Metalux

DESCRIPTION

GC8IC 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 GC8IC is compatible with all of today's popular ceiling systems and is available with a number of options and accessories for application versatility.

The GC8IC series features efficiency, quality and performance. The series is designed for installation when the housing will be in direct contact with insulation.

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. KOs for continuous row wiring. Endplates have integral Grid-lock feature for safety and convenience.

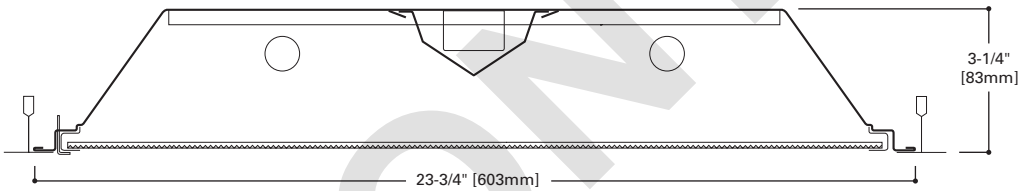
Electrical
Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Rotor lock lampholders. UL/CUL listed. Type IC Rated for direct contact with insualtion. Suitable for damp locations.**

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 Thinges 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.



2GC8IC
228T8
232
428T8

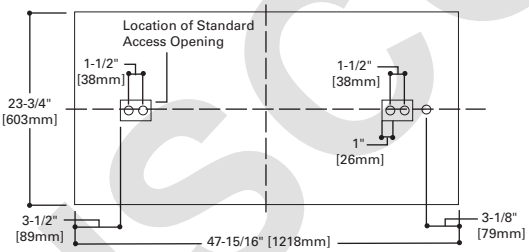
2' X 4' TROFFER
2 OR 4 LAMP

Specification T8 Troffer

FOR USE IN
INSULATED CEILINGS

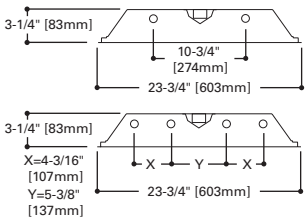
powered by fifthlight technology

MOUNTING DATA



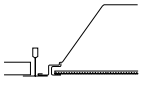
DOOR FRAMES

LAMP CONFIGURATIONS

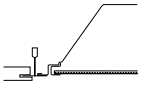


CEILING COMPATIBILITY

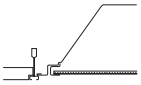
G
Grid/Lay-in
Standard



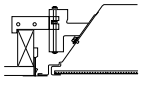
G
Concealed T



G
Slot Grid



F
Flange Trim
With Supporting
Swing Gates



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

(Verify compatibility/ consult factory.)

ENERGY DATA

Input Watts:
HB Ballast & STD Lamps
228T8 (48)
232 (53)
428T8 (96)

Luminaire Efficacy Rating
LER = FL-79
Catalog Number: 2GC8IC-232A
Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = $3.03

*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.

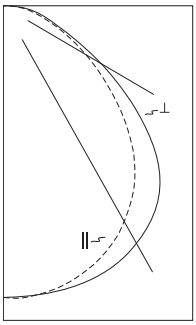
LINEAR DISCONNECT
Designed to provide safe and convenient means of disconnecting power

COOPER Lighting Solutions

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

ISO 9001 SYSTEMS CERTIFIED

PHOTOMETRICS



2GC8IC-232A
Electronic Ballast
(2) F032/35K
T8 lamps
3100 lumens
Spacing criterion: (II) 1.2 x mounting height, (⊥) 1.4 x mounting height
Efficiency 84.7%
Test Report: 2GC8IC-232A.IES
LER = FL-80
Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = $3.00

Candela

Angle	Along II	45°	Across ⊥
0	1963	1963	1963
5	1966	1957	1962
10	1940	1941	1956
15	1895	1914	1944
20	1834	1876	1924
25	1753	1820	1883
30	1646	1741	1822
35	1525	1640	1745
40	1373	1502	1635
45	1186	1323	1463
50	986	1131	1235
55	795	917	974
60	623	677	734
65	471	460	528
70	347	295	383
75	247	198	288
80	175	151	212
85	93	92	118
90	7	16	23

Coefficients of Utilization

Effective floor cavity reflectance					20%														
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	101	101	101	101	99	99	99	99	94	94	94	90	90	90	86	86	86	85	
1	93	89	85	82	90	87	84	81	83	81	78	80	78	76	77	75	74	72	
2	85	78	73	68	83	77	71	67	74	69	66	71	67	64	68	65	63	61	
3	78	69	63	57	76	68	62	57	65	60	56	63	59	55	61	57	54	52	
4	71	62	54	49	69	60	54	49	58	53	48	56	51	47	55	50	47	45	
5	66	55	48	42	64	54	47	42	52	46	42	51	45	41	49	45	41	39	
6	61	50	42	37	59	49	42	37	48	41	37	46	41	36	45	40	36	34	
7	56	45	38	33	55	45	38	33	43	37	33	42	37	32	41	36	32	30	
8	53	41	34	29	51	41	34	29	40	34	29	39	33	29	38	33	29	27	
9	49	38	31	27	48	37	31	26	37	31	26	36	30	26	35	30	26	25	
10	46	35	28	24	45	35	28	24	34	28	24	33	28	24	32	27	24	22	

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1565	25.2	29.8
0-40	2585	41.7	49.2
0-60	4403	71.0	83.8
0-90	5254	84.7	100.0
0-180	5254	84.7	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	2690	3001	3319
55	2223	2564	2724
65	1788	1746	2004
75	1531	1227	1785
85	1712	1693	2172

ORDERING INFORMATION

SAMPLE NUMBER: 2GC8IC-232A-UNV-HB81-U

Rating [2]
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

Type
IC=IC Rated

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 or **4** Lamps (Not included)

Wattage (Length)
28T8=28W T8 (48")
32=32W T8 (48") [6], [8]

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

Option – Aluminum Flange Trim [5]
Blank=SW (Single White)

Type	Color
'S' Single	'N' Natural
'R' In Row	'W' White
'E' End of Row	

Voltage [3]
347V=347 Volt
UNV=Universal Voltage 120-277 [4]

Options
GL=Single Element Fuse
GM=Double Element Fuse
Flex=Flex Installed
EL=Emergency Installed [14]

Ballast Type [3]
EB8_=T8 Electronic Instant Start. Total Harmonic Distortion < 10%
No. of Ballast 1 or 2
EB8_/PLUS= T8 Electronic Instant Start. High Ballast Factor >1.13. Total Harmonic Distortion < 10%
No. of Ballast 1 or 2
ER8_=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%
No. of Ballast 1 or 2

High Performance T8 Ballasts
HB8_L=T8 Electronic Instant Start. Low Ballast Factor .77
HB8_=T8 Electronic Instant Start. Ballast Factor .88
HB8_N=T8 Electronic Instant Start. Normal Ballast Factor 1.0
HB8_H=T8 Electronic Instant Start. High Ballast Factor 1.15-1.2
HR8_DIM=T8 Electronic Program Start Step Dimming. Ballast Factor .88
HR8_L=T8 Electronic Program Start. Low Ballast Factor .77
HR8_=T8 Electronic Program Start. Ballast Factor .88
HR8_H=T8 Electronic Program Start. High Ballast Factor 1.15-1.2

0-10V Dimming Ballasts [9]
5LTV8_=T8 0-10V Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87 [12], [13]
No. of Ballast 1 or 2
5LTVS8_=T8 0-10V Spec Grade Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87 [10], [11]
No. of Ballast 1 or 2

Fifth Light DALI Ballasts [7]
5LT8_=T8 DALI Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 1.0
No. of Ballast 1 or 2

Options
REP=Riveted EndPlates
PAF=Painted After Fabrication

Packaging
U=Unit Pack
PAL=Palletized Uncartoned Fixtures
PALC=Palletized Fixtures In Carton

ACCESSORIES

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

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

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

NOTES: [1]An EQ Grid Clip is recommended for all 9/16" ceiling systems. [2]For NYC rated product, see separate specification sheets. [3]Products also available in non-US voltages and frequencies for international markets. [4]Not available when specifying emergencies, voltage must be specific. [5]Specify row configuration, type in catalog number when ordering complete fixture. [6]4-lamp 32W T8 fixture is not available in a IC rated version. [7]For a complete listing of Fifthlight Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com. [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. [11]Specification Grade 0-10V ballast not offered in 3 or 4-lamp versions. [12]Standard 0-10V ballast not available for 28W T8 lamps. [13]Voltage must be specified for Standard 0-10V 32W 3 and 4-lamp ballast. 4-lamp ballast versions must be 277V. [14]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.
2GC8IC-228T8A	20 lbs.
2GC8IC-232A	20 lbs.
2GC8IC-428T8A	20 lbs.

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