

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: P579505

Luminaire Tested: **CTN-CA8-230-740-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579505
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-CA8-230-740-U-T5N-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28157 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G3

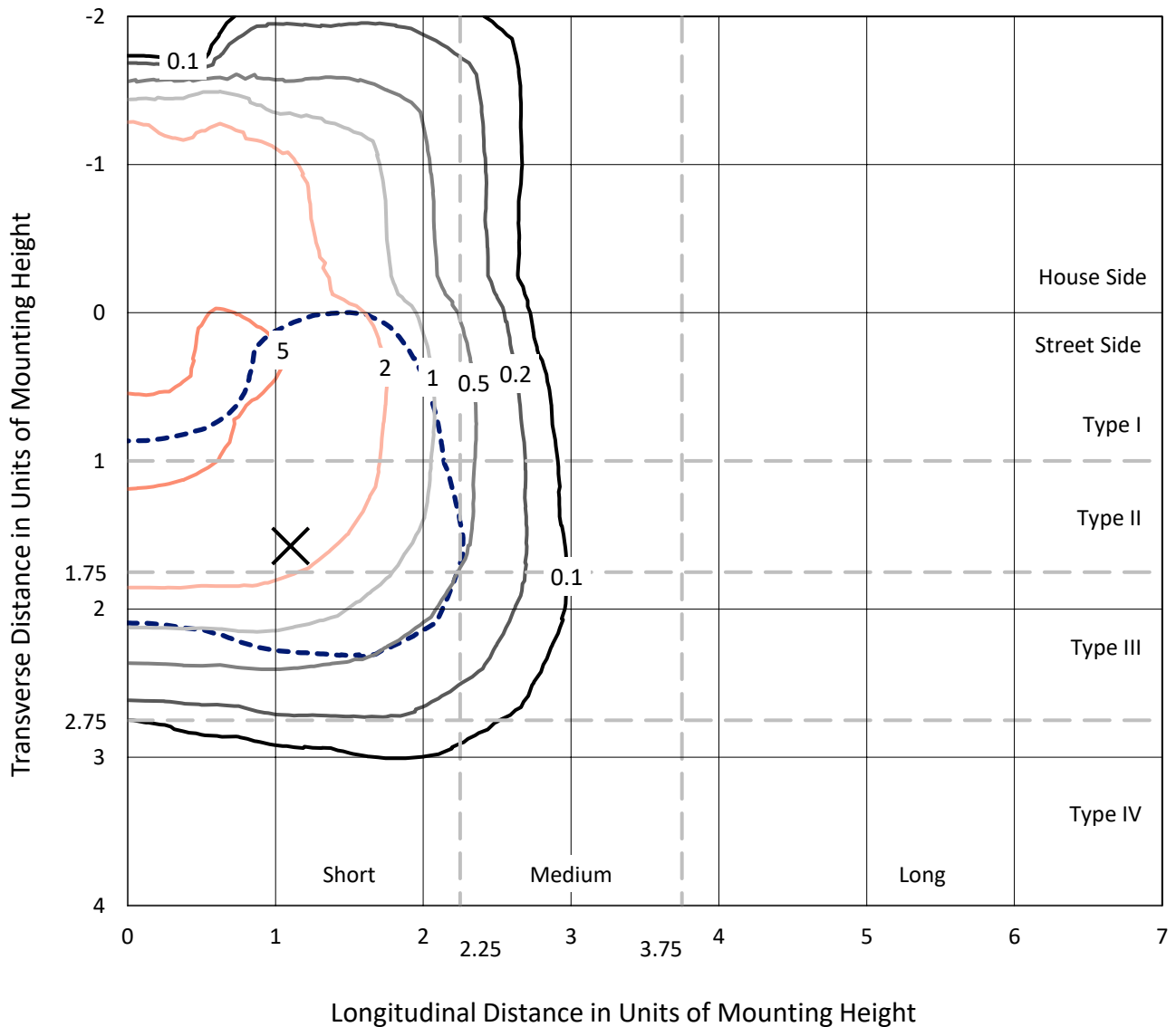
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

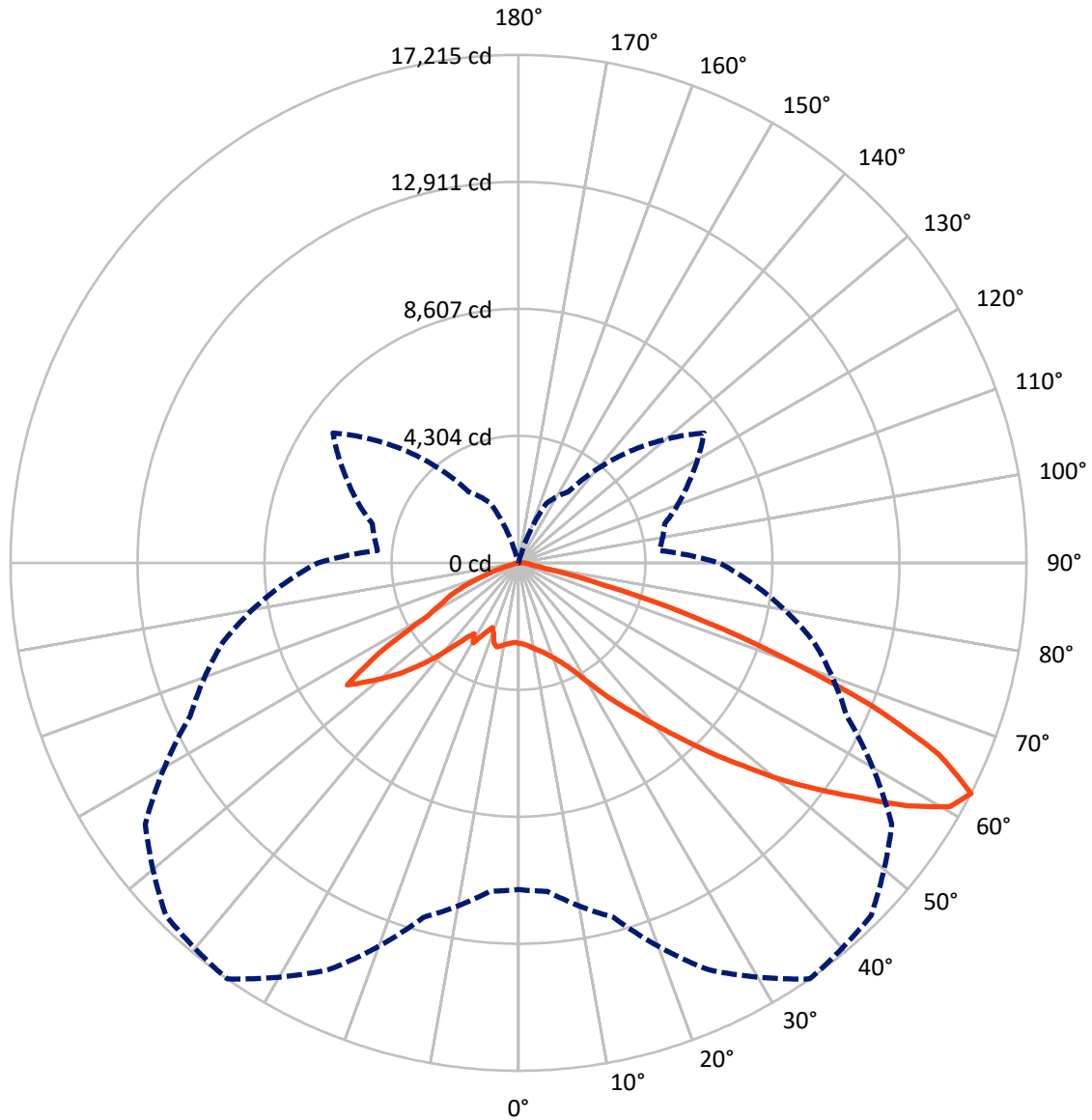
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 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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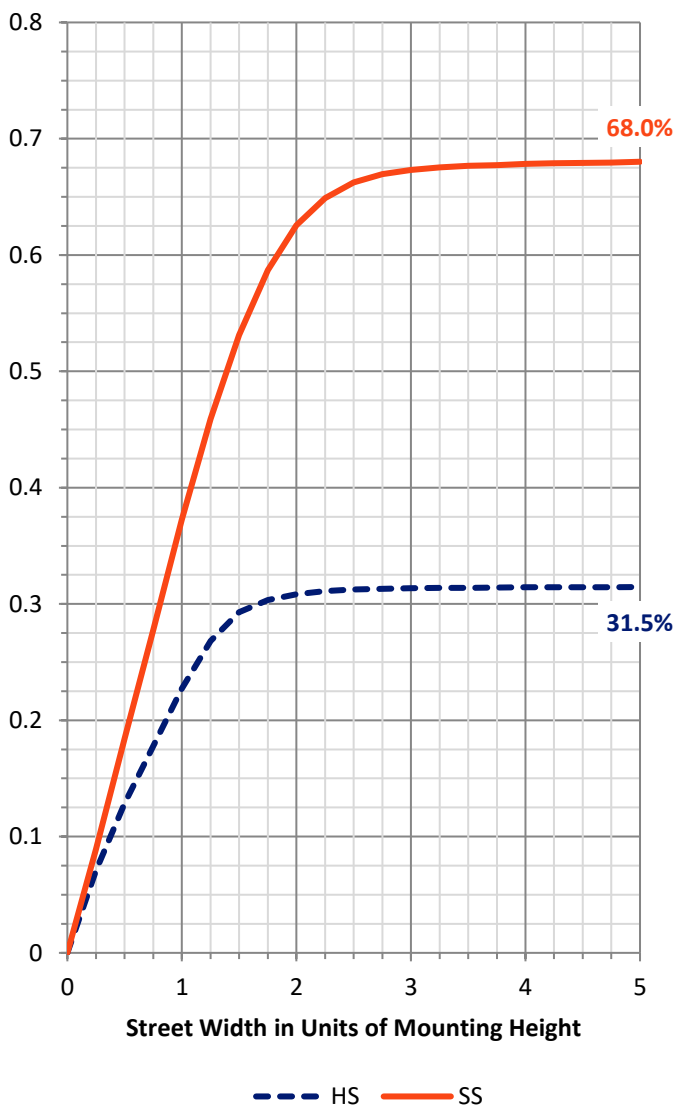
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8907.7	0.0	8907.7
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	19233.2	16.1	19249.3
	% Fixture	68.3	0.1	68.4
Total	Lumens	28140.9	16.1	28157.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.5	1.0
10°-20°	866.5	3.1
20°-30°	1609.0	5.7
30°-40°	3172.3	11.3
40°-50°	5694.7	20.2
50°-60°	8277.8	29.4
60°-70°	6803.0	24.2
70°-80°	1293.1	4.6
80°-90°	154.8	0.5
90°-100°	14.6	0.1
100°-110°	1.4	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°	28140.9	99.9
0°-180°	28157.0	100.0

Coefficient of Utilization

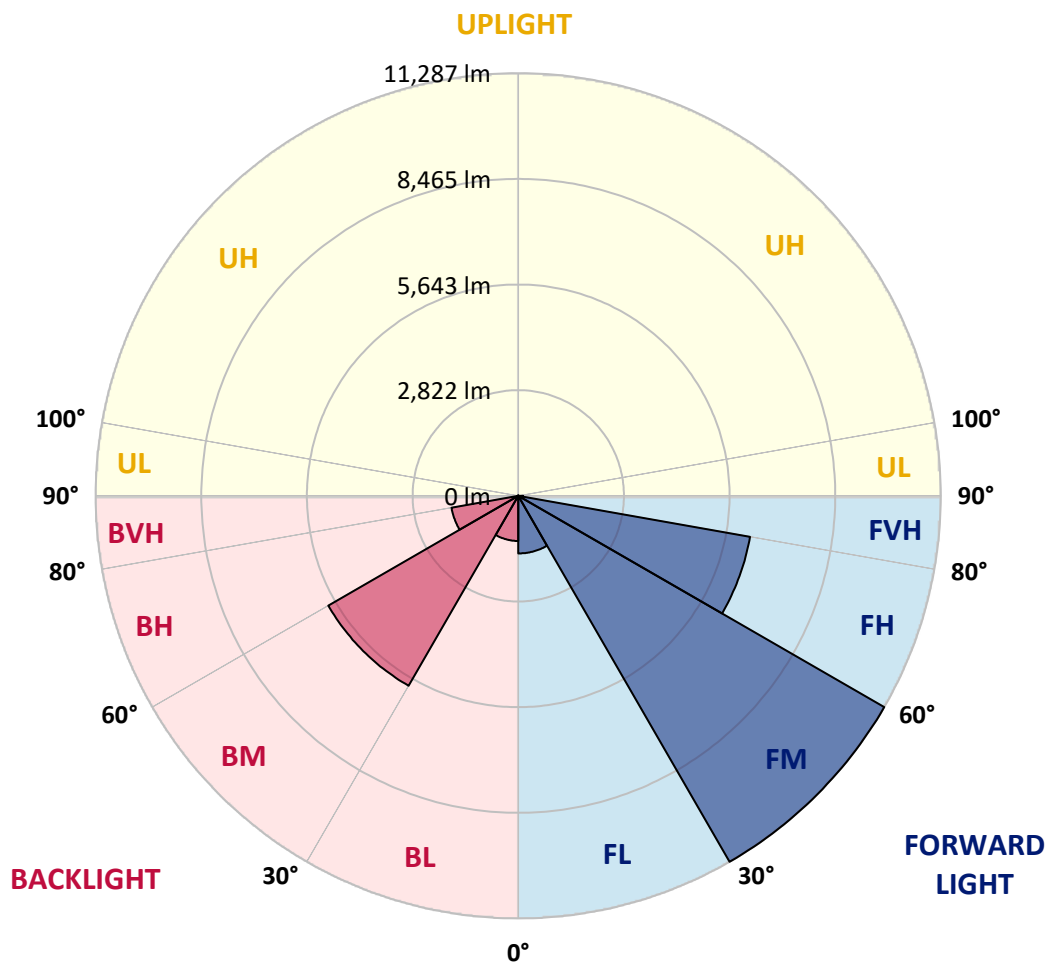


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1538.9	5.5			
FM	(30°-60°)	11286.6	40.1			
FH	(60°-80°)	6285.3	22.3			G3/7500
FVH	(80°-90°)	122.4	0.4			G2/225
BL	(0°-30°)	1206.1	4.3	B3/2500		
BM	(30°-60°)	5858.2	20.8	B4/8500		
BH	(60°-80°)	1810.9	6.4	B3/2500		G3/2500
BVH	(80°-90°)	32.4	0.1			G1/100
UL	(90°-100°)	14.6	0.1		U2/50	
UH	(100°-180°)	1.4	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°	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1
2.5°	2802.9	2780.0	2782.3	2799.5	2748.0	2765.1	2741.1	2761.7	2752.5	2761.7	2767.4
5°	2859.0	2830.4	2829.2	2846.4	2805.2	2815.5	2788.0	2801.7	2789.2	2800.6	2800.6
7.5°	2927.6	2903.6	2897.9	2911.6	2875.0	2879.6	2852.1	2857.8	2842.9	2857.8	2846.4
10°	3013.5	2991.7	2982.6	2989.4	2956.2	2958.5	2928.8	2931.1	2909.3	2921.9	2912.8
12.5°	3103.9	3074.1	3069.6	3081.0	3046.7	3042.1	3016.9	3019.2	2995.2	3006.6	2999.7
15°	3197.7	3166.8	3168.0	3179.4	3145.1	3147.4	3121.1	3125.6	3101.6	3113.0	3103.9
17.5°	3322.5	3291.6	3289.3	3309.9	3281.3	3290.4	3263.0	3268.7	3251.5	3253.8	3243.5
20°	3501.0	3461.0	3453.0	3482.7	3445.0	3456.4	3441.5	3461.0	3454.1	3448.4	3440.4
22.5°	3713.9	3683.0	3667.0	3689.9	3645.2	3667.0	3675.0	3715.1	3725.4	3718.5	3592.6
25°	3998.9	3982.9	3966.8	3956.5	3902.8	3937.1	3978.3	4044.7	4088.2	4105.3	3930.2
27.5°	4383.4	4391.5	4321.6	4310.2	4249.5	4303.3	4377.7	4485.3	4573.4	4605.5	4369.7
30°	4877.9	4888.2	4793.2	4765.7	4729.1	4774.9	4913.3	5031.2	5161.7	5215.5	4900.8
32.5°	5534.8	5525.7	5386.0	5333.4	5300.2	5318.5	5463.9	5625.2	5771.7	5893.0	5506.2
35°	6337.1	6308.5	6159.7	6014.4	5882.7	5938.8	6045.3	6241.0	6463.0	6641.5	6103.6
37.5°	7268.7	7241.3	7014.7	6777.7	6517.9	6542.0	6637.0	6956.3	7242.4	7289.3	6001.8
40°	8231.3	8219.8	8005.8	7704.8	7300.8	7187.5	7313.4	7702.5	8004.7	7186.3	6238.7
42.5°	9192.6	9137.7	9017.5	8716.5	8178.6	7929.1	8098.5	8487.6	8812.7	7534.3	6788.0
45°	10162.0	10106.0	10004.1	9783.2	9223.5	8860.7	8910.0	9341.4	9635.6	8186.6	7360.3
47.5°	11022.7	10981.5	10908.3	10784.6	10285.6	9957.2	9862.2	10164.3	10364.6	8716.5	7799.8
50°	11764.3	11728.9	11757.5	11716.3	11569.8	11225.3	10911.7	10892.2	10988.4	9188.1	8203.8
52.5°	12416.7	12368.6	12491.1	12636.5	12771.5	12694.8	11936.0	11582.4	11495.4	9541.7	8475.0
55°	12955.8	12938.6	13149.2	13541.8	14055.6	14257.1	13031.3	12219.9	11948.6	9841.6	8500.2
57.5°	13278.5	13319.7	13764.9	14524.9	15529.8	15624.7	14313.1	12897.4	12348.0	10023.6	8620.4
60°	12726.9	12866.5	13667.6	15261.9	16784.1	16825.3	15234.5	13032.4	11825.0	9368.9	7978.3
62.5°	11074.2	11174.9	12435.0	15215.0	17214.5	16900.9	15440.5	12270.2	10363.5	7947.4	6785.8
65°	7825.0	7941.7	9460.5	13720.3	15661.4	15672.8	14143.8	10610.7	8283.9	6152.8	5239.5
67.5°	4719.9	4908.8	6347.4	9960.6	12895.1	13129.7	11799.8	8033.3	5928.5	4017.2	3391.2
70°	1548.5	1721.3	2897.9	5895.3	9295.6	10300.5	8861.9	5220.1	3095.9	1698.4	1367.7
72.5°	613.5	692.4	1020.9	2607.2	5990.3	6877.3	5460.4	2522.5	1039.2	450.9	392.6
75°	409.7	417.7	471.5	888.1	2931.1	3760.8	2632.4	733.6	385.7	281.5	247.2
77.5°	357.1	358.2	382.3	468.1	954.5	1442.1	757.7	393.7	319.3	231.2	204.9
80°	327.3	331.9	346.8	399.4	437.2	489.8	374.3	328.5	277.0	212.9	193.4
82.5°	313.6	317.0	326.2	361.7	353.7	367.4	302.1	260.9	233.5	195.7	185.4
85°	286.1	291.8	297.6	319.3	290.7	251.8	233.5	175.1	167.1	147.6	136.2
87.5°	216.3	215.2	209.4	212.9	194.6	159.1	131.6	98.4	80.1	66.4	54.9
90°	90.4	91.6	88.1	83.5	73.2	60.7	45.8	27.5	13.7	4.6	2.3
92.5°	68.7	69.8	67.5	60.7	52.6	42.3	30.9	16.0	9.2	3.4	1.1
95°	42.3	43.5	41.2	36.6	32.0	24.0	16.0	10.3	5.7	2.3	0.0
97.5°	25.2	26.3	24.0	21.7	17.2	11.4	9.2	6.9	4.6	2.3	0.0
100°	14.9	14.9	13.7	11.4	8.0	6.9	5.7	4.6	3.4	1.1	0.0
102.5°	6.9	6.9	6.9	4.6	3.4	3.4	3.4	3.4	3.4	1.1	0.0
105°	2.3	2.3	1.1	1.1	1.1	2.3	2.3	2.3	2.3	1.1	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.3	2.3	1.1	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	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°	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1	2733.1
2.5°	2761.7	2739.9	2743.4	2723.9	2719.3	2698.7	2735.4	2738.8	2728.5	2738.8
5°	2796.0	2769.7	2776.6	2754.8	2749.1	2720.5	2750.2	2748.0	2739.9	2750.2
7.5°	2846.4	2816.6	2820.1	2794.9	2789.2	2757.1	2784.6	2776.6	2767.4	2780.0
10°	2910.5	2881.9	2883.0	2848.7	2845.2	2808.6	2844.1	2829.2	2815.5	2833.8
12.5°	2999.7	2959.7	2956.2	2918.5	2917.3	2879.6	2916.2	2903.6	2885.3	2913.9
15°	3102.7	3049.0	3035.2	2987.2	2986.0	2945.9	2982.6	2963.1	2954.0	2988.3
17.5°	3236.7	3169.1	3065.0	2901.3	2826.9	2839.5	2968.8	3015.8	2893.3	2911.6
20°	3317.9	2990.6	2838.4	2770.8	2735.4	2531.6	2255.8	2278.7	2550.0	2679.3
22.5°	3180.6	3083.3	3027.2	2932.2	2437.8	2368.0	2384.0	2379.4	2029.2	1925.1
25°	3466.7	3375.1	3273.3	2687.3	2585.4	2555.7	2563.7	2235.2	2044.1	2052.1
27.5°	3878.7	3760.8	3115.3	2861.3	2840.7	2797.2	2639.2	2244.4	2268.4	2284.4
30°	4399.5	3980.6	3317.9	3206.9	3165.7	3118.8	2449.2	2507.6	2552.2	2601.5
32.5°	4903.0	3871.9	3705.9	3590.3	3526.2	2831.5	2762.8	2870.4	2915.0	2957.4
35°	4857.3	4337.7	4122.5	3976.0	3855.8	3055.8	3116.5	3280.1	3398.0	3396.9
37.5°	4983.2	4844.7	4596.3	4410.9	3346.5	3423.2	3550.2	3736.8	3879.9	3878.7
40°	5508.5	5358.6	5125.1	4726.8	3708.2	3886.7	4060.7	4235.8	4338.8	4346.8
42.5°	6030.4	5914.8	5704.2	4175.1	4151.1	4398.3	4580.3	4691.3	4754.3	4776.0
45°	6550.0	6441.3	5604.6	4618.1	4691.3	4936.2	5047.3	5069.0	5136.5	5134.2
47.5°	6963.2	6870.4	5156.0	5144.5	5326.5	5495.9	5460.4	5433.0	5450.1	5459.3
50°	7344.3	5981.2	5558.8	5725.9	6002.9	6023.5	5875.9	4654.7	5762.6	5743.1
52.5°	6822.4	5837.0	5934.2	6325.7	6797.2	6558.0	6269.6	4080.2	5404.3	5918.2
55°	5969.7	6068.2	6287.9	6944.8	7410.7	7126.8	6645.0	4201.5	3586.9	2919.6
57.5°	6088.8	6244.4	6662.1	7569.7	7976.0	5644.7	6202.1	2962.0	2005.2	2004.0
60°	5669.9	5905.6	6654.1	7850.1	6456.1	3616.6	2484.7	67.5	389.1	385.7
62.5°	4793.2	5128.5	6348.6	7672.7	5348.3	2939.1	2213.5	5.7	2.3	2.3
65°	3707.0	4101.9	5293.3	6643.8	4738.2	2531.6	1643.5	0.0	0.0	0.0
67.5°	2430.9	2797.2	3974.9	5518.8	3933.7	1913.6	1104.4	0.0	0.0	0.0
70°	1012.9	1465.0	2469.8	3988.6	2893.3	1253.2	524.2	0.0	0.0	0.0
72.5°	293.0	446.4	1112.5	2381.7	1795.7	655.8	194.6	0.0	0.0	0.0
75°	193.4	203.7	336.5	957.9	873.3	240.3	79.0	0.0	0.0	0.0
77.5°	162.5	167.1	214.0	267.8	280.4	95.0	64.1	0.0	0.0	0.0
80°	149.9	151.1	192.3	199.1	149.9	79.0	62.9	0.0	0.0	0.0
82.5°	139.6	136.2	163.7	157.9	124.8	68.7	58.4	0.0	0.0	0.0
85°	96.1	98.4	111.0	140.8	75.5	34.3	41.2	0.0	0.0	0.0
87.5°	29.8	34.3	43.5	44.6	13.7	4.6	0.0	0.0	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)