Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P453167

Luminaire Tested: **GALN-SA4A-830-U-T2R-HSS**

Issue Date: 1/4/2021

Report Generated By 670248863

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P453167
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)
Test Lab:	INNOVATION CENTER
Issue Date:	1/4/2021
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GALN-SA4A-830-U-T2R-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11510 lumens
Efficiency:	N/A
Efficacy:	95.1 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	121
Input Voltage (V):	NR
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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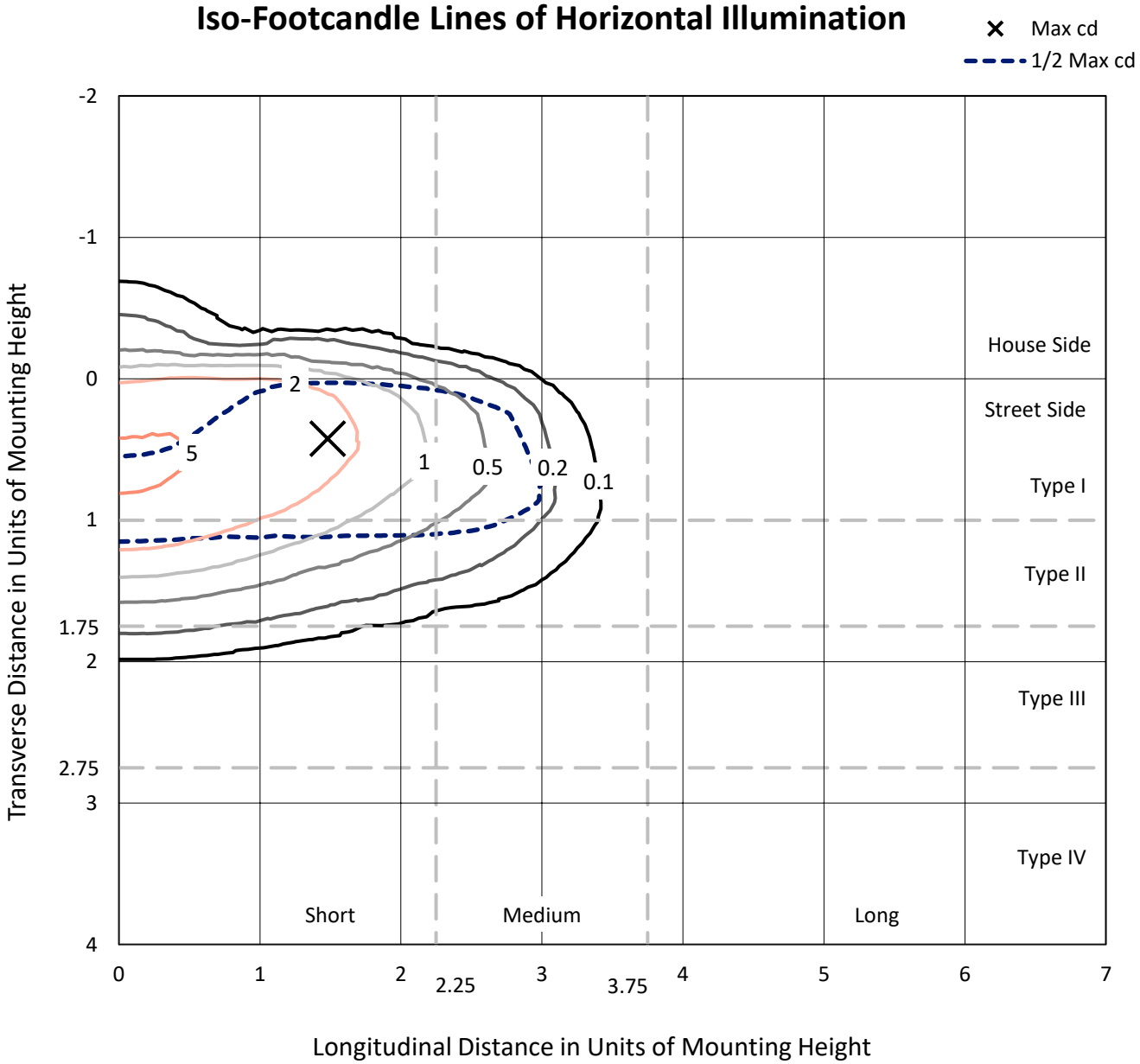
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
Type II - Short - N/A

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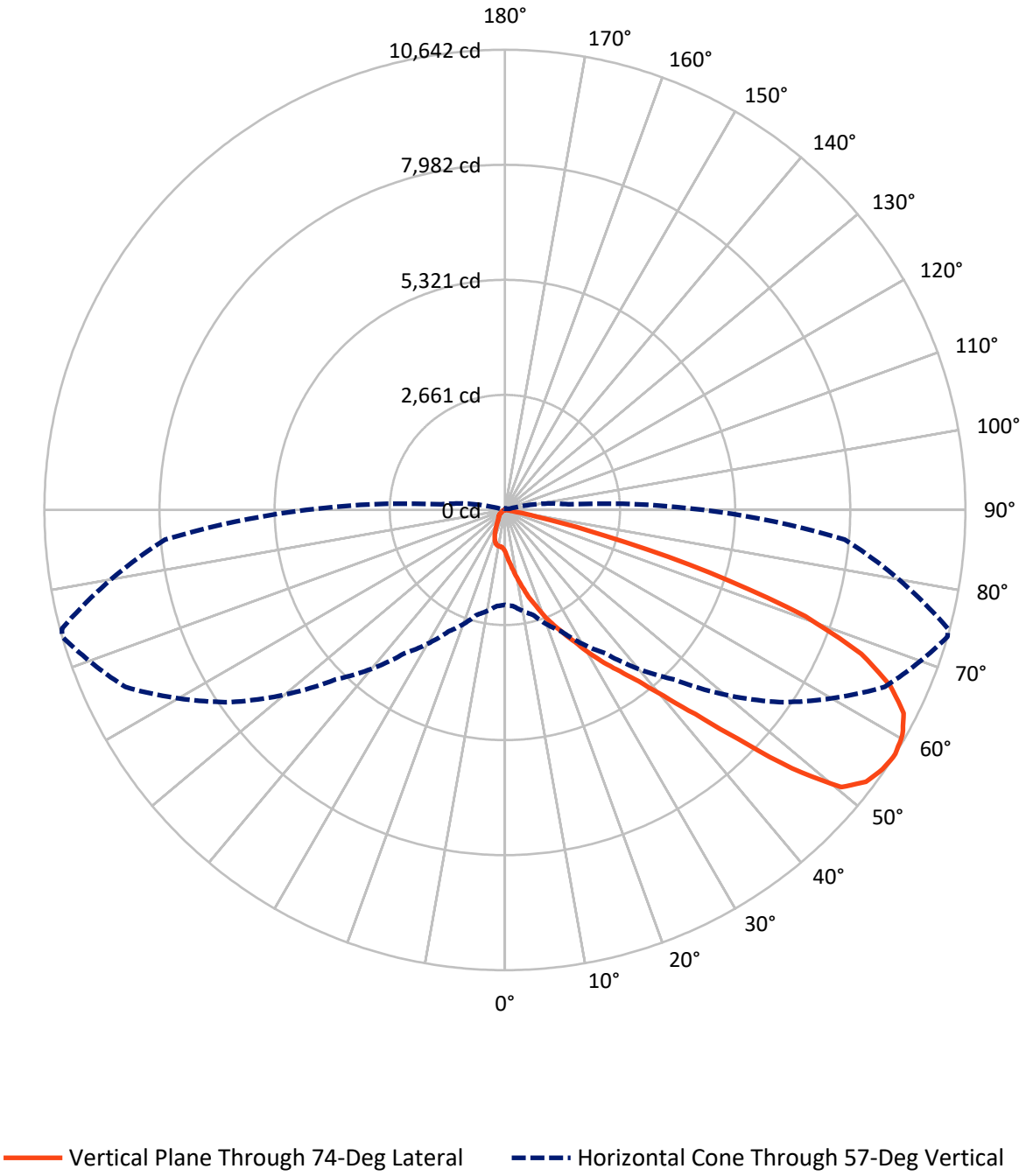
Luminous Intensity Polar Plot



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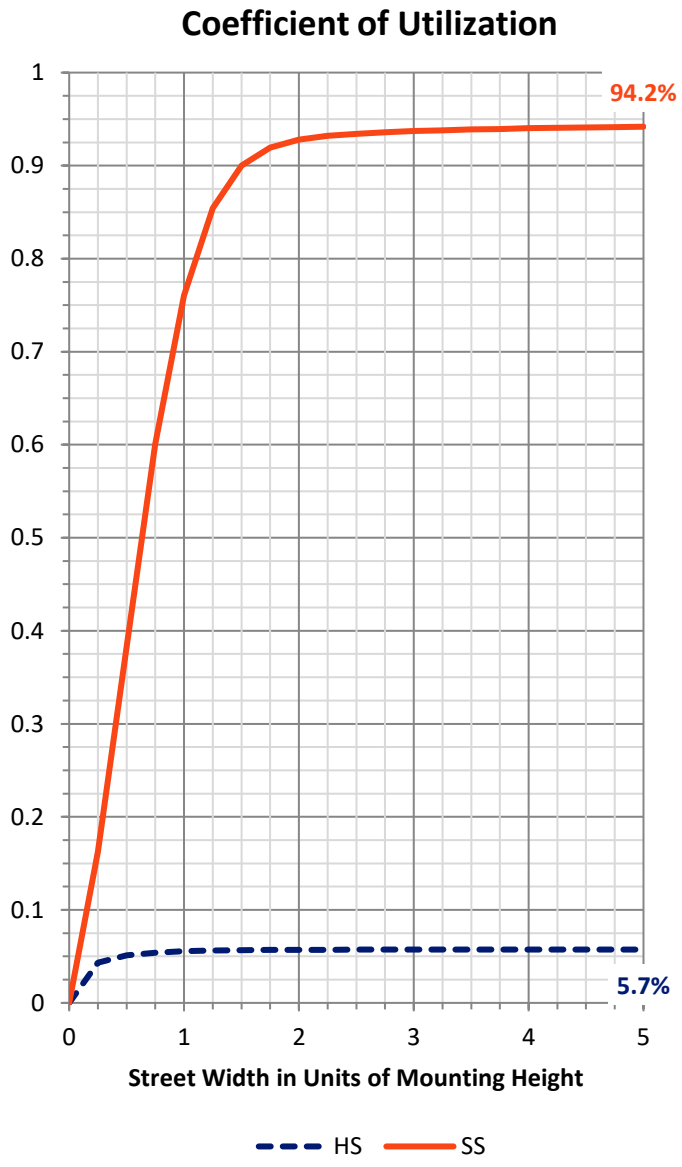
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	663.9	0.0	663.9
	% Fixture	5.8	0.0	5.8
Street Side	Lumens	10846.1	0.0	10846.1
	% Fixture	94.2	0.0	94.2
Total	Lumens	11510.0	0.0	11510.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	1.0
10°-20°	458.6	4.0
20°-30°	981.3	8.5
30°-40°	1803.6	15.7
40°-50°	2765.0	24.0
50°-60°	2925.0	25.4
60°-70°	1910.1	16.6
70°-80°	521.9	4.5
80°-90°	28.1	0.2
90°-100°	0.0	0.0
100°-110°	0.0	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°	11510.0	100.0
0°-180°	11510.0	100.0



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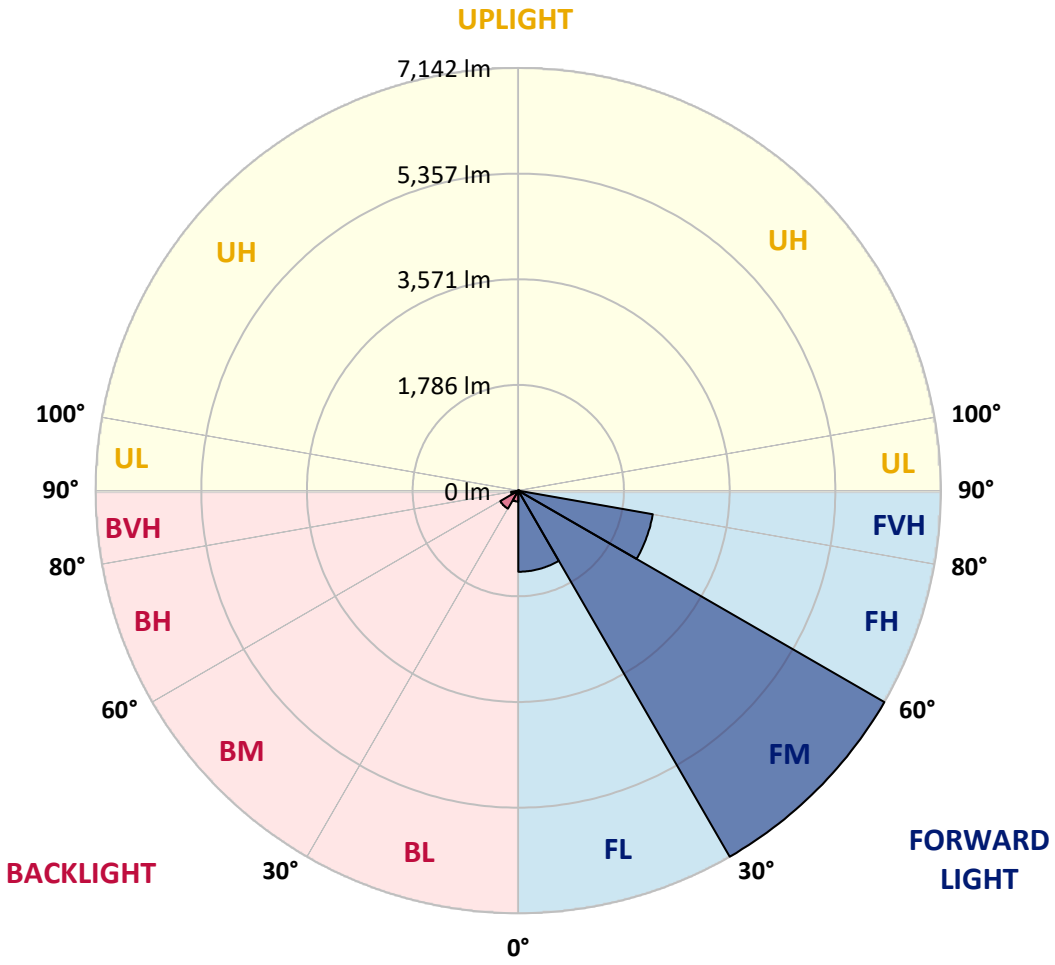
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1370.8	11.9			
FM	(30°-60°)	7142.2	62.1			
FH	(60°-80°)	2307.4	20.0			G2/5000
FVH	(80°-90°)	25.8	0.2			G1/100
BL	(0°-30°)	185.4	1.6	B1/500		
BM	(30°-60°)	351.5	3.1	B1/1000		
BH	(60°-80°)	124.6	1.1	B1/500		G1/500
BVH	(80°-90°)	2.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	963.9	963.9	963.9	963.9	963.9	963.9	963.9	963.9	*963.9*	963.9	963.9
2.5°	1410.6	1397.8	1372.4	1363.7	1326.3	1268.3	1217.5	1149.1	*1095.1*	1089.5	1024.3
5°	1889.0	1860.3	1848.4	1791.2	1701.4	1617.2	1472.5	1362.9	*1236.5*	1227.0	1095.9
7.5°	2349.9	2310.1	2298.2	2244.2	2139.3	2006.6	1819.0	1619.6	*1419.3*	1401.0	1192.0
10°	2683.6	2689.2	2667.7	2632.0	2547.0	2411.9	2180.6	1908.0	*1622.7*	1599.7	1300.1
12.5°	2922.8	2922.0	2926.0	2925.2	2879.9	2777.4	2534.2	2220.3	*1846.8*	1801.5	1424.1
15°	3078.6	3081.0	3092.9	3134.2	3139.0	3075.4	2872.8	2519.1	*2106.7*	2050.3	1558.4
17.5°	3235.9	3252.6	3271.7	3310.6	3345.6	3320.2	3177.1	2830.7	*2341.9*	2299.8	1702.2
20°	3495.8	3518.8	3507.7	3531.6	3549.8	3552.2	3441.8	3118.3	*2627.2*	2556.5	1866.7
22.5°	3911.4	3910.6	3882.0	3839.1	3803.3	3801.8	3701.6	3413.9	*2886.3*	2817.9	2032.0
25°	4436.7	4439.1	4383.5	4261.1	4172.1	4063.2	3948.0	3673.0	*3163.6*	3079.4	2206.0
27.5°	5039.1	5024.0	4939.7	4771.3	4594.8	4408.9	4242.8	3974.2	*3457.7*	3387.7	2405.5
30°	5580.2	5574.7	5476.1	5270.3	5038.3	4851.5	4610.7	4351.7	*3838.3*	3752.5	2628.8
32.5°	6084.1	6092.0	5955.3	5742.4	5518.3	5302.9	5048.6	4712.5	*4211.8*	4090.2	2872.0
35°	6477.4	6485.4	6343.9	6166.7	5936.3	5757.5	5515.1	5097.1	*4580.5*	4478.0	3151.7
37.5°	6687.2	6697.6	6615.7	6482.2	6338.4	6248.6	6022.9	5592.2	*5028.7*	4966.8	3482.3
40°	6727.0	6738.9	6703.1	6667.4	6659.4	6723.8	6657.8	6175.5	*5650.2*	5553.2	3975.0
42.5°	6607.8	6623.7	6639.6	6719.0	6881.1	7117.2	7346.8	6967.0	*6450.4*	6320.1	4577.4
45°	6294.7	6293.1	6355.9	6561.7	6924.8	7428.7	8066.8	7957.9	*7540.7*	7385.8	5428.5
47.5°	5759.0	5751.1	5887.0	6180.2	6746.0	7485.9	8654.1	9161.1	*8932.2*	8789.2	6343.1
50°	4942.9	4981.9	5195.6	5604.9	6301.8	7312.7	8835.3	9950.2	*10074.2*	9922.4	7082.2
52.5°	3986.9	3985.3	4320.7	4876.2	5643.8	6931.2	8708.9	10093.2	*10445.3*	10329.3	7446.2
55°	2950.6	2971.3	3320.2	3880.4	4789.5	6235.1	8296.5	9946.2	*10586.7*	10504.9	7686.2
57°	*2194.9*	*2231.5*	*2511.2*	*3104.0*	*4045.7*	*5546.1*	*7747.3*	*9683.2*	*10642.4*	*10597.9*	*7885.6*
57.5°	2048.7	2050.3	2322.9	2861.6	3828.0	5281.4	7590.0	9573.5	*10640.8*	10616.1	7918.2
60°	1261.2	1300.9	1489.2	1934.3	2802.0	4122.0	6535.5	8943.3	*10558.1*	10593.9	8057.3
62.5°	754.9	771.6	894.0	1165.8	1806.3	3008.7	5348.2	8136.7	*10342.8*	10451.6	8047.7
65°	485.5	489.5	545.2	705.7	1129.2	2033.6	4121.2	7071.1	*9785.7*	9986.0	7733.0
67.5°	375.1	381.4	403.7	463.3	654.8	1266.7	2914.9	5933.9	*8884.5*	9142.8	6970.1
70°	333.0	336.1	344.1	363.2	433.1	715.2	1813.5	4635.4	*7367.5*	7440.6	5454.7
72.5°	271.8	280.5	305.2	311.5	343.3	446.6	1009.2	3111.2	*4950.1*	4968.3	3051.6
75°	210.6	212.2	248.7	267.0	289.3	307.5	450.6	1568.7	*2377.7*	2250.5	1176.1
77.5°	157.3	164.5	181.2	204.2	236.0	220.1	201.8	591.2	*738.3*	724.7	341.7
80°	100.9	104.9	126.4	153.4	183.6	143.8	113.6	173.2	*162.1*	166.9	81.9
82.5°	50.9	51.7	81.1	124.8	116.8	72.3	71.5	70.7	*60.4*	59.6	38.1
85°	5.6	11.9	52.4	71.5	52.4	23.8	33.4	32.6	*31.8*	32.6	22.3
87.5°	0.8	0.8	8.7	10.3	7.2	7.9	9.5	10.3	*12.7*	11.9	9.5
90°	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	963.9	963.9	963.9	963.9	963.9	963.9	963.9	963.9	963.9	963.9	963.9
2.5°	992.6	960.8	902.0	845.5	803.4	776.4	741.4	728.7	710.4	708.1	699.3
5°	1035.5	975.1	872.6	791.5	726.3	677.1	634.2	598.4	569.8	563.4	566.6
7.5°	1096.7	1006.9	863.8	753.4	662.8	578.5	510.2	468.1	437.9	426.7	428.3
10°	1165.8	1049.0	862.2	712.8	574.6	471.2	396.5	359.2	341.7	335.4	328.2
12.5°	1247.6	1097.5	858.3	650.0	477.6	375.9	322.6	300.4	283.7	278.9	278.9
15°	1339.8	1149.1	839.2	572.2	387.8	310.7	275.0	257.5	251.9	247.1	247.1
17.5°	1436.0	1200.0	799.4	476.0	321.8	266.2	244.0	233.6	225.7	220.1	220.1
20°	1545.7	1250.0	735.9	391.0	271.8	237.6	220.1	208.2	201.8	197.1	195.5
22.5°	1649.8	1290.6	654.8	321.1	236.8	213.8	197.9	185.2	178.8	176.4	176.4
25°	1757.8	1315.2	557.1	265.4	216.2	193.9	176.4	166.1	160.5	158.9	158.1
27.5°	1862.7	1329.5	471.2	232.0	197.1	175.6	158.9	151.0	145.4	143.8	144.6
30°	1989.9	1331.9	387.8	208.2	180.4	158.1	143.0	135.9	132.7	131.1	130.3
32.5°	2118.6	1328.7	325.8	193.9	164.5	143.0	130.3	124.8	122.4	120.0	120.0
35°	2263.3	1312.0	277.3	179.6	149.4	130.3	119.2	114.4	111.3	108.9	108.1
37.5°	2442.8	1303.3	249.5	163.7	135.9	118.4	108.1	103.3	100.9	97.7	97.0
40°	2725.8	1342.2	240.8	149.4	122.4	107.3	97.7	92.2	89.0	85.8	85.0
42.5°	3078.6	1410.6	226.5	135.1	110.5	97.0	87.4	81.1	75.5	71.5	69.9
45°	3535.5	1500.4	204.2	120.0	100.1	85.8	77.1	69.1	62.0	58.8	58.0
47.5°	4014.7	1587.0	184.4	108.1	89.0	76.3	66.8	58.0	51.7	49.3	48.5
50°	4308.8	1604.5	171.7	94.6	77.9	66.0	56.4	48.5	44.5	42.1	42.1
52.5°	4443.1	1576.6	154.2	82.6	67.5	58.0	48.5	42.1	39.7	38.1	37.3
55°	4536.8	1533.7	131.1	71.5	58.0	49.3	42.9	38.1	35.0	33.4	32.6
57°	*4591.7*	*1475.7*	*113.6*	*62.8*	*50.1*	*42.9*	*38.1*	*34.2*	*31.0*	*27.8*	*27.8*
57.5°	4594.0	1453.5	108.9	62.0	47.7	41.3	37.3	33.4	29.4	26.2	25.4
60°	4523.3	1300.9	87.4	52.4	38.1	35.0	31.0	26.2	20.7	17.5	16.7
62.5°	4296.0	1107.0	72.3	44.5	31.0	27.0	22.3	19.9	14.3	10.3	10.3
65°	3951.9	898.0	62.0	35.8	25.4	19.9	15.1	14.3	8.7	4.8	4.0
67.5°	3454.5	699.3	52.4	29.4	21.5	14.3	10.3	9.5	4.8	1.6	0.0
70°	2632.0	476.8	43.7	23.8	15.9	10.3	7.2	5.6	3.2	0.8	0.0
72.5°	1517.0	262.2	36.6	18.3	11.9	7.9	5.6	3.2	3.2	0.0	0.0
75°	542.0	112.8	27.8	13.5	9.5	6.4	4.0	1.6	2.4	0.8	0.0
77.5°	172.4	60.4	18.3	10.3	7.9	4.8	3.2	1.6	1.6	0.8	0.0
80°	50.9	31.8	11.1	8.7	5.6	4.0	2.4	0.8	1.6	0.8	0.0
82.5°	27.8	15.9	8.7	6.4	5.6	3.2	2.4	0.8	0.8	0.8	0.0
85°	14.3	9.5	7.2	6.4	5.6	3.2	2.4	0.8	0.0	0.8	0.8
87.5°	7.9	7.2	7.2	6.4	5.6	4.0	2.4	0.8	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	0.0

(END OF REPORT)