

HHSL2 HE

Applications

The HARRIS HHSL2 is an innovative high bay and is **industry leading with up to 198 LPW at 80 CRI**. The low profile design offers energy savings, low maintenance, and control options for low or high bay settings in industrial, commercial, and retail applications.

Project Name:	
Catalog Number:	
Type:	
Note:	
Date:	



HHSL2424LHEUNVFD850LAFGPF
[Lens Option Shown]



Construction & Design

- Narrow lightweight 2' and 4' aluminum body allows for optimal thermal management and ease of handling during installation
- Available with five different light distribution types: No lens, acrylic frosted general lens, acrylic frosted narrow lens, acrylic glare reduction lens, and acrylic clear focus lens

Additional Options

- Rigid and suspended mounting options
- Field installed precision fit fixture wireguard available for 2' and 4' fixture lengths
- Field or factory installed Battery Back Up available in 10w or 20w, Certified in CA Title 20
- Single or bulk pack available
- High ambient operating range up to 65°C
- More available, see factory and field installed fixture options

Electrical

- Available in 120v-277v, 347v and 480v
 - Standard 0-10v dimming driver
 - 6 kV/3 kA surge protection standard, 20 kV/10 kA surge protection available
 - Power Factor >0.9*
 - Total Harmonic Distortion < 20%*
- *Note: Varies based on option

Control and Sensor Options

- Factory installed control and sensor options
- Control and sensor options are available to be installed in the field
- Manual Programming Sensors
- Remote Programming Sensors
- Remote Programming Sensors with Zoning
- Onsite Network Programming
- Internet/Cloud Based Network Programming

Lumen Maintenance

See lumen maintenance table on page 2

Fixture Certifications & Listings

- Buy American Act Compliant
- UL/cUL Listed
- UL/cUL Listed for Damp Locations
- UL 1598 65°C
- DesignLights Consortium® Standard qualified luminaire
- DesignLights Consortium® Premium qualified luminaire
- Visit the [DLC® QPL](#) for listed models

Patent Information

Orion is serious about intellectual property. This product may be covered by one or more patents.

Warranty

See Orion's [Product Limited Warranty](#) for more details and information

Performance Information, 277v, 5000K, ≥ 80 CRI¹

Nominal Lumen Code	Wattage	No Lens (DLC Standard)		LAFG (DLC Standard)		LAFN (DLC Premium)		LACF (DLC Premium)		LAGR (DLC Premium)		Input Current
		Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	
2'												
09L	48w	9,525lm	198	8,848lm	184	8,734lm	182	8,781lm	183	8,927	186	0.17A
12L	67w	12,975lm	195	11,931lm	179	11,765lm	177	11,786lm	177	10,680	183	0.24A
15L	77w	14,857lm	194	13,885lm	181	13,368lm	174	13,595lm	177	13,926	182	0.28A
18L	106w	20,646lm	195	19,033lm	179	18,930lm	178	18,765lm	177	19,054	180	0.38A
4'												
24L	120w	23,779lm	198	22,073lm	184	21,577lm	180	21,618lm	180	21,442	179	0.43A
30L	153w	30,013lm	196	27,831lm	182	27,284lm	178	27,325lm	179	27,439	179	0.55A
40L	212w	40,310lm	190	38,056lm	180	37,033lm	175	37,188lm	175	37,632	178	0.77A
45L	237w	44,249lm	187	41,210lm	174	40,238lm	170	40,600lm	171	42,088	178	0.86A

Lumen Maintenance with No Lens²

Fixture Size	Nominal Lumen Code	Nominal Lumens	Operating Temperature	Calculated Lumen Maintenance		
				L70	L80	L90
2'	09L	9,000	25°C	233,000	146,000	68,000
			55°C	224,000	135,000	64,000
			65°C	192,000	120,000	57,000
2'	12L	12,000	25°C	233,000	146,000	68,000
			55°C	224,000	135,000	58,000
			65°C	183,000	115,000	54,000
2'	15L	15,000	25°C	233,000	146,000	68,000
			55°C	223,000	135,000	58,000
			65°C	183,000	115,000	54,000
2'	18L	18,000	25°C	219,000	136,000	62,000
			55°C	204,000	126,000	57,000
			65°C	137,000	85,000	39,000
4'	24L	24,000	25°C	233,000	146,000	68,000
			55°C	224,000	135,000	64,000
			65°C	184,000	115,000	54,000
4'	30L	30,000	25°C	233,000	146,000	68,000
			55°C	222,000	138,000	64,000
			65°C	174,000	109,000	52,000
4'	40L	40,000	25°C	219,000	136,000	62,000
			55°C	204,000	126,000	57,000
4'	45L	45,000	25°C	219,000	136,000	62,000
			55°C	202,000	125,000	56,000

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)

HHSL2424LHEUNVFD850LAFGHWTSLV40SP

Ordering Information (Enter Selected Catalog Number Below)

Series	Fixture Size	Nominal Lumen Code ³	Performance Efficacy	Voltage	Fixture Type	CRI; Color Temp	Lens Options	Power Connection Options	Fixture Options	Factory Installed Control Options	Packaging Options
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Series	Fixture Size	Nominal Lumen Code ³	Performance Efficacy	Voltage	Fixture Type	CRI; Color Temp	Lens Options	Power Connection Options	Fixture Options	Factory Installed Control Options	Packaging Options
HHSL2= HARRIS LED High Bay Star Line, Gen 2	2= 2'	2' 09L= 9,000lm 12L= 12,000lm 15L= 15,000lm 18L= 18,000lm	HE= High Efficacy	UNV= 120v-277v 347= 347v ⁴ 480= 480v ⁴	FD= Factory Wired for Dimming Applications	840= 80CRI; 4000K 850= 80CRI; 5000K	[Blank]= No Lens [DLC Standard] LAFG= Lens, Acrylic Frosted General Distribution [DLC Standard] LAFN= Lens, Acrylic Frosted 50° Narrow Aisle Distribution [DLC Standard] LACF= Lens, Acrylic Clear 35° Focus Distribution [DLC Premium] LAGR= Lens, Acrylic Frosted 90° Glare Reduction [DLC Premium]	[See Page 4 for part numbers and descriptions]	[Blank]= No Option TS= Additional 20 kV/10 kA Surge Protection BB10= Battery Back Up, 10w ^{4,5,6} BB20= Battery Back Up, 20w ^{4,5,6} OE= Orange End Panels HT65= 65°C High Ambient Operating Temp	[See Page 4 for part numbers and descriptions]	[Blank]= Bulk Pack SP= Single Pack
	4= 4'	4' 24L= 24,000lm 30L= 30,000lm 40L= 40,000lm ⁴ 45L= 45,000lm ⁴									

Additional Specification Information

³ For actual lumens, see performance table

⁴ Not available with **HT65** option

⁵ Multiply 10w or 20w by the lumens per watt [LPW] of the fixture to calculate lumen output in emergency mode

⁶ Fixture with Battery Back Up cannot be used with **PF** or **ML** power connections

Power Connection Ordering Information

Power Connection Options					
HW = Hardwire [includes dimming leads] ⁷					
ML = Mate-N-Lok connector [requires purchase of Mate-N-Lok power cord - sold separately] ⁷					
PF = Platform connector [requires purchase of platform power cord - sold separately]					
PFD = Platform connector [includes dimming leads, requires purchase of platform cord - sold separately]					
Or build a cord below:					
Whip Length	Whip Color	Whip Type	Plug Option* [Plug Only Available for Non-Dimming Cords]	Plug Amperage* [Select Amperage only if plug is selected]	Voltage [Select Voltage only if plug is selected]
06 = 6' whip	W = White	[Blank] = Non-dimming 3 leads [18/3]	[Blank] = No plug	15 = 15 amps	1 = 120v
11 = 11' whip	B = Black	D = Dimming 5 leads [18/5]	TL = Twist-lock plug	20 = 20 amps	2 = 277v
		EM = Emergency 4 leads [18/4]**	SB = Straight blade plug		4 = 480v
* If a sensor will be specified, please specify a power connection without dimming leads					
**If a plug is required for an emergency whip type [EM], please contact the factory.					

Sensor and Controls Ordering Information

Factory Installed Control Options ⁸	
[Blank] = No Control Options	Integrated in Fixture Body:
VL40B = Keilton: PIR Occupancy Sensor, Daylight Harvesting, High and Low End Trim, 0-10V Dimming, IR Remote Programmable ^{4,9}	
VBM40B = 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 ⁴	
WSxxB = Integrated, Wattstopper PIR Occupancy Sensor, HIGH/LOW/OFF, 0-10V Dimming, Switching Photocell, IR Remote Programmable, 360° ^{9,10}	
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 ⁴	
EN3 = Enlighted IoT: All Features of EN2 - Network Lighting Control PLUS access to Apps: Space Management, Asset Tracking, and Contact Tracing Apps ⁴	
	End Mounted:
LV40 = Leviton OSFHU: PIR Occupancy Sensor, ON/OFF, Manual Programmable, 20 & 40 ft. Lenses	
LD40 = Leviton HB011: PIR Occupancy Sensor, Daylight Harvesting, 0-10V Dimming Modes, Manual Programmable, 20 & 40 ft. Lenses ^{4,11}	
WBxx = PIR Occupancy Sensor, HIGH/LOW/OFF, 0-10V Dimming, Switching Photocell, Bluetooth, Mobile App Programmable, 360° ¹⁰	

Additional Specification Information

³ For actual lumens, see performance table

⁴ Not available with **HT65** option

⁷ **ML** [Mate-N-Lok] or **HW** [Hardwire] fixture option is not available with OEMS1 style sensors

⁸ For more information about these options go to our [controls landing page](#)

⁹ Requires remote for commissioning and/or modifying settings. See accessories table

¹⁰ "xx" in part number is a place holder for lens height of sensor. Either "20" or "40" can be included at end of part number to replace the "xx" placeholder

¹¹ Not compatible with **480** (480v) fixture models

Accessories (Factory Installed)



Sensor
(ENx)



Sensor
(WSxxB)



Sensor
(WBxx)



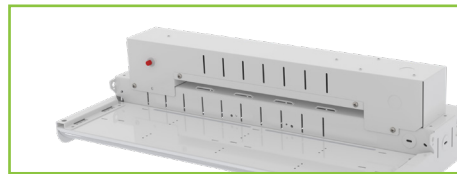
Sensor
(VL40B)



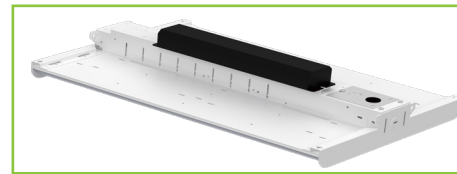
Sensor
(VBM40B)



Sensor
(LV40/LD40)



Battery Back Up
(BBxx)



Battery Back Up
(BBxx)



Orange End Cap
(OE)



No Lens Option
((blank) 24L Shown)



Glare Reduction Lens
(LAGR)

Physical Information¹²

Nominal Lumen Code	Length	Width	Depth	Weight
09L/12L/15L/18L	23.75"	15.00"	3.16"	6.00-11.00lbs.
24L/30L/40L/45L	45.75"	15.00"	3.16"	11.00-17.00lbs.

Ambient Operating Temperatures¹³

Nominal Lumen Code	All Voltages	With Battery Back Up
All Lumen Packages	-20°C to 55°C [-4°F to 131°F]	Min. Operating Temp. 0°C [32°F]
Nominal Lumen Code	120-277v	With Battery Back Up
09L/12L/15L/18L/24L/30L with HT65 Option	-20°C to 65°C [-4°F to 149°F]	Not available

Sensor Type	Operating Range
ENx	0°C to 50°C [32°F to 122°F]
VL40B	0°C to 55°C [32°F to 131°F]
VBM40B	0°C to 55°C [32°F to 131°F]
WSxxB	0°C to 65°C [32°F to 149°F]
LV40	0°C to 65°C [32°F to 149°F]
LD40	0°C to 50°C [32°F to 122°F]
WBxx	0°C to 60°C [32°F to 140°F]

Additional Specification Information

¹² Weight will vary based on option selection

¹³ Ambient operating range when suspended 12" from the ceiling

Accessories (Field Installed)

Suspended Mounting Options	
ECAB19	19" Cables with Snap Hooks [2 Required per Fixture]
ECAB31	31" Cables with Snap Hooks [2 Required per Fixture]
HW-FC008	Hanging cable, Set of Two: Adjustable 180", Loop, Y-Fit with Snap Hooks [1 Set per Fixture]
LED-HHSL1-PMR01-KIT ¹⁵	Pendant Mounting Bracket Kit for UNV HHSL1 Style Fixtures, Galvanized Steel [Available for Hardwired (HW) models only]
LED-HHSL1-PMR01-KIT-480 ¹⁵	Pendant Mounting Bracket Kit for 347/480 HHSL1 Style Fixtures, Galvanized Steel [Available for Hardwired (HW) models only]
Rigid Mounting Option	
H131SET	Rigid/Flush and Threaded Rod Mounting Bracket Set [Raw Galvanized Steel-also available in white, add -W to the end of the part number]
Battery Back Up Options ¹⁶ *	
HHSL-UNV-BBxxKIT	Field Installed Battery Back Up Kit for LSLH and HHSL UNV HW [120v-277v hardwired] fixtures
LSLH-347-BBxx-KIT	Field Installed Battery Back Up Kit for LSLH and HHSL 347 HW [347v hardwired] fixtures
LSLH-480-BBxx-KIT	Field Installed Battery Back Up Kit for LSLH and HHSL 480 HW [480v hardwired] fixtures
*To order 10w battery back up kit, change "xx" to "10". To order 20w battery back up change "xx" to "20". Example: HHSL-UNV-BB10KIT	
Wireguard Options*	
LED-HHSL-WG01-KIT	Field Installed Wireguard Kit for 09L/12L/15L/18L 2' Fixtures without an End Mounted Sensor, Bulk Pack
LED-HHSL-WG02-KIT	Field Installed Wireguard Kit for 24L/30L/40L/45L 4' Fixtures without an End Mounted Sensor, Bulk Pack
LED-HHSL-WG03-KIT	Field Installed Wireguard Kit for 09L/12L/15L/18L 2' Fixtures with an End Mounted Sensor, Bulk Pack
LED-HHSL-WG04-KIT	Field Installed Wireguard Kit for 24L/30L/40L/45L 4' Fixtures with an End Mounted Sensor, Bulk Pack
*Add "-SP" at the end of the Wireguard Options order logic for Single Pack.	

Remote Required for Commissioning	
RM51	Vealite Keilton Sensor IR Remote Controller
FSIR-100	Hand-Held Sensor Configuration Tool Required for Adjusting Default Factory Settings, Including Hi/Low/Off Modes and Sensitivity/Time Delay/Cut Off [Ordered Separately-To Be Used with OEMS1360P/OEMS1368P or embedded WSxxB]
Keilton Ecosystem Accessories	
All accessories can be commissioned and controlled via the Keilton app as they are part of the same ecosystem as the VBM40B 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]
End Mounted Sensor Options ^{7,14*}	
OEMS1300P	End Mounted On/Off Only Sensor, 120v-277v, Normal Temp/Dry, High Bay, Low Bay & Aisle Lenses, 4-Pin Platform Input, 4-Pin Platform Output (LV40)
OEMS1330P	End Mounted On/Off Only Sensor, 120v-277v, Cold Temp/Damp, High Bay, Low Bay & Aisle Lenses, 4-Pin Platform Input, 4-Pin Output (LV40)
OEMS1370P	End Mounted On/Off Only Sensor, 480v, Normal Temp/Dry, High Bay, Low Bay & Aisle Lenses, 5-Pin Platform Input, 5-Pin Platform Output (LV40)
OEMS1360P ⁹	Plug 'N Play End Mounted Remote Programmable On/Dim/Off & Ambient Sensor, 120v-277v, Cold & Normal Temp, 20'-40' Lens, 4-Pin Platform Input, 5-Pin Platform Output [Requires FSIR-100 Sensor Configuration Tool - Not Included] (WSxxB)
OEMS1368P ⁹	Plug 'N Play End Mounted Remote Programmable On/Dim/Off & Ambient Sensor, 347v/480v, Cold & Normal Temp, 20'-40' Lens, 5-Pin Platform Input, 5-Pin Platform Output [Requires FSIR-100 Sensor Configuration Tool - Not Included] (WSxxB)
OEMS1380P	Plug 'N Play End Mounted Bluetooth App Programmable On/Dim/Off & Ambient Sensor, 120v-277v, Cold & Normal Temp, 20'-40' Lens, 4-Pin Platform input, 5-Pin Platform Output (WBxx)

Additional Specification Information

⁷ Cannot be used with **ML** (Mate-N-Lok) or **HW** (Hardwire) fixture option is not available with OEMS1 style sensors

⁹ Requires remote for commissioning and/or modifying settings. See accessories table

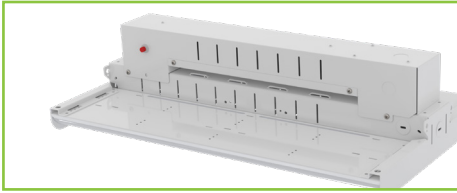
¹⁴ All Sensors come standard with a Raw Aluminum housing finish. Dark Gray and White housings are available. For Dark Gray add **"-DG"**. For a White Housing add **"-WH"** at the end of the sensor part number

¹⁵ Not available with battery back up option

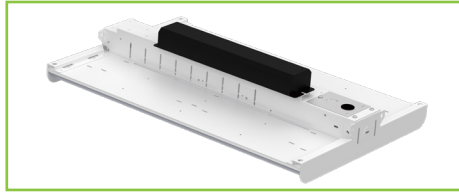
¹⁶ Fixture with **LSLH-xxx-BBxx-KIT** cannot be used with **PF** or **ML** power connections

HHSL2 HE

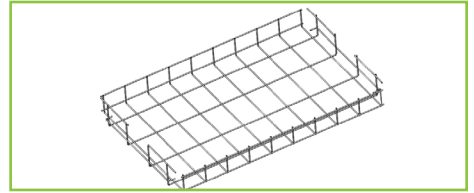
Accessories [Field Installed]



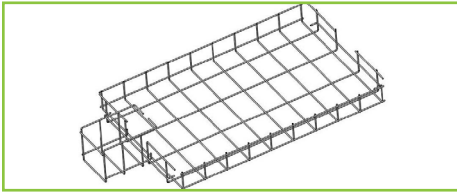
Battery Back Up
(LSLH-xxx-BBxx-KIT)



Battery Back Up
(HHSL-UNV-BBxxKIT)



Fixture Wireguard
(LED-HHSL-WGOx-KIT)

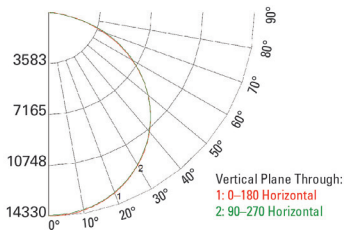


Fixture Wireguard with End Mounted Sensor Wireguard
(LED-HHSL-WGOx-KIT)

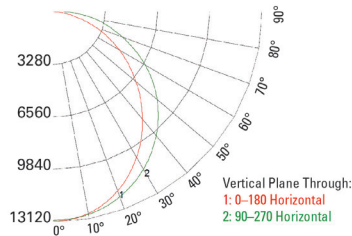
Photometrics

Visit orionlighting.com to obtain all .IES files

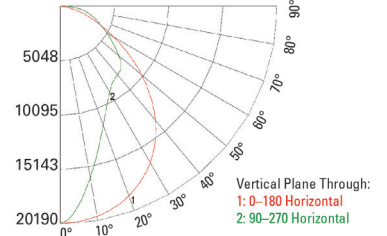
45L 840 No Lens



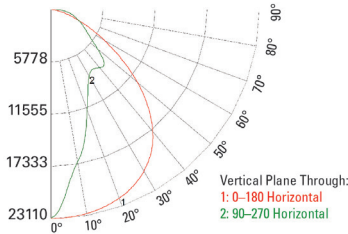
45L 840 LAFG



45L 840 LAFN



45L 840 LACF



45L 840 LAGR

