RENOVA™
Innovative Lighting Ideas
Energy Efficient Solutions

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

Geometric Series

Optional
Wireless Sensor
Shown Installed

project:

fixture type:

catalog #:

quantity:

ORDERING GUIDE

GEO - - - - - - - - -

PREFIX/ SERIES	SIZE	OPTICS (DISTRIBUTION)	LUMEN OUTPUT	DRIVER VOLTAGE	DRIVER TYPE	COLOR TEMP.	DIFFUSER TYPE	TRIM COLOR AND FINISH	ROW CONFIGURATION	FIXTURE OPTIONS
GEO - Geometrix Series LED Linear Luminaire	**2** - 24" **3** - 36" **4** - 48" **6** - 72" **8** - 96"	**73** - 70% Uplight 30% Downlight **XX** - Custom Uplight % Custom Downlight %	**L015** - 1500 lm (11w) **L020** - 2000 lm (14w) **L030** - 3000 lm (26w) **L040** - 4000 lm (30w) **L050** - 5000 lm (35w) **L060** - 6000 lm (40w) **L070** - 7000 lm (48w) **L080** - 8000 lm (55w) **L090** - 9000 lm (63w) **L100** - 10000 lm (69w) **L110** - 11000 lm (75w) **L120** - 12000 lm (83w) **LC** - Custom	**UNV** - Universal Voltage (120v - 277v) (60 Hz)	**DM** - 0-10v Low Voltage Dimming (10% - 100%) (Standard) **DM1** - 0-10v Low Voltage Dimming (1% - 100%) **LH1** - Lutron Hi-Lume* Dimming (1% - 100%) **LV** - Line Voltage* Dimming (120V only) **DA1** - Dali-2 and D4i cert * Dimming (1% - 100%) *Special Order Only	**C27** - 2700 K* **C30** - 3000 K* **C35** - 3500 K **C40** - 4000 K **C50** - 5000 K* *Special Order Only	**AF1** - Frosted, Acrylic Lens (Flat Sheet) with Fine Texture (Standard) **CS** - Custom (Specify)	**TW** - Fine Textured White Powder Coat (Standard) **CS** - Custom (Specify)	**IND** - Individual **END** - End of Row **MID** - Middle of Row	**4Pxx** - 1/4" I.P. Pendant with Standard Canopy (White Finish) **ACxx** - Adjustable Aircraft Cable with Standard Canopy (White Finish) **1CWxx** - Single Circuit Power Cord (B/W/G) (White) **CS** - Custom (Specify) ("xx" = Total Length in Inches) **QP1** - Single Circuit Quick Plug Wiring Harness - 12 GA. 20 amp **EMPK** - Emergency Battery Back-Up* **SNS21x** - Occupancy/ Vacancy/Daylight Harvesting Wireless Sensor * 5w / 90 min. duration is standard. Other options are available

** 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.

(Hg)

*PRIOR TO REPLACING AN EXISTING FLUORESCENT FIXTURE, PLEASE NOTE THE FOLLOWING:*

Fluorescent lamps contain small amounts of mercury. Such lamps are labeled "Contains Mercury" and / or with the symbol "Hg." Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at www.lamprecycle.org.
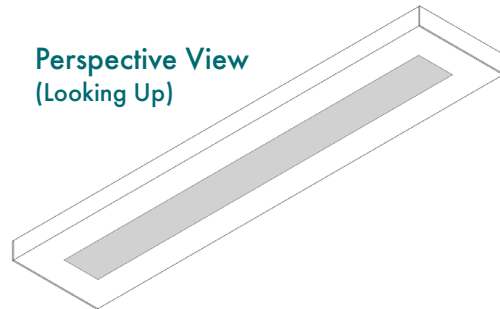
GEO Cross Section

10.000"

2.000"

4.000"
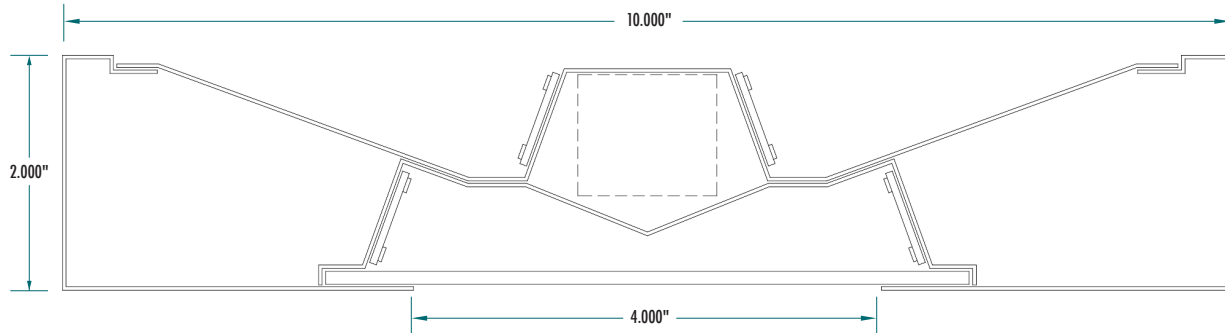
Perspective View
(Looking Down)
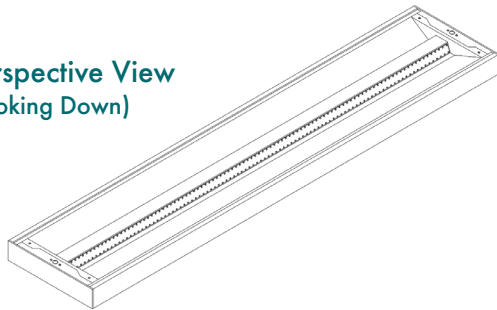
Perspective View
(Looking Up)

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_{70} 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.
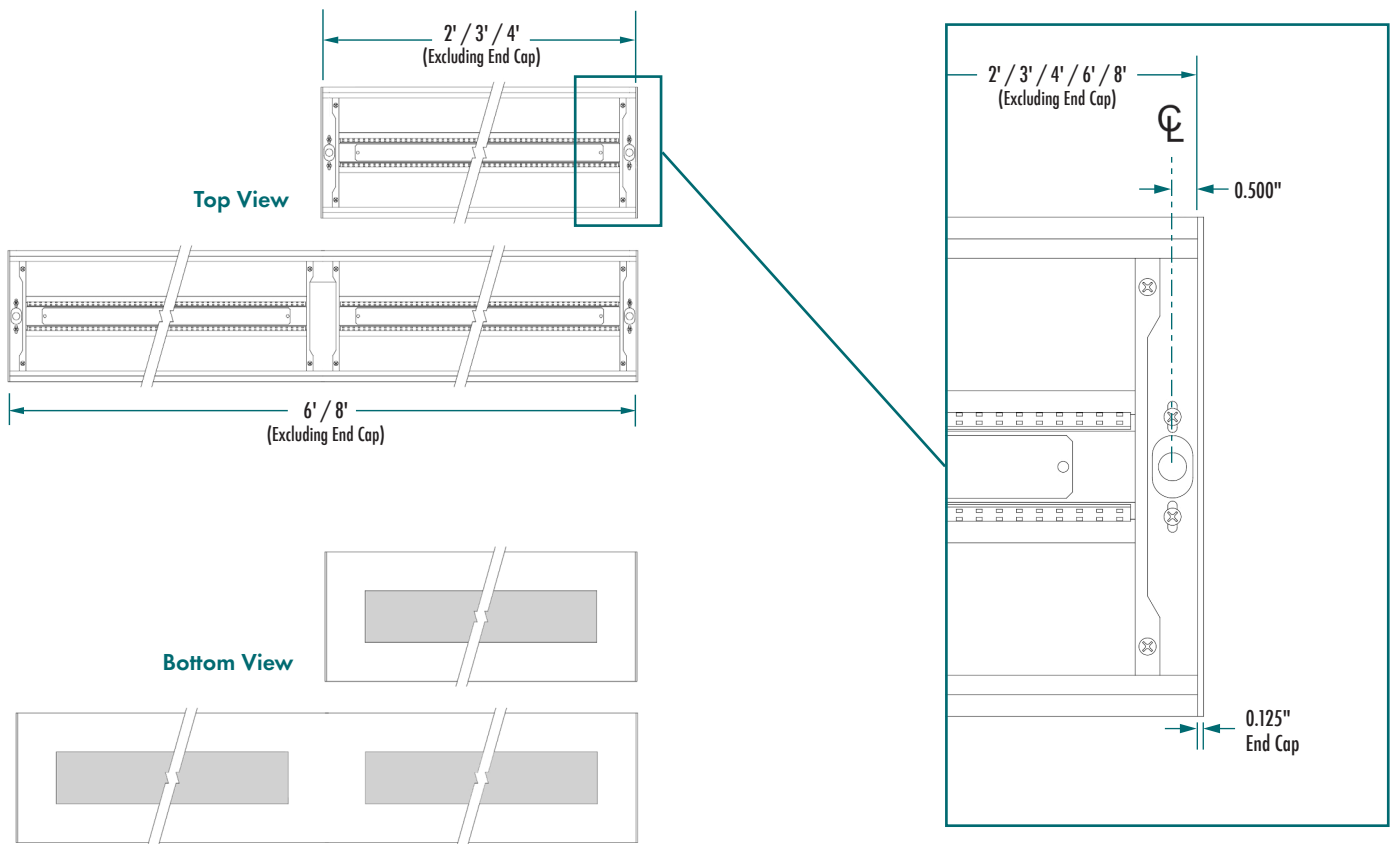
NOTES:

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

2' / 3' / 4'
(Excluding End Cap)

Top View

6' / 8'
(Excluding End Cap)

Bottom View

2' / 3' / 4' / 6' / 8'
(Excluding End Cap)

0.500"

0.125"
End Cap

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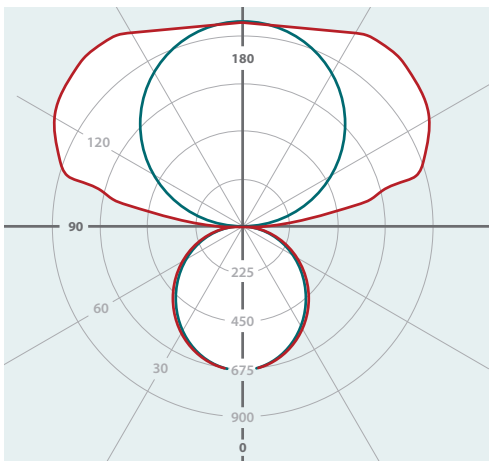
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Catalog #: GEO4-73-L060-UNV-DM-C40-AF1-XX-XX-XX
Photometric Test Report #: 12172513.01
Delivered Lumens: 6010
Efficacy (Lumens/Watt): 150.3
Power: 39.97w @ 120 VAC
Power Factor: 0.997
Current THD: 4.07%
CRI (Ra): 83.8
CCT: 3985 K
LED Life: L_{70} > 60,000hrs / L_{90} > 36,000hrs

Coefficients of Utilizations (%)
Effective Floor Cavity Reflectance 20 Per (pfc=0.20)

pcc		80			70			50		30	
pw		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	5017	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

Candela Distribution Polar Plot

Along
180 Deg. Plane
0 Deg. Plane

Across
270 Deg. Plane
90 Deg. Plane

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

Cone of Light Tabulation

Ht.	Fc	Dia. (Ft)
4'	41.2	4.89'
6'	18.3	7.34'
8'	10.3	9.78'
10'	6.60	12.2'
12'	4.58	14.7'
14'	3.37	17.1'
16'	2.58	19.6'

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
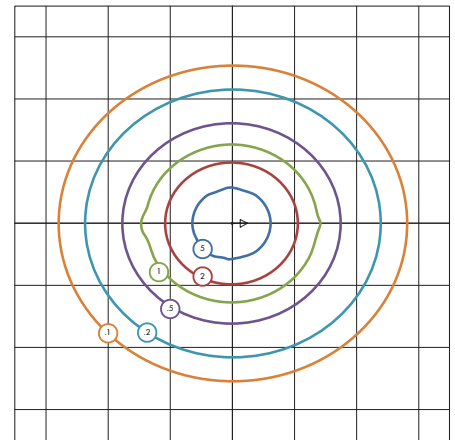
Grid Lines in Units of Mounting Height

5fc 2fc 1fc .5fc .2fc .1fc