

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: P579632

Luminaire Tested: **CTN-CA10-630-727-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579632
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-CA10-630-727-U-T5N-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52924 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U2 - G4

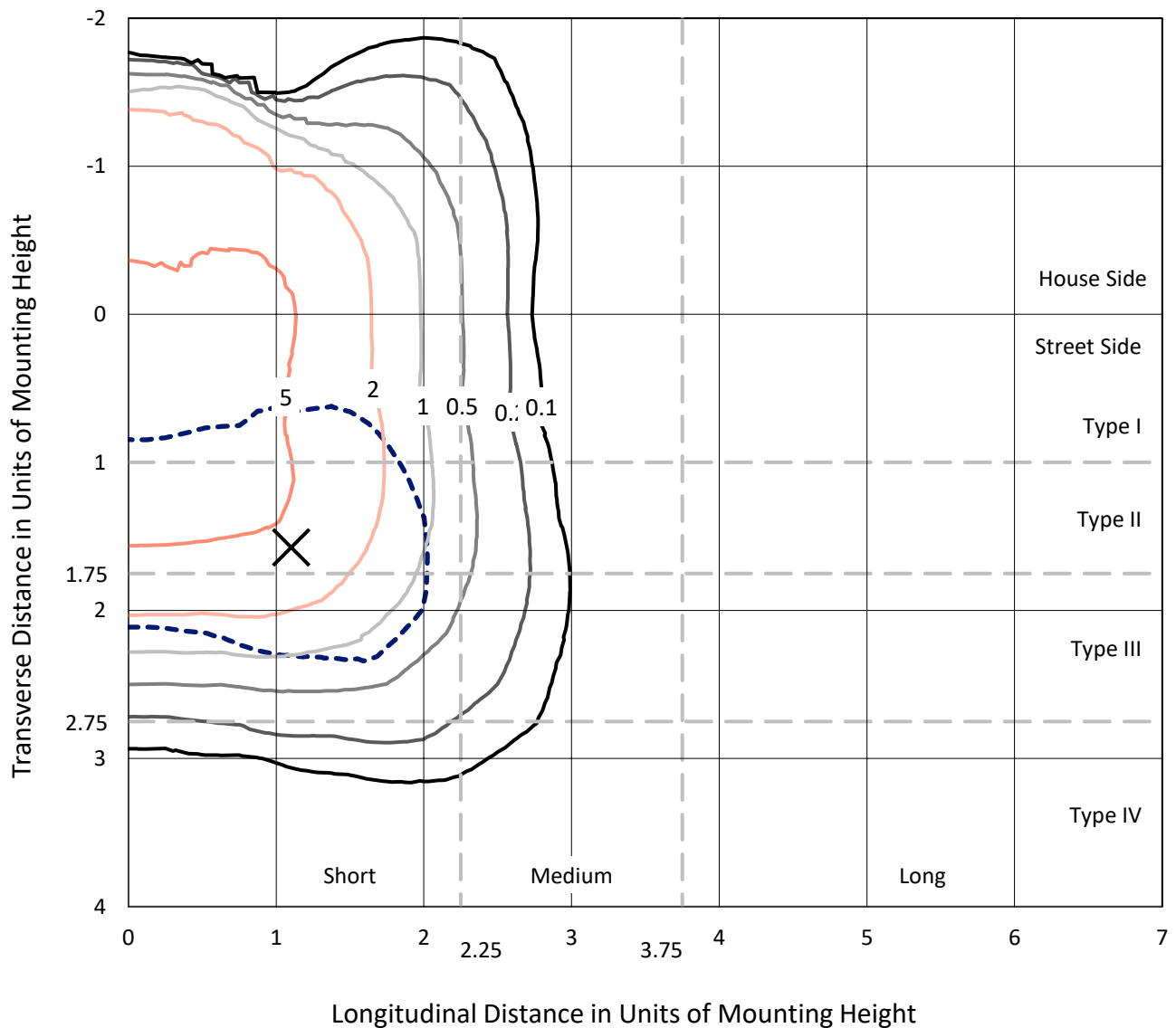
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

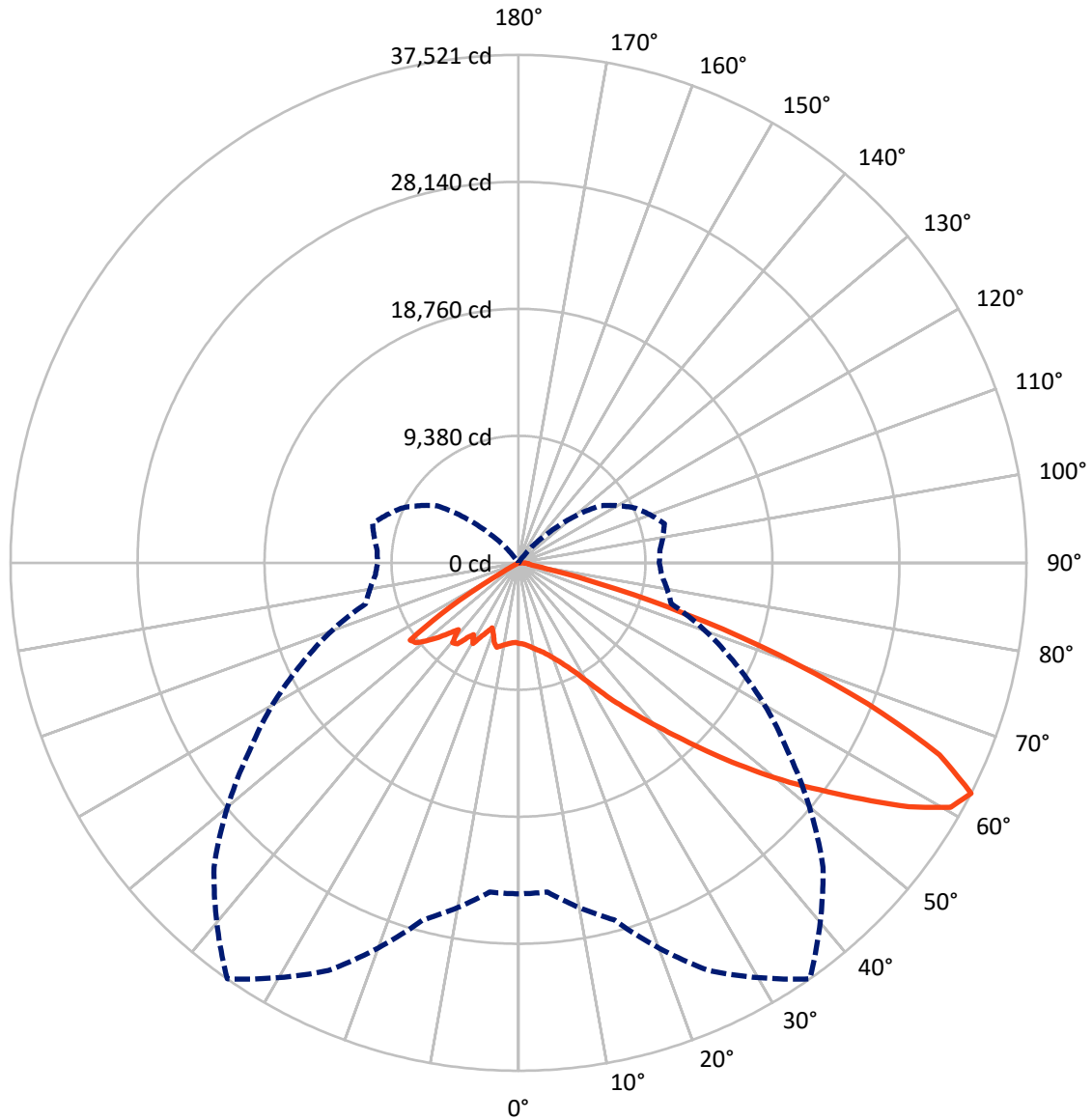
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.1 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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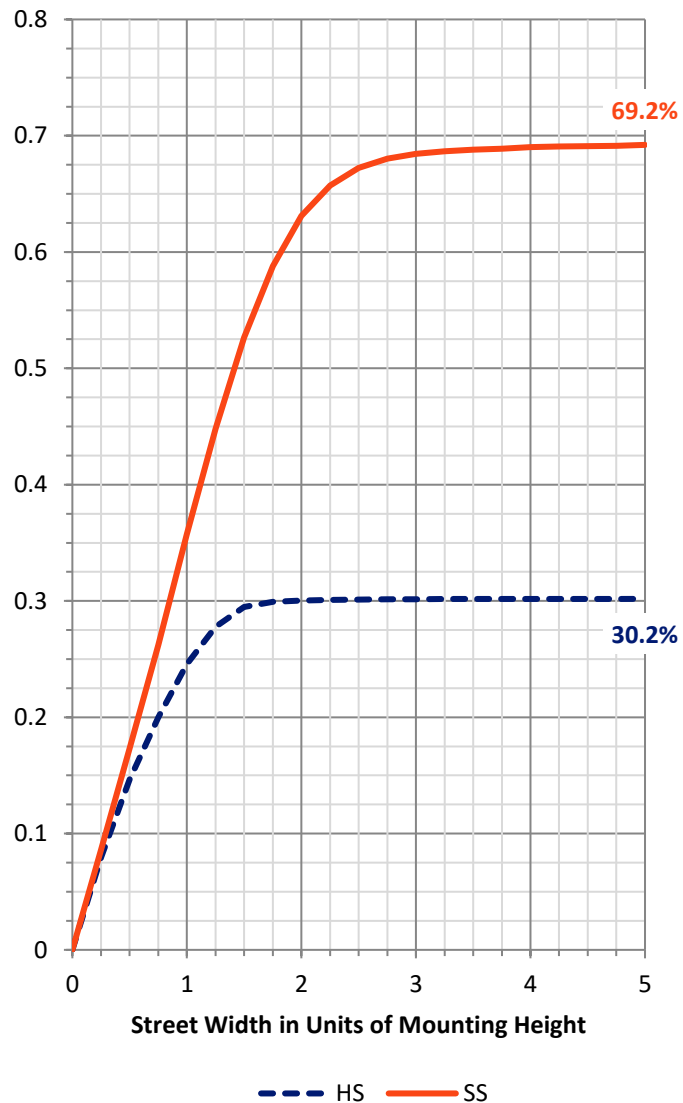
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16062.6	0.0	16062.6
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	36815.4	45.9	36861.4
	% Fixture	69.6	0.1	69.6
Total	Lumens	52878.0	46.0	52924.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	588.0	1.1
10°-20°	1887.3	3.6
20°-30°	3449.5	6.5
30°-40°	6573.5	12.4
40°-50°	11282.9	21.3
50°-60°	15136.3	28.6
60°-70°	11506.6	21.7
70°-80°	2178.8	4.1
80°-90°	275.1	0.5
90°-100°	40.4	0.1
100°-110°	5.5	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°	52878.0	99.9
0°-180°	52924.0	100.0

Coefficient of Utilization



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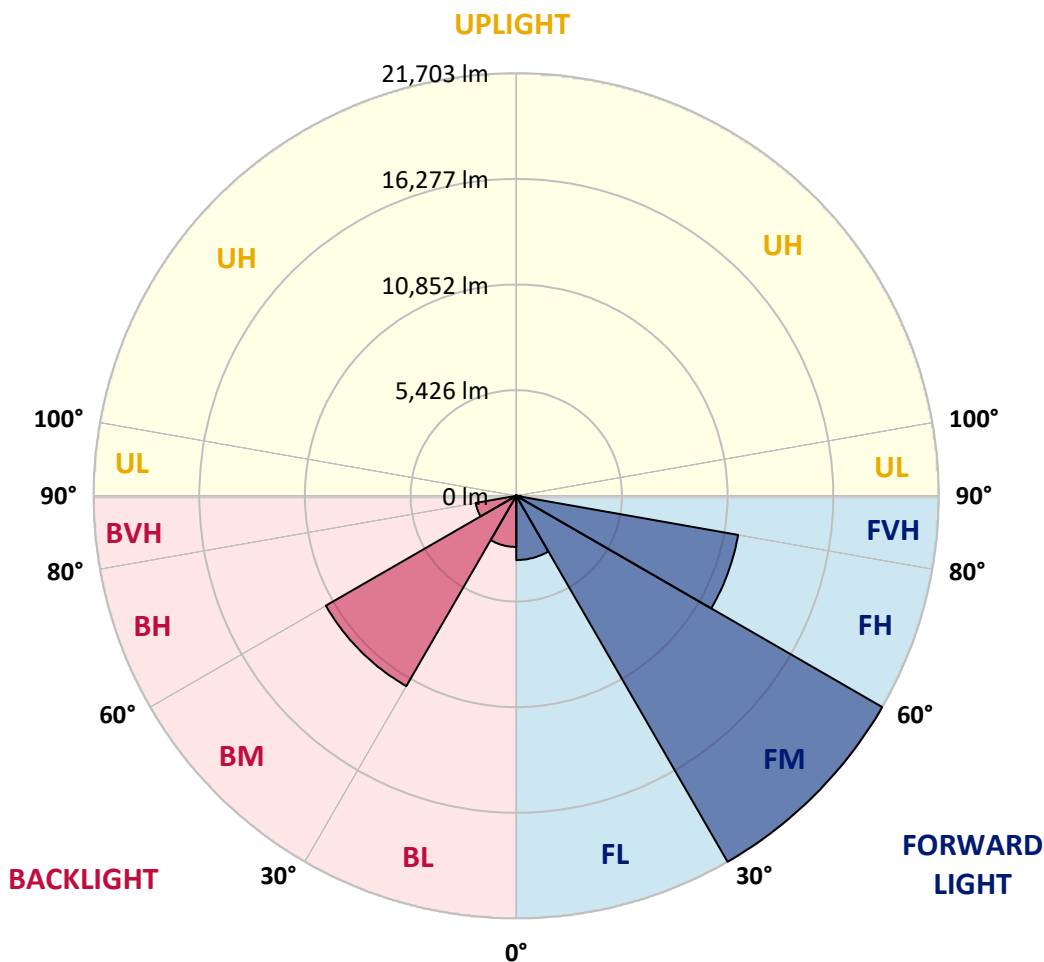
CATALOG NUMBER: CTN-CA10-630-727-U-T5N-HSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3299.1	6.2			
FM (30°-60°)	21703.2	41.0			
FH (60°-80°)	11570.2	21.9			G4/12000
FVH (80°-90°)	242.9	0.5			G3/500
BL (0°-30°)	2625.6	5.0	B4/5000		
BM (30°-60°)	11289.5	21.3	B5		
BH (60°-80°)	2115.2	4.0	B3/2500		G3/2500
BVH (80°-90°)	32.2	0.1			G1/100
UL (90°-100°)	40.4	0.1		U2/50	
UH (100°-180°)	5.5	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°	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9
2.5°	6107.1	6062.2	6064.7	6104.6	5989.8	6032.2	5982.3	6032.2	6004.8	6024.8	6034.7
5°	6214.4	6169.4	6164.5	6206.9	6109.6	6139.5	6089.6	6124.5	6087.1	6112.1	6112.1
7.5°	6376.5	6331.6	6316.6	6349.1	6259.3	6281.7	6229.3	6249.3	6206.9	6239.3	6221.8
10°	6568.6	6518.7	6501.2	6518.7	6441.4	6453.8	6391.5	6413.9	6351.6	6389.0	6364.0
12.5°	6773.2	6708.3	6708.3	6723.3	6641.0	6643.4	6586.1	6598.5	6536.2	6576.1	6546.2
15°	6995.2	6922.9	6932.8	6947.8	6860.5	6875.5	6815.6	6835.5	6770.7	6810.6	6780.7
17.5°	7289.6	7212.2	7202.3	7247.2	7164.8	7192.3	7124.9	7149.9	7092.5	7105.0	7090.0
20°	7696.2	7598.9	7576.5	7636.3	7544.0	7564.0	7514.1	7564.0	7504.1	7414.3	7162.3
22.5°	8182.7	8097.9	8060.4	8100.4	7990.6	8025.5	8023.0	8102.9	7938.2	7371.9	7119.9
25°	8823.8	8766.5	8694.1	8699.1	8566.9	8619.3	8714.1	8776.4	8075.4	7579.0	7584.0
27.5°	9679.5	9622.1	9522.4	9484.9	9292.8	9420.1	9567.3	8958.5	8407.2	8534.4	8464.6
30°	10772.2	10762.2	10560.2	10495.3	10285.7	10445.4	10318.2	9275.4	9465.0	9642.1	9534.8
32.5°	12226.6	12156.8	11864.9	11747.6	11528.1	11620.4	10497.8	10348.1	10630.0	10869.5	10757.2
35°	13985.4	13773.4	13476.5	13244.5	12862.8	12348.9	11181.3	11473.2	11894.8	12224.1	11680.3
37.5°	16028.6	15799.1	15335.1	14918.4	14317.2	12715.6	12211.7	12795.4	13324.3	12967.6	11712.7
40°	18131.6	17927.1	17490.5	16954.1	15938.8	13853.2	13461.5	14160.0	14761.3	12718.1	12094.4
42.5°	20219.7	20045.1	19693.3	19164.5	17857.2	15207.8	14831.1	15582.0	15015.7	13204.6	13184.6
45°	22325.3	22238.0	21838.8	21387.3	20129.9	16941.7	16365.4	16951.6	14449.4	14369.6	14322.2
47.5°	24031.7	24046.6	23906.9	23672.4	22554.8	18845.1	18094.2	16355.4	15138.0	15225.3	15247.7
50°	25790.4	25678.2	25670.7	25685.7	25219.1	21297.4	19271.7	16086.0	16038.6	16031.1	16011.1
52.5°	27200.0	27057.8	27352.1	27586.6	27863.6	24034.2	19094.6	16999.0	16727.1	16632.3	16051.0
55°	28347.5	28292.6	28771.6	29565.0	30797.3	26933.0	20661.3	17889.7	17345.8	15130.5	13648.6
57.5°	29043.6	29123.4	30111.3	31670.5	33978.1	29335.4	22484.9	18792.7	14851.1	13326.8	13232.0
60°	27711.4	28133.0	29814.4	33237.2	36667.4	31595.7	23842.1	18974.9	13364.2	12548.5	12358.9
62.5°	24450.8	24410.9	27299.7	33237.2	37520.6	31820.2	24271.2	17685.1	11675.3	10612.5	10400.5
65°	17305.9	17410.7	20496.6	29951.6	34180.2	29597.4	22387.6	15035.7	9312.8	8337.4	8050.5
67.5°	10709.8	10702.4	13723.5	22058.3	27823.6	24780.1	18847.6	11525.6	6463.8	5543.3	5231.4
70°	3699.7	3804.5	6171.9	12907.7	20481.7	19413.9	14105.2	7277.1	3407.8	2429.9	2050.7
72.5°	1471.9	1506.8	2215.3	5755.3	12795.4	12970.1	8571.9	3535.0	1020.3	648.6	608.7
75°	963.0	968.0	1062.8	2078.1	6209.4	6977.7	3981.6	1015.4	474.0	434.1	424.1
77.5°	830.7	833.2	883.1	1052.8	2023.2	2714.3	1132.6	601.2	396.7	356.7	346.8
80°	770.9	773.4	798.3	905.6	975.4	925.5	603.7	484.0	334.3	316.8	314.3
82.5°	728.5	738.4	750.9	815.8	788.3	696.0	501.4	391.7	257.0	274.4	281.9
85°	671.1	681.1	688.5	726.0	658.6	508.9	389.2	294.4	164.7	179.6	177.1
87.5°	503.9	508.9	498.9	494.0	459.0	356.7	257.0	187.1	64.9	59.9	54.9
90°	242.0	239.5	229.5	212.1	184.6	144.7	107.3	59.9	27.4	12.5	5.0
92.5°	192.1	189.6	184.6	167.1	144.7	107.3	77.3	42.4	24.9	10.0	2.5
95°	129.7	124.7	119.7	107.3	89.8	64.9	44.9	29.9	20.0	7.5	2.5
97.5°	84.8	82.3	74.8	64.9	49.9	34.9	27.4	22.5	17.5	7.5	2.5
100°	52.4	52.4	47.4	37.4	24.9	20.0	17.5	17.5	12.5	5.0	0.0
102.5°	32.4	29.9	27.4	17.5	12.5	12.5	12.5	12.5	10.0	5.0	0.0
105°	17.5	17.5	12.5	10.0	7.5	5.0	7.5	10.0	7.5	2.5	0.0
107.5°	5.0	5.0	5.0	2.5	2.5	0.0	2.5	5.0	5.0	2.5	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	5.0	2.5	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°	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9	5959.9
2.5°	6022.3	5974.9	5987.3	5939.9	5932.4	5882.6	5967.4	5972.4	5949.9	5974.9
5°	6099.6	6042.2	6064.7	6007.3	5997.3	5932.4	5999.8	5992.3	5974.9	5994.8
7.5°	6209.4	6152.0	6164.5	6097.1	6084.6	6012.3	6077.1	6052.2	6029.7	6057.2
10°	6361.5	6296.7	6306.7	6226.8	6216.8	6132.0	6206.9	6169.4	6137.0	6174.4
12.5°	6548.6	6463.8	6453.8	6369.0	6361.5	6281.7	6359.0	6321.6	6289.2	6349.1
15°	6763.2	6650.9	6636.0	6528.7	6516.2	6433.9	6508.7	6453.8	6428.9	6506.2
17.5°	7050.1	6653.4	6431.4	6274.2	6184.4	6139.5	6274.2	6456.3	6401.5	6404.0
20°	6932.8	6506.2	6209.4	6074.6	5977.4	5543.3	4944.5	5116.7	5465.9	5638.1
22.5°	6897.9	6748.2	6626.0	6399.0	5433.5	5189.0	5223.9	5184.0	4525.4	4273.5
25°	7566.5	7394.4	7129.9	5939.9	5660.5	5605.6	5625.6	4937.1	4440.6	4513.0
27.5°	8422.2	8245.1	6940.3	6274.2	6219.3	6147.0	5752.8	4892.2	4959.5	5029.4
30°	9499.9	8569.4	7237.2	7032.6	6930.3	6855.5	5393.6	5463.4	5575.7	5663.0
32.5°	10550.2	8541.9	8087.9	7833.4	7706.2	6254.3	6094.6	6256.8	6371.5	6438.9
35°	10562.7	9519.9	9040.9	8714.1	7905.8	6723.3	6870.5	7142.4	7424.3	7476.7
37.5°	10849.5	10627.5	10078.7	9667.0	5880.1	7504.1	7828.4	8140.3	8422.2	8439.6
40°	11992.1	11752.6	11238.7	10333.1	6493.8	7653.8	8883.7	9235.5	9472.5	9460.0
42.5°	13132.2	12967.6	12433.7	9183.1	7317.0	6631.0	9991.4	10223.4	10373.1	10477.8
45°	14279.8	14115.1	12311.5	10083.7	8297.4	7262.1	9721.9	11036.7	11201.3	11253.7
47.5°	15175.4	14768.8	11281.1	11278.6	9522.4	8070.4	8028.0	11770.1	11914.8	11877.4
50°	16003.6	13184.6	12194.2	11670.3	10789.7	8831.3	8536.9	9904.0	12560.9	12506.0
52.5°	14561.7	12795.4	12977.5	10615.0	11807.5	9587.2	9110.7	8881.2	11413.4	12882.7
55°	13022.5	13271.9	13778.4	11662.8	8566.9	9831.7	9597.2	9140.7	7701.2	6481.3
57.5°	13289.4	13661.1	13686.0	12633.3	8866.2	6142.0	7865.9	6885.4	4350.8	4360.8
60°	12398.8	12882.7	10003.8	8422.2	4767.4	1279.8	124.7	109.8	758.4	923.0
62.5°	10482.8	11156.4	9549.8	7337.0	3058.5	47.4	12.5	2.5	0.0	0.0
65°	8117.8	8928.6	8070.4	6331.6	2714.3	15.0	0.0	0.0	0.0	0.0
67.5°	5353.7	6084.6	6132.0	5296.3	2262.7	7.5	0.0	0.0	0.0	0.0
70°	2242.8	3158.3	3816.9	3936.7	1778.7	2.5	0.0	0.0	0.0	0.0
72.5°	648.6	1002.9	1836.1	2365.0	1130.1	0.0	0.0	0.0	0.0	0.0
75°	431.6	461.5	531.4	1065.2	563.8	0.0	0.0	0.0	0.0	0.0
77.5°	356.7	364.2	304.4	291.9	162.2	0.0	0.0	0.0	0.0	0.0
80°	324.3	319.3	244.5	172.1	59.9	0.0	0.0	0.0	0.0	0.0
82.5°	299.4	284.4	177.1	89.8	39.9	0.0	0.0	0.0	0.0	0.0
85°	202.1	199.6	79.8	54.9	7.5	0.0	0.0	0.0	0.0	0.0
87.5°	54.9	69.9	17.5	7.5	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)