

# Albeo® LED Luminaires

## ABV3 Series - LED High Bay Lighting



### Product Description:

The Albeo® ABV3 LED luminaire is an exceptional mixture of value and performance. Ideal for high bay and low bay applications in industrial and commercial buildings. Designed to replace 150W-1500W HID and four-to eight-lamp T5/T8 HIF fixtures with unmatched reliability and quality. Now with integral Daintree sensors and controls!

### Performance Highlights:

**Light Output Range:** 6,500 – 90,000 lumens

**CRI:** 70 & 80 CRI

**CCT:** 3000K, 3500K, 4000K, 5000K

**Distributions:** 120°, 90°, 55°, 30° diffused, textured & clear lens options

**Input Voltage:** 120V-277V, 347V, & 480V

**Efficiency:** Up to 200 LPW

**Fixture Rated:** L70 @ 100,000 hours min. @ 55°C

**Limited Warranty:** 5 Years

**Temperature Rating:** -30°C to +55°C (-22°F to 131° F)

**Controls & Sensors:** 0-10V standard; Occupancy and Ambient Light Detection with Dimming available; Wireless Daintree™ Networked options available



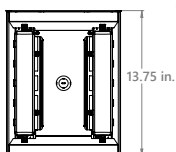
### Certifications:



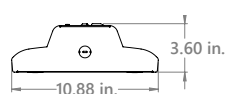
Please refer to the DLC QPL website for the latest and most complete information.  
[www.designlights.org/QPL](http://www.designlights.org/QPL)

### Product Dimensions:

9T, 9H, 12T, 12H,  
15T & 18T Output  
1S-Module

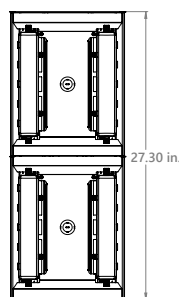


Max Weight: 10 lbs.



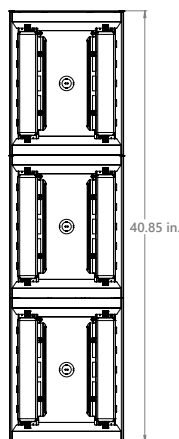
Side View

30 & 30H, 36T &  
36H Output  
2S-Module



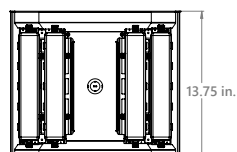
Max Weight: 20 lbs.

48T & 48H  
Output  
3S-Module

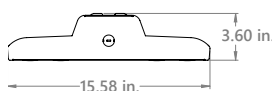


Max Weight: 30 lbs.

15H, 18H, 24T  
& 24H Output  
1D-Module

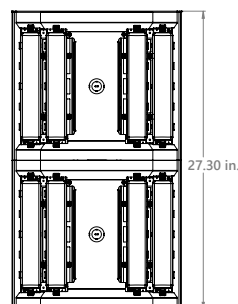


Max Weight: 11 lbs.



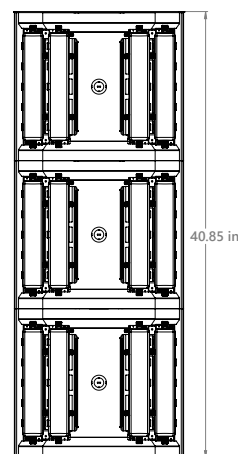
Side View

60T & 60H  
Output  
2D-Module



Max Weight: 22 lbs.

90T & 90H  
Output  
3D-Module



Max Weight: 33 lbs.

## Ordering Number Logic

## ABV3

PRODUCT ID	VOLTAGE	LUMEN OUTPUT	PERFORMANCE LEVEL	LED COLOR TEMP	OPTIC / LENS	CONTROLS	MOUNTING	CORD	PLUG	FINISH	OPTIONS
ABV3 = Albeo Highbay ABV 3 <sup>rd</sup> Gen	0 = 120-277 1 = 120* 2 = 208* 3 = 240* 4 = 277* 5 = 480* D = 347* *Specify single voltage if plug, sensor, or wireless needed.	09 = 9,000 12 = 12,000 15 = 15,000 18 = 18,000 24 = 24,000 30 = 30,000 36 = 36,000 48 = 48,000 60 = 60,000 90 = 90,000	T = Standard Efficiency H = High Performance	70 Plus CRI 47 = 4000K 57 = 5000K 80 Plus CRI 38 = 3000K C8 = 3500K 48 = 4000K 58 = 5000K 90 Plus CRI C9 = 3500K 49 = 4000K	Open Optic: Max. Efficiency 1Q = 120° No Lens 9Q = 90° No Lens  Clear Lens: Moderate Glare Reduction 1C = 120° Clear 9C = 90° Clear 5C = 55° Clear 3C = 30° Clear WC = Wide Parking Garage Optic  Diffused Lens: Max. Glare Reduction 1D = 120° Diffused 9D = 90° Diffused 5T = 55° Textured Diffused 3T = 30° Textured Diffused	QQ = None QV = 0-10V Dimming  Daintree™ Networked: NA = Occ, Ambient Light Sensor, iBeacon w/ High-Low Dim NB = Occ & Ambient Light Sensor w/ High-Low Dim TQ* = ZigBee Wireless Daintree™ Enabled  Daintree™ One: FB = Occ & Ambient Light Sensor w/ High-Low Dim FD = Occ & Ambient Light Sensor On/Off FF = Occ w/ High-Low Dim FH = Occ On/Off FK = Ambient Light Sensor w/ High-Low Dim FM = Ambient Light Sensor On/Off  NOTE: 40ft (12m) height, WHR1 IR Remote 93131632 * T Wireless Control (no sensor) must use Discrete Voltage for all Lumen packages over 24,000lm AQ* = Occ Sensor On/Off 360° LSXR, No External Wiring BQ* = Occ Sensor High-Low Dimming 360° LSXR PQ* = Daylight Sensor w/occupancy On/Off LSXR, No External Wiring * 15-45ft (4.6-13.7m) mounting heights  Full Featured: 2Q = Motion Sensor w/Daylight, High-Low Dimming, and IR Remote Adjustable (IR remote sold separately to modify default settings)	ST = Standard (no hardware included) 22 = 1/2" Threaded rod mount kit  Rod and nuts not included SM = Surface Mount Hardware not included 23 = 3/4" Pendant Mount Kit  3/4" Conduit not included 41 = Y-Cable/ Hook 5ft. 42 = Y-Cable/ Hook 10ft. 43 = Y-Cable/ Hook 15ft. 44 = Y-Cable/ Hook 20ft.  UP = Standard Inverted Mount 61 = Inverted Mount Y-Cable/ Hook 5ft. 62 = Inverted Mount Y-Cable/ Hook 10ft. 63 = Inverted Mount Y-Cable/ Hook 15ft. 64 = Inverted Mount Y-Cable/ Hook 20ft.	K = Knockout A = 6ft. 18ga Black Cord B = 12ft. 18ga Black Cord C = 15ft. 18ga Black Cord D = 20ft. 18ga Black Cord  Specialty Modular Cord Sets: FS = Reloc OCS - 10ft. 18ga White Cord GS = Reloc OCS - 15ft. 18ga White Cord MF = Plug-N-Go - 3ft. 18ga Black Cord HF = Plug-N-Go - 10ft. 18ga Black Cord  LE = ACS - MC Flex3+ 6ft 2EA6-LW 277/480 #16AWG NE = ACS - MC Flex3+ 12ft 2EA12-LW 277/480 #16AWG	Q = None A = 15A straight plug B = 20A straight plug C = 15A twist lock plug D = 20A twist lock plug	W = White Powder Coat K = Black Powder Coat E = Emergency Orange Powder Coat	Blank = No Special Options 1PK = Single Pack for distributor stocking. Default is Job Pack. *Not Available for 90T & 90H. EL1 = 120° Battery Backup* EL5 = 50° Battery Backup* *Battery Backup not available for 347V/480V ZL1 = WHS20 Low Lens (2.5m or 8ft) ZL2 = WHS20 Medium Lens (6m or 20ft)

LUMEN PACKAGE	OUTPUT LEVEL	70 CRI @ 4000K OR 5000K CCT				MODULE BODY
		TYPICAL DELIVERED LUMENS	TYPICAL POWER		TYPICAL LPW 120-277V	
			120-277V	347/480V		
09	T	9,000	50	52	180	1S
09	H	9,000	46	48	196	1S
12	T	11,900	68	70	175	1S
12	H	11,900	61	63	195	1S
15	T	15,200	92	93	165	1S
15	H	15,200	81	82	188	1S
18	T	17,600	109	110	161	1S
18	H	17,600	88	91	200	1D
24	T	23,400	137	139	171	1D
24	H	23,400	122	124	192	1D
30	T	30,400	184	185	165	2S
30	H	30,500	163	164	187	2S
36	T	35,500	221	222	160	2S
36	H	35,500	190	194	187	2S
48	T	47,400	284	291	167	3S
48	H	47,400	248	257	191	3S
60	T	58,500	360	367	163	2D
60	H	58,500	314	323	186	2D
90	T	87,700	554	554	158	3D
90	H	87,700	483	486	182	3D

\*All packages are 55°C rated with the exception of 60T & 90T which is 45°C ambient max rated

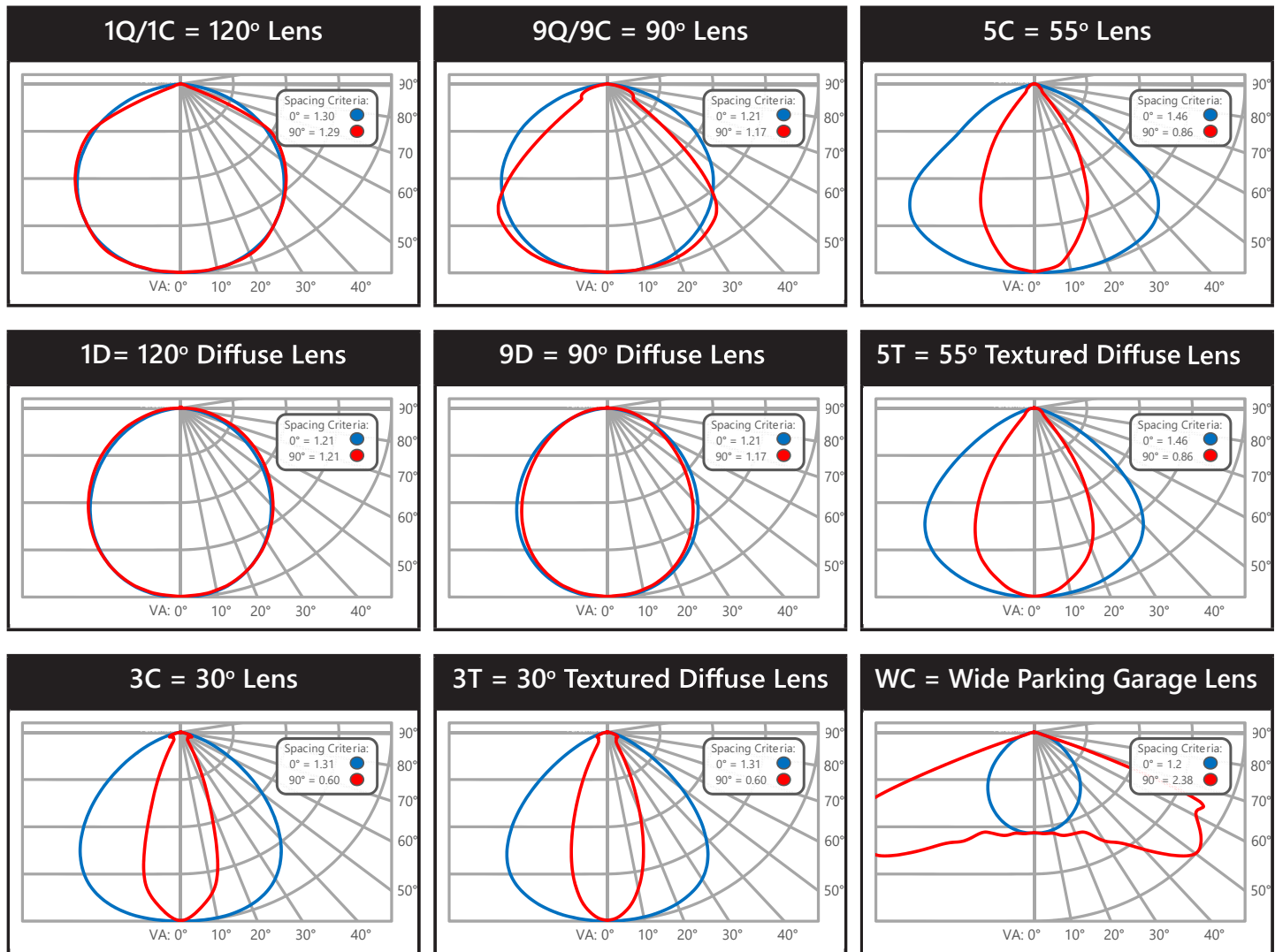


CONTROLS CODE	DESCRIPTION
QQ	None
QV	0-10V Top Access Control Wires
TQ	ZigBee Wireless Daintree™ Enabled
NA	Occupancy and Ambient Light (AL) Detection with Dimming and iBeacon Functionality
NB	Occupancy and Ambient Light (AL) Detection with Dimming Functionality
FB	Occupancy and Ambient Light Detection with High-Low Dimming Functionality
FD	Occupancy and Ambient Light Detection On/Off Only
FF	Occupancy Detection with High-Low Dimming Functionality
FH	Occupancy Detection On/Off Only
FK	Ambient Light Detection with High-Low Dimming Functionality
FM	Ambient Light Detection On/Off Only

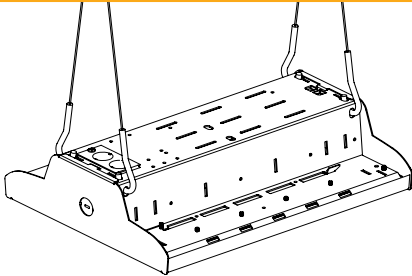
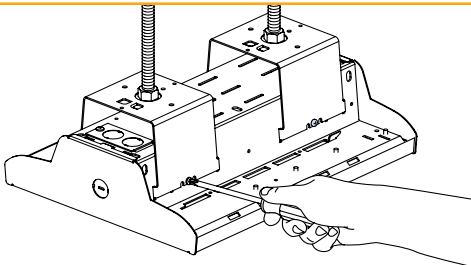
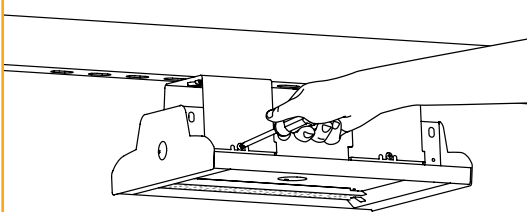
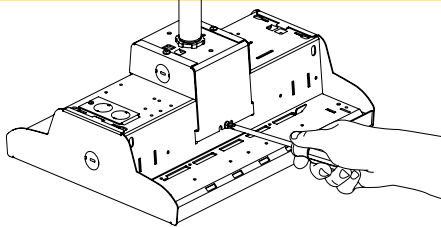

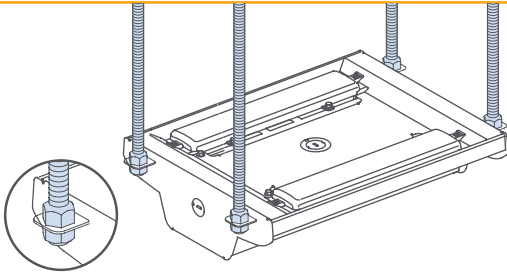
NOTE: See WHS20 spec sheet (Pg. 4) for default program parameters and occupancy detection patterns  
 - DAINTREE™ ONE Upgradeable to DAINTREE™ NETWORKED  
 - WHR1 Remote PN: 93131632  
 - 40ft (12m) mounting height

CRI	CCT	LUMEN PACKAGE OUTPUT		OPTIC CODE	OPTIC DESCRIPTION	OUTPUT
		T OUTPUT	H OUTPUT			
70	5000	100%	100%	1Q	120° No Lens	100%
	4000	100%	100%	9Q	90° No Lens	98%
80	5000	95%	98%	1C	120° Clear Lens	98%
	4000	92%	92%	9C	90° Clear Lens	96%
	3500	90%	92%	5C	55° Clear Lens	96%
90	5000	87%	92%	3C	30° Clear Lens	97%
	3500	79%	78%	1D	120° Diffused Lens	93%
	4000	81%	79%	9D	90° Diffused Lens	91%
WC				5T	55° Textured Diffused Lens	94%
				3T	30° Textured Diffused Lens	95%
				WC	Wide Parking Garage Optic	94%

## Photometric Data:

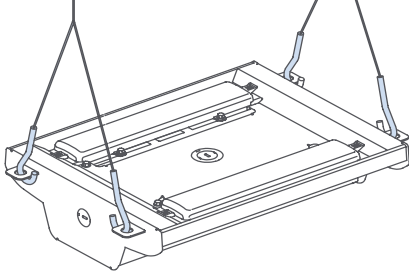


## Mounting & Accessories:

MOUNTING OPTIONS	IMAGE	ORDER LOGIC CODE	AFTERMARKET ORDER LOGIC
<b>Standard Chain/Cable Mount</b> Available on all fixture configurations (chain not included). Y-Cable w/ hook can be ordered as an accessory.		ST = Standard (No chain or mounting hardware included)	<b>Aftermarket:</b> NA
<b>Rod Mount (optional)</b> <b>Available on all fixture</b> configurations. Attaches to 1/2" threaded rod (rod and nuts not included).		22 = 1/2" Threaded Rod Kit	<b>SKU:</b> 93120346 Description: 1/2" Surface Mounting Kit
<b>Surface Mount (optional)</b> Available on all fixture configurations. Attaches to structural member in ceiling. (Hardware not included.)		SM = Surface Mount	
<b>Pendant Mount (optional)</b> Available on all fixture configurations. Attaches to 3/4" threaded conduit (conduit not included).		23 = 3/4" Pendant Mount Kit	<b>SKU:</b> 93120347 Description: 3/4" Pendant Mounting Kit
<b>Y-Cable w/hook (optional)</b> Use with Standard Mounting Option only. Order separately. Price adder per pair. 5 ft., 10 ft., 15 ft., 20 ft. lengths available.			<b>(41) Y-Cable/Hook 5ft:</b> 93075756 <b>(42) Y-Cable/Hook 10ft:</b> 93075552 <b>(43) Y-Cable/Hook 15ft:</b> 93075553 <b>(44) Y-Cable/Hook 20ft:</b> 93075554
<b>Standard Inverted Mount</b> Available on all fixture configurations Attaches to 3/8" threaded rod (rod not included)		UP = Standard Inverted Mount	<b>Aftermarket:</b> NA

Chain/cable mount is standard and included in price. Price adder for Y-Cable, Rod Mount, Pendant Mount, and Rotatable Bracket. Consult Sales for latest information. See "Installation Instructions" for mounting details.

## Mounting & Accessories:

MOUNTING OPTIONS	IMAGE	ORDER LOGIC CODE	AFTERMARKET ORDER LOGIC
Inverted Y- Cable Mount		<b>61</b> = Inverted Mount Y-Cable/ Hook 5ft <b>62</b> = Inverted Mount Y-Cable/ Hook 10ft <b>63</b> = Inverted Mount Y-Cable/ Hook 15ft <b>64</b> = Inverted Mount Y-Cable/ Hook 20ft	<b>Aftermarket:</b> NA

## Accessories & Renewal Parts

### Replacement Lenses & Optics



ORDERING SKU	ORDERING CAT# LOGIC	FIXTURE CAT# LOGIC	DESCRIPTION
93075866	ABV3 D Kit	1D or 9D	Diffused Lens Only (2 lenses)
93075867	ABV3 C Kit	1C or 9C	Clear Lens Only (2 lenses)
93075988	ABV3 9 Kit	9C or 9D	90 degree Optic (2 reflectors)
93075989	ABV3 1 Kit	1C or 1D	120 degree Optic (2 reflectors)
93117671	ABV3 5T Kit	5T	Textured Diffused 55 degree Lens (2 lenses)
93075991	ABV3 5C Kit	5C	Clear 55 degree Lens (2 lenses)
93117672	ABV3 3T Kit	3T	Textured Diffused 30 degree Lens (2 lenses)
93075993	ABV3 3C Kit	3C	Clear 30 degree Lens (2 lenses)

### Wire Guards



ORDERING SKU	ORDERING CAT# LOGIC	FIXTURE CAT# LOGIC	DESCRIPTION
93077600	WG ABV3 1S WT	9T, 9H, 12T, 12H, 15T, 15H, 18T	1S Wire Guard White Painted
93077666	WG ABV3 1D WT	18H, 24T, 24H	1D Wire Guard White Painted
93077602	WG ABV3 2S WT	30T, 30H, 36T, 36H	2S Wire Guard White Painted
93077604	WG ABV3 3S WT	48T, 48H	3S Wire Guard White Painted
93077668	WG ABV3 2D WT	60T, 60H	2D Wire Guard White Painted

\*Wire Guards must be ordered in packs of 5 each\*

### Field Swappable WHS20 Sensor Accessories



ORDERING SKU	ORDERING CAT# LOGIC	DESCRIPTION	QTY
93134998	WHS20_LOW_LENS_KIT	Low Lens: 2.5m (8ft)	1
93134999	WHS20_LOW_LENS_KIT_10		10
93135000	WHS20_MED_LENS_KIT	Med Lens: 6m (20ft)	1
93135001	WHS20_MED_LENS_KIT_10		10
93135002	WHS20_HIGH_LENS_KIT	High Lens: 12m (40ft)	1
93135003	WHS20_HIGH_LENS_KIT_10		10
93134984	WHS20_SNAP_AISLE_MASK_KIT	Snap On Aisle Mask	1
93134985	WHS20_SNAP_AISLE_MASK_KIT_10		10

**NOTE:** See WHS20 spec sheet for Occupancy Detection Patterns



## LED & Optical Assembly

**CRI:** 70 & 80 CRI Standard

**Fixture Rated Life:** L70 @ 100,000 hrs. 55°C Fixtures are certified to depreciate no more than 30% at max. ambient temperature conditions.

**TM-21 Calculation at 25°C:** L70 @ 250,000 hrs minimum  
L90 @ 65,000 hrs minimum

**Distribution /Lenses:**

No Lens: 90°, 120° open optic (most efficient)

Clear Refractive Optic: 30°, 55°, wide distribution

Textured Refractive Optic: 30°, 55°, (reduced glare)

Clear Lens (optional): 90°, 120°

Diffused Lens (optional): 90°, 120°  
(maximum glare reduction)

**Wire Guard Option:** For added fixture protection. Ships separately for ease of fixture install. Easily field installable.

## Electrical

**Input Voltage:** 120-277V, 347V, or 480V

**Input Frequency:** 50/60Hz

**System Power Factor (PF):** >0.9\*

**Total Harmonic Distortion (THD):** <20%\*

**LED Driver Type:** Class1, 3kV surge protection

**EMI:** FCC CFR Title 47 Part 15, Class A

\* PF and THD may vary with options

## Ratings & Evaluations

**Operating Temperature:** -30°C to +55°C (-22°F to 131° F)

**Storage Temperature:** -40°C to +70°C

**Surge protection:** 3kV driver surge protection

**Location:** UL 1598 Suitable for Damp Locations

**Safety:** UL/cUL Listed 

**Environmental:** RoHS compliant

**Utility:** DLC Premium on all 70 CRI & selected 80 CRI options.

DLC Premium on all H Output options.



Meets DLC Standard on all CRI versions Please refer to <http://www.designlights.org/QPL> for complete information

## Construction & Finish

**Housing:** Combination steel and aluminum

**Lensing:** Polycarbonate diffused, acrylic clear

**Reflector:** White highly effective polycarbonate

**Paint:** Powder coat painted housing

No glass in housing or lenses

**Weight:** 10-11 lbs. per module (see dimensional drawings)

## Controls

**Standard Dimming:** 0-10VDC

**Minimum Dimming:** Dim down to 10%

**Wireless Networking & Sensing:**

- WHS20 Zigbee Wireless Daintree™ control module with available Occupancy Detection, Ambient Light Detection, Dimming, and iBeacon Functionality
  - See table on page 2 for details
  - See WHS20 spec sheet for Default Programming Parameters
  - WHR1 IR Remote = SKU # 93131632
- ZigBee Wireless Daintree with No Sensor – Sensor TQ
- Wattstopper FSP Series Motion + daylight + IR config (IR remote sold separately) – Sensor 2Q
- Wattstopper FSP remote = SKU# 93076263
- Sensor Switch LSX LSXR Series - Sensor AQ, BQ, or PQ

## Mounting

**Typical Mounting:**

- Standard Chain/Cable mount ready
- Threaded rod kit & Surface mount optional
- Pendant mount kit optional

**Inverted Mounting:**

- Standard Chain/Cable mount ready
- Rod Inverted Mounting option, see pg. 4

**Cord & Plugs:**

- Standard = knockout access (no cord, no plug)
  - 6 ft, 12 ft, 15 ft, 20 ft cord options
- 15A, 20A, Straight or twist lock plug- Plugs A, B, C, or D
- Reloc OCS Cord-Plug FS or GS
- Plug-N-Go Cord-Plug MF or HF

## Accessories, Options & Packaging

**Optional Emergency Battery:** Provides 90-minutes of Emergency lighting. Design lumen output: 1650-1750lm. Fully independent LED system that does not degrade performance or ratings of the fixture. 120-277V Only Ships separately from fixture to avoid shipping damage.

**Standalone EMBB:** Order as field installed aftermarket or standalone solution for emergency lighting. 2lbs  
SKU# 93059499 - ASM2430 50° beam 1750 lm  
SKU# 93059500 - ASM2429 120° beam 1650 lm

**Packaging:** Standard pack is job pack/bulk pack consisting of 7-21 fixtures in a half Gaylord box. Fixtures are sleeve-wrapped within the bulk box for quick unloading at jobsite. Orders of <14 fixtures are typically single pack. Single Pack (i.e. for stocking) - Option 1PK. 90T & 90H are bulk pack only.

## Design Life & Warranty

**Reliability Testing:** Fixture components designed to exceed 100,000 hrs of operation at the worst possible rated conditions. Complete system evaluated at extreme conditions and monitored during production.

**System Warranty:** 5 years