

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P522230

Luminaire Tested: **CST-CA8-330-750-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522230  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-330-750-U-T5R-HSS-HM-EX90  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 42207 lumens  
Efficiency: N/A  
Efficacy: 127.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B5 - U2 - G5

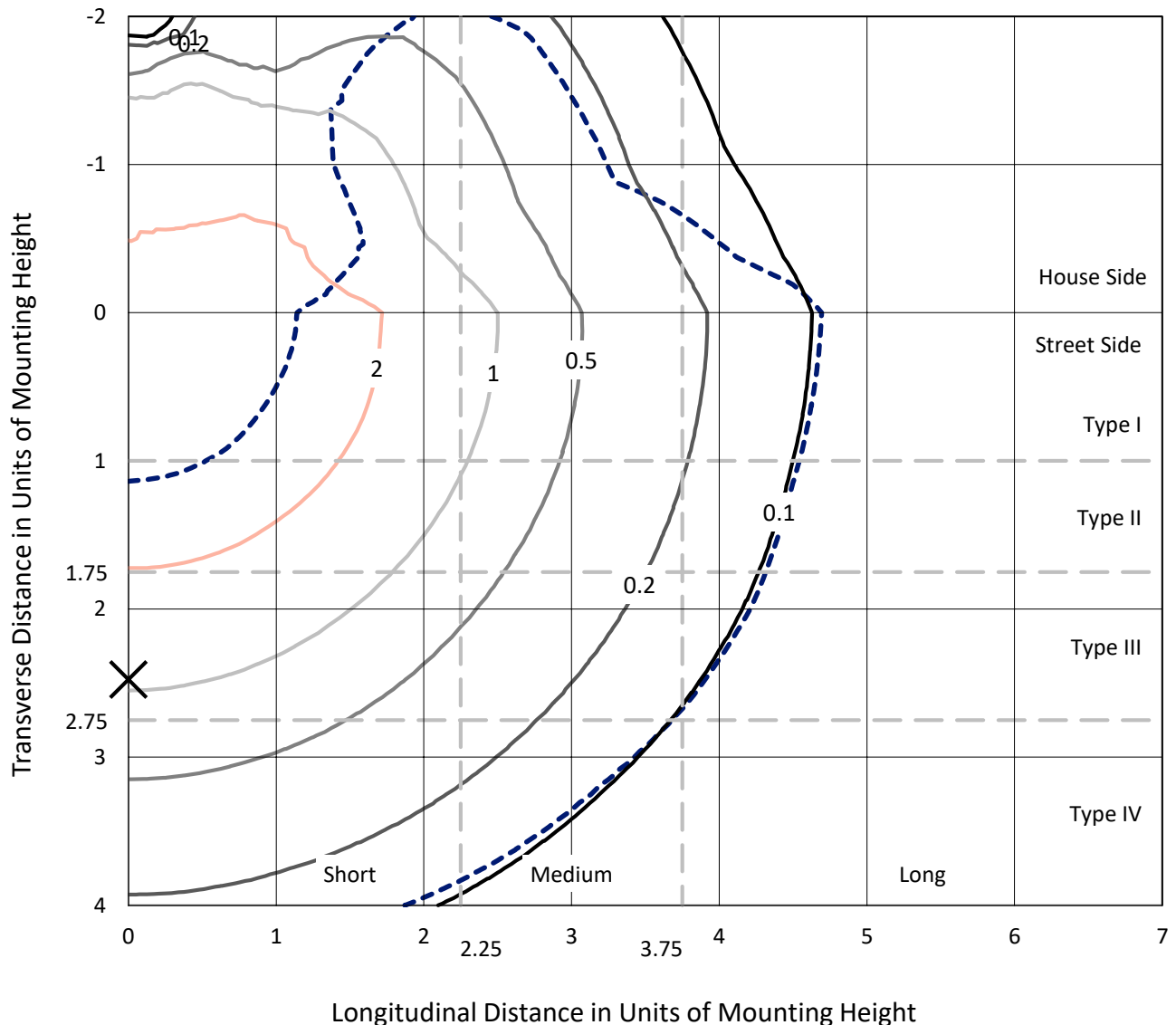
Input Watts (W): 331.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

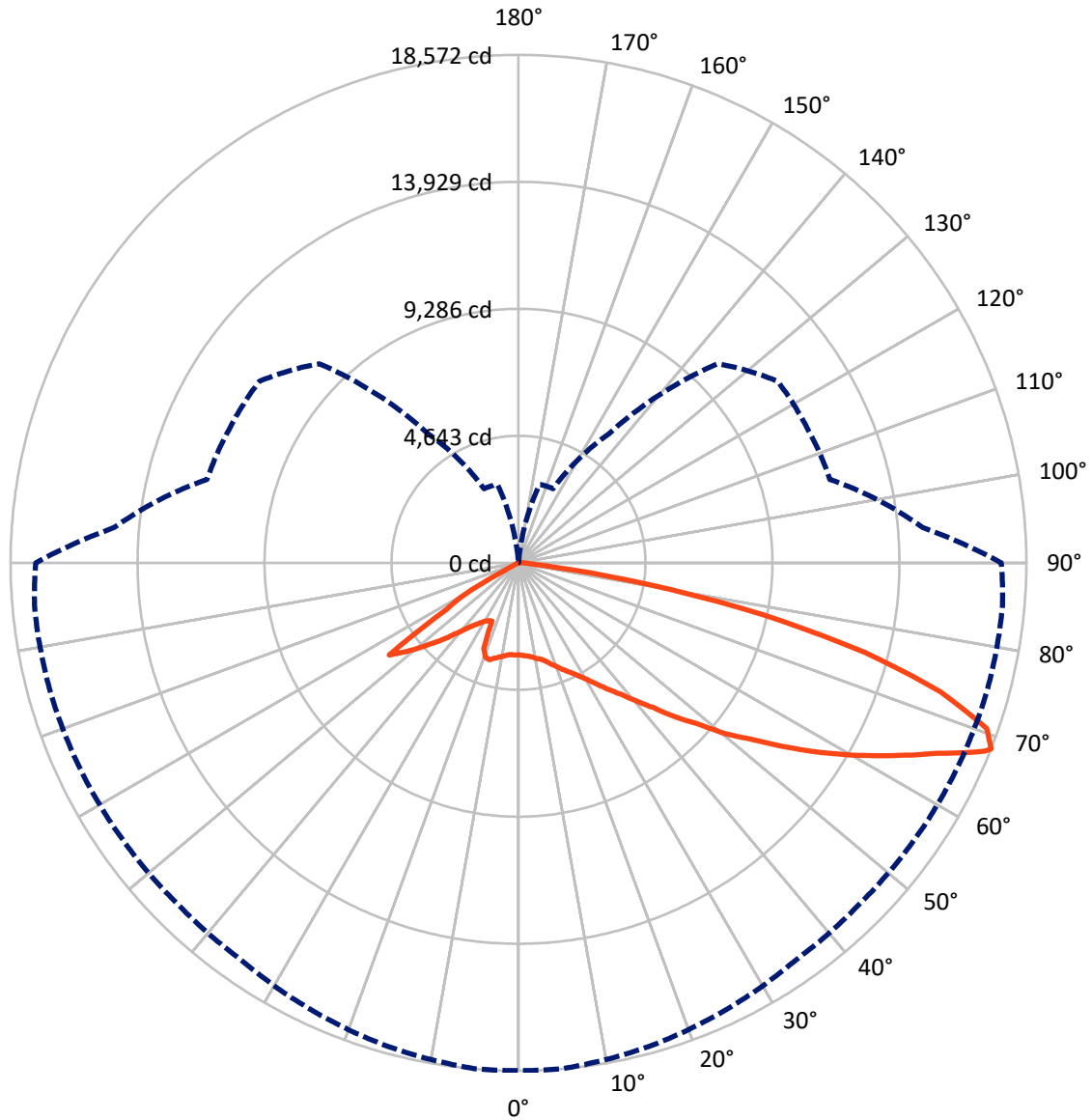
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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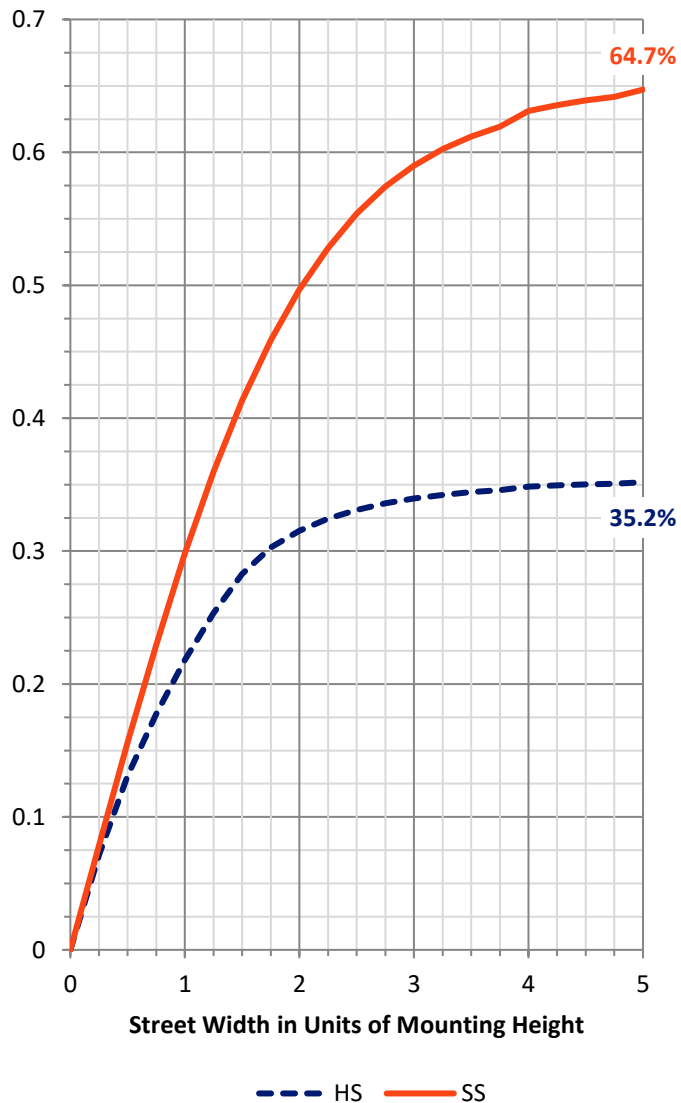
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14854.0	2.6	14856.5
	% Fixture	35.2	0.0	35.2
<b>Street Side</b>	Lumens	27339.3	11.1	27350.5
	% Fixture	64.8	0.0	64.8
<b>Total</b>	Lumens	42193.3	13.7	42207.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	325.0	0.8
10°-20°	1041.1	2.5
20°-30°	1858.6	4.4
30°-40°	3023.5	7.2
40°-50°	5163.3	12.2
50°-60°	8615.3	20.4
60°-70°	11985.6	28.4
70°-80°	9290.7	22.0
80°-90°	890.3	2.1
90°-100°	10.8	0.0
100°-110°	0.9	0.0
110°-120°	0.5	0.0
120°-130°	0.3	0.0
130°-140°	0.3	0.0
140°-150°	0.4	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-90°	42193.3	100.0
0°-180°	42207.0	100.0

**Coefficient of Utilization**

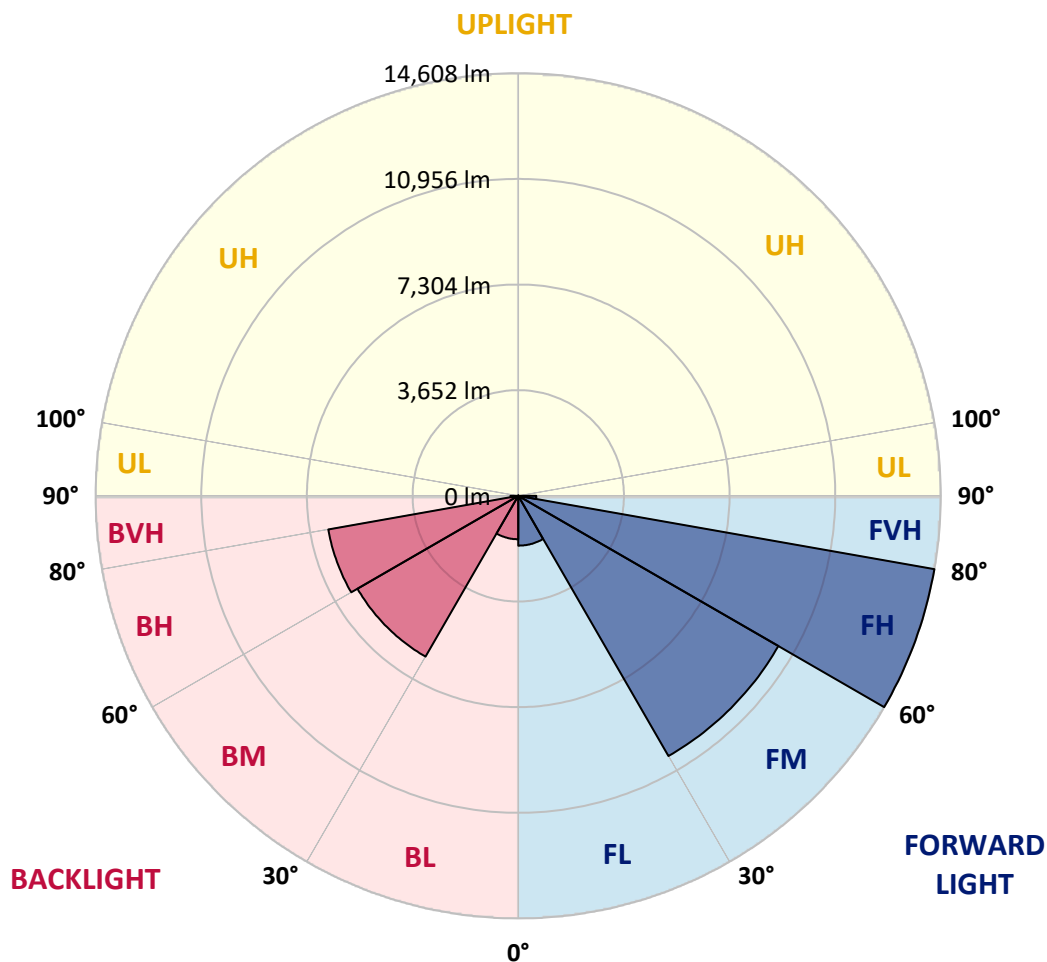


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1722.6	4.1			
FM (30°-60°)	10385.9	24.6			
FH (60°-80°)	14608.0	34.6			G5
FVH (80°-90°)	622.8	1.5			G4/750
BL (0°-30°)	1502.0	3.6	B3/2500		
BM (30°-60°)	6416.3	15.2	B4/8500		
BH (60°-80°)	6668.2	15.8	B5		G5
BVH (80°-90°)	267.4	0.6			G3/500
UL (90°-100°)	10.8	0.0		U2/50	
UH (100°-180°)	2.9	0.0		U1/10	

**BUG Rating: B5-U2-G5**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0
2.5°	3397.1	3392.3	3389.1	3409.8	3351.0	3374.8	3359.0	3379.6	3374.8	3384.4	3386.0
5°	3420.9	3413.0	3401.8	3424.1	3389.1	3405.0	3387.6	3397.1	3366.9	3392.3	3395.5
7.5°	3474.9	3452.7	3451.1	3457.4	3433.6	3444.7	3414.6	3425.7	3409.8	3400.3	3409.8
10°	3555.9	3536.8	3516.2	3528.9	3489.2	3503.5	3471.7	3481.3	3473.3	3452.7	3471.7
12.5°	3611.5	3617.8	3603.5	3613.1	3578.1	3565.4	3554.3	3552.7	3548.0	3517.8	3513.0
15°	3735.4	3738.5	3713.1	3719.5	3711.5	3705.2	3689.3	3676.6	3651.2	3632.1	3619.4
17.5°	3897.4	3879.9	3856.1	3862.4	3884.6	3856.1	3846.5	3822.7	3786.2	3754.4	3748.1
20°	4067.3	4056.2	4033.9	4046.6	4045.1	4026.0	4030.8	3991.1	3938.6	3911.6	3891.0
22.5°	4256.3	4240.4	4224.5	4248.3	4229.3	4216.6	4211.8	4184.8	4119.7	4089.5	4084.8
25°	4445.3	4437.3	4448.4	4440.5	4413.5	4404.0	4410.3	4400.8	4324.6	4288.0	4265.8
27.5°	4681.9	4662.8	4680.3	4670.8	4642.2	4643.8	4645.4	4647.0	4561.2	4513.6	4481.8
30°	4951.9	4945.5	4967.8	4937.6	4910.6	4928.1	4942.4	4910.6	4836.0	4766.1	4755.0
32.5°	5302.9	5263.2	5288.6	5250.5	5209.2	5250.5	5275.9	5212.4	5152.0	5063.1	5078.9
35°	5692.0	5679.3	5679.3	5630.0	5607.8	5672.9	5698.3	5636.4	5542.7	5464.9	5445.8
37.5°	6104.9	6117.6	6157.3	6136.7	6116.0	6155.7	6212.9	6130.3	6009.6	5927.0	5904.8
40°	6652.8	6684.6	6711.6	6684.6	6660.8	6686.2	6751.3	6643.3	6559.1	6514.6	6467.0
42.5°	7242.0	7296.0	7278.6	7281.7	7302.4	7338.9	7404.0	7305.6	7208.7	7207.1	7137.2
45°	8039.3	8039.3	8002.8	8037.7	8034.5	8125.0	8153.6	8099.6	8018.6	7994.8	7934.5
47.5°	8784.1	8862.0	8847.7	8898.5	8858.8	8935.0	9031.9	8985.8	8892.1	8808.0	8795.3
50°	9822.8	9803.7	9784.7	9860.9	9854.6	9907.0	9995.9	9967.3	9837.1	9741.8	9724.3
52.5°	10736.0	10836.0	10812.2	10926.6	10863.0	10937.7	11044.1	11039.3	10880.5	10786.8	10759.8
55°	11889.0	11955.7	11950.9	12068.5	11981.1	12079.6	12168.5	12178.0	12004.9	11871.5	11912.8
57.5°	13089.6	13145.2	13113.5	13210.3	13124.6	13259.6	13313.6	13278.6	13177.0	13008.6	13070.6
60°	14291.9	14339.5	14376.1	14384.0	14334.8	14414.2	14465.0	14495.2	14334.8	14142.6	14217.2
62.5°	15513.2	15567.2	15535.4	15548.1	15411.5	15519.5	15583.1	15591.0	15406.8	15236.8	15289.3
65°	16799.6	16874.2	16759.9	16683.7	16515.3	16513.7	16597.9	16612.2	16482.0	16361.3	16340.6
67.5°	18392.5	18425.9	18181.3	17925.6	17641.3	17579.4	17638.1	17671.5	17746.1	17743.0	17649.3
68°	18572.0	18565.6	18317.9	18013.0	17708.0	17636.6	17665.1	17708.0	17757.3	17766.8	17654.0
70°	18163.8	18086.0	17944.7	17560.3	17258.6	17071.2	16971.1	17050.5	16917.1	16918.7	16707.5
72.5°	16134.2	16124.6	15864.2	15673.6	15405.2	15093.9	14951.0	14949.4	14962.1	14870.0	14652.4
75°	13069.0	13081.7	12778.4	12646.5	12564.0	12505.2	12535.4	12629.1	12638.6	12637.0	12560.8
77.5°	9114.5	9166.9	9085.9	8871.5	9101.8	9298.7	9678.3	9872.0	9810.1	9995.9	10113.4
80°	4777.2	4882.0	4885.2	5036.1	5221.9	5401.3	5728.5	6022.3	5806.3	5711.0	5612.6
82.5°	1256.2	1294.4	1351.5	1264.2	1291.2	1318.2	1572.3	1548.5	1429.3	1492.9	1588.2
85°	358.9	370.0	354.2	320.8	293.8	270.0	276.3	233.5	203.3	201.7	195.3
87.5°	252.5	271.6	239.8	206.5	185.8	173.1	166.8	141.3	114.3	100.1	79.4
90°	117.5	115.9	100.1	77.8	68.3	65.1	65.1	50.8	28.6	17.5	15.9
92.5°	49.2	50.8	41.3	33.4	28.6	22.2	17.5	11.1	6.4	3.2	1.6
95°	17.5	19.1	15.9	12.7	11.1	9.5	7.9	6.4	3.2	1.6	1.6
97.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.2	3.2	1.6	1.6
100°	0.0	0.0	0.0	1.6	3.2	3.2	3.2	3.2	1.6	1.6	1.6
102.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
105°	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
145°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
150°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
160°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
165°	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6
167.5°	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6
170°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
172.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
175°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
177.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





REPORT NUMBER: P522230

CATALOG NUMBER: CST-CA8-330-750-U-T5R-HSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0	3359.0
2.5°	3382.8	3374.8	3371.7	3332.0	3343.1	3319.3	3374.8	3359.0	3355.8	3378.0
5°	3390.7	3354.2	3376.4	3351.0	3357.4	3322.4	3366.9	3347.8	3349.4	3360.6
7.5°	3395.5	3374.8	3397.1	3352.6	3370.1	3357.4	3389.1	3370.1	3389.1	3398.7
10°	3443.1	3433.6	3417.7	3405.0	3417.7	3387.6	3427.3	3424.1	3435.2	3463.8
12.5°	3508.3	3497.1	3481.3	3459.0	3468.5	3457.4	3487.6	3490.8	3511.4	3525.7
15°	3605.1	3590.8	3582.9	3560.7	3563.8	3555.9	3573.4	3576.5	3617.8	3613.1
17.5°	3741.7	3725.8	3732.2	3711.5	3703.6	3684.5	3652.8	3641.7	3690.9	3705.2
20°	3891.0	3873.5	3881.5	3864.0	3716.3	3416.1	3617.8	3756.0	3651.2	3643.2
22.5°	4060.9	4041.9	4048.2	4021.2	3838.6	3276.4	2850.8	2815.8	3216.0	3378.0
25°	4248.3	4222.9	4219.8	4184.8	3584.5	2966.7	2919.0	2857.1	2564.9	2333.0
27.5°	4480.2	4442.1	4423.0	3895.8	3559.1	3082.6	3011.2	2790.4	2366.4	2380.7
30°	4731.1	4675.6	4318.2	3970.4	3744.9	3219.2	3123.9	2445.8	2448.9	2442.6
32.5°	5017.0	4893.1	4230.9	4199.1	3967.2	3365.3	2593.5	2564.9	2568.1	2577.6
35°	5391.8	4542.1	4524.7	4526.3	4238.8	3255.7	2747.5	2720.5	2723.7	2730.1
37.5°	5471.2	4896.3	4899.5	4863.0	4527.9	2974.6	2934.9	2933.3	2927.0	2920.6
40°	5534.8	5342.6	5296.5	5237.8	4197.5	3203.3	3190.6	3181.1	3185.9	3198.6
42.5°	6031.8	5887.3	5842.9	5773.0	4305.5	3549.5	3508.3	3497.1	3509.8	3503.5
45°	6692.5	6571.8	6484.5	5337.8	4756.6	3925.9	3892.6	3878.3	3883.1	3922.8
47.5°	7391.3	7319.8	7053.0	5766.6	5282.2	4370.6	4337.3	4315.0	4323.0	4313.5
50°	8152.0	8086.9	6528.9	6413.0	5863.5	4850.3	4801.0	4793.1	4796.3	4794.7
52.5°	8977.9	7616.8	7235.7	7115.0	6476.5	5352.1	5334.6	5291.8	5301.3	5291.8
55°	9946.7	8023.4	8013.9	7872.5	7165.8	5935.0	5914.3	5854.0	5474.4	5806.3
57.5°	10866.2	8800.0	8800.0	8663.4	7870.9	6514.6	6481.3	6436.8	3891.0	3138.2
60°	11873.1	9578.2	9556.0	9443.2	8550.7	7067.3	5744.4	5731.7	2350.5	2358.4
62.5°	12743.4	10272.2	10311.9	10207.1	9205.0	5291.8	2661.8	2607.8	231.9	357.3
65°	13718.6	11039.3	11087.0	10979.0	9913.3	5612.6	2888.9	2861.9	52.4	47.6
67.5°	14823.9	11804.8	11696.8	11577.7	10327.8	5779.3	3001.6	2977.8	14.3	9.5
68°	14833.4	11788.9	11649.2	11568.2	10288.1	5747.6	2992.1	2969.9	14.3	9.5
70°	14071.1	11195.0	11055.2	11075.9	9795.8	5496.6	2868.2	2826.9	14.3	9.5
72.5°	12344.8	9962.6	9805.3	9694.2	8687.3	4886.8	2571.2	2493.4	14.3	9.5
75°	10562.9	8442.7	8182.2	7937.6	6989.5	3999.0	2109.1	2021.7	14.3	9.5
77.5°	8325.2	6435.2	6065.2	5904.8	5252.1	2954.0	1567.5	1472.2	14.3	7.9
80°	4600.9	3692.5	3378.0	3279.6	3003.2	1735.9	898.9	841.7	12.7	7.9
82.5°	1189.5	892.5	778.2	751.2	705.1	411.3	219.2	208.0	11.1	6.4
85°	169.9	125.5	138.2	163.6	157.2	106.4	76.2	65.1	9.5	4.8
87.5°	88.9	74.6	87.3	98.5	100.1	61.9	31.8	17.5	4.8	0.0
90°	14.3	14.3	15.9	17.5	17.5	7.9	6.4	0.0	0.0	0.0
92.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.6	3.2	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P522230  
 CATALOG NUMBER: CST-CA8-330-750-U-T5R-HSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)