

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: P522121

Luminaire Tested: **CST-CA10-210-750-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522121
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-210-750-U-T5R-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23506 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - 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

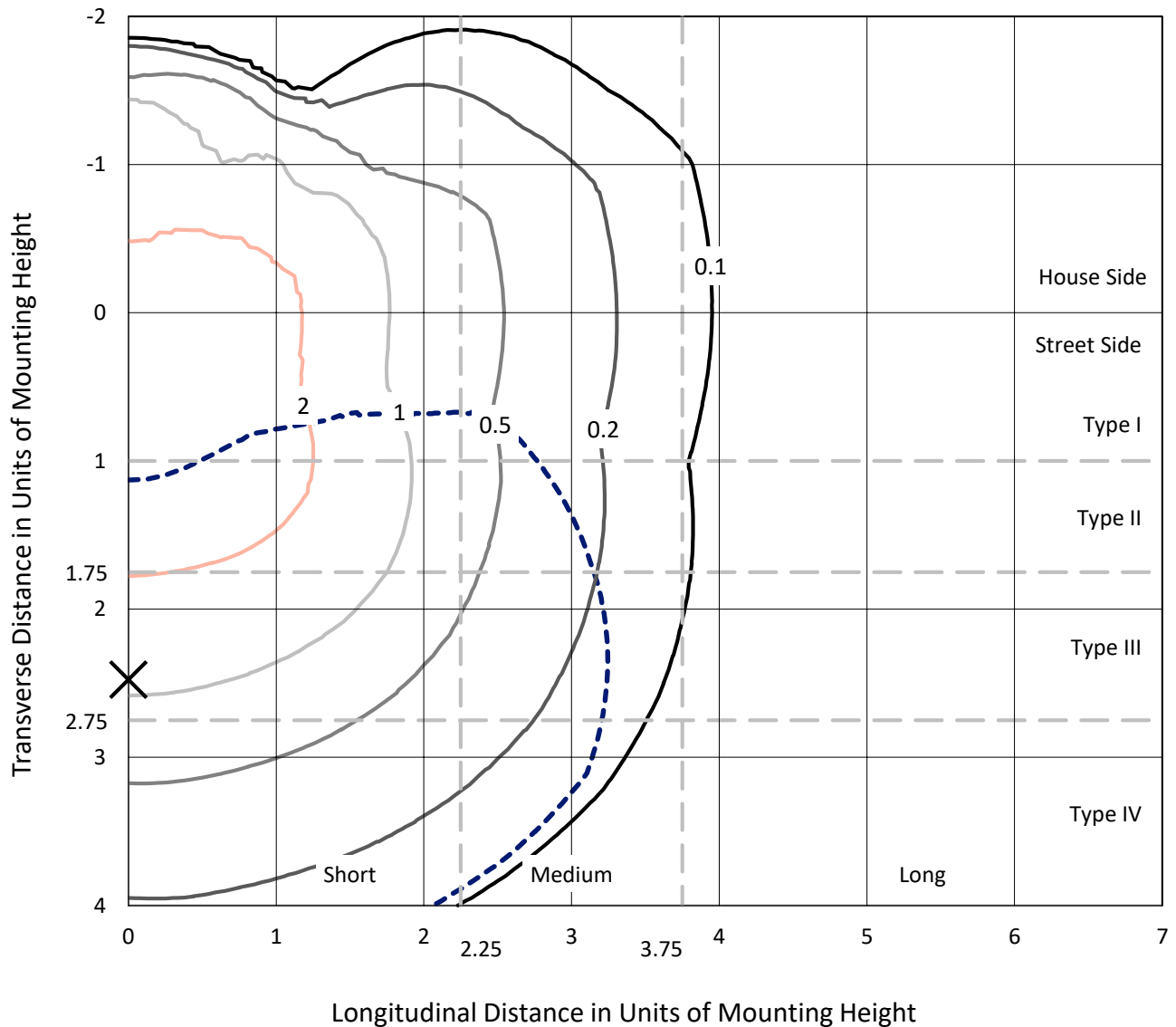




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Iso-Footcandle Lines of Horizontal Illumination

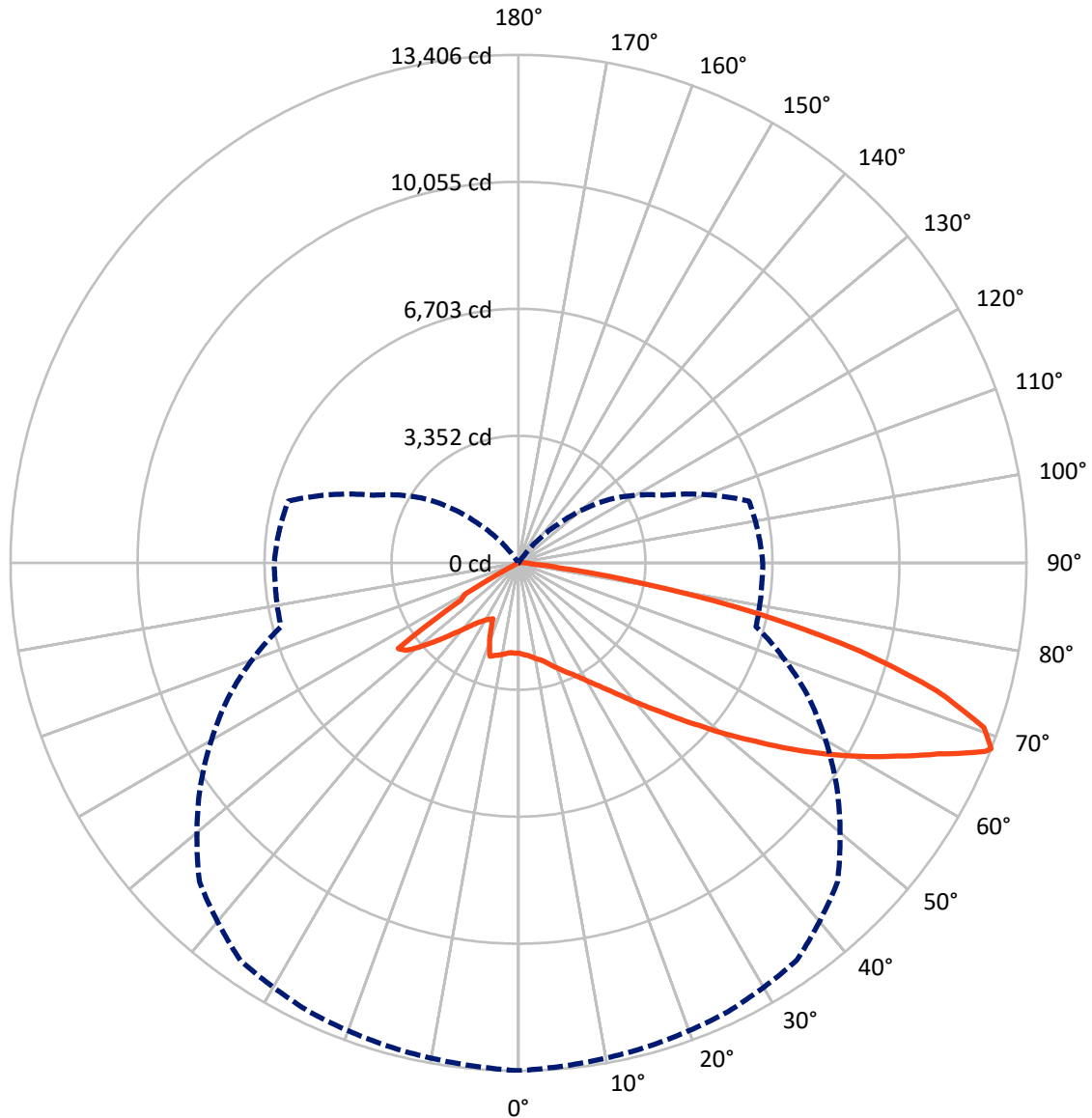
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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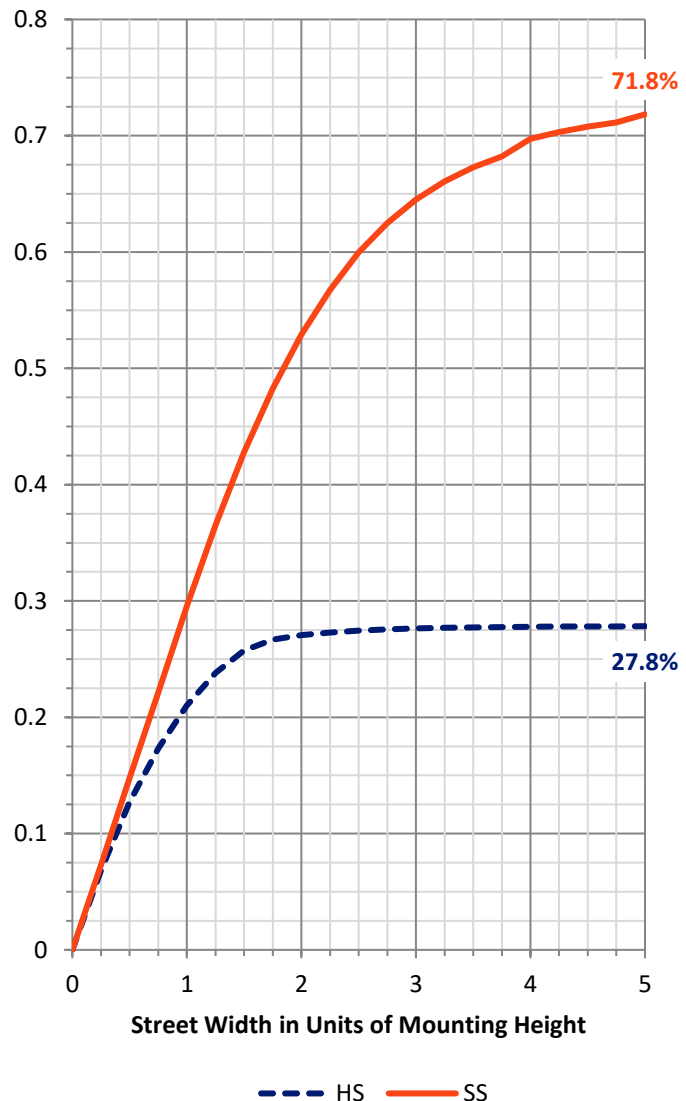
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6565.3	0.1	6565.4
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	16927.1	13.5	16940.6
	% Fixture	72.0	0.1	72.1
Total	Lumens	23492.4	13.6	23506.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.1	1.0
10°-20°	732.4	3.1
20°-30°	1239.9	5.3
30°-40°	1964.3	8.4
40°-50°	3211.5	13.7
50°-60°	4919.3	20.9
60°-70°	6048.6	25.7
70°-80°	4673.7	19.9
80°-90°	471.6	2.0
90°-100°	13.4	0.1
100°-110°	0.2	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°	23492.4	99.9
0°-180°	23506.0	100.0

Coefficient of Utilization



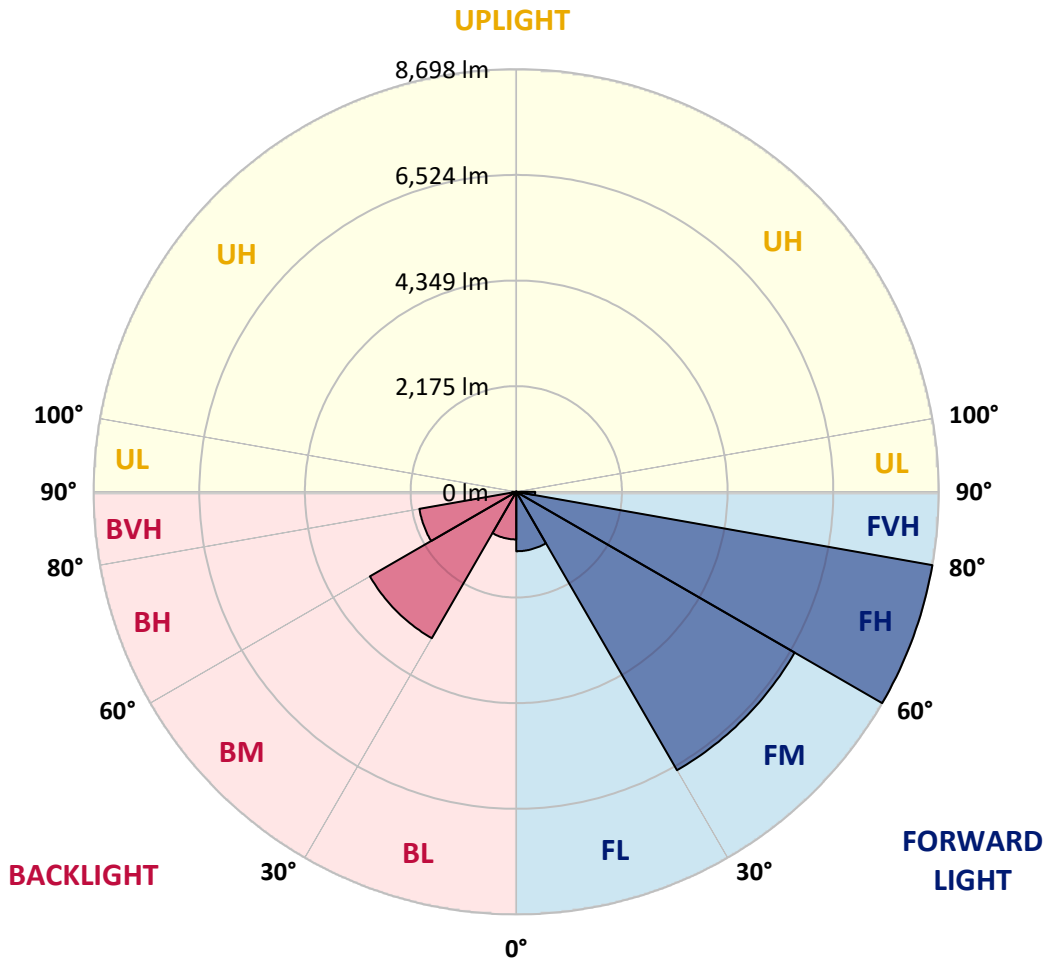
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1223.5	5.2			
FM (30°-60°)	6616.5	28.1			
FH (60°-80°)	8698.2	37.0			G4/12000
FVH (80°-90°)	388.9	1.7			G3/500
BL (0°-30°)	979.9	4.2	B2/1000		
BM (30°-60°)	3478.6	14.8	B3/5000		
BH (60°-80°)	2024.1	8.6	B3/2500		G3/2500
BVH (80°-90°)	82.7	0.4			G1/100
UL (90°-100°)	13.4	0.1		U2/50	
UH (100°-180°)	0.2	0.0		U1/10	

BUG Rating: B3-U2-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4
2.5°	2424.4	2419.9	2415.4	2425.6	2385.9	2402.9	2389.3	2401.8	2392.7	2402.9	2399.5
5°	2456.1	2451.6	2438.0	2449.4	2423.3	2430.1	2413.1	2417.6	2387.1	2405.2	2404.1
7.5°	2508.2	2495.8	2486.7	2486.7	2464.1	2462.9	2435.8	2436.9	2413.1	2410.9	2415.4
10°	2578.4	2569.4	2544.5	2546.7	2515.0	2510.5	2476.5	2475.4	2456.1	2444.8	2455.0
12.5°	2630.5	2639.6	2616.9	2616.9	2585.2	2562.6	2538.8	2523.0	2508.2	2491.2	2483.3
15°	2725.7	2734.7	2704.1	2703.0	2690.5	2663.4	2637.3	2603.4	2577.3	2569.4	2556.9
17.5°	2849.1	2843.4	2817.4	2818.5	2820.8	2776.6	2750.6	2706.4	2669.0	2641.9	2635.1
20°	2974.8	2974.8	2946.5	2955.5	2944.2	2903.4	2886.5	2825.3	2773.2	2743.8	2720.0
22.5°	3115.2	3109.5	3090.3	3109.5	3086.9	3046.1	3017.8	2956.7	2889.8	2723.4	2655.4
25°	3248.8	3245.4	3253.3	3259.0	3230.7	3179.7	3160.5	3095.9	2910.2	2691.7	2554.7
27.5°	3417.5	3406.2	3424.3	3435.7	3407.4	3363.2	3322.4	3249.9	2857.0	2684.9	2670.2
30°	3633.8	3608.9	3635.0	3640.6	3611.2	3584.0	3522.9	3160.5	2875.1	2825.3	2820.8
32.5°	3864.8	3835.4	3869.4	3873.9	3835.4	3812.7	3658.7	3114.1	3052.9	2995.2	3000.8
35°	4138.9	4138.9	4155.9	4158.1	4129.8	4091.3	3504.7	3340.5	3286.2	3233.0	3231.8
37.5°	4472.9	4462.7	4508.0	4535.2	4504.6	4394.8	3728.9	3651.9	3568.1	3500.2	3359.8
40°	4876.1	4894.2	4906.6	4933.8	4904.4	4657.5	4056.2	3969.0	3903.3	3675.7	3321.3
42.5°	5310.9	5315.4	5342.6	5376.6	5376.6	5116.1	4439.0	4364.2	4279.3	3594.2	3434.5
45°	5830.7	5820.5	5872.6	5926.9	5912.2	5642.7	4884.0	4828.5	4431.0	3830.9	3832.0
47.5°	6420.6	6408.2	6482.9	6554.3	6480.6	6227.0	5373.2	5330.1	4277.0	4231.7	4222.7
50°	7102.3	7071.8	7157.8	7252.9	7192.9	6879.2	5967.7	5141.0	4706.2	4670.0	4664.3
52.5°	7830.5	7806.7	7858.8	8020.7	7941.4	7562.1	6530.5	5304.1	5203.3	5162.5	5152.4
55°	8652.6	8606.1	8718.2	8841.7	8749.9	8317.4	7085.3	5845.4	5741.2	5671.0	5569.1
57.5°	9516.6	9449.8	9507.5	9662.7	9574.3	9090.8	7801.0	6402.5	6279.1	5196.5	4783.2
60°	10377.2	10346.6	10369.3	10506.3	10397.6	9842.7	8471.4	6960.8	5314.3	5139.9	5160.3
62.5°	11242.3	11175.5	11195.9	11336.3	11197.0	10558.4	9106.7	7468.1	5592.9	5531.7	5553.2
65°	12169.8	12090.5	12108.6	12149.4	11977.2	11200.4	9668.3	7947.1	6011.8	5947.3	5971.1
67.5°	13287.4	13214.9	13116.4	12995.3	12757.5	11882.1	10226.6	8451.0	6482.9	6446.7	6454.6
68°	13406.3	13336.1	13217.2	13073.4	12806.2	11910.4	10250.4	8465.7	6489.7	6444.4	6446.7
70°	13036.0	13077.9	12943.2	12702.0	12478.9	11496.0	9862.0	8139.6	6200.9	6134.1	6117.2
72.5°	11544.7	11636.4	11450.7	11409.9	11135.9	10241.3	8629.9	7062.7	5393.6	5415.1	5353.9
75°	9320.7	9455.4	9230.1	9242.5	9086.3	8542.7	7232.6	5880.5	4428.8	4527.3	4545.4
77.5°	6481.8	6675.4	6576.9	6675.4	6598.4	6402.5	5597.4	4528.4	3379.0	3492.3	3536.4
80°	3380.2	3610.0	3740.3	3781.0	3806.0	3798.0	3408.5	2717.7	1953.4	1995.3	1993.0
82.5°	1069.0	1013.5	1046.3	1037.3	1009.0	1020.3	919.5	719.1	498.2	549.2	525.4
85°	322.7	325.0	315.9	313.7	289.9	254.8	208.4	120.0	58.9	69.1	64.5
87.5°	237.8	240.1	221.9	210.6	197.0	171.0	132.5	74.7	28.3	27.2	21.5
90°	131.4	126.8	117.8	108.7	103.0	88.3	66.8	28.3	10.2	7.9	6.8
92.5°	71.3	67.9	63.4	60.0	52.1	41.9	27.2	9.1	4.5	1.1	0.0
95°	32.8	30.6	29.4	26.0	22.6	15.9	9.1	5.7	3.4	1.1	0.0
97.5°	14.7	13.6	12.5	10.2	7.9	4.5	4.5	3.4	2.3	1.1	0.0
100°	3.4	3.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.1	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4	2381.4
2.5°	2396.1	2389.3	2385.9	2364.4	2371.2	2352.0	2389.3	2380.3	2374.6	2390.5
5°	2398.4	2374.6	2389.3	2376.9	2381.4	2354.2	2383.7	2371.2	2370.1	2376.9
7.5°	2404.1	2388.2	2402.9	2378.0	2389.3	2378.0	2399.5	2387.1	2397.3	2404.1
10°	2434.6	2425.6	2418.8	2413.1	2421.0	2398.4	2425.6	2426.7	2430.1	2450.5
12.5°	2477.7	2468.6	2457.3	2442.6	2450.5	2441.4	2461.8	2467.5	2479.9	2490.1
15°	2537.7	2520.7	2516.2	2502.6	2510.5	2506.0	2510.5	2507.1	2530.9	2527.5
17.5°	2620.3	2601.1	2536.5	2470.9	2429.0	2441.4	2493.5	2561.5	2578.4	2580.7
20°	2650.9	2515.0	2508.2	2433.5	2399.5	2397.3	2289.7	2128.9	2177.6	2291.9
22.5°	2614.7	2429.0	2409.7	2395.0	2250.1	2012.3	1989.6	1965.8	1960.2	1977.1
25°	2533.1	2511.6	2494.6	2302.1	2073.4	2074.5	2041.7	1885.4	1642.0	1621.6
27.5°	2657.7	2628.3	2464.1	2167.4	2162.9	2160.6	2111.9	1711.0	1658.9	1671.4
30°	2799.3	2750.6	2321.4	2282.9	2281.8	2261.4	1893.3	1725.8	1725.8	1728.0
32.5°	2962.3	2660.0	2402.9	2421.0	2419.9	2323.7	1828.8	1817.5	1813.0	1824.3
35°	3086.9	2587.5	2578.4	2611.3	2588.6	1971.5	1943.2	1933.0	1928.5	1922.8
37.5°	3048.4	2795.9	2795.9	2816.2	2633.9	2099.4	2085.9	2085.9	2076.8	2072.3
40°	3107.3	3055.2	3029.1	3037.1	1913.7	2254.6	2264.8	2262.5	2261.4	2269.3
42.5°	3417.5	3371.1	3347.3	3066.5	2142.5	2241.0	2490.1	2489.0	2492.4	2489.0
45°	3812.7	3769.7	3707.4	2869.5	2432.4	1964.7	2744.9	2757.4	2758.5	2757.4
47.5°	4227.2	4200.0	3562.5	3176.3	2747.2	2108.5	2623.7	3064.2	3058.6	3065.4
50°	4665.4	4543.1	3544.4	3539.8	3082.4	2346.3	2347.4	3332.6	3390.4	3408.5
52.5°	5153.5	4118.5	3928.2	3584.0	3422.1	2590.9	2566.0	2953.3	3741.4	3759.5
55°	4786.6	4350.6	4347.2	3189.9	3560.2	2826.4	2829.8	2802.7	3431.1	3899.9
57.5°	4762.8	4773.0	4765.1	3559.1	2597.7	2649.8	3083.5	3059.7	2221.7	1800.5
60°	5173.9	5188.6	4629.2	3843.3	2808.3	1629.5	1899.0	1613.7	1635.2	1652.2
62.5°	5566.8	5571.3	3765.2	2519.6	1391.7	65.7	31.7	26.0	24.9	24.9
65°	6001.6	6001.6	4035.8	2748.3	1344.1	24.9	4.5	3.4	12.5	12.5
67.5°	6421.8	6328.9	4234.0	2918.2	1367.9	3.4	0.0	0.0	0.0	0.0
68°	6398.0	6296.1	4215.9	2913.6	1364.5	2.3	0.0	0.0	0.0	0.0
70°	6042.4	5943.9	3999.6	2781.1	1313.6	2.3	0.0	0.0	0.0	0.0
72.5°	5333.5	5242.9	3542.1	2451.6	1184.5	1.1	0.0	0.0	0.0	0.0
75°	4514.8	4502.4	3059.7	2068.9	1015.8	1.1	0.0	0.0	0.0	0.0
77.5°	3632.7	3576.1	2391.6	1621.6	818.7	0.0	0.0	0.0	0.0	0.0
80°	2023.6	2107.4	1399.6	953.5	515.2	0.0	0.0	0.0	0.0	0.0
82.5°	546.9	511.8	305.7	207.2	98.5	0.0	0.0	0.0	0.0	0.0
85°	70.2	77.0	35.1	28.3	6.8	0.0	0.0	0.0	0.0	0.0
87.5°	36.2	43.0	11.3	9.1	2.3	0.0	0.0	0.0	0.0	0.0
90°	6.8	7.9	3.4	1.1	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)