

## FEATURES

- Available 2', 3', 4' or 8'
- Heavy die formed steel channel
- Rotary lock lampholders for positive lamp contact
- Channel ends double as joiners
- Individual or row mounting. Surface or suspended
- Ballast covers on 4' and 8' units are secured with ¼-turn fasteners

## PROJECT INFORMATION

Project Name \_\_\_\_\_

Type \_\_\_\_\_

Catalog No. \_\_\_\_\_

Date \_\_\_\_\_

## CONSTRUCTION

Steel housing die formed with heat sink embossments for cooler running ballasts. Socket saddles are factory installed.

## FINISH

White painted parts are treated with a five stage phosphate bonding process and finished with a high reflectance baked enamel.

## BALLASTS

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, unless otherwise specified. CEE NEMA Premium compliant.

## ELECTRICAL

Standard class "P," thermally protected, auto-resetting HPF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6" through access location. NEC/CEC-compliant ballast disconnect is standard.

## CERTIFICATION

All luminaires are built to UL 1598 standards and bear appropriate UL and CUL or CSA labels. Damp location labeling is standard. Emergency-equipped fixtures labeled UL 924.

## ORDERING INFORMATION

## EXAMPLE CS4-232-EU-GLR

| CS                                |                      |                               |                                  |                                                                |             |                                                                           |
|-----------------------------------|----------------------|-------------------------------|----------------------------------|----------------------------------------------------------------|-------------|---------------------------------------------------------------------------|
| MODEL                             | SIZE                 | NO. OF LAMPS IN CROSS SECTION | LAMP TYPE                        | BALLAST                                                        | VOLTAGE     | OPTIONS                                                                   |
| CS Straight-Sided Utility Channel | 2 2'                 | 1 One                         | 14 2', T5: 14 Watt               | E Electronic T8, Instant Start                                 | U 120V-277V | GLR Fast Blow Fuse                                                        |
|                                   | 3 3'                 | 2 Two                         | 17 2', T8: 17 Watt               | 4E 4-Lamp Electronic T8, Instant Start                         | 347 347V    | GMF Slow Blow Fuse                                                        |
|                                   | 4 4'                 |                               | 21 3', T5: 21 Watt               | EP Electronic T5, Programmed Start (std. T5/T5HO, optional T8) |             | EL Emergency Battery Pack (Not in 2')                                     |
|                                   | 6 6' (Tandem length) |                               | 24 2', T5: 24 Watt               |                                                                |             | BC Branch Circuit Plug-on Wiring System. See options section for details. |
|                                   | 8 8' (Tandem length) |                               | 25 3', T8: 25 Watt               |                                                                |             | PAF Paint After Fabrication                                               |
|                                   |                      |                               | 28 4', T5: 28 Watt               |                                                                |             |                                                                           |
|                                   |                      |                               | 32 4', T8: 32, 30, 28 or 25 Watt | For a specific ballast vendor, show as option.                 |             |                                                                           |
|                                   |                      |                               | 39 3', T5HO: 39 Watt             |                                                                |             |                                                                           |
|                                   |                      |                               | 54 4', T5: 54 Watt               |                                                                |             |                                                                           |

## ACCESSORIES (ORDER SEPARATELY)

- ITB4** Hanger for Close Mounting on a T-Bar Ceiling
- CSZT** Zip Tee Hanger - 1½" Spacer on T-Bar Ceiling
- CSTH** Slide Tong Hanger with ¾" Hole
- CSWG4** 4' Wire Guard, 2 Required for 8' Fixture
- CSWG3** 3' Wire Guard, 2 Required for 6' Fixture
- CSRA4** 4' Asymmetric Reflector
- CSR4** 4' Symmetric Reflector

For complete list of options and accessories, see options and accessories section.

## PHOTOMETRIC DATA

Test **LSI11147** Test Date **1/6/06**

### LUMINAIRE DATA

|                          |                                                                                |
|--------------------------|--------------------------------------------------------------------------------|
| Luminaire                | CS4-232-EB8-PAF<br>CS Striplight<br>4' Striplight with white painted reflector |
| Ballast                  | B232I120RH                                                                     |
| Ballast Factor           | 0.88                                                                           |
| Lamp                     | F32T8                                                                          |
| Lumens per Lamp          | 2900                                                                           |
| Watts                    | 62                                                                             |
| Mounting                 | Surface                                                                        |
| Shielding Angle          | 0° = 0 90° = 0                                                                 |
| Spacing Criterion        | 0° = 1.25 90° = 1.61                                                           |
| Luminous Opening in Feet | Length: 3.92<br>Width: 0.35<br>Height: 0.08                                    |

### ZONAL LUMEN SUMMARY

| Zone  | Lumens | % Lamp | % Fixt. |
|-------|--------|--------|---------|
| 0-30  | 853    | 14.7   | 15.3    |
| 0-40  | 1456   | 25.1   | 26.2    |
| 0-60  | 2878   | 49.6   | 51.7    |
| 0-90  | 4493   | 77.5   | 80.8    |
| 0-180 | 5561   | 95.9   | 100.0   |

### ENERGY DATA

|                                                         |                                              |
|---------------------------------------------------------|----------------------------------------------|
| Total Luminaire Efficiency                              | 95.9%                                        |
| Luminaire Efficacy Rating (LER)                         | 79                                           |
| IESNA RP-1-1993 Compliance                              | Noncompliant                                 |
| Comparative Yearly Lighting Energy Cost per 1000 Lumens | \$3.04 based on 3000 hrs. and \$0.08 per KWH |

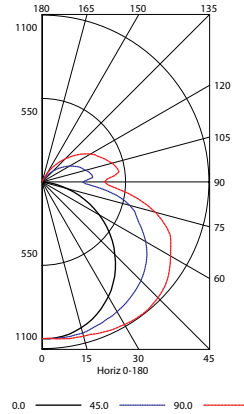
### COEFFICIENTS OF UTILIZATION (%)

| RCR | RC | 80 |    |    |    | 70 |    |    |    | 50 |    |    | 0  |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|     | RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 0  |
|     | 1  | 97 | 92 | 86 | 82 | 93 | 88 | 83 | 79 | 80 | 76 | 73 | 59 |
|     | 2  | 87 | 78 | 70 | 64 | 83 | 74 | 68 | 62 | 68 | 62 | 58 | 46 |
|     | 3  | 79 | 67 | 59 | 52 | 74 | 64 | 56 | 50 | 59 | 52 | 47 | 37 |
|     | 4  | 71 | 59 | 50 | 43 | 68 | 56 | 48 | 41 | 51 | 44 | 39 | 31 |
|     | 5  | 65 | 52 | 43 | 36 | 62 | 50 | 41 | 35 | 46 | 38 | 33 | 26 |
|     | 6  | 60 | 46 | 37 | 31 | 57 | 45 | 36 | 30 | 41 | 34 | 28 | 22 |
|     | 7  | 55 | 42 | 33 | 27 | 53 | 40 | 32 | 26 | 37 | 30 | 25 | 20 |
|     | 8  | 51 | 38 | 29 | 24 | 49 | 36 | 28 | 23 | 34 | 27 | 22 | 17 |
| 9   | 48 | 35 | 26 | 21 | 45 | 33 | 26 | 20 | 31 | 24 | 19 | 15 |    |
| 10  | 45 | 32 | 24 | 19 | 43 | 31 | 23 | 18 | 28 | 22 | 17 | 14 |    |

RCR = Room Cavity Ratio

RC = Effective Ceiling Reflectance RW = Wall Reflectance

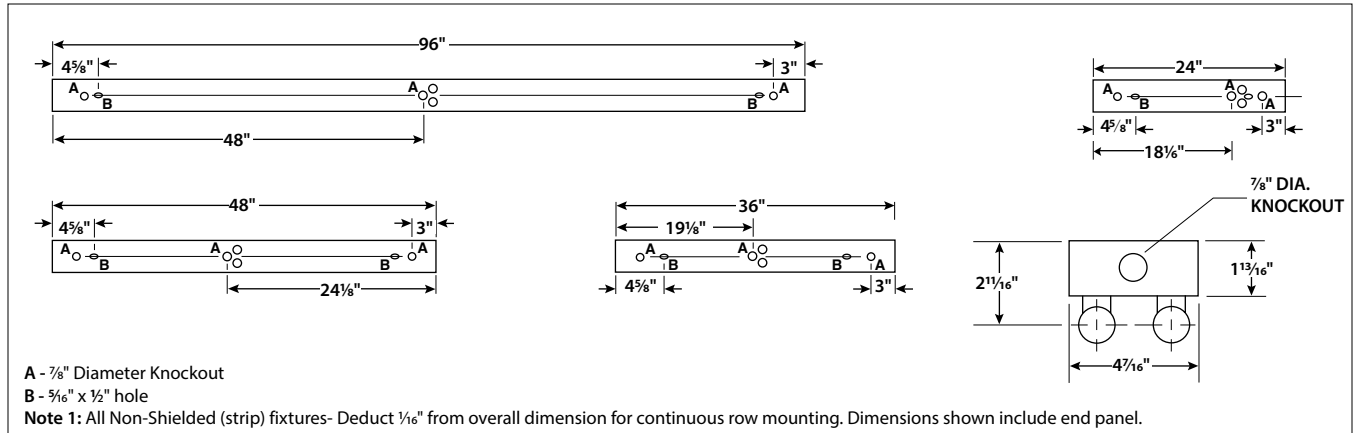
### INDOOR CANDELA PLOT



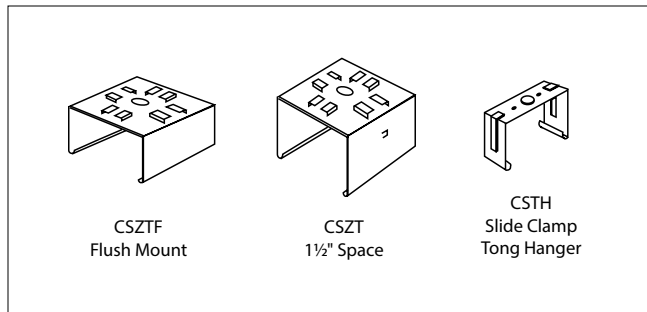
### AVG. LUMINANCE (Candela/Sq. M.)

| Average Luminance Angle | 0.0  | 22.5 | 45.0  | 67.5  | 90.0  |
|-------------------------|------|------|-------|-------|-------|
| 0                       | 8104 | 8104 | 8104  | 8104  | 8104  |
| 30                      | 7817 | 7827 | 8125  | 8485  | 8691  |
| 40                      | 7562 | 7701 | 8450  | 9084  | 9393  |
| 45                      | 7361 | 7692 | 8689  | 9430  | 9762  |
| 50                      | 7197 | 7691 | 8938  | 9795  | 10168 |
| 55                      | 6938 | 7731 | 9214  | 10180 | 10549 |
| 60                      | 6593 | 7871 | 9487  | 10534 | 10993 |
| 65                      | 6189 | 8042 | 9743  | 11103 | 11660 |
| 70                      | 5647 | 8113 | 10219 | 11816 | 12301 |
| 75                      | 4732 | 8073 | 10939 | 12193 | 12645 |
| 80                      | 3725 | 8568 | 11168 | 12212 | 12651 |
| 85                      | 1752 | 8614 | 10549 | 11795 | 12309 |

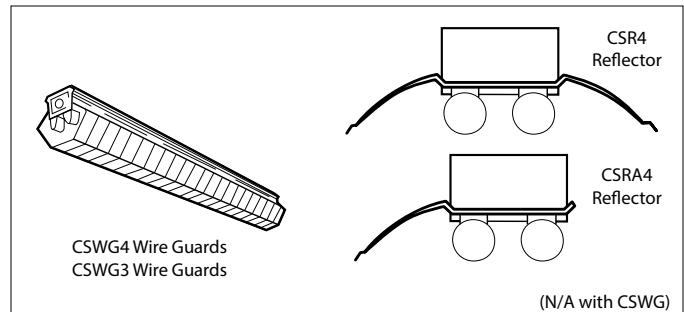
### DIMENSIONAL DATA



### MOUNTING DATA



### ACCESSORIES



**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.