

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: P579555

Luminaire Tested: **CST-CA8-230-750-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579555
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-4)
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-T5N-HSS-HM-EX90
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: 30097 lumens
Efficiency: N/A
Efficacy: 131.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - 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

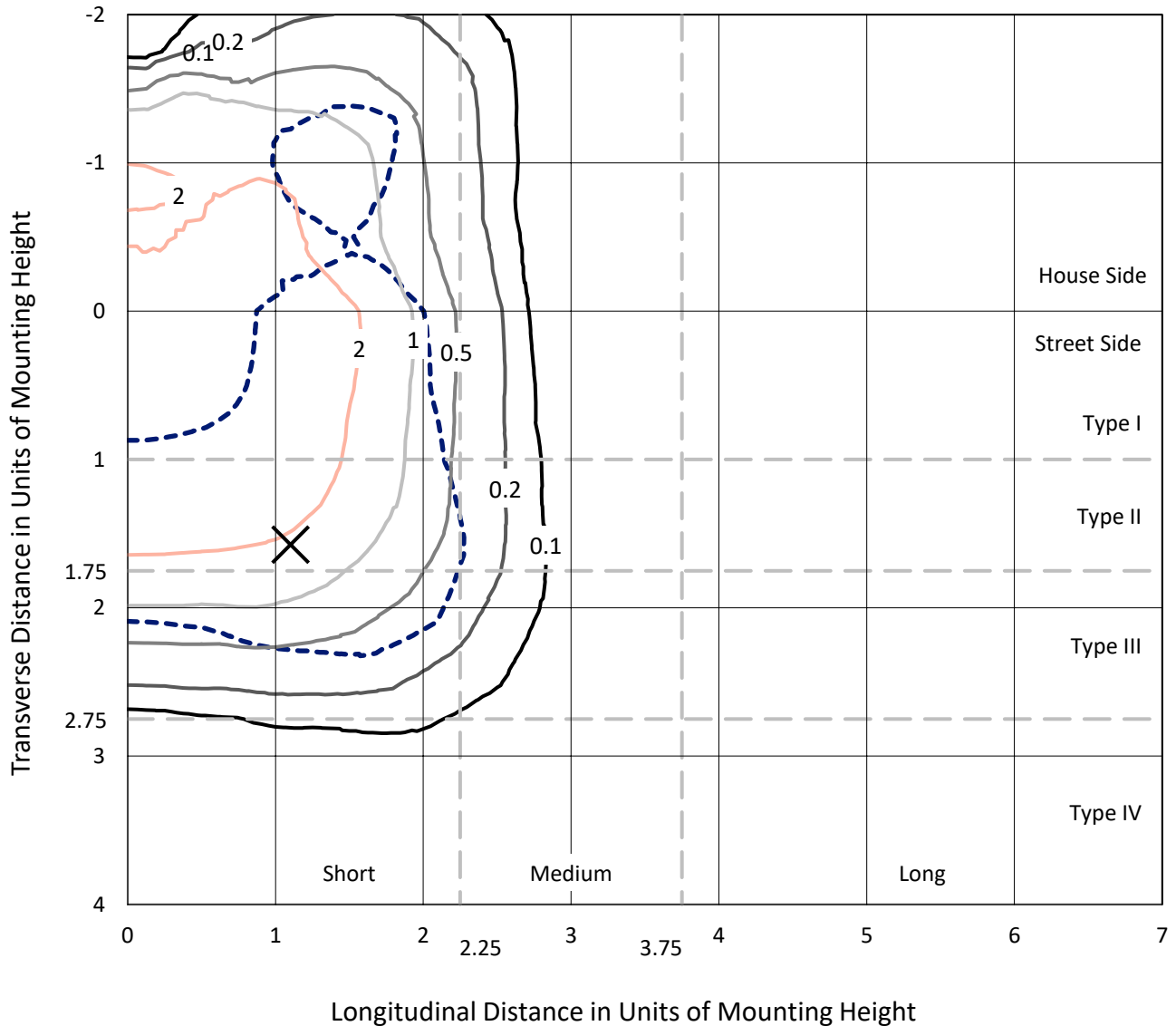




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Iso-Footcandle Lines of Horizontal Illumination

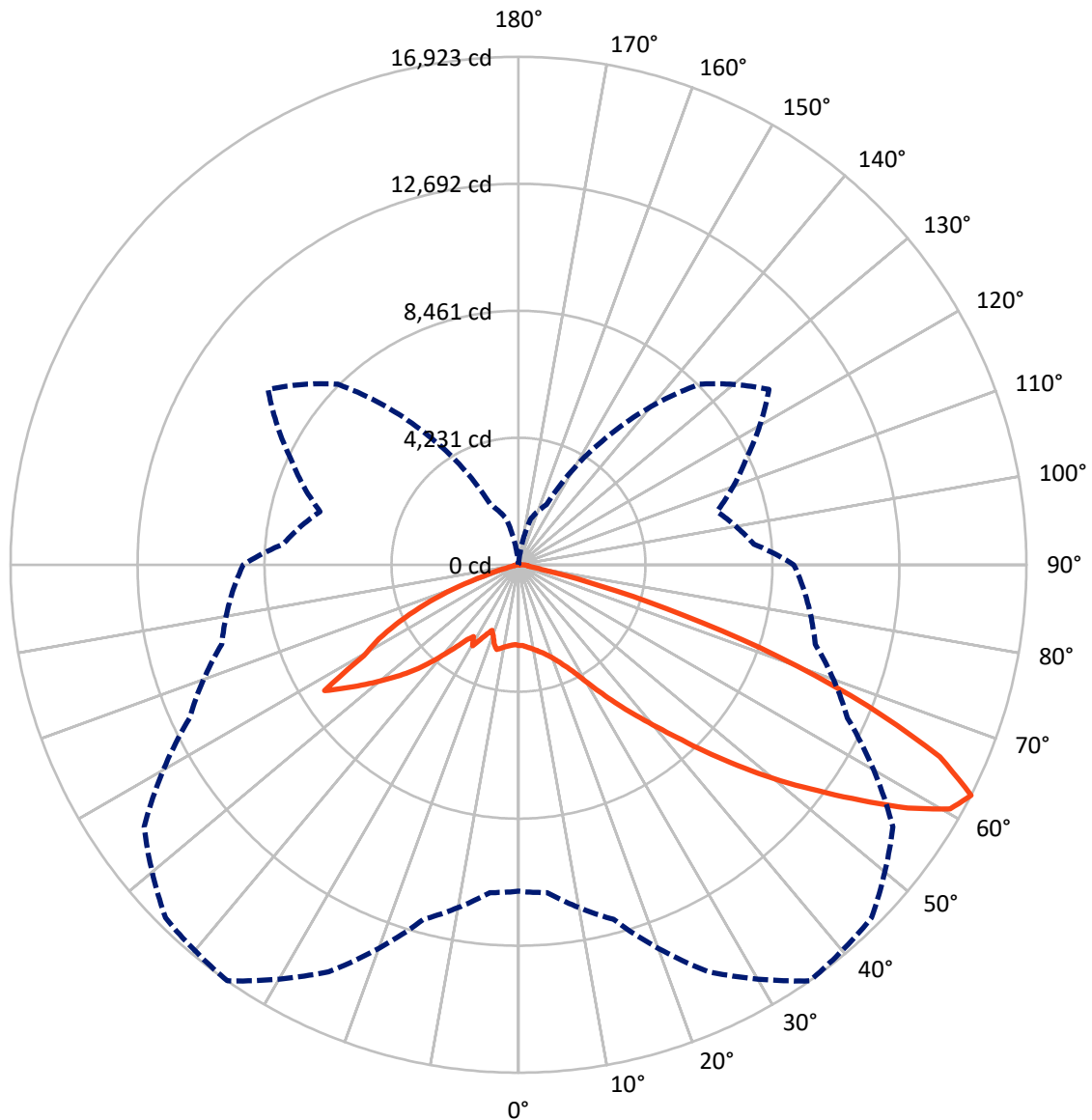
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4 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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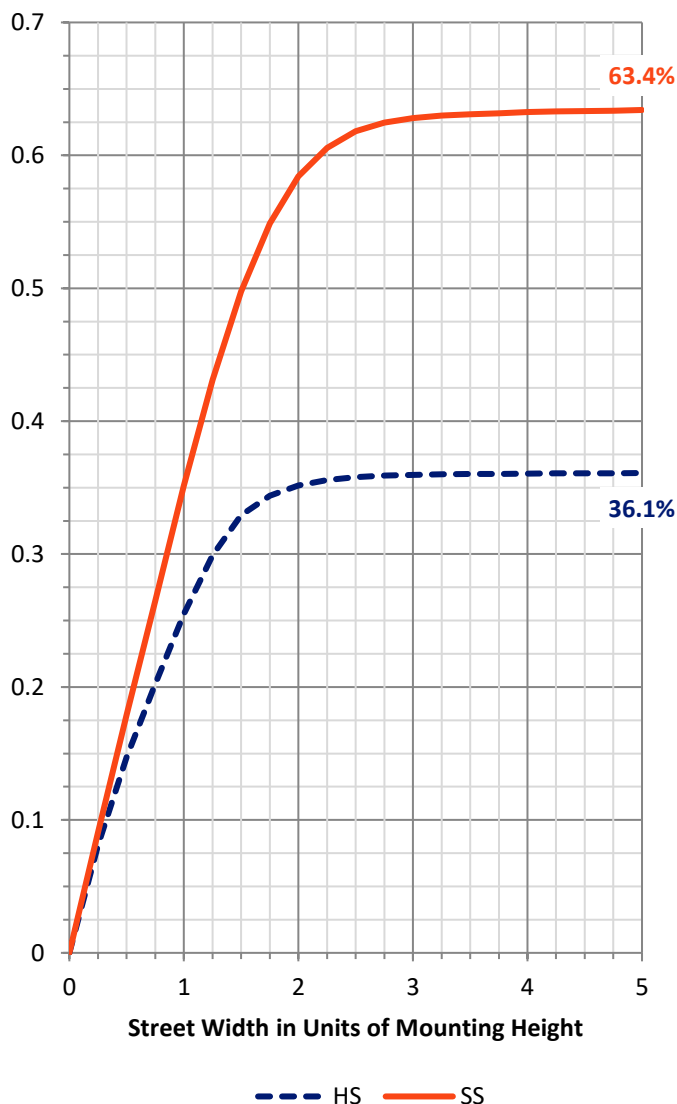
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10924.5	0.0	10924.5
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	19158.2	14.3	19172.5
	% Fixture	63.7	0.0	63.7
Total	Lumens	30082.7	14.3	30097.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.8	0.9
10°-20°	855.7	2.8
20°-30°	1646.2	5.5
30°-40°	3284.0	10.9
40°-50°	5996.4	19.9
50°-60°	8960.7	29.8
60°-70°	7508.2	24.9
70°-80°	1405.1	4.7
80°-90°	161.7	0.5
90°-100°	12.9	0.0
100°-110°	1.4	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°	30082.7	100.0
0°-180°	30097.0	100.0

Coefficient of Utilization

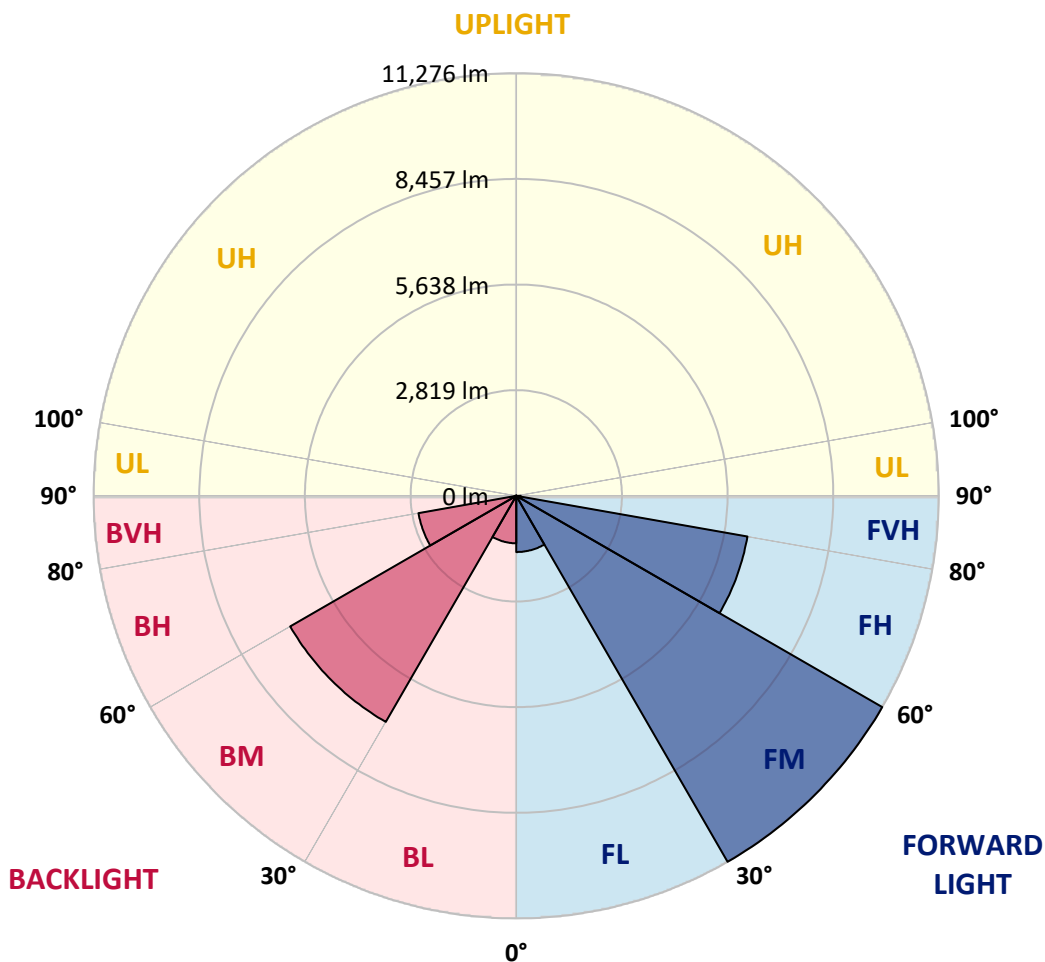


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1500.7	5.0			
FM	(30°-60°)	11275.7	37.5			
FH	(60°-80°)	6264.0	20.8			G3/7500
FVH	(80°-90°)	117.8	0.4			G2/225
BL	(0°-30°)	1265.9	4.2	B3/2500		
BM	(30°-60°)	6965.3	23.1	B4/8500		
BH	(60°-80°)	2649.3	8.8	B4/5000		G4/5000
BVH	(80°-90°)	44.0	0.1			G1/100
UL	(90°-100°)	12.9	0.0		U2/50	
UH	(100°-180°)	1.4	0.0		U1/10	

BUG Rating: B4-U2-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0
2.5°	2750.5	2727.9	2731.3	2747.1	2697.5	2717.8	2696.4	2716.7	2709.9	2718.9	2725.7
5°	2790.0	2761.8	2764.1	2782.1	2743.7	2760.7	2739.2	2752.8	2741.5	2753.9	2755.0
7.5°	2844.2	2820.5	2817.1	2835.1	2802.4	2817.1	2795.6	2802.4	2791.1	2805.8	2801.3
10°	2916.4	2894.9	2889.3	2901.7	2875.7	2883.6	2861.1	2870.1	2853.2	2870.1	2862.2
12.5°	2996.5	2968.3	2969.4	2982.9	2957.0	2962.6	2944.6	2954.7	2934.4	2952.5	2946.8
15°	3091.2	3050.6	3058.5	3073.2	3048.4	3065.3	3043.8	3058.5	3039.3	3058.5	3051.7
17.5°	3214.2	3167.9	3173.6	3197.3	3177.0	3204.0	3179.2	3197.3	3188.2	3200.7	3198.4
20°	3369.9	3339.4	3333.8	3363.1	3333.8	3367.6	3354.1	3385.7	3387.9	3400.3	3406.0
22.5°	3577.5	3557.2	3543.6	3563.9	3538.0	3561.7	3580.9	3635.0	3655.3	3688.0	3690.3
25°	3853.9	3852.7	3822.3	3823.4	3790.7	3822.3	3876.4	3961.1	4015.2	4056.9	4041.2
27.5°	4227.3	4234.1	4187.8	4169.8	4131.4	4178.8	4290.5	4395.4	4493.6	4552.2	4552.2
30°	4714.7	4721.4	4653.8	4617.7	4582.7	4665.0	4798.2	4934.7	5074.6	5159.2	5140.0
32.5°	5360.0	5338.6	5241.5	5176.1	5116.3	5211.1	5364.5	5519.1	5709.7	5831.6	5816.9
35°	6143.0	6065.1	5968.1	5846.2	5717.6	5792.1	5936.5	6130.6	6395.7	6578.4	6532.2
37.5°	7052.3	6975.6	6809.7	6599.9	6375.4	6384.4	6498.3	6834.5	7166.2	7315.1	7283.6
40°	7996.6	7936.8	7784.5	7514.8	7108.7	7015.0	7202.3	7607.3	7924.4	8111.6	8058.6
42.5°	8958.9	8898.0	8782.9	8512.1	7974.0	7748.4	7943.5	8384.7	8723.1	8907.0	8846.1
45°	9919.0	9849.0	9757.7	9518.5	9005.2	8674.6	8784.0	9189.1	9498.2	9706.9	9581.7
47.5°	10762.9	10716.6	10654.6	10557.5	10108.5	9743.0	9735.1	10002.5	10215.7	10353.3	10199.9
50°	11497.3	11464.6	11499.6	11479.3	11315.7	10982.9	10778.7	10760.6	10829.4	10929.8	10711.0
52.5°	12156.2	12098.6	12228.4	12389.7	12510.4	12442.7	11781.6	11410.5	11334.9	11368.7	11120.5
55°	12695.5	12668.4	12886.1	13291.1	13849.6	13998.5	12811.7	12042.2	11763.6	11745.5	11463.5
57.5°	13024.9	13063.2	13498.7	14270.4	15294.8	15342.2	14076.3	12718.0	12181.0	11987.0	11662.0
60°	12500.3	12648.1	13391.5	14983.4	16521.1	16550.5	15004.8	12842.1	11659.8	11225.4	10822.7
62.5°	10877.9	10965.9	12230.6	14959.7	16922.8	16636.2	15226.0	12093.0	10237.1	9544.4	9172.1
65°	7662.6	7827.3	9182.3	13459.2	15421.1	15457.2	13968.0	10456.0	8174.8	7408.8	7168.5
67.5°	4627.8	4785.8	6228.7	9715.9	12536.4	12941.4	11651.9	7916.5	5862.0	4894.1	4651.5
70°	1502.7	1674.2	2838.5	5726.7	9221.8	10193.1	8768.2	5152.4	3069.8	2150.3	1889.7
72.5°	570.9	622.8	924.0	2501.2	5743.6	6805.2	5423.2	2584.7	951.1	566.3	497.5
75°	371.2	379.1	432.1	876.6	2769.7	3746.7	2614.0	757.0	381.3	338.5	313.6
77.5°	319.3	324.9	347.5	436.6	882.2	1432.8	750.2	387.0	318.1	282.0	265.1
80°	301.2	303.5	318.1	370.0	412.9	478.3	361.0	323.8	277.5	265.1	252.7
82.5°	285.4	293.3	301.2	336.2	335.1	344.1	289.9	253.8	235.8	248.2	243.7
85°	266.3	270.8	276.4	300.1	273.0	231.3	223.4	174.9	170.4	181.6	170.4
87.5°	187.3	198.6	191.8	201.9	189.5	147.8	125.2	99.3	79.0	65.4	63.2
90°	76.7	77.8	73.3	67.7	59.8	49.6	39.5	24.8	11.3	5.6	2.3
92.5°	59.8	59.8	57.5	51.9	45.1	37.2	28.2	15.8	7.9	3.4	1.1
95°	37.2	38.4	36.1	32.7	28.2	22.6	16.9	9.0	5.6	2.3	1.1
97.5°	23.7	23.7	21.4	19.2	15.8	11.3	7.9	6.8	4.5	2.3	0.0
100°	13.5	13.5	12.4	10.2	7.9	5.6	5.6	4.5	3.4	1.1	0.0
102.5°	7.9	7.9	5.6	4.5	3.4	3.4	3.4	3.4	2.3	1.1	0.0
105°	3.4	3.4	2.3	2.3	1.1	1.1	2.3	2.3	2.3	1.1	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	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	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0
2.5°	2721.2	2700.9	2704.3	2685.1	2681.7	2662.5	2700.9	2705.4	2694.1	2704.3
5°	2752.8	2727.9	2735.8	2714.4	2711.0	2685.1	2718.9	2716.7	2707.6	2717.8
7.5°	2800.2	2774.2	2778.7	2755.0	2750.5	2722.3	2753.9	2743.7	2734.7	2747.1
10°	2866.7	2837.4	2839.6	2809.2	2812.6	2775.3	2813.7	2795.6	2784.4	2801.3
12.5°	2946.8	2914.1	2915.2	2883.6	2882.5	2846.4	2880.3	2870.1	2853.2	2879.1
15°	3050.6	3013.4	3010.0	2968.3	2957.0	2916.4	2947.9	2928.8	2917.5	2954.7
17.5°	3196.1	3154.4	3142.0	3091.2	2880.3	2758.4	2927.6	2985.2	2915.2	2903.9
20°	3390.2	3355.2	3327.0	3250.3	2896.0	2515.8	2234.9	2237.2	2532.8	2669.3
22.5°	3653.1	3611.3	3558.3	3448.9	2656.9	2356.8	2357.9	2354.5	2020.6	1879.6
25°	4012.9	3962.2	3853.9	3235.6	2820.5	2542.9	2536.2	2205.6	2021.7	2031.9
27.5°	4499.2	4395.4	3761.4	3505.3	3111.5	2784.4	2621.9	2220.3	2242.8	2258.6
30°	5117.4	4700.0	4064.8	3912.5	3461.3	3104.8	2424.5	2479.7	2524.9	2535.0
32.5°	5751.5	4713.6	4550.0	4388.6	3892.2	2825.0	2732.5	2837.4	2884.8	2890.4
35°	5745.8	5291.2	5080.2	4898.6	4291.6	3022.4	3081.1	3242.4	3363.1	3357.5
37.5°	6080.9	5928.6	5677.0	5446.9	3862.9	3404.9	3509.8	3692.5	3839.2	3834.7
40°	6781.5	6605.5	6339.3	5856.4	4276.9	3842.6	3989.3	4185.6	4289.4	4295.0
42.5°	7443.8	7298.2	7026.3	5471.7	4794.8	4369.5	4502.6	4634.6	4698.9	4719.2
45°	8102.6	7998.8	7094.0	6047.1	5420.9	4899.7	4987.7	5012.5	5080.2	5072.3
47.5°	8637.4	8522.3	6821.0	6769.1	6180.2	5402.9	5396.1	5363.4	5388.2	5393.8
50°	9125.9	7739.3	7369.3	7541.9	6976.7	5916.2	5787.6	5721.0	5687.2	5672.5
52.5°	9511.7	7741.6	7881.5	8340.7	7875.9	6473.5	6197.1	6009.8	5261.8	5847.4
55°	9840.0	8060.9	8366.6	9194.7	8650.9	7056.8	6567.2	6233.2	3512.0	2815.9
57.5°	10028.4	8303.4	8847.2	9994.6	9327.8	7705.5	6045.9	5228.0	1985.6	1983.3
60°	9300.7	7868.0	8833.7	10414.3	9132.6	5977.1	2461.7	2060.1	375.7	385.8
62.5°	7873.6	6844.7	8377.9	10184.1	8505.4	5258.5	2207.9	1586.2	12.4	10.2
65°	6100.1	5460.4	7054.5	8957.8	7738.2	4387.5	1646.0	1142.9	3.4	0.0
67.5°	3990.4	3848.2	5205.4	7428.0	6311.1	3399.2	1104.5	547.2	2.3	0.0
70°	1701.3	1970.9	3297.7	5385.9	4830.9	2338.7	532.5	197.4	1.1	0.0
72.5°	476.1	630.7	1467.8	3155.5	3038.2	1229.7	207.6	83.5	1.1	0.0
75°	282.0	242.6	420.8	1259.1	1479.0	432.1	95.9	64.3	1.1	0.0
77.5°	234.7	189.5	241.4	321.5	447.9	155.7	81.2	57.5	0.0	0.0
80°	220.0	168.1	208.7	224.5	221.1	129.7	80.1	57.5	0.0	0.0
82.5°	208.7	146.7	172.6	172.6	185.0	119.6	75.6	56.4	0.0	0.0
85°	156.8	102.7	115.1	148.9	133.1	84.6	55.3	45.1	0.0	0.0
87.5°	59.8	37.2	45.1	47.4	38.4	19.2	4.5	4.5	0.0	0.0
90°	1.1	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: P579555
 CATALOG NUMBER: CST-CA8-230-750-U-T5N-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)