

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: P579415

Luminaire Tested: **CTN-CA8-330-722-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579415
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-330-722-U-T5N-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 2200K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31336 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G3

Input Watts (W): 331.5
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

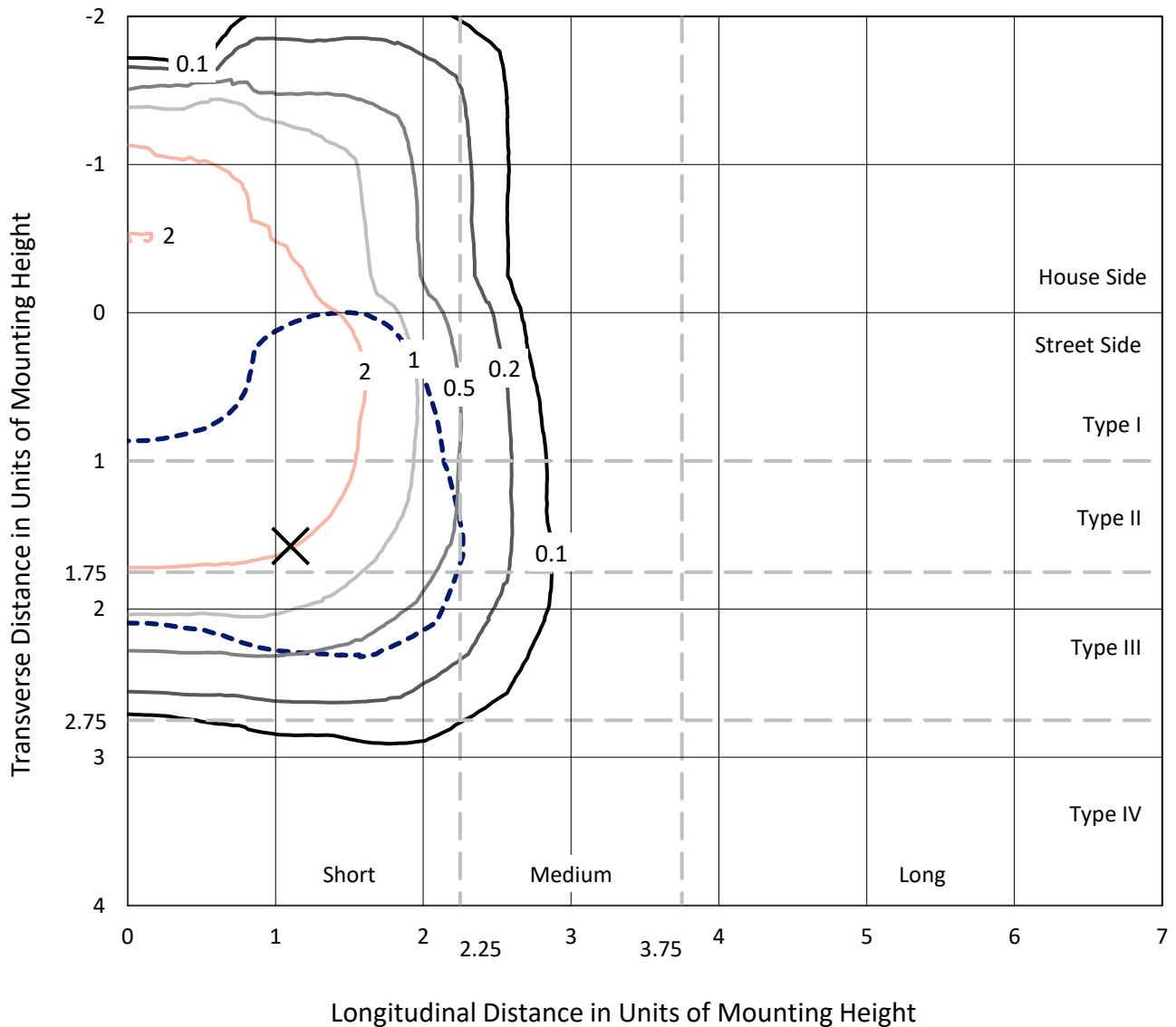




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Iso-Footcandle Lines of Horizontal Illumination

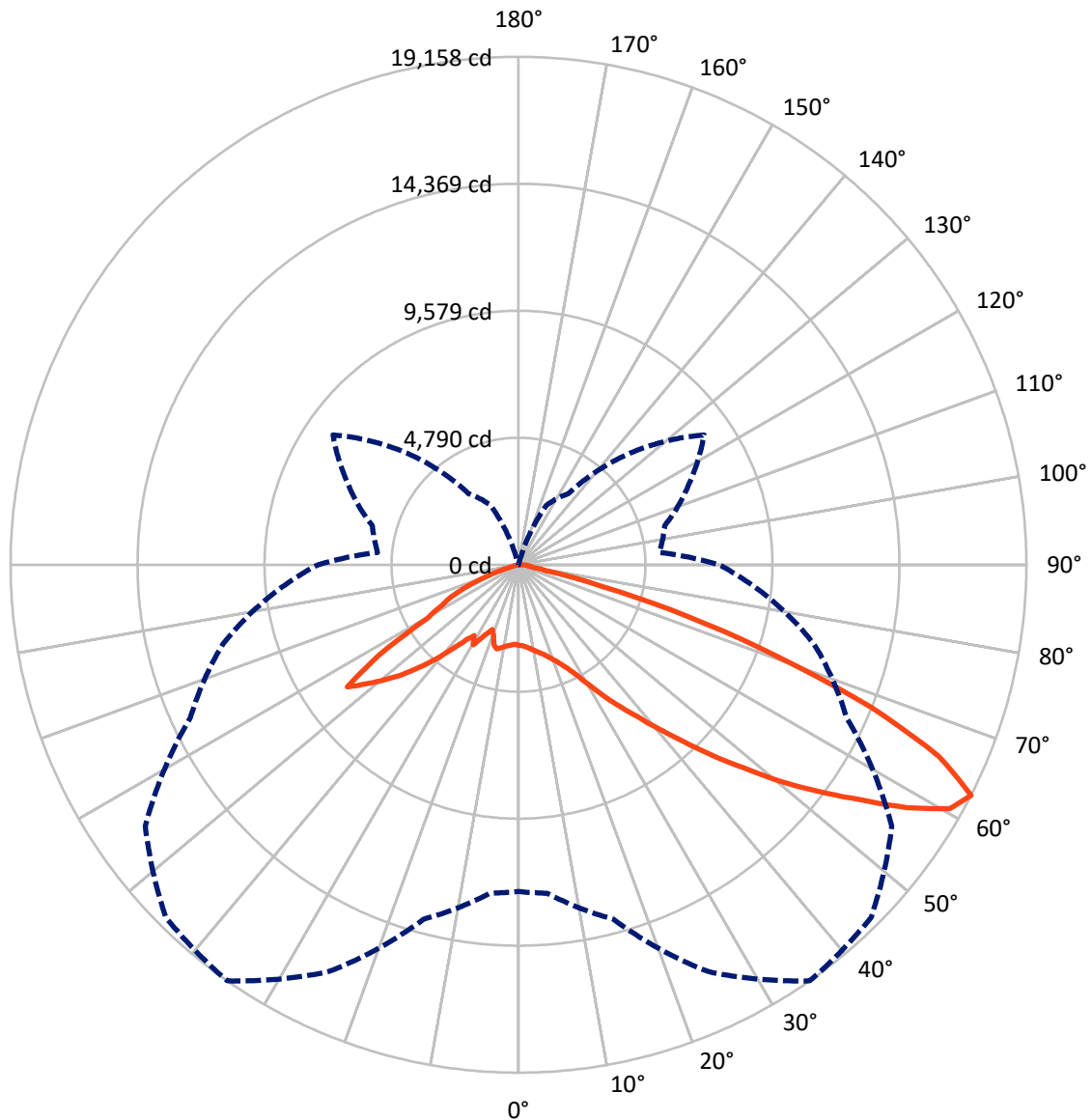
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.6 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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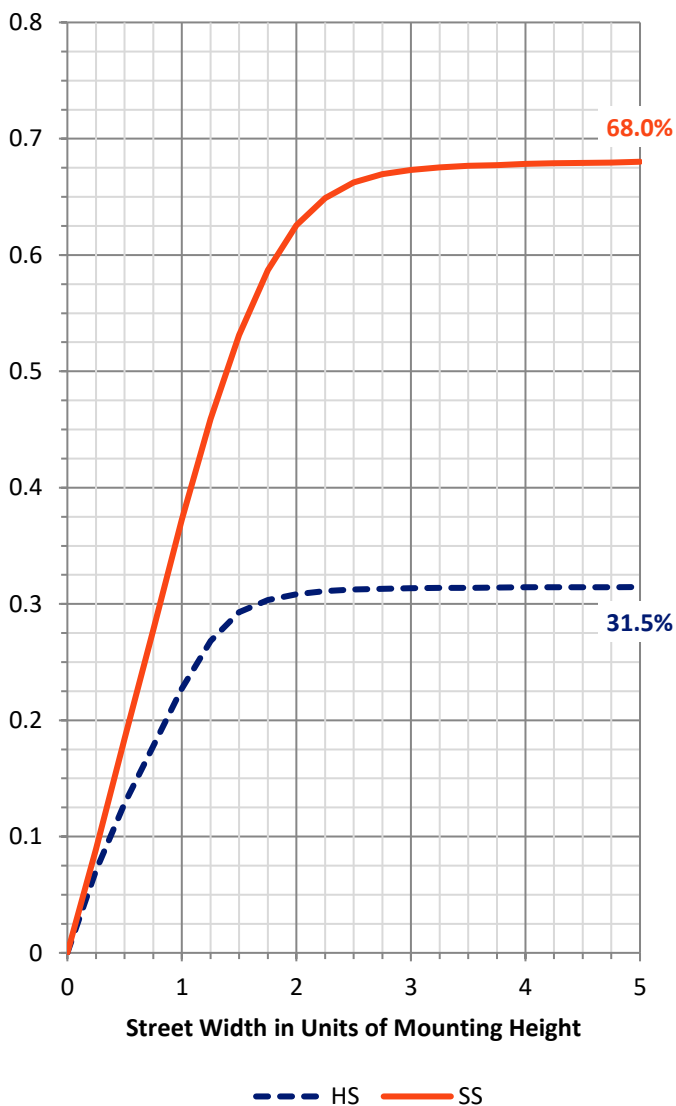
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9913.4	0.0	9913.4
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	21404.7	17.9	21422.6
	% Fixture	68.3	0.1	68.4
Total	Lumens	31318.1	17.9	31336.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.9	1.0
10°-20°	964.4	3.1
20°-30°	1790.7	5.7
30°-40°	3530.5	11.3
40°-50°	6337.6	20.2
50°-60°	9212.4	29.4
60°-70°	7571.1	24.2
70°-80°	1439.2	4.6
80°-90°	172.3	0.5
90°-100°	16.3	0.1
100°-110°	1.6	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°	31318.1	99.9
0°-180°	31336.0	100.0

Coefficient of Utilization



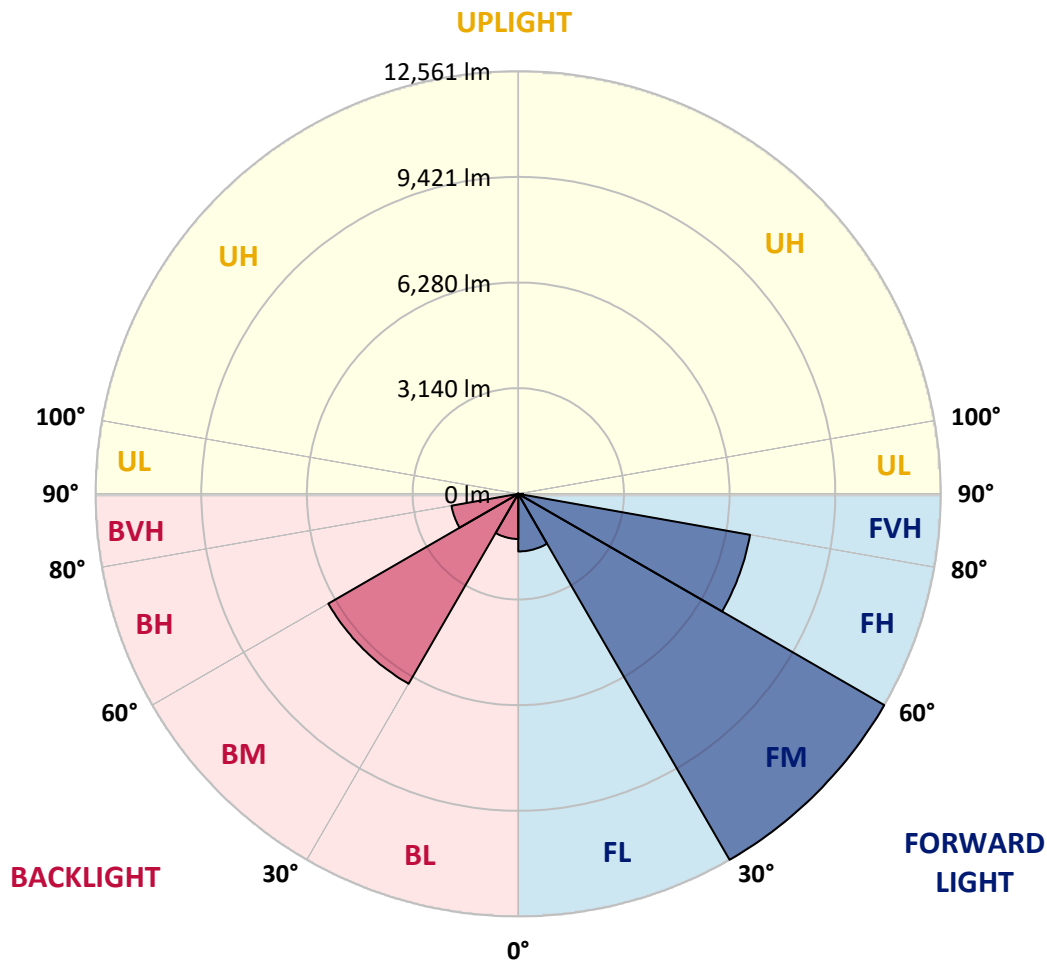
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1712.7	5.5			
FM	(30°-60°)	12560.9	40.1			
FH	(60°-80°)	6994.9	22.3			G3/7500
FVH	(80°-90°)	136.2	0.4			G2/225
BL	(0°-30°)	1342.3	4.3	B3/2500		
BM	(30°-60°)	6519.6	20.8	B4/8500		
BH	(60°-80°)	2015.4	6.4	B3/2500		G3/2500
BVH	(80°-90°)	36.1	0.1			G1/100
UL	(90°-100°)	16.3	0.1		U2/50	
UH	(100°-180°)	1.6	0.0		U1/10	

BUG Rating: B4-U2-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6
2.5°	3119.3	3093.9	3096.4	3115.5	3058.2	3077.3	3050.6	3073.5	3063.3	3073.5	3079.9
5°	3181.8	3149.9	3148.6	3167.7	3121.9	3133.4	3102.8	3118.1	3104.1	3116.8	3116.8
7.5°	3258.2	3231.4	3225.1	3240.3	3199.6	3204.7	3174.1	3180.5	3163.9	3180.5	3167.7
10°	3353.7	3329.5	3319.3	3327.0	3290.0	3292.6	3259.4	3262.0	3237.8	3251.8	3241.6
12.5°	3454.3	3421.2	3416.1	3428.9	3390.6	3385.5	3357.5	3360.1	3333.3	3346.1	3338.4
15°	3558.8	3524.4	3525.7	3538.4	3500.2	3502.7	3473.4	3478.5	3451.8	3464.5	3454.3
17.5°	3697.6	3663.2	3660.7	3683.6	3651.8	3661.9	3631.4	3637.7	3618.6	3621.2	3609.7
20°	3896.3	3851.7	3842.8	3875.9	3833.9	3846.6	3830.1	3851.7	3844.1	3837.7	3828.8
22.5°	4133.2	4098.8	4081.0	4106.5	4056.8	4081.0	4089.9	4134.5	4146.0	4138.3	3998.2
25°	4450.4	4432.5	4414.7	4403.2	4343.4	4381.6	4427.5	4501.3	4549.7	4568.8	4374.0
27.5°	4878.3	4887.3	4809.6	4796.8	4729.3	4789.2	4872.0	4991.7	5089.8	5125.4	4863.1
30°	5428.6	5440.1	5334.3	5303.8	5263.0	5314.0	5468.1	5599.3	5744.5	5804.3	5454.1
32.5°	6159.7	6149.5	5994.1	5935.5	5898.6	5919.0	6080.7	6260.3	6423.4	6558.4	6127.9
35°	7052.6	7020.7	6855.2	6693.4	6546.9	6609.3	6727.8	6945.6	7192.7	7391.4	6792.7
37.5°	8089.4	8058.8	7806.6	7543.0	7253.8	7280.6	7386.3	7741.7	8060.1	8112.3	6679.4
40°	9160.6	9147.9	8909.7	8574.7	8125.1	7999.0	8139.1	8572.1	8908.4	7997.7	6943.0
42.5°	10230.5	10169.4	10035.6	9700.7	9102.0	8824.3	9012.8	9445.9	9807.6	8384.9	7554.4
45°	11309.4	11246.9	11133.6	10887.8	10264.9	9861.1	9915.9	10396.1	10723.4	9110.9	8191.3
47.5°	12267.2	12221.3	12139.8	12002.3	11446.9	11081.4	10975.6	11311.9	11534.8	9700.7	8680.4
50°	13092.6	13053.1	13084.9	13039.1	12876.0	12492.6	12143.6	12122.0	12229.0	10225.4	9130.0
52.5°	13818.6	13765.1	13901.4	14063.1	14213.4	14128.1	13283.6	12890.0	12793.2	10619.0	9431.9
55°	14418.5	14399.4	14633.8	15070.7	15642.6	15866.7	14502.6	13599.5	13297.6	10952.7	9459.9
57.5°	14777.7	14823.6	15319.0	16164.8	17283.1	17388.8	15929.1	14353.5	13742.2	11155.2	9593.7
60°	14163.8	14319.2	15210.8	16985.1	18679.1	18725.0	16954.5	14503.8	13160.1	10426.7	8879.1
62.5°	12324.5	12436.6	13839.0	16932.8	19158.0	18809.0	17183.8	13655.6	11533.5	8844.7	7551.9
65°	8708.4	8838.3	10528.6	15269.4	17429.6	17442.3	15740.6	11808.7	9219.2	6847.5	5831.1
67.5°	5252.8	5463.0	7064.1	11085.2	14351.0	14612.1	13132.1	8940.2	6597.9	4470.8	3774.0
70°	1723.3	1915.7	3225.1	6560.9	10345.2	11463.5	9862.4	5809.4	3445.4	1890.2	1522.1
72.5°	682.7	770.6	1136.2	2901.5	6666.6	7653.8	6076.9	2807.3	1156.5	501.8	436.9
75°	456.0	464.9	524.8	988.4	3262.0	4185.4	2929.6	816.5	429.2	313.3	275.1
77.5°	397.4	398.7	425.4	521.0	1062.3	1604.9	843.2	438.2	355.4	257.3	228.0
80°	364.3	369.4	385.9	444.5	486.6	545.2	416.5	365.6	308.2	236.9	215.3
82.5°	349.0	352.8	363.0	402.5	393.6	408.9	336.3	290.4	259.8	217.8	206.3
85°	318.4	324.8	331.2	355.4	323.5	280.2	259.8	194.9	186.0	164.3	151.6
87.5°	240.7	239.5	233.1	236.9	216.5	177.0	146.5	109.5	89.2	73.9	61.1
90°	100.6	101.9	98.1	93.0	81.5	67.5	50.9	30.6	15.3	5.1	2.5
92.5°	76.4	77.7	75.1	67.5	58.6	47.1	34.4	17.8	10.2	3.8	1.3
95°	47.1	48.4	45.9	40.8	35.7	26.7	17.8	11.5	6.4	2.5	0.0
97.5°	28.0	29.3	26.7	24.2	19.1	12.7	10.2	7.6	5.1	2.5	0.0
100°	16.6	16.6	15.3	12.7	8.9	7.6	6.4	5.1	3.8	1.3	0.0
102.5°	7.6	7.6	7.6	5.1	3.8	3.8	3.8	3.8	3.8	1.3	0.0
105°	2.5	2.5	1.3	1.3	1.3	2.5	2.5	2.5	2.5	1.3	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.5	2.5	1.3	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	0.0



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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°	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6	3041.6
2.5°	3073.5	3049.3	3053.1	3031.5	3026.4	3003.4	3044.2	3048.0	3036.5	3048.0
5°	3111.7	3082.4	3090.0	3065.8	3059.5	3027.6	3060.7	3058.2	3049.3	3060.7
7.5°	3167.7	3134.6	3138.4	3110.4	3104.1	3068.4	3099.0	3090.0	3079.9	3093.9
10°	3239.1	3207.2	3208.5	3170.3	3166.5	3125.7	3165.2	3148.6	3133.4	3153.7
12.5°	3338.4	3293.8	3290.0	3248.0	3246.7	3204.7	3245.4	3231.4	3211.0	3242.9
15°	3453.1	3393.2	3377.9	3324.4	3323.1	3278.6	3319.3	3297.7	3287.5	3325.7
17.5°	3602.1	3526.9	3411.0	3228.9	3146.1	3160.1	3304.0	3356.3	3220.0	3240.3
20°	3692.5	3328.2	3158.8	3083.7	3044.2	2817.5	2510.5	2536.0	2837.8	2981.8
22.5°	3539.7	3431.4	3369.0	3263.3	2713.0	2635.3	2653.2	2648.1	2258.3	2142.4
25°	3858.1	3756.2	3642.8	2990.7	2877.3	2844.2	2853.1	2487.6	2274.9	2283.8
27.5°	4316.6	4185.4	3467.1	3184.3	3161.4	3113.0	2937.2	2497.8	2524.5	2542.3
30°	4896.2	4430.0	3692.5	3569.0	3523.1	3470.9	2725.8	2790.7	2840.4	2895.2
32.5°	5456.6	4309.0	4124.3	3995.7	3924.3	3151.2	3074.8	3194.5	3244.2	3291.3
35°	5405.7	4827.4	4587.9	4424.9	4291.2	3400.8	3468.3	3650.5	3781.7	3780.4
37.5°	5545.8	5391.7	5115.3	4908.9	3724.4	3809.7	3951.1	4158.7	4317.9	4316.6
40°	6130.4	5963.6	5703.7	5260.5	4126.9	4325.6	4519.2	4714.0	4828.7	4837.6
42.5°	6711.2	6582.6	6348.2	4646.5	4619.8	4894.9	5097.4	5221.0	5291.0	5315.2
45°	7289.5	7168.5	6237.4	5139.5	5221.0	5493.6	5617.1	5641.3	5716.5	5713.9
47.5°	7749.3	7646.1	5738.1	5725.4	5927.9	6116.4	6076.9	6046.3	6065.5	6075.6
50°	8173.5	6656.5	6186.5	6372.4	6680.7	6703.6	6539.3	5180.2	6413.2	6391.5
52.5°	7592.6	6496.0	6604.2	7039.8	7564.6	7298.4	6977.4	4540.8	6014.5	6586.4
55°	6643.7	6753.3	6997.8	7728.9	8247.3	7931.5	7395.2	4675.8	3991.8	3249.3
57.5°	6776.2	6949.4	7414.3	8424.4	8876.6	6282.0	6902.3	3296.4	2231.6	2230.3
60°	6310.0	6572.4	7405.4	8736.4	7185.1	4025.0	2765.2	75.1	433.1	429.2
62.5°	5334.3	5707.5	7065.3	8539.0	5952.1	3270.9	2463.4	6.4	2.5	2.5
65°	4125.6	4565.0	5891.0	7393.9	5273.2	2817.5	1829.1	0.0	0.0	0.0
67.5°	2705.4	3113.0	4423.6	6141.9	4377.8	2129.7	1229.1	0.0	0.0	0.0
70°	1127.2	1630.4	2748.7	4438.9	3220.0	1394.7	583.4	0.0	0.0	0.0
72.5°	326.1	496.8	1238.1	2650.6	1998.5	729.8	216.5	0.0	0.0	0.0
75°	215.3	226.7	374.5	1066.1	971.8	267.5	87.9	0.0	0.0	0.0
77.5°	180.9	186.0	238.2	298.1	312.1	105.7	71.3	0.0	0.0	0.0
80°	166.9	168.1	214.0	221.6	166.9	87.9	70.1	0.0	0.0	0.0
82.5°	155.4	151.6	182.1	175.8	138.8	76.4	65.0	0.0	0.0	0.0
85°	107.0	109.5	123.6	156.7	84.1	38.2	45.9	0.0	0.0	0.0
87.5°	33.1	38.2	48.4	49.7	15.3	5.1	0.0	0.0	0.0	0.0
90°	1.3	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)