

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 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. Heavy endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. KOs for continuous row wiring. Endplates have integral Gridlock 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

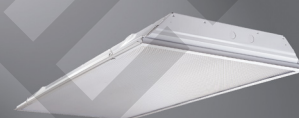
Positive cam action spring loaded steel latches with baked white enamel finish. Safety-lock T-hinges allow hinging and latching either side.

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 100% virgin 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.

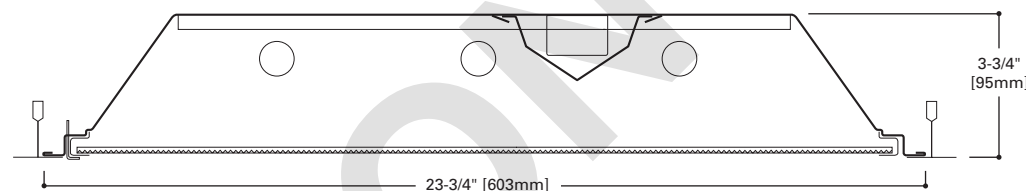


2GC8
328T8
332

2' X 4' TROFFER
3 T8 LAMPS

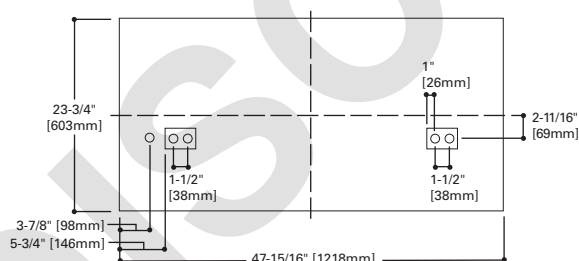
Specification T8 Troffer

New York City Rated

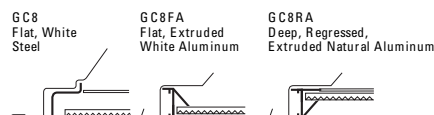


*maximum overall nominal depth

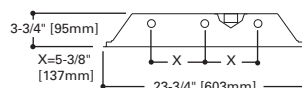
MOUNTING DATA



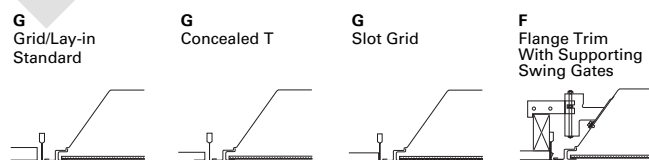
DOOR FRAMES



LAMP CONFIGURATIONS



CEILING COMPATIBILITY



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

(Verify compatibility/ consult factory.)

ENERGY DATA

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

Luminaire Efficacy Rating

LER = FL-69

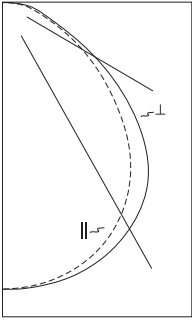
Catalog Number: 2GC8-332A

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.46

*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.

LINEAR DISCONNECT
Designed to provide safe and convenient means of disconnecting power

PHOTOMETRICS



2GC8-332A

Electronic Ballast

(3) F32T8 lamps

2750 lumens per Lamp

Spacing criterion:

(II) 1.3 x mounting

height, (⊥) 1.4 x

mounting height

Efficiency 86.2%

Test Report:

233P137

LER = FL-69

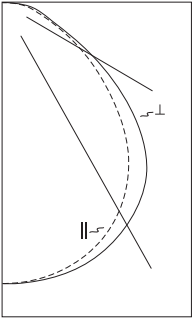
Yearly Cost of 1000

lumens, 3000 hrs at

.08 KWH = \$3.46

Candela

Angle	Along II	45°	Across
0	2742	2742	2742
5	2726	2734	2743
10	2695	2711	2729
15	2637	2670	2701
20	2556	2606	2649
25	2446	2512	2566
30	2301	2386	2461
35	2123	2221	2327
40	1900	2004	2153
45	1629	1747	1916
50	1339	1484	1623
55	1079	1202	1293
60	840	884	968
65	631	587	693
70	464	369	507
75	338	261	397
80	250	212	305
85	142	131	183
90	23	31	43



2GC8-332A187

Electronic Ballast

(3) FO32/35K lamps

2750 lumens per Lamp

Spacing criterion:

(II) 1.3 x mounting

height, (⊥) 1.4 x

mounting height

Efficiency 70.6%

Test Report:

107P148

LER = FL-57

Yearly Cost of 1000

lumens, 3000 hrs at

.08 KWH = \$3.46

Candela

Angle	Along II	45°	Across 0
0	2428	2428	2428
5	2412	2423	2435
10	2383	2407	2431
15	2333	2376	2416
20	2260	2331	2392
25	2165	2271	2355
30	2046	2192	2303
35	1903	2083	2226
40	1721	1919	2054
45	1466	1563	1703
50	1135	1040	1245
55	801	747	835
60	533	572	540
65	385	379	388
70	317	285	319
75	265	270	260
80	179	182	181
85	95	96	108
90	0	0	0

Coefficients of Utilization

Effective floor cavity reflectance										20%			30%			10%			0%
rc	80%				70%				50%			30%			10%			0%	
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																			
0	103	103	103	103	100	100	100	100	96	96	96	92	92	92	88	88	88	86	
1	94	90	87	84	92	88	85	82	85	82	80	81	79	77	78	77	75	73	
2	86	80	74	69	84	78	73	68	75	71	67	72	68	65	69	67	64	62	
3	79	70	64	58	77	69	63	58	67	61	57	64	60	56	62	58	55	53	
4	73	63	56	50	71	62	55	50	60	54	49	58	52	48	56	51	48	46	
5	67	56	49	43	65	55	48	43	54	47	43	52	47	42	50	46	42	40	
6	62	51	44	38	60	50	43	38	49	42	38	47	42	37	46	41	37	35	
7	58	46	39	34	56	46	39	34	44	38	33	43	37	33	42	37	33	31	
8	54	42	35	30	52	42	35	30	41	34	30	40	34	30	39	33	30	28	
9	50	39	32	27	49	38	32	27	37	31	27	37	31	27	36	31	27	25	
10	47	36	29	25	46	35	29	25	35	29	25	34	28	25	33	28	24	23	

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	2169	26.3	30.5
0-40	3555	43.1	50.0
0-60	5967	72.3	83.9
0-90	7103	86.1	99.9
0-180	7108	86.1	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3627	3890	4266
55	2962	3299	3549
65	2351	2187	2582
75	2056	1588	2415
85	2565	2366	3306

Coefficients of Utilization

Effective floor cavity reflectance										20%				30%				10%				0%	
rc	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	84	84	84	84	82	82	82	82	78	78	78	75	75	75	72	72	72	71					
1	78	75	72	69	76	73	70	68	70	68	66	67	66	64	65	63	62	61					
2	71	66	62	58	70	65	61	57	62	59	56	60	57	55	58	56	54	52					
3	66	59	54	49	64	58	53	49	56	52	48	54	50	47	52	49	47	45					
4	61	53	47	43	59	52	47	42	50	46	42	49	45	41	47	44	41	39					
5	56	48	42	37	55	47	41	37	45	41	37	44	40	36	43	39	36	35					
6	52	43	37	33	51	43	37	33	41	36	33	40	36	32	39	35	32	31					
7	48	39	34	29	47	39	33	29	38	33	29	37	32	29	36	32	29	27					
8	45	36	30	26	44	36	30	26	35	30	26	34	29	26	33	29	26	25					
9	42	33	28	24	41	33	27	24	32	27	24	31	27	24	31	26	23	22					
10	40	31	25	22	39	30	25	22	30	25	22	29	25	21	28	24	21	20					

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1947	23.2	32.8
0-40	3239	38.6	54.6
0-60	5145	61.2	86.8
0-90	5928	70.6	100.0
0-180	5928	70.6	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3269	3485	3798
55	2202	2054	2296
65	1436	1414	1448
75	1614	1645	1584
85	1719	1737	1954

ORDERING INFORMATION

SAMPLE NUMBER: NY2GC8-332A-120V-EB81-U

Rating
NY=New York City Rated (20 Gauge Riveted End Plates)

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⁽⁵⁾
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)
IMA 48=Injection Molded Acrylic (.150" Thick)
DA=Dropped Dish - Matte White Acrylic

Voltage⁽²⁾
120V=120 Volt
277V=277 Volt
347V=347 Volt
UNV=Universal Voltage 120-277⁽³⁾

Options
GL=Single Element Fuse
GM=Double Element Fuse
Flex=Flex Installed
EL=Emergency Installed⁽⁶⁾

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⁽⁴⁾
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

PAF=Painted After Fabrication
MEP=Modified End Plate/ For End Filler Applications (See options & accessories)

Packaging

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

ACCESSORIES

EQ-CLIP-U=T-BAR Safety Earthquake Clips⁽¹⁾

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⁾For a complete listing of Fifthlight Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com ⁽⁵⁾Standard off-center ballast compartment on 3-lamp fixtures.

⁽⁶⁾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.

SHIPPING DATA

Catalog No.	Wt.
NY2GC8-328T8A	31 lbs.
NY2GC8-332A	31 lbs.