

ABV4 Series

LED High Bay Lighting

The **Albeo® ABV4** 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 fixtures with unmatched reliability and quality. Now with integral Daintree® sensors and controls. See optic **N1** for aisle distribution!



CONSTRUCTION

| | |
|--------------------------|---|
| Housing: | Combination steel and aluminum |
| Lens: | Polycarbonate, Acrylic |
| Paint: | Powder coat painted housing No glass in housing or lenses |
| Weight: | 10–11 lbs (4.55–4.99 kg) per module (see dimensional drawings) |
| Optical Assembly: | Polycarbonate reflective optics with optional lens |

OPTICAL SYSTEM

| | |
|----------------------|---|
| Distribution: | Wide, Wide Diffused (reduce Glare), Medium and Narrow |
| Lumens: | 9,000–90,000 |
| Efficacy: | 167 - 197 LPW typical |
| CCT: | 3000K, 3500K, 4000K, 5000K |
| CRI: | 70, 80, & 90 |

ELECTRICAL

| | |
|--|--|
| Input Voltage: | 120V–277V, 347V, & 480V |
| Input Frequency: | 50/60Hz |
| LED Driver Type: | Designed to exceed 100,000 hrs of operation at worst possible rated conditions |
| Power Factor (PF)*: | >0.9* |
| Total Harmonic Distortion (THD)*: | <20%* |
| Surge Protection: | Tested per ANSI C136.2-2015 <ul style="list-style-type: none"> • 6kV surge protection, standard for Lumen Output '24' and higher • 3kV surge protection, Lumen Output '18' and lower |
| EMI: | FCC CFR Title 47 Part 15, Class A |

* PF and THD may vary with options

CONTROLS

| | |
|------------------|---|
| Dimming: | Standard 0–10VDC, 10% |
| Controls: | High-end trim, occupancy and ambient light detection with dimming available. Wireless Daintree® options available. |
| Listing | DLC 5.1 LLC: Integrated/embedded networked lighting controls, luminaire-level lighting control (LLC) |

LUMEN AMBIENT TEMPERATURE

| TYPE | TEMPERATURE RATE |
|------------------------------|---------------------------------|
| OPERATING TEMPERATURE | –30°C to +55°C (–22°F to 131°F) |
| STORAGE TEMPERATURE | –40°C to +70°C (–40°F to 158°F) |

LUMEN MAINTENANCE

| ESTIMATED LXX(10K) @ HRS 250,000 HR AT 25°C | REPORTED LXX(10K) @ HRS 65,000 HR AT 25°C | LXX(10K) @ HOURS 100,000 HR AT 55°C |
|--|--|--|
| L70 | L90 | L70 |

MOUNTING & ACCESSORIES

- **Typical Mounting:**
 - Standard Chain/Cable mount ready
 - Threaded rod kit & Surface mount optional
 - Pendant mount kit optional
- **Standard:** Knockout access (no cord, no plug)
- **Cord & Plugs:**
 - 6 ft, 12 ft, 15 ft, 20 ft cord options
 - 5A, 20A, Straight or twist lock plug
 - Reloc OCS Cord-Plug FS or GS
 - Plug-N-Go Cord-Plug MF or HF
- **Wire Guard Option Available**
- **Integral and Accessory EMBB Options Available**

DESIGN LIFE & WARRANTY

- **Reliability Testing:** Fixture components designed to exceed 100,000 hrs of operation at the worst possible rated conditions. Please refer to the DLC QPL website for the latest and most complete information: <http://www.designlights.org/QPL>
- **Certification:** UL/cUL Listed, RoHS
- **Packaging:** Standard job pack contain 7–21 fixtures. Orders of <14 are typically single pack. 90T & 90H are bulk pack only.
- **Current's Limited 5-year Warranty:** See website
- **Rated:** IP20, Damp
- Certain airborne contaminants can reduce integrity of acrylic material and LEDs and may negatively affect the functioning of the LEDs and other electronic components, depending on factors such as concentration levels, ventilation and temperature. (Contact manufacturer for list of substances)



DLC Premium on select configurations. Call factory for details



ABV4 Series

LED High Bay Lighting

Ordering Information

CUSTOMER NAME _____

Project Name _____

Date _____ Type _____

Catalog Number _____

ABV4

| PRODUCT ID | VOLTAGE | LUMEN OUTPUT | CCT/CRI | OPTICS/LENS | CONTROLS | MOUNTING | CORD ¹ | PLUG ² | FINISH | OPTIONS |
|--|---------------|---------------|--------------------|---|---|---|---|-------------------------|---------------|--|
| ABV4 = Albeo® Highbay ABV 4 th Gen | 0 = 120-277 | 09 = 9,000lm | 70 Plus CRI | W1 = 120° No Lens | QQ = Dimming leads not externally accessible | ST = Standard | K = Knockout | Q = None | WHITE = White | Blank = No Special Options 1PK = Single Pack for distributor stocking. Default is Job Pack (7-21). E20 ^{5,6,10,11} = Emergency Unit 20W E30 ⁸ = 30W integrated emergency battery pack. Certified in CA Title 20 MAEDBS (Assurance L Series) GTD ⁷ = Generator Transfer Device WC = White Cord SP10 = 10kV Surge Protection Uplight (nominal lumens) ^{16,17,18,19} U1 = 1000 lumens U2 = 2000 lumens U3 = 3000 lumens U4 = 4000 lumens |
| | 1 = 120 | 12 = 12,000lm | 47 = 4000k | WD = 120° Diffused ¹³ | QV = 0-10V Dimming | SM = Surface Mount | A = 6ft. 18ga black cord | A = 15A Straight Plug | BLACK = Black | |
| | 4 = 277 | 15 = 15,000lm | 57 = 5000k | M1 = 55° Diffused ¹⁴ | Daintree® Networked: | 22 = 1/2" Threaded rod mount kit (Rod and nut not included) | B = 12ft. 18ga black cord | B = 20A Straight Plug | | |
| | D = 347 | 18 = 18,000lm | 80 Plus CRI | N1 = 30° Diffused ¹⁴ | NA = Occupancy & Ambient Light Sensor, w/ Continuous Dimming (full feature) | 23 = 3/4" Pendant Mount Kit | C = 15ft. 18ga black cord | C = 15A Twist Lock Plug | | |
| | 5 = 480 | 24 = 24,000lm | 38 = 3000k | | TQ ³ = Wireless Daintree® Enabled (no sensor) | 41 = Y-Cable/ Hook 5ft. | D = 20ft. 18ga black cord | D = 20A Twist Lock Plug | | |
| | | 30 = 30,000lm | C8 = 3500k | | Daintree® EZ Connect: | 42 = Y-Cable/ Hook 10ft. | | | | |
| | | 36 = 36,000lm | 48 = 4000k | | DF = Occupancy & Ambient light sensor w/ Continuous Dimming | 43 = Y-Cable/ Hook 15ft. | | | | |
| | | 48 = 48,000lm | 58 = 5000k | | Daintree® One: | 44 = Y-Cable/ Hook 20ft. | | | | |
| | | 60 = 60,000lm | 90 Plus CRI | | FB = Occupancy & Ambient Light Sensor with Continuous Dimming | | | | | |
| | | 72 = 72,000lm | C9 = 3500k | | 3rd Party Options ⁴: | | | | | |
| | 90 = 90,000lm | 49 = 4000k | | QA = Occupancy Sensor On/Off 360° LSXR, No External Wiring | | | | | | |
| | | | | QB ¹² = Occupancy Sensor Continuous Dimming 360° LSXR | | | | | | |
| | | | | QP = Daylight Sensor w/occupancy On/Off LSXR, No External Wiring, Full Featured | | | | | | |
| | | | | | | | Specialty Modular Cord Sets^{2a}: | | | |
| | | | | | | | FS = Reloc 10ft 18ga White Cord | | | |
| | | | | | | | GS = Reloc 15ft 18ga White Cord | | | |
| | | | | | | | MF = Plug-N-Go - 3ft. 18ga Black Cord | | | |
| | | | | | | | HF = Plug-N-Go - 10ft. 18ga Black Cord | | | |
| | | | | | | | LE ⁹ = ACS - MC Flex3+ 10ft 2EA 10-LW 277/480 #16AWG | | | |
| | | | | | | | NE ⁹ = ACS - MC Flex3+ 12ft 2EA 12-LW 277/480 #16AWG | | | |

- 3-conductor cords. Dimming leads separate if controls option QV is selected. Contact factory if 5-conductor cord is needed.
- Must specify discrete voltage. See NEMA Plug Type Table.
- TQ not available with 72/90 Lumen or D/5 Voltage.
- QA, QB, QP not available with 72/90 Lumen.
- Emergency unit and 347/480VAC version not available with mounting SM, 22 and 23.
- Contact manufacturer for specialty and regular cord feasibility
- GTD with 347/480V contact factory
- Contact factory for lead-time.
- Available with Voltage 4 or 5 only
- Not available with GTD
- Only available with Single Pack
- QB not available with 480V
- WD is Polycarbonate lens
- N1 and M1 are acrylic lenses
- NX Connect devices can be customized with the NX Connect app, available on the Apple® Store. NX Connect sensors are typically bottom mounted
- ST Mounting Option only
- For 347/480V contact factory
- Only available up to 48,000 lumens
- Uplight max ambient temperature = +40°C

NOTE:

See WHS20 spec sheet for default program parameters and occupancy detection patterns.

- Daintree Wireless Controls can be upgraded over time for greater functionality.
- WHR1 Remote PN: 93131632
- Daintree EZ Connect App can be downloaded on the Apple® App Store.
- 40ft (12m) mounting height.



ABV4 Series
LED High Bay Lighting
Ordering Information

CUSTOMER NAME _____

Project Name _____

Date _____ Type _____

Catalog Number _____

| 70 CRI @ 4000K OR 5000K CCT | | | | | | | |
|-----------------------------|--------------------------|---------------|----------|----------------------|------------------|-------------|---------------------------------|
| LUMEN PACKAGE | TYPICAL DELIVERED LUMENS | TYPICAL POWER | | TYPICAL LPW 120-277V | TYPICAL LPW 347V | MODULE BODY | TYPICAL LUMEN IN EMERGENCY MODE |
| | | 120-277V | 347/480V | | | | |
| 09 | 9,000 | 46 | 48 | 197 | 188 | 1S | 3755 |
| 12 | 12,000 | 61 | 63 | 196 | 190 | 1S | 3794 |
| 15 | 15,000 | 78 | 79 | 192 | 189 | 1S | 3789 |
| 18 | 18,000 | 97 | 95 | 187 | 190 | 1S | 3800 |
| 24 | 24,000 | 135 | 133 | 178 | 181 | 1S | 3614 |
| 30 | 29,000 | 173 | 171 | 167 | 170 | 1S | 3401 |
| 36 | 36,000 | 194 | 192 | 184 | 187 | 2S | 3747 |
| 48 | 48,000 | 271 | 266 | 177 | 180 | 2S | 3603 |
| 60 | 60,000 | 319 | 314 | 188 | 191 | 2D | 3822 |
| 72 | 72,000 | 370 | 364 | 195 | 198 | 3D | 3959 |
| 90 | 90,000 | 477 | 470 | 189 | 192 | 3D | 3832 |

| OPTIC CODE | OPTIC DESCRIPTION | OUTPUT |
|------------|----------------------------|--------|
| W1 | 120° No Lens | 100% |
| WD | 120° Diffused Lens | 93% |
| M1 | 55° Textured Diffused Lens | 94% |
| N1 | 30° Textured Diffused Lens | 95% |

| CRI | LUMENS | CCT | LUMEN PACKAGE OUTPUT |
|-----|-----------|------|----------------------|
| 70 | All Lumen | 4000 | 100% |
| | | 5000 | 100% |
| 80 | | 5000 | 92% |
| | | 4000 | 92% |
| | | 3500 | 90% |
| 90 | | 3000 | 87% |
| | 3500 | 81% | |
| | | 4000 | 83% |

LPW/LUMEN SPECS BASED ON WIDE DISTRIBUTION

De-rate 5°C for "SM" Surface Mount Option

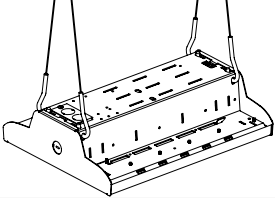
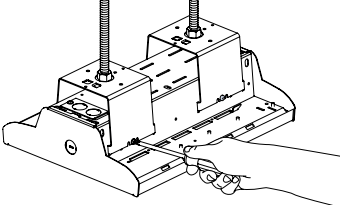
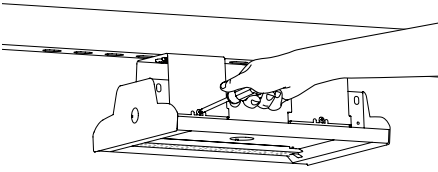
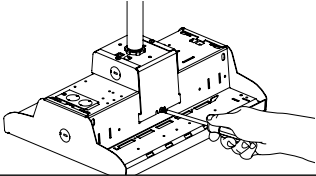
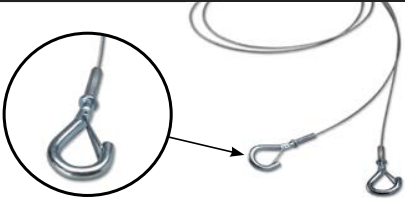
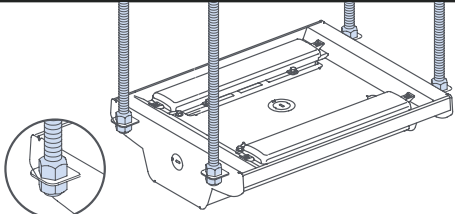
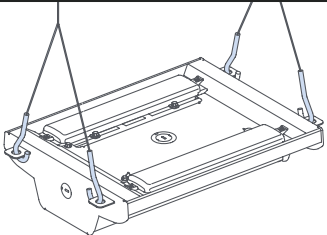
Add 7W for "E20" option and 10W for "E20" with 347/480V input. (Charging Load)

| NEMA PLUG TYPE | | | | |
|----------------|------------------|------------------|--------------------|----------------------|
| VOLTAGE | A (15A STRAIGHT) | B (20A STRAIGHT) | C (15A TWIST LOCK) | 20D (1 A TWIST LOCK) |
| 120 | 5-15P | 5-20P | L5-15P | L5-20P |
| 277 | 7-15P | 7-20P | L7-15P | L7-20P |
| 347 | 24-15P | 24-20P | N/A | L24-20P |
| 480 | N/A | N/A | N/A | L8-20P |

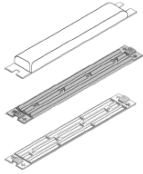
| FIELD INSTALLABLE 20W BATTERY KITS* | |
|-------------------------------------|---------------|
| ORDERING SKU | ABV BODY SIZE |
| 93313452 | 1S |
| 93313453 | 2S, 2D, 3D |

*Emergency battery pack options are California Energy Commission (CEC) Title 20 compliant

MOUNTING AND ACCESSORIES:

| MOUNTING OPTIONS | IMAGE | ORDER LOGIC CODE | AFTERMARKET ORDER LOGIC |
|---|---|---|--|
| <p>Standard Chain/Cable Mount</p> <p>Available on all fixture configurations (chain not included). Y-Cable w/hook can be ordered as an accessory.</p> |  | <p>ST = Standard (No chain or mounting hardware included)</p> | <p>Aftermarket: NA</p> |
| <p>Rod Mount (optional)</p> <p>Available on all fixture configurations. Attaches to 1/2" threaded rod (rod and nuts not included).</p> |  | <p>22 = 1/2" Threaded Rod Kit</p> | <p>SKU: 93120346G Description: 1/2" Surface Mounting Kit NOTE: Kit included two (2) brackets.</p> |
| <p>Surface Mount (optional)</p> <p>Available on all fixture configurations. Attaches to structural member in ceiling. (Hardware not included.)</p> |  | <p>SM = Surface Mount</p> | |
| <p>Pendant Mount (optional)</p> <p>Available on all fixture configurations. Attaches to 3/4" threaded conduit. (conduit not included).</p> |  | <p>23 = 3/4" Pendant Mount Kit</p> | <p>SKU: 93120347G Description: 3/4" Pendant Mounting Kit</p> |
| <p>Y-Cable w/hook (optional)</p> <p>Use with Standard Mounting Option only. Order separately. Price adder per pair. 5 ft., 10 ft., 15 ft., 20 ft. lengths available.</p> |  | | <p>(41) Y-Cable/Hook 5ft: 93075756G (42) Y-Cable/Hook 10ft: 93075552G (43) Y-Cable/Hook 15ft: 93075553G (44) Y-Cable/Hook 20ft: 93075554G</p> |
| <p>Standard Inverted Mount</p> <p>Available on all fixture configurations. Attaches to 3/8" threaded rod (rod not included)</p> |  | <p>UP = Standard Inverted Mount</p> | <p>Aftermarket: NA NOTE: Dimensions center hole to center hole of inverted mount are: Single-Wide (1S, 2S, 3S housings): Width 7.4" Double-Wide (1D, 2D, 3D housings): Width 12.06" Lengths: 14.87" (1S/1D), 28.42" (2S, 2D), 41.97" (3S, 3D)</p> |
| <p>Inverted Y- Cable Mount</p> |  | <p>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</p> | <p>Aftermarket: NA NOTE: Dimensions center hole to center hole of inverted mount are: Single-Wide (1S, 2S, 3S housings): Width 7.4" Double-Wide (1D, 2D, 3D housings): Width 12.06" Lengths: 14.87" (1S/1D), 28.42" (2S, 2D), 41.97" (3S, 3D)</p> |

REPLACEMENT LENSES & OPTICS:



| ORDERING SKU | ORDERING CAT# LOGIC | FIXTURE CAT# LOGIC | DESCRIPTION |
|--------------|------------------------|--------------------|---|
| 93075866G | Wide Diffused Lens Kit | Optics = WD | Diffused Lens Only (2 Lenses) <small>*does not change beam angle</small> |
| 93075989G | Reflector Optic Kit | Optics = WD | 120 Degree Optic (2 White Reflectors) |
| 93117671G | M1 Optic Kit | Optics = M1 | Textured Diffused 55 degree Optic (2 Refractors) |
| 93117672G | N1 Optic Kit | Optics = N1 | Textured Diffused 30 Degree Optic (2 Refractors) |

Check fixture images on pg. 1 to determine how many optics are needed based on housing type.

Example: 60T lumen code = '2D' housing = 8 lenses and/or optics needed = 4 kits

WIRE GUARDS:



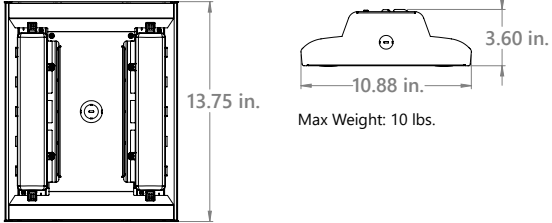
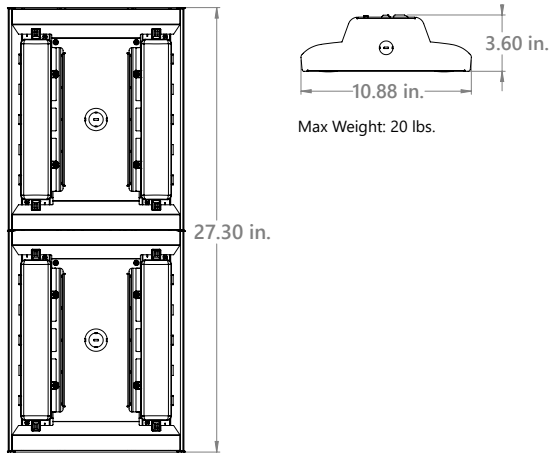
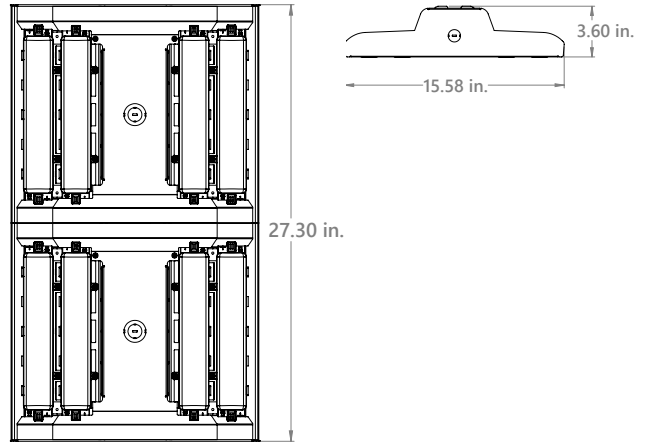
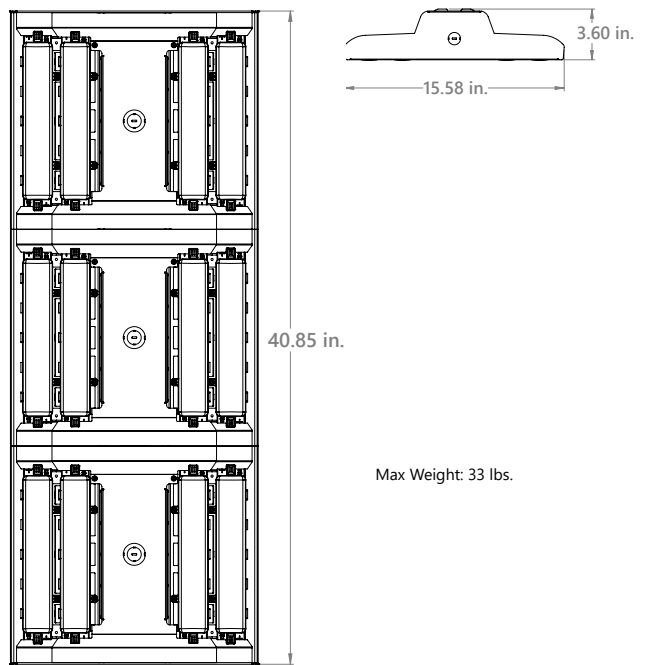
| ORDERING SKU | DESCRIPTION |
|--------------|-----------------------------------|
| 93077600G | 1S Wire Guard White Painted - 5pk |
| 93077602G | 2S Wire Guard White Painted - 5pk |
| 93077604 | 3S Wire Guard White Painted - 5pk |
| 93077668G | 2D Wire Guard White Painted - 5pk |

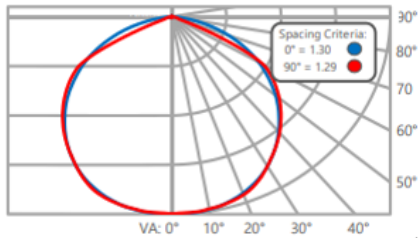
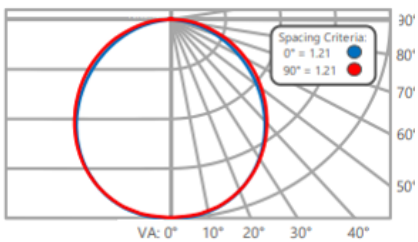
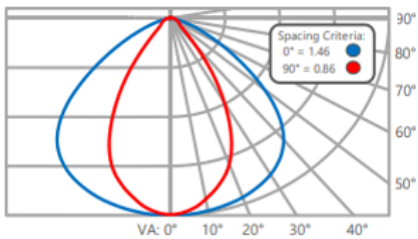
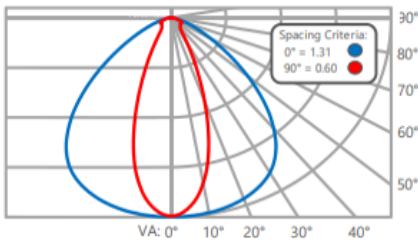
FIELD SWAPPABLE WHS20 SENSOR ACCESSORIES:



| ORDERING SKU | ORDERING CAT# LOGIC | DESCRIPTION |
|--------------|------------------------------|------------------------------|
| 93134999G | WHS20_LOW_LENS_KIT_10 | Low Lens: 2.5m (8ft) - 10pk |
| 93135001G | WHS20_MED_LENS_KIT_10 | Med Lens: 6m (20ft) - 10pk |
| 93135003G | WHS20_HIGH_LENS_KIT_10 | High Lens: 12m (40ft) - 10pk |
| 93134985G | WHS20_SNAP_AISLE_MASK_KIT_10 | Snap on Aisle Mask |

NOTE: See WHS20 spec sheet for Occupancy Detection Patterns

1S MODULE - 9K, 12K, 15K, 18K, 24K, 30K LUMENS

2S MODULE - 36K, 48K LUMENS

2D MODULE - 60K LUMENS

3D MODULE - 72K, 90K LUMENS


PHOTOMETRIC DATA
W1 = WIDE

WD = WIDE DIFFUSED

M1 = MEDIUM

N1 = NARROW


CUSTOMER NAME _____

Project Name _____

Date _____ Type _____

Catalog Number _____

WIRELESS NETWORKING AND SENSING DEVICE OPTIONS*

- **Daintree® One:** Wireless fixture integrated sensor that is perfect for single fixtures or small area applications. Standalone wireless lighting controls that work independently. Comes preset from the factory, yet can be upgraded to Daintree EZ Connect and/or Daintree Enterprise in the future. Factory preset to shut off 20 minutes after the space is vacated of occupants. Daylight harvesting preset enabled on.
- **Daintree® EZ Connect:** Wireless fixture integrated sensor that is designed for room based controls where a group of fixtures communicate to each other and communicate wirelessly in chorus as a system. The advantage is simple, minimal field based commissioning. Factory preset to shut off 20 minutes after the space is vacated of occupants. No daylight harvesting set in initial preset. EZ Connect wireless lighting controls are set up and/or can be changed by the Daintree EZ Connect application that can be downloaded via a smart device.
- **Daintree® Enterprise:** Wireless fixture integrated sensor technology that is ideal for multisite lighting system management. System requires software and commissioning. Monitor multiple controls, lighting, energy, HVAC with unlimited potential for other (3rd party) sensor integration. "Open on the bottom" means that ZigBee communication protocol is an industry standard with countless wireless hardware sensing options. "Open on the top" means that the data from the sensors can be used by any 3rd party software supplier/developer, be it part of a complete BMS system or simple API (Application Programming Interface or "App"). Daintree Enterprise offers a complete future proof solution from any Daintree enabled installed base of fixtures.

*Contact Factory for specific option availability

WHR1 IR REMOTE



ABV4 WITH OPTIONAL DAINTREE WIRELESS WHS20 CONTROL MODULE

