

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: P522120

Luminaire Tested: **CST-CA10-210-750-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522120
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
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-EX120
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: 27381 lumens
Efficiency: N/A
Efficacy: 128.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

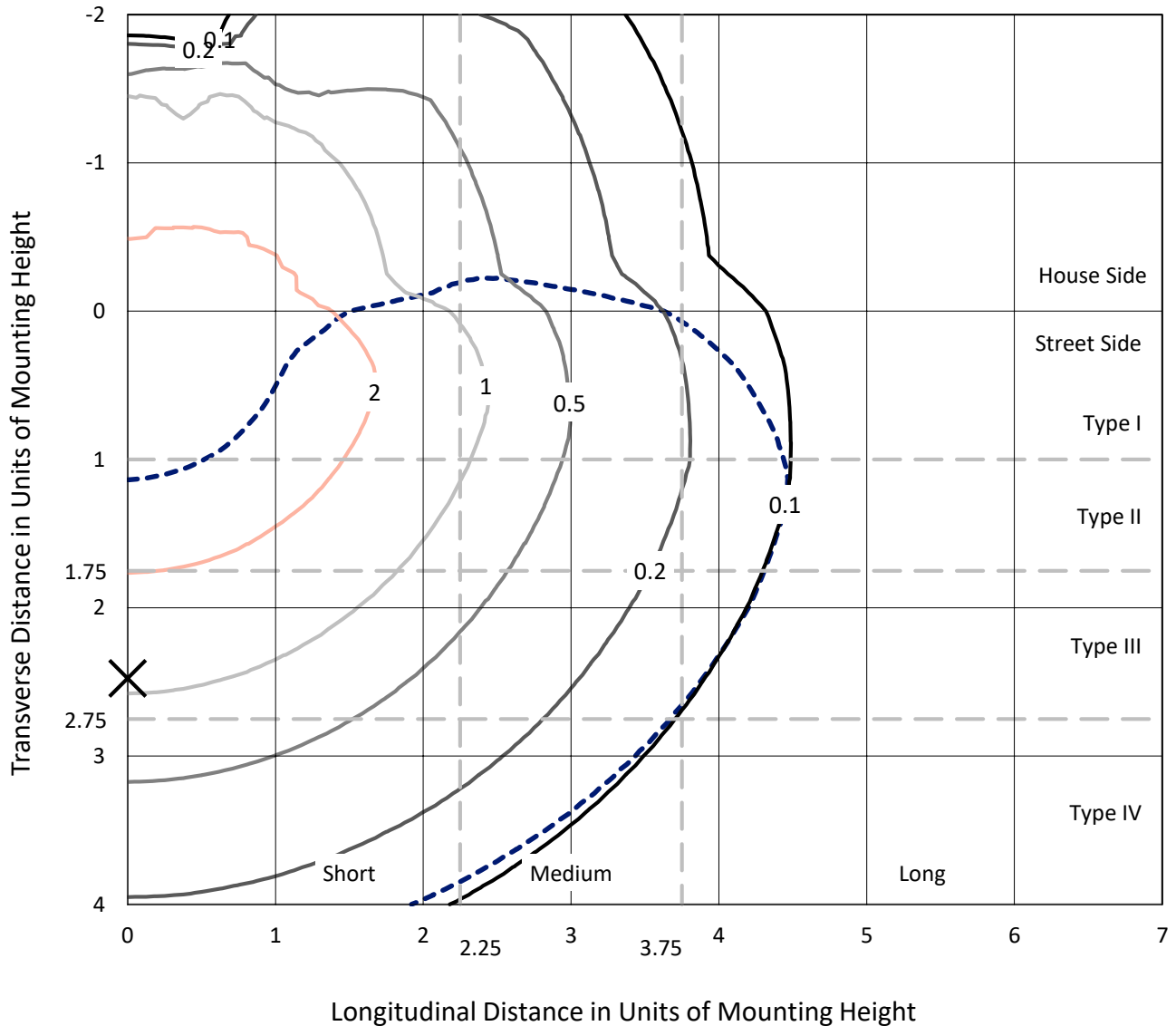
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

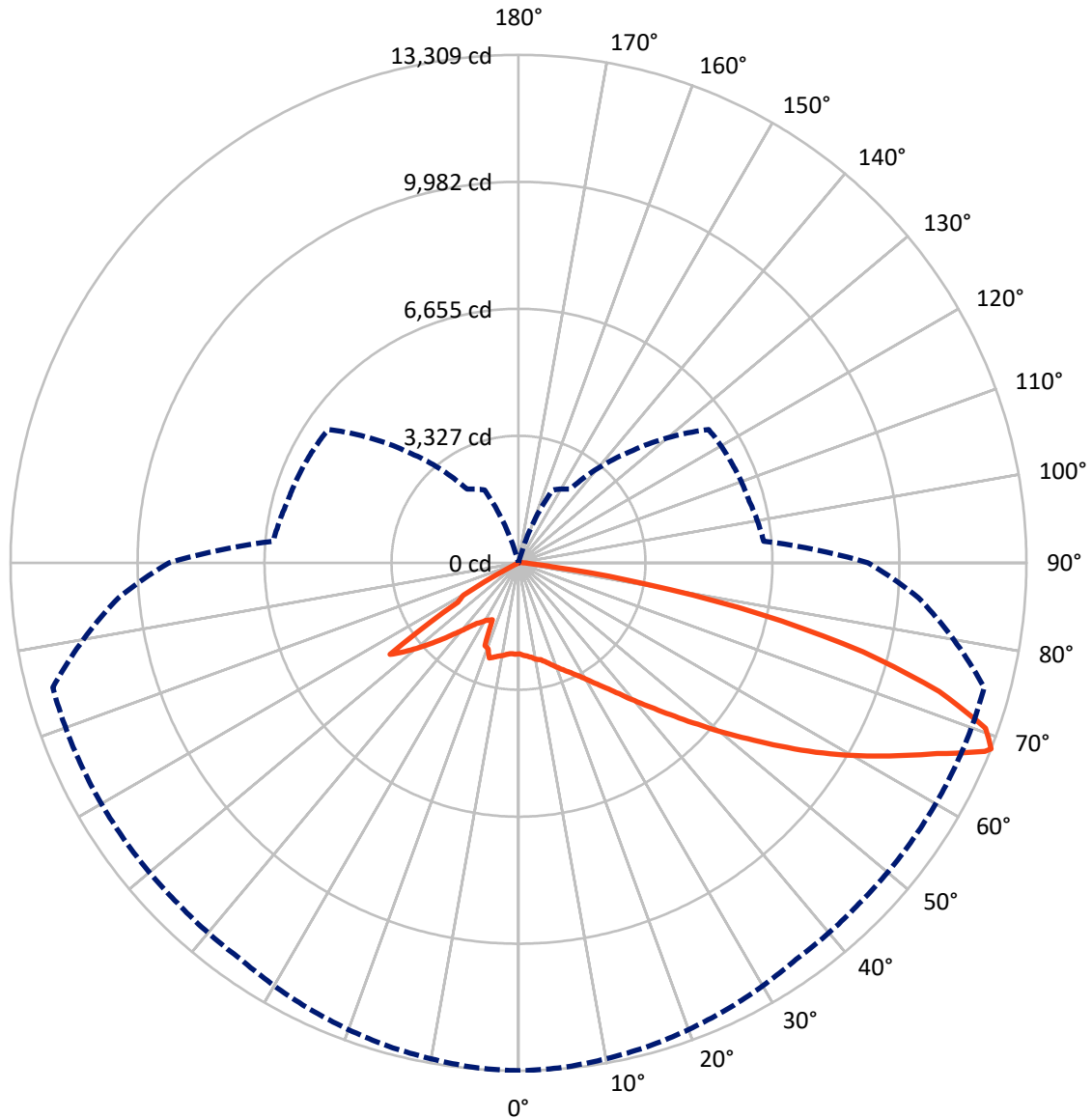
× Max cd
 - - - 1/2 Max cd



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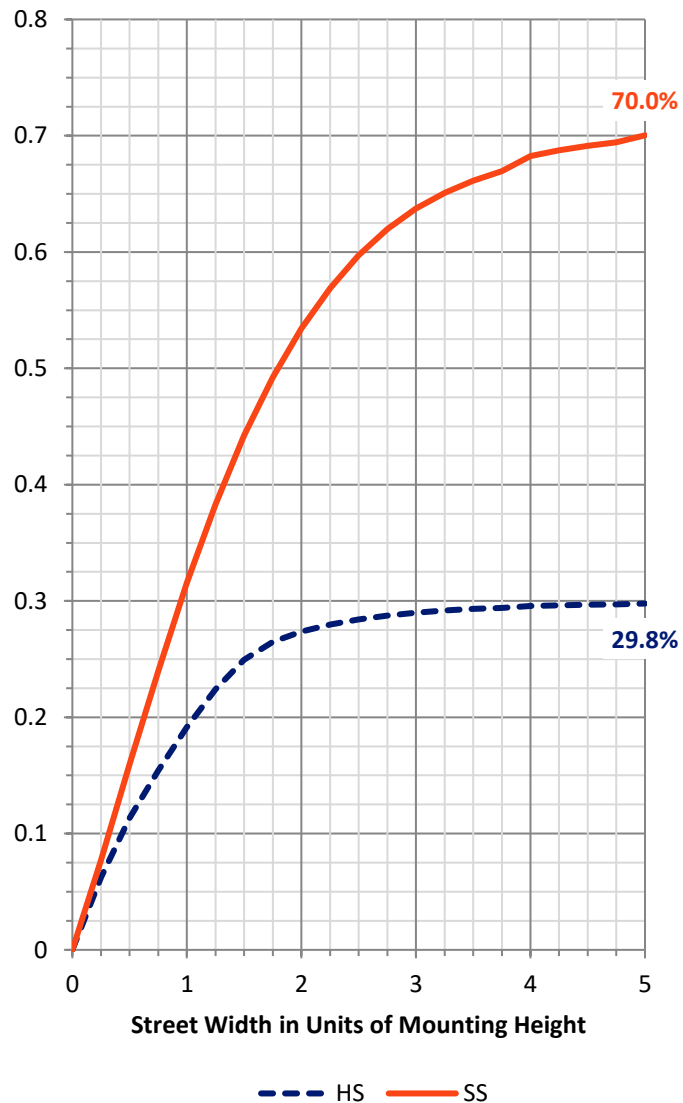
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8162.0	1.2	8163.2
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	19206.6	11.2	19217.8
	% Fixture	70.1	0.0	70.2
Total	Lumens	27368.5	12.4	27381.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.7	0.8
10°-20°	737.4	2.7
20°-30°	1263.0	4.6
30°-40°	2048.9	7.5
40°-50°	3455.5	12.6
50°-60°	5632.5	20.6
60°-70°	7554.1	27.6
70°-80°	5867.6	21.4
80°-90°	577.9	2.1
90°-100°	11.0	0.0
100°-110°	0.6	0.0
110°-120°	0.2	0.0
120°-130°	0.1	0.0
130°-140°	0.2	0.0
140°-150°	0.2	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	27368.5	100.0
0°-180°	27381.0	100.0

Coefficient of Utilization

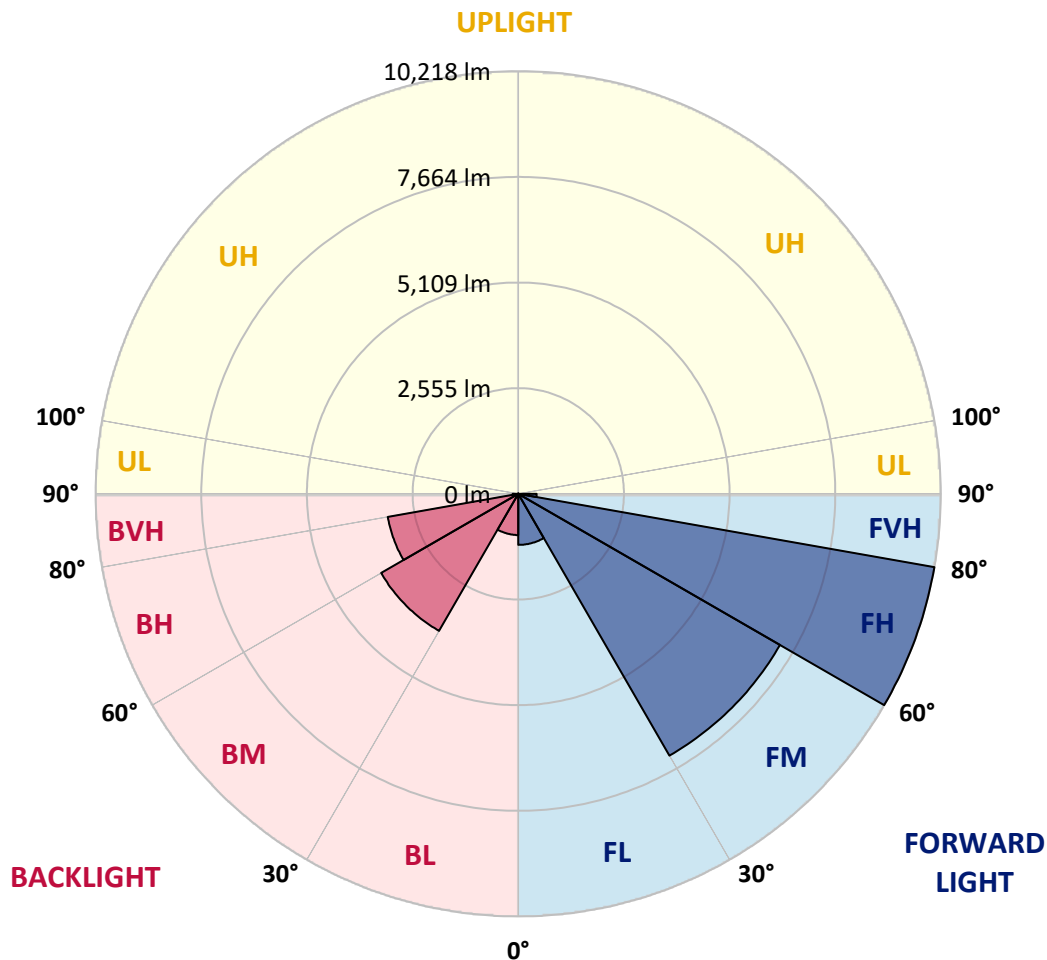


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1235.0	4.5			
FM	(30°-60°)	7309.0	26.7			
FH	(60°-80°)	10218.3	37.3			G4/12000
FVH	(80°-90°)	444.3	1.6			G3/500
BL	(0°-30°)	997.1	3.6	B2/1000		
BM	(30°-60°)	3827.9	14.0	B3/5000		
BH	(60°-80°)	3203.4	11.7	B4/5000		G4/5000
BVH	(80°-90°)	133.6	0.5			G2/225
UL	(90°-100°)	11.0	0.0		U2/50	
UH	(100°-180°)	1.5	0.0		U1/10	

BUG Rating: B4-U2-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1
2.5°	2426.8	2420.0	2418.8	2432.4	2389.4	2410.9	2391.6	2407.5	2397.3	2405.2	2406.4
5°	2459.6	2447.1	2439.2	2455.1	2427.9	2438.1	2416.6	2423.4	2395.0	2410.9	2413.2
7.5°	2507.2	2486.8	2484.5	2489.0	2465.3	2473.2	2438.1	2446.0	2425.6	2416.6	2424.5
10°	2571.7	2552.4	2537.7	2547.9	2516.2	2520.7	2483.4	2484.5	2469.8	2452.8	2466.4
12.5°	2607.9	2610.2	2603.4	2611.3	2585.3	2570.6	2544.5	2535.5	2520.7	2500.4	2493.6
15°	2698.5	2694.0	2680.4	2692.9	2689.5	2675.9	2644.2	2623.8	2592.1	2580.8	2569.4
17.5°	2809.5	2794.8	2783.5	2799.3	2816.3	2788.0	2757.4	2729.1	2687.2	2664.6	2651.0
20°	2926.1	2916.0	2904.6	2929.5	2935.2	2913.7	2891.0	2849.1	2800.4	2771.0	2742.7
22.5°	3056.4	3036.0	3039.4	3072.2	3062.0	3051.8	3022.4	2988.4	2929.5	2892.2	2810.6
25°	3191.1	3179.8	3195.7	3210.4	3202.5	3180.9	3166.2	3141.3	3075.6	3030.3	2911.4
27.5°	3358.7	3340.6	3361.0	3366.7	3359.9	3354.2	3333.8	3314.6	3243.2	3192.3	3043.9
30°	3555.8	3534.2	3567.1	3559.2	3552.4	3556.9	3544.4	3502.5	3439.1	3370.0	3221.7
32.5°	3790.2	3761.9	3799.2	3782.2	3766.4	3798.1	3768.7	3729.0	3654.3	3573.9	3428.9
35°	4061.9	4063.1	4082.3	4054.0	4048.4	4082.3	4063.1	4014.4	3945.3	3861.5	3655.4
37.5°	4391.5	4382.4	4431.1	4417.5	4397.1	4442.4	4448.1	4387.0	4262.4	4179.7	3936.3
40°	4792.4	4790.1	4805.9	4808.2	4802.5	4824.1	4834.3	4752.7	4672.3	4547.8	3714.3
42.5°	5220.4	5229.5	5257.8	5237.4	5264.6	5292.9	5296.3	5228.3	5112.8	4363.2	3945.3
45°	5734.5	5762.8	5782.1	5777.5	5790.0	5830.8	5834.2	5797.9	5684.7	4726.7	4364.3
47.5°	6324.5	6351.7	6357.3	6393.6	6382.3	6440.0	6432.1	6433.2	6312.0	5232.9	4820.7
50°	7002.8	7015.3	7061.7	7082.1	7053.8	7131.9	7111.5	7136.4	6987.0	5812.7	5311.0
52.5°	7723.0	7744.5	7763.8	7840.8	7804.6	7872.5	7845.3	7903.1	7729.8	6402.6	5855.7
55°	8541.8	8545.2	8578.0	8656.1	8608.6	8690.1	8650.5	8672.0	8533.8	7054.9	6423.0
57.5°	9409.2	9397.9	9410.3	9472.6	9429.6	9490.7	9474.9	9495.2	9366.2	7741.1	6837.5
60°	10267.5	10250.6	10268.7	10310.6	10251.7	10357.0	10300.4	10319.6	10180.4	8442.1	7428.6
62.5°	11130.4	11118.0	11097.6	11139.5	11053.4	11107.8	11131.6	11099.9	10977.6	9076.3	7942.7
65°	12056.8	12044.3	11969.6	11995.6	11841.6	11815.6	11824.6	11834.8	11753.3	9704.7	8506.7
67.5°	13182.4	13164.2	13023.8	12847.2	12625.2	12576.5	12581.1	12608.2	12619.6	10513.3	9166.8
68°	13309.2	13276.4	13120.1	12915.1	12683.0	12626.4	12620.7	12626.4	12632.0	10520.1	9160.1
70°	12985.3	12972.9	12854.0	12606.0	12368.2	12232.3	12114.5	12110.0	12055.6	9982.2	8653.9
72.5°	11523.4	11507.5	11366.0	11190.5	11043.2	10830.4	10677.5	10686.5	10597.1	8822.6	7574.7
75°	9325.4	9324.3	9154.4	9007.2	9009.4	8993.6	8942.6	9032.1	8939.2	7483.0	6460.4
77.5°	6498.9	6521.5	6510.2	6424.2	6545.3	6712.9	6895.2	7067.4	7014.1	5911.2	5151.3
80°	3395.0	3458.4	3682.6	3692.8	3777.7	3940.8	4065.3	4180.9	4188.8	3354.2	2976.0
82.5°	902.5	921.8	997.7	976.1	969.3	1002.2	1029.4	1032.8	1035.0	874.2	816.5
85°	280.8	288.8	279.7	267.2	248.0	226.5	220.8	180.1	142.7	117.8	103.0
87.5°	199.3	212.9	192.5	181.2	160.8	152.9	137.0	107.6	83.8	58.9	39.6
90°	103.0	105.3	94.0	80.4	74.7	70.2	60.0	43.0	21.5	11.3	10.2
92.5°	52.1	53.2	46.4	39.6	34.0	29.4	22.6	12.5	6.8	3.4	1.1
95°	20.4	21.5	19.3	17.0	13.6	10.2	9.1	6.8	4.5	2.3	1.1
97.5°	6.8	6.8	6.8	5.7	5.7	5.7	5.7	4.5	3.4	2.3	1.1
100°	0.0	0.0	0.0	1.1	2.3	3.4	3.4	3.4	2.3	1.1	1.1
102.5°	0.0	0.0	0.0	0.0	0.0	1.1	2.3	2.3	2.3	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	0.0	1.1	1.1	1.1
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
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	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	1.1	1.1	1.1
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	1.1	1.1	1.1	1.1
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
165°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
170°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
175°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	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°	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1	2387.1
2.5°	2400.7	2393.9	2397.3	2369.0	2375.8	2357.7	2396.2	2386.0	2381.5	2397.3
5°	2406.4	2381.5	2401.8	2382.6	2386.0	2359.9	2391.6	2379.2	2378.1	2387.1
7.5°	2408.6	2396.2	2415.4	2383.7	2393.9	2383.7	2407.5	2395.0	2406.4	2414.3
10°	2440.3	2433.5	2431.3	2420.0	2427.9	2405.2	2434.7	2434.7	2440.3	2461.9
12.5°	2486.8	2477.7	2472.0	2451.7	2459.6	2452.8	2476.6	2481.1	2491.3	2500.4
15°	2550.2	2534.3	2528.7	2510.5	2516.2	2515.1	2532.1	2533.2	2555.8	2554.7
17.5°	2631.7	2609.1	2615.9	2602.3	2603.4	2594.3	2585.3	2585.3	2605.7	2610.2
20°	2729.1	2600.0	2430.1	2335.0	2318.0	2330.5	2379.2	2459.6	2358.8	2387.1
22.5°	2553.6	2436.9	2429.0	2407.5	2393.9	2090.4	2012.3	1987.4	2117.6	2341.8
25°	2576.2	2526.4	2511.7	2484.5	2083.6	2080.2	2057.6	2020.2	1651.1	1643.1
27.5°	2696.3	2647.6	2623.8	2176.5	2167.4	2166.3	2132.3	1757.5	1672.6	1683.9
30°	2836.7	2780.1	2354.3	2286.3	2278.4	2260.3	2065.5	1736.0	1734.8	1736.0
32.5°	2998.6	2810.6	2422.2	2418.8	2423.4	2367.9	1830.0	1823.2	1822.0	1833.4
35°	3220.6	2607.9	2592.1	2609.1	2585.3	2047.4	1939.8	1936.4	1937.6	1931.9
37.5°	3073.4	2811.8	2808.4	2808.4	2752.9	2095.0	2073.4	2089.3	2087.0	2079.1
40°	3135.6	3058.6	3038.3	3031.5	2327.1	2260.3	2247.8	2268.2	2271.6	2277.3
42.5°	3438.0	3367.8	3357.6	3277.2	2532.1	2510.5	2472.0	2493.6	2491.3	2498.1
45°	3809.4	3761.9	3717.7	2841.2	2808.4	2781.2	2741.6	2766.5	2773.3	2768.7
47.5°	4242.0	4189.9	3870.6	3124.3	3123.2	3101.7	3057.5	3077.9	3074.5	3074.5
50°	4676.8	4620.2	3516.1	3484.4	3473.1	3439.1	3402.9	3406.3	3407.4	3418.7
52.5°	5162.7	4126.5	3892.1	3828.7	3837.7	3815.1	3780.0	2861.6	3763.0	3773.2
55°	4825.2	4319.0	4305.4	4221.6	4243.1	4213.7	4191.0	2823.1	3742.6	4135.6
57.5°	4770.8	4734.6	4723.3	4637.2	4664.4	4384.7	4594.2	3089.2	2588.7	1891.1
60°	5186.4	5147.9	5141.1	5065.3	5063.0	3484.4	4176.3	2118.7	1655.6	1666.9
62.5°	5589.6	5527.3	5544.3	5454.8	3845.7	2123.3	1871.9	47.6	75.9	80.4
65°	6039.1	5935.0	5951.9	5869.3	3966.8	2238.8	2023.6	24.9	21.5	20.4
67.5°	6471.7	6289.4	6202.2	6115.0	4119.7	2357.7	2108.5	6.8	0.0	0.0
68°	6450.2	6257.7	6168.2	6085.6	4103.8	2354.3	2104.0	6.8	0.0	0.0
70°	6086.7	5913.4	5828.5	5765.1	3918.1	2273.9	2019.1	6.8	0.0	0.0
72.5°	5321.2	5224.9	5170.6	5115.1	3481.0	2033.8	1810.7	6.8	0.0	0.0
75°	4521.7	4494.5	4460.6	4338.3	2901.2	1664.6	1488.0	6.8	0.0	0.0
77.5°	3582.9	3581.8	3499.1	3355.3	2184.4	1221.9	1097.3	5.7	0.0	0.0
80°	1937.6	2111.9	2048.5	1974.9	1238.9	664.7	633.0	4.5	0.0	0.0
82.5°	544.7	515.2	494.9	463.2	260.5	144.9	141.6	4.5	0.0	0.0
85°	75.9	83.8	92.9	105.3	60.0	38.5	34.0	2.3	0.0	0.0
87.5°	43.0	48.7	60.0	62.3	22.6	18.1	5.7	0.0	0.0	0.0
90°	9.1	10.2	11.3	11.3	4.5	4.5	0.0	0.0	0.0	0.0
92.5°	0.0	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	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	0.0	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	0.0	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.1	1.1	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)