

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.

APPLICATION

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.

SPECIFICATION FEATURES

A... Construction

Unitized low profile recessed housing is die formed of code gauge prime cold rolled steel with full length stiffeners and mechanical endplate attachment for added strength. Off center, 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. Standard unit is NYC Approved. (No modifications necessary).

B... Electrical**

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Pressure lock lampholders. UL/CUL listed. Suitable for damp locations.

C... Finish

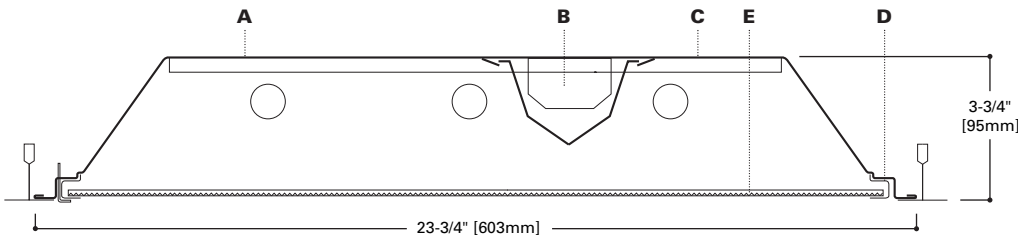
Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibition. Lighting grade baked white enamel finish with premium reflectance for high efficiency.

D... Hinging/Latching

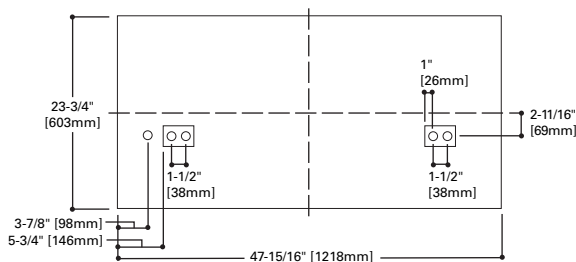
Positive spring loaded cam action steel latches and safety lock T-hinges provide secure, high quality door fit and allow hinging and latching from either side.

E... Frame/Shielding

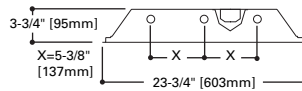
Heavy gauge flat steel door is die formed with reinforced mitered corners. Housing and door frame assemblies incorporate full length and width mechanical light traps. Light stabilized, acrylic prismatic lens.



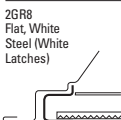
MOUNTING DATA



LAMP CONFIGURATIONS



DOOR FRAMES



CEILING COMPATIBILITY

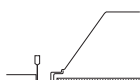
G
Grid/Lay-in
Standard



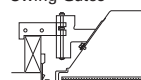
G
Concealed T



G
Slot Grid



F
Flange Trim
With Supporting
Swing Gates



**Ceiling
Type**

Exposed Grid
Concealed T
Slot Grid
Flange

**Trim
Type**

G
G
G
G***

COOPER LIGHTING

| Catalog # | | Type |
|-------------|--|------|
| Project | | |
| Comments | | Date |
| Prepared by | | |



2GR8
328T8
332

2' X 4' TROFFER
3 T8 LAMPS

General Purpose
T8 Commercial Troffer

ENERGY DATA

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

Luminaire Efficacy Rating
LER = FL-68
Catalog Number: 2GR8-332A

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.53

*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.

***Order FCS-24W-U Flange Kit for installation in drywall ceiling. See options and accessories compatibility section.

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

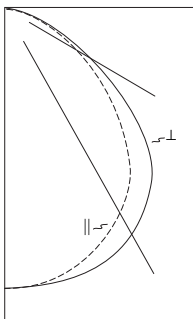
LINEAR DISCONNECT

Safe and convenient means of disconnecting power.



ADF012708

PHOTOMETRICS



2GR8-332A

Electronic Ballast
F32T8/35K lamps
2800 lumens

Spacing criterion:
(II) 1.2 x mounting
height, (⊥) 1.4 x
mounting height

Efficiency 76.0%

Test Report:
2GR8332A.IES

LER = FL-68

Yearly Cost of 1000
lumens, 3000 hrs at
.08 KWH = \$3.53

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 | 91 | 91 | 91 | 91 | 88 | 88 | 88 | 88 | 84 | 84 | 84 | 81 | 81 | 81 | 78 | 78 | 78 | 76 | | | |
| 1 | 84 | 81 | 78 | 75 | 82 | 79 | 76 | 74 | 76 | 74 | 72 | 73 | 71 | 69 | 70 | 69 | 67 | 66 | | | |
| 2 | 77 | 72 | 67 | 63 | 75 | 70 | 66 | 63 | 68 | 64 | 61 | 65 | 62 | 60 | 63 | 61 | 59 | 57 | | | |
| 3 | 71 | 64 | 59 | 54 | 70 | 63 | 58 | 54 | 61 | 57 | 53 | 59 | 55 | 52 | 57 | 54 | 51 | 50 | | | |
| 4 | 66 | 58 | 52 | 47 | 64 | 57 | 51 | 47 | 55 | 50 | 46 | 53 | 49 | 45 | 51 | 48 | 45 | 43 | | | |
| 5 | 60 | 51 | 45 | 40 | 59 | 51 | 45 | 40 | 49 | 44 | 40 | 48 | 43 | 39 | 46 | 42 | 39 | 37 | | | |
| 6 | 56 | 46 | 40 | 35 | 54 | 46 | 40 | 35 | 44 | 39 | 35 | 43 | 38 | 35 | 42 | 38 | 34 | 33 | | | |
| 7 | 51 | 42 | 35 | 31 | 50 | 41 | 35 | 31 | 40 | 34 | 31 | 39 | 34 | 30 | 38 | 33 | 30 | 29 | | | |
| 8 | 47 | 37 | 31 | 27 | 46 | 37 | 31 | 27 | 36 | 30 | 27 | 35 | 30 | 26 | 34 | 30 | 26 | 25 | | | |
| 9 | 44 | 34 | 27 | 23 | 43 | 33 | 27 | 23 | 32 | 27 | 23 | 31 | 26 | 23 | 31 | 26 | 23 | 21 | | | |
| 10 | 41 | 30 | 24 | 20 | 40 | 30 | 24 | 20 | 29 | 24 | 20 | 29 | 24 | 20 | 28 | 23 | 20 | 19 | | | |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 1965 | 23.4 | 30.8 |
| 0-40 | 3239 | 38.6 | 50.7 |
| 0-60 | 5421 | 64.5 | 84.9 |
| 0-90 | 6386 | 76.0 | 100.0 |
| 0-180 | 6386 | 76.0 | 100.0 |

Typical VCP Percentages

| Room Size (Ft.) | Height Along | | Height Across | |
|-----------------|--------------|-------|---------------|-------|
| | 8.5' | 10.0' | 8.5' | 10.0' |
| 20 x 20 | 67 | 71 | 64 | 68 |
| 30 x 30 | 60 | 64 | 57 | 61 |
| 30 x 60 | 52 | 55 | 47 | 50 |
| 60 x 30 | 62 | 66 | 60 | 64 |
| 60 x 60 | 52 | 55 | 48 | 51 |

Candela

| Angle | Along II | 45° | Across ⊥ |
|-------|----------|------|----------|
| 0 | 2460 | 2460 | 2460 |
| 5 | 2445 | 2456 | 2468 |
| 10 | 2416 | 2440 | 2464 |
| 15 | 2367 | 2409 | 2449 |
| 20 | 2295 | 2358 | 2413 |
| 25 | 2194 | 2281 | 2352 |
| 30 | 2063 | 2176 | 2266 |
| 35 | 1900 | 2045 | 2163 |
| 40 | 1705 | 1879 | 2015 |
| 45 | 1474 | 1650 | 1794 |
| 50 | 1200 | 1362 | 1474 |
| 55 | 932 | 1045 | 1122 |
| 60 | 710 | 745 | 811 |
| 65 | 533 | 497 | 566 |
| 70 | 389 | 326 | 416 |
| 75 | 275 | 243 | 327 |
| 80 | 201 | 204 | 251 |
| 85 | 110 | 122 | 143 |
| 90 | 0 | 0 | 0 |

ORDERING INFORMATION

SAMPLE NUMBER: 2GR8-332A-120V-EB81-U

| | | | |
|--|--|---|---|
| 2=2' Width Series GR8=General Purpose T8 Commercial Troffer⁽¹⁾ | Number of Lamps⁽²⁾ 3=3 Lamps (Not included) Wattage (Length) 28T8=28W T8 (48") 32=32W T8 (48") A=#12 Pattern Acrylic A125=#12 Pattern Acrylic (.125" Thick) A19/156=#19 Pattern Acrylic (.156" Thick) IMA 48=Injection Moldeed Acrylic (.150" Thick) PB1S=Silver Parabolic Louver (1/2" x 1/2" x 1/2") (Additional shielding media available, see accessory section) | Ballast Type⁽³⁾ BALLIST ADDED FOR ITEM QHE3X32T8 EB8_/PLUS= T8 Electronic Instant Start. No. of Ballast 1, 2 or 3 High Ballast Factor >1.13. Total Harmonic Distortion < 10% ER8_=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10% No. of Ballast 1, 2 or 3 HPT8 Ballast 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 | Options FCS-24W-U=Field Installed Flange Kit (See options & accessories) Packaging U=Unit Pack |
| Voltage⁽³⁾ 120V=120 Volt 277V=277 Volt 347V=347 Volt UNV=Universal Voltage 120-277⁽⁴⁾ | | ACCESSORIES EQ-CLIP-U=T-BAR Safety Earthquake Clips⁽¹⁾ | |
| Options GL=Single Element Fuse GM=Double Element Fuse Lamps=Lamps Installed Flex=Flex Installed EBP 700F = EBP700F Fluorescent Battery Pack for Sure-Lite | | | |

NOTES: ⁽¹⁾An EQ Grid Clip is recommended for all 9/16" ceiling systems. ⁽²⁾Standard off-center ballast compartment on 3-lamp fixtures. ⁽³⁾Products also available in non-US voltages and frequencies for international markets. ⁽⁴⁾Not available when specifying emergencies, voltage must be specific.

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. |
|-------------|---------|
| 2GR8-228T8A | 31 lbs. |
| 2GR8-332A | 31 lbs. |