

DESCRIPTION

GC8 is a premium grade specification lensed troffer series. This innovative, high quality luminaire is dedicated to the latest T8 lamp and micro electronic ballast technology for optimal performance and energy efficiency. The GC8 is compatible with all of today's popular ceiling systems and is available with a number of options and accessories for application versatility.

The GC8 Series features efficiency, quality and performance. The series is an excellent choice for commercial office spaces, schools, hospitals or retail merchandising areas.

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

SPECIFICATION FEATURES

Construction

Rigid housing is die formed of code gauge prime cold rolled steel and features full length die-formed stiffeners and unibody endplate for added strength. Side flanges are hemmed. Innovative design provides superior lens brightness uniformity and visual comfort. Micro ballast cover*** reduces ballast shadow for superior lens brightness uniformity and is easily removed without tools. Die formed captive lampholder brackets fully enclose lampholder wiring permitting easy lampholder replacement. Unibody endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. Ample KOs are provided for continuous row wiring. Endplates have integral Grid-lock feature for safety and convenience.

Electrical

Ballasts are CBM/ETL Class "P" and are positively secured by mounting bolts. Roto-lock lampholders ensure positive lamp retention. UL/CUL listed. Suitable for damp locations.**

Finish

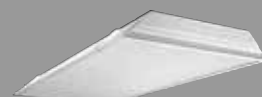
Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibition. Housing and ballast cover finished with new 90% reflective white enamel for superior performance. "PAF" Painted After Fabrication option also available.

Hinging/Latching

Positive spring loaded steel latches with baked white enamel finish. Safety-lock T-hinges allow hinging and latching either side.

Frame/Shielding

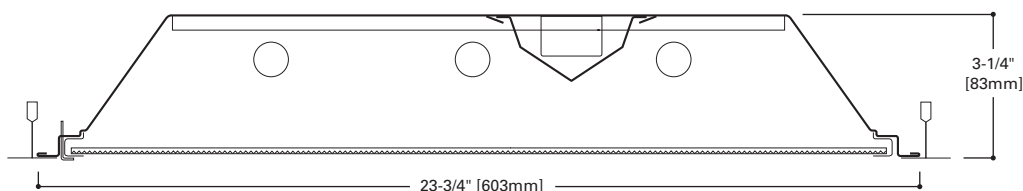
Die formed, heavy gauge, flat steel door with reinforced mitered corners and baked white enamel finish. Flat and regressed aluminum doors also available. Positive light seals. Light stabilized, acrylic prismatic lens. Standard #12 pattern. Numerous additional shielding options available.



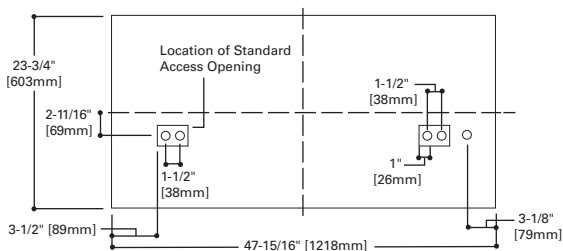
2GC8
328T8
332

2' X 4' TROFFER
3 T8 LAMPS

Specification T8 Troffer



MOUNTING DATA



CEILING COMPATIBILITY

G
Grid/Lay-in
Standard



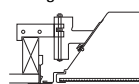
G
Concealed T



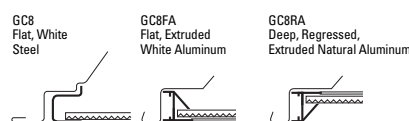
G
Slot Grid



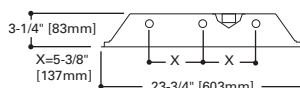
F
Flange Trim
With Supporting
Swing Gates



DOOR FRAMES



LAMP CONFIGURATIONS



Ceiling Type

Exposed Grid
Concealed T
Slot Grid
Flange

(Verify compatibility/ consult factory.)

Trim Type

G
G
G
F

ENERGY DATA

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

Luminaire Efficacy Rating

LER = FL-83

Catalog Number: 2GC8-332A

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$2.89

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

**Consult Pre Sales Technical Support.

***Full sized ballast cover for biaxial lamps and emergency option may apply.

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

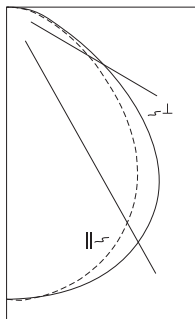
LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.



PHOTOMETRICS

**2GC8-332A**

Electronic Ballast

(3) F32T8 lamps

3100 lumens

Spacing criterion:

(H) 1.2 x mounting

height, (L) 1.4 x

mounting height

Efficiency 85%

Test Report:

2GC8-332A.IES

LER = FL-83

Yearly Cost of 1000

lumens, 3000 hrs at

.08 KWH = \$2.89

Candela

| Angle | Along H | 45° | Across |
|-------|---------|------|--------|
| 0 | 2985 | 2985 | 2985 |
| 5 | 2987 | 2971 | 2981 |
| 10 | 2947 | 2946 | 2971 |
| 15 | 2881 | 2906 | 2950 |
| 20 | 2785 | 2840 | 2907 |
| 25 | 2659 | 2753 | 2837 |
| 30 | 2500 | 2628 | 2737 |
| 35 | 2309 | 2470 | 2603 |
| 40 | 2074 | 2253 | 2424 |
| 45 | 1797 | 1979 | 2166 |
| 50 | 1491 | 1683 | 1839 |
| 55 | 1194 | 1368 | 1471 |
| 60 | 935 | 1023 | 1109 |
| 65 | 711 | 692 | 800 |
| 70 | 520 | 441 | 576 |
| 75 | 370 | 296 | 433 |
| 80 | 263 | 227 | 319 |
| 85 | 141 | 139 | 184 |
| 90 | 11 | 26 | 37 |

Coefficients of Utilization

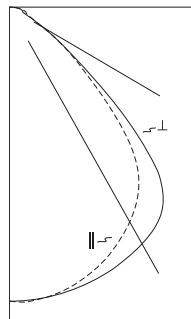
| Effective floor cavity reflectance | | | | | | | | | | | | 20% | | | | | | | | | | | |
|------------------------------------|-----|-----|-----|-----|-----|----|----|----|-----|----|----|-----|-----|----|----|----|-----|----|--|--|----|--|--|
| rc | 80% | | | | 70% | | | | 50% | | | | 30% | | | | 10% | | | | 0% | | |
| rw | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 101 | 101 | 101 | 101 | 99 | 99 | 99 | 99 | 94 | 94 | 94 | 90 | 90 | 90 | 87 | 87 | 87 | 85 | | | | | |
| 1 | 93 | 89 | 86 | 83 | 91 | 87 | 84 | 81 | 84 | 81 | 79 | 80 | 78 | 76 | 77 | 76 | 74 | 72 | | | | | |
| 2 | 85 | 78 | 73 | 68 | 83 | 77 | 72 | 67 | 74 | 70 | 66 | 71 | 68 | 64 | 69 | 66 | 63 | 61 | | | | | |
| 3 | 78 | 69 | 63 | 57 | 76 | 68 | 62 | 57 | 66 | 60 | 56 | 63 | 59 | 55 | 61 | 57 | 54 | 52 | | | | | |
| 4 | 72 | 62 | 55 | 49 | 70 | 61 | 54 | 49 | 59 | 53 | 48 | 57 | 52 | 48 | 55 | 50 | 47 | 45 | | | | | |
| 5 | 66 | 55 | 48 | 43 | 64 | 55 | 48 | 42 | 53 | 47 | 42 | 51 | 46 | 41 | 50 | 45 | 41 | 39 | | | | | |
| 6 | 61 | 50 | 43 | 37 | 59 | 49 | 42 | 37 | 48 | 42 | 37 | 46 | 41 | 37 | 45 | 40 | 36 | 35 | | | | | |
| 7 | 57 | 45 | 38 | 33 | 55 | 45 | 38 | 33 | 44 | 37 | 33 | 42 | 37 | 33 | 41 | 36 | 32 | 31 | | | | | |
| 8 | 53 | 42 | 34 | 30 | 51 | 41 | 34 | 30 | 40 | 34 | 29 | 39 | 33 | 29 | 38 | 33 | 29 | 27 | | | | | |
| 9 | 49 | 38 | 31 | 27 | 48 | 38 | 31 | 27 | 37 | 31 | 27 | 36 | 30 | 26 | 35 | 30 | 26 | 25 | | | | | |
| 10 | 46 | 35 | 29 | 24 | 45 | 35 | 28 | 24 | 34 | 28 | 24 | 33 | 28 | 24 | 32 | 27 | 24 | 22 | | | | | |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 2371 | 25.5 | 30.0 |
| 0-40 | 3907 | 42.0 | 49.4 |
| 0-60 | 6627 | 71.3 | 83.8 |
| 0-90 | 7909 | 85.0 | 99.9 |
| 0-180 | 7909 | 85.0 | 100.0 |

Luminance Data

| Angle in Deg | Average 0-Deg cd/sm | Average 45-Deg cd/sm | Average 90-Deg cd/sm |
|--------------|---------------------|----------------------|----------------------|
| 45 | 4706 | 4489 | 4913 |
| 55 | 3339 | 3826 | 4114 |
| 65 | 2698 | 2626 | 3036 |
| 75 | 2293 | 1834 | 2683 |
| 85 | 2595 | 2558 | 3386 |

**2GC8-332A156**

Electronic Ballast

(3) F32T8 lamps

3100 lumens

Spacing criterion:

(H) 1.2 x mounting

height, (L) 1.4 x

mounting height

Efficiency 82.5%

Test Report:

2GC8-

332A19_156.IES

LER = FL-80

Yearly Cost of 1000

lumens, 3000 hrs at

.08 KWH = \$3.00

Candela

| Angle | Along H | 45° | Across |
|-------|---------|------|--------|
| 0 | 3509 | 3509 | 3509 |
| 5 | 3509 | 3490 | 3501 |
| 10 | 3454 | 3451 | 3474 |
| 15 | 3362 | 3388 | 3433 |
| 20 | 3241 | 3301 | 3379 |
| 25 | 3086 | 3189 | 3306 |
| 30 | 2908 | 3045 | 3223 |
| 35 | 2683 | 2848 | 3105 |
| 40 | 2321 | 2496 | 2839 |
| 45 | 1704 | 1907 | 2163 |
| 50 | 1126 | 1373 | 1281 |
| 55 | 734 | 1028 | 742 |
| 60 | 408 | 697 | 422 |
| 65 | 271 | 448 | 235 |
| 70 | 212 | 284 | 170 |
| 75 | 196 | 146 | 159 |
| 80 | 150 | 79 | 132 |
| 85 | 77 | 73 | 81 |
| 90 | 5 | 17 | 16 |

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 | 98 | 98 | 98 | 98 | 96 | 96 | 96 | 96 | 92 | 92 | 92 | 88 | 88 | 88 | 84 | 84 | 84 | 82 | | | | | |
| 1 | 91 | 88 | 85 | 82 | 89 | 86 | 83 | 81 | 83 | 80 | 78 | 79 | 78 | 76 | 77 | 75 | 74 | 72 | | | | | |
| 2 | 84 | 79 | 74 | 70 | 82 | 77 | 73 | 69 | 74 | 70 | 67 | 72 | 68 | 66 | 69 | 67 | 64 | 63 | | | | | |
| 3 | 78 | 70 | 65 | 60 | 76 | 69 | 64 | 59 | 67 | 62 | 58 | 65 | 61 | 57 | 63 | 59 | 56 | 55 | | | | | |
| 4 | 72 | 63 | 57 | 52 | 70 | 62 | 56 | 52 | 60 | 55 | 51 | 59 | 54 | 50 | 57 | 53 | 50 | 48 | | | | | |
| 5 | 67 | 57 | 51 | 46 | 65 | 57 | 50 | 46 | 55 | 49 | 45 | 53 | 48 | 45 | 52 | 48 | 44 | 43 | | | | | |
| 6 | 62 | 52 | 46 | 41 | 61 | 51 | 45 | 41 | 50 | 44 | 40 | 49 | 44 | 40 | 47 | 43 | 40 | 38 | | | | | |
| 7 | 58 | 48 | 41 | 36 | 57 | 47 | 41 | 36 | 46 | 40 | 36 | 45 | 40 | 36 | 44 | 39 | 36 | 34 | | | | | |
| 8 | 54 | 44 | 37 | 33 | 53 | 43 | 37 | 33 | 42 | 37 | 33 | 41 | 36 | 32 | 40 | 36 | 32 | 31 | | | | | |
| 9 | 51 | 40 | 34 | 30 | 50 | 40 | 34 | 30 | 39 | 33 | 30 | 38 | 33 | 29 | 37 | 33 | 29 | 28 | | | | | |
| 10 | 48 | 37 | 31 | 27 | 47 | 37 | 31 | 27 | 36 | 31 | 27 | 35 | 30 | 27 | 35 | 30 | 27 | 25 | | | | | |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 2762 | 29.7 | 36.0 |
| 0-40 | 4546 | 48.9 | 59.3 |
| 0-60 | 6894 | 74.1 | 89.9 |
| 0-90 | 7671 | 82.5 | 100.0 |
| 0-180 | 7671 | 82.5 | 100.0 |

Luminance Data

| Angle in Deg | Average 0-Deg cd/sm | Average 45-Deg cd/sm | Average 90-Deg cd/sm |
|--------------|---------------------|----------------------|----------------------|
| 45 | 3865 | 4326 | 4906 |
| 55 | 2053 | 2875 | 2075 |
| 65 | 1029 | 1700 | 892 |
| 75 | 1215 | 905 | 985 |
| 85 | 1417 | 1343 | 1491 |

ORDERING INFORMATION

SAMPLE NUMBER: 2GC8-332A-UNV0V-EB81-U

| | | | | | |
|--|---|--|--|---|--|
| Rating⁽⁵⁾ Blank = Standard ATW-SW4 = Chicago Rated | Number of Lamps⁽²⁾ 3 Lamps (Not included) | Voltage⁽³⁾ 120V =120 Volt 277V =277 Volt 347V =347 Volt UNV =Universal Voltage 120-277 ⁽⁴⁾ | Options GL =Single Element Fuse GM =Double Element Fuse Lamps =Lamps Installed Flex =Flex Installed EL =Emergency Installed | Options FR =Fire Rated Label REP =Riveted End Plates PAF =Painted After Fabrication | Packaging U =Unit Pack PAL =Job Pack, out of carton PALC =Job Pack, in carton |
| Width 2=2' Width | Wattage (Length) 28T8 =28W T8 (48") 32 =32W T8 (48") | Ballast Type⁽³⁾ EB8 = T8 Electronic Instant Start. Total Harmonic Distortion < 10% No. of Ballast 1, 2 or 3 EB8 /PLUS = T8 Electronic Instant Start. High Ballast Factor >1.13. Total Harmonic Distortion < 10% No. of Ballast 1, 2 or 3 ER8 = T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10% No. of Ballast 1, 2 or 3 | | ACCESSORIES EQ-CLIP-U =T-BAR Safety Earthquake Clips ⁽¹⁾ FCTKA-24W-U =Field Installed Flange Kit | |
| Trim Type G =Grid/Lay-in (Standard) ⁽¹⁾ G =Concealed T G =Slot Grid F =Flange Trim | A =#12 Pattern Acrylic 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") | Option – Aluminum Flange Trim⁽⁶⁾ Blank =SW (Single White) Type Color 'S' Single 'N' Natural 'R' In Row 'W' White 'E' End of Row | | FCTK Trim Kit Field Convertible Aluminum | |
| Series C8 =Specification T8 Troffer | Door Frame Standard =Flat White Steel Door (Leave Blank) FA =Flush White Extruded Aluminum c/w Spring Latch RA =Regressed White Extruded Aluminum FAN =Flush Natural Anodized Extruded Aluminum RAN =Regressed Natural Anodized Extruded Aluminum FAB =Flush Black Extruded Aluminum RAB =Regressed Black Extruded Aluminum | High Performance T8 Ballast (HPT8) 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 | | A - 24 R W - U 22 =2' x 2' 24 =2' x 4' N =Natural W =White Blank =Single R =In Row E =End Row U =Unit Pack | |

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. ⁽⁵⁾ For NYC rated product, see separate specification sheets. ⁽⁶⁾ Specify row configuration, type in catalog number when ordering complete fixture.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

SHIPPING INFORMATION

| Catalog No. | Wt. |
|-------------|---------|
| 2GC8-328T8A | 20 lbs. |
| 2GC8-332A | 20 lbs. |