

# Category: LED

## **Geometric Series**

**Prefix: GEO** 

The Geometrix Series LED direct/indirect architectural luminaire family has been developed to dramatically improve energy efficiency and quality of light using Solid State Lighting (SSL) technologies. The Geometrix Series LED fixtures provide an attractive, energy efficient, architectural look which has been specifically designed to replace existing fluorescent lighting or for use in new construction. Comfortable, low glare, uniform lighting is attributed to this style of fixture. Typical applications for this type of product are interior spaces. Applications include:

















- Retail Environments
- Commercial Spaces
- Schools, Colleges and Universities
- Hospitals and Healthcare Facilities
- Government Facilities



# project: fixture type: catalog #: quantity:

## **ORDERING GUIDE**

**GEO** PREFIX/ DRIVER DRIVER OPTICS LUMEN COLOR DIFFUSER TRIM COLOR FIXTURE SIZE OUTPUT VOLTAGE TYPE TEMP. SERIES TYPE AND FINISH CONFIGURATION OPTIONS L015 - 1500 lm **4Pxx** - 1/4" I.P. Pendant with Standard Canopy (White Finish) GEO - Geometrix **2** - 24" **73** - 70% UNV - Universal DM - 0-10v Low Voltage **C27** - 2700 K\* AF1 - Frosted. TW - Fine Textured IND - Individual (11w) Dimming (10% - 100%) **3** - 36" Acrylic Lens Series LED Uplight C30 - 3000 K\* L020 - 2000 lm (120v - 277v) (Standard) 4 - 48" (Flat Sheet) Coat (Standard) MID - Middle of Row Linear 30% **C35** - 3500 K ACxx - Adjustable Aircraft Cable with (14w) (60 Hz) 6-72 with Fine Luminaire Downlight DM1 - 0-10v Low Voltage **C40** - 4000 K CS - Custom (Specify) Standard Canopy (White Finish) **L030** - 3000 lm 8-96" Texture XX - Custom Dimming (1% - 100%) **C50** - 5000 K\* (26w) (Standard) Upliaht % (White) **L040** - 4000 lm LH1 - Lutron Hi-Lume\* Dimming (1% - 100%) CS - Custom CS - Custom (Specify) Order Only Downlight % L050 - 5000 lm (Specify) (35w) LV - Line Voltage\* ("xx" = Total Length in Inches) **L060** - 6000 lm Dimming (120V only) (40w) L070 - 7000 lm **QP1** - Single Circuit Quick Plug Wiring Harness - 12 GA. 20 amp DA1- Dali-2 and (48w) D4i cert **L080** - 8000 lm Dimming (1% -(55w) EMPK - Emergency Battery Back-Up\* **L090** - 9000 lm SNS21x - Occupancy/ Vacancy/Daylight \*Special Order (63w) Harvesting Wireless Sensor **L100** - 10000 lm (69w) **L110** - 11000 Im \* 5w / 90 min. duration is standard. Other (75w) options are available **L120** - 12000 lm LC - Custom

<sup>\*\*</sup> GEO Series Luminaires have a lumen output range from 1500 Lumens through 12,000 Lumens depending on length of fixture and driver/board configuration.

Consult factory for correct catalog number on all custom configured lighting products.

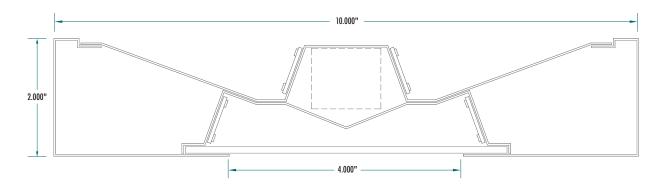




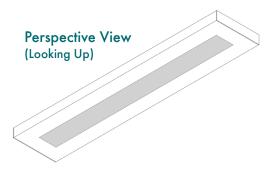
## **Geometric Series**

## **GEO Cross Section**









#### **CONSTRUCTION**

- Precision die-formed from code-gauge cold rolled steel
- Resistance (spot) welded and mechanically fastened.
- Consult factory for all options or any modifications needed.

### **FINISH**

## Housing

 Fine textured white polyester powder coat baked enamel as standard. Consult factory for all other finish/color options

#### Reflector / Optics

 High Reflectance Matte White polyester powder coat baked enamel for extreme durability and superior optical efficiency and diffusion (95% T.R.).

## LEDs / OPTICS

- High performance LED boards manufactured specifically for interior lighting. LED boards feature the latest mid-power LEDs for maximum performance, efficiency and longevity.
- Standard color temperatures offered are 3500K and 4000K. Consult factory for all other color temperature options. 80 CRI (Minimum). RoHS Compliant.

 Always consult factory for the latest developments and improvements concerning LEDs and Optics.

#### **DRIVERS**

- Electronic, high efficiency, programmable, linear, constant current type. Universal voltage 120v-277v (Standard).
- Features include constant lumen maintenance, end of life indication and LED thermal protection.
- 0-10v dimmable. 10%-100% dimming (Standard) / 1%-100% dimming (Optional).
- Factory programmed drive current, Dim to Off function and Soft Start function.
- Step-Dim and Line Voltage Dimming Drivers are optional.
- Auxiliary output (Optional) used to power various sensors / wireless modules.
- Suitable for dry and damp locations.
- UL / CUL Class 2 Recognized, RoHS Compliant.

## LENS (DIFFUSER)

 Extruded, clear, 100% virgin frosted acrylic extruded from high light transmission / LED diffusing polymer.
 Flat lens provides a clean, aesthetic architectural look.

#### MOUNTING

 Fixtures are designed to be suspended using pendants or adjustable aircraft cable. Consult factory for all other special mounting conditions.

#### **ELECTRICAL**

- Fixtures are UL/CUL Listed and labeled for dry / damp locations.
- LM<sub>70</sub> performance for 50,000+ hours
- Bi-level dimming option allows 50% power for compliance with common energy codes.
- Driver disconnect provided where required to comply with US & Canadian codes.

## QUALITY CONTROL

 All fixtures are designed, fabricated, assembled, tested, packaged and shipped from RENOVA's manufacturing facility in Warwick, RI (USA).

## WARRANTY

 5-Year limited warranty. Please refer to RENOVA's website at www.renova.com/warranties for the latest warranty terms and conditions.

#### NOTES:

LED Dimming Drivers have adjustable output capability. A wide range of input watts/lumen output can be adjusted up or down on all models to suit a particular application. Always consult factory for the latest information.

Photometric data, IES files and all other information is available on request.

RENOVA products are constantly being improved; therefore the information shown is subject to change without notice. Always consult your lighting representative or RENOVA Lighting Systems, Inc., for the latest information.

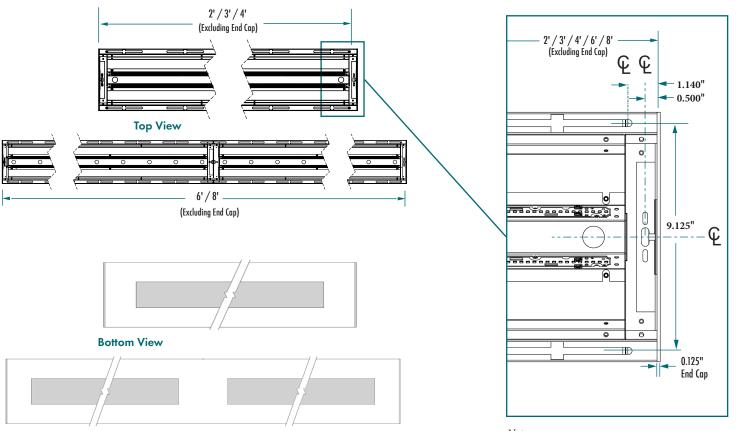




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# GEO Mounting Details/General Fixture Lengths



## Notes

- Center hole mounting location is typically used for stem mounting, it can be used for cable mounting but balance of fixture may be challenging.
- 2) Typical cable mounting, utilizes the two exterior mounting channels.

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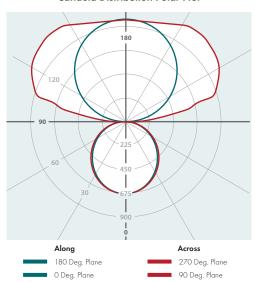
Catalog #: GEO4-73-L060-UNV-DM-C40-AF1-XX-XX-XX

Photometric Test Report #: 12172513.01

Delivered Lumens: 6010
Efficacy (Lumens/Watt): 150.3
Power: 39.97w @ 120 VAC
Power Factor: 0.997
Current THD: 4.07%
CRI (Ra): 83.8
CCT: 3985 K

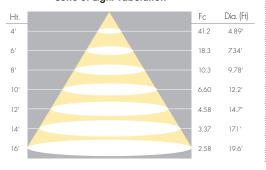
**LED Life:**  $L_{70} > 60,000 hrs / L_{90} > 36,000 hrs$ 

## Candela Distribution Polar Plot



**Spacing Criteria** SC (Along): 1.23 SC (Across): 1.22

## Cone of Light Tabulation



	Coefficients of Utilizations (%) Effective Floor Cavity Reflectance 20 Per (pfc=0.20)										
bcc	80		70			50		30			
š		70	50	30	70	50	30	50	30	50	30
RCR	0	6154	6154	6154	5523	5523	5523	4343	4343	3264	3264
	1	5603	5347	5118	501 <i>7</i>	4805	4613	3789	3659	2856	2773
	2	5095	4661	4302	4555	4192	3889	3312	3102	2500	2363
	3	4642	4090	3662	4146	3682	3318	2915	2658	2205	2033
	4	4240	3610	3149	3786	3254	2859	2582	2299	1958	1766
	5	3884	3206	2733	3468	2894	2485	2302	2006	1752	1548
	6	3571	2866	2394	3190	2590	2180	2067	1766	1578	1369
	7	3295	2579	2115	2946	2333	1929	1867	1568	1430	1220
	8	3050	2332	1881	2729	2113	1718	1696	1401	1304	1095
	9	2834	2121	1685	2538	1924	1541	1549	1261	1195	989
	10	2641	1938	1517	2368	1760	1389	1421	1140	1100	898

## Average Luminance Summary (cd/m²)

## Horizontal Angle (Degrees)

Angle	Along (0°)	45°	Across (90°)
0	2644	2644	2644
45	2279	1959	1886
55	2116	1722	1647
65	1905	1445	1365
75	1636	1093	1006
85	1087	494	422

Vertical Angle (Degrees)

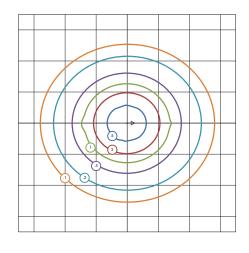
## **Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-40	819	13.6%
0-60	1422	23.7%
0-90	1807	30.1
90-180	4204	69.9%

# Horizontal Footcandles

Mounting Height = 8"-0' A.F.F.

Maximum Calculated Value = 10.3 Fc @ Nadir



Grid Lines in Units of Mounting Height



