

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.

SPECIFICATION FEATURES

Construction

Rigid housing is die formed of code gauge prime cold rolled steel and features full length dieformed 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. Rotor-lock T8 lampholders. Biaxial models use 2G11 base lampholders with double-edge wiping action pressure-lock contacts and horizontally oriented lamp support clips. 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 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. 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 Lighting Solutions (www.cooperlighting.com) to maximize energy savings.

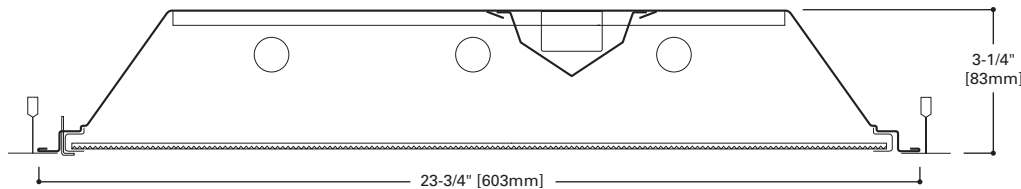
Catalog #		Type
Project		
Comments		Date
Prepared by		



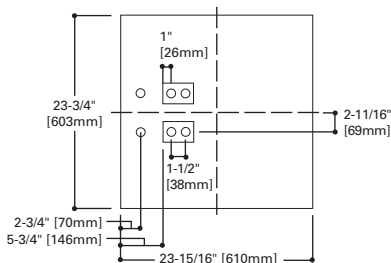
2GC8
317
3BX40
3U1-5/8

2' X 2' TROFFER
3 LAMPS

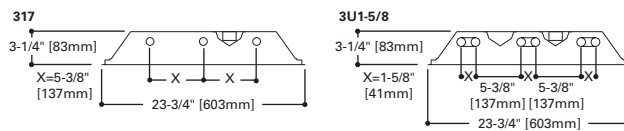
Specification T8 Troffer



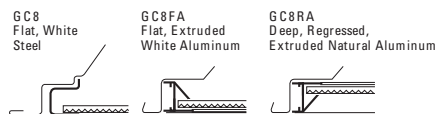
MOUNTING DATA



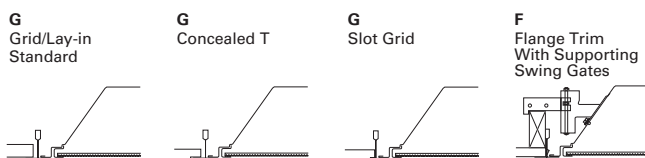
LAMP CONFIGURATIONS



DOOR FRAMES



CEILING COMPATIBILITY



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

(Verify compatibility/ consult factory.)

ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
 317 (56), 3BX40 (98), 3U1-5/8 (88)
ES Ballast & STD Lamps
 317 (68), 3BX40 (125), 3U1-5/8 (105)
Luminaire Efficacy Rating
 LER = FL-63
Catalog Number: 2GC8-317
Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.81

*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.

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

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.

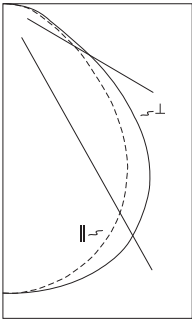


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Specifications and dimensions subject to change without notice.
Consult your representative for additional options and finishes.

PHOTOMETRICS



2GC8-317A
 Electronic Ballast
 (3) F17/SPX35
 T8 lamps
 1300 lumens
 Spacing criterion:
 (||) 1.2 x mounting
 height, (⊥) 1.3 x
 mounting height
 Efficiency 75.5%
 Test Report:
 2GC8317A.IES
 LER = FL-63
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$3.81

Candela			
Angle	Along	45°	Across ⊥
0	1213	1213	1213
5	1210	1209	1215
10	1191	1198	1211
15	1161	1180	1202
20	1120	1151	1184
25	1064	1111	1156
30	994	1056	1106
35	905	980	1040
40	804	884	960
45	683	760	851
50	553	620	708
55	435	486	559
60	335	347	404
65	250	229	284
70	186	154	213
75	143	121	171
80	107	102	125
85	56	60	63
90	0	0	0

Coefficients of Utilization

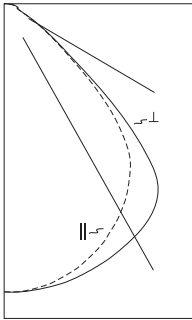
rc	Effective floor cavity reflectance																							
	80%				70%				50%				30%				10%				0%			
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	0	90	90	90	88	88	88	88	84	84	84	80	80	80	77	77	77	76	76	76	76	76	76	
1	83	79	76	74	81	78	75	72	74	72	70	72	70	68	69	67	66	64	64	64	64	64	64	
2	76	70	65	61	74	69	64	60	66	62	59	64	60	58	61	59	56	55	55	55	55	55	55	
3	70	62	56	52	68	61	56	51	59	54	50	57	53	49	55	51	49	47	47	47	47	47	47	
4	64	55	49	44	62	54	49	44	53	48	43	51	46	43	49	45	42	41	41	41	41	41	41	
5	59	50	43	39	58	49	43	38	47	42	38	46	41	38	45	41	37	36	36	36	36	36	36	
6	55	45	39	34	53	44	38	34	43	38	34	42	37	33	41	36	33	31	31	31	31	31	31	
7	51	41	35	30	50	40	34	30	39	34	30	38	33	30	37	33	29	28	28	28	28	28	28	
8	47	38	31	27	46	37	31	27	36	31	27	35	30	27	34	30	27	25	25	25	25	25	25	
9	44	35	29	24	43	34	28	24	33	28	24	32	28	24	32	27	24	23	23	23	23	23	23	
10	42	32	26	22	41	32	26	22	31	26	22	30	25	22	29	25	22	21	21	21	21	21	21	

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	960	23.7	31.4
0-40	1569	38.7	51.3
0-60	2594	64.1	84.8
0-90	3059	75.5	100.0
0-180	3059	75.5	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3394	3776	4228
55	2665	2977	3424
65	2078	1904	2361
75	1941	1643	2321
85	2258	2419	2540



2GC8-317A156
 Electronic Ballast
 (3) F17/SPX35
 T8 lamps
 1300 lumens
 Spacing criterion:
 (||) 1.2 x mounting
 height, (⊥) 1.4 x
 mounting height
 Efficiency 72.6%
 Test Report:
 2GC8317A19_156.IES
 LER = FL-60
 Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$4.00

Candela			
Angle	Along	45°	Across ⊥
0	1344	1344	1344
5	1340	1339	1344
10	1319	1324	1336
15	1283	1298	1320
20	1234	1263	1297
25	1172	1219	1270
30	1102	1163	1241
35	1015	1094	1199
40	905	982	1115
45	700	748	861
50	435	511	489
55	267	393	282
60	158	268	164
65	91	168	94
70	65	95	69
75	63	59	67
80	52	34	54
85	29	26	31
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	50	30	10	0
RCR	0	86	86	86	84	84	84	84	81	81	81	77	77	77	74	74	74	73	73	73	73	73	73	
1	80	77	75	72	78	76	73	71	73	71	69	70	68	67	67	66	65	64	64	64	64	64	64	
2	74	69	65	61	72	68	64	61	65	62	59	63	60	58	61	59	57	55	55	55	55	55	55	
3	69	62	57	53	67	61	56	52	59	55	51	57	53	51	55	52	50	48	48	48	48	48	48	
4	64	56	50	46	62	55	50	46	53	49	45	52	48	45	50	47	44	43	43	43	43	43	43	
5	59	51	45	40	57	50	44	40	48	44	40	47	43	39	46	42	39	38	38	38	38	38	38	
6	55	46	40	36	53	45	40	36	44	39	36	43	39	35	42	38	35	34	34	34	34	34	34	
7	51	42	36	32	50	41	36	32	40	35	32	39	35	32	38	34	31	30	30	30	30	30	30	
8	48	39	33	29	47	38	33	29	37	32	29	36	32	29	36	31	28	27	27	27	27	27	27	
9	45	36	30	26	44	35	30	26	34	30	26	34	29	26	33	29	26	25	25	25	25	25	25	
10	42	33	28	24	41	33	27	24	32	27	24	31	27	24	31	27	24	22	22	22	22	22	22	

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1058	26.1	36.0
0-40	1743	43.0	59.3
0-60	2649	65.4	90.1
0-90	2940	72.6	100.0
0-180	2940	72.6	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3478	3717	4278
55	1636	2407	1727
65	757	1397	781
75	855	801	910
85	1169	1048	1250

ORDERING INFORMATION

SAMPLE NUMBER: 2GC8-317A-UNV-EB81-U

<p>Rating⁽⁶⁾ 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%</p> <p>EB8_/PLUS= T8 Electronic Start. Total Harmonic Distortion < 10%. High Ballast Factor > 1.15.</p> <p>ER8_= T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%</p> <p>High Performance T8 Ballasts HB8_=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 – .88</p> <p>HB8_L=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Low Ballast Factor .77 – .82</p> <p>HB8_N=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Normal Ballast Factor 1.0</p> <p>HB8_H=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20</p> <p>HR8_T=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 – .88</p> <p>HR8_DIM=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Step Dimming. Ballast Factor .88</p> <p>HR8_L=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Low Ballast Factor .71 – .79</p> <p>HR8_H=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20</p> <p>Fifth Light DALI Ballasts⁽⁹⁾ 5LT8_=T8 DALI Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 1.0</p>	<p>Options LAO=Less Access Opening⁽⁵⁾ FR=Fire Rated Label REP=Riveted End Plates PAF=Painted After Fabrication</p>
<p>Width 2=2' Width</p>	<p>Wattage 17=17W T8 (24") U1-5/8=31W T8 (24")⁽¹⁰⁾ BX40=40W Biac (24")</p>	<p>Number of Ballasts 1=1 Ballast 2=2 Ballasts 3=3 Ballasts</p>	<p>Packaging U=Unit Pack PAL=Job Pack, out of carton PALC=Job Pack, in carton</p>
<p>Trim Type G=Grid/Lay-in ⁽¹⁾ (Standard) G=Concealed T G=Slot Grid F=Flange Trim</p>	<p>Shielding A=#12 Acrylic Pattern A125=#12 Pattern Acrylic (.125" Thickness) A19/156=#19 Pattern Acrylic (.156" Thickness)</p>	<p>Option – Aluminum Flange Trim⁽⁷⁾ Blank=SW (Single White) Type Color 'S' Single 'N' Natural 'R' In Row 'W' White 'E' End of Row</p>	
<p>Series C8=Specification T8 Troffer</p>	<p>Options GL=Single Element Fuse GM=Double Element Fuse Lamps=Lamps Installed Flex=Flex Installed EL=Emergency Installed⁽¹¹⁾</p>		
<p>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>Voltage⁽³⁾ 347V=347 Volt UNV=Universal Voltage 120-277⁽⁴⁾</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⁾Consult Pre Sales Technical Support. ⁽⁶⁾For NYC rated product, see separate specification sheets. ⁽⁷⁾Specify row configuration, type in catalog number when ordering complete fixture. ⁽⁸⁾Not available in UNV voltages. Must specify voltage. ⁽⁹⁾For a complete listing of Fifthlight Technology products and other solutions from Cooper Lighting Solutions visit www.cooperlighting.com. ⁽¹⁰⁾Fifthlight ballast option not available. ⁽¹¹⁾Please specify required voltage, 120V or 277V.

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

ACCESSORIES

EQ-CLIP-U=T-BAR Safety Earthquake Clips⁽¹⁾
FCTKA-22W-U=Field Installed Flange Kit

FCTK | **A - 24** | **R W - U**

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

SHIPPING DATA

Catalog No.	Wt.
2GC8-3U1-5/8A	12 lbs.
2GC8-317A	12 lbs.

