

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 KO's 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. 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

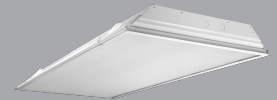
Positive spring loaded steel latches and safety lock T-hinges provide secure, high quality door fit and allow hinging and latching from either side.

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

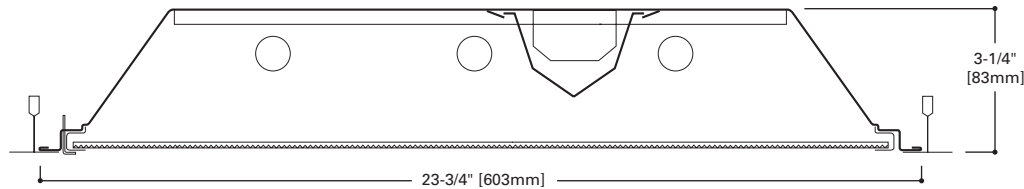
Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Lighting Solutions (www.cooperlighting.com) to maximize energy savings.



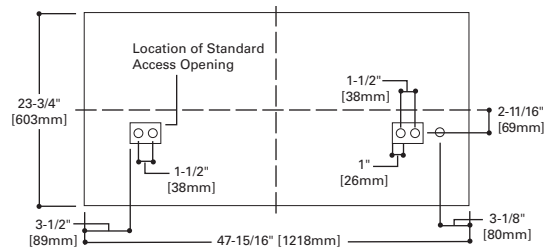
2GR8
328T8
332

2' X 4' TROFFER
3 T8 LAMPS

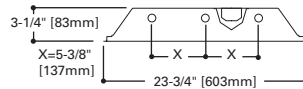
General Purpose
T8 Commercial Troffer



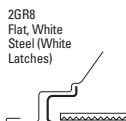
MOUNTING DATA



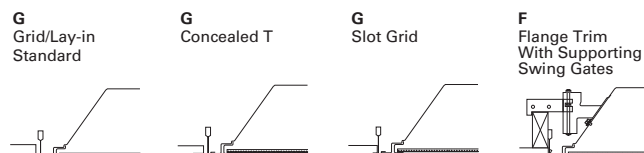
LAMP CONFIGURATIONS



DOOR FRAMES



CEILING COMPATIBILITY



COOPER LIGHTING SOLUTIONS

ENERGY DATA

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

Luminaire Efficacy Rating
LER = FL-75
Catalog Number: 2GR8-332A

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.20

*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.

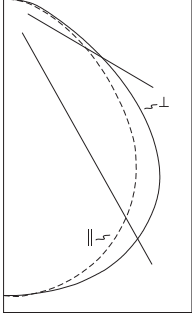
Ceiling	Trim
Type	Type
Exposed Grid	G
Concealed T	G
Slot Grid	G
Flange	G***

LINEAR DISCONNECT
Safe and convenient means of
disconnecting power.



ADF012708

PHOTOMETRICS

**2GR8-332A**

Electronic Ballast

(3) F28T8 lamps

3100 lumens

Spacing criterion:

(II) 1.2 x mounting

height, (L) 1.4 x

mounting height

Efficiency 77.6%

Test Report:

2GR8-332A.IES

LER = FL-75

Yearly Cost of 1000

lumens, 3000 hrs at

.08 KWH = \$3.20

Candela

Angle	Along II	45°	Across
0	2717	2717	2717
5	2719	2706	2716
10	2684	2685	2708
15	2622	2648	2691
20	2537	2592	2655
25	2419	2510	2594
30	2276	2400	2503
35	2101	2256	2383
40	1888	2059	2225
45	1630	1808	1991
50	1342	1537	1688
55	1082	1248	1345
60	847	928	1011
65	640	632	731
70	471	405	527
75	333	271	394
80	237	206	295
85	127	127	169
90	12	25	36

Coefficients of Utilization

rc	Effective floor cavity reflectance												20%															
	80%				70%				50%				30%				10%				0%							
	rw	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0							
RCR																												
0	92	92	92	92	90	90	90	90	86	86	86	82	82	82	79	79	79	78										
1	85	81	78	75	83	80	77	74	76	74	72	73	71	70	70	69	67	66										
2	78	72	67	62	76	70	65	62	67	63	60	65	62	59	62	60	57	56										
3	71	63	57	52	69	62	56	52	60	55	51	58	54	50	56	52	49	48										
4	65	56	50	45	64	55	49	45	53	48	44	52	47	43	50	46	43	41										
5	60	51	44	39	59	50	43	39	48	43	38	47	42	38	45	41	37	36										
6	56	46	39	34	54	45	39	34	44	38	34	42	37	33	41	37	33	32										
7	52	41	35	30	50	41	35	30	40	34	30	39	33	30	38	33	29	28										
8	48	38	31	27	47	37	31	27	36	31	27	35	30	27	34	30	26	25										
9	45	35	29	24	44	34	28	24	33	28	24	33	28	24	32	27	24	23										
10	42	32	26	22	41	32	26	22	31	26	22	30	25	22	30	25	22	20										

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	2162	23.2	30.0
0-40	3564	38.3	49.4
0-60	6046	65.0	83.8
0-90	7213	77.6	100.0
0-180	7213	77.6	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	3697	4101	4516
55	3026	3490	3761
65	2429	2399	2774
75	2064	1679	2442
85	2337	2337	3110

ORDERING INFORMATION

SAMPLE NUMBER: 2GR8-332A-UNV-EB81-U

Rating⁽⁵⁾ Blank = Standard ATW-SW4 = Chicago Rated	Number of Lamps⁽⁴⁾ 3 =3 Lamps (Not included)	Voltage⁽²⁾ 120V =120 Volt 277V =277 Volt 347V =347 Volt UNV =Universal Voltage 120-277 ⁽³⁾	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⁽⁶⁾ 5LT8 =T8 DALI Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 1.0 ⁽⁷⁾	Options FR =Fire Label	Packaging U =Unit Pack PAL =Job Pack, out of carton PALC =Job Pack, in carton
Width 2 =2' Width	Wattage 28T8 =28W T8 (48") 32 =32W T8 (48")	Options GL =Single Element Fuse GM =Double Element Fuse Flex =Flex Installed EL =Emergency Installed ⁽⁸⁾			
Trim Type G =Grid/Lay-in (Standard)	Shielding A =#12 Acrylic Pattern A125 =#12 Pattern Acrylic (.125" Thick) A19/156 =#19 Pattern Acrylic (.156" Thick)				
Series R8 =General Purpose T8 Commercial Troffer ⁽¹⁾					

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

Number of Ballasts
 1=1 Ballast
 2=2 Ballasts
 3=3 Ballasts

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. ⁽⁶⁾ For a complete listing of Fifthlight Technology products and other solutions from Cooper Lighting Solutions, visit www.cooperlighting.com. ⁽⁷⁾ For 5LT8 Fifth Light DALI, 3-lamp models require (2) ballasts. ⁽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.

SHIPPING INFORMATION

Catalog No.	Wt.
2GR8-328T8A	20 lbs.
2GR8-332A	20 lbs.