

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: McGRAW-EDISON

Report Number: P579640

Luminaire Tested: **CTN-CA6-230-727-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579640
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-727-U-T5-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (6) 2700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21449 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U2 - G4

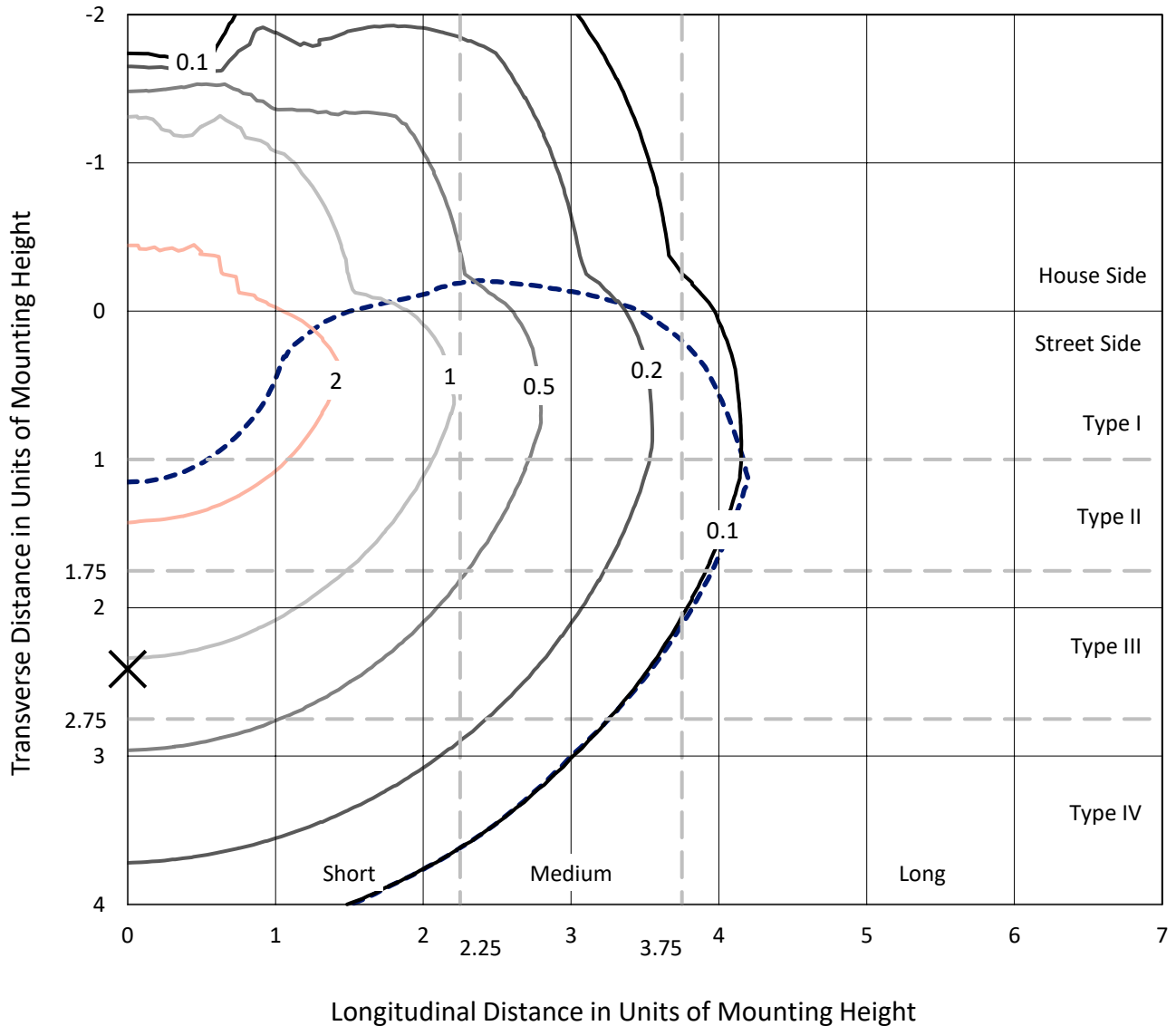
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

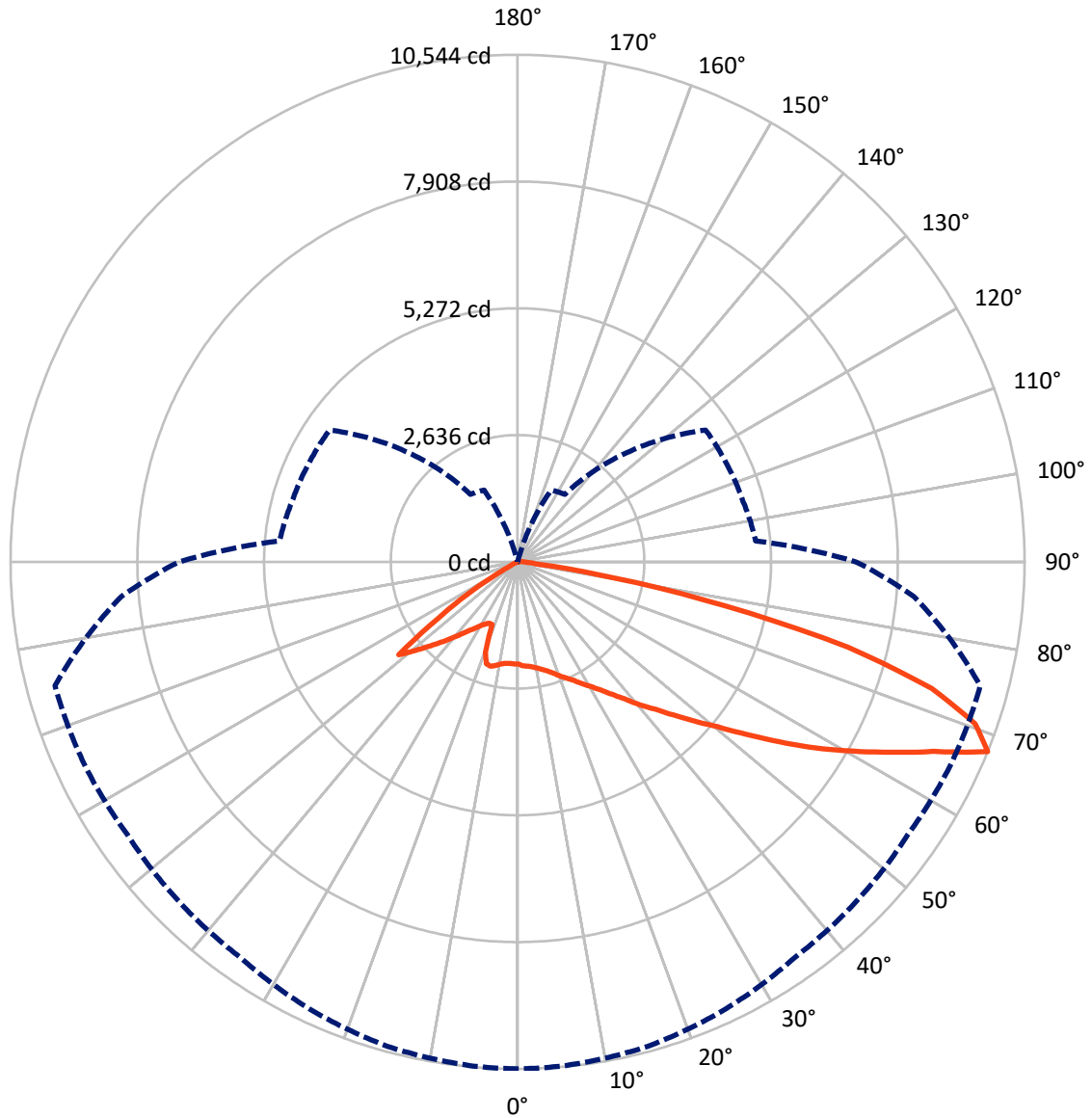
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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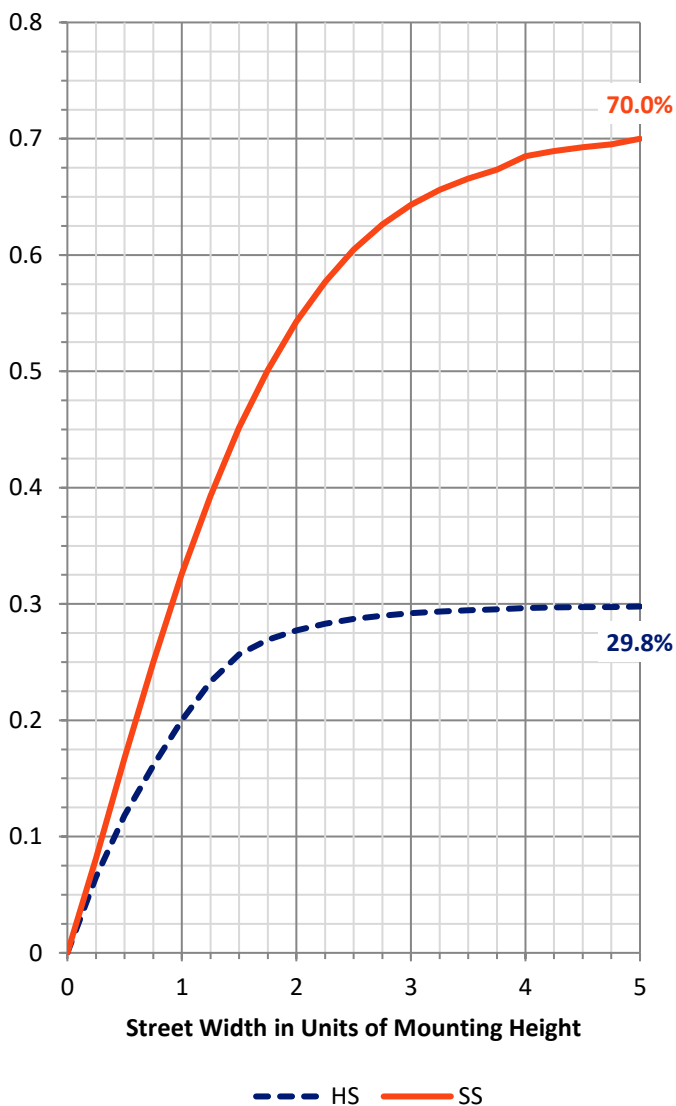
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6402.6	2.1	6404.8
	% Fixture	29.9	0.0	29.9
Street Side	Lumens	15020.1	24.1	15044.2
	% Fixture	70.0	0.1	70.1
Total	Lumens	21422.7	26.3	21449.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.9	1.0
10°-20°	634.3	3.0
20°-30°	1064.5	5.0
30°-40°	1726.2	8.0
40°-50°	2820.8	13.2
50°-60°	4420.7	20.6
60°-70°	5920.7	27.6
70°-80°	4315.4	20.1
80°-90°	315.1	1.5
90°-100°	20.1	0.1
100°-110°	5.7	0.0
110°-120°	0.4	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°	21422.7	99.9
0°-180°	21449.0	100.0

Coefficient of Utilization

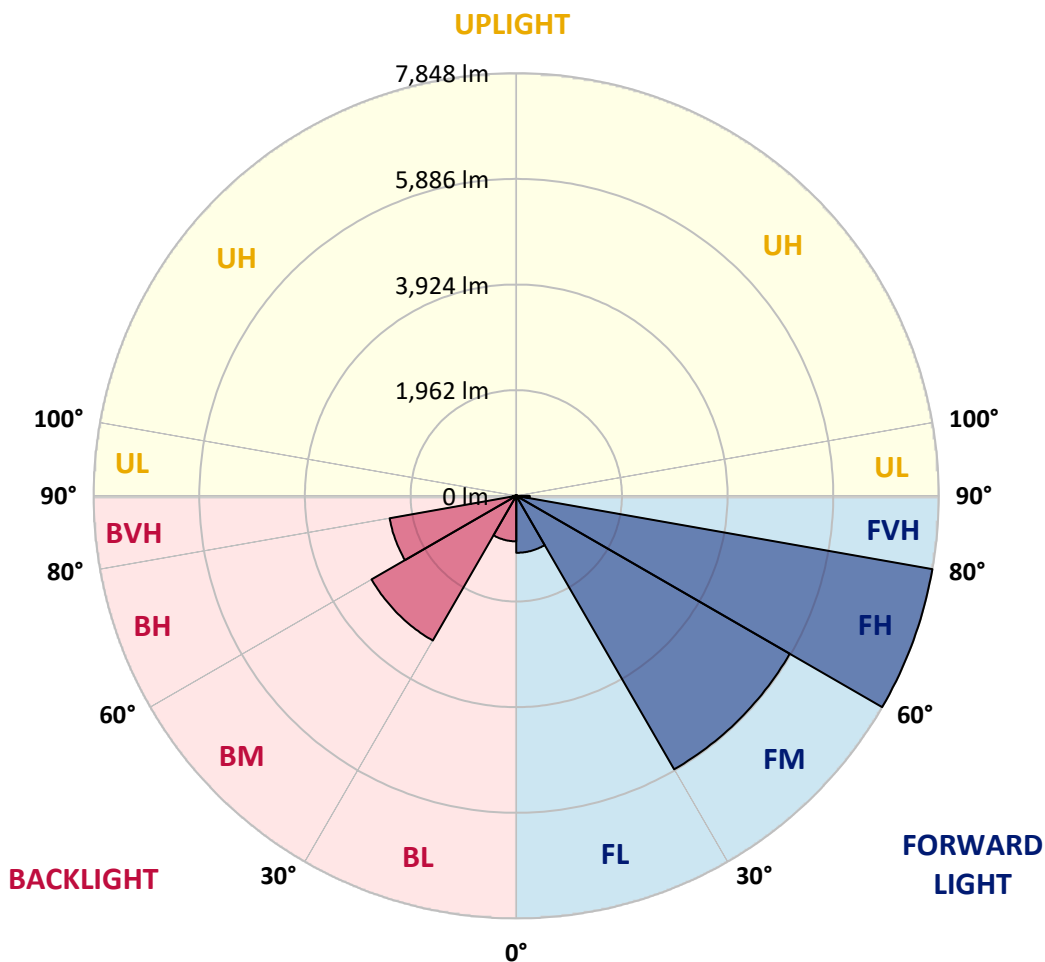


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1058.0	4.9			
FM (30°-60°)	5864.5	27.3			
FH (60°-80°)	7848.3	36.6			G4/12000
FVH (80°-90°)	249.2	1.2			G3/500
BL (0°-30°)	845.8	3.9	B2/1000		
BM (30°-60°)	3103.2	14.5	B3/5000		
BH (60°-80°)	2387.7	11.1	B3/2500		G3/2500
BVH (80°-90°)	65.9	0.3			G1/100
UL (90°-100°)	20.1	0.1		U2/50	
UH (100°-180°)	6.1	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°	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4
2.5°	2165.9	2153.3	2154.2	2165.9	2130.8	2142.5	2127.2	2138.9	2130.8	2133.5	2138.9
5°	2179.5	2165.9	2166.8	2181.3	2149.7	2159.6	2138.9	2145.2	2138.0	2141.6	2141.6
7.5°	2206.5	2191.2	2190.3	2199.3	2166.8	2170.4	2151.5	2152.4	2141.6	2148.8	2145.2
10°	2247.1	2234.5	2225.4	2230.9	2202.0	2200.2	2175.8	2176.7	2163.2	2171.3	2165.0
12.5°	2296.7	2279.5	2277.7	2279.5	2248.0	2240.8	2215.5	2217.3	2193.0	2205.6	2198.4
15°	2359.8	2332.7	2332.7	2342.7	2302.1	2296.7	2266.0	2267.8	2242.6	2252.5	2245.3
17.5°	2437.3	2411.2	2406.7	2413.9	2378.7	2371.5	2340.0	2338.2	2310.2	2312.9	2306.6
20°	2537.4	2511.3	2500.5	2518.5	2474.3	2468.9	2431.0	2427.4	2397.7	2389.6	2385.9
22.5°	2630.3	2609.6	2604.2	2624.0	2578.0	2573.5	2537.4	2532.9	2505.0	2493.3	2422.0
25°	2734.9	2730.4	2728.6	2734.9	2691.6	2682.6	2654.7	2648.3	2624.9	2610.5	2523.9
27.5°	2870.2	2868.4	2863.0	2863.9	2824.2	2816.1	2789.9	2785.4	2761.1	2744.8	2633.9
30°	3011.7	3011.7	3000.0	3006.3	2986.5	2973.9	2953.1	2936.9	2921.6	2904.4	2764.7
32.5°	3175.0	3174.0	3163.2	3182.2	3167.7	3167.7	3155.1	3138.0	3110.9	3102.8	2933.3
35°	3385.1	3371.5	3367.0	3397.7	3393.2	3401.3	3396.8	3378.7	3356.2	3337.3	3131.7
37.5°	3617.7	3614.1	3627.6	3646.6	3656.5	3678.1	3664.6	3663.7	3660.1	3612.3	3078.5
40°	3904.4	3889.1	3908.0	3918.0	3910.8	3945.9	3934.2	3944.1	3971.2	3587.0	3074.9
42.5°	4190.3	4176.8	4190.3	4239.0	4228.2	4270.5	4265.1	4303.9	4319.2	3640.2	3324.6
45°	4542.0	4526.6	4537.4	4595.2	4600.6	4652.0	4679.9	4716.9	4724.1	3984.7	3625.8
47.5°	4945.9	4920.7	4941.4	4968.5	5050.5	5099.2	5126.3	5171.4	5217.3	4399.5	3968.5
50°	5391.4	5389.6	5412.1	5459.0	5552.8	5601.5	5648.4	5695.3	5771.0	4862.1	4352.6
52.5°	5957.7	5945.9	5984.7	6028.9	6111.8	6186.7	6242.6	6291.3	6372.4	5330.1	4768.3
55°	6605.1	6564.5	6638.5	6713.3	6748.5	6836.8	6875.6	6916.2	6993.7	5822.4	5010.9
57.5°	7303.9	7294.0	7345.4	7372.5	7448.2	7503.2	7523.9	7568.1	7567.2	6334.6	5423.8
60°	7991.9	7981.1	8041.5	8057.8	8118.2	8167.8	8160.6	8200.2	8214.7	6815.2	5828.7
62.5°	8716.0	8698.0	8753.9	8757.5	8721.4	8801.7	8793.6	8826.9	8814.3	7285.0	6227.3
65°	9507.7	9521.2	9539.3	9465.3	9378.8	9448.2	9446.4	9509.5	9554.6	7941.4	6761.1
67.5°	10543.8	10526.7	10433.8	10255.2	10045.1	9974.8	9900.0	9946.0	9958.6	8267.9	7034.3
70°	10096.5	10058.7	10017.2	9835.0	9581.7	9403.1	9286.8	9335.5	9386.9	7813.4	6606.9
72.5°	9006.4	8912.6	8719.6	8559.1	8413.0	8239.0	8097.4	8182.2	8294.9	6930.6	5850.4
75°	7105.5	7018.1	6877.4	6768.3	6689.9	6688.0	6681.7	6747.6	6731.3	5627.6	4756.6
77.5°	4400.4	4583.4	4713.3	4620.4	4652.9	4586.1	4733.1	4819.7	4898.1	4034.3	3388.7
80°	2031.6	2078.5	2308.4	2248.9	2201.1	2187.6	2196.6	2347.2	2391.4	1810.7	1516.7
82.5°	463.5	444.5	460.8	427.4	425.6	405.8	408.5	408.5	394.1	333.6	279.5
85°	234.4	239.9	241.7	231.7	204.7	184.0	170.4	144.3	124.4	106.4	90.2
87.5°	156.9	161.4	164.1	150.6	135.3	118.1	107.3	87.5	69.4	43.3	33.4
90°	107.3	106.4	103.7	96.5	86.6	73.9	59.5	41.5	24.3	9.0	6.3
92.5°	76.6	74.8	73.9	67.6	60.4	50.5	38.8	26.1	13.5	6.3	3.6
95°	50.5	49.6	49.6	46.0	40.6	33.4	26.1	17.1	9.9	5.4	3.6
97.5°	35.2	34.3	34.3	32.5	28.9	24.3	18.0	11.7	8.1	5.4	3.6
100°	24.3	24.3	24.3	22.5	20.7	17.1	13.5	9.0	7.2	5.4	3.6
102.5°	16.2	16.2	17.1	16.2	14.4	11.7	9.0	7.2	6.3	4.5	3.6
105°	10.8	10.8	10.8	10.8	9.9	8.1	7.2	6.3	5.4	4.5	3.6
107.5°	7.2	7.2	7.2	7.2	6.3	5.4	5.4	5.4	4.5	4.5	3.6
110°	4.5	4.5	4.5	5.4	4.5	4.5	4.5	4.5	4.5	3.6	3.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
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°	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4
2.5°	2134.4	2121.7	2128.1	2115.4	2110.0	2098.3	2120.8	2122.6	2120.8	2124.4
5°	2137.1	2122.6	2129.9	2115.4	2112.7	2099.2	2121.7	2121.7	2116.3	2119.0
7.5°	2143.4	2128.1	2133.5	2116.3	2116.3	2100.1	2127.2	2125.4	2120.8	2127.2
10°	2165.0	2147.0	2147.0	2130.8	2132.6	2115.4	2148.8	2148.8	2145.2	2156.0
12.5°	2198.4	2175.8	2176.7	2154.2	2157.8	2144.3	2184.9	2186.7	2186.7	2204.7
15°	2241.7	2207.4	2211.0	2186.7	2193.9	2177.7	2213.7	2211.9	2216.4	2242.6
17.5°	2294.9	2257.0	2225.4	2146.1	2099.2	2101.0	2208.3	2257.9	2200.2	2217.3
20°	2317.4	2133.5	2033.4	2004.5	1998.2	1898.1	1693.4	1725.0	1918.0	2001.8
22.5°	2165.9	2107.3	2097.4	2060.4	1787.2	1711.5	1724.1	1706.1	1516.7	1409.4
25°	2239.9	2201.1	2178.6	1853.0	1791.7	1778.2	1769.2	1597.8	1392.3	1402.2
27.5°	2344.5	2294.0	2023.5	1861.1	1872.9	1852.1	1799.8	1437.3	1431.0	1447.3
30°	2468.0	2340.9	1972.1	1956.7	1970.3	1943.2	1513.1	1498.7	1498.7	1514.9
32.5°	2619.5	2123.5	2092.9	2094.7	2085.7	1779.1	1592.4	1588.8	1599.6	1613.2
35°	2577.1	2265.1	2267.8	2283.2	2262.4	1740.3	1716.9	1703.3	1712.4	1717.8
37.5°	2494.2	2477.9	2477.9	2460.8	1931.5	1876.5	1851.2	1849.4	1848.5	1848.5
40°	2703.4	2688.0	2669.1	2639.3	2020.8	2035.2	1997.3	1992.8	1995.5	2005.4
42.5°	2941.4	2935.1	2933.3	2265.1	2206.5	2217.3	2176.7	2165.0	2165.0	2187.6
45°	3221.8	3213.7	3014.4	2421.1	2411.2	2423.8	2378.7	2350.8	2366.1	2382.3
47.5°	3543.8	3543.8	2669.1	2654.7	2654.7	2661.9	2616.8	2578.9	2594.2	2599.7
50°	3896.3	3345.4	2936.9	2923.4	2936.0	2932.4	2885.5	2533.8	2859.4	2862.1
52.5°	3994.6	3253.4	3230.9	3215.5	3230.9	3228.2	3179.5	2113.6	3092.9	3137.1
55°	3541.0	3543.8	3539.2	3516.7	3532.9	3526.6	3478.8	2307.5	2280.4	2032.5
57.5°	3828.7	3832.3	3830.5	3826.9	3841.3	2790.8	3603.3	2084.8	1273.2	1274.1
60°	4141.6	4123.6	4118.1	4110.0	3483.3	1978.4	1501.4	145.2	497.7	490.5
62.5°	4425.6	4419.3	4400.4	4395.9	2955.8	1558.2	1522.1	33.4	26.1	25.2
65°	4820.6	4764.7	4749.4	4701.6	3150.6	1659.2	1624.9	9.9	0.9	0.0
67.5°	4967.6	4854.0	4798.9	4773.7	3205.6	1711.5	1645.6	9.9	0.9	0.0
70°	4689.8	4549.2	4479.7	4451.8	2995.5	1599.6	1534.7	9.9	0.9	0.0
72.5°	4158.7	4055.0	4027.1	3937.8	2641.1	1404.0	1347.2	9.9	0.0	0.0
75°	3411.2	3373.3	3339.1	3244.4	2147.0	1115.4	1064.9	9.0	0.0	0.0
77.5°	2482.4	2426.5	2363.4	2260.6	1449.1	728.6	702.4	8.1	0.0	0.0
80°	1119.0	1073.0	1057.7	897.2	514.0	237.2	209.2	7.2	0.0	0.0
82.5°	217.3	195.7	185.8	178.5	115.4	64.0	55.9	5.4	0.0	0.0
85°	73.9	82.1	95.6	105.5	64.9	38.8	32.5	3.6	0.0	0.0
87.5°	28.9	38.8	46.9	48.7	24.3	16.2	9.0	1.8	0.0	0.0
90°	5.4	7.2	6.3	4.5	2.7	0.9	0.0	0.0	0.0	0.0
92.5°	2.7	3.6	2.7	2.7	1.8	0.9	0.0	0.0	0.0	0.0
95°	3.6	3.6	3.6	2.7	1.8	0.9	0.0	0.0	0.0	0.0
97.5°	3.6	3.6	3.6	2.7	1.8	0.9	0.0	0.0	0.0	0.0
100°	3.6	3.6	3.6	2.7	1.8	0.9	0.0	0.0	0.0	0.0
102.5°	3.6	3.6	3.6	2.7	1.8	0.9	0.0	0.0	0.0	0.0
105°	3.6	4.5	3.6	2.7	1.8	0.9	0.0	0.0	0.0	0.0
107.5°	3.6	4.5	3.6	2.7	1.8	0.9	0.0	0.0	0.0	0.0
110°	3.6	4.5	3.6	2.7	1.8	0.9	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°
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)