

**FEATURES**

- Choice of 4' solid top or 5% uplight distribution reflectors
- Telescopic spring loaded lampholders
- 2½" lamp spacing
- For individual or continuous row mounting
- Channel ends double as joiners
- Two 4' reflectors with aligners supplied on 8' fixtures

**PROJECT INFORMATION**

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

Type \_\_\_\_\_

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

Date \_\_\_\_\_

**HOUSING**

Die formed steel with knockouts for stems or chain hangers.

**REFLECTOR**

Die embossed with transverse ribs for maximum rigidity. Available with apertures for uplight.

**BALLASTS**

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

**FINISH**

White painted parts are treated with a five stage phosphate bonding process and finished after fabrication with a minimum 90% reflective gloss baked enamel. LSR and M4R reflectors specular room side, Mill finish aluminum top surface.

**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 CSR4-296-U-EU-EL**

CSR						E		
MODEL	SIZE	NO. OF LAMPS IN CROSS SECTION	LAMP TYPE	REFLECTOR TYPE	BALLAST	VOLTAGE	OPTIONS	
CSR Industrial	4 4'	1 One	48 4', T12: Slimline	ST Solid Top Reflector	E Electronic Instant Start (Std.)	U 120V-277V	GLR Fast Blow Fuse	
	8 8'	2 Two	96T8 8', T8: 59 Watt	U 5% Uplight Reflector		120 120V	GMF Slow Blow Fuse	
			96 8', T12: Slimline	LSRU Apertured Alum Reflector with Specular Silver Finish		277 277V	EL Emergency Battery Pack <sup>1</sup>	
				LSR Solid Top Alum Reflector with Specular Silver Finish		347 347V	BC1 Branch Circuit Wiring Single Circuit	
				M4RU Apertured Alum Reflector with 95% Reflective Specular Silver Finish			PAF Paint After Fabrication	
				M4R Solid Top Alum Reflector with 95% Reflection Specular Silver Finish				

**ACCESSORIES (ORDER SEPARATELY)**

**CSZTF** Zip Tee Hanger - flush mounting on T-Bar ceiling

**CSZT** Zip Tee Hanger - 1½" spacer on tee bar ceiling

**CSTH** Slide Clamp Tong Hanger

**S18** 18" Stem, canopy and 8° aligner

**SS18** 18", 45° Swivel Stem & Canopy

**ITB4** Close Mounting on T-Bar ceiling

**CSHC** 14" Chain Hanging Assembly

**CSRWG4** 4' Wire Guard (two required for 8' fixture)

**OS1360K** Occupancy/Daylight sensor kit, 120/277/347V, one relay, 360 Lens, snap on drop down adaptor, quick connect wiring<sup>2</sup>

<sup>1</sup> Option requires fixture voltage in catalog numbers.

<sup>2</sup> Use programmed start ballast. Not recommended for use with an instant start. For more occupancy/daylight harvesting sensor accessories see Technical section.

Test 7993 Test Date 1/8/03

## PHOTOMETRIC DATA

### LUMINAIRE DATA

Luminaire	CSR8-296-LE CSR Industrial 96" x 11" Luminaire with Baked White Reflector
Ballast	R-2E75-S-TP
Ballast Factor	0.95
Lamp	F96T12
Lumens per Lamp	6300
Watts	158
Mounting	Recessed
Shielding Angle	N/A
Spacing Criterion	0° = 1.27 90° = 1.46
Luminous Opening in Feet	Length: 8.00 Width: 0.92 Height: 0.00

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	2481	19.7	22.9
0-40	4177	33.1	38.5
0-60	7912	62.8	73.0
0-90	10841	86.0	100.0
0-180	10841	86.0	100.0

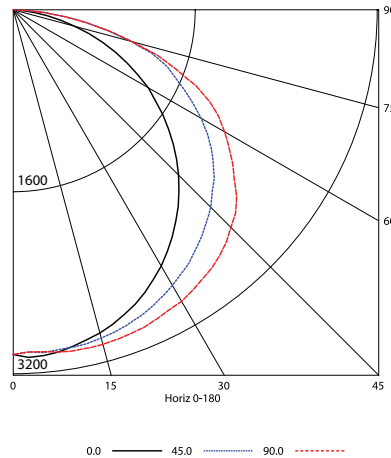
### ENERGY DATA

Total Luminaire Efficiency	86.0%
Luminaire Efficacy Rating (LER)	65
IESNA RP-1-1993 Compliance	Non-Compliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.69 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	93	88	84	80	90	86	82	79	82	79	76	70	0	
2	83	76	69	64	81	74	68	63	71	66	62	57	0	
3	75	66	58	52	73	64	57	52	62	56	51	47	0	
4	69	58	50	43	67	56	49	43	54	48	42	39	0	
5	63	51	43	37	61	50	42	37	48	41	36	33	0	
6	58	46	38	32	56	45	37	32	43	37	31	29	0	
7	54	41	33	28	52	41	33	28	39	32	28	25	0	
8	50	38	30	25	48	37	30	25	36	29	24	22	0	
9	46	34	27	22	45	34	27	22	33	26	22	20	0	
10	43	32	25	20	42	31	24	20	30	24	20	18	0	

### INDOOR CANDELA PLOT



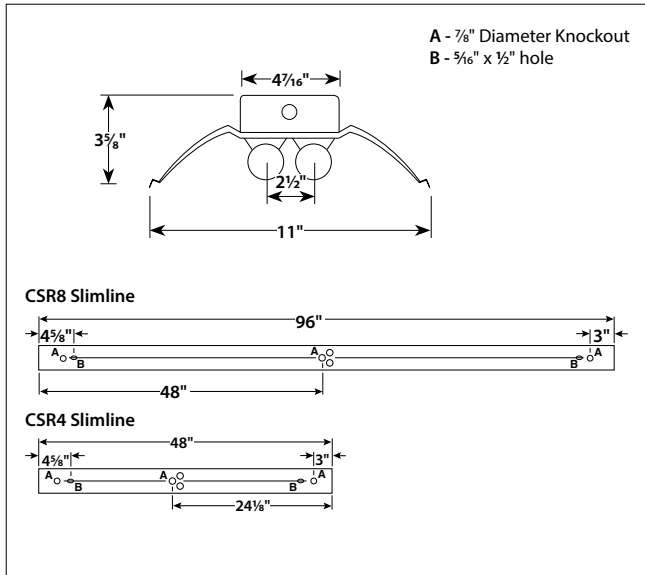
### AVG. LUMINANCE (Candela/Sq. M.)

Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	4469	4469	4469	4469	4469
30	4428	4541	4764	4956	5038
40	4341	4567	4973	5302	5430
45	4285	4585	5121	5526	5644
50	4214	4598	5290	5734	5879
55	4120	4671	5462	5910	6056
60	4045	4756	5634	6140	6327
65	3845	4904	5779	6457	6644
70	3592	5024	6162	6636	6564
75	3204	5035	6125	6171	6210
80	2594	5357	5567	5601	5567
85	1678	5001	4934	4732	4397

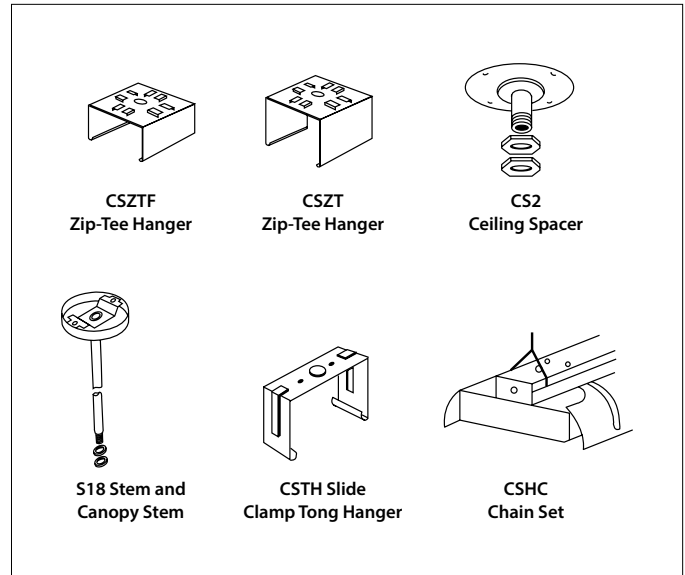
RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

### DIMENSIONAL DATA



### MOUNTING ACCESSORIES



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