

COOPER LIGHTING - 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

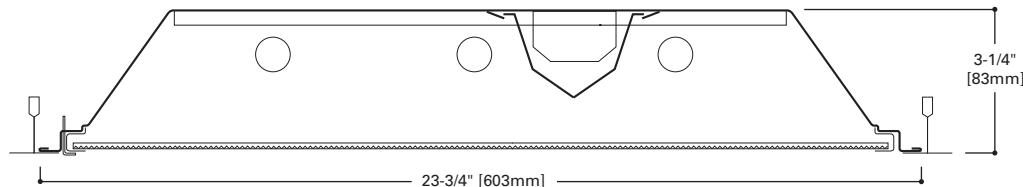
Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Controls (www.coopercontrol.com) to maximize energy savings.



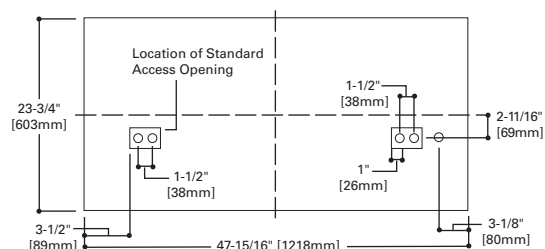
2GR8
328T8
332

2' X 4' TROFFER
3 T8 LAMPS

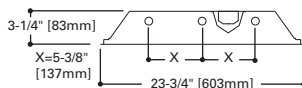
General Purpose
T8 Commercial Troffer



MOUNTING DATA

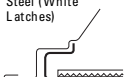


LAMP CONFIGURATIONS



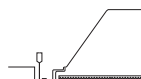
DOOR FRAMES

2GR8
Flat, White
Steel (White
Latches)



CEILING COMPATIBILITY

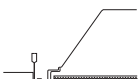
G
Grid/Lay-in
Standard



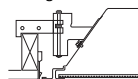
G
Concealed T



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***

COOPER LIGHTING

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.

LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

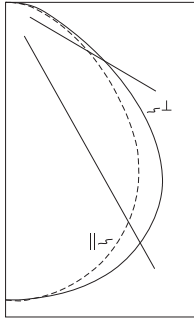
LINEAR DISCONNECT

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 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% | | |
| rw | 70 | 50 | 30 | 10 | 70 | 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 | Options FR =Fire Label | Packaging U =Unit Pack | |
| 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 | ACCESSORIES EQ-CLIP-U =T-BAR Safety Earthquake Clips ⁽¹⁾ FCTKA-24W-U =Field Installed Flange Kit | FCTK | A - 24 | R W - U |
| 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) PB1S =Silver Parabolic Louver (1/2" x 1/2" x 1/2") | | FCTK Trim Kit Field Convertible Aluminum | A - 24 22 =2' x 2' 24 =2' x 4' | R W - U N =Natural W =White Blank =Single R =In Row E =End Row U =Unit Pack | |
| Series R8 =General Purpose T8 Commercial Troffer ⁽¹⁾ | | | | | | |
| 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 Controls, visit www.coopercontrol.com.

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

SHIPPING INFORMATION

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