

## DESCRIPTION

Series 81 can be used individually or in illuminated rows and patterns, each fixture is uniquely suited to achieve many functional and aesthetic spatial effects. Shielding locks in place without hardware. The trim is rigid "U" shaped, doubled formed with a 3/8" regress soft lit edge.

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

## SPECIFICATION FEATURES

### A ... Construction

20-gauge steel housing. Nominal 3' or 4' illuminated sections.

### B ... Shielding

Acrylic diffuser or lens, parabolic or bold baffle shielding.

### C ... Electrical

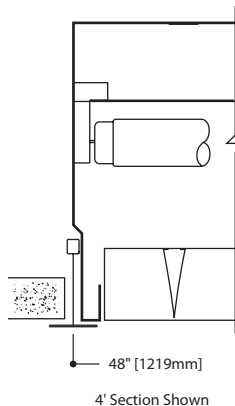
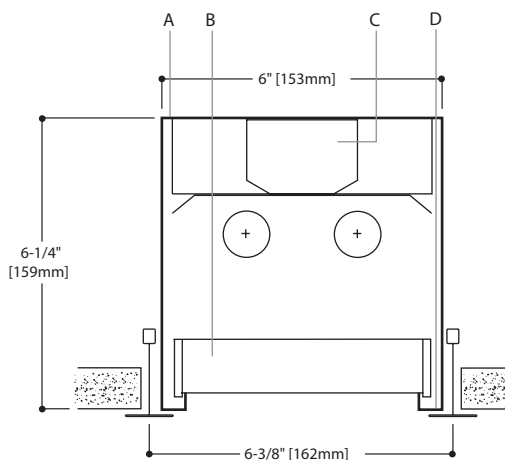
120, 277, 347 or Universal Voltage electronic ballast. Fixtures and electrical components certified to UL and CUL standards. Note: Please consult factory, Fifthlight may not be available in some configured options.

### D ... Finish

Durable, low gloss, white, powder coated acrylic finish.

### Mounting

Recessed. (ETG) Exposed T-Grid only.



### NOTE:

Need to specify: Individual Run=Grid between fixtures, or Continuous Run=No Grid between fixtures. Continuous run fixtures cannot be installed as individuals, and individual fixtures cannot be combined into continuous runs



**81**

1 & 2T8

1 & 2T5

1 & 2T5HO

**Recessed**

**Direct**

**Light Distribution**

Indirect - 0.0%

Direct - 100.0%



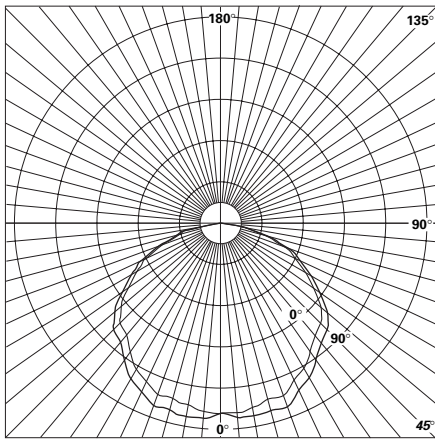
## ORDERING INFORMATION

| Series                       | Number of Lamps<br>(Not included) | Lamp Type                     | Length <sup>1</sup> | Voltage <sup>2</sup>  | Emergency                               | Fusing  |
|------------------------------|-----------------------------------|-------------------------------|---------------------|---|---|---|
| 81: Exposed "T" grid ceiling | 1: 1 Lamp<br>2: 2 Lamps           | T8<br>T5<br>T5HO              | 3: 3 ft<br>4: 4 ft  | 1: 120V<br>2: 277V<br>3: 347V<br>U: Universal               | EM: Emergency Pack<br>(Consult Factory) | GLR<br>GMF  |
| Mounting                     |                                   | Ceiling Type                  |                     | Ballast   |   | Shielding   |
| R: Recessed                  |                                   | ETG: 15/16" Exposed<br>T-Grid |                     | EB: Electronic Ballast<br>(Standard)<br>DB: Dimming Ballast |   | S22: White Acrylic Diffuser<br>S58: KSH-12 Acrylic Lens<br>S72: White Bold Baffle<br>S79: Semi-Specular Aluminum Parabolic Baffle |

Notes: 1 Available in 3' and 4' individual fixture lengths

2 Not all options available. Please consult your Cooper Lighting Representative for availability.

## PHOTOMETRICS



**Series 81**  
 (2) F40T12RS/WW  
 3200 Lumens  
 Efficiency 38.4%  
 Test Report  
 #3010.0

## Coefficients of Utilization

| Effective floor cavity reflectance |     |    |    |    |     |    | 20% |     |    |    |  |  |
|------------------------------------|-----|----|----|----|-----|----|-----|-----|----|----|--|--|
| rc                                 | 80% |    |    |    | 50% |    |     | 30% |    |    |  |  |
| rw                                 | 70  | 50 | 30 | 10 | 50  | 30 | 10  | 50  | 30 | 10 |  |  |
| RCR                                |     |    |    |    |     |    |     |     |    |    |  |  |
| 1                                  | 43  | 41 | 40 | 39 | 39  | 38 | 37  | 38  | 37 | 36 |  |  |
| 2                                  | 40  | 38 | 35 | 34 | 36  | 34 | 33  | 34  | 33 | 32 |  |  |
| 3                                  | 37  | 34 | 32 | 30 | 32  | 31 | 29  | 31  | 30 | 28 |  |  |
| 4                                  | 35  | 31 | 28 | 26 | 30  | 27 | 26  | 29  | 27 | 25 |  |  |
| 5                                  | 32  | 28 | 25 | 23 | 27  | 25 | 23  | 26  | 24 | 23 |  |  |
| 6                                  | 30  | 26 | 23 | 21 | 25  | 22 | 21  | 24  | 22 | 20 |  |  |
| 7                                  | 28  | 24 | 21 | 19 | 23  | 20 | 19  | 22  | 20 | 18 |  |  |
| 8                                  | 26  | 22 | 19 | 17 | 21  | 18 | 17  | 20  | 18 | 17 |  |  |
| 9                                  | 24  | 20 | 17 | 15 | 19  | 17 | 15  | 19  | 16 | 15 |  |  |
| 10                                 | 23  | 18 | 15 | 14 | 18  | 15 | 13  | 17  | 15 | 13 |  |  |

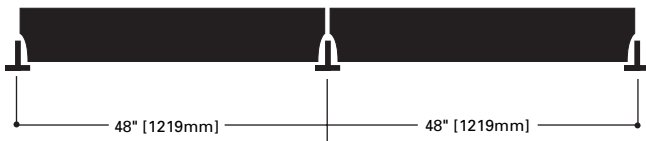
## Zonal Lumen Summary

| Zone                               | Lumens | %Lamp | %Fixture |
|------------------------------------|--------|-------|----------|
| 0-30                               | 1069   | 16.7  | 43.4     |
| 0-40                               | 1580   | 24.7  | 64.2     |
| 0-60                               | 1814   | 56.7  | 88.9     |
| 0-90                               | 2460   | 38.4  | 100.0    |
| 90-180                             | 0      | 0.0   | 0.0      |
| 0-180                              | 2460   | 38.4  | 100.0    |
| Total Luminaire Efficiency = 38.4% |        |       |          |

## Candela

| Angle | Along II | 45°  | Across ⊥ |
|-------|----------|------|----------|
| 0     | 1596     | 1596 | 1596     |
| 5     | 1568     | 1598 | 1624     |
| 10    | 1448     | 1491 | 1526     |
| 15    | 1359     | 1395 | 1462     |
| 20    | 1239     | 1275 | 1373     |
| 25    | 1065     | 1099 | 1238     |
| 30    | 929      | 979  | 1156     |
| 35    | 721      | 792  | 966      |
| 40    | 551      | 652  | 768      |
| 45    | 351      | 471  | 568      |
| 50    | 270      | 355  | 446      |
| 55    | 228      | 263  | 383      |
| 60    | 179      | 198  | 340      |
| 65    | 140      | 152  | 261      |
| 70    | 92       | 102  | 162      |
| 75    | 63       | 71   | 98       |
| 80    | 37       | 43   | 51       |
| 85    | 14       | 22   | 21       |
| 90    | 0        | 0    | 0        |

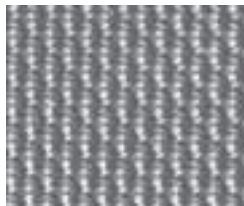
## MOUNTING INFORMATION



## SHIELDING INFORMATION



**S22 Acrylic Diffuser**  
 3/16" thick, matte white finish with mullion, no light leaks.



**S58 Acrylic Lens**  
 1/8" thick, clear acrylic prismatic lens.



**S72 Bold Baffle**  
 1" high x 1.2" o.c., 3/16" thick aluminum baffle, continuous and unbroken, no visible joints.



**S79 Parabolic Baffle**  
 1-1/4" high blade, 2.4" o.c., semi-specular low-brightness Pearlescent Aluminum baffle. Continuous and unbroken, no visible joints.