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:	
Type:	
Note:	
Date:	

HHUF415UNVFD85006WWHHS45-SP

UL WET RATED | UL CERTIFIED | NSF

IP65 | IK10 Rated | DLC LISTED PREMIUM

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 Programming 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 Listed for Wet Locations
- IP65 Rated
- IK10 Impact Rating (Fixture Only)
- DesignLights Consortium® Premium qualified luminaire
- Visit the DLC® QPL for listed models

Warranty

See Orion's Product Limited Warranty for more details and information

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Performance Information, 277v, $\geq$ 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 Maintenance[2]

Nominal Lumen Code	Nominal Lumens	Operating Temperature	Calculated Lumen Maintenance		
			L70	L80	L90
15	15,000	25℃	173,000	109,000	51,000
		50℃	173,000	109,000	51,000
21	21,000	25℃	173,000	109,000	51,000
		50℃	165,000	99,000	49,000
30	30,000	25℃	173,000	109,000	51,000
		50℃	160,000	98,000	47,000
36	36,000	25℃	173,000	109,000	51,000
		50℃	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)	NSF ANSI NSF's Certification Program is accredited by the American National Standards Institute	NSF NSF's Certification Program is accredited by the Standards Council of Canada	Exposed equipment surfaces other than those in a food or splash zone.	Non- Food Zone = Food preparation areas such as kitchens, food warehousing area may be damp.
3.231.7	Yes-NSF2 (Splash Zone)	NSF ANSI NSF's Certification Program is accredited by the American National Standards Institute	NSF NSF's Certification Program is accredited by the Standards Council of Canada	Equipment surfaces, other than those in a food zone, that are subject to splash, spillage, 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 ±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)

Series	Nominal Lumen Code	Voltage	Driver Type	CRI; Color Temp	Power Connection	Fixture Color	Fixture Options	Sensor Options	Special Certifications	Packaging Options

Series	Nominal Lumen Code³	Voltage	Driver Type	CRI; Color Temp	Power Connection	Fixture Colors	Fixture Options	Sensor Options	Special Certifications	Packaging Options
HHUF4= HARRIS LED High Bay UFO, Gen 4	**15**= 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 can be located on page 2.	**UNV**= 120v-277v **HMV**= 277v-480v⁴	**FD**= Full Dimming	**850**= 80CRI; 5000K **840**= 80CRI; 4000K	**(See below for part numbers and descriptions)**	**WH**= White **BL**= Black*	**(blank)**= No Fixture Options **TS**= Additional 20kV/10kA Surge Protection Assembly Kit*	**(See page 4 for part numbers and descriptions)**	**(blank)**= No Special Certifications **-SZC**= NSF2 Splash Zone Certified **Note:** The only mounting option that meets NSF certification is the standard eyebolt that ships with the fixture.	**-SP**= Single Pack

* Special order. Contact your Orion representative for lead times

Power Connection Ordering Information

Power Connection Options					
Build a cord below:					
Whip Length	**Whip Color**	**Whip Type**	**Plug Option**	**Plug Amperage*** *(Select Amperage only if plug is selected)*	**Voltage*** *(Select Voltage only if plug is selected)*
06= 6' whip	**W**= Whip (black fixtures ship with black power cord, and white fixtures ship with white power cord)	**(Blank)**= Non-dimming 3 leads	**(Blank)**= No plug **TL**= TwistLock plug **SB**= Straight blade plug	**15**= 15 amps **20**= 20 amps	**1**= 120v **2**= 277v **4**= 480v

Additional Specification Information

³ For actual lumens, see performance table

⁴ Battery back up only available for 120-277v input voltage range

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Sensor and Control Options

Sensor Options[5]

(blank)=
No Sensor Options

IP65 Rated and NSF Rated[9]

HS45=
Haisen: Microwave Occupancy Sensor, Photosensor, Low End Trim, 0-10V Dimming, IR Remote Programmable[6,7]

IP65 Rated[10]

VBM40=
Keilton Bluetooth Mesh Network: 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 Programmable[7]

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[7,8,9]

EN2=
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[7,8]

EN3=
Enlighted IoT: All Features of EN2 - Network Lighting Control PLUS access to Apps: Space Management, Asset Tracking, and Contact Tracing Apps[7,8]

Standard (Factory Installed)

Eyebolt

6' Whip

Options (Factory Installed)

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

PIR Sensor (WBxx)

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

Enlighted Sensor (ENx)

Keilton Sensor (VBM40)

Additional Specification Information

[5] Visit our Lighting Controls page for more information

[6] Requires use of one commissioning remote per project

[7] Not compatible with **HHUFAB-BB** or **HHUFCD-BB** battery back up kits

[8] "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

[10] IP Rating was evaluated by third party testing lab

Ambient Operating Temperatures

Nominal Lumen Code	All Voltages	With Battery Back Up
15/21/30/36	-40ºC to 50ºC [-40ºF to 122ºF]	0ºC to 50ºC [32ºF to 122ºF]

Sensor Type	Operating Range
HS45	-20ºC to 50ºC [-4ºF to 122ºF]
VBM40	-30ºC to 50ºC [-22ºF to 122ºF]
WBxx	-40ºC to 50ºC [-40ºF to 122ºF]
ENx	0ºC to 50ºC [32ºF to 122ºF]

Accessories (Sold Separately and Field Installed)

Mounting Options	
HHUF-PM	Pendent Mount Hook, 3/4" Conduit
HHUF-TM-WH[7]	Tandem Mount Bracket for conduit, rigid, or suspended mounting (requires 2 fixtures to be purchased), White
HHUF-TM-BL[7]	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-HS[6]	Remote Control for Sensor Commissioning (for **HS45** Sensor only)
HHUF-BBS[4,11*]	15/21/30/36 Remote Battery Backup Kit, 30w, **UNV** 120-277v only, for use with Sensors *(*Special Order)*
15/21 Lumen Package Additional Fixture Options	
HHUFAB-PC[11]	15/21 (Small) Polycarbonate Refractor
HHUFAB-AL[12]	15/21 (Small) Aluminum Reflector
HHUFAB-BB[4,12]	15/21 (Small) Remote Battery Back Up Kit, 25w, **UNV** 120-277v only
30/36 Lumen 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
Keilton Ecosystem Accessories	
All accessories can be commissioned and controlled via the Keilton app as they are part of the same ecosystem as the VBM40 Keilton sensors. For more information on the Keilton Ecosystem, please visit this link.	
CR01-ETC	Real Time Clock USB Dongle (Keeps Keilton devices schedules in sync in case of power loss - 1 per zone)

Additional Specification Information

[4] Battery back up only available for 120-277v input voltage range

[6] Requires use of one commissioning remote per project

[7] Not compatible with **HHUFAB-BB** or **HHUFCD-BB** battery back up kits

[11] ENx option is not available with this fixture option

[12] Multiply battery back up wattage by the lumens per watt (LPW) of the fixture to calculate lumen output in emergency mode

[13] U Bracket mount has a center hole for 1/2" conduit. The U Bracket mount can be adjusted to 50° angle from vertical
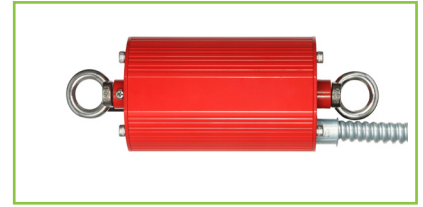
Accessories (Sold Separately and Field Installed)

Polycarbonate Refractor
(HHUFxx-PC)

Aluminum Reflector
(HHUFxx-AL)

Remote Battery Back Up Kit
(HHUFxx-BB)

Tandem Mount Bracket
(HHUF-TM-WH)

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

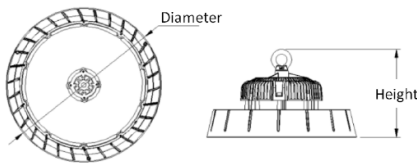**U Bracket Mount Kit Surface or Pendent Mount 1/2" Conduit, White**
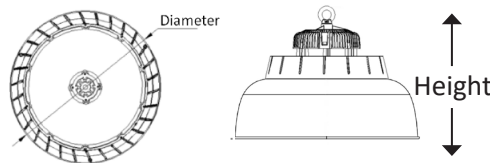**(HHUFxx-UB-WH)**

Remote
(HHUF-RC-HS)

Physical Information

Fixture

Nominal Lumen Code	Diameter	Height	Weight[14]
15/21	11.4"	7.25"	8.8lbs.
30/36	13.8"	7.55"	12.0lbs.

Fixture with Reflector

Nominal Lumen Code	Diameter	Height
15/21	18.5"	13.25"
30/36	20.7"	13.55"

Fixture with Refractor

Nominal Lumen Code	Diameter	Height
15/21	16.2"	13.9"
30/36	16.0"	15.5"
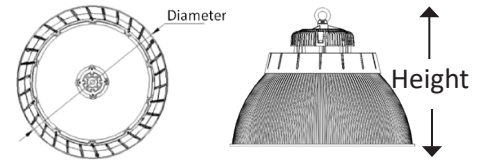
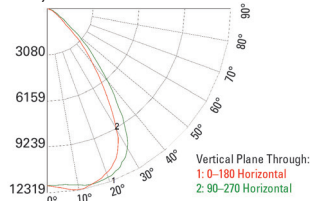## Photometrics

Visit orionlighting.com to obtain all .IES files

21,000 850 Standard
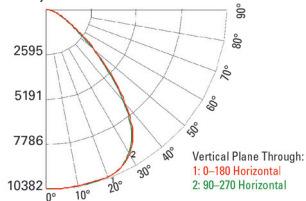
21,000 850 Refractor

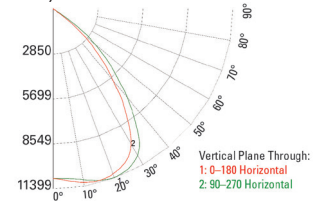### 21,000 850 Reflector

Additional Specification Information

[14] Weight will vary based on option selection

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