

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: P579470

Luminaire Tested: **CTN-CA8-480-730-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579470
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-CA8-480-730-U-T5N-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47266 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U2 - G4

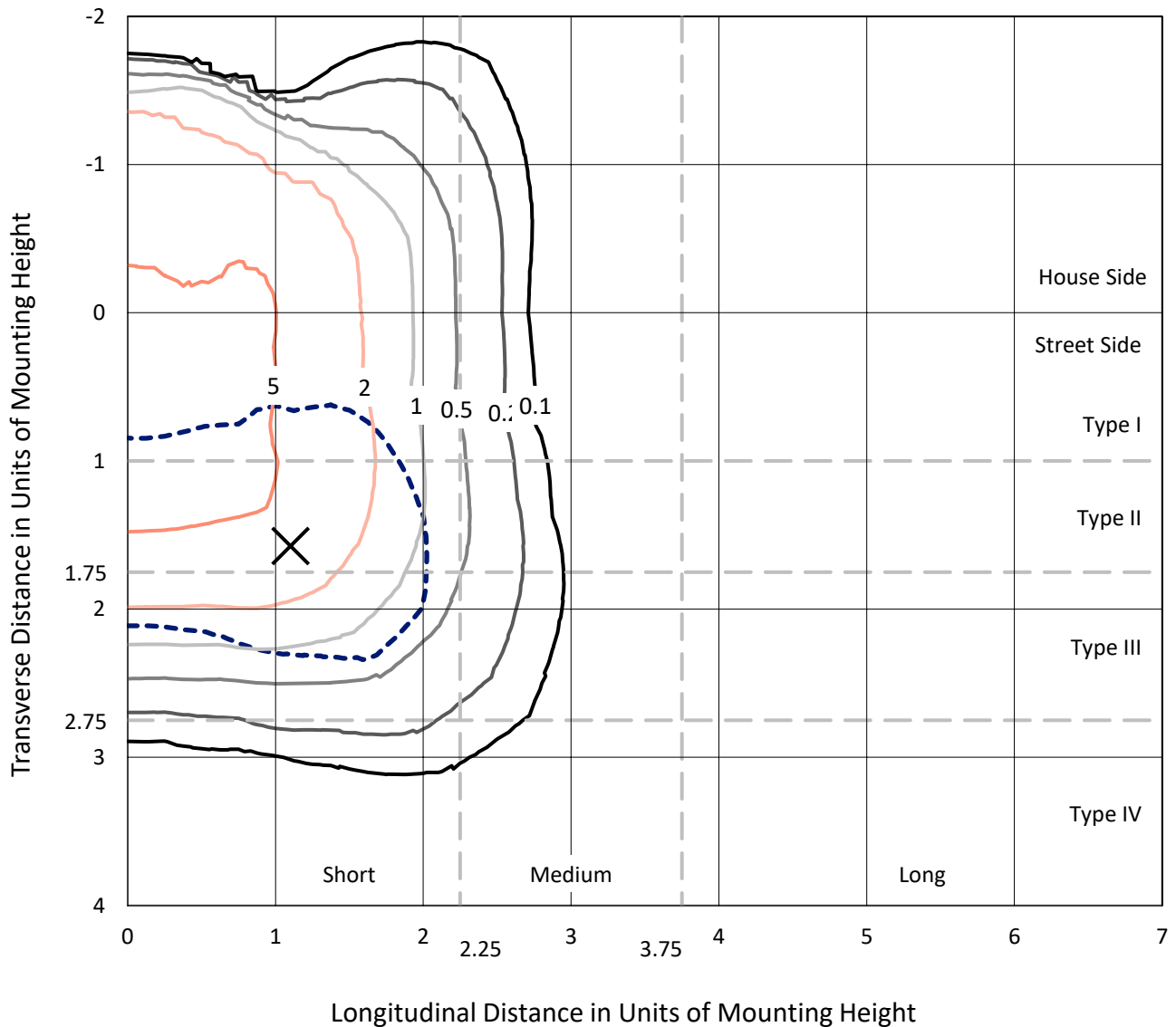
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

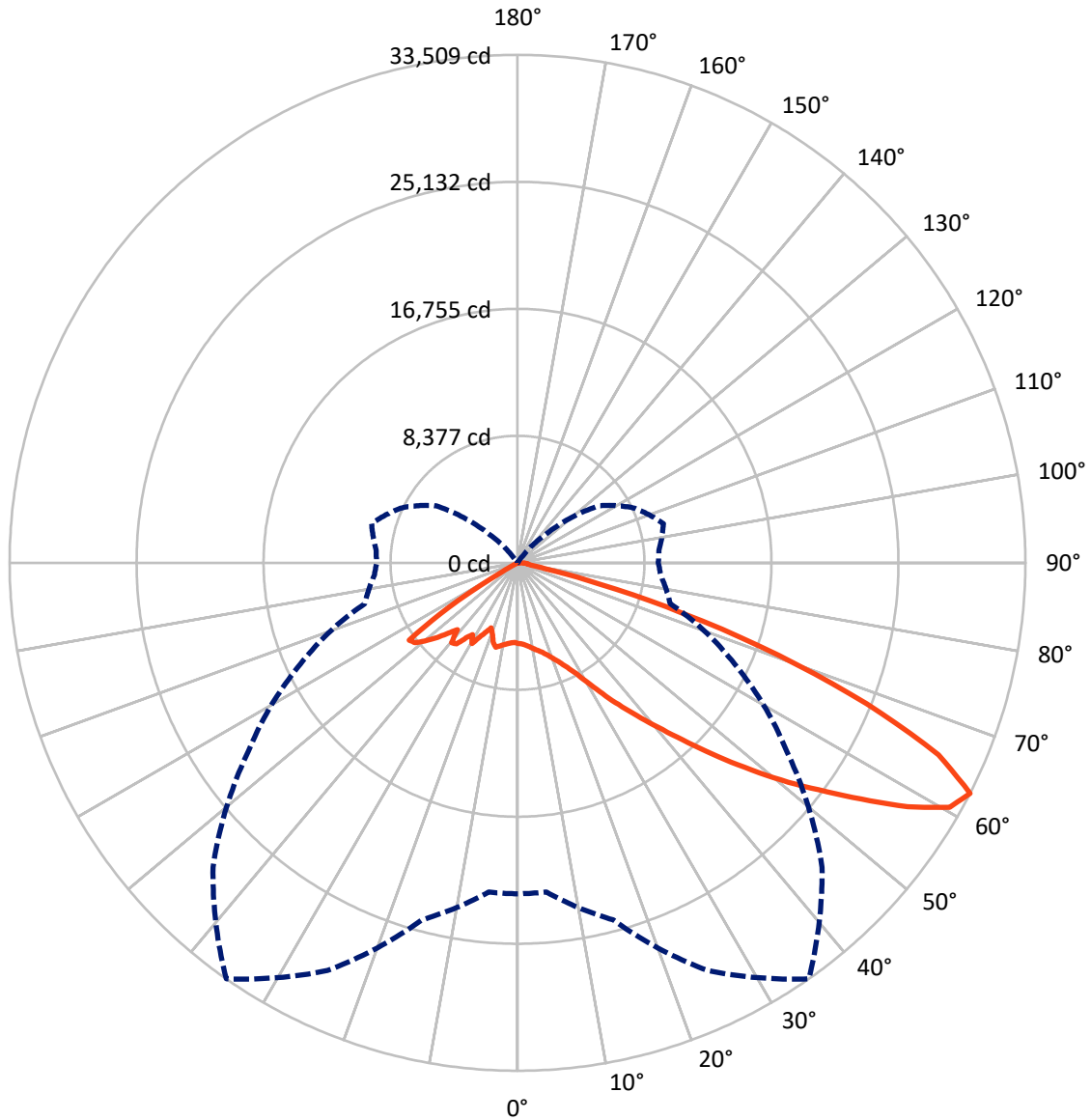
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.1 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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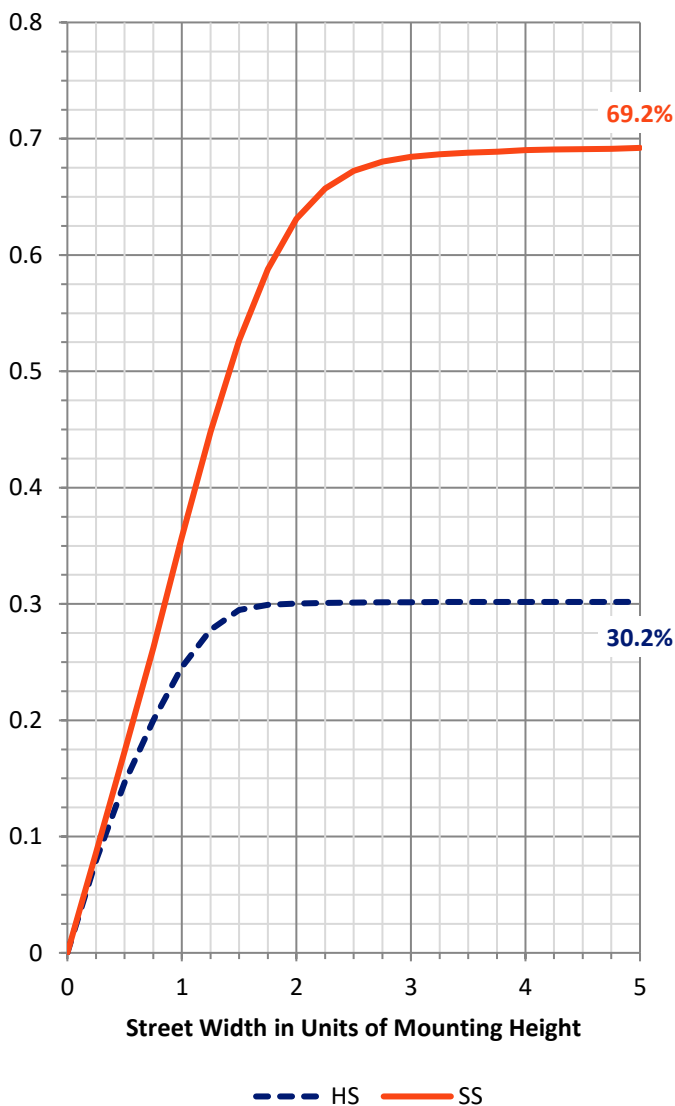
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14345.4	0.0	14345.4
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	32879.6	41.0	32920.6
	% Fixture	69.6	0.1	69.6
Total	Lumens	47225.0	41.1	47266.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	525.2	1.1
10°-20°	1685.5	3.6
20°-30°	3080.7	6.5
30°-40°	5870.8	12.4
40°-50°	10076.7	21.3
50°-60°	13518.1	28.6
60°-70°	10276.4	21.7
70°-80°	1945.9	4.1
80°-90°	245.7	0.5
90°-100°	36.1	0.1
100°-110°	4.9	0.0
110°-120°	0.1	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°	47225.0	99.9
0°-180°	47266.0	100.0

Coefficient of Utilization

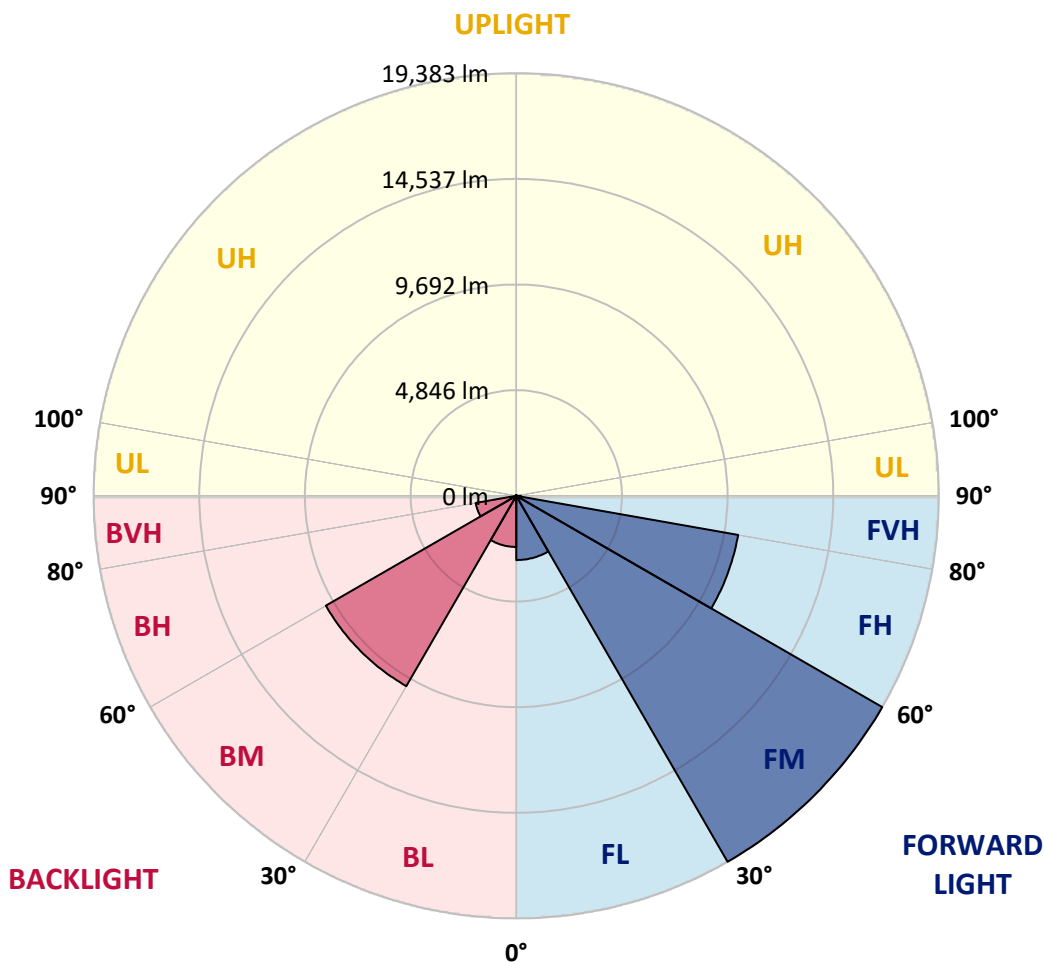


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2946.4	6.2			
FM (30°-60°)	19383.0	41.0			
FH (60°-80°)	10333.2	21.9			G4/12000
FVH (80°-90°)	216.9	0.5			G2/225
BL (0°-30°)	2344.9	5.0	B3/2500		
BM (30°-60°)	10082.6	21.3	B5		
BH (60°-80°)	1889.1	4.0	B3/2500		G3/2500
BVH (80°-90°)	28.8	0.1			G1/100
UL (90°-100°)	36.1	0.1		U2/50	
UH (100°-180°)	4.9	0.0		U1/10	

BUG Rating: B5-U2-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7
2.5°	5454.2	5414.1	5416.3	5452.0	5349.5	5387.3	5342.8	5387.3	5362.8	5380.7	5389.6
5°	5550.0	5509.9	5505.4	5543.3	5456.4	5483.1	5438.6	5469.8	5436.4	5458.6	5458.6
7.5°	5694.8	5654.7	5641.3	5670.3	5590.1	5610.1	5563.4	5581.2	5543.3	5572.3	5556.7
10°	5866.4	5821.8	5806.2	5821.8	5752.7	5763.9	5708.2	5728.2	5672.5	5706.0	5683.7
12.5°	6049.1	5991.1	5991.1	6004.5	5931.0	5933.2	5882.0	5893.1	5837.4	5873.1	5846.3
15°	6247.4	6182.7	6191.7	6205.0	6127.0	6140.4	6086.9	6104.8	6046.8	6082.5	6055.7
17.5°	6510.3	6441.2	6432.3	6472.4	6398.9	6423.4	6363.2	6385.5	6334.3	6345.4	6332.0
20°	6873.4	6786.5	6766.5	6820.0	6737.5	6755.3	6710.8	6755.3	6701.9	6621.7	6396.6
22.5°	7307.9	7232.1	7198.7	7234.4	7136.3	7167.5	7165.3	7236.6	7089.5	6583.8	6358.8
25°	7880.5	7829.2	7764.6	7769.1	7651.0	7697.8	7782.5	7838.2	7212.1	6768.7	6773.2
27.5°	8644.7	8593.5	8504.3	8470.9	8299.4	8413.0	8544.4	8000.8	7508.4	7622.0	7559.7
30°	9620.6	9611.7	9431.2	9373.3	9186.1	9328.7	9215.1	8283.8	8453.1	8611.3	8515.5
32.5°	10919.5	10857.1	10596.4	10491.7	10295.7	10378.1	9375.5	9241.8	9493.6	9707.5	9607.2
35°	12490.3	12300.9	12035.7	11828.5	11487.7	11028.7	9986.0	10246.6	10623.2	10917.3	10431.6
37.5°	14315.0	14110.0	13695.6	13323.5	12786.6	11356.2	10906.1	11427.5	11899.8	11581.2	10460.5
40°	16193.2	16010.5	15620.6	15141.6	14234.8	12372.2	12022.4	12646.2	13183.2	11358.4	10801.4
42.5°	18058.1	17902.1	17588.0	17115.6	15948.1	13582.0	13245.6	13916.2	13410.4	11792.9	11775.1
45°	19938.5	19860.5	19504.1	19100.8	17977.9	15130.5	14615.8	15139.4	12904.7	12833.4	12791.0
47.5°	21462.5	21475.9	21351.1	21141.6	20143.5	16830.4	16159.8	14606.9	13519.6	13597.6	13617.6
50°	23033.2	22933.0	22926.3	22939.7	22523.0	19020.6	17211.4	14366.3	14323.9	14317.2	14299.4
52.5°	24292.1	24165.1	24428.0	24637.4	24884.7	21464.7	17053.2	15181.7	14938.9	14854.2	14335.1
55°	25317.0	25267.9	25695.7	26404.2	27504.9	24053.7	18452.4	15977.1	15491.4	13512.9	12189.5
57.5°	25938.6	26009.9	26892.2	28284.7	30345.6	26199.2	20081.1	16783.6	13263.4	11902.1	11817.4
60°	24748.8	25125.3	26627.0	29683.9	32747.4	28217.8	21293.2	16946.3	11935.5	11206.9	11037.6
62.5°	21836.8	21801.1	24381.2	29683.9	33509.4	28418.4	21676.4	15794.4	10427.1	9478.0	9288.6
65°	15455.8	15549.3	18305.4	26749.6	30526.1	26433.2	19994.2	13428.3	8317.2	7446.0	7189.8
67.5°	9564.9	9558.2	12256.3	19700.1	24849.1	22130.9	16832.7	10293.4	5772.8	4950.7	4672.2
70°	3304.1	3397.7	5512.1	11527.8	18292.0	17338.4	12597.2	6499.1	3043.5	2170.1	1831.4
72.5°	1314.5	1345.7	1978.5	5140.0	11427.5	11583.5	7655.5	3157.1	911.3	579.3	543.6
75°	860.0	864.5	949.1	1855.9	5545.5	6231.8	3555.9	906.8	423.3	387.7	378.8
77.5°	741.9	744.2	788.7	940.2	1806.9	2424.1	1011.5	537.0	354.3	318.6	309.7
80°	688.5	690.7	713.0	808.8	871.2	826.6	539.2	432.2	298.6	283.0	280.7
82.5°	650.6	659.5	670.6	728.6	704.1	621.6	447.8	349.8	229.5	245.1	251.8
85°	599.3	608.2	614.9	648.4	588.2	454.5	347.6	262.9	147.0	160.4	158.2
87.5°	450.1	454.5	445.6	441.1	410.0	318.6	229.5	167.1	57.9	53.5	49.0
90°	216.1	213.9	205.0	189.4	164.9	129.2	95.8	53.5	24.5	11.1	4.5
92.5°	171.6	169.3	164.9	149.3	129.2	95.8	69.1	37.9	22.3	8.9	2.2
95°	115.9	111.4	106.9	95.8	80.2	57.9	40.1	26.7	17.8	6.7	2.2
97.5°	75.8	73.5	66.8	57.9	44.6	31.2	24.5	20.1	15.6	6.7	2.2
100°	46.8	46.8	42.3	33.4	22.3	17.8	15.6	15.6	11.1	4.5	0.0
102.5°	29.0	26.7	24.5	15.6	11.1	11.1	11.1	11.1	8.9	4.5	0.0
105°	15.6	15.6	11.1	8.9	6.7	4.5	6.7	8.9	6.7	2.2	0.0
107.5°	4.5	4.5	4.5	2.2	2.2	0.0	2.2	4.5	4.5	2.2	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	4.5	2.2	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°	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7	5322.7
2.5°	5378.4	5336.1	5347.2	5304.9	5298.2	5253.7	5329.4	5333.9	5313.8	5336.1
5°	5447.5	5396.3	5416.3	5365.1	5356.2	5298.2	5358.4	5351.7	5336.1	5353.9
7.5°	5545.5	5494.3	5505.4	5445.3	5434.1	5369.5	5427.4	5405.2	5385.1	5409.6
10°	5681.4	5623.5	5632.4	5561.1	5552.2	5476.5	5543.3	5509.9	5480.9	5514.3
12.5°	5848.5	5772.8	5763.9	5688.1	5681.4	5610.1	5679.2	5645.8	5616.8	5670.3
15°	6040.2	5939.9	5926.5	5830.7	5819.6	5746.1	5812.9	5763.9	5741.6	5810.7
17.5°	6296.4	5942.1	5743.8	5603.5	5523.3	5483.1	5603.5	5766.1	5717.1	5719.3
20°	6191.7	5810.7	5545.5	5425.2	5338.3	4950.7	4415.9	4569.7	4881.6	5035.3
22.5°	6160.5	6026.8	5917.6	5714.9	4852.6	4634.3	4665.5	4629.8	4041.6	3816.6
25°	6757.6	6603.8	6367.7	5304.9	5055.4	5006.4	5024.2	4409.2	3965.9	4030.5
27.5°	7521.8	7363.6	6198.3	5603.5	5554.4	5489.8	5137.8	4369.1	4429.3	4491.7
30°	8484.3	7653.2	6463.5	6280.8	6189.4	6122.6	4817.0	4879.4	4979.6	5057.6
32.5°	9422.3	7628.7	7223.2	6996.0	6882.3	5585.6	5443.0	5587.9	5690.4	5750.5
35°	9433.4	8502.1	8074.3	7782.5	7060.6	6004.5	6136.0	6378.8	6630.6	6677.4
37.5°	9689.6	9491.4	9001.2	8633.6	5251.4	6701.9	6991.5	7270.0	7521.8	7537.4
40°	10710.1	10496.2	10037.2	9228.4	5799.5	6835.6	7934.0	8248.1	8459.8	8448.6
42.5°	11728.3	11581.2	11104.4	8201.3	6534.8	5922.1	8923.2	9130.4	9264.1	9357.7
45°	12753.2	12606.1	10995.3	9005.6	7410.4	6485.8	8682.6	9856.7	10003.8	10050.6
47.5°	13553.0	13189.9	10075.1	10072.9	8504.3	7207.6	7169.8	10511.8	10641.0	10607.6
50°	14292.7	11775.1	10890.5	10422.7	9636.2	7887.2	7624.3	8845.2	11218.1	11169.0
52.5°	13004.9	11427.5	11590.1	9480.2	10545.2	8562.3	8136.7	7931.7	10193.2	11505.5
55°	11630.2	11853.0	12305.3	10416.0	7651.0	8780.6	8571.2	8163.5	6877.9	5788.4
57.5°	11868.6	12200.6	12222.9	11282.7	7918.4	5485.4	7024.9	6149.3	3885.7	3894.6
60°	11073.2	11505.5	8934.3	7521.8	4257.7	1143.0	111.4	98.0	677.3	824.4
62.5°	9362.1	9963.7	8528.8	6552.6	2731.5	42.3	11.1	2.2	0.0	0.0
65°	7250.0	7974.1	7207.6	5654.7	2424.1	13.4	0.0	0.0	0.0	0.0
67.5°	4781.3	5434.1	5476.5	4730.1	2020.8	6.7	0.0	0.0	0.0	0.0
70°	2003.0	2820.7	3408.9	3515.8	1588.6	2.2	0.0	0.0	0.0	0.0
72.5°	579.3	895.7	1639.8	2112.2	1009.3	0.0	0.0	0.0	0.0	0.0
75°	385.4	412.2	474.6	951.4	503.5	0.0	0.0	0.0	0.0	0.0
77.5°	318.6	325.3	271.8	260.7	144.8	0.0	0.0	0.0	0.0	0.0
80°	289.6	285.2	218.3	153.7	53.5	0.0	0.0	0.0	0.0	0.0
82.5°	267.4	254.0	158.2	80.2	35.6	0.0	0.0	0.0	0.0	0.0
85°	180.5	178.2	71.3	49.0	6.7	0.0	0.0	0.0	0.0	0.0
87.5°	49.0	62.4	15.6	6.7	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)