

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: P522117

Luminaire Tested: **CTN-CA10-210-740-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522117  
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: McGRAW-EDISON  
Catalog Number: CTN-CA10-210-740-U-T5R-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26888 lumens  
Efficiency: N/A  
Efficacy: 126.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G4

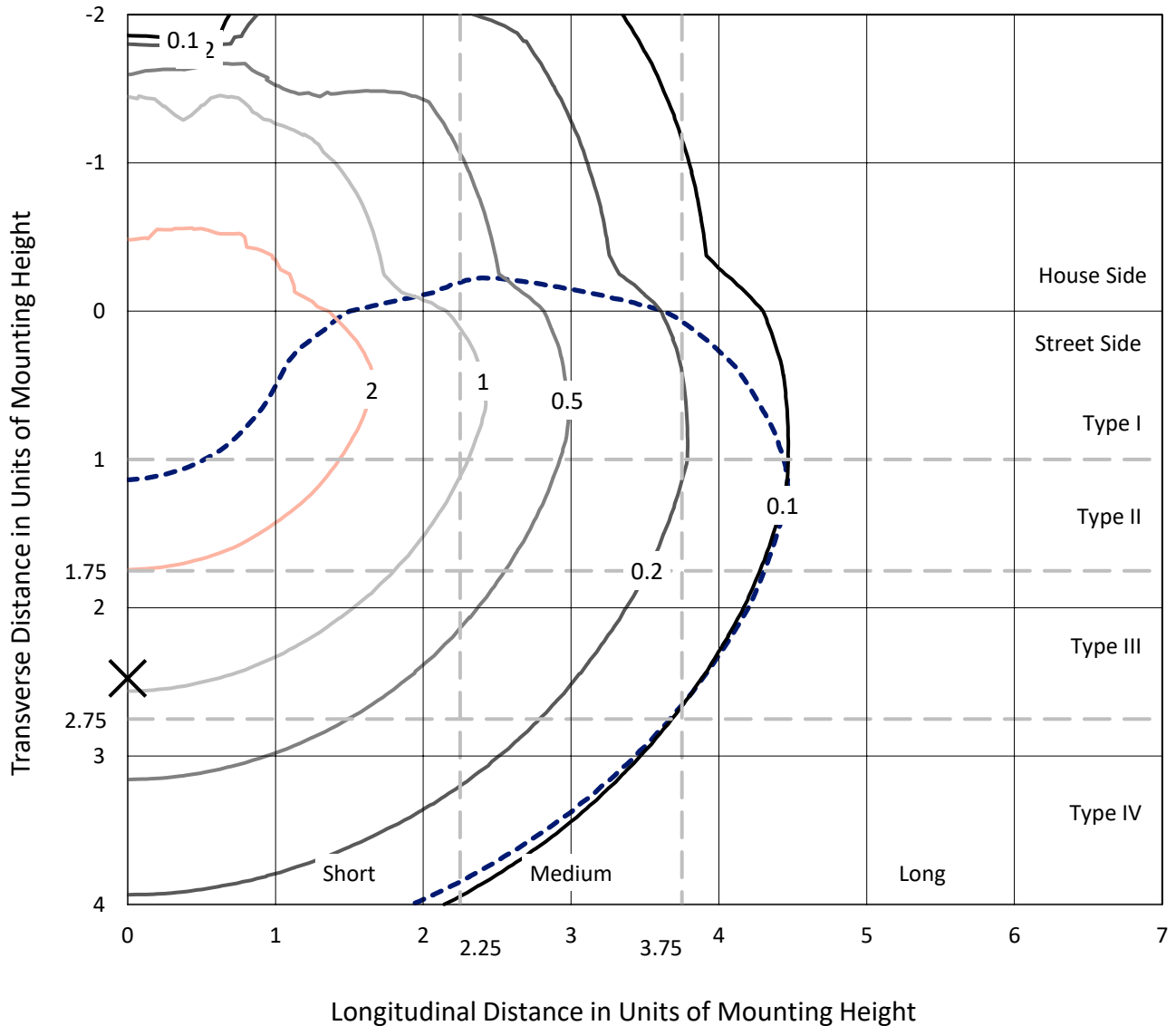
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

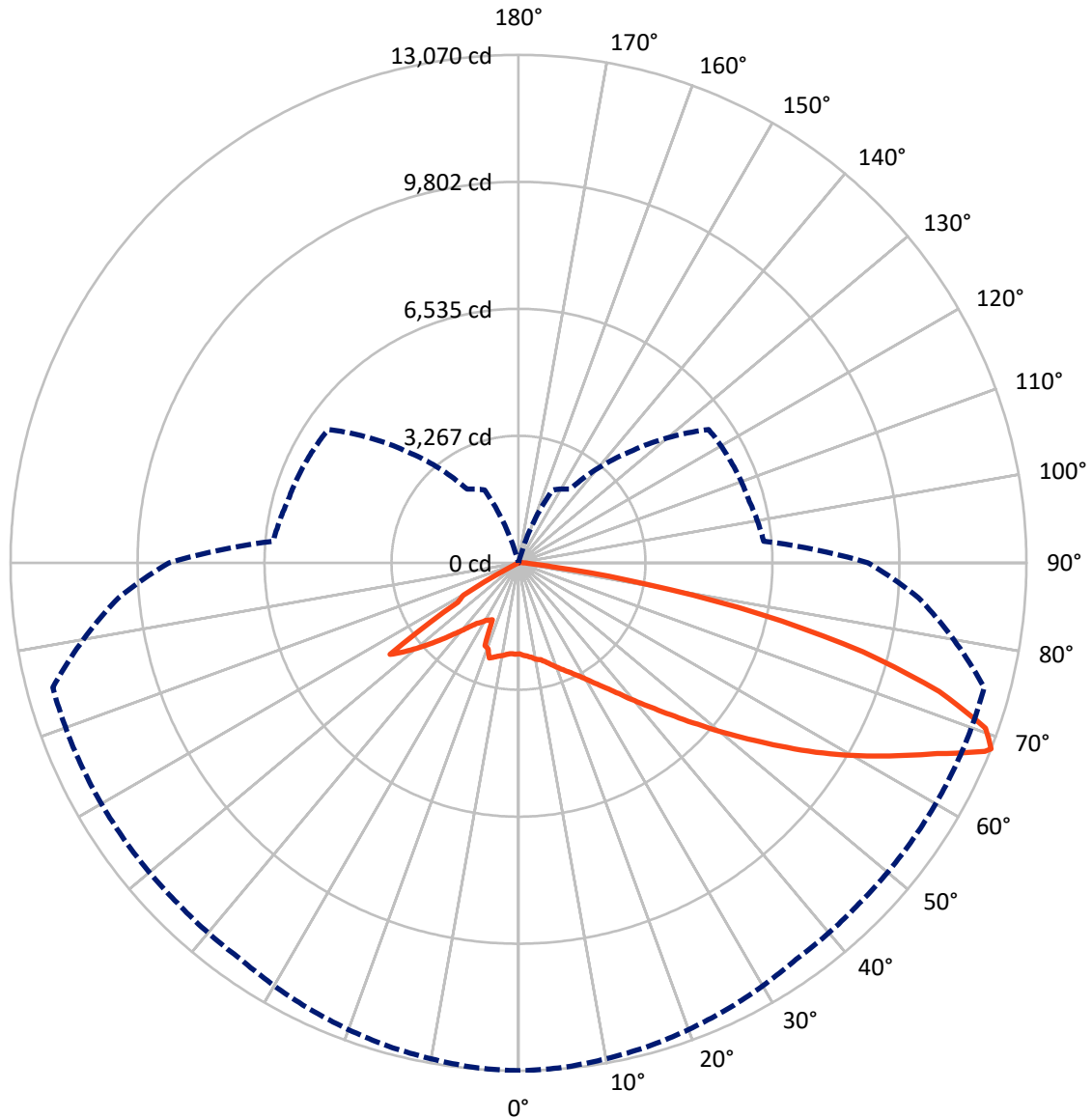
× Max cd  
 - - - 1/2 Max cd



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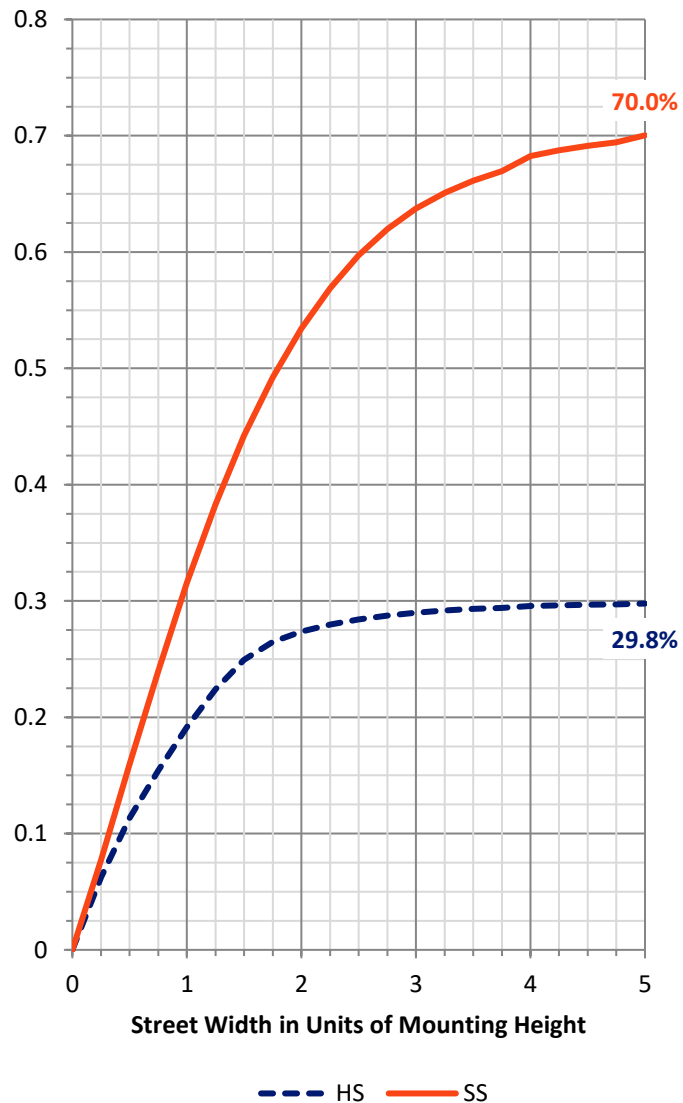
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8015.0	1.2	8016.2
	% Fixture	29.8	0.0	29.8
<b>Street Side</b>	Lumens	18860.7	11.0	18871.7
	% Fixture	70.1	0.0	70.2
<b>Total</b>	Lumens	26875.7	12.2	26888.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.5	0.8
10°-20°	724.1	2.7
20°-30°	1240.3	4.6
30°-40°	2012.1	7.5
40°-50°	3393.2	12.6
50°-60°	5531.1	20.6
60°-70°	7418.1	27.6
70°-80°	5761.9	21.4
80°-90°	567.5	2.1
90°-100°	10.8	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°	26875.7	100.0
0°-180°	26888.0	100.0

**Coefficient of Utilization**

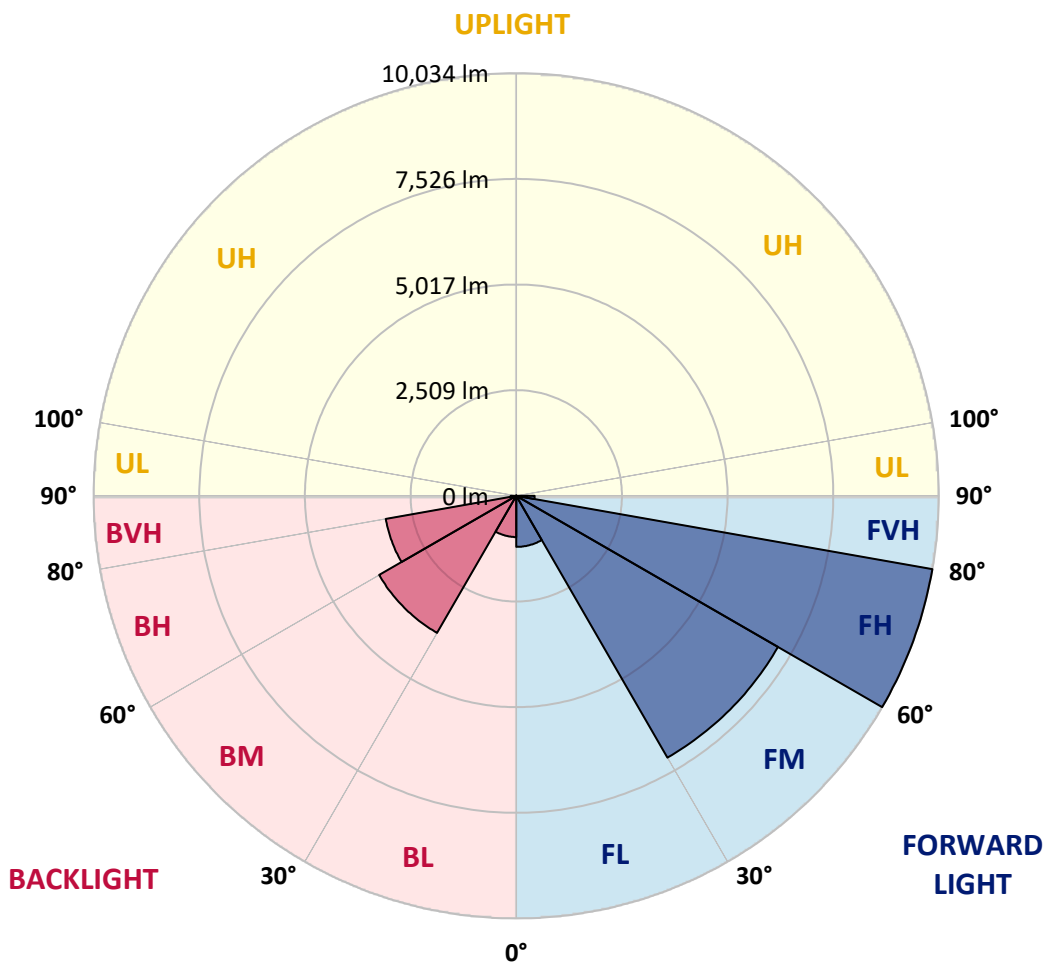


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1212.8	4.5			
FM	(30°-60°)	7177.4	26.7			
FH	(60°-80°)	10034.3	37.3			G4/12000
FVH	(80°-90°)	436.3	1.6			G3/500
BL	(0°-30°)	979.1	3.6	B2/1000		
BM	(30°-60°)	3759.0	14.0	B3/5000		
BH	(60°-80°)	3145.7	11.7	B4/5000		G4/5000
BVH	(80°-90°)	131.2	0.5			G2/225
UL	(90°-100°)	10.8	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°	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1
2.5°	2383.1	2376.4	2375.3	2388.6	2346.4	2367.5	2348.6	2364.2	2354.1	2361.9	2363.0
5°	2415.3	2403.1	2395.3	2410.9	2384.2	2394.2	2373.0	2379.7	2351.9	2367.5	2369.7
7.5°	2462.0	2442.0	2439.8	2444.2	2420.9	2428.7	2394.2	2402.0	2381.9	2373.0	2380.8
10°	2525.4	2506.5	2492.0	2502.0	2470.9	2475.4	2438.7	2439.8	2425.3	2408.6	2422.0
12.5°	2561.0	2563.2	2556.5	2564.3	2538.7	2524.3	2498.7	2489.8	2475.4	2455.3	2448.7
15°	2649.9	2645.5	2632.1	2644.4	2641.0	2627.7	2596.6	2576.5	2545.4	2534.3	2523.2
17.5°	2758.9	2744.5	2733.3	2748.9	2765.6	2737.8	2707.8	2680.0	2638.8	2616.6	2603.2
20°	2873.5	2863.4	2852.3	2876.8	2882.4	2861.2	2839.0	2797.8	2750.0	2721.1	2693.3
22.5°	3001.3	2981.3	2984.7	3016.9	3006.9	2996.9	2968.0	2934.6	2876.8	2840.1	2760.0
25°	3133.7	3122.6	3138.1	3152.6	3144.8	3123.7	3109.2	3084.7	3020.2	2975.8	2859.0
27.5°	3298.2	3280.5	3300.5	3306.0	3299.4	3293.8	3273.8	3254.9	3184.8	3134.8	2989.1
30°	3491.7	3470.6	3502.9	3495.1	3488.4	3492.9	3480.6	3439.5	3377.2	3309.4	3163.7
32.5°	3721.9	3694.1	3730.8	3714.1	3698.6	3729.7	3700.8	3661.9	3588.5	3509.5	3367.2
35°	3988.8	3989.9	4008.8	3981.0	3975.5	4008.8	3989.9	3942.1	3874.3	3792.0	3589.6
37.5°	4312.4	4303.5	4351.3	4338.0	4318.0	4362.5	4368.0	4308.0	4185.6	4104.5	3865.4
40°	4706.1	4703.8	4719.4	4721.6	4716.1	4737.2	4747.2	4667.1	4588.2	4465.9	3647.4
42.5°	5126.4	5135.3	5163.1	5143.1	5169.8	5197.6	5200.9	5134.2	5020.8	4284.6	3874.3
45°	5631.3	5659.1	5678.0	5673.5	5685.8	5725.8	5729.1	5693.5	5582.3	4641.6	4285.7
47.5°	6210.6	6237.3	6242.9	6278.5	6267.3	6324.1	6316.3	6317.4	6198.4	5138.6	4733.9
50°	6876.7	6889.0	6934.6	6954.6	6926.8	7003.5	6983.5	7007.9	6861.2	5708.0	5215.4
52.5°	7584.0	7605.1	7624.0	7699.6	7664.0	7730.8	7704.1	7760.8	7590.6	6287.4	5750.3
55°	8388.0	8391.3	8423.5	8500.3	8453.6	8533.6	8494.7	8515.8	8380.2	6927.9	6307.4
57.5°	9239.8	9228.6	9240.9	9302.0	9259.8	9319.8	9304.3	9324.3	9197.5	7601.8	6714.4
60°	10082.7	10066.0	10083.8	10124.9	10067.1	10170.5	10114.9	10133.8	9997.1	8290.1	7294.8
62.5°	10930.0	10917.8	10897.8	10938.9	10854.4	10907.8	10931.1	10900.0	10779.9	8912.8	7799.7
65°	11839.7	11827.4	11754.0	11779.6	11628.4	11602.8	11611.7	11621.7	11541.6	9530.0	8353.5
67.5°	12945.0	12927.2	12789.3	12615.9	12397.9	12350.1	12354.5	12381.2	12392.3	10324.0	9001.8
68°	13069.6	13037.3	12883.9	12682.6	12454.6	12399.0	12393.5	12399.0	12404.6	10330.7	8995.1
70°	12751.5	12739.3	12622.5	12379.0	12145.5	12012.0	11896.4	11891.9	11838.6	9802.5	8498.1
72.5°	11315.9	11300.3	11161.3	10989.0	10844.4	10635.4	10485.2	10494.1	10406.3	8663.7	7438.3
75°	9157.5	9156.4	8989.6	8845.0	8847.2	8831.7	8781.6	8869.5	8778.3	7348.2	6344.1
77.5°	6381.9	6404.1	6393.0	6308.5	6427.5	6592.1	6771.1	6940.1	6887.8	5804.7	5058.6
80°	3333.8	3396.1	3616.3	3626.3	3709.7	3869.8	3992.1	4105.6	4113.4	3293.8	2922.4
82.5°	886.3	905.2	979.7	958.6	951.9	984.1	1010.8	1014.2	1016.4	858.5	801.8
85°	275.8	283.6	274.7	262.4	243.5	222.4	216.8	176.8	140.1	115.7	101.2
87.5°	195.7	209.1	189.0	177.9	157.9	150.1	134.6	105.6	82.3	57.8	38.9
90°	101.2	103.4	92.3	79.0	73.4	68.9	58.9	42.3	21.1	11.1	10.0
92.5°	51.2	52.3	45.6	38.9	33.4	28.9	22.2	12.2	6.7	3.3	1.1
95°	20.0	21.1	18.9	16.7	13.3	10.0	8.9	6.7	4.4	2.2	1.1
97.5°	6.7	6.7	6.7	5.6	5.6	5.6	5.6	4.4	3.3	2.2	1.1
100°	0.0	0.0	0.0	1.1	2.2	3.3	3.3	3.3	2.2	1.1	1.1
102.5°	0.0	0.0	0.0	0.0	0.0	1.1	2.2	2.2	2.2	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°	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1	2344.1
2.5°	2357.5	2350.8	2354.1	2326.3	2333.0	2315.2	2353.0	2343.0	2338.6	2354.1
5°	2363.0	2338.6	2358.6	2339.7	2343.0	2317.4	2348.6	2336.4	2335.2	2344.1
7.5°	2365.3	2353.0	2371.9	2340.8	2350.8	2340.8	2364.2	2351.9	2363.0	2370.8
10°	2396.4	2389.7	2387.5	2376.4	2384.2	2361.9	2390.8	2390.8	2396.4	2417.5
12.5°	2442.0	2433.1	2427.5	2407.5	2415.3	2408.6	2432.0	2436.4	2446.4	2455.3
15°	2504.3	2488.7	2483.1	2465.3	2470.9	2469.8	2486.5	2487.6	2509.8	2508.7
17.5°	2584.3	2562.1	2568.8	2555.4	2556.5	2547.6	2538.7	2538.7	2558.8	2563.2
20°	2680.0	2553.2	2386.4	2293.0	2276.3	2288.5	2336.4	2415.3	2316.3	2344.1
22.5°	2507.6	2393.1	2385.3	2364.2	2350.8	2052.8	1976.1	1951.6	2079.5	2299.7
25°	2529.8	2480.9	2466.5	2439.8	2046.1	2042.8	2020.5	1983.8	1621.3	1613.5
27.5°	2647.7	2599.9	2576.5	2137.3	2128.4	2127.3	2093.9	1725.9	1642.5	1653.6
30°	2785.6	2730.0	2311.9	2245.2	2237.4	2219.6	2028.3	1704.7	1703.6	1704.7
32.5°	2944.6	2760.0	2378.6	2375.3	2379.7	2325.2	1797.0	1790.4	1789.2	1800.4
35°	3162.6	2561.0	2545.4	2562.1	2538.7	2010.5	1904.9	1901.6	1902.7	1897.1
37.5°	3018.0	2761.1	2757.8	2757.8	2703.3	2057.2	2036.1	2051.7	2049.5	2041.7
40°	3079.2	3003.6	2983.5	2976.9	2285.2	2219.6	2207.4	2227.4	2230.7	2236.3
42.5°	3376.1	3307.1	3297.1	3218.2	2486.5	2465.3	2427.5	2448.7	2446.4	2453.1
45°	3740.8	3694.1	3650.8	2790.1	2757.8	2731.1	2692.2	2716.7	2723.3	2718.9
47.5°	4165.6	4114.5	3800.9	3068.1	3066.9	3045.8	3002.5	3022.5	3019.1	3019.1
50°	4592.6	4537.0	3452.8	3421.7	3410.6	3377.2	3341.6	3345.0	3346.1	3357.2
52.5°	5069.7	4052.2	3822.0	3759.7	3768.6	3746.4	3711.9	2810.1	3695.2	3705.2
55°	4738.3	4241.2	4227.9	4145.6	4166.7	4137.8	4115.6	2772.3	3675.2	4061.1
57.5°	4684.9	4649.4	4638.2	4553.7	4580.4	4305.7	4511.5	3033.6	2542.1	1857.1
60°	5093.0	5055.2	5048.6	4974.1	4971.8	3421.7	4101.1	2080.6	1625.8	1636.9
62.5°	5488.9	5427.8	5444.4	5356.6	3776.4	2085.0	1838.2	46.7	74.5	79.0
65°	5930.4	5828.1	5844.8	5763.6	3895.4	2198.5	1987.2	24.5	21.1	20.0
67.5°	6355.2	6176.2	6090.5	6004.9	4045.5	2315.2	2070.6	6.7	0.0	0.0
68°	6334.1	6145.0	6057.2	5976.0	4030.0	2311.9	2066.1	6.7	0.0	0.0
70°	5977.1	5807.0	5723.6	5661.3	3847.6	2232.9	1982.7	6.7	0.0	0.0
72.5°	5225.4	5130.9	5077.5	5023.0	3418.3	1997.2	1778.1	6.7	0.0	0.0
75°	4440.3	4413.6	4380.2	4260.1	2849.0	1634.7	1461.2	6.7	0.0	0.0
77.5°	3518.4	3517.3	3436.1	3294.9	2145.1	1199.9	1077.5	5.6	0.0	0.0
80°	1902.7	2073.9	2011.6	1939.4	1216.5	652.8	621.6	4.4	0.0	0.0
82.5°	534.9	506.0	486.0	454.8	255.8	142.3	139.0	4.4	0.0	0.0
85°	74.5	82.3	91.2	103.4	58.9	37.8	33.4	2.2	0.0	0.0
87.5°	42.3	47.8	58.9	61.2	22.2	17.8	5.6	0.0	0.0	0.0
90°	8.9	10.0	11.1	11.1	4.4	4.4	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)