast and lamp options.

**APPLICATIONS:** Warehouse, aisle lighting or general commercial and industrial projects



Dimension varies with voltage and lamp type (consult factory).

#### LAMP INCLUDED

LAMP WATTAGE	CATALOG # SSB MOUNT	CATALOG # HCP MOUNT	CATALOG # DIRECT MNT
70W PSMH	FP1407-MO	FP2407- <b>(a)</b> 0	FP3407-MO
100W PSMH	FP1410-M0	FP2410- <b>(a)</b> 0	FP3410-M0
150W PSMH	FP1615-M0	FP2615- <b>(a)</b> 0	FP3615-M0
70W HPS	FP1507-1	FP2507-1	FP3507-1
100W HPS	FP1510-1	FP2510-1	FP3510-1
150W HPS	FP1515-1	FP2515-1	FP3515-1



SLIDE SPLICE BOX



HOOK, CORD & PLUG



DIRECT MOUNT

SEE PAGE 49 FOR MORE INFORMATION ABOUT THESE MOUNTINGS



All PSMH fixtures are supplied with open-rated lamps and sockets

#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
BALLAST CHOICES FOR HINGED SPLICE BOX			
Quad-volt (120/208/240/277V) (HPS only)	М		
Canada Tri-volt (120/277/347V) (PSMH only)	T		
(MH only)	T		
(HPS only)	T		
BALLAST CHOICES FOR HOOK, CORD & PLUG (	(a)		
<b>120V, 277V, 208V, or 240V</b> (PSMH & MH only)	1, 2, 3 or 4		
277V, 208V, or 240V (HPS)	2, 3 or 4		
Canada 347V (PSMH only)	6		
Canada 347V (70W & 100W MH only)	6		
Canada 347V (HPS only)	6		
Acrylic Dome Lens (PSMH & MH only) (HPS only)		change O to A	
Polycarbonate Lens or Refractor		V	
Polycarbonate Lens & Refractor		AV	
Conical Lens (PSMH & MH only) (HPS only)		change O to Y	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Locking-type Receptacle (120V)	L5-15R	
***	Locking-type Receptacle (208- or 240V)	L6-15R	
	Locking-type Receptacle (277V)	L7-15R	
	Locking-type Receptacle (Canada 347V)	L37±20R	
	Power Hook (for use with HCP mount)	PH- <b>(a)</b>	
	(120V, 277V, 277V Reactor, 208V, 240V)	(1, 2, 3, or 4)	
	Power Hook (Canada 347V)	PH÷6	
	Surface Mounting Box	ESB-7WH	

SEE PAGE 51 FOR MORE INFORMATION ABOUT THESE ACCESSORIES

# HIGH & LOW BAY Mounting Options & Accessories DIRECT





Designed for surface or pendant mounting, the HSB has two 3/4" and six 1/2" knockouts on the sides and one 3/4" adjustable knockout and mounting holes for common junction boxes on top. The galvanized steel HSB is roomy, measuring 4"W x 4"L x 1.6"H (102 mm W x 102 mm L x 41 mm H).

# HOOK, CORD & PLUG - HCP

To suspend luminaire from a ceiling eye hanger (customer supplied), a quick connect hook with retainer spring is provided. Supplied with a 30-inch (762 mm) SJEOW cord and a voltage-specific NEMA standard locking-type plug for appropriate voltage.



For FC and FP Series. For either surface wiring or pendant mount from rigid conduit. A removable steel electrical box can be installed prior to mounting the fixture, using 3/4-inch conduit for pendant mounting (shown) and three 1/2-inch knockouts for surface wiring.



For FC and FP Series. To suspend fixture from a ceiling eye hanger (customer supplied), a quick connect hook with retainer spring is provided. Furnished with a 30-inch (762 mm) cord and NEMA standard locking-type plug for appropriate voltage.

## **EYEBOLT & CORD - WET LISTED**



For IA, IC, ICM and ICJ fixtures when ordered with Wet Listed option. To suspend fixture from a ceiling eye hanger (customer supplied), an eyebolt and C-clasp is provided. Furnished with a 30-inch (762 mm) cord connected to fixture with wet location fitting. Cord to be hard wired.

# **DIRECT MOUNT**

For FC and FP Series fixtures. For installation over a recessed junction box. If surface wiring is required, use the Direct Mount with the ESB-7WH Surface Mounting Box accessory (see next page).

# **EXTERNAL FUSE**

Fusing can help troubleshoot a short or overload in the circuit. A single fuse is used for fixtures with a 120-, 277- or Canada 347-volt ballast. A dual fuse is used for fixtures with a 208-, 240- or 480-volt ballast, Singlevoltage ballast supplied (n/a on dualvolt, multi-volt or tri-volt). Add suffix "F" to the catalog number.

#### DESCRIPTION

Single Fuse

Dual Fuse (n/a Canada)



DELAY-RELAY QUARTZ STANDBY

Delay-relay, quartz standby option is available for all fixtures, except the Shallow Low Bays. After a momentary power interruption, the quartz standby supplies safety lighting until the HID lamp restrikes and reaches approximately 50 percent brightness. This option includes a 100-watt quartz lamp. Add suffix "Q" to the catalog number.

#### DESCRIPTION

Quartz Option

# **OPTICAL CHAMBER AIR FILTER**



For IA, IAP and IAR Series. Helps prevent dirt contaminants from entering the optical chamber. The Dacron Polyester felt filter is installed in the top closure of the enclosure option; add suffix "B" to enclosure catalog number.

#### DESCRIPTION

Optical Chamber Air Filter



# HIGH & LOW BAY Mounting Options & Accessories DIRECT





For FP Series. Attaches easily with a V-band collar. For HPS fixtures, add suffix "A" to catalog number. For 150W PSMH and 70 & 100W MH fixtures, change "O" to "A". 1.7 inches deep.

#### DESCRIPTION

FP Series



Add suffix "A" to the catalog number.

#### DESCRIPTION

16" IAP Series - 3.2" deep (250W max.)

22" IAR Series - 2.3" deep (400W max.)



For 16-inch IAP Series fixtures. It is also available for 22-inch IAR Series fixtures. Add suffix "E" to the catalog number.

#### DESCRIPTION

16" IAP Series (250W max.)

22" IAR Series (400W max.)



Attaches easily with a V-band collar.

#### DESCRIPTION

IAP Series (1.7" deep) (n/a with "W" option) (250W max.) Àdd suffix "Y" to catalog no.

IAR Series (2" deep) (n/a with "W" option) (400W max.) Add suffix "Y" to catalog no.

FP Series (1.06" deep) PSMH (Change suffix "O" to "Y") HPS (Add suffix "Y" to catalog #)



A clear, tempered-glass lens in a gasketed steel frame simply clips onto the bottom of the reflector. Included top enclosure attaches to the reflector, reducing dirt contamination in the optical chamber. Standard on 1000-watt PSMH fixtures. Hardware included. Add suffix "E" to catalog number.

#### FACTORY INSTALLED.

#### DESCRIPTION

IA Series



Steel guard attaches to reflector with V-band. Not for use with lens enclosures. Hardware included. Factory-installed option for 1000W PSMH fixtures, suffix "W."

SERIES	CATALOG #
IA Series	WG-A
IAP Series	WG-AP
IAR Series <sup>♠</sup>	WG-AR

<sup>▲</sup> n/a 750W & 1000W



Relamp easily without removing the wire guard. Attaches to reflector with V-band. Not for use with lens enclosures. Hardware included.

SERIES	CATALOG #
IA Series	WG-A/OC
IAP Series	WG-AP/OC
IAR Series <sup>▲</sup>	WG-AR/OC

<sup>▲</sup> n/a 750W & 1000W



Clear acrylic lens with white painted steel end-covers. Available for four- or six-lamp H Series fixtures.

SERIES	CATALOG #
H (4-lamp)	H-LK4
H (6-lamp)	H-LK6



Steel wire guard with white painted finish. Includes mounting hardware. Available for H and HN Series fixtures.

SERIES	CATALOG #
H (2-lamp)	H-WG2
H (4-lamp)	H-WG4
H (6-lamp)	H-WG6
HN (6/8 lamp	) H-WG6N

# HIGH & LOW BAY Mounting Options & Accessories DIRECT





Use with Hook, Cord & Plug mounts. Provides three threaded knockouts for 1/2" conduit, an eye hanger to support the luminaire and a lockingtype receptacle for appropriate voltage.

VOLTAGE	CATALOG #
120V	PH-1
277V	PH-2
208V	PH-3
240V	PH-4
480V	PH-5
Canada 347V	PH*6

# LOCKING-TYPE RECEPTACLE

A NEMA standard, locking-type receptacle is available for use with any Hook, Cord & Plug mount fixture.

4-wire receptacle for use with "EB" or "D" options on Fluorescent fixtures.

VOLTAGE	CATALOG #
120V	L5-15R
120V, 4-wire	L14-20R
277V	L7-15R
277V, 4-wire	L16-20R
208/240V	L6-15R
480V	L8-20R
Canada 347V	L37*20R



5' (1.5 m) long safety cable with Hang-Fast provides added safety. Recommended for all Hook, Cord & Plug mount fixtures. SC-5C required for Wet Listed fixtures.

CATALOG #
SC-5 (galvanized)
SC-5C (stainless steel)



5' (1.5 m) long safety cable with Hang-Fast provides added safety. Two required if using for mounting.

CATALOG #

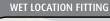
SC-5



For H and HN Series fixtures only. Single lamp field installed Plug-N-Go emergency ballast. Will operate one lamp for 90 minutes. Available on 120- or 277-volt only. Provides easy field installation and maintenance of battery packs. Fixture must be ordered with "EB" option. If using with Cord & Plug mount, 4-wire receptacle must be used.

DESCRIPTION	CATALOG #
T8: 800 lumens	H-EB800D
T8: 1350 lumens	H-EB1400D
T8: 3000 lumens	H-EB3000D

Consult factory for T5HO lumen data.





For HS & HT series only. 1/2" conduit entry.

CATALOG # HS-WLF1/2



For HS and HT Series only. The HS Series version includes two 5' stainless steel aircraft cables and two ball hooks (order 1 kit per 4' fixture). The HT Series version includes three 5' aircraft cables and three ball hooks (order 1 kit per 8' fixture).

SERIES	CATALOG #
HS Series	HS-ACMTK5
HT Series	HT-ACMTK5



Die-cast aluminum, for use on all ceiling-mounted FC and FP series fixtures where surface wiring is required. Five tapped and plugged knockouts are provided to feed 1/2-inch conduit. , Size: 10"W x 6"H x 1.25"D.

CATALOG # ESB-7WH

## **FLOODLIGHTING**



		DESCRIPTION	AVAILABLE WATTAGES AND LAMP TYPES	OPTICAL PATTERN	PAGE NUMBER
	NSF SERIES	Standard Economy Flood	150W - 400W HID	·	Page 57
	NSW SERIES	Wide Economy Flood	150W - 400W HID		Page 59
STANDARD	NS SERIES	Compact Economy Flood	50W - 150W HID 13 - 42W CFL		Page 60
	FS SERIES	Square Standard Floodlight	70W - 1000W HID		Page 62
	LFS SERIES	Rectangular Standard Floodlight	70W - 150W HID		Page 63
SIGN UPLIGHT	W SERIES	Sign Uplight	70W - 400W HID		Page 61



### STANDARD FLOOD

Standard floodlight products are available with various optical systems and are typically installed with a 45- to 60-degree tilt above the horizon. Standard floodlights are ideal for lighting open areas, for façade applications, and sign lighting.



### **SPOTLIGHT**

Spotlight fixtures are typically installed for uplighting applications. The light distribution produced provides reduced glare, better light control, and offers greater aesthetic appeal. Spotlights are a good choice for lighting tall, narrow subjects such as flagpoles, columns, and signs.

		DESCRIPTION	AVAILABLE WATTAGES AND LAMP TYPES	OPTICAL PATTERN	PAGE NUMBER
MO	NSC SERIES	Forward Throw Economy Flood	150W - 400W HID		Page 58
FORWARD THROW	CF SERIES	Square Forward Throw Floodlight	70W - 1000W HID		Page 64
FO	LCF SERIES	Rectangular Forward Throw Floodlight	70W - 150W HID		Page 65
	PM SERIES	Square Spotlight	70W - 1000W HID		Page 66
SPOTLIGHT	LPM SERIES	Rectangular Spotlight	70W - 150W HID		Page 67
	PN SERIES	Square Narrow Spotlight	70W - 1000W HID		Page 68
	LPN SERIES	Rectangular Narrow Spotlight	70W - 150W HID		Page 69



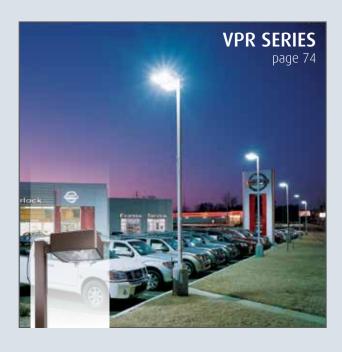
## FORWARD THROW FLOOD

Forward Throw floodlights are designed to assure maximum forward throw and beam projection, while minimizing glare and spill light. Fixtures are generally positioned with a 15- to 25-degree tilt above horizontal. Forward Throw floodlights are primarily used to light parking lots, auto sales lots, and various sports areas.

# **CUTOFF PARKING & AREA**



			DESCRIPTION	AVAILABLE WATTAGES AND LAMP TYPES	OPTICAL PATTERN	PAGE NUMBER
WIDE THROW		PR SERIES	Square Wide Throw Area Light	70W - 1000W HID		Page 70
	P	LPR SERIES	Rectangular Wide Throw Area Light	70W - 150W HID		Page 71
		AVH3 SERIES	Horizontal-Lamp Wide Throw Aviator®	70W - 400W HID		Page 72
		AVV3 SERIES	Vertical-Lamp Wide Throw AeroDome®	150W - 1000W HID		Page 73
		VPR SERIES	Square Vertical-Lamp Wide Throw Area Light	250W - 1000W HID		Page 74
		WPR SERIES	Wedge Wide Throw Area Light	100W - 400W HID		Page 75
		AVVA SERIES	Automotive Frontline AeroDome®	250W - 1000W HID		Page 84



## **WIDE THROW**

Wide throw distribution delivers good lateral light distribution with adequate forward throw, with optics that are ideal for roadway, general parking lot, or other area lighting applications.

			APPLICATIONS	AVAILABLE WATTAGES AND LAMP TYPES	OPTICAL PATTERN	PAGE NUMBER
FORWARD THROW	THE	AC SERIES	Square Forward Throw Area Light	70W - 1000W HID		Page 76
	P	LAC SERIES	Rectangular Forward Throw Area Light	70W - 150W HID		Page 77
		AVH4 SERIES	Horizontal-Lamp Forward Throw Aviator®	70W - 400W HID		Page 78
		AVV4 SERIES	Vertical-Lamp Forward Throw AeroDome®	150W - 1000W HID		Page 79
		VFT SERIES	Square Vertical-Lamp Forward Throw Area Light	250W - 1000W HID		Page 80
		WAC SERIES	Wedge Forward Throw Area Light	100W - 400W HID		Page 81
SYMMETRIC		QV SERIES	Square Vertical-Lamp Symmetric Post Top Light	70W - 1000W HID		Page 82
		AVV5 SERIES	Vertical-Lamp Symmetric AeroDome®	150W - 1000W HID		Page 83



## **FORWARD THROW**

Forward Throw distribution provides adequate lateral light distribution with good forward throw. Their optics are ideal for lighting perimeters or wall mounted applications.



## **SYMMETRIC**

Symmetric distribution provides circular or square light distribution, and is ideal for general parking and area lighting applications.

## PROPER ETIQUETTE FOR LIGHTING "OLD GLORY"

## Guidelines for appropriate lighting of the U.S. Flag

The American flag is the nation's most recognizable symbol. The flag is a way to celebrate freedom and show patriotism. In order to protect the integrity of the flag, many regulations, including how the flag is displayed, have been put into place by the government.

According to the U.S. Flag Code, flags are traditionally displayed from sunrise to sunset but can be presented continuously if properly illuminated during nighttime hours. The flag must be clearly visible at all times regardless of wind direction or visibility.

## FLAG LIGHTING GUIDELINES

- In most instances, a single ground mounted metal halide fixture placed in close proximity (2' to 5') to the base of the flagpole will provide sufficient illumination to the flag.
- Depending on the height of the pole and the ambient light levels in the area, various wattages and/or fixture types should be considered.

Up to 20'	150W PSMH Spotlight, PM Series (page 66)
20' to 25'	320W/400W PSMH Spotlight, PM Series (page 66)
25' to 40'	320W/400W PSMH Narrow Spotlight, PN Series (page 68)
40' and up	1000W MH Narrow Spotlight, PN Series (page 68)

Order fixtures with Uplight Lens, option "U"

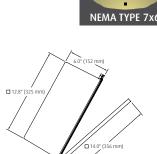
 These recommendations are based on average flag light levels with moderately lit surrounding areas.
 If ambient light levels in the area are higher, you might consider increasing the wattage. Likewise, if the surrounding area is dimly lit, lower wattages may be used.

As a precaution, check local Dark Sky guidelines on using floodlights for flagpole illumination. Many floodlights can be ordered with glare shields or internal louvers that help to direct light into the targeted area.



For help with an upcoming lighting project, contact our Application Engineering Team at (800) 236-7000 or by email at applications@ruudlightingdirect.com







#### STANDARD ECONOMY FLOOD

The NSF Series Flood is typically installed with a 45- to 60-degree tilt above horizontal to provide wide coverage of illumination. The 14-inch square fixture features a copper-free, die-cast aluminum housing and lens frame and is designed for easy installation and serviceability. A versatile lens frame makes this fixture suitable for downlighting and uplighting applications.

**APPLICATIONS:** Large open areas, facades, sign lighting, and security applications

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
150W PSMH	14"	NSF*615-M
250W PSMH	14"	NSF*625-M
320W PSMH 🖣	14"	NSF*632-M
400W PSMH ♥	14"	NSF*640-M
150W HPS	14"	NSF*515-M
250W HPS	14"	NSF*525-M
400W HPS	14"	NSF*540-M

Reduced envelope lamp. ED28 for 320W and 400W PSMH.
---

MOUNTING CODES					
Insert Code at * in Catalog Number					
3					
3 = 2" Adjustable Fitter					
4 = Yoke Mount					
SEE PAGE 85 FOR MORE INFORMATION					

**ABOUT THESE MOUNTINGS** 

MOUNTING ALTERNATIVES START ON PAGE 90





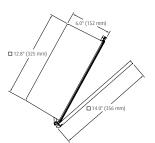
#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (PSMH only)	27		
480V Ballast (not available on 150W HPS)	5		
Canada Tri-volt Ballast (120/277/347V) (PSMH & 250W-400W HPS only) (150W HPS only)	T T		
Button Photocell (factory-installed except in 2" adjustable fitter) (277V Reactor, 120V, 277V, 208V, or 240V) (Canada 347V)	27, 1, 2, 3, or 4 6	P P	
External Photocell For fixtures w/480V	5	Р	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Deep Baffle	DB-14	
	Wire Guard	FWG-14	
	Glare Shield	GS-14	
<b>6</b>	Button Photocell (for 2" fitter) 120V 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6	





# NSC SERIES by RUUD LIGHTING

#### FORWARD THROW ECONOMY FLOOD

NSC Series fixtures provide narrow vertical and wide horizontal distribution in a compact housing size. The 14" Flood-Cutoff is typically installed with a 45- to 60-degree tilt angle. The optical system is designed with sharp cutoff to reduce glare for pedestrians and vehicular traffic. The 14-inch square fixture features a copper-free, die-cast aluminum housing and lens frame and is designed for easy installation and serviceability. A versatile lens frame makes this fixture suitable for downlighting and uplighting applications.

**APPLICATIONS:** Parking lots, facades, sign lighting and security applications

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
150W PSMH	14"	NSC*615-M
250W PSMH	14"	NSC*625-M
320W PSMH <b>P</b>	14"	NSC*632-M
400W PSMH ♥	14"	NSC*640-M
150W HPS	14"	NSC*515-M
250W HPS	14"	NSC*525-M
400W HPS	14"	NSC*540-M

Reduced envelope lamp.	ED28 for 320W and 400W PSMH.
------------------------	------------------------------

MOUNTING CODES	
Insert Code at * in Catalog Number	
3	
<b>3</b> = 2" Adjustable Fitter	
4 = Yoke Mount	
CEE DAGE OF FOR MODE INFORMATION	

**ABOUT THESE MOUNTINGS MOUNTING ALTERNATIVES START ON PAGE 90** 





#### FACTORY-INSTALLED OPTIONS

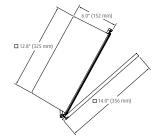
DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (PSMH only)	27		
480V Ballast (not available on 150W HPS)	5		
Canada Tri-volt Ballast (120/277/347V) (PSMH & 250W-400W HPS only) (150W HPS only)	T T		
Button Photocell (factory-installed except in 2" adjustable fitter) (277V Reactor, 120V, 277V, 208V, or 240V) (Canada 347V)	27, 1, 2, 3, or 4 6	P P	
External Photocell For fixtures w/480V	5	Р	-

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Deep Baffle	DB-14	
	Wire Guard	FWG-14	
<b>4</b>	Button Photocell (for 2" fitter) 120V 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6	









#### WIDE ECONOMY FLOOD

The NSW Series is designed to provide maximum side-to-side coverage. This fixture is typically installed from a 15- to 25-degree tilt above horizontal to prevent glare and ensure optimum performance. The 14-inch square floodlight features a copper-free, die-cast aluminum housing and lens frame and is designed for easy installation and serviceability. The versatile lens frame makes this fixture suitable for downlighting or uplighting applications.

**APPLICATIONS:** Roadway, parking areas, sign lighting and security applications

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER	
150W PSMH	14"	NSW <b>*</b> 615-M	
250W PSMH	14"	NSW <b>*</b> 625-M	
320W PSMH <b>₽</b>	14"	NSW <b>*</b> 632-M	
400W PSMH <b>♥</b>	14"	NSW*640-M	
150W HPS	14"	NSW <b>*</b> 515-M	
250W HPS	14"	NSW*525-M	
400W HPS	14"	NSW*540-M	

1	Reduced	envelone	lamn	FD28	for	320W	and	400W PSMH.	
w	Kenncen	envelope	таттр.	EUZO	IUI	SZUVV	allu	400W F3MIN.	

MOUNTING CODES		
Insert Code at * in Catalog Number		
3		
<b>3</b> = 2" Adjustable Fitter		
4 = Yoke Mount		
SEE PAGE 85 FOR MORE INFORMATION		

ABOUT THESE MOUNTINGS

**MOUNTING ALTERNATIVES START ON PAGE 90** 





#### FACTORY-INSTALLED OPTIONS

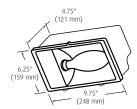
DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (PSMH only)	27		
480V Ballast (not available on 150W HPS)	5		
Canada Tri-volt Ballast (120/277/347V) (PSMH & 250W-400W HPS only) (150W HPS only)	T T		
Button Photocell (factory-installed except in 2" adjustable fitter) (277V Reactor, 120V, 277V, 208V, or 240V) (Canada 347V)	27, 1, 2, 3, or 4 6	P P	
<b>External Photocell</b> For fixtures w/480V	5	Р	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Deep Baffle	DB-14	
	Wire Guard	FWG-14	
	Glare Shield	GS-14	
<b>4</b>	Button Photocell (for 2" fitter) 120V 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6	







# NS SERIES by DIRECT



#### COMPACT ECONOMY FLOOD

The NS Series is designed to provide conventional floodlighting for a variety of surfaces and areas. The fixture features a compact, seamless, die-cast aluminum housing and a high impact, clear tempered and annealed glass lens. Complete silicone gasketing at lens and mounting provides a watertight seal.

**APPLICATIONS:** Facades, small sign lighting, and security applications

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER		
50W PSMH	9.8" x 6.3"	NS6405-D		
70W PSMH	9.8" x 6.3"	NS6407-D		
100W PSMH	9.8" x 6.3"	NS6410-D		
50W HPS (120V)	9.8" x 6.3"	NS6505-1		
70W HPS (120V)	9.8" x 6.3"	NS6507-1		
100W HPS (120V)	9.8" x 6.3"	NS6510-1		
150W HPS (120V)	9.8" x 6.3"	NS6515-1		
13W CFL	9.8" x 6.3"	NS6213-UL		
26/32/42W CFL	9.8" x 6.3"	NS6242-UL		
▲ Specify lamp wattage for	▲ Specify lamp wattage for included lamp. Consult factory for discrete wattage			

labeling to meet state and/or local regulations where applicable.



supplied 1/2" Adjustable Fitter

**MOUNTING ALTERNATIVES START ON PAGE 90** 





#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
Dual-volt Ballast (120/277V)			
(50W & 70W HPS only)	D		
208V or 240V Ballast			
(PSMH only)	3 or 4		
(50W & 70W HPS only)	3 or 4		
Canada 347V Ballast			
(PSMH only)	D to 6		
(50W HPS only)	D to 6		
(70W HPS only)	D to 6		
(26W, 32W, 42W CFL only)	UL to 6L		
High Power Factor Ballast (standard on CFL)		Н	
Button Photocell (n/a on 100W MH)			
(P=HID only, LP=CFL only)			
(120V, 277V, 208V, or 240V)	1, 2, 3, or 4	P or LP	
(Canada 347V)	6	P or LP	
Tamperproof Lens Fasteners		J	

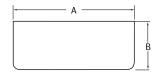
#### FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
Deep Baffle	DB-9
Wire Guard	FWG-9
Glare Shield	GS-9
Mounting Box	MNB-1
Mounting Box with Stake, Cord & Plug	MNB-2
Conduit Slipfitter	MNH-2
Ground Mount Post	PGM-1
Tamperproof Screwdriver	TPS-1

SEE PAGE 86 FOR MORE INFORMATION ABOUT THESE ACCESSORIES







"A"	"B"
12" (305 mm) Square	5.0" (127 mm)
16" (406 mm) Square	6.5" (165 mm)



#### SIGN UPLIGHT

The Sign Uplight is available in 12- or 16-inches square, this fixture features a die-cast aluminum, weather-tight housing. The precision specular reflector has a strong main beam of 67 degrees and exceptional lateral distribution to provide excellent uniformities from top to bottom and left to right. The optical chamber is sealed to reduce dirt and insect contamination.

**APPLICATIONS:** Mount 5-feet away and 2-feet below for optimum lighting of a 12ft. area. Mounting arm not included. NOTE: Consult factory if used as a downlight.

## LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	12"	MW <b>*</b> 407-M
100W PSMH	12"	MW*410-M
150W PSMH	12"	MW*615-M
250W PSMH	16"	W <b>*</b> 625-M
320W PSMH 🎙	16"	W <b>*</b> 632-M
400W PSMH <b>₽</b>	16"	W <b>*</b> 640-M
70W HPS	12"	MW <b>*</b> 507-M
100W HPS	12"	MW*510-M
150W HPS	12"	MW*515-M
250W HPS	16"	W <b>*</b> 525-M
400W HPS	16"	W <b>*</b> 540-M

Reduced envelope lamp. ED28 for 320W & 400W PSMH.



**MOUNTING CODES** 

Insert Code at \* in Catalog Numbei

3 = 2" Adjustable Fitter 4 = Yoke Mount





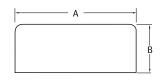
### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(70W-150W HPS only)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W-400W PSMH, 250W & 400W HPS only)	5		
(70W-150W HPS only)	5		
Tri-volt Ballast (120/277/347V)			
(150W-400W PSMH, 250W & 400W HPS only)	T		
(70W-150W HPS and 70W & 100W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell (n/a on 480V)			
(factory-installed except in 2" adjustable fitter)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/480V	5	Р	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	<b>Wire Guard</b> 12" Housing 16" Housing	FWG-12 FWG-16	
	<b>Glare Shield</b> 12" Housing 16" Housing	GS-12 GS-16	
<b>4</b>	Button Photocell (for 2" fitter) 120V 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6	





"A"	"B"
12" (305 mm) Square	5.0" (127 mm)
16" (406 mm) Square	6.5" (165 mm)
22" (559 mm) Square	9.3" (235 mm)







#### **SQUARE STANDARD FLOODLIGHT**

A general-purpose floodlight, the FS Series is available in three sizes, 12-, 16- and 22-inches square and features a die-cast aluminum, weather-tight housing. The diffused reflector is designed to provide conventional floodlighting for a variety of applications and mounting positions. Fixtures are typically installed with a 45- to 60-degree tilt above the horizon. The optical chamber is sealed to reduce dirt and insect contamination.

**APPLICATIONS:** Illuminating signs, large open areas, and facades

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	12"	MFS*407-M
100W PSMH	12"	MFS*410-M
150W PSMH	12"	MFS*615-M
250W PSMH	16"	FS*625-M
320W PSMH 🎙	16"	FS*632-M
400W PSMH	16"	FS*640-M
1000W MH	22"	FS*499-M
70W HPS	12"	MFS*507-M
100W HPS	12"	MFS*510-M
150W HPS	12"	MFS*515-M
250W HPS	16"	FS*525-M
400W HPS	16"	FS*540-M
1000W HPS	22"	FS*599-M

Reduced envelope lamp. ED28 for 320W PSMF	1.
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## **MOUNTING CODES** 3 = 2" Adjustable Fitter 4 = Yoke Mount 6 = 1/2" Adjustable Fitter (12" housing only) 8 = No Mounting Hardware (factory-drilled with 2-foot cord) SEE PAGE 85 FOR MORE INFORMATION

ABOUT THESE MOUNTINGS **MOUNTING ALTERNATIVES START ON PAGE 90** 

#### FACTORY-INSTALLED OPTIONS

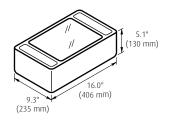
DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(70W-150W HPS, 12" housing only)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W-400W PSMH, 1000W MH, 250W-1000W HPS)	5		
(70W-150W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-400W PSMH, 1000W MH, 250W-1000W HPS)	T		
(70W-150W HPS and 70W & 100W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Uplight Lens Frame		U	
Button Photocell (n/a 1000W 120V & all 480V)			
(factory-installed except in 2" adjustable fitter)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/1000W, 120V	1	Р	
For fixtures w/480V	5	Р	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER
	Deep Baffle	
	12" Housing	DB-12
1	16" Housing	DB-16
	22" Housing	DB-22
	Wire Guard	
57 (ESSENTED	12" Housing	FWG-12
	16" Housing	FWG-16
	22" Housing	FWG-22
	Glare Shield <sup>▲</sup>	
	12" Housing	GS-12
	16" Housing	GS-16
	22" Housing	GS-22
	Polycarbonate Vandal Shield <sup>▲▼</sup>	
	12" Housing	LS-12
100	16" Housing	LS-16
	22" Housing	LS-22
	Button Photocell (for 2" fitter)	
20	120V (n/a 1000W)	PC-1
	208V, 240V or 277V	PC-2
	Canada 347V	PC*6
▲ Consult factory if us	sing Glare Shield and Polycarbonate Vandal Sh	ield together

▼ n/a if fixture is used in an uplight position







#### RECTANGULAR STANDARD FLOODLIGHT

A general-purpose floodlight, the LFS Series is typically installed with a 45-to 60-degree tilt back from vertical to provide a wide coverage of illumination. Fixture features an aluminum die-cast housing, precise reflector system and tempered glass lens for optimized lighting performance. The optical chamber is sealed to reduce dirt and insect contamination, and allows fixture operation in any position.

**APPLICATIONS:** Ideal for lighting signs and facades as well as uplighting and downlighting applications

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	16.0" x 9.3"	LFS*407-M
100W PSMH	16.0" x 9.3"	LFS*410-M
150W PSMH	16.0" x 9.3"	LFS*615-M
70W HPS	16.0" x 9.3"	LFS*507-M
100W HPS	16.0" x 9.3"	LFS*510-M
150W HPS	16.0" x 9.3"	LFS*515-M

SEE PAGE 85 FOR MORE INFORMATION ABOUT THESE MOUNTINGS

MOUNTING ALTERNATIVES START ON PAGE 90



#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(HPS only)	1		
277V Reactor Ballast (150W PSMH only)	27		
<b>480V Ballast</b> (70W & 100W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V) (70W & 100W PSMH & 70W-100W HPS only)	Ţ		
Single Fuse (277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V or 480V) (n/a Canada)	3, 4 or 5	F	
Button Photocell (n/a on 480V) (factory-installed except in 2" adjustable fitter)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/480V	5	Р	
Tamperproof Lens Fasteners		J	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER
	Deep Baffle	DB-12
	Wire Guard	FWG-L
	Glare Shield <sup>▲</sup>	GS-12
	Polycarbonate Vandal Shield <sup>▲▼</sup>	LS-L
	Ground Mount Post	PGM-1
	Tamperproof Screwdriver	TPS-1
4	Button Photocell (for 2" fitter) 120V 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6

Consult factory if using Glare Shield and Polycarbonate Vandal Shield together

<sup>▼</sup> n/a if fixture is used in an uplight position



"A"	"B"
12" (305 mm) Square	5.0" (127 mm)
16" (406 mm) Square	6.5" (165 mm)
22" (559 mm) Square	9.3" (235 mm)

# CF SERIES by DIRECT

## **SQUARE FORWARD THROW FLOODLIGHT**

This forward throw fixture has an optical system specifically designed to assure maximum main beam projection, while minimizing spill light. It is generally positioned with a 15- to 25-degree tilt above horizontal to reduce glare and obtain optimum performance. The fixture features an aluminum die-cast, weather-tight housing.

APPLICATIONS: Parking lots, auto sales lots and outdoor sports areas

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	12"	MCF*407-M
100W PSMH	12"	MCF*410-M
150W PSMH	12"	MCF*615-M
250W PSMH	16"	CF*625-M
320W PSMH 🎙	16"	CF*632-M
400W PSMH	16"	CF*640-M
750W PSMH	22"	CF*675-M
1000W MH	22"	CF*499-M
70W HPS	12"	MCF*507-M
100W HPS	12"	MCF*510-M
150W HPS	12"	MCF*515-M
250W HPS	16"	CF*525-M
400W HPS	16"	CF*540-M
1000W HPS	22"	CF*599-M

Reduced envelope	lamp.	ED28 for	320W	PSMH.
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MOUNTING CODES		
Insert Code at * in Catalog Number		
3 6 5		
3 = 2" Adjustable Fitter		
4 = Yoke Mount		
5 = 20° Fixed Mount		
6 = 1/2" Adjustable Fitter (12" housing only)  8 = No Mounting Hardware (factory-drilled with 2-foot cord)		

SEE PAGE 85 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS** 

**MOUNTING ALTERNATIVES START ON PAGE 90** 





#### FACTORY-INSTALLED OPTIONS

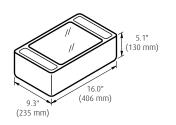
DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(70-150W HPS, 12" housing only)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W-750W PSMH, 250W-1000W HPS only)	5		
(70W-150W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-750W PSMH, 1000W MH, 250W-1000W HPS)	T		
(70W-150W HPS and 70W & 100W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Uplight Lens Frame		U	
Button Photocell (n/a 1000W 120V & all 480V)			
(factory-installed except in 2" adjustable fitter)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/1000W, 120V	1	Р	
For fixtures w/480V	5	Р	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Wire Guard		
<b>2</b> 4 (10) (10) <b>48</b>	12" Housing	FWG-12	
	16" Housing	FWG-16	
	22" Housing	FWG-22	
	Backlight Shield		
-62	12" Housing	SBL-12	
100	16" Housing	SBL-16	
	22" Housing	SBL-22	
	Polycarbonate Vandal Shield		
	12" Housing	LS-12	
	16" Housing	LS-16	
	22" Housing	LS-22	
	Button Photocell (for 2" fitter)		
A COL	120V (n/a 1000W)	PC-1	
0	208V, 240V or 277V	PC-2	
	Canada 347V	PC*6	

<sup>▲</sup> n/a if fixture is used in an uplight position







#### RECTANGULAR FORWARD THROW FLOODLIGHT

This forward throw luminaire has an optical system specifically designed to assure maximum main beam projection, while minimizing spill light. The fixture features an aluminum die-cast housing and a a precise reflector system and tempered glass lens. It is generally positioned with a 20-degree tilt above horizontal to reduce glare and obtain maximum performance. The optical chamber is sealed to reduce dirt and insect contamination.

**APPLICATIONS:** Ideal for small parking areas and building-mounted security lighting

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER	
70W PSMH	16.0" x 9.3"	LCF*407-M	
100W PSMH	16.0" x 9.3"	LCF*410-M	
150W PSMH	16.0" x 9.3"	LCF*615-M	
70W HPS	16.0" x 9.3"	LCF*507-M	
100W HPS	16.0" x 9.3"	LCF*510-M	
150W HPS	16.0" x 9.3"	LCF*515-M	

MOUNTING CODES		
Insert Code at * in Catalog Number		
3 4 8		
<b>3</b> = 2" Adjustable Fitter		
4 = Yoke Mount  8 = No Mounting Hardware (factory-drilled with 2-foot cord)		

SEE PAGE 85 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS** 

**MOUNTING ALTERNATIVES START ON PAGE 90** 



#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(HPS only)	1		
277V Reactor Ballast (150W PSMH only)	27		
480V Ballast (70W-100W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(70W & 100W PSMH & 70W-100W HPS only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V or 480V) (n/a Canada)	3, 4 or 5	F	
Button Photocell (n/a on 480V)			
(factory-installed except in 2" adjustable fitter)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/480V	5	Р	
Tamperproof Lens Fasteners		J	

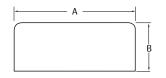
#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Wire Guard	FWG-L	
	Polycarbonate Vandal Shield <sup>®</sup>	LS-L	
	Ground Mount Post	PGM-1	
	Tamperproof Screwdriver	TPS-1	
6	Button Photocell (for 2" fitter) 120V 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6	

<sup>▲</sup> n/a if fixture is used in an uplight position



#### SHOWN WITH OPTIONAL UPLIGHT LENS



"A"	"B"
12" (305 mm) Square	5.0" (127 mm)
16" (406 mm) Square	6.5" (165 mm)
22" (559 mm) Square	9.3" (235 mm)





# PM SERIES by DIRECT



## **SQUARE SPOTLIGHT**

The Square Spotlight features a smooth diffuse reflector providing an intermediate distribution. The fixture features an aluminum die-cast, weather-tight housing and a sealed optical chamber reduces dirt and insect contamination.

APPLICATIONS: Illuminating tall, narrow subjects such as flagpoles, steeples, columns and signs

#### LAMP INCLUDED

HOUSING SIZE	CATALOG NUMBER
12"	MPM*407-M
12"	MPM*410-M
12"	MPM*615-M
16"	PM*625-M
16"	PM*632-M
16"	PM*640-M
22"	PM*499-M
12"	MPM*507-M
12"	MPM*510-M
12"	MPM*515-M
16"	PM*525-M
16"	PM*540-M
	12" 12" 12" 16" 16" 22" 12" 12" 16"

<b>₽</b>	- 1				,		_		
·Ψ	Reduced	envelope	iamp.	ED28	TOL	320W	Ъ	400W PSMH.	

## **MOUNTING CODES** Insert Code at \* in Catalog Number 3 = 2" Adjustable Fitter 4 = Yoke Mount 6 = 1/2" Adjustable Fitter (12" housing only) 8 = No Mounting Hardware (factory-drilled with 2-foot cord) SEE PAGE 85 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS**

MOUNTING ALTERNATIVES START ON PAGE 90

#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(70W-150W HPS, 12" housing only)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W-400W PSMH, 1000W MH, 250W-400W HPS)	5		
(70W-150W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-400W PSMH, 1000W MH, 250W-400W HPS)	T		
(70W-150W HPS and 70W & 100W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Uplight Lens Frame		U	
Button Photocell (n/a 1000W 120V & all 480V)			
(factory-installed except in 2" adjustable fitter)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/1000W, 120V	1	Р	
For fixtures w/480V	5	Р	

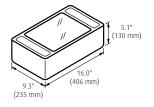
#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER
	Deep Baffle 12" Housing 16" Housing 22" Housing	DB-12 DB-16 DB-22
	Wire Guard 12" Housing 16" Housing 22" Housing	FWG-12 FWG-16 FWG-22
	Glare Shield <sup>≜</sup> 12" Housing 16" Housing 22" Housing	GS-12 GS-16 GS-22
	Polycarbonate Vandal Shield   12" Housing 16" Housing 22" Housing	LS-12 LS-16 LS-22
	Internal Louver 12" Housing 16" Housing 22" Housing	DL-12 DL-16 not available
<b>6</b>	<b>Button Photocell</b> (for 2" fitter) 120V (n/a 1000W) 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6

Consult factory if using Glare Shield and Polycarbonate Vandal Shield together

<sup>▼</sup> n/a if fixture is used in an uplight position







# LPM SERIES by DIRECT

#### **RECTANGULAR SQUARE SPOTLIGHT**

The Rectangular Spotlight has a smooth aluminum diffuse reflector providing an intermediate distribution. The housing is constructed of die-cast aluminum and the optical chamber is sealed to reduce dirt and insect contamination.

**APPLICATIONS:** For illuminating tall, narrow subjects such as flagpoles and steeples

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER	
70W PSMH	16.0" x 9.3"	LPM*407-M	
100W PSMH	16.0" x 9.3"	LPM*410-M	
150W PSMH	16.0" x 9.3"	LPM*615-M	
70W HPS	16.0" x 9.3"	LPM*507-M	
100W HPS	16.0" x 9.3"	LPM*510-M	
150W HPS	16.0" x 9.3"	LPM*515-M	

MOUNTING CODES
Insert Code at * in Catalog Number
3 4 8
<b>3</b> = 2" Adjustable Fitter
4 = Yoke Mount
8 = No Mounting Hardware (factory-drilled with 2-foot cord)

SEE PAGE 85 FOR MORE INFORMATION ABOUT THESE MOUNTINGS

MOUNTING ALTERNATIVES START ON PAGE 90

#### **FACTORY-INSTALLED OPTIONS**

CHANGE SUFFIX TO	ADD AFTER SUFFIX	
1		
27		
5		
T		
27, 1, 2 or 6	F	
3, 4 or 5	F	
27, 1, 2, 3, or 4	Р	
6	Р	
5	Р	
	J	
	SUFFIX TO  1 27 5  T 27, 1, 2 or 6 3, 4 or 5  27, 1, 2, 3, or 4 6	SUFFIX TO SUFFIX  1 27 5  T 27, 1, 2 or 6 3, 4 or 5  F  27, 1, 2, 3, or 4 6 P

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER
	Deep Baffle	DB-12
	Wire Guard	FWG-L
	Glare Shield <sup>▲</sup>	GS-12
	Polycarbonate Vandal Shield <sup>▲▼</sup>	LS-L
	Internal Louver	DL-L
	Ground Mount Post	PGM-1
	Tamperproof Screwdriver	TPS-1
<b>4</b>	<b>Button Photocell</b> (for 2" fitter) 120V 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6

Consult factory if using Glare Shield and Polycarbonate Vandal Shield together

▼ n/a if fixture is used in an uplight position



#### SHOWN WITH OPTIONAL UPLIGHT LENS



"A"	"B"
12" (305 mm) Square	5.0" (127 mm)
16" (406 mm) Square	6.5" (165 mm)
22" (559 mm) Square	9.3" (235 mm)







## **SQUARE NARROW SPOTLIGHT**

The Square Narrow Spotlight features a smooth, bright, anodized reflector, providing a precise distribution. The fixture features an aluminum die-cast, weather-tight housing and a sealed optical chamber to reduce dirt and insect contamination.

APPLICATIONS: Illuminating tall, narrow subjects such as flagpoles, steeples, columns and signs

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	12"	MPN*407-M
100W PSMH	12"	MPN*410-M
150W PSMH	12"	MPN*615-M
250W PSMH	16"	PN*625-M
320W PSMH 🎙	16"	PN*632-M
400W PSMH <b>₽</b>	16"	PN*640-M
1000W MH	22"	PN <b>*</b> 499-M
70W HPS	12"	MPN*507-M
100W HPS	12"	MPN*510-M
150W HPS	12"	MPN*515-M
250W HPS	16"	PN*525-M
400W HPS	16"	PN*540-M

## **MOUNTING CODES** Insert Code at \* in Catalog Number 3 = 2" Adjustable Fitter 4 = Yoke Mount 6 = 1/2" Adjustable Fitter (12" housing only) 8 = No Mounting Hardware (factory-drilled with 2-foot cord) SEE PAGE 85 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS**

**MOUNTING ALTERNATIVES START ON PAGE 90** 

#### FACTORY-INSTALLED OPTIONS

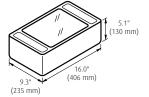
DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(70W-150W HPS, 12" housing only)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W-400W PSMH, 1000W MH, 250W-400W HPS)	5		
(70W-150W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-400W PSMH, 1000W MH, 250W-400W HPS)	T		
(70W-150W HPS and 70W & 100W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Uplight Lens Frame		U	
Button Photocell (n/a 1000W 120V & all 480V)			
(factory-installed except in 2" adjustable fitter)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/1000W, 120V	1	Р	
For fixtures w/480V	5	Р	

#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Deep Baffle 12" Housing 16" Housing 22" Housing	DB-12 DB-16 DB-22	
	Wire Guard 12" Housing 16" Housing 22" Housing	FWG-12 FWG-16 FWG-22	
	Glare Shield <sup>®</sup> 12" Housing 16" Housing 22" Housing	GS-12 GS-16 GS-22	
	Polycarbonate Vandal Shield <sup>▲▼</sup> 12" Housing 16" Housing 22" Housing	LS-12 LS-16 LS-22	
	Internal Louver 12" Housing 16" Housing 22" Housing	DL-12 DL-16 not available	
4	<b>Button Photocell</b> (for 2" fitter) 120V (n/a 1000W) 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6	

Consult factory if using Glare Shield and Polycarbonate Vandal Shield together n/a if fixture is used in an uplight position







#### **RECTANGULAR NARROW SPOTLIGHT**

The optics for the Rectangular Narrow Spotlight feature a smooth, bright reflector, providing a precise distribution. The housing is constructed of die-cast aluminum and the optical chamber is sealed to reduce dirt and insect contamination.

**APPLICATIONS:** For illuminating tall, narrow subjects such as flagpoles and steeples

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER	
70W PSMH	16.0" x 9.3"	LPN*407-M	
100W PSMH	16.0" x 9.3"	LPN*410-M	
150W PSMH	16.0" x 9.3"	LPN*615-M	
70W HPS	16.0" x 9.3"	LPN*507-M	
100W HPS	16.0" x 9.3"	LPN*510-M	
150W HPS	16.0" x 9.3"	LPN*515-M	

MOUNTING CODES		
Insert Code at * in Catalog Number		
3 4 8		
3 = 2" Adjustable Fitter		
4 = Yoke Mount		
8 = No Mounting Hardware (factory-drilled with 2-foot cord)		

SEE PAGE 85 FOR MORE INFORMATION ABOUT THESE MOUNTINGS

MOUNTING ALTERNATIVES START ON PAGE 90



#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(HPS only)	1		
277V Reactor Ballast (150W PSMH only)	27		
480V Ballast (70W-100W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V) (70W & 100W PSMH & 70W-100W HPS only)	T		
Single Fuse (277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V or 480V) (n/a Canada)	3, 4 or 5	F	
<b>Button Photocell</b> (n/a on 480V) (factory-installed except in 2" adjustable fitter)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/480V	5	Р	
Tamperproof Lens Fasteners		J	

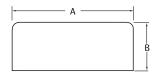
#### FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
Deep Baffle	DB-12
Wire Guard	FWG-L
Glare Shield <sup>▲</sup>	GS-12
Polycarbonate Vandal Shield <sup>▲▼</sup>	LS-L
Internal Louver	DL-L
Ground Mount Post	PGM-1
Tamperproof Screwdriver	TPS-1
Button Photocell (for 2" fitter) 120V 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6

Consult factory if using Glare Shield and Polycarbonate Vandal Shield together
 n/a if fixture is used in an uplight position



# Minimum 150°C Supply Conductors Required for Wall Mount. NON COMBUSTIBLE SURFACE ONLY



"A"	"B"
12" (305 mm) Square	5.0" (127 mm)
16" (406 mm) Square	6.5" (165 mm)
22" (559 mm) Square	9.3" (235 mm)

# PR SERIES by DIRECT

#### **SQUARE WIDE THROW AREA LIGHT**

The 12-inch and 16-inch housings of the Wide Throw Area Light have a Type III asymmetric distribution pattern. The 22-inch aluminum die-cast housing has Type II asymmetric distribution. The precise reflector system provides wide side-to-side and moderate front distribution.

**APPLICATIONS:** Roadway, parking areas or for building-mounted security lighting

#### LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	12"	MPR*407-M
100W PSMH	12"	MPR*410-M
150W PSMH	12"	MPR*615-M
250W PSMH	16"	PR*625-M
320W PSMH <b>₽</b>	16"	PR*632-M
400W PSMH <b>₽</b>	16"	PR*640-M
750W PSMH	22"	PR*675-M
1000W MH	22"	PR*499-M
70W HPS	12"	MPR*507-M
100W HPS	12"	MPR*510-M
150W HPS	12"	MPR*515-M
250W HPS	16"	PR*525-M
400W HPS	16"	PR*540-M
1000W HPS	22"	PR*599-M

Reduced envelope lamp, ED28 for 320W & 400W PSN	•	Reduced	envelone	lamo.	FD28 fo	or 320W	& 400W	PSME
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MOUNTING CODES
Insert Code at * in Catalog Number
8 K M W
1 = 1-1/2" Close Pole Mount
2 = 6" Extended Pole Mount
<b>3</b> = 2" Adjustable Fitter
4 = Yoke Mount
6 = 1/2" Adjustable Fitter (12" housing only)
8 = No Mounting Hardware (factory-drilled with 2-foot cord)
K = Round Tube Off-Center Tenon (16" housing only) (Fits up to 3" O.D.)
M = Round Tube Off-Center Tenon (16" housing only) (Direct fitter for 4" sq. pole)

NOTE: When using multiple 22" sq. housings at a 90° configuration, a special 12" arm is required; see page 91.

> SEE PAGE 85 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS**

**W** = Wall Mount (Backlight Shield is standard)

**MOUNTING ALTERNATIVES START ON PAGE 90** 





#### FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast (70W-150W HPS)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast (70W & 100W PSMH only) (150W-750W PSMH, 1000W MH, 250W-1000W HPS) (70W-150W HPS only)	5 5 5		
Canada Tri-volt Ballast (120/277/347V) (150w-750W PSMH, 1000W MH, 250W-1000W HPS) (70W-150W HPS and 70W & 100W PSMH only)	T T		
Single Fuse (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor) (delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell (n/a 1000W 120V & all 480V) (factory-installed except in 2" adjustable fitter) (277V Reactor, 120V, 277V, 208V, or 240V) (Canada 347V)	27, 1, 2, 3, or 4 6	P P	
External Photocell For fixtures w/1000W, 120V For fixtures w/480V	1 5	P P	

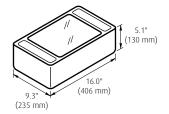
#### FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER
	Wire Guard	
T-000000000	12" Housing	FWG-12
	16" Housing	FWG-16
	22" Housing	FWG-22
	Backlight Shield <sup>*</sup>	
-60	12" Housing	SBL-12
100	16" Housing	SBL-16
	22" Housing	SBL-22
	Button Photocell (for 2" fitter)	
100	120V (n/a 1000W)	PC-1
0	208V, 240V or 277V	PC-2
	Canada 347V	PC*6

Standard on Wall Mount, mounting code "W"



Minimum 150°C Supply Conductors Required for Wall Mount. NON COMBUSTIBLE SURFACE ONLY





# LPR SERIES by DIRECT

# **RECTANGULAR WIDE THROW AREA LIGHT**

The Wide Throw Area Light reflector provides wide side-to-side and moderate front distribution with a Type III asymmetric distribution pattern. The housing is constructed of die-cast aluminum and the optical chamber is sealed to reduce dirt and insect contamination.

**APPLICATIONS:** For illuminating small parking lots and building mounted security lighting

LAMP INCLUDED				
LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER		
70W PSMH	16.0" x 9.3"	LPR*407-M		
100W PSMH	16.0" x 9.3"	LPR*410-M		
150W PSMH	16.0" x 9.3"	LPR*615-M		
70W HPS	16.0" x 9.3"	LPR*507-M		
100W HPS	16.0" x 9.3"	LPR*510-M		

16.0" x 9.3" LPR\*515-M

LAMB INCLUDED

150W HPS

MOUNTING CODES
Insert Code at * in Catalog Number
1 3 4 8 W
1 = 1-1/2" Close Pole Mount
<b>3</b> = 2" Adjustable Fitter
4 = Yoke Mount
8 = No Mounting Hardware (factory-drilled with 2-foot cord)
<b>W</b> = Wall Mount
SEE PAGE 85 FOR MORE INFORMATION

ABOUT THESE MOUNTINGS

**MOUNTING ALTERNATIVES START ON PAGE 90** 

# FACTORY-INSTALLED OPTIONS

1 27 5		
27		
5		
T		
27, 1, 2 or 6	F	
3, 4 or 5	F	
27, 1, 2, 3, or 4	Р	
6	Р	
5	Р	
	J	
	27, 1, 2 or 6 3, 4 or 5 7, 1, 2, 3, or 4 6	T

# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
Wire Guard	FWG-L
Glare Shield <sup>≜</sup>	GS-12
Polycarbonate Vandal Shield <sup>▲▼</sup>	LS-L
Backlight Shield (standard on Wall Mount)	SBL-L
Tamperproof Screwdriver	TPS-1
Button Photocell (for 2" fitter) 120V 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6

Consult factory if using Glare Shield and Polycarbonate Vandal Shield together

n/a if fixture is used in an uplight position

# IES TYPE III

# AVH3 SERIES by PURECTS

# **HORIZONTAL-LAMP WIDE THROW AVIATOR®**

This distinctive full cutoff fixture combines a horizontal lamp and features a segmented reflector designed to provide excellent side-to-side distribution. The housing and door frame are constructed from die-cast aluminum and features a high impact, strength-tempered glass lens. The no-leak silicone gasket assures a lifetime seal.

APPLICATIONS: Roadway, parking areas or for building-mounted security lighting

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	14.4" x 15.5"	MAVH30407-M
100W PSMH	14.4" x 15.5"	MAVH30410-M
150W PSMH	14.4" x 15.5"	MAVH30615-M
250W PSMH	18.5" x 19.6"	AVH30625-M
320W PSMH <b>(</b>	18.5" x 19.6"	AVH30632-M
400W PSMH <b>₽</b>	18.5" x 19.6"	AVH30640-M
70W HPS	14.4" x 15.5"	MAVH30507-M
100W HPS	14.4" x 15.5"	MAVH30510-M
150W HPS	14.4" x 15.5"	MAVH30515-M
250W HPS	18.5" x 19.6"	AVH30525-M
400W HPS	18.5" x 19.6"	AVH30540-M

Reduced envelope lamp. ED28 for 320W & 400W PSMH.

**MOUNTING ALTERNATIVES START ON PAGE 90** 





"A"	"B"
14.4" (366 mm)	6.3" (160 mm)
18.5" (470 mm)	7.9" (201 mm)

"C"	"D"	
15.5" (393 mm)	20.9" (532 mm)	
19.6" (498 mm)	26.5" (674 mm)	





# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH)	5		
(150W-400W PSMH, 250W-400W HPS only)	5		
(70W-150W HPS)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-400W PSMH, 250W-400W HPS)	T		
(70W-150W HPS and 70W & 100W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell (For fixtures w/480V)	5	Р	

# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
<b>Extended Arm</b> 14.4" x 15.5" Housing 18.5" x 19.6" Housing	AVE-1 AVE-2
Upsweep Extended Arm 14.4" x 15.5" Housing 18.5" x 19.6" Housing	AVU-1 AVU-2
Round Pole Adaptor 14.4" x 15.5" Housing 18.5" x 19.6" Housing (fits round poles 3" to 6" in diameter)	AVRP-1 AVRP-2
Backlight Shield 14.4" x 15.5" Housing 18.5" x 19.6" Housing	SBL-AV1 SBL-AV2



POST TOP

SIDE-ARM

# AVV3 SERIES by DIRECT



# **VERTICAL-LAMP WIDE THROW AERODOME®**

The AeroDome is a stylish fixture that features a high-impact, clear tempered glass lens, reflectors made of premium-grade pre-finished aluminum, and a rugged, die-cast housing. The AVV3 Series delivers excellent photometric performance, higher footcandle averages, and improved uniformity. The AVV3 Series provides an IES Type III Full Cutoff distribution with a vertical lamp position that provides excellent performance.

**APPLICATIONS:** Roadway and parking areas

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
150W PSMH	20"	AVV3*615-M
250W PSMH	20"	AVV3*625-M
320W PSMH <b>₽</b>	20"	AVV3*632-M
400W PSMH <b>₽</b>	20"	AVV3*640-M
750W PSMH	25"	AVV3*675-M
1000W PSMH <b>₽</b>	25"	AVV3*699-M
1000W MH 🎙	25"	AVV3*499-M
150W HPS	20"	AVV3*515-M
250W HPS	20"	AVV3*525-M
400W HPS	20"	AVV3*540-M
1000W HPS <b>₽</b>	25"	AVV3*599-M

Reduced envelope lamp. ED28 for 320W & 400	W PSMH.
BT37 for 1000W MH & PSMH. ED37 for 1000W	HPS.

# **MOUNTING CODES** Insert Code at \* in Catalog Number 0 = Side-Arm Mount L = Side-Arm Mount (optic rotated) R = Side-Arm Mount (optic rotated) **F** = Round Tube Center Tenon H = Round Tube Center 4" Square Pole I = Round Tube Center 5" Square Pole

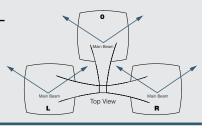
# **MOUNTING ALTERNATIVES START ON PAGE 90**

J = Round Tube Center 6" Square Pole

HOUSING	"A"	"B"	"C"	"D"	"E"	"F"	"G"
20"	23.0"	20.0"	11.8"	36.0"	12.0"	20.0"	28.8"
(501 mm)	(585 mm)	(501 mm)	(300 mm)	(913 mm)	(305 mm)	(501 mm)	(733 mm)
25"	28.6"	25.0"	14.4"	41.8"	14.5"	25.0"	36.7"
(635 mm)	(726 mm)	(635 mm)	(366 mm)	(1062 mm)	(368 mm)	(635 mm)	(931 mm)

# **ROTATABLE OPTICS**

AeroDome Type III optics can be rotated 90 degrees to meet site light distribution requirements while retaining the visual orientation of the AeroDome housing and pole. Rotatable optics are factory set or field rotatable on the Side-Arm Mount and field rotatable in the Round Tube Center Post-Top Mount.





# **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast (150W HPS)	5		
(PSMH, 1000W MH, 250W-1000W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W HPS)	T		
(150W-1000W PSMH, 1000W MH, 250W-1000W HPS)	T		
Single Fuse (n/a with Post-Top fixtures)			
(277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (n/a with Post-Top fixtures)			
(208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Button Photocell (n/a 1000W 120V & all 480V)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/1000W, 120V	1	Р	
For fixtures w/480V	5	Р	

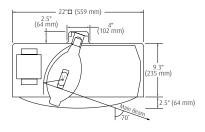
# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Full Cutoff External Backlight Shield <sup>A</sup> 20" Housing 25" Housing	SBL-AVV20CBZ SBL-AVV25CBZ	
External Backlight Shield <sup>▼</sup> 20" Housing 25" Housing	SBL-AVV20EBZ SBL-AVV25EBZ	
Round Pole Adaptor (fits round poles 3" to 6" in diameter)	AVRP-3	

- Full Cutoff External Backlight Shield includes the External Backlight Shield
- For backlight cutoff. To maintain "full cutoff" order Full Cutoff External Backlight Shield.



# Minimum 150°C Supply Conductors Required for Wall Mount. NON COMBUSTIBLE SURFACE ONLY



4" square x 2.5" H (102 mm x 64 mm) cast aluminum, gasketed box supplied on 1000W MH and 250W - 400W HPS fixtures.

# VPR SERIES by DIRECT

# **SQUARE VERTICAL-LAMP WIDE THROW AREA LIGHT**

The VPR Series fixture features a 70-degree main beam. Inside the die-cast aluminum housing, the lamp is tilted 20 degrees from vertical toward the house-side of the fixture. This fixture provides low nadir candlepower and great lateral distribution. 250W through 400W fixtures feature an acrylic sag lens; 750W and 1000W fixtures feature a glass sag lens.

APPLICATIONS: Wide roadway areas, large parking areas

# LAMP INCLUDED

CATALOG NUMBER	HOUSING SIZE	LAMP WATTAGE
VPR*6925-M	22"	250W PSMH
VPR*6932-M	22"	320W PSMH <b></b>
VPR*6940-M	22"	400W PSMH <b>₽</b>
VPR*675-M	22"	750W PSMH
VPR*699-M	22"	1000W PSMH ♥
VPR*499-M	22"	1000W MH♥
VPR*592-M	22"	250W HPS
VPR*594-M	22"	400W HPS
VPR*675-M VPR*699-M VPR*499-M VPR*592-M	22" 22" 22" 22"	750W PSMH  1000W PSMH ♥  1000W MH ♥  250W HPS

Φ	Reduced	envelope	lamp.	ED28	for	320W	Ъ	400W	PSMH.	
	BT37 for	1000W M	н я ро	MH						

MOUNTING CODES
Insert Code at * in Catalog Number
1 2 8 W
1 = 1-1/2" Close Pole Mount
2 = 6" Extended Pole Mount
8 = No Mounting Hardware (factory-drilled with 2-foot cord)
w = Wall Mount

NOTE: When using multiple 22" sq. housings at a 90° configuration, a special 12" arm is required; see page 91.

> SEE PAGE 85 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS** MOUNTING ALTERNATIVES START ON PAGE 90



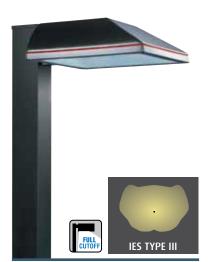


# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (250W-400W PSMH only)	27		
480V Ballast	5		
Canada Tri-volt Ballast (120/277/347V)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor) (delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell (n/a 1000W 120V & all 480V) (277V Reactor, 120V, 277V, 208V, or 240V) (Canada 347V)	27, 1, 2, 3, or 4 6	P P	
External Photocell For fixtures w/1000W, 120V For fixtures w/480V	1 5	P P	

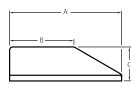
# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Cutoff Baffle	CSF-22	
Backlight Shield	SBL-22	



# STANDARD IN BLACK SHOWN WITH OPTIONAL ACCENT STRIPE

Minimum 150°C Supply Conductors Required for Wall Mount. NON COMBUSTIBLE SURFACE ONLY



"A"	"B"	"C"
16" Square (406 mm)	9.5" (241 mm)	5.1" (129 mm)
22" Square	13.4"	6.5"
(559 mm)	(340 mm)	(165 mm)

# WPR SERIES by DIRECT

# **WEDGE WIDE THROW AREA LIGHT**

Available in 16-inch or 22-inch square, the distinctive architectural styling of WPR Series fixtures offers an estimated 50% lower EPA values than typical shoebox housings. Fixtures feature a clear, tempered glass lens mounted securely in the recessed die-cast door frame. WPR Series fixtures use a parking/roadway reflector with Type III asymmetric distribution.

**APPLICATIONS:** Roadway, parking areas or for building-mounted security lighting

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
100W PSMH	16"	WPR*410-M
150W PSMH	16"	WPR*615-M
250W PSMH	22"	WPR*6925-M
320W PSMH <b>\$</b>	22"	WPR*6932-M
400W PSMH <b>\$</b>	22"	WPR*6940-M
100W HPS	16"	WPR*510-M
150W HPS	16"	WPR*515-M
250W HPS	22"	WPR*592-M
400W HPS	22"	WPR*594-M
_		

Reduced envelope lar	np. ED28 for 320W & 400W PSMH.
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MOUNTING CODES
Insert Code at * in Catalog Number
1 2 8 W
1 = 1-1/2" Close Pole Mount
2 = 6" Extended Pole Mount
8 = No Mounting Hardware (factory-drilled with 2-foot cord)
<b>W</b> = Wall Mount

**NOTE**: When using multiple 22" sq. housings at a 90° configuration, a special 12" arm is required; see page 91.

SEE PAGE 85 FOR MORE INFORMATION
ABOUT THESE MOUNTINGS
MOUNTING ALTERNATIVES START ON PAGE 90





for Wet Locations

# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(100W PSMH only)	5		
(150W-400W PSMH, 250W-400W HPS only)	5		
(100W-150W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-400W PSMH, 250W-400W HPS only)	T		
(100W & 150W HPS and 100W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell (n/a on 480V)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell (480V only)	5	Р	
Accent Stripe (note at end of catalog number pre	fix: G=Grey, R=Red (1	WPR1615 <b>R</b> -M)	

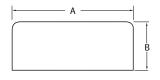
# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
<b>Wire Guard</b> 16" Housing 22" Housing	FWG-16 FWG-22	
Backlight Shield 16" Housing 22" Housing	SBL-16 SBL-22	



† Actual IES Type III

### Minimum 150°C Supply Conductors Required for Wall Mount. NON COMBUSTIBLE SURFACE ONLY



"A"	"B"
12" (305 mm) Square	5.0" (127 mm)
16" (406 mm) Square	6.5" (165 mm)
22" (559 mm) Square	9.3" (235 mm)

# AC SERIES by DIRECT

# **SQUARE FORWARD THROW AREA LIGHT**

This compact forward-throw reflector has a main beam of 60+ degrees from vertical (30 degrees from horizontal), providing wide lateral distribution and excellent uniformities. The housing is aluminum die-cast. A backlight shield accessory (standard on wall mount) permits precise cutoff adjustability.

**APPLICATIONS:** Parking lots and area lighting

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	12"	MAC*407-M
100W PSMH	12"	MAC*410-M
150W PSMH	12"	MAC*615-M
250W PSMH	16"	AC*625-M
320W PSMH <b>₽</b>	16"	AC*632-M
400W PSMH ♥	16"	AC*640-M
750W PSMH	22"	AC*675-M
1000W MH	22"	AC*499-M
70W HPS	12"	MAC*507-M
100W HPS	12"	MAC*510-M
150W HPS	12"	MAC*515-M
250W HPS	16"	AC*525-M
400W HPS	16"	AC*540-M

MOL	JNTING CO	DES	
Insert Code at * in Catalog	) Number		
1 2	3	4	6
8 K	M	W	
<b>1</b> = 1-1/2" Close Pole	e Mount		

- 2 = 6" Extended Pole Mount3 = 2" Adjustable Fitter
- 4 = Yoke Mount
- 4 TOKE MOUTE
- 6 = 1/2" Adjustable Fitter (12" housing only)
- 8 = No Mounting Hardware (factory-drilled with 2-foot cord) K = Round Tube Off-Center Tenon
- (16" housing only) (Fits up to 3" O.D.)
- M = Round Tube Off-Center Tenon (16" housing only) (Direct fitter for 4" sq. pole)
- **W** = Wall Mount (Backlight Shield is standard)

**NOTE**: When using multiple 22" sq. housings at a 90° configuration, a special 12" arm is required; see page 91.

SEE PAGE 85 FOR MORE INFORMATION ABOUT THESE MOUNTINGS

**MOUNTING ALTERNATIVES START ON PAGE 90** 

# FACTORY-INSTALLED OPTIONS

22" fixtures

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(70W-150W HPS)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W-750W PSMH, 250W-400W HPS)	5		
(70W-150W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-750W PSMH, 250W-400W HPS)	T		
(70W-150W HPS and 70W & 100W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell (n/a 1000W 120V & all 480V)			
(factory-installed except in 2" adjustable fitter)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/1000W, 120V	1	Р	
For fixtures w/480V	5	Р	

# FIELD-INSTALLED ACCESSORIES

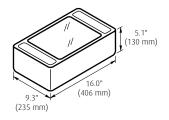
	DESCRIPTION	CATALOG NUMBER	
723	<b>Wire Guard</b> 12" Housing 16" Housing	FWG-12 FWG-16	
	22" Housing	FWG-22	
	Backlight Shield* 12" Housing 16" Housing 22" Housing	SBL-12 SBL-16 SBL-22	
6	<b>Button Photocell</b> (for 2" fitter) 120V (n/a 1000W) 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6	

standard on Wall Mount, mounting code "W"



† Actual IES Type III

Minimum 150°C Supply Conductors Required for Wall Mount. NON COMBUSTIBLE SURFACE ONLY





# LAC SERIES by DIRECT

# **RECTANGULAR FORWARD THROW AREA LIGHT**

This compact forward-throw reflector has a main beam of 60+ degrees from vertical (30 degrees from horizontal), providing wide lateral distribution and improved uniformities. The backlight shield accessory (standard on wall mount) permits precise cutoff adjustability. The housing is constructed of die-cast aluminum and the optical chamber is sealed to reduce dirt and insect contamination.

**APPLICATIONS:** For illuminating small parking lots and building mounted security lighting

LAMP INCL	LAMP INCLUDED			
LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER		
70W PSMH	16.0" x 9.3"	LAC*407-M		
100W PSMH	16.0" x 9.3"	LAC*410-M		
150W PSMH	16.0" x 9.3"	LAC*615-M		
70W HPS	16.0" x 9.3"	LAC*507-M		
100W HPS	16.0" x 9.3"	LAC*510-M		
150W HPS	16.0" x 9.3"	LAC*515-M		

MOUNTING CODES
Insert Code at * in Catalog Number
1 = 1-1/2" Close Pole Mount
<b>3</b> = 2" Adjustable Fitter
4 = Yoke Mount
8 = No Mounting Hardware (factory-drilled with 2-foot cord)
W = Wall Mount
CEL DACE OF EOD WODE INCODMATION

SEE PAGE 85 FOR MORE INFORMATION ABOUT THESE MOUNTINGS MOUNTING ALTERNATIVES START ON PAGE 90

# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(70W-150W HPS, only)	1		
277V Reactor Ballast (150W PSMH only)	27		
480V Ballast (70W-100W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V) (70W & 100W PSMH & 70W-100W HPS only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V or 480V) (n/a Canada)	3, 4 or 5	F	
Button Photocell (n/a on 480V) (factory-installed except in 2" adjustable fitter) (277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	P	
External Photocell For fixtures w/480V	5	Р	
Tamperproof Lens Fasteners		j	

# FIELD-INSTALLED ACCESSORIES

	DESCRIPTION	CATALOG NUMBER	
	Wire Guard	FWG-L	
	Polycarbonate Vandal Shield <sup>®</sup>	LS-L	
	Backlight Shield <sup>▼</sup>	SBL-L	
	Tamperproof Screwdriver	TPS-1	
<b>%</b>	Button Photocell (for 2" fitter) 120V 208V, 240V or 277V Canada 347V	PC-1 PC-2 PC*6	

<sup>▲</sup> n/a if fixture is used in an uplight position

<sup>▼</sup> standard on Wall Mount, mounting code "W"

# TYPE IV<sup>†</sup>

# AVH4 SERIES by DIRECT

# **HORIZONTAL-LAMP FORWARD THROW AVIATOR®**

This distinctive full cutoff fixture combines a horizontal lamp and features a segmented reflector designed to provide forward throw and substantial lateral distribution. The housing and door frame are constructed from die-cast aluminum and features a high impact, strength-tempered glass lens. The no-leak silicone gasket assures a lifetime seal.

**APPLICATIONS:** Parking lots

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	14.4" x 15.5"	MAVH40407-M
100W PSMH	14.4" x 15.5"	MAVH40410-M
150W PSMH	14.4" x 15.5"	MAVH40615-M
250W PSMH	18.5" x 19.6"	AVH40625-M
320W PSMH <b>(</b>	18.5" x 19.6"	AVH40632-M
400W PSMH <b>₽</b>	18.5" x 19.6"	AVH40640-M
70W HPS	14.4" x 15.5"	MAVH40507-M
100W HPS	14.4" x 15.5"	MAVH40510-M
150W HPS	14.4" x 15.5"	MAVH40515-M
250W HPS	18.5" x 19.6"	AVH40525-M
400W HPS	18.5" x 19.6"	AVH40540-M

PReduced envelope lamp. ED28 for 320W & 400W PSMH.

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	14.4" x 15.5"	MAVH40407-M
100W PSMH	14.4" x 15.5"	MAVH40410-M
150W PSMH	14.4" x 15.5"	MAVH40615-M
250W PSMH	18.5" x 19.6"	AVH40625-M
320W PSMH <b>₽</b>	18.5" x 19.6"	AVH40632-M
400W PSMH <b>₽</b>	18.5" x 19.6"	AVH40640-M
70W HPS	14.4" x 15.5"	MAVH40507-M
100W HPS	14.4" x 15.5"	MAVH40510-M
150W HPS	14.4" x 15.5"	MAVH40515-M
250W HPS	18.5" x 19.6"	AVH40525-M
400W HPS	18.5" x 19.6"	AVH40540-M

**MOUNTING ALTERNATIVES START ON PAGE 90** 

† Actual IES Type III

"A"	"B"
14.4" (366 mm)	6.3" (160 mm)
18.5" (470 mm)	7.9" (201 mm)

"C"	"D"
15.5" (393 mm)	20.9" (532 mm)
19.6" (498 mm)	26.5" (674 mm)

# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH)	5		
(150W-400W PSMH, 250W-400W HPS only)	5		
(70W-150W HPS)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-400W PSMH, 250W-400W HPS)	T		
(70W-150W HPS and 70W & 100W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell (For fixtures w/480V)	5	Р	

# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
<b>Extended Arm</b> 14.4" x 15.5" Housing 18.5" x 19.6" Housing	AVE-1 AVE-2
Upsweep Extended Arm 14.4" x 15.5" Housing 18.5" x 19.6" Housing	AVU-1 AVU-2
Round Pole Adaptor 14.4" x 15.5" Housing 18.5" x 19.6" Housing (fits round poles 3" to 6" in diameter)	AVRP-1 AVRP-2
<b>Backlight Shield</b> 14.4" x 15.5" Housing 18.5" x 19.6" Housing	SBL-AV1 SBL-AV2



POST TOP

SIDE-ARM

# AVV4 SERIES by DIRECT

# **VERTICAL-LAMP FORWARD THROW AERODOME®**

The Forward Throw AeroDome is a stylish fixture that features a high-impact, clear tempered glass lens, reflectors made of premium-grade pre-finished aluminum, and a rugged, diecast housing. The AVV4 Series delivers excellent photometric performance, higher footcandle averages, and improved uniformity. The AVV4 Series has a main beam of 67.5 degrees and provides IES Type IV distribution.

**APPLICATIONS:** Parking lots, auto sales lots and tennis courts

# LAMP INCLUDED

(635 mm)

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
150W PSMH	20"	AVV4*615-M
250W PSMH	20"	AVV4*625-M
320W PSMH <b>(</b>	20"	AVV4*632-M
400W PSMH <b>♥</b>	20"	AVV4*640-M
750W PSMH	25"	AVV4*675-M
1000W PSMH <b>₽</b>	25"	AVV4*699-M
1000W MH 🎙	25"	AVV4*499-M
150W HPS	20"	AVV4*515-M
250W HPS	20"	AVV4*525-M
400W HPS	20"	AVV4*540-M
1000W HPS 🎙	25"	AVV4*599-M

	MOUNTING CODES
	Insert Code at * in Catalog Number
	0, L, R
_	<b>0</b> = Side-Arm Mount
	L = Side-Arm Mount (optic rotated)
	R = Side-Arm Mount (optic rotated)
	<b>F</b> = Round Tube Center Tenon
	<b>H</b> = Round Tube Center 4" Square Pole
_	I = Round Tube Center 5" Square Pole
	J = Round Tube Center 6" Square Pole
_	MOUNTING ALTERNATIVES START ON PAGE 90

(368 mm)

Reduced envelope lamp. ED28 for 320W & 400W PSMH. BT37 for 1000W MH & PSMH. ED37 for 1000W HPS.

(726 mm)

HOUSING	"A"	"B"	"C"	"D"	"E"	"F"	"G"
20" (501 mm)	23.0" (585 mm)	20.0" (501 mm)	11.8" (300 mm)	36.0" (913 mm)	12.0" (305 mm)	20.0" (501 mm)	28.8" (733 mm)
25"	28.6"	25.0"	14 4"	41.8"	14 5"	25.0"	36.7"

(1062 mm)

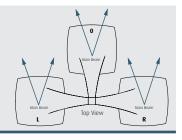
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### **ROTATABLE OPTICS**

(366 mm)

(635 mm)

AeroDome Type IV optics can be rotated 90 degrees to meet site light distribution requirements while retaining the visual orientation of the AeroDome housing and pole. Rotatable optics are factory set or field rotatable on the Side-Arm Mount and field rotatable in the Round Tube Center Post-Top Mount.



(635 mm)

(931 mm)

# **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast (150W HPS)	5		
(PSMH, 1000W MH, 250W-1000W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W HPS)	T		
(PSMH, 1000W MH, 250W-1000W HPS only)	T		
Single Fuse (n/a with Post-Top fixtures)			
(277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (n/a with Post-Top fixtures)			
(208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Button Photocell (n/a 1000W 120V & all 480V)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/1000W, 120V	1	Р	
For fixtures w/480V	5	Р	

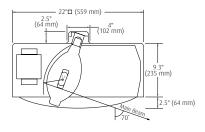
# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Full Cutoff External Backlight Shield <sup>♠</sup> 20" Housing 25" Housing	SBL-AVV20CBZ SBL-AVV25CBZ	
External Backlight Shield <sup>▼</sup> 20" Housing 25" Housing	SBL-AVV20EBZ SBL-AVV25EBZ	
Round Pole Adaptor (fits round poles 3" to 6" in diameter)	AVRP-3	

- Full Cutoff External Backlight Shield includes the External Backlight Shield accessory
- ▼ For backlight cutoff. To maintain "full cutoff" order Full Cutoff External Backlight Shield.

# **IES TYPE IV**

# Minimum 150°C Supply Conductors Required for Wall Mount. NON COMBUSTIBLE SURFACE ONLY



4" square x 2.5" H (102 mm x 64 mm) cast aluminum, gasketed box supplied on 1000W MH and 250W - 400W HPS fixtures.

# VFT SERIES by DIRECT

# **SQUARE VERTICAL-LAMP FORWARD THROW AREA LIGHT**

The VFT Series fixture features a 70-degree main beam. Inside the die-cast aluminum housing, the lamp is tilted 20 degrees from vertical toward the house-side of the fixture. The VFT provides low nadir candlepower and great forward and lateral distribution. 250W through 400W fixtures feature an acrylic sag lens; 750W and 1000W fixtures feature a glass sag lens.

**APPLICATIONS:** Wide roadways areas and large parking areas

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER	
250W PSMH	22"	VFT*6925-M	
320W PSMH <b>Q</b>	22"	VFT*6932-M	
400W PSMH <b>Q</b>	22"	VFT*6940-M	
750W PSMH	22"	VFT*675-M	
1000W PSMH 🎙	22"	VFT*699-M	
1000W MH 🎙	22"	VFT*499-M	
250W HPS	22"	VFT*592-M	
400W HPS	22"	VFT*594-M	

Φ	Reduced envelope lamp. ED28 for 320W & 400W PSMH.
	BT37 for 1000W MH & PSMH.

MOUNTING CODES
Insert Code at * in Catalog Number
1 2 8 W
1 = 1-1/2" Close Pole Mount
2 = 6" Extended Pole Mount
8 = No Mounting Hardware (factory-drilled with 2-foot cord)
w = Wall Mount

NOTE: When using multiple 22" sq. housings at a 90° configuration, a special 12" arm is required; see page 91.

SEE PAGE 85 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS** MOUNTING ALTERNATIVES START ON PAGE 90





us for Wet Locations

# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (250W-400W PSMH only)	27		
480V Ballast	5		
Tri-volt Ballast (120/277/347V)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor) (delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell (n/a 1000W 120V & all 480V) (277V Reactor, 120V, 277V, 208V, or 240V) (Canada 347V)	27, 1, 2, 3, or 4 6	P P	
External Photocell For fixtures w/1000W, 120V For fixtures w/480V	1 5	P P	

# FIELD-INSTALLED ACCESSORIES

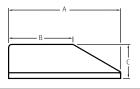
DESCRIPTION	CATALOG NUMBER	
Cutoff Baffle	CSF-22	
Backlight Shield	SBL-22	



† Actual IES Type III

# STANDARD IN BLACK SHOWN WITH OPTIONAL ACCENT STRIPE

Minimum 150°C Supply Conductors Required for Wall Mount. NON COMBUSTIBLE SURFACE ONLY



"A"	"B"	"C"
16" Square	9.5"	5.1"
(406 mm)	(241 mm)	(129 mm)
22" Square	13.4"	6.5"
(559 mm)	(340 mm)	(165 mm)

# WAC SERIES by DIRECT

# WEDGE FORWARD THROW AREA LIGHT

Available in 16-inch or 22-inch square, the distinctive architectural styling of WPR Series fixtures offers an estimated 50% lower EPA values than typical shoebox housings. Fixtures feature a clear, tempered glass lens mounted securely in the recessed die-cast door frame. WAC Series fixtures use a forward throw area cutoff reflector with a main beam of 60+ degrees from vertical providing great lateral distribution and uniformity.

**APPLICATIONS:** Parking areas

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER	
100W PSMH	16"	WAC*410-M	
150W PSMH	16"	WAC*615-M	
250W PSMH	22"	WAC*6925-M	
320W PSMH <b>(</b>	22"	WAC*6932-M	
400W PSMH 🎙	22"	WAC*6940-M	
100W HPS	16"	WAC*510-M	
150W HPS	16"	WAC*515-M	
250W HPS	22"	WAC*592-M	
400W HPS	22"	WAC*594-M	

Reduced envelope lar	np. ED28 for 320W & 400W PSMH.
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MOUNTING CODES
Insert Code at * in Catalog Number
1 2 8 W
1 = 1-1/2" Close Pole Mount
2 = 6" Extended Pole Mount
8 = No Mounting Hardware (factory-drilled with 2-foot cord)
w = Wall Mount

**NOTE**: When using multiple 22" sq. housings at a 90° configuration, a special 12" arm is required; see page 91.

SEE PAGE 88 FOR MORE INFORMATION
ABOUT THESE MOUNTINGS
MOUNTING ALTERNATIVES START ON PAGE 90





Location

# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(100W PSMH only)	5		
(150W-400W PSMH, 250W-400W HPS only)	5		
(100W-150W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-400W PSMH, 250W-400W HPS only)	T		
(100W & 150W HPS and 100W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell (n/a on 480V)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell (480V only)	5	Р	
Accent Stripe (note at end of catalog number pre	fix: G=Grey, R=Red (1	WAC1615 <b>R</b> -M)	

# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Wire Guard 16" Housing 22" Housing	FWG-16 FWG-22	
Backlight Shield <sup>▲</sup> 16" Housing 22" Housing	SBL-16 SBL-22	

standard on Wall Mount, mounting code "W"



**IES TYPE V** 

# QV SERIES by DIRECT



# **SQUARE VERTICAL-LAMP SYMMETRIC POST TOP LIGHT**

The QV Series, for 70-to 150-watt medium base lamps and 250- to 1000-watt mogul-base lamps, provides quadrate distribution resulting in great uniformity and optimum pole spacing. The housing is constructed of die-cast aluminum and the optical chamber is sealed to reduce dirt contamination. NOTE: All 22-inch fixtures have a sag lens. Order CSF-22 Cutoff Baffle accessory to maintain full cutoff.

**APPLICATIONS:** Parking lots and area lighting

# LAMP INCLUDED

1440	HOHEING	CATALOG
LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	16"	QV*407-M
100W PSMH	16"	QV*410-M
150W PSMH	16"	QV*615-M
250W PSMH	22"	QV <b>*</b> 6925-M
320W PSMH <b></b>	22"	QV <b>*</b> 6932-M
400W PSMH <b>♥</b>	22"	QV <b>*</b> 6940-M
750W PSMH	22"	QV <b>*</b> 675-M
1000W PSMH <b>₽</b>	22"	QV*699-M
1000W MH 🎙	22"	QV <b>*</b> 499-M
70W HPS	16"	QV <b>*</b> 507-M
100W HPS	16"	QV <b>*</b> 510-M
250W HPS	22"	QV*592-M
400W HPS	22"	QV <b>*</b> 594-M

Φ	Reduced	envelope	lamp.	ED28	for	320W	ъ	400W	PSMF	١.
		1000W MH								

# **MOUNTING CODES**











- A = Center Tenon Mount Square Tube (For 2-3/8" up to 3" O.D.)
- **C** = 4" Center Direct Mount Square Tube
- D = 5" Center Direct Mount Square Tube (22" housing only)
- **E** = 6" Center Direct Mount Square Tube (22" housing only)
- F = Center Tenon Mount Round Tube (16" housing only, for 2-3/8" up to 3" O.D.)
- **H** = 4" Center Direct Mount Round Tube (16" housing only)
- 1 = 1-1/2" Close Pole Mount
- 2 = 6" Extended Pole Mount

NOTE: When using multiple 22" sq. housings at a 90° configuration, a special 12" arm is required; see page 91.

> SEE PAGE 85 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS**

MOUNTING ALTERNATIVES START ON PAGE 90



16" (406 mm) Square

22" (559 mm) Square 9.3" (235 mm)



6.5" (165 mm)

# **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W-1000W PSMH, 1000W MH, 250W-400W HPS)	5		
(70W-100W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-1000W PSMH, 1000W MH, 250W-400W HPS)	T		
(70W-100W HPS and 70W-100W PSMH only)	T		
Single Fuse (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Button Photocell (n/a 1000W 120V & all 480V)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/1000W, 120V	1	Р	
For fixtures w/480V	5	Р	

# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
Cutoff Baffle 16" Housing 22" Housing	not available CSF-22
<b>Wire Guard</b> 16" Housing 22" Housing	FWG-16 not available

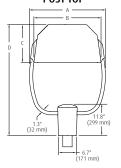
SEE PAGE 88 FOR MORE INFORMATION ABOUT THESE ACCESSORIES

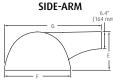
Spec sheets and photometric files are available at www.ruudlightingdirect.com













# AVV5 SERIES by DIRECT

# **VERTICAL-LAMP SYMMETRIC AERODOME®**

The Symmetric AeroDome is a stylish fixture that features a high-impact, clear tempered glass lens, reflectors made of premium-grade pre-finished aluminum, and a rugged, die-cast housing. The AVV5 Series delivers excellent photometric performance and improved uniformity with an IES Type V distribution.

**APPLICATIONS:** Parking and area lighting

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
150W PSMH	20"	AVV5*615-M
250W PSMH	20"	AVV5*625-M
320W PSMH 🎙	20"	AVV5*632-M
400W PSMH <b>♥</b>	20"	AVV5*640-M
750W PSMH	25"	AVV5*675-M
1000W PSMH ♥	25"	AVV5*699-M
1000W MH 🎙	25"	AVV5*499-M
150W HPS	20"	AVV5*515-M
250W HPS	20"	AVV5*525-M
400W HPS	20"	AVV5*540-M
1000W HPS 🎙	25"	AVV5*599-M

insert code at * in catalog Number
0 F, H, I, J
0 = Side-Arm Mount
<b>F</b> = Round Tube Center Tenon
<b>H</b> = Round Tube Center 4" Square Pole
I = Round Tube Center 5" Square Pole
J = Round Tube Center 6" Square Pole
MOUNTING ALTERNATIVES START ON PAGE 90

**MOUNTING CODES** 

 $<sup>\</sup>P$  Reduced envelope lamp. ED28 for 320W & 400W PSMH. BT37 for 1000W MH & PSMH. ED37 for 1000W HPS

HOUSING	"A"	"B"	"C"	"D"	"E"	"F"	"G"
20"	23.0"	20.0"	11.8"	36.0"	12.0"	20.0"	28.8"
(501 mm)	(585 mm)	(501 mm)	(300 mm)	(913 mm)	(305 mm)	(501 mm)	(733 mm)
25"	28.6"	25.0"	14.4"	41.8"	14.5"	25.0"	36.7"
(635 mm)	(726 mm)	(635 mm)	(366 mm)	(1062 mm)	(368 mm)	(635 mm)	(931 mm)

# **FACTORY-INSTALLED OPTIONS**

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W-400W PSMH only)	27		
<b>480V Ballast</b> (150W HPS)	5		
(PSMH, 1000W MH, 250W-1000W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V) (150W HPS) (PSMH, 1000W MH, 250W-1000W HPS only)	T T		
Single Fuse (n/a with Post-Top fixtures) (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (n/a with Post-Top fixtures) (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Button Photocell (n/a 1000W 120V & all 480V)			
(277V Reactor, 120V, 277V, 208V, or 240V)	27, 1, 2, 3, or 4	Р	
(Canada 347V)	6	Р	
External Photocell			
For fixtures w/1000W, 120V	1	Р	
For fixtures w/480V	5	Р	

# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Round Pole Adaptor (fits round poles 3" to 6" in diameter)	AVRP-3	



POST TOP

SIDE-ARM

# AVVA SERIES by DIRECT

# **AUTOMOTIVE FRONTLINE AERODOME®**

AeroDome Automotive Frontline is a stylish fixture that features a high-impact, clear tempered glass lens, reflectors made of premium-grade pre-finished aluminum, and a rugged, die-cast housing. Optics are IES Full Cutoff and rotatable for mounting and layout flexibility plus provides high light levels on the frontline.

**APPLICATIONS:** Specifically designed for frontline automotive sales lots

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
250W PSMH	25"	AVVA*6925-M
320W PSMH	25"	AVVA*6932-M
400W PSMH	25"	AVVA*6940-M
750W PSMH	25"	AVVA*675-M
1000W PSMH <b>₽</b>	25"	AVVA*699-M
1000W MH ₽	25"	AVVA*499-M
250W HPS	25"	AVVA*592-M
400W HPS	25"	AVVA*594-M
1000W HPS ₽	25"	AVVA*599-M
_		

PReduced envelope lamp. BT37 for 1000W MH & PSMH. ED37 for 1000W HPS.

MOUNTING CODES	
Insert Code at * in Catalog Number	
0, L, R F, H, I, J	
0 = Side-Arm Mount	
L = Side-Arm Mount (optic rotated)	
R = Side-Arm Mount (optic rotated)	
<b>F</b> = Round Tube Center Tenon	
H = Round Tube Center 4" Square Pole	

J = Round Tube Center 6" Square Pole

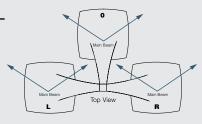
■ = Round Tube Center 5" Square Pole

**MOUNTING ALTERNATIVES START ON PAGE 90** 

HOUSING	"A"	"B"	"C"	"D"	"E"	"F"	"G"
25"	28.6"	25.0"	14.4"	41.8"	14.5"	25.0"	36.7"
(635 mm)	(726 mm)	(635 mm)	(366 mm)	(1062 mm)	(368 mm)	(635 mm)	(931 mm)

# **ROTATABLE OPTICS**

AeroDome Frontline optics can be rotated 90 degrees to meet site light distribution requirements while retaining the visual orientation of the AeroDome housing and pole. Rotatable optics are factory set or field rotatable on the Side-Arm Mount and field rotatable in the Round Tube Center Post-Top Mount.





# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (250W-400W PSMH only)	27		
480V Ballast	5		
Canada Tri-volt Ballast (120/277/347V)	T		
Single Fuse (n/a with Post-Top fixtures) (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (n/a with Post-Top fixtures) (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
<b>Button Photocell</b> (n/a 1000W 120V & all 480V) (277V Reactor, 120V, 277V, 208V, or 240V) (Canada 347V)	27, 1, 2, 3, or 4 6	P P	
External Photocell			
For fixtures w/1000W, 120V	1	Р	
For fixtures w/480V	5	Р	

# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
Frontline Automotive External Backlight Shield	SBL-AVVA25EBZ
Round Pole Adaptor (fits round poles 3" to 6" in diameter)	AVRP-3

SEE PAGE 89 FOR MORE INFORMATION ABOUT THESE ACCESSORIES

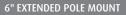
# FLOOD & AREA Mountings





### **MOUNTING CODE 1**

- For AC, LAC, WAC, PR, LPR, WPR, QV, VFT and VPR Series.
- Extruded aluminum mounting arm attaches fixture in a fixed horizontal position to the side of a square pole. A steel backing plate inside the pole secures the fixture.
- On 12" and rectangular housings, the arm measures 1-1/2" L x 2-1/2" H; on 16" and 22" housings, it measures 1-1/2" L x 4-1/2" H.





### **MOUNTING CODE 2**

- For AC, WAC, PR, WPR, QV, VFT and VPR Series.
- Extruded aluminum mounting arm attaches fixture in a fixed horizontal position to the side of a square pole. A steel backing plate inside the pole secures the fixture.
- On 12" housings, the arm measures 1-1/2" L x 2-1/2" H; on 16" and 22" housings, it measures 1-1/2" L x 4-1/2" H.
- When using multiple 22" square housings at a 90° configuration, a special 12" arm is required; see page 91.



### **MOUNTING CODE 3**

- For NSF, NSC, NSW, W, FS, LFS, CF, LCF, PM, LPM, PN, LPN, PR, LPR, AC and LAC Series.
- Slip-fits over a 2" pole or tenon (2-3/8" O.D.).
- Allows tilt above horizontal in 2-1/2° increments, as well as lateral rotation.
- Provides enclosed and gasketed internal wiring chamber.
- Knockout provided for field-installed photocell accessory.



### **MOUNTING CODE 4**

- For NSF, NSC, NSW, W, FS, LFS, CF, LCF, PM, LPM, PN, LPN, PR, LPR, AC and LAC Series.
- Ideal for wall, ground, roof or wood pole mounting; bolts directly to almost any surface.
- Provided with 36" external cord for ease of wiring.
- Allows tilt above horizontal to any angle, and double locks in 5° increments.





### **MOUNTING CODE 5**

- For CF Series only.
- Provides optimum tilt above horizontal angle for cutoff optics, where adjustability is not required.
- Arm bolts directly to side of square pole; backing plate secures arm inside pole.

1/2" ADJUSTABLE FITTER



### **MOUNTING CODE 6**

- For 12" AC, CF, FS, PM, PN, and PR Series.
- NPSM threaded end for mounting to 1/2" threaded pipe or junction box.
- Allows tilt above horizontal in 5° increments.

NO MOUNTING HARDWARE



### **MOUNTING CODE 8**

- For all Square and Rectangular Series fixtures.
- Fixture comes factory-drilled to accept mounting codes 1, 2, 3, 4, 5, 6, 8 and W. Also used with WM-5, PT & PBD tenons and 12" arm.
- Comes supplied with 2-foot cord.

WALL MOUNT



# **MOUNTING CODE W**

- For AC, LAC, WAC, PR, LPR, WPR, VFT and VPR Series.
- Cast aluminum mounting box with gasket attaches in a fixed position to the side of fixture, utilizing threaded mounting studs supplied.
- Provided with 4 threaded and closed 1/2" conduit entries.
- 150°C minimum supply wire is required.

# SQUARE TUBE CENTER



# DIRECT - MOUNTING CODE C, D, E TENON - MOUNTING CODE A

- For QV Series only.
- Fabricated aluminum yoke comprised of square extruded arms and base (C, D or E) or cast hub (A) supports fixture housing directly over pole.
- Base (C, D or E) fits inside a 4", 5" or 6" square pole, secured with four 5/16-18 steel screws. (5" or 6" base available with 22" square housing only).
- Mounting hub (A) is secured with eight allen head set screws (supplied) to prevent rotation.
   The hub slip-fits over a steel or aluminum tenon measuring 2-3/8" (standard) up to 3" O.D. When mounting 22" square fixtures on fiberglass or aluminum poles, a 3" O.D. steel tenon that mounts inside the pole is required.

# ROUND TUBE CENTER



# DIRECT – MOUNTING CODE H TENON – MOUNTING CODE F

- For 16" QV Series only.
- Fabricated aluminum yoke comprised of round extruded arms and base (H) or cast hub (F) supports fixture housing directly over pole.
- Base (H) fits inside a 4" square pole, and is secured with four 5/16-18 steel screws.
- Hub (F) slip-fits over a steel or aluminum tenon or pole measuring 2-3/8" up to 3" 0.D., and is secured with eight allen head set screws to prevent rotation.

# ROUND TUBE -OFF CENTER



## DIRECT – MOUNTING CODE M TENON – MOUNTING CODE K

- For 16" AC and PR Series only.Fabricated aluminum yoke
- comprised of round extruded arms and base (M) or cast hub (K) supports fixture housing off-center of pole.
- Base (M) fits inside a 4" square pole, and is secured with four 5/16-18 steel screws.
- Hub (K) slip-fits over a steel tenon or pole measuring 2-3/8" up to 3" O.D.; secured with eight allen head set screws to prevent rotation.

# FLOOD & AREA Economy Flood Accessories





For use with NS Series. The aluminum baffle controls light direction and provides full side cutoff. It simply wraps around lens frame and is secured with two supplied fasteners. Standard with our exclusive Colorfast DeltaGuard® finish, featuring an E-coat epoxy primer with bronze ultra-durable powder topcoat.

### CATALOG #

DB-9



For use with NS Series. This is the same construction as the MNB-1 Mounting Box, but with a 6.5" long aluminum stake for mounting into the ground. A gasketed, 10 ft. cord is supplied with a 120V straight blade plug. Standard with our exclusive Colorfast DeltaGuard® finish, featuring an E-coat epoxy primer with bronze ultra-durable powder topcoat.

### CATALOG #

MNB-2



For NSF, NSC, and NSW Series. Steel guard provides protection to optical system. Attaches easily around lens frame with supplied #8 stainless steel screws. A black acrylic E-coat finish is standard.

# CATALOG #

FWG-14



For use with NS Series. The aluminum glare shield holds forward brightness to a minimum for eye-level fixtures. It simply wraps around lens frame and is secured with two supplied fasteners. Standard with our exclusive Colorfast DeltaGuard® finish, featuring an E-coat epoxy primer with bronze ultra-durable powder topcoat.

### CATALOG #

GS-9



For use with NS Series. The cast aluminum hub provides a threaded entry for the 1/2" Adjustable Fitter, and slips over a 2-3/8" O.D. pipe or tenon. A 3/8" allen set screw is provided to secure the slipfitter. Standard with our exclusive Colorfast DeltaGuard® finish, featuring an E-coat epoxy primer with bronze ultra-durable powder topcoat.

### CATALOG #

MNH-2



For NSF and NSW Series. The aluminum glare shield holds forward brightness to a minimum for eye level fixtures. It attaches easily around lens frame with two supplied fasteners. Finished in black ultra durable powder topcoat

# CATALOG #

GS-14

Consult factory for availability of other finish colors.



For use with NS Series. The steel Wire Guard provides protection in high vandalism areas. It attaches to the lens with supplied #8-32 black stainless steel screws. A black acrylic E-coat finish is standard. Size is 9.64" x 6.13" x 1.46". 1" between wires.

### CATALOG #

FWG-9

# **GROUND MOUNT POST**



Use with 2" Adjustable Fitter for ground mounted floodlight fixtures. Wiring or conduit feeds through post base. Overall: 24"H (610 mm) Tube: 18"H x 2.4"D (457 x 60 mm) Base: 4.9"W x 6.3"L (124 x 159 mm)

# CATALOG #

PGM-1

# **BUTTON PHOTOCELL**



This photocell is suitable for any outdoor fixture with a 120, 208, 240, 277 or 347V ballast. A knockout is provided in the 2" Adjustable Fitter to field install the button-type photocell. There is no sensitivity adjustment.

VOLTAGE	CATALOG #
120V	PC-1
208/240/277V	PC-2
Canada 347V	PC*6



For use with NS Series. The cast aluminum box measures 2.5" x 2.5" x 3.75" W, and provides an enclosed wiring chamber to mount a fixture with the 1/2" Adjustable Fitter. Four threaded knockouts are provided for 1/2" conduit entry, one on the top, back and on either side. Standard with our exclusive Colorfast DeltaGuard® finish, featuring an E-coat epoxy primer with bronze ultra-durable powder topcoat.

### CATALOG #

MNB-1

# **DEEP BAFFLE - 14" FLOOD**



For NSF and NSC Series. Aluminum baffle allows precise control of light direction while maintaining full side cutoff. Attaches to lens frame with supplied #8 fasteners. Finished in black ultra-durable powder topcoat.

# CATALOG #

DB-14

# EXTERNAL PHOTOCELL



For 480V fixtures. This photocell is factory-installed and must be ordered at the same time as the fixture. It measures 3-3/8"L x 2"W x 1-1/2"H. An adjustable window slide allows setting of early turn off/on.

VOLTAGE	SUFFIX	
480V	-5P	

# FLOOD & AREA Rectangular Accessories





For LFS, LPM and LPN Series. Aluminum baffle allows precise control of light direction while maintaining full side cutoff. Attaches to lens frame with supplied #8 fasteners. Finished with black ultra durable powder paint.

CATALOG #	DEPTH
DB-12	3.5"



Aluminum shield deters brightness for pedestrian traffic. Attaches easily to lens frame with supplied #8 fasteners. Finished with an ultra-durable black powder coat paint. (Glare Shield is not recommended for the LCF or LAC Series.) Consult factory if use of Glare Shield with Polycarbonate Vandal Shield is intended.

CATALOG #	DEPTH
GS-12	4.0"



Steel guard provides protection to optical system of any L Series fixture. Attaches easily to lens frame with supplied #8 fasteners. Finished with an acrylic black E-coat paint.

1" (25 mm) space between wires.

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C	ATA	LOG	#	
F	WG-	L		



Clear polycarbonate shield 0.118" (3 mm) thick provides protection to optical system of any L Series fixture. Attaches easily to lens frame with supplied #8 fasteners. Consult factory if use of Polycarbonate Vandal Shield with Glare Shield is intended. (n/a if fixture is used in an uplight position)

CATALOG #	DEPTH
LS-L	2.0"

# INTERNAL LOUVER

For LPM and LPN Series. Field-installed Internal Louver accessory provides light pollution control and helps conceal the light source (reduces brightness).

CATALOG # DL-L



For LPR and LAC fixtures (standard on LAC Wall Mount). This pre-finished, anodized-aluminum shield provides backlight cutoff for floodlights. It mounts easily inside the fixture lens.

CATALOG # SBL-L



Use with 2" Adjustable Fitter for ground mounted floodlight fixtures. Wiring or conduit feeds through post base. Overall: 24"H (610 mm). Tube: 18"H x 2.4"D (457 x 60 mm). Base: 4.9"W x 6.3"L (124 x 159 mm).

CATALOG # PGM-1



For use with fixtures using Tamperproof Lens Fasteners.

CATALOG # TPS-1

# BUTTON PHOTOCELL

This photocell is suitable for any outdoor fixture with a 120, 208, 240, 277 or 347V ballast. A knockout is provided in the 2" Adjustable Fitter to field install the button-type photocell. There is no sensitivity adjustment.

VOLTAGE	CATALOG #
120V	PC-1
208/240/277V	PC-2
Canada 347V	PC*6



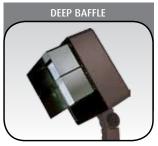
For 480V fixtures. This photocell is factory-installed and must be ordered at the same time as the fixture. It measures 3-3/8"L x 2"W x 1-1/2"H. An adjustable window slide allows setting of early turn off/on.

VOLTAGE	SUFFIX	
480V	-5P	



# FLOOD & AREA Square Accessories





For FS, PM, and PN Series. Aluminum baffle allows precise control of light direction while maintaining full side cutoff. Attaches to lens frame with supplied #8 fasteners. Available for all housing sizes. Finished with an acrylic black E-coat paint.

CAT. #	HOUSING	DEPTH	
DB-12	12"	3.5"	
DB-16	16"	5.0"	
DB-22	22"	6.0"	



Aluminum shield deters second story brightness and holds forward brightness to a minimum for eye-level fixture. Attaches easily to lens frame with supplied #8 fasteners. Available for all housing sizes. Finished with an ultra-durable black powder coat paint. Glare Shield is not recommended for the CF Series. Consult factory if use of Glare Shield with Polycarbonate Vandal Shield is intended.

CAT. #	HOUSING	DEPTH	
GS-12	12"	4.0"	
GS-16	16"	5.0"	
GS-22	22"	6.5"	



Steel guard provides protection to optical system of any outdoor or square commercial fixture with 12", 16" or 22" housing. Attaches easily to lens frame with supplied #8 fasteners. Finished with an acrylic black E-coat paint. 1" space between wires.

CATALOG #	HOUSING	
FWG-12	12"	
FWG-16	16"	
FWG-22	22"	



Clear polycarbonate shield 0.118" thick provides protection to optical system of any size floodlight or commercial fixture. Attaches easily to lens frame with supplied #8 fasteners. Consult factory if use of Polycarbonate Vandal Shield with Glare Shield is intended. (n/a if fixture is used in an uplight position.)

CAT. #	HOUSING	DEPTH	
LS-12	12"	2.0"	
LS-16	16"	2.5"	
LS-22	22"	3.5"	



For QV, VFT and VPR series. Aluminum shield for achieving full-cutoff performance. Attaches to lens frame with supplied #8 fasteners. Standard with our Colorfast DeltaGuard® finish.

CAT. #	HOUSING	DEPTH	
CSF-22	22"	2.375"	



For PM and PN Series. Internal Louver provides light pollution control and helps conceal the light source (reduces brightness).

CATALOG #	HOUSING	
DL-12	12"	
DL-16	16"	



For AC, CF, PR, VFT, VPR, WAC and WPR fixtures. This prefinished anodized aluminum shield provides backlight cutoff for floodlights. It mounts easily inside the fixture lens and can be position adjusted. Is available for all housing sizes (standard on the AC and WAC Series Wall Mount, mounting code "W").

CATALOG #	HOUSING	
SBL-12	12"	
SBL-16	16"	
SBL-22	22"	



This photocell is suitable for any outdoor fixture with a 120, 208, 240, 277 or 347V ballast. A knockout is provided in the 2" Adjustable Fitter to field install the button-type photocell. There is no sensitivity adjustment.

VOLTAGE	CATALOG #	
120V	PC-1	
208/240/277V	PC-2	
Canada 347V	PC*6	



For 1000W fixtures at 120V or 480V fixtures. This photocell is factory installed and must be ordered at the same time as the fixture. It measures 3-3/8"L x 2"W x 1-1/2"H. An adjustable window slide allows setting of early turn off/on.

VOLTAGE	SUFFIX	
120V (1000W)	-1P	
480V	-5P	

# FLOOD & AREA AeroDome® & Aviator® Accessories





For AVH3 and AVH4 Series. Extended Arm is cast aluminum and is field installed to the standard Integrated Arm. Mounts directly to a square pole.

CAT. #	HOUSING	LENGTH	
AVE-1	14.4"x15.5"	15"	
AVE-2	18.5"x19.6"	18"	



For AVH3 and AVH4 Series. Extended Upsweep Arm is cast aluminum and is field-installed to the standard Integrated Arm, blending the shape of the fixture housing. Mounts directly to a square pole. Raises fixture housing by 7.5" (small housing) or 9.0" (medium housing).

CAT. #	HOUSING	LENGTH	
AVU-1	14.4"x15.5"	15"	
AVU-2	18.5"x19.6"	18"	



Cast aluminum adaptor secures fixture to 3" to 6" round pole (AVH Series) or 4" to 6" round pole (AVV Series). Sized to mount up to four fixtures 90° apart.

CAT. #	HOUSING	
AVRP-1	(AVH) 14.4"x15.5"	
AVRP-2	(AVH) 18.5"x19.6"	
AVRP-3	All AVV Series	



For AVH3 and AVH4 Series. This prefinished anodized aluminum shield provides backlight cutoff. It mounts easily inside the fixture lens and can be position adjusted.

CATALOG #	HOUSING
SBL-AV1	14.4" x 15.5"
SBL-AV2	18.5" x 19.6"



For AVV3 and AVV4 Series, Fabricated of 0.063" (2 mm) thick aluminum. Used to reduce light level to house side of fixture. Attaches to any of the four sides of the lens frame with supplied black stainless steel hardware. Shield measures 2.4" deep. To maintain full cutoff order SBL-AVV20CBZ or SBL-AVV25CBZ.

CATALOG #	HOUSING
SBL-AVV20EBZ	20"
SBL-AVV25EBZ	25"



For AVVA Series only. Fabricated of 0.063" (2 mm) thick aluminum. Used to reduce light level to house side of fixture. Attaches to lens frame with supplied black stainless steel hardware. Shield measures 10.9" deep.

	CATALOG #
SBL-AVVA25EBZ	SBL-AVVA25EBZ



For AVV3 and AVV4 Series. Fabricated of 0.063" (2 mm) thick aluminum. Includes External Backlight Shield (SBL-AVV20EBZ or SBL-AVV25EBZ), which is used for achieving full cutoff performance. Attaches to lens frame with supplied black stainless steel hardware. Shield measures 2.3" deep.

CATALOG #	HOUSING	
SBL-AVV20CBZ	20"	
SBL-AVV25CBZ	25"	



For 1000W fixtures at 120V or 480V fixtures. This photocell is factory installed and must be ordered at the same time as the fixture. It measures 3-3/8"L x 2"W x 1-1/2"H. An adjustable window slide allows setting of early turn off/on.

VOLTAGE	SUFFIX	
120V (1000W)	-1P	
480V	-5P	

# FLOOD & AREA Mounting Alternatives





The Tenon Adaptor supports single or multiple square outdoor fixtures using a 6.1" (155 mm) or 12.1" (308 mm) long horizontal arm. This arm mounts to a round hub that slip-fits over a tenon or pole ranging in size from 2-3/8" to 3" O.D. The cast aluminum hub is provided with eight allen set screws. Order the fixture "without arm" (mounting code "8") and specify the Tenon Adaptor configuration as follows:

# TENON ADAPTOR WITH 6" ARM FOR 16", 22" OR 22" WEDGE HOUSING

CATALOG #	MOUNTING
PT-11	1 fixture
PT-12(90)	90° twin
PT-12(180)	180° twin
PT-13(90)	90° triple
PT-13(120)	120° triple
PT-14(90)	90° quad

**NOTE**: PT-12(90), PT-13(90) and PT-14(90) can not be used with 22" Housing.

# TENON ADAPTOR WITH 6" ARM FOR 12", 16" WEDGE OR RECTANGULAR HOUSING

CATALOG #	MOUNTING
PT-21	1 fixture
PT-22(90)	90° twin
PT-22(180)	180° twin
PT-23(90)	90° triple
PT-23(120)	120° triple
PT-24(90)	90° quad

# TENON ADAPTOR WITH 12" ARM FOR 16" OR 22" HOUSING

CATALOG #	MOUNTING
PT-61	1 fixture
PT-62(90)	90° twin
PT-62(180)	180° twin
PT-63(90)	90° triple
PT-63(120)	120° triple
PT-64(90)	90° quad



The Tenon Adaptor for the AeroDome and Aviator supports multiple directarm mounted fixtures using round pole adaptors (AVRP included). The round pole adaptors mount to a round hub that slip-fits over a tenon or pole ranging in size from 2-3/8" to 3" O.D. The cast aluminum hub is provided with eight allen set screws.

# TENON ADAPTOR FOR AVIATOR 14.4" x 15.5" HOUSING

CATALOG #	MOUNTING
PT-A11	1 fixture
PT-A12(90)	90° twin
PT-A12(180)	180° twin
PT-A13(90)	90° triple
PT-A13(120)	120° triple
PT-A14(90)	90° quad

# TENON ADAPTOR FOR AVIATOR 18.5" x 19.6" HOUSING

CATALOG #	MOUNTING
PT-A21	1 fixture
PT-A22(90)	90° twin
PT-A22(180)	180° twin
PT-A23(90)	90° triple
PT-A23(120)	120° triple
PT-A24(90)	90° quad

# TENON ADAPTOR FOR AERODOME 20" AND 25" HOUSING

CATALOG #	MOUNTING
PT-A31	1 fixture
PT-A32(90)	90° twin
PT-A32(180)	180° twin
PT-A33(90)	90° triple
PT-A33(120)	120° triple
PT-A34(90)	90° quad



Mount a floodlight to the side of a square pole. Typically, two brackets are mounted on either side to provide accent lighting for the front row of an automobile sales lot. The 11" (279 mm) long by 3" (76 mm) square steel arm bolts securely to the pole, and provides a 2-3/8" O.D. tenon to mount a fixture with our 2" Adjustable Fitter. Two 1/2" hex head bolts are supplied to secure the bracket to the pole. Provided friction fit end cap encloses the wiring chamber. **NOTE**: Pole must be field drilled before installation of Bracket.

diffied before firstaliation of bracket
CATALOG # MOUNTING
PW-1A3(***) 1 fixture
PW-2A3(***) 2 fixtures
** Indicate 3", 4", 5", or 6" pole



This adaptor is designed to attach any square outdoor fixture with the Yoke Mount to a horizontal surface, such as a wood cross arm or a parapet. Supplied with three 3/8" x 3/4" long stainless steel screws to mount the bracket to the Yoke Mount. The base of the adaptor is marked in 10° increments to set the rotation angle of the fixture. Vertical tilt adjustment of the fixture is made with the Yoke bracket. We recommend use of 1/2' bolt or screw to attach Cross-Arm Adaptor to its mounting surface (supplied by others). Measures 2.7"L x 4.3"W x 4.3"D (69 x 109 x 109 mm).

# CATALOG #

CA-1

# MOUNTING BOX



The cast aluminum box measures 2.5" x 2.5" x 3.8" W (64 x 64 x 95 mm), and provides an enclosed wiring chamber to mount a fixture with the 1/2" Adjustable Fitter. Four threaded knockouts are provided for 1/2" conduit entry, on top, back and on either side. The box is supplied with a gasket at the cover to ensure a watertight seal. Three screws are provided to secure the cover to the box. A ground screw is provided inside the box.

# CATALOG #

MNB-1



Same construction as the MNB-1 Mounting Box, but with a 6.5" (165 mm) long aluminum stake for ground mounting. A gasketed, 10-foot cord is supplied with a 120V straight blade plug.

# CATALOG #

MNB-2

# FLOOD & AREA Mounting Alternatives





Order the fixture "without arm" (mounting code "8"). Consult factory for use with Round Tapered pole.

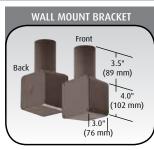
CAT. #	DESCRIPTION
PM-2/12-12	For 12" sq. housing, 16" Wedge, and Rectangular
PM-2/16-12	For 16" sq. housing, 22" Wedge
PM-2/22-12	For 22" sq. housing



The WM-4 Bracket attaches a Ruud outdoor light to almost any surface, including to a wall, on a roof or to the side of a wood pole. The WM-4 Bracket provides wiring access and a built-in 2-3/8" O.D. tenon to mount a fixture with our 2" Adjustable Fitter. We suggest use of 3/8" dia. bolts to mount bracket to wall. Mounting holes are spaced 3-1/4" apart. If surface wiring is required, consult factory.

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WM-4



The WM-1 Bracket attaches a Ruud outdoor light to almost any surface, including on the ground, to a wall, on a roof or to the side of a wood pole. The WM-1 Bracket provides wiring access and a built-in 2-3/8" O.D. tenon to mount a fixture with our 2" Adjustable Fitter. We suggest use of 3/8" dia. bolts to mount bracket to wall. Drill points for box mounting provided by installer.

### CATALOG #

WM-1



The cast aluminum hub provides a threaded entry for the 1/2" Adjustable Fitter, and slips over a 2-3/8" O.D. pipe or tenon. A 3/8" allen set screw is provided to secure the slipfitter. 1.9"/2"H (48/52 mm)

# CATALOG #

MNH-2



The WM-2 Bracket attaches a Ruud outdoor light to almost any surface, including on the ground, to a wall, on a roof or to the side of a wood pole. The WM-2 Bracket provides wiring access and a built-in 2-3/8" O.D. tenon to mount a fixture with our 2" Adjustable Fitter. We suggest use of 3/8" dia. bolts to mount bracket to wall. Mounting holes are spaced 3-1/4" apart. If surface wiring is required, consult factory.

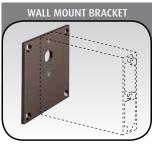




Use with 2" Adjustable Fitter for ground mounted floodlight fixtures. Wiring or conduit feeds through post base. Overall: 24"H (610 mm) Tube: 18"H x 2.4"D (457 x 60 mm) Base: 4.9"W x 6.3"L (124 x 159 mm)

### CATALOG #

PGM-1



The WM-3 Bracket attaches a Ruud outdoor light to almost any surface, including to a wall, on a roof or to the side of a wood pole. Bracket is a 4.8" (121 mm) sq. and 1/4" (6 mm) thick aluminum plate to mount fixture with Direct Mount arm. (NOTE: Not available with Fixed 20° Mount.) We suggest use of 3/8" dia. bolts to mount bracket to wall. Mounting holes are spaced 4" apart.

### CATALOG #

WM-3

# WOOD POLE MOUNTING BRACKET



Structural steel bracket attaches to Yoke Mount with supplied hardware and to pole with 5/8" through bolt or threaded rod (supplied by others). 6" to 12" (152 to 305 mm) diameter round wood poles.

### CATALOG #

PWY-1

# **POLES & TENONS**

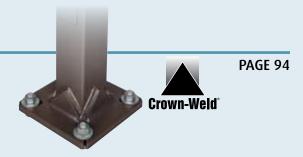


Many factors go into selecting the right pole for your application. Fixture size, shape, mounting method, Effective Projected Area (EPA) rating and even geographical location of the job site should all be considered.

Ruud Lighting offers three classes of poles to meet your project needs:

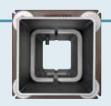
# **PREMIUM**

Premium steel poles include a Crown-Weld® pole base and is much stronger than traditional designs. Crown-Weld has four formed triangle sections and increased weld surface area that provides a dramatic improvement in pole fatigue resistance and yield strength and features a 50% higher EPA value.



# PREMIUM REINFORCED

We made our Premium Square Steel pole even better by reinforcing the inside of the first 24 inches of the pole, making it stronger than non-reinforced poles yet lighter than poles of greater width.





**PAGE 94** 

# BENEFITS FOR PREMIUM POLES

# Exclusive Colorfast DeltaGuard® Finish

DeltaGuard is our exclusive on-site total finishing system that ensures pole and fixture color are an exact match while providing unmatched protection against the elements. The DeltaGuard process offers outstanding performance in durability and color retention in addition to:

- Ultraviolet Light Resistance
- · Abrasion Resistance
- Superior Adhesion
- Corrosion Resistance
- Chemical Resistance



# **High-Quality Materials**

Our poles are manufactured using the highest quality of aluminum and steel so you never have to worry about the integrity of your project.

# **NEC Requirements**

All poles offered by Ruud Lighting meet or exceed NEC requirements.

**NOTE**: Ruud Lighting Premium Poles are intended to be sold with Ruud Lighting Fixtures. In some instances we may sell a pole for replacement purposes if existing Ruud fixtures are in use or for warranty purposes. We reserve the right to limit or refuse to sell poles independent of fixtures.

# **ROUND TAPERED**

Round Tapered Poles are available in aluminum or steel and combine a graceful, distinctive appearance with quality construction. The grounding lug meets UL and NEC requirements for electrical ground bonding.



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# **POLE COMPARISON CHART**



FEATURE		PRE	MIUM SQUARE ST	TAPERED STEEL	TAPERED ALUMINUM		
POLE LENGTH	3"	4" (0.125 WALL)	4" (0.188 WALL)	5"	6"	ROUND	ROUND
10'	•	•					
12'		•					
15'	•	•					
17'		•					
20'	•	•					
22'		•	•				
25'		•	•	•		•	•
27'		•					
30'		•	•	•	•	•	•
35'						•	•
39'						•	•
45'						•	
50'						•	
FINISHES							
Bronze (standard)	•	•	•	•	•	•	•
Black (extra charge)	•	•	•	•	•		
Black (no extra charge)						•	•
White (extra charge)	•	•	•	•	•		
White (no extra charge)						•	•
Silver (extra charge)	•	•	•	•	•		
WARRANTY							
7-year DeltaGuard®	•	•	•	•	•		
1-year						•	•
SUPPLIED WITH						,	
Masonite Template	•	•	•	•	•		
Paper Template (not to scale)						•	•
Anchor Bolts	•	•	•	•	•	•	•
Base Cover	•	•	•	•	•	•	
Nut Cover							•
Pole Cap (Direct Mount)	•	•	•	•	•	•	•
SHIPPING TIME							
Quik Ship™	•	•	•	•	•		
4 weeks						1-50	1-30
5 weeks							31-75
6 weeks						51-99	76-99
Consult Factory						100+	100+
FREIGHT							
Based on Destination	•	•	•	•	•		
Included						•	•
ACCESSORY							
GFI Receptacle	•	•	•	•	•		

REINFORCED WALL

# ORDERING THE PERFECT POLE

- Select a fixture and desired pole height.
- 4 Ensure the pole's EPA rating is equal to or greater than the EPA rating for your desired fixture and mount by comparing the fixture/mount EPA rating with the selected pole's rating.
- Determine EPA rating for the selected fixture and mounting method (see pages 100-101).
- If your pole isn't equal to or greater than EPA rating for the fixture and mount, look for our heavier duty pole in the desired height with sufficient EPA rating.
- Find the geographic wind zone for the job site (see page 95 and 97).
- 6 Have this information ready and call us for final pole selection.

**NOTE**: When selecting poles for geographic areas with winds or EPAs exceeding our published data, please consult a local civil engineer with the information from our catalog before ordering.

# **PREMIUM**







Premium straight square steel poles offer the ultimate in strength and reliability. These nontapered poles are available in 3-,4-,5- or 6-inch square, ranging from 10- through 30-feet in length and feature our Crown-Weld pole base. Steel pole base cover and pole cap with matching DeltaGuard® finish to match fixture.

Our Reinforced Premium Straight Square Steel poles fill the need for a stronger 27- and 30-foot 4-inch pole in tough wind conditions.

# PREMIUM EXCLUSIVE FEATURES

- Crown-Weld pole base featuring 50% higher EPA value
- Colorfast DeltaGuard® finish with 7-year warranty
- **EXACT** pole to fixture finish color match
- Steel pole base cover and pole cap with matching Colorfast DeltaGuard finish
- QUIK SHIP™
- · Poles ship with fixtures
- Masonite bolt template
- Pole freight based on destination
- · Comes complete with hand hole cover, pole base cover, and anchor bolts



27- and 30-foot 4-inch poles



Hanging signs, banners and flags on poles change the EPA rating and increase vibration. The EPA ratings data provided in this catalog does not allow for this added stress, which could result in pole or fixture





# **INCLUDED ACCESSORIES**

### **DESCRIPTION**



# **Template and Anchor Bolts**

Masonite template and galvanized anchor bolts are included with each Premium pole. Anchor bolts shipping in advance will incur additional freight charges.



### **Hand Hole Cover**

Premium poles come with a 2" x 6" (51 x 152 mm) hand hole located 12-18" (305-457 mm) above the pole base, and they include a hand hole cover and grounding lug. Hand hole cover is shipped separately from pole.



### Pole Base Cover

Each Premium pole is shipped complete with a welded base and base cover. The steel pole has Crown-Weld base and slotted holes.

# FIELD-INSTALLED ACCESSORIES

**DESCRIPTION** 

# GFI Receptacle (120V)

The common-sense design of this accessory allows for easy installation; the outlet is built right into a pole hand hole cover-no extra holes to drill, extra conduit to install or separate boxes to attach, and it's UL Listed in the U.S. and Canada for wet locations. The assembly is tightened down with two internal locking brackets, and a gasketed, hinged cover is included. Order with your poles or retrofit an existing installation.

## CATALOG NUMBER

REC-GFIBZ

Spec sheets and photometric files are available at www.ruudlightingdirect.com

	CATALOG #	LENGTH (FT) X WIDTH (IN) X	BOLT CIRCLE RANGE (IN)	BOLT PATTERN RANGE (IN)	BOLT SIZE (IN)	POLE EPA RATINGS BASE WIND VELOCITY (MPH)							SHIPPING WEIGHT	
		WALL (IN)				70	80	90	100	110	120	130	140	(LBS)
	PS3S10C*BZ	10 x 3 x 0.125	10/9.3-11	6.6-7.7	3/4	31.4	23.6	18.2	14.3	11.5	9.3	7.0	6.3	58
	PS3S15C*BZ	15 x 3 x 0.125	10/9.3-11	6.6-7.7	3/4	18.5	13.4	9.9	7.4	5.5	4.1	3.0	2.2	82
	PS3S20C*BZ	20 x 3 x 0.125	10/9.3-11	6.6-7.7	3/4	11.5	7.8	5.2	3.3	2.0	0.9	0.1	0.0	119
	PS4S10C*BZ	10 x 4 x 0.125	10/9.3-11	6.6-7.7	3/4	59.9	45.2	35.1	27.9	22.6	18.5	15.4	12.9	78
	PS4S12C*BZ	12 x 4 x 0.125	10/9.3-11	6.6-7.7	3/4	48.4	36.2	27.9	21.9	17.5	14.2	11.6	9.5	99
	PS4S15C*BZ	15 x 4 x 0.125	10/9.3-11	6.6-7.7	3/4	36.5	26.9	20.3	15.6	12.1	9.5	7.4	5.8	119
	PS4S17C*BZ	17 x 4 x 0.125	10/9.3-11	6.6-7.7	3/4	30.7	22.3	16.6	12.5	9.41	7.1	5.3	3.9	131
	PS4S20C*BZ	20 x 4 x 0.125	10/9.3-11	6.6-7.7	3/4	24.0	16.9	12.1	8.7	6.1	4.2	2.7	1.5	150
팶	PS4S22C*BZ	22 x 4 x 0.125	10/9.3-11	6.6-7.7	3/4	20.4	14.0	9.7	6.6	4.3	2.5	1.2	0.1	163
ST	PS4S22S*BZ	22 x 4 x 0.188	10/9.3-11	6.6-7.7	3/4	31.1	22.3	16.2	11.8	8.6	6.2	4.3	2.8	207
	PS4S25C*BZ	25 x 4 x 0.125	10/9.3-11	6.6-7.7	3/4	15.9	10.4	6.6	3.9	1.9	0.4	0.0	0.0	182
	PS4S25S*BZ	25 x 4 x 0.188	10/9.3-11	6.6-7.7	3/4	25.3	17.6	12.3	8.5	5.7	3.6	1.9	0.6	252
	PS4S27R*BZ	27 x 4 x 0.125	10/9.3-11	6.6-7.7	3/4	22.0	14.9	10.0	6.6	4.0	2.0	0.0	0.0	232
	PS4S30R*BZ	30 x 4 x 0.125	10/9.3-11	6.6-7.7	3/4	17.7	11.4	7.1	4.0	1.7	0.0	0.0	0.0	301
	PS4S30H*BZ	30 x 4 x 0.188	10/9.3-11	6.6-7.7	3/4	19.5	12.5	7.8	4.4	1.9	0.0	0.0	0.0	337
	PS5S25S*BZ	25 x 5 x 0.188	10/9.7-11.3	6.9-7.9	1	43.9	31.4	22.8	16.6	12.1	8.7	6.0	3.8	320
	PS5S30S*BZ	30 x 5 x 0.188	10/9.7-11.3	6.9-7.9	1	32.2	21.9	14.9	9.9	6.2	3.4	1.2	0.0	379
	PS6S30S*BZ	30 x 6 x 0.188	11.5/11.3-12.8	8.0-9.0	1	50.8	35.7	25.3	17.9	12.4	8.2	4.9	2.4	457

# REINFORCED WALL

POLE NOTES:

 Indicate **T** for tenon mount.

(Order tenon separately as found on pages 90 and 98-99.)

For CF Series fixtures with Fixed 20° Mount, add prefix "2" to configuration numbers (i.e. "21", "22", "23", "25", and "26"). EXAMPLE: PS6S30S1BZ becomes PS6S30S21BZ



**BOLT CIRCLE**: Measure from the center of one stud hole directly across the center of the base plate, to the center of the opposite stud hole.

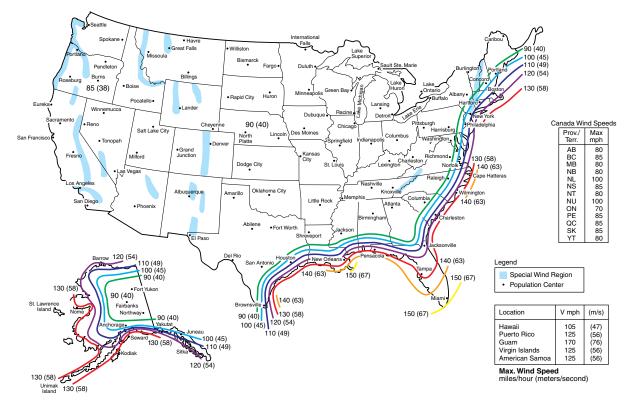


**BOLT PATTERN**: Measure from the center of one stud hole to the center of an adjacent stud hole.

# APPROXIMATE MAXIMUM WIND ZONES FOR PREMIUM POLES

This map indicates approximate maximum wind zones throughout the United States. Base wind velocities are established using a 50-year recurring mean. The EPA rating of the pole must be equal to or greater than that of the fixture(s), taking into consideration the wind conditions at the job site. Pole and fixture EPA ratings are on pages 100-101.

**NOTE**: When selecting poles for geographic areas with winds or EPAs exceeding our published data, please consult a local civil engineer with the information from our catalog before ordering.



Spec sheets and photometric files are available at www.ruudlightingdirect.com



# ROUND TAPERED

# STEEL AND ALUMINUM POLES



Round Tapered poles are available in lengths of 25, 30, 35, 39, 45 and 50 feet. The steel shaft is composed of ASTM A595 Grade A 11-gauge steel with minimum yield strength of 55,000 psi. Shaft taper is a uniform 0.140-inch per foot, and the one-piece construction features a full-length, longitudinal, high frequency resistance weld. The base is made of carbon steel with 36,000-psi minimum yield strength and telescopes the shaft, welded top and bottom. The aluminum shaft is made of seamless 6063 alloy aluminum and the base is cast from A356 alloy aluminum. The ground lug meets UL and NEC requirements for electrical ground bonding.

# **POLE FEATURES**

- 1-year warranty bronze polyester powder finish
- Close pole to fixture finish color match
- Partially galvanized anchor bolts
- · Reinforced hand hole welded to the shaft
- Steel hand-hole cover attached with two fasteners
- Comes complete with pole base cover or nut covers and anchor bolts



Tenon on top of pole



Hanging signs, banners and flags on poles change the EPA rating and increase vibration. The EPA ratings data provided in this catalog does not allow for this added stress, which could result in pole or fixture failure.

# **INCLUDED ACCESSORIES**

# DESCRIPTION



### **Template and Anchor Bolts**

Paper template (not to scale) and anchor bolts are included with each round tapered pole. Anchor bolts shipping in advance will incur additional freight charges.



### **Hand Hole Cover**

Steel cover and attachment bar with machine screw is included to cover the rectangular-shaped hand hole. Hand hole is located 18-inches above the pole base.



### Pole Base Cover

Each Round Tapered steel pole (shown) is shipped with a full base cover made from ABS plastic. Its two-piece construction is secured with two plastic, hand-push rivets. Each Round Tapered Aluminum pole is shipped with nut covers.

	CATALOG #	BASE O.D. (IN) X	POLE	BOLT CIRCLE	BOLT PATTERN	BOLT	80 1	MPH	90 1	MPH	100	MPH	SHIPPING
		TOP O.D. (IN) X WALL (IN)	LENGTH (FT)	RANGE (IN)	RANGE (IN)	SIZE (IN)	MAX EPA	MAX FIXTURE WEIGHT	MAX EPA	MAX FIXTURE WEIGHT	MAX EPA	MAX FIXTURE WEIGHT	WEIGHT (LBS)
	%PSRV25C <b>*</b> BZ	7.0 x 3.5 RND x 0.125	25'	10.0/9.5-10.5	6.8-7.4	1	20.3	507	16.2	405	13.1	327	200
	%PSRV30C*BZ	8.0 x 3.8 RND x 0.125	30'	11.0/10.5-11.5	7.5-8.1	1	18.9	473	14.9	373	12.0	300	265
STEEL	%PSRV35C <b>*</b> BZ	8.5 x 3.6 RND x 0.125	35'	11.5/11-12	7.8-8.4	1	18.9	472	15.1	377	12.2	305	315
STI	%PSRV39C*BZ	9.0 x 3.6 RND x 0.125	39'	12.5/12-13	8.5-9.1	1	17.2	430	13.5	338	10.8	270	355
	%PSRV45C*BZ	10.0 x 3.7 RND x 0.125	45'	13.5/13-14	9.2-9.8	1	17.4	435	13.5	338	10.6	265	450
	%PSRV50C*BZ	10.0 x 3.0 RND x 0.125	50'	13.5/13-14	9.2-9.8	1	13.2	330	10.6	265	8.3	208	475
≥	%PARV25C*BZ	6.0 x 4.0 RND x 0.188	25'	9.5/8.75-10.25	6.18-7.25	3/4	8.6	150	6.1	150	4.6	150	119
<u> </u>	%PARV30C*BZ	8.0 x 4.5 RND x 0.188	30'	11.5/11-12.12	7.75-8.56	1	14.6	150	11.1	150	8.6	150	182
ALUMINUM	%PARV35C*BZ	8.0 x 4.5 RND x 0.188	35'	11.5/11-12.12	7.75-8.56	1	9.8	150	7.1	150	5.3	150	208
Ι	%PARV39C*BZ	9.0 x 6.0 RND x 0.188	39'	14.0/13.38-15	9.43-10.56	1	16.7	200	12.4	200	9.2	200	285

**NOTE**: Only available in contiguous 48 states.

### POLE NOTES:

Indicate T for tenon mount.

(Order tenon separately as found on pages 90 and 98-99.)

Insert Code at \* in Catalog Number (for AeroDome/Aviator only)



AeroDome and Aviator fixtures require AVRP accessory for each fixture. See page 87.



**BOLT CIRCLE**: Measure from the center of one stud hole directly across the center of the base plate, to the center of the opposite stud hole.



**BOLT PATTERN**: Measure from the center of one stud hole to the center of an adjacent stud hole.

### ORDERING

Because poles are manufactured upon your order, your credit card will be charged immediately regardless of lead-time required prior to shipment. Please be sure to carefully select your poles based upon proper mounting configuration and wind loading in your area.

### POLE SHIPPING

A complete shipping address must be provided at time of order (no PO. boxes). Expedited orders cannot be accepted. Because poles and fixtures ship from different locations, we cannot guarantee arrival of fixtures and poles on the same day. Anchor bolts shipping in advance will incur additional freight charges.

### **CHANGES AND CANCELLATIONS**

Your order cannot be changed or cancelled because these poles are manufactured for you specifically.

# APPROXIMATE MAXIMUM WIND ZONES FOR ROUND TAPERED POLES

This map indicates approximate maximum wind zones throughout the United States. Base wind velocities are established using a 50-year recurring mean. The EPA rating of the pole must be equal to or greater than that of the fixture(s), taking into consideration the wind conditions at the job site. Pole and fixture EPA ratings are on pages 100-101.

**NOTE**: When selecting poles for geographic areas with winds or EPAs exceeding our published data, please consult a local civil engineer with the information from our catalog before ordering.



# **POLE TENONS** Fixture Mounting Brackets



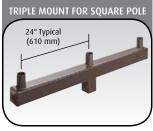
# **SQUARE INTERNAL – VERTICAL**

**Steel (PB Series)** The square base of the PB Series bracket is designed to be inserted into a square, non-tapered pole. (When ordering, specify the appropriate pole width). The multiple PB Series brackets are supplied with snap-on end caps to enclose the wiring chamber. The PB Series brackets are constructed of square steel tubing. Fixtures mounted to these brackets can be adjusted both vertically and horizontally.

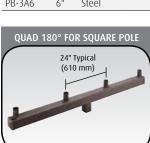
**Aluminum (PA Series)** The PA Series bracket is similar in design and function to the PB Series but is made of cast aluminum. Only the single PA Series tenon is available. It is used with square, non-tapered poles.



CAT #	SIZE	MATERIAL
PB-1A3	3"	Steel
PA-1A4	4"	Aluminum
PB-1A5	5"	Steel
PB-1A6	6"	Steel



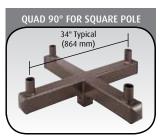
CAT #	SIZE	MATERIAL	
PB-3A3	3"	Steel	
PB-3A4	4"	Steel	
PB-3A5	5"	Steel	
PB-3A6	6"	Steel	



CAT #	SIZE	MATERIAL	
PB-4A4(180)	4"	Steel	
PB-4A5(180)	5"	Steel	
PB-4A6(180)	6"	Steel	



CAT #	SIZE	MATERIAL	
PB-2A3	3"	Steel	
PB-2A4	4"	Steel	
PB-2A5	5"	Steel	
PB-2A6	6"	Steel	



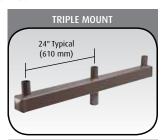
CAT #	SIZE	MATERIAL	
PB-4A4(90)	4"	Steel	
PB-4A5(90)	5"	Steel	
PB-4A6(90)	6"	Steel	

# TENONS FOR ROUND POLE

**(PB Series)** Twin and Triple brackets for mounting over a round pole or tenon with an O.D. of 2-3/8". I.D. of base tube is 2.438".



CATALOG # PB-2R2.375



CATALOG # PB-3R2.375

# **IN-LINE BRACKETS**

**(PBD Series)** The square base of the steel PBD Series bracket is designed to be inserted into a 4" square, non-tapered steel pole. The bracket is supplied with end caps to enclose the wiring chamber, and with 1-1/2" direct mount arms to install the fixtures. Order fixture without mounting arm for use with this bracket. (Fixture Mounting Code "8").



CATALOG # PBD-2A4



PBD-3A4

PB SERIES (SQUARE INTERNAL – VERTICAL)	



Spec sheets and photometric files are available at www.ruudlightingdirect.com

# **POLE TENONS** Fixture Mounting Brackets



# **ROUND EXTERNAL MOUNT**

**(PT Series)** The round base of the cast aluminum PT Series bracket is designed to mount over a round pole or tenon ranging in size from 2-3/8 (60 mm) to 3 inches (76 mm) 0.D. The PT Series brackets can be mounted on a square pole but require use of the Single Vertical Tenon (PB-1A or PA-1A). Fixtures mounted to these brackets can only be adjusted vertically.



CATALOG #

PT-1



CATALOG #

PT-2(90)

Not for use with 22" housings



CATALOG #

PT-2(180)



CATALOG #

PT-3(90)

Not for use with 22" housings



CATALOG #

PT-3(120)



CATALOG #

PT-4(90)

Not for use with 22" housings

# **SQUARE INTERNAL - HORIZONTAL**

**(PD Series)** The square base of the PD Series aluminum bracket is designed to be inserted into square, non-tapered 4-inch steel or aluminum poles. Die formed end cap is supplied to enclose the wiring chamber. Fixtures mounted to these brackets can only be adjusted vertically.



CATALOG #

PD-2A4(90)

Not for use with 22" housings



CATALOG #

PD-2A4(180)

90° TRIPLE

CATALOG #

PD-3A4(90)

Not for use with 22" housings



CATALOG #

PD-4A4(90)

Not for use with 22" housings





# EFFECTIVE PROJECTED AREA (EPA) RATINGS - DIRECT MOUNT



1-1/2" CLOSE POLE MOUNT (0° TILT) – (MOUNTING CODE 1)	•-					
CONFIGURATION NUMBER	1	2	3	5	6	
Square housing 12"	0.47	0.94	•	•	•	
Square housing 16"	0.80	1.60	•	•	•	
Square housing 22"	1.49	2.98	<b>A</b>	<b>A</b>	<b>A</b>	
Square housing 22" with Sag Lens (QV, VFT & VPR Series 250W & 400W PSMH)	1.58	3.16	<b>A</b>	<b>A</b>	<b>A</b>	
Square housing 22" with Sag Lens & back box (QV, VFT & VPR Series 1000W MH, 250W & 400W HPS)	1.64	3.28	<b>A</b>	<b>A</b>	<b>A</b>	
Wedge housing 16"	0.45	0.80	•	•	•	
Wedge housing 22"	0.84	1.46	<b>A</b>	<b>A</b>	<b>A</b>	
Rectangular housing 16.0" x 9.3"	0.60	0.77	•	•	•	

<sup>•</sup> For Configurations 3, 5 and 6, a 6" Extended Pole Mount must be used.

<sup>▲</sup> For Configurations 3, 5, and 6 with a 22" square housing or 22" Wedge housing, a special 12" Extended Pole Mount must be used. See page 91.

6" EXTENDED POLE MOUNT (0° TILT) – (MOUNTING CODE 2)						
CONFIGURATION NUMBER	1	2	3	5	6	
Square housing 12"	0.55	1.10	0.92	1.40	1.84	
Square housing 16"	0.95	1.90	1.50	2.25	3.00	
Square housing 22"	1.64	3.28	<b>A</b>	<b>A</b>	<b>A</b>	
Square housing 22" with Sag Lens (QV, VFT & VPR Series 250W & 400W PSMH)	1.73	3.46	<b>A</b>	<b>A</b>	<b>A</b>	
Square housing 22" with Sag Lens & back box (QV, VFT & VPR Series 1000W MH, 250W & 400W HPS)	1.79	3.58	<b>A</b>	<b>A</b>	<b>A</b>	
Wedge housing 16"	0.53	0.96	0.93	1.41	1.86	
Wedge housing 22"	0.99	1.76	<b>A</b>	<b>A</b>	<b>A</b>	
Rectangular housing 16.0" x 9.3"	0.60	1.06	0.93	1.27	1.86	

<sup>▲</sup> For Configurations 3, 5, and 6 with a 22" square housing or 22" Wedge housing, a special 12" Extended Pole Mount must be used. See page 91.

# 12" EXTENDED POLE MOUNT (ORDER SEPARATELY)

FIXTURES AT 90° CONFIGURATION, ORDER FIXTURE WITHOUT ARM (MOUNTING CODE 8	3) -■	■•■				
CONFIGURATION NUMBER						
Square housing 22" with Flat Lens	1.79	3.58	3.03	4.61	6.06	
Square housing 22" with Sag Lens (QV or VFT Series)	1.88	3.76	3.21	4.88	6.42	
Square housing 22" with Sag Lens & back box (OV or VET Series)	1.94	3.88	3.33	5.06	6.66	

FIXED 20° MOUNT - (MOUNTING CODE 5)	+■	■・■				
CONFIGURATION NUMBER	21	22	23	25	26	
Square housing 12"	0.70	1.12	1.18	1.66	2.36	
Square housing 16"	1.26	2.08	2.17	3.08	4.30	
Square housing 22"	2.36	3.44	n/a	n/a	n/a	
Rectangular housing 16.0" x 9.3"	0.88	1.24	1.50	2.12	3.00	

SIDE-ARM MOUNT (0° TILT) – (MOUNTING CODE 0)	+■		4			•
CONFIGURATION NUMBER	1	2	3	5	6	7▼
Aviator 14.4" x 15.5"	0.62	1.24	1.06	1.67	2.11	1.45
Aviator 14.4" x 15.5" with Extended Arm (AVE-1)	1.05	2.10	1.49	2.54	2.98	2.15
Aviator 14.4" x 15.5" with Extended Upsweep Arm (AVU-1)	1.00	2.00	1.51	2.51	3.01	2.14
Aviator 18.5" x 19.6"	1.03	2.07	1.75	2.78	3.50	2.40
Aviator 18.5" x 19.6" with Extended Arm (AVE-2)	1.60	3.20	2.32	3.92	4.64	3.32
Aviator 18.5" x 19.6" with Extended Upsweep Arm (AVU-2)	1.52	3.03	2.35	3.87	4.70	3.29
AeroDome 20"	1.74	3.48	2.56	4.30	5.13	3.65
AeroDome 20" with External Backlight Shield	2.01	4.02	3.10	5.11	6.20	4.21
AeroDome 20" with External Backlight Shield – Full Cutoff	2.03	4.06	3.37	5.40	6.74	4.96
AeroDome 25"	2.59	5.18	3.87	6.46	7.74	5.52
AeroDome 25" with External Backlight Shield	2.65	5.30	4.37	7.02	8.74	6.44
AeroDome 25" with External Backlight Shield – Full Cutoff	3.06	6.13	5.20	8.27	10.40	7.69
AeroDome 25" with Frontline Backlight Shield	2.85	5.69	5.75	8.60	11.50	8.90

ullet Only for use on Round Tapered Poles, must be used with AVRP accessory. See page 89.

IN-LINE BRACKET (PBD) – ORDER FIXTURE WITHOUT ARM (MOUNTING CODE 8)	■.■	
CONFIGURATION NUMBER	2 FIXTURES	3 FIXTURES
Square housing 12"	1.39	2.33
Square housing 16"	1.88	3.00
Square housing 22"	3.02	4.62
Square housing 22" with Sag Lens (VFT Series)	3.11	4.71
Square housing 22" with Sag Lens & back box (VFT Series)	3.17	4.77
Rectangular housing 16.0" x 9.3"	1.49	2.38

Spec sheets and photometric files are available at www.ruudlightingdirect.com

# **EFFECTIVE PROJECTED AREA (EPA) RATINGS - DIRECT MOUNT**



# SQUARE TUBE POST TOP - (MOUNTING CODE A, C, D or E)

CONFIGURATION NUMBER					
Square housing 16" (QV Series)	2.23	2.23	n/a	n/a	
Square housing 22" with Sag Lens (QV Series)	3.50	3.50	3.50	3.50	
Square housing 22" with Sag Lens & back box (QV Series)	3.56	3.56	3.56	3.56	

### ROUND TUBE POST TOP - (MOUNTING CODE F, H, I, J, K or M)

CONFIGURATION NUMBER						
Square housing 16" (AC and PR Series)	n/a	n/a	n/a	n/a	1.21	1.21
Square housing 16" (QV Series)	1.21	1.21	n/a	n/a	n/a	n/a
AeroDome 20"	2.10	1.96	1.96	1.96	n/a	n/a
AeroDome 20" with External Backlight Shield	2.37	2.23	2.23	2.23	n/a	n/a
AeroDome 20" with External Backlight Shield – Full Cutoff	2.62	2.48	2.48	2.48	n/a	n/a
AeroDome 25"	2.69	2.55	2.55	2.55	n/a	n/a
AeroDome 25" with External Backlight Shield	3.13	2.99	2.99	2.99	n/a	n/a
AeroDome 25" with External Backlight Shield – Full Cutoff	3.55	3.41	3.41	3.41	n/a	n/a
AeroDome 25" with Frontline Backlight Shield	4.31	4.18	4.18	4.18	n/a	n/a

# EFFECTIVE PROJECTED AREA (EPA) RATINGS - TENONS & BRACKETS

# 2" ADJUSTABLE FITTER - 12" SQUARE HOUSING

CATALOG #	# FIXTURES	0°	10°	20°	30°	45°	60°	70°	80°	90°
PA/PB-1	1	0.61	0.65	0.77	0.84	0.91	1.07	1.16	1.20	1.21
PA/PB-2	2 in-line	2.82	2.89	3.14	3.28	3.41	3.73	3.91	3.99	4.01
PB-3	3 in-line	4.68	4.91	5.28	5.50	5.68	6.17	6.44	6.56	6.59
PB-4(90)	4 @ 90°	4.19	4.37	4.55	4.65	4.76	5.00	5.12	5.14	5.20
PB-4	4 in-line	6.54	6.93	7.42	7.71	7.95	8.60	8.97	9.13	9.17
PT-1	1	0.82	0.86	0.98	1.05	1.11	1.28	1.37	1.41	1.42
PT/PD-2(90)	2 @ 90°	1.26	1.41	1.52	1.58	1.62	1.77	1.84	1.87	n/a
PT/PD-2(180)	2 @ 180°	1.43	1.43	1.43	1.43	1.49	1.75	1.90	1.95	1.96
PT/PD-3(90)	3 @ 90°	1.87	2.02	2.13	2.19	2.23	2.38	2.45	2.48	n/a
PT-3(120)	3 @ 120°	1.70	1.89	2.21	2.36	2.47	2.76	3.08	3.16	3.16
PT/PD-4(90)	4 @ 90°	2.31	2.60	2.82	2.94	3.04	3.32	3.49	3.54	3.53
PW-1A3	1	1.08	1.12	1.24	1.31	1.38	1.54	1.63	1.67	1.68
PW-2A3	2	2.16	2.24	2.48	2.62	2.76	3.08	3.26	3.32	3.34

# 2" ADJUSTABLE FITTER - 16" SQUARE HOUSING

CATALOG #	# FIXTURES				30°		60°	70°	80°	90°
PA/PB-1	1	0.93	1.06	1.27	1.39	1.50	1.78	1.95	2.02	2.03
PA/PB-2	2 in-line	3.86	4.11	4.53	4.78	4.99	5.56	5.89	6.03	6.05
PB-3	3 in-line	6.35	6.87	7.51	7.88	8.19	9.04	9.55	9.76	9.79
PB-4(90)	4 @ 90°	5.84	6.17	6.49	6.67	6.83	7.25	7.50	7.60	7.62
PB-4	4 in-line	8.84	9.63	10.49	10.98	11.40	12.53	13.21	13.49	13.53
PT-1	1	1.14	1.26	1.48	1.60	1.71	1.99	2.16	2.23	2.24
PT/PD-2(90)	2 @ 90°	1.90	2.16	2.36	2.47	2.56	2.81	n/a	n/a	n/a
PT/PD-2(180)	2 @ 180°	2.09	2.09	2.10	2.34	2.40	2.84	3.08	3.18	3.19
PT/PD-3(90)	3 @ 90°	2.83	3.10	3.30	3.41	3.49	3.75	n/a	n/a	n/a
PT-3(120)	3 @ 120°	2.07	2.81	3.50	4.24	4.74	5.09	5.48	5.63	5.63
PT/PD-4(90)	4 @ 90°	3.57	4.13	4.53	4.72	4.90	5.42	n/a	n/a	n/a
PW-1A3	1	1.40	1.53	1.74	1.86	1.97	2.25	2.42	2.49	2.50
PW-2A3	2	2.80	3.06	3.48	3.72	3.94	4.50	4.84	4.98	5.00

### 2" ADJUSTABLE FITTER - 22" SQUARE HOUSING

CATALOG #	# FIXTURES		10°	20°	30°	45°	60°	70°	80°	90°
PA/PB-1	1	1.62	1.94	2.34	2.56	2.74	3.26	3.57	3.69	3.69
PA/PB-2	2 in-line	5.63	6.28	7.07	7.51	7.87	8.91	9.51	9.77	9.77
PB-3	3 in-line	9.12	10.27	11.45	12.12	12.66	14.22	15.12	15.51	15.51
PB-4(90)	4 @ 90°	8.74	9.40	9.99	10.32	10.59	11.37	11.83	12.03	12.03
PB-4	4 in-line	12.62	14.27	15.84	16.73	17.45	19.53	20.73	21.25	21.25
PT-1	1	1.83	2.15	2.55	2.77	2.95	3.47	3.77	3.90	3.90
PT/PD-2(180)	2 @ 180°	3.45	3.45	3.87	3.99	4.23	4.97	5.44	5.60	5.60
PT-3(120)	3 @ 120°	3.33	3.68	4.97	5.33	5.51	6.41	n/a	n/a	n/a
PW-1A3	1	2.09	2.41	2.81	3.03	3.21	3.73	4.03 <sup>^</sup>	4.16	4.16 <mark>^</mark>
PW-2A3	2	4.18	4.82 <mark>^</mark>	5.62	6.06 <mark>^</mark>	6.42	7.46	8.06	8.32	8.32

**Fixture Mounting Height Total Pole Height** 

# 2" ADJUSTABLE FITTER - ECONOMY FLOOD (EXCLUDES COMPACT)

CATALOG #	# FIXTURES				30°		60°	70°	80°	90°
PA/PB-1	1	0.78	0.88	1.02	1.09	1.14	1.34	1.45	1.53	1.61
PA/PB-2	2 in-line	3.54	3.75	4.04	4.18	4.28	4.67	4.90	5.05	5.21
PB-3	3 in-line	6.03	6.34	6.77	6.98	7.13	7.72	8.06	8.29	8.52
PB-4(90)	4 @ 90°	4.87	5.34	5.77	5.99	6.13	6.72	7.07	7.30	7.53
PB-4	4 in-line	8.51	8.95	9.50	9.78	9.97	10.76	11.23	11.53	11.84
PT-1	1	0.99	1.09	1.23	1.30	1.35	1.55	1.66	1.74	1.82
PT/PD-2(90)	2 @ 90°	1.40	1.58	1.73	1.81	1.90	2.14	n/a	n/a	n/a
PT/PD-2(180)	2 @ 180°	1.76	1.76	1.76	1.76	1.76	2.04	2.20	2.33	2.44
PT/PD-3(90)	3 @ 90°	2.08	2.26	2.41	2.49	2.58	2.86	n/a	n/a	n/a
PT-3(120)	3 @ 120°	2.02	2.37	2.57	2.63	2.64	2.98	3.08	3.26	3.33
PT/PD-4(90)	4 @ 90°	2.74	3.09	3.37	3.52	3.66	4.11	n/a	n/a	n/a
PW-1A3	1	1.25 🚹	1.35	1.49	1.56	1.61	1.81	1.92 ^	2.00	2.08
PW-2A3	2	2.49 📥	2.70	2.98	3.13	3.22	3.62	3.85 ^	4.00	4.15

# 2" ADJUSTABLE FITTER - RECTANGULAR HOUSING

CATALOG #	# FIXTURES				30°		60°	70°	80°	90°
PA/PB-1	1	0.65	0.79	0.91	0.96	0.99	1.14	1.36	1.22	1.21
PA/PB-2	2 in-line	2.89	3.17	3.41	3.51	3.57	3.87	4.31	4.03	4.01
PB-3	3 in-line	4.91	5.33	5.69	5.84	5.93	6.38	7.04	6.62	6.59
PB-4(90)	4 @ 90°	4.11	4.53	4.89	5.04	5.13	5.58	6.24	5.82	5.79
PB-4	4 in-line	6.93	7.49	7.97	8.17	8.29	8.89	9.77	9.21	9.17
PT-1	1	0.86	1.00	1.12	1.17	1.20	1.35	1.57	1.43	1.42
PT/PD-2(90)	2 @ 90°	1.32	1.45	1.56	1.60	1.61	1.74	n/a	n/a	n/a
PT/PD-2(180)	2 @ 180°	1.24	1.35	1.52	1.59	1.64	1.85	2.17	1.97	1.95
PT/PD-3(90)	3 @ 90°	1.84	1.97	2.08	2.11	2.13	2.25	n/a	n/a	n/a
PT-3(120)	3 @ 120°	2.27	2.41	2.53	2.57	2.61	2.75	2.98	2.84	2.83
PT/PD-4(90)	4 @ 90°	2.44	2.70	2.91	2.98	3.02	3.26	n/a	n/a	n/a
PW-1A3	1	1.12 🚹	1.26	1.38	1.43	1.46	1.61	1.83	1.69	1.68
PW-2A3	2	2.24 ^	2.52	2.76	2.86	2.92 ^	3.22	3.66	3.38	3.36

# WHY IS EPA IMPORTANT?

Effective Projected Area—or EPA—is a rating assigned to a pole-mounted lighting fixture based on the fixture or pole's surface area and shape. The EPA is used to calculate wind loading to determine the proper pole size needed to support a fixture in outdoor applications. EPA maps (as seen on pages 95 and 97) indicate approximate maximum wind zones throughout the United States. Base wind velocities are established using a 50-year recurring mean.

Note that the wind map has several shaded areas designated as Special Wind Regions. In these areas, the magnitudes of the local wind speeds are dramatically affected by local conditions. These special wind regions include mountainous terrain, gorges, and other geographic areas that produce exceptional wind velocities. Poles located in a special wind region may be subjected to wind speeds that are higher than those indicated in the surrounding area. Wind speeds in these special regions should be determined by consulting the authority with local jurisdiction in that particular area, or through the analysis of local meteorological conditions

NOTE: Hanging signs, banners and flags on poles change the EPA rating and increase vibration. The EPA ratings data provided in this catalog does not allow for this added stress which could result in

# **CANOPY & PARKING STRUCTURE**



			DESCRIPTION	AVAILABLE WATTAGES AND LAMP TYPES	OPTICAL PATTERN	PAGE NUMBER
		CL SERIES	Canopy Light	70W - 400W HID 26W - 42W CFL		Page 103
DIRECT MOUNT		QV SERIES	Square Vertical- Lamp Symmetric Parking Structure	70W - 150W HID		Page 105
DIRECT		SE7 SERIES	Square Up/Down Parking Structure Light	100W - 150W HID		Page 106
		F/SCL SERIES	Translucent Lens Parking Structure Light	70W - 150W HID	•	Page 107
RECESSED	4	RC SERIES	Recessed Canopy Light	70W - 150W HID	•	Page 104



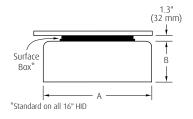
# **CANOPY & PARKING STRUCTURE**

Our Canopy and Parking Structure products are available with various optical systems to meet the needs of your application.

Fixtures are designed for canopy, soffit lighting and parking lot applications. All Canopy and Parking Structure fixtures deliver performance, efficiency, ease of installation and value.

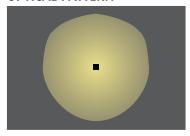


# STANDARD IN WHITE FINISH



"A"	"B"
12" (305 mm) Square	5.0" (127 mm)
16" (406 mm) Square	6.5" (165 mm)
22" (559 mm) Square	9.3" (235 mm)

# **OPTICAL PATTERN**



# CL SERIES by DIRECT



# **CANOPY LIGHT**

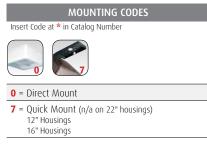
The CL Series fixtures are available in 12-, 16- and 22-inch square and feature seamless, aluminum die-cast housings. These highly efficient fixtures feature precision specular reflectors that provide cutoff distribution for maximum light levels. A flat crystal #73, tempered glass lens is standard.

**APPLICATIONS:** Canopy, soffit, freezer & cooler, multipurpose room lighting or for projects that require shallow housings.

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	12"	MCL*407-M
100W PSMH	12"	MCL*410-M
150W PSMH <sup>▲</sup>	12"	MCL*615-M
250W PSMH <sup>†</sup>	16"	CL*625-M
250W PSMH	22"	CL06925-M
320W PSMH	22"	CL06932-M
400W PSMH	22"	CL06940-M
70W HPS	12"	MCL*507-M
100W HPS	12"	MCL*510-M
150W HPS▲	12"	MCL*515-M
250W HPS <sup>†</sup>	16"	CL*525-M
250W HPS	22"	CL0592-M
400W HPS	22"	CL0594-M
26/32/42W CFL*	12"	MCL*242-U
†SB-16 Surface Box acc	essory is standar	d

SB-16 accessory required if mounting to a combustible surface.



SEE PAGE 108 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS** 





Quick Mount (mounting code 7) is listed for Damp Locations

# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(70W-150W HPS, 12" housing only)	1		
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W-400W PSMH & 250W-400W HPS only)	5		
(70W-150W HPS only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W-400W PSMH, 250W-400W HPS)	T		
(70W-150W HPS and 70W & 100W PSMH only)	T		
Single Fuse			
(277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	
Dual Fuse			
(208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor or fluorescent)			
(delay-relay type) (includes 100W Q lamp)		Q	
Glass Drop Prismatic Lens (12" or 16" only)			
(1-3/4" [44 mm] deep)		A	
Ballast Noise Suppressor (n/a 277V reactor)		N	
Tamperproof Lens Fasteners		J	

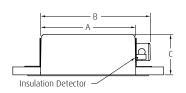
# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Wire Guard 12" Housing 16" Housing 22" Housing	FWG-12 FWG-16 FWG-22	
Surface Box 12" and 22" Housing (standard on 16" Housing; required on 12" 150W if mounting to combustible surface)	SB-16	
Tamperproof Screwdriver	TPS-1	

<sup>▼</sup> Specify lamp wattage for included lamp. Consult factory for discrete wattage labeling to meet state and/or local regulations where applicable.

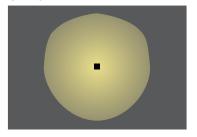


### STANDARD IN WHITE FINISH



"A"	"B"	"C"
12" Square	13.88"	5.0"
(305 mm)	(353 mm)	(127 mm)
16" Square	17.88"	6.5"
(406 mm)	(454 mm)	(165 mm)

# **OPTICAL PATTERN**



# RC SERIES by DIRECT

# **RECESSED CANOPY LIGHT**

RC Series fixtures are 12- and 16-inches square and feature a seamless, aluminum die-cast housing. This highly efficient fixture features a precision specular reflector that provides cutoff distribution for maximum light levels. A crystal #73, flat tempered glass lens is standard.

**APPLICATIONS:** Canopy illumination, soffit lighting

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
70W PSMH	12"	MRC0407-1
100W PSMH	12"	MRC0410-1
150W PSMH	12"	MRC0615-1
150W PSMH	16"	RC0615-1
70W HPS	12"	MRC0507-1
100W HPS	12"	MRC0510-1
150W HPS	12"	MRC0515-1
150W HPS	16"	RC0515-1
26/32/42W CFL	12"	MRC0242-U

Specify lamp wattage for included lamp. Consult factory for discrete wattage labeling to meet state and/or local regulations where applicable.



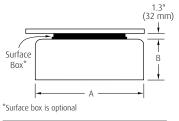
# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Ballast (standard on CFL)			
(PSMH & 150W HPS in 16" housing)	2		
(70W-150W HPS in 12" housing)	2		
208V Ballast (standard on CFL)			
(PSMH & 150W HPS in 16" housing)	3		
(70W-150W HPS in 12" housing)	3		
240V Ballast (standard on CFL)			
(PSMH & 150W HPS in 16" housing)	4		
(70W-150W HPS in 12" housing)	4		
Canada 347V Ballast (n/a CFL)			
(150W PSMH & 150W HPS in 16" housing)	6		
(70W & 100W PSMH)	6		
(70W-150W HPS in 12" housing)	6		
Single Fuse			
(120V, 277V, or 347V)	1, 2 or 6	F	
Dual Fuse			
(208V or 240V) (n/a Canada)	3 or 4	F	
Quartz Standby			
(delay-relay type) (includes 100W Q lamp)		Q	
Glass Drop Prismatic Lens (12" housing only) (Lens is 1-3/4" [44 mm] deep)		А	

# FIELD-INSTALLED ACCESSORIES

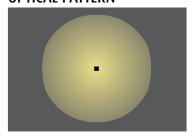
DESCRIPTION	CATALOG NUMBER
2 x 2 Lay-in Panel 12" Housing 16" Housing	LPF-12 LPF-16





"A"	"B"
16" (406 mm) Square	6.5" (165 mm)

# **OPTICAL PATTERN**



# QV SERIES by DIRECT

# **SQUARE VERTICAL-LAMP SYMMETRIC PARKING STRUCTURE**

The QV Series fixture is 16-inches square and features a seamless, aluminum die-cast housing. The Type V optical system uses a vertically positioned, medium-base lamp and provides great uniformity. A clear tempered glass lens is secured in a hinged, gasketed frame. Direct or quick mount options available.

**APPLICATIONS:** Parking structure, canopy and soffit lighting

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER	
70W PSMH	16"	QV*407-M	
100W PSMH	16"	QV*410-M	
150W PSMH	16"	QV <b>*</b> 615-M	
70W HPS	16"	QV*507-M	
100W HPS	16"	QV <b>*</b> 510-M	

MOUNTING CODES
Insert Code at * in Catalog Number
• Direct Mount
<b>7</b> = Quick Mount

SEE PAGE 108 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS** 





(mounting code 7) is listed for Damp Locations

# **FACTORY-INSTALLED OPTIONS**

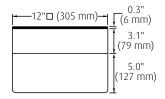
DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W PSMH only)	5		
(HPS)	5		
Canada Tri-volt Ballast (120/277/347V)			
(150W PSMH only)	T		
(70W-100W HPS and 70W & 100W PSMH only)	T		
Single Fuse			
(277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
Dual Fuse			
(208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor or fluorescent)			
(delay-relay type) (includes 100W Q lamp)		Q	
<b>36" Cord</b> (for use with PD-20BZ bracket)			
(n/a for Quick Mount)		K	
Tamperproof Lens Fasteners		J	

# FIELD-INSTALLED ACCESSORIES

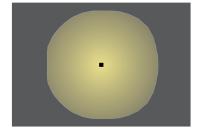
DESCRIPTION	CATALOG NUMBER	
Wire Guard	FWG-16	
Surface Box	SB-16	
Parking Deck Bracket (not for use with Quick Mount, option 7)	PD-20BZ	_
Tamperproof Screwdriver	TPS-1	



Minimum 150°C Supply Conductors Required for PSMH; 125°C for HPS.



# **OPTICAL PATTERN**



# SE7 SERIES by DIRECT

# **SQUARE UP/DOWN PARKING STRUCTURE LIGHT**

The SE7 fixture is 12-inches square and features an aluminum die-cast ballast housing. A clear lens encloses a specular aluminum reflector that provides ceiling illumination as well as wide, uniform light distribution reducing the dark cavity effect and delivering uniform light distribution. A virtually unbreakable polycarbonate lens is UV-stabilized to minimize yellowing.

**APPLICATIONS:** Parking structure, canopy and soffit lighting

# LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	MOUNTING POSITION	CATALOG NUMBER	
100W PSMH	12"	Ceiling/Soffit	SE7410-M	
150W PSMH	12"	Ceiling/Soffit	SE7615-M	
100W HPS	12"	Ceiling/Soffit	SE7510-M	
150W HPS	12"	Ceiling/Soffit	SE7515-M	



Ouick Mount, option "B' 10.18"L x 5.75"W x 1.56"D





Quick Mount (option B) is listed for Damp Locations

# FACTORY-INSTALLED OPTIONS

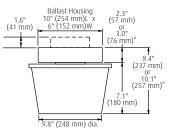
DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
120V Reactor Ballast			
(HPS only)	1		
277V Reactor Ballast (150W PSMH only)	27		
Canada Tri-volt Ballast (120/277/347V)			
(150W PSMH only)	T		
(HPS & 100W PSMH only)	T		
Single Fuse			
(277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
Dual Fuse			
(208V or 240V) (n/a Canada)	3 or 4	F	
Button Photocell			
(277V Reactor, 120V, 277V, 208V, 240V or 347V)	27, 1, 2, 3, 4 or 6	Р	
Quartz Standby (n/a 277V Reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Quick Mount (Damp Listed)		В	
24" Cord (for use with PD-10BZ bracket)		K	
Tamperproof Lens Fasteners		J	

# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER	
Parking Deck Bracket (not for use with Quick Mount, option "B")	PD-10BZ	
Tamperproof Screwdriver	TPS-1	

SEE PAGE 108-109 FOR MORE INFORMATION ABOUT THESE ACCESSORIES





#### NOTE:

\* This dimension may vary depending on wattage and voltage. (Consult factory)

# F/SCL SERIES by DIRECT

# TRANSLUSCENT LENS PARKING STRUCTURE LIGHT

The F/SCL Series fixtures include a prismatic, injection-molded polycarbonate refractor lens. Symmetric distribution allows wide spacing while maintaining brightness cutoff. The optical chamber is completely enclosed and gasketed.

**APPLICATIONS:** Parking structure, storage and utility areas with low ceiling heights

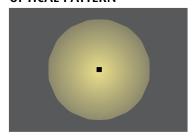
## LAMP INCLUDED

LAMP WATTAGE	CATALOG NUMBER	
70W PSMH	F*407-MSCL	
100W PSMH	F*410-MSCL	
150W PSMH	F*615-MSCL	
70W HPS	F*507-1SCL	
100W HPS	F*510-1SCL	
150W HPS	F*515-1SCL	

MOUNTING CODES	
Insert Code at * in Catalog Number	
1 = Slide Splice Box	
3 = Direct Mount	
•	

SEE PAGE 109 FOR MORE INFORMATION **ABOUT THESE MOUNTINGS** 

## **OPTICAL PATTERN**





Locations

All PSMH fixtures are supplied with open-rated lamps and sockets

# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W PSMH only)	27		
Canada Tri-volt Ballast (120/277/347V) (150W PSMH only) (100W PSMH only) (HPS only)	T T T		
Quad-volt Ballast (120/208/240/277V) (HPS only)	M		
Quartz Standby (n/a 277V Reactor) (non delay-relay type) (includes 100W Q lamp) (for 100W & 150W HPS, change suffix to -M)		Q	

# FIELD-INSTALLED ACCESSORIES

DESCRIPTION	CATALOG NUMBER
Surface Mounting Box	ESB-7WH
SEE PAGE 109 FOR MORE INFORMA	TION AROUT THIS ACCESSORY

# CANOPY & PARKING STRUCTURE Mounting Options & Accessories DIRECT





For use with CL7, QV7 and SE7 fixtures. A steel tray in black epoxy e-coat mounts directly to the ceiling or to a 4-inch octagon or square recessed junction box. Three conduit knockouts are provided on each of the long sides of the tray: (2) for 1/2-inch and (1) for 3/4-inch. A 2-inch conduit opening is provided in the center of the tray. A hinge bracket attached to the fixture simply hooks into a slot in the tray, supporting the fixture while the electrical connection is made. The fixture then swings up into place and a latch on the housing attaches it to the tray. Two #8 screws are provided to secure the fixture. For 12-inch square housings, 5.8"W x 10.2"L x 1.6"D (146 x 259 x 40 mm); For 16-inch square housings, 58"W x 13.7"L x 1.6"D (146 x 347 x 40 mm). UL and cUL Listed for damp locations.



For CL and QV Series. This die-cast aluminum box has five threaded and closed 1/2" conduit entries for surface wiring. Supplied with our Colorfast DeltaGuard® finish with a black ultra-durable powder topcoat. Four #8-32 threaded stud and hex nuts included for ease of installation. Measures 11.3"L x 8"W x 1.3"H (286 x 203 x 32 mm)

## CATALOG #

SB-16



For CL and QV Series. Steel guard provides protection to optical system of any outdoor or square commercial fixture with 12", 16" or 22" housing (except CL Series with drop lens). Attaches easily to lens frame with supplied #8 fasteners. Finished with an acrylic black E-coat paint. 1" (25 mm) space between wires.

CATALOG #	HOUSING
FWG-12	12"
FWG-16	16"
FWG-22	22"



For SE7 Series. "K" option required. Fabricated aluminum bracket suspends fixture 10" (254 mm) below ceiling to clear concrete "T" construction. The bracket includes holes on each side for easy mounting to fixture.

## CATALOG #

PD-10BZ

# PARKING DECK BRACKET

For 16" CL and QV Series."K" option required. Fabricated aluminum bracket adjusts vertically from 11" (279 mm) up to 20" (508 mm). Suspends fixture to clear concrete "T" construction. For white finish, specify PD-20WH.

## CATALOG #

PD-20BZ



For RC Series. The field-installed lightweight steel Lay-in Panel accessory replaces a standard 24" square recessed ceiling tile, and supports the fixture. It is finished with a white ultra-durable powder coat

#### CATALOG #

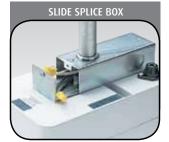
LPF-12

LPF-16

# CANOPY & PARKING STRUCTURE Mounting Options & Accessories DIRECT



For F/SCL Series fixtures. For installation over a recessed junction box. If surface wiring is required, use the Direct Mount with the ESB-7WH Surface Mounting Box accessory.



For use with F/SCL Series. Use for either surface wiring or pendant mount from rigid conduit. A removable steel electrical box can be installed prior to mounting the fixture, using 3/4" conduit for pendant mounting (shown) and three 1/2" knockouts for surface wiring.



For F/SCL Series where surface wiring is required. Use in conjunction with direct mount. Measures 10" x 6" x 1.3" (254 x 152 x 32 mm).

CATALOG #

ESB-7WH



For use with the CL, SE7 and QV Series with Tamperproof Lens Fasteners.

CATALOG #

TPS-1

# **EXIT & EMERGENCY**



DESCRIPTION LAMP SOUR		LAMP SOURCE	REMOTE CAPABLE OPTION	PAGE NUMBER		
	< <b>EXIT</b> >	EXD SERIES	Plastic LED Exit Sign	High Brightness LEDs	No	Page 112
NCY		EM11LP SERIES	Low Profile Emergency Light	5.4W Wedge-Based Incandescent	No	Page 112
EXIT & EMERGENCY		EMDE SERIES	Wet Listed Emergency Light	6W G4 Xenon	No	Page 112
EX		EM11/22 SERIES	Emergency Light	5.4W Wedge-Based Incandescent	Yes	Page 113
	<b>EXII</b>	EXDM SERIES	Emergency Light & LED Exit Sign	High Brightness LEDs and 5.4W Incandescent	Yes	Page 113
REMOTES	a <sub>e</sub>	EMRH SERIES	Wet Listed Remote Head	5.4W Wedge-Based Incandescent	_	Page 113



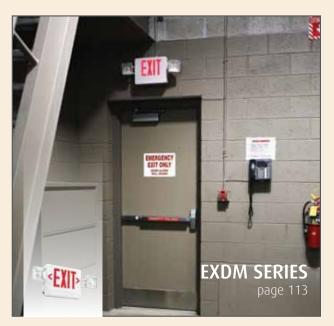
# **EXIT SIGNS**

Our exit signs feature light emitting diode (LED) technology to save both energy and maintenance costs. LED technology delivers a 25-year maintenance-free life and 94% energy savings compared to incandescent lamp signs.



# **EMERGENCY LIGHTS**

Emergency Lights feature thermoplastic or die-cast housings and are available with T5 tungsten or G4 Xenon lamps.



# **COMBINATION EXIT/EMERGENCY**

Our combination emergency/exit sign is a perfect cost-saving solution for projects requiring battery backup emergency lighting and an exit sign.

# **COMMON FEATURES**

## **Electronics**

Batteries within Exit and Emergency Lighting are maintained by a solid-state circuit of nominal input voltage. The automatic brownout protection switches to battery operation when AC drops below 80%.

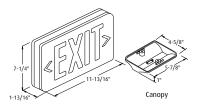
## Labels

Exit and Emergency Lighting fixtures are UL Listed for damp locations (except EMDE and EMRH Series that are UL Listed for wet locations) and to current UL924 emergency and power equipment safety standard. Fixtures also comply with the NFPA Life Safety Code, NEC and OSHA illumination standards and UL924 requirements.

# Warranty

Three-year warranty for defects in materials and manufacturing.





# EXD SERIES by DIRECT



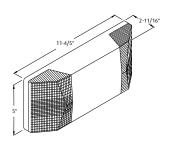
# **PLASTIC LED EXIT SIGN**

EXD Series signs are easy to install and are available with red 6-inch letters and can be used as a single or double face sign. A sealed, maintenance-free lead calcium rechargeable battery provides a minimum of 90 minutes of emergency power. Fixtures are listed for dry or damp locations with ambients between 68°F - 122° F (20° C - 50° C). EXD Series fixtures feature high impact thermoplastic housings and can be wall or ceiling mounted with the use of the included mounting canopy.

DESCRIPTION	CATALOG NUMBER
Red Letters, White Housing, Universal Face AC with Battery Backup	EXDBRWH







# EM11LP SERIES by DIRECTO



## LOW PROFILE EMERGENCY LIGHT

The EM11LP Series includes two 6-volt, 5.4-watt T5 wedge-based incandescent lamps. The housing is injection molded of UL94V0 flame-retardant impact resistant thermoplastic material. Fixtures are listed for dry or damp locations with ambients between 68° F - 122° F (20° C - 50° C). A sealed, 6-volt, lead-calcium battery operates both lamps for a minimum of 90 minutes after a power outage. EM11LP Series fixtures are suitable for either wall or ceiling mounting.

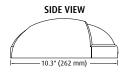
#### LAMPS INCLUDED

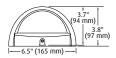
DESCRIPTION	CATALOG
	NUMBER
White Housing, AC with Battery Backup	EM11LPWH



for Damp









for Wet Locations

# EMDE SERIES by DIRECT



# WET LISTED EMERGENCY LIGHT

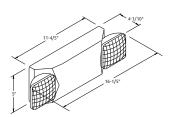
The EMDE Series fixtures include two 6-volt, 6-watt 2-pin G4 Xenon lamps. A silicone sponge gasket between the die-cast aluminum housing halves assures a watertight seal. A maintenance-free, long-life, nickel-cadmium 6-volt battery operates both lamps for a minimum of 90 minutes after a power outage. Fixtures are listed for wet locations with ambients between 32° F - 122° F (0° C - 50° C). EMDE Series fixtures mount directly to a recessed junction box.

## **LAMPS INCLUDED**

DESCRIPTION	CATALOG NUMBER
Bronze Housing, AC with Battery Backup	EMDEBZ
White Housing, AC with Battery Backup	EMDEWH

Spec sheets and photometric files are available at www.ruudlightingdirect.com









# **EMERGENCY LIGHT**

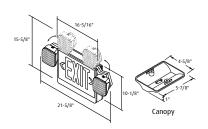
The EM11/22 Series emergency light includes two 6-volt, 5.4-watt T5 wedge base lamps. A sealed, 6-volt, sealed lead calcium battery operates both lamps for a minimum of 90 minutes after a power outage. Fixtures are listed for dry or damp locations with ambients between 68° F - 122° F (20° C - 50° C). EMP11/22 Series fixtures can be mounted to a wall-recessed junction box with a universal back plate or ceiling mounted.

## LAMPS INCLUDED

DESCRIPTION	CATALOG NUMBER
White Housing, AC with Battery Backup	EM11SWH
White Housing, AC with Battery Backup, 11W Remote Capability▲	EM22RWH

Choose from EMRH Series Remote Head options below









# **EMERGENCY LIGHT/LED EXIT SIGN**

The EXDM Series emergency light includes two 6-volt, 5.4-watt tungsten (T5 wedge base) lamps. The exit sign features two LED bars available with red 6-inch letters, single or double face. A sealed, maintenance-free lead calcium rechargeable battery provides a minimum of 90 minutes of emergency power. Fixtures are listed for dry or damp locations with ambients between 68° F - 104° F (20° C - 40° C). An automatic low-voltage disconnect protects the battery from deep discharge. A mounting canopy is included with all fixtures.

## LAMPS INCLUDED

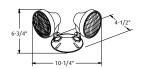
DESCRIPTION	CATALOG NUMBER	
Red Letters, White Housing, Universal Face AC with Battery Backup	EXDMBRWH	
Red Letters, White Housing, Universal Face AC with Battery Backup, 14.4W Remote Capability	EXDMBRRWH	

Choose from EMRH Series Remote Head options below









# EMRH SERIES by DIRECT



# **WET LISTED REMOTE HEAD**

The outdoor single head EMRHS and dual head EMRHD 6.5-volt remote emergency lights are durable and weatherproof. The fixtures are constructed of injection-molded, UL94V0 flame-retardant, high-impact thermoplastic material. Can be used with the EXDM Series Emergency Light/LED Exit Sign and EM22 Emergency Light.

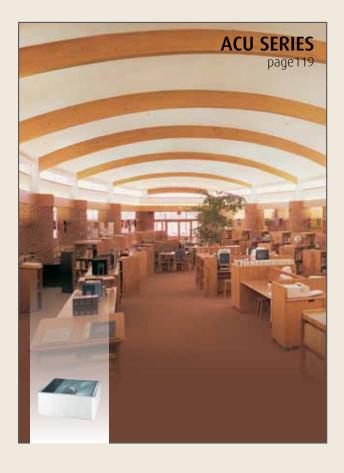
## LAMP(S) INCLUDED

DESCRIPTION	CATALOG NUMBER
5.4-watt, injection-molded T5 single remote head	EMRHS5WW
5.4-watt, injection-molded T5 dual remote head	EMRHD5WW

# **INDIRECT**



		DESCRIPTION	AVAILABLE WATTAGES AND LAMP TYPES	PAGE NUMBER
FLUORESCENT	U SERIES	Indirect Linear Fluorescent	54W T5H0 28W T5	Page 116
	ACU SERIES	Square Forward Throw Indirect Light	70W - 1000W HID	Page 119
OIH	LACU SERIES	Rectangular Forward Throw Indirect Light	70W - 150W HID	Page 120
	WACU SERIES	Wedge Forward Throw Indirect Light	70W - 400W HID	Page 121



# HID

Perfect for educational or professional and computer intensive environments, HID indirect lighting provides uniform ceiling illumination with little spill light on the wall. An adjustable backlight shield is standard. Fixtures are available in a 12-, 16- or 22-inch square, wedge, or rectangular housing and can accommodate a variety of lamp types.

# **FLUORESCENT**

#### HOUSING

The die-formed steel housing has a perforated bottom, and features riveted, heavy-duty, die-cast aluminum mounting plates. The end caps are die-cast aluminum and are factory installed. DeltaGuard® finish is standard on housing and end caps.

# **BALLAST/WIRE MANAGEMENT CHANNEL**

Die-formed pre-painted steel prevents wires from becoming visible from below the ceiling.

## REFLECTOR

Die-formed, super high efficiency, specular aluminum reflectors are retained in place with two ¼ turn fasteners for ease of servicing.

## **LAMPS**

The Indirect Linear Fluorescent Series has been specifically designed for use with energy-efficient T5 and T5HO lamp technology, which has great lumen maintenance and provides excellent color consistency. Each fixture comes standard with lamps.

## **BALLAST**

Standard with a programmed-start electronic ballast for optimal life and performance. It is standard with Universal 120- to 277-volt operation.



Indirect fluorescent lighting provides smooth and uniform illumination without the harsh glare of traditional task or recessed lighting and creates a perfect environment for work or study. Available in individual or continuous runs, and a variety of mounting options, our linear indirect fixtures add sophistication to any space.









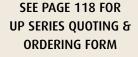
# INDIRECT LINEAR FLUORESCENT

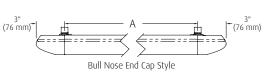
Designed to fit many applications, the Indirect Linear Fluorescent series has a perforated housing and is available in 4-, 8-, and 12-foot lengths.

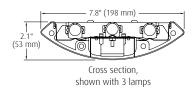
**APPLICATIONS:** Classroom, office, multi-purpose rooms

	"A"
4-foot	48" (122 cm)
8-foot	96" (244 cm)
12-foot	144" (366 cm)









# Factory-Installed End Cap Starter Section Runner Section Runner Section Factory-Installed End Cap Factory-Installed End Cap

Continuous runs lock together using the Mate-N-Lok® technology.

# **END CAP STYLES**

for Damp





**BULL NOSE** 

WING

# MOUNTING OPTIONS







PENDANT CABLE

LE Y-CABLE

# LAMP OPTIONS







1 LAMP

2 LAMPS

3 LAMPS

# **EXAMPLE OF TYPICAL INSTALLATION**

Installation example shows a single 32' run. The 8' fixtures feature 2 x 54W T5HO 4100K lamps and the wing end cap style. Fixtures are cable hung with an adjustable 12" to 27" range of aircraft cable. Feed kits mount over a junction box on a hard ceiling and feature same-sized canopies.

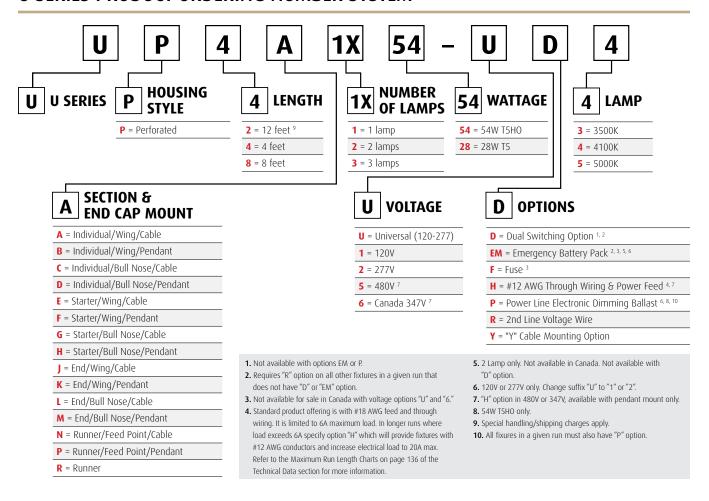
#### LAMPS INCLUDED

QTY	DESCRIPTION	CATALOG NUMBER	
1	8' Starter	UP8E2X54-U4	
2	8' Runners	UP8R2X54-U4	
1	8' End	UP8J2X54-U4	
1	Feed Mounting Kit	U-MKC27CA4WT	
4	Non-Feed Mounting Kits	U-MKC27CN4WT	

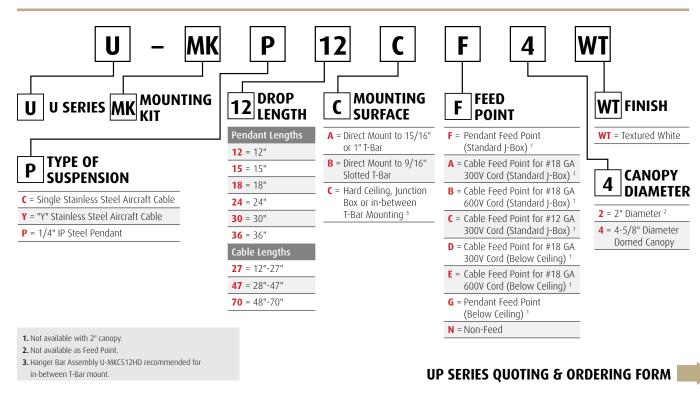


Spec sheets and photometric files are available at www.ruudlightingdirect.com

# U SERIES PRODUCT ORDERING NUMBER SYSTEM



# **U SERIES MOUNTING KITS ORDERING NUMBER SYSTEM**



# **U SERIES QUOTING** AND ORDERING FORM



It's easy to choose the right product for your project. Use this form and make copies for quick and simple ordering or quoting of indirect products. If you need additional assistance with your order, call Customer Service at (800) 236-7000.

NAME:	
CUSTOMER NUMBER:	

# RUN INFORMATION

QUANTITY	LENGTH	LENGTH PREFE	RENCE
3 Runs	32'	8-foot	(Example)
8 Runs	4'	Individual	(Example)
			·

FIXTURE INFORMATION	(check one in each category)
---------------------	------------------------------

1	LENGTH PREFERENCE
	(if configuring a continuous run,
	complete <b>Run Information</b> above)

- □ 4-foot ■ 8-foot
- □ 12-foot (special S&H applies)
- **LAMP WATTAGE □** 28W T5
  - □ 54W T5HO (standard)
- - LAMP COLOR TEMPERATURE
  - **□** 3500K □ 4100K

**END CAP STYLE** 

■ Wing

□ Bull Nose

□ 5000K

- **VOLTAGE** 
  - □ 120V □ 277V

□ 1 Lamp

□ 2 Lamps

□ 3 Lamps

- **□**208V Canada 347V (T5H0 only)
- □ 240V □ 480V (T5H0 only)

NUMBER OF LAMPS

# **OPTIONS**

- □ Dimming <sup>1</sup> □ Dual Switching <sup>2</sup>
- ☐ Emergency Battery Pack <sup>3, 4</sup>
- ☐ Aircraft Y-Cable

- □ Fusing <sup>3</sup>
- □ #12 AWG Wiring <sup>5</sup>
- □ 2nd Line Voltage Wire 6
- 1. Can reduce lamp life. 120V or 277V only.
- 2. Not available with Dimming or Emergency Battery Pack options.
- 3. Not available in Canada for 120V-277V & 347V.
- 4. Only available on 2-lamp models. 120V or 277V only. Not available with Dual Switching option.
- 5. Required for some continuous run applications (#18 AWG is standard).
- 6. Required for some dimming, dual switching, and emergency battery pack applications.

# MOUNTING KIT INFORMATION (check one in each category)

# MOUNTING KIT STYLE

- ☐ Aircraft Cable
- ☐ Aircraft Y-Cable
- □ Pendant

# **DROP LENGTH**

- Adjustable Cable/Y-cable
- **12**"-27"
- **28**"-47"
- **48**"-70"

- Fixed Pendant
- **□** 12" **2**4"
- **1**5" **30**"
- **18**" **3**6"

# **MOUNTING SURFACE**

- ☐ Hard Ceiling (J-box)
- ☐ Drop Tile T-bar Ceiling

(if mounting to a drop tile ceiling, specify if you're mounting direct to acoustical panels, standard t-bar or slotted t-bar)

# **FEED POINTS**

- ☐ Wiring Above Ceiling ☐ Wiring Below Ceiling
- (#12 AWG-wired fixtures must be wired above the ceiling)

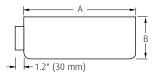
# **NON-FEED CANOPY DIAMETER**

- $\square$  4-5/8" (standard on feeds)
- **2**"



#### STANDARD IN WHITE FINISH

A Minimum of 150°C Supply Conductors Are Required.



"A"	"B"
12" (305 mm) Square	5.0" (127 mm)
16" (406 mm) Square	6.5" (165 mm)
22" (559 mm) Square	9.3" (235 mm)

# ACU SERIES by RUUD LIGHTING DIRECT

# **SQUARE FORWARD THROW INDIRECT LIGHT**

This compact forward throw reflector has a main beam of 60°+ from vertical (30° from horizontal), which provides uniform ceiling illumination with little spill light on the wall. An adjustable backlight shield is standard. A clear, tempered glass lens is held securely in a die-cast aluminum door frame. **NOTE**: Noise suppressor is standard on all fixtures except 320W PSMH and 1000W MH.

**APPLICATIONS:** Classroom, office, multi-purpose rooms

## LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER	
70W PSMH	12"	MACU407-M	
100W PSMH	12"	MACU410-M	
150W PSMH	12"	MACU615-M	
250W PSMH	16"	ACU625-M	
320W PSMH <b>₽</b>	16"	ACU632-M	
1000W MH 🎙	22"	ACU499-M	





Supplied Wall Mount Box 6" x 4" x 1.2" (152 mm x 102 mm x 30 mm) NOT FOR USE IN WET LOCATIONS



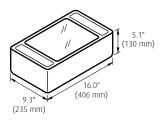
# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W-320W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W-320W PSMH, 1000W MH only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(70W & 100W PSMH only)	T		
(150W-320W PSMH, 1000W MH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	



#### STANDARD IN WHITE FINISH

A Minimum of 150°C Supply Conductors Are Required.



# LACU SERIES by DIRECT

# RECTANGULAR FORWARD THROW INDIRECT LIGHT

This compact forward throw reflector has a main beam of 60°+ from vertical (30° from horizontal), which provides uniform ceiling illumination with little spill light on the wall. An adjustable backlight shield is standard. A clear, tempered glass lens is held securely in a die-cast aluminum door frame. **NOTE**: Noise suppressor not available with this fixture.

**APPLICATIONS:** Classroom, office, multi-purpose rooms

## LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER	
70W PSMH	16.0" x 9.3"	LACU407-M	
100W PSMH	16.0" x 9.3"	LACU410-M	
150W PSMH	16.0" x 9.3"	LACU615-M	



Supplied Wall Mount Box 6" x 4" x 1.2" (152 mm x 102 mm x 30 mm) NOT FOR USE IN WET LOCATIONS



# **FACTORY-INSTALLED OPTIONS**

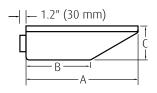
DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W PSMH only)	27		
480V Ballast (70W & 100W PSMH only)	5		
Canada Tri-volt Ballast (120/277/347V) (70W & 100W PSMH only) (150W PSMH only)	T T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor) (delay-relay type) (includes 100W Q lamp)		Q	





## STANDARD IN WHITE FINISH SHOWN WITH OPTIONAL ACCENT STRIPE

A Minimum of 150°C Supply Conductors Are Required.



"A"	"B"	"C"		
16" Square	9.5"	5.1"		
(406 mm)	(241 mm)	(129 mm)		
22" Square	13.4"	6.5"		
(559 mm)	(340 mm)	(165 mm)		

# WEDGE FORWARD THROW INDIRECT LIGHT

This compact forward throw reflector has a main beam of 60°+ from vertical (30° from horizontal), which provides uniform ceiling illumination with little spill light on the wall. An adjustable backlight shield is standard. A clear, tempered glass lens is held securely in a die-cast aluminum door frame. **NOTE**: Noise suppressor is standard on all WACU Series fixtures.

**APPLICATIONS:** Classroom, office, multi-purpose rooms

## LAMP INCLUDED

LAMP WATTAGE	HOUSING SIZE	CATALOG NUMBER
WAITAGE	JILL	NOMBER
70W PSMH	16"	WACU407-M
100W PSMH	16"	WACU410-M
150W PSMH	16"	WACU615-M
250W PSMH	22"	WACU6925-M
320W PSMH <b>♥</b>	22"	WACU6932-M
400W PSMH <b>₽</b>	22"	WACU6940-M





6" x 4" x 1.2" (152 mm x 102 mm x 30 mm) NOT FOR USE IN WET LOCATIONS



# FACTORY-INSTALLED OPTIONS

DESCRIPTION	CHANGE SUFFIX TO	ADD AFTER SUFFIX	
277V Reactor Ballast (150W-400W PSMH only)	27		
480V Ballast			
(70W & 100W PSMH only)	5		
(150W-400W PSMH only)	5		
Canada Tri-volt Ballast (120/277/347V)			
(70W & 100W PSMH only)	T		
(150W-400W PSMH only)	T		
<b>Single Fuse</b> (277V Reactor, 120V, 277V, or 347V)	27, 1, 2 or 6	F	
<b>Dual Fuse</b> (208V, 240V, or 480V) (n/a Canada)	3, 4 or 5	F	
Quartz Standby (n/a 277V reactor)			
(delay-relay type) (includes 100W Q lamp)		Q	
Accent Stripe (note at end of catalog number pre	fix: G=Grey, R=Red (\	WACU615R-M)	

# **REPLACEMENT LAMPS**





When you need exceptional HID, fluorescent and incandescent lamp solutions at lower cost, count on Luma® Lamps to deliver efficient, high-quality light for a wide variety of commercial, professional and industrial applications. Plus, get the great service and excellence you've come to expect from Ruud Lighting Direct.

# LAMP CALCULATIONS



Whether you are specifying a low-voltage, incandescent PAR, or MH PAR lamp, the style or shape of the luminaire does not affect optical performance. As a result, three variables should be considered when you calculate footcandle levels or beam spreads:

- Distance that the lamp must project
- Aiming angle of the lamp
- · Choice of lamp, regarding beam spread and wattage

The distance the lamp must project is a function of the ceiling height and the fixture distance from the object to be illuminated. Most lighting professionals recommend a 60-degree aiming angle to minimize reflected glare when illuminating artwork that is displayed on walls. There are two calculations that will help you choose the right lamp:

- 1. Determine the lamp intensity (nadir candlepower)
- 2. Determine the beam spread

The formulas and examples that follow will help you make those calculations.

# SAMPLE CALCULATIONS FOR A 50W MR16/NF/24°/EXZ

Data for these calculations found on pages 126 and 127 under column headings:

- CBCP (Center Beam Candlepower)
- 0° Aiming Angle Beam Spread
- 60° Aiming Angle Beam Spread

# 0° NADIR FOOTCANDLES

50W MR16 lamp has a nadir candlepower of 3000 candelas. To calculate nadir footcandles at a 0° aiming angle, use the following formula:

$$fc_{N0^{\circ}} = \frac{Nadir\ cd}{Distance\ from\ fixture^2}$$



6' 100fc

## **EXAMPLE:**

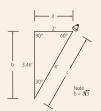
Lamp: 50MR16

Distance:

Calculation: 
$$fc_{N0^{\circ}} = \frac{3000}{(5)^2} = \frac{3000}{25} = 120 \text{ fc}$$

# 60° NADIR FOOTCANDLES

Illustration shows the 50W MR16 at a 60° aiming angle, positioned 2' from the wall, projecting to an object 4' away. To calculate nadir footcandles at a 60° aiming angle, use the following formula:



$$f_{C_{N60^{\circ}}} = \frac{Nadir cd}{(2 \text{ x Distance of fixture from wall})^2 \text{ x 2}}$$

## **EXAMPLE:**

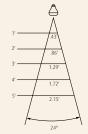
Lamp: 50MR16

Distance: 2'

Calculation:  $fc_{N0^{\circ}} = \frac{3000}{(2 \times 2)^2 \times 2} = \frac{3000}{25} = 94 \text{ fc}$ 

# 0° BEAM SPREADS

Diagram shows visual beam spread (24°) for a 50W MR16 lamp and indicates the beam width in feet at various distances from the lamp. To determine the beam spread for a lamp at a 0° aiming angle, multiply the number shown in the 0° column on pages 124 or 125 by the distance from the fixture.



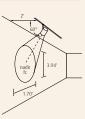
#### **EXAMPLE:**

50MR16 Lamp: Distance: 3'

Calculation:  $3 \times 0.43 = 1.29'$ 

# 60° BEAM SPREADS

Illustration shows the beam spread of a 50W MR16 lamp in a fixture 2' from the wall, positioned at a 60° aiming angle. To determine the beam spread width and height at a 60° aiming angle, multiply the numbers shown in the 60° column on page 124 or 125 by the distance of the fixture from the wall.



#### **EXAMPLE:**

50MR16 Lamp: Distance:

Calculation:  $0.85 \times 2 = 1.70'$  wide

1.97 x 2 = 3.94' high



# **FLUORESCENT**

# Replacement Lamps



Ruud Lighting carries a wide selection of fluorescent lamps from Luma Lamps. Choose from Single Tube, Double Tube-2 pin, Double Tube-4 pin, Triple Tube, Double D and Linear Fluorescent lamps - all 100% satisfaction guaranteed.

	'		,				
	CATALOG #	DESCRIPTION	BASE	INTIAL/MEAN LUMENS	AVERAGE RATED LIFE	CCT <b>≜</b> (K)	CRI
	32W (3500K)	F32W/T8/835	G13	2775/2600	20000	3500	82
	:LF32835C (case quantity = 25)						
	:LF32835HS (half skid quantity = 625)						
	:LF32835FS (full skid quantity = 1250)						
T8 Linear	32W (4100K)	F32W/T8/840	G13	2775/2600	20000	4100	82
Fluorescent	:LF32841C (case quantity = 25)						
TCLP	:LF32841HS (half skid quantity = 625)						
Compliant	:LF32841FS (full skid quantity = 1250)						
	32W (5000K)	F32W/T8/850	G13	2775/2600	20000	5000	82
4	:LF32850C (case quantity = 25)						
	:LF32850HS (half skid quantity = 625)						
	:LF32850FS (full skid quantity = 1250)						
	54W (3500K)	F54W/T5/835	G5	4950/4675	20000	3500	85
	:LF54835C (case quantity = 40)						
	:LF54835HS (half skid quantity = 600)						
	:LF54835FS (full skid quantity = 1200)						
T5H0 Linear	54W (4100K)	F54W/T5/840	G5	4950/4675	20000	4100	85
Fluorescent	:LF54841C (case quantity = 40)						
TCLP	:LF54841HS (half skid quantity = 600)						
Compliant	:LF54841FS (full skid quantity = 1200)						
-	54W (5000K)	F54W/T5/850	G5	4950/4675	20000	5000	85
41							
	:LF54850HS (half skid quantity = 600)						
	:LF54850FS (full skid quantity = 1200)						

<sup>▲</sup>Correlated Color Temperature (Kelvin)

	CATALOG #	DESCRIPTION	PINS	BASE	INTIAL/MEAN LUMENS	AVERAGE RATED LIFE	CCT <b>*</b> (K)	CRI
CFL	13W							
Single	:CF13SA/27	CFT13W/GX23/827	2	GX23	820 / 700	10000	2700	82
Tube (2-pin)								
CFL	13W							
Double	:CF13DA/27	CFQ13W/GX23/827	2	GX23-2	800 / 685	10000	2700	82
Tube (2-pin)								

**^**Correlated Color Temperature (Kelvin)



# **FLUORESCENT**

# Replacement Lamps



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			<u> </u>						
		CATALOG #	DESCRIPTION	PINS	BASE	INTIAL/MEAN LUMENS	AVERAGE RATED LIFE	ССТ <b>^</b> (К)	CRI
		13W							
		:CF13D4/27	CFQ13W/G24q/827	4	G24q-1	890 / 750	12000	2700	82
		:CF13D4/35	CFQ13W/G24q/835	4	G24q-1	890 / 750	12000	3500	82
		:CF13D4/41	CFQ13W/G24q/841	4	G24q-1	890 / 750	12000	4100	82
CFL	<u></u>	18W							
Double		:CF18D4/27	CFQ18W/G24q/827	4	G24q-2	1190 / 960	12000	2700	82
Tube	Щ	:CF18D4/35	CFQ18W/G24q/835	4	G24q-2	1190 / 960	12000	3500	82
(4-pin)	THE STATE OF THE S	:CF18D4/41	CFQ18W/G24q/841	4	G24q-2	1190 / 960	12000	4100	82
		26W							
		:CF26D4/27	CFQ26W/G24q/827	4	G24q-3	1700 / 1435	12000	2700	82
		:CF26D4/35	CFQ26W/G24q/835	4	G24q-3	1700 / 1435	12000	3500	82
		:CF26D4/41	CFQ26W/G24q/841	4	G24q-3	1700 / 1435	12000	4100	82
·		26W							
		:CF26T4/27	CFTR26W/GX24q/827	4	GX24q-3	1700 / 1435	12000	2700	82
		:CF26T4/35	CFTR26W/GX24q/835	4	GX24q-3	1700 / 1435	12000	3500	82
		:CF26T4/41	CFTR26W/GX24q/841	4	GX24q-3	1700 / 1435	12000	4100	82
		32W							
		:CF32T4/27	CFTR32W/GX24q/827	4	GX24q-3	2180 / 1845	12000	2700	82
		:CF32T4/35	CFTR32W/GX24q/835	4	GX24q-3	2180 / 1845	12000	3500	82
CFL		:CF32T4/41	CFTR32W/GX24q/841	4	GX24q-3	2180 / 1845	12000	4100	82
Triple		42W							
Tube	Щ	:CF42T4/27	CFTR42W/GX24q/827	4	GX24q-4	3190 / 2680	12000	2700	82
(4-pin)	milin.	:CF42T4/35	CFTR42W/GX24q/835	4	GX24q-4	3190 / 2680	12000	3500	82
		:CF42T4/41	CFTR42W/GX24q/841	4	GX24q-4	3190 / 2680	12000	4100	82
		57W							
		:CF57T4/27	CFTR57W/GX24q/827	4	GX24q-5	4300 / 3700	12000	2700	82
		:CF57T4/35	CFTR57W/GX24q/835	4	GX24q-5	4300 / 3700	12000	3500	82
		:CF57T4/41	CFTR57W/GX24q/841	4	GX24q-5	4300 / 3700	12000	4100	82
		70W							
		:CF70T4/41	CFTR70W/GX24q/841	4	GX24q-4	5200 / 4470	12000	4100	82
		21W							
CEI		:CF212D/35	CF21W/2D/GR10q/835	4	GR10q-4	1350 / 1130	10000	3500	82
CFL Double D		28W							
(4-pin)		:CF282D/35	CF28W/2D/GR10q/835	4	GR10q-4	2045 / 1715	10000	3500	82
(4 5)		38W							
		:CF382D/35	CF38W/2D/GR10q/835	4	GR10q-4	2845 / 2390	10000	3500	82
			<del>-</del>						

<sup>▲</sup>Approximate Center Beam Candlepower



# **INCANDESCENT**

# Replacement Lamps



Ruud Lighting carries a wide selection of incandescent lamps from Luma Lamps. Choose from MR16, Quartz and PAR Halogen lamps - all 100% satisfaction guaranteed.

Data in these	columns	used	tor	calculations	ΩD	nage	173

	CATALOG #	DESCRIPTION	BEAM ANGLE	0° AIMING ANGLE BEAM SPREAD PER FOOT	60° AIMING ANGLE BEAM SPREAD PER FOOT FROM WALL	CBCP* (CANDELAS)	AVERAGE RATED LIFE
	20W						
	:20MR16ESX	20MR16/SP/12°/ESX	12°	0.21	0.42W x 0.87H	3300	4000
	:20MR16BBF	20MR16/NF/24°/BBF	24°	0.43	0.85W x 1.97H	1000	4000
	:20MR16BAB	20MR16/FL/36°/BAB	36°	0.65	1.30W x 3.80H	460	4000
	35W						
MD16	:35MR16FMT	35MR16/SP/12°/FMT	12°	0.21	0.42W x 0.87H	6300	4000
MR16 UU Bi-pin Base	:35MR16FMY	35MR16/NF/24°/FMY	24°	0.43	0.85W x 1.97H	3600	4000
or-pili base	:35MR16FMW	35MR16/FL/36°/FMW	36°	0.65	1.30W x 3.80H	730	4000
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	50W						
	:50MR16EXT	50MR16/SP/12°/EXT	12°	0.21	0.42W x 0.87H	9150	4000
	:50MR16EXZ	50MR16/NF/24°/EXZ	24°	0.43	0.85W x 1.97H	3000	4000
	:50MR16EXN	50MR16/FL/36°/EXN	36°	0.65	1.30W x 3.80H	1500	4000
	:50MR16FNV	50MR16/VW/60°/FNV	60°	1.15	2.31W	750	4000

<sup>▲</sup>Approximate Center Beam Candlepower

		CATALOG #	DESCRIPTION	APPROX. LUMENS	AVERAGE RATED LIFE
0	رك	100W			
Quartz DC Payonet		:QZ100DC	Q100DC	1200	2000
DC Bayonet Base		150W			
	J	:QZ150DC	Q150DC	2100	2000
		100W			,
	(T)	:QZ100T3	Q100T3	1200	2000
	μ̈́	:QZ100T3L	Q100T3/Long	1300	2000
	)ní	150W			
Quartz	JIII	:QZ150T3	Q150T3	2000	2000
Double		250W			
Ended Base		:QZ250T3	Q250T3	4250	2000
		300W			
ĺ		:QZ300T3	Q300T3	4800	2000
	-	500W			
		:QZ500T4	Q500T4	8500	2000

## FOR MR16 & QUARTZ LAMPS

Use only in an enclosed fixture. Do not touch lamp with bare hands. Keep combustible materials away from lamp. Do not use if lamp is scratched or broken. Use in fixtures rated for this product.

## **FOR MR16 LAMPS**

Color temperature of incandescent lamps ranges from 2700K-3100K.

Spec sheets and photometric files are available at www.ruudlightingdirect.com



# **INCANDESCENT** Replacement Lamps



Ruud Lighting carries a wide selection of incandescent lamps from Luma Lamps. Choose from MR16, Quartz and PAR Halogen lamps - all 100% satisfaction guaranteed.

> Data in these columns used for calculations on page 123

					for calculation	ons on page 123.		
		CATALOG #	DESCRIPTION	BEAM ANGLE	0° AIMING ANGLE BEAM SPREAD PER FOOT	60° AIMING ANGLE BEAM SPREAD PER FOOT FROM WALL	APPROX. LUMENS	AVERAGE RATED LIFE
		35W PAR20						
		:35PAR20SP	35PAR20/SP/12°	12°	0.21	0.42W x 0.87H	380	2500
		:35PAR20NF	35PAR20/NF/24°	24°	0.43	0.85W x 1.97H	380	2500
		:35PAR20FL	35PAR20/FL/36°	36°	0.65	1.30W x 3.80H	380	2500
	Ш	50W PAR20						
		:50PAR20SP	50PAR20/SP/12°	12°	0.21	0.42W x 0.87H	550	2500
	PAR20	:50PAR20NF	50PAR20/NF/24°	24°	0.43	0.85W x 1.97H	550	2500
		:50PAR20FL	50PAR20/FL/36°	36°	0.65	1.30W x 3.80H	550	2500
		50W PAR30						
		:50PAR30SP	50PAR30/SP/12°	12°	0.21	0.42W x 0.87H	660	2500
		:50PAR30NF	50PAR30/NF/24°	24°	0.43	0.85W x 1.97H	660	2500
		:50PAR30FL	50PAR30/FL/36°	36°	0.65	1.30W x 3.80H	660	2500
	W	75W PAR30						
	₩ PAR30	:75PAR30SP	75PAR30/SP/12°	12°	0.21	0.42W x 0.87H	1000	2500
	PARSU	:75PAR30NF	75PAR30/NF/24°	24°	0.43	0.85W x 1.97H	1000	2500
		:75PAR30FL	75PAR30/FL/36°	36°	0.65	1.30W x 3.80H	1000	2500
		50W PAR30L						
		:50PAR3LSP	50PAR3L/SP/12° long neck	12°	0.21	0.42W x 0.87H	580	2500
DAD		:50PAR3LNF	50PAR3L/NF/24° long neck	24°	0.43	0.85W x 1.97H	580	2500
PAR Halogen		:50PAR3LFL	50PAR3L/FL/36° long neck	36°	0.65	1.30W x 3.80H	580	2500
Medium		75W PAR30L						
Base		:75PAR3LSP	75PAR3L/SP/12° long neck	12°	0.21	0.42W x 0.87H	1000	2500
	PAR30L	:75PAR3LNF	75PAR3L/NF/24° long neck	24°	0.43	0.85W x 1.97H	1000	2500
		:75PAR3LFL	75PAR3L/FL/36° long neck	36°	0.65	1.30W x 3.80H	1000	2500
		45W PAR38						
		:45PAR38SP	45PAR38/SP/12°	12°	0.21	0.42W x 0.87H	525	2500
		:45PAR38FL	45PAR38/FL/36°	36°	0.65	1.30W x 3.80H	525	2500
		:45PAR38WF	45PAR38/WF/50°	50°	0.93	1.87W x 10.73H	525	2500
		60W PAR38						
		:60PAR38SP	60PAR38/SP/12°	12°	0.21	0.42W x 0.87H	720	2500
5		:60PAR38FL	60PAR38/FL/36°	36°	0.65	1.30W x 3.80H	720	2500
\		:60PAR38WF	60PAR38/WF/50°	50°	0.93	1.87W x 10.73H	720	2500
		75W PAR38						
		:75PAR38SP	75PAR38/SP/12°	12°	0.21	0.42W x 0.87H	1040	2500
	PAR38	:75PAR38FL	75PAR38/FL/36°	36°	0.65	1.30W x 3.80H	1040	2500
		:75PAR38WF	75PAR38/WF/50°	50°	0.93	1.87W x 10.73H	1040	2500
		90W PAR38						
		:90PAR38NS	90PAR38/NS/8°	8°	0.14	0.28W x 0.57H	1280	2500
		:90PAR38SP	90PAR38/SP/12°	12°	0.21	0.42W x 0.87H	1280	2500
		:90PAR38FL	90PAR38/FL/36°	36°	0.65	1.30W x 3.80H	1280	2500
		:90PAR38WF	90PAR38/WF/50°	50°	0.93	1.87W x 10.73H	1280	2500



# HID Replacement Lamps



Ruud Lighting carries a wide selection of HID lamps from Luma Lamps. Choose from Probe Start Metal Halide, Pulse Start Metal Halide and High Pressure Sodium - all 100% satisfaction guaranteed.

	CATALOG #	DESCRIPTION	FIXTURE Type	BULB TYPE	OPERATING POSITION	BASE	INITIAL/MEAN LUMENS (V)	CCT▲ (K)	CRI	AVERAGE RATED LIFE (V)
	70W (ANSI-M	198)								
	:MH070G12	MH070/G12/UVS/4K Clear	Enclosed	T8 (T25)	Universal	G12	5600	4200	70	10000
Metal Halide	100W (ANSI-									
G12 Base	:MH100G12	MH100/G12/UVS/4K Clear	Enclosed	T8 (T25)	Universal	G12	9000	4200	70	10000
لهها	150W (ANSI-	•								
	:MH150G12	MH150/G12/UVS/4K Clear	Enclosed	T8 (T25)	Universal	G12	14000	4200	70	10000
		1110) Pulse Start								
	:MH050MCE	MH50/MED/U/C/E Coated	Enclosed	ED17	Universal	E26	3200 / 2100	3700	70	10000
	:MH050MCO	MH50/MED/U/C/O Coated	Open	EDX17	Universal	E26	3000 / 2000	3700	70	10000
	:MH050ME	MH50/MED/U/E Clear	Enclosed	ED17	Universal	E26	3400 / 2200	4000	65	10000
	:MH050M0	MH50/MED/U/O Clear	Open	EDX17	Universal	E26	3200 / 2100	3200	65	10000
	•	198) Pulse Start								
	:MH070MCE	MH70/MED/U/C/E Coated	Enclosed	ED17	Universal	E26	5300 / 3400	3700	70	15000
	:MH070MCO	MH70/MED/U/C/O Coated	Open	EDX17	Universal	E26	5000 / 3300	3700	70	15000
	:MH070ME	MH70/MED/U/E Clear	Enclosed	ED17	Universal	E26	5600 / 3600	4000	65	15000
	:MH070M0	MH70/MED/U/O Clear	Open	EDX17	Universal	E26	5300 / 3400	4000	65	15000
Metal Halide		M90) Pulse Start	- 1 1	50.47			0500 / 5500	2700		45000
Medium Base	:MH100MCE	MH100/MED/U/C/E Coated	Enclosed	ED17	Universal	E26	8500 / 5500	3700	70	15000
<b>♠</b>	:MH100MC0	MH100/MED/U/C/O Coated	Open	EDX17	Universal	E26	8100 / 5300	3700	70	15000
	:MH100ME	MH100/MED/U/E Clear	Enclosed	ED17	Universal	E26	9000 / 5900	4000	65	15000
\	:MH100M0	MH100/MED/U/O Clear	Open	EDX17	Universal	E26	8500 / 5500	3200	65	15000
	:PS150MCE	M102) Pulse Start  PS150/MED/U/C/E Coated	Enclosed	ED17	Universal	E26	13300 / 10000	3700	70	15000
	:PS150MC0	PS150/MED/U/C/O Coated	Open	EDX17	Universal	E26	15000 / 9500	3700	70	15000
	:PS150ME	PS150/MED/U/E Clear	Enclosed	ED17	Universal	E26	14000 / 10500	4000	68	15000
	:PS150MC	PS150/MED/U/O Clear	Open	EDX17	Universal	E26	13300 / 10000	4000	68	15000
		M57) Probe Start	Ореп	LUXI7	OHIVEISUI	LZU	13300 / 10000	4000		15000
	:MH175MCE	MH175/MED/U/C/E Coated	Enclosed	ED17	Universal	E26	13300 / 8600	3700	70	10000
	:MH175ME	MH175/MED/U/E Clear	Enclosed	ED17	Universal	E26	14000 / 9100	4000	65	10000
		M57) Probe Start	Eliciosed	LUTI	OHIVEISUI	LZU	14000 / 3100	4000	05	10000
	:MH175CE	MH175/U/C/E Coated	Enclosed	ED28	Universal	E39	13300 / 8600	3700	70	10000
( )	:MH175E	MH175/U/E Clear	Enclosed	ED28	Universal	E39	14000 / 9100	4000	65	10000
		M58) Probe Start					, , , , , , , , , , , , , , , , , , , ,			
	:MH250CE	MH250/U/C/E Coated	Enclosed	ED28	Universal	E39	20000 / 13000	3700	70	10000
ED28	:MH250E	MH250/U/E Clear	Enclosed	ED28	Universal	E39	21000 / 13700	4000	65	10000
LUZO	400W (ANSI-	M59) Probe Start					·			
Madal Halt I	:MH400UCE	MH400/U/C/E Coated	Enclosed	ED37	Universal	E39	34000 / 22000	3700	70	20000
Metal Halide	:MH400UE	MH400/U/E Clear	Enclosed	ED37	Universal	E39	36000 / 23000	4000	65	20000
Mogul Base	:MH400UPCE	MH400/28/U/C/E Coated	Enclosed	ED28	Universal	E39	34000 / 22000	3700	70	20000
	:MH400UPE	MH400/28/U/E Clear	Enclosed	ED28	Universal	E39	36000 / 23000	4000	65	20000
	:MH400BUC0	MH400/VBU/C/O Coated	Open	ED37	Base Up	EX39	38000 / 25000	3700	70	20000
( ) \ /	:MH400BU0	MH400/VBU/O Clear	Open	ED37	Base Up	EX39	40000 / 26000	4000	65	20000
	1000W (ANS	I-M47) Probe Start								
	:MH999UCE	MH1000/U/C/E Coated	Enclosed	BT56	Universal	E39	110000 / 71000	4000	70	12000
	:MH999UE	MH1000/U/E Clear	Enclosed	BT56	Universal	E39	106000 / 85500	4200	65	15000
ED37 BT56	:MH999UPE	MH1000/37/U/E Clear	Enclosed	BT37	Universal	E39	110000 / 71000	4000	65	12000

▲Approximate Center Beam Candlepower

Spec sheets and photometric files are available at www.ruudlightingdirect.com



# HID Replacement Lamps



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		guaranteeu.								
	CATALOG #	DESCRIPTION	FIXTURE Type	BULB TYPE	OPERATING POSITION	BASE	INITIAL/MEAN LUMENS (V)	CCT <sup>▲</sup> (K)	CRI	AVERAGE RATED LIFE (V)
	250W (ANSI-I	M138/M153) Pulse Start								
	:PS250BUCE	PS250/VBU/C/E Coated	Enclosed	ED28	Base Up	E39	23800 / 19000	3700	70	15000
	:PS250BUCO	PS250/VBU/C/O Coated	Open	ED28	Base Up	EX39	22600 / 18000	3700	70	15000
	:PS250BUE	PS250/VBU/E Clear	Enclosed	ED28	Base Up	E39	25000 / 20000	4000	68	15000
	:PS250BU0	PS250/VBU/O Clear	Open	ED28	Base Up	EX39	23800 / 19000	4000	68	15000
ED28	320W (ANSI-	M132/M154) Pulse Start								
	:PS320BUC0	PS320/VBU/C/O Coated	Open	ED37	Base Up	EX39	29000 / 23000	3700	70	20000+
	:PS320BU0	PS320/VBU/O Clear	Open	ED37	Base Up	EX39	31000 / 25000	4000	68	20000+
	:PS320PBCE	PS320/28/VBU/C/E Coated	Enclosed	ED28	Base Up	E39	31000 / 25000	3700	70	20000+
Pulse Start	:PS320PBCO	PS320/28/VBU/C/O Coated	Open	ED28	Base Up	EX39	29000 / 23000	3700	70	20000+
Metal Halide	:PS320PBUE	PS320/28/VBU/E Clear	Enclosed	ED28	Base Up	E39	33000 / 26000	4000	68	20000+
Mogul Base	:PS320PBU0	PS320/28/VBU/O Clear	Open	ED28	Base Up	EX39	31000 / 25000	4000	68	20000+
	400W (ANSI-I	M135/M155) Pulse Start								
	:PS400BUCE	PS400/VBU/C/E Coated	Enclosed	ED37	Base Up	E39	42000 / 33000	3700	70	20000+
	:PS400BUC0	PS400/VBU/C/O Coated	Open	ED37	Base Up	EX39	39000 / 31000	3700	70	20000+
	:PS400BUE	PS400/VBU/E Clear	Enclosed	ED37	Base Up	E39	44000 / 35000	4000	68	20000+
	:PS400BU0	PS400/VBU/O Clear	Open	ED37	Base Up	EX39	41000 / 33000	4000	68	20000+
	:PS400PBCE	PS400/28/VBU/C/E Coated	Enclosed	ED28	Base Up	E39	42000 / 33000	3700	70	20000+
ED37	:PS400PBCO	PS400/28/VBU/C/O Coated	Open	ED28	Base Up	EX39	39000 / 31000	3700	70	20000+
	:PS400PBUE	PS400/28/VBU/E Clear	Enclosed	ED28	Base Up	E39	44000 / 35000	4000	68	20000+
	:PS400PBUO	PS400/28/VBU/O Clear	Open	ED28	Base Up	EX39	41000 / 33000	4000	68	20000+
	35W (ANSI-S7	76)								
	:HP035M	HPS35/MED/U Clear	Open	ED17	Universal	E26	2250 / 1700	2100	22	16000
	50W (ANSI-Se	58)								
High Pressure	:HP050M	HPS50/MED/U Clear	Open	ED17	Universal	E26	4000 / 3600	2100	22	24000+
Sodium	70W (ANSI-Se	52)								
Medium Base	:HP070M	HPS70/MED/U Clear	Open	ED17	Universal	E26	6000 / 4500	2100	22	24000+
	100W (ANSI-9	•								
	:HP100M	HPS100/MED/U Clear	Open	ED17	Universal	E26	9000 / 6750	2100	22	24000+
	150W (ANSI-9	· ·								
	:HP150M	HPS150/MED/U Clear	Open	ED17	Universal	E26	15000 / 11250	2100	22	24000+
$\int_{\mathbb{Q}}$	50W (ANSI-Se	· ·								
	:HP050	HPS50/U Clear	Open	ED23.5	Universal	E39	4000 / 3600	2100	22	24000+
\ /	70W (ANSI-Se	<u> </u>								
	:HP070	HPS70/U Clear	Open	ED23.5	Universal	E39	6000 / 4500	2100	22	24000+
ET18	100W (ANSI-9	•								
High Pressure	:HP100	HPS100/U Clear	Open	ED23.5	Universal	E39	9000 / 6750	2100	22	24000+
Sodium	150W (ANSI-5	•								
Mogul Base	:HP150	HPS150/U Clear	Open	ED23.5	Universal	E39	15000 / 11250	2100	22	24000+
	250W (ANSI-9	•		ET.	11.1	F2.0	24000 / 10505	2400	22	24000
	:HP250	HPS250/U Clear	Open	ET18	Universal	E39	26000 / 19500	2100	22	24000+
\	400W (ANSI-9	•					40000 / = : = :			24000
	:HP400	HPS400/U Clear	Open	ET18	Universal	E39	48000 / 36000	2100	22	24000+
ET23.5 ET25	1000W (ANSI	- <b>S52)</b> HPS1000/U Clear					130000 / 124000			
	:HP999		Open	ET25	Universal	E39		2100	22	24000+

Approximate Center Beam Candlepower

# **TECHNICAL DATA**





For more than 25 years, Ruud Lighting Direct's commitment to the art and science of effective illumination means we know our products inside and out. We are committed to providing the information you need to make the best possible decision on all your lighting projects. We're proud to present our comprehensive

warranty package, featuring coverage periods from three months to three years in addition to our seven-year quarantee on Colorfast DeltaGuard® finishes. Ruud Lighting Direct will repair or replace any unit that cracks, peels, fades or corrodes during the coverage period.

# WARRANTY INFORMATION



## LIMITED WARRANTY SUMMARY

Ruud Lighting provides a limited warranty to the original purchaser of its products. Below is a summary of some of the terms of Ruud Lighting's limited warranty. It is only a summary. Complete terms of Ruud Lighting's limited warranty for its products can be found at

www.ruudlightingdirect.com/conditions\_of\_use Copies are also available upon request.

## **ONE YEAR**

Lensed Linear Fluorescent Round Tapered Poles

#### **THREE YEARS**

Security Fixtures High and Low Bay Fixtures Flood and Area Fixtures Exit and Emergency products Indirect Fixtures Exit and Emergency batteries Premium Square Steel Poles

## **FIVE YEARS**

Linear Fluorescent Fixtures (except lensed)

## LIMITED WARRANTY FOR FINISH

Ruud Lighting's Colorfast DeltaGuard® finish limited warranty provides that the finish will be free from material cracking, peeling, excessive fading or corrosion defects under normal use and service for seven years.

## LIMITED WARRANTY FOR ROUND TAPERED POLES

Ruud Lighting offers a one-year limited warranty for its Round Tapered Poles. RLI warrants to Buyer, with proof of purchase, that its Round Tapered Poles will be free from material defects in workmanship and materials under normal use and service for a period of one year commencing on the date of product shipment (the "Pole Warranty Period"). The Limited Round Tapered Pole Warranty specifically excludes fatigue failure or similar phenomena, resulting from induced vibration, harmonic oscillation or resonance associated with movement of air currents around the pole. Buyer assumes all liabilities associated with ensuring the Round Tapered Poles ordered by Buyer will be a compatible fit to the foundation or anchorage to which the Round Tapered Poles may be attached and for the structural integrity of such foundation and anchorage. Company disclaims all liability for damages which may result from the improper installation of the Round Tapered Poles.

## LIMITED WARRANTY FOR LAMPS

Ruud Lighting's supplied lamps limited warranty provides that the lamps will be free from material defects in workmanship and materials under normal use and service for the following periods from date of shipment:

## **THREE MONTHS**

- Incandescent lamps, including halogen and quartz
- Compact fluorescent lamps used in products that are connected to control gear or occupancy sensor that cause lamps to frequently switch "on" or "off"
- Special order compact fluorescent lamp, regardless of manufacturer's published lamp life data

#### SIX MONTHS

- HID lamps with rated life less than 10,000 hours, as published in the Technical Data Section of Company's catalog
- Fluorescent lamps with rated life less than 10,000 hours, as published in the Technical Data Section of Company's
- Linear fluorescent lamps used in products that are connected to control gear or occupancy sensor that cause lamps to frequently switch "on" or "off"
- Special order HID lamps, regardless of manufacturer's published lamp life data

## **ONE YEAR**

- HID lamps with rated life equal to or greater than 10,000 hours, as published in the Technical Data Section of Company's catalog
- Fluorescent lamps with rated life equal to or greater than 10,000 hours, as published in the Technical Data Section of Company's catalog

# THIS DOCUMENT IS A SUMMARY ONLY IT IS NOT LEGALLY BINDING

All purchases of products and services from Ruud Lighting, Inc. are subject to the Ruud Lighting, Inc. Terms and Conditions of Sale as in effect from time to time which are hereby incorporated by reference. From time to time, the Ruud Lighting, Inc. Terms and Conditions of Sale may be modified by Ruud Lighting, Inc. in its sole discretion and without notice. For complete warranty terms for products sold by Ruud Lighting, please refer to the limited warranty information located at:

www.ruudlightingdirect.com/conditions\_of\_use or by sending a written request to Ruud Lighting, Inc., Customer Service Department, 9201 Washington Ave., Racine, WI 53406 or by calling Customer Service at 800-236-7000.

# LIGHTING APPLICATION GUIDELINES



# OUTDOOR—Typical Recommended Footcandle Levels

Typical Recommended Footcandie Zeveis						
OUTDOOR APPLICATION		RECOMMENDED FOOTCANDLE LEVEL				
AUTO SALES LOT		10-100				
BASKETBALL	Recreational	20				
BUILDING FLOODLIGHTING		5-50				
GOLF	Miniature	10				
	Driving Range	20 at the tee				
		10 vertical 600' down range				
HOCKEY	Recreational	20				
	Club	30				
	College	50				
HORSESHOES		5				
PARKING AREAS		1-7				
RIDING ARENA	Recreational	30				
	Professional	50				
SECURITY LIGHTING		0.5-5				
SERVICE STATIONS		20-80				
SIGN LIGHTING		5-100				
STREET LIGHTING		1-3				
SWIMMING POOL	Recreational	30				
(on pool deck)	College	50				

OUTDOOR APPLICATION	ı	RECOMMENDED FOOTCANDLE LEVEL
TENNIS COURTS	Recreational	30
	Club	50-75
	Tournament	125
VOLLEYBALL	Recreational	20
	Club	30

All values shown are average maintained footcandles

## **OUTDOOR**—Recommended Mounting Heights

WATTAGE	MOUNTING HEIGHT
750W & 1000W	30'
320W & 400W	25-30'
250W	20'-25'
150W	15'-20'
100W	10'-15'
70W	8-15'
50W	5-10'

# INDOOR—Typical Recommended Footcandle Levels

INDOOR APPLICATION		RECOMMENDED FOOTCANDLE LEVEL
AIRCRAFT HANGAR		75-100
ASSEMBLY/PACKAGING	Medium	50-70
	Fine	75-100
AUTO SERVICE GARAGE		60-80
AUTO SHOWROOM		50-80
BODY SHOP		80-120
CHURCH		20-25
CONSTRUCTION/TEMPORARY		5
COOLER		20-30
ENGINEERING/DRAFTING		50-125
FOOD PROCESSING		50-100
FOUNDRY		40-60
GYMNASIUM	Recreational	30
	Elementary/Club	50
	High School	80
HOCKEY	Recreational	50
	Club	100
HORSE RIDING ARENA		30-50
LOADING DOCK		30-50
MACHINE SHOP	Rough	50-75
	Medium	75-100
	Fine	100-200
MANUFACTURING	Crude	50-75
	Average	75-100
	Detail	100-150
MULTIPURPOSE ROOM		30-75
OFFICE	Ambient	30-50
	Task	60-75
PARKING GARAGE		2-10
RETAIL	Average	50-80
	Superstores	80-120
SWIMMING POOLS	Recreational	30
(on pool deck)	Professional	75

INDOOR APPLICATION		RECOMMENDED FOOTCANDLE LEVEL
TENNIS COURTS	Recreational	50
	Club	60-75
	Professional	125
WAREHOUSE	Active	20-30
	Inactive	15-20
WOODWORKING SHOPS	·	60-80

All recommended footcandle levels are based on the IESNA Lighting Handbook ninth edition. For all applications, the visual environtment must also be considered. All values shown are average maintained footcandles at 2.5' Above Finished Floor (AFF).

# INDOOR—Recommended Mounting Heights

SERIES	1000W 750W	400W 320W	250W	150W	100W			
IA	30'+	22'-35'	18'-25'	15'-20'	_			
IAP	_	20'-35'	15'-20'	12'-20'	12'-20'			
IAP w/CONICAL LENS	_	_	12'-25'	12'-20'	12'-20'			
IAR	30'+	18'-35'	16'-25'	_	_			
IAR w/CONICAL LENS	_	14'-30'	12'-25'	_	_			
IC	_	18'-25'	16'-20'	14'-16'	_			
ICM	_	16'-25'	14'-20'	12'-16'				
ICJ	_	14'-20'	12'-18'	10'-16'	_			
FC	_	_	_	11'-18'	8'-15'			
FP	_	_	_	11'-18'	8'-15'			
CL	_	18'-30'	15'-25'	10'-20'	8'-15'			
H (32W T8)	Typically, 10-12' is the minimum recommended mounting height, and the maximum will be dictated by the light level you are looking for. If you need a high light level, you may find that there are too many fixtures needed to achieve it and a MH system may be a better choice for initial cost and energy usage.							
H (54W T5H0)	10' minimum mounting height when using the prismatic and white reflectors for task lighting; 13' with the aluminum reflector. Perhaps higher depending on the desired light level. The maximum will be dictated by the light level you are looking for.							
HN				aisle lighting a ended for lowe				

# LIGHTING APPLICATION GUIDELINES



## INDOOR—Calculating Fixture Requirements

Calculate the Room Cavity Ratio (RCR).

## RCR = 2.5 x Cavity Height x Room Perimeter Room Area

\*Cavity height = distance between bottom of fixtures and work plane. (Work plane is usually 2.5-3 feet above finished floor.)

- 1. Determine Reflectances of walls and ceiling (CC). Floor typically 20%.
- 2. Find appropriate Coefficient of Utilization from CU tables that correspond to chosen fixture. CU tables are found with the photometric data for the appropriate indoor fixture. CU is chosen based on the RCR and the room reflectance.
- 3. Determine footcandle level to be achieved. Select lamp type and wattage desired with proper maintenance factors (MF). (MF typically 0.75 for PSMH, 0.65 for MH, 0.80 for HPS, 0.95 for LFL.)
- 4. To calculate number of fixtures required, you can use the following formula:

Number of fixtures = 
$$\frac{\text{Room Area x Footcandles desired}}{\text{Lamp Lumens x CU x MF}}$$

CU = Coefficient of Utilization (step #3)

MF = Maintenance Factor (step #4)

5. Verify that your fixture spacing does not exceed the spacing-tomounting-height ratio indicated by the spacing criterion (SC). If it exceeds, try using a lower wattage or call Application Engineering for assistance.

## INDOOR—Design Guidelines

FIXTURE	BEST USE
HIGH BAY (IA)	Generally over 20' mounting height
Hydroformed Aluminum Reflector	(from bottom of fixture to floor)
PRISMATIC REFLECTORS (IAP, IAR)	White/light color ceilings (painted or
	insulated). Clean environments.
COMPACT LOW BAY (IC)	Generally under 20' mounting height
	(from bottom of fixture to floor).
RECESSED CANOPY (RC)	Inaccessible ceilings.
LOW BAY (ICJ)	High illumination areas with lower-than-
	normal mounting height.
PARKING STRUCTURE REFLECTOR (QV)	Parking Garages (very wide pattern).
CANOPY LIGHT (CL)	Concentrated downlight.
	High illumination levels.
AREA CUTOFF INDIRECT (ACU)	Areas with white ceiling. Ambient
	lighting for offices and indoor pools.
LINEAR FLUORESCENT HIGH BAY (H)	Open areas or warehouse aisles,
	temperature controlled environments
INDIRECT LINEAR FLUORESCENT (U)	Clean areas with white ceilings.
	Offices, conference rooms, libraries.

## REFLECTANCES OF COLORS AND MATERIALS

COLOR/MATERIAL	REFLECTANCE	COLOR/MATERIAL	REFLECTANCE
Black Paint	0%	Glass	0%
Clean White Paint	70%	Pastels	30-50%
Dirty White Paint	50%	Unpainted Concrete	30%
Dark Paints	10%	Unpainted Metal	30%
Foil Back Insulation	30%	Wood	30%

NOTE: Floors are typically considered 20%

## INDOOR—Example

PROJECT CRITERA: We have an 80' x 80' fine assembly area with a 22' ceiling. The ceiling and walls are clean white and have recently been painted. Looking at page 132, we know that we want 75-100fc. Customer likes the look of H Series and wants to use a T8 linear fluorescent high bay.

1. Calculate the Room Cavity Ratio (RCR).

Cavity Height = (22' ceiling) - (1' fixture depth\*) - (2.5' work plane height)

\*with mounting
= 18.5'

RCR = 
$$(2.5) (18.5') (80' + 80' + 80' + 80')$$
 $(80' \times 80')$ 
= 2.31

2. Based on the Reflectance chart above, clean white is 70% reflective.

# **COEFFICIENTS OF UTILIZATION**

Effective Floor Cavity Reflectance = 20%

	CC		80	)%			70	1%			50%			30%			10%	
١	WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
	RCR																	
	0	1.10	1.10	1.10	1.10	1.07	1.07	1.07	1.07	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94
	1	1.03	0.99	0.96	0.96	1.00	0.97	0.94	0.92	0.93	0.91	0.89	0.90	0.88	0.86	0.86	0.85	0.83
	2	0.95	0.89	0.84	0.79	0.93	0.87	0.82	0.78	0.84	0.80	0.76	0.81	0.78	0.75	0.78	0.76	0.73
	3	0.88	0.79	0.73	0.68	0.86	0.78	0.72	0.67	0.75	0.70	0.66	0.73	0.69	0.65	0.71	0.67	0.64
	4	0.81	0.71	0.64	0.59	0.79	0.70	0.63	0.58	0.68	0.62	0.57	0.66	0.61	0.57	0.64	0.59	0.56
	5	0.74	0.63	0.56	0.50	0.72	0.62	0.55	0.50	0.60	0.54	0.49	0.59	0.53	0.49	0.57	0.52	0.48
	6	0.68	0.57	0.49	0.44	0.66	0.56	0.48	0.43	0.54	0.48	0.43	0.53	0.47	0.43	0.51	0.46	0.42
	7	0.53	0.51	0.43	0.38	0.61	0.50	0.43	0.38	0.49	0.42	0.37	0.47	0.41	0.37	0.46	0.41	0.37
	8	0.58	0.45	0.38	0.33	0.56	0.45	0.38	0.32	0.44	0.37	0.32	0.42	0.36	0.32	0.41	0.36	0.32
	9	0.53	0.41	0.33	0.28	0.52	0.40	0.33	0.28	0.39	0.32	0.28	0.38	0.32	0.28	0.37	0.32	0.27
	10	0.49	0.37	0.29	0.25	0.48	0.36	0.29	0.25	0.35	0.29	0.24	0.35	0.28	0.24	0.34	0.28	0.24

- 3. Below is CU table for the H Series from the spec sheet. Because the RCR is 2.31, we will choose 0.91 for our CU.
- 4. Calculate for 80fc average; T8 is desired lamp type; specular reflectors for high efficiency; MF = 0.95.
- 5. See page 135 for lamp lumen data. Calculate number of fixtures =  $(80 \times 80)(80)$ (16,800) (0.91) (0.95) = 35.2
- **6.** The spec sheet indicates that the SC = 1.2. (1.2) (18.5' cavity height) = 22.2' maximum spacing between fixtures. Using 36 fixtures and spacing the fixtures on a 6 x 6 grid keeps the fixture centers within the recommended maximum spacing.

# **BALLAST LINE CURRENT DATA**



# LOW WATTAGE PULSE START METAL HALIDE (PSMH)

	HIGH I	POWER FACTO	OR, 60 Hz		NORMA	L POWER FAC	TOR, 60 Hz
	SYSTEM WATTAGE	STARTING AMPERES	OPERATING AMPERES		SYSTEM WATTAGE	STARTING AMPERES	OPERATING AMPERES
50W PSMH				50W PSMH			
120V HX	68	1.20	0.60	120V HX	70	2.40	1.50
208V HX	68	0.65	0.35	208V HX	70	1.25	0.85
240V HX	68	0.60	0.30	240V HX	70	1.00	0.75
277V HX	68	0.50	0.25	277V HX	70	0.80	0.65
347V HX	72	0.40	0.30	347V HX	72	0.80	0.55
70W PSMH				70W PSMH			
120V HX	92	1.70	0.80	120V HX	90	2.70	2.10
208V HX	92	0.95	0.45	208V HX	90	1.50	1.20
240V HX	92	0.85	0.40	240V HX	90	1.25	1.00
277V HX	92	0.70	0.35	277V HX	90	1.10	0.95
347V HX	92	0.60	0.30	347V HX	90	1.05	0.70
480V HX	92	0.50	0.23	100W PSMH			
100W PSMH				120V HX	127	4.00	3.00
120V HX	127	2.60	1.10	208V HX	127	2.30	1.50
208V HX	127	1.50	0.65	240V HX	127	2.00	1.35
240V HX	127	1.30	0.55	277V HX	127	1.75	1.30
277V HX	127	1.15	0.50	347V HX	130	1.40	1.00
347V HX	126	0.90	0.40				·
480V HX	126	0.55	0.30				

<sup>\*</sup>Starting exceed operating amperes. (Starting amper values may be starting or open circuit, whichever is greater.)

# HIGH WATTAGE PULSE START METAL HALIDE (PSMH)

WATTAGE         AMPERES         AN           150W PSMH         277V Reactor         170         1.50 <sup>♠</sup> 1.50 <sup>♠</sup> 120V HX         185         3.50         2.15           208V HX         185         2.15         2.25           240V HX         185         1.75         1.55           277V HX         185         1.25         480V CWA         188         0.40           250W PSMH         275         1.35 <sup>♠</sup> 1.35 <sup>♠</sup>	HIGH POWER FACTOR, 60 Hz						
277V Reactor 170 1.50 <sup>♠</sup> 120V HX 185 3.50 208V HX 185 2.15 240V HX 185 1.75 277V HX 185 1.55 347V HX 185 1.25 480V CWA 188 0.40 250W PSMH 277V Reactor 275 1.35 <sup>♠</sup>	RATING IPERES						
120V HX     185     3.50       208V HX     185     2.15       240V HX     185     1.75       277V HX     185     1.55       347V HX     185     1.25       480V CWA     188     0.40       250W PSMH       277V Reactor     275     1.35 <sup>A</sup>							
208V HX       185       2.15         240V HX       185       1.75         277V HX       185       1.55         347V HX       185       1.25         480V CWA       188       0.40         250W PSMH         277V Reactor       275       1.35 <sup>a</sup>	0.65						
240V HX     185     1.75       277V HX     185     1.55       347V HX     185     1.25       480V CWA     188     0.40       250W PSMH       277V Reactor     275     1.35 <sup>A</sup>	1.60						
277V HX     185     1.55       347V HX     185     1.25       480V CWA     188     0.40       250W PSMH       277V Reactor     275     1.35 <sup>A</sup>	1.00						
<b>347V HX</b> 185 1.25 <b>480V CWA</b> 188 0.40 <b>250W PSMH</b> <b>277V Reactor</b> 275 1.35 <sup>▲</sup>	0.80						
<b>480V CWA</b> 188 0.40 <b>250W PSMH</b> <b>277V Reactor</b> 275 1.35 <sup>▲</sup>	0.55						
<b>250W PSMH 277V Reactor</b> 275 1.35 <sup>A</sup>	0.55						
<b>277V Reactor</b> 275 1.35	0.40						
<b>120V CWA</b> 288 1.40	1.10						
	2.50						
<b>208V CWA</b> 288 0.80	1.45						
<b>240V CWA</b> 288 0.70	1.25						
<b>277V CWA</b> 288 0.60	1.10						
<b>347V CWA</b> 288 0.50	0.90						
<b>480V CWA</b> 288 0.45	0.60						
320W PSMH							
<b>277V Reactor</b> 349 1.70 <sup>♠</sup>	1.40						
<b>120V CWA</b> 368 2.60	3.20						
<b>208V CWA</b> 368 1.50	1.80						
<b>240V CWA</b> 368 1.35	1.60						
<b>277V CWA</b> 368 1.15	1.40						
<b>347V CWA</b> 368 0.85	1.15						
<b>480V CWA</b> 368 0.65	0.80						

	SYSTEM WATTAGE	STARTING AMPERES	OPERATING AMPERES
400W PSMH			
277V Reactor	435	2.10	1.70
120V CWA	450	3.65	4.00
208V CWA	450	2.05	2.25
240V CWA	450	1.85	2.00
277V CWA	450	1.55	1.75
347V CWA	452	1.20	1.40
480V CWA	455	0.80	1.00
750W PSMH			
277V Reactor	_	_	_
120V CWA	815	4.80	6.80
208V CWA	815	2.80	4.00
240V CWA	815	2.40	3.40
277V CWA	815	2.10	3.00
347V CWA	820	1.70	2.40
480V CWA	820	1.10	1.70
1000W PSMH			
277V Reactor	_	_	_
120V CWA	1080	7.00	9.00
208V CWA	1080	4.00	5.20
240V CWA	1080	3.50	4.50
277V CWA	1080	3.00	3.90
347V CWA	1080	2.10	3.15
480V CWA	1080	1.80	2.25

HIGH POWER FACTOR, 60 Hz

# **METAL HALIDE (MH)**

	HIGH POWER FACTOR, 60 Hz					
	SYSTEM WATTAGE	STARTING AMPERES	OPERATING AMPERES			
1000W MH						
120V CWA	1080	6.30	9.00			
208V CWA	1080	3.50	5.55			
240V CWA	1080	3.25	4.60			
277V CWA	1080	2.85	4.00			
347V CWA	1080	2.50	3.10			
480V CWA	1080	1.55	2.30			

**NOTE**: Consult factory for line amperes data when using quartz option. Ballast information values shown here are approximate and may vary between ballast manufacturers.

<sup>\*</sup> Starting exceed operating amperes. (Starting amper values may be starting or open circuit, whichever is greater.)

# **BALLAST LINE CURRENT DATA**



# **HIGH PRESSURE SODIUM (HPS)**

	HIGH POWER FACTOR, 60 Hz					
	SYSTEM WATTAGE	STARTING AMPERES	OPERATING AMPERES			
50W HPS						
120V Reactor	62	0.95	0.55			
120V HX	66	1.00⁴▼	0.60▼			
277V HX	66	0.45	0.25 <sup>▼</sup>			
70W HPS						
120V Reactor	86	1.30	0.75			
120V HX	90	1.50	0.80			
208V HX	90	0.85	0.45			
240V HX	90	0.75	0.40			
277V HX	90	0.65	0.35 <sup>▼</sup>			
347V HX	93	0.55	0.30			
480V HX	93	0.36	0.21			
100W HPS						
120V Reactor	115	1.50	1.05			
120V HX	126	2.10	1.10			
208V HX	126	1.20	0.60			
240V HX	126	1.05	0.55			
277V HX	126	0.90	0.45			
347V HX	130	0.70	0.39			
480V HX	130	0.50	0.30			
150W HPS						
120V HX	170	2.80	1.65			
208V HX	188	1.60	1.00			
240V HX	188	1.40	0.85			
277V HX	188	1.30	0.80			
347V HX	188	0.90	0.60			
480V HX	188	0.70	0.45			
250W HPS						
120V CWA	300	1.75	2.50			
208V CWA	300	1.00	1.50			
240V CWA	300	0.85	1.30			
277V CWA	300	0.75	1.10			
347V CWA	300	0.75	0.90			
480V CWA	300	0.45	0.70			
400W HPS	300	0.45	0.70			
120V CWA	460	3.70	3.80			
208V CWA	460	2.15	2.20			
240V CWA		25				
277V CWA	460	1.85	1.90			
	460	1.60	1.70			
347V CWA	460	1.15	1.30			
480V CWA	460	0.80	1.00			
1000W HPS	44	7.2-	0 ==			
120V CWA	1100	7.20	9.50			
208V CWA	1100	4.15	5.50			
240V CWA	1100	3.60	4.75			
277V CWA	1100	3.10	4.20			
347V CWA	1100	2.20	3.30			

480V CWA

1100

2.30

2.30

	SYSTEM WATTAGE	STARTING AMPERES	OPERATING AMPERES	
50W HPS				
120V Reactor	62	1.80	1.18	
120V HX	67	1.80	1.49	
277V HX	67	0.74	0.67	
70W HPS				
120V Reactor	86	2.10	1.60	
120V HX	93	2.41	1.84	
208V HX	93	1.28	1.05	
240V HX	93	1.14	0.92	
277V HX	93	1.06	0.79	
347V HX	93	0.78	0.66	
100W HPS				
120V Reactor	115	3.05	2.10	
120V HX	122	3.24	2.58	
208V HX	122	1.82	1.57	
240V HX	122	1.60	1.34	
277V HX	122	1.40	1.15	
347V HX	130	1.08	0.88	
150W HPS				
120V HX	170	4.50	3.30	
208V HX	188	2.90	1.85	
240V HX	188	2.50	1.65	
277V HX	188	2.55	2.00	
347V HX	188	1.55	1.10	
480V HX	188	1.20	1.00	

greater.)

**NOTE**: Consult factory for line amperes data when using quartz option. Ballast information values shown here are approximate and may vary between ballast manufacturers.

<sup>▼</sup> Not truly High Power Factor, but rather Power Factor Corrected P.F. between 80 and 90%.

# **BALLAST LINE CURRENT DATA**



## LINEAR FLUORESCENT

	LINE CURRENT (AMPS)	INPUT POWER (WATTS)	BALLAST FACTOR	MAX THD	POWER FACTOR
28W T5	1-LAMP				
120V	0.30	35	1.03	≤10%	0.98
208V	0.17	35	1.03	≤10%	0.98
240V	0.15	35	1.03	≤10%	0.98
277V	0.14	35	1.03	≤10%	0.98
28W T5	2-LAMP				
120V	0.56	67	1.00	≤10%	0.98
208V	0.32	67	1.00	≤10%	0.98
240V	0.28	67	1.00	≤10%	0.98
277V	0.24	67	1.00	≤10%	0.98
28W T5	4-LAMP				
120V	1.12	134	1.00	≤10%	0.98
208V	0.65	134	1.00	≤10%	0.98
240V	0.56	134	1.00	≤10%	0.98
277V	0.48	134	1.00	≤10%	0.98
28W T5	6-LAMP				
120V	1.68	201	1.00	≤10%	0.98
208V	0.97	201	1.00	≤10%	0.98
240V	0.84	201	1.00	≤10%	0.98
277V	0.72	201	1.00	≤10%	0.98
32W T8	2-LAMP				
120V	0.62	74	1.15	≤10%	0.99
208V <sup>4</sup>	0.36	74	1.15	≤15%	0.98
240V <sup>^</sup>	0.30	73	1.15	≤15%	0.98
277V	0.27	73	1.15	≤15%	0.98
32W T8	4-LAMP				
120V	1.30	151	1.15	≤10%	0.99
208V <sup>▲</sup>	0.72	149	1.15	≤15%	0.98
240V <sup>▲</sup>	0.62	148	1.15	≤15%	0.98
277V	0.55	147	1.15	≤15%	0.98
32W T8	6-LAMP				
120V	1.98	222	1.15	≤10%	0.99
208V <sup>▲</sup>	1.06	221	1.15	≤15%	0.98
240V <sup>4</sup>	0.92	220	1.15	≤15%	0.98
277V	0.82	218	1.15	≤15%	0.98
32W T8	8-LAMP				
120V	2.60	296	1.18	≤10%	0.99
208V <sup>▲</sup>	1.42	296	1.18	≤10%	0.98
240V <sup>4</sup>	1.23	296	1.18	≤10%	0.98
277V	1.10	290	1.18	≤10%	0.98

	(AMPS)	(WATTS)						
54W T5H	IO 2-LAMF	•						
120V	1.00	120	1.10	10%	0.98			
208V <sup>▲</sup>	0.57	119	1.10	10%	0.98			
240V <sup>^</sup>	0.49	117	1.10	10%	0.98			
277V	0.43	117	1.10	10%	0.98			
347V	0.35	120	1.10	10%	0.98			
480V	0.25	119	1.10	10%	0.98			
54W T5H	IO 4-LAMF	•						
120V	2.00	241	1.10	10%	0.98			
208V <sup>▲</sup>	1.15	240	1.10	10%	0.98			
240V <sup>4</sup>	0.99	238	1.10	10%	0.98			
277V	0.86	236	1.10	10%	0.98			
347V	0.70	240	1.10	10%	0.98			
480V	0.50	238	1.10	10%	0.98			
54W T5H	IO 6-LAMF							
120V	3.00	361	1.10	10%	0.98			
208V <sup>▲</sup>	1.73	359	1.10	10%	0.98			
240V <sup>^</sup>	1.48	356	1.10	10%	0.98			
277V	1.29	353	1.10	10%	0.98			
347V	1.05	360	1.10	10%	0.98			
480V	0.75	357	1.10	10%	0.98			
54W T5H	IO 8-LAMF	)						
120V	4.00	480	1.00	10%	0.99			
208V <sup>▲</sup>	2.28	472	1.00	10%	0.99			
240V <sup>^</sup>	1.96	468	1.00	10%	0.99			
277V	1.72	468	1.00	10%	0.99			
≜ Estimated values								

Estimated values

# **COMPACT FLUORESCENT (CFL)**

HIGH POWER FACTOR, 60 Hz

	SYSTEM WATTAGE	OPERATING AMPERES						
13W DOUBLE T	UBE/4-PIN							
120V	17	0.13						
277V	17	0.06						
26W DOUBLE T	UBE/4-PIN							
120V	27	0.24						
277V	27	0.11						
26W TRIPLE TUBE/4-PIN								
120V	26	0.22						
277V	26	0.09						
32W TRIPLE TU	BE/4-PIN							
120V	36	0.30						
277V	36	0.13						
42W TRIPLE TU	BE/4-PIN							
120V	47	0.39						
277V	47	0.17						
57W QUAD TU	BE/4-PIN							
120V	59	0.50						
277V	59	0.21						
70W QUAD TUE	BE/4-PIN							
120V	75	0.63						
277V	75	0.27						

## **DOUBLE D FLUORESCENT**

HIGH POWER FACTOR, 60 Hz

	SYSTEM WATTAGE	OPERATING AMPERES
21W DOUBLE D	PLUG IN/4-PIN	ı
120V	22	0.17
277V	21	0.08
28W DOUBLE D	PLUG IN/4-PIN	l e
120V	30	0.23
277V	28	0.10
38W DOUBLE D	PLUG IN/4-PIN	l
120V	42	0.26
277V	38	0.11
28W DOUBLE D	PLUG IN/4-PIN	(UNIVERSAL VOLTAGE)
120V-277V	28	0.23-0.10
38W DOUBLE D	PLUG IN/4-PIN	(UNIVERSAL VOLTAGE)
120V-277V	38	0.26-0.11

▲ Estimated values

## 18AWG STANDARD MAXIMUM RUN LENGTH CHART, MAX LOAD = 6A

**MAXIMUM RUN LENGTH CHART - U SERIES** 

• • • • • • • • • • • • • • • • • • • •									
WATTAGE	# OF		MAXIMUM LENGTH (FEET)						
	LAMPS	120V	208V	240V	277V	347V	480V		
28W	1	80	140	160	168	_	_		
	2	44	68	80	84	_	_		
	3	24	44	52	56	_	_		
54W	1	44	80	92	100	132	184		
	2	20	40	44	48	64	92		
	3	12	24	28	32	44	60		

## 12AWG STANDARD MAXIMUM RUN LENGTH CHART, MAX LOAD = 20A

	WATTAGE	# OF		MAXIMUM LENGTH (FEET)						
		LAMPS	120V	208V	240V	277V	347V	480V		
		1	264	468	532	568	_	_		
	28W	2	132	232	264	284	_	_		
		3	88	156	176	188	_	_		
		1	152	264	304	332	444	612		
54W	2	76	132	152	164	220	304			
		3	48	88	100	108	148	204		

# **LAMP INFORMATION**



# **PULSE START METAL HALIDE (PSMH)**

			,	•		
LAMP WATTAGE	LAMP RATING	LAMP FINISH	INITIAL LUMENS (VERT)	INITIAL LUMENS (HORZ)	AVG. RATED LIFE (VERT)	AVG. RATED LIFE (HORZ)
50W						
	Enclosed	Clear	3400	3100	10000	7500
	Enclosed	Coated	3200	_	10000	_
	Open	Coated	3000	_	10000	_
70W						
	Enclosed	Clear	5600	5000	15000	11250
	Enclosed	Coated	5300	_	15000	_
	Open	Coated	5000	_	15000	_
100W						
	Enclosed	Clear	9000	8100	15000	11250
	Enclosed	Coated	8500	_	15000	_
	Open	Coated	8100	_	15000	_
150W						
	Enclosed	Clear	14000	12600	15000	11250
	Open	Clear	13300	_	15000	_
	Enclosed	Coated	13300	_	15000	_
	Open	Coated	12600	_	15000	_
250W						
	Enclosed	Clear	25000	22000	15000	12000
	Open	Clear	23800	_	15000	_
	Enclosed	Coated	23800		15000	
	Open	Coated	22000	_	15000	
320W	· ·					
	Enclosed	Clear	33000	30000	20000	20000
	Open	Clear	31000		20000	
	Enclosed	Coated	31000	_	20000	_
	Open	Coated	29000	_	20000	
400W						
	Enclosed	Clear	44000	40000	20000	20000
	Open	Clear	41000	_	20000	-
	Enclosed	Coated	42000	_	20000	_
	Open	Coated	39000		20000	_
750W						
	S-Rated	Clear	82000	68000	16000	12000
	S-Rated	Coated	72000	_	16000	_
1000W						
	Enclosed	Clear	110000	107800	15000	9000
					.5000	,,,,,

# **METAL HALIDE (MH)**

LAMP WATTAGE	LAMP RATING	LAMP FINISH	INITIAL LUMENS (VERT)	INITIAL LUMENS (HORZ)	AVG. RATED LIFE (VERT)	AVG. RATED LIFE (HORZ)
1000W						
	Enclosed	Clear	110000	99000	12000	9000
	Open	Clear	107000	_	12000	_
	Open	Coated	100000	_	12000	_

# **HIGH PRESSURE SODIUM (HPS)**

LAMP WATTAGE	LAMP RATING	INITIAL LUMENS	AVERAGE RATED LIFE
35W	Open	2250	16000
50W	Open	4000	24000
50W (DIFFUSE)	Open	3800	24000
70W	Open	6400	24000
70W (DIFFUSE)	Open	5950	24000
100W	Open	9500	24000
100W (DIFFUSE)	Open	8800	24000
150W	Open	16000	24000
250W	Open	28000	24000
400W	Open	51000	24000
1000W	Open	140000	24000

# **COMPACT FLUORESCENT (CFL)**

LAMP WATTAGE	LAMP RATING	INITIAL LUMENS	AVERAGE RATED LIFE
13W	Open	900	10000
21W	Open	1350	10000
26W	Open	1710	10000
28W	Open	2050	10000
32W	Open	2220	12000
38W	Open	2850	10000
42W	Open	3200	12000
57W	Open	4300	12000
70W	Open	5200	12000

## LINEAR FLUORESCENT

LAMP WATTAGE	LAMP RATING	INITIAL LUMENS	TEST TEMP	RATED LIFE @ 3 HOURS/START
28W T5	Open	2900	25°C	30000
32W T8	Open	2800	25°C	20000
54W T5H0	Open	4950	35°C	20000

**NOTE**: Lamp information values shown here are approximate and may vary between lamp manufacturers.

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# THE FOLLOWING NAMES ARE REGISTERED TRADEMARKS OF RUUD LIGHTING, INC.:

AeroDome Aviator Colorfast DeltaGuard Crown-Weld EZ Bay EZ Bay Plus EZ Wall Pack Ruud Ruud Lighting

Quik Ship is a trademark of Ruud Lighting.

