

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: P579485

Luminaire Tested: **CTN-CA10-630-740-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579485
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-CA10-630-740-U-T5-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56902 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U3 - G5

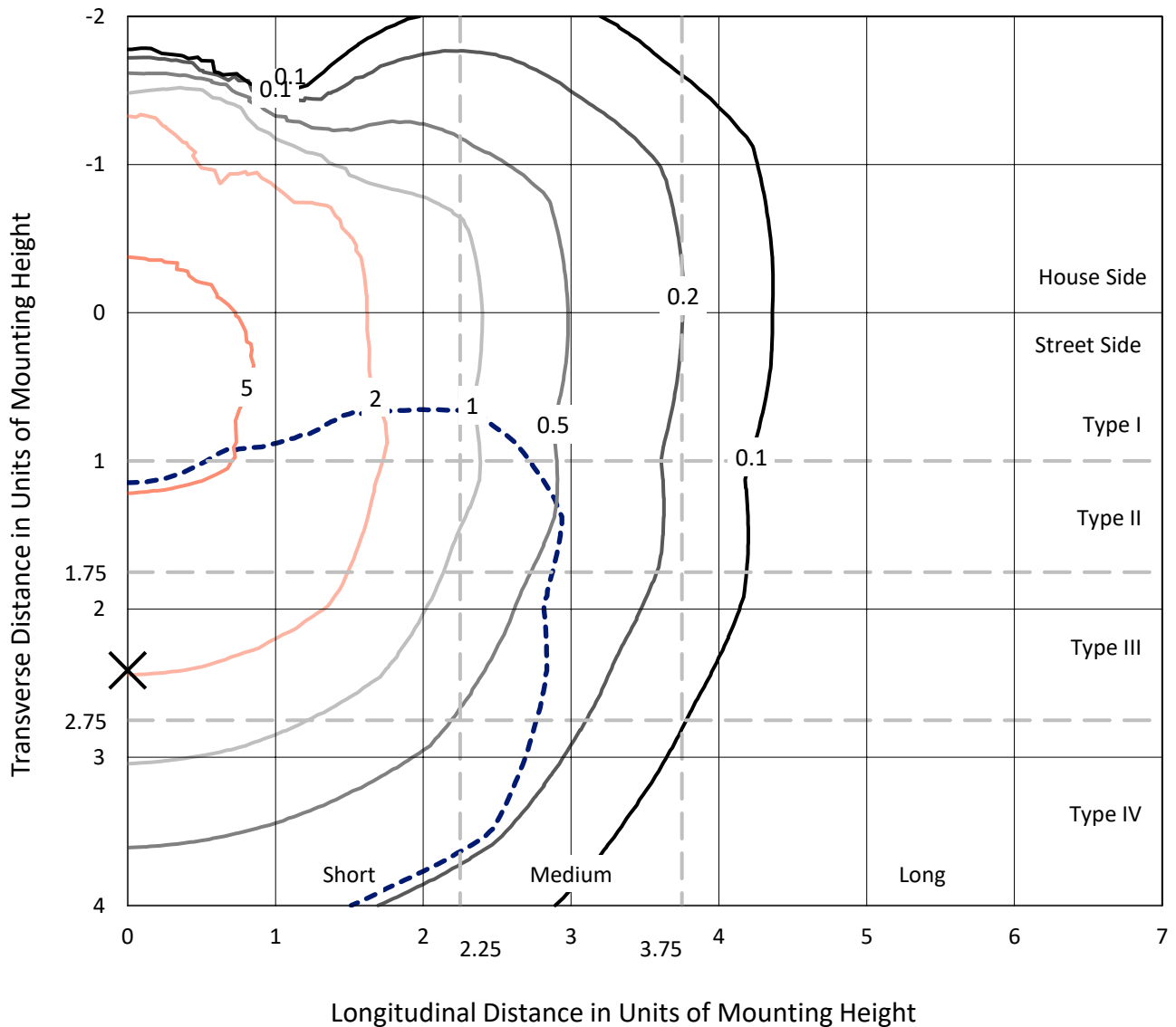
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

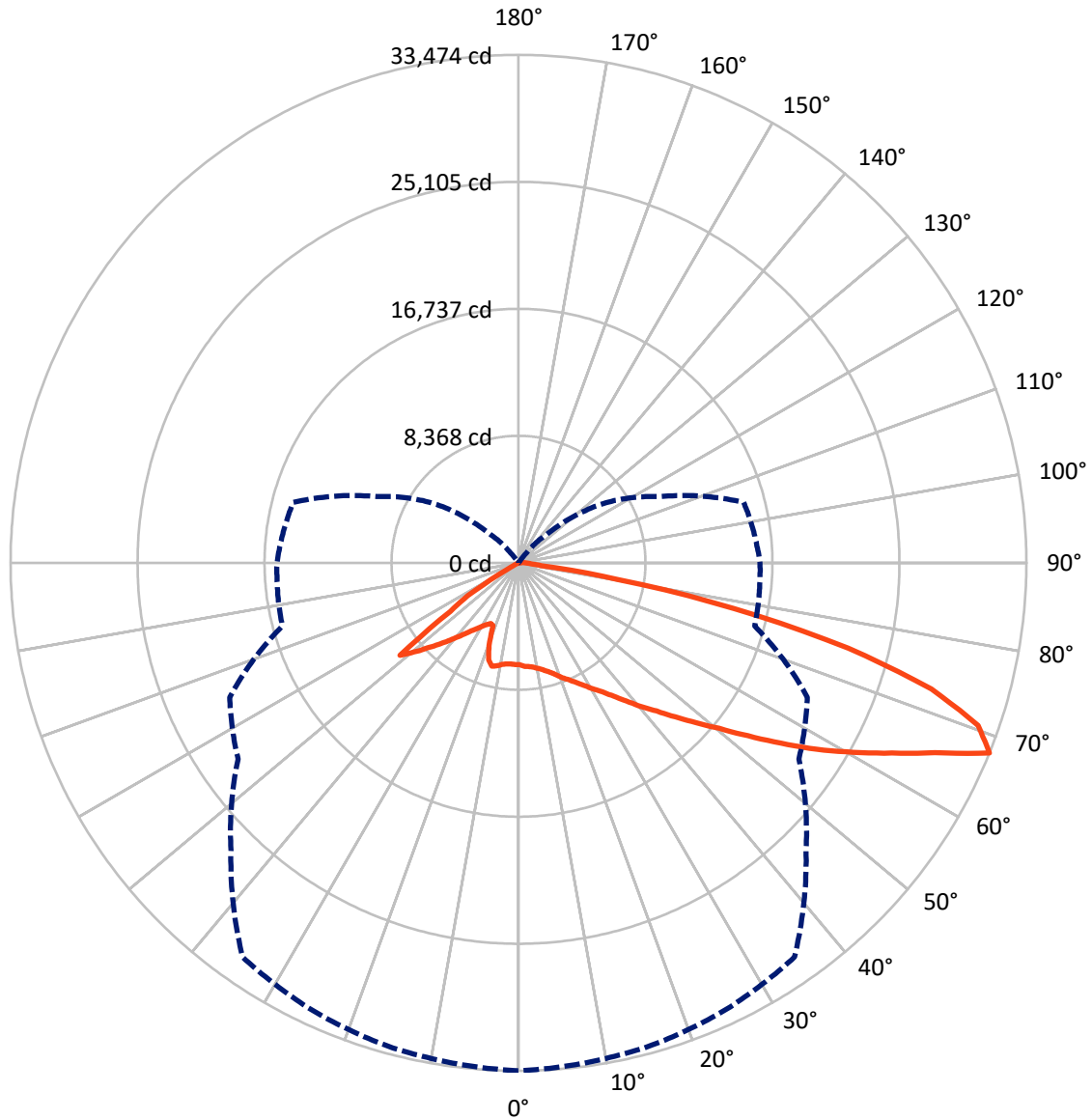
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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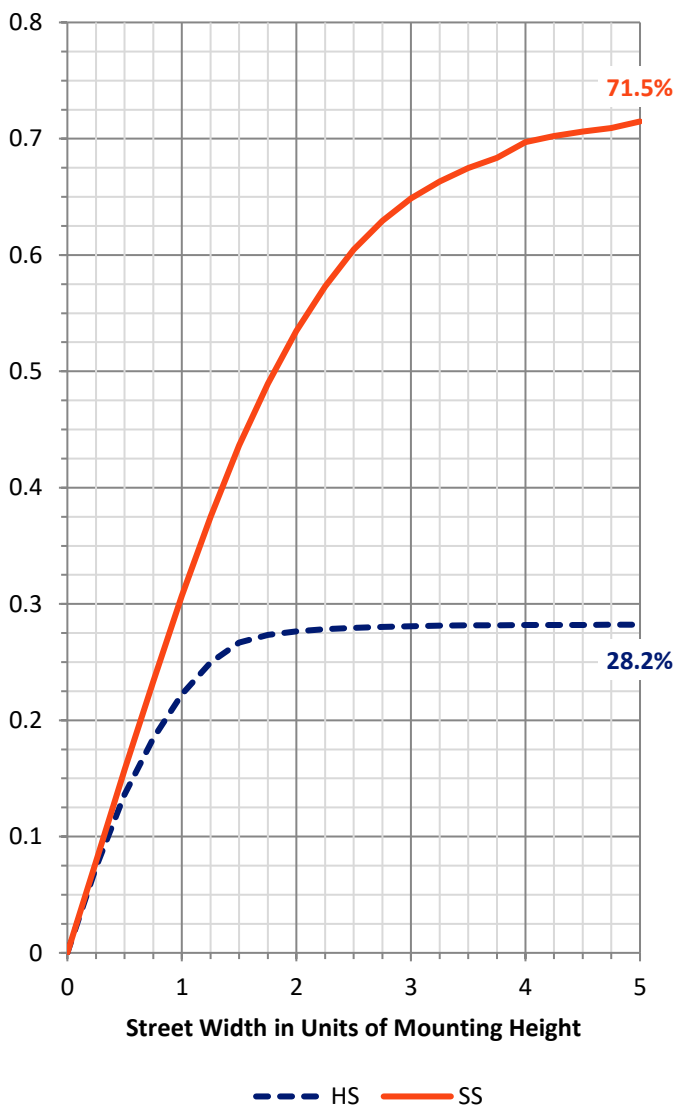
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16127.1	0.2	16127.3
	% Fixture	28.3	0.0	28.3
Street Side	Lumens	40702.2	72.5	40774.7
	% Fixture	71.5	0.1	71.7
Total	Lumens	56829.3	72.7	56902.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	646.3	1.1
10°-20°	1989.6	3.5
20°-30°	3294.4	5.8
30°-40°	5185.9	9.1
40°-50°	8116.0	14.3
50°-60°	11718.2	20.6
60°-70°	14516.8	25.5
70°-80°	10572.3	18.6
80°-90°	789.8	1.4
90°-100°	62.0	0.1
100°-110°	10.4	0.0
110°-120°	0.3	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°	56829.3	99.9
0°-180°	56902.0	100.0

Coefficient of Utilization

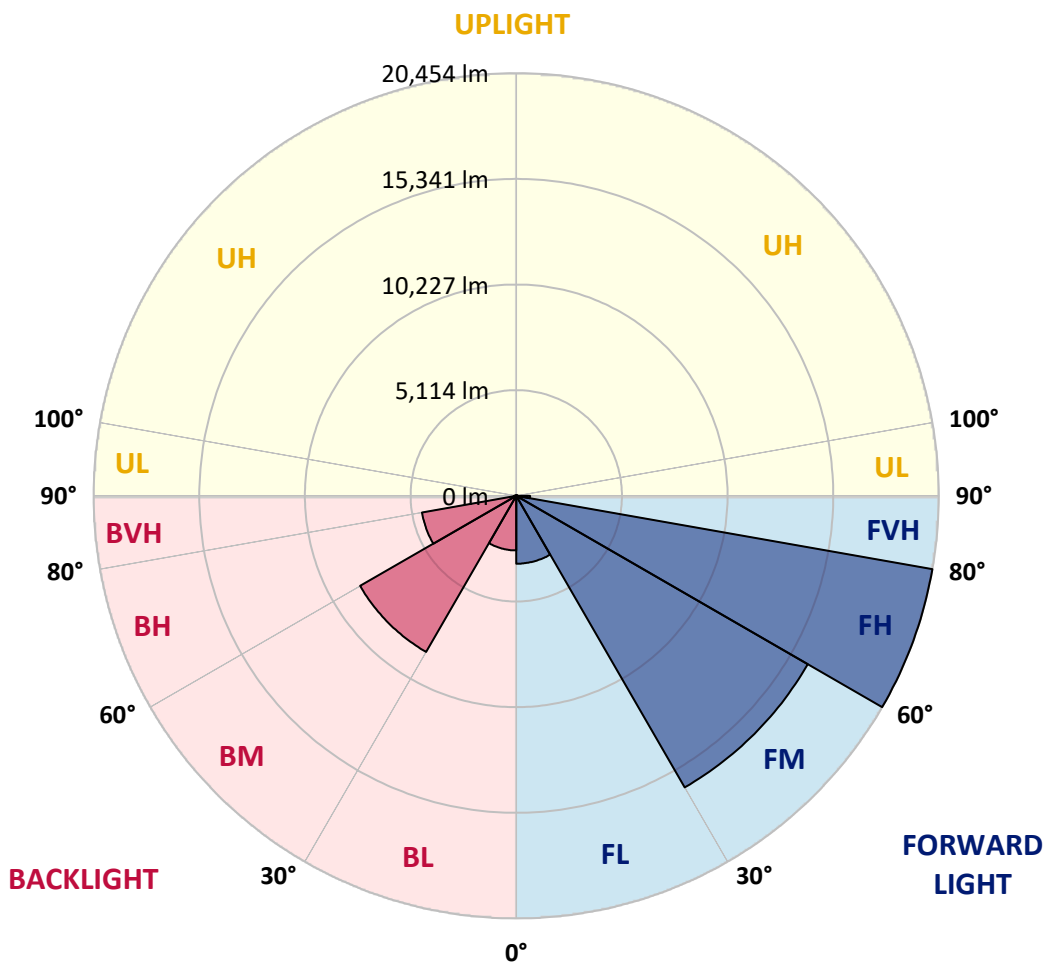


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3286.5	5.8			
FM (30°-60°)	16295.1	28.6			
FH (60°-80°)	20454.4	35.9			G5
FVH (80°-90°)	666.2	1.2			G4/750
BL (0°-30°)	2643.7	4.6	B4/5000		
BM (30°-60°)	8725.1	15.3	B5		
BH (60°-80°)	4634.7	8.1	B4/5000		G4/5000
BVH (80°-90°)	123.6	0.2			G2/225
UL (90°-100°)	62.0	0.1		U3/500	
UH (100°-180°)	10.7	0.0		U2/50	

BUG Rating: B5-U3-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6
2.5°	6824.2	6787.1	6787.1	6827.1	6715.8	6750.1	6704.4	6744.4	6721.6	6733.0	6747.2
5°	6864.1	6821.4	6824.2	6872.7	6772.9	6801.4	6747.2	6767.2	6747.2	6755.8	6755.8
7.5°	6938.3	6901.2	6901.2	6929.7	6829.9	6838.5	6790.0	6790.0	6764.3	6784.3	6767.2
10°	7078.0	7038.1	7018.1	7032.4	6944.0	6932.6	6867.0	6867.0	6827.1	6858.4	6832.8
12.5°	7246.3	7189.2	7183.5	7186.4	7086.6	7066.6	6992.5	6995.3	6921.2	6964.0	6932.6
15°	7448.7	7377.5	7371.7	7383.2	7277.6	7240.6	7157.9	7157.9	7075.2	7098.0	7055.2
17.5°	7708.3	7625.6	7611.3	7631.3	7525.7	7491.5	7394.6	7377.5	7286.2	7269.1	7232.0
20°	8050.5	7956.4	7927.8	7970.6	7836.6	7805.2	7688.3	7651.2	7528.6	7326.1	7060.9
22.5°	8358.5	8284.3	8267.2	8295.7	8173.1	8141.7	8027.7	7950.7	7654.1	7246.3	7001.0
25°	8709.2	8680.7	8672.1	8655.0	8543.8	8489.6	8381.3	8272.9	7599.9	7040.9	7035.2
27.5°	9142.7	9128.4	9088.5	9074.2	8951.6	8917.4	8774.8	8076.1	7406.0	7366.0	7343.2
30°	9616.1	9587.6	9547.6	9550.5	9467.8	9405.0	9065.7	7902.2	7779.5	7779.5	7719.7
32.5°	10140.8	10109.4	10069.5	10078.1	10043.8	9989.6	8968.7	8361.3	8267.2	8292.9	8218.7
35°	10791.0	10739.7	10725.4	10759.6	10762.5	10411.7	9139.8	8985.8	8911.7	8894.6	8615.1
37.5°	11549.6	11506.8	11558.1	11638.0	11546.7	10520.1	9821.4	9772.9	9698.8	9285.3	8623.7
40°	12459.3	12382.3	12445.0	12496.3	12436.4	11164.6	10537.2	10554.3	10488.7	9262.5	8529.6
42.5°	13360.4	13286.3	13340.4	13468.8	13446.0	11963.1	11409.8	11446.9	10785.3	9316.6	9259.6
45°	14475.4	14449.8	14432.7	14538.2	14626.6	12918.4	12445.0	12442.1	10574.3	10177.9	10126.5
47.5°	15738.8	15704.5	15713.1	15847.1	15981.2	14059.1	13668.4	12522.0	11118.9	11158.9	11113.2
50°	17147.5	17110.4	17221.7	17415.6	17484.0	15339.5	14860.4	12305.3	12253.9	12296.7	12219.7
52.5°	18935.6	18852.9	19024.0	19232.1	19320.5	16853.8	14926.0	13585.7	13500.1	13508.7	13263.4
55°	20968.8	20903.3	21057.3	21291.1	21422.3	18544.9	16289.1	14831.9	14780.6	13326.2	12000.1
57.5°	23178.9	23104.8	23310.1	23378.6	23412.8	20293.0	17660.8	16183.6	13808.1	12168.4	12094.2
60°	25346.3	25266.4	25525.9	25537.3	25637.1	22038.3	18964.1	17486.9	13303.4	13086.6	13023.9
62.5°	27622.0	27522.2	27750.3	27741.7	27545.0	23635.2	20255.9	18738.8	14204.5	14033.4	13936.5
65°	30148.6	30074.5	30234.2	29977.5	29586.8	25286.4	21596.2	20101.9	15254.0	15222.6	15199.8
67.5°	33473.7	33328.3	33006.0	32458.5	31711.4	26800.7	22554.4	21000.2	16106.6	15961.2	15915.6
70°	32136.3	31965.2	31719.9	31118.2	30356.8	25377.6	21014.5	19642.8	15060.0	15065.7	14957.4
72.5°	28454.7	28158.1	27927.1	27083.0	26663.8	22163.7	18311.0	17047.7	13026.8	13269.1	13217.8
75°	22446.1	22143.8	21764.5	21433.7	21388.1	17977.4	14763.5	13853.8	10386.0	10562.8	10691.2
77.5°	14549.6	14438.4	14917.5	14603.8	14886.1	12379.4	10545.7	9764.4	7157.9	7605.6	7545.7
80°	6658.8	6530.5	7300.5	7083.7	7189.2	6079.9	5153.1	4950.6	3239.6	3262.4	3330.8
82.5°	1505.7	1454.4	1508.6	1385.9	1351.7	1143.5	1006.7	912.6	573.2	607.4	638.8
85°	824.2	824.2	812.7	755.7	647.3	533.3	422.1	325.1	176.8	193.9	191.1
87.5°	578.9	564.6	561.8	501.9	430.6	365.0	290.9	208.2	99.8	68.4	62.7
90°	396.4	390.7	370.7	333.7	288.0	236.7	176.8	102.7	42.8	20.0	14.3
92.5°	288.0	282.3	268.1	236.7	196.8	159.7	116.9	68.4	34.2	14.3	2.9
95°	191.1	188.2	179.7	154.0	128.3	102.7	74.1	42.8	28.5	11.4	2.9
97.5°	131.2	128.3	119.8	102.7	82.7	65.6	45.6	31.4	22.8	8.6	2.9
100°	88.4	85.6	79.8	65.6	51.3	39.9	28.5	22.8	17.1	8.6	2.9
102.5°	57.0	54.2	48.5	39.9	28.5	22.8	20.0	17.1	11.4	5.7	2.9
105°	34.2	31.4	25.7	20.0	17.1	14.3	14.3	11.4	8.6	2.9	2.9
107.5°	17.1	14.3	11.4	11.4	11.4	8.6	8.6	8.6	5.7	2.9	0.0
110°	2.9	2.9	5.7	5.7	5.7	5.7	5.7	5.7	5.7	2.9	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°	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6	6701.6
2.5°	6733.0	6687.3	6713.0	6673.1	6664.5	6621.7	6690.2	6698.7	6693.0	6704.4
5°	6741.5	6693.0	6721.6	6673.1	6673.1	6627.4	6693.0	6693.0	6675.9	6681.6
7.5°	6764.3	6715.8	6735.8	6681.6	6684.5	6630.3	6710.1	6701.6	6687.3	6707.3
10°	6829.9	6775.7	6772.9	6721.6	6733.0	6675.9	6775.7	6775.7	6761.5	6798.5
12.5°	6935.4	6855.6	6841.3	6778.6	6801.4	6752.9	6875.5	6881.3	6884.1	6944.0
15°	7046.7	6949.7	6964.0	6889.8	6881.3	6855.6	6966.8	6961.1	6958.2	7040.9
17.5°	7203.5	6747.2	6673.1	6621.7	6610.3	6547.6	6650.3	6847.0	6744.4	6687.3
20°	6955.4	6715.8	6422.1	6322.3	6302.3	5757.7	5327.1	5521.0	5783.3	5806.1
22.5°	6730.1	6644.6	6621.7	6464.9	5595.1	5412.6	5429.7	5358.4	4736.7	4465.8
25°	7009.6	6935.4	6838.5	5880.3	5675.0	5609.4	5589.4	4859.4	4368.9	4400.2
27.5°	7320.4	7237.7	6393.6	5894.5	5940.2	5848.9	5398.3	4534.3	4505.8	4559.9
30°	7708.3	7046.7	6239.6	6211.1	6253.9	6136.9	4796.6	4733.9	4725.3	4782.4
32.5°	8150.3	6795.7	6650.3	6650.3	6630.3	5367.0	5053.3	5010.5	5033.3	5093.2
35°	7984.9	7189.2	7172.1	7243.4	6764.3	5506.7	5463.9	5389.8	5406.9	5426.9
37.5°	7802.4	7836.6	7845.1	7808.1	4933.5	5906.0	5871.7	5857.5	5840.4	5846.1
40°	8481.1	8503.9	8495.3	8156.0	5324.2	5983.0	6333.7	6308.1	6305.2	6339.4
42.5°	9273.9	9336.6	9288.1	7194.9	5846.1	5030.5	6867.0	6852.7	6847.0	6918.3
45°	10166.5	10226.3	9208.3	7705.4	6402.2	5207.3	6904.1	7434.5	7477.3	7540.0
47.5°	11133.2	11121.8	8498.2	8489.6	7055.2	5697.8	5740.6	8130.3	8201.6	8224.4
50°	12245.4	10417.4	9305.2	8991.5	7793.8	6248.2	6085.6	7460.2	9034.3	9057.1
52.5°	12008.7	10306.2	10232.0	7887.9	8455.4	6855.6	6695.9	6653.1	9365.1	9915.5
55°	11193.1	11278.6	11173.1	8655.0	6199.7	7397.4	7297.6	7254.8	6966.8	5515.3
57.5°	12099.9	12125.6	12034.3	9359.4	6305.2	4611.3	7183.5	6162.6	4003.8	3983.9
60°	13041.0	13083.8	8963.0	6875.5	4040.9	1542.8	367.9	387.8	1106.5	972.4
62.5°	13939.3	13982.1	9487.7	6282.4	2552.3	114.1	74.1	51.3	57.0	57.0
65°	15111.4	15128.5	10155.0	6650.3	2652.1	28.5	8.6	0.0	0.0	0.0
67.5°	15718.8	15368.0	10323.3	6818.5	2723.4	17.1	5.7	0.0	0.0	0.0
70°	14800.5	14424.1	9610.4	6390.8	2538.0	14.3	2.9	0.0	0.0	0.0
72.5°	13041.0	12858.5	8626.5	5666.4	2247.2	8.6	2.9	0.0	0.0	0.0
75°	10808.1	10565.7	7152.2	4722.5	1859.3	5.7	0.0	0.0	0.0	0.0
77.5°	7688.3	7716.8	4984.8	3442.1	1266.2	5.7	0.0	0.0	0.0	0.0
80°	3365.1	3442.1	2184.4	1579.9	447.7	2.9	0.0	0.0	0.0	0.0
82.5°	641.6	590.3	285.2	225.3	57.0	0.0	0.0	0.0	0.0	0.0
85°	211.0	231.0	105.5	85.6	25.7	0.0	0.0	0.0	0.0	0.0
87.5°	74.1	94.1	31.4	25.7	5.7	0.0	0.0	0.0	0.0	0.0
90°	11.4	11.4	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)