

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: P579386

Luminaire Tested: **CTN-CA10-310-722-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579386
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-CA10-310-722-U-T5N-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26748 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G3

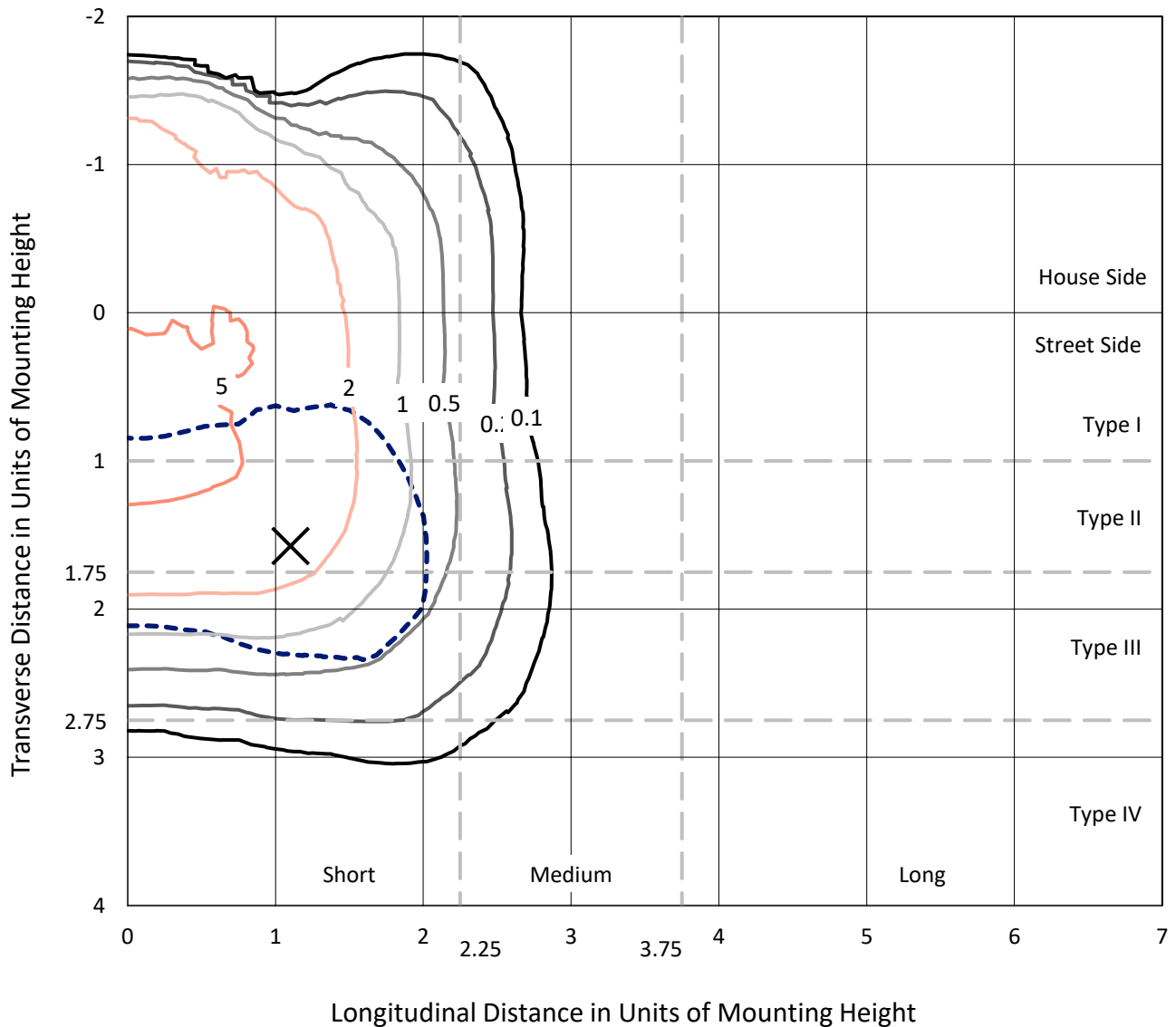
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

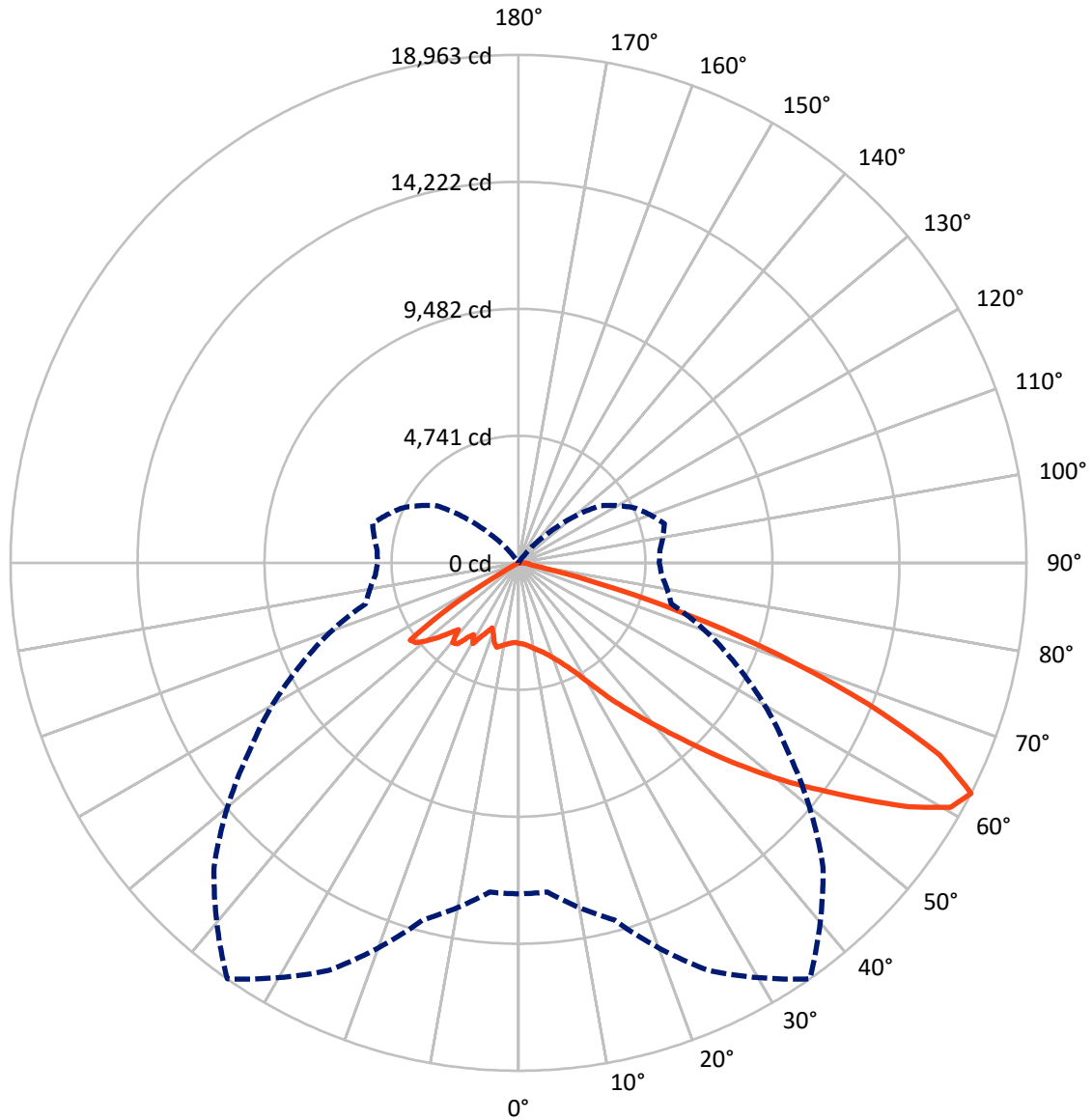
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 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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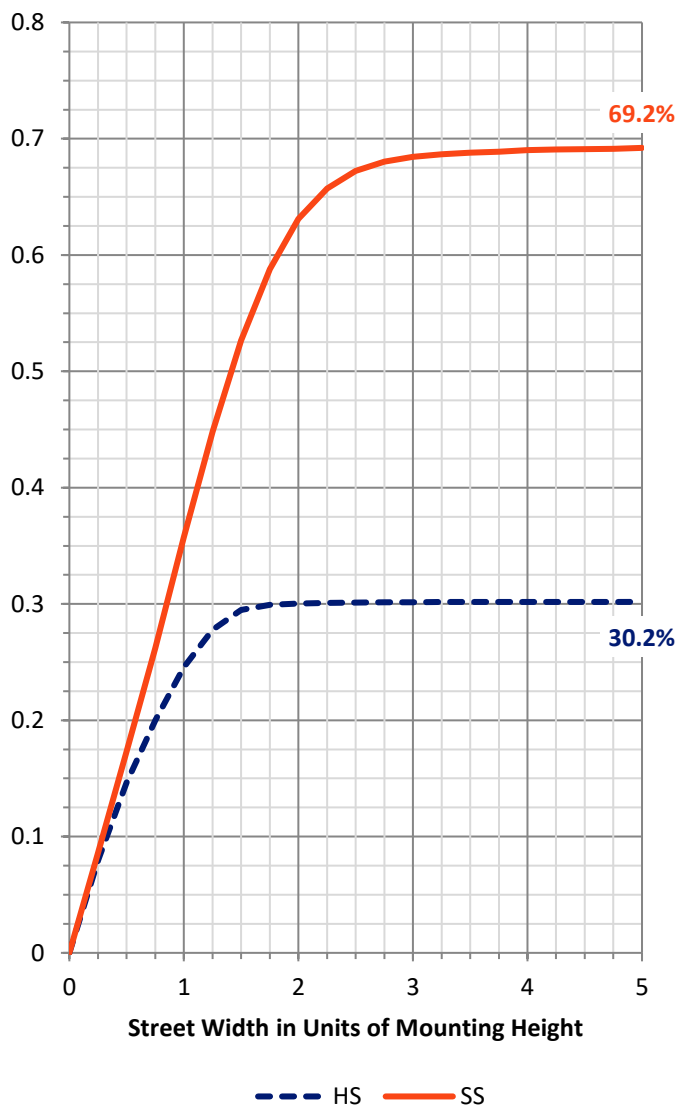
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8118.1	0.0	8118.1
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	18606.7	23.2	18629.9
	% Fixture	69.6	0.1	69.6
Total	Lumens	26724.8	23.2	26748.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.2	1.1
10°-20°	953.8	3.6
20°-30°	1743.4	6.5
30°-40°	3322.3	12.4
40°-50°	5702.4	21.3
50°-60°	7649.9	28.6
60°-70°	5815.5	21.7
70°-80°	1101.2	4.1
80°-90°	139.1	0.5
90°-100°	20.4	0.1
100°-110°	2.8	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°	26724.8	99.9
0°-180°	26748.0	100.0

Coefficient of Utilization

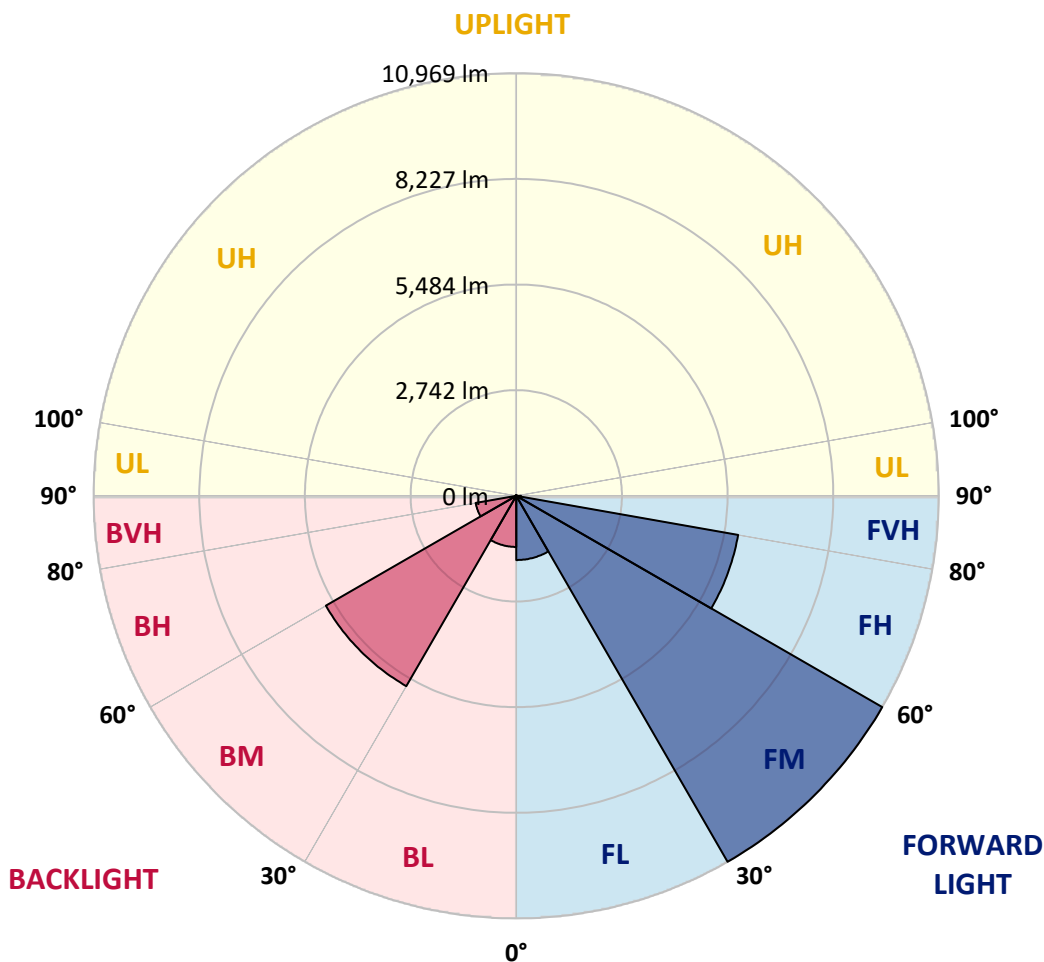


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1667.4	6.2			
FM	(30°-60°)	10968.9	41.0			
FH	(60°-80°)	5847.6	21.9			G3/7500
FVH	(80°-90°)	122.8	0.5			G2/225
BL	(0°-30°)	1327.0	5.0	B3/2500		
BM	(30°-60°)	5705.8	21.3	B4/8500		
BH	(60°-80°)	1069.0	4.0	B3/2500		G3/2500
BVH	(80°-90°)	16.3	0.1			G1/100
UL	(90°-100°)	20.4	0.1		U2/50	
UH	(100°-180°)	2.8	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°	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2
2.5°	3086.5	3063.8	3065.1	3085.3	3027.3	3048.7	3023.5	3048.7	3034.8	3044.9	3050.0
5°	3140.8	3118.1	3115.5	3137.0	3087.8	3102.9	3077.7	3095.4	3076.5	3089.1	3089.1
7.5°	3222.7	3200.0	3192.5	3208.8	3163.5	3174.8	3148.3	3158.4	3137.0	3153.4	3144.5
10°	3319.8	3294.6	3285.8	3294.6	3255.5	3261.8	3230.3	3241.6	3210.1	3229.0	3216.4
12.5°	3423.2	3390.4	3390.4	3398.0	3356.4	3357.6	3328.6	3334.9	3303.4	3323.6	3308.5
15°	3535.4	3498.8	3503.9	3511.4	3467.3	3474.9	3444.6	3454.7	3421.9	3442.1	3427.0
17.5°	3684.2	3645.1	3640.1	3662.7	3621.1	3635.0	3601.0	3613.6	3584.6	3590.9	3583.3
20°	3889.7	3840.5	3829.2	3859.4	3812.8	3822.9	3797.7	3822.9	3792.6	3747.2	3619.9
22.5°	4135.6	4092.7	4073.8	4094.0	4038.5	4056.1	4054.9	4095.2	4012.0	3725.8	3598.4
25°	4459.6	4430.6	4394.0	4396.6	4329.7	4356.2	4404.1	4435.6	4081.3	3830.4	3833.0
27.5°	4892.1	4863.1	4812.6	4793.7	4696.6	4760.9	4835.3	4527.7	4249.0	4313.3	4278.0
30°	5444.3	5439.3	5337.1	5304.4	5198.5	5279.1	5214.8	4687.8	4783.6	4873.2	4818.9
32.5°	6179.4	6144.1	5996.6	5937.3	5826.4	5873.0	5305.6	5230.0	5372.5	5493.5	5436.8
35°	7068.3	6961.1	6811.1	6693.8	6500.9	6241.2	5651.1	5798.6	6011.7	6178.1	5903.3
37.5°	8100.9	7984.9	7750.4	7539.8	7236.0	6426.5	6171.8	6466.9	6734.2	6553.9	5919.7
40°	9163.8	9060.4	8839.8	8568.7	8055.5	7001.5	6803.5	7156.5	7460.4	6427.8	6112.6
42.5°	10219.1	10130.9	9953.1	9685.8	9025.1	7686.1	7495.7	7875.2	7589.0	6673.6	6663.6
45°	11283.3	11239.2	11037.4	10809.2	10173.7	8562.4	8271.1	8567.4	7302.8	7262.5	7238.5
47.5°	12145.7	12153.3	12082.7	11964.1	11399.3	9524.4	9144.9	8266.1	7650.8	7694.9	7706.3
50°	13034.6	12977.9	12974.1	12981.6	12745.9	10763.8	9740.0	8129.9	8106.0	8102.2	8092.1
52.5°	13747.0	13675.1	13823.9	13942.4	14082.4	12147.0	9650.5	8591.4	8453.9	8406.0	8112.3
55°	14327.0	14299.2	14541.3	14942.2	15565.1	13612.1	10442.3	9041.5	8766.6	7647.0	6898.1
57.5°	14678.7	14719.1	15218.4	16006.4	17172.7	14826.2	11364.0	9497.9	7505.8	6735.4	6687.5
60°	14005.4	14218.5	15068.3	16798.2	18531.9	15968.6	12049.9	9590.0	6754.3	6342.0	6246.2
62.5°	12357.5	12337.3	13797.4	16798.2	18963.1	16082.0	12266.7	8938.1	5900.7	5363.6	5256.5
65°	8746.5	8799.4	10359.1	15137.7	17274.8	14958.6	11314.8	7599.1	4706.7	4213.7	4068.7
67.5°	5412.8	5409.0	6935.9	11148.4	14062.2	12523.9	9525.7	5825.1	3266.8	2801.6	2644.0
70°	1869.8	1922.8	3119.3	6523.6	10351.5	9811.9	7128.8	3677.9	1722.3	1228.1	1036.4
72.5°	743.9	761.5	1119.6	2908.8	6466.9	6555.1	4332.3	1786.6	515.7	327.8	307.6
75°	486.7	489.2	537.1	1050.3	3138.2	3526.6	2012.3	513.2	239.6	219.4	214.3
77.5°	419.9	421.1	446.3	532.1	1022.5	1371.8	572.4	303.9	200.5	180.3	175.3
80°	389.6	390.9	403.5	457.7	493.0	467.8	305.1	244.6	169.0	160.1	158.9
82.5°	368.2	373.2	379.5	412.3	398.4	351.8	253.4	198.0	129.9	138.7	142.5
85°	339.2	344.2	348.0	366.9	332.9	257.2	196.7	148.8	83.2	90.8	89.5
87.5°	254.7	257.2	252.2	249.6	232.0	180.3	129.9	94.6	32.8	30.3	27.7
90°	122.3	121.0	116.0	107.2	93.3	73.1	54.2	30.3	13.9	6.3	2.5
92.5°	97.1	95.8	93.3	84.5	73.1	54.2	39.1	21.4	12.6	5.0	1.3
95°	65.6	63.0	60.5	54.2	45.4	32.8	22.7	15.1	10.1	3.8	1.3
97.5°	42.9	41.6	37.8	32.8	25.2	17.7	13.9	11.3	8.8	3.8	1.3
100°	26.5	26.5	24.0	18.9	12.6	10.1	8.8	8.8	6.3	2.5	0.0
102.5°	16.4	15.1	13.9	8.8	6.3	6.3	6.3	6.3	5.0	2.5	0.0
105°	8.8	8.8	6.3	5.0	3.8	2.5	3.8	5.0	3.8	1.3	0.0
107.5°	2.5	2.5	2.5	1.3	1.3	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	2.5	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°	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2	3012.2
2.5°	3043.7	3019.7	3026.0	3002.1	2998.3	2973.1	3015.9	3018.5	3007.1	3019.7
5°	3082.8	3053.8	3065.1	3036.1	3031.1	2998.3	3032.3	3028.5	3019.7	3029.8
7.5°	3138.2	3109.2	3115.5	3081.5	3075.2	3038.6	3071.4	3058.8	3047.5	3061.3
10°	3215.1	3182.4	3187.4	3147.1	3142.0	3099.2	3137.0	3118.1	3101.7	3120.6
12.5°	3309.7	3266.8	3261.8	3218.9	3215.1	3174.8	3213.9	3195.0	3178.6	3208.8
15°	3418.1	3361.4	3353.8	3299.6	3293.3	3251.7	3289.5	3261.8	3249.2	3288.3
17.5°	3563.1	3362.7	3250.5	3171.0	3125.6	3102.9	3171.0	3263.1	3235.3	3236.6
20°	3503.9	3288.3	3138.2	3070.2	3021.0	2801.6	2499.0	2586.0	2762.5	2849.5
22.5°	3486.2	3410.6	3348.8	3234.1	2746.1	2622.6	2640.2	2620.0	2287.2	2159.8
25°	3824.1	3737.1	3603.5	3002.1	2860.9	2833.1	2843.2	2495.2	2244.3	2280.9
27.5°	4256.6	4167.1	3507.7	3171.0	3143.3	3106.7	2907.5	2472.5	2506.6	2541.9
30°	4801.3	4331.0	3657.7	3554.3	3502.6	3464.8	2725.9	2761.2	2818.0	2862.1
32.5°	5332.1	4317.1	4087.7	3959.0	3894.7	3160.9	3080.2	3162.2	3220.2	3254.2
35°	5338.4	4811.4	4569.3	4404.1	3995.6	3398.0	3472.4	3609.8	3752.3	3778.7
37.5°	5483.4	5371.2	5093.8	4885.8	2971.8	3792.6	3956.5	4114.1	4256.6	4265.4
40°	6060.9	5939.8	5680.1	5222.4	3282.0	3868.3	4489.9	4667.6	4787.4	4781.1
42.5°	6637.1	6553.9	6284.0	4641.2	3698.1	3351.3	5049.7	5166.9	5242.6	5295.5
45°	7217.1	7133.8	6222.3	5096.3	4193.6	3670.3	4913.5	5578.0	5661.2	5687.7
47.5°	7669.7	7464.2	5701.5	5700.3	4812.6	4078.8	4057.4	5948.7	6021.8	6002.9
50°	8088.3	6663.6	6163.0	5898.2	5453.1	4463.4	4314.6	5005.5	6348.3	6320.6
52.5°	7359.5	6466.9	6558.9	5364.9	5967.6	4845.4	4604.6	4488.6	5768.4	6511.0
55°	6581.6	6707.7	6963.6	5894.4	4329.7	4969.0	4850.5	4619.7	3892.2	3275.7
57.5°	6716.5	6904.4	6917.0	6384.9	4481.0	3104.2	3975.4	3479.9	2198.9	2204.0
60°	6266.4	6511.0	5056.0	4256.6	2409.5	646.8	63.0	55.5	383.3	466.5
62.5°	5298.1	5638.5	4826.5	3708.1	1545.8	24.0	6.3	1.3	0.0	0.0
65°	4102.8	4512.6	4078.8	3200.0	1371.8	7.6	0.0	0.0	0.0	0.0
67.5°	2705.8	3075.2	3099.2	2676.8	1143.6	3.8	0.0	0.0	0.0	0.0
70°	1133.5	1596.2	1929.1	1989.6	899.0	1.3	0.0	0.0	0.0	0.0
72.5°	327.8	506.9	928.0	1195.3	571.2	0.0	0.0	0.0	0.0	0.0
75°	218.1	233.3	268.6	538.4	285.0	0.0	0.0	0.0	0.0	0.0
77.5°	180.3	184.1	153.8	147.5	82.0	0.0	0.0	0.0	0.0	0.0
80°	163.9	161.4	123.6	87.0	30.3	0.0	0.0	0.0	0.0	0.0
82.5°	151.3	143.7	89.5	45.4	20.2	0.0	0.0	0.0	0.0	0.0
85°	102.1	100.9	40.3	27.7	3.8	0.0	0.0	0.0	0.0	0.0
87.5°	27.7	35.3	8.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	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)