



TRIM OPTIONS



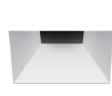
ROUND FLANGED



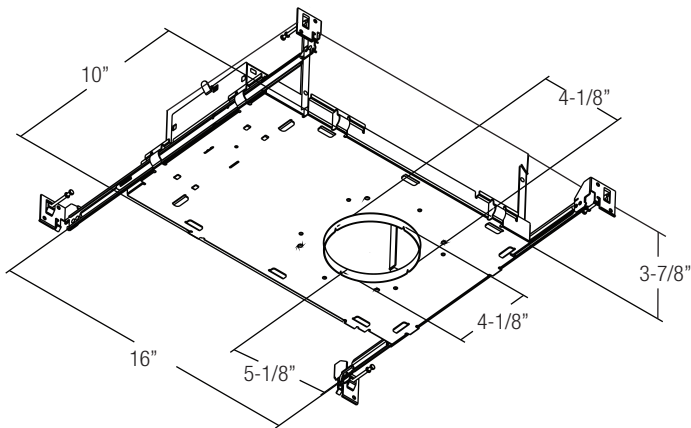
ROUND TRIMLESS



SQUARE FLANGED



SQUARE TRIMLESS



| NOMINAL LUMENS | DELIVERED LUMENS | WATTAGE |
|----------------|------------------|---------|
| 2000           | 2509             | 26 W    |
| 1500           | 1527             | 18 W    |
| 1200           | 1392             | 16 W    |
| 900            | 1037             | 12 W    |
| 700            | 881              | 10 W    |

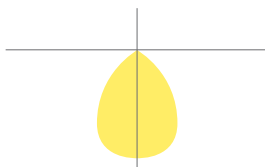
Based on 4000K, 90+ CRI. Actual wattage may vary +/- 5%

**FEATURES**

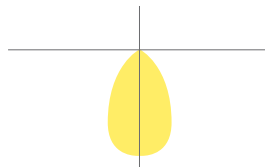
A small aperture, architectural LED downlight that delivers the ultimate in uncompromised quality and performance, with precise, glare-free illumination, and unmatched flexibility. With the use of a single universal housing, it utilizes a multitude of trims, field changeable optics, with a full 365-degree horizontal rotation. Whether it's high-end architectural, hospitality, commercial, residential, or retail, the ER3 provides the most innovative solution to any design application that requires a small aperture.

|                         |                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------|
| LUMENS                  | 700, 900, 1200, 1500, 2000 (Custom lumen packages available)                                                |
| CCT & DYNAMIC PLATFORMS | 27K, 30K, 35K, 40K, 50K, Tunable White, Dims to Warm, RGB + White                                           |
| CRI                     | 90+ Standard, 98+ Optional                                                                                  |
| COLOR QUALITY           | 2 Step MacAdam Ellipse                                                                                      |
| DISTRIBUTIONS           | WD (50-degree), MD (35-degree), and ND (25-degree)                                                          |
| TRIM OPTIONS            | Downlight, Lensed Downlight, and Pinhole Square and Round Trim and Trim-less Options                        |
| REFLECTOR COLORS        | WH (White), CL (Chrome), SHZ (Satin Haze), BK (Black)                                                       |
| FLANGE COLORS           | WH (White)                                                                                                  |
| DIMMING                 | 0-10V Flicker Free 1% Dimming Standard (DIM10), LUTH, LUTFTB, LUT2W, ELDO10.1, ELDODMX.1, ELDODALI.1, DIMTR |
| EMERGENCY               | 10W - Up to 1000L Output (Bodine BSL310)<br>20W - Up to 2000L Output (Bodine BSL20)                         |
| LIFETIME                | L70 at 102,000 Hours                                                                                        |
| PHOTOMETRIC TESTS       | In Accordance with IES LM79-08, LM80 and TM-30, TM-21                                                       |
| CCEA OPTION             | For CCEA approved ER3 Family, please contact Elite Lighting for more information.                           |

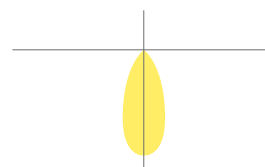
WD: WIDE  
Candlepower Distribution Curve



MD: MEDIUM  
Candlepower Distribution Curve



ND: NARROW  
Candlepower Distribution Curve



Reference IES files for additional distribution curve information.



#### FLANGED OPTION

Post-painted powder coated Die-Cast trim ring available in white and custom colors (Please consult factory for custom paint color options). Collar and trim rotate jointly, and a Solite frosted lens is standard on all trims (Please consult factory for additional lens options). Available in Open Downlight, Lensed Downlight, Pinhole Downlight, Slot. Trims attach to the housing with piano springs for snug fit and zero light leakage.

#### TRIM-LESS OPTION

Die-Cast perforated mesh cover intended for installation in drywall or plaster ceilings. Mudding may be applied right up to the edge of the luminaire opening to provide a seamless appearance. Trimless accessory is secured to the housing to prevent fractures in the ceiling and/or drywall during and after installation. Trims attach to the housing with piano springs for snug fit and zero light leakage. Available in Open Downlight, Lensed Downlight, Pinhole Downlight, and Slot.

#### HOUSING

Designed for new construction installations and suitable for Non IC applications. Thermally protected, specification grade adjustable recessed housing. For new construction insulated ceilings where housing will be in direct contact with insulation. die-formed all aluminum construction is painted matte black for maximum heat dissipation, rust protection and glare-free illumination.

#### MOUNTING

Pre-installed bar hangers allow housing to be positioned and locked at any point within a 24" joist span. They can be positioned on either the long or short axis of the housing and can be shortened for 12" joists. Bar hangers can fit onto T-Bar spline with additional slots and holes for special mounting methods, if necessary. Butterfly brackets are also provided and are constructed from 18-gauge steel and can be adjusted vertically. Butterfly brackets may be installed with 3/4" or 1-1/2" lathing channel, 1/2" EMT, or optional C-Channel mounting bars are available.

#### WARRANTY

Five-year warranty for parts and components. (Labor not included)

#### LISTINGS

c-UL-us - Listed for Wet Location if used with 1328 or 1307 Trims.

c-UL-us - Listed for Feed Through Wiring.

CP - City of Chicago Environmental Air (CCEA) marking for plenum applications (option)

Energy Star, JA8 and California Title 24 compliant.

#### LED DYNAMIC PLATFORM OPTIONS



Tunable White with Smart White Technology utilizing the Lumenetix Platform allows you to color tune the luminaire via various controls. Create the perfect environment for the desired use of the space, while maintaining a CRI of 90+ across the tunable range of 8000 to 1650K. (Click here for more details)



Dims to Warm with Smart Dimming Technology. At 100% full brightness the luminaire is at 3000K. When dimmed to 1%, the light transitions to 1800K, creating a warm ambiance within the space. (Click here for more details)



RGB+White with Smart Hue Technology provides full color mixing of RGB and white colors. Utilizing the Lumenetix Platform allows you to choose from unlimited RGB color options, via various controls. Ideal for Circadian Rhythm applications or to create the perfect human centric environment. (Click here for more details)

#### DIMMING & DRIVER INFORMATION

**DIM10** - 0-10V dimming on either MVOLT 120V or 277V, 347V. Dimmable down to 1% of initial lumens, standard.

**DIMTR** - Triac & Electronic low voltage dimming. Available in 120V.

**LUT2W** - Lutron LTEA2W Hi-Lume 1%. 2-wire LED driver (120V forward phase only).

**LUTH** - Lutron LDE1 Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology.

**LUTFTB** - Lutron PEQ0 Hi-Lume Premier Eco System. 0.1% dimming with Soft in Fade to Black dimming technology.

**ELDO10.1** - EldoLED SoloDrive 0-10V. Dimming down to 0.1%. Available on all luminaires up to 100 watts.

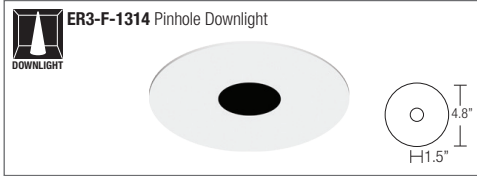
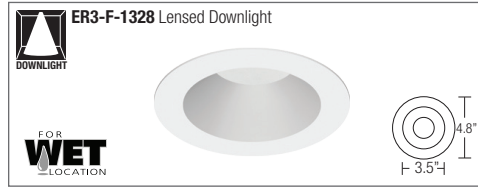
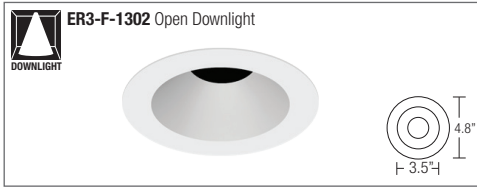
DALI - DALI DT6, DT8 dimming down to 1%.

**ELDODMX** - EldoLED PowerDrive dimming down to 0.1%.

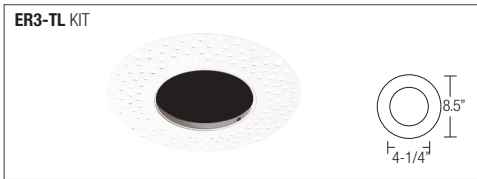
Please see EldoLED website for wiring diagrams and a list of compatible DMX and Dali control systems.

The LED driver is rated for 50 to 60Hz at 120V/277V input, produces less than 20%THD, and has a power factor between 90% and 100%, and is thermally protected for additional safety. Junction box and Driver can be accessed from below the ceiling and above the ceiling. Junction Box is Listed for through branch circuit wiring.

### Round Flanged Trim Options



### Round Trim-less Options



#### FLANGED OPTION:

Post-painted powder coated Die-Cast trim ring available in white and custom colors (Please consult factory for custom paint color options). Collar and trim rotate jointly, and a Solite frosted lens is standard on all trims (Please consult factory for additional lens options). Available in Open Downlight, Lensed Downlight, Pinhole Downlight, Slot, Adjustable Downlight Accent or Lensed Adjustable Wall Wash. Trims attach to the housing with piano springs for snug fit and zero light leakage.

#### FINISH



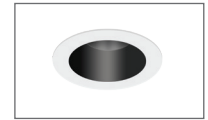
**WH**-White



**CL**-Chrome



**SHZ**-Satin Haze



**BK**-Black

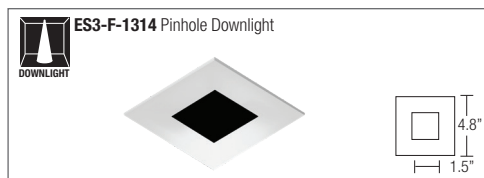
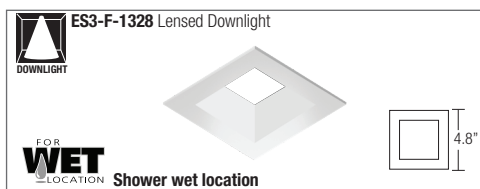
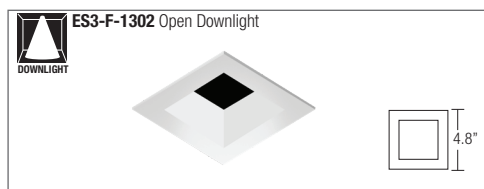
#### TRIMLESS OPTION:

Die-Cast perforated mesh cover intended for installation in drywall or plaster ceilings. Mudding may be applied right up to the edge of the luminaire opening to provide a seamless appearance. Trimless accessory is secured to the housing to prevent fractures in the ceiling and/or drywall during and after installation. Trims attach to the housing with piano springs for snug fit and zero light leakage. Available in Open Downlight, Lensed Downlight, Pinhole Downlight, Slot, Adjustable Downlight Accent or Lensed Adjustable Wall Wash.

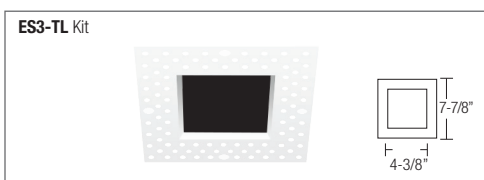
#### Note:

Additional lens filters must only be used on open non-lensed downlight trim options.

### Square Flanged Trim Options



### Square Trim-less Options



### FLANGED OPTION:

Post-painted powder coated Die-Cast trim ring available in white and custom colors (Please consult factory for custom paint color options). Collar and trim rotate jointly, and a Solite frosted lens is standard on all trims (Please consult factory for additional lens options). Available in Open Downlight, Lensed Downlight, Pinhole Downlight, Slot, Adjustable Downlight Accent or Lensed Adjustable Wall Wash. Trims attach to the housing with piano springs for snug fit and zero light leakage.

### FINISH



**WH**-White

**CL**-Chrome



**SHZ**-Satin Haze

**BK**-Black

### TRIMLESS OPTION:

Die-Cast perforated mesh cover intended for installation in drywall or plaster ceilings. Mudding may be applied right up to the edge of the luminaire opening to provide a seamless appearance. Trimless accessory is secured to the housing to prevent fractures in the ceiling and/or drywall during and after installation. Trims attach to the housing with piano springs for snug fit and zero light leakage. Available in Open Downlight, Lensed Downlight, Pinhole Downlight, Slot, Adjustable Downlight Accent or Lensed Adjustable Wall Wash.

### Note:

Additional lens filters must only be used on open non-lensed downlight trim options.

## ORDERING GUIDE

| TYPE                             | LUMENS                                                                                                                                                               | DIMMING                                                                                                                                                                                                                                                                                  | VOLTAGE                                                                                                                                        | OPTICS                                                                                                      | CCT                                                                                                                                                          | CIR                                                          | EMERGENCY                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HIGH PERFORMANCE<br>ER3-SHAL-LED | <input type="checkbox"/> 700L<br><input type="checkbox"/> 900L<br><input type="checkbox"/> 1200L<br><input type="checkbox"/> 1500L<br><input type="checkbox"/> 2000L | <input type="checkbox"/> DIM10<br><input type="checkbox"/> DIMTR<br><input type="checkbox"/> LUTH<br><input type="checkbox"/> LUT2W<br><input type="checkbox"/> ELD010.1<br><input type="checkbox"/> ELD0DALI.1<br><input type="checkbox"/> ELD0DMX.1<br><input type="checkbox"/> LUTFTB | <input type="checkbox"/> 120<br><input type="checkbox"/> 277<br><input type="checkbox"/> 347<br><input type="checkbox"/> MVOLT<br>(DIM10 only) | <input type="checkbox"/> ND (25°)<br><input type="checkbox"/> MD (35°)<br><input type="checkbox"/> WD (50°) | <input type="checkbox"/> 27K<br><input type="checkbox"/> 30K<br><input type="checkbox"/> 35K<br><input type="checkbox"/> 40K<br><input type="checkbox"/> 50K | <input type="checkbox"/> 90+<br><input type="checkbox"/> 98+ | <input type="checkbox"/> EMG-LED-10W<br><input type="checkbox"/> EMG-LED-20W<br>Only accessible from the top of the luminaire<br><input type="checkbox"/> Blank-Standard bar hangers (included)<br><input type="checkbox"/> BP31 - 27" C-channel bar hangers.<br><input type="checkbox"/> RIF - RIF filter.<br><input type="checkbox"/> SF - Spray Foam suitable for insulation.<br>(Consult factory for details)<br><input type="checkbox"/> CP - CCEA Chicago Plenum |

- LUTFTB up to 1500L only. - LUT2W, DIMTR 120V only. - LUTH, ELD010.1, ELD0DALI.1, ELD0DMX.1 120-277V only.

## TRIM OPTIONS

### TRIM & TRIM-LESS OPTIONS

| ROUND TRIM OPTIONS                                                                                                                                |  |                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLANGE-LESS TRIM OPTIONS                                                                                                                          |  | FINISH                                                                                                           |  | LENS FILTERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <input type="checkbox"/> <b>ER3-F-1328</b> - Lensed Downlight ( wet Location)<br><input type="checkbox"/> <b>ER3-F-1314**</b> - Pinhole Downlight |  | <input type="checkbox"/> <b>ER3-F-1302</b> - Open Downlight<br><input type="checkbox"/> <b>ER3-TL-KIT*</b> - Kit |  | <input type="checkbox"/> <b>W-WH</b> - White<br><input type="checkbox"/> <b>CL-WH</b> - Chrome<br><input type="checkbox"/> <b>SHZ-WH</b> -Satin Haze<br><input type="checkbox"/> <b>BK-WH</b> -Black                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                   |  |                                                                                                                  |  | <input type="checkbox"/> <b>BP8MR16-FR</b> - FROSTED<br><input type="checkbox"/> <b>BP8MR16-SF</b> - SOFT FOCUS<br><input type="checkbox"/> <b>BP8MR16-CL</b> - CLEAR<br><input type="checkbox"/> <b>BP8MR16-UV</b> - ULTRAVIOLET<br><input type="checkbox"/> <b>6BP8MR16-SP</b> - SPREAD<br><input type="checkbox"/> <b>BPmr16-HC</b> - HONEY COMB<br><input type="checkbox"/> <b>BPmr16-LI</b> - LINEAR<br><input type="checkbox"/> <b>BPmr16-SOL</b> - SOLITE<br><b>Note:</b><br>Additional lens filters must only be used on open non-lensed downlight trim options |
|                                                                                                                                                   |  |                                                                                                                  |  | <input type="checkbox"/> <b>BP8MR16-BL</b> - BLUE<br><input type="checkbox"/> <b>BP8MR16-GR</b> - GREEN<br><input type="checkbox"/> <b>BP8MR16-PI</b> - PINK<br><input type="checkbox"/> <b>BP8MR16-PU</b> - PURPLE<br><input type="checkbox"/> <b>BP8MR16-DL</b> - DAY LIGHT<br><input type="checkbox"/> <b>BP8MR16-YE</b> - YELLOW<br><input type="checkbox"/> <b>BP8MR16-AM</b> - AMBER<br><input type="checkbox"/> <b>BP8MR16-OR</b> - ORANGE<br><input type="checkbox"/> <b>BP8MR16-RE</b> - RED                                                                   |

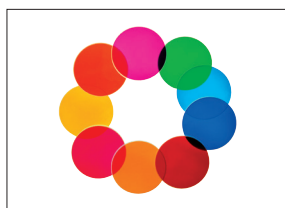
| SQUARE TRIM OPTIONS                                                                                                                               |  |                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLANGE-LESS TRIM OPTIONS                                                                                                                          |  | FINISH                                                                                                           |  | LENS FILTERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <input type="checkbox"/> <b>ES3-F-1328</b> - Lensed Downlight ( wet Location)<br><input type="checkbox"/> <b>ES3-F-1314**</b> - Pinhole Downlight |  | <input type="checkbox"/> <b>ES3-F-1302</b> - Open Downlight<br><input type="checkbox"/> <b>ES3-TL-KIT*</b> - Kit |  | <input type="checkbox"/> <b>W-WH</b> - White<br><input type="checkbox"/> <b>CL-WH</b> - Chrome<br><input type="checkbox"/> <b>SHZ-WH</b> -Satin Haze<br><input type="checkbox"/> <b>BK-WH</b> -Black                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                   |  |                                                                                                                  |  | <input type="checkbox"/> <b>BP8MR16-FR</b> - FROSTED<br><input type="checkbox"/> <b>BP8MR16-SF</b> - SOFT FOCUS<br><input type="checkbox"/> <b>BP8MR16-CL</b> - CLEAR<br><input type="checkbox"/> <b>BP8MR16-UV</b> - ULTRAVIOLET<br><input type="checkbox"/> <b>6BP8MR16-SP</b> - SPREAD<br><input type="checkbox"/> <b>BPmr16-HC</b> - HONEY COMB<br><input type="checkbox"/> <b>BPmr16-LI</b> - LINEAR<br><input type="checkbox"/> <b>BPmr16-SOL</b> - SOLITE<br><b>Note:</b><br>Additional lens filters must only be used on open non-lensed downlight trim options |
|                                                                                                                                                   |  |                                                                                                                  |  | <input type="checkbox"/> <b>BP8MR16-BL</b> - BLUE<br><input type="checkbox"/> <b>BP8MR16-GR</b> - GREEN<br><input type="checkbox"/> <b>BP8MR16-PI</b> - PINK<br><input type="checkbox"/> <b>BP8MR16-PU</b> - PURPLE<br><input type="checkbox"/> <b>BP8MR16-DL</b> - DAY LIGHT<br><input type="checkbox"/> <b>BP8MR16-YE</b> - YELLOW<br><input type="checkbox"/> <b>BP8MR16-AM</b> - AMBER<br><input type="checkbox"/> <b>BP8MR16-OR</b> - ORANGE<br><input type="checkbox"/> <b>BP8MR16-RE</b> - RED                                                                   |

\*Driver only accessible from the top of the luminaire when using Trim-less application

\*\*Pinhole and Slot are only available in black (Reflector) and white (Trim)

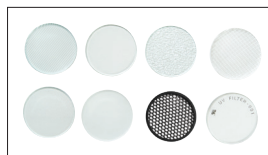
Emergency only accessible from the top of the luminaire

### COLOR FILTERS & DISTRIBUTION FILTERS



#### MR16 LENS FILTER

| CAT. #     | COLOR     |
|------------|-----------|
| BP8MR16-BL | BLUE      |
| BP8MR16-GR | GREEN     |
| BP8MR16-PI | PINK      |
| BP8MR16-PU | PURPLE    |
| BP8MR16-DL | DAY LIGHT |
| BP8MR16-YE | YELLOW    |
| BP8MR16-AM | AMBER     |
| BP8MR16-OR | ORANGE    |
| BP8MR16-RE | RED       |



#### MR16 SPECIALTY LENS FILTER

| CAT. #         | COLOR       |
|----------------|-------------|
| 1. BP8MR16-FR  | FROSTED     |
| 2. BP8MR16-SF  | SOFT FOCUS  |
| 3. BP8MR16-CL  | CLEAR       |
| 4. BP8MR16-UV  | ULTRAVIOLET |
| 5. 6BP8MR16-SP | SPREAD      |
| 6. BPmr16-HC   | HONEY COMB  |
| 7. BPmr16-LI   | LINEAR      |
| 8. BPmr16-SOL  | SOLITE      |

#### Note:

Additional lens filters must only be used on open non-lensed downlight trim options.

\*Please consult factory

**ER3-SHAL-LED-2000L-DIM10-MVOLT-ND-40K-90-ER3-F-1302**

TEST NO.: **EL121757**

INPUT WATTS: **26.3**

LUMENS: **2509**

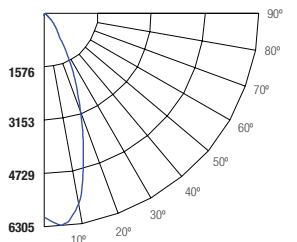
CRI: **90**

EFFICACY: **95**

CCT: **4000K**

SPACING CRITERIA: **0.58**

**Candle Power Distribution (Candelas)**



| Cone of Light       |                     |                          |                       |
|---------------------|---------------------|--------------------------|-----------------------|
| Beam Diameter (ft.) | Beam Area (sq. ft.) | Beam Circumference (ft.) | Beam Volume (cu. ft.) |
| 2                   | 1517                | 1.1                      | 1.1                   |
| 4                   | 379                 | 2.3                      | 2.3                   |
| 6                   | 169                 | 3.4                      | 3.4                   |
| 8                   | 94.8                | 4.5                      | 4.6                   |
| 10                  | 60.7                | 5.6                      | 5.7                   |
| 12                  | 42.1                | 6.8                      | 6.9                   |

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

**Zonal Lumens Summary**

| Zone | Lumens  | %Lamp  | %Fixt  |
|------|---------|--------|--------|
| 0-20 | 1407.33 | 56.10  | 56.10  |
| 0-30 | 2069.01 | 82.50  | 82.50  |
| 0-40 | 2311.85 | 92.20  | 92.20  |
| 0-60 | 2443.04 | 97.40  | 97.40  |
| 0-80 | 2500.48 | 99.70  | 99.70  |
| 0-90 | 2508.64 | 100.00 | 100.00 |

**Luminance (Average candela/M<sup>2</sup>)**

| Angle in Degrees | Average 0° | Average 45° | Average 90° |
|------------------|------------|-------------|-------------|
| 45               | 17904      | 22527       | 97615       |
| 55               | 18517      | 17230       | 16554       |
| 65               | 18262      | 16858       | 15940       |
| 75               | 17589      | 16429       | 15955       |
| 85               | 16364      | 19229       | 19204       |

**Lumens Per Zone**

| Zone  | Lumens |
|-------|--------|
| 0-10  | 494.96 |
| 10-20 | 912.37 |
| 20-30 | 661.68 |
| 30-40 | 242.83 |
| 40-50 | 87.20  |
| 50-60 | 43.99  |
| 60-70 | 35.07  |
| 70-80 | 22.36  |
| 80-90 | 8.17   |

**Candela Tabulation**

| 0  | 0       |
|----|---------|
| 0  | 6066.90 |
| 5  | 5971.79 |
| 15 | 3718.82 |
| 25 | 1673.64 |
| 35 | 349.66  |
| 45 | 57.79   |
| 55 | 48.48   |
| 65 | 35.23   |
| 75 | 20.78   |
| 85 | 6.51    |
| 90 | 0.18    |

**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

| RC | 80% |     |     |     | 70% |     |     |     | 50% |     |     |     | 30% |     |     |     | 10% |     |     |     | 0%  |     |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RW | 70% | 50% | 30% | 10% | 70% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0%  |
| 0  | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 102 | 100 | 100 | 100 | 100 |
| 1  | 114 | 111 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 95  | 94  | 93  | 92  | 91  | 90  | 89  |
| 2  | 109 | 104 | 100 | 97  | 106 | 102 | 99  | 96  | 99  | 96  | 94  | 96  | 94  | 92  | 93  | 92  | 90  | 88  | 87  | 86  | 85  | 84  | 83  | 82  |
| 3  | 104 | 98  | 93  | 90  | 102 | 97  | 92  | 89  | 94  | 90  | 88  | 92  | 89  | 86  | 89  | 87  | 85  | 83  | 82  | 81  | 80  | 79  | 78  | 77  |
| 4  | 99  | 93  | 88  | 84  | 98  | 91  | 87  | 83  | 89  | 85  | 82  | 87  | 84  | 81  | 86  | 83  | 80  | 78  | 77  | 76  | 75  | 74  | 73  | 72  |
| 5  | 95  | 88  | 82  | 79  | 94  | 87  | 82  | 78  | 85  | 81  | 78  | 83  | 80  | 77  | 82  | 79  | 76  | 75  | 74  | 73  | 72  | 71  | 70  | 69  |
| 6  | 91  | 83  | 78  | 74  | 90  | 83  | 78  | 74  | 81  | 77  | 73  | 80  | 76  | 73  | 79  | 75  | 73  | 71  | 70  | 69  | 68  | 67  | 66  | 65  |
| 7  | 88  | 79  | 74  | 70  | 86  | 79  | 74  | 70  | 78  | 73  | 70  | 77  | 72  | 69  | 75  | 72  | 69  | 68  | 67  | 66  | 65  | 64  | 63  | 62  |
| 8  | 84  | 76  | 71  | 67  | 83  | 75  | 70  | 67  | 74  | 70  | 67  | 73  | 69  | 66  | 72  | 69  | 66  | 65  | 64  | 63  | 62  | 61  | 60  | 59  |
| 9  | 81  | 73  | 67  | 64  | 80  | 72  | 67  | 64  | 71  | 67  | 64  | 70  | 66  | 63  | 70  | 66  | 63  | 62  | 61  | 60  | 59  | 58  | 57  | 56  |
| 10 | 78  | 70  | 65  | 61  | 77  | 69  | 64  | 61  | 69  | 64  | 61  | 68  | 64  | 61  | 67  | 63  | 61  | 60  | 59  | 58  | 57  | 56  | 55  | 54  |

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

**ER3-SHAL-LED-2000L-DIM10-MVOLT-MD-40K-90-ER3-F-1302**

TEST NO.: **EL121860**

INPUT WATTS: **26.1**

LUMENS: **2344**

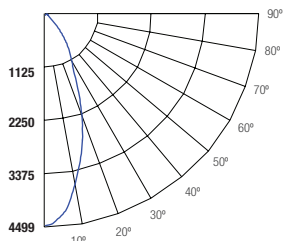
CRI: **90**

EFFICACY: **90**

CCT: **4000K**

SPACING CRITERIA: **0.68**

**Candle Power Distribution (Candelas)**



| Cone of Light       |                     |                          |                       |
|---------------------|---------------------|--------------------------|-----------------------|
| Beam Diameter (ft.) | Beam Area (sq. ft.) | Beam Circumference (ft.) | Beam Volume (cu. ft.) |
| 2                   | 1099                | 1.5                      | 1.5                   |
| 4                   | 275                 | 2.9                      | 2.9                   |
| 6                   | 122                 | 4.4                      | 4.4                   |
| 8                   | 68.7                | 5.9                      | 5.8                   |
| 10                  | 44                  | 7.4                      | 7.3                   |
| 12                  | 30.5                | 8.8                      | 8.8                   |

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

**Zonal Lumens Summary**

| Zone | Lumens  | %Lamp  | %Fixt  |
|------|---------|--------|--------|
| 0-20 | 1193.19 | 50.90  | 50.90  |
| 0-30 | 1883.1  | 80.40  | 80.40  |
| 0-40 | 2140.51 | 91.30  | 91.30  |
| 0-60 | 2277.2  | 97.20  | 97.20  |
| 0-80 | 2335.52 | 99.70  | 99.70  |
| 0-90 | 2343.61 | 100.00 | 100.00 |

**Luminance (Average candela/M<sup>2</sup>)**

| Angle in Degrees | Average 0° | Average 45° | Average 90° |
|------------------|------------|-------------|-------------|
| 45               | 17982      | 20863       | 114503      |
| 55               | 18895      | 16794       | 16294       |
| 65               | 18314      | 16438       | 15826       |
| 75               | 17183      | 15972       | 15913       |
| 85               | 13951      | 18425       | 18802       |

**Lumens Per Zone**

| Zone  | Lumens |
|-------|--------|
| 0-10  | 380.02 |
| 10-20 | 813.17 |
| 20-30 | 689.91 |
| 30-40 | 257.42 |
| 40-50 | 91.85  |
| 50-60 | 44.84  |
| 60-70 | 35.65  |
| 70-80 | 22.67  |
| 80-90 | 8.09   |

**Candela Tabulation**

| 0  | 0       |
|----|---------|
| 0  | 4395.00 |
| 5  | 4228.22 |
| 15 | 3047.97 |
| 25 | 1638.42 |
| 35 | 256.84  |
| 45 | 58.04   |
| 55 | 49.47   |
| 65 | 35.33   |
| 75 | 20.30   |
| 85 | 5.55    |
| 90 | 0.18    |

**Coefficients of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

| RC | 80% |     |     |     | 70% |     |     |     | 50% |     |     |     | 30% |     |     |     | 10% |     |     |     | 0%  |     |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RW | 70% | 50% | 30% | 10% | 70% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0%  |
| 0  | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 102 | 100 | 100 | 100 | 100 |
| 1  | 114 | 111 | 108 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 95  | 94  | 93  | 92  | 91  | 90  | 89  |
| 2  | 108 | 103 | 100 | 96  | 106 | 102 | 98  | 95  | 99  | 96  | 93  | 96  | 93  | 91  | 93  | 91  | 89  | 88  | 87  | 86  | 85  | 84  | 83  | 82  |
| 3  | 103 | 97  | 92  | 88  | 101 | 96  | 91  | 88  | 93  | 89  | 86  | 91  | 88  | 85  | 88  | 86  | 84  | 82  | 81  | 80  | 79  | 78  | 77  | 76  |
| 4  | 99  | 91  | 86  | 82  | 97  | 90  | 85  | 82  | 88  | 84  | 81  | 86  | 83  | 80  | 84  | 81  | 79  | 77  | 76  | 75  | 74  | 73  | 72  | 71  |
| 5  | 94  | 86  | 81  | 77  | 93  | 85  | 80  | 76  | 84  | 79  | 76  | 82  | 78  | 75  | 80  | 77  | 74  | 73  | 72  | 71  | 70  | 69  | 68  | 67  |
| 6  | 90  | 82  | 76  | 72  | 89  | 81  | 76  | 72  | 79  | 75  | 71  | 78  | 74  | 71  | 77  | 73  | 70  | 69  | 68  | 67  | 66  | 65  | 64  | 63  |
| 7  | 86  | 78  | 72  | 68  | 85  | 77  | 72  | 68  | 76  | 71  | 68  | 75  | 70  | 67  | 73  | 70  | 67  | 66  | 65  | 64  | 63  | 62  | 61  | 60  |
| 8  | 83  | 74  | 68  | 65  | 81  | 73  | 68  | 64  | 72  | 67  | 64  | 71  | 67  | 64  | 70  | 66  | 64  | 62  | 61  | 60  | 59  | 58  | 57  | 56  |
| 9  | 79  | 70  | 65  | 61  | 78  | 70  | 65  | 61  | 69  | 64  | 61  | 68  | 64  | 61  | 67  | 63  | 61  | 60  | 59  | 58  | 57  | 56  | 55  | 54  |
| 10 | 76  | 67  | 62  | 58  | 75  | 67  | 62  | 58  | 66  | 61  | 58  | 65  | 61  | 58  | 65  | 61  | 58  | 57  | 56  | 55  | 54  | 53  | 52  | 51  |

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

**ER3-SHAL-LED-2000L-DIM10-MVOLT-WD-40K-90-ER3-F-1302**

TEST NO.: **EL121863**

INPUT WATTS: **26.1**

LUMENS: **2470**

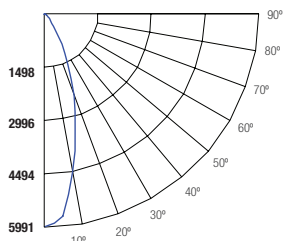
CRI: **90**

EFFICACY: **95**

CCT: **4000K**

SPACING CRITERIA: **0.60**

**Candle Power Distribution (Candelas)**



| Cone of Light       |                     |                          |                       |
|---------------------|---------------------|--------------------------|-----------------------|
| Beam Diameter (ft.) | Beam Area (sq. ft.) | Beam Circumference (ft.) | Beam Volume (cu. ft.) |
| 2                   | 1429                | 1.2                      | 1.2                   |
| 4                   | 357                 | 2.3                      | 2.3                   |
| 6                   | 159                 | 3.5                      | 3.5                   |
| 8                   | 89.3                | 4.7                      | 4.6                   |
| 10                  | 57.1                | 5.9                      | 5.8                   |
| 12                  | 39.7                | 7                        | 6.9                   |

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

**Zonal Lumens Summary**

| Zone | Lumens  | %Lamp  | %Fixt  |
|------|---------|--------|--------|
| 0-20 | 1360.3  | 55.30  | 55.10  |
| 0-30 | 2024.81 | 82.30  | 82.00  |
| 0-40 | 2272.76 | 92.40  | 92.00  |
| 0-60 | 2405.25 | 97.80  | 97.40  |
| 0-80 | 2461.81 | 100.10 | 99.70  |
| 0-90 | 2469.64 | 100.40 | 100.00 |

**Luminance (Average candela/M<sup>2</sup>)**

| Angle in Degrees | Average 0° | Average 45° | Average 90° |
|------------------|------------|-------------|-------------|
| 45               | 45342      | 18162       | 17824       |
| 55               | 19143      | 19093       | 18666       |
| 65               | 18988      | 19335       | 18511       |
| 75               | 19045      | 18376       | 17174       |
| 85               | 19380      | 18299       | 7164        |

**Lumens Per Zone**

| Zone  | Lumens |
|-------|--------|
| 0-10  | 470.29 |
| 10-20 | 890.00 |



1- Luminaire will be shipped with Powerpacks pre-installed, ready to be integrated to designated control systems

2- Luminaire will be shipped with Sensors installed on the luminaire, allowing for individual luminaire control. Luminaires will be ready to be integrated with designated control systems

3- Luminaire will be shipped with Sensors to be remotely installed on the ceiling. Luminaires will be ready to be integrated with designated control systems

| BRAND                                          | EASYFIT<br>by EnOcean                                                                                                                                        | LUTRON                                                                                                                                                                                        | enlighted                                                                                                                                                                                                                                                                                                                                                                                                                     | LEVITON                                                                                                                                                        | OSRAM                                                                                                                                                                                                                                                                                                 | PHILIPS<br>EasySense                                                           | legrand®                                                                                                                  |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| CONTROL UNIT                                   | <input type="checkbox"/> LEDRU<br>LED Relay Zone<br>Controller 0-10V <sup>1</sup>                                                                            | <input type="checkbox"/> FCJS-010<br>Lutron Vive 0-10V Individual<br>Pow Pak (Luminaire is<br>shipped Vive Enabled) <sup>14</sup>                                                             | <input type="checkbox"/> CU-4E-FMH<br>Fixture Mount Control<br>Unit <sup>15</sup>                                                                                                                                                                                                                                                                                                                                             | <input type="checkbox"/> ZL027 –NOW<br>Intellect Power Control<br>Module <sup>16</sup>                                                                         | <input type="checkbox"/> EN-WCM2-ZB-DR<br>Wireless Control Module <sup>17</sup>                                                                                                                                                                                                                       | <input type="checkbox"/> SBR -BS<br>Xitanium SR<br>Bridge <sup>18</sup>        | <input type="checkbox"/> LMFC-011<br>ON/OFF/0-10V dimming<br>fixture controller <sup>19</sup>                             |
|                                                | <input type="checkbox"/> LEDDU<br>LED Zone Controller<br>0-10V <sup>1</sup>                                                                                  | <input type="checkbox"/> FCJS-ECO<br>Lutron Vive Eco-system Pow<br>Pak (Luminaire is shipped Vive<br>Enabled) <sup>14</sup>                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> ZL027 –NOW<br>Intellect Power Control<br>Module <sup>16</sup>                                                                         | <input type="checkbox"/> EN- ALC-ZB-BK-DR<br>Wireless Area Lighting<br>Control Module <sup>17</sup>                                                                                                                                                                                                   |                                                                                |                                                                                                                           |
| INTEGRAT<br>SENSOR                             | N/A                                                                                                                                                          | N/A                                                                                                                                                                                           | N/A                                                                                                                                                                                                                                                                                                                                                                                                                           | N/A                                                                                                                                                            | N/A                                                                                                                                                                                                                                                                                                   | N/A                                                                            | N/A                                                                                                                       |
| *WIRELESS<br>OCCUPANCY<br>SENSOR               | <input type="checkbox"/> EOSCU-W-EO<br>Occupancy Sensor<br>- Ceiling Mounted<br>(Must be specified<br>with LEDRU or<br>LEDDU control<br>unit) <sup>3</sup>   | N/A                                                                                                                                                                                           | N/A                                                                                                                                                                                                                                                                                                                                                                                                                           | N/A                                                                                                                                                            | N/A                                                                                                                                                                                                                                                                                                   | N/A                                                                            | <input type="checkbox"/> LMDC-100<br>Dual technology PIR<br>Ceiling Mount Occupancy<br>Sensor <sup>3</sup>                |
| *WIRELESS<br>DAYLIGHT<br>SENSOR                | <input type="checkbox"/> ELLSU-W-EO<br>Light Level Sensor -<br>Ceiling Mounted<br>(Must be specified<br>with LEDRU or<br>LEDDU control<br>unit) <sup>3</sup> | N/A                                                                                                                                                                                           | N/A                                                                                                                                                                                                                                                                                                                                                                                                                           | N/A                                                                                                                                                            | N/A                                                                                                                                                                                                                                                                                                   | N/A                                                                            | <input type="checkbox"/> LMLS-400<br>Single zone switching<br>and dimming digital<br>photosensor <sup>3</sup>             |
| *WIRELESS<br>OCCUPANCY<br>& DAYLIGHT<br>SENSOR | N/A                                                                                                                                                          | N/A                                                                                                                                                                                           | <input type="checkbox"/> SU-5E-IoT<br>IoT Node Micro Sensor <sup>3</sup><br><input type="checkbox"/> SU-5E-CL<br>Connected Lighting<br>Micro Sensor <sup>3</sup><br><input type="checkbox"/> SU-5E-IL<br>Independent Lighting /<br>Enlighted One Micro<br>Sensor <sup>3</sup><br><input type="checkbox"/> SU-5S-H-(IoT/CL/IL)<br>Surface Mount Sensor <sup>3</sup><br><br>(Must be specified with CU-<br>4E-FMH Control Unit) | <input type="checkbox"/> ZL00J -TOW<br>Intellect Intelligent Fixture<br>Control System <sup>3</sup><br><br>(Must be specified with<br>ZL027 –NOW Control Unit) | <input type="checkbox"/> EN-CLM-PIR-DD-ZB<br>SensiLUM™ Wireless<br>Integrated Sensor<br><input type="checkbox"/> EN-SCPPH-1500-ZB<br>Wireless Passive Infrared<br>Occupancy and Photo<br>Sensors <sup>3</sup><br><br>(Must be specified with<br>EN-WCM2-ZB-DR or EN-<br>ALC-ZB-BK-DR Control<br>Unit) | <input type="checkbox"/> SNS200-<br>CMP<br>SNS200 for<br>grouping <sup>3</sup> | N/A                                                                                                                       |
| ACCESORIES                                     | N/A                                                                                                                                                          | N/A                                                                                                                                                                                           | <input type="checkbox"/> TMC-SU-5E<br>Tile Mount Carrier<br><input type="checkbox"/> CBL-5E-CU4-30N<br>30 inch Sensor Cable for<br>CU-4 and IoT Ready™<br>drivers<br><input type="checkbox"/> CBL-5E-CU4-7F<br>7 foot Sensor Cable for<br>CU-4 and IoT Ready™<br>drivers                                                                                                                                                      | N/A                                                                                                                                                            | N/A                                                                                                                                                                                                                                                                                                   | N/A                                                                            | N/A                                                                                                                       |
| NOTES                                          | N/A                                                                                                                                                          | 4- Luminaire will be compatible with Lutron LRF2-OCR2B-P-WH Ceiling mount 360° occupancy/vacancy sensor & LRF2-DCRB-WH Ceiling-mount daylight sensor. Sensors must be ordered through Lutron. | 5- Luminaire will be compatible with ENLIGHTED SU-5E-IoT, SU-5E-CL, SU-5E-IL, SU-5S-H, Sensors.                                                                                                                                                                                                                                                                                                                               | 6-Luminaire will be compatible with Leviton Intellect App & Keypad Room Controller                                                                             | 7-Luminaire will be compatible with EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors                                                                                                                                                                                            | 8-Luminaire will be compatible with Philips field and wireless switch.         | 9-Luminaire will be compatible with DLM Room control system LMPB-100. DLM control system must be ordered through Legrand. |