

Project:		Catalog #:		Type:	
Preparer:		Notes:		Date:	



HB Series

ECO Round High Bay
17,651 - 29,756 Lumens | 175-400W HID Equivalent

Project Applications

Retrofit, New Construction, Commercial, Industrial, Warehouse, Manufacturing, Big Box Retail, General Open Spaces



*120W/150W fixtures shown (drop reflectors & yoke accessories are ordered separately)



PRODUCT OVERVIEW

ETi SSL's HB ECO Round High Bay Series combines a robust and durable die-cast design with excellent performance (17,651 - 29,756 lumen packages available @ up to 148 LPW) It is an ideal design solution with its universal round form factor for many new construction and retrofit commercial and industrial applications. Our products are engineered using the latest innovative LED technologies to provide the perfect mix of modern design, performance, world class quality and reliability. All at a superior value to the designer, specifier, contractor and end-user.

The HB Series is rated IP65 to minimize environmental impact from contaminants like dust and bugs to maximize photometric performance over the lifetime of the luminaire. Our extremely efficient optical system qualifies for DLC Premium for superior energy savings and can qualify for maximum energy rebate opportunities. The HB Series delivers a performance first uniform light distribution optimized for most general open space applications. Optional secondary drop prismatic and aluminum reflectors are available for additional design flexibility. Each fixture includes an optional diffusing lens filter that can be easily installed to help significantly reduce direct-view visual glare, brightness and LED pixelation for superior visual comfort within the space when needed.

Robust thermal management is optimized thanks to the luminaire's pass-through convective cooling die-cast heatsink design. Helping to maximize the total system life and performance of the luminaire. Even in demanding high ambient applications thanks to our 50° C (122° F) high ambient temperature rating. For added product durability in demanding applications, the HB Series has an IK09 impact rated tempered glass lens design. It can withstand 10 joules of impact (equivalent to the impact of 5kg (11 lbs) steel ball dropped from 200 mm (8 inches). ETi takes great pride in our dedication to providing solutions with the product reliability and quality that you can always depend on.

In-stock base HB SKUs typically ship in 2-3 days. Rapid Ship SKUs (w/ installed occupancy sensors, BBUs or both) typically ship in 2-weeks or less.

KEY PRODUCT FEATURES, DETAILS & SPECS

- All configurations are DLC Premium qualified for max energy savings & rebates
- Up to 148 LPW provides 60+% in energy savings vs. legacy HID, T5 & T8 luminaires
- 120W @ 17,651 lumens, 150W @ 22,242 lumens, 202W @ 29,756 lumens
- 80+ CRI standard for true accurate color rendering & visual performance
- Fixture ships w/ optional diffusing lens filter to improve visual glare (field installed)
- Die-cast design w/ pass-through convective heatsink maximizes life & performance
- 40° to 50° C (-40° to 122° F) high ambient temp rating for demanding applications
- IP65 rated luminaire minimizes environmental impact from contaminants
- Robust 4kV LED driver surge protection is standard for added protection
- Reported L75/102,000, Projected L70 @ 128,000 hours (per IES TM21)
- Drop prismatic or aluminum reflectors available for added design flexibility
- Standard universal O-ring mount for quick & easy pendant installation
- Weighing in at only 9.3 lbs allows for ease of handling & fixture installation
- Optional yoke mount w/ hook allows for tilt aiming & added install flexibility
- 120-277V drivers w/ 0-10V dimming (down to 10%) capability as standard
- Optional occupancy sensor for added energy savings & code compliance
- BBU options for safety & code compliance (CA Title 20 MAEDBS)
- IK09 rated tempered glass lens for protection against 10 joules of impact

STOCK ORDERING INFORMATION (typical 2-3 day shipment lead time)^{1,2,3}

Catalog Logic/PT#	Model #	UPC	Size	Lumens	Wattage	LPW	CCT	CRI	Voltage	Dimming	DLC ³
HB-16200LM-8-50K-MV-LVD	63802161	50849489066054	10.2" dia.	17,651	120.3	146.7	5000K	80 _(min)	120-277V	0-10V	Premium
HB-20250LM-8-50K-MV-LVD	63802261	50849489066061	10.2" dia.	22,242	150.5	147.8					
HB-27000LM-8-50K-MV-LVD	63803361	50849489066078	11.4" dia.	29,756	201.8	147.4					

Notes:

- See next page for additional available rapid ship product configurations and stock accessories.
- Stock SKUs typically ship in 24-48 hours upon receipt of an approved released order.
- Search first 6-digits of the model # followed by '##' on the DLC QPL...Ex. '638021##' to view DLC qualified SKUs.

2-WEEK RAPID SHIP PROGRAM DETAILS (typical 2-week shipment lead time)^{1,2,3}

OCCUPANCY SENSOR INSTALLED - RAPID SHIP ORDERING INFORMATION^{1,2,3}

Catalog Logic/PT#	Model #	Rapid Ship Option	Sensor Model # ²	DLC ³
HB-16200LM-8-50K-MV-LVD-EOS	63802161-I	OC Sensor	70201102	Premium
HB-20250LM-8-50K-MV-LVD-EOS	63802261-I			
HB-27000LM-8-50K-MV-LVD-EOS	63803361-I			

BATTERY BACKUP UNIT (BBU) INSTALLED - RAPID SHIP ORDERING INFORMATION^{1,2,3,4}

Catalog Logic/PT#	Model #	Rapid Ship Option	BBU Model # ^{2,4}	DLC ³
HB-16200LM-8-50K-MV-LVD-EM-R25	63802161-EM-R25	BBU Round (25W)	70112201-2-KIT (25W)	Premium
HB-20250LM-8-50K-MV-LVD-EM-R25	63802261-EM-R25			
HB-27000LM-8-50K-MV-LVD-EM-R25	63803361-EM-R25			
HB-16200LM-8-50K-MV-LVD-EM-R40	63802161-EM-R40	BBU Round (40W)	70114401-2-KIT (40W)	Premium
HB-20250LM-8-50K-MV-LVD-EM-R40	63802261-EM-R40			
HB-27000LM-8-50K-MV-LVD-EM-R40	63803361-EM-R40			

OC SENSOR & BATTERY BACKUP UNIT (BBU) INSTALLED - RAPID SHIP ORDERING INFORMATION^{1,2,3,4}

Catalog Logic/PT#	Model #	Rapid Ship Options	Sensor Model # ²	BBU Model # ^{2,4}	DLC ³
HB-16200LM-8-50K-MV-LVD-EOS-EM-R25	63802161-I-EM-R25	OC Sensor & BBU Round	70201102	70112201-2-KIT (25W)	Premium
HB-20250LM-8-50K-MV-LVD-EOS-EM-R25	63802261-I-EM-R25				
HB-27000LM-8-50K-MV-LVD-EOS-EM-R25	63803361-I-EM-R25				
HB-16200LM-8-50K-MV-LVD-EOS-EM-R40	63802161-I-EM-R40	OC Sensor & BBU Round	70201102	70114401-2-KIT (40W)	Premium
HB-20250LM-8-50K-MV-LVD-EOS-EM-R40	63802261-I-EM-R40				
HB-27000LM-8-50K-MV-LVD-EOS-EM-R40	63803361-I-EM-R40				

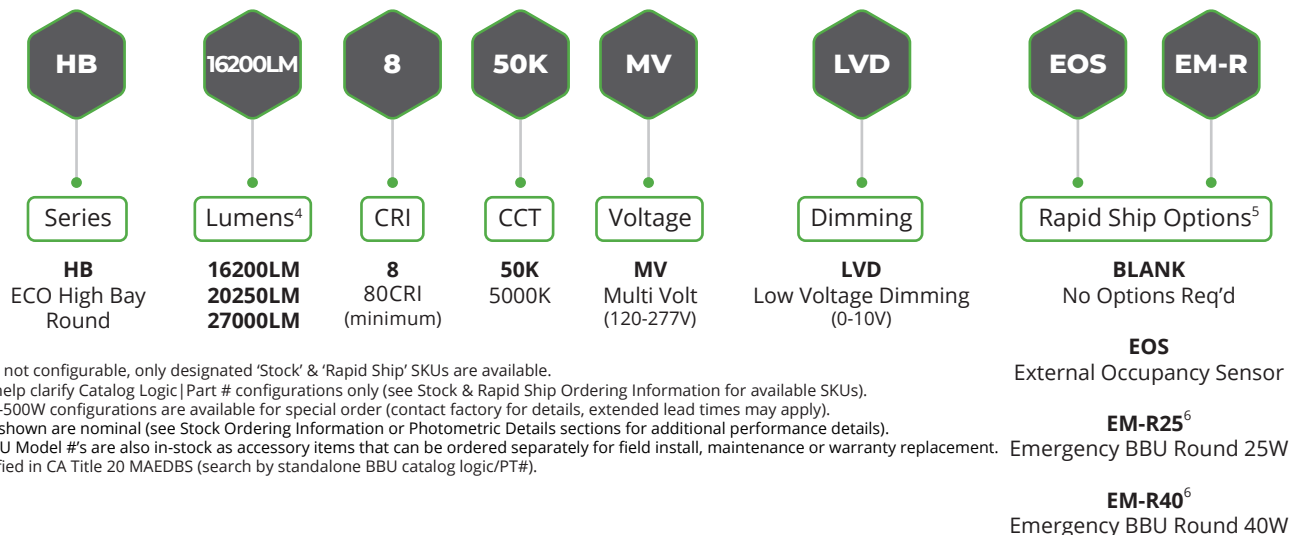
Notes:

- Rapid Ship SKUs typically ship in 2-weeks or less, direct from ETI with the available options pre-installed (lead times can be quantity dependent, always contact factory to confirm).
- Sensor and BBU Model #'s are also in-stock as accessory items that can be ordered separately for field install, maintenance or warranty replacement (see below for additional item details).
- Search first 6-digits of the model # followed by '##' on the DLC QPL...Ex. '638021##' to view DLC qualified SKUs ('Rapid Ship' SKUs are currently DLC Premium, always check QPL to confirm).
- BBUs are certified in CA Title 20 MAEDBS (search by standalone BBU catalog logic/PT#).

CATALOG LOGIC | PART # DECODER^{1, 2, 3}

Example SKU: HB-16200LM-8-50K-MV-LVD

(Model # 63802161)



Notes:

- This product is not configurable, only designated 'Stock' & 'Rapid Ship' SKUs are available.
- Decoder is to help clarify Catalog Logic | Part # configurations only (see Stock & Rapid Ship Ordering Information for available SKUs).
- Additional 240-500W configurations are available for special order (contact factory for details, extended lead times may apply).
- Lumen values shown are nominal (see Stock Ordering Information or Photometric Details sections for additional performance details).
- Sensor and BBU Model #'s are also in-stock as accessory items that can be ordered separately for field install, maintenance or warranty replacement.
- BBUs are certified in CA Title 20 MAEDBS (search by standalone BBU catalog logic/PT#).

HB Series

ECO Round High Bay
17,651 - 29,756 Lumens | 175-400W HID Equivalent | DLC Premium | 5-yr Warranty

AVAILABLE STOCK ACCESSORIES (must be ordered separately)



*Yoke shown assembled (requires field assembly & installation).



Occupancy Sensor^{1,2,3,4} (field installed)



*shown w/ optional OC sensor installed

Additional Mounting Accessories^{1,2,3} (field installed)

Catalog Logic/PT#	Model #	Description
EHBR-YKHK ^{1,2,3,4}	70507101	Yoke & hook mount kit (100-240W)

Notes:

1. Yoke & hook mount kit requires field assembly & installation to luminaire.
2. Yoke can be surface mounted without the included hook accessory.
3. Yoke allows for tilt adjustment up to 85° from horizontal.



Emergency LED Driver/BBU^{1,2,3}

(BBU field installed - fixture only & w/ OC sensor or 0-10V dimming)

Catalog Logic/PT#	Model #	Description
EMUFO-25170-YY-KIT (G3)	70112201-2-KIT	Round, 25W, IP65, 90 min, install kit
EMUFO-40170-YY-KIT (G3)	70114401-2-KIT	Round, 40W, IP65, 90 min, install kit
EM-R-TEST-REMOTE ³	70203101	Round BBU handheld test remote

Notes:

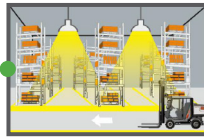
1. BBU certified in CA Title 20 MAEDBS. (search by BBU catalog logic/PT#, Ex. 'EMUFO-25170-YY')
2. Multiply the LPW of specified SKU by BBU wattage for the approximate delivered lumens. (Ex. 147 LPW x 25-watts = approximately 3,675 lumens)
3. BBU handheld test remote max operating distance of 98' (29.9m).

OCCUPANCY SENSOR FACTORY SETTINGS DETAILS

100%

Occupancy Light Level - 'High Light Level'

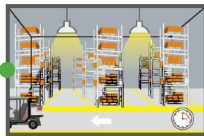
When 'Occupancy' is detected, the fixture will remain or switch on at the set dimming level or 'High Light Level'.



5 min

Hold Time - 'Zero Occupancy Time'

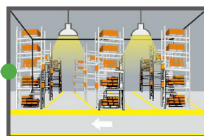
Time required with zero occupancy before dimming to the 'Low Light Level' mode or switching to an 'off state'.



10%

Standby Dim Level - 'Low Light Level'

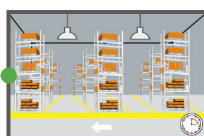
After 'Hold Time' elapses with zero occupancy detected the fixture will dim to the 'Low Light Level' or standby dim level.



5 min

Standby Period - 'Time to OFF State'

Time required after 'Hold Time' elapses before the fixture will switch to an 'off state' with zero occupancy detected. If set to 0 seconds, fixture will switch to an 'off state' after 'Hold Time' elapses. If set to ∞, the fixture will stay in the 'Low Light Level' mode until occupancy is detected.



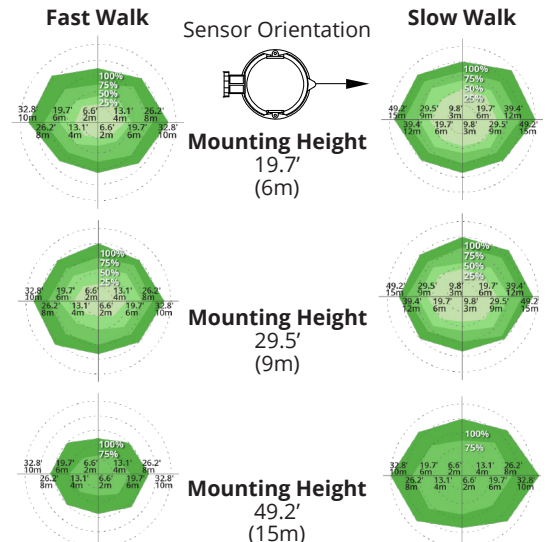
Additional Factory Sensor Settings^{1,2}

Function	Factory Settings
Detection Area	100% (sensor range)
Sensitivity Level	HS - High Sensitivity
Daylight Sensor	Disabled

Notes:

1. Settings can be changed using the (70205101) remote programmer. (Max handheld remote programmer operating distance of 49.2' (15m))
2. See Instruction Manual for operation and additional setting details.

Sensor Detection Pattern & Range



PHOTOMETRIC DETAILS

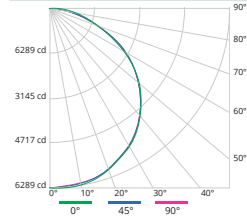
HB-16200LM-8-50K-MV-LVD

Luminaire Data

IES File Name	63802161.IES
CCT & CRI	5000K, 80CRI minimum
Initial Delivered Lumens	17,651
Wattage	120.3W
Efficacy	146.7
Beam Angle	50% = 114° 10% = 154°
Spacing	0° = 1.32 90° = 1.30

Photometric values based on tests performed in compliance with LM-63 & LM-79

Indoor Candela Plot



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	4944	28.0%
0-40	8173	46.3%
0-60	14589	82.7%
0-90	17634	99.9%
0-180	17651	100.0%

Candlepower

Angle	0°	90°
0	6285	6285
5	6268	6257
10	6206	6192
15	6108	6085
20	5959	5930
25	5765	5730
30	5528	5484
35	5233	5191
40	4879	4845
45	4470	4440
50	4019	3972
55	3519	3449
60	2916	2803
65	2237	2149
70	1540	1444
75	885	804
80	350	297
85	87	65
90	7	5

Coefficients of Utilization

rc rw RCR	Effective Floor Cavity Reflectance 20%																								
	80%				70%				50%				30%				10%				0%				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100							
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85							
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72							
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61							
4	84	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52							
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45							
6	71	58	49	43	69	57	48	42	55	47	42	53	47	42	52	46	41	39							
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	37	35							
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31							
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28							
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25							

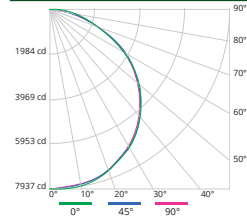
HB-20250LM-8-50K-MV-LVD

Luminaire Data

IES File Name	63802261.IES
CCT & CRI	5000K, 80CRI minimum
Initial Delivered Lumens	22,242
Wattage	150.5W
Efficacy	147.8
Beam Angle	50% = 114° 10% = 154°
Spacing	0° = 1.32 90° = 1.30

Photometric values based on tests performed in compliance with LM-63 & LM-79

Indoor Candela Plot



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	6248	28.1%
0-40	10319	46.4%
0-60	18421	82.8%
0-90	22220	99.9%
0-180	22242	100.0%

Candlepower

Angle	0°	90°
0	7933	7933
5	7915	7901
10	7838	7817
15	7712	7681
20	7526	7483
25	7275	7226
30	6959	6915
35	6580	6528
40	6140	6064
45	5638	5537
50	5074	4958
55	4438	4314
60	3630	3501
65	2785	2626
70	1903	1744
75	1077	942
80	421	328
85	97	81
90	7	4

Coefficients of Utilization

rc rw RCR	Effective Floor Cavity Reflectance 20%																								
	80%				70%				50%				30%				10%				0%				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100							
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85							
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72							
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61							
4	84	72	63	57	81	71	63	56	68	61	55	66	60	55	64	58	54	52							
5	77	64	55	49	75	63	55	49	61	54	48	59	53	47	57	51	47	45							
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39							
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37	35							
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31							
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28							
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25							

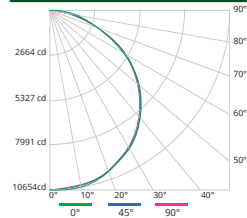
HB-27000LM-8-50K-MV-LVD

Luminaire Data

IES File Name	63803361.IES
CCT & CRI	5000K, 80CRI minimum
Initial Delivered Lumens	29,756
Wattage	201.8W
Efficacy	147.5
Beam Angle	50% = 114° 10% = 154°
Spacing	0° = 1.30 90° = 1.30

Photometric values based on tests performed in compliance with LM-63 & LM-79

Indoor Candela Plot



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	8374	28.1%
0-40	13811	46.4%
0-60	24624	82.8%
0-90	29727	99.9%
0-180	29756	100.0%

Candlepower

Angle	0°	90°
0	10651	10651
5	10610	10600
10	10503	10482
15	10325	10293
20	10076	10024
25	9714	9663
30	9264	9211
35	8726	8681
40	8123	8081
45	7448	7402
50	6683	6616
55	5795	5720
60	4778	4682
65	3632	3545
70	2445	2370
75	1348	1268
80	514	452
85	113	99
90	15	6

Coefficients of Utilization

rc rw RCR	Effective Floor Cavity Reflectance 20%																								
	80%				70%				50%				30%				10%				0%				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100							
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85							
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72							
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61							
4	84	72	63	57	81	71	63	56	68	61	55	66	60	55	64	58	54	52							
5	77	64	55	49	75	63	55	49	61	54	48	59	53	47	57	51	47	45							
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39							
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35							
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31							
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28							
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25							

HB Series

ECO Round High Bay
17,651 - 29,756 Lumens | 175-400W HID Equivalent | DLC Premium | 5-yr Warranty

PRODUCT SPECIFICATIONS

Construction

Die-cast white primary housing with specially engineered alternating heatsink fins and dedicated slots to help promote pass-through convective cooling. Reduces the fixture's operating temperatures to increase life of all electrical components and improved lumen maintenance over time. A separate die-cast driver housing is isolated from the primary heatsink to further increase component life. Complete fixture, including the driver housing and optical assembly are fully sealed and rated for IP65 ingress protection to protect the luminaire from environmental contaminants. Fixture is designed for use in wet locations.

Optics & LED Platform

LEDs are surface mounted to a metal printed circuit board (MCPCB) and is coupled with a clear tempered glass lens. Designed to generate an extremely uniform all-purpose symmetrical beam distribution (50% beam @ 114°, 10% beam @ 144°). An optional diffusing lens filter is included with each fixture (field installed) to provide a uniform and soft visual appearance when in direct-view to help reduce glare, brightness and LED pixelation for excellent visual comfort. Optional 90° secondary prismatic and aluminum reflectors are available separately. Available in 5000K CCT, with a minimum CRI of 80.

Electrical

UL recognized drivers are rated for 50,000 hours to deliver optimal performance over the extended system life of the luminaire. Universal 120-277V with 0-10V dimming capability (dimming range of 100% to 10%) for use with secondary controls by others. Fixture is supplied with 6' of 3-wire S/O cord and 6' of 2-wire dimming cord. Drivers shall have a power factor greater than 0.90 and less than 20% total harmonic distortion. 4kV surge protection is standard. Drivers are rated for FCC part 15 Class B use in commercial applications. 75.29% LED lumen maintenance at 102,000 hours (L75/102,000) per IES TM21. Projected L70 @ 128,000 hours.

Mounting & Installation

Luminaire is designed for easy and flexible pendant/suspension mount installation via standard O-ring mounting system. Fixture includes 6' of 3-wire S/O cord and 6' of 2-wire dimming cord with dimming leads provided for ease of installation. Optional adjustable yoke mount bracket accessory with hook mount accessory (use as needed) is available for field installation and field aiming as required (see mounting options for more detail). Installer must ensure installation compatibility in any application and overall compliance to all applicable local and national building and electrical codes.

Impact Rating

IK09 impact rated tempered glass design. Protection against 10 joules of impact equivalent to 5 kg (11 lbs) steel ball dropped from 200 mm (8") above impacted surface. IK Ratings are an international numeric classification to indicate the degrees of protection provided by enclosures for electrical equipment against external mechanical impacts. IK ratings are defined as IK00 to IK10. The IK rating scale identifies the ability of an enclosure to resist impact energy levels measured in joules (J) in accordance with IEC 62262:2002 and IEC 60068-2-75:1997.

Compliance & Certification

All luminaires are cULus listed and are built for wet location use. Complete fixture, including driver housing and optical assembly are rated IP65. Shall be suitable for use in -40° C (-40° F) to 50° C (122° F) high ambient environments. Complies to FCC part 15 Class B. Adheres to LM79, LM80 and TM21 industry standards for performance and lifetime calculations. DesignLights Consortium® (DLC) Premium qualified product. Always refer to DLC website at www.designlights.org/QPL to confirm specific product configurations that are qualified.

(Search first 6-digits of the model # followed by '##' on the DLC QPL...Ex. '638021##' to view DLC qualified products)

Standard Available Control Options

Optional external mounted microwave occupancy sensors are available (compatible with fixture only & secondary reflector accessories). Factory sensor settings can be changed using an optional handheld remote programmer accessory (15m | 49.2' max distance, see instruction manual for details). Standard factory default settings: 100% high, 10% low, hold time @ 5 minutes (no motion detected, dim to low), standby time @ 5 minutes (time after hold time w/ no motion detected fixture turns off), daylight sensor is disabled.

Standard Available Emergency BBU Options

Optional remote/external emergency battery backup units are available in approximately 25 or 40-watts for 120-277V use to meet required life-safety requirements (50° C/122° F max ambient). The battery system provides 90-minutes of continuous power to the LED system for code compliance. BBUs are certified in CA Title 20 MAEDBS. Test switch/indicator light is located on the exterior housing of the round BBU housing. An optional handheld test remote is also available. Multiply the lumens per watt of the specified SKU by the BBU wattage for the approximate delivered lumens. (Ex. 147 LPW x 25-watts = approximately 3,675 lumens)

Warranty

The HB Series of round high bay luminaires ships with ETi SSL's 5-year standard warranty. (Terms & Conditions apply)

MISCELLANEOUS PRODUCT SPECIFICATIONS & DETAILS

Load Information

Power Factor	> 0.90
THD	< 20%
Frequency	50/60 Hz
Sound Rating	< 20 DbA
Low Temp Start	-40° C (-40° F)
Max Temp	50° C (122° F)
Unit Weight (120W)	7.0 lbs
Unit Weight (150W)	7.0 lbs
Unit Weight (202W)	9.3 lbs

Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (102,000 hours)
25° C (77° F)	> 75.29% (all wattages)

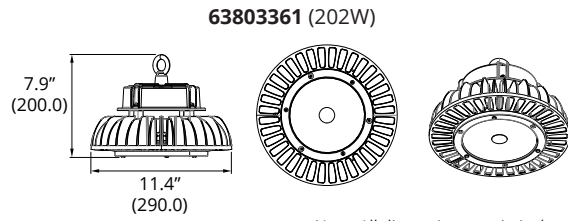
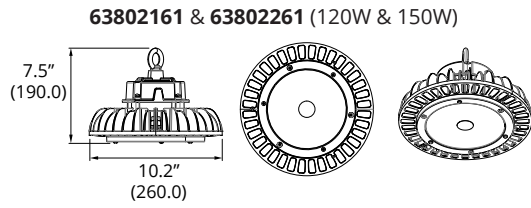
Ambient Temperature	TM-21 Theoretical L70 (hours)
25° C (77° F)	128,000 (all wattages)

Shipping Information*

Size	Unit Weight	Pallet (48"l x 40"w x 57"h)
120W	8.3 lbs	TBD units per
150W	8.3 lbs	TBD units per
202W	10.8 lbs	TBD units per

*Pallet details coming soon.

KEY DIMENSIONAL INFORMATION



Note: All dimensions are in inches (millimeters).

PROJECT NOTES

Blank area for project notes.