

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 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 Grid-lock feature for safety and convenience.

Electrical

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Pressure lock 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 matte 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 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 2U1-5/8, 2U6T8

2' X 2' TROFFER
2 OR 4 LAMPS

Specification T8 Troffer

New York City Rated



ENERGY DATA

Input Watts:

EB Ballast & STD Lamps
2U1-5/8 (61), 2U6T8 (61)

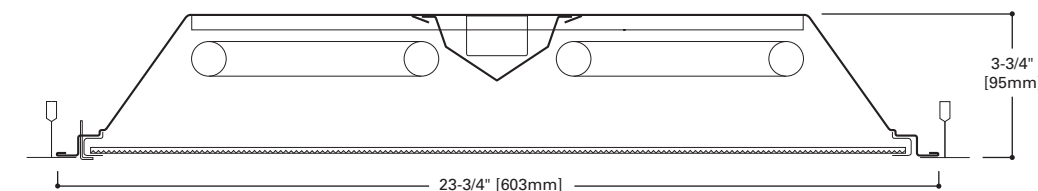
HB Ballast & STD Lamps
2U1-5/8 (54), 2U6T8 (54)

Luminaire Efficacy Rating

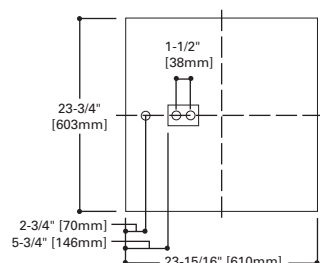
LER = FL-56

Catalog Number: 2GC8-2U6T8A

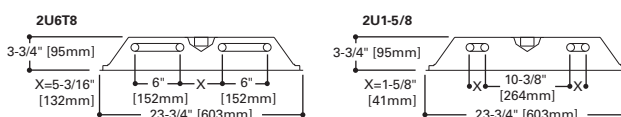
Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$4.29



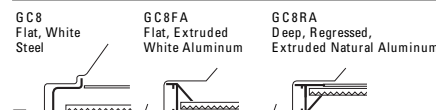
MOUNTING DATA



LAMP CONFIGURATIONS



DOOR FRAMES



CEILING COMPATIBILITY



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

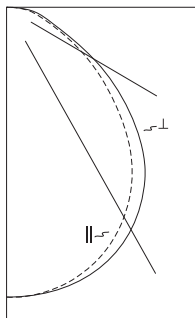
(Verify compatibility/ consult factory.)

*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.

PHOTOMETRICS

**2GC8-2U6T8A**

Electronic Ballast

(2) FB31T8/TL741/6
lamps

2600 lumens

Spacing criterion:

(II) 1.2 x mounting

height, (⊥) 1.3 x

mounting height

Efficiency 74.6%

Test Report:

2GC82U6T8A.IES

LER = FL-56

Yearly Cost of 1000

lumens, 3000 hrs at

.08 KWH = \$4.29

Candela

Angle	Along II	45°	Across ⊥
0	1567	1567	1567
5	1563	1560	1564
10	1541	1544	1552
15	1503	1514	1530
20	1449	1468	1494
25	1376	1407	1439
30	1285	1325	1365
35	1178	1216	1275
40	1048	1079	1166
45	894	926	1025
50	736	777	861
55	591	625	694
60	454	462	525
65	333	311	375
70	242	197	273
75	180	139	213
80	135	112	163
85	76	64	94
90	0	0	0

Coefficients of Utilization

Effective floor cavity reflectance													20%
rc	80%				70%				50%				0%
	70	50	30	10	70	50	30	10	50	30	10	50	
RCR													
0	89	89	89	89	87	87	87	87	83	83	83	79	76
1	82	78	75	73	80	77	74	71	73	71	69	71	68
2	75	69	64	60	73	68	63	60	65	61	58	63	60
3	69	61	56	51	67	60	55	51	58	53	50	56	54
4	63	55	49	44	62	54	48	43	52	47	43	50	48
5	58	49	43	38	57	48	42	38	47	42	38	45	44
6	54	45	38	34	53	44	38	33	43	37	33	41	40
7	50	41	34	30	49	40	34	30	39	33	30	38	37
8	47	37	31	27	46	37	31	27	36	30	27	35	34
9	44	34	28	24	43	34	28	24	33	28	24	32	31
10	41	32	26	22	40	31	26	22	30	25	22	29	29

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1225	23.6	31.6
0-40	1989	38.2	51.3
0-60	3277	63.0	84.5
0-90	3878	74.6	100.0
0-180	3878	74.6	100.0

Typical VCP Percentages

Room Size (Ft.)	Height Along		Height Across	
	8.5'	10.0'	8.5'	10.0'
20 x 20	61	65	58	62
30 x 30	54	58	51	55
30 x 60	45	48	40	44
60 x 30	56	60	55	59
60 x 60	46	49	42	46

ORDERING INFORMATION

SAMPLE NUMBER: NY2GC8-2U6T8A-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)⁽²⁾
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=2 Lamps
4=4 Lamps

Wattage (Length)
U6T8=32W T8 (24")⁽⁸⁾
U1-5/8=31W T8 (24")⁽⁷⁾

Shielding
A=#12 Acrylic Pattern
A125=#12 Acrylic Pattern
 (.125" Thickness)
A19/156=#19 Acrylic Pattern
 (.156" Thickness)
DA=Dropped Dish - Matte White Acrylic
IMA 48=Injection Molded Acrylic
 (.150" Thickness)

Voltage
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⁽¹⁵⁾

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

0-10V Dimming Ballasts⁽⁹⁾

5LTV8__=T8 0-10V Program Rapid Start.
 Total Harmonic Distortion < 10%.
 Ballast Factor 0.87⁽¹⁴⁾
5LTVS8__=T8 0-10V Spec Grade Program Rapid
 Start. Total Harmonic Distortion < 10%.
 Ballast Factor 0.87^{(10), (12)}

Fifth Light DALI Ballasts⁽⁶⁾

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
MEP=Modified End
 Plates
PAF=Painted After
 Fabrication
 (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⁽²⁾

NOTES: ⁽¹⁾ Integral end plate grid lock feature not available in heat removal. ⁽²⁾ An EQ Grid Clip is recommended for all 9/16" ceiling systems. Four required per fixture. ⁽³⁾ Not available when specifying emergencies, voltage must be specific. ⁽⁴⁾ Specify row configuration, type in catalog number when ordering complete fixture.

⁽⁵⁾ Fixtures equipped with "EL" option may require a 5-1/2" housing depth. If installing in field, must use low profile battery pack. ⁽⁶⁾ For a complete listing of Fifthlight Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com. ⁽⁷⁾ Fifthlight ballast option not available. ⁽⁸⁾ Ballast Factor is 0.88 for 4 lamp 32W T8 fixtures. ⁽⁹⁾ 0-10V ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system.

⁽¹⁰⁾ Specification grade 0-10V dimming ballast are NEMA premium and CEE listed. They are compatible with low mercury and energy saving lamps. ⁽¹²⁾ Specification Grade 0-10V ballast not offered in 3 or 4-lamp versions.

⁽¹⁴⁾ Standard 0-10V ballast not offered in 3 or 4-lamp versions. ⁽¹⁵⁾ Please specify required voltage, 120V or 277V.

For complete product data, reference the Fluorescent Specification binder. Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Solutions Representative for availability and ordering information.

SHIPPING INFORMATION

Catalog No.	Wt.
NY2GC8-2U6T8A	18 lbs.
NY2GC8-2U1-5/8A	18 lbs.