

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: P579600

Luminaire Tested: **CST-CA8-230-760-U-T5-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579600
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-230-760-U-T5-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28845 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

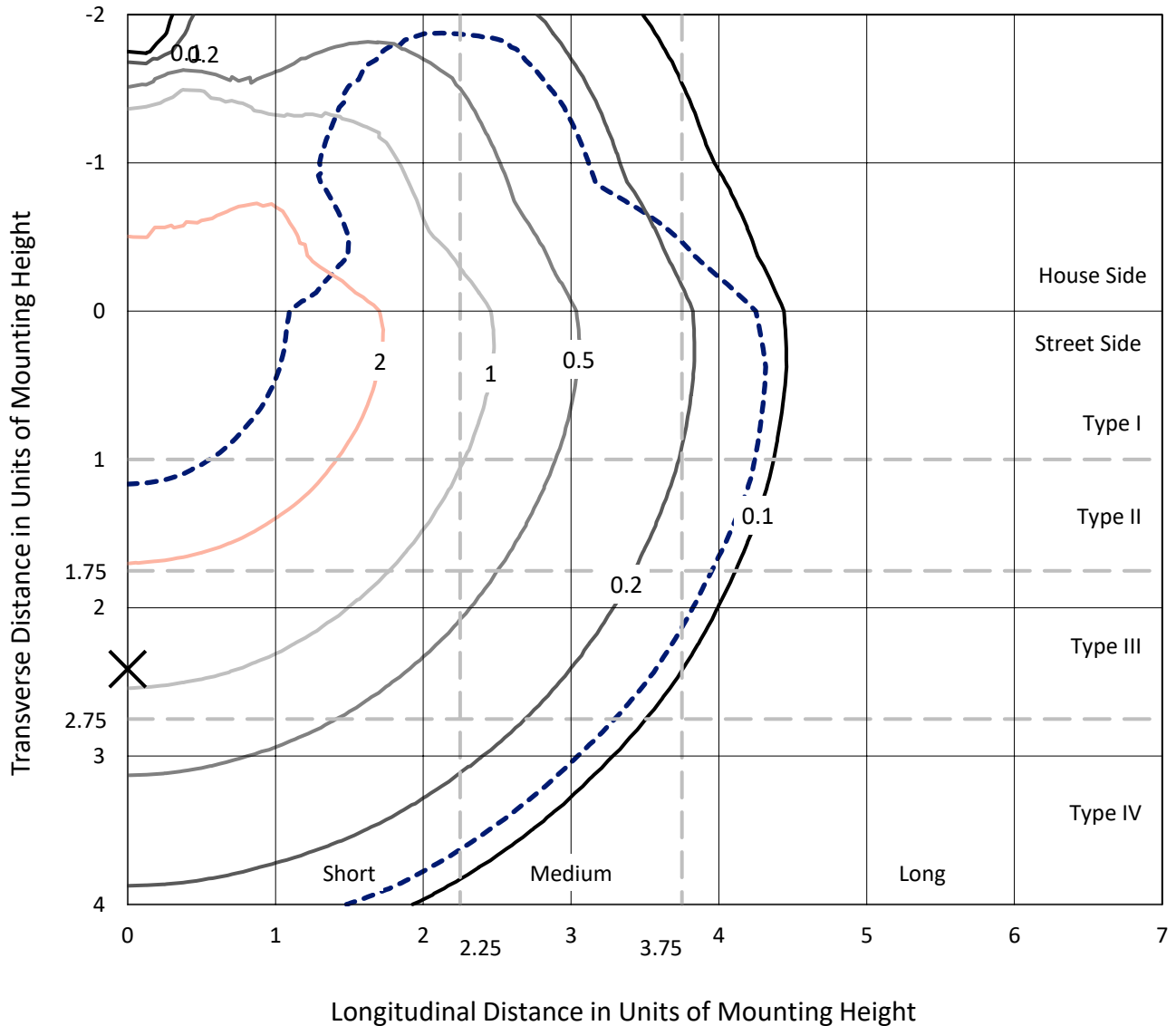
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

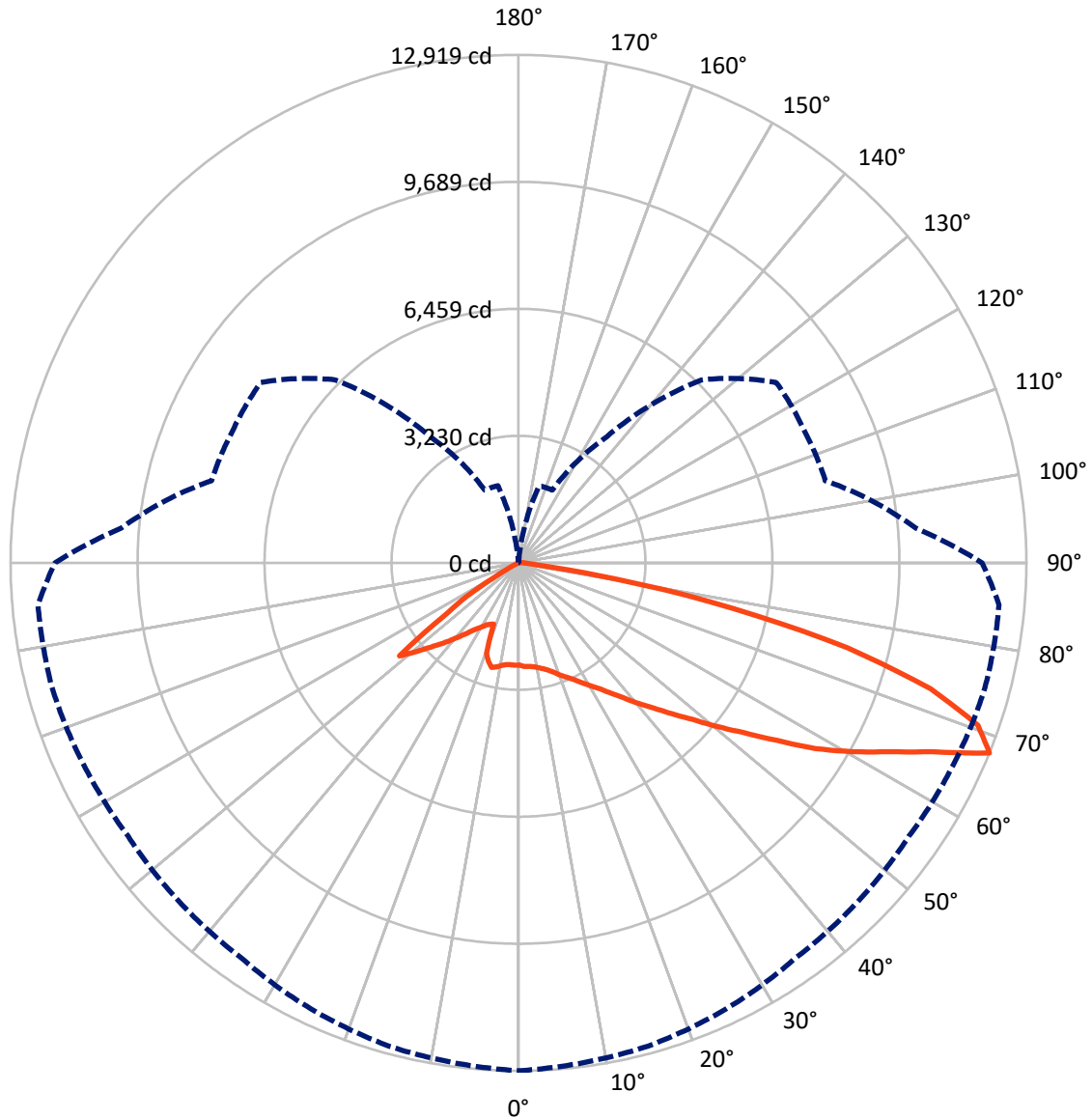
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 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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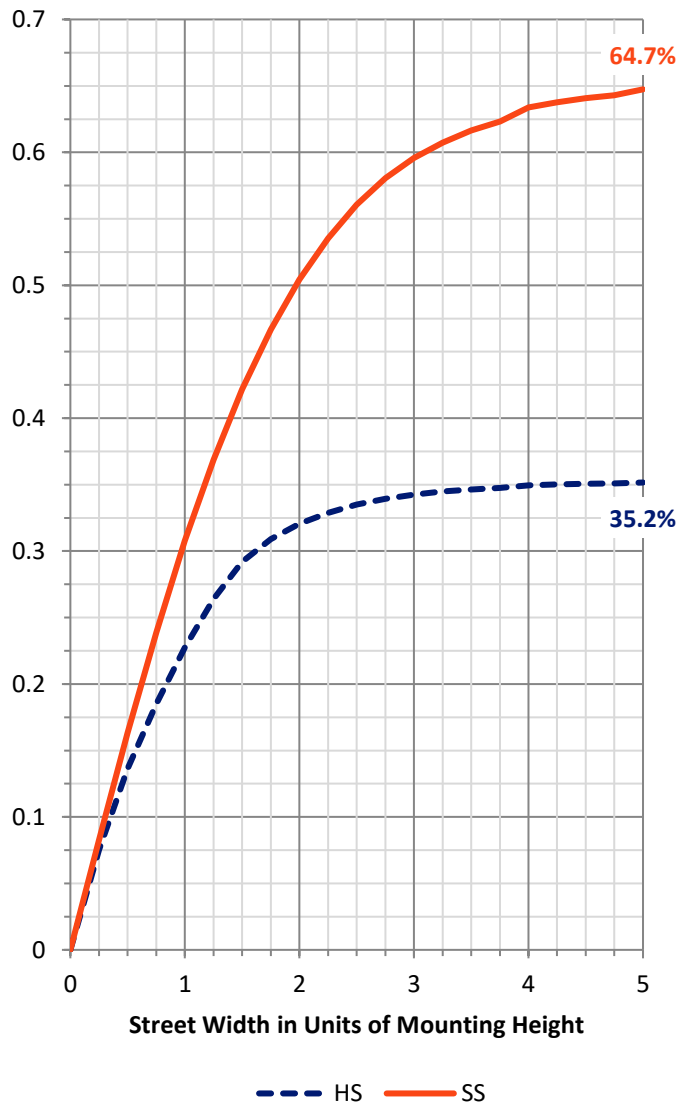
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10153.4	0.6	10154.0
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	18670.7	20.3	18691.0
	% Fixture	64.7	0.1	64.8
Total	Lumens	28824.1	20.9	28845.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.1	0.9
10°-20°	776.9	2.7
20°-30°	1346.9	4.7
30°-40°	2210.0	7.7
40°-50°	3686.4	12.8
50°-60°	5965.9	20.7
60°-70°	8234.9	28.5
70°-80°	5941.2	20.6
80°-90°	411.8	1.4
90°-100°	17.8	0.1
100°-110°	3.0	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°	28824.1	99.9
0°-180°	28845.0	100.0

Coefficient of Utilization

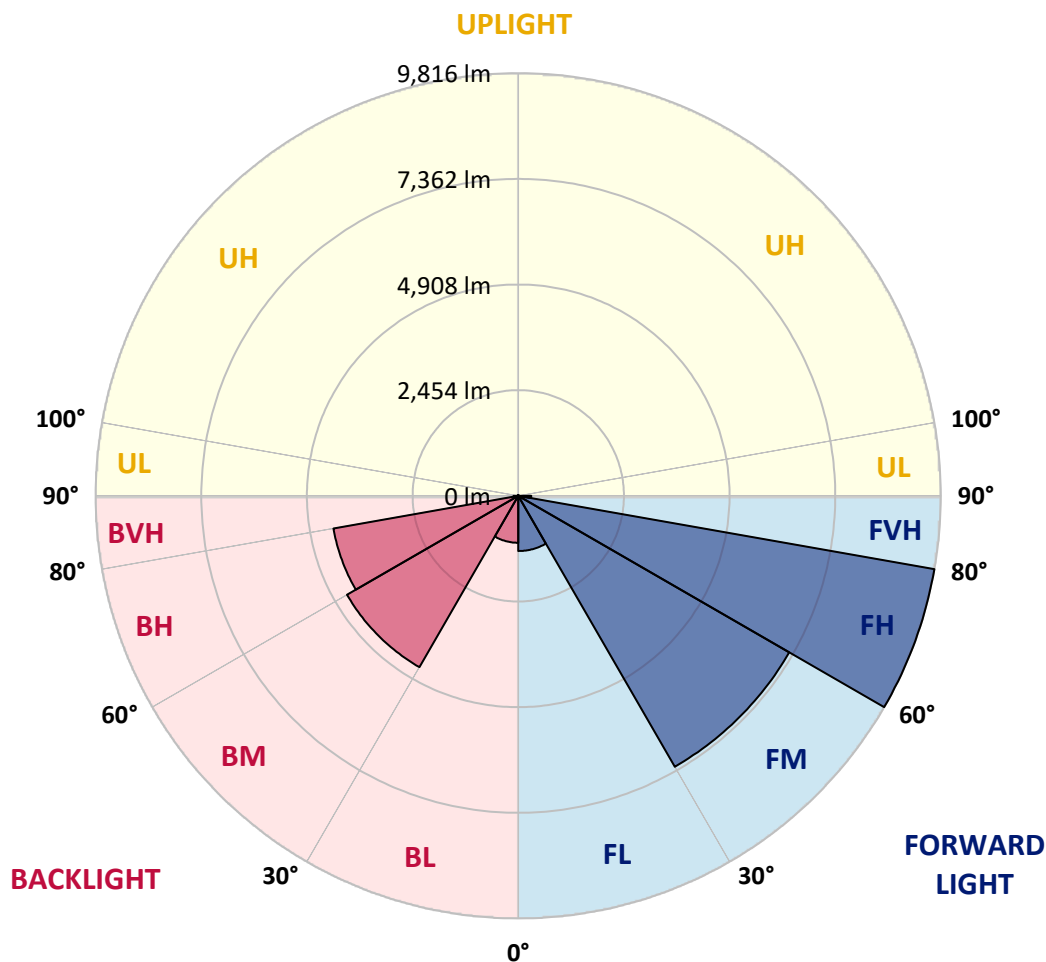


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1282.7	4.4			
FM	(30°-60°)	7268.2	25.2			
FH	(60°-80°)	9816.3	34.0			G4/12000
FVH	(80°-90°)	303.4	1.1			G3/500
BL	(0°-30°)	1091.1	3.8	B3/2500		
BM	(30°-60°)	4594.2	15.9	B3/5000		
BH	(60°-80°)	4359.7	15.1	B4/5000		G4/5000
BVH	(80°-90°)	108.4	0.4			G2/225
UL	(90°-100°)	17.8	0.1		U2/50	
UH	(100°-180°)	3.1	0.0		U1/10	

BUG Rating: B4-U2-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4
2.5°	2639.2	2623.7	2624.8	2640.3	2598.3	2613.8	2596.1	2611.6	2603.9	2609.4	2616.0
5°	2646.9	2628.1	2630.4	2649.1	2616.0	2628.1	2607.2	2616.0	2609.4	2616.0	2617.1
7.5°	2666.8	2648.0	2649.1	2663.5	2629.3	2638.1	2618.2	2622.6	2611.6	2623.7	2620.4
10°	2708.8	2691.1	2684.5	2696.6	2666.8	2667.9	2644.7	2649.1	2632.6	2649.1	2642.5
12.5°	2765.1	2740.8	2743.0	2749.6	2713.2	2715.4	2687.8	2694.4	2666.8	2690.0	2682.3
15°	2833.5	2803.7	2807.0	2818.1	2782.7	2779.4	2754.0	2754.0	2729.7	2747.4	2739.7
17.5°	2928.5	2895.4	2893.2	2900.9	2872.2	2872.2	2843.5	2840.2	2815.9	2830.2	2828.0
20°	3052.2	3014.6	3008.0	3022.4	2985.9	2990.3	2953.9	2950.6	2924.1	2932.9	2934.0
22.5°	3163.7	3133.9	3132.8	3154.9	3111.8	3117.3	3084.2	3075.4	3053.3	3065.4	3068.8
25°	3291.8	3287.4	3284.1	3291.8	3248.7	3248.7	3225.6	3217.8	3203.5	3212.3	3221.1
27.5°	3453.0	3450.8	3442.0	3443.1	3406.7	3412.2	3386.8	3382.4	3375.7	3374.6	3370.2
30°	3630.8	3620.9	3608.7	3616.5	3599.9	3605.4	3583.3	3569.0	3566.8	3567.9	3561.3
32.5°	3828.5	3815.2	3807.5	3820.8	3827.4	3842.8	3841.7	3802.0	3802.0	3818.5	3788.7
35°	4073.6	4052.7	4059.3	4076.9	4090.2	4129.9	4123.3	4095.7	4104.6	4112.3	4076.9
37.5°	4361.8	4347.5	4377.3	4410.4	4411.5	4467.9	4454.6	4461.2	4460.1	4450.2	4427.0
40°	4707.5	4684.3	4715.2	4740.6	4725.1	4792.5	4790.3	4820.1	4840.0	4874.2	4861.0
42.5°	5050.9	5033.2	5063.1	5118.3	5109.4	5186.7	5197.8	5244.2	5271.8	5324.8	5293.8
45°	5473.8	5463.9	5491.5	5534.6	5564.4	5667.1	5707.9	5727.8	5797.4	5861.4	5789.7
47.5°	5947.6	5960.8	5956.4	6034.8	6101.1	6225.8	6242.4	6306.5	6367.2	6437.9	6368.3
50°	6537.2	6515.2	6535.0	6610.1	6718.3	6808.9	6893.9	6985.6	7045.2	7118.1	6990.0
52.5°	7172.2	7191.0	7235.1	7351.1	7430.6	7537.7	7615.0	7724.3	7782.9	7845.8	7679.1
55°	7972.8	7988.3	8036.8	8156.1	8212.4	8333.9	8386.9	8496.2	8552.5	8580.1	8367.0
57.5°	8911.4	8859.5	8899.3	8961.1	9048.3	9179.8	9194.1	9296.8	9296.8	9332.1	9060.5
60°	9749.6	9714.2	9756.2	9844.5	9878.8	9998.0	9985.9	10069.8	10091.9	10065.4	9740.7
62.5°	10575.5	10582.2	10636.3	10665.0	10651.7	10722.4	10751.1	10839.5	10803.0	10811.9	10437.5
65°	11578.2	11593.7	11588.2	11535.1	11415.9	11555.0	11547.3	11687.5	11696.4	11775.9	11340.8
67.5°	12918.8	12850.3	12725.5	12512.4	12276.1	12194.4	12122.6	12192.2	12281.6	12267.3	11790.2
70°	12397.6	12286.0	12220.9	12035.4	11719.6	11556.1	11407.1	11419.2	11549.5	11561.7	11073.6
72.5°	10959.8	10903.5	10652.8	10490.5	10274.1	10148.2	9968.2	10009.1	10179.1	10207.8	9819.1
75°	8645.3	8593.4	8367.0	8314.0	8206.9	8268.7	8224.6	8241.1	8378.1	8252.2	8019.2
77.5°	5595.3	5607.5	5572.1	5692.5	5688.1	5691.4	5852.6	5869.2	6002.8	5925.5	5700.2
80°	2508.9	2545.3	2631.5	2805.9	2699.9	2757.3	2819.2	2800.4	2935.1	2630.4	2739.7
82.5°	508.0	525.6	495.8	517.9	483.7	501.3	526.7	488.1	483.7	448.3	416.3
85°	261.7	265.0	263.9	258.4	227.5	209.8	202.1	170.1	153.5	150.2	139.1
87.5°	170.1	172.3	166.7	165.6	145.8	133.6	119.3	100.5	83.9	58.5	48.6
90°	103.8	103.8	98.3	92.8	82.8	74.0	59.6	43.1	25.4	9.9	5.5
92.5°	69.6	69.6	67.4	64.0	57.4	49.7	38.6	25.4	12.1	4.4	2.2
95°	44.2	44.2	43.1	42.0	37.5	32.0	24.3	15.5	7.7	3.3	1.1
97.5°	28.7	28.7	28.7	27.6	25.4	22.1	16.6	9.9	5.5	2.2	1.1
100°	17.7	18.8	17.7	17.7	16.6	14.4	11.0	6.6	4.4	2.2	1.1
102.5°	9.9	9.9	11.0	11.0	9.9	8.8	6.6	5.5	3.3	2.2	1.1
105°	4.4	4.4	5.5	5.5	5.5	4.4	4.4	3.3	2.2	2.2	1.1
107.5°	1.1	1.1	1.1	2.2	3.3	3.3	3.3	3.3	2.2	1.1	1.1
110°	0.0	0.0	0.0	1.1	1.1	2.2	2.2	2.2	2.2	1.1	1.1



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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



REPORT NUMBER: P579600

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4
2.5°	2609.4	2596.1	2606.1	2589.5	2585.1	2570.7	2598.3	2602.8	2600.5	2605.0
5°	2611.6	2595.0	2607.2	2590.6	2589.5	2574.0	2602.8	2603.9	2596.1	2599.4
7.5°	2618.2	2602.8	2611.6	2592.8	2595.0	2576.2	2609.4	2608.3	2603.9	2611.6
10°	2642.5	2624.8	2628.1	2608.3	2613.8	2593.9	2634.8	2637.0	2632.6	2646.9
12.5°	2684.5	2660.2	2667.9	2644.7	2649.1	2629.3	2678.9	2682.3	2682.3	2705.4
15°	2741.9	2716.5	2733.1	2703.2	2704.3	2674.5	2712.1	2712.1	2716.5	2748.5
17.5°	2825.8	2794.9	2817.0	2789.4	2617.1	2552.0	2680.1	2758.5	2628.1	2617.1
20°	2929.6	2915.3	2927.4	2882.1	2602.8	2304.6	2072.7	2060.6	2317.9	2445.9
22.5°	3056.6	3042.2	3047.8	2990.3	2323.4	2113.6	2110.2	2088.2	1766.8	1678.5
25°	3205.7	3198.0	3185.8	2704.3	2401.8	2200.8	2174.3	1886.1	1701.7	1718.2
27.5°	3365.8	3342.6	2932.9	2809.2	2522.1	2288.0	2137.9	1761.3	1754.7	1770.1
30°	3544.7	3422.1	3002.5	2960.5	2662.4	2396.3	1860.7	1838.6	1838.6	1862.9
32.5°	3772.2	3195.7	3195.7	3173.7	2835.8	2103.6	1959.0	1945.7	1961.2	1971.1
35°	3737.9	3437.6	3472.9	3463.0	3071.0	2142.3	2116.9	2094.8	2098.1	2098.1
37.5°	3749.0	3761.1	3803.1	3760.0	2678.9	2310.1	2269.3	2264.8	2268.2	2275.9
40°	4095.7	4102.3	4117.8	4022.8	2878.8	2505.6	2449.3	2438.2	2449.3	2465.8
42.5°	4469.0	4487.7	4505.4	3658.4	3158.2	2727.5	2671.2	2650.2	2670.1	2687.8
45°	4910.7	4939.4	4668.8	3982.0	3474.0	2980.4	2920.8	2895.4	2907.5	2923.0
47.5°	5407.6	5452.9	4402.7	4393.9	3845.0	3279.7	3211.2	3162.6	3181.4	3180.3
50°	5968.6	5211.0	4864.3	4858.8	4259.1	3613.2	3542.5	3498.3	3512.7	3501.6
52.5°	6574.8	5353.5	5364.5	5363.4	4692.0	3972.0	3906.9	3851.7	3737.9	3842.8
55°	7195.4	5846.0	5887.9	5881.3	5145.9	4343.1	4273.5	4221.6	2758.5	2330.0
57.5°	7812.7	6360.6	6373.8	6389.3	5616.3	4700.9	4395.0	4037.2	1573.6	1565.8
60°	8422.2	6850.9	6877.4	6886.2	5870.3	3891.4	1796.6	1829.8	475.9	568.7
62.5°	9053.9	7334.5	7358.8	7351.1	6123.1	3618.7	1887.2	1849.6	44.2	40.9
65°	9860.0	7940.8	7906.5	7881.1	6521.8	3861.6	2027.4	2017.5	14.4	9.9
67.5°	10142.7	8078.8	8009.2	8000.4	6579.2	3913.5	2038.5	2030.7	14.4	9.9
70°	9502.2	7554.3	7435.0	7438.3	6122.0	3660.6	1901.5	1890.5	13.3	9.9
72.5°	8321.7	6672.0	6622.3	6359.5	5301.6	3220.0	1686.2	1644.3	13.3	8.8
75°	6832.1	5389.9	5279.5	4984.7	4219.4	2559.7	1324.0	1269.9	12.1	7.7
77.5°	4742.8	3779.9	3569.0	3268.6	2822.5	1697.3	890.0	820.5	11.0	7.7
80°	2150.0	1551.5	1559.2	1194.8	957.4	575.3	282.7	256.2	9.9	6.6
82.5°	374.3	276.1	259.5	250.7	208.7	141.3	86.1	74.0	8.8	4.4
85°	130.3	104.9	115.9	136.9	121.5	85.0	53.0	50.8	5.5	2.2
87.5°	44.2	46.4	54.1	65.2	57.4	33.1	19.9	14.4	1.1	0.0
90°	4.4	5.5	5.5	5.5	3.3	0.0	0.0	0.0	0.0	0.0
92.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.1	1.1	1.1	0.0	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	0.0	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	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579600
 CATALOG NUMBER: CST-CA8-230-760-U-T5-HSS-HM-EX90

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)