

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: P454080

Luminaire Tested: **GALN-SA5A-830-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454080
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5A-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18377 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 154
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



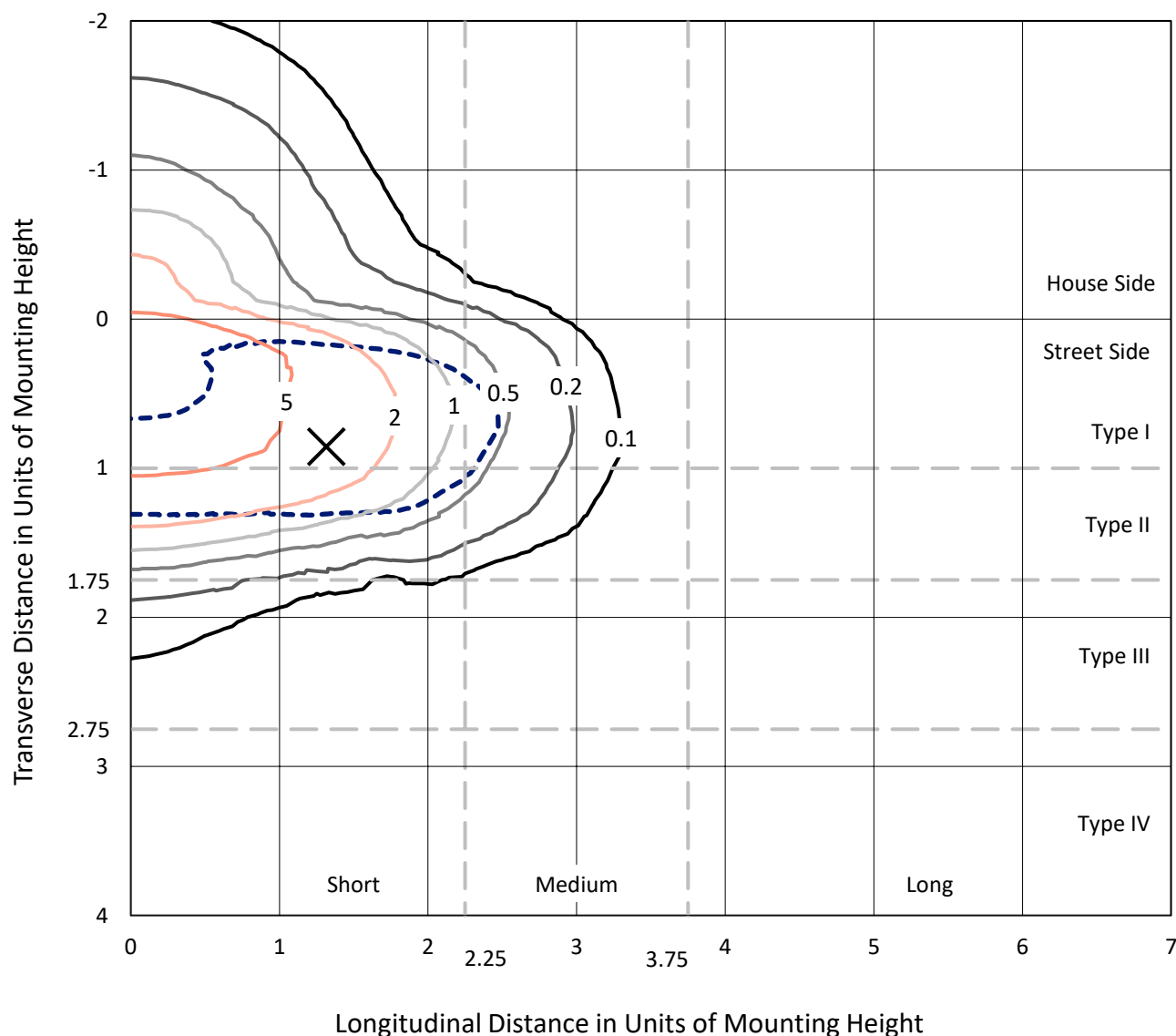
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

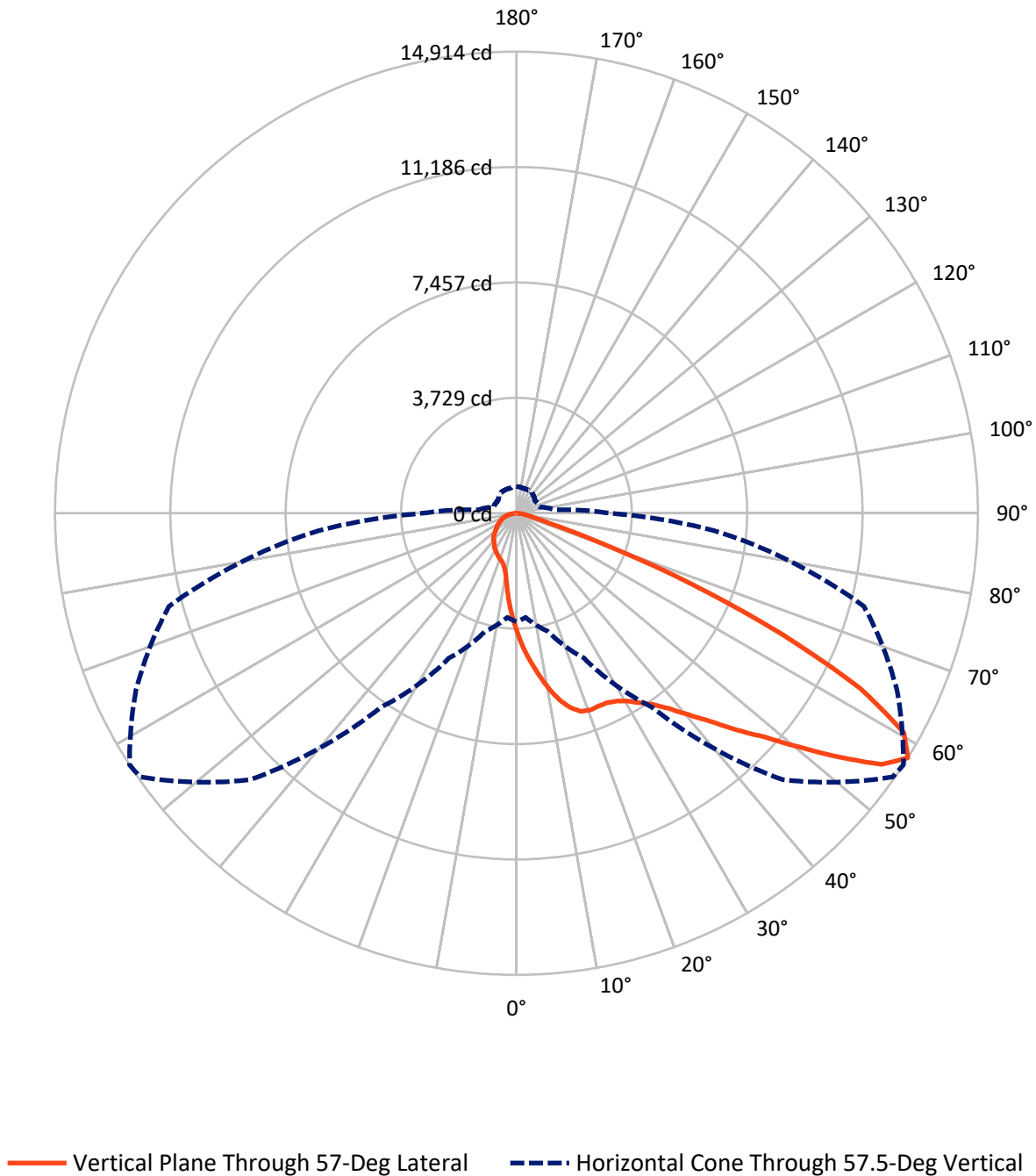


Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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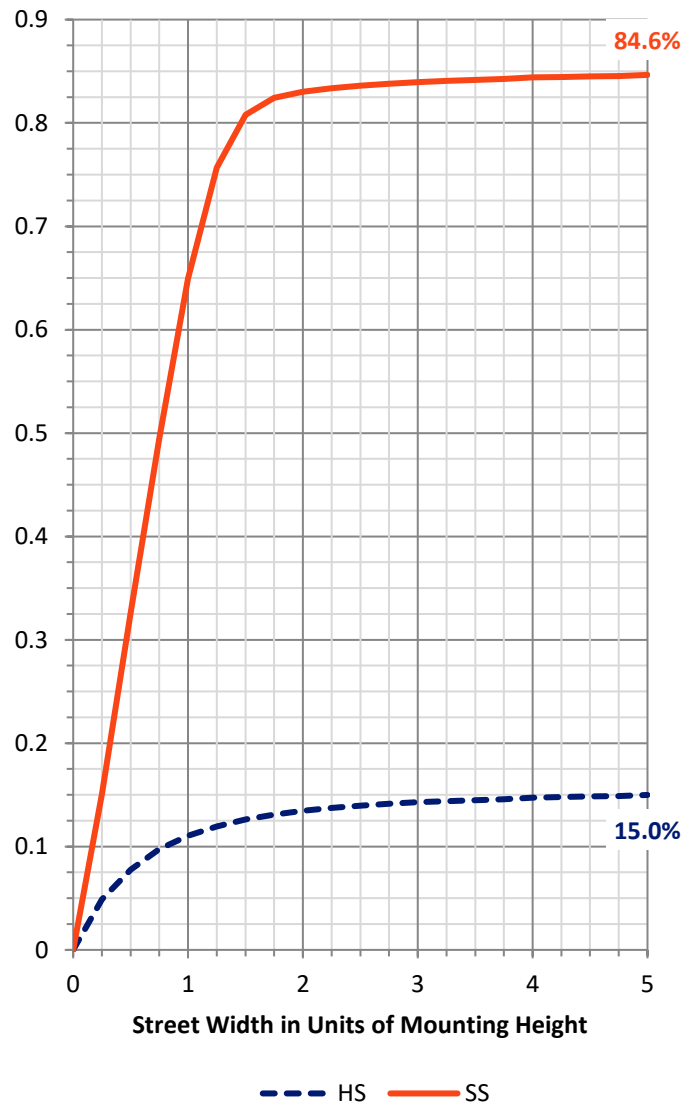
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2794.6	0.0	2794.6
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	15582.4	0.0	15582.4
	% Fixture	84.8	0.0	84.8
Total	Lumens	18377.0	0.0	18377.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.1	2.0
10°-20°	1093.5	6.0
20°-30°	1815.8	9.9
30°-40°	2735.2	14.9
40°-50°	4106.6	22.3
50°-60°	4603.0	25.0
60°-70°	2693.9	14.7
70°-80°	796.8	4.3
80°-90°	161.1	0.9
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°	18377.0	100.0
0°-180°	18377.0	100.0

Coefficient of Utilization



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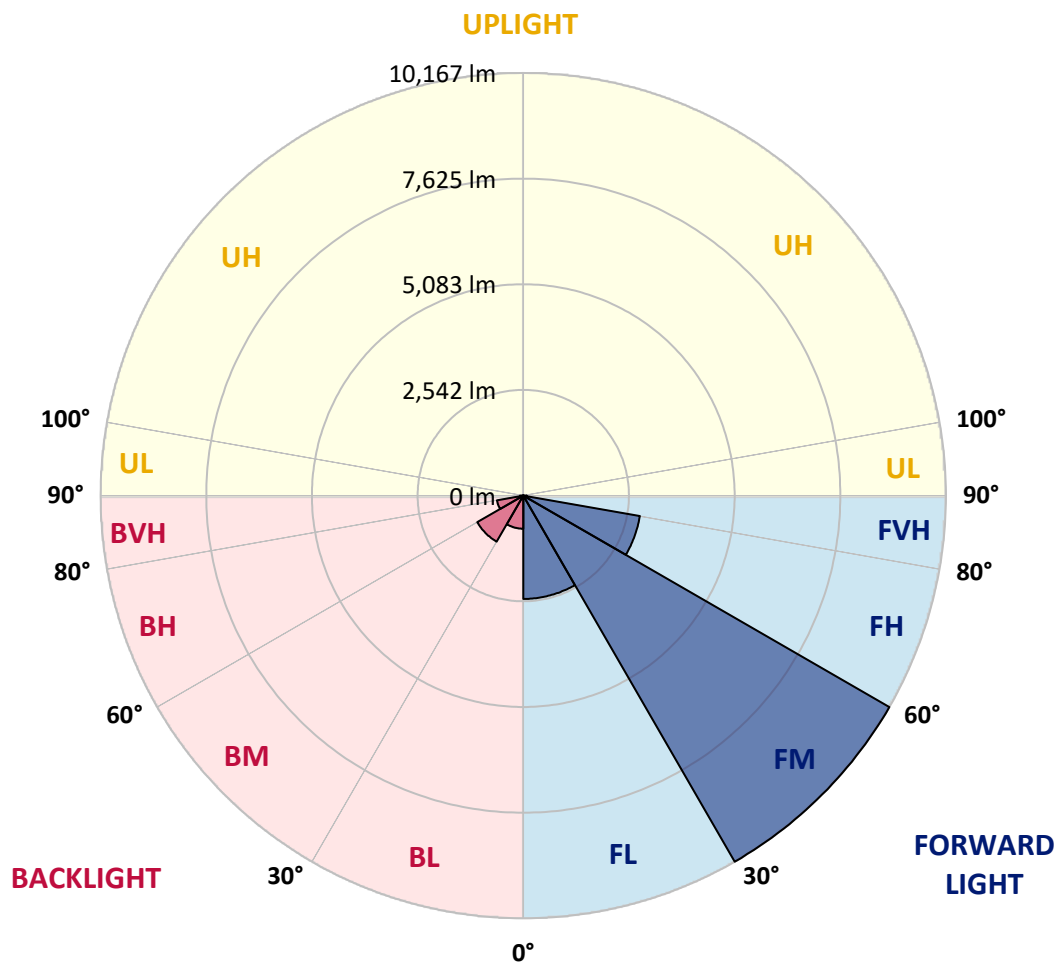
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2484.1	13.5			
FM	(30°-60°)	10167.0	55.3			
FH	(60°-80°)	2847.7	15.5			G2/5000
FVH	(80°-90°)	83.6	0.5			G1/100
BL	(0°-30°)	796.3	4.3	B2/1000		
BM	(30°-60°)	1277.8	7.0	B2/2500		
BH	(60°-80°)	643.0	3.5	B2/1000		G2/1000
BVH	(80°-90°)	77.5	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8
2.5°	4797.3	4745.0	4703.8	4667.6	4620.3	4492.5	4364.8	4362.8	4261.2	4104.2	3943.3
5°	5578.9	5508.5	5517.6	5404.9	5292.2	5107.2	4836.6	4822.5	4606.2	4312.5	4013.7
7.5°	6087.9	6089.0	6060.8	5996.4	5874.7	5664.4	5357.6	5288.2	4987.5	4541.8	4094.2
10°	6061.8	6089.0	6136.2	6191.6	6228.8	6125.2	5845.5	5761.0	5369.7	4819.5	4183.7
12.5°	5713.7	5756.0	5823.4	5962.2	6186.5	6357.5	6262.0	6193.6	5812.3	5096.1	4282.3
15°	5496.5	5521.6	5558.8	5652.4	5893.8	6303.2	6550.7	6514.5	6229.8	5408.9	4392.9
17.5°	5430.1	5455.2	5467.3	5524.6	5696.6	6116.1	6664.4	6728.7	6600.0	5696.6	4504.6
20°	5496.5	5508.5	5508.5	5542.7	5677.5	6006.5	6659.3	6789.1	6903.8	6041.7	4609.2
22.5°	5670.5	5675.5	5668.5	5680.5	5781.1	6036.6	6612.0	6773.0	7149.2	6334.4	4690.7
25°	5953.2	5961.2	5914.9	5886.8	5960.2	6169.4	6638.2	6786.1	7341.3	6614.1	4745.0
27.5°	6274.0	6284.1	6227.8	6162.4	6196.6	6333.4	6740.8	6873.6	7485.2	6889.7	4779.2
30°	6667.4	6671.4	6576.8	6498.4	6476.2	6577.8	6915.8	7039.6	7664.3	7214.6	4830.5
32.5°	7069.7	7099.9	6978.2	6867.6	6830.3	6861.5	7174.4	7294.1	7877.5	7563.7	4913.0
35°	7617.0	7622.0	7476.1	7341.3	7218.6	7258.9	7505.3	7591.8	8172.3	7967.0	5029.7
37.5°	8300.0	8346.3	8145.1	7893.6	7742.7	7684.4	7905.7	8000.2	8585.7	8462.0	5205.7
40°	9058.5	9075.6	8903.6	8746.6	8471.0	8302.0	8454.9	8557.5	9095.7	9052.5	5409.9
42.5°	9535.3	9572.5	9585.6	9569.5	9362.3	9078.6	9137.0	9185.2	9699.3	9606.7	5619.2
45°	9696.3	9751.6	9938.7	10335.0	10357.2	10077.5	9941.7	9988.0	10357.2	10166.0	5819.4
47.5°	9429.7	9524.2	9869.3	10682.1	11290.7	11311.8	10902.4	10800.8	10956.7	10629.8	5964.2
50°	8740.6	8760.7	9288.8	10465.8	11728.3	12491.8	12068.3	11879.1	11526.1	10972.8	6063.8
52.5°	7674.3	7697.5	8140.1	9460.9	11458.7	13316.6	13432.3	13094.3	12104.5	11239.4	6129.2
55°	5696.6	5830.4	6317.3	7593.8	10181.1	13239.2	14516.7	14324.6	12803.6	11450.6	6231.8
57.5°	3502.7	3380.0	3957.4	5166.5	7657.2	12174.9	14851.7	14914.1	13573.1	11627.7	6403.8
60°	1611.5	1635.7	1874.1	2664.7	4667.6	9524.2	13988.6	14382.9	13998.7	11621.6	6447.1
62.5°	1110.6	1088.4	1028.1	1169.9	2128.6	6023.6	11815.8	12483.7	13145.6	11260.5	6275.1
65°	992.9	970.7	854.0	814.8	977.8	2625.5	8589.7	9432.7	11068.4	10349.1	5846.5
67.5°	927.5	897.3	776.6	700.1	698.1	1045.2	5064.9	6079.9	8209.5	8749.7	5065.9
70°	859.1	834.9	715.2	630.7	594.5	656.9	2226.1	2914.2	5330.5	6305.2	3946.3
72.5°	790.7	762.5	654.9	564.3	517.1	491.9	853.0	1109.6	3011.8	3780.3	2419.3
75°	691.1	677.0	585.5	511.0	459.7	397.3	541.2	617.6	1440.5	1736.3	1214.2
77.5°	604.6	589.5	520.1	446.6	409.4	322.9	384.3	419.5	607.6	704.2	548.2
80°	442.6	457.7	438.6	394.3	365.2	253.5	258.5	287.7	361.1	399.4	335.0
82.5°	280.7	308.8	338.0	303.8	276.6	200.2	179.1	190.1	246.5	261.5	148.9
85°	117.7	119.7	196.2	185.1	157.9	118.7	107.6	113.7	131.8	137.8	69.4
87.5°	45.3	44.3	69.4	64.4	49.3	34.2	34.2	38.2	52.3	48.3	22.1
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°	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8	3860.8
2.5°	3873.9	3802.5	3660.6	3484.6	3355.8	3211.0	3083.2	2991.7	2957.5	2941.4	2911.2
5°	3870.9	3730.0	3436.3	3128.5	2881.0	2627.5	2413.2	2274.4	2262.4	2169.8	2160.8
7.5°	3871.9	3656.6	3188.8	2736.2	2358.9	2099.4	1922.4	1876.1	1820.8	1806.7	1813.7
10°	3874.9	3563.0	2923.3	2347.9	1982.7	1812.7	1746.3	1728.2	1730.2	1736.3	1737.3
12.5°	3878.9	3472.5	2647.6	2053.1	1771.5	1701.0	1694.0	1710.1	1727.2	1740.3	1743.3
15°	3883.9	3368.9	2379.0	1815.7	1665.8	1659.8	1682.9	1710.1	1734.2	1753.4	1756.4
17.5°	3877.9	3248.2	2153.7	1669.9	1607.5	1636.7	1674.9	1709.1	1731.2	1749.3	1751.3
20°	3863.8	3113.4	1936.4	1567.3	1571.3	1618.6	1659.8	1692.0	1716.1	1725.2	1732.2
22.5°	3809.5	2952.4	1747.3	1487.8	1528.0	1593.4	1642.7	1661.8	1634.7	1615.5	1620.6
25°	3716.9	2743.2	1571.3	1423.4	1488.8	1558.2	1608.5	1562.2	1540.1	1532.0	1536.1
27.5°	3601.3	2513.8	1438.5	1356.0	1438.5	1519.0	1504.9	1496.8	1486.8	1473.7	1476.7
30°	3476.5	2289.5	1325.8	1303.7	1384.2	1430.4	1436.5	1449.6	1438.5	1418.4	1426.4
32.5°	3360.8	2078.3	1240.3	1259.4	1345.9	1338.9	1384.2	1399.3	1348.0	1280.6	1283.6
35°	3262.3	1882.1	1175.9	1216.2	1280.6	1283.6	1328.8	1276.5	1221.2	1189.0	1191.0
37.5°	3187.8	1729.2	1133.7	1179.0	1197.1	1235.3	1211.2	1184.0	1176.9	1154.8	1155.8
40°	3143.6	1595.4	1106.5	1149.8	1146.8	1172.9	1095.5	1122.6	1132.7	1125.6	1126.7
42.5°	3099.3	1500.9	1078.4	1109.6	1108.5	1057.2	1040.1	1063.3	1089.4	1092.5	1090.4
45°	3064.1	1427.4	1049.2	1048.2	1068.3	987.8	982.8	996.9	1034.1	1052.2	1051.2
47.5°	3024.9	1366.1	1004.9	976.8	982.8	944.6	936.5	942.6	987.8	1017.0	1025.1
50°	2975.6	1304.7	949.6	911.4	886.2	904.3	906.4	907.4	952.6	985.8	992.9
52.5°	2936.3	1258.4	886.2	858.1	827.9	868.1	883.2	885.2	912.4	939.5	944.6
55°	2959.5	1232.3	823.9	803.7	776.6	830.9	860.1	864.1	870.1	890.3	893.3
57.5°	3028.9	1238.3	773.6	747.4	727.3	786.6	835.9	839.0	834.9	859.1	863.1
60°	3050.0	1235.3	736.3	685.0	673.0	739.4	800.7	806.8	805.8	841.0	848.0
62.5°	2961.5	1197.1	699.1	632.7	624.7	691.1	751.4	775.6	780.6	830.9	840.0
65°	2753.3	1118.6	649.8	577.4	577.4	639.8	704.2	737.4	751.4	818.8	828.9
67.5°	2478.6	1026.1	599.5	530.1	528.1	590.5	653.9	688.1	710.2	801.7	807.8
70°	2057.1	901.3	537.2	478.8	478.8	535.2	592.5	633.7	665.9	769.5	769.5
72.5°	1409.3	749.4	461.7	420.5	421.5	473.8	532.1	578.4	616.6	705.2	707.2
75°	891.3	585.5	379.2	358.1	362.1	411.4	471.8	520.1	596.5	697.1	700.1
77.5°	473.8	411.4	301.8	296.8	301.8	347.0	414.4	480.8	598.5	604.6	594.5
80°	306.8	291.7	238.4	228.3	230.4	279.7	369.2	456.7	480.8	486.9	464.7
82.5°	167.0	185.1	169.0	158.9	158.9	218.3	314.9	363.1	345.0	286.7	273.6
85°	71.4	86.5	87.5	76.5	73.4	134.8	211.2	198.2	184.1	176.0	174.0
87.5°	20.1	28.2	28.2	21.1	16.1	37.2	42.2	12.1	0.0	1.0	2.0
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)