

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: P579477

Luminaire Tested: **CST-CA10-210-740-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579477
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-CA10-210-740-U-T5N-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28776 lumens
Efficiency: N/A
Efficacy: 135.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G4

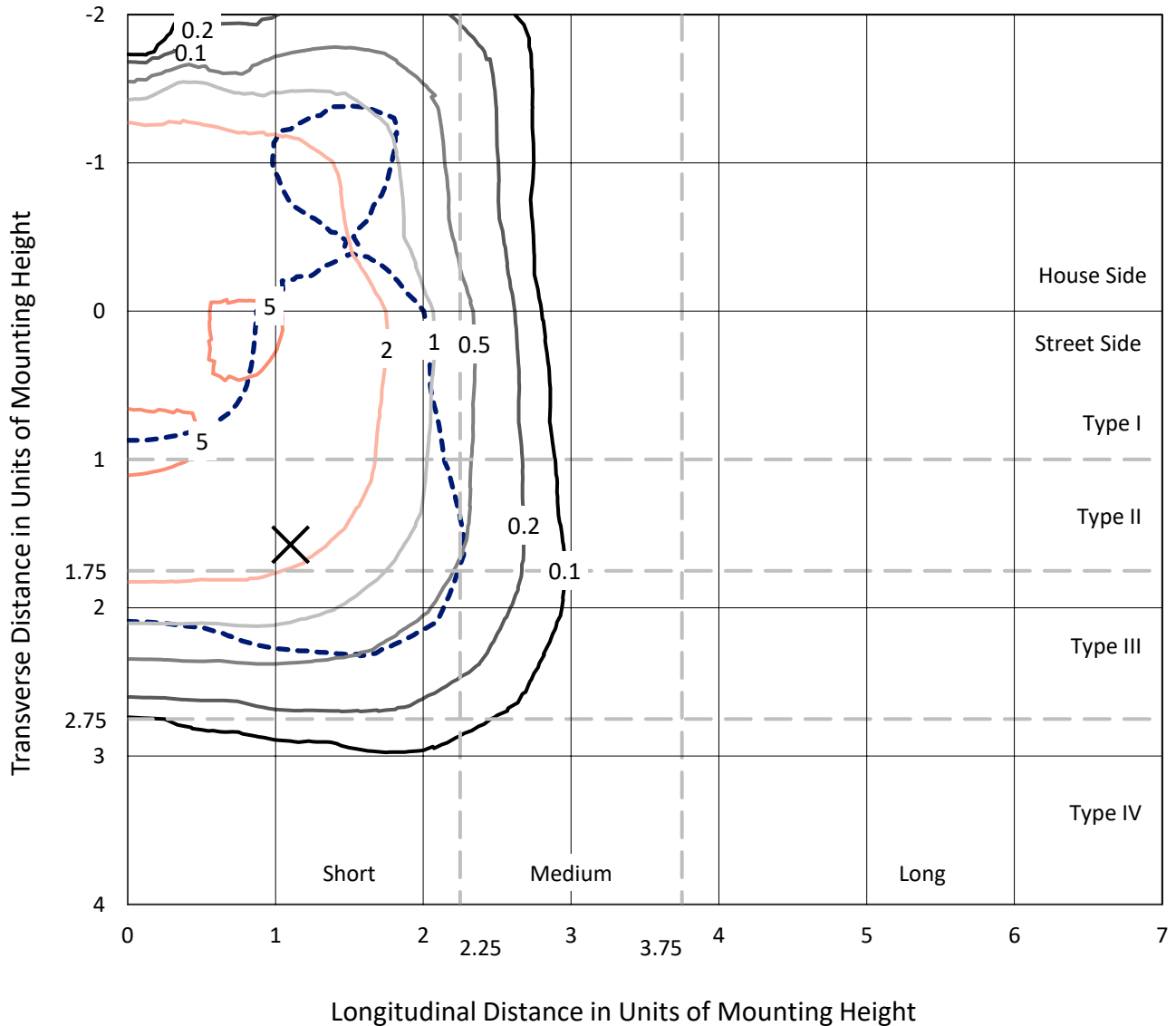
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

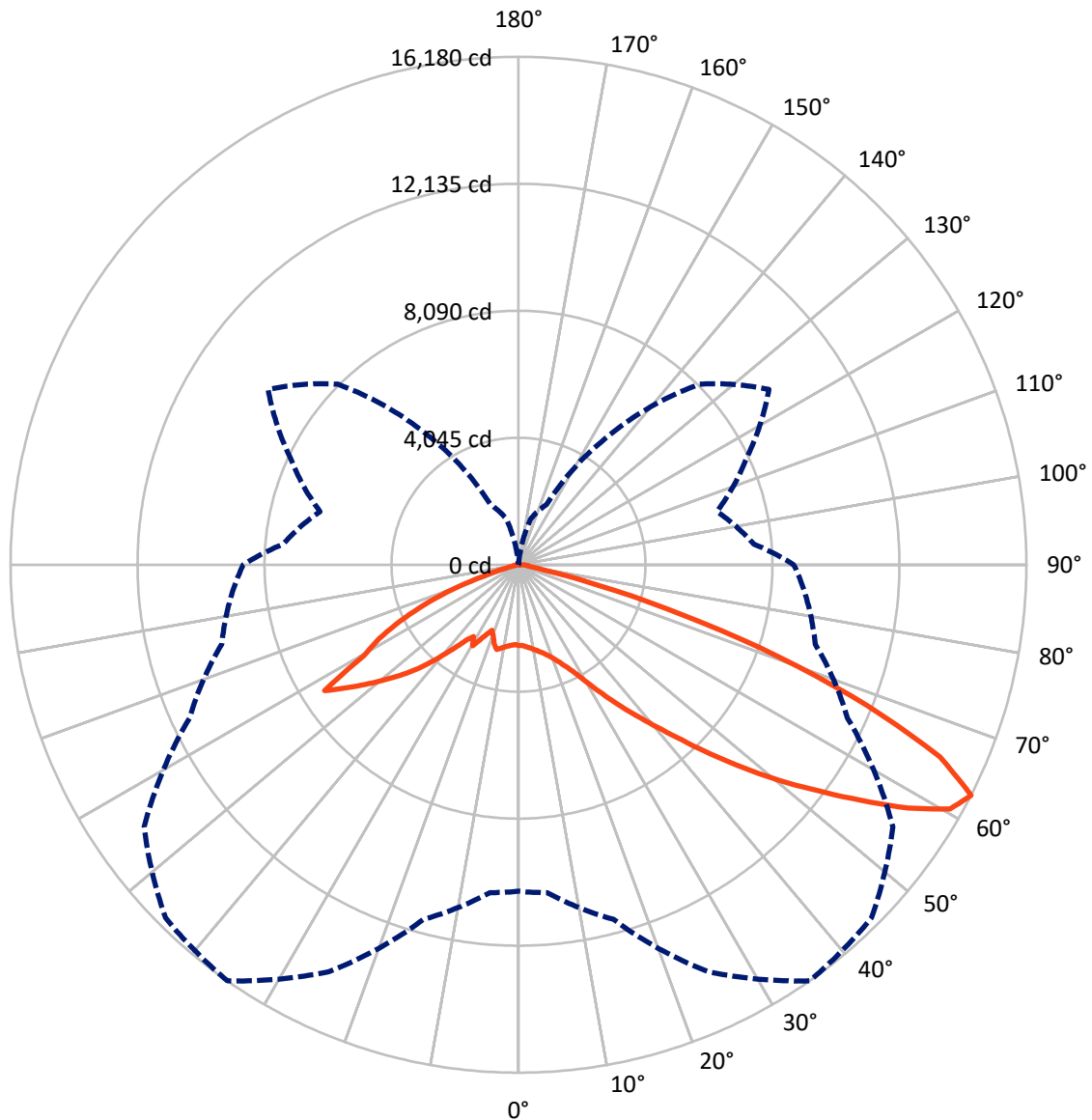
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type III - Short - N/A

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CATALOG NUMBER: CST-CA10-210-740-U-T5N-HSS-HM-EX90

Luminous Intensity Polar Plot



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

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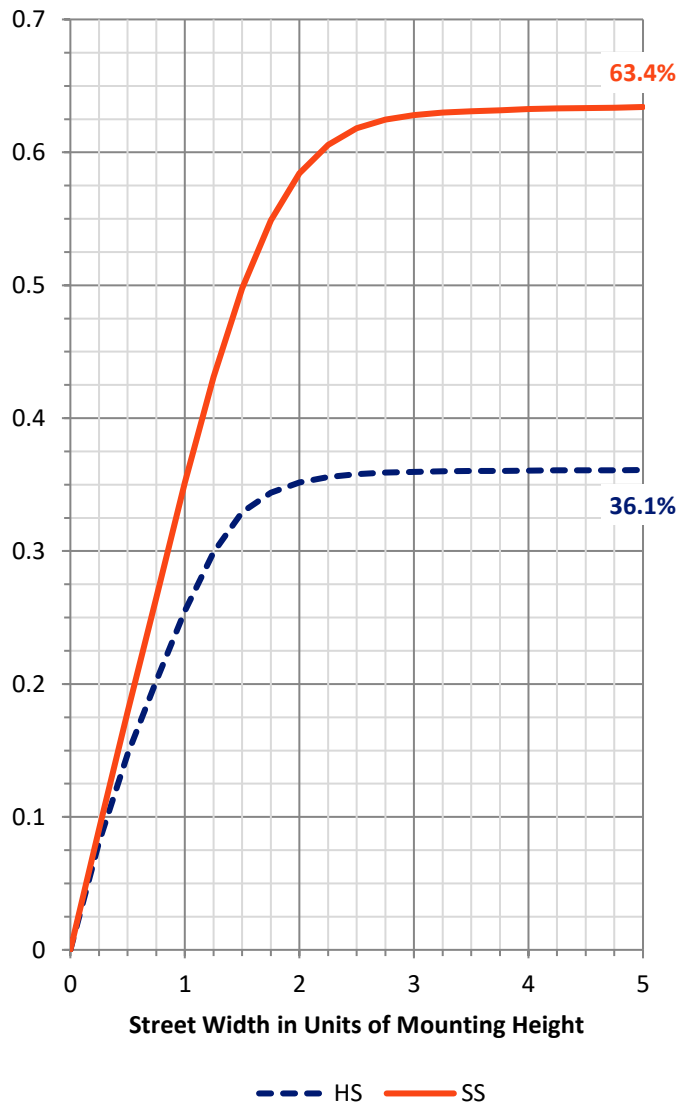
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10445.0	0.0	10445.0
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	18317.3	13.6	18331.0
	% Fixture	63.7	0.0	63.7
Total	Lumens	28762.3	13.7	28776.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.1	0.9
10°-20°	818.1	2.8
20°-30°	1573.9	5.5
30°-40°	3139.8	10.9
40°-50°	5733.2	19.9
50°-60°	8567.4	29.8
60°-70°	7178.7	24.9
70°-80°	1343.4	4.7
80°-90°	154.6	0.5
90°-100°	12.3	0.0
100°-110°	1.3	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°	28762.3	100.0
0°-180°	28776.0	100.0

Coefficient of Utilization

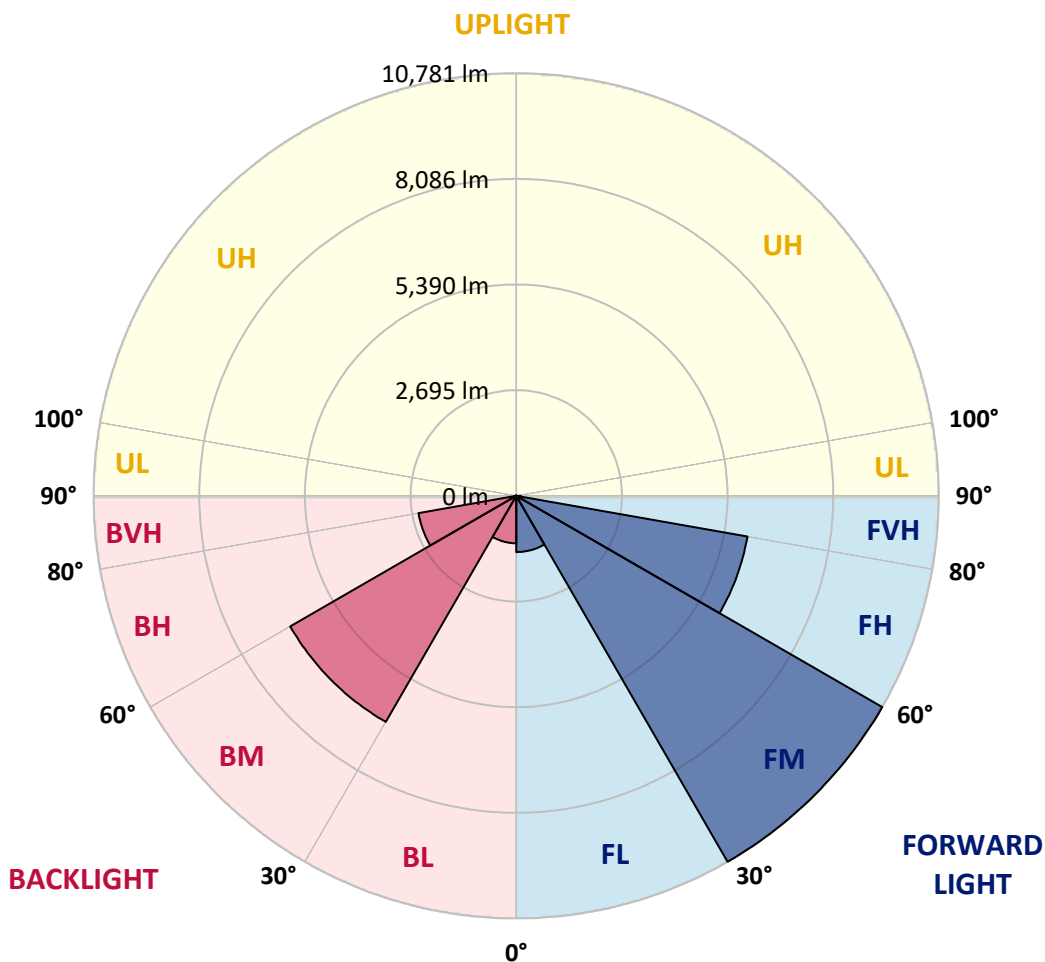


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1434.8	5.0			
FM (30°-60°)	10780.8	37.5			
FH (60°-80°)	5989.1	20.8			G3/7500
FVH (80°-90°)	112.6	0.4			G2/225
BL (0°-30°)	1210.4	4.2	B3/2500		
BM (30°-60°)	6659.6	23.1	B4/8500		
BH (60°-80°)	2533.0	8.8	B4/5000		G4/5000
BVH (80°-90°)	42.0	0.1			G1/100
UL (90°-100°)	12.3	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°	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8
2.5°	2629.8	2608.2	2611.5	2626.6	2579.1	2598.5	2578.0	2597.4	2591.0	2599.6	2606.1
5°	2667.5	2640.6	2642.7	2660.0	2623.3	2639.5	2619.0	2631.9	2621.2	2633.0	2634.1
7.5°	2719.3	2696.7	2693.4	2710.7	2679.4	2693.4	2672.9	2679.4	2668.6	2682.6	2678.3
10°	2788.4	2767.9	2762.5	2774.3	2749.5	2757.1	2735.5	2744.1	2727.9	2744.1	2736.6
12.5°	2864.9	2838.0	2839.0	2852.0	2827.2	2832.6	2815.3	2825.0	2805.6	2822.9	2817.5
15°	2955.5	2916.7	2924.3	2938.3	2914.6	2930.7	2910.2	2924.3	2905.9	2924.3	2917.8
17.5°	3073.1	3028.9	3034.3	3056.9	3037.5	3063.4	3039.7	3056.9	3048.3	3060.2	3058.0
20°	3222.0	3192.9	3187.5	3215.5	3187.5	3219.8	3206.9	3237.1	3239.2	3251.1	3256.5
22.5°	3420.5	3401.0	3388.1	3407.5	3382.7	3405.3	3423.7	3475.5	3494.9	3526.2	3528.3
25°	3684.7	3683.6	3654.5	3655.6	3624.3	3654.5	3706.3	3787.2	3839.0	3878.9	3863.8
27.5°	4041.8	4048.2	4004.0	3986.8	3950.1	3995.4	4102.2	4202.5	4296.3	4352.4	4352.4
30°	4507.7	4514.2	4449.5	4415.0	4381.5	4460.3	4587.6	4718.1	4851.8	4932.7	4914.4
32.5°	5124.7	5104.2	5011.5	4948.9	4891.8	4982.4	5129.1	5276.8	5459.1	5575.6	5561.6
35°	5873.3	5798.9	5706.1	5589.6	5466.7	5537.9	5675.9	5861.5	6115.0	6289.7	6245.5
37.5°	6742.7	6669.4	6510.8	6310.2	6095.5	6104.2	6213.1	6534.6	6851.7	6994.1	6963.9
40°	7645.6	7588.4	7442.8	7185.0	6796.7	6707.1	6886.2	7273.4	7576.6	7755.6	7704.9
42.5°	8565.7	8507.4	8397.4	8138.5	7624.0	7408.3	7594.9	8016.6	8340.2	8516.1	8457.8
45°	9483.6	9416.8	9329.4	9100.7	8609.9	8293.9	8398.5	8785.7	9081.3	9280.8	9161.1
47.5°	10290.5	10246.3	10186.9	10094.2	9664.8	9315.4	9307.8	9563.5	9767.3	9898.9	9752.2
50°	10992.7	10961.4	10994.8	10975.4	10819.0	10500.8	10305.6	10288.3	10354.1	10450.1	10240.9
52.5°	11622.6	11567.6	11691.7	11845.9	11961.3	11896.6	11264.5	10909.6	10837.4	10869.7	10632.4
55°	12138.2	12112.3	12320.5	12707.8	13241.7	13384.1	12249.3	11513.7	11247.3	11230.0	10960.3
57.5°	12453.2	12489.9	12906.2	13644.0	14623.5	14668.8	13458.5	12159.8	11646.4	11460.8	11150.2
60°	11951.6	12092.9	12803.8	14325.8	15796.0	15824.0	14346.3	12278.5	11148.0	10732.7	10347.6
62.5°	10400.5	10484.6	11693.8	14303.1	16180.0	15906.0	14557.7	11562.2	9787.8	9125.5	8769.6
65°	7326.3	7483.8	8779.3	12868.5	14744.3	14778.8	13355.0	9997.1	7816.0	7083.6	6853.8
67.5°	4424.7	4575.7	5955.3	9289.5	11986.1	12373.4	11140.5	7569.0	5604.7	4679.3	4447.3
70°	1436.8	1600.7	2713.9	5475.3	8817.0	9745.7	8383.4	4926.3	2935.1	2055.9	1806.8
72.5°	545.8	595.4	883.4	2391.4	5491.5	6506.5	5185.1	2471.2	909.3	541.5	475.7
75°	354.9	362.4	413.1	838.1	2648.1	3582.3	2499.3	723.8	364.6	323.6	299.9
77.5°	305.3	310.7	332.2	417.4	843.5	1369.9	717.3	370.0	304.2	269.7	253.5
80°	288.0	290.2	304.2	353.8	394.8	457.4	345.2	309.6	265.4	253.5	241.6
82.5°	272.9	280.5	288.0	321.4	320.4	329.0	277.2	242.7	225.4	237.3	233.0
85°	254.6	258.9	264.3	286.9	261.0	221.1	213.6	167.2	162.9	173.7	162.9
87.5°	179.1	189.8	183.4	193.1	181.2	141.3	119.7	94.9	75.5	62.6	60.4
90°	73.3	74.4	70.1	64.7	57.2	47.5	37.8	23.7	10.8	5.4	2.2
92.5°	57.2	57.2	55.0	49.6	43.1	35.6	27.0	15.1	7.6	3.2	1.1
95°	35.6	36.7	34.5	31.3	27.0	21.6	16.2	8.6	5.4	2.2	1.1
97.5°	22.7	22.7	20.5	18.3	15.1	10.8	7.6	6.5	4.3	2.2	0.0
100°	12.9	12.9	11.9	9.7	7.6	5.4	5.4	4.3	3.2	1.1	0.0
102.5°	7.6	7.6	5.4	4.3	3.2	3.2	3.2	3.2	2.2	1.1	0.0
105°	3.2	3.2	2.2	2.2	1.1	1.1	2.2	2.2	2.2	1.1	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2	2.2	1.1	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8	2574.8
2.5°	2601.7	2582.3	2585.6	2567.2	2564.0	2545.7	2582.3	2586.6	2575.9	2585.6
5°	2631.9	2608.2	2615.8	2595.3	2592.0	2567.2	2599.6	2597.4	2588.8	2598.5
7.5°	2677.2	2652.4	2656.8	2634.1	2629.8	2602.8	2633.0	2623.3	2614.7	2626.6
10°	2740.9	2712.8	2715.0	2685.9	2689.1	2653.5	2690.2	2672.9	2662.1	2678.3
12.5°	2817.5	2786.2	2787.3	2757.1	2756.0	2721.5	2753.8	2744.1	2727.9	2752.8
15°	2916.7	2881.1	2877.9	2838.0	2827.2	2788.4	2818.6	2800.2	2789.4	2825.0
17.5°	3055.9	3016.0	3004.1	2955.5	2753.8	2637.3	2799.1	2854.2	2787.3	2776.5
20°	3241.4	3208.0	3181.0	3107.6	2768.9	2405.4	2136.8	2139.0	2421.6	2552.1
22.5°	3492.7	3452.8	3402.1	3297.5	2540.3	2253.3	2254.4	2251.2	1931.9	1797.1
25°	3836.8	3788.3	3684.7	3093.6	2696.7	2431.3	2424.8	2108.8	1933.0	1942.7
27.5°	4301.7	4202.5	3596.3	3351.4	2975.0	2662.1	2506.8	2122.8	2144.4	2159.5
30°	4892.8	4493.7	3886.4	3740.8	3309.3	2968.5	2318.1	2370.9	2414.1	2423.8
32.5°	5499.0	4506.7	4350.3	4196.0	3721.4	2701.0	2612.5	2712.8	2758.1	2763.5
35°	5493.6	5058.9	4857.2	4683.6	4103.2	2889.7	2945.8	3100.1	3215.5	3210.1
37.5°	5814.0	5668.4	5427.8	5207.8	3693.4	3255.4	3355.7	3530.5	3670.7	3666.4
40°	6483.9	6315.6	6061.0	5599.4	4089.2	3673.9	3814.2	4001.9	4101.1	4106.5
42.5°	7117.0	6977.9	6717.9	5231.5	4584.3	4177.7	4305.0	4431.2	4492.6	4512.1
45°	7747.0	7647.7	6782.7	5781.7	5183.0	4684.6	4768.8	4792.5	4857.2	4849.7
47.5°	8258.3	8148.2	6521.6	6472.0	5908.9	5165.7	5159.3	5128.0	5151.7	5157.1
50°	8725.3	7399.7	7045.8	7210.9	6670.5	5656.5	5533.6	5469.9	5437.6	5423.5
52.5°	9094.2	7401.8	7535.6	7974.6	7530.2	6189.4	5925.1	5746.1	5030.9	5590.7
55°	9408.1	7707.1	7999.4	8791.1	8271.2	6747.1	6278.9	5959.6	3357.9	2692.4
57.5°	9588.3	7939.0	8458.9	9555.9	8918.4	7367.3	5780.6	4998.5	1898.5	1896.3
60°	8892.5	7522.6	8446.0	9957.2	8731.8	5714.8	2353.6	1969.6	359.2	368.9
62.5°	7528.0	6544.3	8010.2	9737.1	8132.1	5027.7	2110.9	1516.6	11.9	9.7
65°	5832.3	5220.7	6744.9	8564.6	7398.6	4194.9	1573.8	1092.7	3.2	0.0
67.5°	3815.2	3679.3	4977.0	7101.9	6034.1	3250.0	1056.0	523.2	2.2	0.0
70°	1626.6	1884.4	3152.9	5149.6	4618.8	2236.1	509.1	188.8	1.1	0.0
72.5°	455.2	603.0	1403.3	3017.0	2904.8	1175.7	198.5	79.8	1.1	0.0
75°	269.7	231.9	402.3	1203.8	1414.1	413.1	91.7	61.5	1.1	0.0
77.5°	224.4	181.2	230.8	307.4	428.2	148.9	77.7	55.0	0.0	0.0
80°	210.3	160.7	199.6	214.7	211.4	124.0	76.6	55.0	0.0	0.0
82.5°	199.6	140.2	165.0	165.0	176.9	114.3	72.3	53.9	0.0	0.0
85°	149.9	98.2	110.0	142.4	127.3	80.9	52.9	43.1	0.0	0.0
87.5°	57.2	35.6	43.1	45.3	36.7	18.3	4.3	4.3	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: P579477
 CATALOG NUMBER: CST-CA10-210-740-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)