

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: P522193

Luminaire Tested: **CST-CA6-230-750-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522193
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-CA6-230-750-U-T5R-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23205 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U2 - G4

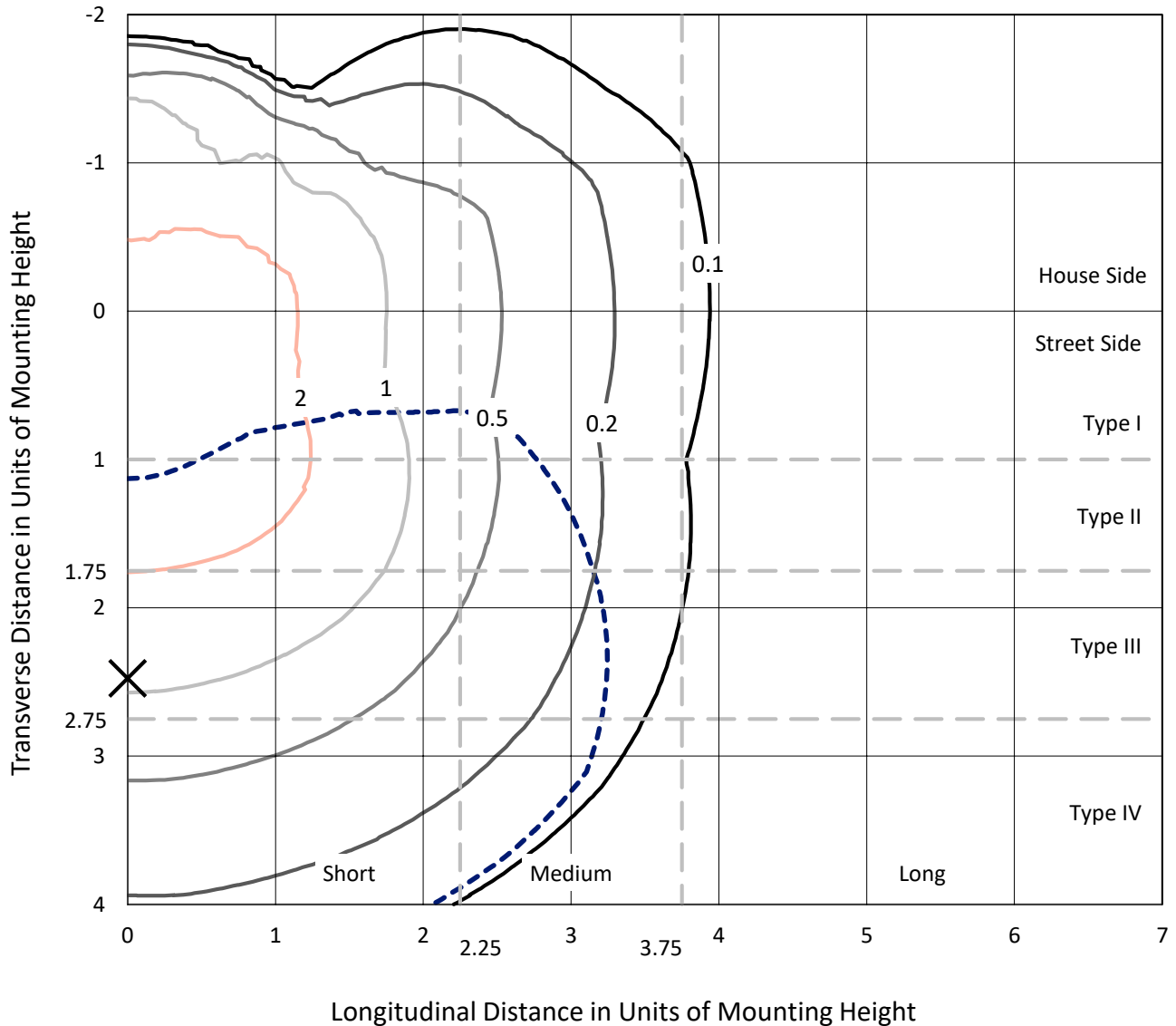
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

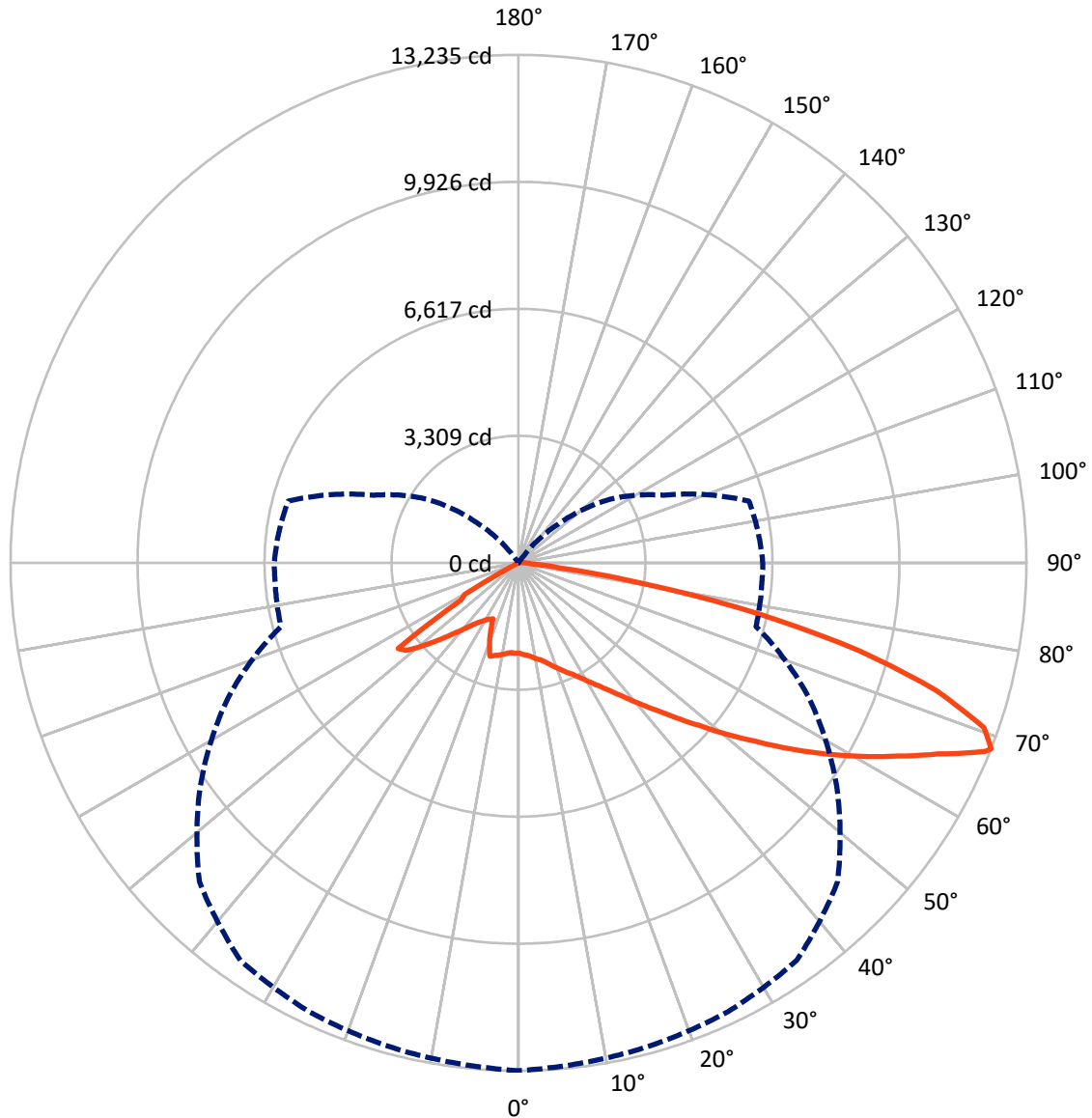
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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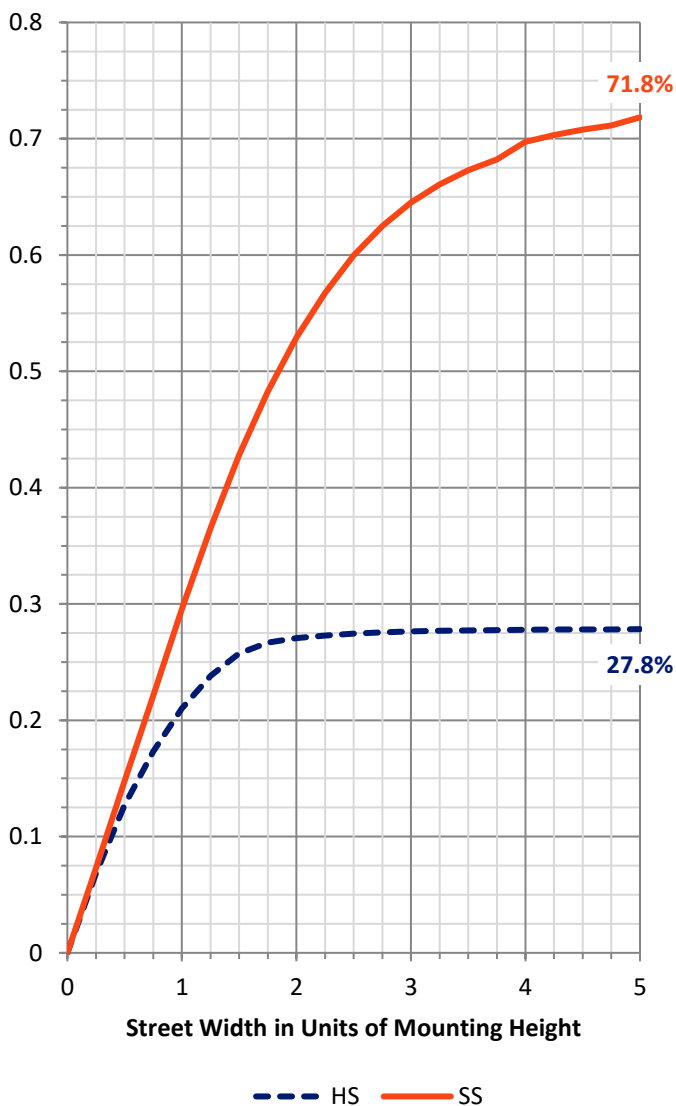
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6481.2	0.1	6481.3
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	16710.4	13.3	16723.7
	% Fixture	72.0	0.1	72.1
Total	Lumens	23191.6	13.4	23205.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.2	1.0
10°-20°	723.0	3.1
20°-30°	1224.0	5.3
30°-40°	1939.2	8.4
40°-50°	3170.4	13.7
50°-60°	4856.3	20.9
60°-70°	5971.1	25.7
70°-80°	4613.8	19.9
80°-90°	465.5	2.0
90°-100°	13.2	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°	23191.6	99.9
0°-180°	23205.0	100.0

Coefficient of Utilization



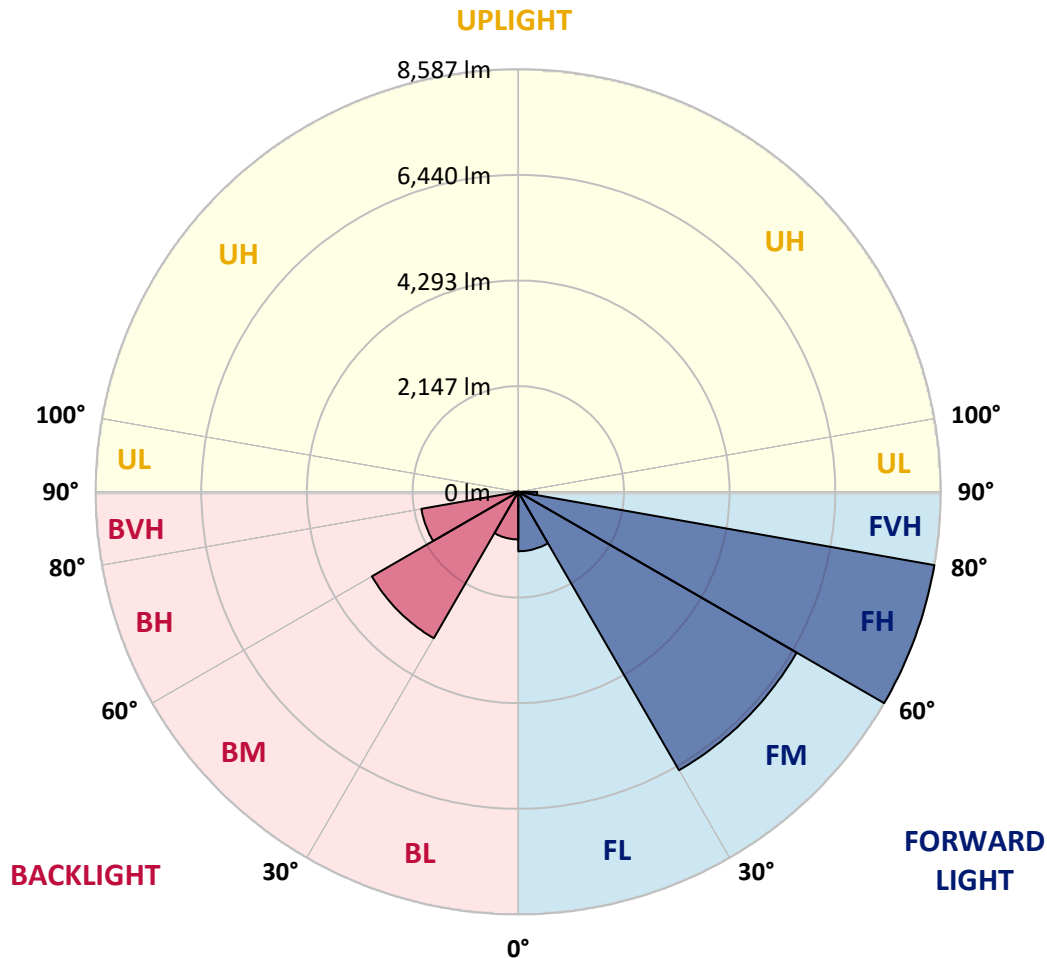
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1207.8	5.2			
FM	(30°-60°)	6531.8	28.1			
FH	(60°-80°)	8586.8	37.0			G4/12000
FVH	(80°-90°)	383.9	1.7			G3/500
BL	(0°-30°)	967.4	4.2	B2/1000		
BM	(30°-60°)	3434.0	14.8	B3/5000		
BH	(60°-80°)	1998.2	8.6	B3/2500		G3/2500
BVH	(80°-90°)	81.6	0.4			G1/100
UL	(90°-100°)	13.2	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°	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9
2.5°	2393.4	2388.9	2384.5	2394.5	2355.4	2372.2	2358.7	2371.0	2362.1	2372.2	2368.8
5°	2424.7	2420.2	2406.8	2418.0	2392.3	2399.0	2382.2	2386.7	2356.5	2374.4	2373.3
7.5°	2476.1	2463.8	2454.9	2454.9	2432.5	2431.4	2404.6	2405.7	2382.2	2380.0	2384.5
10°	2545.4	2536.5	2511.9	2514.1	2482.8	2478.4	2444.8	2443.7	2424.7	2413.5	2423.6
12.5°	2596.8	2605.8	2583.4	2583.4	2552.1	2529.8	2506.3	2490.6	2476.1	2459.3	2451.5
15°	2690.8	2699.7	2669.5	2668.4	2656.1	2629.3	2603.6	2570.0	2544.3	2536.5	2524.2
17.5°	2812.6	2807.0	2781.3	2782.4	2784.7	2741.1	2715.3	2671.7	2634.9	2608.0	2601.3
20°	2936.7	2936.7	2908.7	2917.7	2906.5	2866.3	2849.5	2789.1	2737.7	2708.6	2685.2
22.5°	3075.3	3069.7	3050.7	3069.7	3047.4	3007.1	2979.2	2918.8	2852.8	2688.5	2621.4
25°	3207.2	3203.9	3211.7	3217.3	3189.3	3139.0	3120.0	3056.3	2873.0	2657.2	2522.0
27.5°	3373.8	3362.6	3380.5	3391.7	3363.7	3320.1	3279.9	3208.3	2820.4	2650.5	2636.0
30°	3587.3	3562.7	3588.4	3594.0	3564.9	3538.1	3477.7	3120.0	2838.3	2789.1	2784.7
32.5°	3815.3	3786.3	3819.8	3824.3	3786.3	3763.9	3611.9	3074.2	3013.8	2956.8	2962.4
35°	4085.9	4085.9	4102.6	4104.9	4076.9	4038.9	3459.9	3297.8	3244.1	3191.6	3190.4
37.5°	4415.6	4405.6	4450.3	4477.1	4446.9	4338.5	3681.2	3605.2	3522.5	3455.4	3316.8
40°	4813.6	4831.5	4843.8	4870.6	4841.6	4597.9	4004.3	3918.2	3853.4	3628.7	3278.8
42.5°	5242.9	5247.4	5274.2	5307.7	5307.7	5050.6	4382.1	4308.3	4224.5	3548.2	3390.5
45°	5756.0	5745.9	5797.4	5851.0	5836.5	5570.4	4821.4	4766.7	4374.3	3781.8	3782.9
47.5°	6338.4	6326.1	6399.9	6470.3	6397.7	6147.3	5304.4	5261.9	4222.3	4177.5	4168.6
50°	7011.4	6981.2	7066.2	7160.1	7100.8	6791.2	5891.3	5075.2	4645.9	4610.2	4604.6
52.5°	7730.2	7706.7	7758.1	7918.0	7839.7	7465.2	6446.8	5236.2	5136.7	5096.4	5086.4
55°	8541.8	8495.9	8606.6	8728.5	8637.9	8210.9	6994.6	5770.5	5667.7	5598.4	5497.8
57.5°	9394.7	9328.8	9385.8	9538.9	9451.7	8974.4	7701.1	6320.5	6198.7	5130.0	4721.9
60°	10244.3	10214.1	10236.5	10371.7	10264.4	9716.7	8362.9	6871.6	5246.2	5074.1	5094.2
62.5°	11098.4	11032.4	11052.5	11191.2	11053.7	10423.2	8990.0	7372.5	5521.2	5460.9	5482.1
65°	12013.9	11935.7	11953.6	11993.8	11823.9	11057.0	9544.5	7845.3	5934.9	5871.1	5894.6
67.5°	13117.3	13045.7	12948.5	12828.9	12594.1	11730.0	10095.6	8342.8	6399.9	6364.1	6371.9
68°	13234.7	13165.3	13048.0	12906.0	12642.2	11757.9	10119.1	8357.3	6406.6	6361.9	6364.1
70°	12869.1	12910.5	12777.4	12539.3	12319.1	11348.8	9735.7	8035.4	6121.5	6055.6	6038.8
72.5°	11396.8	11487.4	11304.1	11263.8	10993.3	10110.2	8519.4	6972.3	5324.5	5345.7	5285.4
75°	9201.3	9334.3	9111.9	9124.2	8969.9	8433.3	7139.9	5805.2	4372.1	4469.3	4487.2
77.5°	6398.8	6589.9	6492.7	6589.9	6513.9	6320.5	5525.7	4470.4	3335.8	3447.6	3491.2
80°	3336.9	3563.8	3692.4	3732.6	3757.2	3749.4	3364.8	2682.9	1928.4	1969.7	1967.5
82.5°	1055.3	1000.5	1032.9	1024.0	996.0	1007.2	907.7	709.9	491.9	542.2	518.7
85°	318.6	320.8	311.9	309.7	286.2	251.5	205.7	118.5	58.1	68.2	63.7
87.5°	234.8	237.0	219.1	207.9	194.5	168.8	130.8	73.8	27.9	26.8	21.2
90°	129.7	125.2	116.3	107.3	101.7	87.2	66.0	27.9	10.1	7.8	6.7
92.5°	70.4	67.1	62.6	59.2	51.4	41.4	26.8	8.9	4.5	1.1	0.0
95°	32.4	30.2	29.1	25.7	22.4	15.7	8.9	5.6	3.4	1.1	0.0
97.5°	14.5	13.4	12.3	10.1	7.8	4.5	4.5	3.4	2.2	1.1	0.0
100°	3.4	3.4	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°	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9	2350.9
2.5°	2365.4	2358.7	2355.4	2334.1	2340.9	2321.8	2358.7	2349.8	2344.2	2359.9
5°	2367.7	2344.2	2358.7	2346.4	2350.9	2324.1	2353.1	2340.9	2339.7	2346.4
7.5°	2373.3	2357.6	2372.2	2347.6	2358.7	2347.6	2368.8	2356.5	2366.6	2373.3
10°	2403.5	2394.5	2387.8	2382.2	2390.0	2367.7	2394.5	2395.6	2399.0	2419.1
12.5°	2445.9	2437.0	2425.8	2411.3	2419.1	2410.2	2430.3	2435.9	2448.2	2458.2
15°	2505.2	2488.4	2483.9	2470.5	2478.4	2473.9	2478.4	2475.0	2498.5	2495.1
17.5°	2586.8	2567.8	2504.1	2439.2	2397.9	2410.2	2461.6	2528.7	2545.4	2547.7
20°	2617.0	2482.8	2476.1	2402.3	2368.8	2366.6	2260.4	2101.6	2149.7	2262.6
22.5°	2581.2	2397.9	2378.9	2364.3	2221.2	1986.5	1964.1	1940.6	1935.1	1951.8
25°	2500.7	2479.5	2462.7	2272.7	2046.8	2048.0	2015.5	1861.3	1620.9	1600.8
27.5°	2623.7	2594.6	2432.5	2139.6	2135.2	2132.9	2084.9	1689.1	1637.7	1650.0
30°	2763.4	2715.3	2291.7	2253.7	2252.5	2232.4	1869.1	1703.7	1703.7	1705.9
32.5°	2924.4	2625.9	2372.2	2390.0	2388.9	2293.9	1805.4	1794.2	1789.7	1800.9
35°	3047.4	2554.4	2545.4	2577.8	2555.5	1946.2	1918.3	1908.2	1903.8	1898.2
37.5°	3009.3	2760.1	2760.1	2780.2	2600.2	2072.6	2059.1	2059.1	2050.2	2045.7
40°	3067.5	3016.1	2990.3	2998.2	1889.2	2225.7	2235.8	2233.5	2232.4	2240.2
42.5°	3373.8	3327.9	3304.5	3027.2	2115.0	2212.3	2458.2	2457.1	2460.5	2457.1
45°	3763.9	3721.4	3660.0	2832.7	2401.2	1939.5	2709.8	2722.1	2723.2	2722.1
47.5°	4173.1	4146.2	3516.9	3135.7	2712.0	2081.5	2590.1	3025.0	3019.4	3026.1
50°	4605.7	4485.0	3499.0	3494.5	3042.9	2316.3	2317.4	3289.9	3347.0	3364.8
52.5°	5087.5	4065.8	3877.9	3538.1	3378.3	2557.7	2533.1	2915.4	3693.5	3711.4
55°	4725.3	4294.9	4291.6	3149.1	3514.6	2790.2	2793.6	2766.8	3387.2	3850.0
57.5°	4701.8	4711.9	4704.1	3513.5	2564.4	2615.9	3044.0	3020.5	2193.3	1777.4
60°	5107.6	5122.2	4569.9	3794.1	2772.4	1608.6	1874.7	1593.0	1614.2	1631.0
62.5°	5495.5	5500.0	3717.0	2487.3	1373.9	64.8	31.3	25.7	24.6	24.6
65°	5924.8	5924.8	3984.1	2713.1	1326.9	24.6	4.5	3.4	12.3	12.3
67.5°	6339.5	6247.9	4179.8	2880.8	1350.4	3.4	0.0	0.0	0.0	0.0
68°	6316.1	6215.4	4161.9	2876.3	1347.1	2.2	0.0	0.0	0.0	0.0
70°	5965.0	5867.8	3948.4	2745.5	1296.7	2.2	0.0	0.0	0.0	0.0
72.5°	5265.2	5175.8	3496.7	2420.2	1169.3	1.1	0.0	0.0	0.0	0.0
75°	4457.0	4444.7	3020.5	2042.4	1002.7	1.1	0.0	0.0	0.0	0.0
77.5°	3586.2	3530.3	2361.0	1600.8	808.2	0.0	0.0	0.0	0.0	0.0
80°	1997.7	2080.4	1381.7	941.3	508.6	0.0	0.0	0.0	0.0	0.0
82.5°	539.9	505.3	301.8	204.6	97.3	0.0	0.0	0.0	0.0	0.0
85°	69.3	76.0	34.7	27.9	6.7	0.0	0.0	0.0	0.0	0.0
87.5°	35.8	42.5	11.2	8.9	2.2	0.0	0.0	0.0	0.0	0.0
90°	6.7	7.8	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)