

FEATURES

- Industrial design delivers a small, lightweight fixture for ease of installation
- Electrical architecture delivers industry leading efficiencies (up to 201 LPW) that translate into lowest life cycle cost
- Designed for ambient temperature settings from -30°C up to 55°C
- Offers lumen outputs up to 60,000 to accommodate various ceiling heights, fixture spacings, and application requirements
- Four optical distribution available to meet any design requirement
- Broad offering of integrated sensor options provide energy savings, code compliance, fixture grouping, and wireless connectivity
- Optimized bulk packaging to minimize job site space requirements and ease waste removal
- Uplight options available to illuminate ceiling above fixture



CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Fixture housing is a combination of steel and aluminum for exceptional durability and heat dissipation
- Fixture design provides easy access to electrical components by removal of bottom channel cover
- Robust white powder coating prevents chipping and/or flaking while providing protection in more demanding environments
- Access plate mounted on back of fixture providing easy access to make wiring connections
- Knockouts on both ends of fixture for electrical connection options

OPTICS

- Diffuse optic options, plus wide, narrow, and aisle light distributions to meet any application requirement
- Field changeable lens for maintenance and flexibility

INSTALLATION

- Mounting options include Chain/Cable mount, Surface mount, and Pendant mount

ELECTRICAL

- Light engine utilizing metal clad boards with high efficacy (up to 201 LPW), long life LEDs protect the fixtures lumen maintenance
- Driver options include 3kV standard surge protection in 120–277V input or 6kV standard surge protection in 347–480V input
- Power Factor >0.9 and THD <20 converts power efficiently and effectively into light
- Driver options for fixed light output or 0-10V dimming down to 10% is available to customize light levels

CONTROLS

- Integration of sensors (NX and Other) accomplished through knockout in bottom middle of fixture which eliminates fixture potentially blocking sensor
- High-end trim, occupancy and ambient light detection with dimming available
- NX Lighting Controls provides options for standalone and networked integrated sensor with wired or wireless connectivity for NX system deployments.
- NX Connect is a standalone wireless deployment for room based applications using wireless enabled and battery operated devices.
- DLC 5.1 LLC: Integrated/embedded networked lighting controls, luminaire-level lighting control (LLLC)

ECHELÄN

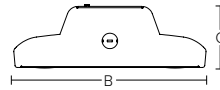


SERVICE PROGRAM

QS10

| Typical Dimensions and Weights | | | | |
|--------------------------------|-------------------|------------------|-------------------|--------------|
| Sizes | (A) Length Inches | (B) Width Inches | (C) Height Inches | Weight (lbs) |
| 1 | 13.75 | 10.88 | 3.46 | 10.0 |
| 2 | 27.30 | 10.88 | 3.60 | 20.0 |
| 3 | 27.30 | 15.58 | 3.60 | 22.0 |

*Size dependent on Lumen code. See dimensions page.



CERTIFICATIONS

- Emergency battery pack options are California Energy Commission (CEC) Title 20 compliant
- All luminaires are built to UL1598 standard
- Damp location labeling is standard
- UL/cUL Listed
- DLC® (DesignLights Consortium) Qualified. Please refer to the DLC® website for specific product qualifications at www.designlights.org
- Product configurations not including battery packs or controls meet federal procurement law requirements under the Trade Agreements Act (FAR 52.225-11). See [Buy America\(n\) Solutions](#)
- -BAA Option: This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9). See [Buy America\(n\) Solutions](#)

WARRANTY

- 5 year warranty. See [HLI Solutions Standard Warranty](#) for additional information.

DATE:

LOCATION:

TYPE:

PROJECT:

CATALOG #:

ORDERING GUIDE

Gray Shading

= Service Program
Limit of 800 luminaires

QS10

Example: ECH1-840-L24-CW-ED-U-ST

CATALOG #

| ECH1 | | | | | | |
|--------------------------------------|------------------|---------------|--|------------------|-------------------------|------------------|
| Model | CRI/CCT | Lumen Output | Optics | Driver | Voltage | Mounting |
| ECH1 High Performance High Bay | 740 4000K 70 CRI | L09 9,000 lm | CW No Lens (120°) | ED 0-10V Dimming | U ⁶ 120-277V | ST Standard |
| | 750 5000K 70 CRI | L12 12,000 lm | DW ⁹ Diffuse Optic Wide (120°) | E Fixed Output | 120 120V | SM Surface Mount |
| | 830 3000K 80 CRI | L15 15,000 lm | DN ⁹ Diffuse Optic Narrow (55°) | | 277 277V | PM Pendant Mount |
| | 835 3500K 80 CRI | L18 18,000 lm | DA ⁹ Diffuse Optic Aisle (30°) | | 347 347V | |
| | 840 4000K 80 CRI | L24 24,000 lm | | | 480 480V | |
| | 850 5000K 80 CRI | L30 30,000 lm | | | | |
| | 935 3500K 90 CRI | L36 36,000 lm | | | | |
| | 940 4000K 90 CRI | L48 48,000 lm | | | | |
| | | L60 60,000 lm | | | | |

| Integrated Sensors (Leave Blank If None Needed) | Options (Leave Blank If None Needed) |
|--|--|
| NX Lighting Controls | PI Packaged Individually |
| Networked Wireless | ELL20 20W Emergency Battery Pack (CEC Title 20 Compliant) Installed ^{1,2,15} |
| NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor | ELL30 30W Emergency Battery Pack (CEC Title 20 Compliant) installed ¹⁶ |
| NXWHM NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming | DTS Dimming Bypass Module ¹¹ |
| Networked Wired | BAA Buy American Act (FAR 52.225-9) Compliant |
| NXE NX Wired Dual RJ45 SmartPORTS, without Sensor | Cord Options |
| NXEHM NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming | F3C006 6', 3 conductor cord |
| Independent Control | F3C012 12', 3 conductor cord |
| NXCHM NX Connect NXC-WHS20 Wireless High Bay Occupancy & Photocell Sensor ^{8,14} | F4C006 6', 4 conductor cord (for ELL20 option) |
| WSPD360 Integral WSPDEMUNV PIR Occupancy Sensor with photocell and 360° Lens | F4C012 12', 4 conductor cord (for ELL20 option) |
| WSPDA Integral WSPDEMUNV PIR Occupancy Sensor with Automatic Dimming Photocell and Aisle Lens | F5C006 6', 5 conductor cord (Line + dimming) |
| WSPDBT360 Bluetooth® Programmable, WSPDBEMUNV PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens | F5C012 12', 5 conductor cord (Line + dimming) |
| WSPDBTA Bluetooth® Programmable, WSPDBEMUNV PIR Occupancy Sensor with Automatic Dimming Photocell and Aisle Lens | Flexible Metal Conduit Options |
| OS1360 On/Off WASP2 Occupancy/Daylight Sensor, 1-relay, 360 lens | C00388 6', 3 wire flexible metal conduit |
| OS1A On/Off WASP2 Occupancy/Daylight Sensor, 1-relay, Aisle lens | C00488 6', 4 wire flexible metal conduit |
| Other | C00588 6', 5 wire flexible metal conduit |
| Independent Control | Cord with Plug Options (See NEMA Table Below) |
| OS On/Off Sensor 360° high mount sensor ⁷ | C6TL15 6' Cord with 15A TL Plug (Only available when specifying discrete voltage codes 120 or 277) ³ |
| OCS On/ Off Occupancy/ Daylight Sensor 360° high mount sensor ⁷ | C6TL20 6' Cord with 20A TL Plug (Only available when specifying discrete voltage code 120, 277, 347 or 480) ⁴ |
| ODS Dimming Occupancy Sensor 360° high mount sensor ⁷ | C6P151 6' Cord with 15A straight blade plug (Only available when specifying discrete voltage code 120, 277 or 347) ⁵ |
| | Specialty Modular Cord Sets |
| | LE ACS-MC Flex + 10ft 2EA 10-LW 277/480 # 16AWG ¹³ |
| | NE ACS-MC Flex + 10ft 2EA 12-LW 277/480 # 16AWG ¹³ |
| | Uplight (nominal lumens) ^{10,11,12} |
| | U1 1000 lumens |
| | U2 2000 lumens |
| | U3 3000 lumens |
| | U4 4000 lumens |

- Notes:
- ELL20 with 347/480V not available with mounting options SM and PM.
 - Quick Ship 10 not available for E20 with cord options
 - Only available with 120V or 277V
 - Only available with 120V, 277V, 347V or 480V
 - Only available with 120V, 277V or 347V
 - Cords/Plugs and Third Party Sensors not available with the U voltage code option
 - Third party sensor are programmable and sensors are typically side mounted.
 - NX Connect devices can be customized with the NX Connect app, available on the Apple® App Store. NX Connect sensors are typically bottom mounted.
 - DW is polycarbonate, DN and DA are acrylic
 - ST mounting option only
 - For 347/480V contact factory
 - Uplight max ambient temperature = +40°C
 - Only available with 277V or 480V
 - High mount lens provided. For low, medium, or aisle distribution order appropriate lens accessory and field change
 - To determine the lumen output in emergency mode, multiply the battery pack wattage by the fixture lumens per watt (LPW)
 - Please consult factory on leadtime for this option

ACCESSORY ORDERING GUIDE

| MOUNTING AND ACCESSORIES | | | |
|--|--|--|---|
| Mounting Options | Description | Configurable Order Logic Code | Accessories |
| <input type="checkbox"/> Standard Chain/ Cable Mount | 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) | n/a |
| <input type="checkbox"/> Surface Mount (optional) | Available on all fixture configurations. Attaches to structural member in ceiling. (Hardware not included.) | SM = Surface Mount | SKU: 93165274 Description: 1/2 Surface Mounting Kit NOTE: Kit included two (2) brackets. |
| <input type="checkbox"/> Pendant Mount (optional) | Available on all fixture configurations. Attaches to 3/4 threaded conduit. (conduit not included). | PM = 3/4 Pendant Mount Kit | SKU: 93165273 Description: 3/4 Pendant Mounting Kit |
| <input type="checkbox"/> Y-Cable w/hook (optional) | Use with Standard Mounting Option only. Order separately. Priced per pair. 5 ft., 10 ft., 15 ft., 20 ft. lengths available | n/a | 5' Y Cable/Hook: 93302310 10' Y Cable/Hook: 93302311 15' Y Cable/Hook: 93306699 20' Y Cable/Hook: 93306750 |
| <input type="checkbox"/> V-Clips w/ chains (optional) | Use with Standard Mounting Option only. Order separately. Priced per pair. 3 ft. length chains included. | n/a | 93146133G |

| WIRE GUARDS | | | |
|--------------------------|------------------------------|----------|----------------------|
| ECH Body Size | | SAP # | SAP Description |
| <input type="checkbox"/> | ECH Size 1 | 93318569 | CUR HB WG 2 10PK |
| <input type="checkbox"/> | ECH Size 1+ End Mount Sensor | 93318570 | CUR HB WG 2 SMS 10PK |
| <input type="checkbox"/> | ECH Size 2 | 93318571 | CUR HB WG 3 10PK |
| <input type="checkbox"/> | ECH Size 2+ End Mount Sensor | 93318572 | CUR HB WG 3 SMS 10PK |
| <input type="checkbox"/> | ECH Size 3 | 93318573 | CUR HB WG 4 5PK |
| <input type="checkbox"/> | ECH Size 3+ End Mount Sensor | 93318574 | CUR HB WG 4 SMS 5PK |

*SMS = Use with end mount sensor. If ordering fixture with sensor, refer to chart on page 6 of spec sheet to determine if sensor is end mounted. If sensor is end mounted, order wireguard for fixture body size with 'SMS' in description.

All highbay wireguards are priced as single accessories and must be ordered as single accessories. Standard packaging is a master carton containing 5 or 10 wireguards depending on fixture body size.

See Highbay Wireguard Installation sheet (hyperlink) for more details.

| NEMA PLUG TYPE TABLE | | | |
|----------------------|------------------------|------------------------|----------------------|
| Voltage | TL15 15A Twist Lock | TL20 20A Twist Lock | P151 15A Straight |
| 120V | L5-15P | L5-20P | 5-15P |
| 277V | L7-15P | L7-20P | 7-15P |
| 347V | N/A | L24-20P | 24-15P |
| 480V | N/A | L8-20P | N/A |

| FIELD INSTALLABLE 20W BATTERY KITS* | | |
|-------------------------------------|--------------|----------------|
| | Ordering SKU | ECH Body Size |
| <input type="checkbox"/> | 93313452 | Size 1 |
| <input type="checkbox"/> | 93313453 | Size 2, Size 3 |

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

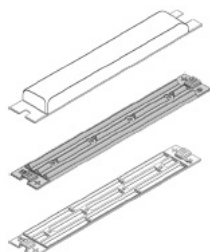
FIELD CHANGEABLE NX-WHS20 SENSOR ACCESSORIES



| Ordering Sku | Ordering Cat# Logic | Description |
|--------------|----------------------------------|------------------------------|
| 93134999 | NX- WHS20_LOW_LENS_KIT_10 | Low Lens: 2.5m (8ft) - 10pk |
| 93135001 | NX- WHS20_MED_LENS_KIT_10 | Med Lens: 6m (20ft) - 10pk |
| 93135003 | NX- WHS20_HIGH_LENS_KIT_10 | High Lens: 12m (40ft) - 10pk |
| 93134985 | NX- WHS20_SNAP_AISLE_MASK_KIT_10 | Snap on Aisle Mask |

NOTE: See below for NX-WHS20 coverage patterns

REPLACEMENT PARTS



| REPLACEMENT LENSES & OPTICS | | | |
|-----------------------------|----------------------------|-----------------------------|---|
| Ordering SKU | Ordering Cat# Logic | Fixture Optic Ordering Code | Description |
| 93164585 | ECH-WIDE DIFFUSED LENS KIT | DW | Diffuse Optic Wide (120°) |
| 93164587 | ECH-DN OPTIC KIT | DN | Diffuse Optic Narrow (55°) factors in kit |
| 93164588 | ECH-DA OPTIC KIT | DA | Diffuse Optic Aisle (30°) |

Body Size and number of lenses required:

Size 1 = 2 lens = 1 kit

Size 2 = 4 lens = 2 kits

Size 3 = 8 lens = 4 kits

DATE:

LOCATION:

TYPE:

PROJECT:

CATALOG #:

DELIVERED LUMENS

| DELIVERED LUMENS AND ELECTRICAL CHARACTERISTICS FOR ECH1 | | | | | | | | |
|--|-------|-------|------------------|----------|-----|----------|-----|--------|
| Ordering Code | | | Delivered Lumens | 120-277V | | 347/480V | | Body |
| CRI/CCT | Lumen | Optic | | Watts | LPW | Watts | LPW | |
| 740 750 | L09 | DW | 9,100 | 49 | 186 | 51 | 178 | Size 1 |
| | L12 | | 12,100 | 66 | 183 | 68 | 178 | |
| | L15 | | 15,100 | 85 | 178 | 86 | 176 | |
| | L18 | | 18,200 | 106 | 172 | 104 | 175 | |
| | L24 | | 24,000 | 147 | 163 | 144 | 167 | |
| | L30 | | 30,000 | 168 | 179 | 170 | 176 | Size 2 |
| | L36 | | 36,400 | 212 | 172 | 209 | 174 | |
| | L48 | | 48,000 | 294 | 163 | 289 | 166 | |
| | L60 | | 60,300 | 343 | 176 | 336 | 179 | Size 3 |
| 830 | L09 | DW | 8,500 | 53 | 160 | 56 | 152 | Size 1 |
| | L12 | | 11,400 | 72 | 158 | 74 | 154 | |
| | L15 | | 14,300 | 94 | 152 | 93 | 154 | |
| | L18 | | 17,200 | 116 | 148 | 114 | 151 | |
| | L24 | | 22,600 | 164 | 138 | 161 | 140 | |
| | L30 | | 28,300 | 186 | 152 | 185 | 153 | Size 2 |
| | L36 | | 34,300 | 232 | 148 | 229 | 150 | |
| | L48 | | 45,200 | 328 | 138 | 322 | 140 | |
| | L60 | | 56,700 | 380 | 149 | 372 | 152 | Size 3 |
| 835 | L09 | DW | 8,800 | 53 | 166 | 56 | 157 | Size 1 |
| | L12 | | 11,900 | 72 | 165 | 74 | 161 | |
| | L15 | | 14,800 | 94 | 157 | 93 | 159 | |
| | L18 | | 17,800 | 116 | 153 | 114 | 156 | |
| | L24 | | 23,500 | 164 | 143 | 161 | 146 | |
| | L30 | | 29,300 | 186 | 158 | 185 | 158 | Size 2 |
| | L36 | | 35,600 | 232 | 153 | 229 | 155 | |
| | L48 | | 46,900 | 328 | 143 | 322 | 146 | |
| | L60 | | 58,800 | 380 | 155 | 372 | 158 | Size 3 |
| 840 850 | L09 | DW | 9,100 | 53 | 172 | 56 | 163 | Size 1 |
| | L12 | | 12,100 | 72 | 168 | 74 | 164 | |
| | L15 | | 15,100 | 94 | 161 | 93 | 162 | |
| | L18 | | 18,200 | 116 | 157 | 114 | 160 | |
| | L24 | | 24,000 | 164 | 146 | 161 | 149 | |
| | L30 | | 30,000 | 186 | 161 | 185 | 162 | Size 2 |
| | L36 | | 36,400 | 232 | 157 | 229 | 159 | |
| | L48 | | 48,000 | 328 | 146 | 322 | 149 | |
| | L60 | | 60,300 | 380 | 159 | 372 | 162 | Size 3 |
| 935 | L09 | DW | 7,900 | 53 | 149 | 56 | 141 | Size 1 |
| | L12 | | 10,600 | 72 | 147 | 74 | 143 | |
| | L15 | | 13,200 | 94 | 140 | 93 | 142 | |
| | L18 | | 15,900 | 116 | 137 | 114 | 139 | |
| | L24 | | 21,000 | 164 | 128 | 161 | 130 | |
| | L30 | | 26,200 | 186 | 141 | 185 | 142 | Size 2 |
| | L36 | | 31,800 | 232 | 137 | 229 | 139 | |
| | L48 | | 41,900 | 328 | 128 | 322 | 130 | |
| | L60 | | 52,600 | 380 | 138 | 372 | 141 | Size 3 |
| 940 | L09 | DW | 8,100 | 53 | 153 | 56 | 145 | Size 1 |
| | L12 | | 10,900 | 72 | 151 | 74 | 147 | |
| | L15 | | 13,500 | 94 | 144 | 93 | 145 | |
| | L18 | | 16,300 | 116 | 141 | 114 | 143 | |
| | L24 | | 21,500 | 164 | 131 | 161 | 134 | |
| | L30 | | 26,900 | 186 | 145 | 185 | 145 | Size 2 |
| | L36 | | 32,600 | 232 | 141 | 229 | 142 | |
| | L48 | | 43,000 | 328 | 131 | 322 | 134 | |
| | L60 | | 53,900 | 380 | 142 | 372 | 145 | Size 3 |

DELIVERED LUMENS (CONTINUED)

| LUMEN OUTPUT MULTIPLIER FOR OPTIC ORDERING CODE | | |
|---|----------------------------|-------------------------|
| Optic Ordering Code | Optic Description | Lumen Output Multiplier |
| CW | No Lens (120°) | 108% |
| DW | Diffuse Optic Wide (120°) | 100% |
| DN | Diffuse Optic Narrow (55°) | 101% |
| DA | Diffuse Optic Aisle (30°) | 102% |

Delivered Lumens (in Table on Previous Page) x Lumen Output Multiplier = Delivered Lumens for fixture with CW, DN, or DA Lens

PROJECTED LUMEN MAINTENANCE

| Calculation Method | Ambient Temp | 25,000 hrs | 50,000 hrs | 60,000 hrs |
|--------------------|--------------|------------|------------|------------|
| TM-21-11 | 25C/77F | 0.96 | 0.94 | 0.93 |
| | 40C/104F | 0.95 | 0.91 | 0.90 |
| TM-21-21 | 25C/77F | 0.96 | 0.94 | 0.93 |
| | 40C/104F | 0.95 | 0.91 | 0.89 |

AMBIENT TEMPERATURE RATINGS

| Lumen Code | L09 | L12 | L15 | L18 | L24 | L30 | L36 | L48 | L60 |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Max Ambient | 55°C | 55°C | 55°C | 55°C | 55°C | 55°C | 55°C | 55°C | 55°C |
| Min Ambient | -30°C | -30°C | -30°C | -30°C | -30°C | -30°C | -30°C | -30°C | -30°C |

NX LIGHTING CONTROLS

| | Control Option Ordering Logic & Description | | Control Option Functionality | | | | | | | | | Control Option Components |
|---------------------------|---|---|------------------------------|---------------------|------------|-----------|---------------------|---------------|-----------------------|---------------------------|--|---|
| | | | Networkable | Standalone Grouping | Scheduling | Occupancy | Daylight Harvesting | 0-10V Dimming | On/Off Control | Bluetooth App Programming | Sensor Height | |
| NX Wireless | NXW | NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor | ✓ | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | - |  NXRM2-H |
| | NXWHM | NX Networked Wireless Enabled Integral NXSMP2-HMO Wireless High Bay Occupancy & Photocell Sensor | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | Max: 45ft |  NXSMP2-HMO |
| NX Wired | NXE | NX Wired Dual RJ45 SmartPORTS , without Sensor | ✓ | ✓ | ✓ | - | - | ✓ | ✓ | ✓** | - |  NXFSP |
| | NXEHM | NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | Max: 45ft |  NXFSP NXSMP2-HMO |
| NX Independent | NXCHM | NX Connect NXC-WHS20 Wireless High Bay Occupancy & Photocell Sensor | - | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓* | Low Max: 8ft Med. Max: 20ft High Max: 40ft |  NXC-WHS20 |
| | WSPD360 | End Mounted WSPDEMUNV PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens | - | - | - | ✓ | ✓ | ✓ | - | - | Max: 45ft |  WSPDEMUNV |
| | WSPDA | End Mounted WSPDEMUNV PIR Occupancy Sensor with Automatic Dimming Photocell and Aisle Lens | - | - | - | ✓ | ✓ | ✓ | - | - | Max: 45ft |  WSPDEMUNV |
| | WSPDBT360 | End Mounted Bluetooth® Programmable, WSPDBEMUNV Occupancy Sensor with Automatic Dimming Photocell and 360° Lens | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | Max: 45ft |  WSPDBEMUNV |
| | WSPDBTA | End Mounted Bluetooth® Programmable, WSPDBEMUNV Occupancy Sensor with Automatic Dimming Photocell and Aisle Lens | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | Max: 45ft |  WSPDBEMUNV |
| | OS1360 | End Mounted WSPDEMUNV PIR On/Off Occupancy/ Daylight Sensor with 360° Lens | - | - | - | ✓ | ✓ | - | On/Off Only No Dim | - | Max: 45ft |  WSPDEMUNV |
| | OS1A | End Mounted WSPDEMUNV PIR On/Off Occupancy/ Daylight Sensor with Aisle Lens | - | - | - | ✓ | ✓ | - | On/Off Only No Dim | - | Max: 45ft |  WSPDEMUNV |
| Other Independent Control | OS | End Mounted LSXR PIR On/Off Sensor 360° High Mount Sensor | - | - | - | ✓ | - | - | On/Off Only No Dim | - | Max: 45ft |  LSXR6LT |
| | OCS | End Mounted LSXR PIR On/Off Occupancy/Daylight Sensor 360° High Mount Sensor | - | - | - | ✓ | ✓ | - | On/Off Only No Dim | - | Max: 45ft |  LSXR6PLT |
| | ODS | End Mounted LSXR PIR Dimming Occupancy Sensor 360° High Mount Sensor | - | - | - | ✓ | - | ✓ | - | - | Max: 45ft |  LSXR6HLLT |

* Requires use of NX Connect App available for download from Apple app store

** Requires NXBTC (bluetooth programming tool), order separately

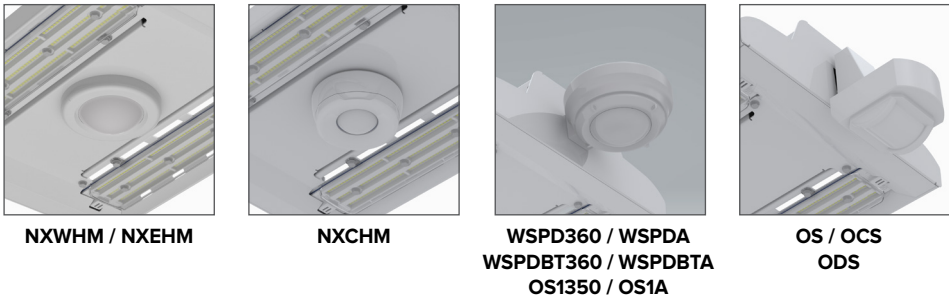
| | |
|------------|-----------|
| DATE: | LOCATION: |
| TYPE: | PROJECT: |
| CATALOG #: | |

CONTROLS

DEFAULT SETTINGS

| | | |
|------------------------------------|--|---------------------------------|
| NX Wireless & Wired | Occupancy Sensor | Enabled |
| | Occupancy Sensor Sensitivity | 7 Minutes |
| | Occupancy Sensor Timeout | 15 Minutes |
| | Occupied Dim Level | 100% |
| | Unoccupied Dim Level | 0% (OFF) |
| | Daylight Sensor | Disabled |
| | Bluetooth | Enabled |
| | 2.4GHz Wireless Mesh | Off |
| | "Passcode Factory Passcode: HubbN3T!" | Enabled |
| | | |
| NX Independent - NX Connect | Settling/Dwell Time | 5 sec |
| | Hold Time | 15 min |
| | Group Hold Time | 15 min |
| | Grace Time | 0 sec |
| | Strategy | - |
| | Occupancy Sensitivity | 5 (highest) |
| | Occupancy Indicator | 1 (enabled) |
| | Partial Off/Standby | 0% |
| | Background Level | 10% |
| | Task Level | 100% |
| NX Independent - WSPDBT360/WSPDBTA | Daylight Harvesting | 1 (enabled) |
| | Low Ambient Output | 250% (of fixtures light output) |
| | High Ambient Output | OFF |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| NX Independent - WSPD360/WSPDA | Occupancy Sensor Timeout | 8 Minutes |
| | Occupied Dim Level | 100% |
| | Unoccupied Dim Level | 50% |
| | Full Off Timeout | Disabled |
| | Daylight Sensor | Disabled |
| | | |
| | | |
| | | |
| | | |
| | | |

PRODUCT IMAGES



CONTROLS TECHNICAL SUPPORT

1-800-888-8006 (7:00 am–7:00 pm est)

APP INFORMATION

NX Lighting Controls App



The NX Lighting Controls App is a free to use mobile application for programming both an NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enabled luminaires and program your NX system settings.



Android



Apple iOS

NX Connect App



The NX Connect mobile App is a free to use mobile application for programming a NX Connect System. The mobile App allows you to discover, configure and share your NX Connect system.

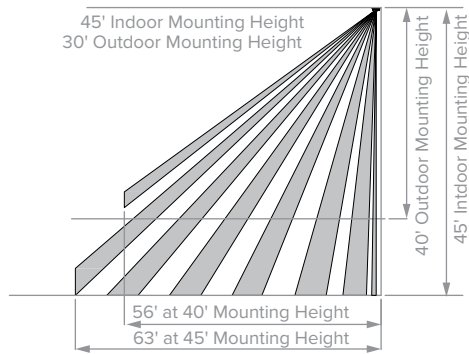


Apple iOS

CONTROLS (CONTD.)

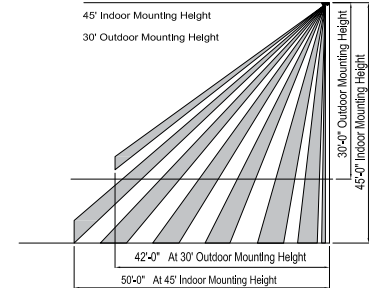
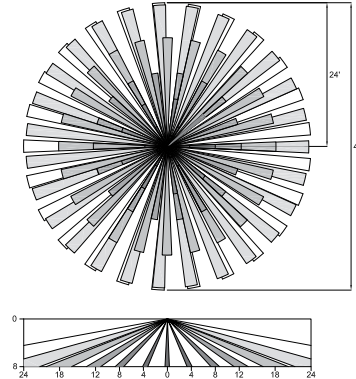
COVERAGE PATTERNS

NXWHM (NXSMP2-HMO SENSOR) NXEHM (NXSMP2-HMO)



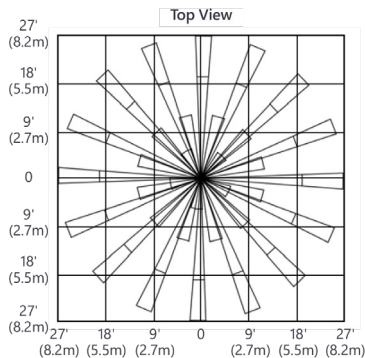
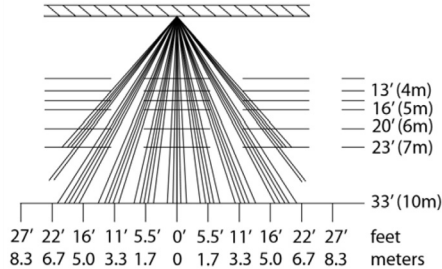
Sensor lens coverage and detection patterns
when mounted at 40ft and 45ft with Standard lens

WSPD360/WSPDA/WSPDBT360/ WASDBTA/OS1360/OS1A

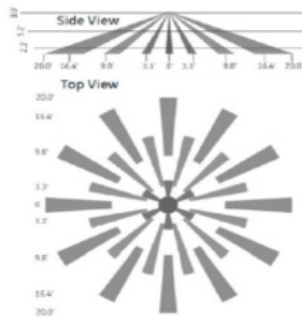


NXCHM (NXC-WHS20 SENSOR) HIGH LENS: 12.2M (40FT) 27ft Radius/54ft Diameter

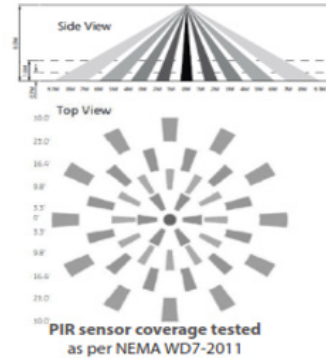
Side View Sensor mounted 33' (10m) from floor



NXCHM (NXC-WHS20 SENSOR) LOW LENS: 2.5M (8FT) 20ft Radius/40ft Diameter



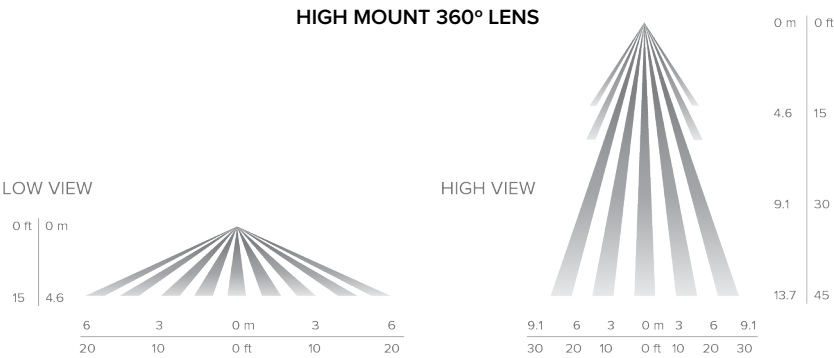
NXCHM (NXC-WHS20 SENSOR) MED LENS: 6M (20FT) 30ft Radius/60ft Diameter



OTHER LIGHTING CONTROLS

OS, OCS, ODS (THIRD PARTY)

COVERAGE PATTERNS



FUNCTIONALITY AND DEFAULT SETTINGS

| Name | Description | Minimum Value | Maximum Value | Default Values for Cat Logic Choice | | |
|---------------------------------|---|---------------|---------------|-------------------------------------|--------|--------|
| | | | | OS | OCS | ODS |
| Occupancy Time Delay (1 Pole) | The length of time the sensor will keep the lights controlled by relay 1 on at full bright after it last detects occupancy, assuming Minimum On Time has been met. | 30 sec | 30 min | 10 min | 10 min | 10 min |
| Occupancy Time Delay (2 Pole) | The length of time the sensor will keep the lights controlled by relay 2 on after it last detects last occupancy, assuming Minimum On Time has been met. | N/A | 30 min | 10 min | 10 min | 10 min |
| Photocell Set-Point | The target light level (at the sensor) that is to be maintained. | Auto | 64fc | N/A | N/A | 4fc |
| Sunlight Discount Factor | Value used to improve the tracking for accuracy of a sensor with a photocell during periods of high daylight. Decreasing the value will lower the controlled level of the lights. | x/1 | x/10 | N/A | N/A | x/1 |
| Dimming Range Max (High Trim) | The maximum output level of a sensor with dimming. | Off | 10 VDC | N/A | 10 VDC | 10 VDC |
| Dimming Range Low (Low Trim) | The minimum output level to which the photocell will dim the lights. | Off | 10 VDC | N/A | 1 VDC | 1 VDC |
| Dual Zone Photocell % | Relative value of photocell set-point that is used to control relay 2. | 110% | 200% | N/A | N/A | 150% |
| Dim to Off Occupancy Time Delay | After Occupancy Time Delay has expired, this setting specifies the amount of time lights are held at minimum dim before turning off. | 0 sec | Never Off | 0 sec | 0 sec | 0 sec |

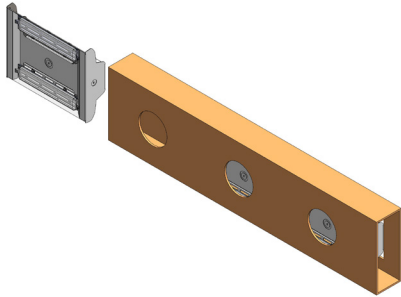
| | |
|------------|-----------|
| DATE: | LOCATION: |
| TYPE: | PROJECT: |
| CATALOG #: | |

PACKAGING/SHIPPING INFO

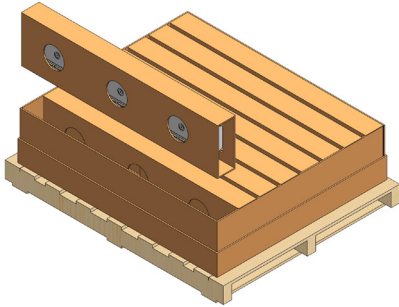
JOB PACKAGING IS STANDARD

Note: Orders less than 14 fixtures are typically sent packaged Individually

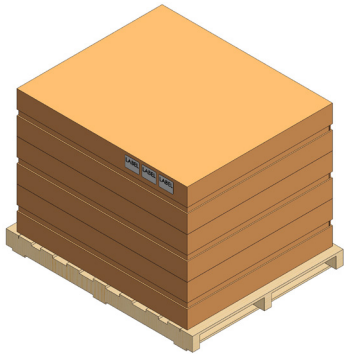
SLEEVE



LAYER



PALLET

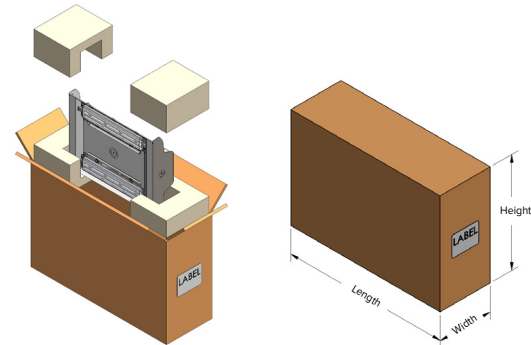


| JOB PACK DETAILS | | | |
|------------------|---------------------|-------------------|-------------------|
| Size | Fixtures per Sleeve | Sleeves per Layer | Layers per Pallet |
| 1 | 3 | 8 | 3 |
| 2 | 1 | 8 | 3 |
| 3 | 1 | 8 | 3 |

| JOB PACK PALLET QTYS | | | |
|----------------------|----------------------|----------------|--------|
| Pallet Dimensions | | | |
| Size | Standard Fixture Qty | L (in) x W(in) | H (in) |
| 1 | 72 | 52 x 42 | 39.0 |
| 2 | 24 | 52 x 42 | 39.0 |
| 3 | 24 | 52 x 42 | 54.0 |

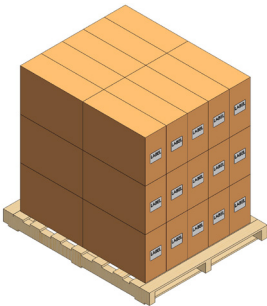
| JOB PACK PALLET QTYS FOR FIXTURES W/ OPTIONS | | | | | |
|--|---------|---------------|-------------------------|----------------|-----------------------|
| Fixture Options | | | | | |
| Cord | EL Pack | Bottom Sensor | Bottom Mt Sensor & Cord | Side Mt Sensor | Side Mt Sensor & Cord |
| 63 | 48 | 72 | 63 | 48 | 48 |
| 21 | 21 | 24 | 21 | 24 | 21 |
| 21 | 21 | 24 | 21 | 24 | 21 |

PACKAGED INDIVIDUALLY: OPTION SELECTION PI



| Packaged Individually Box Dimensions | | | |
|--------------------------------------|-------------|------------|-------------|
| Size | Length (in) | Width (in) | Height (in) |
| 1 | 22.3 | 7.5 | 15.0 |
| 2 | 36.5 | 7.5 | 15.0 |
| 3 | 39.0 | 9.5 | 22.0 |

| Packaged Individually Pallet Qty & Dimensions | | | |
|---|-----|-----------------|-------------|
| Size | Qty | L (in) x W (in) | Height (in) |
| 1 | 30 | 52 x 42 | 49.0 |
| 2 | 20 | 52 x 42 | 48.0 |
| 3 | 6 | 52 x 42 | 44.5 |



Note: Packaged Individually dimensions do not change if sensor, cord, or EMBB option is added to fixture

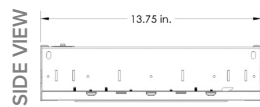
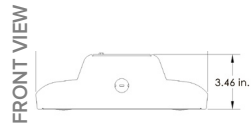
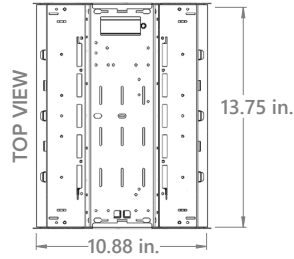
| | |
|------------|-----------|
| DATE: | LOCATION: |
| TYPE: | PROJECT: |
| CATALOG #: | |

DIMENSIONS

ECH SIZE 1

L09, L12, L15, L18 & L24 LUMEN OUTPUT

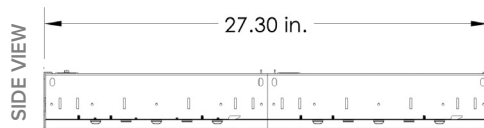
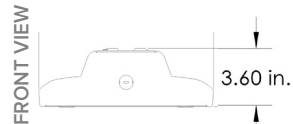
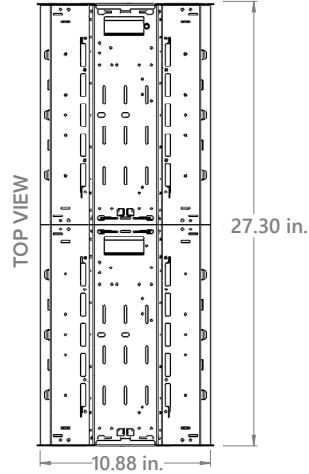
Max Weight: 10 lbs



ECH SIZE 2

L30, L36 & L48 LUMEN OUTPUT

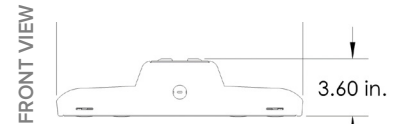
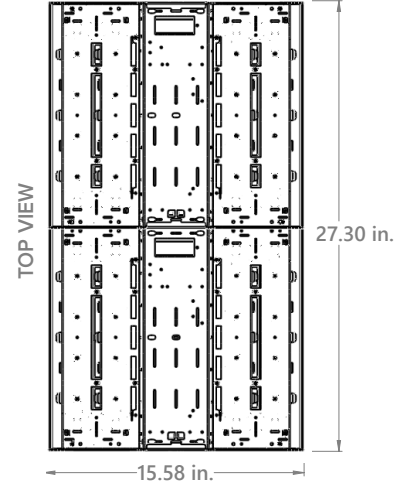
Max Weight: 20 lbs



ECH SIZE 3

L60 LUMEN OUTPUT

Max Weight: 22 lbs

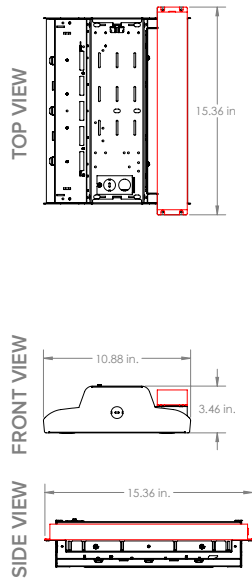


EMERGENCY BATTERY INFORMATION

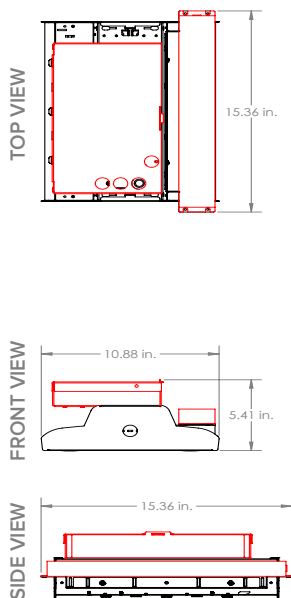
Lumens in Emergency Mode = LPW of Fixture x EM Pack Wattage (20 watts)

ECH SIZE 1

L09, L12, L15, L18 & L24 LUMEN OUTPUT
VOLTAGE: U, 120V, & 277V

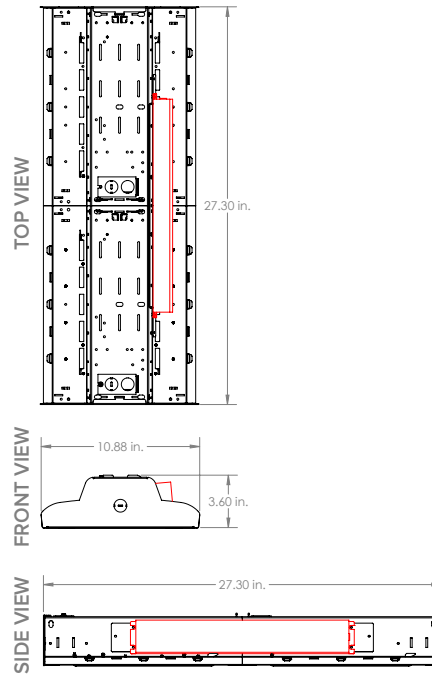


VOLTAGE: 347V & 480V

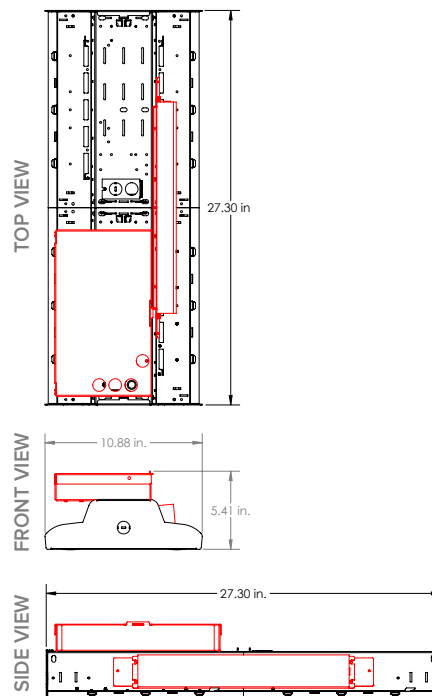


ECH SIZE 2

L30, L36 & L48 LUMEN OUTPUT
VOLTAGE: U, 120V, & 277V

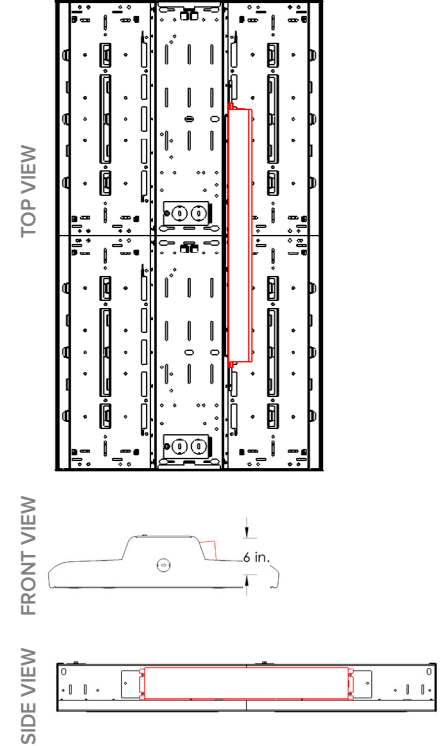


VOLTAGE: 347V & 480V

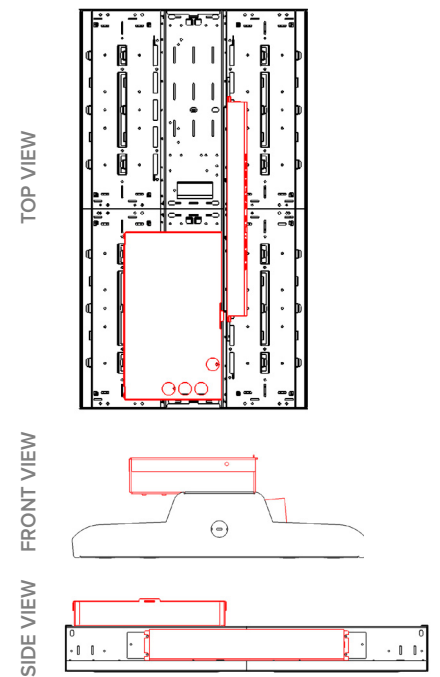


ECH SIZE 3

L60 LUMEN OUTPUT
VOLTAGE: U, 120V, & 277V



VOLTAGE: 347V & 480V



PHOTOMETRY

ECH1-840-L24-DW-EDU-U4

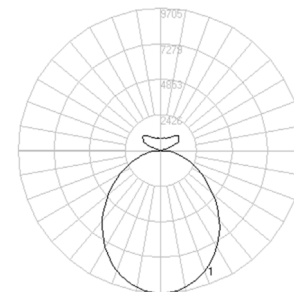
LUMINAIRE DATA

| | |
|-------------------|---|
| Description | LED Highbay; 24,000 Lumens; Diffuse Optic Wide; Uplight |
| Delivered Lumens | 24,001 |
| Watts | 164 |
| Efficacy | 146 |
| Spacing Criterion | 0°= 1.20 90°= 1.18 |

ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|-------|--------|-------------|
| 0-30 | 7319 | 30.3 |
| 0-40 | 11697 | 48.5 |
| 0-60 | 19467 | 80.9 |
| 0-90 | 23943 | 99.8 |
| 0-180 | 24001 | 100 |

POLAR GRAPH



90-270 deg plane

ECH1-840-L24-DN-EDU

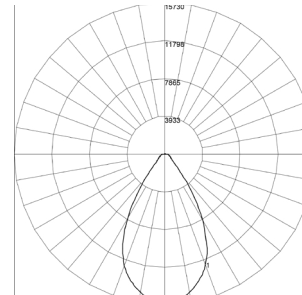
LUMINAIRE DATA

| | |
|-------------------|--|
| Description | LED Highbay; 24,000 Lumens; Diffuse Optic Narrow |
| Delivered Lumens | 24,240 |
| Watts | 164 |
| Efficacy | 148 |
| Spacing Criterion | 0°= 1.36 90°= .94 |

ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|-------|--------|-------------|
| 0-30 | 11280 | 46.5 |
| 0-40 | 16767 | 69.2 |
| 0-60 | 22365 | 92.3 |
| 0-90 | 24153 | 99.6 |
| 0-180 | 24240 | 100 |

POLAR GRAPH

Maximum Candela = 15730 Located At Horizontal Angle = 0, Vertical Angle = 1
1 - Vertical Plane Through Horizontal Angles (90 - 270)

ECH1-840-L24-DA-EDU

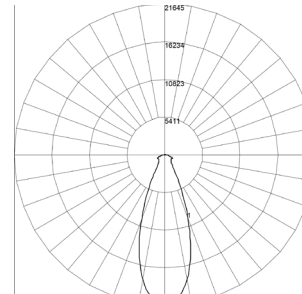
LUMINAIRE DATA

| | |
|-------------------|---|
| Description | LED Highbay; 24,000 Lumens; Diffuse Optic Aisle |
| Delivered Lumens | 24,480 |
| Watts | 164 |
| Efficacy | 149 |
| Spacing Criterion | 0°= 1.32 90°= .62 |

ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|-------|--------|-------------|
| 0-30 | 12337 | 50.4 |
| 0-40 | 16790 | 68.6 |
| 0-60 | 22082 | 90.2 |
| 0-90 | 24367 | 99.5 |
| 0-180 | 24480 | 100 |

POLAR GRAPH

Maximum Candela = 21845 Located At Horizontal Angle = 0, Vertical Angle = 1
1 - Vertical Plane Through Horizontal Angles (90 - 270)