

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: P579417

Luminaire Tested: **CTN-CA8-330-722-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579417
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-CA8-330-722-U-T5N-HSS-HM-EX90
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: 33980 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G4

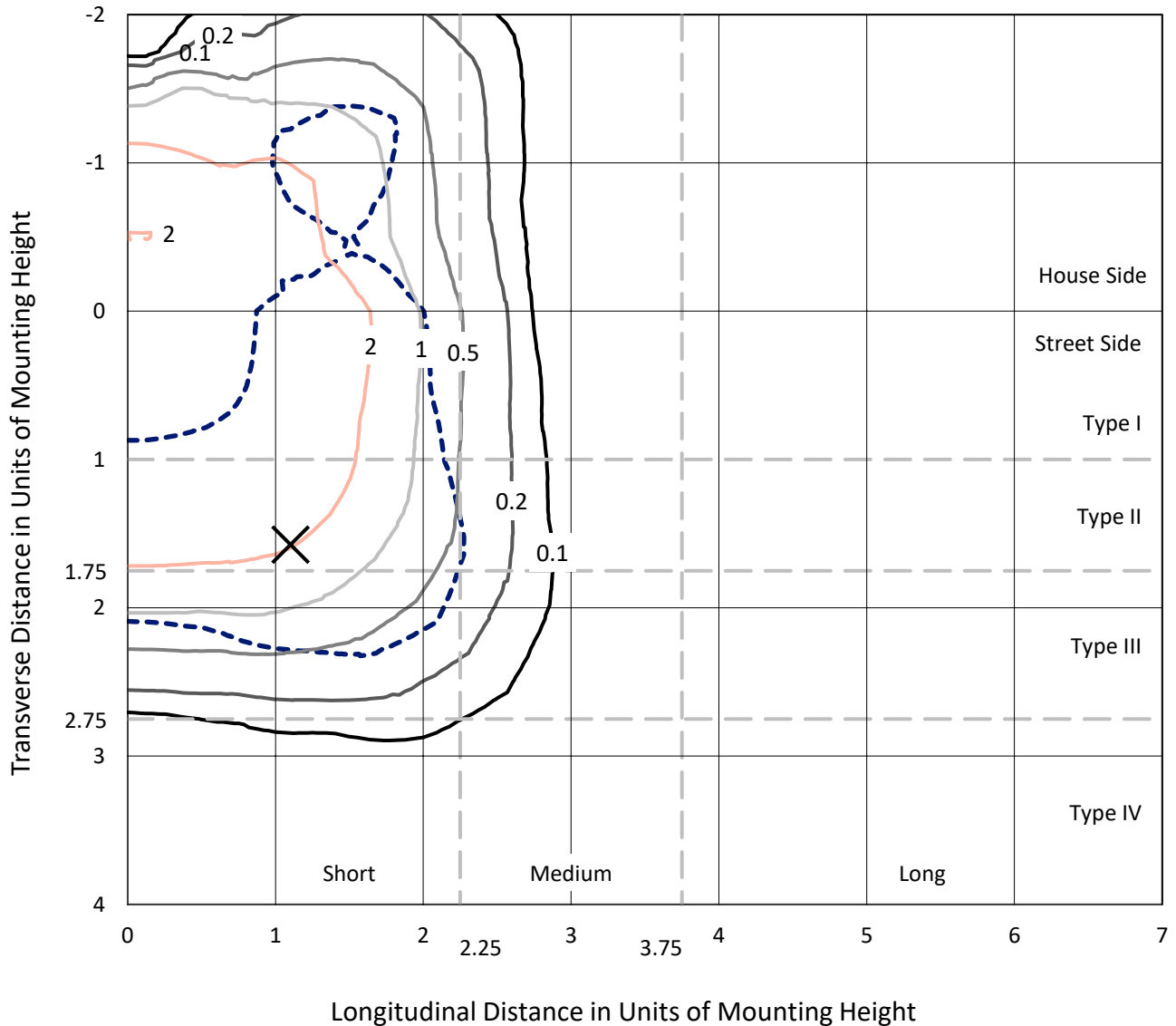
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

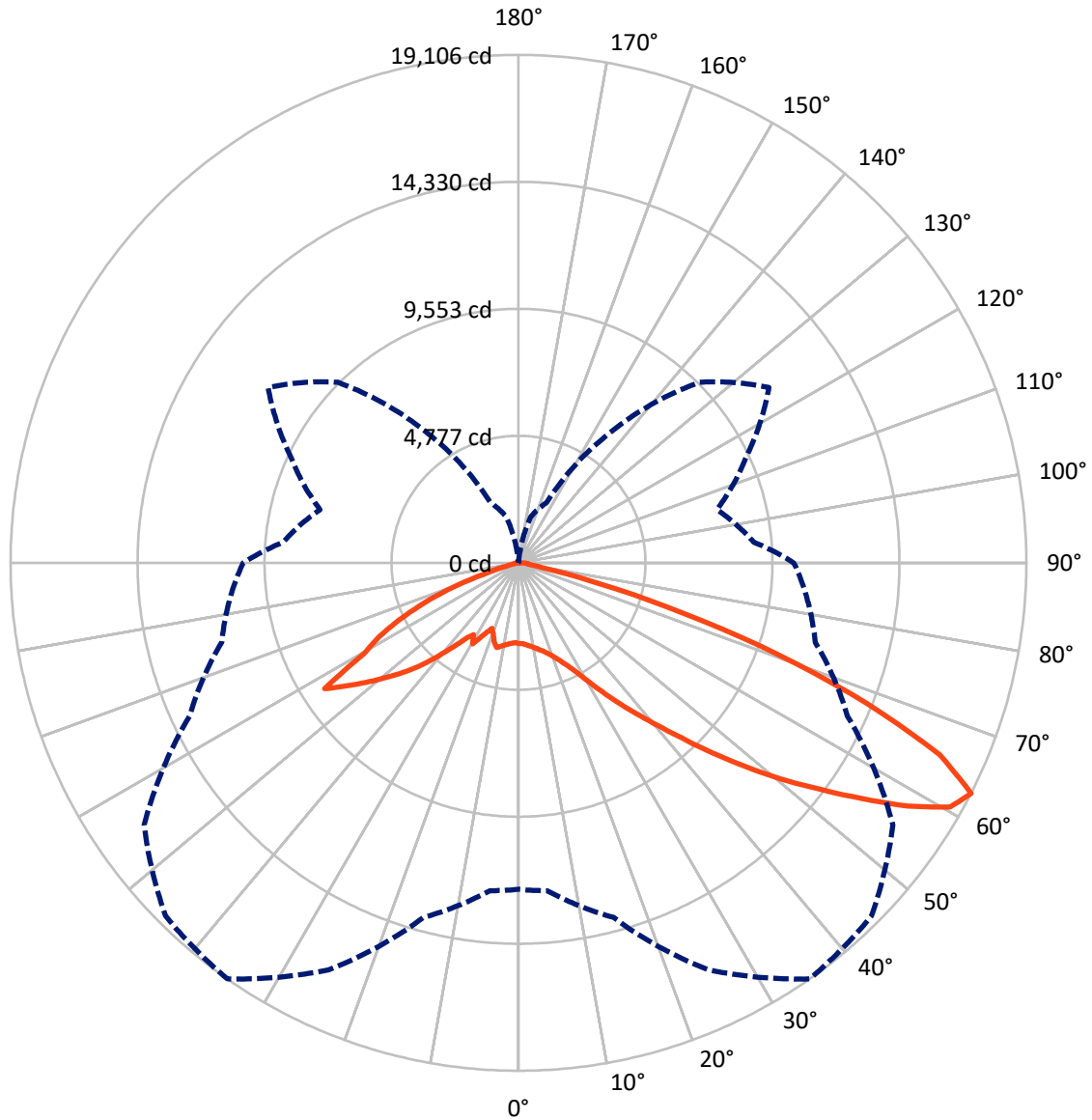
✕ Max cd
 - - - 1/2 Max cd



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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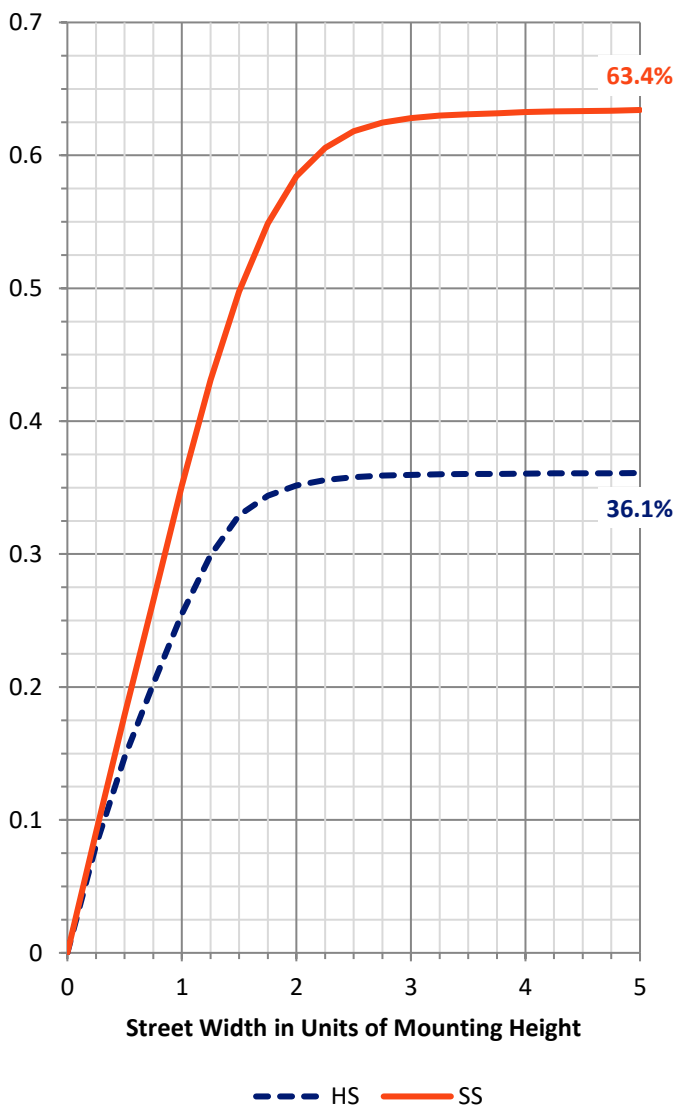
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12333.9	0.0	12334.0
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	21629.9	16.1	21646.0
	% Fixture	63.7	0.0	63.7
Total	Lumens	33963.9	16.1	33980.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	298.9	0.9
10°-20°	966.1	2.8
20°-30°	1858.6	5.5
30°-40°	3707.7	10.9
40°-50°	6770.0	19.9
50°-60°	10116.8	29.8
60°-70°	8476.9	24.9
70°-80°	1586.4	4.7
80°-90°	182.6	0.5
90°-100°	14.5	0.0
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°	33963.9	100.0
0°-180°	33980.0	100.0

Coefficient of Utilization

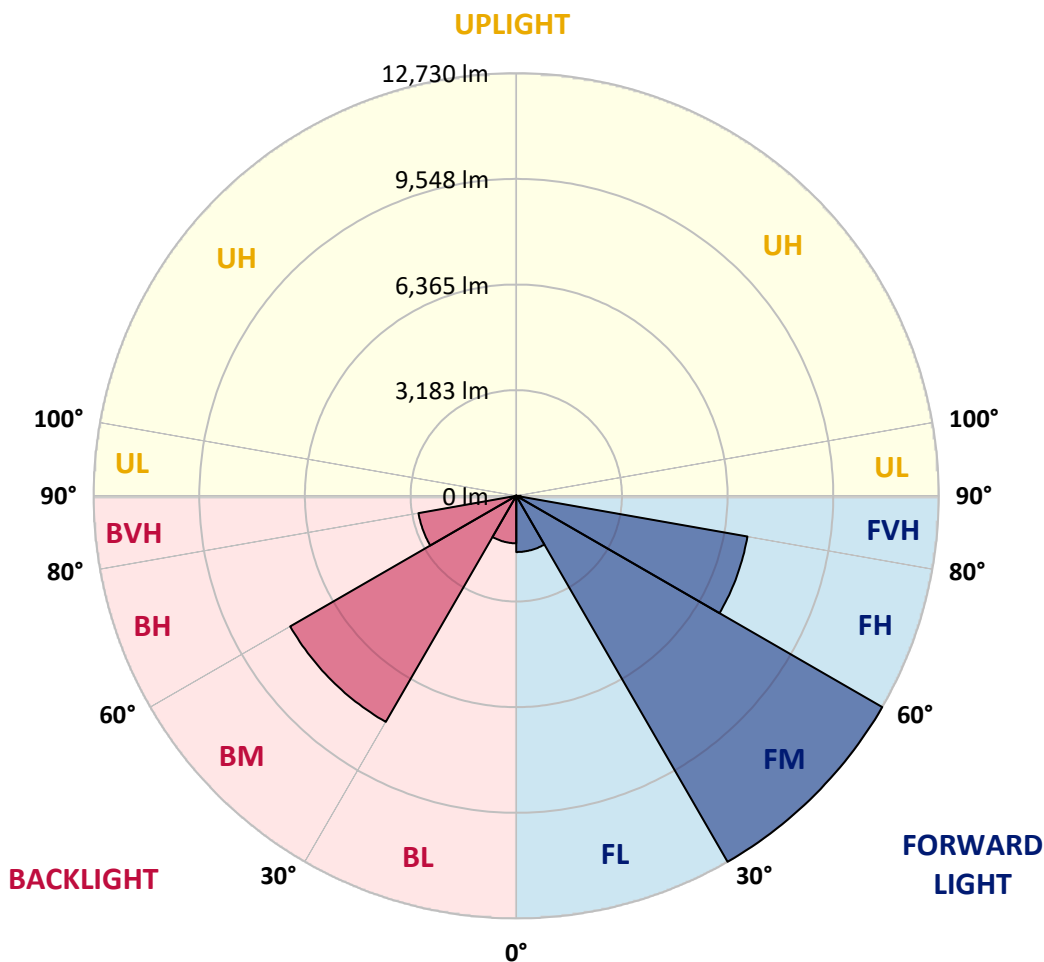


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1694.3	5.0			
FM	(30°-60°)	12730.5	37.5			
FH	(60°-80°)	7072.2	20.8			G3/7500
FVH	(80°-90°)	133.0	0.4			G2/225
BL	(0°-30°)	1429.3	4.2	B3/2500		
BM	(30°-60°)	7864.0	23.1	B4/8500		
BH	(60°-80°)	2991.1	8.8	B4/5000		G4/5000
BVH	(80°-90°)	49.6	0.1			G1/100
UL	(90°-100°)	14.5	0.0		U2/50	
UH	(100°-180°)	1.6	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°	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4
2.5°	3105.4	3079.9	3083.7	3101.6	3045.5	3068.4	3044.2	3067.2	3059.5	3069.7	3077.4
5°	3150.0	3118.1	3120.7	3141.0	3097.7	3116.8	3092.6	3107.9	3095.2	3109.2	3110.5
7.5°	3211.1	3184.3	3180.5	3200.9	3164.0	3180.5	3156.3	3164.0	3151.2	3167.8	3162.7
10°	3292.6	3268.4	3262.0	3276.1	3246.8	3255.7	3230.2	3240.4	3221.3	3240.4	3231.5
12.5°	3383.0	3351.2	3352.5	3367.8	3338.5	3344.8	3324.5	3335.9	3313.0	3333.4	3327.0
15°	3490.0	3444.2	3453.1	3469.7	3441.6	3460.7	3436.5	3453.1	3431.4	3453.1	3445.5
17.5°	3628.9	3576.7	3583.0	3609.8	3586.8	3617.4	3589.4	3609.8	3599.6	3613.6	3611.0
20°	3804.7	3770.3	3763.9	3797.0	3763.9	3802.1	3786.8	3822.5	3825.0	3839.0	3845.4
22.5°	4039.0	4016.1	4000.8	4023.7	3994.4	4021.2	4042.8	4104.0	4126.9	4163.8	4166.4
25°	4351.1	4349.8	4315.4	4316.7	4279.8	4315.4	4376.6	4472.1	4533.2	4580.4	4562.5
27.5°	4772.7	4780.3	4728.1	4707.7	4664.4	4717.9	4844.0	4962.5	5073.3	5139.5	5139.5
30°	5323.0	5330.6	5254.2	5213.4	5173.9	5266.9	5417.2	5571.3	5729.3	5824.8	5803.1
32.5°	6051.5	6027.3	5917.8	5843.9	5776.4	5883.4	6056.6	6231.1	6446.4	6584.0	6567.4
35°	6935.5	6847.6	6738.1	6600.5	6455.3	6539.4	6702.4	6921.5	7220.8	7427.2	7374.9
37.5°	7962.1	7875.5	7688.3	7451.4	7197.9	7208.1	7336.7	7716.3	8090.8	8258.9	8223.3
40°	9028.3	8960.7	8788.8	8484.4	8025.8	7920.1	8131.5	8588.8	8946.7	9158.2	9098.3
42.5°	10114.8	10046.0	9916.0	9610.4	9002.8	8748.0	8968.4	9466.4	9848.5	10056.2	9987.4
45°	11198.7	11119.7	11016.6	10746.5	10167.0	9793.8	9917.3	10374.6	10723.6	10959.2	10817.9
47.5°	12151.5	12099.2	12029.2	11919.6	11412.7	11000.0	10991.1	11293.0	11533.7	11689.1	11515.9
50°	12980.7	12943.7	12983.2	12960.3	12775.6	12399.8	12169.3	12148.9	12226.6	12340.0	12092.9
52.5°	13724.5	13659.6	13806.0	13988.2	14124.5	14048.1	13301.6	12882.6	12797.2	12835.5	12555.2
55°	14333.4	14302.8	14548.6	15005.9	15636.4	15804.5	14464.6	13595.9	13281.3	13260.9	12942.4
57.5°	14705.3	14748.6	15240.3	16111.5	17268.1	17321.6	15892.4	14358.8	13752.5	13533.5	13166.6
60°	14113.0	14279.9	15119.3	16916.5	18652.6	18685.7	16940.7	14499.0	13164.1	12673.7	12219.0
62.5°	12281.4	12380.7	13808.6	16889.8	19106.1	18782.5	17190.4	13653.2	11557.9	10775.8	10355.5
65°	8651.2	8837.2	10367.0	15195.7	17410.7	17451.5	15770.1	11805.0	9229.5	8364.6	8093.3
67.5°	5224.9	5403.2	7032.3	10969.4	14153.8	14611.0	13155.2	8937.8	6618.3	5525.5	5251.6
70°	1696.6	1890.2	3204.7	6465.5	10411.5	11508.2	9899.5	5817.2	3465.8	2427.7	2133.5
72.5°	644.5	703.1	1043.2	2823.9	6484.6	7683.2	6122.9	2918.1	1073.8	639.4	561.7
75°	419.1	428.0	487.8	989.7	3127.0	4230.1	2951.3	854.7	430.5	382.1	354.1
77.5°	360.5	366.8	392.3	492.9	996.1	1617.6	847.0	436.9	359.2	318.4	299.3
80°	340.1	342.6	359.2	417.8	466.2	540.1	407.6	365.6	313.3	299.3	285.3
82.5°	322.3	331.2	340.1	379.6	378.3	388.5	327.4	286.6	266.2	280.2	275.1
85°	300.6	305.7	312.1	338.8	308.2	261.1	252.2	197.4	192.3	205.1	192.3
87.5°	211.4	224.2	216.5	228.0	214.0	166.9	141.4	112.1	89.2	73.9	71.3
90°	86.6	87.9	82.8	76.4	67.5	56.0	44.6	28.0	12.7	6.4	2.5
92.5°	67.5	67.5	65.0	58.6	50.9	42.0	31.8	17.8	8.9	3.8	1.3
95°	42.0	43.3	40.8	36.9	31.8	25.5	19.1	10.2	6.4	2.5	1.3
97.5°	26.7	26.7	24.2	21.7	17.8	12.7	8.9	7.6	5.1	2.5	0.0
100°	15.3	15.3	14.0	11.5	8.9	6.4	6.4	5.1	3.8	1.3	0.0
102.5°	8.9	8.9	6.4	5.1	3.8	3.8	3.8	3.8	2.5	1.3	0.0
105°	3.8	3.8	2.5	2.5	1.3	1.3	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	2.5	1.3	1.3



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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°	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4
2.5°	3072.3	3049.3	3053.1	3031.5	3027.7	3006.0	3049.3	3054.4	3041.7	3053.1
5°	3107.9	3079.9	3088.8	3064.6	3060.8	3031.5	3069.7	3067.2	3057.0	3068.4
7.5°	3161.4	3132.1	3137.2	3110.5	3105.4	3073.5	3109.2	3097.7	3087.5	3101.6
10°	3236.6	3203.5	3206.0	3171.6	3175.4	3133.4	3176.7	3156.3	3143.6	3162.7
12.5°	3327.0	3290.1	3291.3	3255.7	3254.4	3213.6	3251.9	3240.4	3221.3	3250.6
15°	3444.2	3402.2	3398.3	3351.2	3338.5	3292.6	3328.3	3306.6	3293.9	3335.9
17.5°	3608.5	3561.4	3547.4	3490.0	3251.9	3114.3	3305.3	3370.3	3291.3	3278.6
20°	3827.6	3788.1	3756.3	3669.6	3269.7	2840.4	2523.3	2525.8	2859.5	3013.7
22.5°	4124.4	4077.2	4017.4	3893.8	2999.7	2660.8	2662.1	2658.3	2281.3	2122.0
25°	4530.7	4473.4	4351.1	3653.1	3184.3	2871.0	2863.4	2490.2	2282.5	2294.0
27.5°	5079.7	4962.5	4246.6	3957.5	3513.0	3143.6	2960.2	2506.7	2532.2	2550.0
30°	5777.7	5306.4	4589.3	4417.3	3907.8	3505.3	2737.3	2799.7	2850.6	2862.1
32.5°	6493.5	5321.7	5137.0	4954.8	4394.4	3189.4	3085.0	3203.5	3256.9	3263.3
35°	6487.1	5973.8	5735.6	5530.6	4845.3	3412.3	3478.6	3660.7	3797.0	3790.6
37.5°	6865.4	6693.5	6409.4	6149.6	4361.3	3844.1	3962.6	4168.9	4334.5	4329.4
40°	7656.4	7457.7	7157.1	6612.0	4828.7	4338.4	4503.9	4725.6	4842.8	4849.1
42.5°	8404.1	8239.8	7932.8	6177.6	5413.4	4933.2	5083.5	5232.5	5305.1	5328.0
45°	9148.0	9030.8	8009.3	6827.2	6120.3	5531.8	5631.2	5659.2	5735.6	5726.7
47.5°	9751.7	9621.8	7701.0	7642.4	6977.5	6099.9	6092.3	6055.3	6083.4	6089.7
50°	10303.3	8737.8	8320.1	8514.9	7876.8	6679.5	6534.3	6459.1	6420.9	6404.4
52.5°	10738.9	8740.4	8898.3	9416.7	8892.0	7308.7	6996.6	6785.2	5940.7	6601.8
55°	11109.5	9100.9	9446.0	10381.0	9767.0	7967.2	7414.4	7037.4	3965.1	3179.2
57.5°	11322.3	9374.7	9988.7	11284.0	10531.3	8699.6	6826.0	5902.5	2241.8	2239.2
60°	10500.7	8883.0	9973.4	11757.9	10310.9	6748.3	2779.3	2325.8	424.2	435.6
62.5°	8889.4	7727.8	9458.8	11498.0	9602.7	5936.9	2492.7	1790.9	14.0	11.5
65°	6887.1	6164.9	7964.7	10113.5	8736.6	4953.6	1858.4	1290.3	3.8	0.0
67.5°	4505.2	4344.7	5877.0	8386.3	7125.3	3837.8	1247.0	617.8	2.5	0.0
70°	1920.8	2225.2	3723.1	6080.8	5454.1	2640.5	601.2	222.9	1.3	0.0
72.5°	537.5	712.0	1657.1	3562.6	3430.2	1388.4	234.4	94.3	1.3	0.0
75°	318.4	273.9	475.1	1421.5	1669.9	487.8	108.3	72.6	1.3	0.0
77.5°	264.9	214.0	272.6	363.0	505.7	175.8	91.7	65.0	0.0	0.0
80°	248.4	189.8	235.6	253.5	249.7	146.5	90.4	65.0	0.0	0.0
82.5°	235.6	165.6	194.9	194.9	208.9	135.0	85.3	63.7	0.0	0.0
85°	177.0	115.9	129.9	168.1	150.3	95.5	62.4	50.9	0.0	0.0
87.5°	67.5	42.0	50.9	53.5	43.3	21.7	5.1	5.1	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)