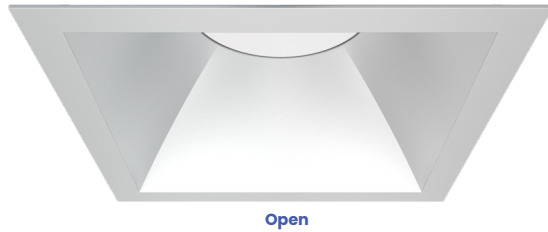


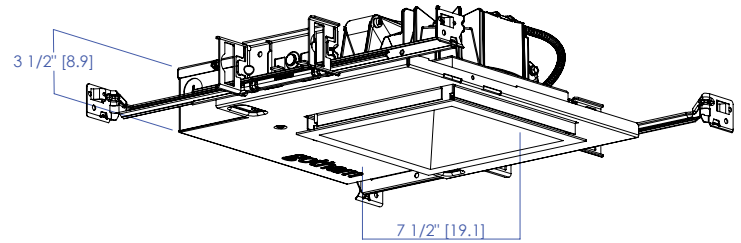
# IVO™ 6" Square Shallow Recessed Downlight

## New Construction & Remodel

TRIM STYLES AND COLORS



Open



New construction housing shown. Please see pages 5-6 for full set of dimensional drawings.

### Flange Styles



Flanged



Flangeless

### Reflector Colors



### Feature Set

- Ultra Shallow recessed downlight fits in plenums as small as 3.5 inches above ceiling
- Perfect Color™ consistency within 1/2-step MacAdam Ellipse
- Exceptional color rendering with 80 CRI, 90 CRI, or 95 CRI minimum
- Bounding Ray™ optical design delivers low brightness apertures for a comfortable lighting experience
- 65° cutoff to source and source image
- Patent pending optics available in three batwing distributions deliver exceptional lighting uniformity
- Field adaptable with interchangeable optics and trims
- Up to 90% lumen maintenance at 55,000 hours
- Fixtures are wet location, covered ceiling

QUICK SPECIFICATIONS

### Distribution / Beam Angles



### Superior Performance\*

| Nominal Lumens   | 05LM | 07LM | 10LM | 15LM | 20LM | 25LM | 30LM | 35LM | 40LM | 45LM | 50LM |
|------------------|------|------|------|------|------|------|------|------|------|------|------|
| Delivered Lumens | 562  | 836  | 1061 | 1537 | 2042 | 2563 | 3099 | 3466 | 3956 | 4454 | 4954 |
| Wattage          | 5.1  | 7.5  | 9.2  | 13.3 | 17.5 | 22.1 | 26.6 | 31.8 | 37.2 | 43.1 | 49.9 |
| Lumens per Watt  | 110  | 111  | 115  | 116  | 117  | 116  | 117  | 109  | 106  | 103  | 99   |

\*Based on 3500K AR LSS MWD 80CRI

### IVO 6" Square Shallow Product Family



Lensed Wall Wash

PRODUCT FAMILY



Luminaire Type:

Catalog Number:

EXAMPLE: IVO6SQS D 10LM 35K 80CRI MWD MIN10 MVOLT ZT NCH P AR LSS F

ORDERING INFORMATION

| Series                             | Function    | Lumen Packages               | Kelvin Temperature | Color Rendering Index <sup>2</sup> | Distribution                    | Dimming Level                          |
|------------------------------------|-------------|------------------------------|--------------------|------------------------------------|---------------------------------|--|
| IVO6SQS<br>Square Shallow Recessed | D Downlight | 05LM <sup>1</sup> 500 Lumens | 27K 2700K          | 80CRI 80+ CRI                      | MD Medium (0.8 s/mh, 60°)       | MIN10 Constant current, dimming to 10% |
|                                    |             | 07LM 750 Lumens              | 30K 3000K          | 90CRI 90+ CRI                      |                                 |  |
|                                    |             | 10LM 1000 Lumens             | 35K 3500K          | 95CRI 95+ CRI                      | MWD Medium Wide (1.0 s/mh, 65°) | MIN1 Constant current, dimming to 1%   |
|                                    |             | 15LM 1500 Lumens             | 40K 4000K          |                                    |                                 |  |
|                                    |             | 20LM 2000 Lumens             | 50K 5000K          |                                    | WD Wide (1.2 s/mh, 75°)         | DARK Constant current, dimming to 0.1% |
|                                    |             | 25LM 2500 Lumens             |                    |                                    |                                 |  |
|                                    |             | 30LM 3000 Lumens             |                    |                                    |                                 |  |
|                                    |             | 35LM 3500 Lumens             |                    |                                    |                                 |  |
|                                    |             | 40LM 4000 Lumens             |                    |                                    |                                 |  |
|                                    |             | 45LM 4500 Lumens             |                    |                                    |                                 |  |
| 50LM 5000 Lumens                   |             |                              |                    |                                    |                                 |  |

| Voltage               | Control Input  | Emergency Option   | Housing Style   | Options  |
|-----------------------|--|--|---|--|
| MVOLT 120V-277V       | ZT <sup>4</sup> 0-10V Generic.   | (Blank) No Emergency   | NCH New Construction Housing  | SF <sup>8</sup> Single Fuse. Specify 120 or 277. |
| 120 120V              | EZT 0-10V eldoLED.   | E6WR <sup>7</sup> 6W integral emergency battery, CA Title 20 compliant emergency battery pack with remote test switch. 2500LM max. | ICAT IC/Airtight Housing (new construction only). 2500LM max.             | WL Wet Location                                  |
| 277 277V              | ELV <sup>4</sup> Electronic line voltage. Forward phase-cut (120V only)                          |  | CP Chicago Plenum (new construction only). 2500LM max.                    |  |
| 347 <sup>3</sup> 347V | DMX <sup>6</sup> DMX with RDM (remote device management).  |  | RM Remodel/Install from below. Not available with Emergency Pack options. |  |
|                       | DALI <sup>6</sup> DALI Compatible.   |  |   |  |
|                       | NLIGHT <sup>7</sup> Embedded wired controls by nLight  |  |   |  |
|                       | NLTAIR <sup>7</sup> Embedded wireless controls by nLight   |  |   |  |
|                       | NLIGHTER <sup>7</sup> Embedded wired controls by nLight with UL924 listed emergency operation    |  |   |  |
|                       | NLTAIREM <sup>7</sup> Embedded wireless controls by nLight with UL924 listed emergency operation |  |   |  |

| Trim Style       | Trim Color  | Trim Finish       | Flange Option                         |
|------------------|---|-------------------|---------------------------------------|
| P Open Reflector | AR Clear Metalized  | LD Matte Diffuse  | F Self Flanged (color matches trim)   |
|                  | BR Black (painted)  | LSS Semi Specular | FL Flangeless (Drywall)               |
|                  | GR Gold Metalized   |                   | FBL <sup>11</sup> Flange Only Black   |
|                  | PR Pewter Metalized                                       |                   | FWR <sup>12</sup> Flange Only White   |
|                  | WTR Wheat Metalized                                       |                   | FRALTBD <sup>10</sup> Flange Only RAL |
|                  | WMR <sup>9</sup> Soft White Matte (painted)               |                   | FCPC Flange Only Custom Paint Color   |
|                  | WRAMF <sup>9</sup> White with Anti-Microbial (painted)    |                   |                                       |
|                  | BZR <sup>9</sup> Dark Bronze Matte (painted)              |                   |                                       |
|                  | TRALTBD <sup>9,10</sup> Trim RAL # (TBD for pricing only) |                   |                                       |
|                  | TCPC <sup>9</sup> Trim Custom Paint Color                 |                   |                                       |

| ACCESSORIES – order as separate catalog numbers (shipped separately) |   |
|--|---|
| IVO6SOPTC D MD U   | Field Replaceable Optic, Medium Distribution      |
| IVO6SOPTC D MWD U  | Field Replaceable Optic, Medium Wide Distribution |
| IVO6SOPTC D WD U   | Field Replaceable Optics, Wide Distribution       |

| ORDERING NOTES  |  |
|---|--|
| 1. 05LM only available with ELV or ZT. Not available with 347V.   | 8. RM with SF is not valid with DMX or nLight, or 40LM-50LM with ELV.  |
| 2. 50K CCT is not available with 90CRI. 35K, 40K or 50K is not available with 95CRI.                                | 9. Not available with Optical Finish.  |
| 3. 347 only available with ZT at MIN1 or MIN10, 4000LM max. Not available with nLight devices or Emergency Options. | 10. Replace with applicable RAL number and finish when ready to order. See RAL BROCHURE for available color options.   |
| 4. ZT is not available with DARK.   | 11. For use with different reflector flange colors only (i.e. AR, BZR, GR, PR, WTR, WMR, WRAMF options). Not applicable with BR (black reflector) or FL (flangeless) option. |
| 5. Only available with MIN1.  | 12. For use with different reflector flange colors only (i.e. AR, BR, BZR, GR, PR, WTR options). Not applicable with WMR, WRAMF (white reflector) or FL (flangeless) option. |
| 6. DMX and DALI are not available with MIN1 or MIN10.   |  |
| 7. E6WR not available with the RM housing or with 30LM, 35LM, 40LM, 45LM or 50LM.                                   |  |



### Optical System

Bounding Ray™ optical design delivers top-down flash for superior brightness control. Source and source image present simultaneously.

Unitized optical system has mechanical attachment of the light engine to the trim for optimized optical alignment.

Source regression delivers 65 degrees of visual cutoff to source and source image.

Patent pending optics are available in three (3) batwing distributions for optimal uniformity, free of shadows, hot spots or striations.

Optics are field interchangeable without tools via twist-lock feature.

### LED Light Engine

Proprietary light engines are custom binned to deliver perfect color consistency of 0.5-step MacAdam Ellipse fixture to fixture.

LED light engine is rated for L90 / 55,000 hours.

Available in 80, 90, or 95 CRI minimum. 90 CRI has an R9 greater than 50. 95 CRI has an R9 greater than 80.

### Trims

Trims are field interchangeable via twist-lock mechanism.

Trims are available in eight (8) standard colors and two standard finishes that can be customized.

### Electrical

Luminaire operates from a 50 or 60 Hz  $\pm 3$  Hz AC line over a voltage ranging from 120 VAC to 347 VAC. The fluctuations of line voltage have no visible effect on the luminous output.

Luminaire has a power factor of 85% or greater at all standard operating voltages and full luminaire output.

EMI/RFI per FCC Title 47 CFR, Part 15, Class A rated. ELV Phase dimming Driver is Class B rated except when used with E6WR or at 30LM and above. Input wires are 18AWG, 600V minimum, solid copper.

### Controls (Optional)

Luminaire is equipped with interface for nLight wired, meaning it has the ability to communicate over an nLight network. When wired, using CAT-5 cabling, with other nLight-enabled sensors, power packs, or WallPods, an nLight control zone is created. Once linked to a Gateway, directly or via a Bridge, the zone becomes capable of remote status monitoring and control via SensorView software. Luminaire is equipped with interface for nLight Air, meaning it can communicate over the wireless nLight control platform. It pairs to other luminaires and wall switches through our mobile app, CLAIRITY+, which allows for single fixture control.

### Dimming

The luminaire is capable of continuous dimming without perceivable stroboscopic flicker as measured by flicker index (ANSI/IES RP-16-10) over a range of 100 – 10%, 100 – 1.0% or 100 – 0.1% of rated lumen output with a smooth shut off function to step to 0%.

eldoLED LED drivers (EZT) conforms to IEEE P1789 standards.

The driver is inaudible in 24dB environment, and stable when input voltage conditions fluctuate over what is typically experienced in a commercial environment.

### Emergency Battery (Optional)

Self testing integral emergency battery (E6WR) provides a emergency lighting for a duration of 90 minutes to meet egress code requirements.

Emergency battery is accessible from below the ceiling.

Emergency battery is CEC T20 Compliant.

### Installation

Luminaire installs in 3.5" plenum depth ceiling (unless noted otherwise).

Fixture is suitable for installation in ceilings from 5/8" to 2" in ceiling thickness via patented retention spring design.

Luminaire has telescopic mounting bars with maximum 24" and minimum 10 1/2" extension and 1 1/8" vertical adjustment (supplied separated).

Mounting brackets also work with C-Channel from 3/4" to 1 1/2", Flat Strap from 1/2" to 3/4", Conduit up to 3/4" in diameter, and 1/2" angle bar.

Luminaire is rated for up to (8) No. 12 AWG 90°C through branch circuit conductors.

Fixture should be used in ceilings with 25°C ambient temperature as standard.

Non-IC rated luminaires shall be installed with 3" of clearance on all sides from insulation or 1/2" clearance on all sides from non-combustible materials (unless marked spacing noted otherwise.)

IC rated luminaires can be installed in direct contact with insulation.

### Construction

Luminaire features LED module with quick-disconnect harness and strain relief for ease of inspection and service.

Servicing and maintaining the light engine, driver and branch circuit conductors is possible without tools from below the ceiling.

Luminaire is constructed with 20 gauge galvanized steel.

### Listings

Fixtures are CSA certified to meet US and Canadian Standards. All fixtures manufactured in strict accordance with the appropriate and current requirements of the "Standards for Safety" to UL, damp location standard, or UL wet location, covered ceiling only, optional.

### Photometrics

All photometry is conducted by IESNA standard LM-79-08 in an accredited lab. LEDs are tested to LM-80 standards. Lumen maintenance is calculated via TM-21.

### Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

### Note:

Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

The product images shown are for illustration purposes only and may not be an exact representation of the product.

## A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provided consistent color appearance and out-of-the-box control capability with simple commissioning when used with Acuity Brands controls products.

All configurations of this luminaire are calibrated and tested meet the Acuity Brands' specification for chromatic consistency - including color rendering, color fidelity and color temperature tolerance around standard CIE chromaticity coordinates.

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

TABLES OF USE

| Marked Spacing in Inches      |                              |                                       |                     |
|-------------------------------|------------------------------|---------------------------------------|---------------------|
| IVO6SQS RM - 5000 Lumens Max. |                              |                                       |                     |
| Lumen Package                 | Fixture Center to Center Min | Fixture Center to Building Member MIN | Space Above Fixture |
| 5000                          | 24                           | 12                                    | 0.5                 |

| Dimming Configurations | Dimming Level | Control Input | Dimming Level | Driver Dim Curve | Recommended Control Dim Curve |                    |
|------------------------|---------------|---------------|---------------|------------------|-------------------------------|--------------------|
|                        | MIN10         | +             | ZT            | 100% to 10%      | Linear                        | Linear/Logarithmic |
|                        |               | +             | EZT           | 100% to 10%      | Linear                        | Linear/Logarithmic |
|                        | MIN1          | +             | ZT            | 100% to 1%       | Linear                        | Linear/Logarithmic |
|                        |               | +             | EZT           | 100% to 1%       | Linear                        | Linear/Logarithmic |
|                        |               | +             | ELV           | 100% to 1%*      | n/a                           | n/a                |
|                        | DARK          | +             | EZT           | 100% to 0.1%     | Logarithmic                   | Linear             |
|                        |               | +             | DMX           | 100% to 0.1%     | Square                        | Linear             |
|                        |               | +             | DALI          | 100% to 0.1%     | Logarithmic                   | Linear             |

\* ELV Minimum Dimming level depends on dimmer and dimmer load

| Embedded Nlight Configurations | Dimming Level | Control Input | Dimming Level | Control Provided | Driver Provided         |                         |
|--------------------------------|---------------|---------------|---------------|------------------|-------------------------|-------------------------|
|                                | MIN10         | +             | NLIGHT        | 100% to 10%      | NIO EZDXA               | eldoLED 0-10V ECOdrive  |
|                                |               | +             | NLIGHTER      | 100% to 10%      | NIO EZDCL ER            | eldoLED 0-10V ECOdrive  |
|                                |               | +             | NLTAIR2       | 100% to 10%      | RIO EZDL G2             | eldoLED 0-10V ECOdrive  |
|                                |               | +             | NLTAIREM2     | 100% to 10%      | RIO EZDL EM G2          | eldoLED 0-10V ECOdrive  |
|                                | MIN1          | +             | NLIGHT        | 100% to 1%       | NIO EZDXA               | eldoLED 0-10V ECOdrive  |
|                                |               | +             | NLIGHTER      | 100% to 1%       | NIO EZDCL ER            | eldoLED 0-10V ECOdrive  |
|                                |               | +             | NLTAIR2       | 100% to 1%       | RIO EZDL G2             | eldoLED 0-10V ECOdrive  |
|                                |               | +             | NLTAIREM2     | 100% to 1%       | RIO EZDL EM G2          | eldoLED 0-10V ECOdrive  |
|                                | DARK          | +             | NLIGHT        | 100% to 0.1%     | NIO EZDXA               | eldoLED 0-10V SOLOdrive |
|                                |               | +             | NLIGHTER      | 100% to 0.1%     | NIO EZDCL ER            | eldoLED 0-10V SOLOdrive |
|                                |               | +             | NLTAIR2       | 100% to 0.1%     | RIO EZDL G2             | eldoLED 0-10V SOLOdrive |
|                                | +             | NLTAIREM2     | 100% to 0.1%  | RIO EZDL EM G2   | eldoLED 0-10V SOLOdrive |                         |

### How to Estimate Delivered Lumens in Emergency Mode

**Delivered Lumens = P x LPW**

P = Output power of emergency driver. P = 6W for E6WR

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

### Flangeless Installation

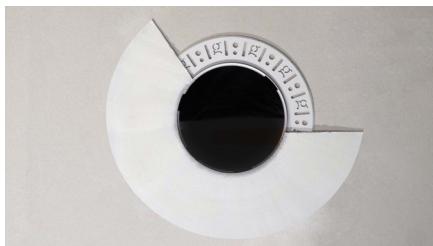
Gotham's flangeless option utilizes a micro-thin polymer mud ring that minimizes the amount of drywall compound required to finish the ceiling. The end result is a virtually undetectable flangeless downlight installation.

The polymer mud ring is installed independent of the of the recessed frame, therefore floating with the ceiling. This innovation minimizes any surface cracks during reflector installation, ceiling movement and any future service to the recessed frame, wiring, electronics, etc.

FLANGELESS



Partially finished mud ring, showing cross-section detail.



An IVO downlight requires only approximately 3" of plaster to finish.



IVO with flangeless trim



**New Construction Dimensions**

Dimensions in inches [centimeters]

1/2" clearance on all sides required from non-combustible materials in non-IC applications, unless marked spacing noted otherwise.

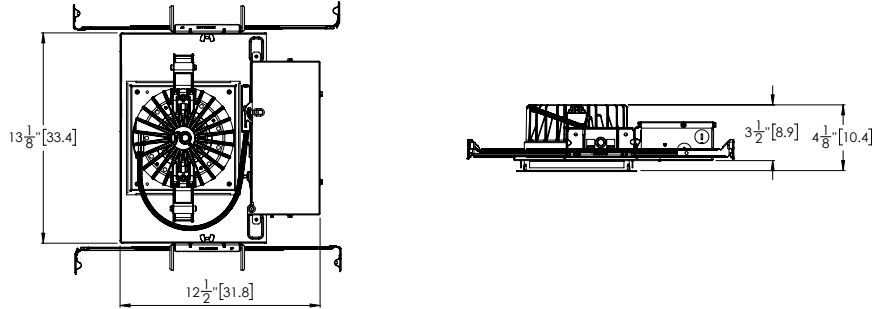
Trim Aperture: 6-5/16" x 6 5/16" (16 x 16)

Ceiling Cutout (flanged): 7-1/8" x 7 1/8" (18.1 x 18.1)

Trim Flange O.D.: 7 1/2" x 7 1/2" (19 x 19)

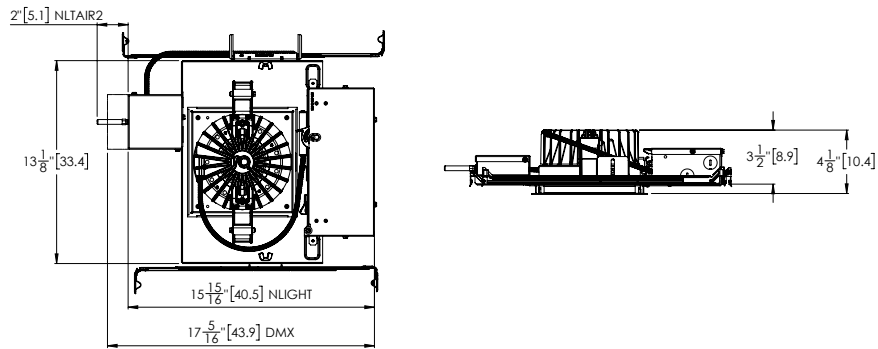
Ceiling Cutout (flangeless): 7 3/8" x 7 3/8" (18.7 x 18.7)

**Standard New Construction Housing (NCH)**



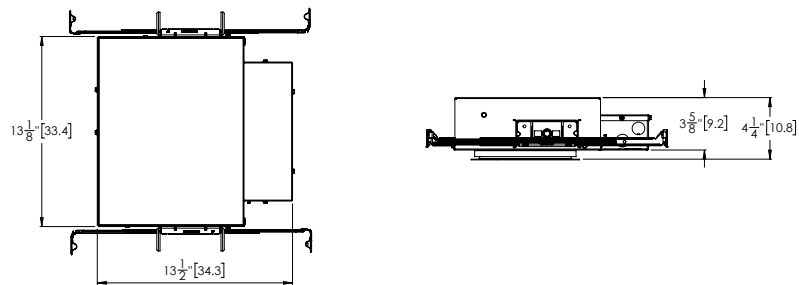
Shipping Weight: 8.3 lbs

**NCH with nLight**



Shipping Weight: 9.8 lbs

**IC Airtight (ICAT) or Chicago Plenum (CP)**  
(dimensions are the same when E6WR added)



Shipping Weight: 11.2 lbs

**Remodel Dimensions**

Dimensions in inches [centimeters]  
1/2" clearance on all sides required from non-combustible materials in non-IC applications, unless marked spacing noted otherwise.

Trim Aperture: 6-5/16" x 6 5/16" (16 x 16)

Ceiling Cutout (flanged): 7" x 7" (17.8 x 17.8)

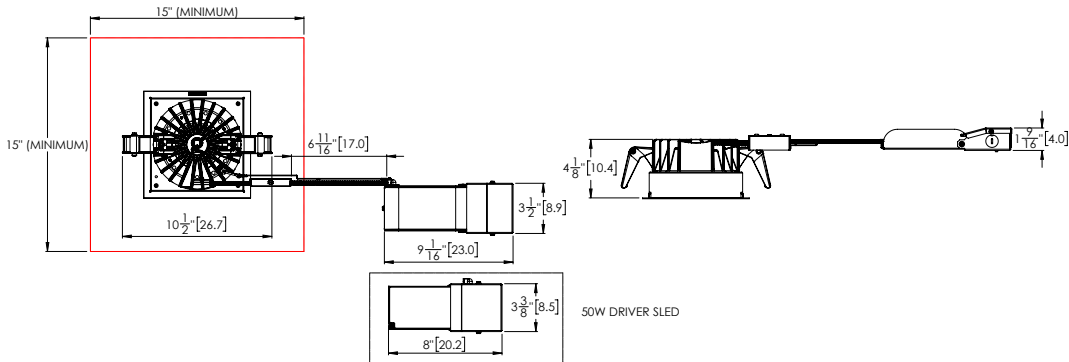
Trim Flange O.D.: 7 1/2" x 7 1/2" (19 x 19)

Ceiling Cutout (flangeless): 7 3/8" x 7 3/8" (18.7 x 18.7)

DIMENSIONAL DATA

**Remodel Construction (RM)**

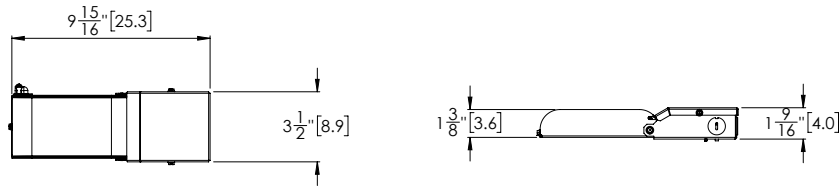
Requires 3.5" of plenum height



Shipping Weight: 4.9 lbs

**Remodel Construction (RM) Driver Enclosure with Fuse (SF)**

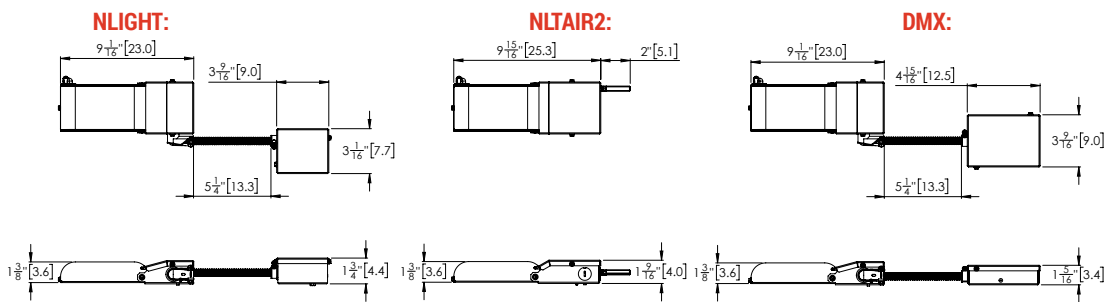
Requires 3.5" of plenum height



Shipping Weight: 5.6 lbs

**Remodel Construction (RM) Driver Enclosures with Control Options**

Requires 3.5" of plenum height



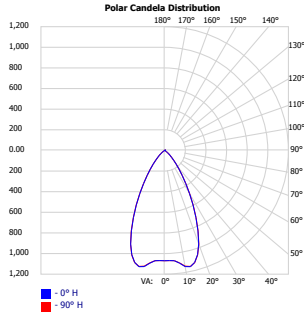
Shipping Weight: 5.6 lbs



**MD Medium Beam**

IVO46SQS D 20LM 35K 80CRI MD P AR LSS

Wattage: 17.5, Lumens: 2035.7, LPW: 116, S/MH: .93, Test No: 23-471-9P351



| Candela Summary |      |
|-----------------|------|
| 0°              | 2059 |
| 10°             | 2201 |
| 20°             | 1857 |
| 30°             | 926  |
| 40°             | 335  |
| 50°             | 96   |
| 60°             | 7    |
| 70°             | 1    |
| 80°             | 0    |
| 90°             | 0    |

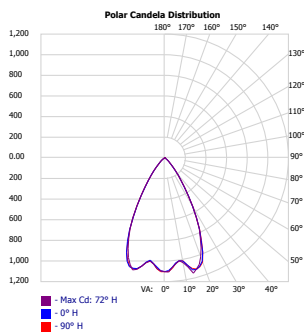
| Zonal Lumen Summary |        |        |
|---------------------|--------|--------|
| Zone                | Lumens | %      |
| 0-30                | 1420.4 | 69.8%  |
| 0-40                | 1804.2 | 88.6%  |
| 0-60                | 2030.8 | 99.8%  |
| 0-90                | 2035.7 | 100.0% |

| Cone of Light   |                        |                    |          |
|-----------------|------------------------|--------------------|----------|
| Mounting Height | Initial FC Center Beam | Beam Diameter (ft) |          |
|                 |                        | Horizontal         | Vertical |
| 8'              | 32.17                  | 7.6                | 8.5      |
| 10'             | 20.59                  | 9.5                | 10.6     |
| 12'             | 14.3                   | 11.4               | 12.7     |
| 14'             | 10.5                   | 13.3               | 14.8     |
| 16'             | 8.04                   | 15.2               | 16.9     |

**MWD Medium Wide Beam**

IVO6SQS D 20LM 35K 80CRI MWD P AR LSS

Wattage: 17.5, Lumens: 2041.7, LPW: 117, S/MH: 0.94, Test No: 23-660-1P351



| Candela Summary |      |
|-----------------|------|
| 0°              | 2095 |
| 10°             | 2025 |
| 20°             | 1812 |
| 30°             | 990  |
| 40°             | 376  |
| 50°             | 122  |
| 60°             | 7    |
| 70°             | 1    |
| 80°             | 0    |
| 90°             | 0    |

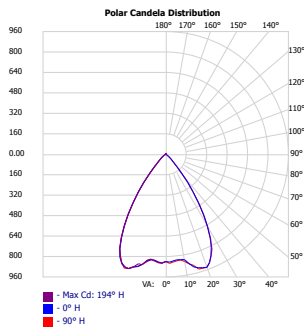
| Zonal Lumen Summary |        |        |
|---------------------|--------|--------|
| Zone                | Lumens | %      |
| 0-30                | 1389.3 | 68.0%  |
| 0-40                | 1781.2 | 87.2%  |
| 0-60                | 2036.3 | 99.7%  |
| 0-90                | 2041.7 | 100.0% |

| Cone of Light   |                        |                    |          |
|-----------------|------------------------|--------------------|----------|
| Mounting Height | Initial FC Center Beam | Beam Diameter (ft) |          |
|                 |                        | Horizontal         | Vertical |
| 8'              | 32.73                  | 9                  | 9        |
| 10'             | 20.95                  | 11.3               | 11.3     |
| 12'             | 14.55                  | 13.5               | 13.5     |
| 14'             | 10.69                  | 15.8               | 15.8     |
| 16'             | 8.18                   | 18                 | 18       |

**WD Wide Beam**

IVO6SQS D 20LM 35K 80CRI WD P AR LSS

Wattage: 9.2, Lumens: 1075, LPW: 117, S/MH: 1.16, Test No: LT23\_10\_09-20P197



| Candela Summary |      |
|-----------------|------|
| 0°              | 1688 |
| 10°             | 1634 |
| 20°             | 1632 |
| 30°             | 1194 |
| 40°             | 464  |
| 50°             | 118  |
| 60°             | 7    |
| 70°             | 1    |
| 80°             | 0    |
| 90°             | 0    |

| Zonal Lumen Summary |        |        |
|---------------------|--------|--------|
| Zone                | Lumens | %      |
| 0-30                | 1285.5 | 62.0%  |
| 0-40                | 1798.5 | 86.7%  |
| 0-60                | 2068.3 | 99.7%  |
| 0-90                | 2073.6 | 100.0% |

| Cone of Light   |                        |                    |          |
|-----------------|------------------------|--------------------|----------|
| Mounting Height | Initial FC Center Beam | Beam Diameter (ft) |          |
|                 |                        | Horizontal         | Vertical |
| 8'              | 26.37                  | 11.1               | 11.1     |
| 10'             | 16.88                  | 13.9               | 13.9     |
| 12'             | 11.72                  | 16.7               | 16.7     |
| 14'             | 8.61                   | 19.5               | 19.4     |
| 16'             | 6.59                   | 22.2               | 22.2     |

| CRI/CCT Multiplier Table |       |            |
|--------------------------|-------|------------|
| CRI                      | CCT   | Multiplier |
| 80                       | 2700K | 0.92       |
|                          | 3000K | 0.96       |
|                          | 3500K | 1.00       |
|                          | 4000K | 1.01       |
|                          | 5000K | 1.04       |
| 90                       | 2700K | 0.80       |
|                          | 3000K | 0.85       |
|                          | 3500K | 0.85       |
|                          | 4000K | 0.89       |
| 95                       | 2700K | 0.68       |
|                          | 3000K | 0.75       |

| Reflector Finish Multiplier |                |            |
|-----------------------------|----------------|------------|
| Trim Color                  | Optical Finish | Multiplier |
| AR                          | LSS            | 1.00       |
| AR                          | LD             | 0.95       |
| GR                          | LSS            | 1.00       |
| GR                          | LD             | 0.95       |
| PR                          | LSS            | 0.96       |
| PR                          | LD             | 0.92       |
| WTR                         | LSS            | 0.96       |
| WTR                         | LD             | 0.91       |
| WR                          |                | 1.01       |
| BZR                         |                | 0.80       |
| BR                          |                | 0.80       |

| UGR (70% 50% 20% reflectance using a 4H x 8H room size) |           |     |     |         |     |     |
|---|-----------|-----|-----|---------|-----|-----|
| Lumen Package   | Crosswise |     |     | Endwise |     |     |
|   | MD        | MWD | WD  | MD      | MWD | WD  |
| 05LM  | 1.3       | 0   | 0   | 1.4     | 0   | 0   |
| 07LM  | 2.7       | 0.6 | 0.4 | 2.8     | 0.8 | 0.7 |
| 10LM  | 3.5       | 1.4 | 1.2 | 3.6     | 1.7 | 1.5 |
| 15LM  | 4.8       | 2.7 | 2.5 | 4.9     | 3   | 2.8 |
| 20LM  | 5.8       | 3.7 | 3.5 | 5.9     | 3.9 | 3.8 |
| 25LM  | 6.6       | 4.5 | 4.3 | 6.7     | 4.7 | 4.6 |
| 30LM  | 7.3       | 5.1 | 5   | 7.4     | 5.4 | 5.2 |
| 35LM  | 7.6       | 5.5 | 5.4 | 7.7     | 5.8 | 5.6 |
| 40LM  | 8.1       | 6   | 5.8 | 8.2     | 6.2 | 6.1 |
| 45LM  | 8.5       | 6.4 | 6.2 | 8.6     | 6.6 | 6.5 |
| 50LM  | 8.9       | 6.7 | 6.6 | 9       | 7   | 6.9 |



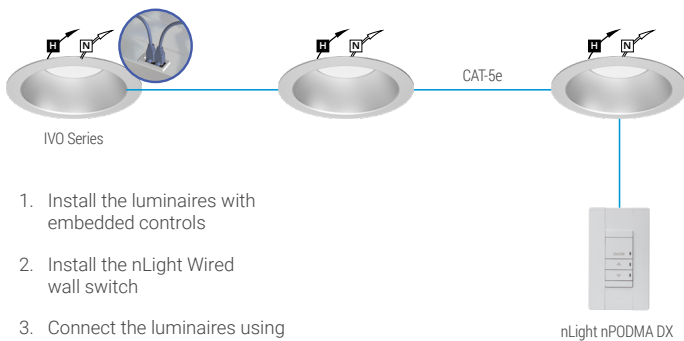


### Single Lighting Controls Platform for Indoor & Outdoor Spaces

nLight® is your networked lighting controls platform, for indoor and outdoor applications, providing wired or wireless options. Scaling from room to campus-wide applications, it is the one platform that grows with your business today and tomorrow; to seamlessly address energy cost optimization, building code compliance, improved occupant comfort, and much more. nLight also interfaces with DALI®, BACnet®, DMX and additional third-party devices.

[nlightcontrols.com](http://nlightcontrols.com)

#### Wired Embedded Controls



1. Install the luminaires with embedded controls
2. Install the nLight Wired wall switch
3. Connect the luminaires using standard CAT-5e cables and the controls devices will automatically discover each other and work (plug and play)

#### Wireless Embedded Controls



1. Install the luminaires with embedded controls
2. Install the nLight AIR battery-powered wall switch
3. Use CLAIRITY+ mobile app to pair the fixtures with the wall switch and if desired, customize the sensor settings

#### UL924 Sequence of Operation

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

