

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: P450368

Luminaire Tested: **GALN-SA1A-830-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P450368
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-SA1A-830-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3713 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 33
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

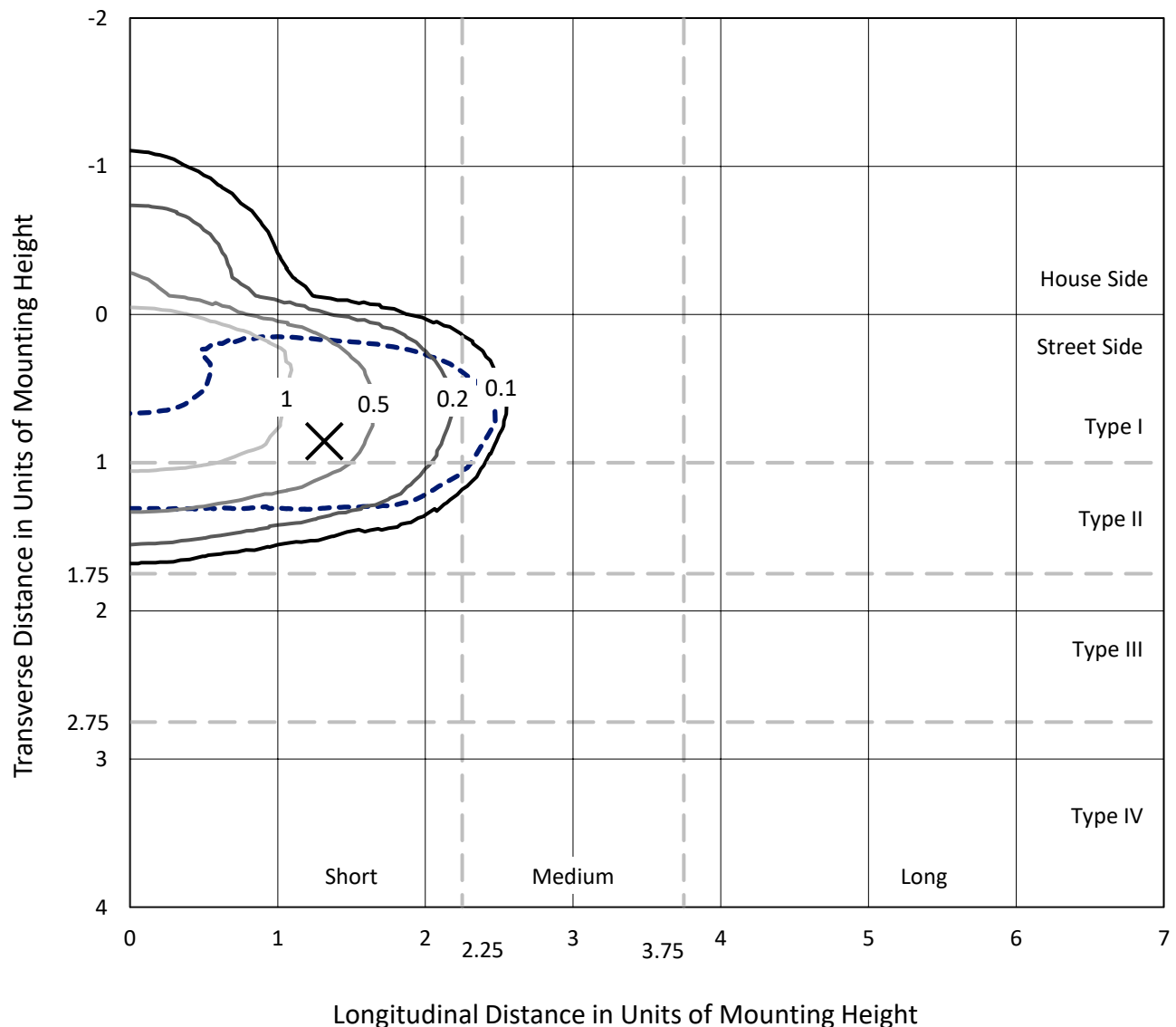


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Iso-Footcandle Lines of Horizontal Illumination

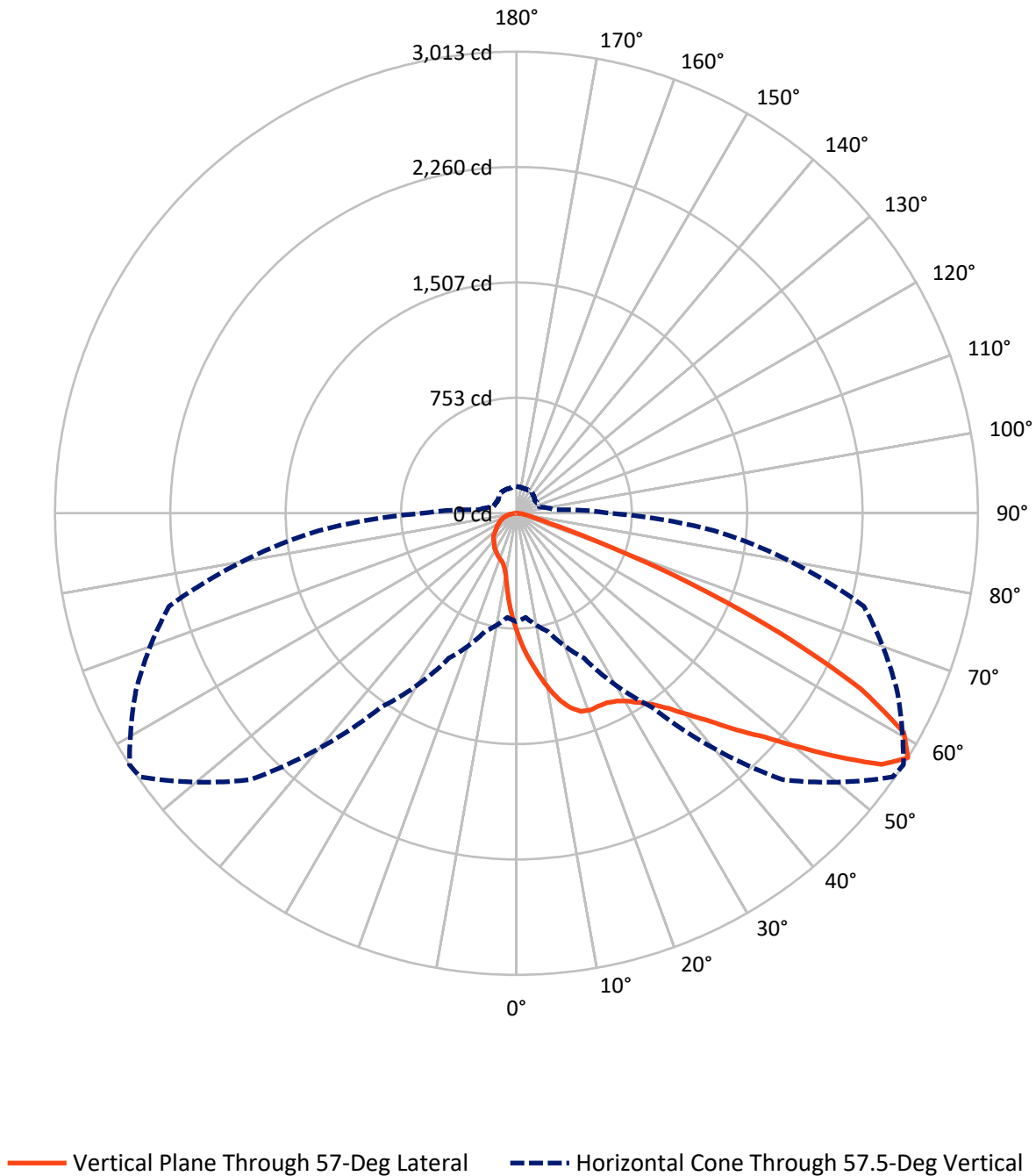
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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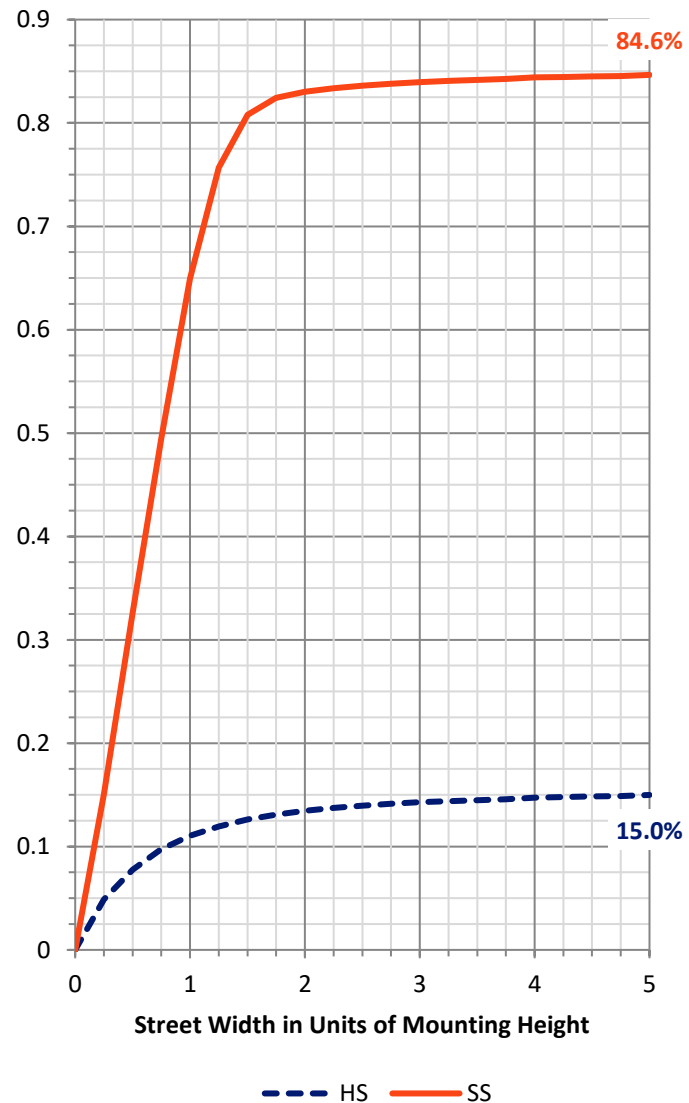
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	564.6	0.0	564.6
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	3148.4	0.0	3148.4
	% Fixture	84.8	0.0	84.8
Total	Lumens	3713.0	0.0	3713.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.0	2.0
10°-20°	220.9	6.0
20°-30°	366.9	9.9
30°-40°	552.6	14.9
40°-50°	829.7	22.3
50°-60°	930.0	25.0
60°-70°	544.3	14.7
70°-80°	161.0	4.3
80°-90°	32.5	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°	3713.0	100.0
0°-180°	3713.0	100.0

Coefficient of Utilization



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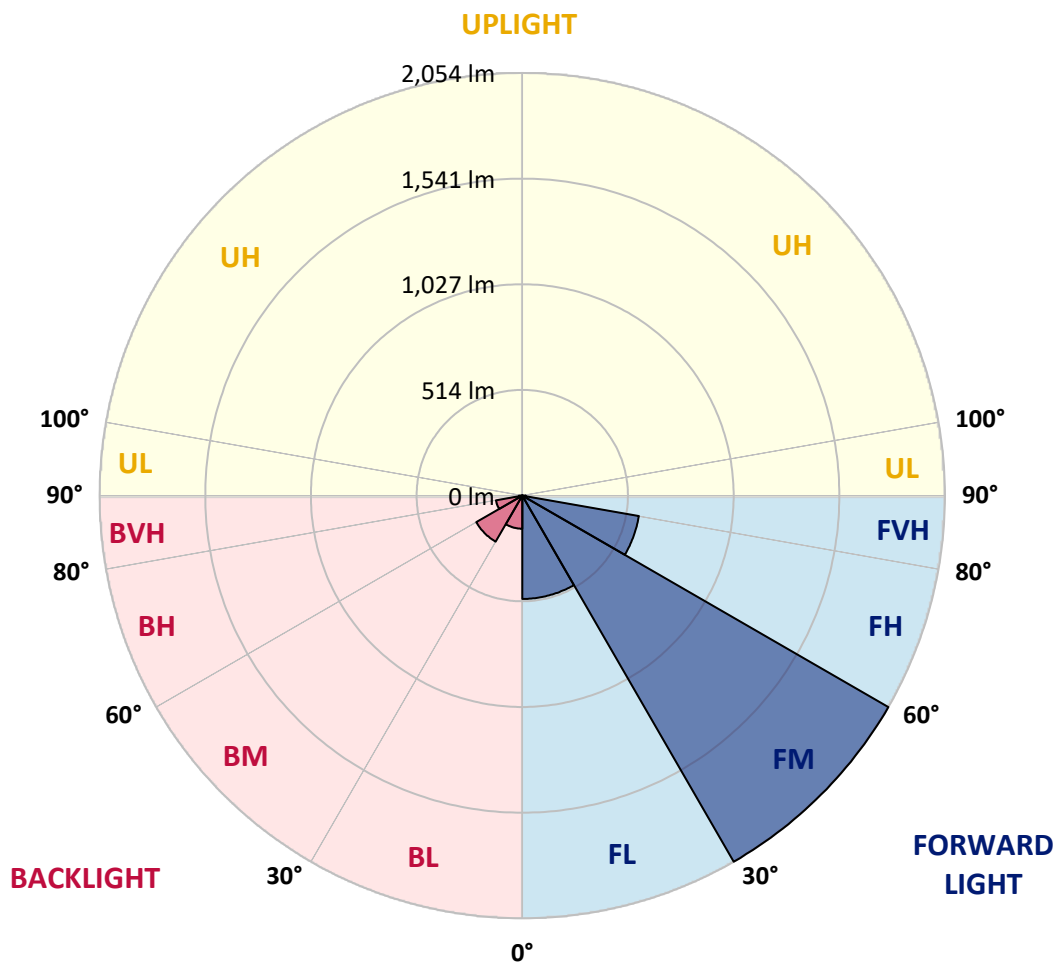
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	501.9	13.5			
FM	(30°-60°)	2054.2	55.3			
FH	(60°-80°)	575.4	15.5			G0/660
FVH	(80°-90°)	16.9	0.5			G1/100
BL	(0°-30°)	160.9	4.3	B1/500		
BM	(30°-60°)	258.2	7.0	B1/1000		
BH	(60°-80°)	129.9	3.5	B1/500		G1/500
BVH	(80°-90°)	15.7	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1
2.5°	969.3	958.7	950.4	943.1	933.5	907.7	881.9	881.5	861.0	829.2	796.7
5°	1127.2	1113.0	1114.8	1092.0	1069.3	1031.9	977.2	974.4	930.7	871.3	811.0
7.5°	1230.0	1230.2	1224.6	1211.6	1187.0	1144.5	1082.5	1068.5	1007.7	917.7	827.2
10°	1224.8	1230.2	1239.8	1251.0	1258.5	1237.6	1181.1	1164.0	1084.9	973.8	845.3
12.5°	1154.4	1163.0	1176.6	1204.6	1250.0	1284.5	1265.2	1251.4	1174.4	1029.6	865.2
15°	1110.5	1115.6	1123.1	1142.0	1190.8	1273.5	1323.5	1316.2	1258.7	1092.9	887.6
17.5°	1097.1	1102.2	1104.6	1116.2	1151.0	1235.7	1346.5	1359.5	1333.5	1151.0	910.1
20°	1110.5	1113.0	1113.0	1119.9	1147.1	1213.6	1345.5	1371.7	1394.9	1220.7	931.3
22.5°	1145.7	1146.7	1145.3	1147.7	1168.1	1219.7	1335.9	1368.5	1444.5	1279.8	947.7
25°	1202.8	1204.4	1195.1	1189.4	1204.2	1246.5	1341.2	1371.1	1483.3	1336.3	958.7
27.5°	1267.6	1269.7	1258.3	1245.1	1252.0	1279.6	1362.0	1388.8	1512.4	1392.0	965.6
30°	1347.1	1347.9	1328.8	1313.0	1308.5	1329.0	1397.3	1422.3	1548.5	1457.7	976.0
32.5°	1428.4	1434.5	1409.9	1387.6	1380.0	1386.3	1449.6	1473.7	1591.6	1528.2	992.7
35°	1539.0	1540.0	1510.5	1483.3	1458.5	1466.6	1516.4	1533.9	1651.2	1609.7	1016.2
37.5°	1677.0	1686.3	1645.7	1594.9	1564.4	1552.6	1597.3	1616.4	1734.7	1709.7	1051.8
40°	1830.2	1833.7	1798.9	1767.2	1711.5	1677.4	1708.3	1729.0	1837.8	1829.0	1093.1
42.5°	1926.6	1934.1	1936.7	1933.5	1891.6	1834.3	1846.1	1855.8	1959.7	1941.0	1135.3
45°	1959.1	1970.3	2008.1	2088.2	2092.6	2036.1	2008.7	2018.0	2092.6	2054.0	1175.8
47.5°	1905.2	1924.3	1994.0	2158.3	2281.2	2285.5	2202.8	2182.3	2213.8	2147.7	1205.0
50°	1766.0	1770.1	1876.8	2114.6	2369.6	2523.9	2438.3	2400.1	2328.8	2217.0	1225.2
52.5°	1550.6	1555.2	1644.7	1911.5	2315.2	2690.6	2713.9	2645.7	2445.7	2270.9	1238.4
55°	1151.0	1178.0	1276.4	1534.3	2057.1	2674.9	2933.0	2894.2	2586.9	2313.6	1259.1
57.5°	707.7	682.9	799.6	1043.9	1547.1	2459.9	3000.7	3013.3	2742.4	2349.3	1293.9
60°	325.6	330.5	378.6	538.4	943.1	1924.3	2826.3	2906.0	2828.4	2348.1	1302.6
62.5°	224.4	219.9	207.7	236.4	430.1	1217.0	2387.3	2522.3	2656.0	2275.1	1267.8
65°	200.6	196.1	172.6	164.6	197.6	530.5	1735.5	1905.8	2236.3	2091.0	1181.3
67.5°	187.4	181.3	156.9	141.5	141.1	211.2	1023.3	1228.4	1658.7	1767.8	1023.5
70°	173.6	168.7	144.5	127.4	120.1	132.7	449.8	588.8	1077.0	1273.9	797.3
72.5°	159.8	154.1	132.3	114.0	104.5	99.4	172.4	224.2	608.5	763.8	488.8
75°	139.6	136.8	118.3	103.2	92.9	80.3	109.3	124.8	291.0	350.8	245.3
77.5°	122.2	119.1	105.1	90.2	82.7	65.2	77.6	84.8	122.8	142.3	110.8
80°	89.4	92.5	88.6	79.7	73.8	51.2	52.2	58.1	73.0	80.7	67.7
82.5°	56.7	62.4	68.3	61.4	55.9	40.4	36.2	38.4	49.8	52.8	30.1
85°	23.8	24.2	39.6	37.4	31.9	24.0	21.7	23.0	26.6	27.8	14.0
87.5°	9.1	8.9	14.0	13.0	10.0	6.9	6.9	7.7	10.6	9.8	4.5
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°	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1	780.1
2.5°	782.7	768.3	739.6	704.0	678.0	648.8	622.9	604.5	597.5	594.3	588.2
5°	782.1	753.6	694.3	632.1	582.1	530.9	487.6	459.5	457.1	438.4	436.6
7.5°	782.3	738.8	644.3	552.8	476.6	424.2	388.4	379.1	367.9	365.0	366.5
10°	782.9	719.9	590.6	474.4	400.6	366.2	352.8	349.2	349.6	350.8	351.0
12.5°	783.7	701.6	534.9	414.8	357.9	343.7	342.3	345.5	349.0	351.6	352.2
15°	784.7	680.7	480.7	366.9	336.6	335.4	340.0	345.5	350.4	354.3	354.9
17.5°	783.5	656.3	435.2	337.4	324.8	330.7	338.4	345.3	349.8	353.4	353.9
20°	780.7	629.0	391.2	316.7	317.5	327.0	335.4	341.9	346.7	348.6	350.0
22.5°	769.7	596.5	353.0	300.6	308.7	321.9	331.9	335.8	330.3	326.4	327.4
25°	751.0	554.3	317.5	287.6	300.8	314.8	325.0	315.6	311.2	309.5	310.4
27.5°	727.6	507.9	290.6	274.0	290.6	306.9	304.1	302.4	300.4	297.8	298.4
30°	702.4	462.6	267.9	263.4	279.7	289.0	290.2	292.9	290.6	286.6	288.2
32.5°	679.0	419.9	250.6	254.5	271.9	270.5	279.7	282.7	272.3	258.7	259.3
35°	659.1	380.3	237.6	245.7	258.7	259.3	268.5	257.9	246.7	240.2	240.6
37.5°	644.1	349.4	229.1	238.2	241.9	249.6	244.7	239.2	237.8	233.3	233.5
40°	635.1	322.3	223.6	232.3	231.7	237.0	221.3	226.8	228.9	227.4	227.6
42.5°	626.2	303.2	217.9	224.2	224.0	213.6	210.2	214.8	220.1	220.7	220.3
45°	619.1	288.4	212.0	211.8	215.8	199.6	198.6	201.4	208.9	212.6	212.4
47.5°	611.2	276.0	203.0	197.4	198.6	190.8	189.2	190.4	199.6	205.5	207.1
50°	601.2	263.6	191.9	184.1	179.1	182.7	183.1	183.3	192.5	199.2	200.6
52.5°	593.3	254.3	179.1	173.4	167.3	175.4	178.5	178.9	184.3	189.8	190.8
55°	598.0	249.0	166.5	162.4	156.9	167.9	173.8	174.6	175.8	179.9	180.5
57.5°	612.0	250.2	156.3	151.0	146.9	158.9	168.9	169.5	168.7	173.6	174.4
60°	616.2	249.6	148.8	138.4	136.0	149.4	161.8	163.0	162.8	169.9	171.3
62.5°	598.4	241.9	141.3	127.8	126.2	139.6	151.8	156.7	157.7	167.9	169.7
65°	556.3	226.0	131.3	116.7	116.7	129.3	142.3	149.0	151.8	165.4	167.5
67.5°	500.8	207.3	121.1	107.1	106.7	119.3	132.1	139.0	143.5	162.0	163.2
70°	415.6	182.1	108.5	96.7	96.7	108.1	119.7	128.0	134.5	155.5	155.5
72.5°	284.7	151.4	93.3	85.0	85.2	95.7	107.5	116.9	124.6	142.5	142.9
75°	180.1	118.3	76.6	72.4	73.2	83.1	95.3	105.1	120.5	140.8	141.5
77.5°	95.7	83.1	61.0	60.0	61.0	70.1	83.7	97.2	120.9	122.2	120.1
80°	62.0	58.9	48.2	46.1	46.5	56.5	74.6	92.3	97.2	98.4	93.9
82.5°	33.7	37.4	34.1	32.1	32.1	44.1	63.6	73.4	69.7	57.9	55.3
85°	14.4	17.5	17.7	15.4	14.8	27.2	42.7	40.0	37.2	35.6	35.2
87.5°	4.1	5.7	5.7	4.3	3.3	7.5	8.5	2.4	0.0	0.2	0.4
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)