

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: P579501

Luminaire Tested: **CTN-CA6-230-740-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579501
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-740-U-T5N-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (6) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28408 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G4

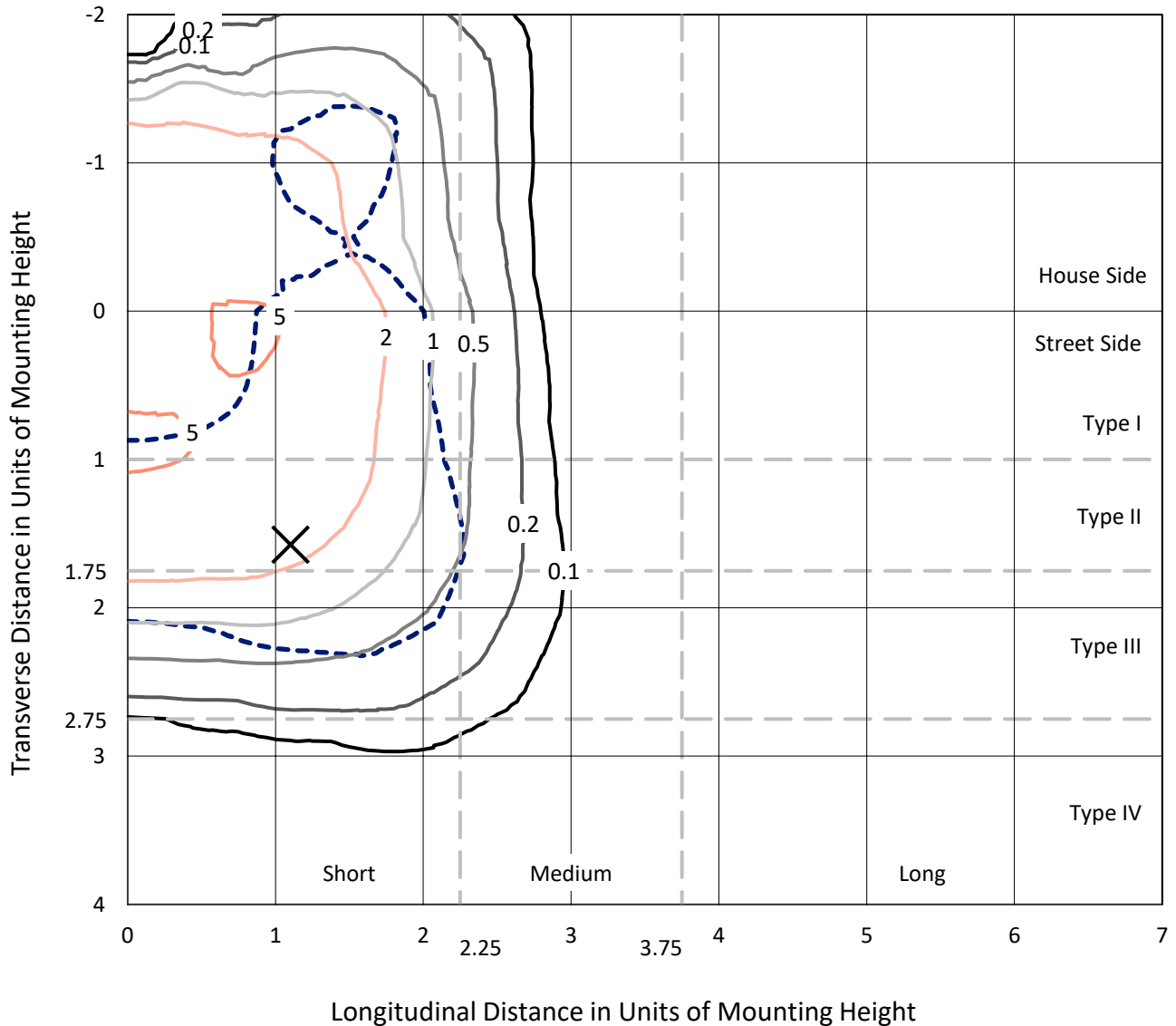
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

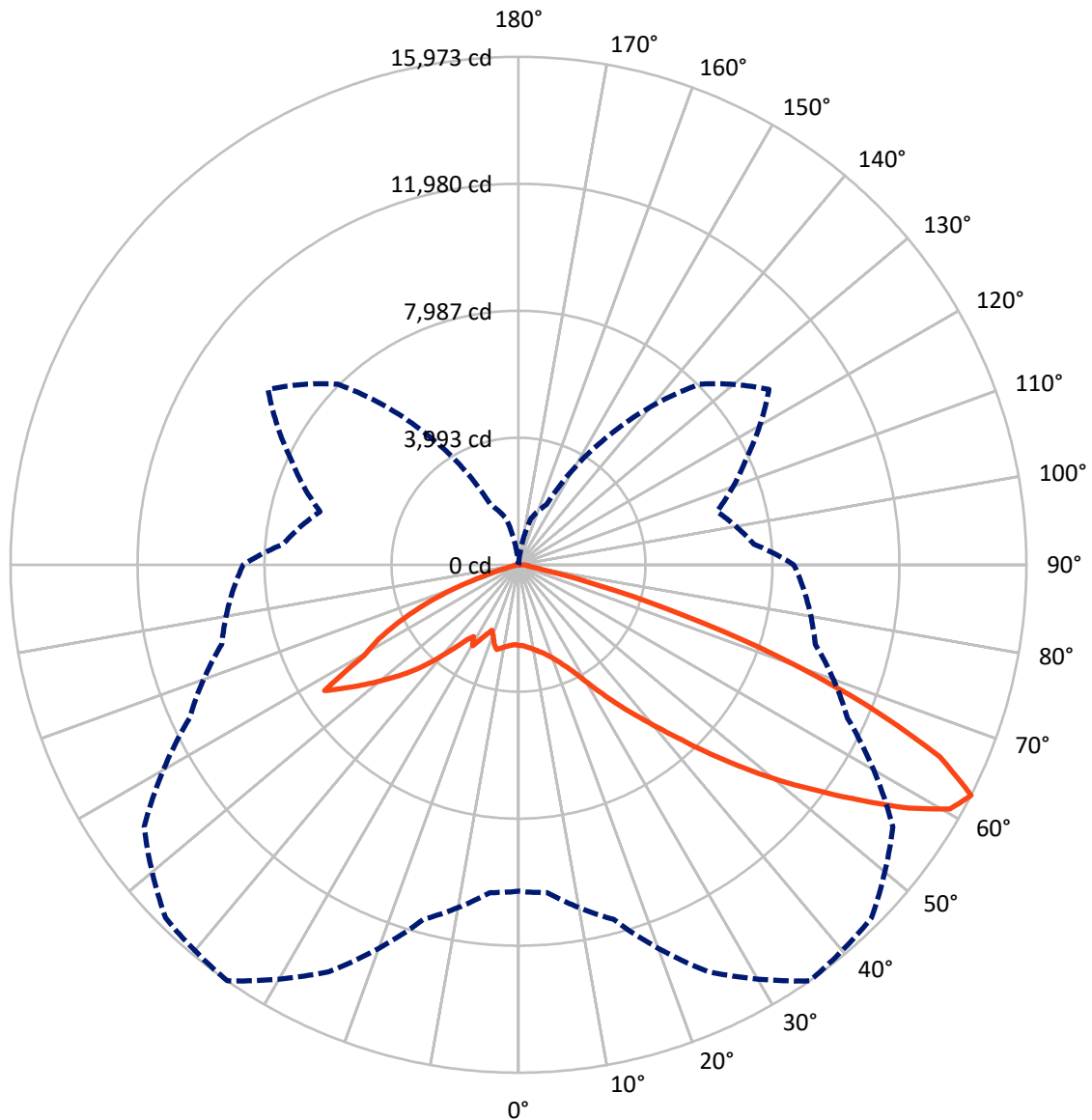
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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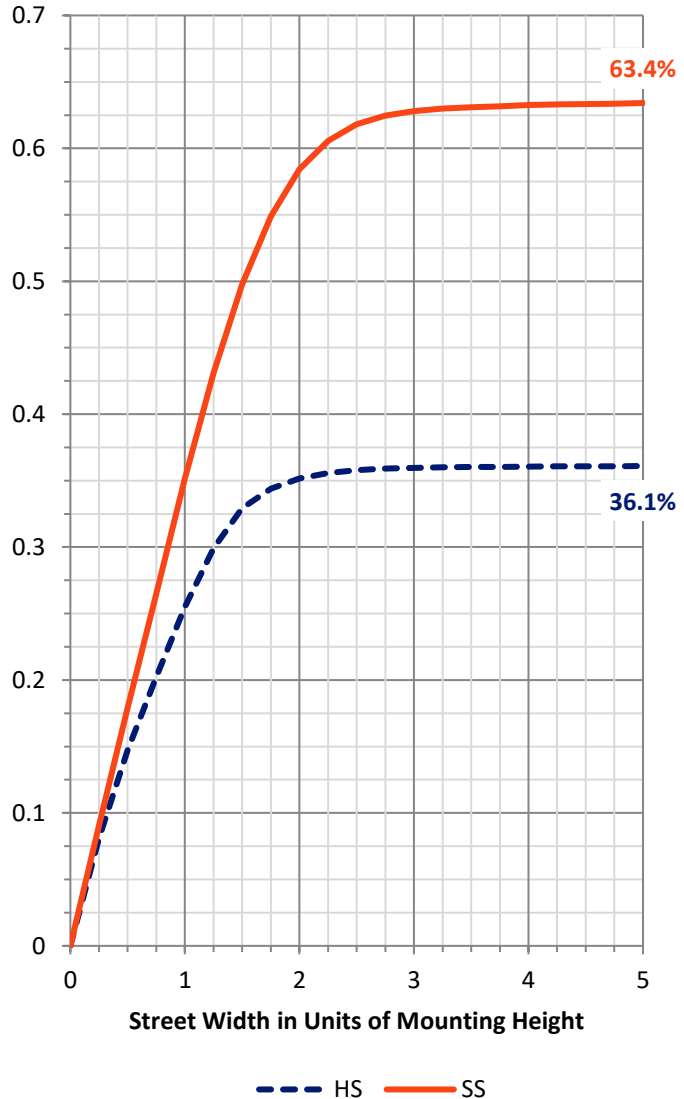
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10311.4	0.0	10311.4
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	18083.1	13.5	18096.6
	% Fixture	63.7	0.0	63.7
Total	Lumens	28394.5	13.5	28408.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.9	0.9
10°-20°	807.7	2.8
20°-30°	1553.8	5.5
30°-40°	3099.7	10.9
40°-50°	5659.9	19.9
50°-60°	8457.8	29.8
60°-70°	7086.9	24.9
70°-80°	1326.2	4.7
80°-90°	152.7	0.5
90°-100°	12.1	0.0
100°-110°	1.3	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°	28394.5	100.0
0°-180°	28408.0	100.0

Coefficient of Utilization

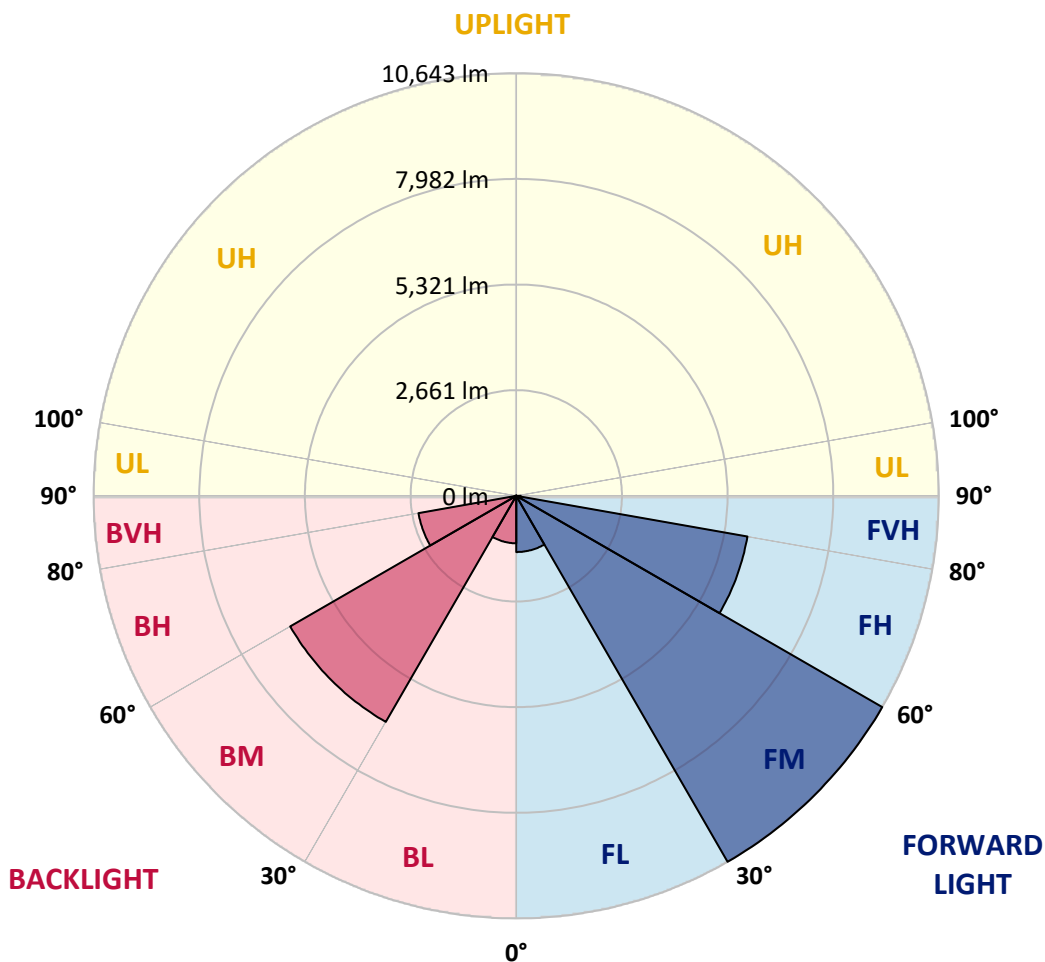


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1416.5	5.0			
FM (30°-60°)	10642.9	37.5			
FH (60°-80°)	5912.5	20.8			G3/7500
FVH (80°-90°)	111.2	0.4			G2/225
BL (0°-30°)	1194.9	4.2	B3/2500		
BM (30°-60°)	6574.5	23.1	B4/8500		
BH (60°-80°)	2500.6	8.8	B4/5000		G4/5000
BVH (80°-90°)	41.5	0.1			G1/100
UL (90°-100°)	12.1	0.0		U2/50	
UH (100°-180°)	1.3	0.0		U1/10	

BUG Rating: B4-U2-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8
2.5°	2596.2	2574.9	2578.1	2593.0	2546.1	2565.3	2545.0	2564.2	2557.8	2566.3	2572.7
5°	2633.4	2606.8	2608.9	2626.0	2589.8	2605.7	2585.5	2598.3	2587.6	2599.4	2600.4
7.5°	2684.5	2662.2	2659.0	2676.0	2645.1	2659.0	2638.8	2645.1	2634.5	2648.3	2644.1
10°	2752.7	2732.5	2727.1	2738.9	2714.4	2721.8	2700.5	2709.0	2693.1	2709.0	2701.6
12.5°	2828.3	2801.7	2802.7	2815.5	2791.0	2796.4	2779.3	2788.9	2769.7	2786.8	2781.4
15°	2917.7	2879.4	2886.9	2900.7	2877.3	2893.3	2873.0	2886.9	2868.8	2886.9	2880.5
17.5°	3033.8	2990.2	2995.5	3017.8	2998.7	3024.2	3000.8	3017.8	3009.3	3021.0	3018.9
20°	3180.8	3152.0	3146.7	3174.4	3146.7	3178.6	3165.9	3195.7	3197.8	3209.5	3214.8
22.5°	3376.7	3357.5	3344.8	3363.9	3339.4	3361.8	3379.9	3431.0	3450.2	3481.1	3483.2
25°	3637.6	3636.5	3607.8	3608.9	3578.0	3607.8	3658.9	3738.8	3789.9	3829.3	3814.4
27.5°	3990.1	3996.5	3952.8	3935.8	3899.6	3944.3	4049.7	4148.7	4241.4	4296.8	4296.8
30°	4450.1	4456.5	4392.6	4358.5	4325.5	4403.2	4528.9	4657.7	4789.8	4869.7	4851.6
32.5°	5059.2	5039.0	4947.4	4885.6	4829.2	4918.6	5063.5	5209.4	5389.3	5504.3	5490.5
35°	5798.2	5724.8	5633.2	5518.2	5396.8	5467.1	5603.4	5786.5	6036.8	6209.3	6165.6
37.5°	6656.5	6584.1	6427.6	6229.5	6017.6	6026.1	6133.7	6451.0	6764.1	6904.6	6874.8
40°	7547.8	7491.4	7347.6	7093.1	6709.8	6621.4	6798.1	7180.4	7479.7	7656.4	7606.4
42.5°	8456.1	8398.6	8290.0	8034.5	7526.5	7313.5	7497.8	7914.1	8233.6	8407.2	8349.7
45°	9362.4	9296.3	9210.1	8984.3	8499.8	8187.8	8291.1	8673.4	8965.2	9162.2	9044.0
47.5°	10158.9	10115.2	10056.6	9965.1	9541.3	9196.2	9188.8	9441.2	9642.4	9772.3	9627.5
50°	10852.1	10821.2	10854.2	10835.1	10680.7	10366.5	10173.8	10156.7	10221.7	10316.5	10109.9
52.5°	11474.0	11419.7	11542.1	11694.4	11808.4	11744.5	11120.5	10770.1	10698.8	10730.7	10496.4
55°	11983.0	11957.4	12163.0	12545.3	13072.4	13212.9	12092.7	11366.4	11103.4	11086.4	10820.2
57.5°	12293.9	12330.2	12741.2	13469.6	14436.5	14481.2	13286.4	12004.3	11497.4	11314.3	11007.6
60°	11798.8	11938.3	12640.0	14142.6	15594.0	15621.7	14162.8	12121.4	11005.4	10595.5	10215.3
62.5°	10267.5	10350.6	11544.3	14120.2	15973.1	15702.6	14371.5	11414.4	9662.6	9008.8	8657.4
65°	7232.6	7388.1	8667.0	12703.9	14555.7	14589.8	13184.2	9869.2	7716.1	6993.0	6766.2
67.5°	4368.1	4517.2	5879.2	9170.7	11832.9	12215.1	10998.0	7472.2	5533.1	4619.4	4390.5
70°	1418.4	1580.3	2679.2	5405.3	8704.3	9621.1	8276.2	4863.3	2897.5	2029.6	1783.7
72.5°	538.8	587.8	872.1	2360.8	5421.3	6423.3	5118.8	2439.6	897.7	534.6	469.6
75°	350.3	357.8	407.8	827.4	2614.3	3536.4	2467.3	714.5	359.9	319.5	296.0
77.5°	301.4	306.7	328.0	412.1	832.7	1352.4	708.1	365.3	300.3	266.2	250.2
80°	284.3	286.5	300.3	349.3	389.7	451.5	340.8	305.6	262.0	250.2	238.5
82.5°	269.4	276.9	284.3	317.3	316.3	324.8	273.7	239.6	222.6	234.3	230.0
85°	251.3	255.6	260.9	283.3	257.7	218.3	210.8	165.1	160.8	171.4	160.8
87.5°	176.8	187.4	181.0	190.6	178.9	139.5	118.2	93.7	74.5	61.8	59.6
90°	72.4	73.5	69.2	63.9	56.4	46.9	37.3	23.4	10.6	5.3	2.1
92.5°	56.4	56.4	54.3	49.0	42.6	35.1	26.6	14.9	7.5	3.2	1.1
95°	35.1	36.2	34.1	30.9	26.6	21.3	16.0	8.5	5.3	2.1	1.1
97.5°	22.4	22.4	20.2	18.1	14.9	10.6	7.5	6.4	4.3	2.1	0.0
100°	12.8	12.8	11.7	9.6	7.5	5.3	5.3	4.3	3.2	1.1	0.0
102.5°	7.5	7.5	5.3	4.3	3.2	3.2	3.2	3.2	2.1	1.1	0.0
105°	3.2	3.2	2.1	2.1	1.1	1.1	2.1	2.1	2.1	1.1	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.1	2.1	1.1	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.1	1.1	1.1



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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°	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8	2541.8
2.5°	2568.5	2549.3	2552.5	2534.4	2531.2	2513.1	2549.3	2553.6	2542.9	2552.5
5°	2598.3	2574.9	2582.3	2562.1	2558.9	2534.4	2566.3	2564.2	2555.7	2565.3
7.5°	2643.0	2618.5	2622.8	2600.4	2596.2	2569.5	2599.4	2589.8	2581.2	2593.0
10°	2705.8	2678.2	2680.3	2651.5	2654.7	2619.6	2655.8	2638.8	2628.1	2644.1
12.5°	2781.4	2750.6	2751.6	2721.8	2720.7	2686.7	2718.6	2709.0	2693.1	2717.6
15°	2879.4	2844.3	2841.1	2801.7	2791.0	2752.7	2782.5	2764.4	2753.8	2788.9
17.5°	3016.8	2977.4	2965.7	2917.7	2718.6	2603.6	2763.3	2817.7	2751.6	2741.0
20°	3199.9	3166.9	3140.3	3067.9	2733.5	2374.7	2109.5	2111.6	2390.6	2519.5
22.5°	3448.1	3408.7	3358.6	3255.3	2507.8	2224.5	2225.6	2222.4	1907.2	1774.1
25°	3787.7	3739.8	3637.6	3054.1	2662.2	2400.2	2393.8	2081.8	1908.3	1917.8
27.5°	4246.7	4148.7	3550.3	3308.6	2936.9	2628.1	2474.8	2095.7	2117.0	2131.9
30°	4830.3	4436.3	3836.7	3693.0	3267.0	2930.5	2288.4	2340.6	2383.2	2392.8
32.5°	5428.7	4449.0	4294.6	4142.4	3673.8	2666.4	2579.1	2678.2	2722.9	2728.2
35°	5423.4	4994.2	4795.1	4623.7	4050.8	2852.8	2908.2	3060.4	3174.4	3169.1
37.5°	5739.7	5595.9	5358.4	5141.2	3646.1	3213.8	3312.8	3485.3	3623.8	3619.5
40°	6400.9	6234.8	5983.5	5527.7	4036.9	3627.0	3765.4	3950.7	4048.6	4054.0
42.5°	7026.0	6888.7	6632.0	5164.6	4525.7	4124.2	4249.9	4374.5	4435.2	4454.4
45°	7647.9	7549.9	6695.9	5707.7	5116.7	4624.7	4707.8	4731.2	4795.1	4787.7
47.5°	8152.7	8044.0	6438.2	6389.2	5833.4	5099.7	5093.3	5062.4	5085.8	5091.2
50°	8613.7	7305.0	6955.7	7118.7	6585.2	5584.2	5462.8	5400.0	5368.0	5354.2
52.5°	8977.9	7307.2	7439.2	7872.6	7433.9	6110.2	5849.3	5672.6	4966.6	5519.2
55°	9287.8	7608.5	7897.1	8678.7	8165.4	6660.8	6198.6	5883.4	3314.9	2657.9
57.5°	9465.6	7837.5	8350.7	9433.7	8804.4	7273.1	5706.6	4934.6	1874.2	1872.0
60°	8778.8	7426.4	8337.9	9829.8	8620.1	5641.7	2323.6	1944.5	354.6	364.2
62.5°	7431.7	6460.6	7907.7	9612.6	8028.1	4963.4	2084.0	1497.2	11.7	9.6
65°	5757.8	5154.0	6658.6	8455.1	7304.0	4141.3	1553.6	1078.7	3.2	0.0
67.5°	3766.5	3632.3	4913.3	7011.1	5956.9	3208.5	1042.5	516.5	2.1	0.0
70°	1605.8	1860.3	3112.6	5083.7	4559.8	2207.5	502.6	186.4	1.1	0.0
72.5°	449.4	595.3	1385.4	2978.4	2867.7	1160.7	195.9	78.8	1.1	0.0
75°	266.2	228.9	397.2	1188.4	1396.0	407.8	90.5	60.7	1.1	0.0
77.5°	221.5	178.9	227.9	303.5	422.8	147.0	76.7	54.3	0.0	0.0
80°	207.6	158.7	197.0	211.9	208.7	122.5	75.6	54.3	0.0	0.0
82.5°	197.0	138.4	162.9	162.9	174.6	112.9	71.3	53.2	0.0	0.0
85°	148.0	96.9	108.6	140.6	125.7	79.9	52.2	42.6	0.0	0.0
87.5°	56.4	35.1	42.6	44.7	36.2	18.1	4.3	4.3	0.0	0.0
90°	1.1	0.0	0.0	0.0	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
110°	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°
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)