

## 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 Cooper Lighting Solutions' 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.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

## 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. End brackets include closure to prevent moisture and insect ingress.

### Finish

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

### Mounting

Recessed.

### Electrical

**REMOTE INSTALLATION ONLY.** Long-life LED system coupled with electrical driver in remote enclosure to deliver optimal performance. LED's are available in 2700K, 3000K, 3500K or 4000K with a typical CRI  $\leq$  85. Projected life is 60,000 hours at 86% lumen output. 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.

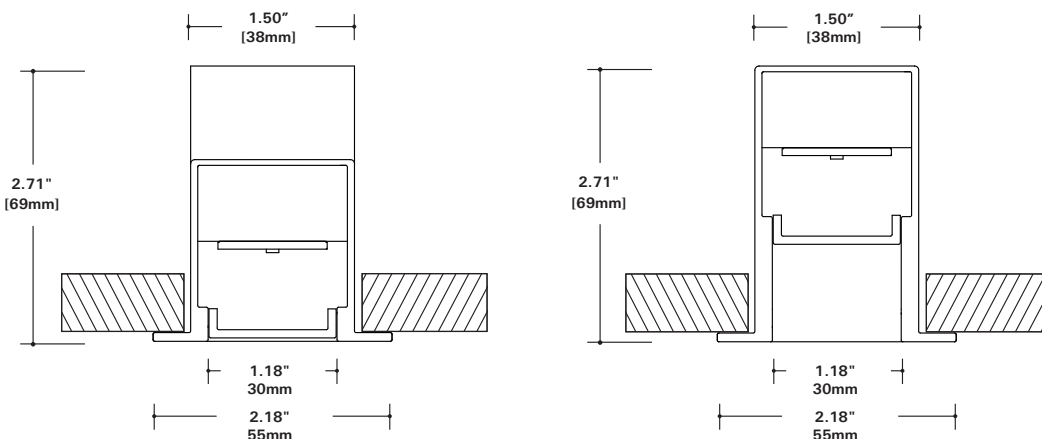


## DEFINE 1

LED

Recessed  
Direct

cULus - 1598  
Damp Location Listed  
LM79/LM80 Compliant  
ROHS Compliant

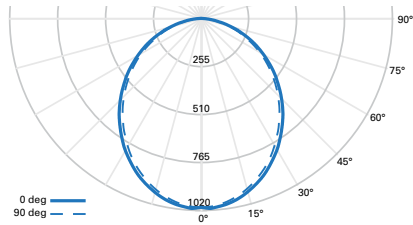


## ORDERING INFORMATION

Sample Number: S121-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>	
S121 = Define 1	DR = Direct Recessed RDR = Regressed Direct Recessed	-LO = Light Level 0 (1285 Lms @ 13.6 W) (321 Lumens per ft @ 3.4 W) -1 = Light Level 1 (2608 Lms @ 27.9 W) (652 Lumens per ft @ 7 W) -2 = Light Level 2 (3696 Lms @ 42.6 W) (924 Lumens per ft @ 10.7 W) -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	Remote LED Driver	Emergency Options	Options <sup>6</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>11</sup> -LUL = Lutron A-Series w/3W dim <sup>11</sup>	B = Battery Pack <sup>8</sup> E = Emergency T = Transfer Switch	CP = Chicago Plenum SVPD1 = Integrated Sensor	1 = Satin Flush Diffuser <sup>9</sup> 4 = Satin Drop Diffuser	W = Matte White S = Silver B = Black C = Custom Color

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



**FILE NAME: S121-DR-1-35-ETG-0048-1-U-DD-1-W**

**CCT: 3500K**

**LUMENS: 2608 Lms**

**WATTS: 27.9 W**

**LPW: 93.5 LPW**

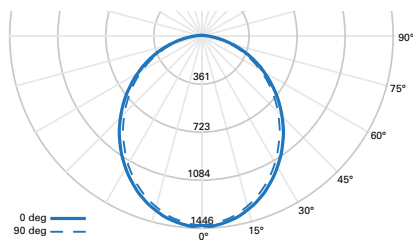
**TEST NUMBER: P33906**

**ZONAL LUMENS SUMMARY**

Zone	Lumens	% Fixture
0°-30°	760	29.1
0°-40°	1222	46.8
0°-60°	2091	80.2
0°-90°	2608	100.0

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

Vertical Angle	0°	45°	90°
45	24328	23681	23215
55	22839	22035	21577
65	21050	20118	19424
75	18011	17256	16619
85	13172	12050	11665



**FILE NAME: S121-DR-2-35-ETG-0048-1-U-DD-1-W**

**CCT: 3500K**

**LUMENS: 3696 Lms**

**WATTS: 42.6 W**

**LPW: 86.8 LPW**

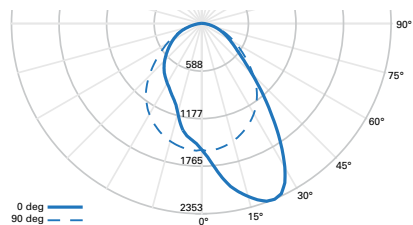
**TEST NUMBER: P33921**

**ZONAL LUMENS SUMMARY**

Zone	Lumens	% Fixture
0°-30°	1077	29.2
0°-40°	1731	46.9
0°-60°	2963	80.0
0°-90°	3696	100.0

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

Vertical Angle	0°	45°	90°
45	34476	33556	32896
55	32364	31229	30577
65	29833	28512	27520
75	25523	24443	23548
85	18684	17081	16536



**FILE NAME: S121-DR-2-35-GYP-0048-1-U-DD-3-W**

**CCT: 3500K**

**LUMENS: 4105 Lms**

**WATTS: 45.3 W**

**LPW: 88.6 LPW**

**TEST NUMBER: P29630**

**ZONAL LUMENS SUMMARY**

Zone	Lumens	% Fixture
0°-30°	1307	32.5
0°-40°	2103	52.4
0°-60°	3391	84.5
0°-90°	4015	100.0

**CANDELA DISTRIBUTION (cd)**

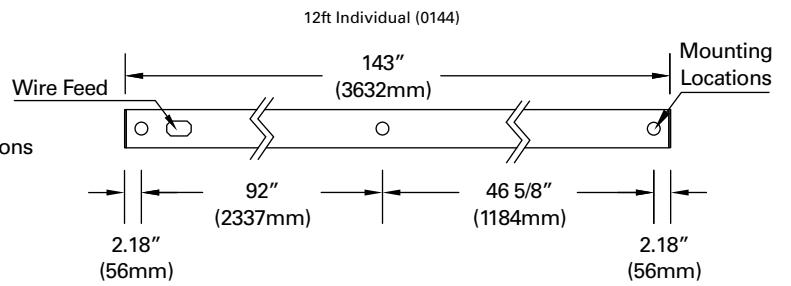
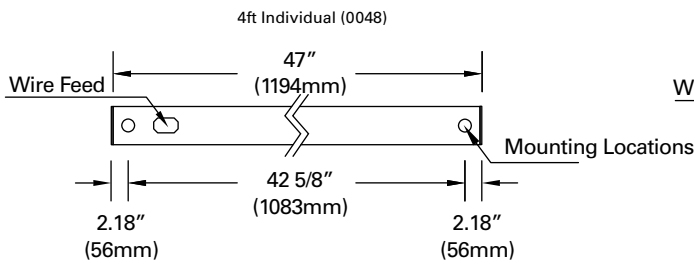
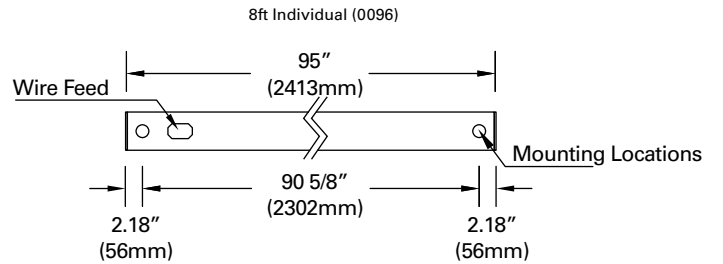
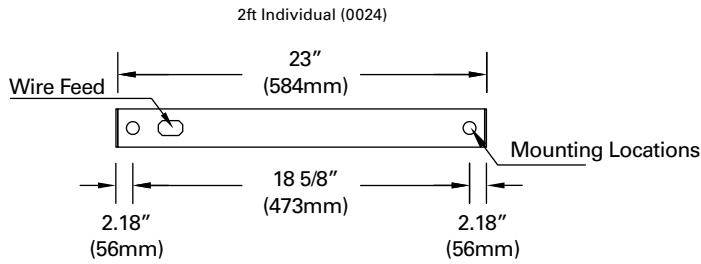
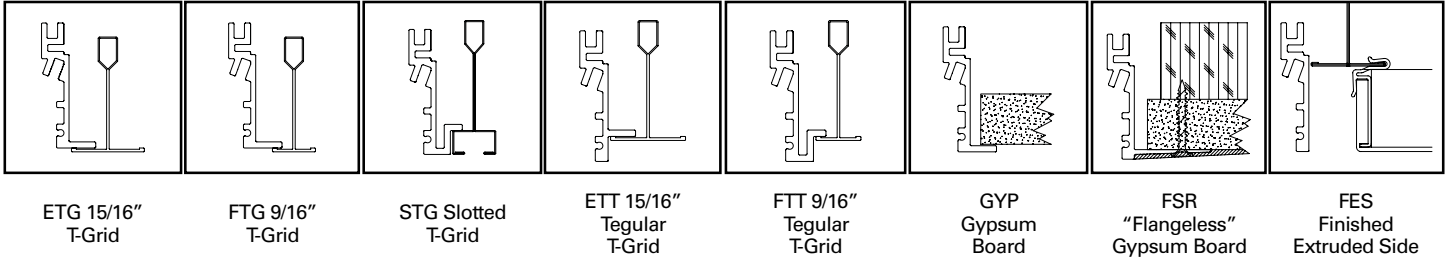
Vertical Angle	0°	90°	180°	270°
0	1562	1562	1562	1562
10	1503	2047	1547	1343
20	1444	2340	1452	1004
25	1375	2324	1381	921
30	1287	2053	1296	855
40	1052	1213	1070	726
50	742	636	765	566
60	477	389	496	413
70	265	229	279	261
80	92	91	106	89
90	0	0	0	0

**LUMEN MAINTENANCE**

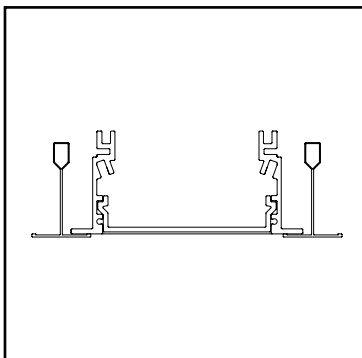
Ambient Temperature	TM-21 Lumen Maintenance (100,000 hours)	Theoretical L70 (Hours)
25°C	>79%	153,000

**MOUNTING**

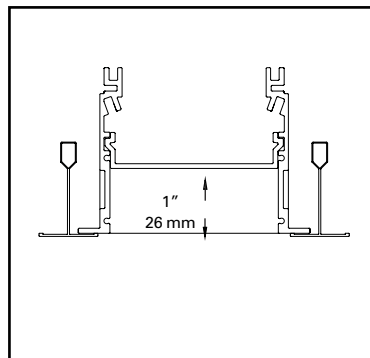
Extruded Trim Flange Details - Refer to submittal drawings for detailed flange information - for additional options consult factory.



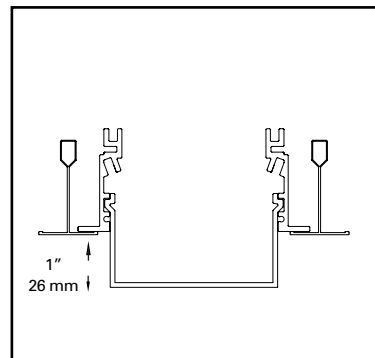
**LENS DETAIL**



Satin Flush Diffuser

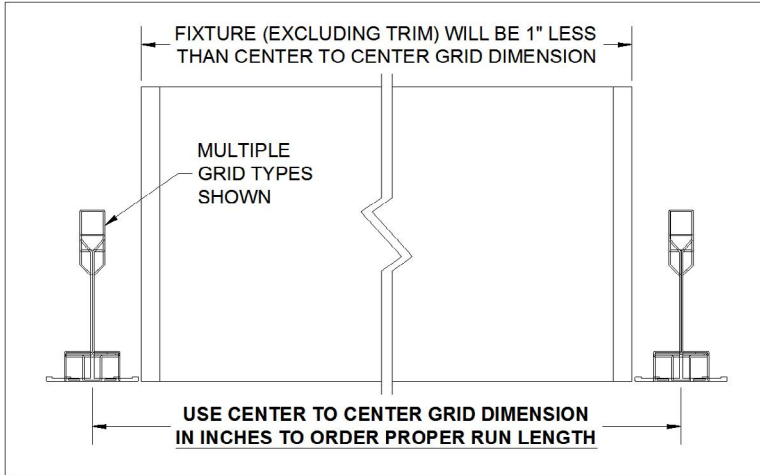


Regressed Satin Diffuser

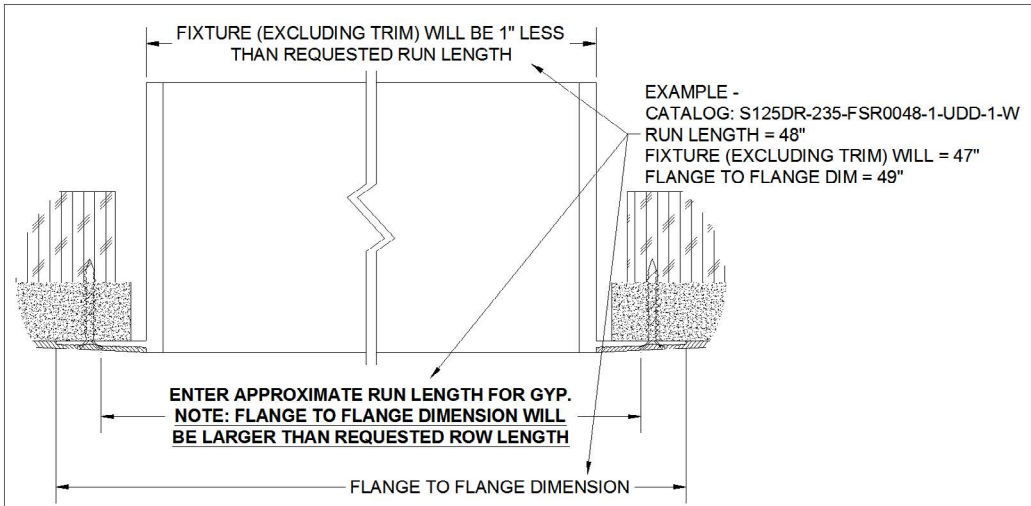


Satin Drop Down Diffuser

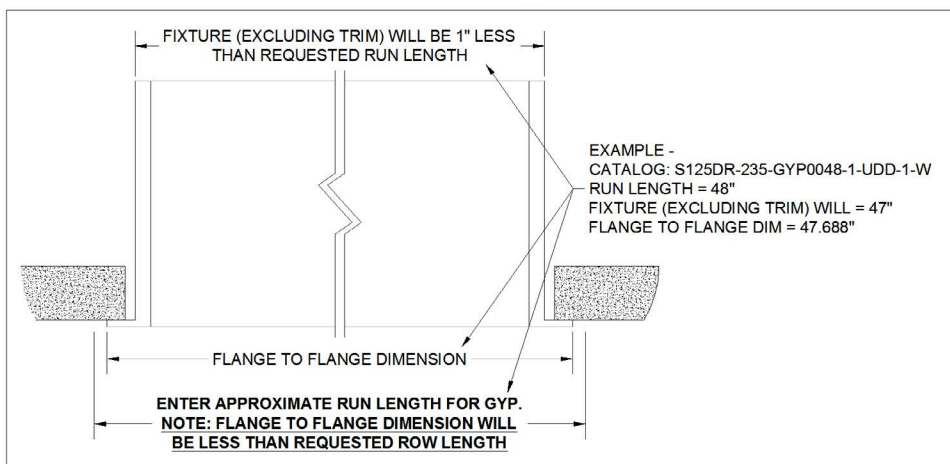
ALL GRID TYPES SHOWN



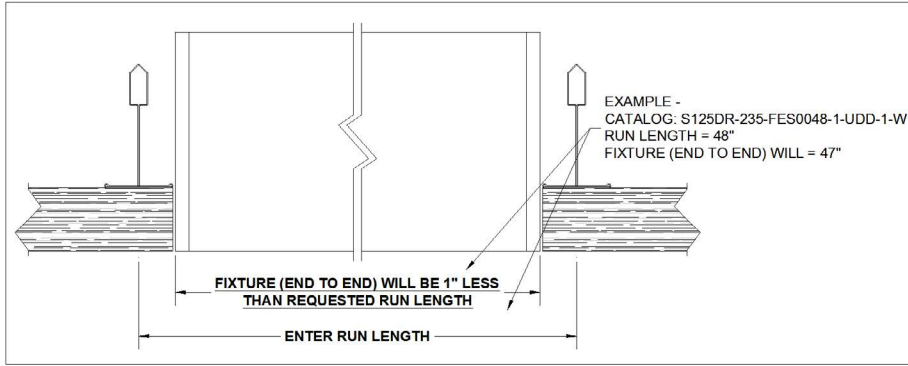
FSR: "FLANGELESS" GYPSUM BOARD



GYP: GYPSUM BOARD

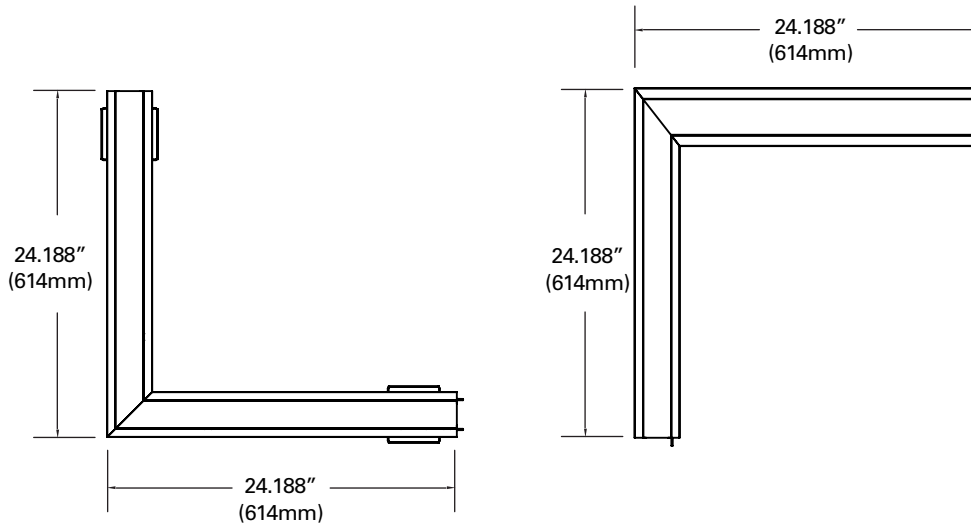


FES: "Finished" Extruded Sides



**CORNER TRANSITIONS**

Consult factory for precise corner locations and for ordering.



**TECHNICAL NOTES**

1. Additional lower light levels are available depending on fixture length. For the HCD driver, the requested output must be between 200 Lms/ft and 950 Lms/ft. Additional drivers and light levels are available - please consult factory for details and lead-time.
2. Not all ceiling types are shown; consult factory for specific ceiling types not listed.
3. 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.
4. Not all dimming options available for every length; please consult factory for specific details.
5. For configurable runs specify length to nearest inch. Standard runs ship in 12ft increments. Ensure to specify 8ft increments if 12ft are too large to receive. Additional charges may apply; please consult factory for details.
6. 347V is achieved using remote transformer.
7. FifthLight DALI is achieved using digital analog converter.
8. Battery pack options are not available in every length; please consult factory for specific details. Battery pack is remote installation only.
9. For all options; consult factory for specific requirements.
10. 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.
11. 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.