

The Ergo-Form Series (EGF) has been developed to dramatically improve energy efficiency and quality of light using Solid State Lighting (SSL) technologies. The Ergo-Form Series 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 where finished ceilings and walls exist. Applications include:

- Commercial/Corporate Office Spaces
- Schools, Colleges and Universities
- Retail Spaces, Public Spaces and Airports
- Hospitals, Government Facilities and Military Bases



2x2 Ergo-Form  
(Shown with Frosted Lens)

project:

fixture type:

catalog #:

quantity:

ORDERING GUIDE

EGF - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]								
PREFIX/SERIES	SIZE	OPTICS (DISTRIBUTION)	LUMEN OUTPUT*	DRIVER VOLTAGE	DRIVER TYPE	COLOR TEMP.	LENS (DIFFUSER)	FIXTURE OPTIONS
EGF - Ergo-Form Series	22 - 2x2 24 - 2x4	N - Normal C - Custom (Specify)	L010 L020 L030 L040 L050 L060 L070 L080 L090 L100 L110 L120 LC - Custom (Specify)	UNV - Universal Voltage (120v - 277v) (60 Hz) (Standard) 120 - 120v, 60Hz 277 - 277v, 60Hz 347 - 347v *Special Order Only	DM - 0-10v Low Voltage Dimming (10% - 100%) (Standard) SD - Step Dimming (50% / 100%) LV - Line Voltage Dimming *Specify Voltage (120v or 277v)	C27 - 2700 K* C30 - 3000 K* C35 - 3500 K C40 - 4000 K C50 - 5000 K*  *Special Order Only	AF - Frosted Linear Prism Acrylic Lens (Standard) CS - Custom (Specify)	AR - Air Return Slots OS - Occupancy Sensor DL - Daylight Harvesting Sensor OD - Occupancy/Daylight Sensor DS - Digital Sensor DT - "DainTree" Sensor EM - Emergency Battery Pack *

\*L(x) = (x)Lumens

SAMPLE ORDERING NUMBER

EGF22-N-L020-UNV-DM-C40-AF

\*Standard "EM" option to be NiCd Battery @ 1000 Lumens @ 90 min. duration (standard). Consult factory for all available options.

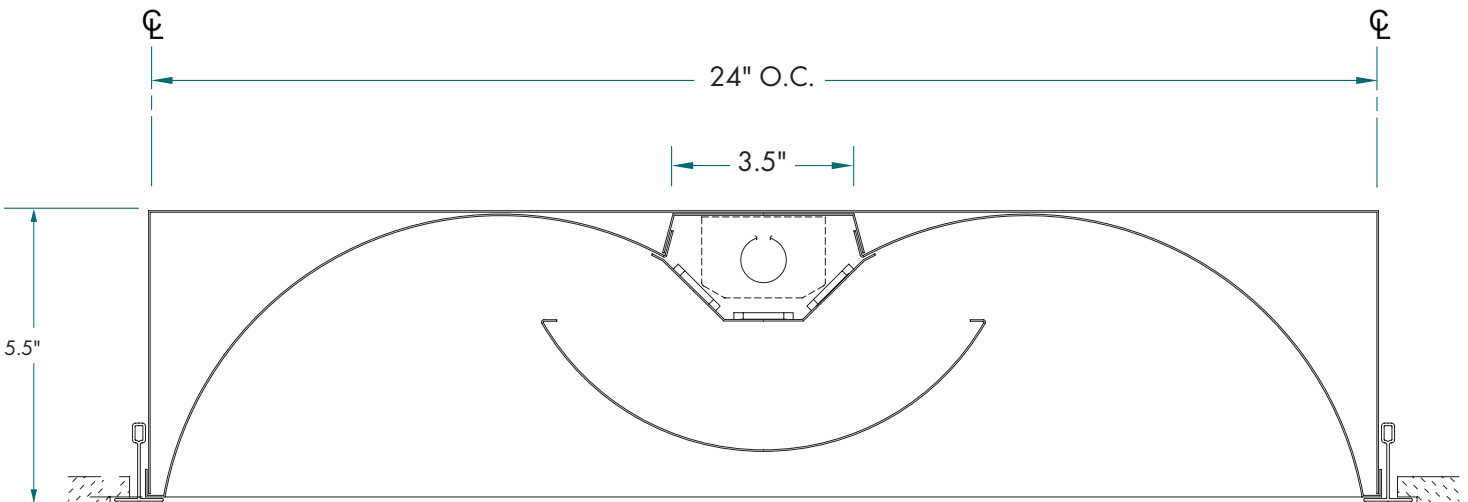
\*\* EGF Series Recessed Fixtures have a lumen output range from 1500 through 7000 depending on driver/board configuration. Consult factory for correct catalog number on all custom configured lighting products.

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](http://www.lamprecycle.org).

## EGF 2x2 Cross Section



### CONSTRUCTION

- Precision die-formed from 22 gage cold rolled steel.
- Mechanically fastened / resistance welded.
- Consult factory for all options or any modifications needed.

### FINISH

- High Reflectance Matte White polyester powder coat baked enamel for extreme durability and superior fixture efficiency. Total Reflectance = 97%.

### LED's/OPTICS

- Custom 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, constant current type. Universal voltage 120v-277v (Standard).
- 0-10v dimmable. 10-100% (Standard) / 0-100% (Optional).
- Step-Dim and Line Voltage Dimming Drivers are optional.
- Suitable for dry and damp locations.
- UL Recognized Class 2, RoHS Compliant.

### LENS (DIFFUSER)

- Custom extruded from special blend of 100% virgin acrylic & high light transmission/LED diffusing polymer. 30% DR additive used to increase resistance to breakage.
- Extruded linear ribs provide clean, aesthetic architectural look.

### MOUNTING

- Recessed fixtures are designed to be mounted into a standard grid (NEMA "G") ceiling T-grid. Consult factory for all other special mounting conditions.

### ELECTRICAL

- Recessed fixtures are UL/CUL listed and labeled.
- LM80 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 recessed fixtures are designed, fabricated, painted, assembled, tested, packaged and shipped from RENOVA's manufacturing facility in Mansfield, MA (USA).

### WARRANTY

- 5-year limited warranty. Please refer to RENOVA's website at [www.renova.com/warranties](http://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.

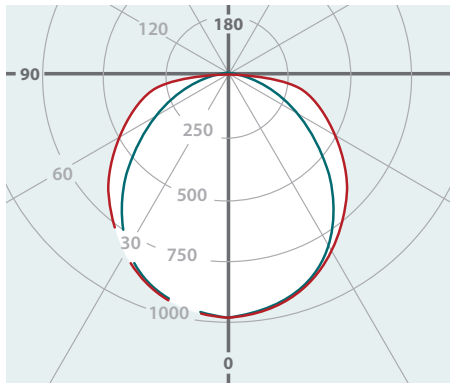
Photometric data, IES files and all other information is available on request.

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.



Catalog #: EGF22-N-L030-UNV-DM-C40-AF-PP  
Photometric Test Report #: 10829852-1108345  
Delivered Lumens: 2829  
Efficacy (Lumens/Watt): 109.3  
Power: 25.89w @ 120 VAC  
Power Factor: 0.996  
Current THD: 6.96%  
CRI: 82.8  
CCT: 4118 K  
LED Life: 50,000+ hrs

**Candela Distribution Polar Plot**



**Along**                      **Across**  
— 180 Deg. Plane      — 270 Deg. Plane  
— 0 Deg. Plane        — 90 Deg. Plane

Spacing/Mounting Height: 1.22  
SC (Along): 1.19 SC (Across): 1.24

**Cone of Light Tabulation**

Ht.	Fc	Dia. (Ft)
4'	61.9	4.87'
6'	27.5	7.31'
8'	15.5	9.75'
10'	9.91	12.2'
12'	6.88	14.6'
14'	5.05	17.1'
16'	3.87	19.5'

Coefficients of Utilizations (%)											
Effective Floor Cavity Reflectance 20 Per (pfc=0.20)											
pfc	pw	80			70			50		30	
		70	50	30	70	50	30	50	30	50	30
RCR	0	3301	3301	3301	3225	3225	3225	3081	3081	2950	2950
	1	3000	2861	2736	2924	2797	2684	2679	2585	2569	2493
	2	2722	2485	2289	2648	2432	2251	2332	2180	2241	2113
	3	2479	2178	1946	2409	2134	1918	2050	1865	1973	1815
	4	2269	1929	1680	2204	1892	1659	1821	1619	1756	1581
	5	2087	1724	1471	2028	1693	1455	1633	1423	1578	1393
	6	1928	1553	1302	1874	1527	1289	1476	1264	1429	1240
	7	1788	1409	1164	1740	1387	1153	1343	1133	1303	1114
	8	1666	1287	1049	1622	1268	1041	1231	1024	1196	1008
	9	1557	1182	953	1517	1166	946	1134	932	1103	919
10	1461	1092	871	1425	1077	865	1049	854	1023	843	

**Average Luminance Summary (cd/m<sup>2</sup>)**

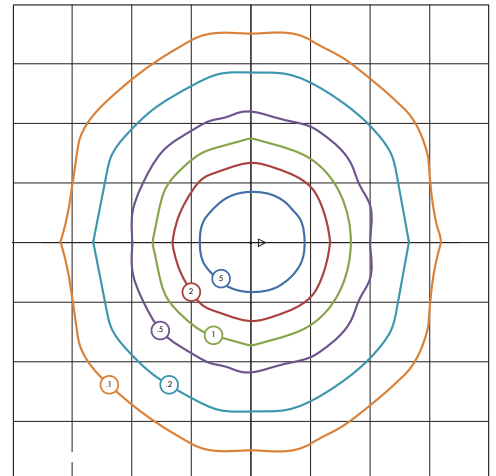
Horizontal Angle (Degrees)

Angle	Along (0°)	45°	Across (90°)
0	3654	3654	3654
45	2869	3242	3462
55	2467	3117	3500
65	2095	3018	3758
75	1768	3098	4642
85	1348	2837	3588

Vertical Angle (Degrees)

**Horizontal Footcandles**

Mounting Height = 8'-0" A.F.F.  
Maximum Calculated Value = 15.5 Fc @ Nadir



**Grid Lines in Units of Mounting Height**

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

**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-40	1228	44.3%
0-60	2127	76.7%
0-90	3103	100.0%
90-180	0	0.0%