

DESCRIPTION

The GC Series features a 4-3/4" deep para-contoured fixture housing, high reflectivity and optimum lamp to lens spacing. The series produces total uniformity of light in the luminous area and is compatible with all of today's popular ceiling systems and is available with a number of options and accessories for application versatility.

The specification luminaire is designed to offer maximum efficiency and performance for today's unique interior specifications. The GC 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

Nominal 4-3/4" deep, para-contoured housing, die formed, prime cold rolled steel. Die embossed housing has full length die formed stiffeners for added strength. Deep "V" ballast/wireway cover easily removed without tools. Die formed captive lampholder bracket fully encloses lampholder wiring permitting easy lampholder replacement. Heavy endplates are securely attached with interlocking tabs and screws. Four auxiliary fixture end suspension points provided. KOs 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 inhibitor. Lighting grade, baked white enamel finish.

Hinging/Latching

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

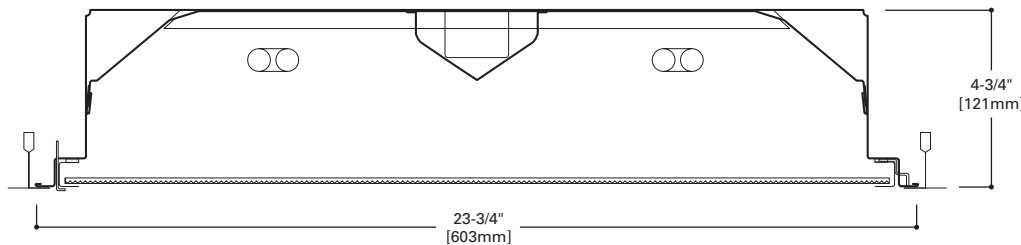
Frame/Shielding

Die formed, heavy gauge, flat steel door with reinforced mitered corners and baked white enamel finish. Positive light seals. Light stabilized 100% virgin acrylic prismatic shielding. Standard #12 pattern. Optional shielding available.

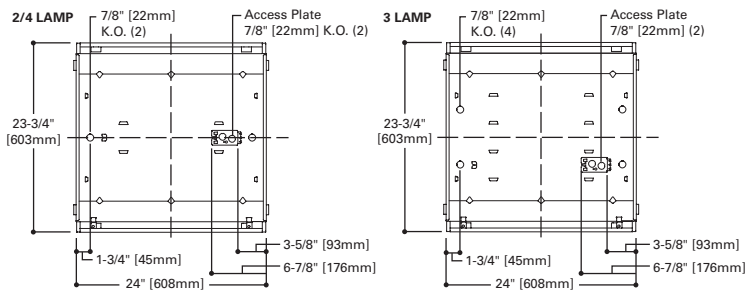


2GC
2BX40
3BX40
4BX40

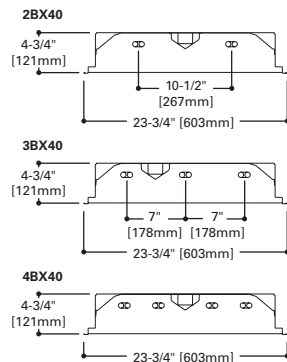
2' X 2' TROFFER
2, 3 OR 4 BIAXIAL LAMPS
Specification Deep Troffer



MOUNTING DATA



LAMP CONFIGURATIONS

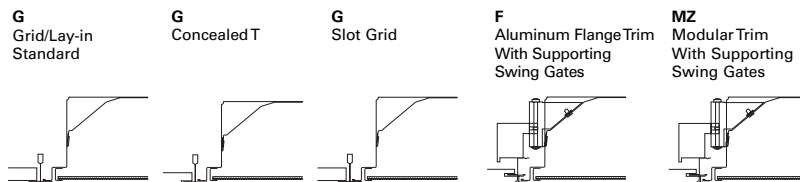


DOOR FRAMES

GC Flat, White Steel
GCFA Flat, Extruded White Aluminum
GCRA Deep, Regressed, Extruded White Aluminum



CEILING COMPATIBILITY



| Ceiling Type | Trim Type |
|----------------------|-----------|
| Exposed Grid | G |
| Concealed T | G |
| Slot Grid | G |
| Flange | F |
| Concealed "T" or "Z" | MZ |
| Metal Pan | MZ |

(Verify compatibility/ consult Pre Sales Technical Support.)

ENERGY DATA

Input Watts:
EB Ballast & STD Lamps
2BX40 (67), 3BX40 (110)
Luminaire Efficacy Rating
LER = FL-62
Catalog Number: 2GC-2BX40
Yearly Cost of 1000 lumens,
3000 hrs at .08 KWH = \$3.87

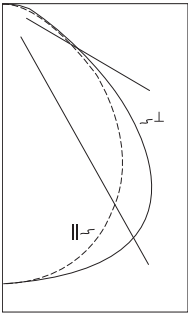
*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.
**Consult Pre Sales Technical Support.

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

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.

PHOTOMETRICS



2GC-2BX40A
Electronic Ballast
F40BX/SPX35/RS
Lamps
3150 Lumens

Spacing criterion:
(II) 1.2 x mounting
height, (⊥) 1.4 x
mounting height
Efficiency 74.3%

Test Report:
2GC2BX40A.IES

LER = FL-62

Yearly Cost of 1000
lumens, 3000 hrs at
.08 KWH = \$3.87

Coefficients of Utilization

| rc | Effective floor cavity reflectance | | | | | | | | | | | | | | | | | | | | | |
|------------|------------------------------------|----|----|----|-----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | 80% | | | | 70% | | | | 20% | | | | | | | | | | | | | |
| | rw | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0% |
| RCR | 0 | 88 | 88 | 88 | 88 | 86 | 86 | 86 | 86 | 83 | 83 | 83 | 79 | 79 | 79 | 76 | 76 | 76 | 74 | 74 | 74 | 74 |
| | 1 | 82 | 79 | 76 | 74 | 80 | 77 | 75 | 73 | 74 | 72 | 70 | 71 | 70 | 68 | 69 | 67 | 66 | 65 | 65 | 65 | 65 |
| | 2 | 76 | 70 | 66 | 62 | 74 | 69 | 65 | 62 | 67 | 63 | 60 | 64 | 61 | 59 | 62 | 60 | 58 | 56 | 56 | 56 | 56 |
| | 3 | 70 | 63 | 58 | 54 | 68 | 62 | 57 | 53 | 60 | 56 | 52 | 58 | 54 | 52 | 56 | 53 | 51 | 49 | 49 | 49 | 49 |
| | 4 | 65 | 57 | 51 | 47 | 63 | 56 | 51 | 46 | 54 | 49 | 46 | 52 | 48 | 45 | 51 | 47 | 45 | 43 | 43 | 43 | 43 |
| | 5 | 60 | 51 | 45 | 40 | 58 | 50 | 44 | 40 | 49 | 44 | 40 | 47 | 43 | 39 | 46 | 42 | 39 | 37 | 37 | 37 | 37 |
| | 6 | 55 | 46 | 40 | 35 | 54 | 45 | 40 | 35 | 44 | 39 | 35 | 43 | 38 | 35 | 42 | 38 | 34 | 33 | 33 | 33 | 33 |
| | 7 | 51 | 42 | 35 | 31 | 50 | 41 | 35 | 31 | 40 | 35 | 31 | 39 | 34 | 31 | 38 | 34 | 30 | 29 | 29 | 29 | 29 |
| | 8 | 47 | 37 | 31 | 27 | 46 | 37 | 31 | 27 | 36 | 31 | 27 | 35 | 30 | 27 | 34 | 30 | 27 | 25 | 25 | 25 | 25 |
| | 9 | 43 | 34 | 28 | 24 | 42 | 33 | 27 | 24 | 32 | 27 | 23 | 32 | 27 | 23 | 31 | 26 | 23 | 22 | 22 | 22 | 22 |
| | 10 | 40 | 31 | 25 | 21 | 39 | 30 | 25 | 21 | 29 | 24 | 21 | 29 | 24 | 21 | 28 | 24 | 21 | 19 | 19 | 19 | 19 |

Zonal Lumen Summary

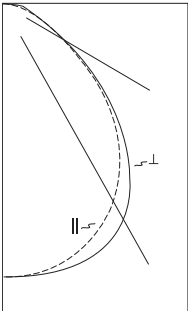
| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 1526 | 24.2 | 32.6 |
| 0-40 | 2492 | 39.6 | 53.2 |
| 0-60 | 4013 | 63.7 | 85.7 |
| 0-90 | 4682 | 74.3 | 100.0 |
| 0-180 | 4682 | 74.3 | 100.0 |

Typical VCP Percentages

| Room Size (Ft.) | Height Along | | Height Across | |
|-----------------|--------------|-------|---------------|-------|
| | 8.5' | 10.0' | 8.5' | 10.0' |
| 20 x 20 | 59 | 64 | 55 | 60 |
| 30 x 30 | 51 | 56 | 48 | 52 |
| 30 x 60 | 41 | 45 | 37 | 40 |
| 60 x 30 | 52 | 57 | 50 | 55 |
| 60 x 60 | 42 | 45 | 38 | 41 |

Candela

| Angle | Along II | 45° | Across ⊥ |
|-------|----------|------|----------|
| 0 | 1902 | 1902 | 1902 |
| 5 | 1896 | 1898 | 1911 |
| 10 | 1868 | 1884 | 1916 |
| 15 | 1812 | 1853 | 1911 |
| 20 | 1737 | 1806 | 1894 |
| 25 | 1641 | 1738 | 1852 |
| 30 | 1521 | 1640 | 1774 |
| 35 | 1375 | 1506 | 1659 |
| 40 | 1204 | 1331 | 1494 |
| 45 | 1007 | 1120 | 1269 |
| 50 | 795 | 906 | 999 |
| 55 | 618 | 678 | 744 |
| 60 | 479 | 472 | 526 |
| 65 | 368 | 322 | 383 |
| 70 | 273 | 222 | 301 |
| 75 | 202 | 175 | 248 |
| 80 | 154 | 146 | 190 |
| 85 | 86 | 79 | 104 |
| 90 | 0 | 0 | 0 |



2GC-3BX40A
Electronic Ballast
F40BX/SPX35/IS
Lamps
3150 Lumens

Spacing criterion:
(II) 1.2 x mounting
height, (⊥) 1.3 x
mounting height
Efficiency 73.4%

Test Report:
2GC3BX40A.IES

LER = FL-61

Yearly Cost of 1000
lumens, 3000 hrs at
.08 KWH = \$3.93

Coefficients of Utilization

| rc | Effective floor cavity reflectance | | | | | | | | | | | | | | | | | | | | | |
|------------|------------------------------------|----|----|----|-----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | 80% | | | | 70% | | | | 20% | | | | | | | | | | | | | |
| | rw | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0% |
| RCR | 0 | 87 | 87 | 87 | 87 | 85 | 85 | 85 | 85 | 82 | 82 | 82 | 78 | 78 | 78 | 75 | 75 | 75 | 73 | 73 | 73 | 73 |
| | 1 | 81 | 78 | 75 | 73 | 79 | 76 | 74 | 72 | 73 | 71 | 70 | 70 | 69 | 67 | 68 | 67 | 65 | 64 | 64 | 64 | 64 |
| | 2 | 75 | 70 | 66 | 62 | 73 | 68 | 65 | 61 | 66 | 63 | 60 | 64 | 61 | 59 | 61 | 59 | 57 | 56 | 56 | 56 | 56 |
| | 3 | 69 | 63 | 58 | 54 | 68 | 62 | 57 | 53 | 60 | 56 | 52 | 58 | 54 | 51 | 56 | 53 | 50 | 49 | 49 | 49 | 49 |
| | 4 | 64 | 57 | 51 | 47 | 63 | 56 | 50 | 46 | 54 | 49 | 46 | 52 | 48 | 45 | 51 | 47 | 45 | 43 | 43 | 43 | 43 |
| | 5 | 59 | 51 | 45 | 40 | 58 | 50 | 44 | 40 | 48 | 44 | 40 | 47 | 43 | 39 | 46 | 42 | 39 | 38 | 38 | 38 | 38 |
| | 6 | 55 | 46 | 40 | 36 | 54 | 45 | 40 | 36 | 44 | 39 | 35 | 43 | 38 | 35 | 42 | 38 | 35 | 33 | 33 | 33 | 33 |
| | 7 | 51 | 42 | 36 | 31 | 50 | 41 | 35 | 31 | 40 | 35 | 31 | 39 | 34 | 31 | 38 | 34 | 31 | 29 | 29 | 29 | 29 |
| | 8 | 47 | 38 | 32 | 28 | 46 | 37 | 31 | 27 | 36 | 31 | 27 | 35 | 31 | 27 | 34 | 30 | 27 | 26 | 26 | 26 | 26 |
| | 9 | 43 | 34 | 28 | 24 | 42 | 33 | 28 | 24 | 33 | 27 | 24 | 32 | 27 | 24 | 31 | 27 | 24 | 22 | 22 | 22 | 22 |
| | 10 | 40 | 31 | 25 | 21 | 39 | 30 | 25 | 21 | 30 | 25 | 21 | 29 | 24 | 21 | 28 | 24 | 21 | 20 | 20 | 20 | 20 |

Zonal Lumen Summary

| Zone | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30 | 2366 | 25.0 | 34.1 |
| 0-40 | 3805 | 40.3 | 54.9 |
| 0-60 | 5973 | 63.2 | 86.2 |
| 0-90 | 6932 | 73.4 | 100.0 |
| 0-180 | 6932 | 73.4 | 100.0 |

Typical VCP Percentages

| Room Size (Ft.) | Height Along | | Height Across | |
|-----------------|--------------|-------|---------------|-------|
| | 8.5' | 10.0' | 8.5' | 10.0' |
| 20 x 20 | 49 | 54 | 47 | 52 |
| 30 x 30 | 41 | 46 | 39 | 43 |
| 30 x 60 | 32 | 35 | 28 | 32 |
| 60 x 30 | 43 | 47 | 41 | 46 |
| 60 x 60 | 32 | 35 | 29 | 33 |

Candela

| Angle | Along II | 45° | Across ⊥ |
|-------|----------|------|----------|
| 0 | 2992 | 2992 | 2992 |
| 5 | 2994 | 2986 | 2999 |
| 10 | 2957 | 2968 | 2995 |
| 15 | 2884 | 2921 | 2971 |
| 20 | 2777 | 2843 | 2917 |
| 25 | 2632 | 2729 | 2812 |
| 30 | 2446 | 2558 | 2631 |
| 35 | 2211 | 2325 | 2374 |
| 40 | 1932 | 2032 | 2056 |
| 45 | 1613 | 1687 | 1711 |
| 50 | 1269 | 1332 | 1360 |
| 55 | 966 | 992 | 997 |
| 60 | 731 | 678 | 704 |
| 65 | 546 | 450 | 530 |
| 70 | 400 | 309 | 426 |
| 75 | 302 | 249 | 354 |
| 80 | 228 | 214 | 274 |
| 85 | 125 | 122 | 151 |
| 90 | 0 | 0 | 0 |

ORDERING INFORMATION

SAMPLE NUMBER: 2GC-2BX40A-120V-EB51-U

| | | | | | | |
|---|--|--|--|--|---|---|
| <p>Rating Blank= Standard NY=New York City Rated ATW-SW4= Chicago Rated</p> | | <p>Number of Lamps 2=2 Lamps 3=3 Lamps⁽⁷⁾ 4=4 Lamps⁽⁶⁾</p> | | | | |
| <p>Width 2=2' Width</p> | | <p>Wattage BX40=40W Biax (24")</p> | | | | <p>Options 20GA/REP=20 Gauge Housing w/Riveted End Plate PAF=Painted After Fabrication LAO=Less Access Opening</p> |
| <p>Trim Type G=Grid/Lay-in (Standard)⁽¹⁾ G=Concealed T G=Slot Grid F=Aluminum Flange Trim⁽⁵⁾ MZ=Modular Trim EMZ=Modular Trim (Extended Swing Arm)</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" Thickness)</p> | | | <p>Ballast Type EB5_=T5 Biax Electronic Instant⁽⁹⁾ Start. Total Harmonic Distortion < 20% TEB5_=T5 Biax Electronic Instant⁽⁹⁾ Start. Total Harmonic Distortion < 10% ER5_=T5 Biax Electronic Program Rapid Start. Total Harmonic Distortion < 10% Fifthight Ballasts⁽⁸⁾ 5LT5B_=T5 Biax DALI Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 1.0</p> | <p>Packaging U=Unit Pack PAL=Palletized Uncartoned Fixtures PALC=Palletized Fixtures in Carton</p> |
| <p>Series C=Specification Deep Troffer</p> | | <p>Option - Aluminum Flange Trim⁽⁵⁾ Blank=SW (Single White) Type Color 'S' Single 'N' Natural 'R' In Row 'W' White 'E' End of Row</p> | | | <p>Number of Ballasts 1=1 Ballast 2=2 Ballasts 3=3 Ballasts</p> | <p>ACCESSORIES EQ-CLIP-U=T-BAR Safety Earthquake Clips⁽¹⁾</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 (3/8") FAN=Flush Natural Anodized Extruded Aluminum RAN=Regressed Natural Anodized Extruded Aluminum (3/8") FAB=Flush Black Extruded Aluminum RAB=Regressed Black Extruded Aluminum (3/8")</p> | | <p>Voltage⁽²⁾ 120V=120 Volt 277V=277 Volt 347V=347 Volt UNV=Universal Voltage 120-277⁽³⁾</p> | | | | |
| | | <p>Options GL=Single Element Fuse GM=Double Element Fuse Lamps=Lamps Installed (refer to lamp ordering options) Flex=Flex Installed (Reference Flex-ordering information) EL=Emergency Installed^{(4),(10)}</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⁾Fixtures equipped with "EL" option may require a 5-1/2" housing depth. If installing in field, must use low profile battery pack. ⁽⁵⁾Specify row configuration, type in catalog number when ordering complete fixture. ⁽⁶⁾Less Access Opening (LAO) housing is required. ⁽⁷⁾Standard off-center ballast compartment on 3-lamp fixtures. ⁽⁸⁾For a complete listing of Fifthight Technology products and other solutions from Cooper Lighting Solutions, visit www.cooperlighting.com. ⁽⁹⁾Not available in UNV voltages. Must specify voltage. ⁽¹⁰⁾Please specify required voltage, 120V or 277V.

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

SHIPPING DATA

| Catalog No. | Wt. |
|-------------|---------|
| 2GC-2BX40A | 18 lbs. |
| 2GC-3BX40A | 18 lbs. |
| 2GC-4BX40A | 18 lbs. |