

## DESCRIPTION

The Define series by Neo-Ray characterizes the ultimate in minimalist simplicity by providing clean, uniform lines of illumination in virtually any architectural environment. Powered by Eaton's most advanced linear LED technology, the Define series delivers outstanding efficacy in a variety of profile widths. 1", 2", 3", 4" and 5" luminaire widths are all specifiable to the nearest inch in length and can be fitted with standard flush, regress and drop lensing. In wall corners and wall to ceiling transitions can all be ordered as standard components and blend seamlessly into the most complex architectural spaces. Custom transitions are also available. Robust construction and adaptable, modular components make installation simple and ensure laser straight runs.

## SPECIFICATION FEATURES

### Construction

Housing trim extruded from 6063 aluminum. Nominal 2' -12' illuminated sections. Used in run configuration and/or individual fixtures. All components are RoHS compliant.

### Lens

Snap in lens available in flush and drop lens profiles. Lens end caps allow for ease of installation and eliminate light leak.

### Finish

Fixture housing trims are high reflective white using electrostatically applied polyester powder coat paint.

### Mounting

Recessed.

### Electrical

Long-life LED system coupled with electrical driver to deliver optimal performance. LED's are available in 2700K, 3000K, 3500K or 4000K with a typical CRI  $\leq$  85. Projected life is 131,000 hours at L70. Electronic drivers are available for 120-277V applications. Fixtures and electrical components certified to UL and cUL standards. Fixtures are damp location listed and IC rated. For Chicago plenum, specify CP in fixture options.

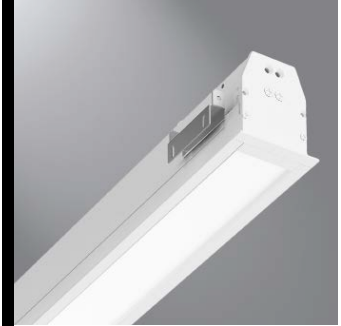
### Controls

Equipped standard with a 0-10V continuous dimming driver compatible

with most standard dimming devices (refer to website for specific compatibility reference). Combine with FifthLight DALI and other energy saving products like sensors, daylighting controls and building management systems to maximize energy savings.

### Warranty

Five year warranty.

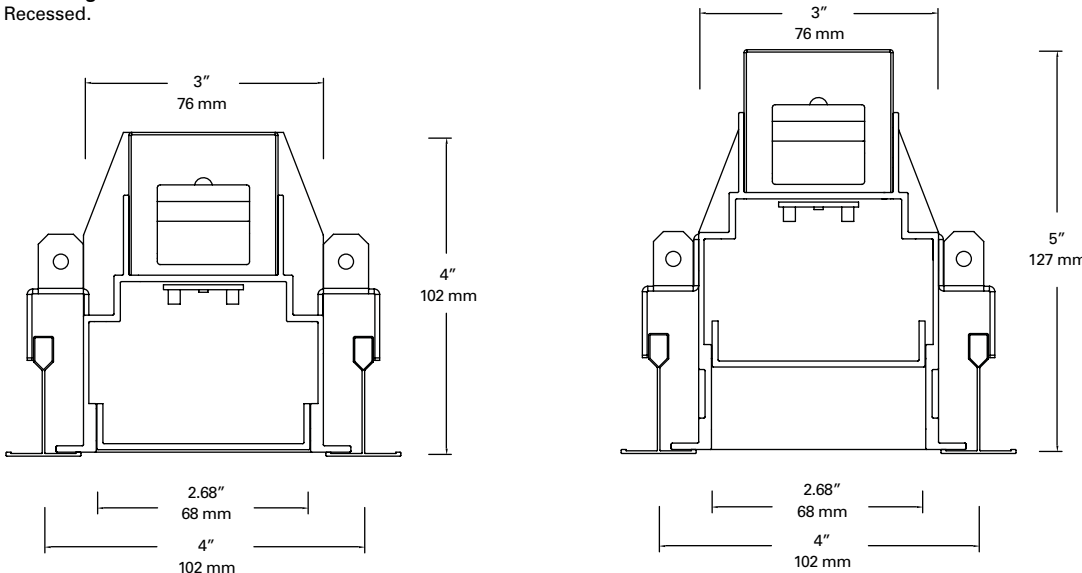


## DEFINE 3

LED

Recessed  
Direct

cULus - 1598  
Damp Location Listed  
LM79/LM80 Compliant  
ROHS Compliant  
Lumawatt Pro Wireless  
4" TechZone Compatible



## ORDERING INFORMATION

Sample Number: S123-DR-2-35-ETG-0048-1-U-DD-1-W

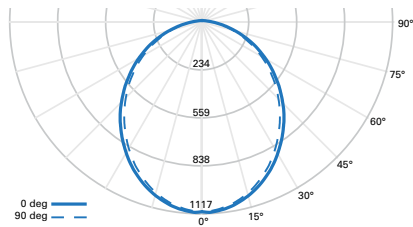
Series	Light Distribution	Light Level <sup>1</sup>	CCT	Ceiling Type <sup>2</sup>	Length <sup>3</sup>	
S123 = Define 3 QS-S123 = Define 3 Quick Ship	DR = Direct Recessed RDR = Regressed Direct Recessed	-LO = Light Level LO (1373Lms @ 13.6W) (343 Lumens per ft @ 3.4W) -1 = Light Level 1 (2899 Lms @ 27.9W) (725 Lumens per ft @ 7W) -2 = Light Level 2 (4108 Lms @ 42.6W) (1027 Lumens per ft @ 10.65W) -LC = Custom Lm/Ft <sup>1</sup>	27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K	ETG = 15/16" T-Grid FTG = 9/16" T-Grid STG = 9/16" Slot-T-Grid ETT = 15/16" Tegular T-Grid FTT = 9/16" Tegular T-Grid GYP = Gypsum board FSR = "Flangeless" Gypsum Board FES = "Finished" Extruded Side	0024 = 2' Individual <sup>4</sup> 0036 = 3' Individual <sup>4</sup> 0048 = 4' Individual 0072 = 6' Individual 0096 = 8' Individual 0144 = 12' Individual XXXX = Configurable Run <sup>5</sup>	
Circuiting	Voltage	Integral LED Driver	Emergency Options	Options <sup>9</sup>	Shielding	Color
1 = Single Circuit 2 = Dual Circuit	1 = 120V 2 = 277V U = Universal (120V-277V) 3 = 347V <sup>6</sup>	-ED = Non-Dimming -DD = 0-10 Volt Dimming, 10% -HCD = 0-10 Volt Dimming, 1% -5L = DALI Dimming <sup>7</sup> -LUE = Lutron A-Series w/eco sys <sup>13</sup> -LUL = Lutron A-Series w/3W dim <sup>13</sup>	B = Battery Pack <sup>8</sup> E = Emergency T = Transfer Switch	CP = Chicago Plenum SVPD1 = Integrated Sensor LWIPD1 = Lumawatt Pro Wireless Integral Sensor <sup>12</sup>	1 = Satin Flush Diffuser <sup>11</sup> 3 = Asymmetric Flush Optic <sup>10</sup> 4 = Satin Drop Diffuser	W = Matte White S = Silver B = Black C = Custom Color

Grey bar denotes available Quick ship options



See page 5 for Technical Notes  
Specifications and dimensions subject to change without notice.  
See additional information on the following pages.

All data certified to LM-79 standards in a NAVLAB approved testing facility



**FILE NAME: S123-DR-1-35-ETG-0048-1-U-DD-1-W**

**CCT: 3500K**

**LUMENS: 2899 Lms**

**WATTS: 27.9 W**

**LPW: 103.9 LPW**

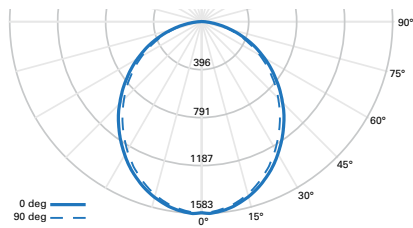
**TEST NUMBER: P33912**

**ZONAL LUMENS SUMMARY**

Zone	Lumens	% Fixture
0°-30°	837	28.9
0°-40°	1347	46.5
0°-60°	2318	80.0
0°-90°	2899	100.0

**LUMINANCE DATA (cd/M<sup>2</sup>)**

Vertical Angle	0°	45°	90°
45	11859	11633	11390
55	11190	10954	10740
65	10328	10008	9805
75	8646	8456	8266
85	5925	6207	6207



**FILE NAME: S123-DR-2-35-ETG-0048-1-U-DD-1-W**

**CCT: 3500K**

**LUMENS: 4108 Lms**

**WATTS: 42.6 W**

**LPW: 96.4 LPW**

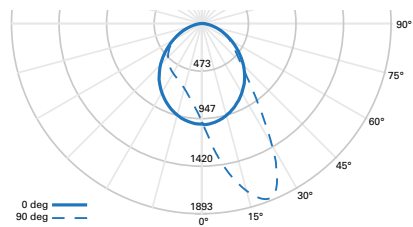
**TEST NUMBER: P33923**

**ZONAL LUMENS SUMMARY**

Zone	Lumens	% Fixture
0°-30°	1186	28.9
0°-40°	1909	46.5
0°-60°	3284	80.0
0°-90°	4108	100.0

**LUMINANCE DATA (cd/M<sup>2</sup>)**

Vertical Angle	0°	45°	90°
45	16805	16485	16139
55	15857	15522	15218
65	14634	14181	13892
75	12252	11981	11715
85	8394	8789	8789



**FILE NAME: S123DR-135-GYP0048-1-UDD-3-W**

**CCT: 3500K**

**LUMENS: 3177 Lms**

**WATTS: 27.9 W**

**LPW: 113.9 LPW**

**TEST NUMBER: G2-1612-022-2**

**ZONAL LUMENS SUMMARY**

Zone	Lumens	% Fixture
0°-30°	1030	32.4
0°-40°	1647	51.8
0°-60°	2649	83.4
0°-90°	3177	100.0

**CANDELA DISTRIBUTION (cd)**

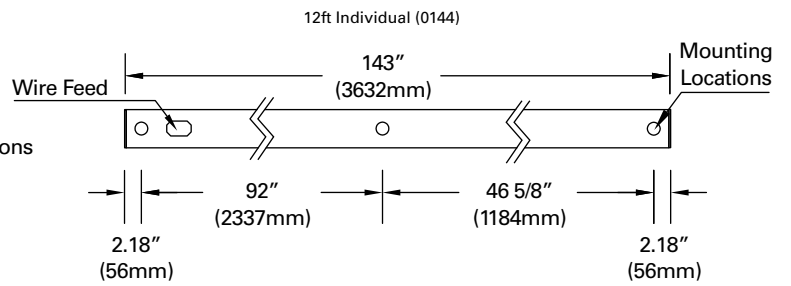
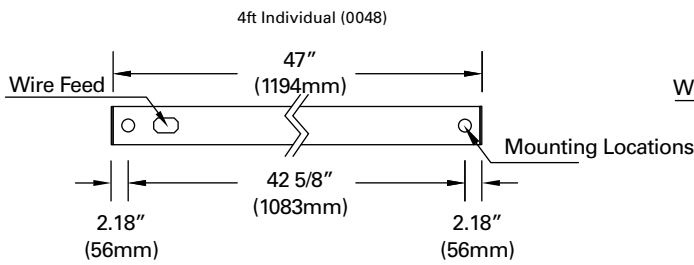
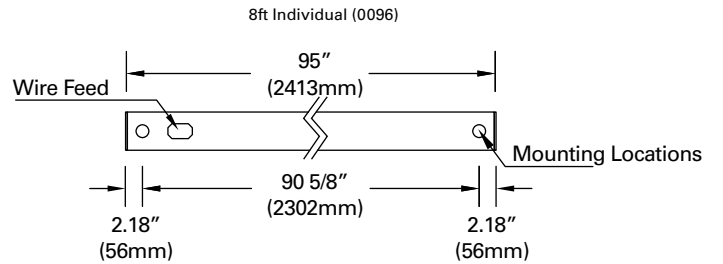
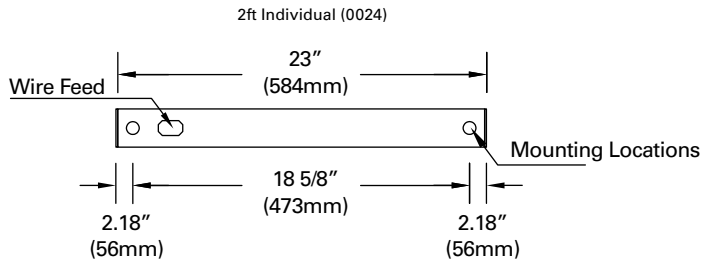
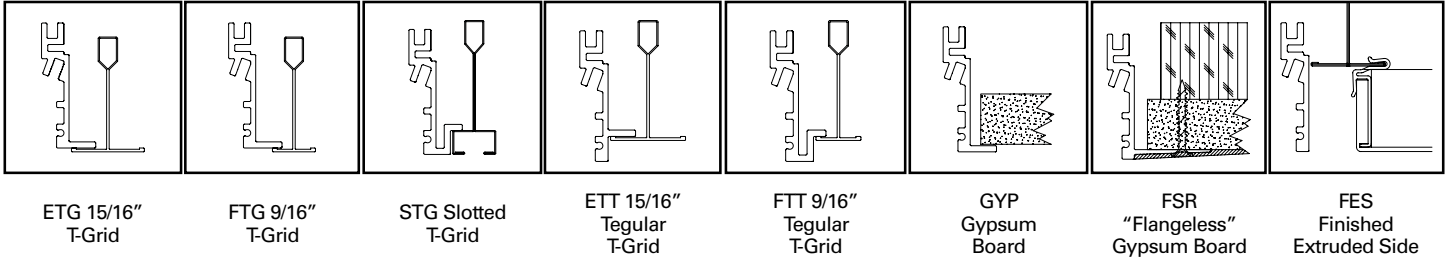
Vertical Angle	0°	90°	180°	270°
0	1145	1145	1145	1145
10	1124	1734	1124	852
20	1035	2140	1041	721
25	977	2023	984	690
30	909	1583	920	660
40	754	794	765	596
50	566	499	580	502
60	379	352	388	381
70	212	208	217	242
80	76	77	80	100
90	0	0	0	0

**LUMEN MAINTENANCE**

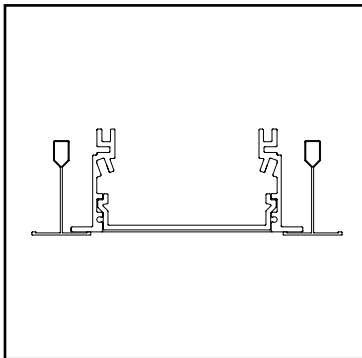
Ambient Temperature	TM-21 Lumen Maintenance (100,000 hours)	Theoretical L70 (Hours)
25°C	84.29%	131,000

**MOUNTING**

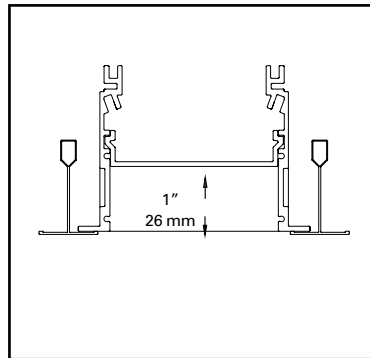
Extruded Trim Flange Details - Refer to submittal drawings for detailed flange information - for additional options consult factory.



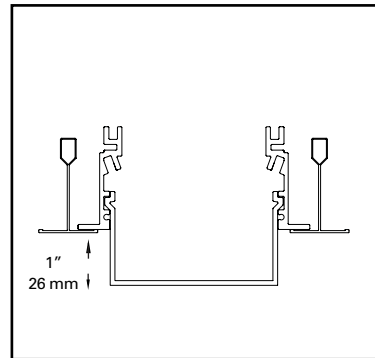
**LENS DETAIL**



Satin Flush Diffuser  
Asymmetric Flush Diffuser

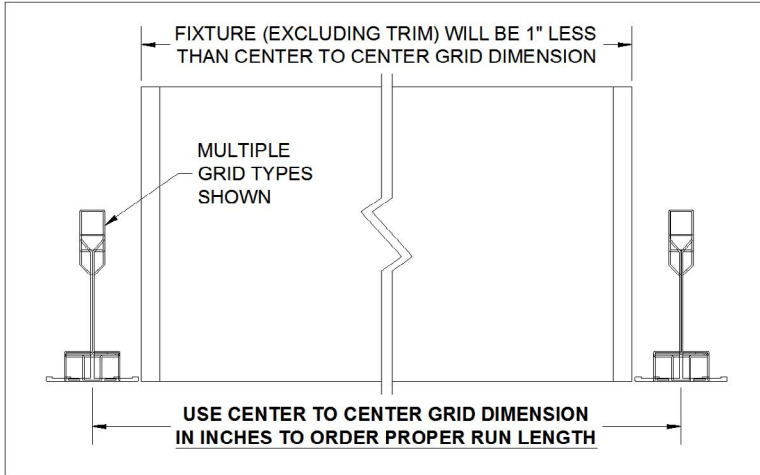


Regressed Satin Diffuser

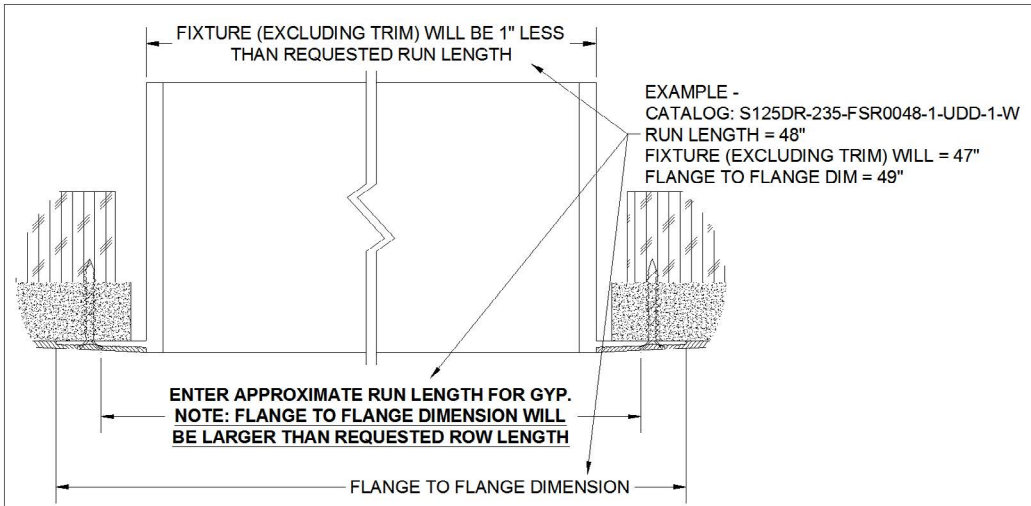


Satin Drop Down Diffuser

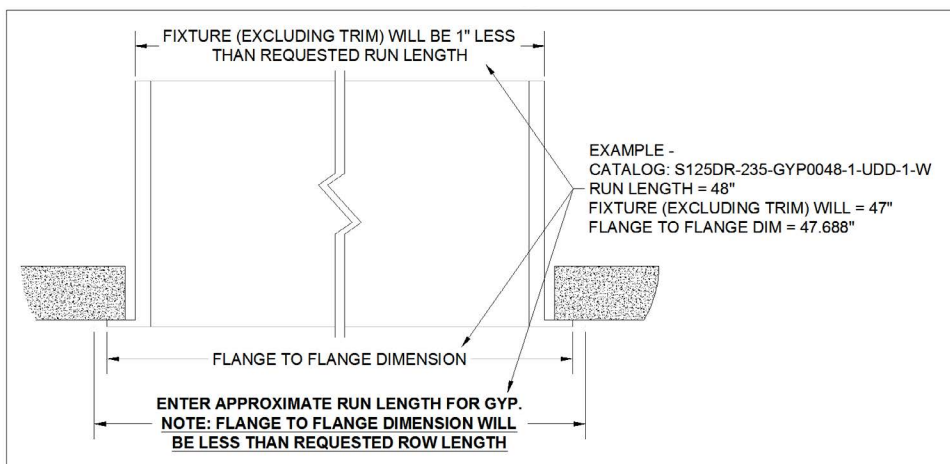
ALL GRID TYPES SHOWN



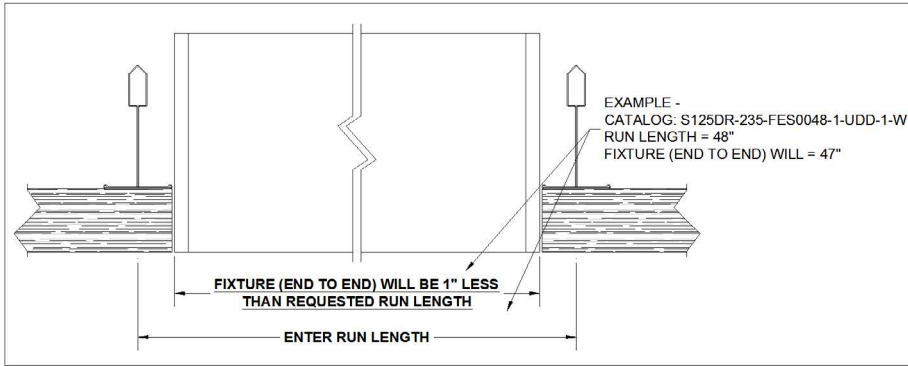
FSR: "FLANGELESS" GYPSUM BOARD



GYP: GYPSUM BOARD

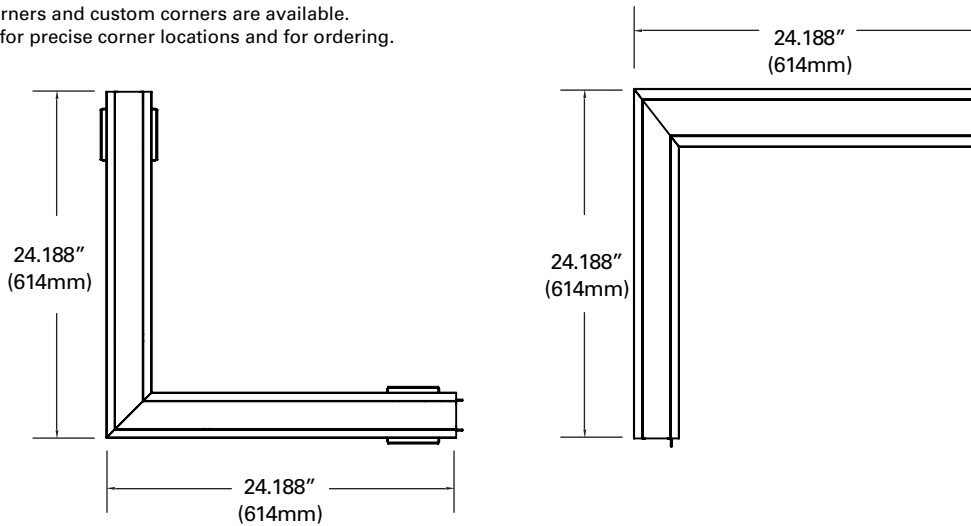


FES: "Finished" Extruded Sides



**CORNER TRANSITIONS**

Standard 90 degree corners and custom corners are available. Please consult factory for precise corner locations and for ordering.



**INTEGRATED SENSOR DETAILS AND PLACEMENT<sup>12</sup>**

4ft Individual	<input type="radio"/>	Sensor Series		Occupancy Technology		Sensing Technology		Coverage Pattern	
		SV	Integrated Sensor for Local Control	P	Passive Infrared	D	Dimming Daylight Harvesting (Closed Loop)	1	~144 ft <sup>2</sup>
8ft Individual	<input type="radio"/>	LWI	Lumawatt Pro Wireless Integral						
12ft Individual	<input type="radio"/>								

**TECHNICAL NOTES**

- Additional lower light levels are available depending on fixture length. For the HCD driver, the requested output must be between 225 Lms/ft and 1030 Lms/ft. Additional drivers and light levels are available - please consult factory for details and lead-time.
- Not all ceiling types are shown; consult factory for specific ceiling types not listed.
- All lengths are nominal. Actual sizes are one inch shorter than nominal to allow easy in-grid installation. For Gypsum or Flangeless installations add 1 inch to overall fixture length. Refer to submittal drawings for actual sizes. See "Mounting" details for example.
- Not all dimming options available for every length; please consult factory for specific details.
- For configurable runs specify length to nearest inch. Standard runs ship in 12ft increments. Specify 8ft increments if 12ft are too large to receive. Additional charges may apply; please consult factory for details.
- 347V is achieved using remote transformer.
- FifthLight DALI is achieved using digital analog converter.
- Battery pack options are not available in every length; please consult factory for specific details. Battery pack is remote installation only.
- For all options; consult factory for specific requirements.
- Asymmetric lens is not available as standard product on regressed housing RDR.
- Standard product is configured with snap-in lens end caps at the beginning and end of a run or individual fixture. End caps are provided for ease of installation and removal of the lens and eliminate light leak from the end of the fixture when flush satin lens is selected. Please contact factory if lens end-caps are not desired as alternate configurations are available.
- Integrated LumaWatt Pro Sensor available as standard product in 4ft, 8ft, and 12ft configurations. Continuous runs and alternate lengths are available. Please consult factory for details. One sensor for every 8ft of fixture length. Standard configurations include Universal voltage, single circuit and 'DD' driver selection. Not available with regressed housing or emergency options.
- Lutron A series drivers are available in light levels LO and 1. For Light level 2, a Lutron TVI is used in conjunction with a DD driver. When a TVI is used, the dimensions of the fixture will be slightly larger on the back side to accommodate the TVI.