

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: P522213

Luminaire Tested: **CST-CA8-230-760-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522213
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-CA8-230-760-U-T5R-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27526 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

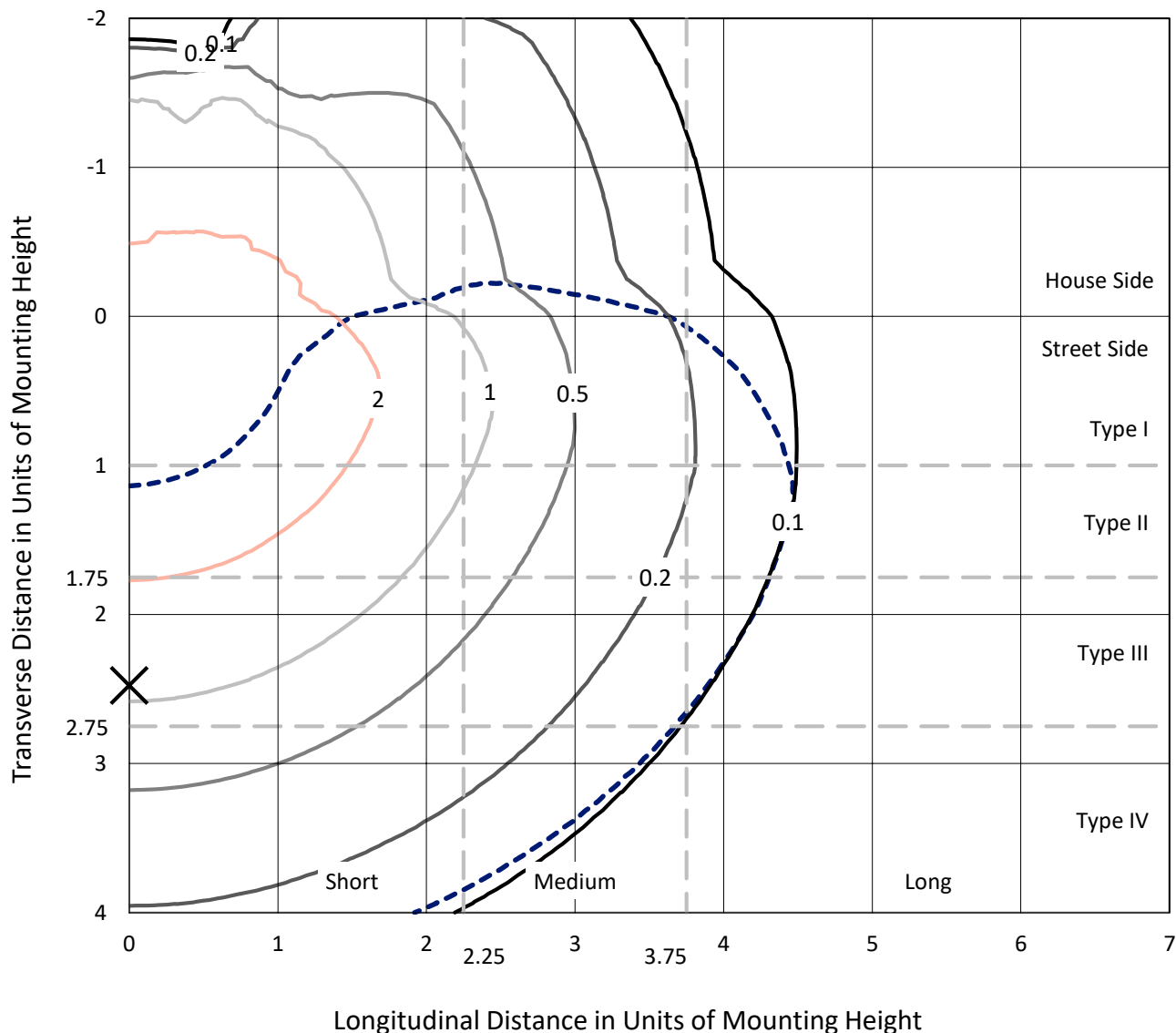
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

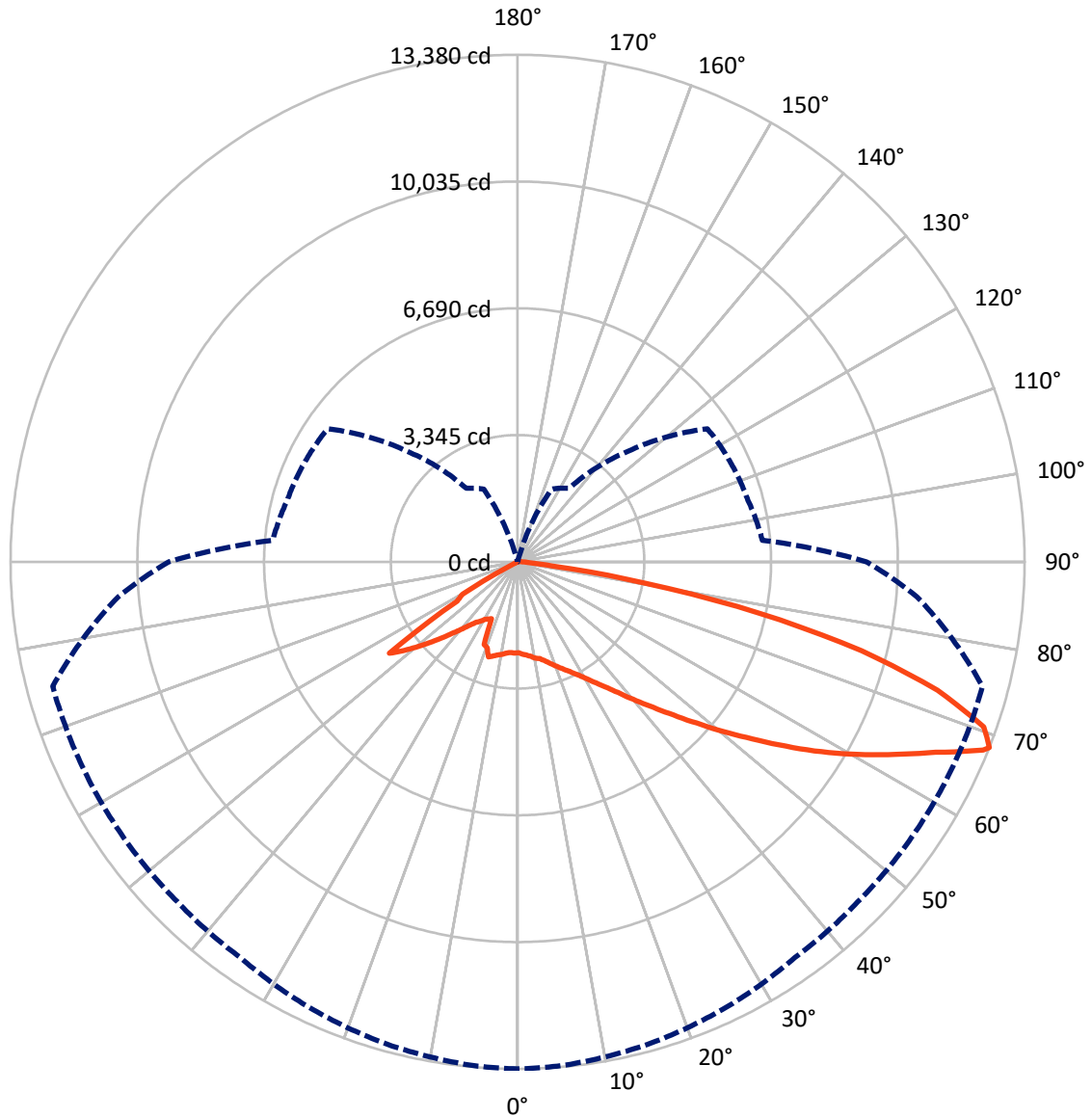
× Max cd
 - - - 1/2 Max cd



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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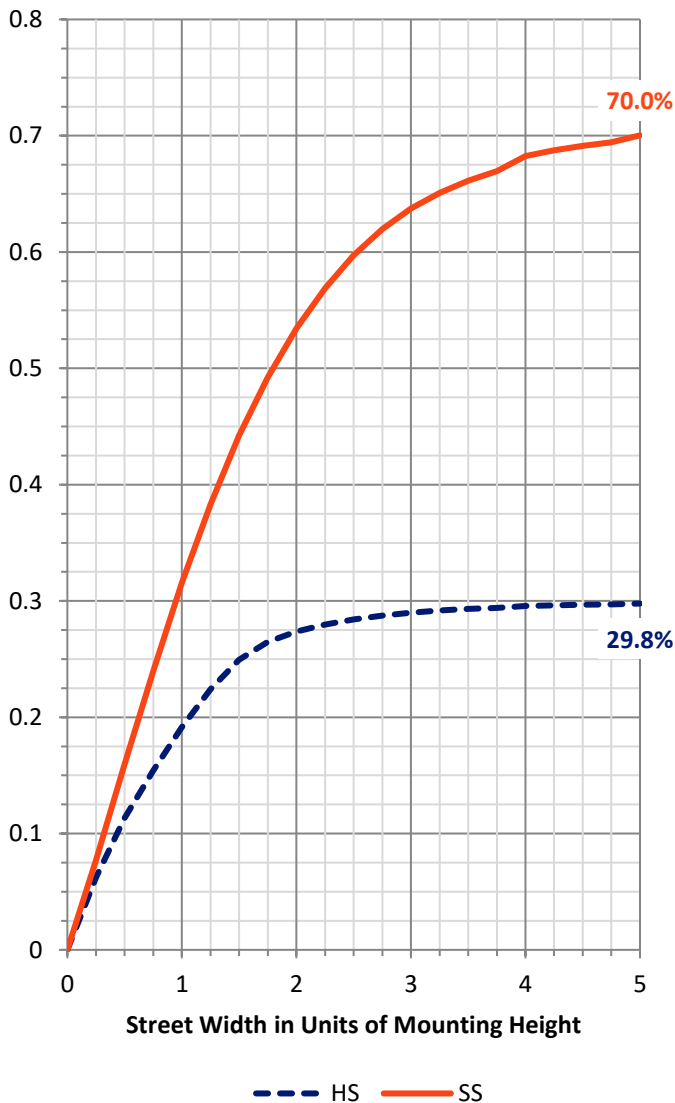
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8205.2	1.2	8206.4
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	19308.3	11.3	19319.5
	% Fixture	70.1	0.0	70.2
Total	Lumens	27513.5	12.5	27526.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.9	0.8
10°-20°	741.3	2.7
20°-30°	1269.7	4.6
30°-40°	2059.8	7.5
40°-50°	3473.8	12.6
50°-60°	5662.3	20.6
60°-70°	7594.1	27.6
70°-80°	5898.7	21.4
80°-90°	580.9	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°	27513.5	100.0
0°-180°	27526.0	100.0



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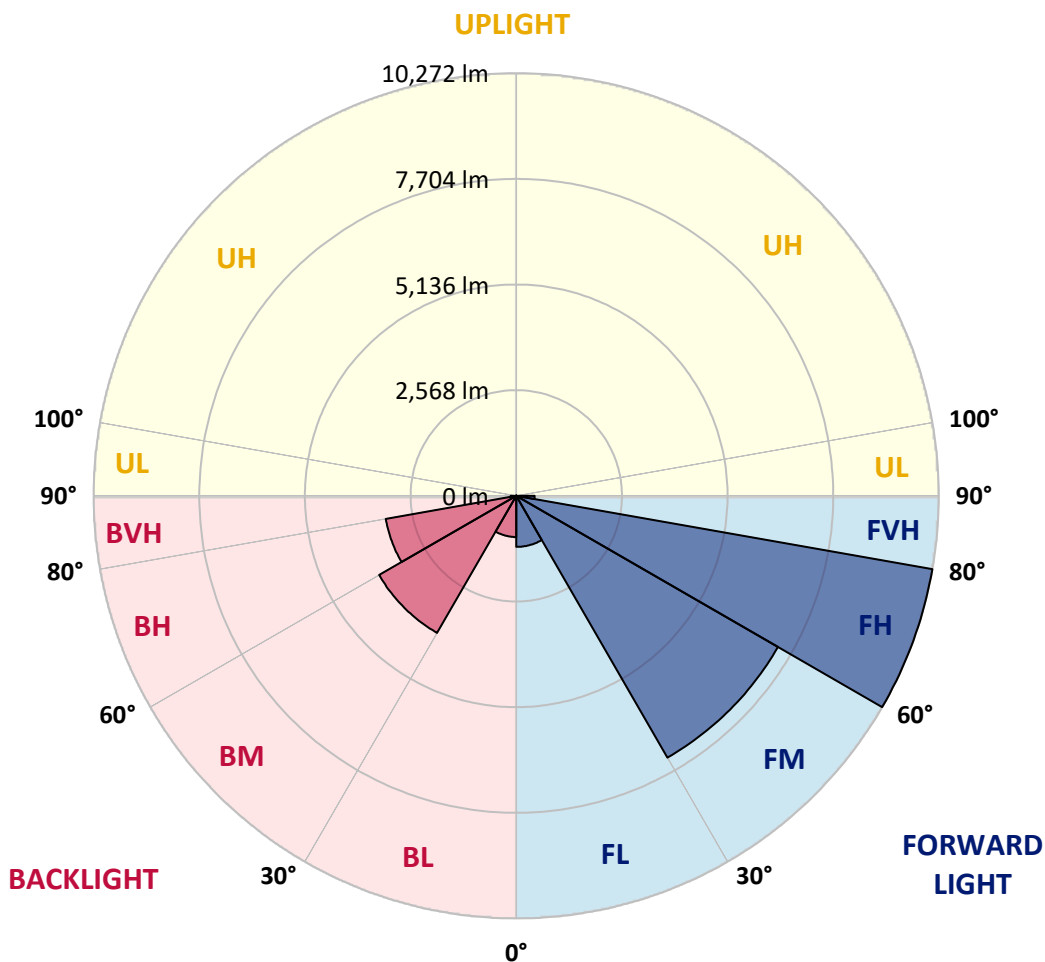
CATALOG NUMBER: CST-CA8-230-760-U-T5R-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1241.6	4.5			
FM (30°-60°)	7347.7	26.7			
FH (60°-80°)	10272.4	37.3			G4/12000
FVH (80°-90°)	446.7	1.6			G3/500
BL (0°-30°)	1002.4	3.6	B3/2500		
BM (30°-60°)	3848.2	14.0	B3/5000		
BH (60°-80°)	3220.4	11.7	B4/5000		G4/5000
BVH (80°-90°)	134.3	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°	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8
2.5°	2439.6	2432.8	2431.6	2445.3	2402.0	2423.7	2404.3	2420.2	2410.0	2418.0	2419.1
5°	2472.6	2460.1	2452.1	2468.1	2440.7	2451.0	2429.4	2436.2	2407.7	2423.7	2425.9
7.5°	2520.4	2499.9	2497.7	2502.2	2478.3	2486.3	2451.0	2459.0	2438.5	2429.4	2437.3
10°	2585.3	2566.0	2551.2	2561.4	2529.5	2534.1	2496.5	2497.7	2482.9	2465.8	2479.4
12.5°	2621.7	2624.0	2617.2	2625.2	2599.0	2584.2	2558.0	2548.9	2534.1	2513.6	2506.8
15°	2712.8	2708.3	2694.6	2707.1	2703.7	2690.1	2658.2	2637.7	2605.8	2594.4	2583.0
17.5°	2824.4	2809.6	2798.2	2814.1	2831.2	2802.8	2772.0	2743.6	2701.4	2678.7	2665.0
20°	2941.6	2931.4	2920.0	2945.1	2950.7	2929.1	2906.3	2864.2	2815.3	2785.7	2757.2
22.5°	3072.6	3052.1	3055.5	3088.5	3078.2	3068.0	3038.4	3004.3	2945.1	2907.5	2825.5
25°	3208.0	3196.6	3212.6	3227.4	3219.4	3197.8	3183.0	3157.9	3091.9	3046.4	2926.8
27.5°	3376.5	3358.3	3378.8	3384.5	3377.6	3372.0	3351.5	3332.1	3260.4	3209.2	3060.0
30°	3574.6	3553.0	3586.0	3578.0	3571.2	3575.7	3563.2	3521.1	3457.3	3387.9	3238.8
32.5°	3810.2	3781.8	3819.3	3802.3	3786.3	3818.2	3788.6	3748.8	3673.6	3592.8	3447.1
35°	4083.5	4084.6	4104.0	4075.5	4069.8	4104.0	4084.6	4035.6	3966.2	3882.0	3674.8
37.5°	4414.7	4405.6	4454.6	4440.9	4420.4	4466.0	4471.7	4410.2	4285.0	4201.9	3957.1
40°	4817.7	4815.5	4831.4	4833.7	4828.0	4849.6	4859.9	4777.9	4697.1	4571.8	3734.0
42.5°	5248.0	5257.2	5285.6	5265.1	5292.4	5320.9	5324.3	5256.0	5139.9	4386.3	3966.2
45°	5764.9	5793.3	5812.7	5808.1	5820.7	5861.6	5865.1	5828.6	5714.8	4751.7	4387.4
47.5°	6358.0	6385.3	6391.0	6427.4	6416.1	6474.1	6466.1	6467.3	6345.5	5260.6	4846.2
50°	7039.9	7052.4	7099.1	7119.6	7091.1	7169.7	7149.2	7174.2	7024.0	5843.4	5339.1
52.5°	7763.9	7785.6	7804.9	7882.3	7845.9	7914.2	7886.9	7944.9	7770.8	6436.5	5886.7
55°	8587.0	8590.4	8623.4	8702.0	8654.2	8736.1	8696.3	8717.9	8579.0	7092.3	6457.0
57.5°	9459.0	9447.6	9460.1	9522.8	9479.5	9541.0	9525.0	9545.5	9415.8	7782.1	6873.7
60°	10321.9	10304.8	10323.1	10365.2	10306.0	10411.9	10354.9	10374.3	10234.3	8486.8	7467.9
62.5°	11189.4	11176.9	11156.4	11198.5	11112.0	11166.6	11190.5	11158.6	11035.7	9124.3	7984.8
65°	12120.6	12108.1	12032.9	12059.1	11904.3	11878.1	11887.2	11897.5	11815.5	9756.1	8551.7
67.5°	13252.2	13234.0	13092.8	12915.2	12692.1	12643.1	12647.7	12675.0	12686.4	10569.0	9215.4
68°	13379.7	13346.7	13189.6	12983.5	12750.1	12693.2	12687.5	12693.2	12698.9	10575.8	9208.6
70°	13054.1	13041.6	12922.0	12672.7	12433.7	12297.1	12178.7	12174.1	12119.5	10035.0	8699.7
72.5°	11584.4	11568.5	11426.2	11249.7	11101.7	10887.7	10734.0	10743.1	10653.2	8869.3	7614.8
75°	9374.8	9373.6	9202.9	9054.9	9057.2	9041.2	8990.0	9079.9	8986.6	7522.6	6494.6
77.5°	6533.3	6556.1	6544.7	6458.2	6580.0	6748.5	6931.8	7104.8	7051.3	5942.5	5178.6
80°	3412.9	3476.7	3702.1	3712.3	3797.7	3961.7	4086.9	4203.0	4211.0	3372.0	2991.7
82.5°	907.3	926.7	1002.9	981.3	974.5	1007.5	1034.8	1038.2	1040.5	878.8	820.8
85°	282.3	290.3	281.2	268.7	249.3	227.7	222.0	181.0	143.4	118.4	103.6
87.5°	200.4	214.0	193.5	182.1	161.7	153.7	137.7	108.1	84.2	59.2	39.8
90°	103.6	105.9	94.5	80.8	75.1	70.6	60.3	43.3	21.6	11.4	10.2
92.5°	52.4	53.5	46.7	39.8	34.2	29.6	22.8	12.5	6.8	3.4	1.1
95°	20.5	21.6	19.4	17.1	13.7	10.2	9.1	6.8	4.6	2.3	1.1
97.5°	6.8	6.8	6.8	5.7	5.7	5.7	5.7	4.6	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°	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8	2399.8
2.5°	2413.4	2406.6	2410.0	2381.5	2388.4	2370.2	2408.9	2398.6	2394.1	2410.0
5°	2419.1	2394.1	2414.6	2395.2	2398.6	2372.4	2404.3	2391.8	2390.7	2399.8
7.5°	2421.4	2408.9	2428.2	2396.3	2406.6	2396.3	2420.2	2407.7	2419.1	2427.1
10°	2453.3	2446.4	2444.2	2432.8	2440.7	2418.0	2447.6	2447.6	2453.3	2474.9
12.5°	2499.9	2490.8	2485.1	2464.6	2472.6	2465.8	2489.7	2494.2	2504.5	2513.6
15°	2563.7	2547.8	2542.1	2523.8	2529.5	2528.4	2545.5	2546.6	2569.4	2568.2
17.5°	2645.7	2622.9	2629.7	2616.1	2617.2	2608.1	2599.0	2599.0	2619.5	2624.0
20°	2743.6	2613.8	2443.0	2347.4	2330.3	2342.8	2391.8	2472.6	2371.3	2399.8
22.5°	2567.1	2449.8	2441.9	2420.2	2406.6	2101.5	2022.9	1997.9	2128.8	2354.2
25°	2589.9	2539.8	2525.0	2497.7	2094.7	2091.3	2068.5	2030.9	1659.8	1651.8
27.5°	2710.5	2661.6	2637.7	2188.0	2178.9	2177.8	2143.6	1766.8	1681.4	1692.8
30°	2851.7	2794.8	2366.7	2298.4	2290.5	2272.3	2076.5	1745.2	1744.0	1745.2
32.5°	3014.5	2825.5	2435.0	2431.6	2436.2	2380.4	1839.7	1832.8	1831.7	1843.1
35°	3237.6	2621.7	2605.8	2622.9	2599.0	2058.2	1950.1	1946.7	1947.8	1942.1
37.5°	3089.6	2826.7	2823.2	2823.2	2767.5	2106.0	2084.4	2100.4	2098.1	2090.1
40°	3152.2	3074.8	3054.3	3047.5	2339.4	2272.3	2259.7	2280.2	2283.6	2289.3
42.5°	3456.2	3385.6	3375.4	3294.5	2545.5	2523.8	2485.1	2506.8	2504.5	2511.3
45°	3829.6	3781.8	3737.4	2856.3	2823.2	2795.9	2756.1	2781.1	2788.0	2783.4
47.5°	4264.5	4212.1	3891.1	3140.9	3139.7	3118.1	3073.7	3094.2	3090.8	3090.8
50°	4701.6	4644.7	3534.7	3502.9	3491.5	3457.3	3420.9	3424.3	3425.5	3436.8
52.5°	5190.0	4148.3	3912.7	3848.9	3858.1	3835.3	3800.0	2876.8	3782.9	3793.2
55°	4850.7	4341.9	4328.2	4244.0	4265.6	4236.0	4213.2	2838.0	3762.4	4157.5
57.5°	4796.1	4759.7	4748.3	4661.8	4689.1	4407.9	4618.5	3105.6	2602.4	1901.1
60°	5213.9	5175.2	5168.4	5092.1	5089.8	3502.9	4198.4	2130.0	1664.3	1675.7
62.5°	5619.2	5556.6	5573.6	5483.7	3866.0	2134.5	1881.8	47.8	76.3	80.8
65°	6071.1	5966.4	5983.5	5900.4	3987.8	2250.6	2034.3	25.0	21.6	20.5
67.5°	6506.0	6322.7	6235.0	6147.4	4141.5	2370.2	2119.7	6.8	0.0	0.0
68°	6484.4	6290.8	6200.9	6117.8	4125.6	2366.7	2115.2	6.8	0.0	0.0
70°	6118.9	5944.8	5859.4	5795.6	3938.9	2285.9	2029.8	6.8	0.0	0.0
72.5°	5349.4	5252.6	5198.0	5142.2	3499.5	2044.6	1820.3	6.8	0.0	0.0
75°	4545.7	4518.3	4484.2	4361.2	2916.6	1673.5	1495.9	6.8	0.0	0.0
77.5°	3601.9	3600.8	3517.7	3373.1	2196.0	1228.3	1103.1	5.7	0.0	0.0
80°	1947.8	2123.1	2059.4	1985.4	1245.4	668.2	636.4	4.6	0.0	0.0
82.5°	547.6	518.0	497.5	465.6	261.8	145.7	142.3	4.6	0.0	0.0
85°	76.3	84.2	93.3	105.9	60.3	38.7	34.2	2.3	0.0	0.0
87.5°	43.3	49.0	60.3	62.6	22.8	18.2	5.7	0.0	0.0	0.0
90°	9.1	10.2	11.4	11.4	4.6	4.6	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)