

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: P453853

Luminaire Tested: **GALN-SA4D-830-U-SL3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453853
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4D-830-U-SL3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24103 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 245
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

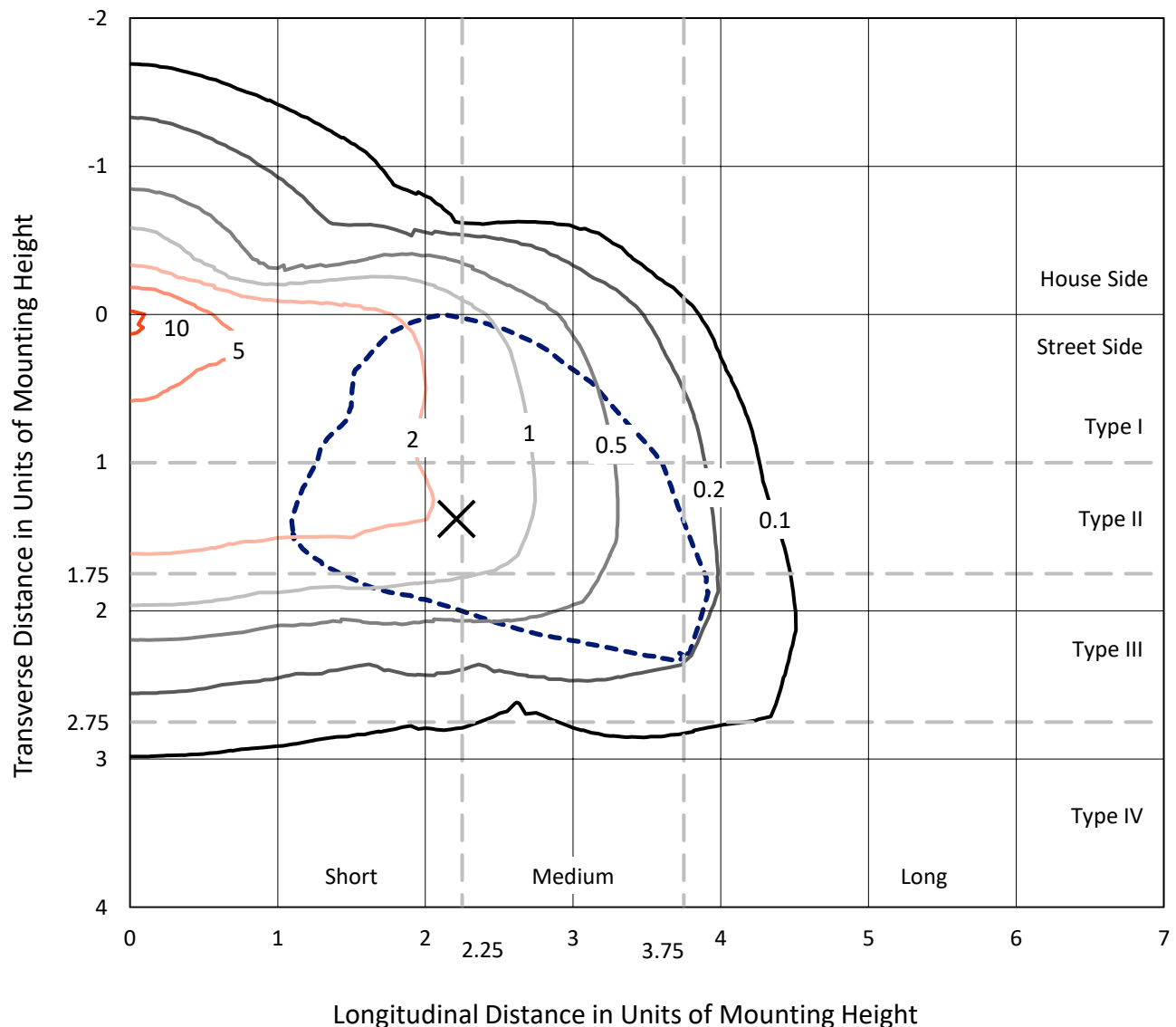


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd



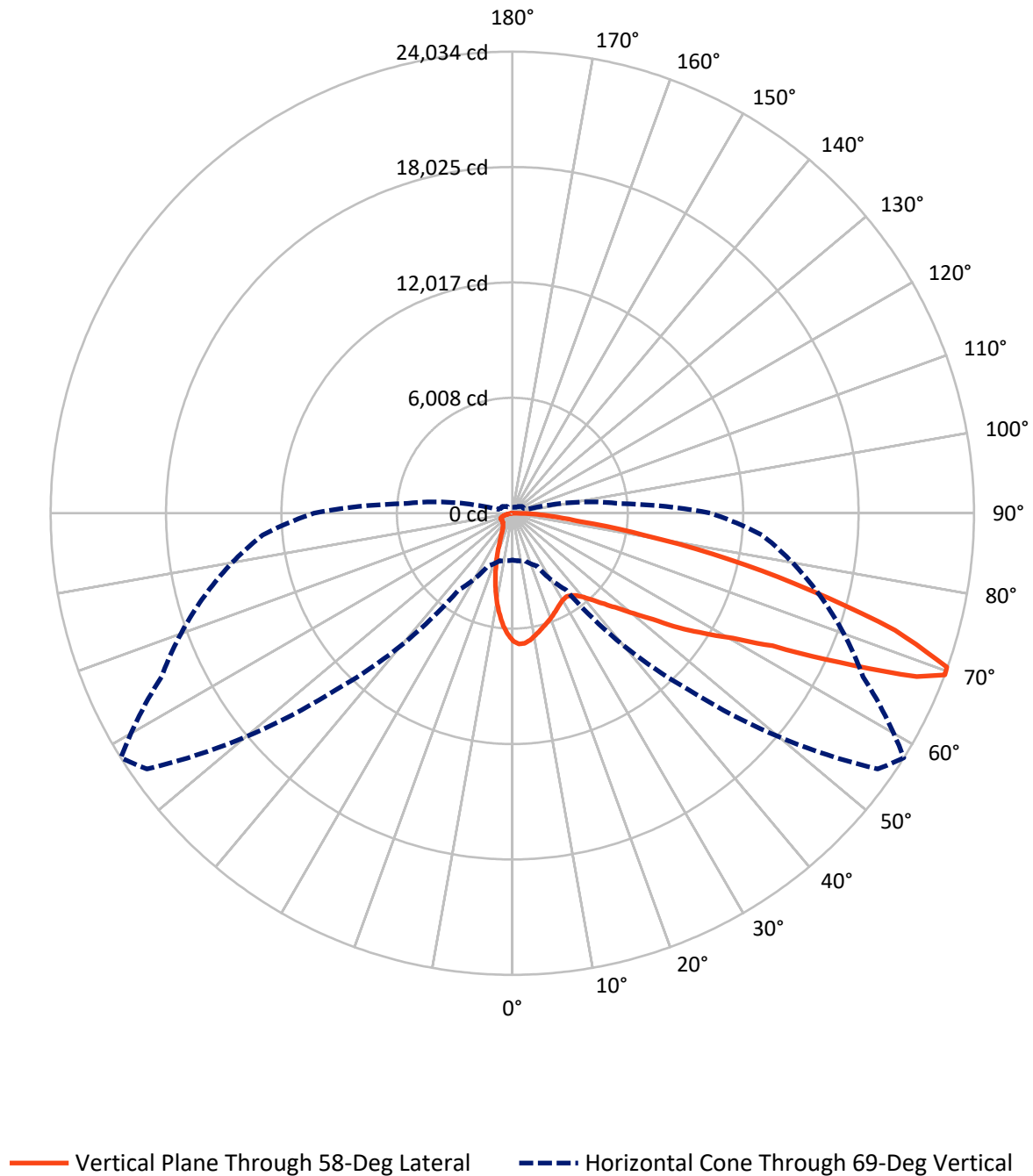
Based on 25 foot mounting height. Maximum calculated value = 10.7 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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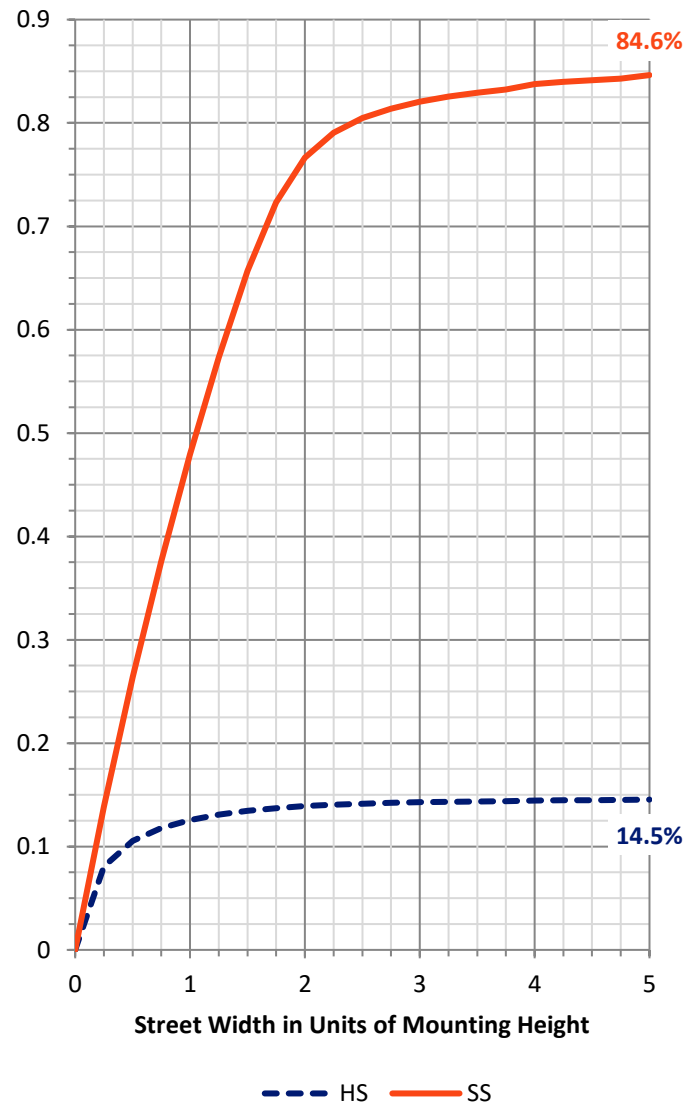
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3532.3	0.0	3532.3
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	20570.7	0.0	20570.7
	% Fixture	85.3	0.0	85.3
Total	Lumens	24103.0	0.0	24103.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	565.6	2.3
10°-20°	1242.1	5.2
20°-30°	1604.8	6.7
30°-40°	2084.3	8.6
40°-50°	3030.3	12.6
50°-60°	4835.3	20.1
60°-70°	6459.4	26.8
70°-80°	3723.6	15.4
80°-90°	557.7	2.3
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°	24103.0	100.0
0°-180°	24103.0	100.0

Coefficient of Utilization



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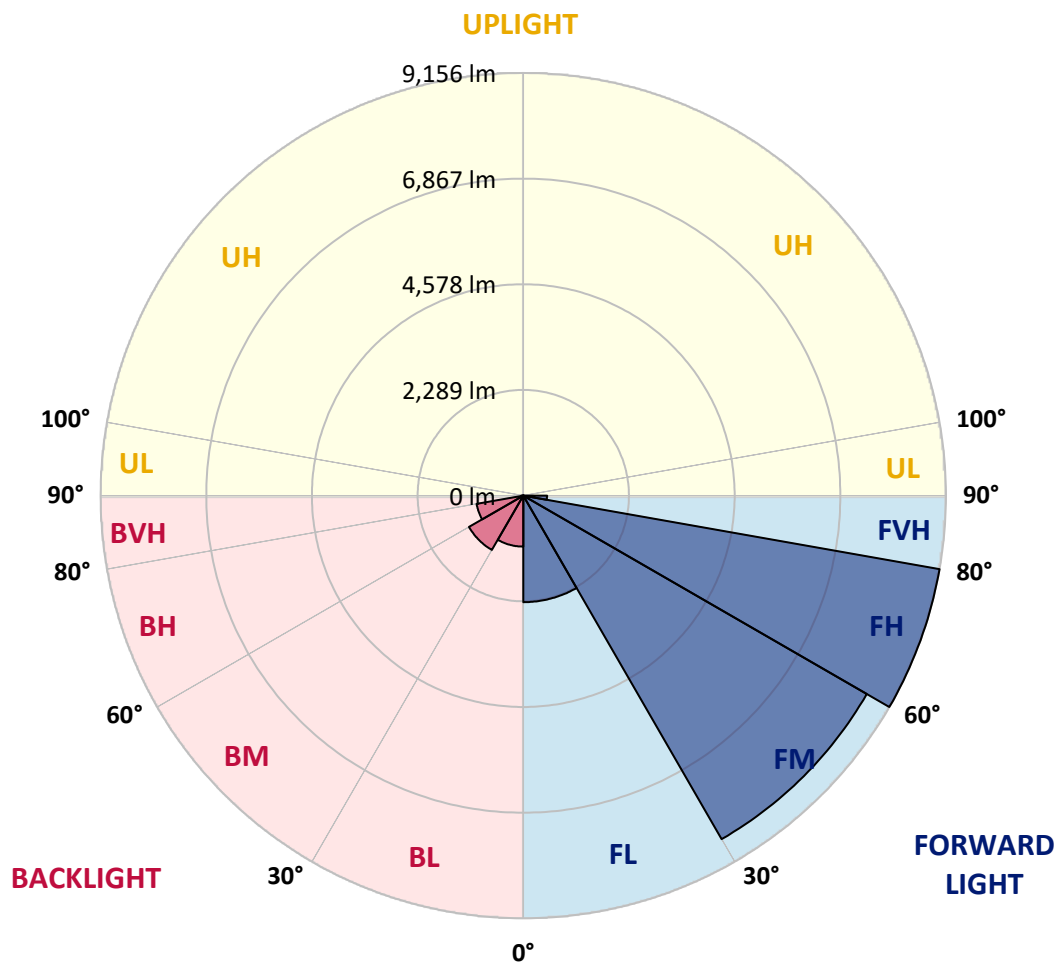
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2308.5	9.6			
FM	(30°-60°)	8591.5	35.6			
FH	(60°-80°)	9155.8	38.0			G4/12000
FVH	(80°-90°)	515.0	2.1			G4/750
BL	(0°-30°)	1104.0	4.6	B3/2500		
BM	(30°-60°)	1358.4	5.6	B2/2500		
BH	(60°-80°)	1027.1	4.3	B3/2500		G3/2500
BVH	(80°-90°)	42.7	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7
2.5°	6908.0	6926.8	6921.4	6914.7	6904.0	6874.4	6826.0	6817.9	6787.0	6721.1	6639.2
5°	6801.8	6817.9	6819.3	6828.7	6842.1	6836.8	6801.8	6797.8	6752.1	6663.3	6526.2
7.5°	6437.5	6459.0	6506.1	6558.5	6605.5	6649.9	6660.7	6667.4	6639.2	6537.0	6354.2
10°	6027.5	6049.0	6070.5	6148.5	6264.1	6374.3	6465.7	6477.8	6484.6	6390.5	6167.3
12.5°	5573.2	5617.5	5663.2	5778.8	5933.4	6106.8	6268.1	6293.7	6339.4	6268.1	6006.0
15°	5187.4	5233.1	5299.0	5402.5	5589.3	5839.3	6066.5	6108.2	6198.2	6161.9	5855.5
17.5°	4919.9	4936.0	4981.7	5100.0	5301.6	5565.1	5868.9	5952.2	6096.1	6086.7	5726.4
20°	4708.8	4729.0	4757.2	4829.8	5039.5	5317.8	5684.7	5792.3	5987.2	6019.5	5598.7
22.5°	4620.1	4634.9	4630.9	4669.9	4812.3	5091.9	5497.9	5625.6	5890.4	5973.8	5480.4
25°	4625.5	4638.9	4618.8	4609.4	4694.1	4893.0	5303.0	5465.6	5812.4	5942.8	5372.9
27.5°	4715.6	4725.0	4687.3	4649.7	4656.4	4769.3	5141.7	5321.8	5746.6	5956.3	5282.8
30°	4836.5	4854.0	4829.8	4784.1	4734.4	4739.8	5038.2	5215.6	5715.7	6003.3	5239.8
32.5°	4992.5	5008.6	4997.8	4961.6	4897.0	4825.8	5012.6	5176.6	5718.4	6098.8	5230.4
35°	5156.5	5188.7	5206.2	5203.5	5151.1	5027.4	5113.4	5249.2	5782.9	6258.7	5285.5
37.5°	5342.0	5368.9	5444.1	5492.5	5444.1	5300.3	5340.6	5434.7	5925.4	6489.9	5406.5
40°	5522.1	5562.4	5672.6	5823.2	5804.4	5678.0	5687.4	5749.3	6176.7	6834.1	5643.1
42.5°	5710.3	5758.7	5950.9	6174.0	6218.4	6120.3	6145.8	6200.9	6534.3	7311.3	6049.0
45°	5952.2	6010.1	6246.6	6524.9	6699.6	6639.2	6711.7	6738.6	7012.8	7932.3	6584.0
47.5°	6264.1	6331.3	6623.0	6969.8	7217.2	7272.3	7398.6	7382.5	7605.7	8667.6	7277.7
50°	6789.7	6827.3	7102.9	7456.4	7796.5	8045.2	8182.3	8207.9	8340.9	9382.7	8053.3
52.5°	7414.8	7448.4	7647.3	7956.5	8382.6	8909.6	9248.3	9165.0	9197.2	10253.8	8960.6
55°	8117.8	8174.3	8300.6	8506.3	9058.8	9834.4	10514.6	10534.7	10177.2	11087.2	9830.4
57.5°	8662.2	8757.7	8974.1	9267.1	9967.5	10862.7	11776.8	11790.2	11333.2	11977.1	10790.1
60°	8388.0	8500.9	8995.6	9709.4	11159.8	12657.3	13285.0	13208.4	12458.3	12990.6	11961.0
62.5°	7205.1	7225.2	7944.4	9060.1	11526.8	15058.1	15529.9	15205.9	13959.8	14275.7	13150.6
65°	4663.1	4794.9	5364.8	6928.2	10321.0	16390.2	19463.1	18714.4	16064.9	15734.2	14146.7
67.5°	2943.9	2910.3	3146.8	3956.1	7098.9	15216.7	22819.6	22701.4	18817.9	16655.0	13908.7
69°	2441.1	2478.8	2559.4	3032.6	4884.9	12992.0	23216.2	24033.5	20152.7	16582.4	13044.4
70°	2213.9	2231.4	2316.1	2688.5	3769.2	10881.5	22565.6	23997.2	20676.9	16278.6	12418.0
72.5°	1756.9	1755.6	1900.7	2236.8	2817.5	6211.7	18528.9	20834.2	20090.9	14864.5	10260.5
75°	1334.8	1356.3	1516.3	1892.7	2595.7	3394.2	12930.1	16044.7	16046.1	11740.5	6402.6
77.5°	962.5	975.9	1162.8	1588.9	2445.2	2751.6	8612.5	11508.0	10818.4	5379.6	2012.3
80°	630.4	638.5	781.0	1258.2	2204.5	2595.7	5106.7	7043.8	5102.7	1427.6	665.4
82.5°	345.5	385.8	477.2	814.6	1769.0	2398.1	3103.8	3564.9	1914.2	635.8	346.8
85°	173.4	184.2	268.8	475.9	1156.0	1984.1	2161.5	2044.6	988.0	315.9	180.1
87.5°	51.1	64.5	111.6	184.2	469.1	1033.7	1203.1	1079.4	380.4	114.3	37.6
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°	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7	6660.7
2.5°	6605.5	6581.3	6473.8	6377.0	6288.3	6194.2	6114.9	6045.0	6051.7	6053.1	5981.8
5°	6455.0	6399.9	6195.6	6004.7	5843.4	5639.0	5464.3	5351.4	5294.9	5219.6	5246.5
7.5°	6250.7	6144.5	5860.8	5543.6	5246.5	4981.7	4694.1	4496.4	4370.1	4247.8	4263.9
10°	6039.6	5868.9	5456.2	5036.8	4652.4	4228.9	3862.0	3547.4	3313.5	3226.2	3168.3
12.5°	5823.2	5598.7	5074.5	4516.6	3985.6	3478.9	2958.6	2621.2	2363.2	2226.0	2243.5
15°	5625.6	5352.7	4676.6	3996.4	3306.8	2703.2	2184.4	1863.1	1683.0	1645.3	1666.8
17.5°	5442.8	5085.2	4304.2	3491.0	2685.8	2027.1	1641.3	1459.8	1387.2	1367.1	1365.7
20°	5254.6	4858.0	3886.2	2950.6	2093.0	1571.4	1346.9	1262.2	1248.8	1256.9	1258.2
22.5°	5063.7	4577.1	3456.0	2414.2	1666.8	1285.1	1177.5	1154.7	1165.4	1184.3	1187.0
25°	4887.6	4329.8	3042.0	1943.8	1330.8	1129.2	1076.7	1076.7	1100.9	1129.2	1130.5
27.5°	4742.4	4090.5	2629.3	1543.2	1114.4	1016.2	998.8	1008.2	1041.8	1063.3	1064.6
30°	4622.8	3867.3	2239.5	1236.7	979.9	926.2	922.1	938.3	962.5	982.6	984.0
32.5°	4532.7	3671.1	1875.2	1039.1	887.2	857.6	856.3	868.4	881.8	887.2	892.6
35°	4497.8	3508.4	1541.8	914.1	825.4	806.5	806.5	805.2	810.6	813.3	815.9
37.5°	4526.0	3383.4	1283.7	833.4	779.7	766.2	758.1	750.1	747.4	747.4	748.7
40°	4645.7	3317.6	1091.5	781.0	747.4	727.2	712.4	703.0	693.6	696.3	699.0
42.5°	4899.7	3329.7	961.1	746.0	719.2	690.9	669.4	658.7	652.0	660.0	658.7
45°	5304.3	3450.6	877.8	721.9	690.9	654.6	634.5	623.7	623.7	635.8	639.9
47.5°	5870.3	3681.8	833.4	703.0	669.4	626.4	606.2	598.2	600.9	621.0	622.4
50°	6561.2	4083.8	825.4	693.6	658.7	606.2	583.4	575.3	582.1	603.6	606.2
52.5°	7323.4	4601.3	864.3	695.0	649.3	594.1	564.6	552.5	559.2	576.7	582.1
55°	8226.7	5249.2	965.2	700.3	635.8	587.4	551.1	524.2	532.3	544.4	545.8
57.5°	9148.8	6066.5	1142.6	701.7	625.1	575.3	528.3	493.3	493.3	501.4	505.4
60°	10275.3	6956.4	1376.5	703.0	626.4	557.9	497.4	458.4	453.0	457.0	458.4
62.5°	11393.7	7701.1	1415.5	699.0	639.9	540.4	463.8	423.4	414.0	412.7	410.0
65°	11887.0	7562.6	1160.1	680.2	654.6	529.6	436.9	389.8	373.7	368.3	368.3
67.5°	11083.2	6397.2	872.4	654.6	645.2	518.9	411.3	361.6	342.8	332.0	332.0
69°	10327.7	5690.1	783.7	637.2	621.0	501.4	395.2	346.8	324.0	311.9	307.8
70°	9744.3	5203.5	746.0	622.4	598.2	481.2	383.1	336.1	310.5	297.1	294.4
72.5°	7776.4	4082.4	653.3	565.9	509.5	404.6	340.1	302.5	278.3	263.5	259.4
75°	4481.7	2212.6	541.7	492.0	410.0	314.5	287.7	263.5	244.6	231.2	227.2
77.5°	1379.2	854.9	392.5	388.5	301.1	243.3	229.9	220.5	207.0	192.2	189.5
80°	580.7	435.5	266.2	262.1	200.3	169.4	165.3	164.0	158.6	146.5	142.5
82.5°	318.6	246.0	185.5	161.3	121.0	98.1	102.2	103.5	99.5	87.4	79.3
85°	155.9	134.4	90.1	72.6	55.1	34.9	33.6	40.3	37.6	26.9	29.6
87.5°	30.9	37.6	24.2	10.8	5.4	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	0.0

(END OF REPORT)