

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: P522214

Luminaire Tested: **CST-CA8-230-760-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522214  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-230-760-U-T5R-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23631 lumens  
Efficiency: N/A  
Efficacy: 103.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U2 - G4

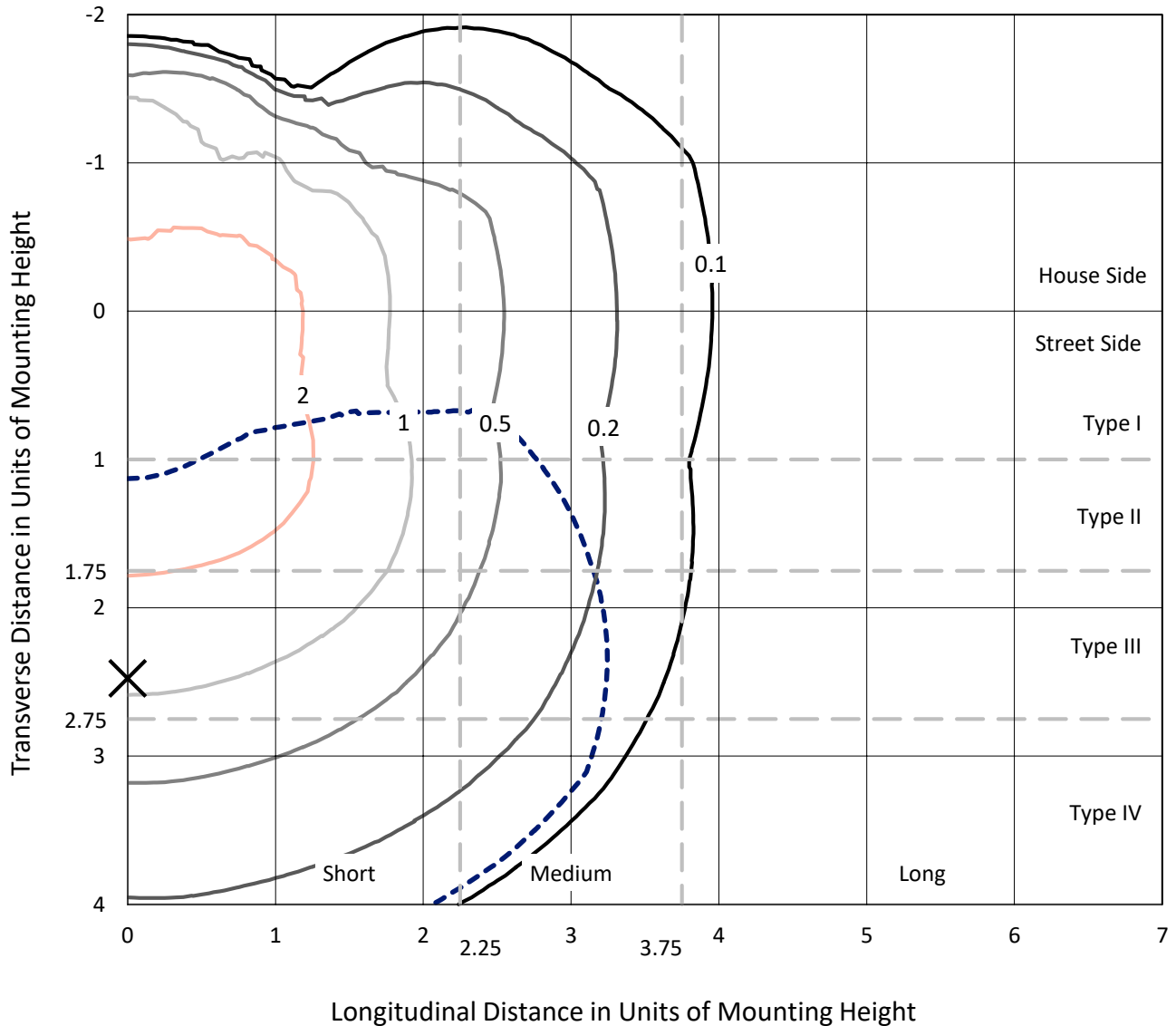
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

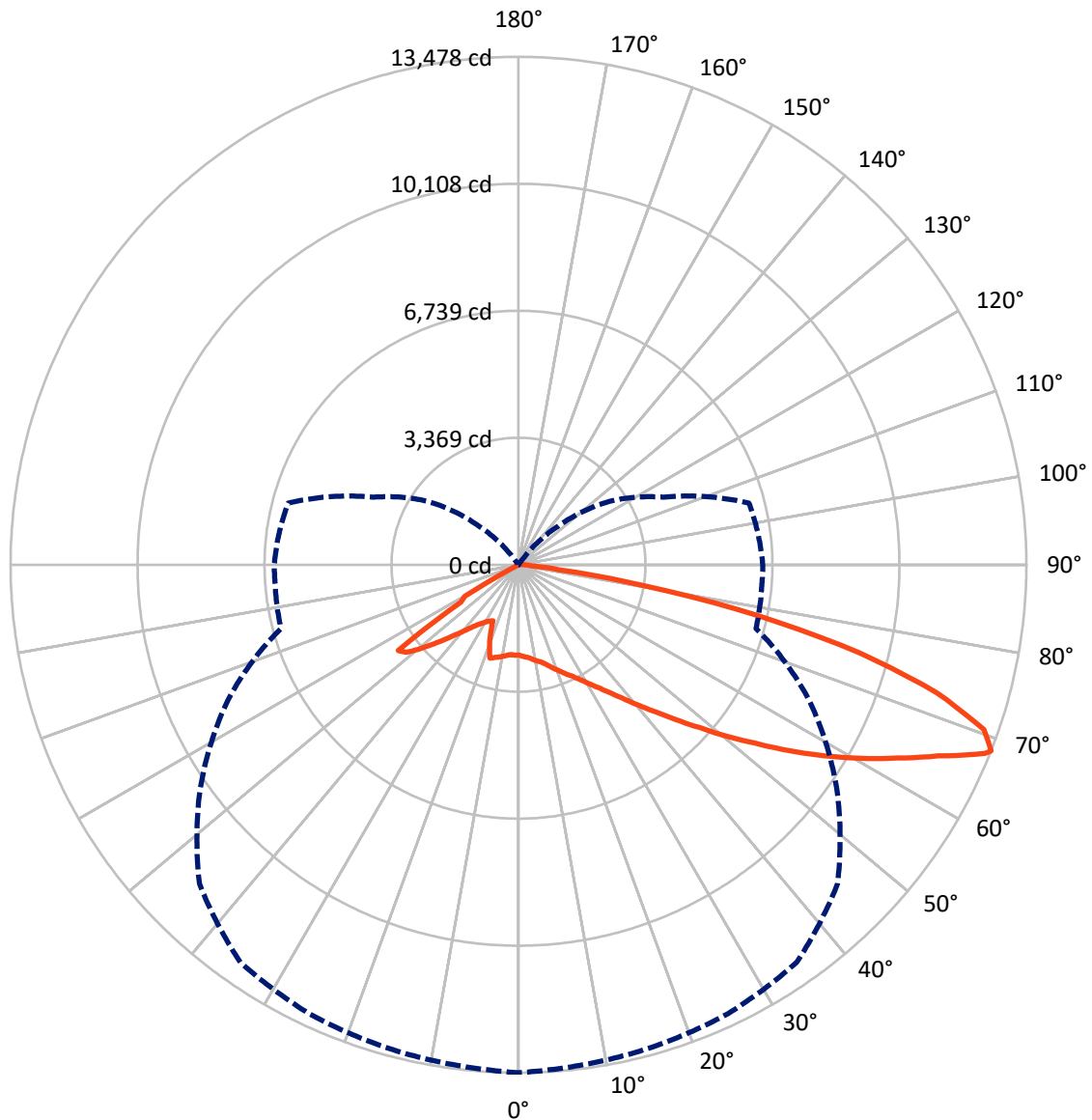
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 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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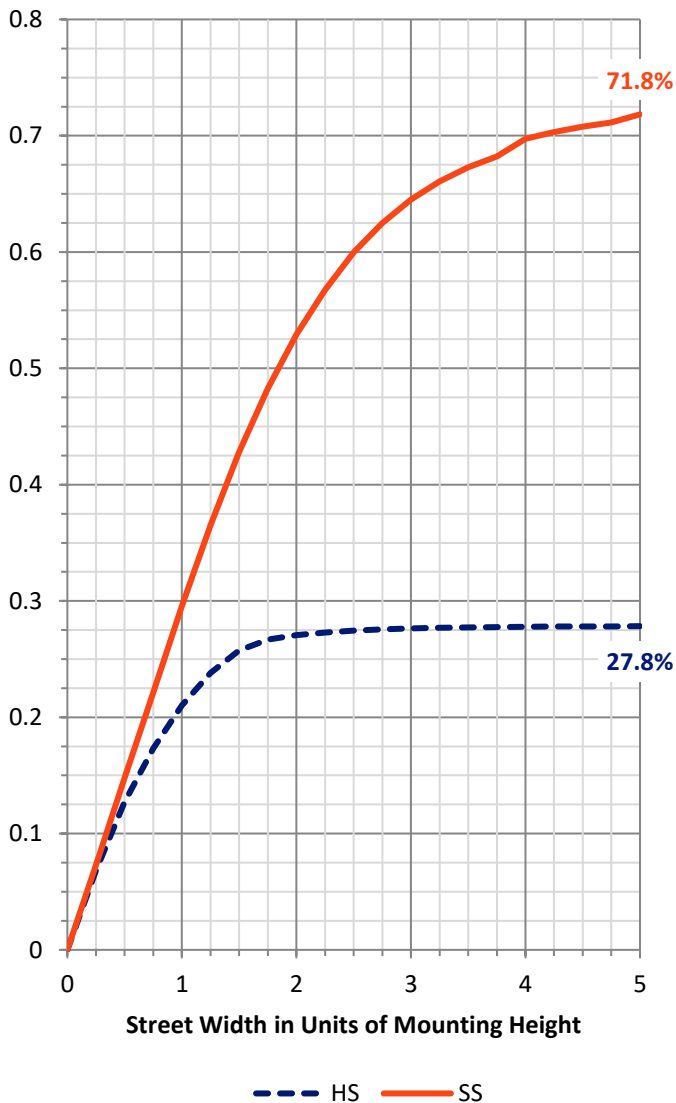
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6600.2	0.1	6600.3
	% Fixture	27.9	0.0	27.9
<b>Street Side</b>	Lumens	17017.2	13.5	17030.7
	% Fixture	72.0	0.1	72.1
<b>Total</b>	Lumens	23617.3	13.7	23631.0
	% Fixture	99.9	0.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.4	1.0
10°-20°	736.3	3.1
20°-30°	1246.5	5.3
30°-40°	1974.8	8.4
40°-50°	3228.6	13.7
50°-60°	4945.4	20.9
60°-70°	6080.8	25.7
70°-80°	4698.6	19.9
80°-90°	474.1	2.0
90°-100°	13.5	0.1
100°-110°	0.2	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	23617.3	99.9
0°-180°	23631.0	100.0



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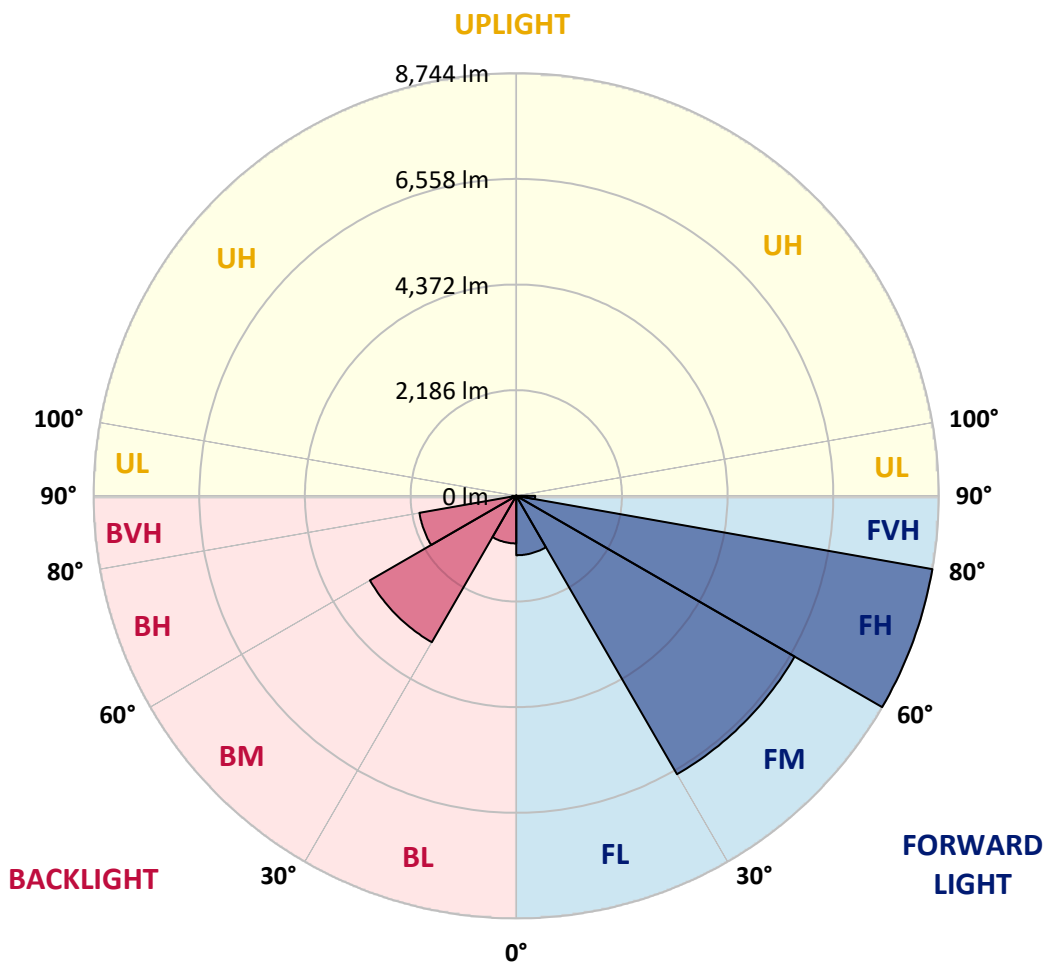
CATALOG NUMBER: CST-CA8-230-760-U-T5R-HSS-HM-EX180

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1230.0	5.2			
FM	(30°-60°)	6651.7	28.1			
FH	(60°-80°)	8744.5	37.0			G4/12000
FVH	(80°-90°)	391.0	1.7			G3/500
BL	(0°-30°)	985.1	4.2	B2/1000		
BM	(30°-60°)	3497.1	14.8	B3/5000		
BH	(60°-80°)	2034.9	8.6	B3/2500		G3/2500
BVH	(80°-90°)	83.1	0.4			G1/100
UL	(90°-100°)	13.5	0.1		U2/50	
UH	(100°-180°)	0.2	0.0		U1/10	

**BUG Rating: B3-U2-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1
2.5°	2437.3	2432.8	2428.2	2438.5	2398.6	2415.7	2402.0	2414.6	2405.5	2415.7	2412.3
5°	2469.2	2464.7	2451.0	2462.4	2436.2	2443.0	2425.9	2430.5	2399.8	2418.0	2416.8
7.5°	2521.6	2509.1	2499.9	2499.9	2477.2	2476.0	2448.7	2449.9	2425.9	2423.7	2428.2
10°	2592.2	2583.0	2558.0	2560.3	2528.4	2523.9	2489.7	2488.6	2469.2	2457.8	2468.1
12.5°	2644.5	2653.6	2630.9	2630.9	2599.0	2576.2	2552.3	2536.4	2521.6	2504.5	2496.5
15°	2740.1	2749.3	2718.5	2717.4	2704.9	2677.5	2651.4	2617.2	2591.0	2583.0	2570.5
17.5°	2864.2	2858.5	2832.4	2833.5	2835.8	2791.4	2765.2	2720.8	2683.2	2655.9	2649.1
20°	2990.6	2990.6	2962.1	2971.2	2959.9	2918.9	2901.8	2840.3	2788.0	2758.4	2734.5
22.5°	3131.8	3126.1	3106.7	3126.1	3103.3	3062.3	3033.9	2972.4	2905.2	2737.9	2669.6
25°	3266.1	3262.7	3270.6	3276.3	3247.9	3196.6	3177.3	3112.4	2925.7	2706.0	2568.2
27.5°	3435.7	3424.3	3442.5	3453.9	3425.5	3381.1	3340.1	3267.2	2872.2	2699.2	2684.4
30°	3653.2	3628.1	3654.3	3660.0	3630.4	3603.1	3541.6	3177.3	2890.4	2840.3	2835.8
32.5°	3885.4	3855.8	3889.9	3894.5	3855.8	3833.0	3678.2	3130.6	3069.1	3011.1	3016.8
35°	4160.9	4160.9	4178.0	4180.2	4151.8	4113.1	3523.4	3358.3	3303.7	3250.2	3249.0
37.5°	4496.7	4486.5	4532.0	4559.3	4528.6	4418.2	3748.8	3671.4	3587.1	3518.8	3377.7
40°	4902.0	4920.2	4932.7	4960.0	4930.4	4682.3	4077.8	3990.1	3924.1	3695.3	3339.0
42.5°	5339.1	5343.7	5371.0	5405.2	5405.2	5143.3	4462.6	4387.4	4302.0	3613.3	3452.8
45°	5861.7	5851.4	5903.8	5958.4	5943.6	5672.7	4910.0	4854.2	4454.6	3851.2	3852.4
47.5°	6454.8	6442.3	6517.4	6589.1	6515.1	6260.1	5401.7	5358.5	4299.8	4254.2	4245.1
50°	7140.1	7109.4	7195.9	7291.5	7231.2	6915.8	5999.4	5168.4	4731.2	4694.8	4689.1
52.5°	7872.1	7848.2	7900.6	8063.3	7983.7	7602.3	6565.2	5332.3	5231.0	5190.0	5179.8
55°	8698.6	8651.9	8764.6	8888.7	8796.5	8361.6	7123.0	5876.5	5771.7	5701.1	5598.7
57.5°	9567.2	9500.0	9558.1	9714.0	9625.2	9139.1	7842.5	6436.6	6312.5	5224.2	4808.6
60°	10432.4	10401.6	10424.4	10562.2	10452.9	9895.0	8516.4	6997.8	5342.5	5167.2	5187.7
62.5°	11302.1	11234.9	11255.4	11396.6	11256.6	10614.5	9155.1	7507.8	5622.6	5561.1	5582.8
65°	12234.5	12154.8	12173.0	12214.0	12040.9	11260.0	9719.7	7989.3	6043.8	5978.9	6002.8
67.5°	13358.1	13285.2	13186.2	13064.4	12825.3	11945.3	10281.0	8495.9	6517.4	6481.0	6488.9
68°	13477.6	13407.0	13287.5	13142.9	12874.3	11973.8	10304.9	8510.7	6524.2	6478.7	6481.0
70°	13105.4	13147.5	13012.0	12769.5	12545.3	11557.1	9914.4	8182.9	6233.9	6166.8	6149.7
72.5°	11606.1	11698.3	11511.6	11470.6	11195.1	10295.8	8675.8	7100.3	5422.2	5443.9	5382.4
75°	9370.2	9505.7	9279.2	9291.7	9134.6	8588.2	7271.0	5911.8	4452.3	4551.4	4569.6
77.5°	6516.2	6710.9	6611.9	6710.9	6633.5	6436.6	5627.2	4552.5	3397.0	3510.9	3555.2
80°	3398.1	3629.2	3760.2	3801.1	3826.2	3818.2	3426.6	2732.2	1963.8	2005.9	2003.6
82.5°	1074.7	1018.9	1051.9	1042.8	1014.3	1025.7	924.4	722.9	500.9	552.1	528.2
85°	324.4	326.7	317.6	315.3	291.4	256.1	209.5	120.7	59.2	69.4	64.9
87.5°	239.1	241.3	223.1	211.7	198.1	171.9	133.2	75.1	28.5	27.3	21.6
90°	132.1	127.5	118.4	109.3	103.6	88.8	67.2	28.5	10.2	8.0	6.8
92.5°	71.7	68.3	63.8	60.3	52.4	42.1	27.3	9.1	4.6	1.1	0.0
95°	33.0	30.7	29.6	26.2	22.8	15.9	9.1	5.7	3.4	1.1	0.0
97.5°	14.8	13.7	12.5	10.2	8.0	4.6	4.6	3.4	2.3	1.1	0.0
100°	3.4	3.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.1	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0



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





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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1	2394.1
2.5°	2408.9	2402.0	2398.6	2377.0	2383.8	2364.5	2402.0	2392.9	2387.2	2403.2
5°	2411.1	2387.2	2402.0	2389.5	2394.1	2366.8	2396.3	2383.8	2382.7	2389.5
7.5°	2416.8	2400.9	2415.7	2390.7	2402.0	2390.7	2412.3	2399.8	2410.0	2416.8
10°	2447.6	2438.5	2431.6	2425.9	2433.9	2411.1	2438.5	2439.6	2443.0	2463.5
12.5°	2490.8	2481.7	2470.3	2455.5	2463.5	2454.4	2474.9	2480.6	2493.1	2503.4
15°	2551.2	2534.1	2529.5	2515.9	2523.9	2519.3	2523.9	2520.4	2544.3	2540.9
17.5°	2634.3	2614.9	2550.0	2484.0	2441.9	2454.4	2506.8	2575.1	2592.2	2594.4
20°	2665.0	2528.4	2521.6	2446.4	2412.3	2410.0	2301.9	2140.2	2189.2	2304.1
22.5°	2628.6	2441.9	2422.5	2407.7	2262.0	2023.0	2000.2	1976.3	1970.6	1987.7
25°	2546.6	2525.0	2507.9	2314.4	2084.4	2085.6	2052.5	1895.4	1650.7	1630.2
27.5°	2671.8	2642.2	2477.2	2178.9	2174.4	2172.1	2123.1	1720.1	1667.8	1680.3
30°	2814.1	2765.2	2333.7	2295.0	2293.9	2273.4	1903.4	1734.9	1734.9	1737.2
32.5°	2978.1	2674.1	2415.7	2433.9	2432.8	2336.0	1838.5	1827.1	1822.6	1834.0
35°	3103.3	2601.3	2592.2	2625.2	2602.4	1982.0	1953.5	1943.3	1938.7	1933.0
37.5°	3064.6	2810.7	2810.7	2831.2	2647.9	2110.6	2096.9	2096.9	2087.8	2083.3
40°	3123.8	3071.4	3045.2	3053.2	1923.9	2266.6	2276.8	2274.5	2273.4	2281.4
42.5°	3435.7	3389.0	3365.1	3082.8	2153.9	2252.9	2503.4	2502.2	2505.6	2502.2
45°	3833.0	3789.8	3727.1	2884.7	2445.3	1975.1	2759.5	2772.0	2773.2	2772.0
47.5°	4249.7	4222.4	3581.4	3193.2	2761.8	2119.7	2637.7	3080.5	3074.8	3081.7
50°	4690.2	4567.3	3563.2	3558.7	3098.7	2358.8	2359.9	3350.3	3408.4	3426.6
52.5°	5180.9	4140.4	3949.1	3603.1	3440.3	2604.7	2579.6	2969.0	3761.3	3779.5
55°	4812.1	4373.8	4370.3	3206.9	3579.2	2841.5	2844.9	2817.6	3449.4	3920.7
57.5°	4788.1	4798.4	4790.4	3578.0	2611.5	2663.9	3099.9	3076.0	2233.6	1810.1
60°	5201.4	5216.2	4653.8	3863.8	2823.3	1638.2	1909.1	1622.2	1643.9	1660.9
62.5°	5596.4	5601.0	3785.2	2533.0	1399.1	66.0	31.9	26.2	25.0	25.0
65°	6033.6	6033.6	4057.3	2762.9	1351.3	25.0	4.6	3.4	12.5	12.5
67.5°	6455.9	6362.6	4256.5	2933.7	1375.2	3.4	0.0	0.0	0.0	0.0
68°	6432.0	6329.5	4238.3	2929.1	1371.8	2.3	0.0	0.0	0.0	0.0
70°	6074.5	5975.5	4020.9	2795.9	1320.6	2.3	0.0	0.0	0.0	0.0
72.5°	5361.9	5270.8	3560.9	2464.7	1190.8	1.1	0.0	0.0	0.0	0.0
75°	4538.8	4526.3	3076.0	2079.9	1021.2	1.1	0.0	0.0	0.0	0.0
77.5°	3652.0	3595.1	2404.3	1630.2	823.1	0.0	0.0	0.0	0.0	0.0
80°	2034.3	2118.6	1407.1	958.5	518.0	0.0	0.0	0.0	0.0	0.0
82.5°	549.9	514.6	307.4	208.3	99.0	0.0	0.0	0.0	0.0	0.0
85°	70.6	77.4	35.3	28.5	6.8	0.0	0.0	0.0	0.0	0.0
87.5°	36.4	43.3	11.4	9.1	2.3	0.0	0.0	0.0	0.0	0.0
90°	6.8	8.0	3.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P522214  
 CATALOG NUMBER: CST-CA8-230-760-U-T5R-HSS-HM-EX180

**CANDELA DISTRIBUTION (continued):**

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