

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: P522196

Luminaire Tested: **CST-CA6-230-760-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522196
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-CA6-230-760-U-T5R-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22714 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U2 - G4

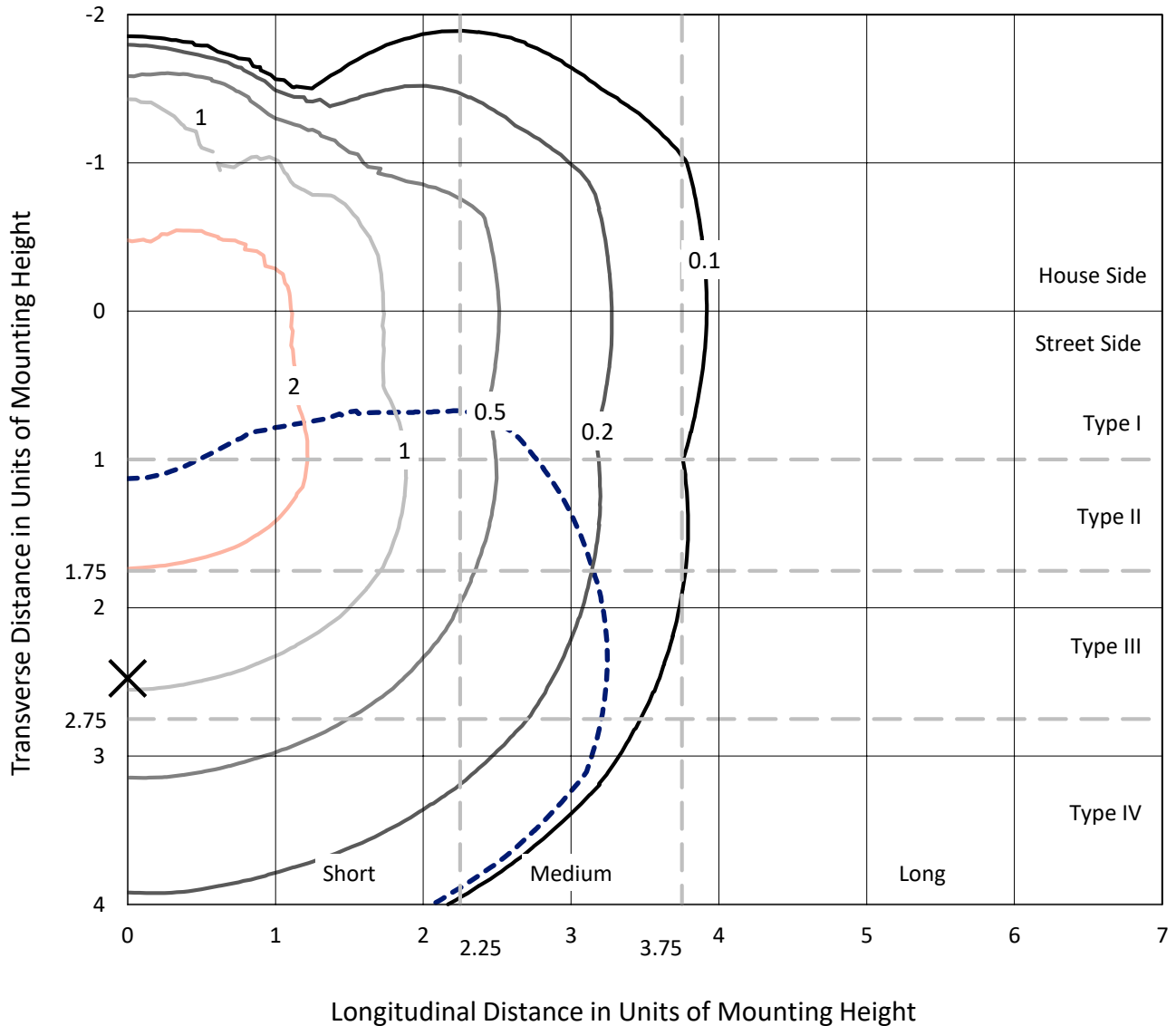
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

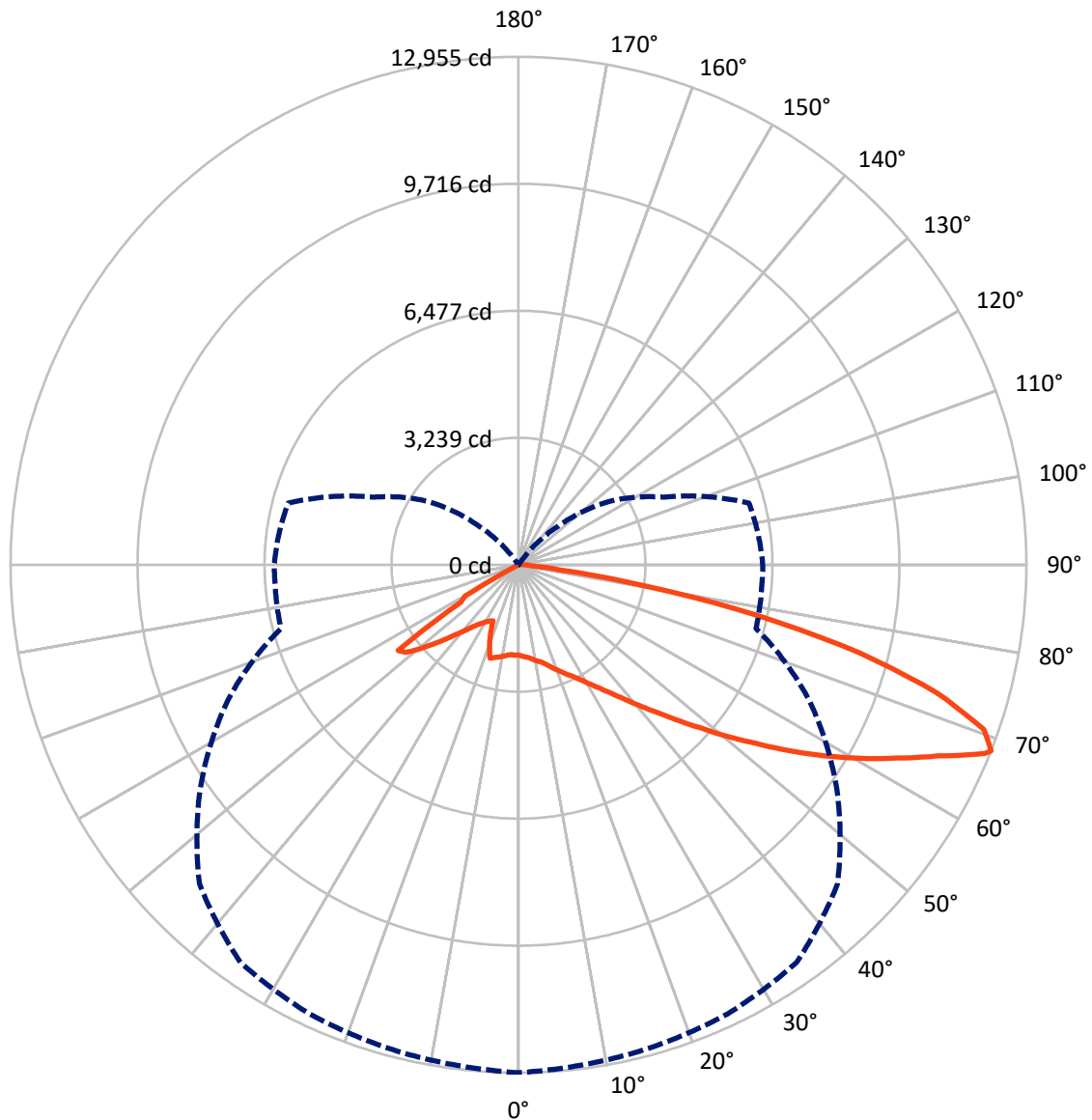
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 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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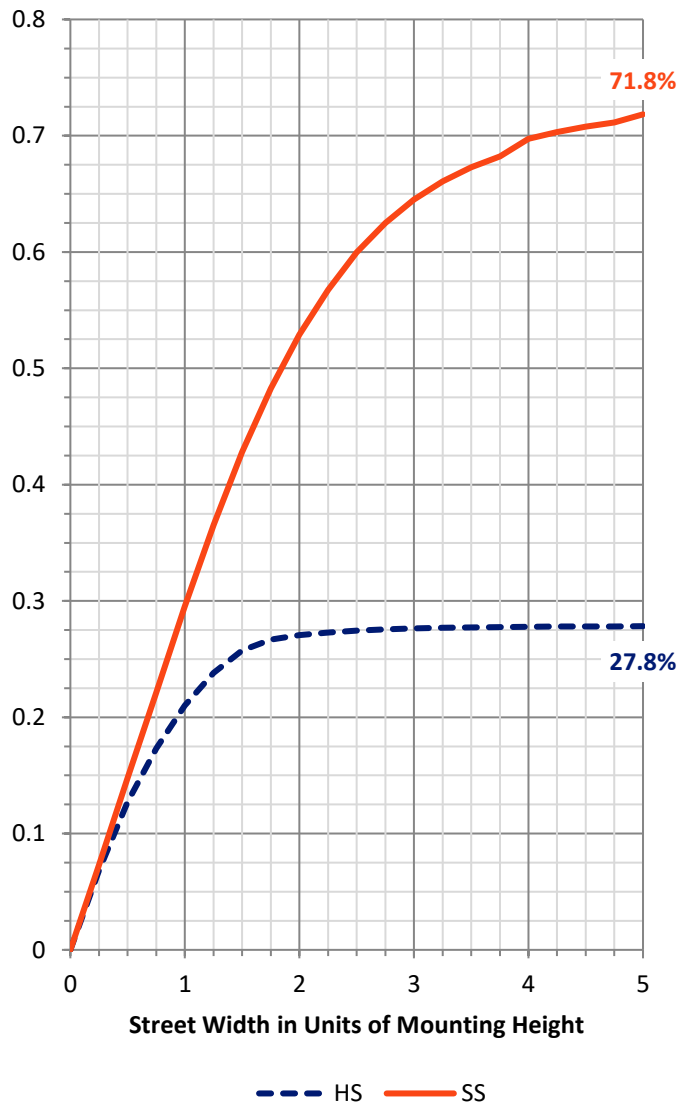
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6344.1	0.1	6344.2
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	16356.8	13.0	16369.8
	% Fixture	72.0	0.1	72.1
Total	Lumens	22700.9	13.2	22714.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.3	1.0
10°-20°	707.7	3.1
20°-30°	1198.1	5.3
30°-40°	1898.1	8.4
40°-50°	3103.3	13.7
50°-60°	4753.5	20.9
60°-70°	5844.8	25.7
70°-80°	4516.2	19.9
80°-90°	455.7	2.0
90°-100°	12.9	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°	22700.9	99.9
0°-180°	22714.0	100.0

Coefficient of Utilization



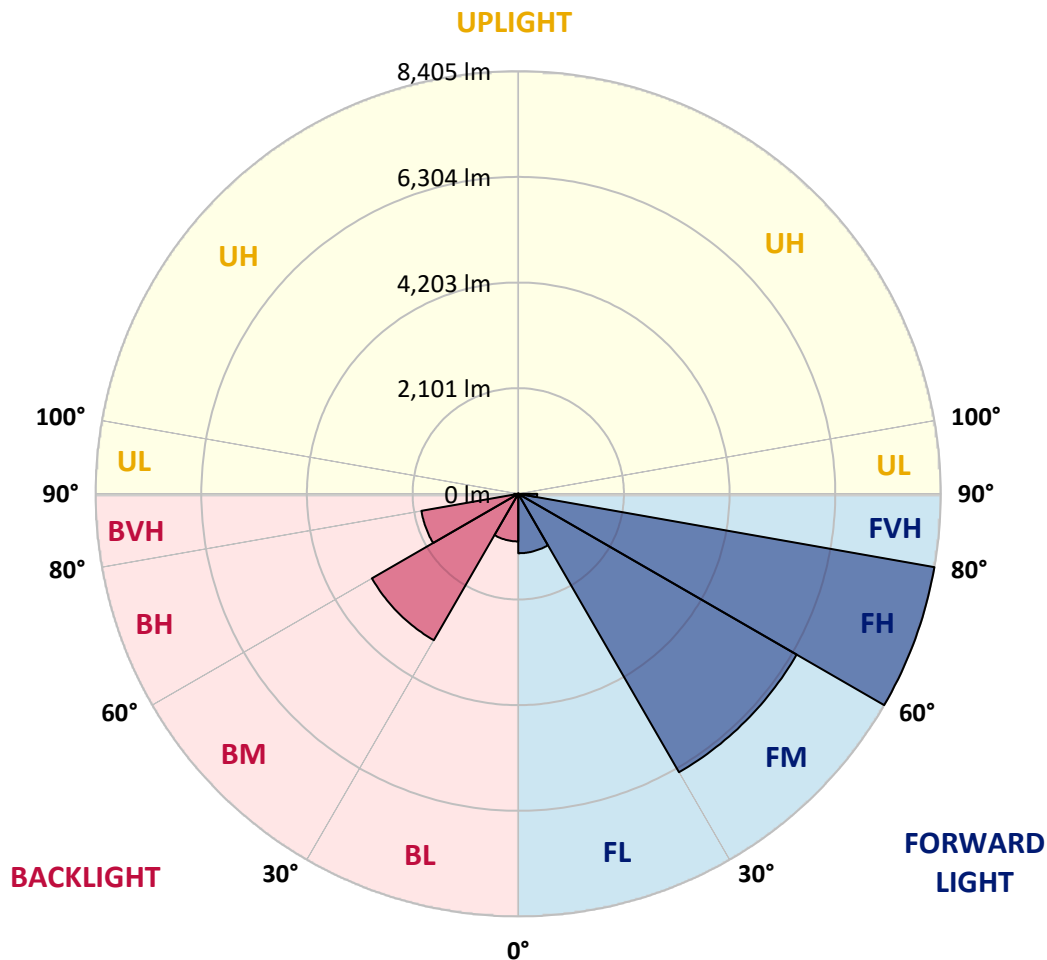
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1182.3	5.2			
FM	(30°-60°)	6393.6	28.1			
FH	(60°-80°)	8405.1	37.0			G4/12000
FVH	(80°-90°)	375.8	1.7			G3/500
BL	(0°-30°)	946.9	4.2	B2/1000		
BM	(30°-60°)	3361.4	14.8	B3/5000		
BH	(60°-80°)	1955.9	8.6	B3/2500		G3/2500
BVH	(80°-90°)	79.9	0.4			G1/100
UL	(90°-100°)	12.9	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°	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2
2.5°	2342.8	2338.4	2334.0	2343.8	2305.5	2322.0	2308.8	2320.9	2312.1	2322.0	2318.7
5°	2373.4	2369.0	2355.9	2366.8	2341.7	2348.2	2331.8	2336.2	2306.6	2324.1	2323.1
7.5°	2423.7	2411.7	2402.9	2402.9	2381.0	2380.0	2353.7	2354.8	2331.8	2329.6	2334.0
10°	2491.6	2482.8	2458.7	2460.9	2430.3	2425.9	2393.1	2392.0	2373.4	2362.4	2372.3
12.5°	2541.9	2550.7	2528.8	2528.8	2498.1	2476.2	2453.3	2437.9	2423.7	2407.3	2399.7
15°	2633.8	2642.6	2613.0	2611.9	2599.9	2573.6	2548.5	2515.6	2490.5	2482.8	2470.8
17.5°	2753.1	2747.6	2722.4	2723.5	2725.7	2683.1	2657.9	2615.2	2579.1	2552.8	2546.3
20°	2874.5	2874.5	2847.2	2855.9	2845.0	2805.6	2789.2	2730.1	2679.8	2651.3	2628.3
22.5°	3010.2	3004.8	2986.2	3004.8	2982.9	2943.5	2916.1	2857.0	2792.5	2631.6	2566.0
25°	3139.4	3136.1	3143.7	3149.2	3121.8	3072.6	3054.0	2991.6	2812.2	2601.0	2468.6
27.5°	3302.4	3291.5	3309.0	3319.9	3292.5	3249.9	3210.5	3140.4	2760.7	2594.4	2580.2
30°	3511.4	3487.3	3512.5	3518.0	3489.5	3463.2	3404.2	3054.0	2778.3	2730.1	2725.7
32.5°	3734.6	3706.2	3739.0	3743.4	3706.2	3684.3	3535.5	3009.1	2950.1	2894.2	2899.7
35°	3999.4	3999.4	4015.8	4018.0	3990.7	3953.5	3386.6	3228.0	3175.5	3124.0	3122.9
37.5°	4322.2	4312.4	4356.1	4382.4	4352.9	4246.7	3603.3	3528.9	3447.9	3382.3	3246.6
40°	4711.8	4729.3	4741.3	4767.6	4739.1	4500.6	3919.5	3835.3	3771.8	3551.9	3209.4
42.5°	5131.9	5136.3	5162.6	5195.4	5195.4	4943.7	4289.4	4217.2	4135.1	3473.1	3318.8
45°	5634.2	5624.4	5674.7	5727.2	5713.0	5452.6	4719.4	4665.8	4281.7	3701.8	3702.9
47.5°	6204.3	6192.3	6264.5	6333.4	6262.3	6017.2	5192.1	5150.6	4132.9	4089.1	4080.4
50°	6863.0	6833.5	6916.6	7008.6	6950.6	6647.5	5766.6	4967.8	4547.6	4512.6	4507.1
52.5°	7566.6	7543.6	7594.0	7750.4	7673.9	7307.3	6310.4	5125.4	5028.0	4988.6	4978.8
55°	8361.0	8316.2	8424.5	8543.8	8455.1	8037.1	6846.6	5648.4	5547.8	5479.9	5381.4
57.5°	9195.9	9131.4	9187.2	9337.1	9251.7	8784.5	7538.2	6186.8	6067.5	5021.4	4622.0
60°	10027.5	9998.0	10019.9	10152.3	10047.2	9511.1	8186.0	6726.2	5135.2	4966.7	4986.4
62.5°	10863.5	10799.0	10818.7	10954.4	10819.8	10202.6	8799.8	7216.5	5404.4	5345.3	5366.1
65°	11759.7	11683.1	11700.6	11740.0	11573.7	10823.1	9342.6	7679.3	5809.3	5746.9	5769.9
67.5°	12839.7	12769.7	12674.5	12557.4	12327.6	11481.8	9882.0	8166.3	6264.5	6229.5	6237.1
68°	12954.6	12886.8	12771.9	12632.9	12374.7	11509.1	9905.0	8180.5	6271.0	6227.3	6229.5
70°	12596.8	12637.3	12507.1	12274.0	12058.4	11108.6	9529.7	7865.3	5992.0	5927.5	5911.0
72.5°	11155.7	11244.3	11064.9	11025.5	10760.7	9896.2	8339.1	6824.7	5211.8	5232.6	5173.5
75°	9006.6	9136.8	8919.1	8931.1	8780.1	8254.9	6988.9	5682.3	4279.5	4374.7	4392.2
77.5°	6263.4	6450.5	6355.3	6450.5	6376.1	6186.8	5408.8	4375.8	3265.2	3374.6	3417.3
80°	3266.3	3488.4	3614.2	3653.6	3677.7	3670.1	3293.6	2626.2	1887.6	1928.0	1925.8
82.5°	1033.0	979.3	1011.1	1002.3	975.0	985.9	888.5	694.8	481.5	530.7	507.7
85°	311.9	314.0	305.3	303.1	280.1	246.2	201.3	116.0	56.9	66.7	62.4
87.5°	229.8	232.0	214.5	203.5	190.4	165.2	128.0	72.2	27.4	26.3	20.8
90°	126.9	122.6	113.8	105.0	99.6	85.4	64.6	27.4	9.8	7.7	6.6
92.5°	68.9	65.7	61.3	58.0	50.3	40.5	26.3	8.8	4.4	1.1	0.0
95°	31.7	29.5	28.5	25.2	21.9	15.3	8.8	5.5	3.3	1.1	0.0
97.5°	14.2	13.1	12.0	9.8	7.7	4.4	4.4	3.3	2.2	1.1	0.0
100°	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	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°	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2	2301.2
2.5°	2315.4	2308.8	2305.5	2284.8	2291.3	2272.7	2308.8	2300.1	2294.6	2309.9
5°	2317.6	2294.6	2308.8	2296.8	2301.2	2274.9	2303.4	2291.3	2290.2	2296.8
7.5°	2323.1	2307.7	2322.0	2297.9	2308.8	2297.9	2318.7	2306.6	2316.5	2323.1
10°	2352.6	2343.8	2337.3	2331.8	2339.5	2317.6	2343.8	2344.9	2348.2	2367.9
12.5°	2394.2	2385.4	2374.5	2360.3	2367.9	2359.2	2378.9	2384.3	2396.4	2406.2
15°	2452.2	2435.8	2431.4	2418.3	2425.9	2421.5	2425.9	2422.6	2445.6	2442.3
17.5°	2532.1	2513.5	2451.1	2387.6	2347.1	2359.2	2409.5	2475.2	2491.6	2493.8
20°	2561.6	2430.3	2423.7	2351.5	2318.7	2316.5	2212.5	2057.2	2104.2	2214.7
22.5°	2526.6	2347.1	2328.5	2314.3	2174.2	1944.5	1922.6	1899.6	1894.1	1910.5
25°	2447.8	2427.0	2410.6	2224.6	2003.5	2004.6	1972.9	1821.9	1586.6	1566.9
27.5°	2568.2	2539.7	2381.0	2094.4	2090.0	2087.8	2040.7	1653.4	1603.1	1615.1
30°	2704.9	2657.9	2243.2	2206.0	2204.9	2185.2	1829.6	1667.6	1667.6	1669.8
32.5°	2862.5	2570.4	2322.0	2339.5	2338.4	2245.4	1767.2	1756.2	1751.9	1762.8
35°	2982.9	2500.3	2491.6	2523.3	2501.4	1905.1	1877.7	1867.9	1863.5	1858.0
37.5°	2945.7	2701.7	2701.7	2721.4	2545.2	2028.7	2015.6	2015.6	2006.8	2002.4
40°	3002.6	2952.2	2927.1	2934.7	1849.3	2178.6	2188.5	2186.3	2185.2	2192.8
42.5°	3302.4	3257.5	3234.6	2963.2	2070.3	2165.5	2406.2	2405.1	2408.4	2405.1
45°	3684.3	3642.7	3582.5	2772.8	2350.4	1898.5	2652.4	2664.5	2665.5	2664.5
47.5°	4084.8	4058.5	3442.5	3069.3	2654.6	2037.5	2535.3	2961.0	2955.5	2962.1
50°	4508.2	4390.1	3424.9	3420.6	2978.5	2267.2	2268.3	3220.3	3276.1	3293.6
52.5°	4979.9	3979.7	3795.9	3463.2	3306.8	2503.6	2479.5	2853.8	3615.3	3632.9
55°	4625.3	4204.0	4200.8	3082.5	3440.3	2731.2	2734.5	2708.2	3315.5	3768.5
57.5°	4602.3	4612.2	4604.5	3439.2	2510.2	2560.5	2979.6	2956.6	2146.9	1739.8
60°	4999.5	5013.8	4473.2	3713.8	2713.7	1574.6	1835.0	1559.3	1580.1	1596.5
62.5°	5379.2	5383.6	3638.3	2434.7	1344.8	63.5	30.6	25.2	24.1	24.1
65°	5799.4	5799.4	3899.8	2655.7	1298.9	24.1	4.4	3.3	12.0	12.0
67.5°	6205.4	6115.7	4091.3	2819.8	1321.8	3.3	0.0	0.0	0.0	0.0
68°	6182.4	6083.9	4073.8	2815.5	1318.5	2.2	0.0	0.0	0.0	0.0
70°	5838.8	5743.6	3864.8	2687.4	1269.3	2.2	0.0	0.0	0.0	0.0
72.5°	5153.8	5066.3	3422.8	2369.0	1144.6	1.1	0.0	0.0	0.0	0.0
75°	4362.7	4350.7	2956.6	1999.2	981.5	1.1	0.0	0.0	0.0	0.0
77.5°	3510.3	3455.6	2311.0	1566.9	791.1	0.0	0.0	0.0	0.0	0.0
80°	1955.4	2036.4	1352.5	921.3	497.9	0.0	0.0	0.0	0.0	0.0
82.5°	528.5	494.6	295.4	200.2	95.2	0.0	0.0	0.0	0.0	0.0
85°	67.8	74.4	33.9	27.4	6.6	0.0	0.0	0.0	0.0	0.0
87.5°	35.0	41.6	10.9	8.8	2.2	0.0	0.0	0.0	0.0	0.0
90°	6.6	7.7	3.3	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)