

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: P522125

Luminaire Tested: **CST-CA10-210-760-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522125
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-210-760-U-T5R-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29457 lumens
Efficiency: N/A
Efficacy: 138.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U1 - G4

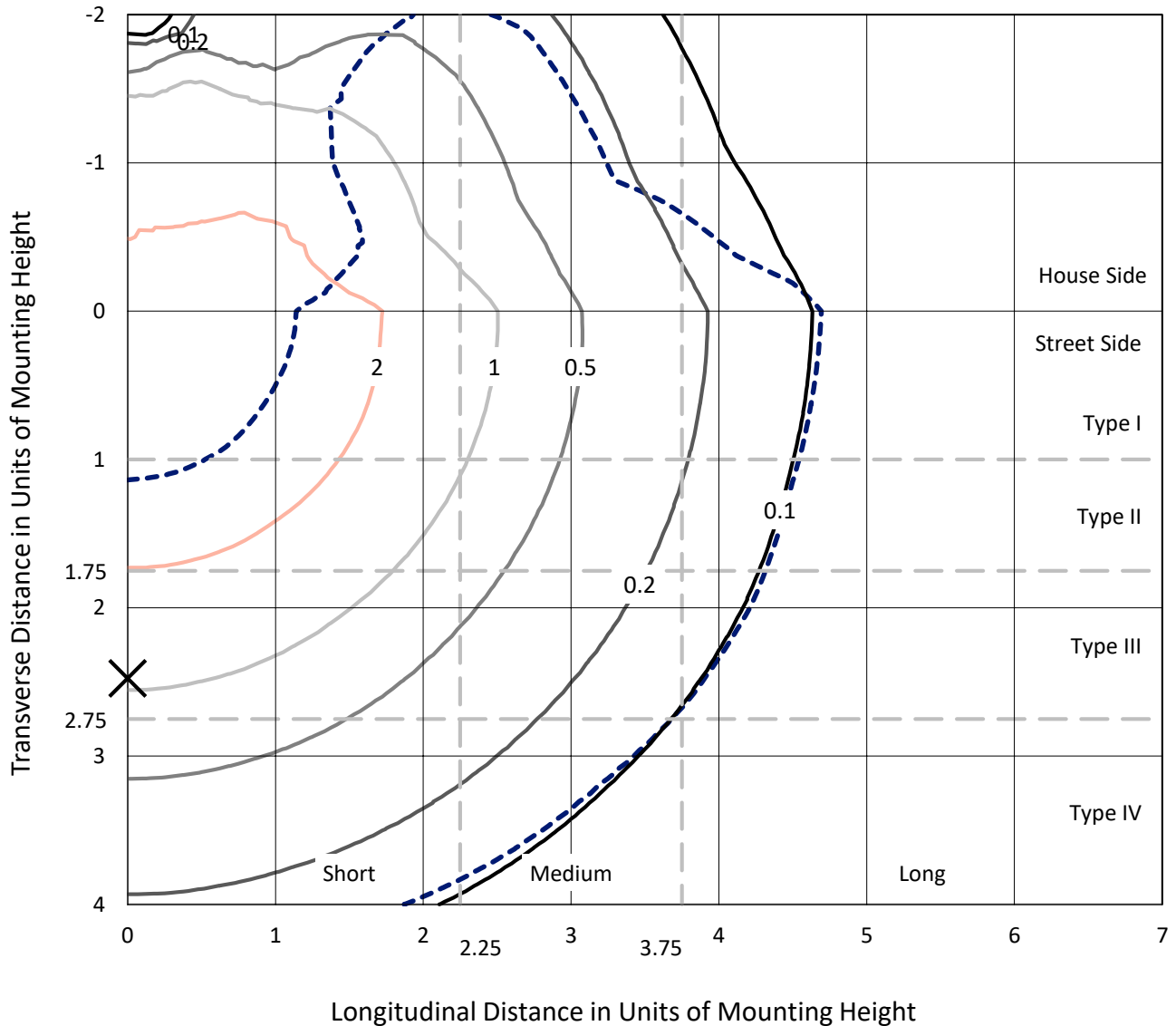
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

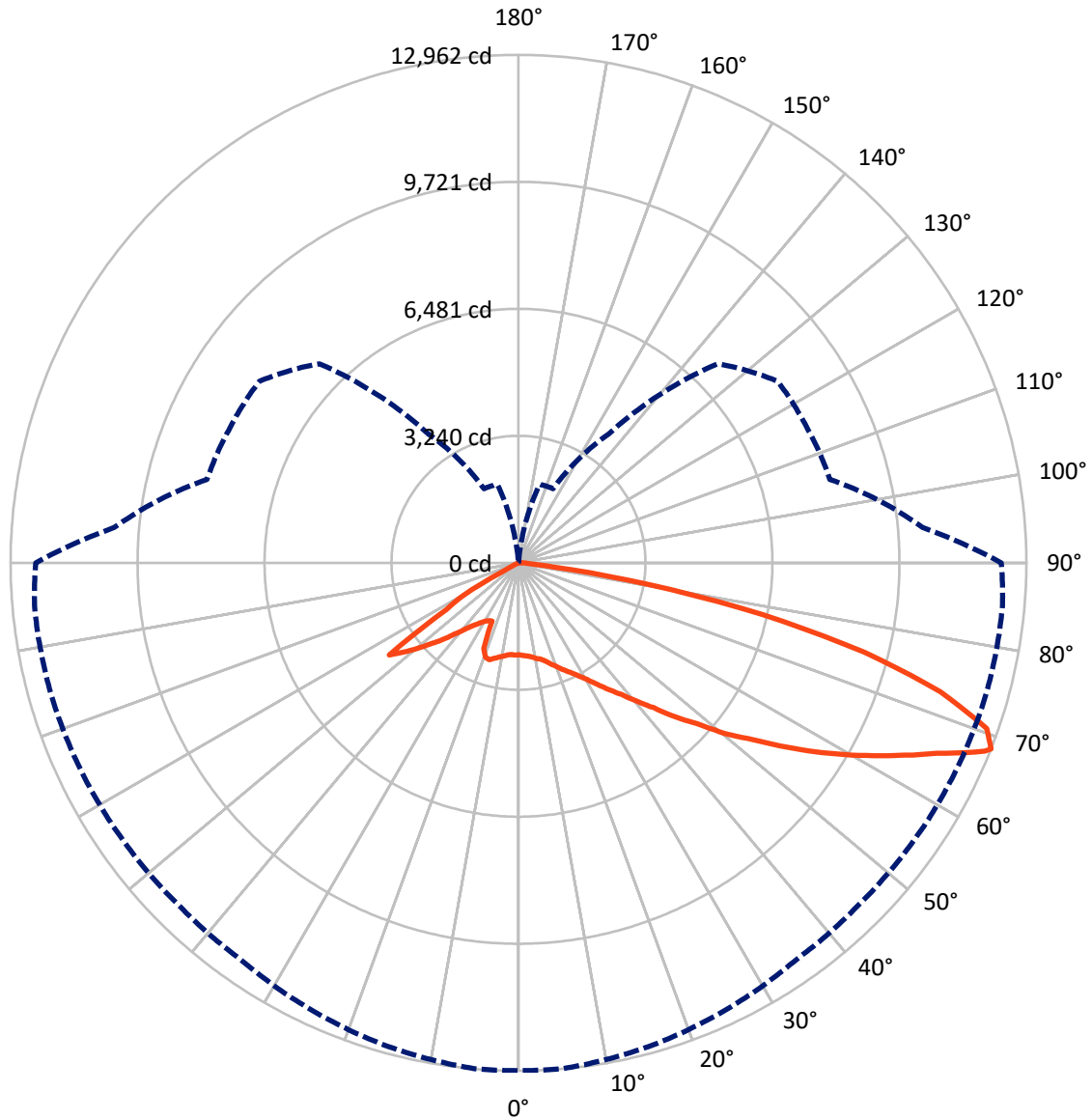
× Max cd
 - - - 1/2 Max cd



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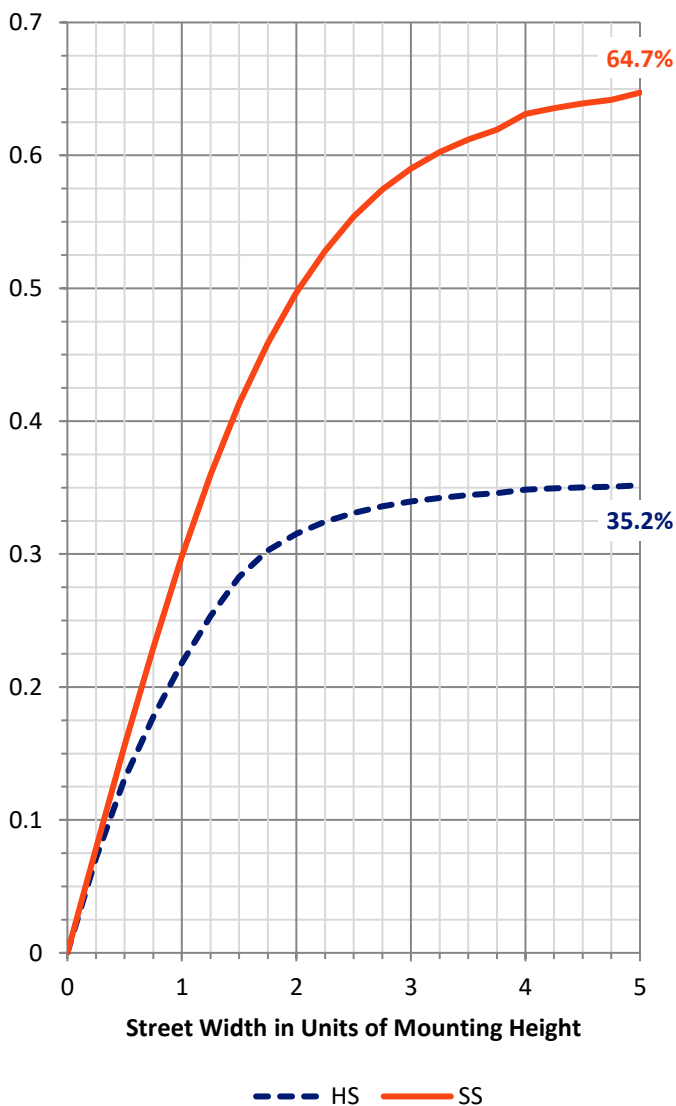
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10366.9	1.8	10368.6
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	19080.6	7.8	19088.4
	% Fixture	64.8	0.0	64.8
Total	Lumens	29447.5	9.5	29457.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.8	0.8
10°-20°	726.6	2.5
20°-30°	1297.1	4.4
30°-40°	2110.2	7.2
40°-50°	3603.6	12.2
50°-60°	6012.7	20.4
60°-70°	8364.9	28.4
70°-80°	6484.1	22.0
80°-90°	621.3	2.1
90°-100°	7.5	0.0
100°-110°	0.6	0.0
110°-120°	0.3	0.0
120°-130°	0.2	0.0
130°-140°	0.2	0.0
140°-150°	0.3	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.1	0.0
0°-90°	29447.5	100.0
0°-180°	29457.0	100.0

Coefficient of Utilization



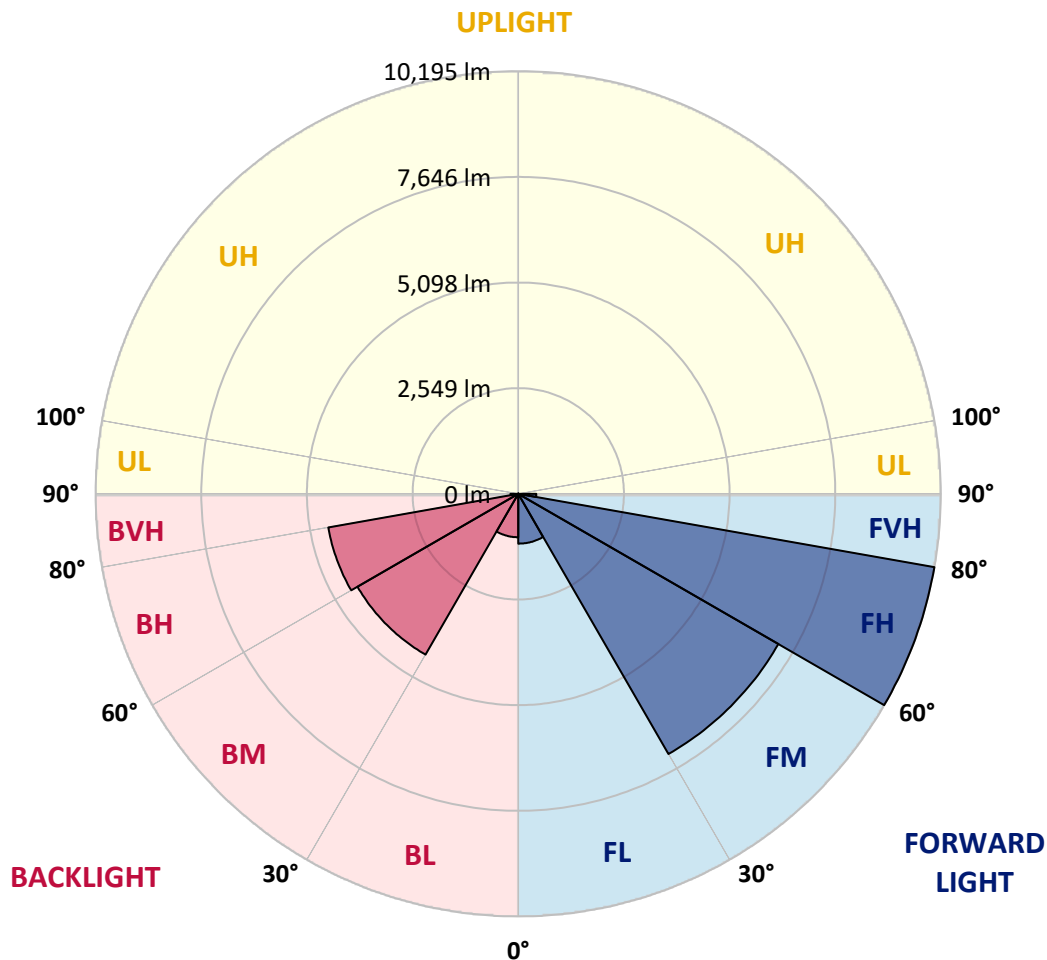
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1202.3	4.1			
FM	(30°-60°)	7248.5	24.6			
FH	(60°-80°)	10195.2	34.6			G4/12000
FVH	(80°-90°)	434.7	1.5			G3/500
BL	(0°-30°)	1048.3	3.6	B3/2500		
BM	(30°-60°)	4478.0	15.2	B3/5000		
BH	(60°-80°)	4653.9	15.8	B4/5000		G4/5000
BVH	(80°-90°)	186.7	0.6			G2/225
UL	(90°-100°)	7.5	0.0		U1/10	
UH	(100°-180°)	2.0	0.0		U1/10	

BUG Rating: B4-U1-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3
2.5°	2370.9	2367.6	2365.3	2379.8	2338.7	2355.4	2344.3	2358.7	2355.4	2362.0	2363.1
5°	2387.5	2382.0	2374.2	2389.7	2365.3	2376.4	2364.2	2370.9	2349.8	2367.6	2369.8
7.5°	2425.2	2409.7	2408.6	2413.0	2396.4	2404.1	2383.1	2390.8	2379.8	2373.1	2379.8
10°	2481.7	2468.4	2454.0	2462.9	2435.2	2445.1	2423.0	2429.6	2424.1	2409.7	2423.0
12.5°	2520.5	2525.0	2515.0	2521.6	2497.2	2488.4	2480.6	2479.5	2476.2	2455.1	2451.8
15°	2607.0	2609.2	2591.5	2595.9	2590.3	2585.9	2574.8	2566.0	2548.2	2534.9	2526.1
17.5°	2720.0	2707.8	2691.2	2695.6	2711.2	2691.2	2684.6	2667.9	2642.4	2620.3	2615.8
20°	2838.6	2830.9	2815.4	2824.2	2823.1	2809.8	2813.1	2785.4	2748.8	2730.0	2715.6
22.5°	2970.5	2959.4	2948.4	2965.0	2951.7	2942.8	2939.5	2920.7	2875.2	2854.1	2850.8
25°	3102.4	3096.9	3104.6	3099.1	3080.3	3073.6	3078.0	3071.4	3018.2	2992.7	2977.2
27.5°	3267.6	3254.3	3266.5	3259.8	3239.9	3241.0	3242.1	3243.2	3183.3	3150.1	3127.9
30°	3456.0	3451.6	3467.1	3446.0	3427.2	3439.4	3449.4	3427.2	3375.1	3326.3	3318.6
32.5°	3701.0	3673.3	3691.0	3664.4	3635.6	3664.4	3682.1	3637.8	3595.7	3533.6	3544.7
35°	3972.5	3963.7	3963.7	3929.3	3913.8	3959.2	3977.0	3933.7	3868.3	3814.0	3800.7
37.5°	4260.7	4269.6	4297.3	4282.9	4268.5	4296.2	4336.1	4278.5	4194.2	4136.6	4121.1
40°	4643.1	4665.3	4684.1	4665.3	4648.7	4666.4	4711.8	4636.5	4577.7	4546.7	4513.4
42.5°	5054.3	5092.0	5079.8	5082.0	5096.5	5121.9	5167.4	5098.7	5031.1	5030.0	4981.2
45°	5610.8	5610.8	5585.3	5609.6	5607.4	5670.6	5690.6	5652.9	5596.3	5579.7	5537.6
47.5°	6130.6	6184.9	6174.9	6210.4	6182.7	6235.9	6303.5	6271.4	6206.0	6147.2	6138.4
50°	6855.5	6842.2	6828.9	6882.1	6877.7	6914.2	6976.3	6956.4	6865.5	6799.0	6786.8
52.5°	7492.8	7562.7	7546.0	7625.8	7581.5	7633.6	7707.9	7704.5	7593.7	7528.3	7509.5
55°	8297.5	8344.1	8340.8	8422.8	8361.8	8430.5	8492.6	8499.3	8378.4	8285.3	8314.2
57.5°	9135.5	9174.3	9152.1	9219.7	9159.9	9254.1	9291.8	9267.4	9196.5	9079.0	9122.2
60°	9974.6	10007.8	10033.3	10038.8	10004.5	10059.9	10095.4	10116.4	10004.5	9870.4	9922.5
62.5°	10826.9	10864.6	10842.4	10851.3	10756.0	10831.4	10875.7	10881.2	10752.7	10634.1	10670.6
65°	11724.7	11776.8	11697.0	11643.8	11526.3	11525.2	11584.0	11593.9	11503.0	11418.8	11404.4
67.5°	12836.5	12859.7	12689.0	12510.6	12312.2	12269.0	12310.0	12333.2	12385.3	12383.1	12317.7
68°	12961.7	12957.3	12784.4	12571.6	12358.7	12308.9	12328.8	12358.7	12393.1	12399.8	12321.1
70°	12676.9	12622.5	12523.9	12255.7	12045.1	11914.3	11844.4	11899.9	11806.8	11807.9	11660.4
72.5°	11260.3	11253.7	11071.9	10938.9	10751.5	10534.3	10434.5	10433.4	10442.3	10378.0	10226.2
75°	9121.1	9129.9	8918.2	8826.2	8768.6	8727.6	8748.7	8814.1	8820.7	8819.6	8766.4
77.5°	6361.1	6397.7	6341.2	6191.6	6352.3	6489.7	6754.6	6889.9	6846.6	6976.3	7058.3
80°	3334.1	3407.2	3409.5	3514.8	3644.4	3769.7	3998.0	4203.1	4052.3	3985.8	3917.1
82.5°	876.8	903.4	943.3	882.3	901.1	920.0	1097.3	1080.7	997.6	1041.9	1108.4
85°	250.5	258.3	247.2	223.9	205.1	188.4	192.9	162.9	141.9	140.8	136.3
87.5°	176.2	189.5	167.4	144.1	129.7	120.8	116.4	98.6	79.8	69.8	55.4
90°	82.0	80.9	69.8	54.3	47.7	45.4	45.4	35.5	20.0	12.2	11.1
92.5°	34.4	35.5	28.8	23.3	20.0	15.5	12.2	7.8	4.4	2.2	1.1
95°	12.2	13.3	11.1	8.9	7.8	6.7	5.5	4.4	2.2	1.1	1.1
97.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.2	2.2	1.1	1.1
100°	0.0	0.0	0.0	1.1	2.2	2.2	2.2	2.2	1.1	1.1	1.1
102.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
105°	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1



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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	1.1	1.1	1.1	1.1
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
145°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
150°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
160°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
165°	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1
167.5°	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1
170°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
172.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
175°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
177.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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°	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3	2344.3
2.5°	2360.9	2355.4	2353.1	2325.4	2333.2	2316.6	2355.4	2344.3	2342.1	2357.6
5°	2366.4	2341.0	2356.5	2338.7	2343.2	2318.8	2349.8	2336.5	2337.6	2345.4
7.5°	2369.8	2355.4	2370.9	2339.8	2352.0	2343.2	2365.3	2352.0	2365.3	2372.0
10°	2403.0	2396.4	2385.3	2376.4	2385.3	2364.2	2391.9	2389.7	2397.5	2417.4
12.5°	2448.5	2440.7	2429.6	2414.1	2420.8	2413.0	2434.1	2436.3	2450.7	2460.7
15°	2516.1	2506.1	2500.6	2485.0	2487.3	2481.7	2493.9	2496.1	2525.0	2521.6
17.5°	2611.4	2600.3	2604.8	2590.3	2584.8	2571.5	2549.3	2541.6	2575.9	2585.9
20°	2715.6	2703.4	2708.9	2696.8	2593.7	2384.2	2525.0	2621.4	2548.2	2542.7
22.5°	2834.2	2820.9	2825.3	2806.5	2679.0	2286.6	1989.6	1965.2	2244.5	2357.6
25°	2965.0	2947.3	2945.0	2920.7	2501.7	2070.5	2037.3	1994.0	1790.1	1628.3
27.5°	3126.8	3100.2	3086.9	2718.9	2483.9	2151.4	2101.5	1947.5	1651.5	1661.5
30°	3301.9	3263.2	3013.8	2771.0	2613.6	2246.7	2180.2	1706.9	1709.2	1704.7
32.5°	3501.5	3415.0	2952.8	2930.6	2768.8	2348.7	1810.0	1790.1	1792.3	1798.9
35°	3763.0	3170.0	3157.9	3159.0	2958.3	2272.2	1917.5	1898.7	1900.9	1905.4
37.5°	3818.5	3417.2	3419.4	3393.9	3160.1	2076.0	2048.3	2047.2	2042.8	2038.4
40°	3862.8	3728.7	3696.5	3655.5	2929.5	2235.7	2226.8	2220.1	2223.5	2232.3
42.5°	4209.7	4108.9	4077.8	4029.1	3004.9	2477.3	2448.5	2440.7	2449.6	2445.1
45°	4670.8	4586.6	4525.6	3725.4	3319.7	2740.0	2716.7	2706.7	2710.1	2737.8
47.5°	5158.5	5108.6	4922.4	4024.6	3686.6	3050.3	3027.1	3011.5	3017.1	3010.4
50°	5689.5	5644.0	4556.7	4475.7	4092.2	3385.1	3350.7	3345.2	3347.4	3346.3
52.5°	6265.8	5315.9	5049.9	4965.7	4520.1	3735.3	3723.1	3693.2	3699.9	3693.2
55°	6942.0	5599.7	5593.0	5494.4	5001.1	4142.1	4127.7	4085.6	3820.7	4052.3
57.5°	7583.7	6141.7	6141.7	6046.4	5493.3	4546.7	4523.4	4492.4	2715.6	2190.2
60°	8286.5	6684.8	6669.3	6590.6	5967.7	4932.4	4009.1	4000.2	1640.4	1646.0
62.5°	8893.9	7169.2	7196.9	7123.7	6424.3	3693.2	1857.7	1820.0	161.8	249.4
65°	9574.4	7704.5	7737.8	7662.4	6918.7	3917.1	2016.2	1997.3	36.6	33.3
67.5°	10345.9	8238.8	8163.4	8080.3	7208.0	4033.5	2094.9	2078.3	10.0	6.7
68°	10352.5	8227.7	8130.2	8073.6	7180.3	4011.3	2088.2	2072.7	10.0	6.7
70°	9820.5	7813.2	7715.6	7730.0	6836.7	3836.2	2001.8	1973.0	10.0	6.7
72.5°	8615.6	6953.0	6843.3	6765.7	6063.0	3410.6	1794.5	1740.2	10.0	6.7
75°	7372.0	5892.3	5710.5	5539.8	4878.1	2791.0	1472.0	1411.0	10.0	6.7
77.5°	5810.3	4491.3	4233.0	4121.1	3665.5	2061.6	1094.0	1027.5	10.0	5.5
80°	3211.1	2577.0	2357.6	2288.9	2096.0	1211.5	627.4	587.5	8.9	5.5
82.5°	830.2	622.9	543.1	524.3	492.1	287.1	153.0	145.2	7.8	4.4
85°	118.6	87.6	96.4	114.2	109.7	74.3	53.2	45.4	6.7	3.3
87.5°	62.1	52.1	61.0	68.7	69.8	43.2	22.2	12.2	3.3	0.0
90°	10.0	10.0	11.1	12.2	12.2	5.5	4.4	0.0	0.0	0.0
92.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.1	1.1	1.1	1.1	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	1.1	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	2.2	1.1	1.1	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°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.1	1.1	1.1	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)