

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 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. Heavy endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. KO's 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. Pressure lock lampholders. 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 matte white enamel for superior performance. "PAF" Painted After Fabrication option also available.

Hinging/Latching

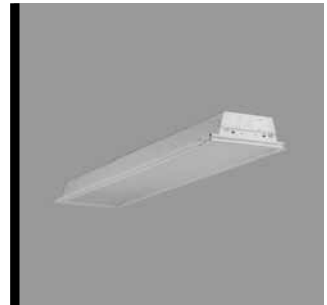
Positive Cam latch with baked white enamel finish. Safety-lock T-hinges allow hinging and latching either side.

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 100% virgin acrylic prismatic lens. Standard #12 pattern. Numerous additional shielding options available.

Controls

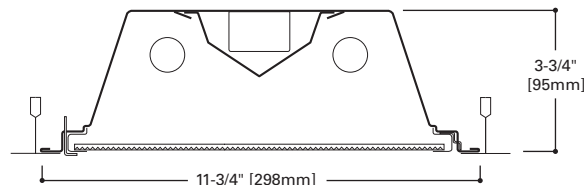
Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Lighting Solutions (www.cooperlighting.com) to maximize energy savings.



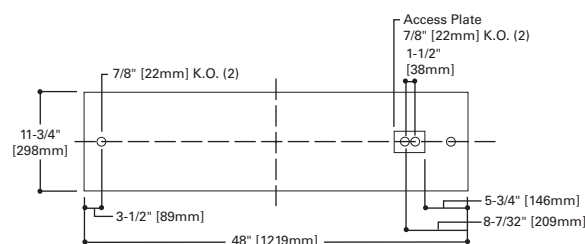
GC8 232

1' X 4' TROFFER
2 LAMP

Specification T8 Troffer
New York City Rated



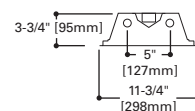
MOUNTING DATA



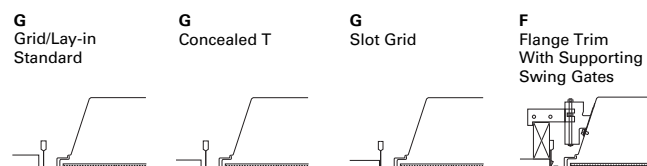
DOOR FRAMES



LAMP CONFIGURATIONS



CEILING COMPATIBILITY



COOPER LIGHTING SOLUTIONS

| Ceiling Type | Trim Type |
|--------------|-----------|
| Exposed Grid | G |
| Concealed T | G |
| Slot Grid | G |
| Flange | F |

(Verify compatibility/ consult factory.)

ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
232 (61)

ES Ballast & STD Lamps
232 (71)

Luminaire Efficacy Rating
LER = FL-58
Catalog Number: GC8-232A

Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$4.15

*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.

***Full sized ballast cover for emergency option.

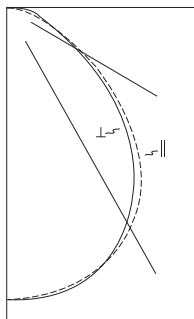
LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

LINEAR DISCONNECT
Safe and convenient means of disconnecting power.



ADF111079

PHOTOMETRICS



GC8-232A
 Electronic Ballast
 (2) FO32/35K lamps
 2800 lumens

Spacing criterion:
 (ll) 1.2 x mounting
 height, (⊥) 1.2 x
 mounting height

Efficiency 71.6%

Test Report:
 GC8232A.IES

LER = FL-58

Yearly Cost of 1000
 lumens, 3000 hrs at
 .08 KWH = \$4.15

Coefficients of Utilization

| rc | Effective floor cavity reflectance | | | | | | | | | | | | | | | | | |
|------------|------------------------------------|----|----|----|-----|----|----|----|-----|----|----|----|----|----|----|----|----|----|
| | 80% | | | | 70% | | | | 20% | | | | 0% | | | | | |
| rw | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 85 | 85 | 85 | 85 | 83 | 83 | 83 | 83 | 80 | 80 | 80 | 76 | 76 | 76 | 73 | 73 | 73 | 72 |
| 1 | 79 | 76 | 74 | 71 | 77 | 75 | 72 | 70 | 72 | 70 | 68 | 69 | 67 | 66 | 66 | 65 | 64 | 62 |
| 2 | 73 | 68 | 64 | 61 | 71 | 67 | 63 | 60 | 64 | 61 | 58 | 62 | 59 | 57 | 60 | 58 | 56 | 54 |
| 3 | 68 | 61 | 56 | 52 | 66 | 60 | 56 | 52 | 58 | 54 | 51 | 56 | 53 | 50 | 55 | 52 | 49 | 48 |
| 4 | 63 | 55 | 50 | 45 | 61 | 54 | 49 | 45 | 53 | 48 | 45 | 51 | 47 | 44 | 49 | 46 | 43 | 42 |
| 5 | 58 | 50 | 44 | 39 | 56 | 49 | 43 | 39 | 47 | 43 | 39 | 46 | 42 | 38 | 45 | 41 | 38 | 37 |
| 6 | 54 | 45 | 39 | 35 | 52 | 44 | 39 | 35 | 43 | 38 | 34 | 42 | 37 | 34 | 41 | 37 | 34 | 32 |
| 7 | 50 | 41 | 35 | 31 | 48 | 40 | 35 | 31 | 39 | 34 | 30 | 38 | 34 | 30 | 37 | 33 | 30 | 29 |
| 8 | 46 | 37 | 31 | 27 | 45 | 36 | 31 | 27 | 35 | 30 | 27 | 34 | 30 | 27 | 34 | 29 | 26 | 25 |
| 9 | 42 | 33 | 27 | 24 | 41 | 33 | 27 | 23 | 32 | 27 | 23 | 31 | 27 | 23 | 30 | 26 | 23 | 22 |
| 10 | 39 | 30 | 25 | 21 | 38 | 30 | 24 | 21 | 29 | 24 | 21 | 28 | 24 | 21 | 28 | 24 | 21 | 19 |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|--------------|--------|-------|----------|
| 0-30 | 1380 | 24.6 | 34.4 |
| 0-40 | 2196 | 39.2 | 54.8 |
| 0-60 | 3452 | 61.6 | 86.1 |
| 0-90 | 4011 | 71.6 | 100.0 |
| 0-180 | 4011 | 71.6 | 100.0 |

Typical VCP Percentages

| Room Size (Ft.) | Height Along | | Height Across | |
|-----------------|--------------|-------|---------------|-------|
| | 8.5' | 10.0' | 8.5' | 10.0' |
| 20 x 20 | 60 | 64 | 60 | 65 |
| 30 x 30 | 52 | 57 | 51 | 56 |
| 30 x 60 | 43 | 46 | 40 | 44 |
| 60 x 30 | 54 | 59 | 54 | 58 |
| 60 x 60 | 44 | 47 | 41 | 45 |

Candlepower

| Angle | Along ll | 45° | Across ⊥ |
|-----------|----------|------|----------|
| 0 | 1782 | 1782 | 1782 |
| 5 | 1768 | 1778 | 1779 |
| 10 | 1745 | 1759 | 1763 |
| 15 | 1707 | 1724 | 1728 |
| 20 | 1651 | 1668 | 1662 |
| 25 | 1574 | 1582 | 1559 |
| 30 | 1471 | 1463 | 1419 |
| 35 | 1343 | 1312 | 1258 |
| 40 | 1186 | 1133 | 1100 |
| 45 | 1002 | 943 | 931 |
| 50 | 813 | 760 | 749 |
| 55 | 633 | 579 | 549 |
| 60 | 475 | 401 | 401 |
| 65 | 348 | 261 | 305 |
| 70 | 253 | 175 | 245 |
| 75 | 193 | 140 | 212 |
| 80 | 140 | 117 | 156 |
| 85 | 75 | 65 | 84 |
| 90 | 0 | 0 | 0 |

ORDERING INFORMATION

SAMPLE NUMBER: NYGC8-232A-120V-EB81-U

| | | | |
|---|--|--|--|
| <p>Rating NY=New York City Rated (20 Gauge Riveted End Plates)</p> | <p>Number of Lamps 2=2 Lamps (Not included)</p> | <p>Ballast Type EB8_ =T8 Electronic Start. Total Harmonic Distortion < 10%</p> | <p>Options RLS=Rotor Lock Socket (T8 Lamp only) FR=Fire Rated Label MEP=Modified End Plate REP=Riveted End Plate PAF=Painted After Fabrication</p> |
| <p>Width Blank=1' Width</p> | <p>Wattage 32=32W T8 (48")</p> | <p>EB8_ /PLUS= T8 Electronic Start. Total Harmonic Distortion < 10%. High Ballast Factor > 1.15.</p> | <p>Packaging U=Unit Pack PAL=Job Pack, out of carton PALC=Job Pack, in carton</p> |
| <p>Trim Type G=Grid/Lay-in (Standard)⁽¹⁾ G=Concealed T G=Slot Grid F=Flange Trim C=Modular Trim</p> | <p>Shielding A=#12 Acrylic Pattern A125=#12 Pattern Acrylic (.125" Thickness) A19/156=#19 Pattern Acrylic (.156" Thickness) DA=Dropped Dish Matte White Acrylic IMA48=Injection Molded Acrylic (.150" Thick)</p> | <p>ER8_ = T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%</p> | <p>ACCESSORIES EQ-CLIP-U=T-BAR Safety Earthquake Clips⁽¹⁾</p> |
| <p>Series C8=Specification T8 Troffer</p> | <p>Voltage⁽²⁾ 120V=120 Volt 277V=277 Volt 347V=347 Volt UNV=Universal Voltage 120-277⁽³⁾</p> | <p>High Performance T8 Ballasts HB8_ =T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 – .88</p> | |
| <p>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</p> | <p>Options GL=Single Element Fuse GM=Double Element Fuse Lamps=Lamps Installed Flex=Flex Installed EL=Emergency Installed⁽⁷⁾</p> | <p>HB8_ L=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Low Ballast Factor .77 – .82</p> | |
| <p>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⁾For a complete listing of Fifthlight Technology products and other solutions from Cooper Lighting Solutions, visit www.cooperlighting.com. ⁽⁵⁾0-10V ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system. ⁽⁶⁾Specification grade 0-10V dimming ballast are NEMA premium and CEE listed. They are compatible with low mercury and energy saving lamps. ⁽⁷⁾Please specify required voltage, 120V or 277V.</p> | | <p>HB8_ N=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. Normal Ballast Factor 1.0</p> | |
| <p>Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Solutions Representative for availability and ordering information.</p> | | <p>HB8_ H=T8 Electronic Instant Start. Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20</p> | |
| | | <p>HR8_ T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 – .88</p> | |
| | | <p>HR8_ DIM=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Step Dimming. Ballast Factor .88</p> | |
| | | <p>HR8_ L=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Low Ballast Factor .71 – .79</p> | |
| | | <p>HR8_ H=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20</p> | |
| | | <p>0-10V Dimming Ballasts⁽⁵⁾ 5LTV8_ =T8 0-10V Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87</p> | |
| | | <p>5LTVS8_ =T8 0-10V Spec Grade Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87⁽⁶⁾</p> | |
| | | <p>Fifth Light DALI Ballasts⁽⁴⁾ 5LT8_ =T8 DALI Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 1.0</p> | |
| | | <p>Number of Ballasts 1=1 Ballast 2=2 Ballasts 3=3 Ballasts</p> | |

SHIPPING INFORMATION

| | |
|--------------------|------------|
| Catalog No. | Wt. |
| NYGC8-232A | 19 lbs |

