

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 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

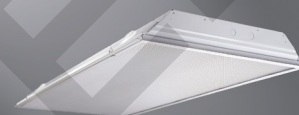
Positive spring loaded steel latches with baked white enamel finish. Safety-lock Things allow hinging and latching either side.

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

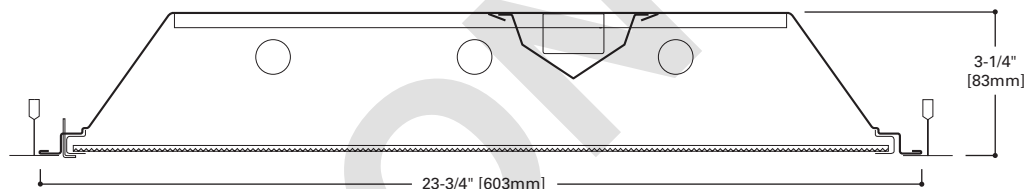
Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Controls (www.coopercontrol.com) to maximize energy savings.



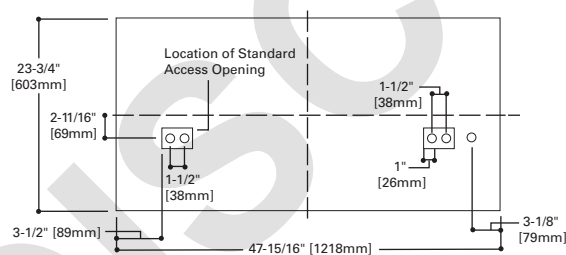
2GC8
328T8
332

2' X 4' TROFFER
328T8
332

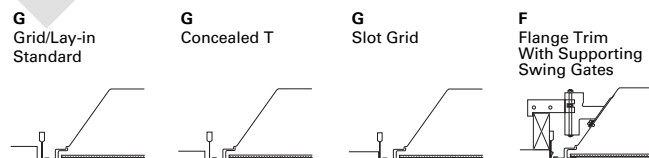
Specification T8 Troffer



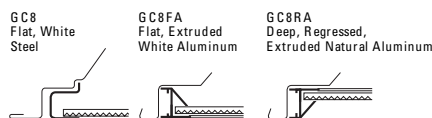
MOUNTING DATA



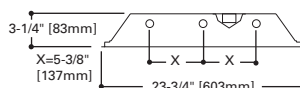
CEILING COMPATIBILITY



DOOR FRAMES



LAMP CONFIGURATION



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
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.

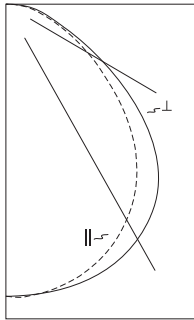
**Consult Pre Sales Technical Support.
***Full sized ballast cover for biaxial lamps and emergency option may apply.

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

LINEAR DISCONNECT

Designed to provide safe and convenient means of disconnecting power

PHOTOMETRICS

**2GC8-332A**

Electronic Ballast

(3) F32T8 lamps

3100 lumens

Spacing criterion:

(II) 1.2 x mounting

height, (L) 1.4 x

mounting height

Efficiency 85%

Test Report:

2GC8-332A.IES

LER = FL-83

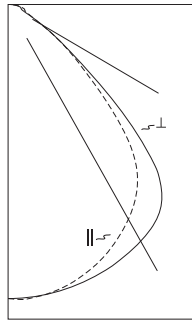
Yearly Cost of 1000

lumens, 3000 hrs at

.08 KWH = \$2.89

Candela

Angle	Along II	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:

(II) 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 II	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												20%											
	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	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						

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

Coefficients of Utilization

rc	Effective floor cavity reflectance												20%											
	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	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	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

Rating⁽⁵⁾
Blank=
 Standard
ATW-SW4=
 Chicago
 Rated

Width
 2=2' Width

Trim Type
G=Grid/Lay-in (Standard)⁽¹⁾
G=Concealed T
G=Slot Grid
F=Flange Trim

Series
C8=Specification T8 Troffer

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

Number of Lamps⁽²⁾
 3 Lamps
 (Not included)

Wattage (Length)
28T8=28W T8 (48")
32=32W T8 (48")

A=#12 Pattern Acrylic
A125=#12 Pattern Acrylic
 (.125" Thick)
A19/156=#19 Pattern
 Acrylic (.156" Thick)

Option – Aluminum Flange Trim⁽⁶⁾
Blank=SW (Single White)
 Type Color
 'S' Single 'N' Natural
 'R' In Row 'W' White
 'E' End of Row

Voltage⁽⁸⁾
120V=120 Volt
277V=277 Volt
347V=347 Volt
UNV=Universal Voltage 120-277⁽⁴⁾

Options
GL=Single Element Fuse
GM=Double Element Fuse
Flex=Flex Installed
EL=Emergency Installed⁽⁸⁾

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 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

Fifth Light DALI Ballasts⁽⁷⁾

5LT8 = T8 DALI Program Rapid Start. Total
 Harmonic Distortion < 10%. Ballast
 Factor 1.0

Number of Ballasts

1=1 Ballast
 2=2 Ballasts
 3=3 Ballasts

Options

FR=Fire Rated Label
REP=Riveted End Plates
PAF=Painted After
 Fabrication

Packaging

U=Unit Pack
PAL=Job Pack, out of carton
PALC=Job Pack, in carton

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.

⁽⁸⁾ 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-24W-U=Field Installed Flange Kit

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

SHIPPING DATA

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