

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: P579552

Luminaire Tested: **CST-CA8-230-750-U-T5-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579552
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-CA8-230-750-U-T5-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: 29470 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

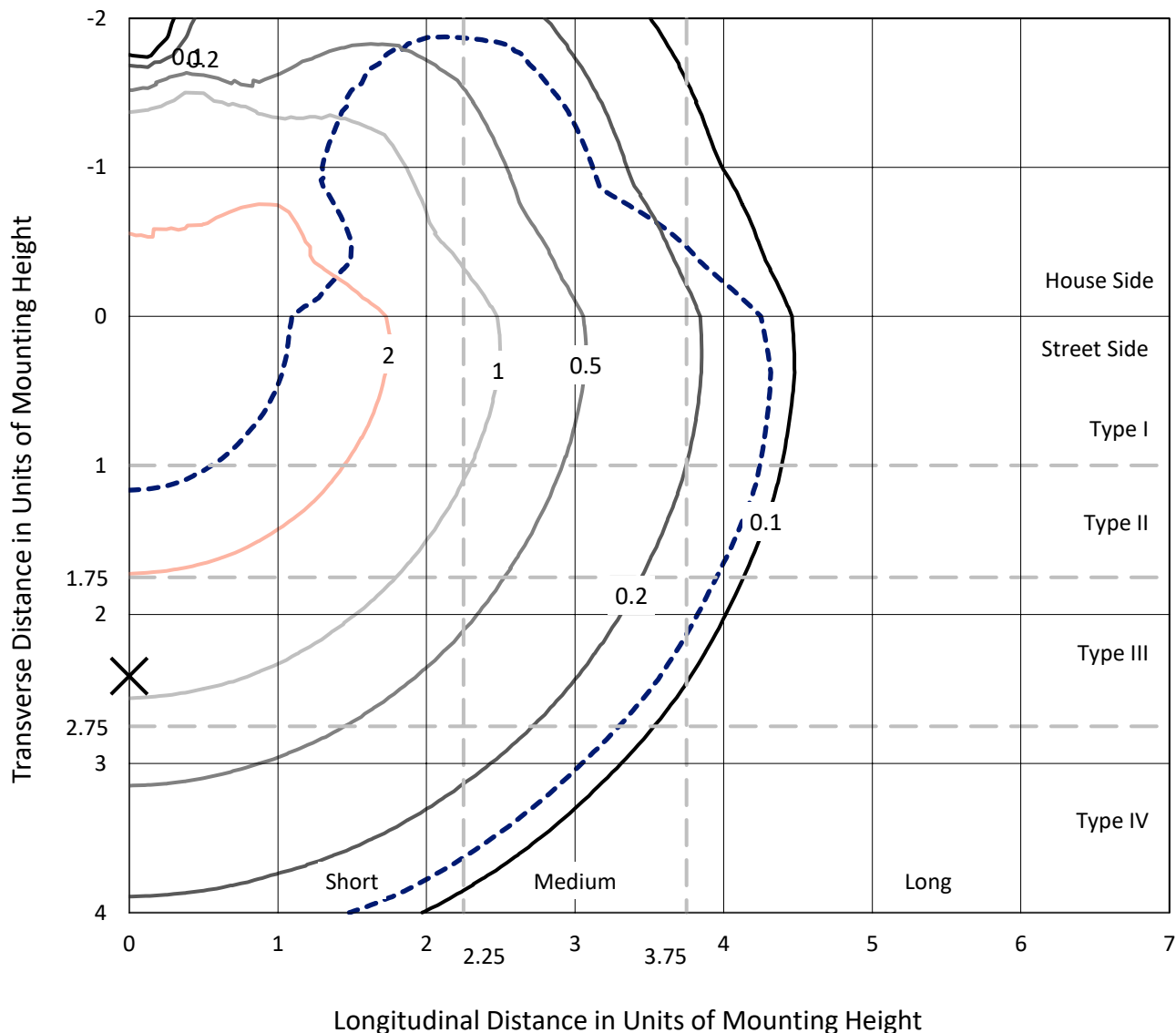
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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 CATALOG NUMBER: CST-CA8-230-750-U-T5-HSS-HM-EX90

Iso-Footcandle Lines of Horizontal Illumination

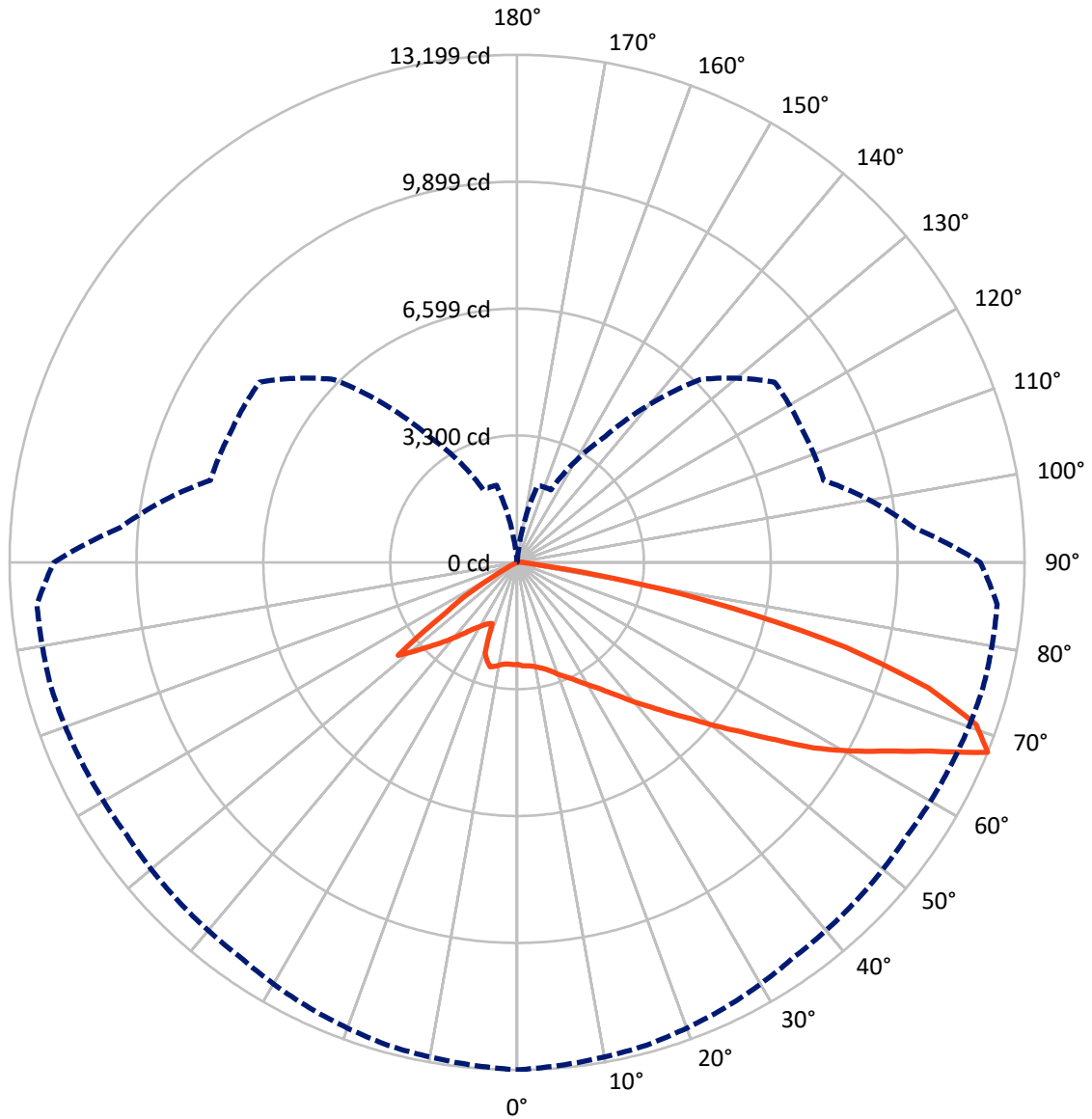
× Max cd
 - - - 1/2 Max cd



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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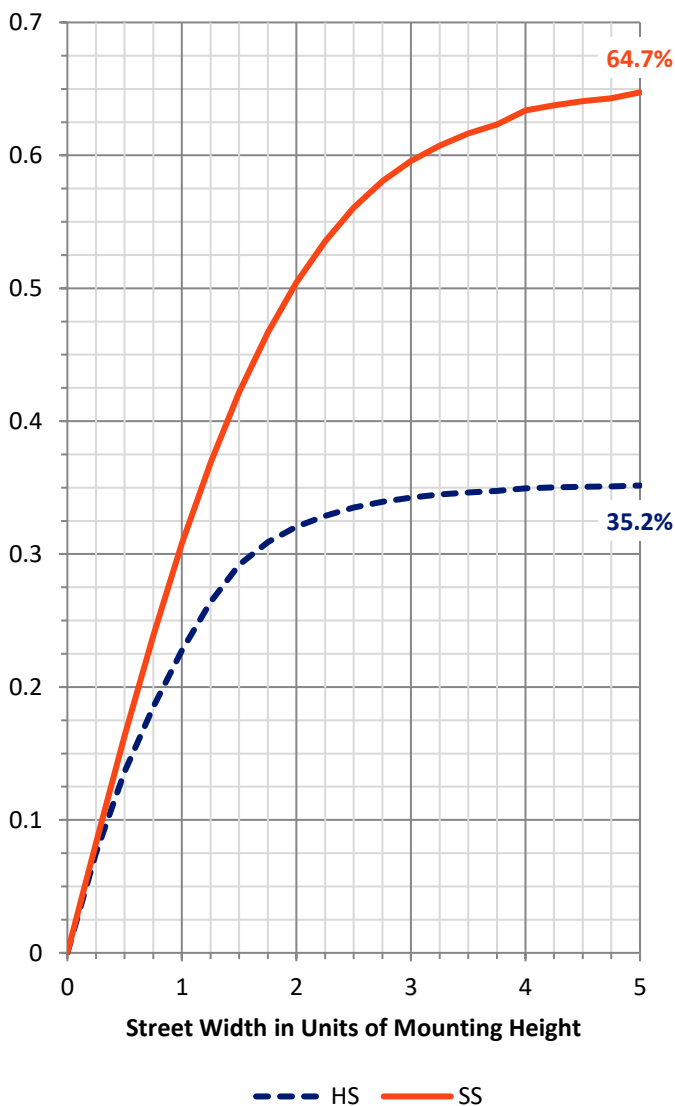
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10373.4	0.6	10374.0
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	19075.2	20.8	19096.0
	% Fixture	64.7	0.1	64.8
Total	Lumens	29448.6	21.4	29470.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.5	0.9
10°-20°	793.7	2.7
20°-30°	1376.1	4.7
30°-40°	2257.9	7.7
40°-50°	3766.3	12.8
50°-60°	6095.2	20.7
60°-70°	8413.3	28.5
70°-80°	6069.9	20.6
80°-90°	420.7	1.4
90°-100°	18.2	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°	29448.6	99.9
0°-180°	29470.0	100.0

Coefficient of Utilization

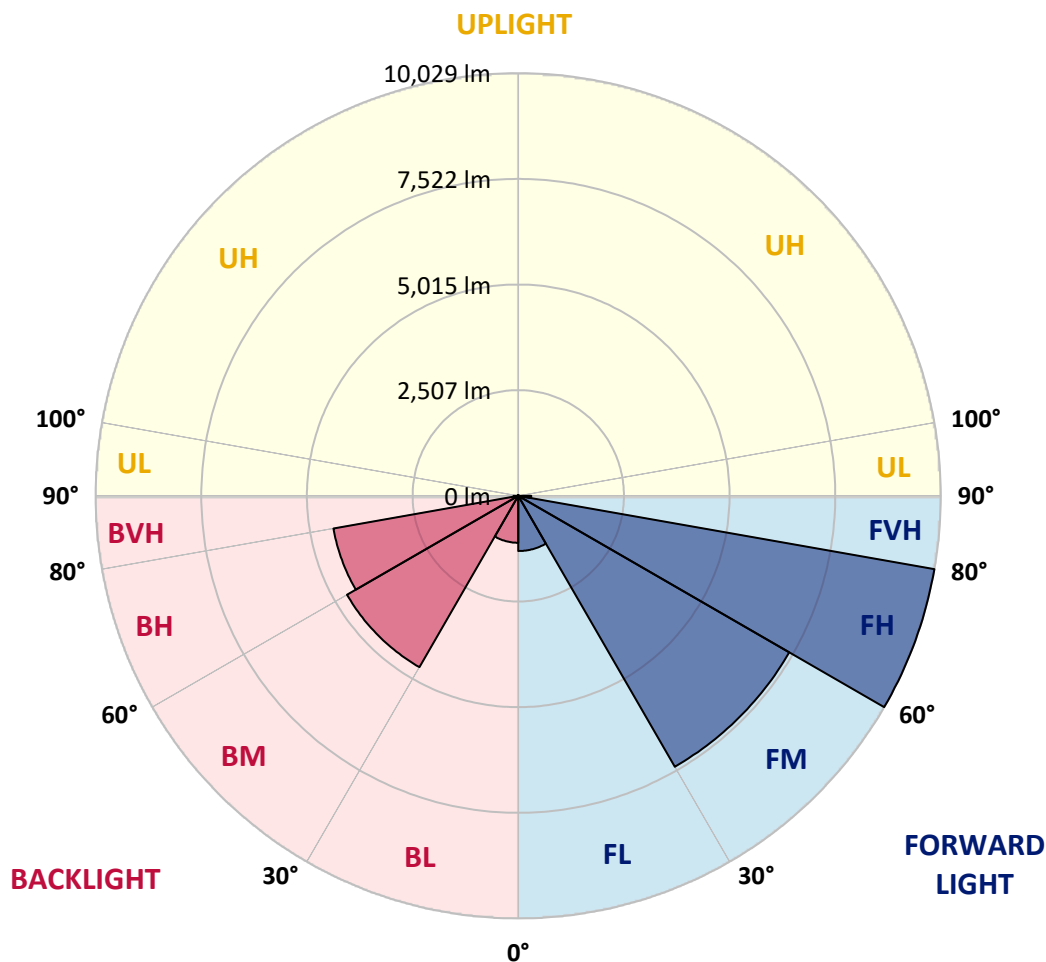


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 CATALOG NUMBER: CST-CA8-230-750-U-T5-HSS-HM-EX90

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1310.5	4.4			
FM	(30°-60°)	7425.7	25.2			
FH	(60°-80°)	10029.0	34.0			G4/12000
FVH	(80°-90°)	310.0	1.1			G3/500
BL	(0°-30°)	1114.8	3.8	B3/2500		
BM	(30°-60°)	4693.7	15.9	B3/5000		
BH	(60°-80°)	4454.2	15.1	B4/5000		G4/5000
BVH	(80°-90°)	110.7	0.4			G2/225
UL	(90°-100°)	18.2	0.1		U2/50	
UH	(100°-180°)	3.2	0.0		U1/10	

BUG Rating: B4-U2-G4
 Type IV Short





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CATALOG NUMBER: CST-CA8-230-750-U-T5-HSS-HM-EX90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8
2.5°	2696.4	2680.6	2681.7	2697.5	2654.6	2670.4	2652.4	2668.2	2660.3	2665.9	2672.7
5°	2704.3	2685.1	2687.4	2706.5	2672.7	2685.1	2663.7	2672.7	2665.9	2672.7	2673.8
7.5°	2724.6	2705.4	2706.5	2721.2	2686.2	2695.2	2674.9	2679.5	2668.2	2680.6	2677.2
10°	2767.5	2749.4	2742.6	2755.0	2724.6	2725.7	2702.0	2706.5	2689.6	2706.5	2699.8
12.5°	2825.0	2800.2	2802.4	2809.2	2772.0	2774.2	2746.0	2752.8	2724.6	2748.3	2740.4
15°	2894.9	2864.5	2867.9	2879.1	2843.0	2839.7	2813.7	2813.7	2788.9	2806.9	2799.0
17.5°	2992.0	2958.1	2955.9	2963.8	2934.4	2934.4	2905.1	2901.7	2876.9	2891.6	2889.3
20°	3118.3	3080.0	3073.2	3087.9	3050.6	3055.1	3017.9	3014.5	2987.5	2996.5	2997.6
22.5°	3232.3	3201.8	3200.7	3223.2	3179.2	3184.9	3151.0	3142.0	3119.4	3131.9	3135.2
25°	3363.1	3358.6	3355.2	3363.1	3319.1	3319.1	3295.4	3287.5	3272.9	3281.9	3290.9
27.5°	3527.9	3525.6	3516.6	3517.7	3480.5	3486.1	3460.2	3455.7	3448.9	3447.8	3443.2
30°	3709.5	3699.3	3686.9	3694.8	3677.9	3683.5	3661.0	3646.3	3644.1	3645.2	3638.4
32.5°	3911.4	3897.9	3890.0	3903.5	3910.3	3926.1	3925.0	3884.4	3884.4	3901.3	3870.8
35°	4161.9	4140.5	4147.2	4165.3	4178.8	4219.4	4212.7	4184.5	4193.5	4201.4	4165.3
37.5°	4456.4	4441.7	4472.2	4506.0	4507.1	4564.7	4551.1	4557.9	4556.8	4546.6	4522.9
40°	4809.5	4785.8	4817.4	4843.3	4827.5	4896.4	4894.1	4924.6	4944.9	4979.8	4966.3
42.5°	5160.3	5142.3	5172.8	5229.2	5220.1	5299.1	5310.4	5357.8	5386.0	5440.1	5408.5
45°	5592.4	5582.3	5610.5	5654.5	5685.0	5789.9	5831.6	5851.9	5923.0	5988.4	5915.1
47.5°	6076.4	6090.0	6085.5	6165.6	6233.3	6360.7	6377.7	6443.1	6505.2	6577.4	6506.3
50°	6678.9	6656.3	6676.6	6753.4	6863.9	6956.4	7043.3	7136.9	7197.9	7272.3	7141.5
52.5°	7327.6	7346.8	7391.9	7510.4	7591.6	7701.0	7780.0	7891.7	7951.5	8015.8	7845.4
55°	8145.5	8161.3	8211.0	8332.8	8390.4	8514.5	8568.6	8680.3	8737.8	8766.0	8548.3
57.5°	9104.5	9051.5	9092.1	9155.3	9244.4	9378.7	9393.3	9498.2	9498.2	9534.3	9256.8
60°	9960.8	9924.7	9967.6	10057.8	10092.8	10214.6	10202.2	10288.0	10310.5	10283.5	9951.8
62.5°	10804.7	10811.5	10866.7	10896.1	10882.5	10954.7	10984.1	11074.3	11037.1	11046.1	10663.7
65°	11829.1	11844.9	11839.2	11785.1	11663.2	11805.4	11797.5	11940.8	11949.8	12031.0	11586.5
67.5°	13198.7	13128.8	13001.3	12783.5	12542.1	12458.6	12385.3	12456.4	12547.7	12533.1	12045.7
70°	12666.2	12552.3	12485.7	12296.2	11973.5	11806.5	11654.2	11666.6	11799.8	11812.2	11313.5
72.5°	11197.3	11139.8	10883.7	10717.8	10496.7	10368.1	10184.2	10225.9	10399.7	10429.0	10031.9
75°	8832.6	8779.6	8548.3	8494.2	8384.7	8447.9	8402.8	8419.7	8559.6	8431.0	8192.9
77.5°	5716.5	5729.0	5692.9	5815.8	5811.3	5814.7	5979.4	5996.3	6132.8	6053.9	5823.7
80°	2563.3	2600.5	2688.5	2866.7	2758.4	2817.1	2880.3	2861.1	2998.7	2687.4	2799.0
82.5°	519.0	537.0	506.6	529.1	494.1	512.2	538.1	498.7	494.1	458.0	425.3
85°	267.4	270.8	269.6	264.0	232.4	214.4	206.5	173.7	156.8	153.4	142.2
87.5°	173.7	176.0	170.4	169.2	148.9	136.5	121.8	102.7	85.7	59.8	49.6
90°	106.0	106.0	100.4	94.8	84.6	75.6	60.9	44.0	25.9	10.2	5.6
92.5°	71.1	71.1	68.8	65.4	58.7	50.8	39.5	25.9	12.4	4.5	2.3
95°	45.1	45.1	44.0	42.9	38.4	32.7	24.8	15.8	7.9	3.4	1.1
97.5°	29.3	29.3	29.3	28.2	25.9	22.6	16.9	10.2	5.6	2.3	1.1
100°	18.1	19.2	18.1	18.1	16.9	14.7	11.3	6.8	4.5	2.3	1.1
102.5°	10.2	10.2	11.3	11.3	10.2	9.0	6.8	5.6	3.4	2.3	1.1
105°	4.5	4.5	5.6	5.6	5.6	4.5	4.5	3.4	2.3	2.3	1.1
107.5°	1.1	1.1	1.1	2.3	3.4	3.4	3.4	3.4	2.3	1.1	1.1
110°	0.0	0.0	0.0	1.1	1.1	2.3	2.3	2.3	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



REPORT NUMBER: P579552

CATALOG NUMBER: CST-CA8-230-750-U-T5-HSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8	2655.8
2.5°	2665.9	2652.4	2662.5	2645.6	2641.1	2626.4	2654.6	2659.1	2656.9	2661.4
5°	2668.2	2651.2	2663.7	2646.7	2645.6	2629.8	2659.1	2660.3	2652.4	2655.8
7.5°	2674.9	2659.1	2668.2	2649.0	2651.2	2632.1	2665.9	2664.8	2660.3	2668.2
10°	2699.8	2681.7	2685.1	2664.8	2670.4	2650.1	2691.9	2694.1	2689.6	2704.3
12.5°	2742.6	2717.8	2725.7	2702.0	2706.5	2686.2	2737.0	2740.4	2740.4	2764.1
15°	2801.3	2775.4	2792.3	2761.8	2762.9	2732.5	2770.8	2770.8	2775.4	2808.1
17.5°	2887.0	2855.5	2878.0	2849.8	2673.8	2607.3	2738.1	2818.2	2685.1	2673.8
20°	2993.1	2978.4	2990.8	2944.6	2659.1	2354.5	2117.6	2105.2	2368.1	2498.9
22.5°	3122.8	3108.2	3113.8	3055.1	2373.7	2159.4	2156.0	2133.4	1805.1	1714.9
25°	3275.1	3267.2	3254.8	2762.9	2453.8	2248.5	2221.4	1927.0	1738.5	1755.5
27.5°	3438.7	3415.0	2996.5	2870.1	2576.8	2337.6	2184.2	1799.5	1792.7	1808.5
30°	3621.5	3496.3	3067.6	3024.7	2720.1	2448.2	1901.0	1878.4	1878.4	1903.3
32.5°	3853.9	3265.0	3265.0	3242.4	2897.2	2149.2	2001.4	1987.9	2003.7	2013.8
35°	3818.9	3512.1	3548.2	3538.0	3137.5	2188.7	2162.7	2140.2	2143.6	2143.6
37.5°	3830.2	3842.6	3885.5	3841.5	2737.0	2360.2	2318.4	2313.9	2317.3	2325.2
40°	4184.5	4191.2	4207.0	4110.0	2941.2	2559.9	2502.3	2491.0	2502.3	2519.3
42.5°	4565.8	4585.0	4603.0	3737.7	3226.6	2786.6	2729.1	2707.7	2728.0	2746.0
45°	5017.1	5046.4	4770.0	4068.3	3549.3	3045.0	2984.1	2958.1	2970.5	2986.3
47.5°	5524.8	5571.0	4498.1	4489.1	3928.4	3350.7	3280.8	3231.1	3250.3	3249.2
50°	6097.9	5323.9	4969.7	4964.0	4351.4	3691.4	3619.2	3574.1	3588.8	3577.5
52.5°	6717.3	5469.5	5480.8	5479.6	4793.7	4058.1	3991.5	3935.1	3818.9	3926.1
55°	7351.3	5972.6	6015.5	6008.7	5257.4	4437.2	4366.1	4313.1	2818.2	2380.5
57.5°	7982.0	6498.4	6511.9	6527.7	5738.0	4802.7	4490.2	4124.7	1607.7	1599.8
60°	8604.7	6999.3	7026.4	7035.4	5997.5	3975.7	1835.6	1869.4	486.3	581.0
62.5°	9250.0	7493.4	7518.3	7510.4	6255.8	3697.1	1928.1	1889.7	45.1	41.7
65°	10073.6	8112.8	8077.9	8051.9	6663.1	3945.3	2071.4	2061.2	14.7	10.2
67.5°	10362.4	8253.8	8182.8	8173.7	6721.8	3998.3	2082.6	2074.7	14.7	10.2
70°	9708.1	7718.0	7596.1	7599.5	6254.7	3740.0	1942.7	1931.5	13.5	10.2
72.5°	8502.0	6816.5	6765.8	6497.3	5416.4	3289.8	1722.7	1679.9	13.5	9.0
75°	6980.1	5506.7	5393.9	5092.7	4310.8	2615.1	1352.7	1297.4	12.4	7.9
77.5°	4845.6	3861.8	3646.3	3339.4	2883.7	1734.0	909.3	838.2	11.3	7.9
80°	2196.6	1585.1	1593.0	1220.7	978.1	587.8	288.8	261.7	10.2	6.8
82.5°	382.5	282.0	265.1	256.1	213.2	144.4	88.0	75.6	9.0	4.5
85°	133.1	107.2	118.5	139.9	124.1	86.9	54.2	51.9	5.6	2.3
87.5°	45.1	47.4	55.3	66.6	58.7	33.8	20.3	14.7	1.1	0.0
90°	4.5	5.6	5.6	5.6	3.4	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: P579552
 CATALOG NUMBER: CST-CA8-230-750-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)