

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: P579602

Luminaire Tested: **CST-CA8-230-760-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579602
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-6)
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-T5N-HSS-HM-EX180
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: 24201 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G3

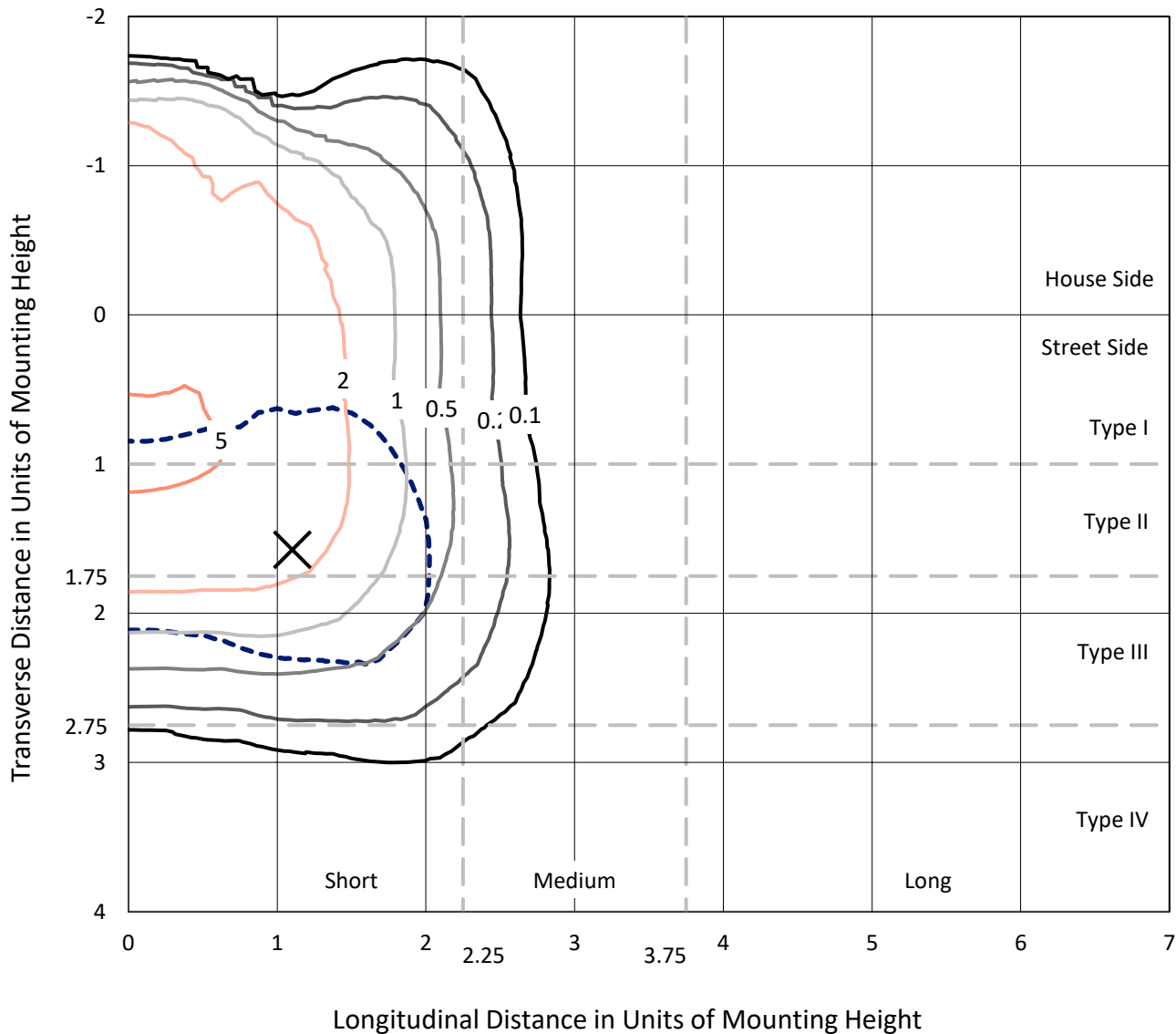
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

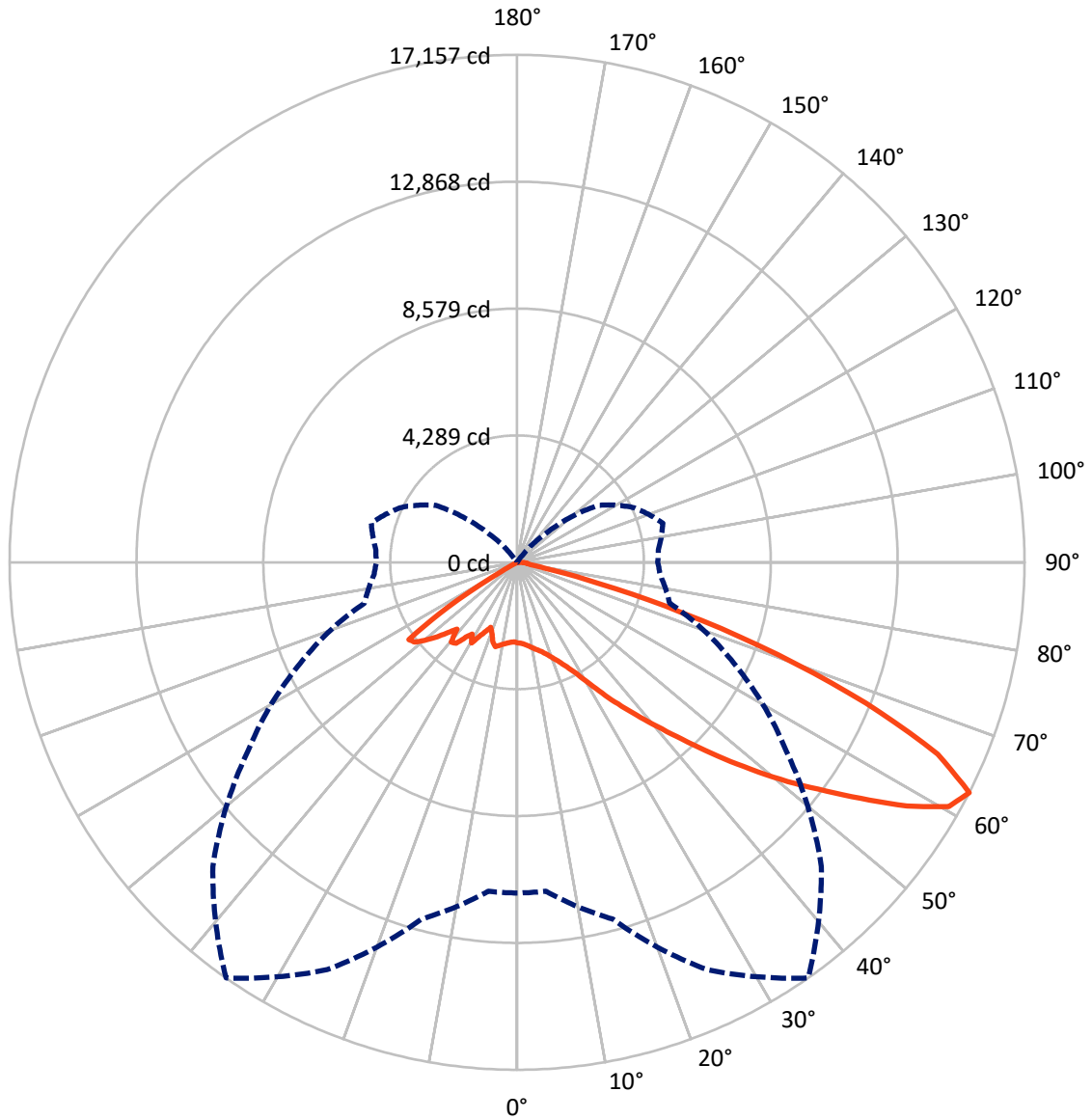
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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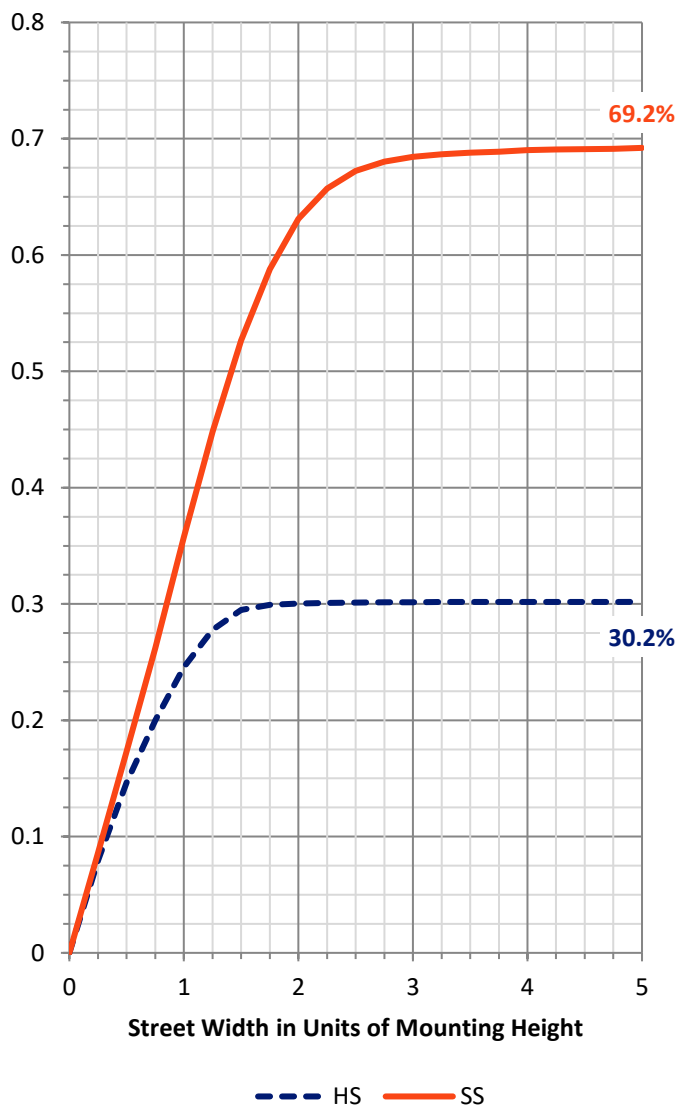
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7345.1	0.0	7345.1
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	16834.9	21.0	16855.9
	% Fixture	69.6	0.1	69.6
Total	Lumens	24180.0	21.0	24201.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.9	1.1
10°-20°	863.0	3.6
20°-30°	1577.4	6.5
30°-40°	3005.9	12.4
40°-50°	5159.4	21.3
50°-60°	6921.5	28.6
60°-70°	5261.7	21.7
70°-80°	996.3	4.1
80°-90°	125.8	0.5
90°-100°	18.5	0.1
100°-110°	2.5	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°	24180.0	99.9
0°-180°	24201.0	100.0

Coefficient of Utilization

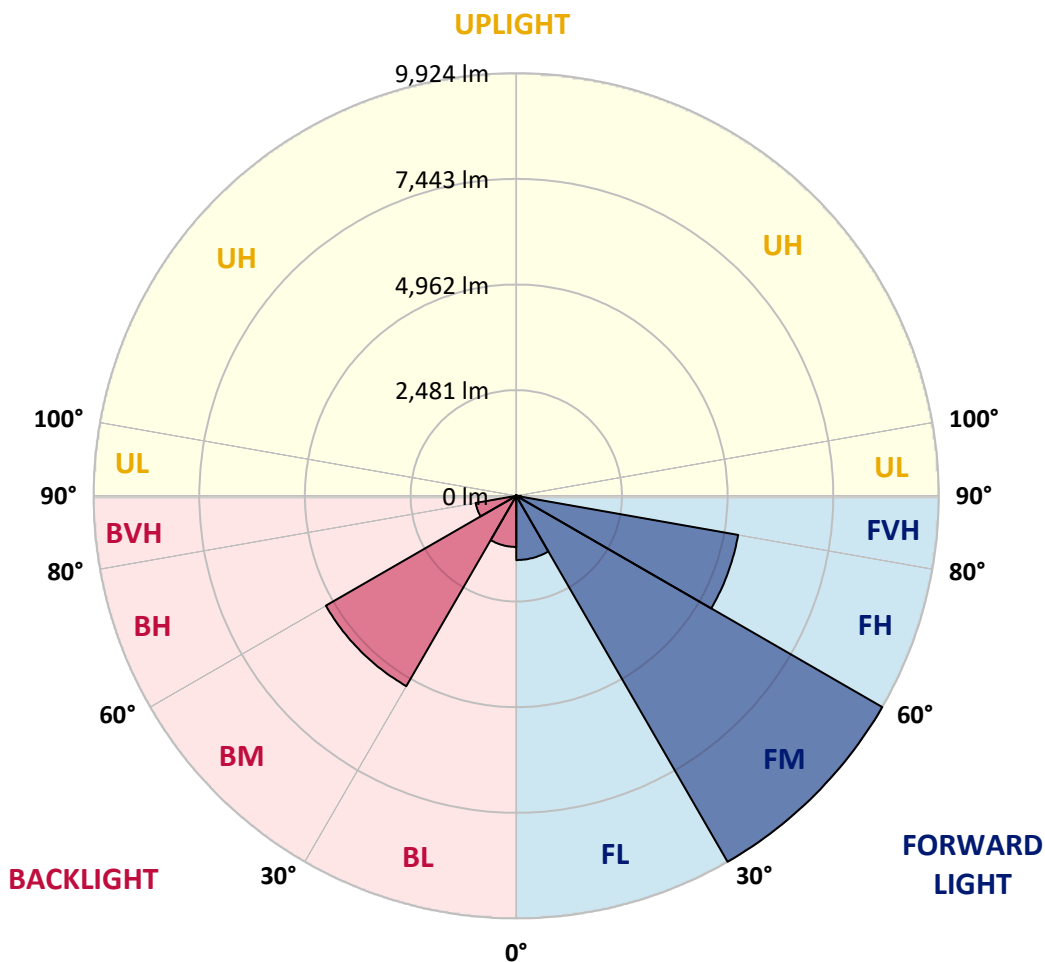


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1508.6	6.2			
FM	(30°-60°)	9924.4	41.0			
FH	(60°-80°)	5290.8	21.9			G3/7500
FVH	(80°-90°)	111.1	0.5			G2/225
BL	(0°-30°)	1200.7	5.0	B3/2500		
BM	(30°-60°)	5162.4	21.3	B4/8500		
BH	(60°-80°)	967.2	4.0	B2/1000		G2/1000
BVH	(80°-90°)	14.7	0.1			G1/100
UL	(90°-100°)	18.5	0.1		U2/50	
UH	(100°-180°)	2.5	0.0		U1/10	

BUG Rating: B4-U2-G3
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3
2.5°	2792.6	2772.1	2773.2	2791.5	2739.0	2758.4	2735.6	2758.4	2745.9	2755.0	2759.6
5°	2841.7	2821.2	2818.9	2838.3	2793.8	2807.5	2784.7	2800.6	2783.5	2794.9	2794.9
7.5°	2915.8	2895.3	2888.5	2903.3	2862.2	2872.5	2848.5	2857.7	2838.3	2853.1	2845.1
10°	3003.7	2980.9	2972.9	2980.9	2945.5	2951.2	2922.7	2933.0	2904.4	2921.5	2910.1
12.5°	3097.2	3067.6	3067.6	3074.4	3036.8	3037.9	3011.7	3017.4	2988.9	3007.1	2993.4
15°	3198.8	3165.7	3170.2	3177.1	3137.2	3144.0	3116.6	3125.7	3096.1	3114.3	3100.6
17.5°	3333.4	3298.0	3293.4	3314.0	3276.3	3288.9	3258.1	3269.5	3243.2	3248.9	3242.1
20°	3519.3	3474.8	3464.6	3491.9	3449.7	3458.9	3436.0	3458.9	3431.5	3390.4	3275.2
22.5°	3741.8	3703.0	3685.9	3704.1	3653.9	3669.9	3668.8	3705.3	3630.0	3371.0	3255.8
25°	4034.9	4008.7	3975.6	3977.9	3917.4	3941.4	3984.8	4013.3	3692.7	3465.7	3468.0
27.5°	4426.2	4400.0	4354.4	4337.3	4249.4	4307.6	4374.9	4096.6	3844.4	3902.6	3870.7
30°	4925.9	4921.3	4828.9	4799.3	4703.4	4776.5	4718.3	4241.4	4328.1	4409.1	4360.1
32.5°	5591.0	5559.0	5425.6	5371.9	5271.6	5313.8	4800.4	4732.0	4860.9	4970.4	4919.1
35°	6395.2	6298.3	6162.5	6056.4	5881.9	5646.9	5113.0	5246.5	5439.3	5589.8	5341.1
37.5°	7329.5	7224.6	7012.4	6821.9	6547.0	5814.6	5584.1	5851.1	6092.9	5929.8	5356.0
40°	8291.2	8197.7	7998.0	7752.8	7288.5	6334.8	6155.7	6475.1	6750.0	5815.7	5530.5
42.5°	9246.0	9166.2	9005.3	8763.5	8165.7	6954.2	6782.0	7125.3	6866.4	6038.2	6029.0
45°	10208.9	10168.9	9986.4	9779.9	9205.0	7747.1	7483.5	7751.6	6607.4	6570.9	6549.2
47.5°	10989.2	10996.0	10932.1	10824.9	10313.8	8617.5	8274.1	7479.0	6922.3	6962.2	6972.5
50°	11793.4	11742.1	11738.7	11745.5	11532.2	9738.9	8812.5	7355.8	7334.1	7330.7	7321.5
52.5°	12438.0	12372.9	12507.5	12614.8	12741.4	10990.3	8731.5	7773.3	7648.9	7605.6	7339.8
55°	12962.7	12937.6	13156.6	13519.4	14083.0	12315.9	9448.0	8180.6	7931.9	6918.8	6241.2
57.5°	13281.0	13317.5	13769.2	14482.2	15537.5	13414.5	10281.9	8593.5	6791.1	6094.1	6050.7
60°	12671.8	12864.6	13633.5	15198.6	16767.2	14448.0	10902.5	8676.8	6111.2	5738.1	5651.4
62.5°	11180.8	11162.6	12483.6	15198.6	17157.4	14550.7	11098.7	8087.0	5338.9	4852.9	4755.9
65°	7913.6	7961.5	9372.7	13696.2	15629.9	13534.2	10237.4	6875.5	4258.5	3812.5	3681.3
67.5°	4897.4	4894.0	6275.4	10086.8	12723.1	11331.4	8618.6	5270.4	2955.8	2534.8	2392.2
70°	1691.8	1739.7	2822.3	5902.4	9365.8	8877.6	6450.0	3327.7	1558.3	1111.1	937.7
72.5°	673.1	689.0	1013.0	2631.8	5851.1	5930.9	3919.7	1616.5	466.6	296.6	278.4
75°	440.3	442.6	486.0	950.3	2839.4	3190.8	1820.7	464.3	216.7	198.5	193.9
77.5°	379.9	381.0	403.8	481.4	925.2	1241.2	517.9	274.9	181.4	163.1	158.6
80°	352.5	353.6	365.1	414.1	446.0	423.2	276.1	221.3	152.9	144.9	143.7
82.5°	333.1	337.7	343.4	373.0	360.5	318.3	229.3	179.1	117.5	125.5	128.9
85°	306.9	311.4	314.9	332.0	301.2	232.7	178.0	134.6	75.3	82.1	81.0
87.5°	230.4	232.7	228.2	225.9	209.9	163.1	117.5	85.6	29.7	27.4	25.1
90°	110.7	109.5	105.0	97.0	84.4	66.2	49.1	27.4	12.5	5.7	2.3
92.5°	87.8	86.7	84.4	76.4	66.2	49.1	35.4	19.4	11.4	4.6	1.1
95°	59.3	57.0	54.8	49.1	41.1	29.7	20.5	13.7	9.1	3.4	1.1
97.5°	38.8	37.6	34.2	29.7	22.8	16.0	12.5	10.3	8.0	3.4	1.1
100°	24.0	24.0	21.7	17.1	11.4	9.1	8.0	8.0	5.7	2.3	0.0
102.5°	14.8	13.7	12.5	8.0	5.7	5.7	5.7	5.7	4.6	2.3	0.0
105°	8.0	8.0	5.7	4.6	3.4	2.3	3.4	4.6	3.4	1.1	0.0
107.5°	2.3	2.3	2.3	1.1	1.1	0.0	1.1	2.3	2.3	1.1	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	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°	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3	2725.3
2.5°	2753.8	2732.2	2737.9	2716.2	2712.8	2690.0	2728.8	2731.0	2720.8	2732.2
5°	2789.2	2763.0	2773.2	2747.0	2742.4	2712.8	2743.6	2740.2	2732.2	2741.3
7.5°	2839.4	2813.2	2818.9	2788.1	2782.4	2749.3	2778.9	2767.5	2757.3	2769.8
10°	2909.0	2879.3	2883.9	2847.4	2842.8	2804.0	2838.3	2821.2	2806.3	2823.4
12.5°	2994.6	2955.8	2951.2	2912.4	2909.0	2872.5	2907.9	2890.7	2875.9	2903.3
15°	3092.7	3041.3	3034.5	2985.4	2979.7	2942.1	2976.3	2951.2	2939.8	2975.2
17.5°	3223.9	3042.5	2940.9	2869.1	2828.0	2807.5	2869.1	2952.3	2927.2	2928.4
20°	3170.2	2975.2	2839.4	2777.8	2733.3	2534.8	2261.0	2339.7	2499.5	2578.2
22.5°	3154.3	3085.8	3029.9	2926.1	2484.6	2372.8	2388.8	2370.5	2069.4	1954.2
25°	3460.0	3381.3	3260.4	2716.2	2588.4	2563.3	2572.5	2257.6	2030.6	2063.7
27.5°	3851.3	3770.3	3173.7	2869.1	2844.0	2810.9	2630.6	2237.1	2267.9	2299.8
30°	4344.1	3918.6	3309.4	3215.9	3169.1	3134.9	2466.4	2498.3	2549.6	2589.6
32.5°	4824.4	3906.0	3698.4	3582.1	3523.9	2859.9	2786.9	2861.1	2913.6	2944.4
35°	4830.1	4353.2	4134.2	3984.8	3615.1	3074.4	3141.7	3266.1	3395.0	3418.9
37.5°	4961.3	4859.7	4608.8	4420.5	2688.8	3431.5	3579.8	3722.4	3851.3	3859.3
40°	5483.7	5374.2	5139.2	4725.1	2969.5	3499.9	4062.3	4223.2	4331.6	4325.8
42.5°	6005.1	5929.8	5685.7	4199.2	3345.9	3032.2	4568.8	4674.9	4743.4	4791.3
45°	6529.8	6454.5	5629.8	4611.0	3794.2	3320.8	4445.6	5046.8	5122.1	5146.1
47.5°	6939.4	6753.4	5158.6	5157.5	4354.4	3690.4	3671.0	5382.2	5448.4	5431.3
50°	7318.1	6029.0	5576.1	5336.6	4933.9	4038.4	3903.8	4528.9	5743.8	5718.7
52.5°	6658.7	5851.1	5934.4	4854.0	5399.3	4384.0	4166.1	4061.2	5219.1	5891.0
55°	5954.9	6069.0	6300.5	5333.2	3917.4	4495.8	4388.6	4179.8	3521.6	2963.8
57.5°	6076.9	6246.9	6258.3	5776.9	4054.3	2808.6	3596.9	3148.6	1989.5	1994.1
60°	5669.7	5891.0	4574.5	3851.3	2180.0	585.2	57.0	50.2	346.8	422.1
62.5°	4793.6	5101.6	4366.9	3355.0	1398.6	21.7	5.7	1.1	0.0	0.0
65°	3712.1	4082.9	3690.4	2895.3	1241.2	6.8	0.0	0.0	0.0	0.0
67.5°	2448.1	2782.4	2804.0	2421.9	1034.7	3.4	0.0	0.0	0.0	0.0
70°	1025.6	1444.2	1745.4	1800.2	813.4	1.1	0.0	0.0	0.0	0.0
72.5°	296.6	458.6	839.6	1081.5	516.8	0.0	0.0	0.0	0.0	0.0
75°	197.4	211.0	243.0	487.1	257.8	0.0	0.0	0.0	0.0	0.0
77.5°	163.1	166.6	139.2	133.5	74.2	0.0	0.0	0.0	0.0	0.0
80°	148.3	146.0	111.8	78.7	27.4	0.0	0.0	0.0	0.0	0.0
82.5°	136.9	130.0	81.0	41.1	18.3	0.0	0.0	0.0	0.0	0.0
85°	92.4	91.3	36.5	25.1	3.4	0.0	0.0	0.0	0.0	0.0
87.5°	25.1	31.9	8.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	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: P579602
 CATALOG NUMBER: CST-CA8-230-760-U-T5N-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)