

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: P522189

Luminaire Tested: **CTN-CA6-230-740-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522189
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-CA6-230-740-U-T5R-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26544 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

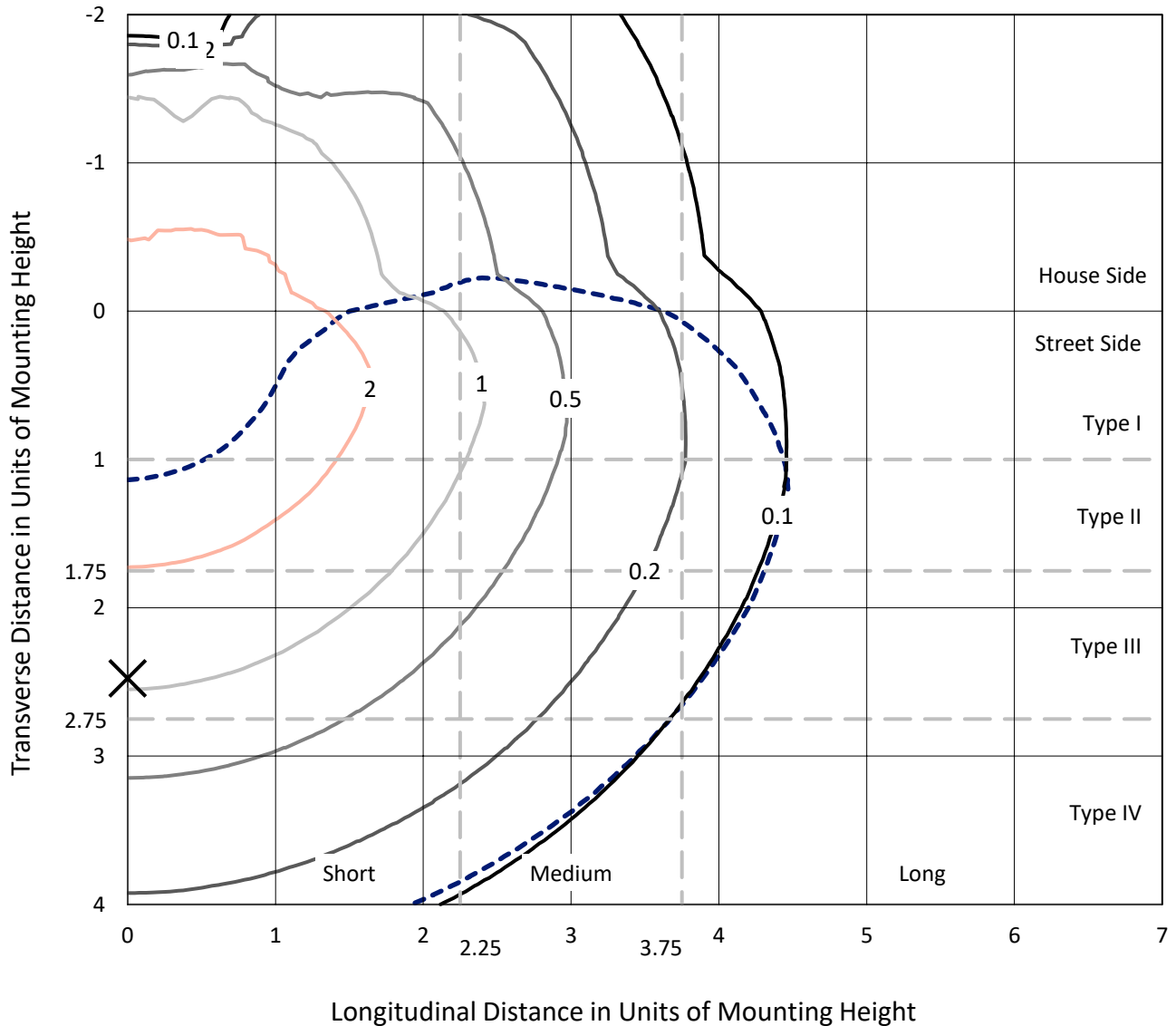
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

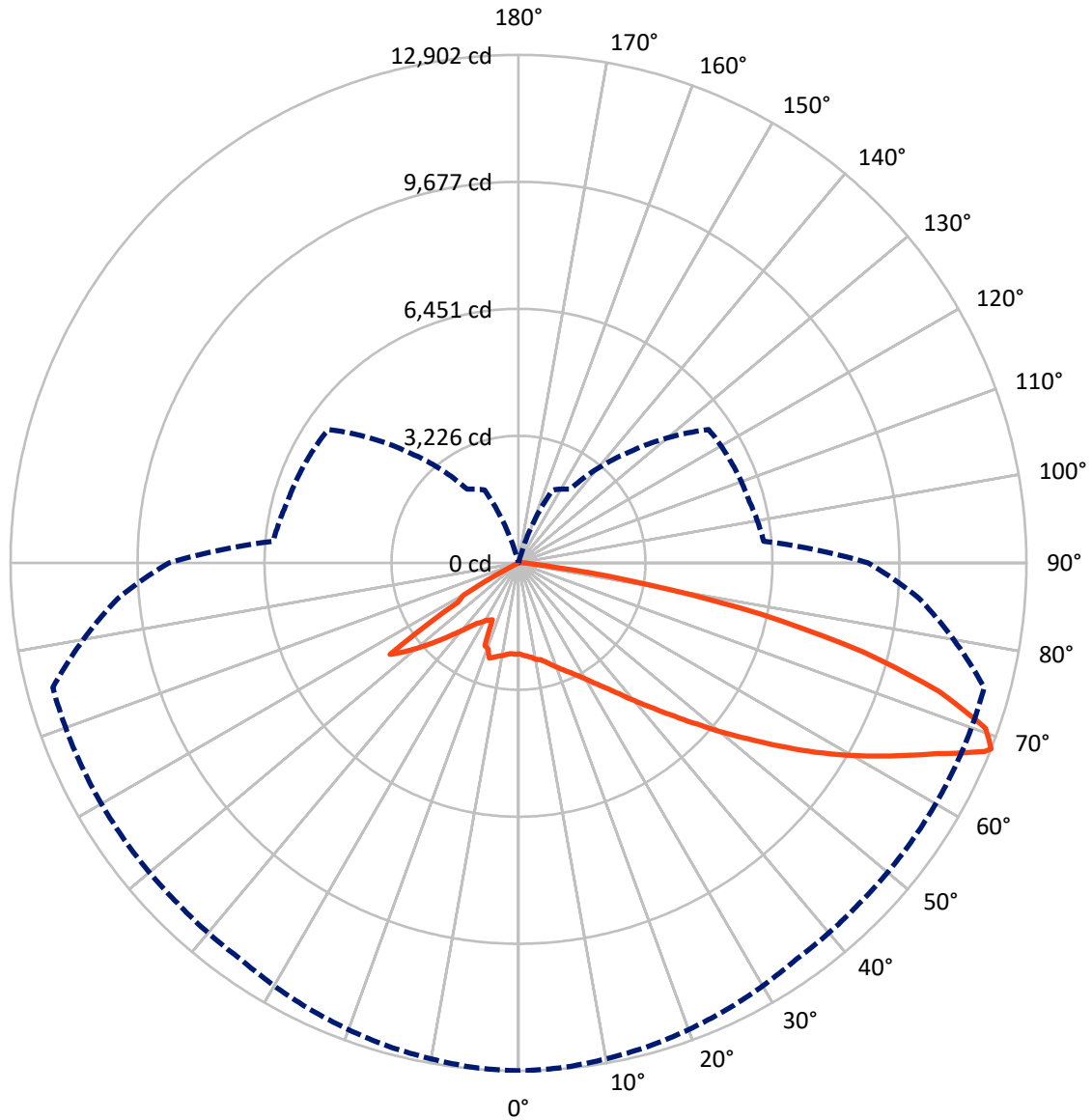
× Max cd
 - - - 1/2 Max cd



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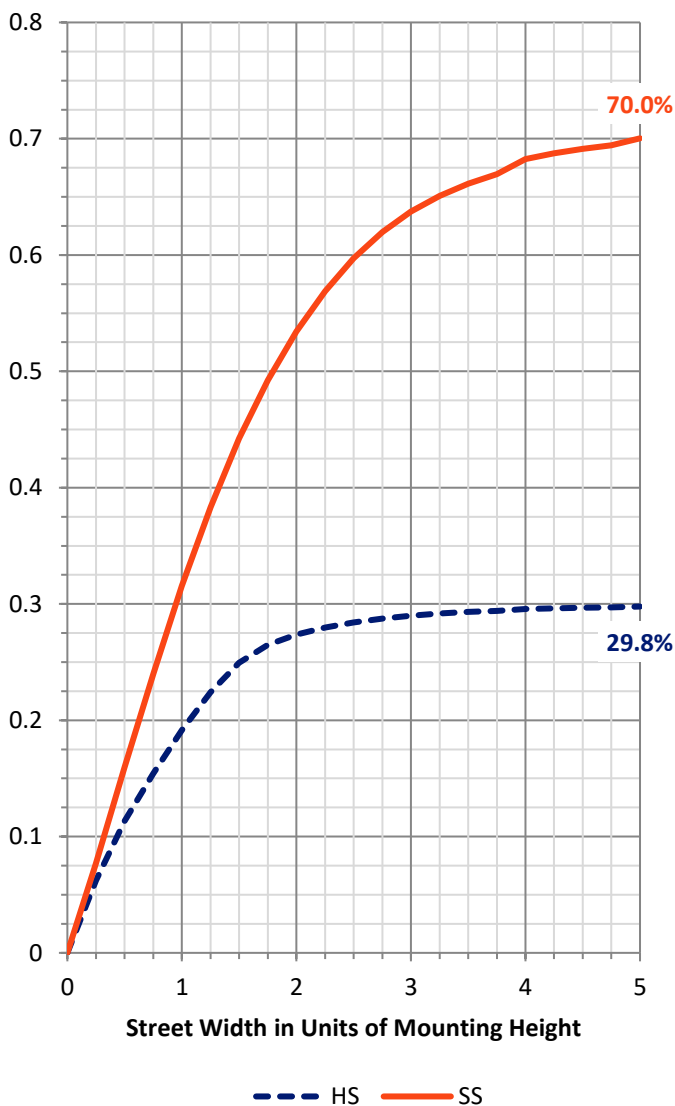
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7912.5	1.2	7913.7
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	18619.4	10.9	18630.3
	% Fixture	70.1	0.0	70.2
Total	Lumens	26531.9	12.1	26544.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.6	0.8
10°-20°	714.8	2.7
20°-30°	1224.4	4.6
30°-40°	1986.3	7.5
40°-50°	3349.8	12.6
50°-60°	5460.3	20.6
60°-70°	7323.2	27.6
70°-80°	5688.2	21.4
80°-90°	560.2	2.1
90°-100°	10.6	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°	26531.9	100.0
0°-180°	26544.0	100.0

Coefficient of Utilization

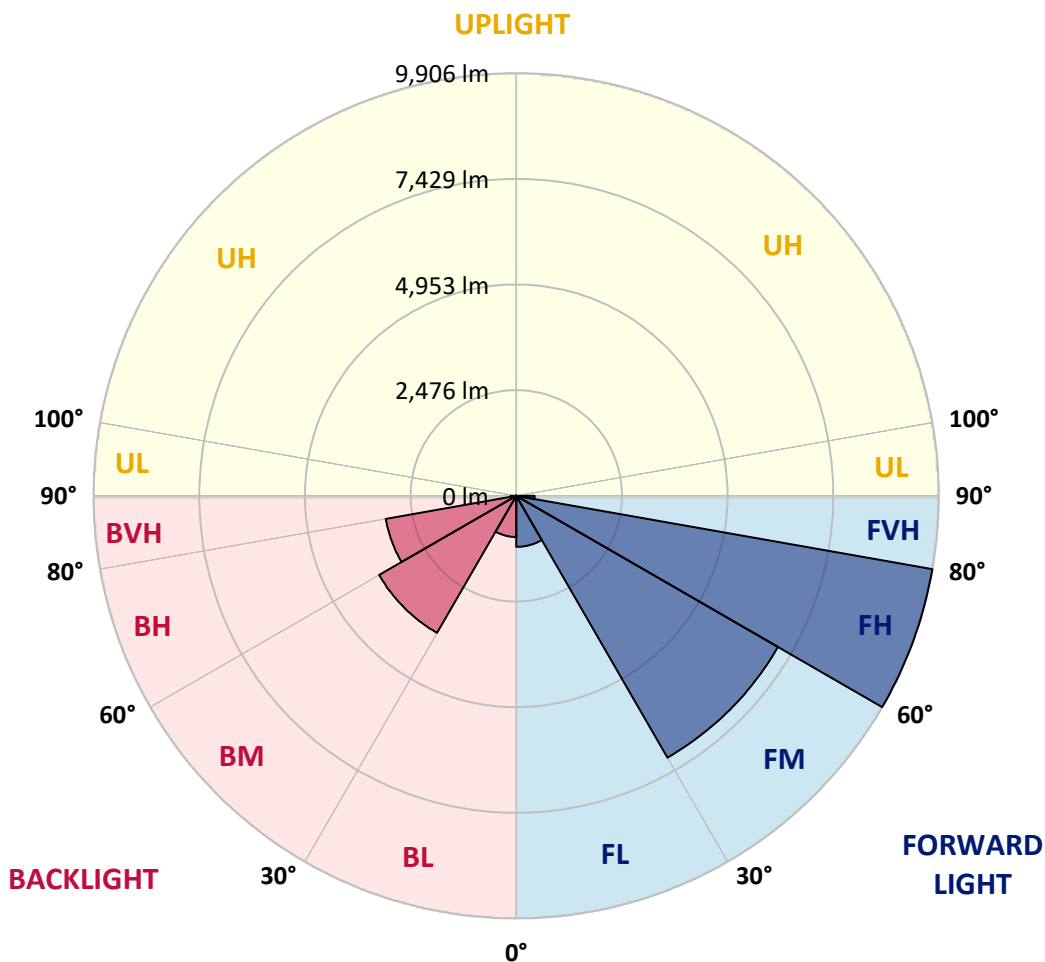


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1197.3	4.5			
FM	(30°-60°)	7085.5	26.7			
FH	(60°-80°)	9905.9	37.3			G4/12000
FVH	(80°-90°)	430.7	1.6			G3/500
BL	(0°-30°)	966.6	3.6	B2/1000		
BM	(30°-60°)	3710.9	14.0	B3/5000		
BH	(60°-80°)	3105.5	11.7	B4/5000		G4/5000
BVH	(80°-90°)	129.5	0.5			G2/225
UL	(90°-100°)	10.6	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°	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1
2.5°	2352.6	2346.0	2344.9	2358.1	2316.3	2337.2	2318.5	2333.9	2324.0	2331.7	2332.8
5°	2384.4	2372.3	2364.6	2380.0	2353.7	2363.5	2342.7	2349.3	2321.8	2337.2	2339.4
7.5°	2430.5	2410.8	2408.6	2412.9	2389.9	2397.6	2363.5	2371.2	2351.5	2342.7	2350.4
10°	2493.1	2474.4	2460.2	2470.0	2439.3	2443.7	2407.5	2408.6	2394.3	2377.8	2391.0
12.5°	2528.2	2530.4	2523.8	2531.5	2506.3	2492.0	2466.7	2458.0	2443.7	2423.9	2417.3
15°	2616.0	2611.6	2598.5	2610.6	2607.3	2594.1	2563.3	2543.6	2512.8	2501.9	2490.9
17.5°	2723.6	2709.4	2698.4	2713.7	2730.2	2702.8	2673.1	2645.7	2605.1	2583.1	2569.9
20°	2836.7	2826.8	2815.8	2840.0	2845.5	2824.6	2802.7	2762.0	2714.8	2686.3	2658.9
22.5°	2962.9	2943.2	2946.5	2978.3	2968.4	2958.6	2930.0	2897.1	2840.0	2803.8	2724.7
25°	3093.6	3082.6	3098.0	3112.2	3104.6	3083.7	3069.4	3045.3	2981.6	2937.7	2822.4
27.5°	3256.1	3238.5	3258.2	3263.7	3257.1	3251.7	3231.9	3213.2	3144.1	3094.7	2950.9
30°	3447.1	3426.2	3458.0	3450.4	3443.8	3448.2	3436.1	3395.5	3334.0	3267.0	3123.2
32.5°	3674.3	3646.9	3683.1	3666.6	3651.3	3682.0	3653.5	3615.0	3542.6	3464.6	3324.1
35°	3937.8	3938.9	3957.5	3930.1	3924.6	3957.5	3938.9	3891.7	3824.7	3743.5	3543.7
37.5°	4257.2	4248.5	4295.7	4282.5	4262.7	4306.6	4312.1	4252.8	4132.1	4052.0	3815.9
40°	4645.9	4643.7	4659.0	4661.2	4655.7	4676.6	4686.5	4607.4	4529.5	4408.7	3600.8
42.5°	5060.8	5069.6	5097.0	5077.3	5103.6	5131.1	5134.4	5068.5	4956.5	4229.8	3824.7
45°	5559.2	5586.7	5605.3	5600.9	5613.0	5652.5	5655.8	5620.7	5510.9	4582.2	4230.9
47.5°	6131.2	6157.5	6163.0	6198.1	6187.2	6243.1	6235.5	6236.6	6119.1	5072.9	4673.3
50°	6788.7	6800.8	6845.8	6865.6	6838.1	6913.9	6894.1	6918.3	6773.4	5635.0	5148.6
52.5°	7486.9	7507.8	7526.5	7601.1	7566.0	7631.9	7605.5	7661.5	7493.5	6206.9	5676.7
55°	8280.6	8283.9	8315.8	8391.5	8345.4	8424.5	8386.0	8406.9	8273.0	6839.2	6226.7
57.5°	9121.6	9110.6	9122.7	9183.0	9141.3	9200.6	9185.2	9205.0	9079.8	7504.5	6628.5
60°	9953.7	9937.2	9954.8	9995.4	9938.3	10040.4	9985.5	10004.2	9869.2	8184.0	7201.5
62.5°	10790.2	10778.1	10758.4	10799.0	10715.6	10768.2	10791.3	10760.6	10642.0	8798.8	7699.9
65°	11688.2	11676.1	11603.7	11628.9	11479.6	11454.4	11463.1	11473.0	11394.0	9408.1	8246.6
67.5°	12779.4	12761.8	12625.7	12454.5	12239.3	12192.1	12196.5	12222.8	12233.8	10191.9	8886.6
68°	12902.4	12870.5	12719.0	12520.3	12295.3	12240.4	12234.9	12240.4	12245.9	10198.5	8880.0
70°	12588.4	12576.3	12461.0	12220.6	11990.1	11858.4	11744.2	11739.8	11687.1	9677.0	8389.3
72.5°	11171.1	11155.8	11018.5	10848.4	10705.7	10499.3	10351.1	10359.9	10273.1	8552.9	7343.1
75°	9040.3	9039.2	8874.6	8731.8	8734.0	8718.7	8669.3	8756.0	8666.0	7254.2	6262.9
77.5°	6300.2	6322.2	6311.2	6227.8	6345.2	6507.7	6684.5	6851.3	6799.7	5730.5	4993.9
80°	3291.2	3352.7	3570.0	3579.9	3662.2	3820.3	3941.1	4053.0	4060.7	3251.7	2885.0
82.5°	874.9	893.6	967.2	946.3	939.7	971.5	997.9	1001.2	1003.4	847.5	791.5
85°	272.3	279.9	271.2	259.1	240.4	219.6	214.1	174.5	138.3	114.2	99.9
87.5°	193.2	206.4	186.6	175.6	155.9	148.2	132.8	104.3	81.2	57.1	38.4
90°	99.9	102.1	91.1	77.9	72.5	68.1	58.2	41.7	20.9	11.0	9.9
92.5°	50.5	51.6	45.0	38.4	32.9	28.5	22.0	12.1	6.6	3.3	1.1
95°	19.8	20.9	18.7	16.5	13.2	9.9	8.8	6.6	4.4	2.2	1.1
97.5°	6.6	6.6	6.6	5.5	5.5	5.5	5.5	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°	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1	2314.1
2.5°	2327.3	2320.7	2324.0	2296.6	2303.2	2285.6	2322.9	2313.0	2308.7	2324.0
5°	2332.8	2308.7	2328.4	2309.8	2313.0	2287.8	2318.5	2306.5	2305.4	2314.1
7.5°	2335.0	2322.9	2341.6	2310.9	2320.7	2310.9	2333.9	2321.8	2332.8	2340.5
10°	2365.7	2359.2	2357.0	2346.0	2353.7	2331.7	2360.3	2360.3	2365.7	2386.6
12.5°	2410.8	2402.0	2396.5	2376.7	2384.4	2377.8	2400.9	2405.3	2415.1	2423.9
15°	2472.2	2456.9	2451.4	2433.8	2439.3	2438.2	2454.7	2455.8	2477.7	2476.6
17.5°	2551.3	2529.3	2535.9	2522.7	2523.8	2515.0	2506.3	2506.3	2526.0	2530.4
20°	2645.7	2520.5	2355.9	2263.6	2247.2	2259.3	2306.5	2384.4	2286.7	2314.1
22.5°	2475.5	2362.4	2354.8	2333.9	2320.7	2026.5	1950.8	1926.6	2052.9	2270.2
25°	2497.5	2449.2	2434.9	2408.6	2019.9	2016.6	1994.7	1958.5	1600.6	1592.9
27.5°	2613.8	2566.6	2543.6	2110.0	2101.2	2100.1	2067.1	1703.8	1621.4	1632.4
30°	2750.0	2695.1	2282.3	2216.4	2208.8	2191.2	2002.4	1682.9	1681.8	1682.9
32.5°	2907.0	2724.7	2348.2	2344.9	2349.3	2295.5	1774.0	1767.4	1766.3	1777.3
35°	3122.1	2528.2	2512.8	2529.3	2506.3	1984.8	1880.5	1877.2	1878.3	1872.8
37.5°	2979.4	2725.8	2722.5	2722.5	2668.7	2030.9	2010.1	2025.4	2023.2	2015.5
40°	3039.8	2965.1	2945.4	2938.8	2256.0	2191.2	2179.1	2198.9	2202.2	2207.7
42.5°	3332.9	3264.8	3255.0	3177.0	2454.7	2433.8	2396.5	2417.3	2415.1	2421.7
45°	3693.0	3646.9	3604.1	2754.4	2722.5	2696.2	2657.8	2681.9	2688.5	2684.1
47.5°	4112.3	4061.8	3752.3	3028.8	3027.7	3006.9	2964.0	2983.8	2980.5	2980.5
50°	4533.9	4479.0	3408.6	3377.9	3366.9	3334.0	3298.9	3302.2	3303.3	3314.2
52.5°	5004.8	4000.4	3773.1	3711.6	3720.4	3698.5	3664.4	2774.1	3648.0	3657.8
55°	4677.7	4187.0	4173.8	4092.6	4113.4	4084.9	4062.9	2736.8	3628.2	4009.1
57.5°	4625.0	4589.9	4578.9	4495.5	4521.8	4250.7	4453.7	2994.8	2509.6	1833.3
60°	5027.9	4990.6	4984.0	4910.4	4908.2	3377.9	4048.7	2054.0	1605.0	1616.0
62.5°	5418.7	5358.3	5374.8	5288.1	3728.1	2058.4	1814.7	46.1	73.6	77.9
65°	5854.5	5753.5	5770.0	5689.9	3845.6	2170.3	1961.8	24.2	20.9	19.8
67.5°	6273.9	6097.1	6012.6	5928.1	3993.8	2285.6	2044.1	6.6	0.0	0.0
68°	6253.0	6066.4	5979.7	5899.5	3978.4	2282.3	2039.7	6.6	0.0	0.0
70°	5900.6	5732.7	5650.3	5588.9	3798.4	2204.4	1957.4	6.6	0.0	0.0
72.5°	5158.5	5065.2	5012.5	4958.7	3374.6	1971.6	1755.4	6.6	0.0	0.0
75°	4383.5	4357.1	4324.2	4205.6	2812.5	1613.8	1442.5	6.6	0.0	0.0
77.5°	3473.4	3472.3	3392.2	3252.8	2117.6	1184.5	1063.8	5.5	0.0	0.0
80°	1878.3	2047.4	1985.9	1914.5	1201.0	644.4	613.7	4.4	0.0	0.0
82.5°	528.0	499.5	479.7	449.0	252.5	140.5	137.2	4.4	0.0	0.0
85°	73.6	81.2	90.0	102.1	58.2	37.3	32.9	2.2	0.0	0.0
87.5°	41.7	47.2	58.2	60.4	22.0	17.6	5.5	0.0	0.0	0.0
90°	8.8	9.9	11.0	11.0	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)