

DESCRIPTION

GC LED is a premium grade specification lensed troffer series. This innovative, high quality luminaire is dedicated to the latest solid state lighting and electronic driver technology for optimal performance and energy efficiency. The GC LED is compatible with all of today's popular ceiling systems and is available with a number of options and accessories for application versatility.

The GC LED series features efficiency, quality and performance. The series is an excellent choice for commercial office spaces, schools, hospitals or retail merchandising areas.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Rigid housing is die formed of code gauge prime cold rolled steel and features full length die-formed stiffeners and unibody endplate for added strength. Side flanges are hemmed. Innovative design provides superior lens brightness uniformity and visual comfort. Unibody endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. KOs for continuous row wiring. Endplates have integral Grid-lock feature for safety and convenience.

Controls

The GC LED is equipped standard with a 0-10V continuous dimming driver that works with any standard 0-10V control/dimmer. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Controls (www.coopercontrol.com) to maximize energy savings.

Electrical

Long-Life LED system coupled with electrical driver to deliver optimal performance. LED's available in 3000k, 3500k or 4000k with a CRI ≥ 85. Projected life is 50,000 hours at 70% lumen output. cULus listed. Electronic drivers are available for 120-277V applications. A 0-10V dimming driver is standard.

Finish

Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibition. Housing and driver cover finished with new 90% reflective white enamel for superior performance. "PAF" Painted After Fabrication option also available.

Hinging/Latching

Positive spring loaded steel latches with baked white enamel finish. Safety-lock T-hinges allow hinging and latching either side.

Frame/Shielding

Die formed, heavy gauge, flat steel door with reinforced mitered corners and baked white enamel finish. Flat and regressed aluminum doors also available. Positive light seals. Light stabilized, acrylic prismatic lens. Standard #12 pattern.

Compliance

Modules are UL recognized components and indoor luminaires are cULus listed for 25°C ambient environments, RoHS compliant, and LED modules comply with IESNA LM-79 and LM-80 standards. DesignLights™ Consortium Qualified (both lumen versions). Refer to www.designlights.org Qualified Products List under Family Models for details.



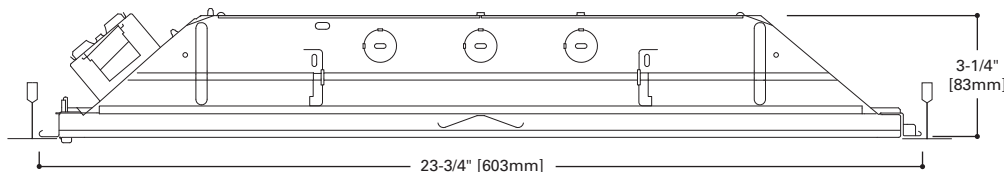
2GC LED

2' X 4' TROFFER LED LAMP

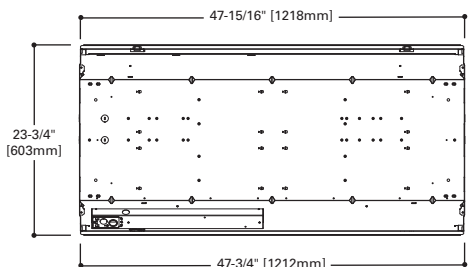
Specification LED Troffer

For Use in Insulated Ceilings

DESIGNLIGHTS CONSORTIUM 



MOUNTING DATA



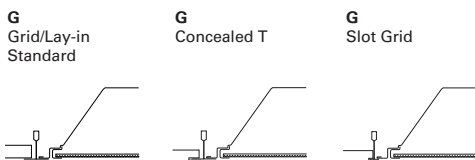
DOOR FRAMES



ENERGY DATA

Input Watts:
48=47W
57=56W

CEILING COMPATIBILITY



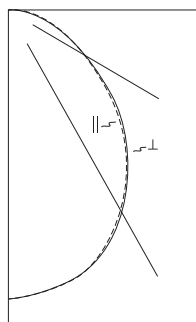
Ceiling Type	Trim Type
Exposed Grid	G
Concealed T	G
Slot Grid	G

(Verify compatibility/ consult factory.)

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.

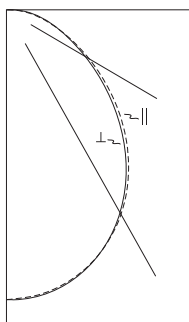
PHOTOMETRICS



2GC-LD1-48-A-UNV-L835-CD1-U
 Dimming Driver
 Linear LED 3500K
 Spacing criterion:
 (II) 1.2 x mounting
 height, (L) 1.2 x
 mounting height
 Efficiency: 100%
 Lumens: 4848
 Input Watts: 46.6W
 Efficacy: 104 LPW
 Test Report:
 2GC-LD1-48-A-UNV-
 L835-CD1-U.IES

Candlepower

Angle	Along II	45°	Across ⊥
0	1992	1992	1992
5	1978	1981	1985
10	1944	1948	1953
15	1889	1892	1894
20	1810	1812	1812
25	1710	1708	1703
30	1588	1585	1575
35	1450	1443	1429
40	1297	1285	1267
45	1133	1117	1095
50	962	945	921
55	794	776	756
60	636	619	606
65	497	480	477
70	371	362	371
75	271	266	284
80	183	186	204
85	103	106	118
90	0	0	0



2GC-LD1-57-A-UNV-L835-CD1-U
 Dimming Driver
 Linear LED 3500K
 Spacing criterion:
 (II) 1.2 x mounting
 height, (L) 1.2 x
 mounting height
 Efficiency: 100%
 Lumens: 5791
 Input Watts: 54.3W
 Efficacy: 107 LPW
 Test Report:
 2GC-LD1-57-A-UNV-
 L835-CD1-U.IES

Candlepower

Angle	Along II	45°	Across ⊥
0	2373	2373	2373
5	2356	2359	2365
10	2316	2321	2327
15	2249	2255	2259
20	2156	2159	2159
25	2037	2035	2030
30	1896	1889	1878
35	1732	1719	1704
40	1549	1532	1512
45	1354	1332	1308
50	1152	1127	1102
55	951	927	907
60	763	740	728
65	592	576	574
70	446	434	446
75	324	319	343
80	220	223	248
85	123	129	145
90	0	0	0

Coefficients of Utilization

rc	Effective floor cavity reflectance																				
	80%			70%			50%			30%			10%			0%					
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84	84	84	84
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71	71	71	71
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61	61	61	61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	55	64	59	55	53	53	53	53
5	77	65	56	50	75	64	56	50	62	55	49	60	53	49	58	52	48	46	46	46	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41	41	41	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	38	36	36	36	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	45	39	34	32	32	32	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29	29	29	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27	27	27	27

Coefficients of Utilization

rc	Effective floor cavity reflectance																				
	80%			70%			50%			30%			10%			0%					
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84	84	84	84
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71	71	71	71
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61	61	61	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52	52	52	52
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46	46	46	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	42	40	40	40	40
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36	36	36	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	45	39	34	32	32	32	32
9	58	45	37	32	57	44	37	32	43	36	31	42	36	31	41	35	31	29	29	29	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	28	38	33	28	27	27	27	27

Zonal Lumen Summary

Zone	Lumens	%Fixture
0-30	1507	31.1
0-40	2407	49.6
0-60	3963	81.7
0-90	4848	100.0
0-180	4848	100.0

Luminaire Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	2553	2517	2467
55	2205	2155	2100
65	1874	1809	1798
75	1668	1637	1748
85	1883	1938	2157

Zonal Lumen Summary

Zone	Lumens	%Fixture
0-30	1796	31.0
0-40	2869	49.5
0-60	4727	81.6
0-90	5791	100.0
0-180	5791	100.0

Luminaire Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3086	3035	2981
55	2672	2604	2548
65	2257	2196	2189
75	2017	1986	2135
85	2274	2385	2681

ORDERING INFORMATION

SAMPLE NUMBER: 2GC-LD1-48-A-UNV-L835-CD1-U

<p>Rating Blank=Standard ATW-SW4=Chicago Rated</p>	<p>Lamp Type LD1=LED 1.0</p>	<p>Voltage ⁽²⁾ UNV=Universal Voltage 120-277 ⁽³⁾</p>	<p>Driver Type CD=0-10V Dimming Driver</p>	<p>Options PAF=Painted After Fabrication G1=Gasket, Door Frame and Housing G2=G1 plus Gasket between Lens and Door G3=G1 and G2 plus Gasketing on Mounting Surface of Fixture Trims</p>	<p>Packaging U=Unit Pack PALC=Palletized Fixtures In Carton</p>
<p>Width 2=2' Width</p>	<p>LED Lumens Output 48=4800 57=5700 ⁽⁶⁾</p>	<p>Options GL=Single Element Fuse GM=Double Element Fuse Flex=Flex Installed EL=Emergency Installed, 700 ⁽⁴⁾ EL14=Emergency Installed, 1400 ^{(4),(5)}</p>	<p>Number of Drivers 1=1 Driver</p>		
<p>Trim Type G=Grid/Lay-in (Standard) ⁽¹⁾ G=Concealed T G=Slot Grid</p>	<p>Shielding A=#12 Acrylic Pattern (0.095" Thickness) A125=#12 Acrylic Pattern (0.125" Thickness)</p>	<p>Lamps Installed L830=3000K L835=3500K L840=4000K</p>			
<p>Series ⁽⁷⁾ C=Specification Troffer</p>					
<p>Door Frame Standard=Flat White Steel Door (Leave Blank) FA=Flush White Extruded Aluminum c/w Spring Latch RA=Regressed White Extruded Aluminum FAN=Flush Natural Anodized Extruded Aluminum RAN=Regressed Natural Anodized Extruded Aluminum FAB=Flush Black Extruded Aluminum RAB=Regressed Black Extruded Aluminum</p>					

ACCESSORIES

EQ-CLIP-U=T-BAR Safety Earthquake Clips ⁽¹⁾
 DF-24-W=2' x 4' Drywall Frame Kit

SHIPPING INFORMATION

Catalog No.	Wt.
2GC-LD1-48	20 lbs.
2GC-LD1-57	20 lbs.

NOTES: ⁽¹⁾An EQ Grid Clip is recommended for all 9/16" ceiling systems. ⁽²⁾Products also available in non-US voltages and frequencies for international markets. ⁽³⁾Not available when specifying emergencies, voltage must be specific. ⁽⁴⁾EL options are non-integral. ⁽⁵⁾EL14 option is not available with 5700 lumen fixture. ⁽⁶⁾5700 lumen option is only UL listed for U.S. ⁽⁷⁾DesignLights™ Consortium Qualified (both lumen versions). Refer to www.designlights.org Qualified Products List under Family Models for details.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.