HARRIS LED HIGH BAY UFO, GEN 4

HHUF4

Applications

Orion Energy Systems product is NSF/ANSI Standard 2. The Harris HHUF4 is ideal for a wide array of applications including harsh environments in agricultural, industrial and manufacturing. When used with the refractor lens option it provides great up lighting for retail applications. The HHUF4 delivers energy and maintenance savings over traditional HID and fluorescent fixtures.

Project Name:	
Catalog Number:	
Туре:	
Note:	
Date:	



HHUF415UNVFD85006WWHHS45-SP



Construction & Design

- Standard 90° Beam angle lens to minimize glare while meeting DLC Premium - UGR limits
- Polycarbonate lens provides ideal distribution
- Die cast aluminum housing provides maximum heat dissipation
- 6' whip power supply comes standard
- Eye bolt comes standard

Additional Fixture Options

- Tandem Mount Bracket option to meet higher lumen applications, up to 70,000 lumens
- White fixture color is standard, other colors available
- Multiple mounting methods
 available
- Reflector or refractor available
- Field installed Battery Back Up available

Electrical

- Available in 120v-277v and 277v-480v
- 6kV/3kA surge protection standard per ANSI C82.77-5.
 20kV/10kA additional surge protection available
- Power Factor >0.9
- Total Harmonic Distortion < 20%* *Note: Varies based on option

Control and Sensor Options

- Control and sensor options are available to be installed in the field
- Remote Programming Sensors
- Remote Programing Sensors with Zoning
- On site Network Programming
- Internet/Cloud Based Network
 Programming

Lumen Maintenance

See lumen maintenance table on page 2

Fixture Certification & Listings

- NSF/ANSI Standard 2
- cULus Listed
- UL Wet Location Listed
- IP65 Rated
- IK10 Impact Rating (Fixture Only)
- DesignLights Consortium®
- Premium qualified luminaire Visit the <u>DLC[®] QPL</u> for listed models

Warranty

See Orion's <u>Product Limited Warranty</u> for more details and information

HHUF4

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Performance Information, 277v, ≥ 80 CRI, $5000K^1$

Nominal Lumen Code	Actual Lumens	Wattage	Tandem Mount Bracket Option Actual Lumens	Tandem Mount Bracket Option Wattage	LPW	Input Current per Fixture
15	14,842lm	101w	-	-	146	0.37A
21	21,088lm	146w	42,176lm	292w	144	0.53A
30	28,893lm	194w	57,786lm	388w	149	0.70A
36	34,465lm	229w	68,930lm	460w	150	0.83A

Lumen Maintenance²

Nominal	Nominal Lumens	Operating Tomporature	Calculated Lumen Maintenance			
Lumen Code	Norminal Lumens	Operating Temperature	L70	L80	L90	
15	15.000	25°C	173,000	109,000	51,000	
CI	15,000	50°C	173,000	109,000	51,000	
21	21 21,000	25°C	173,000	109,000	51,000	
21		50°C	165,000	99,000	49,000	
30	30,000	25°C	173,000	109,000	51,000	
50		50°C	160,000	98,000	47,000	
26	36 36,000	25°C	173,000	109,000	51,000	
50		50°C	155,000	97,000	46,000	

NSF Classification (NSF/ANSI Standard 170)

NSF Certification	Orion NSF Certified	USA Accredited Cert. Program Mark	Canada Accredited Cert. Program Mark	NSF Equipment Location, Use & Explanation	Common Lighting Application
3.231.4	Yes-NSF2 (Non-Food Zone)	NSE North Contraction North Co	NSFE	Exposed equipment surfaces other than those in a food or splash zone.	Non- Food Zone = Food preparation areas such as kitchens, food warehous- ing area may be damp.
3.231.7	Yes-NSF2 (Splash Zone)	NSSE Vertication	NSFE	Equipment surfaces, other than those in a food zone, that are subject to splash, spill- age, or other food soiling during operation of the equipment.	Splash Zone = Food processing areas where food may land on lighting fixture and pressure hose wash-downs are needed to clean area and lighting fixture. Area may be damp or wet.

Additional Specification Information

 1 Actual performance may vary by up to $\pm 10\%$ of values listed; facility factors and fixture options can affect performance values

 2 Calculated hours based on TM-21 projections and components used at the time of testing. Warranty is not associated with Calculated Lumen Maintenance

Ordering Information Example (NOTE: No dashes or spaces unless noted below) HHUF415UNVFD85006WWHTSHS45-SZC-SP

Ordering Information (Enter Selected Catalog Number Below)

Lumen CodeTypeColor TempConnection TempColorOptionsOptionsCertificationsOptionsSeriesNominal Lumen Code3VoltageDriver TypeCRI; Color TempPower ConnectionFixture ColorsFixture OptionsSensor OptionsSpecial CertificationsPacka OptionsHHUF4= HARRIS15= 15,0001mUNV= 120v-277vFD= Full Dimming850= 80CRI; 2000K06W= 6' WhipWH= BL= Black*Iblank)= No Fixture OptionsSee and TableIblank)= No Special CertificationsPacka Options30= 30,0001m36= 36,0001m36= 36,0001m277v-480v4FD= Full Dimming80CRI; 4000KWH= Single BL= Black*Iblank)= NoFixture Noficial Surge Protection Additional 20KV/10KA Surge Noficial Surge Noficial Soon Soon SoonSpecial CertifiedSee and Soon Soon Soon Soon Soon Soon SoonNote: Note: The only mounting option is located in the field installed accessories on page 5. The performance informationThe only mounting soon soon Soon SoonNote: Standard eyebolt that ships with the fixture.Note: soon soon		-								
Lumen Code3TypeColor TempColor TempColorsOptionsOptionsCertificationsOptionsHHUF4= HARRIS LED High Bay UFO, Gen 415= 15,000Im 21= 21,000Im 30= 30,000ImUNV= 120v-277v HMV= 277v-480v4FD= Ful Dimming 277v-480v4850= 80CRI; 80CRI; 4000K06W= 6' Whip 6' Whip 80CRI; 4000KWH= White BL= Black*(blank)= No Fixture Options TS= Black*See Table Below(blank)= No Special Certifications -SZC= Note: The only mounting option that meets NSF certification is the standard eyebolt that ships with the fixture.Option	Series		Voltage		Color					Packaging Options
Lumen Code3TypeColor TempColor TempColorsOptionsOptionsCertificationsOptionsHHUF4= HARRIS 										
HARRIS LED High Bay UFO, Gen 415,000 lm120v-277v HMV= 277v-480v4Full Dimming80CRI; 5000K 840= 80CRI; 4000KWhite BL= Black*No Fixture OptionsTable BelowNo Special CertificationsSingle Pack30= 30,000 lm36= 36,000 lm36= 36,000 lm36= 36,000 lm36= 36,000 lm36= 36,000 lm36= socration is located in the field installed accessories on page 5. The performance informationNote: I Tandem bracket ordering option is located in the field installed accessories on page 5. The performance informationNote: I Tandem bracket ordering option is located in the field installed accessories on page 5. The performance informationIsource I Tandem bracket ordering option is located in the field installed accessories on page 5. The performance informationIsource I Tandem bracket ordering option is located in the field installed accessories on page 5. The performance informationIsource I Tandem bracket ordering option is located in the field installed accessories on page 5. The performance informationIsource I Tandem bracket ordering option is located in the field installed accessories on page 5. The performance informationIsource I Tandem bracket ordering option is located in the field installed accessories on page 5. The performance informationIsource I Tandem bracket ordering option is located in the field installed accessories on page 5. The performance informationIsource I Tandem bracket ordering I Tandem br	Series		Voltage		Color					Packaging Options
can be located on page 2.	HARRIS LED High Bay UFO,	15,000lm 21= 21,000lm 30= 30,000lm 36= 36,000lm Note: Tandem bracket ordering option is located in the field installed accessories on page 5. The performance information	120v-277v HMV=	Full	80CRI; 5000K 840 = 80CRI;	 White BL =	No Fixture Options TS = Additional 20kV/10kA Surge Protection Assembly	Table	No Special Certifications -SZC= NSF2 Splash Zone Certified Note: The only mounting option that meets NSF certification is the standard eyebolt that	-SP= Single Pack

* Special order. Contact your Orion representative for lead times

Sensor and Control Options

Sensor Options

(blank)=

No Sensor Options

IP65 Rated and NSF Rated¹⁰

<u>HS45</u>=

Haisen: Microwave Occupancy Sensor, Photosensor, Low End Trim, 0-10V Dimming, IR Remote Programmable^{5,6}

IP65 Rated¹⁰

<u>VBM40</u>=

Vealite Keilton Bluetooth Mesh: Wireless Fixture Controller, PIR Occupancy Sensor, HIGH/LOW/OFF, 0-10V Dimming, Daylight Harvesting, High End Trim, Luminaire Level Lighting Control, Wireless Zones, Time-of-Day Scheduling, Keilton Mobile App Programmable⁶

Not IP65 or NSF Rated

WBxx=

Wattstopper FDP-3x1: PIR Occupancy Sensor, Daylight Harvesting, High and Low End Trim, 0-10V Dimming, Bluetooth Mobile App Programmable^{6,7,8,9}

Enlighted Connected Lighting Sensor: Network Lighting Control Component, PIR Occupancy Sensor, Daylight Harvesting, High End Trim, Dimming Modes, Luminaire Level Lighting Control, Wireless Zones, Modified IEEE 802.15.4.1, BLE Radio, Temperature Sensor, Scene Control, Demand Response, Data Collection, BMS Integration, Cloud Access^{6.7,9}

EN3=

Enlighted IoT: All Features of EN2 - Network Lighting Control PLUS access to Apps: Space Management, Asset Tracking, and Contact Tracing Apps^{67,9}

Additional Specification Information

³ For actual lumens, see performance table

 $^{\rm 4}$ Battery back up only available for 120-277v input voltage range

⁵ Requires use of one commissioning remote per project
⁶ Not compatible with HHUFAB-BB or HHUFCD-BB battery back up kits

⁷ For more information about these options go to our controls landing page

*"xx" in part number is a place holder for lens height of sensor. Either "15" or "40" can be included at end of part number to replace the "xx" placeholder ⁹ Sensor option is not IP65 or Wet Location Rated ¹⁰IP Rating was evaluated by third party testing lab

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HHUF4

Standard (Factory Installed)



Eyebolt



6' Whip

Options (Factory Installed)



Microwave Sensor and Black Fixture Options (HS45) and (BL)



Enlighted Sensor (ENx)



(WBxx)



(VBM40)



Additional 20kV/10kA Surge Protection Assembly Kit (TS)

0°C to 50°C (32°F to 122°F)

Ambient Operating Temperatures

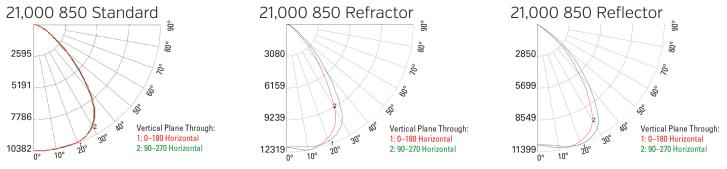
Sensor Type
HS45
VBM40
WBxx
HS45 VBM40

ENx

HHUF4

Photometrics

Visit orionlighting.com to obtain all .IES files



Accessories (Sold Separately and Field Installed)

Mounting Options					
HHUF-PM	Pendent Mount Hook, 3/4" Conduit				
HHUF-TM-WH ⁶	Tandem Mount Bracket for conduit, rigid, or suspended mounting (requires 2 fixtures to be purchased), White				
HHUF-TM-BL ⁶	Tandem Mount Bracket for conduit, rigid, or suspended mounting (requires 2 fixtures to be purchased), Black				
15/21 Lumen Package Mounting Options					
HHUFAB-UB-WH ¹³	15/21 (Small) U Bracket Mount Kit Surface or Pendent Mount 1/2" Conduit, White				
HHUFAB-UB-BL ¹³	15/21 (Small) U Bracket Mount Kit Surface or Pendent Mount 1/2" Conduit, Black				
30/36 Lumen Package Mounting Options					
HHUFCD-UB-WH ¹³	30/36 [Large] U Bracket Mount Kit Surface or Pendent Mount 1/2" Conduit, White				
HHUFCD-UB-BL ¹³	30/36 (Large) U Bracket Mount Kit Surface or Pendent Mount 1/2" Conduit, Black				

Additional Fixture Options						
HHUF-RC-HS⁵	Remote Control for Sensor Commissioning (for HS45 Sensor only)					
HHUF-BBS ^{4,12*}	15/21/30/36 Remote Battery Backup Kit, 30w, UNV 120-277v only, for use with Sensors <i>(*Special Order)</i>					
15/21 Lumen Package Additional Fixture Options						
HHUFAB-PC ¹¹	15/21 (Small) Polycarbonate Refractor					
HHUFAB-AL ¹¹	15/21 (Small) Aluminum Reflector					
HHUFAB-BB ^{4,12}	15/21 (Small) Remote Battery Back Up Kit, 25w UNV 120-277v only					
30/36 Lume	n Package Additional Fixture Options					
HHUFCD-PC ¹¹	30/36 (Large) Polycarbonate Refractor					
HHUFCD-AL ¹¹	30/ 36 (Large) Aluminum Reflector					
HHUFCD-BB ^{4,12}	30/36 (Large) Remote Battery Back Up Kit, 40w, UNV 120-277v only					

Additional Specification Information

 $^{\rm 4}$ Battery back up only available for 120-277v input voltage range

⁵ Requires use of one commissioning remote per project

⁶ Not compatible with HHUFAB-BB or HHUFCD-BB battery back up kits

" ENx option is not available with this fixture option

 $^{\rm 12}$ Multiply battery back up wattage by the lumens per watt [LPW] of the fixture to calculate lumen output in emergency mode

 $^{\rm 13}$ U Bracket mount has a center hole for 1/2" conduit. The U Bracket mount can be adjusted to 50° angle from vertical

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HHUF4

Accessories (Sold Separately and Field Installed)



Polycarbonate Refractor (HHUFxx-PC)



Tandem Mount Bracket (HHUF-TM-WH)





Aluminum Reflector (HHFxx-AL)



Pendent Mount Hook 3/4" (HHUF-PM)



Remote Battery Back Up Kit (HHUFxx-BB)

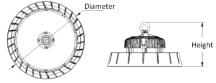


U Bracket Mount Kit Surface or Pendent Mount 1/2" Conduit, White (HHUFxx-UB-WH)

Physical Information

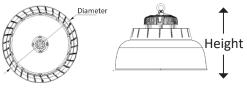
Fixture

Nominal Lumen Code	Diameter	Height	Weight ¹⁴
15/21	11.4"	7.6"	8.8lbs.
30/36	13.8"	8.3"	12.0lbs.

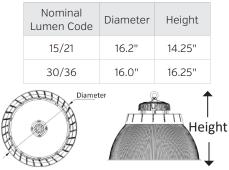


Fixture with Reflector

Nominal Lumen Code	Diameter	Height
15/21	18.5"	13.6"
30/36	20.7"	14.3"



Fixture with Refractor



Additional Specification Information

¹⁴ Weight will vary based on option selection

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