

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: P579551

Luminaire Tested: **CST-CA8-230-750-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579551  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-230-750-U-T5-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22511 lumens  
Efficiency: N/A  
Efficacy: 98.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U2 - G4

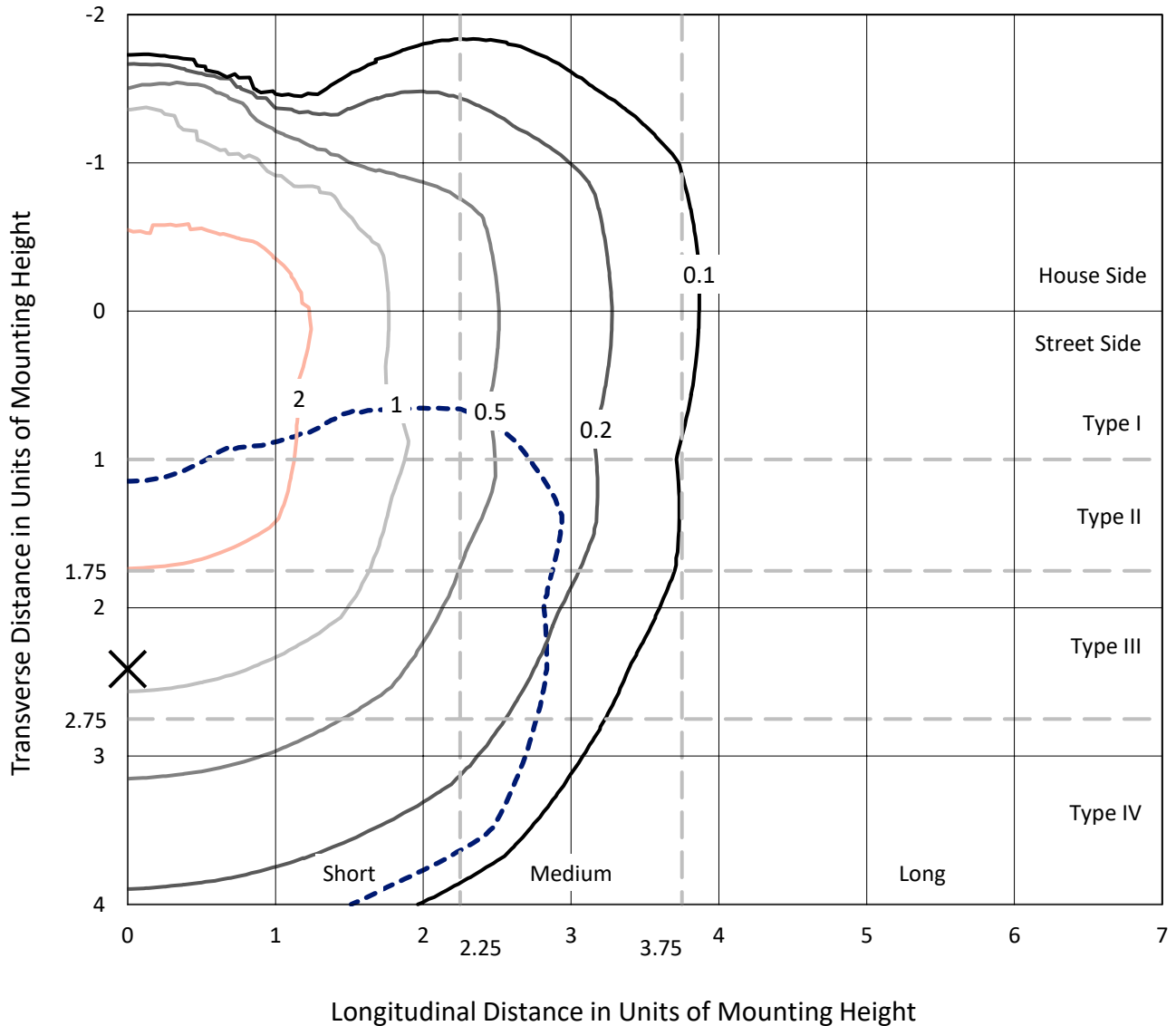
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

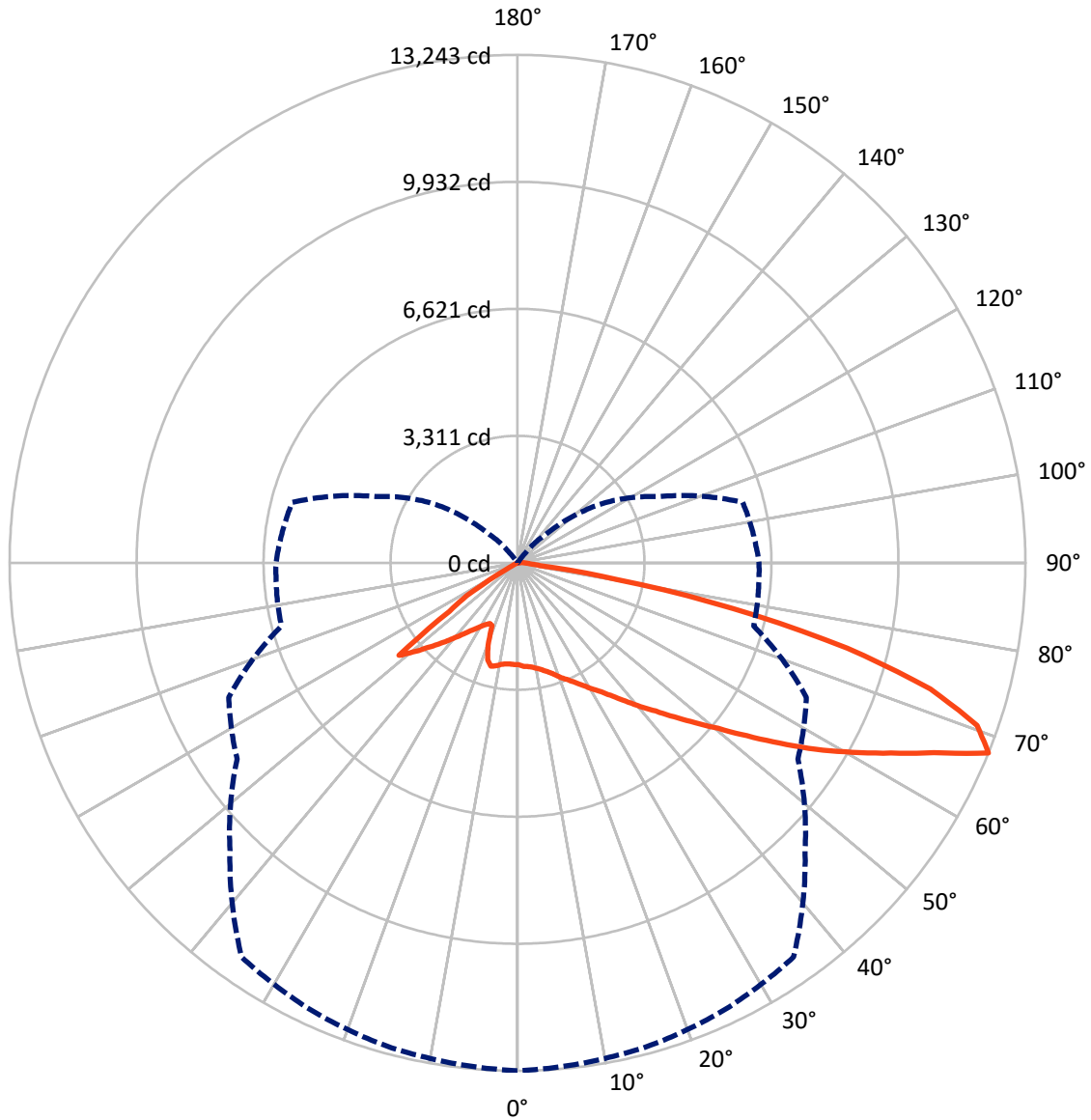
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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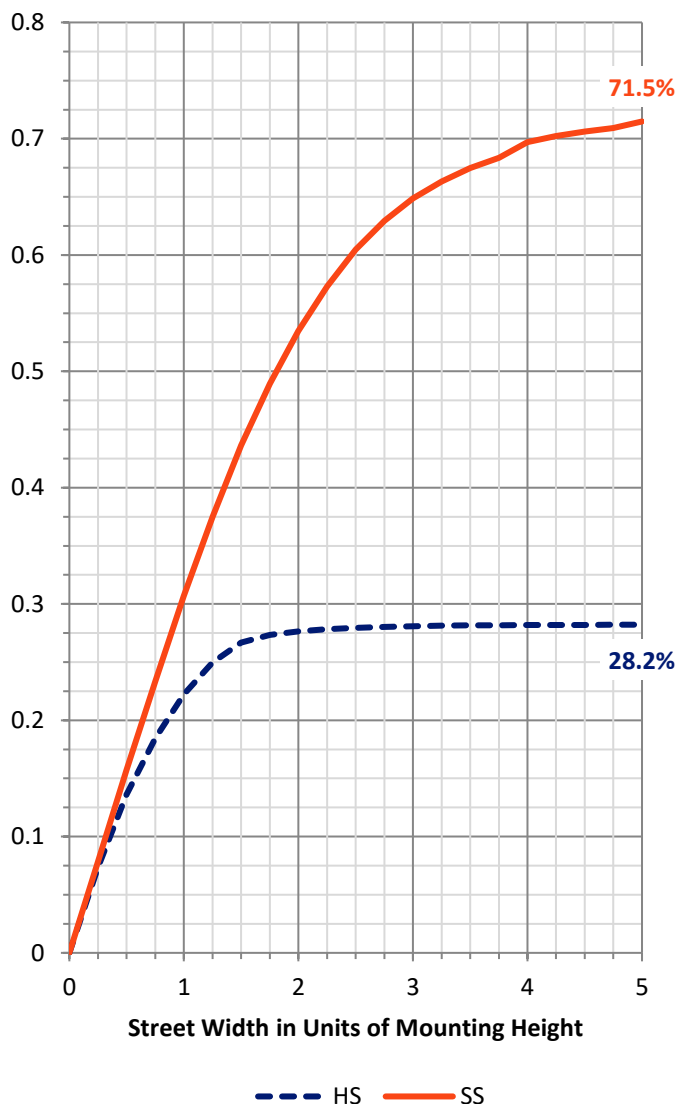
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6380.0	0.1	6380.1
	% Fixture	28.3	0.0	28.3
<b>Street Side</b>	Lumens	16102.2	28.7	16130.9
	% Fixture	71.5	0.1	71.7
<b>Total</b>	Lumens	22482.2	28.8	22511.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	255.7	1.1
10°-20°	787.1	3.5
20°-30°	1303.3	5.8
30°-40°	2051.6	9.1
40°-50°	3210.8	14.3
50°-60°	4635.8	20.6
60°-70°	5743.0	25.5
70°-80°	4182.5	18.6
80°-90°	312.4	1.4
90°-100°	24.5	0.1
100°-110°	4.1	0.0
110°-120°	0.1	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°	22482.2	99.9
0°-180°	22511.0	100.0

**Coefficient of Utilization**

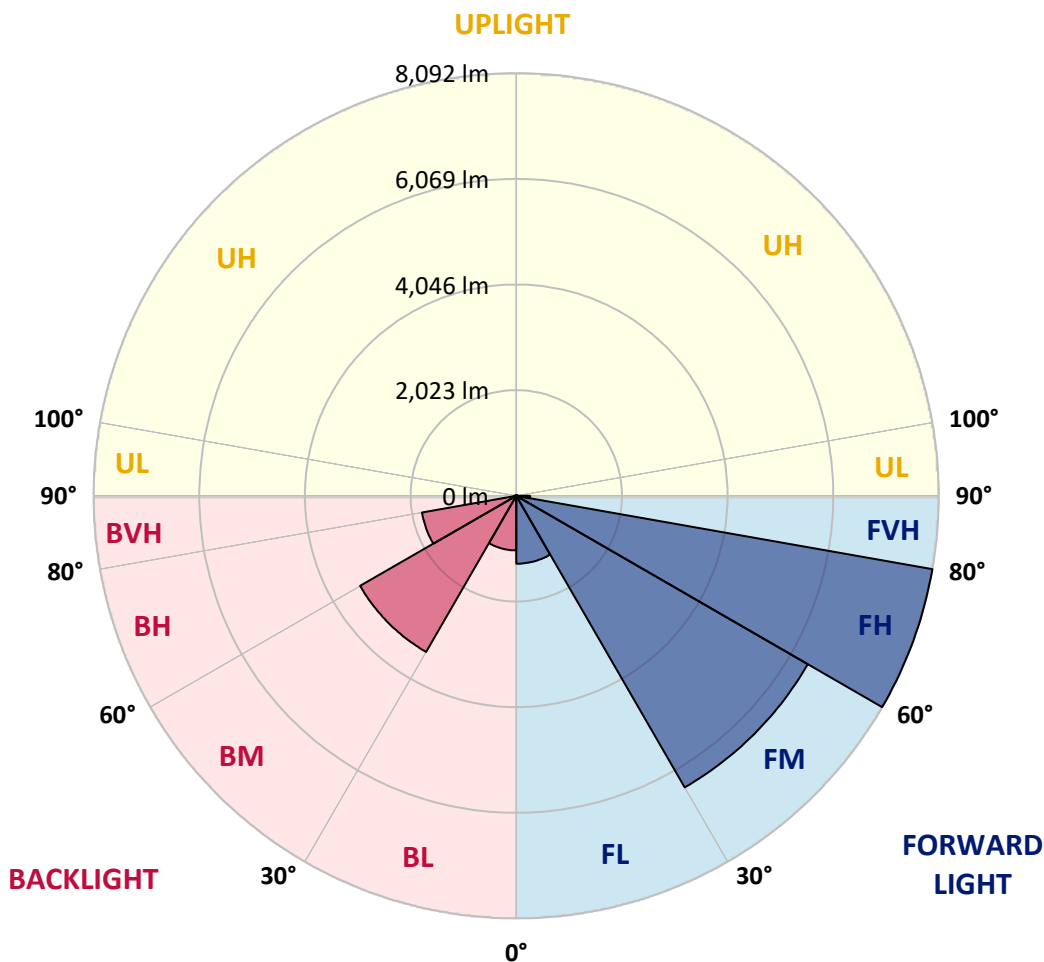


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1300.2	5.8			
FM	(30°-60°)	6446.5	28.6			
FH	(60°-80°)	8092.0	35.9			G4/12000
FVH	(80°-90°)	263.6	1.2			G3/500
BL	(0°-30°)	1045.9	4.6	B3/2500		
BM	(30°-60°)	3451.7	15.3	B3/5000		
BH	(60°-80°)	1833.5	8.1	B3/2500		G3/2500
BVH	(80°-90°)	48.9	0.2			G1/100
UL	(90°-100°)	24.5	0.1		U2/50	
UH	(100°-180°)	4.2	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°	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2
2.5°	2699.7	2685.1	2685.1	2700.9	2656.9	2670.4	2652.3	2668.1	2659.1	2663.6	2669.3
5°	2715.5	2698.6	2699.7	2718.9	2679.4	2690.7	2669.3	2677.2	2669.3	2672.7	2672.7
7.5°	2744.9	2730.2	2730.2	2741.5	2702.0	2705.4	2686.2	2686.2	2676.0	2683.9	2677.2
10°	2800.1	2784.3	2776.4	2782.1	2747.1	2742.6	2716.7	2716.7	2700.9	2713.3	2703.1
12.5°	2866.7	2844.1	2841.9	2843.0	2803.5	2795.6	2766.3	2767.4	2738.1	2755.0	2742.6
15°	2946.8	2918.6	2916.3	2920.9	2879.1	2864.4	2831.7	2831.7	2799.0	2808.0	2791.1
17.5°	3049.5	3016.7	3011.1	3019.0	2977.3	2963.7	2925.4	2918.6	2882.5	2875.7	2861.1
20°	3184.8	3147.6	3136.3	3153.3	3100.2	3087.8	3041.6	3026.9	2978.4	2898.3	2793.4
22.5°	3306.7	3277.4	3270.6	3281.9	3233.4	3220.9	3175.8	3145.4	3028.0	2866.7	2769.7
25°	3445.5	3434.2	3430.8	3424.0	3380.0	3358.6	3315.7	3272.8	3006.6	2785.5	2783.2
27.5°	3616.9	3611.3	3595.5	3589.9	3541.3	3527.8	3471.4	3195.0	2929.9	2914.1	2905.1
30°	3804.2	3792.9	3777.1	3778.3	3745.5	3720.7	3586.5	3126.2	3077.7	3077.7	3054.0
32.5°	4011.8	3999.4	3983.6	3987.0	3973.4	3952.0	3548.1	3307.8	3270.6	3280.7	3251.4
35°	4269.0	4248.7	4243.1	4256.6	4257.7	4119.0	3615.8	3554.9	3525.6	3518.8	3408.2
37.5°	4569.1	4552.2	4572.5	4604.1	4568.0	4161.8	3885.4	3866.3	3836.9	3673.3	3411.6
40°	4929.0	4898.5	4923.4	4943.7	4920.0	4416.8	4168.6	4175.4	4149.4	3664.3	3374.4
42.5°	5285.5	5256.2	5277.6	5328.4	5319.4	4732.7	4513.8	4528.5	4266.8	3685.8	3663.2
45°	5726.6	5716.5	5709.7	5751.4	5786.4	5110.6	4923.4	4922.2	4183.3	4026.5	4006.2
47.5°	6226.4	6212.9	6216.3	6269.3	6322.3	5561.9	5407.4	4953.8	4398.8	4414.6	4396.5
50°	6783.7	6769.1	6813.1	6889.8	6916.9	6068.5	5878.9	4868.1	4847.8	4864.7	4834.2
52.5°	7491.1	7458.4	7526.1	7608.4	7643.4	6667.5	5904.9	5374.6	5340.8	5344.2	5247.2
55°	8295.5	8269.5	8330.5	8423.0	8474.9	7336.5	6444.1	5867.6	5847.3	5272.0	4747.4
57.5°	9169.8	9140.5	9221.7	9248.8	9262.3	8028.1	6986.8	6402.4	5462.6	4813.9	4784.6
60°	10027.2	9995.6	10098.3	10102.8	10142.3	8718.6	7502.4	6918.0	5262.9	5177.2	5152.4
62.5°	10927.5	10888.0	10978.3	10974.9	10897.1	9350.3	8013.4	7413.3	5619.5	5551.8	5513.4
65°	11927.1	11897.8	11960.9	11859.4	11704.8	10003.5	8543.7	7952.5	6034.6	6022.2	6013.2
67.5°	13242.5	13185.0	13057.5	12840.9	12545.3	10602.6	8922.8	8307.9	6371.9	6314.4	6296.4
70°	12713.4	12645.7	12548.7	12310.7	12009.4	10039.6	8313.5	7770.9	5957.9	5960.2	5917.3
72.5°	11257.0	11139.6	11048.2	10714.3	10548.5	8768.2	7244.0	6744.2	5153.5	5249.4	5229.1
75°	8879.9	8760.3	8610.2	8479.4	8461.3	7112.0	5840.6	5480.7	4108.8	4178.8	4229.5
77.5°	5756.0	5712.0	5901.5	5777.4	5889.1	4897.4	4172.0	3862.9	2831.7	3008.8	2985.2
80°	2634.3	2583.5	2888.1	2802.4	2844.1	2405.3	2038.6	1958.5	1281.6	1290.6	1317.7
82.5°	595.7	575.4	596.8	548.3	534.8	452.4	398.2	361.0	226.8	240.3	252.7
85°	326.0	326.0	321.5	299.0	256.1	211.0	167.0	128.6	69.9	76.7	75.6
87.5°	229.0	223.4	222.3	198.6	170.4	144.4	115.1	82.4	39.5	27.1	24.8
90°	156.8	154.6	146.7	132.0	113.9	93.6	69.9	40.6	16.9	7.9	5.6
92.5°	113.9	111.7	106.0	93.6	77.8	63.2	46.3	27.1	13.5	5.6	1.1
95°	75.6	74.5	71.1	60.9	50.8	40.6	29.3	16.9	11.3	4.5	1.1
97.5°	51.9	50.8	47.4	40.6	32.7	25.9	18.1	12.4	9.0	3.4	1.1
100°	35.0	33.8	31.6	25.9	20.3	15.8	11.3	9.0	6.8	3.4	1.1
102.5°	22.6	21.4	19.2	15.8	11.3	9.0	7.9	6.8	4.5	2.3	1.1
105°	13.5	12.4	10.2	7.9	6.8	5.6	5.6	4.5	3.4	1.1	1.1
107.5°	6.8	5.6	4.5	4.5	4.5	3.4	3.4	3.4	2.3	1.1	0.0
110°	1.1	1.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.1	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
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°	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2	2651.2
2.5°	2663.6	2645.6	2655.7	2639.9	2636.5	2619.6	2646.7	2650.1	2647.8	2652.3
5°	2667.0	2647.8	2659.1	2639.9	2639.9	2621.9	2647.8	2647.8	2641.1	2643.3
7.5°	2676.0	2656.9	2664.8	2643.3	2644.4	2623.0	2654.6	2651.2	2645.6	2653.5
10°	2702.0	2680.5	2679.4	2659.1	2663.6	2641.1	2680.5	2680.5	2674.9	2689.6
12.5°	2743.7	2712.1	2706.5	2681.7	2690.7	2671.5	2720.0	2722.3	2723.4	2747.1
15°	2787.7	2749.4	2755.0	2725.7	2722.3	2712.1	2756.1	2753.9	2752.8	2785.5
17.5°	2849.8	2669.3	2639.9	2619.6	2615.1	2590.3	2630.9	2708.8	2668.1	2645.6
20°	2751.6	2656.9	2540.7	2501.2	2493.3	2277.8	2107.4	2184.2	2287.9	2297.0
22.5°	2662.5	2628.7	2619.6	2557.6	2213.5	2141.3	2148.0	2119.8	1873.9	1766.7
25°	2773.1	2743.7	2705.4	2326.3	2245.1	2219.1	2211.2	1922.4	1728.4	1740.8
27.5°	2896.0	2863.3	2529.4	2331.9	2350.0	2313.9	2135.6	1793.8	1782.5	1804.0
30°	3049.5	2787.7	2468.5	2457.2	2474.1	2427.8	1897.6	1872.8	1869.4	1892.0
32.5°	3224.3	2688.4	2630.9	2630.9	2623.0	2123.2	1999.1	1982.2	1991.2	2014.9
35°	3158.9	2844.1	2837.4	2865.6	2676.0	2178.5	2161.6	2132.3	2139.0	2146.9
37.5°	3086.7	3100.2	3103.6	3088.9	1951.7	2336.5	2322.9	2317.3	2310.5	2312.8
40°	3355.2	3364.2	3360.8	3226.6	2106.3	2366.9	2505.7	2495.5	2494.4	2507.9
42.5°	3668.8	3693.7	3674.5	2846.4	2312.8	1990.1	2716.7	2711.0	2708.8	2737.0
45°	4022.0	4045.6	3642.9	3048.3	2532.8	2060.1	2731.3	2941.2	2958.1	2982.9
47.5°	4404.4	4399.9	3362.0	3358.6	2791.1	2254.1	2271.0	3216.4	3244.6	3253.7
50°	4844.4	4121.2	3681.2	3557.1	3083.3	2471.8	2407.5	2951.3	3574.1	3583.1
52.5°	4750.8	4077.2	4047.9	3120.5	3345.0	2712.1	2649.0	2632.0	3704.9	3922.7
55°	4428.1	4461.9	4420.2	3424.0	2452.7	2926.5	2887.0	2870.1	2756.1	2181.9
57.5°	4786.9	4797.0	4760.9	3702.7	2494.4	1824.3	2841.9	2438.0	1584.0	1576.1
60°	5159.2	5176.1	3545.9	2720.0	1598.6	610.3	145.5	153.4	437.7	384.7
62.5°	5514.5	5531.5	3753.4	2485.4	1009.7	45.1	29.3	20.3	22.6	22.6
65°	5978.2	5985.0	4017.4	2630.9	1049.2	11.3	3.4	0.0	0.0	0.0
67.5°	6218.5	6079.7	4084.0	2697.5	1077.4	6.8	2.3	0.0	0.0	0.0
70°	5855.2	5706.3	3802.0	2528.2	1004.1	5.6	1.1	0.0	0.0	0.0
72.5°	5159.2	5087.0	3412.7	2241.7	889.0	3.4	1.1	0.0	0.0	0.0
75°	4275.8	4179.9	2829.5	1868.3	735.6	2.3	0.0	0.0	0.0	0.0
77.5°	3041.6	3052.8	1972.1	1361.7	500.9	2.3	0.0	0.0	0.0	0.0
80°	1331.2	1361.7	864.2	625.0	177.1	1.1	0.0	0.0	0.0	0.0
82.5°	253.8	233.5	112.8	89.1	22.6	0.0	0.0	0.0	0.0	0.0
85°	83.5	91.4	41.7	33.8	10.2	0.0	0.0	0.0	0.0	0.0
87.5°	29.3	37.2	12.4	10.2	2.3	0.0	0.0	0.0	0.0	0.0
90°	4.5	4.5	0.0	0.0	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
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579551  
 CATALOG NUMBER: CST-CA8-230-750-U-T5-HSS-HM-EX180

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
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)