COOPER LIGHTING SOLUTIONS - METALUX®

DESCRIPTION

The GR8 is a T8-dedicated lensed troffer designed to offer premium performance in a low profile housing. T8 dedication and optimized lamp to lens spacing provides the best in energy efficiency and optical control. The GR8's shallow, low profile housing is compatible with even highly restrictive plenums. Luminaires are compatible with today's popular ceiling systems.

The GR8 offers great performance and great quality. The series is an excellent choice for commercial offices, schools, hospitals, retail merchandising and many other applications.

Catalog #		**Type**
Project		
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Construction

Unitized low profile recessed housing is die formed of code gauge prime cold rolled steel with full length stiffeners and unibody endplate for added strength. Ballast cover is easily removed without tools. Die formed captive lampholder bracket fully encloses lampholder wiring for easy lampholder replacement. Ample KOs are provided for continuous row wiring. Built-in grid-lock feature for safety and convenience.

Electrical**

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Rotor-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. Lighting grade baked white enamel finish with premium reflectance for high efficiency.

Hinging/Latching

Positive spring loaded steel latches and safety lock T-hinges provide secure, high quality door fit and allow hinging and latching from either side.

Frame/Shielding

Heavy gauge flat steel door is die formed with reinforced mitered corners. Housing and door frame assemblies incorporate full width mechanical light traps. Light stabilized, acrylic prismatic lens.

Controls

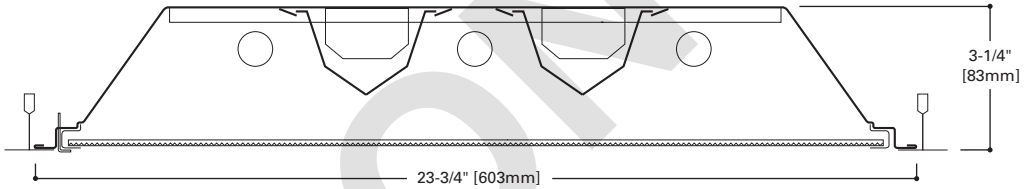
Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Lighting Solutions (www.cooperlighting.com) to maximize energy savings.



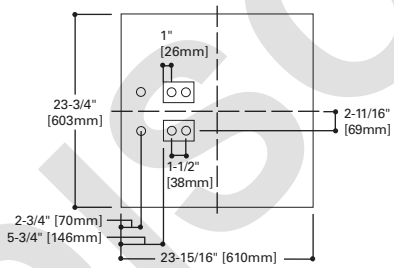
2GR8
317
3U1-5/8

2' X 2' TROFFER
3 LAMP

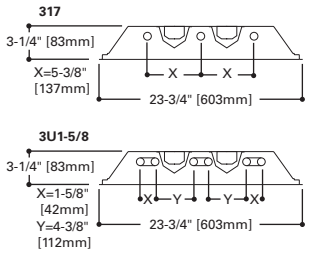
General Purpose
T8 Commercial Troffer



MOUNTING DATA



LAMP CONFIGURATIONS

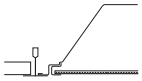


DOOR FRAMES

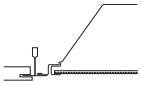


CEILING COMPATIBILITY

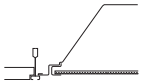
G
Grid/Lay-in
Standard



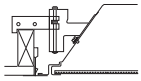
G
Concealed T



G
Slot Grid



F
Flange Trim
With Supporting
Swing Gates



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

ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
317 (52), 3U1-5/8 (88)

ES Ballast & STD Lamps
317 (69), 3U1-5/8 (105)

Luminaire Efficacy Rating
LER = FL-61
Catalog Number: 2GR8-317A

Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = $3.93

*Standard G (Grid) Type Fixtures can be field converted by adding trim kits. See Compatibility Section or Consult Factory.

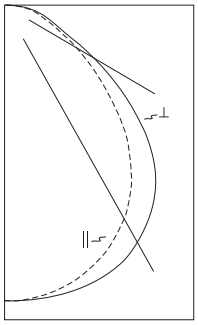
**Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

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

LINEAR DISCONNECT
Safe and convenient means of disconnecting power.

DISCONTINUED

PHOTOMETRICS



2GR8-317A
Electronic Ballast
(3) F17T8 lamps
1350 lumens
Spacing criterion: (II) 1.2 x mounting height, (⊥) 1.3 x mounting height
Efficiency 73%
Test Report: 2GR8317A.IES
LER = FL-61
Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = $3.93

Candela

Angle	Along II	45°	Across ⊥
0	1171	1171	1171
5	1167	1167	1172
10	1150	1157	1169
15	1121	1139	1161
20	1079	1111	1145
25	1025	1074	1118
30	961	1021	1069
35	877	948	1009
40	772	855	932
45	658	729	826
50	530	599	687
55	419	474	538
60	323	335	395
65	238	223	273
70	180	150	207
75	140	118	165
80	103	99	120
85	54	58	62
90	0	0	0

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	87	87	87	87	85	85	85	85	81	81	81	78	78	78	75	75	75	73
1	80	77	74	71	78	75	72	70	72	70	68	69	67	66	67	65	64	62
2	73	68	63	59	71	66	62	58	64	60	57	61	58	56	59	57	55	53
3	67	60	54	50	66	59	54	50	57	52	49	55	51	48	53	50	47	45
4	62	54	48	43	60	53	47	43	51	46	42	49	45	41	48	44	41	39
5	57	48	42	37	56	47	42	37	46	41	37	44	40	36	43	39	36	34
6	53	44	37	33	52	43	37	33	42	36	32	40	36	32	39	35	32	30
7	49	40	34	29	48	39	33	29	38	33	29	37	32	29	36	32	28	27
8	46	36	30	26	45	36	30	26	35	30	26	34	29	26	33	29	26	24
9	43	33	28	24	42	33	27	24	32	27	23	31	27	23	31	26	23	22
10	40	31	25	21	39	30	25	21	30	25	21	29	24	21	28	24	21	20

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	927	22.9	31.3
0-40	1516	37.4	51.3
0-60	2507	61.9	84.8
0-90	2957	73.0	100.0
0-180	2957	73.0	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3269	3622	4104
55	2567	2904	3296
65	1979	1854	2270
75	1901	1602	2240
85	2177	2338	2499

DISCONTINUED

ORDERING INFORMATION

SAMPLE NUMBER: 2GR8-317A-UNV-EB81-U

Rating[5]
Blank=Standard
ATW-SW4=Chicago Rated

Width
2=2' Width

Trim Type
G=Grid/Lay-in (Standard)

Series
R8=General Purpose T8 Commercial Troffer[1]

Number of Lamps[4]
3=3 Lamps (Not included)

Wattage
17=17W T8 (24")
U1-5/8=31W T8 (24")[7]

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

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[9]

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[8]
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 Label

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]
FCTKA-22W-U=Field Installed Flange Kit

FCTK A – 24 R W – U

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

NOTES: [1]An EQ Grid Clip is recommended for all 9/16" ceiling systems. Four required per fixture. [2]Products also available in non-US voltages and frequencies for international markets. [3]Not available when specifying emergencies, voltage must be specific. [4]Standard off-center ballast compartment on 3-lamp fixtures. [5]For NYC rated product, see separate specification sheets. [7] Fifthlight ballast option not available. [8] For a complete listing of Fifthlight Technology products and other solutions from Cooper Lighting Solutions , visit www.cooperlighting.com [9] 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.

DISCONTINUED

SHIPPING INFORMATION

Catalog No.	Wt.
2GR8-317A	10 lbs.
2GR8-3U1-5/8	10 lbs.