

DESCRIPTION

GC8 is a premium grade specification lensed troffer series. This innovative, high quality luminaire is dedicated to the latest T8 lamp and micro electronic ballast technology for optimal performance and energy efficiency. The GC8 is compatible with all of today's popular ceiling systems and is available with a number of options and accessories for application versatility.

The GC8 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. Micro ballast cover*** reduces ballast shadow for superior lens brightness uniformity and is easily removed without tools. Die formed captive lampholder brackets fully enclose lampholder wiring permitting easy lampholder replacement. Unibody endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. Ample KOs are provided for continuous row wiring. Endplates have integral Grid-lock feature for safety and convenience.

Electrical

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Roto-lock lampholders ensure positive lamp retention. UL/CUL listed. Suitable for damp locations.**

Finish

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

Hinging/Latching

Positive Cam latch 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. Numerous additional shielding options available.

Controls

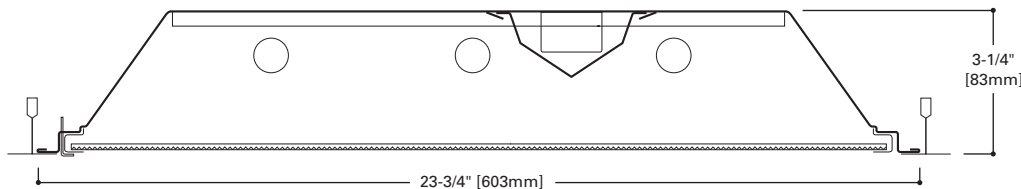
Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Controls (www.coopercontrol.com) to maximize energy savings.



2GC8
328T8
332

2' X 4' TROFFER
3 T8 LAMPS

Specification T8 Troffer



ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
328T8 (67)
332 (91)

Luminaire Efficacy Rating
LER = FL-83

Catalog Number: 2GC8-332A

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$2.89

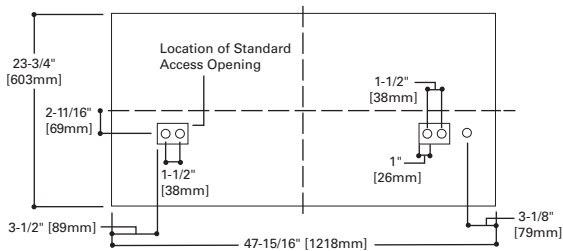
*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

**Consult Pre Sales Technical Support.

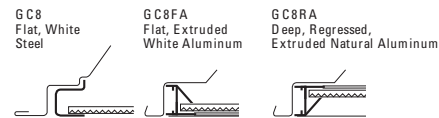
***Full sized ballast cover for biaxial lamps and emergency option may apply.

****When ordering Flange Kit for installation in drywall ceilings, see options and accessories compatibility section and ordering logic.

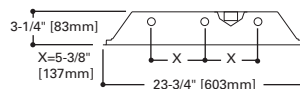
MOUNTING DATA



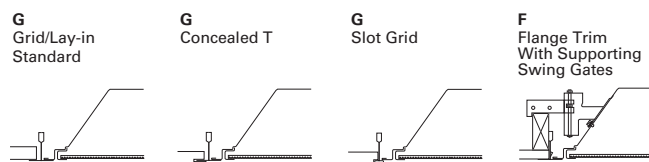
DOOR FRAMES



LAMP CONFIGURATIONS



CEILING COMPATIBILITY



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

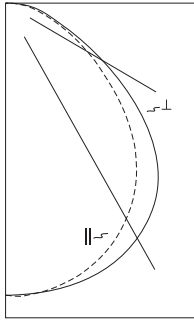
(Verify compatibility/ consult factory.)

LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT
Safe and convenient means of disconnecting power.

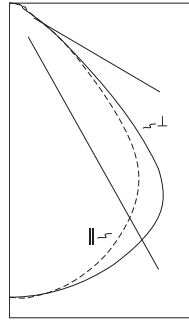


PHOTOMETRICS



2GC8-332A
 Electronic Ballast
 (3) F32T8 lamps
 3100 lumens
 Spacing criterion:
 (H) 1.2 x mounting
 height, (L) 1.4 x
 mounting height
 Efficiency 85%
 Test Report:
 2GC8-332A.IES
 LER = FL-83
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$2.89

Candela			
Angle	Along H	45°	Across
0	2985	2985	2985
5	2987	2971	2981
10	2947	2946	2971
15	2881	2906	2950
20	2785	2840	2907
25	2659	2753	2837
30	2500	2628	2737
35	2309	2470	2603
40	2074	2253	2424
45	1797	1979	2166
50	1491	1683	1839
55	1194	1368	1471
60	935	1023	1109
65	711	692	800
70	520	441	576
75	370	296	433
80	263	227	319
85	141	139	184
90	11	26	37



2GC8-332A156
 Electronic Ballast
 (3) F32T8 lamps
 3100 lumens
 Spacing criterion:
 (H) 1.2 x mounting
 height, (L) 1.4 x
 mounting height
 Efficiency 82.5%
 Test Report:
 2GC8-
 332A19_156.IES
 LER = FL-80
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$3.00

Candela			
Angle	Along H	45°	Across 0
0	3509	3509	3509
5	3509	3490	3501
10	3454	3451	3474
15	3362	3388	3433
20	3241	3301	3379
25	3086	3189	3306
30	2908	3045	3223
35	2683	2848	3105
40	2321	2496	2839
45	1704	1907	2163
50	1126	1373	1281
55	734	1028	742
60	408	697	422
65	271	448	235
70	212	284	170
75	196	146	159
80	150	79	132
85	77	73	81
90	5	17	16

Coefficients of Utilization

rc	Effective floor cavity reflectance																							
	80%				70%				50%				30%				10%				0%			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
0	101	101	101	101	99	99	99	99	94	94	94	90	90	90	87	87	87	85						
1	93	89	86	83	91	87	84	81	84	81	79	80	78	76	77	76	74	72						
2	85	78	73	68	83	77	72	67	74	70	66	71	68	64	69	66	63	61						
3	78	69	63	57	76	68	62	57	66	60	56	63	59	55	61	57	54	52						
4	72	62	55	49	70	61	54	49	59	53	48	57	52	48	55	50	47	45						
5	66	55	48	43	64	55	48	42	53	47	42	51	46	41	50	45	41	39						
6	61	50	43	37	59	49	42	37	48	42	37	46	41	37	45	40	36	35						
7	57	45	38	33	55	45	38	33	44	37	33	42	37	33	41	36	32	31						
8	53	42	34	30	51	41	34	30	40	34	29	39	33	29	38	33	29	27						
9	49	38	31	27	48	38	31	27	37	31	27	36	30	26	35	30	26	25						
10	46	35	29	24	45	35	28	24	34	28	24	33	28	24	32	27	24	22						

Coefficients of Utilization

rc	Effective floor cavity reflectance																							
	80%				70%				50%				30%				10%				0%			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
0	98	98	98	98	96	96	96	96	92	92	92	88	88	88	84	84	84	82						
1	91	88	85	82	89	86	83	81	83	80	78	79	78	76	77	75	74	72						
2	84	79	74	70	82	77	73	69	74	70	67	72	68	66	69	67	64	63						
3	78	70	65	60	76	69	64	59	67	62	58	65	61	57	63	59	56	55						
4	72	63	57	52	70	62	56	52	60	55	51	59	54	50	57	53	50	48						
5	67	57	51	46	65	57	50	46	55	49	45	53	48	45	52	48	44	43						
6	62	52	46	41	61	51	45	41	50	44	40	49	44	40	47	43	40	38						
7	58	48	41	36	57	47	41	36	46	40	36	45	40	36	44	39	36	34						
8	54	44	37	33	53	43	37	33	42	37	33	41	36	32	40	36	32	31						
9	51	40	34	30	50	40	34	30	39	33	30	38	33	29	37	33	29	28						
10	48	37	31	27	47	37	31	27	36	31	27	35	30	27	35	30	27	25						

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	2371	25.5	30.0
0-40	3907	42.0	49.4
0-60	6627	71.3	83.8
0-90	7909	85.0	99.9
0-180	7909	85.0	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	4706	4489	4913
55	3339	3826	4114
65	2698	2626	3036
75	2293	1834	2683
85	2595	2558	3386

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	2762	29.7	36.0
0-40	4546	48.9	59.3
0-60	6894	74.1	89.9
0-90	7671	82.5	100.0
0-180	7671	82.5	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3865	4326	4906
55	2053	2875	2075
65	1029	1700	892
75	1215	905	985
85	1417	1343	1491

ORDERING INFORMATION

SAMPLE NUMBER: 2GC8-332A-UNV0V-EB81-U

<p>Rating⁽⁵⁾ Blank= Standard ATW-SW4= Chicago Rated</p>	<p>Number of Lamps⁽²⁾ 3 Lamps (Not included)</p>	<p>Ballast Type EB8_=T8 Electronic Start. Total Harmonic Distortion < 10% EB8_/PLUS= T8 Electronic Start. Total Harmonic Distortion < 10%. High Ballast Factor > 1.15. ER8_= T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10% High Performance T8 Ballasts HB8_=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 – .88 HB8_L=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Low Ballast Factor .77 – .82 HB8_N=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Normal Ballast Factor 1.0 HB8_H=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20 HR8_T8=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 – .88 HR8_DIM=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Step Dimming. Ballast Factor .88 HR8_L=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Low Ballast Factor .71 – .79 HR8_H=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20 Light DALI Ballasts⁽⁷⁾ 8_=T8 DALI Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 1.0</p>	<p>Options FR=Fire Rated Label REP=Riveted End Plates PAF=Painted After Fabrication</p> <p>Packaging U=Unit Pack PAL=Job Pack, out of carton PALC=Job Pack, in carton</p>
<p>Width 2=2' Width</p>	<p>Wattage (Length) 28T8=28W T8 (48") 32=32W T8 (48")</p>	<p>A=#12 Pattern Acrylic A125=#12 Pattern Acrylic (.125" Thick) A19/156=#19 Pattern Acrylic (.156" Thick) PB1S=Silver Parabolic Louver (1/2" x 1/2" x 1/2")</p>	
<p>Trim Type G=Grid/Lay-in (Standard)⁽¹⁾ G=Concealed T G=Slot Grid F=Flange Trim</p>	<p>Option – Aluminum Flange Trim⁽⁶⁾ Blank=SW (Single White) Type Color 'S' Single 'N' Natural 'R' In Row 'W' White 'E' End of Row</p>	<p>Voltage⁽³⁾ 120V=120 Volt 277V=277 Volt 347V=347 Volt UNV=Universal Voltage 120-277⁽⁴⁾</p>	
<p>Series C8=Specification T8 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>	<p>Options GL=Single Element Fuse GM=Double Element Fuse Lamps=Lamps Installed Flex=Flex Installed EL=Emergency Installed</p>	<p>OS-QHE3X32T8/ UNV-ISN-S</p>	

NOTES: ⁽¹⁾An EQ Grid Clip is recommended for all 9/16" ceiling systems. ⁽²⁾Standard off-center ballast compartment on 3-lamp fixtures. ⁽³⁾Products also available in non-US voltages and frequencies for international markets. ⁽⁴⁾Not available when specifying emergencies, voltage must be specific. ⁽⁵⁾For NYC rated product, see separate specification sheets. ⁽⁶⁾Specify row configuration, type in catalog number when ordering complete fixture. ⁽⁷⁾For a complete listing of Fifthlight Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com.

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

Number of Ballasts
1=1 Ballast
2=2 Ballasts
3=3 Ballasts

ACCESSORIES

EQ-CLIP-U=T-BAR Safety Earthquake Clips⁽¹⁾
FCTKA-24W-U=Field Installed Flange Kit

<p>FCTK Trim Kit Field Convertible</p>	<p>A - 24 22=2' x 2' 24=2' x 4'</p>	<p>R W - U N=Natural W=White</p>
<p>Aluminum</p>	<p>Blank=Single R=In Row E=End Row</p>	<p>U=Unit Pack</p>

SHIPPING INFORMATION

Catalog No.	Wt.
2GC8-328T8A	20 lbs.
2GC8-332A	20 lbs.

