

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: P522194

Luminaire Tested: **CST-CA6-230-750-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522194  
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-CA6-230-750-U-T5R-HSS-HM-EX90  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (6) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29709 lumens  
Efficiency: N/A  
Efficacy: 130.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U1 - G4

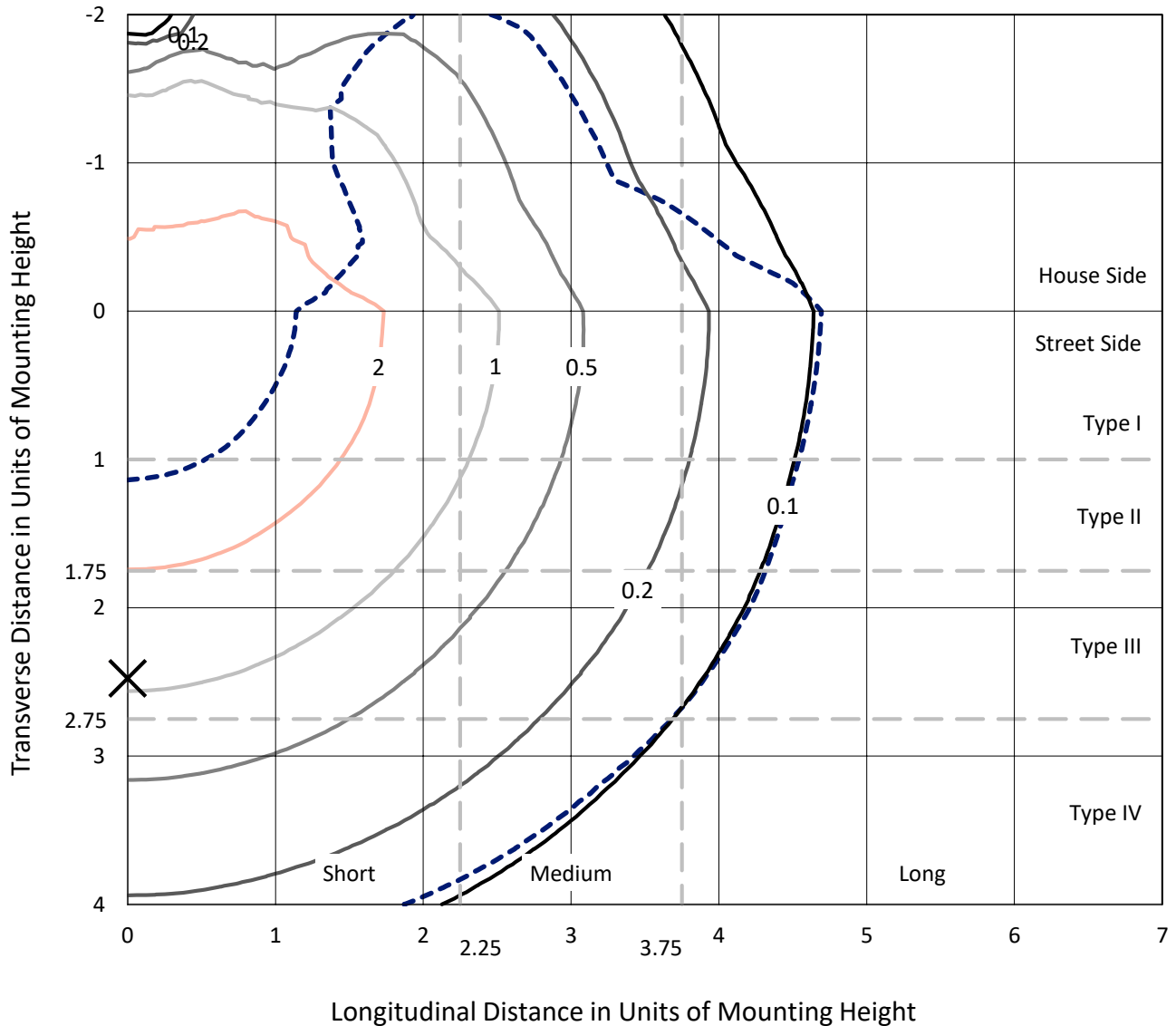
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P522194  
 CATALOG NUMBER: CST-CA6-230-750-U-T5R-HSS-HM-EX90

### Iso-Footcandle Lines of Horizontal Illumination

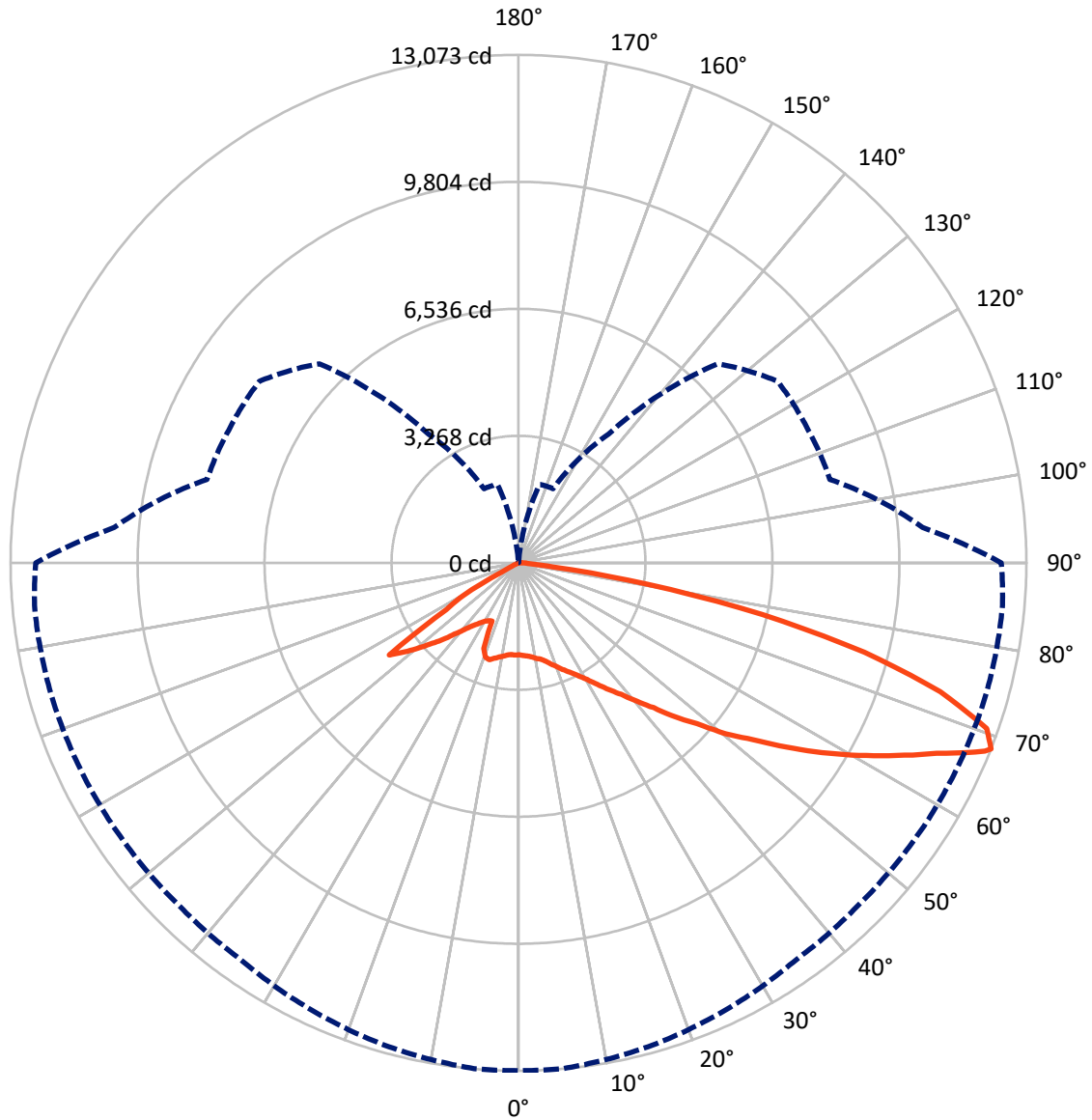
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Short - N/A

REPORT NUMBER: P522194  
CATALOG NUMBER: CST-CA6-230-750-U-T5R-HSS-HM-EX90

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P522194  
 CATALOG NUMBER: CST-CA6-230-750-U-T5R-HSS-HM-EX90

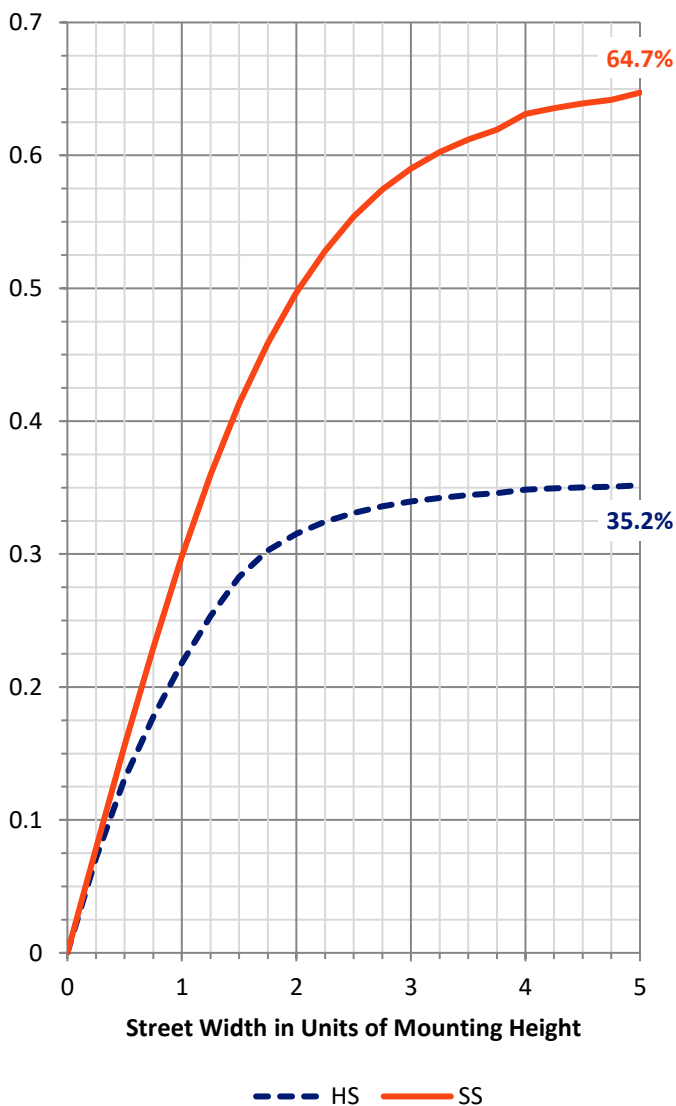
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10455.5	1.8	10457.3
	% Fixture	35.2	0.0	35.2
<b>Street Side</b>	Lumens	19243.8	7.8	19251.6
	% Fixture	64.8	0.0	64.8
<b>Total</b>	Lumens	29699.4	9.6	29709.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	228.7	0.8
10°-20°	732.8	2.5
20°-30°	1308.2	4.4
30°-40°	2128.2	7.2
40°-50°	3634.4	12.2
50°-60°	6064.2	20.4
60°-70°	8436.5	28.4
70°-80°	6539.6	22.0
80°-90°	626.7	2.1
90°-100°	7.6	0.0
100°-110°	0.6	0.0
110°-120°	0.3	0.0
120°-130°	0.2	0.0
130°-140°	0.2	0.0
140°-150°	0.3	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.1	0.0
0°-90°	29699.4	100.0
0°-180°	29709.0	100.0

**Coefficient of Utilization**



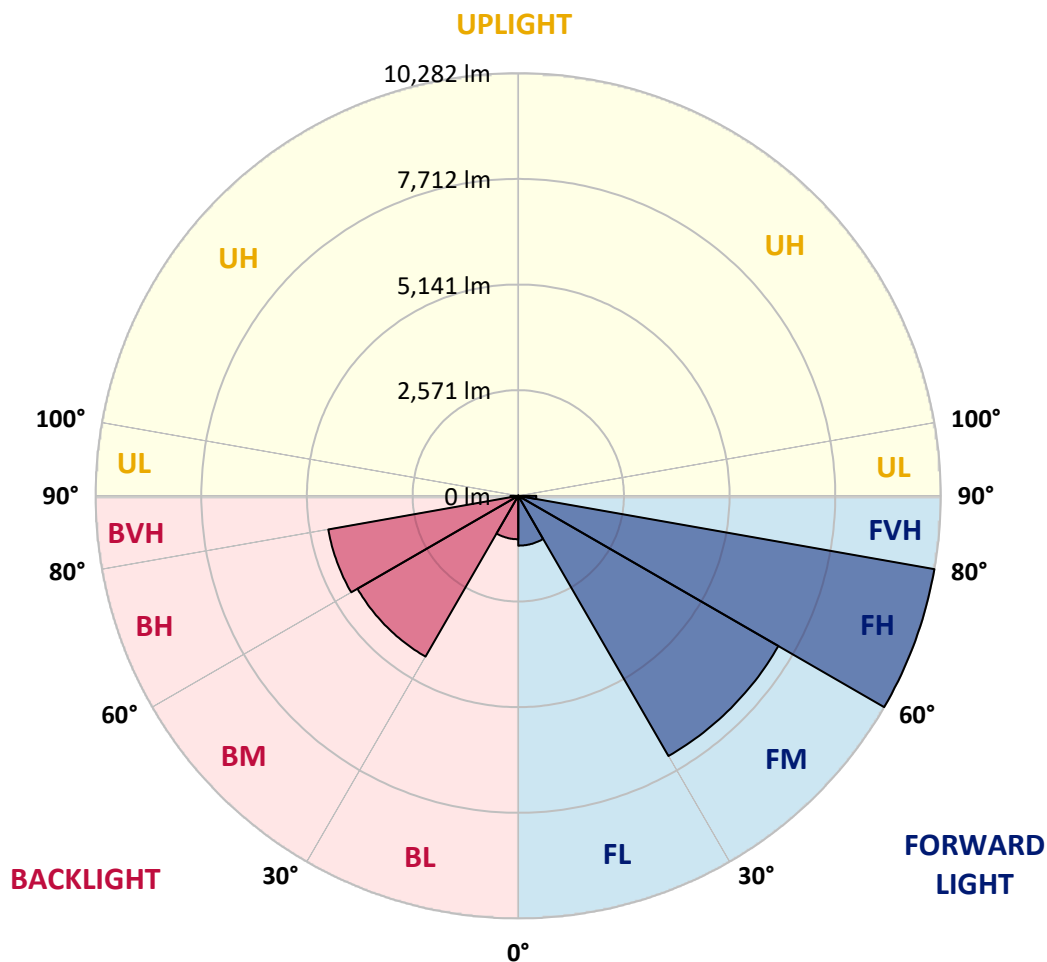
REPORT NUMBER: P522194  
 CATALOG NUMBER: CST-CA6-230-750-U-T5R-HSS-HM-EX90

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1212.5	4.1			
FM	(30°-60°)	7310.5	24.6			
FH	(60°-80°)	10282.4	34.6			G4/12000
FVH	(80°-90°)	438.4	1.5			G3/500
BL	(0°-30°)	1057.3	3.6	B3/2500		
BM	(30°-60°)	4516.3	15.2	B3/5000		
BH	(60°-80°)	4693.7	15.8	B4/5000		G4/5000
BVH	(80°-90°)	188.3	0.6			G2/225
UL	(90°-100°)	7.6	0.0		U1/10	
UH	(100°-180°)	2.0	0.0		U1/10	

**BUG Rating: B4-U1-G4**

Type IV Short





REPORT NUMBER: P522194

CATALOG NUMBER: CST-CA6-230-750-U-T5R-HSS-HM-EX90

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3
2.5°	2391.2	2387.8	2385.6	2400.1	2358.7	2375.5	2364.3	2378.9	2375.5	2382.2	2383.3
5°	2407.9	2402.3	2394.5	2410.2	2385.6	2396.8	2384.5	2391.2	2369.9	2387.8	2390.0
7.5°	2445.9	2430.3	2429.2	2433.6	2416.9	2424.7	2403.5	2411.3	2400.1	2393.4	2400.1
10°	2503.0	2489.5	2475.0	2484.0	2456.0	2466.1	2443.7	2450.4	2444.8	2430.3	2443.7
12.5°	2542.1	2546.6	2536.5	2543.2	2518.6	2509.7	2501.8	2500.7	2497.4	2476.1	2472.8
15°	2629.3	2631.5	2613.6	2618.1	2612.5	2608.0	2596.9	2587.9	2570.0	2556.6	2547.7
17.5°	2743.3	2731.0	2714.2	2718.7	2734.4	2714.2	2707.5	2690.8	2665.0	2642.7	2638.2
20°	2862.9	2855.1	2839.4	2848.4	2847.3	2833.8	2837.2	2809.3	2772.4	2753.4	2738.8
22.5°	2995.9	2984.8	2973.6	2990.4	2976.9	2968.0	2964.6	2945.6	2899.8	2878.6	2875.2
25°	3129.0	3123.4	3131.2	3125.6	3106.6	3099.9	3104.4	3097.7	3044.0	3018.3	3002.7
27.5°	3295.5	3282.1	3294.4	3287.7	3267.6	3268.7	3269.8	3270.9	3210.6	3177.0	3154.7
30°	3485.6	3481.1	3496.8	3475.5	3456.5	3468.8	3478.9	3456.5	3404.0	3354.8	3347.0
32.5°	3732.6	3704.7	3722.6	3695.7	3666.7	3695.7	3713.6	3668.9	3626.4	3563.8	3575.0
35°	4006.5	3997.6	3997.6	3962.9	3947.3	3993.1	4011.0	3967.4	3901.4	3846.7	3833.2
37.5°	4297.2	4306.1	4334.1	4319.5	4305.0	4332.9	4373.2	4315.1	4230.1	4172.0	4156.3
40°	4682.8	4705.2	4724.2	4705.2	4688.4	4706.3	4752.1	4676.1	4616.9	4585.6	4552.0
42.5°	5097.6	5135.6	5123.3	5125.5	5140.1	5165.8	5211.6	5142.3	5074.1	5073.0	5023.8
45°	5658.8	5658.8	5633.0	5657.6	5655.4	5719.1	5739.2	5701.2	5644.2	5627.5	5585.0
47.5°	6183.0	6237.8	6227.8	6263.5	6235.6	6289.2	6357.4	6325.0	6259.1	6199.8	6190.9
50°	6914.1	6900.7	6887.3	6941.0	6936.5	6973.4	7036.0	7015.9	6924.2	6857.1	6844.8
52.5°	7556.9	7627.4	7610.6	7691.1	7646.4	7698.9	7773.8	7770.4	7658.7	7592.7	7573.7
55°	8368.5	8415.5	8412.1	8494.8	8433.4	8502.7	8565.3	8572.0	8450.1	8356.2	8385.3
57.5°	9213.6	9252.8	9230.4	9298.6	9238.2	9333.3	9371.3	9346.7	9275.1	9156.6	9200.2
60°	10059.9	10093.4	10119.1	10124.7	10090.1	10146.0	10181.7	10203.0	10090.1	9954.8	10007.3
62.5°	10919.5	10957.6	10935.2	10944.1	10848.0	10924.0	10968.7	10974.3	10844.6	10725.0	10761.9
65°	11825.0	11877.6	11797.1	11743.4	11624.9	11623.8	11683.1	11693.1	11601.5	11516.5	11502.0
67.5°	12946.3	12969.8	12797.6	12617.6	12417.5	12373.9	12415.3	12438.8	12491.3	12489.1	12423.1
68°	13072.6	13068.1	12893.7	12679.1	12464.5	12414.2	12434.3	12464.5	12499.1	12505.8	12426.5
70°	12785.3	12730.5	12631.0	12360.5	12148.1	12016.2	11945.8	12001.7	11907.8	11908.9	11760.2
72.5°	11356.6	11349.9	11166.6	11032.5	10843.5	10624.4	10523.8	10522.7	10531.6	10466.8	10313.6
75°	9199.1	9208.1	8994.5	8901.8	8843.6	8802.3	8823.5	8889.5	8896.2	8895.0	8841.4
77.5°	6415.6	6452.5	6395.4	6244.5	6406.6	6545.2	6812.4	6948.8	6905.2	7036.0	7118.7
80°	3362.6	3436.4	3438.6	3544.8	3675.6	3801.9	4032.2	4239.0	4087.0	4019.9	3950.6
82.5°	884.3	911.1	951.3	889.8	908.8	927.8	1106.7	1089.9	1006.1	1050.8	1117.9
85°	252.6	260.5	249.3	225.8	206.8	190.0	194.5	164.3	143.1	142.0	137.5
87.5°	177.7	191.2	168.8	145.3	130.8	121.8	117.4	99.5	80.5	70.4	55.9
90°	82.7	81.6	70.4	54.8	48.1	45.8	45.8	35.8	20.1	12.3	11.2
92.5°	34.7	35.8	29.1	23.5	20.1	15.7	12.3	7.8	4.5	2.2	1.1
95°	12.3	13.4	11.2	8.9	7.8	6.7	5.6	4.5	2.2	1.1	1.1
97.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	2.2	2.2	1.1	1.1
100°	0.0	0.0	0.0	1.1	2.2	2.2	2.2	2.2	1.1	1.1	1.1
102.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
105°	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1



REPORT NUMBER: P522194  
 CATALOG NUMBER: CST-CA6-230-750-U-T5R-HSS-HM-EX90

**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	1.1	1.1	1.1	1.1
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
145°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
150°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
160°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
165°	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1
167.5°	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1
170°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
172.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
175°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
177.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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: P522194

CATALOG NUMBER: CST-CA6-230-750-U-T5R-HSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3	2364.3
2.5°	2381.1	2375.5	2373.3	2345.3	2353.2	2336.4	2375.5	2364.3	2362.1	2377.8
5°	2386.7	2361.0	2376.6	2358.7	2363.2	2338.6	2369.9	2356.5	2357.6	2365.5
7.5°	2390.0	2375.5	2391.2	2359.9	2372.2	2363.2	2385.6	2372.2	2385.6	2392.3
10°	2423.6	2416.9	2405.7	2396.8	2405.7	2384.5	2412.4	2410.2	2418.0	2438.1
12.5°	2469.4	2461.6	2450.4	2434.8	2441.5	2433.6	2454.9	2457.1	2471.7	2481.7
15°	2537.6	2527.5	2522.0	2506.3	2508.5	2503.0	2515.3	2517.5	2546.6	2543.2
17.5°	2633.7	2622.6	2627.0	2612.5	2606.9	2593.5	2571.1	2563.3	2598.0	2608.0
20°	2738.8	2726.5	2732.1	2719.8	2615.9	2404.6	2546.6	2643.8	2570.0	2564.4
22.5°	2858.4	2845.0	2849.5	2830.5	2701.9	2306.2	2006.6	1982.0	2263.7	2377.8
25°	2990.4	2972.5	2970.2	2945.6	2523.1	2088.2	2054.7	2011.1	1805.4	1642.2
27.5°	3153.6	3126.7	3113.3	2742.2	2505.2	2169.8	2119.5	1964.1	1665.7	1675.7
30°	3330.2	3291.1	3039.5	2794.7	2636.0	2266.0	2198.9	1721.5	1723.8	1719.3
32.5°	3531.4	3444.2	2978.1	2955.7	2792.5	2368.8	1825.5	1805.4	1807.6	1814.3
35°	3795.2	3197.2	3184.9	3186.0	2983.6	2291.7	1933.9	1914.9	1917.2	1921.7
37.5°	3851.1	3446.5	3448.7	3423.0	3187.1	2093.8	2065.9	2064.7	2060.3	2055.8
40°	3895.8	3760.6	3728.2	3686.8	2954.6	2254.8	2245.8	2239.1	2242.5	2251.4
42.5°	4245.7	4144.0	4112.7	4063.5	3030.6	2498.5	2469.4	2461.6	2470.5	2466.1
45°	4710.8	4625.8	4564.3	3757.2	3348.1	2763.4	2739.9	2729.9	2733.2	2761.2
47.5°	5202.7	5152.4	4964.5	4059.1	3718.1	3076.4	3053.0	3037.3	3042.9	3036.2
50°	5738.1	5692.3	4595.6	4514.0	4127.2	3414.0	3379.4	3373.8	3376.0	3374.9
52.5°	6319.4	5361.4	5093.1	5008.1	4558.8	3767.3	3755.0	3724.8	3731.5	3724.8
55°	7001.3	5647.6	5640.9	5541.4	5043.9	4177.6	4163.0	4120.5	3853.4	4087.0
57.5°	7648.6	6194.2	6194.2	6098.1	5540.3	4585.6	4562.1	4530.8	2738.8	2208.9
60°	8357.3	6742.0	6726.3	6647.0	6018.7	4974.6	4043.4	4034.5	1654.5	1660.1
62.5°	8969.9	7230.5	7258.5	7184.7	6479.3	3724.8	1873.6	1835.6	163.2	251.5
65°	9656.3	7770.4	7804.0	7728.0	6977.9	3950.6	2033.4	2014.4	36.9	33.5
67.5°	10434.4	8309.3	8233.3	8149.4	7269.6	4068.0	2112.8	2096.0	10.1	6.7
68°	10441.1	8298.1	8199.7	8142.7	7241.7	4045.6	2106.1	2090.5	10.1	6.7
70°	9904.5	7880.0	7781.6	7796.2	6895.1	3869.0	2018.9	1989.8	10.1	6.7
72.5°	8689.4	7012.5	6901.8	6823.6	6114.9	3439.7	1809.9	1755.1	10.1	6.7
75°	7435.1	5942.7	5759.4	5587.2	4919.8	2814.8	1484.6	1423.1	10.1	6.7
77.5°	5860.0	4529.7	4269.2	4156.3	3696.9	2079.3	1103.4	1036.3	10.1	5.6
80°	3238.5	2599.1	2377.8	2308.4	2113.9	1221.9	632.7	592.5	8.9	5.6
82.5°	837.3	628.3	547.8	528.8	496.3	289.5	154.3	146.4	7.8	4.5
85°	119.6	88.3	97.3	115.1	110.7	74.9	53.7	45.8	6.7	3.4
87.5°	62.6	52.5	61.5	69.3	70.4	43.6	22.4	12.3	3.4	0.0
90°	10.1	10.1	11.2	12.3	12.3	5.6	4.5	0.0	0.0	0.0
92.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.1	2.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P522194  
 CATALOG NUMBER: CST-CA6-230-750-U-T5R-HSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.1	1.1	1.1	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)