

COOPER LIGHTING SOLUTIONS - METALUX®

DESCRIPTION

The GR8IC 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 GR8IC's shallow, low profile housing is compatible with even highly restrictive plenums. Luminaires are compatible with today's popular ceiling systems.

The GR8IC offers great performance and great quality. 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

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. Type IC Rated for direct contact with insulation. 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.

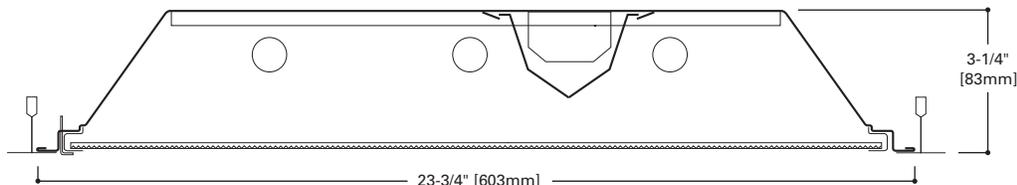


2GR8IC
328T8
332

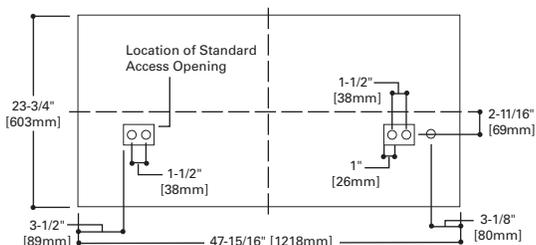
2' X 4' TROFFER
3 T8 LAMPS

General Purpose
T8 Commercial Troffer

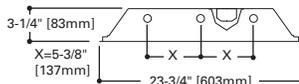
**FOR USE IN
INSULATED CEILINGS**



MOUNTING DATA

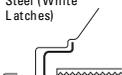


LAMP CONFIGURATIONS



DOOR FRAMES

2GR8
Flat, White
Steel (White
Latches)



CEILING COMPATIBILITY

G
Grid/Lay-in
Standard



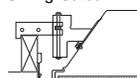
G
Concealed T



G
Slot Grid



F
Flange Trim
With Supporting
Swing Gates



**Ceiling
Type**

Exposed Grid
Concealed T
Slot Grid
Flange

**Trim
Type**

G
G
G
G***

ENERGY DATA

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

Luminaire Efficacy Rating
LER = FL-75
Catalog Number: 2GR8IC-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.

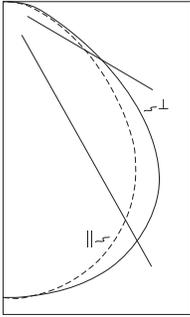
***When ordering Flange Kit for installation in drywall ceilings, see options and accessories compatibility section and ordering logic.

LINEAR DISCONNECT

Safe and convenient means of
disconnecting power.



PHOTOMETRICS



2GR81C-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:
2GR81C-332A.IES

LER = FL-75

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

Candela

Angle	Along II	45°	Across L
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																							
	80%				70%				50%				30%				10%				0%			
	70	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: 2GR81C-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	Packaging U =Unit Pack PAL =Job Pack, out of carton PALC =Job Pack, in carton
Width 2 =2' Width	Wattage 28T8 =28W T8 (48") ⁽⁶⁾ 32 =32W T8 (48")	Options GL =Single Element Fuse GM =Double Element Fuse Flex =Flex Installed EL =Emergency Installed ⁽⁸⁾	Number of Ballasts 1 =1 Ballast 2 =2 Ballasts 3 =3 Ballasts	
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⁾		
Type IC =IC Rated				

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⁾When utilizing 28W T8 lamps, HPT8 Ballast must be specified. ⁽⁷⁾For a complete listing of Fifthlight Technology products and other solutions from Cooper Lighting Solutions, visit www.cooperlighting.com ⁽⁸⁾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.

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

SHIPPING INFORMATION

Catalog No.	Wt.
2GR81C-328T8A	20 lbs.
2GR81C-332A	20 lbs.

