

**Round Remodel Downlight with Care222® UV Technology**
6"

OVERVIEW

**Feature Set**

- Visible light integrated with filtered far-UVC 222nm light module in Hybrid and UV-only solutions
- Visible Light only companion option available
- Bounding Ray™ optical design
- One piece self-flanged trim construction
- 2.5 MacAdam Ellipse; 80 CRI typical, 90+ CRI optional
- Medium Wide 1.0 S:MH distribution standard
- 65° cutoff to source and source image
- Fixtures are damp location listed
- Available with 10% dimming, 1% dimming, or dim to dark

**Distribution**



COMPLEMENTARY PRODUCTS

**Coordinated Apertures | Multiple Layers of Light**



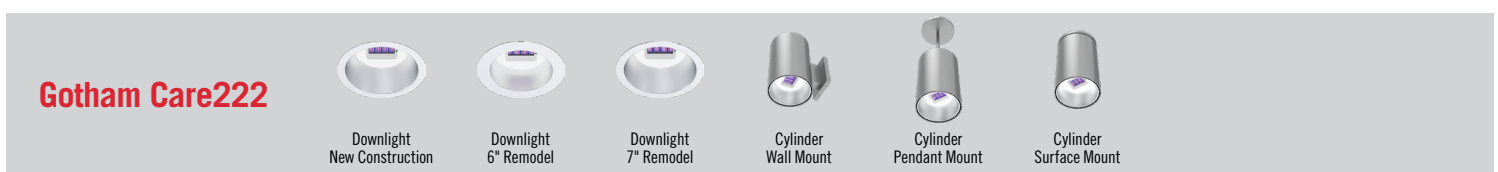
**EV06 New Construction Downlight with Care222**



**EV06 6" Remodel Downlight with Care222**



**EV06 7" Remodel Downlight with Care222**



**Gotham Care222**

**A+ Capable Luminaire**

This item is an A+ capable luminaire, which has been designed and tested to provide 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 to 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).

ORDERING INFORMATION

Luminaire Type:

Catalog Number:

EXAMPLE: EV06RM UV222H D108 35/10 AR MWD LSS MVOLT EZ1

| Series                                  | Wavelength <sup>1</sup>  | Programming Option <sup>2</sup>   |
|---|--|---|
| EV06RM EVO 6In. Remodel Round Downlight | <b>UV222H</b> Visible light integrated with 222nm UV module<br><b>UV222<sup>4</sup></b> 222nm UV module only (no visible light)<br><b>UV222VL</b> Visible light downlight (companion fixture - no UV module) | <b>D108</b> Dose Level for 108 inch (min) to 113.9 inch (max) Height from Floor to Module Face<br><b>D114</b> Dose Level for 114 inch (min) to 119.9 inch (max) Height from Floor to Module Face<br><b>D120</b> Dose Level for 120 inch (min) to 125.9 inch (max) Height from Floor to Module Face<br><b>D126</b> Dose Level for 126 inch (min) to 131.9 inch (max) Height from Floor to Module Face<br><b>D132</b> Dose Level for 132 inch (min) or Greater Height from Floor to Module Face |

| Color Temperature <sup>3</sup> | Nominal Lumen Values <sup>3</sup> | Reflector & Flange Color | Finish            | Ceiling Cutout               | Voltage |
|--------------------------------|-----------------------------------|--------------------------|-------------------|------------------------------|---------|
| 27/ 2700 K                     | 05 500 lumens                     | AR Clear                 | LSS Semi-specular | (blank) 7" Ceiling Cutout    | MVOLT   |
| 30/ 3000 K                     | 10 1000 lumens                    |                          | LD Matte-diffuse  | CC6 6"-6 7/8" Ceiling Cutout | 120     |
| 35/ 3500 K                     | 15 1500 lumens                    |                          | LS Specular       |                              | 277     |
| 40/ 4000 K                     | 20 2000 lumens                    |                          |                   |                              |         |

| Driver <sup>1</sup>   | Control Interface <sup>1</sup>   | Options   |
|---|--|---|
| <b>GZ10</b> 0-10V driver dims to 10%<br><b>GZ1</b> 0-10V driver dims to 1%<br><b>EZ10</b> eldoLED 0-10V ECOdrive. Linear dimming to 10% min.<br><b>EZ1</b> eldoLED® 0-10V ECOdrive. Linear dimming to 1% min.<br><b>EZB</b> eldoLED® 0-10V SOLOdrive. Logarithmic dimming to <1%.<br><b>EDAB<sup>4</sup></b> eldoLED® SOLOdrive DALI. Logarithmic dimming to <1%.<br><b>ELV<sup>4</sup></b> Electronic line voltage/Forward phase/Triac dimming. 120v only. | <b>(blank)</b> No controls<br><b>NLT<sup>5</sup></b> nLight® dimming pack controls. Specify 120V or 277V<br><b>NLTAIR<sup>25</sup></b> nLight® dimming pack controls emergency circuit. Specify 120V or 277V | <b>(blank)</b> No options<br><b>TRW</b> White painted flange<br><b>TRBL</b> Black painted flange<br><b>90CRI<sup>6</sup></b> High CRI (90+) |

Programming Option Table

| Programming Option | Mounting Height to Module Face    | Mounting Height to Fixture Aperture |
|--------------------|-----------------------------------|-------------------------------------|
| D108               | Minimum 9" AFF to 9' 5" AFF       | Minimum 8' 9" AFF to 9' 2" AFF      |
| D114               | Minimum 9' 6" AFF to 9'-11" AFF   | Minimum 9' 3" AFF to 9'-8" AFF      |
| D120               | Minimum 10' AFF to 10' 5" AFF     | Minimum 9'-9" AFF to 10'-2" AFF     |
| D126               | Minimum 10'-6" AFF to 10'-11" AFF | Minimum 10'-3" AFF to 10'-8" AFF    |
| D132               | Minimum 11" AFF and above         | Minimum 10'-9" AFF and above        |

AFF: Above Finished Floor

**ACCESSORIES – order as separate catalog numbers (shipped separately)**

|                  |   |
|------------------|---|
| CTAEV06          | 6" Aperture ceiling thickness adapter (extends mounting frame to accommodate ceiling thickness up to 5"). |
| GRA611 UV222 DWH | White ceiling opening goof ring adapters. To cover a hole greater than 7 1/8" ID and less than 11" OD.    |
| GRA611 UV222 DBL | Black ceiling opening goof ring adapters. To cover a hole greater than 7 1/8" ID and less than 11" OD.    |

**ORDERING NOTES**

- Visible light of UV222H & UV222VL versions only suitable for dimming. See [Tech-240](#) for list of compatible dimmers. Driver options and dimming not available for UV222 module only version.
- Not for use with UV222VL Visible Light only version.
- Color Temperature/Nominal Lumen Values available for Hybrid & Visible Light versions only.
- Not available with nLight® options.
- Not available with the UV222 only option. Not available with DALI, ELV & ECOS2. Not available with CP option. Not recommended for metal ceiling installations.
- Not available for UV222 module only version.

**UV Disinfection\***

Care222® UV disinfection technology inactivates pathogens<sup>1</sup> by utilizing 222nm wavelengths to disrupt the DNA and RNA genetic material in the pathogen which prevents it from reproducing.

Care222 technology operates continually and meets exposure guidelines for occupied space established by the American Conference of Governmental Industrial Hygienists (ACGIH®)<sup>2</sup>. Occupants can be present in the space, during treatment, when installed and used in accordance with written instructions.

**UV Lamp Module Source**

Care222 mercury-free far-UVC excimer lamp. Emits a soft violet glow from 1.75" x 2.38" [44.5mm x 60.3mm] opening when powered.

**UV Filter**

Patented short pass filter for narrow band 222nm emission that removes longer wavelengths that can penetrate the living tissue in skin or beyond the top layer of the cornea in the eyes.

**UV Wavelength**

Emitted Wavelength Range is 200nm ~ 230nm with Peak Wavelength at 222nm far-UVC.

**UV Lamp Module Run Time**

Requires no external controls or startup commissioning. UV lamp module will operate on 12-minute cycles for a duration of between 10 and 50 seconds each cycle. The duration will depend on the specific dose chosen to meet the application design requirements.

UV lamp rated for 3000 hours (approximately 5 years of life based on activated hours).<sup>3</sup>

**Optical Assembly**

Optical design is a Bounding Ray™ design with 65° cutoff to source and source image. Top-down flash characteristic for superior glare control.

Unitized optics shall have mechanical attachment of the light engine to the lower reflector for optical alignment.

Medium Wide 1.0 S:MH distribution standard.

**Electrical**

The luminaire operates from a 50 or 60 Hz ±3 Hz AC line over a voltage ranging from 120 VAC to 277 VAC.

Power factor > 0.9%.

**Requires unswitched leg for UVC module. Single circuit; not intended for use with wall switches. Connect to an unswitched circuit intended for 24/7/365 continuous operation.**

**Controls**

Luminaire can be equipped with interface for nLight® wired or wireless network with integral power supply.

nLight® modules are not integral to the fixture, and are shipped as remote add-ons.

**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 perform within the recommended operating areas for flicker as a function of frequency and modulation (%) outlined in IEEE Standard 1789-2015 (IEEE Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers), in typical operating conditions at representative dimming levels.

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

**Construction**

Product should not be installed into an existing fixture or housing; remodel only.

Junction box capacity: 8 (4 in, 4 out) 12AWG rated for 90°C

Luminaires are suitable for installation in ceilings up to 1½" thick. (specify ceiling thickness adapter to extend frame to accommodate ceiling thickness up to 5")

The assembly and manufacturing process for the luminaire is designed to assure all internal components are adequately supported to withstand mechanical shock and vibration.

25°C ambient temperature standard (1/2" clearance on all sides unless marked spacing noted otherwise).

**Listings**

UL listed and certified to meet US standards for LED luminaires and germicidal equipment for use in occupied spaces.

Meets California ozone emissions limits. California Air Resources Board (CARB) certified. Damp location listed.

**Disclaimer**

\*All references to "disinfection" are referring generally to bioburden reduction and are not intended to refer to any specific definition of the term as may be used for other purposes by the U.S. Food and Drug Administration or the U.S. Environmental Protection Agency. Bioburden reduction is a function of fixture run time and the distance to the UV light source, airflow, room size, shadow areas and/or other factors, and the level of reduction will vary within a specific space. These fixtures are not intended for use in the cure, mitigation or prevention of disease and are not certified or approved for use as or for the disinfection of medical devices by the FDA. It is the obligation of the end-user to consult with appropriately qualified Professional Engineers, a Certified Infection Control professional and a Certified Industrial Hygienist, as applicable, to determine whether these fixtures meet the applicable requirements for system performance, code compliance, safety (including safety and hazard alerting signs), suitability and effectiveness for use in a particular application design.

For sale only in the United States of America and Mexico. Not registered as a pesticide device.

1. Reference pages 5-7 of this document under Projected Virus Inactivation and Projected Bacteria Inactivation.
2. ACGIH® 2021 TLVs® and BEIs® - Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices; when installed and used in accordance with written instructions.
3. Average rated life based on industry standard measurements and not a performance claim specific to any individual product.

**Registration**

EPA Est. No.: 97727-IN-1

**Precautionary Statements**

- Emitters used in this fixture are in the EXEMPT RISK GROUP for photobiological risk, as described in IEC 62471, when correctly commissioned and properly installed in accordance with written instructions.
  - See [Installation Instructions](#) for proper usage guidelines and warnings regarding risks resulting from misuse.
- See below for information about potential limited photodegradation of materials.
- This fixture may generate ozone. Each emitter in the fixture has an ozone emission maximum concentration of 0.001 ppm over an 8-hour period, as tested in accordance with UL 867. Precautions that can be taken, if needed, to ensure that ozone concentration stays within applicable permissible exposure limits are described in the [Installation Instructions](#).

**Buy American Act**

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

**Photometrics**

LEDs tested to LM-80 standards in an accredited lab. Measured in accordance with LM-79-08 IESNA standard. Extrapolated life calculated per IESNA TM-21-21. 70% Lumen maintenance at 60,000 hours. Color variation <2.5-step MacAdam ellipse (2.5SDCM).

**Warranty**

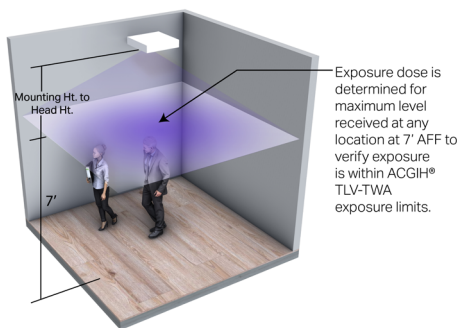
2-year limited warranty for Hybrid (H) and UV Module only versions. Complete warranty terms located under Acuity Brands UV Lighting: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions). The UV Module only version is an ultraviolet (UV) based device that is not serviceable. The Hybrid (H) version contains an embedded UV based device that is not separable from the fixture and is also not serviceable. Therefore, if this fixture experiences a failure due to a defect in material or workmanship after the warranty period has expired or the fixture reaches the end of its useful life then, if continued operation is desired, a new fixture must be purchased.

5-year limited warranty for Visible Light (VL) only version. Complete warranty terms located under Acuity Brands Lighting LED Commercial Indoor: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions). These are the only warranties provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed.

**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.

**Projected UV Exposure and Exposure Limits**



This chart illustrates mounting height configurations for the EVO6 fixture, incorporating Care222® technology, that provide a UV exposure dose within the exposure guidelines<sup>1</sup> established and published by the American Conference of Governmental Industrial Hygienists (ACGIH®). For the UV exposure dose to remain within the ACGIH guidelines for the level of UV exposure a typical worker can be exposed to without adverse health effects, the maximum exposure dose must not exceed 23 mJ/cm<sup>2</sup> (millijoules per square centimeter) for an 8-hour period of time. Per the UL 8802 standard, the upper limit of occupied space is defined to be a test plane 7' Above Finished Floor (AFF). This calculated maximum exposure dose represents the dose an individual would receive over an 8-hour period at 7' Above Finished Floor (AFF) even if stationary in the location of maximum dose.

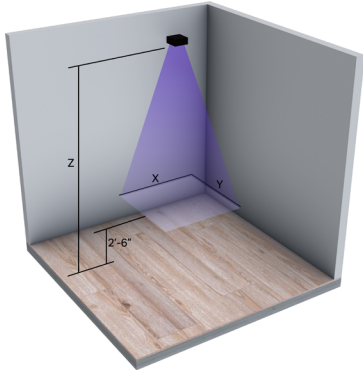
The levels of exposure in the ACGIH guidelines are quantified as Threshold Limit Values (TLVs®) and are expressed as Time-Weighted Averages (TWAs). The TLVs for incoherent ultraviolet (UV) radiation are established for wavelengths between 180 and 400 nm and represent conditions under which it is believed that nearly all healthy workers may be repeatedly exposed without acute adverse health effects such as erythema and photokeratitis. ACGIH guidelines are designed for use by industrial hygienists in making decisions regarding safe levels of exposure to hazards in the workplace.

1. ACGIH® 2021 TLVs® and BEIs® - Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices; when installed and used in accordance with written instructions.

| Distance                       |                                     |                                | Maximum 8 Hr. Dose | Meets ACGIH® TLV-TWA   |
|--------------------------------|-------------------------------------|--------------------------------|--------------------|------------------------|
| Mounting Height to Module Face | Mounting Height to Fixture Aperture | Mounting Height to Head Height | mJ/cm <sup>2</sup> | <23 mJ/cm <sup>2</sup> |
| 9'                             | 8'-9"                               | 2'                             | 22.41              | Yes                    |
| 9'-6"                          | 9'-3"                               | 2'-6"                          | 22.78              | Yes                    |
| 10'                            | 9'-9"                               | 3'                             | 21.77              | Yes                    |
| 10'-6"                         | 10'-3"                              | 3'-6"                          | 21.82              | Yes                    |
| 11'                            | 10'-9"                              | 4'                             | 20.4               | Yes                    |
| 12'                            | 11'-9"                              | 5'                             | 12.72              | Yes                    |

SPECIFICATIONS

Projected Virus and Bacteria Inactivation



Use this chart to estimate the effectiveness of one EVO6 fixture, mounted at various mounting heights (Z) and having different areas of coverage (X x Y), at inactivating the pathogens listed below on surfaces. The calculated average dose for each scenario is determined from Visual® lighting application software radiometric modeling<sup>1</sup> and is then correlated with laboratory research<sup>2</sup> to derive predicted inactivation effectiveness for specific pathogens. The analysis assumes that a horizontal plane positioned 2'-6" Above Finished Floor (AFF) is receiving the dose. For different areas of coverage or multiple fixture layouts, consult an Acuity Brands UV Lighting Specialist.

1. The results presented here are based upon a 12'x12'x15' high empty room with all surface reflectance assumed to be 5%.
2. Reference [Pathogen Inactivation Dose Reference List](#) - 222nm, 254nm & Pulsed Xenon UV Light Sources.
3. As a result of computational limitations and simplifying modeling assumptions in Visual, variations in actual product performance from tested product samples, and/or variations in field conditions from laboratory testing conditions, the accuracy of calculated output values identifying radiometric quantities and any resulting derived radiation dose predictions may be adversely affected. See complete disclaimer at [VISUAL LIGHTING DISCLAIMER](#)

| 4'x4' Area (X x Y) |                                |                                     | Calculated Average Dose <sup>3</sup><br>mJ/cm <sup>2</sup> | Surface Pathogen Inactivation <sup>2</sup> |              |               |            |              |               |            |              |         |
|--------------------|--------------------------------|-------------------------------------|--|--|--------------|---------------|------------|--------------|---------------|------------|--------------|---------|
| Programming Option | Mounting Height to Module Face | Mounting Height to Fixture Aperture |  | Feline Calicivirus                         |              |               | Influenza  |              |               | SARS-CoV-2 |              |         |
|                    |                                |                                     | % in 24 Hours  | Hrs to 90%                                 | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% |         |
| D108               | 9'                             | 8'-9"                               | 4.5 mJ/cm <sup>2</sup> over 24 hr                          | 80.3 %                                     | 34.1 hr      | 102.2 hr      | 99.4 %     | 10.7 hr      | 32.0 hr       | >99.9 %    | 6.4 hr       | 19.2 hr |
| D114               | 9.6'                           | 9'-3"                               | 6.6 mJ/cm <sup>2</sup> over 24 hr                          | 90.8 %                                     | 23.2 hr      | 69.6 hr       | >99.9 %    | 7.3 hr       | 21.8 hr       | >99.9 %    | 4.4 hr       | 13.1 hr |
| D120               | 10'                            | 9'-9"                               | 8.2 mJ/cm <sup>2</sup> over 24 hr                          | 94.8 %                                     | 18.7 hr      | 56.1 hr       | >99.9 %    | 5.9 hr       | 17.6 hr       | >99.9 %    | 3.5 hr       | 10.5 hr |
| D126               | 10'.6"                         | 10'-3"                              | 10.2 mJ/cm <sup>2</sup> over 24 hr                         | 97.5 %                                     | 15.0 hr      | 45.0 hr       | >99.9 %    | 4.7 hr       | 14.1 hr       | >99.9 %    | 2.8 hr       | 8.5 hr  |
| D132               | 11'                            | 10'-9"                              | 11.4 mJ/cm <sup>2</sup> over 24 hr                         | 98.3 %                                     | 13.5 hr      | 40.4 hr       | >99.9 %    | 4.2 hr       | 12.7 hr       | >99.9 %    | 2.5 hr       | 7.6 hr  |
| D132               | 12'                            | 11'-9"                              | 9.3 mJ/cm <sup>2</sup> over 24 hr                          | 96.4 %                                     | 16.6 hr      | 49.7 hr       | >99.9 %    | 5.2 hr       | 15.6 hr       | >99.9 %    | 3.1 hr       | 9.3 hr  |

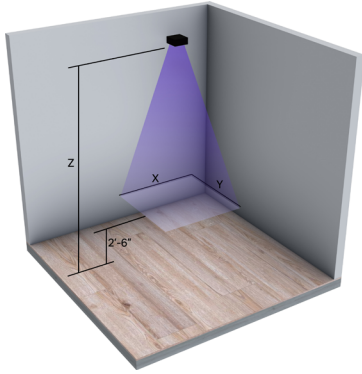
| 4'x4' Area (X x Y) |                                |                                     | Calculated Average Dose <sup>3</sup><br>mJ/cm <sup>2</sup> | Surface Pathogen Inactivation <sup>2</sup> |              |               |            |              |               |            |              |         |
|--------------------|--------------------------------|-------------------------------------|--|--|--------------|---------------|------------|--------------|---------------|------------|--------------|---------|
| Programming Option | Mounting Height to Module Face | Mounting Height to Fixture Aperture |  | MRSA                                       |              |               | Salmonella |              |               | E. coli    |              |         |
|                    |                                |                                     | % in 24 Hours  | Hrs to 90%                                 | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% |         |
| D108               | 9'                             | 8'-9"                               | 4.5 mJ/cm <sup>2</sup> over 24 hr                          | 90.5 %                                     | 23.5 hr      | 70.5 hr       | 97.3 %     | 15.3 hr      | 45.8 hr       | 99.4 %     | 10.7 hr      | 32.0 hr |
| D114               | 9.6'                           | 9'-3"                               | 6.6 mJ/cm <sup>2</sup> over 24 hr                          | 96.8 %                                     | 16.0 hr      | 48.0 hr       | 99.5 %     | 10.4 hr      | 31.2 hr       | >99.9 %    | 7.3 hr       | 21.8 hr |
| D120               | 10'                            | 9'-9"                               | 8.2 mJ/cm <sup>2</sup> over 24 hr                          | 98.6 %                                     | 12.9 hr      | 38.7 hr       | 99.9 %     | 8.4 hr       | 25.1 hr       | >99.9 %    | 5.9 hr       | 17.6 hr |
| D126               | 10'.6"                         | 10'-3"                              | 10.2 mJ/cm <sup>2</sup> over 24 hr                         | 99.5 %                                     | 10.3 hr      | 31.0 hr       | >99.9 %    | 6.7 hr       | 20.2 hr       | >99.9 %    | 4.7 hr       | 14.1 hr |
| D132               | 11'                            | 10'-9"                              | 11.4 mJ/cm <sup>2</sup> over 24 hr                         | 99.7 %                                     | 9.3 hr       | 27.9 hr       | >99.9 %    | 6.0 hr       | 18.1 hr       | >99.9 %    | 4.2 hr       | 12.7 hr |
| D132               | 12'                            | 11'-9"                              | 9.3 mJ/cm <sup>2</sup> over 24 hr                          | 99.2 %                                     | 11.4 hr      | 34.3 hr       | >99.9 %    | 7.4 hr       | 22.3 hr       | >99.9 %    | 5.2 hr       | 15.6 hr |

| 6'x6' Area (X x Y) |                                |                                     | Calculated Average Dose <sup>3</sup><br>mJ/cm <sup>2</sup> | Surface Pathogen Inactivation <sup>2</sup> |              |               |            |              |               |            |              |         |
|--------------------|--------------------------------|-------------------------------------|--|--|--------------|---------------|------------|--------------|---------------|------------|--------------|---------|
| Programming Option | Mounting Height to Module Face | Mounting Height to Fixture Aperture |  | Feline Calicivirus                         |              |               | Influenza  |              |               | SARS-CoV-2 |              |         |
|                    |                                |                                     | % in 24 Hours  | Hrs to 90%                                 | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% |         |
| D108               | 9'                             | 8'-9"                               | 3.5 mJ/cm <sup>2</sup> over 24 hr                          | 71.4 %                                     | 44.2 hr      | 132.5 hr      | 98.2 %     | 13.8 hr      | 41.5 hr       | 99.9 %     | 8.3 hr       | 24.9 hr |
| D114               | 9.6'                           | 9'-3"                               | 5.3 mJ/cm <sup>2</sup> over 24 hr                          | 85.2 %                                     | 28.9 hr      | 86.8 hr       | 99.8 %     | 9.1 hr       | 27.2 hr       | >99.9 %    | 5.4 hr       | 16.3 hr |
| D120               | 10'                            | 9'-9"                               | 6.8 mJ/cm <sup>2</sup> over 24 hr                          | 91.4 %                                     | 22.6 hr      | 67.7 hr       | >99.9 %    | 7.1 hr       | 21.2 hr       | >99.9 %    | 4.2 hr       | 12.7 hr |
| D126               | 10'.6"                         | 10'-3"                              | 8.7 mJ/cm <sup>2</sup> over 24 hr                          | 95.6 %                                     | 17.6 hr      | 52.9 hr       | >99.9 %    | 5.5 hr       | 16.6 hr       | >99.9 %    | 3.3 hr       | 9.9 hr  |
| D132               | 11'                            | 10'-9"                              | 9.9 mJ/cm <sup>2</sup> over 24 hr                          | 97.2 %                                     | 15.5 hr      | 46.5 hr       | >99.9 %    | 4.8 hr       | 14.5 hr       | >99.9 %    | 2.9 hr       | 8.7 hr  |
| D132               | 12'                            | 11'-9"                              | 8.3 mJ/cm <sup>2</sup> over 24 hr                          | 95.0 %                                     | 18.5 hr      | 55.4 hr       | >99.9 %    | 5.8 hr       | 17.3 hr       | >99.9 %    | 3.5 hr       | 10.4 hr |

| 6'x6' Area (X x Y) |                                |                                     | Calculated Average Dose <sup>3</sup><br>mJ/cm <sup>2</sup> | Surface Pathogen Inactivation <sup>2</sup> |              |               |            |              |               |            |              |         |
|--------------------|--------------------------------|-------------------------------------|--|--|--------------|---------------|------------|--------------|---------------|------------|--------------|---------|
| Programming Option | Mounting Height to Module Face | Mounting Height to Fixture Aperture |  | MRSA                                       |              |               | Salmonella |              |               | E. coli    |              |         |
|                    |                                |                                     | % in 24 Hours  | Hrs to 90%                                 | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% |         |
| D108               | 9'                             | 8'-9"                               | 3.5 mJ/cm <sup>2</sup> over 24 hr                          | 83.7 %                                     | 30.5 hr      | 91.4 hr       | 93.9 %     | 19.8 hr      | 59.4 hr       | 98.2 %     | 13.8 hr      | 41.5 hr |
| D114               | 9.6'                           | 9'-3"                               | 5.3 mJ/cm <sup>2</sup> over 24 hr                          | 93.7 %                                     | 19.9 hr      | 59.8 hr       | 98.6 %     | 13.0 hr      | 38.9 hr       | 99.8 %     | 9.1 hr       | 27.2 hr |
| D120               | 10'                            | 9'-9"                               | 6.8 mJ/cm <sup>2</sup> over 24 hr                          | 97.1 %                                     | 15.6 hr      | 46.7 hr       | 99.6 %     | 10.1 hr      | 30.4 hr       | >99.9 %    | 7.1 hr       | 21.2 hr |
| D126               | 10'.6"                         | 10'-3"                              | 8.7 mJ/cm <sup>2</sup> over 24 hr                          | 98.9 %                                     | 12.2 hr      | 36.5 hr       | >99.9 %    | 7.9 hr       | 23.7 hr       | >99.9 %    | 5.5 hr       | 16.6 hr |
| D132               | 11'                            | 10'-9"                              | 9.9 mJ/cm <sup>2</sup> over 24 hr                          | 99.4 %                                     | 10.7 hr      | 32.0 hr       | >99.9 %    | 6.9 hr       | 20.8 hr       | >99.9 %    | 4.9 hr       | 14.6 hr |
| D132               | 12'                            | 11'-9"                              | 8.3 mJ/cm <sup>2</sup> over 24 hr                          | 98.7 %                                     | 12.7 hr      | 38.2 hr       | 99.9 %     | 8.3 hr       | 24.8 hr       | >99.9 %    | 5.8 hr       | 17.4 hr |

SPECIFICATIONS

Projected Virus and Bacteria Inactivation



Use this chart to estimate the effectiveness of one EVO6 fixture, mounted at various mounting heights (Z) and having different areas of coverage (X x Y), at inactivating the pathogens listed below on surfaces. The calculated average dose for each scenario is determined from Visual® lighting application software radiometric modeling<sup>1</sup> and is then correlated with laboratory research<sup>2</sup> to derive predicted inactivation effectiveness for specific pathogens. The analysis assumes that a horizontal plane positioned 2'-6" Above Finished Floor (AFF) is receiving the dose. For different areas of coverage or multiple fixture layouts, consult an Acuity Brands UV Lighting Specialist.

1. The results presented here are based upon a 12'x12'x15' high empty room with all surface reflectance assumed to be 5%.
2. Reference [Pathogen Inactivation Dose Reference List](#) - 222nm, 254nm & Pulsed Xenon UV Light Sources.
3. As a result of computational limitations and simplifying modeling assumptions in Visual, variations in actual product performance from tested product samples, and/or variations in field conditions from laboratory testing conditions, the accuracy of calculated output values identifying radiometric quantities and any resulting derived radiation dose predictions may be adversely affected. See complete disclaimer at [VISUAL LIGHTING DISCLAIMER](#)

| 8'x8' Area (X x Y) |                                |                                     | Calculated Average Dose <sup>3</sup><br>mJ/cm <sup>2</sup> | Surface Pathogen Inactivation <sup>2</sup> |              |               |            |              |               |            |              |         |
|--------------------|--------------------------------|-------------------------------------|--|--|--------------|---------------|------------|--------------|---------------|------------|--------------|---------|
| Programming Option | Mounting Height to Module Face | Mounting Height to Fixture Aperture |  | Feline Calicivirus                         |              |               | Influenza  |              |               | SARS-CoV-2 |              |         |
|                    |                                |                                     | % in 24 Hours  | Hrs to 90%                                 | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% |         |
| D108               | 9'                             | 8'-9"                               | 2.4 mJ/cm <sup>2</sup> over 24 hr                          | 58.5 %                                     | 62.8 hr      | 188.5 hr      | 94.0 %     | 19.7 hr      | 59.0 hr       | 99.1 %     | 11.8 hr      | 35.4 hr |
| D114               | 9.6'                           | 9'-3"                               | 3.9 mJ/cm <sup>2</sup> over 24 hr                          | 75.4 %                                     | 39.4 hr      | 118.2 hr      | 98.9 %     | 12.3 hr      | 37.0 hr       | >99.9 %    | 7.4 hr       | 22.2 hr |
| D120               | 10'                            | 9'-9"                               | 5.2 mJ/cm <sup>2</sup> over 24 hr                          | 84.5 %                                     | 29.7 hr      | 89.0 hr       | 99.7 %     | 9.3 hr       | 27.9 hr       | >99.9 %    | 5.6 hr       | 16.7 hr |
| D126               | 10'.6"                         | 10'-3"                              | 6.9 mJ/cm <sup>2</sup> over 24 hr                          | 91.5 %                                     | 22.4 hr      | 67.1 hr       | >99.9 %    | 7.0 hr       | 21.0 hr       | >99.9 %    | 4.2 hr       | 12.6 hr |
| D132               | 11'                            | 10'-9"                              | 8.0 mJ/cm <sup>2</sup> over 24 hr                          | 94.4 %                                     | 19.1 hr      | 57.3 hr       | >99.9 %    | 6.0 hr       | 18.0 hr       | >99.9 %    | 3.6 hr       | 10.8 hr |
| D132               | 12'                            | 11'-9"                              | 7.1 mJ/cm <sup>2</sup> over 24 hr                          | 92.1 %                                     | 21.7 hr      | 65.2 hr       | >99.9 %    | 6.8 hr       | 20.4 hr       | >99.9 %    | 4.1 hr       | 12.3 hr |

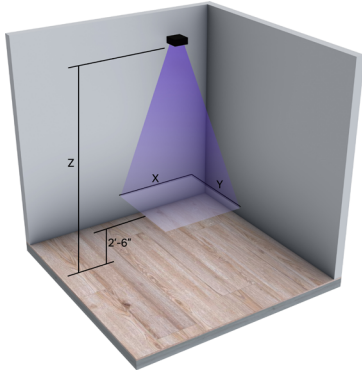
| 8'x8' Area (X x Y) |                                |                                     | Calculated Average Dose <sup>3</sup><br>mJ/cm <sup>2</sup> | Surface Pathogen Inactivation <sup>2</sup> |              |               |            |              |               |            |              |         |
|--------------------|--------------------------------|-------------------------------------|--|--|--------------|---------------|------------|--------------|---------------|------------|--------------|---------|
| Programming Option | Mounting Height to Module Face | Mounting Height to Fixture Aperture |  | MRSA                                       |              |               | Salmonella |              |               | E. coli    |              |         |
|                    |                                |                                     | % in 24 Hours  | Hrs to 90%                                 | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% |         |
| D108               | 9'                             | 8'-9"                               | 2.4 mJ/cm <sup>2</sup> over 24 hr                          | 72.1 %                                     | 43.3 hr      | 130.0 hr      | 85.9 %     | 28.2 hr      | 84.5 hr       | 94.0 %     | 19.7 hr      | 59.1 hr |
| D114               | 9.6'                           | 9'-3"                               | 3.9 mJ/cm <sup>2</sup> over 24 hr                          | 86.9 %                                     | 27.2 hr      | 81.5 hr       | 95.6 %     | 17.7 hr      | 52.0 hr       | 98.9 %     | 12.4 hr      | 37.1 hr |
| D120               | 10'                            | 9'-9"                               | 5.2 mJ/cm <sup>2</sup> over 24 hr                          | 93.3 %                                     | 20.4 hr      | 61.3 hr       | 98.4 %     | 13.3 hr      | 39.9 hr       | 99.7 %     | 9.3 hr       | 27.9 hr |
| D126               | 10'.6"                         | 10'-3"                              | 6.9 mJ/cm <sup>2</sup> over 24 hr                          | 97.2 %                                     | 15.4 hr      | 46.3 hr       | 99.6 %     | 10.0 hr      | 30.1 hr       | >99.9 %    | 7.0 hr       | 21.0 hr |
| D132               | 11'                            | 10'-9"                              | 8.0 mJ/cm <sup>2</sup> over 24 hr                          | 98.5 %                                     | 13.2 hr      | 39.5 hr       | 99.8 %     | 8.6 hr       | 25.7 hr       | >99.9 %    | 6.0 hr       | 18.0 hr |
| D132               | 12'                            | 11'-9"                              | 7.1 mJ/cm <sup>2</sup> over 24 hr                          | 97.5 %                                     | 15.0 hr      | 45.0 hr       | 99.7 %     | 9.7 hr       | 29.2 hr       | >99.9 %    | 6.8 hr       | 20.4 hr |

| 10'x10' Area (X x Y) |                                |                                     | Calculated Average Dose <sup>3</sup><br>mJ/cm <sup>2</sup> | Surface Pathogen Inactivation <sup>2</sup> |              |               |            |              |               |            |              |         |
|----------------------|--------------------------------|-------------------------------------|--|--|--------------|---------------|------------|--------------|---------------|------------|--------------|---------|
| Programming Option   | Mounting Height to Module Face | Mounting Height to Fixture Aperture |  | Feline Calicivirus                         |              |               | Influenza  |              |               | SARS-CoV-2 |              |         |
|                      |                                |                                     | % in 24 Hours  | Hrs to 90%                                 | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% |         |
| D108                 | 9'                             | 8'-9"                               | 1.7 mJ/cm <sup>2</sup> over 24 hr                          | 45.2 %                                     | 91.8 hr      | 275.4 hr      | 85.4 %     | 28.7 hr      | 86.2 hr       | 95.9 %     | 17.2 hr      | 51.7 hr |
| D114                 | 9.6'                           | 9'-3"                               | 2.7 mJ/cm <sup>2</sup> over 24 hr                          | 62.8 %                                     | 55.9 hr      | 167.8 hr      | 95.7 %     | 17.5 hr      | 52.6 hr       | 99.5 %     | 10.5 hr      | 31.5 hr |
| D120                 | 10'                            | 9'-9"                               | 3.8 mJ/cm <sup>2</sup> over 24 hr                          | 74.1 %                                     | 40.9 hr      | 122.6 hr      | 98.7 %     | 12.8 hr      | 38.4 hr       | >99.9 %    | 7.7 hr       | 23.0 hr |
| D126                 | 10'.6"                         | 10'-3"                              | 5.1 mJ/cm <sup>2</sup> over 24 hr                          | 84.2 %                                     | 30.0 hr      | 90.0 hr       | 99.7 %     | 9.4 hr       | 28.2 hr       | >99.9 %    | 5.6 hr       | 16.9 hr |
| D132                 | 11'                            | 10'-9"                              | 6.2 mJ/cm <sup>2</sup> over 24 hr                          | 89.1 %                                     | 24.9 hr      | 74.7 hr       | >99.9 %    | 7.8 hr       | 23.4 hr       | >99.9 %    | 4.7 hr       | 14.0 hr |
| D132                 | 12'                            | 11'-9"                              | 5.7 mJ/cm <sup>2</sup> over 24 hr                          | 87.1 %                                     | 27.0 hr      | 81.0 hr       | 99.9 %     | 8.5 hr       | 25.4 hr       | >99.9 %    | 5.1 hr       | 15.2 hr |

| 10'x10' Area (X x Y) |                                |                                     | Calculated Average Dose <sup>3</sup><br>mJ/cm <sup>2</sup> | Surface Pathogen Inactivation <sup>2</sup> |              |               |            |              |               |            |              |         |
|----------------------|--------------------------------|-------------------------------------|--|--|--------------|---------------|------------|--------------|---------------|------------|--------------|---------|
| Programming Option   | Mounting Height to Module Face | Mounting Height to Fixture Aperture |  | MRSA                                       |              |               | Salmonella |              |               | E. coli    |              |         |
|                      |                                |                                     | % in 24 Hours  | Hrs to 90%                                 | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% |         |
| D108                 | 9'                             | 8'-9"                               | 1.7 mJ/cm <sup>2</sup> over 24 hr                          | 58.2 %                                     | 63.3 hr      | 189.9 hr      | 73.9 %     | 41.2 hr      | 123.5 hr      | 85.4 %     | 28.8 hr      | 86.3 hr |
| D114                 | 9.6'                           | 9'-3"                               | 2.7 mJ/cm <sup>2</sup> over 24 hr                          | 76.1 %                                     | 38.6 hr      | 115.5 hr      | 89.0 %     | 25.1 hr      | 75.2 hr       | 95.7 %     | 17.5 hr      | 52.6 hr |
| D120                 | 10'                            | 9'-9"                               | 3.8 mJ/cm <sup>2</sup> over 24 hr                          | 85.9 %                                     | 28.2 hr      | 84.6 hr       | 95.1 %     | 18.3 hr      | 55.0 hr       | 98.7 %     | 12.8 hr      | 38.4 hr |
| D126                 | 10'.6"                         | 10'-3"                              | 5.1 mJ/cm <sup>2</sup> over 24 hr                          | 93.1 %                                     | 20.7 hr      | 62.1 hr       | 98.4 %     | 13.4 hr      | 40.3 hr       | 99.7 %     | 9.4 hr       | 28.2 hr |
| D132                 | 11'                            | 10'-9"                              | 6.2 mJ/cm <sup>2</sup> over 24 hr                          | 96.0 %                                     | 17.2 hr      | 51.5 hr       | 99.3 %     | 11.2 hr      | 33.5 hr       | >99.9 %    | 7.8 hr       | 23.4 hr |
| D132                 | 12'                            | 11'-9"                              | 5.7 mJ/cm <sup>2</sup> over 24 hr                          | 94.9 %                                     | 18.6 hr      | 55.8 hr       | 99.0 %     | 12.1 hr      | 36.3 hr       | 99.9 %     | 8.5 hr       | 25.4 hr |

SPECIFICATIONS

Projected Virus and Bacteria Inactivation



Use this chart to estimate the effectiveness of one EVO6 fixture, mounted at various mounting heights (Z) and having different areas of coverage (X x Y), at inactivating the pathogens listed below on surfaces. The calculated average dose for each scenario is determined from Visual® lighting application software radiometric modeling<sup>1</sup> and is then correlated with laboratory research<sup>2</sup> to derive predicted inactivation effectiveness for specific pathogens. The analysis assumes that a horizontal plane positioned 2'-6" Above Finished Floor (AFF) is receiving the dose. For different areas of coverage or multiple fixture layouts, consult an Acuity Brands UV Lighting Specialist.

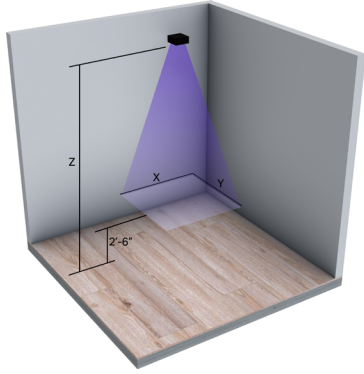
1. The results presented here are based upon a 12'x12'x15' high empty room with all surface reflectance assumed to be 5%.
2. Reference [Pathogen Inactivation Dose Reference List](#) - 222nm, 254nm & Pulsed Xenon UV Light Sources.
3. As a result of computational limitations and simplifying modeling assumptions in Visual, variations in actual product performance from tested product samples, and/or variations in field conditions from laboratory testing conditions, the accuracy of calculated output values identifying radiometric quantities and any resulting derived radiation dose predictions may be adversely affected. See complete disclaimer at [VISUAL LIGHTING DISCLAIMER](#)

| 12'x12' Area (X x Y) |                                |                                     | Calculated Average Dose <sup>3</sup><br>mJ/cm <sup>2</sup> | Surface Pathogen Inactivation <sup>2</sup> |              |               |            |              |               |            |              |         |
|----------------------|--------------------------------|-------------------------------------|--|--|--------------|---------------|------------|--------------|---------------|------------|--------------|---------|
| Programming Option   | Mounting Height to Module Face | Mounting Height to Fixture Aperture |  | Feline Calicivirus                         |              |               | Influenza  |              |               | SARS-CoV-2 |              |         |
|                      |                                |                                     | % in 24 Hours  | Hrs to 90%                                 | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% |         |
| D108                 | 9'                             | 8'-9"                               | 1.2 mJ/cm <sup>2</sup> over 24 hr                          | 34.6 %                                     | 129.9 hr     | 389.7 hr      | 74.3 %     | 40.7 hr      | 122.0 hr      | 89.6 %     | 24.4 hr      | 73.2 hr |
| D114                 | 9.6'                           | 9'-3"                               | 2.0 mJ/cm <sup>2</sup> over 24 hr                          | 50.7 %                                     | 78.2 hr      | 234.6 hr      | 89.5 %     | 24.5 hr      | 73.5 hr       | 97.7 %     | 14.7 hr      | 44.1 hr |
| D120                 | 10'                            | 9'-9"                               | 2.7 mJ/cm <sup>2</sup> over 24 hr                          | 62.5 %                                     | 56.4 hr      | 169.1 hr      | 95.6 %     | 17.6 hr      | 52.9 hr       | 99.5 %     | 10.6 hr      | 31.8 hr |
| D126                 | 10'.6"                         | 10'-3"                              | 3.8 mJ/cm <sup>2</sup> over 24 hr                          | 74.2 %                                     | 40.8 hr      | 122.3 hr      | 98.7 %     | 12.8 hr      | 38.3 hr       | >99.9 %    | 7.7 hr       | 23.0 hr |
| D132                 | 11'                            | 10'-9"                              | 4.6 mJ/cm <sup>2</sup> over 24 hr                          | 81.1 %                                     | 33.2 hr      | 99.5 hr       | 99.5 %     | 10.4 hr      | 31.2 hr       | >99.9 %    | 6.2 hr       | 18.7 hr |
| D132                 | 12'                            | 11'-9"                              | 4.4 mJ/cm <sup>2</sup> over 24 hr                          | 79.8 %                                     | 34.5 hr      | 103.6 hr      | 99.4 %     | 10.8 hr      | 32.4 hr       | >99.9 %    | 6.5 hr       | 19.5 hr |

| 12'x12' Area (X x Y) |                                |                                     | Calculated Average Dose <sup>3</sup><br>mJ/cm <sup>2</sup> | Surface Pathogen Inactivation <sup>2</sup> |              |               |            |              |               |            |              |          |
|----------------------|--------------------------------|-------------------------------------|--|--|--------------|---------------|------------|--------------|---------------|------------|--------------|----------|
| Programming Option   | Mounting Height to Module Face | Mounting Height to Fixture Aperture |  | MRSA                                       |              |               | Salmonella |              |               | E. coli    |              |          |
|                      |                                |                                     | % in 24 Hours  | Hrs to 90%                                 | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% | % in 24 Hours | Hrs to 90% | Hrs to 99.9% |          |
| D108                 | 9'                             | 8'-9"                               | 1.2 mJ/cm <sup>2</sup> over 24 hr                          | 46.0 %                                     | 89.6 hr      | 268.8 hr      | 61.3 %     | 58.2 hr      | 174.7 hr      | 74.3 %     | 40.7 hr      | 122.2 hr |
| D114                 | 9.6'                           | 9'-3"                               | 2.0 mJ/cm <sup>2</sup> over 24 hr                          | 64.1 %                                     | 53.9 hr      | 161.8 hr      | 79.3 %     | 35.1 hr      | 105.2 hr      | 89.5 %     | 24.5 hr      | 73.5 hr  |
| D120                 | 10'                            | 9'-9"                               | 2.7 mJ/cm <sup>2</sup> over 24 hr                          | 75.9 %                                     | 38.9 hr      | 116.6 hr      | 88.8 %     | 25.3 hr      | 75.8 hr       | 95.6 %     | 17.7 hr      | 53.0 hr  |
| D126                 | 10'.6"                         | 10'-3"                              | 3.8 mJ/cm <sup>2</sup> over 24 hr                          | 86.0 %                                     | 28.1 hr      | 84.3 hr       | 95.1 %     | 18.3 hr      | 54.8 hr       | 98.7 %     | 12.8 hr      | 38.3 hr  |
| D132                 | 11'                            | 10'-9"                              | 4.6 mJ/cm <sup>2</sup> over 24 hr                          | 91.1 %                                     | 22.9 hr      | 68.6 hr       | 97.6 %     | 14.9 hr      | 44.6 hr       | 99.5 %     | 10.4 hr      | 31.2 hr  |
| D132                 | 12'                            | 11'-9"                              | 4.4 mJ/cm <sup>2</sup> over 24 hr                          | 90.2 %                                     | 23.8 hr      | 71.4 hr       | 97.2 %     | 15.5 hr      | 46.4 hr       | 99.4 %     | 10.8 hr      | 32.5 hr  |

PHOTODEGRADATION

Projected Photodegradation Effect



Use the chart (below left) to estimate the photodegradation effect on surfaces from one EVO6 fixture, mounted at various mounting heights (Z) and having different areas of coverage (X x Y)<sup>1</sup>. The calculated average dose<sup>2</sup> for each scenario is determined from Visual® lighting application software radiometric modeling and is then correlated with independent laboratory photodegradation testing<sup>3</sup>. The analysis assumes that a horizontal plane positioned 2'-6" Above Finished Floor (AFF) is receiving the dose. Note that the calculated doses as presented are average values on the designated calculation plane. Calculated doses at specific points may be higher or lower than the average value. To estimate the photodegradation effect for different areas of coverage, at specific points, or multiple fixture layouts, consult an Acuity Brands UV Lighting Specialist.

- The results presented here are based upon a 12'x12'x15' high empty room with all surface reflectance assumed to be 5%.
- As a result of computational limitations and simplifying modeling assumptions in Visual, variations in actual product performance from tested product samples, and/or variations in field conditions from laboratory testing conditions, the accuracy of calculated output values identifying radiometric quantities and any resulting derived radiation dose predictions may be adversely affected. See complete disclaimer at [VISUAL LIGHTING DISCLAIMER](#)
- Independent laboratory photodegradation testing performed by Assured Testing Services, Ridgeway, PA, Test Report 28545, August 12, 2020.

| 4'x4' Area (X x Y) |                                |                                     | Calculated Avg. 24hr Dose <sup>2</sup> | Years to Dose of 54,000 mJ/cm <sup>2</sup> * |
|--------------------|--------------------------------|-------------------------------------|--|--|
| Programming Option | Mounting Height to Module Face | Mounting Height to Fixture Aperture | mJ/cm <sup>2</sup>                     |  |
| D108               | 9'                             | 8'-9"                               | 4.5                                    | 32.9   |
| D114               | 9'-6"                          | 9'-3"                               | 6.6                                    | 22.4   |
| D120               | 10'                            | 9'-9"                               | 8.2                                    | 18.0   |
| D126               | 10'-6"                         | 10'-3"                              | 10.2                                   | 14.5   |
| D132               | 11'                            | 10'-9"                              | 11.4                                   | 13.0   |
| D132               | 12'                            | 11'-9"                              | 9.3                                    | 15.9   |

| 6' x 6' Area (X x Y) |                                |                                     | Calculated Avg. 24hr Dose <sup>2</sup> | Years to Dose of 54,000 mJ/cm <sup>2</sup> * |
|----------------------|--------------------------------|-------------------------------------|--|--|
| Programming Option   | Mounting Height to Module Face | Mounting Height to Fixture Aperture | mJ/cm <sup>2</sup>                     |  |
| D108                 | 9'                             | 8'-9"                               | 3.5                                    | 42.3   |
| D114                 | 9'-6"                          | 9'-3"                               | 5.3                                    | 27.9   |
| D120                 | 10'                            | 9'-9"                               | 6.8                                    | 21.8   |
| D126                 | 10'-6"                         | 10'-3"                              | 8.7                                    | 17.0   |
| D132                 | 11'                            | 10'-9"                              | 9.9                                    | 14.9   |
| D132                 | 12'                            | 11'-9"                              | 8.3                                    | 17.8   |

| 8' x 8' Area (X x Y) |                                |                                     | Calculated Avg. 24hr Dose <sup>2</sup> | Years to Dose of 54,000 mJ/cm <sup>2</sup> * |
|----------------------|--------------------------------|-------------------------------------|--|--|
| Programming Option   | Mounting Height to Module Face | Mounting Height to Fixture Aperture | mJ/cm <sup>2</sup>                     |  |
| D108                 | 9'                             | 8'-9"                               | 2.4                                    | 61.6   |
| D114                 | 9'-6"                          | 9'-3"                               | 3.9                                    | 37.9   |
| D120                 | 10'                            | 9'-9"                               | 5.2                                    | 28.5   |
| D126                 | 10'-6"                         | 10'-3"                              | 6.9                                    | 21.4   |
| D132                 | 11'                            | 10'-9"                              | 8                                      | 18.5   |
| D132                 | 12'                            | 11'-9"                              | 7.1                                    | 20.8   |

| 10' x 10' Area     |                                |                                     | Calculated Avg. 24hr Dose <sup>2</sup> | Years to Dose of 54,000 mJ/cm <sup>2</sup> * |
|--------------------|--------------------------------|-------------------------------------|--|--|
| Programming Option | Mounting Height to Module Face | Mounting Height to Fixture Aperture | mJ/cm <sup>2</sup>                     |  |
| D108               | 9'                             | 8'-9"                               | 1.7                                    | 87.0   |
| D114               | 9'-6"                          | 9'-3"                               | 2.7                                    | 54.8   |
| D120               | 10'                            | 9'-9"                               | 3.8                                    | 38.9   |
| D126               | 10'-6"                         | 10'-3"                              | 5.1                                    | 29.0   |
| D132               | 11'                            | 10'-9"                              | 6.2                                    | 23.9   |
| D132               | 12'                            | 11'-9"                              | 5.7                                    | 26.0   |

| 12' x 12' Area     |                                |                                     | Calculated Avg. 24hr Dose <sup>2</sup> | Years to Dose of 54,000 mJ/cm <sup>2</sup> * |
|--------------------|--------------------------------|-------------------------------------|--|--|
| Programming Option | Mounting Height to Module Face | Mounting Height to Fixture Aperture | mJ/cm <sup>2</sup>                     |  |
| D108               | 9'                             | 8'-9"                               | 1.2                                    | 123.3  |
| D114               | 9'-6"                          | 9'-3"                               | 2                                      | 74.0   |
| D120               | 10'                            | 9'-9"                               | 2.7                                    | 54.8   |
| D126               | 10'-6"                         | 10'-3"                              | 3.8                                    | 38.9   |
| D132               | 11'                            | 10'-9"                              | 4.6                                    | 32.2   |
| D132               | 12'                            | 11'-9"                              | 4.4                                    | 33.6   |

Photodegradation Testing Results<sup>3</sup>

| Material                              | Photodegradation Effect at Dose of 54,000 mJ/cm <sup>2</sup> * |                   |               |                                   |
|---------------------------------------|--|-------------------|---------------|-----------------------------------|
|                                       | Before UV Exposure   | After UV Exposure | Average Δ E** | Average Δ - Durometer Hardness*** |
| Polyvinyl chloride (PVC)              |  |                   | 27.27         | 3                                 |
| Polypropylene                         |  |                   | 3.86          | -1                                |
| Polyethylene                          |  |                   | 5.50          | 0                                 |
| Polytetrafluoroethylene (PTFE)        |  |                   | 1.02          | 0                                 |
| Clear polymethyl methacrylate         |  |                   | 2.50          | 3                                 |
| White polymethyl methacrylate         |  |                   | 9.08          | -3                                |
| Polyoxymethylene                      |  |                   | 4.47          | 5                                 |
| Polycarbonate                         |  |                   | 6.89          | -3                                |
| Acrylonitrile butadiene styrene (ABS) |  |                   | 0.90          | 0                                 |
| Polyester                             |  |                   | 1.13          | -1                                |
| Nylon                                 |  |                   | 6.77          | -4                                |



PROJECTED PHOTODEGRADATION EFFECT (CONTINUED)  
Photodegradation Testing Results<sup>3</sup>

| Material                             | Photodegradation Effect at Dose of 54,000 mJ/cm <sup>2</sup> * |                   | Average Δ E** | Average Δ - Durometer Hardness*** |
|--------------------------------------|--|-------------------|---------------|-----------------------------------|
|                                      | Before UV Exposure   | After UV Exposure |               |                                   |
| Cotton                               |  |                   | 2.12          | N/A                               |
| Wool                                 |  |                   | 2.73          | N/A                               |
| Pine/Fir                             |  |                   | 7.79          | 1                                 |
| Oak                                  |  |                   | 8.73          | -14                               |
| Poplar                               |  |                   | 11.65         | -7                                |
| Low grade paper (copy paper)         |  |                   | 4.15          | N/A                               |
| Rag paper (stationary writing paper) |  |                   | 7.44          | N/A                               |
| Oil paint on paper                   |  |                   | 1.47          | N/A                               |
| Watercolors on rag paper             |  |                   | 3.12          | N/A                               |
| Window glass                         |  |                   | 0.11          | N/A                               |
| Vinyl flooring                       |  |                   | 2.13          | -2                                |
| Wall paper                           |  |                   | 3.83          | N/A                               |
| Newsprint Color                      |  |                   | 8.13          | N/A                               |
| Barcode paper label                  |  |                   | 1.34          | N/A                               |

**Independent Lab Test Results<sup>3</sup> for Determining Photodegradation Effect for Far-UVC Filtered 222nm technology (Care222®)**

\* The independent test lab results compared materials at an initial state of no UV exposure and a final state of UV exposure at 54,000 mJ/cm<sup>2</sup>.

\*\* ΔE is a benchmark used to measure color difference compared to a known set of CIELAB color coordinates defined by the International Commission on Illumination (CIE). The Photodegradation Testing Results table presents data calculated by the CIE76 formula, ΔE\*ab. CIE76 is a formula that relates a measured color difference to a known set of CIELAB coordinates. ΔE\*ab ~ 2.3 equates to a Just Noticeable Difference

\*\*\* Durometer Hardness is a benchmark of material hardness, as measured by a Shore Durometer device. The Photodegradation Testing Results table presents the difference in measured material hardness over the exposure dose. For the majority of the materials tested there was no or only a very small change in Durometer Hardness. Unvarnished Oak and Poplar showed some change in Durometer Hardness.

**Comparing Far-UVC Filtered 222nm Disinfection Technology (Care222®) Photodegradation Effect to General Illumination Photodegradation Effect**

To compare photodegradation caused by UV to photodegradation caused by general illumination, which also causes a photodegradation effect, a Just Noticeable Difference (ΔE\*ab ~ 2.3) in a space illuminated by a white light source to an illuminance of 50 fc would occur as soon as 6 months for highly sensitive materials and as long as 30 years for minimally sensitive materials.\* There is recognizable photodegradation of materials caused by almost all light sources including incandescent, fluorescent, halogen, metal halide, LED, and UV. While some UV sources, depending on spectral content and intensity, can cause substantial photodegradation, the information presented in the Photodegradation Testing Results table illustrates specifically the generally minimal photodegradation effect of far-UVC filtered 222nm technology (Care222) when utilizing these products in typical application.

\* ANSI/IES RP-30-20 Recommended Practice: Lighting Museums, Table C-2

3. Independent laboratory photodegradation testing performed by Assured Testing Services, Ridgeway, PA, Test Report 28545, August 12, 2020.

Tables of Use

| EVO - eldoLED® Driver Default Dimming Curve |              |                  |                    |
|---|--------------|------------------|--------------------|
| Nomenclature                                | Min. Dimming | Driver Dim Curve | Control Dim Curve  |
| EZ10  | 10%          | Linear           | Linear/Logarithmic |
| EZ1   | 1%           | Linear           | Linear/Logarithmic |
| EZB   | <1%          | Logarithmic      | Linear             |
| EDAB  | <1%          | Logarithmic*     | Linear             |

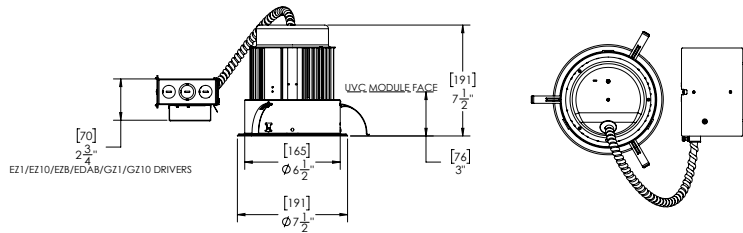
\*Changeable through DALI controller

DIMENSIONAL DATA

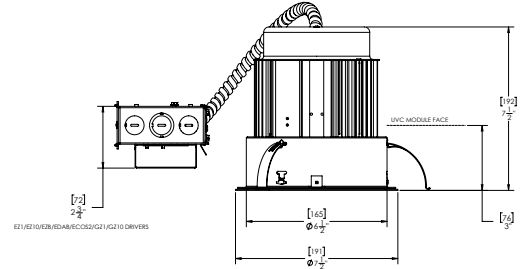
|                            |  |
|----------------------------|--|
| Aperture: 61/4" [15.9]     | Ceiling Opening: 71/8" [18.1] self-flanged |
| Overlap Trim: 71/2" [19.1] | 71/4" [18.4] flangeless                    |

Dimensions in inches [centimeters]

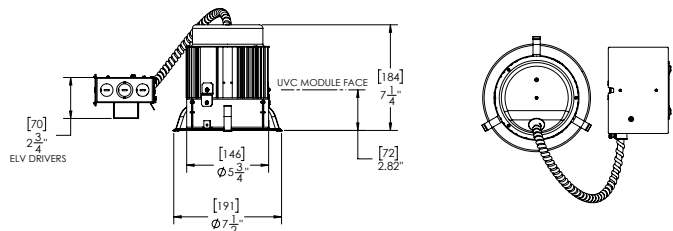
Standard 7" Remodel



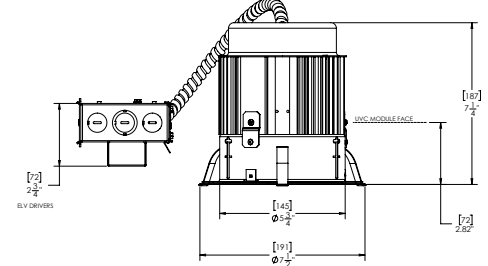
Module Regression in Trim



CC6 6" Remodel



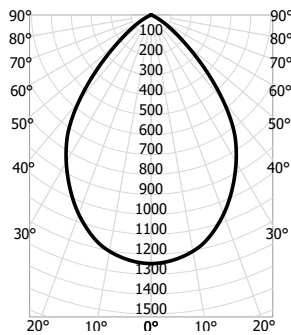
Module Regression in Trim



Photometry

PHOTOMETRY: VISIBLE LIGHT ONLY

EVO6RM UV222VL 35/15 AR LSS INPUT WATT: 17.03; DELIVERED LUMENS: 1311; LPW = 77; 1.05 S/MH; TEST NO: 21-351P205



| CP Summary |            |        |           | Zonal Lumen Summary |                        |               | Cone of Light     |       |  | Luminance (cd/sq.m) |  |
|------------|------------|--------|-----------|---------------------|------------------------|---------------|-------------------|-------|--|---------------------|--|
| 0°         | Zone       | Lumens | % Fixture | Mounting Height     | Initial FC Center Beam | Beam Diameter | Average Luminance |       |  |                     |  |
| 0°         | 0° - 30°   | 881    | 50%       | 6.0 ft              | 34.7 fc                | 9.5 ft        | 0°                | 63229 |  |                     |  |
| 5°         | 0° - 40°   | 1329   | 76%       | 8.0 ft              | 19.5 fc                | 12.6 ft       | 45°               | 27147 |  |                     |  |
| 15°        | 0° - 60°   | 1736   | 99%       | 10.0 ft             | 12.5 fc                | 15.8 ft       | 55°               | 10874 |  |                     |  |
| 25°        | 0° - 90°   | 1758   | 100%      | 12.0 ft             | 8.7 fc                 | 18.9 ft       | 65°               | 1622  |  |                     |  |
| 35°        | 90° - 180° | 0      | 0%        | 14.0 ft             | 6.4 fc                 | 22.1 ft       | 75°               | 296   |  |                     |  |
| 45°        | 0° - 180°  | 1758   | 100%      |                     |                        |               | 85°               | 195   |  |                     |  |
| 55°        |            | 123    |           | Beam Angle: 76.5°   |                        |               |                   |       |  |                     |  |
| 65°        |            | 14     |           | Field Angle: 109.8° |                        |               |                   |       |  |                     |  |
| 75°        |            | 2      |           |                     |                        |               |                   |       |  |                     |  |
| 85°        |            | 0      |           |                     |                        |               |                   |       |  |                     |  |
| 90°        |            | 0      |           |                     |                        |               |                   |       |  |                     |  |

| Lumen Output Multiplier |       |            |
|-------------------------|-------|------------|
| CRI                     | CCT   | Multiplier |
| 80                      | 2700K | 0.96       |
|                         | 3000K | 1.00       |
|                         | 3500K | 1.00       |
|                         | 4000K | 1.01       |
| 90                      | 2700K | 0.80       |
|                         | 3000K | 0.83       |
|                         | 3500K | 0.85       |
|                         | 4000K | 0.87       |

| Reflector Finish Multiplier |            |
|-----------------------------|------------|
| Reflector Finish            | Multiplier |
| LS - Specular               | 1          |
| LSS - Semi Specular         | 0.956      |
| LD - Matte Diffuse          | 0.85       |

| Distributions |             |
|---------------|-------------|
| Beam Angle    | Field Angle |
| 77            | 110         |

nLIGHT AIR

nLight® AIR is the ideal solution for retrofit or new construction spaces where adding communication wiring is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each EVO Luminaire ordered with the NLTAIR option. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

| nLight® AIR Control Accessories                                      |                        |
|--|------------------------|
| Order as separate catalog number. Visit <a href="#">nLight AIR</a> . |                        |
| Wall Switches  | Model Number           |
| On/Off single pole   | rPODB (color) G2       |
| On/Off two pole  | rPODB 2P (color) G2    |
| On/Off & raise/lower single pole                                     | rPODB DX (color) G2    |
| On/Off & raise/lower two pole  | rPODB 2P DX (color) G2 |

| nLight® AIR Control Accessories (cont.) |                       |
|---|-----------------------|
| Occupancy Sensors (PIR/dual tech)       | Model Number          |
| Small motion 360°, ceiling              | rCMS 9 / rCMS PDT 9   |
| Large motion 360°, ceiling              | rCMS 10 / rCMS PDT 10 |

**UL924 Sequence of Operation**

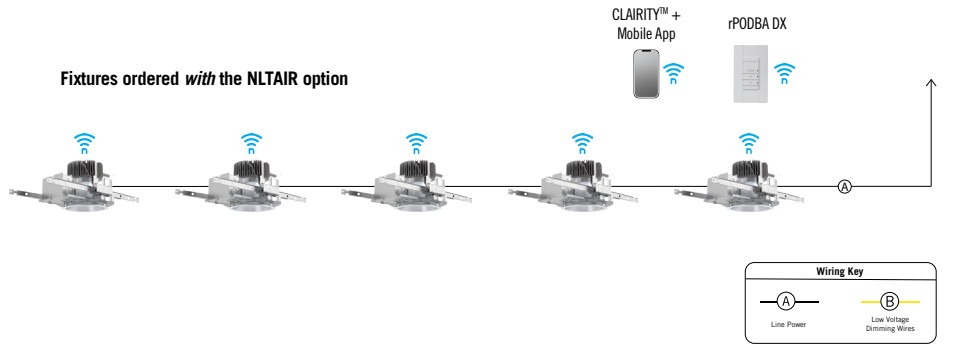
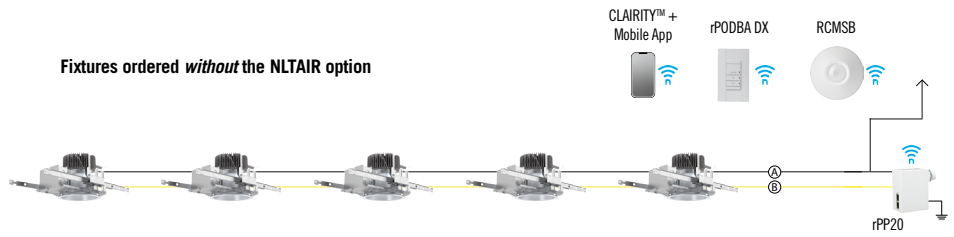
The below information applies to all nLight AIR devices with an EM option.

- 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.

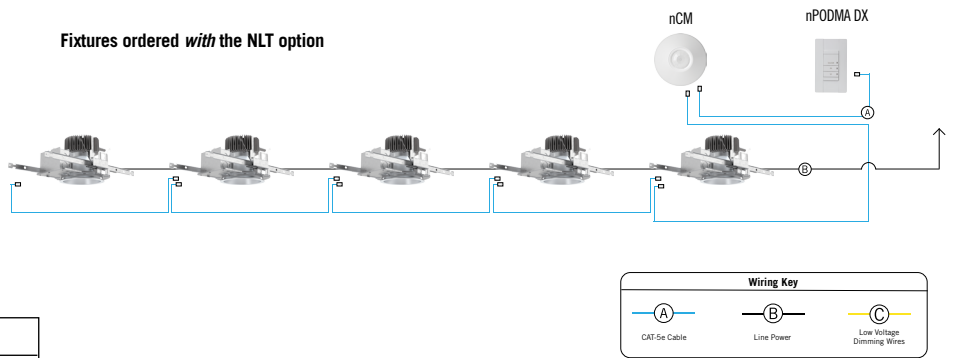
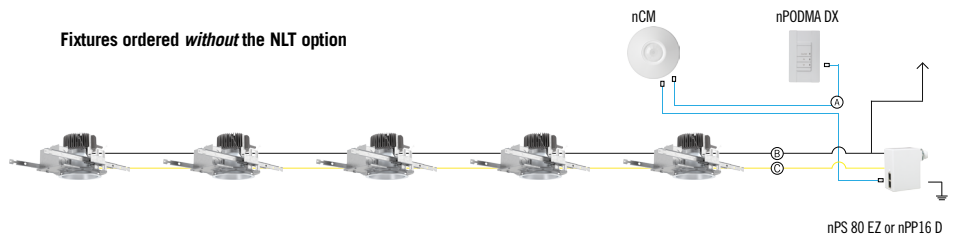
nLight® The nLight® solution is a digital networked lighting control system that provides both energy savings and increased user configurability by cost effectively integrating time-based, daylight-based, sensor-based and manual lighting control schemes.

| nLight® Wired Control Accessories                                |                     |
|--|---------------------|
| Order as separate catalog number. Visit <a href="#">nLight</a> . |                     |
| Wall Switches  | Model Number        |
| On/Off single pole   | nPODM (color)       |
| On/Off two pole  | nPODM 2P (color)    |
| On/Off & raise/lower single pole                                 | nPOD DX (color)     |
| On/Off & raise/lower two pole                                    | nPODM 2P DX (color) |
| Graphic touchscreen  | nPOD GFX (color)    |
| Photocell Controls   |                     |
| Dimming  | nCM ADCX            |

| nLight® Wired Control Accessories (cont.) |                             |
|---|-----------------------------|
| Occupancy Sensors (PIR/dual tech)         | Model Number                |
| Small motion 360°, ceiling                | nCM 9 / nCM PDT 9           |
| Large motion 360°, ceiling                | nCM 10 / nCM PDT 10         |
| Wide View                                 | nWV 16 / nWV PDT 16         |
| Wall switch with raise/lower              | nWSX LV DX / nWSX PDT LV DX |
| Cat-5 Cables (plenum rated)               |                             |
| 10', CAT5                                 | CAT5 10FT J1                |
| 15', CAT5                                 | CAT5 15FT J1                |



**Possibilities for nLight® Wired**



| Driver       |                          | Control Provided (note: 347V/UVOLT versions provided with 347 option selected) |                |                |                   |
|--------------|--------------------------|--|----------------|----------------|-------------------|
| Nomenclature | Description              | NLT  | NLTER          | NLTAIR2        | NLTAIRER2         |
| GZ10         | 0-10V driver dims to 10% | nPP16 D EFP  | nPP16 D ER EFP | RPP20 D 24V G2 | RPP20 D 24V ER G2 |
| GZ1          | 0-10V driver dims to 1%  | nPP16 D EFP  | nPP16 D ER EFP | RPP20 D 24V G2 | RPP20 D 24V ER G2 |
| EZ10         | eldoLED® 0-10V ECOdrive  | nPS 80 EZ  | nPS 80 EZ ER   | RPP20 D 24V G2 | RPP20 D 24V ER G2 |
| EZ1          | eldoLED® 0-10V ECOdrive  | nPS 80 EZ  | nPS 80 EZ ER   | RPP20 D 24V G2 | RPP20 D 24V ER G2 |
| EZB          | eldoLED® 0-10V SOLOdrive | nPS 80 EZ  | nPS 80 EZ ER   | RPP20 D 24V G2 | RPP20 D 24V ER G2 |

nLIGHT