

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: P451312

Luminaire Tested: **GALN-SA2A-830-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451312
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2A-830-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7448 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): 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

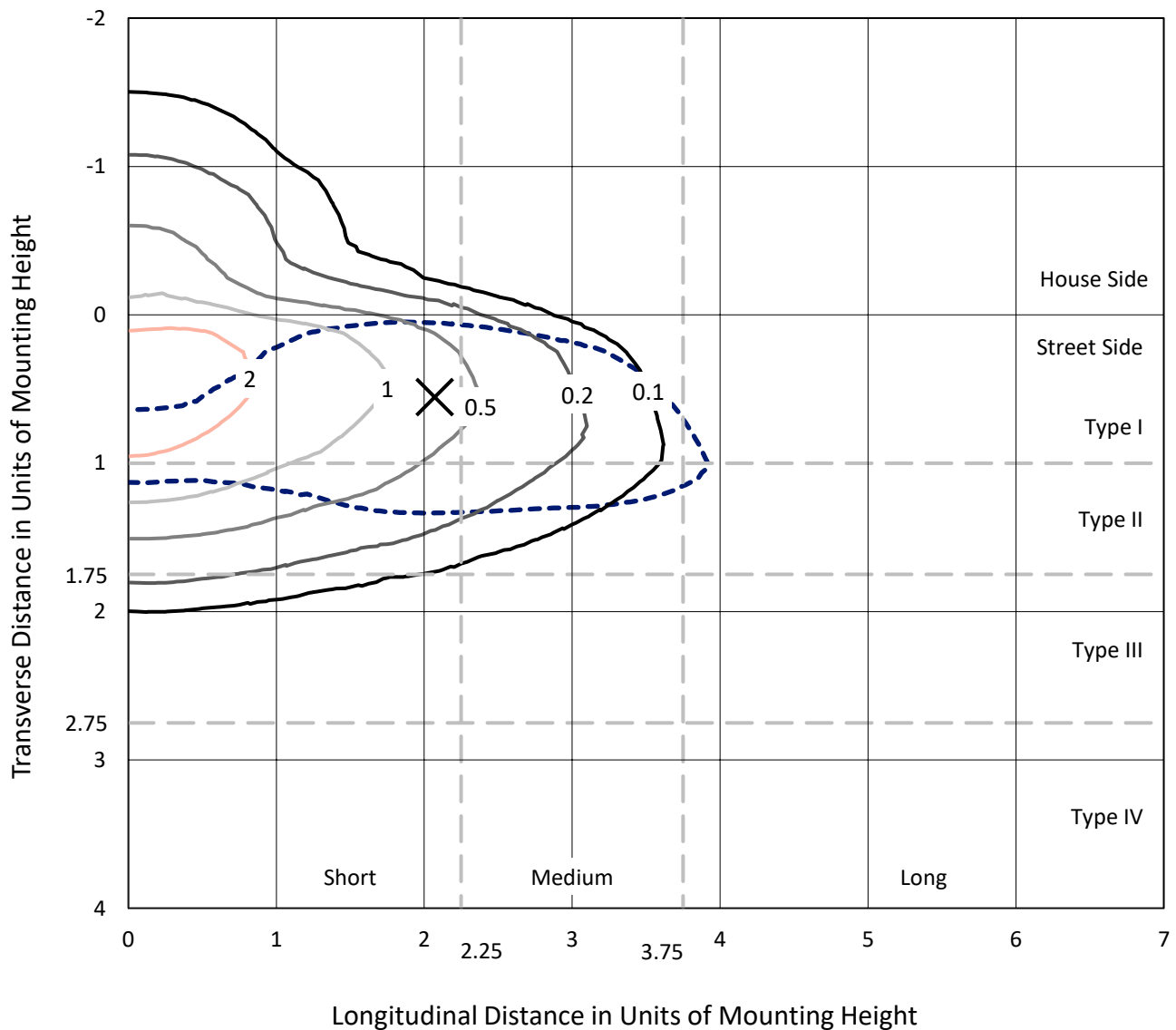


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

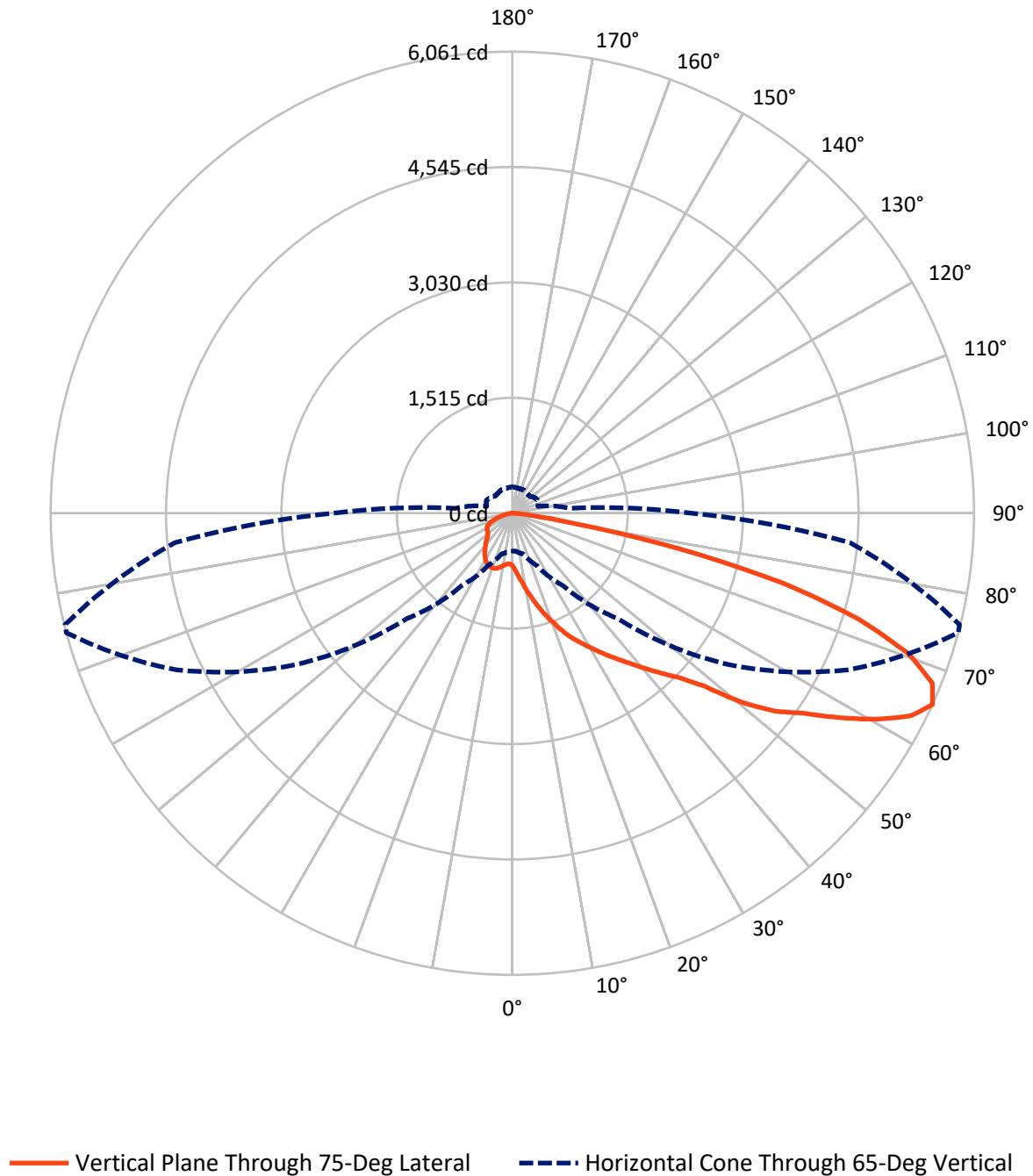


Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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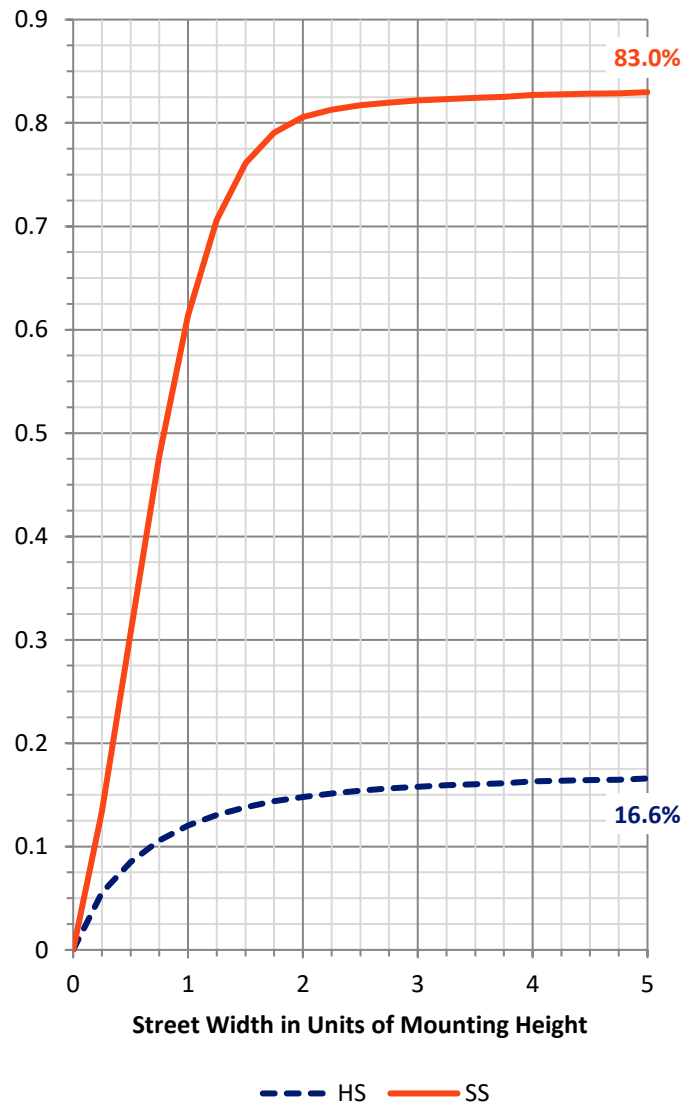
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1252.1	0.0	1252.1
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	6195.9	0.0	6195.9
	% Fixture	83.2	0.0	83.2
Total	Lumens	7448.0	0.0	7448.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.1	1.1
10°-20°	329.3	4.4
20°-30°	636.1	8.5
30°-40°	1033.3	13.9
40°-50°	1421.4	19.1
50°-60°	1678.1	22.5
60°-70°	1470.3	19.7
70°-80°	701.9	9.4
80°-90°	93.4	1.3
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°	7448.0	100.0
0°-180°	7448.0	100.0

Coefficient of Utilization



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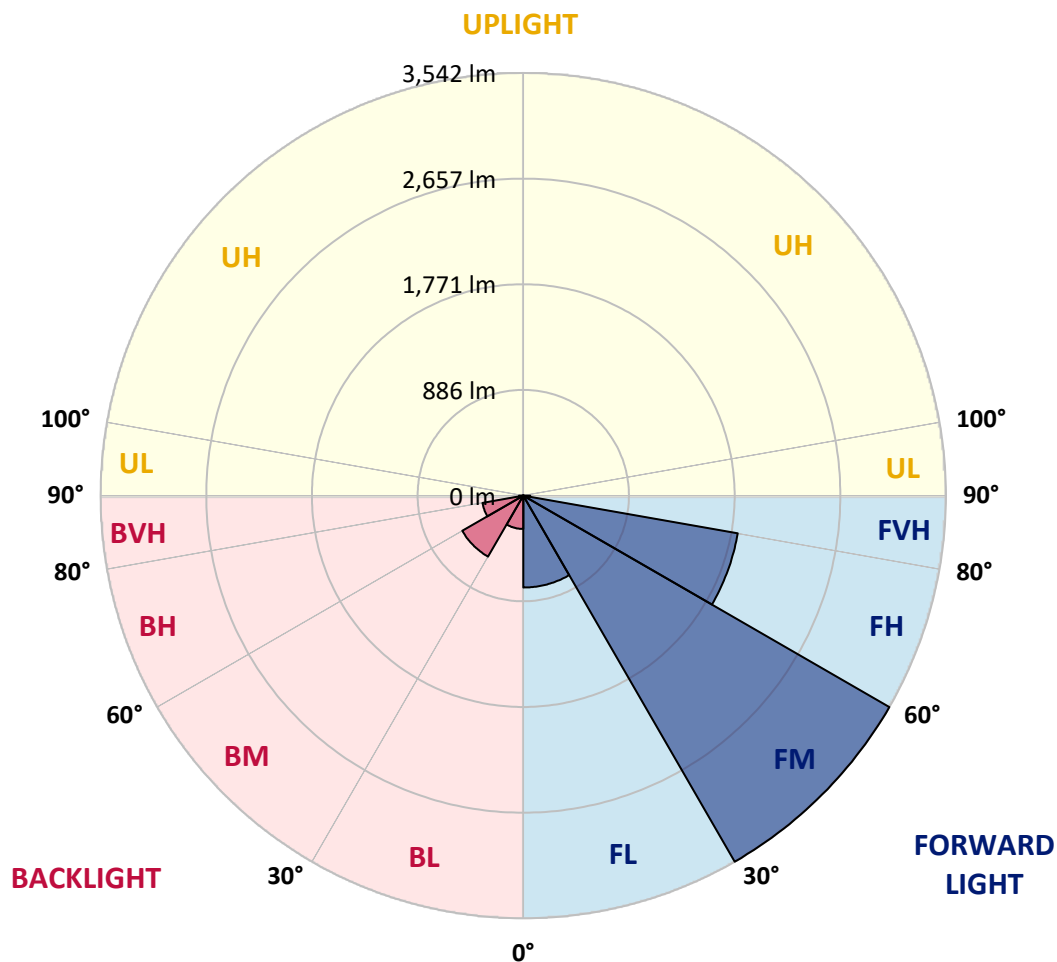
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	770.0	10.3			
FM	(30°-60°)	3542.4	47.6			
FH	(60°-80°)	1825.1	24.5			G2/5000
FVH	(80°-90°)	58.4	0.8			G1/100
BL	(0°-30°)	279.5	3.8	B1/500		
BM	(30°-60°)	590.4	7.9	B1/1000		
BH	(60°-80°)	347.2	4.7	B1/500		G1/500
BVH	(80°-90°)	35.0	0.5			G1/100
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°	75°	76°	85°
0°	692.0	692.0	692.0	692.0	692.0	692.0	692.0	692.0	692.0	692.0	692.0
2.5°	919.5	913.4	906.9	889.2	870.2	848.8	818.1	788.6	749.4	748.2	719.1
5°	1174.4	1170.3	1141.6	1125.1	1081.0	1022.5	972.8	895.6	824.1	815.6	759.1
7.5°	1408.7	1392.9	1382.0	1352.1	1308.5	1233.3	1137.2	1033.0	913.4	902.1	808.4
10°	1585.2	1583.6	1577.9	1552.1	1519.4	1444.6	1338.0	1188.5	1026.5	1004.3	868.1
12.5°	1717.3	1718.5	1717.7	1717.3	1693.9	1630.5	1514.9	1357.4	1140.8	1125.1	937.2
15°	1804.2	1816.3	1821.1	1841.3	1843.3	1800.9	1701.6	1520.6	1269.7	1246.3	1011.6
17.5°	1861.5	1867.6	1890.2	1924.5	1952.4	1944.7	1856.3	1671.7	1401.4	1362.2	1088.7
20°	1916.5	1927.0	1944.3	1991.2	2040.5	2063.1	2000.9	1826.4	1531.9	1506.8	1174.0
22.5°	2030.8	2045.7	2051.8	2075.6	2117.6	2157.6	2129.4	1974.6	1674.9	1641.0	1264.4
25°	2224.3	2240.1	2223.1	2217.4	2231.2	2251.0	2244.9	2114.4	1809.8	1761.3	1350.1
27.5°	2476.4	2478.4	2445.3	2413.8	2379.8	2369.7	2351.1	2238.4	1927.0	1886.6	1436.1
30°	2747.0	2737.4	2682.4	2625.4	2568.1	2511.5	2458.2	2358.0	2057.5	2011.0	1520.6
32.5°	2998.3	2993.1	2932.1	2843.6	2746.6	2693.3	2585.5	2478.8	2197.2	2152.4	1607.4
35°	3186.6	3194.2	3127.2	3030.6	2924.8	2877.5	2741.4	2605.7	2341.9	2293.0	1702.0
37.5°	3320.3	3316.3	3256.9	3173.2	3080.3	3039.1	2923.6	2744.2	2497.4	2450.5	1805.4
40°	3368.0	3365.5	3321.5	3260.5	3201.5	3187.0	3114.3	2893.7	2675.5	2620.6	1929.8
42.5°	3337.7	3342.9	3313.8	3297.3	3286.4	3296.9	3303.7	3089.6	2869.9	2819.4	2064.7
45°	3244.7	3241.9	3237.9	3264.9	3326.3	3395.4	3491.2	3274.6	3081.1	3040.7	2245.7
47.5°	3078.7	3098.9	3109.0	3183.7	3317.9	3481.5	3706.9	3522.7	3387.8	3352.6	2521.6
50°	2846.4	2862.6	2922.4	3055.3	3255.2	3513.8	3917.8	3928.3	3899.2	3833.3	2821.4
52.5°	2483.7	2508.7	2631.9	2875.5	3126.8	3500.5	4045.4	4276.1	4314.5	4265.2	3116.7
55°	2077.7	2112.8	2242.9	2562.4	2949.8	3427.7	4133.5	4477.7	4630.8	4585.1	3401.1
57.5°	1680.1	1717.3	1851.0	2160.5	2641.2	3267.0	4191.3	4702.3	5061.4	5002.0	3755.0
60°	1259.2	1298.0	1412.7	1731.4	2201.7	2952.7	4152.1	4897.0	5491.7	5466.2	4109.3
62.5°	812.4	855.2	955.0	1218.8	1692.3	2523.2	3942.4	5004.5	5864.1	5833.4	4367.8
65°	494.9	499.7	554.7	756.6	1158.2	1953.6	3462.9	4861.9	6060.5	6051.2	4446.6
67.5°	320.0	327.6	352.7	453.3	694.4	1357.0	2768.9	4391.2	5945.7	5942.5	4283.8
70°	270.3	272.7	284.0	305.8	403.6	822.9	1944.3	3641.0	5509.8	5509.8	3892.3
72.5°	241.6	244.8	248.9	255.7	288.0	466.2	1160.2	2834.3	4757.2	4788.7	3313.0
75°	219.4	218.6	221.0	222.2	245.6	304.6	599.9	2096.2	3680.2	3617.2	2399.2
77.5°	187.8	189.1	187.8	193.1	216.9	231.9	304.6	1406.6	2230.4	2148.8	1204.3
80°	154.3	156.3	158.4	161.6	185.4	176.1	183.0	641.1	824.9	807.6	372.1
82.5°	115.9	118.8	122.0	129.7	145.8	116.3	115.5	273.9	297.7	272.7	136.9
85°	46.9	55.3	83.6	91.3	91.7	63.8	71.1	114.3	121.6	118.8	53.7
87.5°	10.9	12.9	27.1	40.8	37.6	23.8	26.3	37.2	42.4	39.2	18.2
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°	692.0	692.0	692.0	692.0	692.0	692.0	692.0	692.0	692.0	692.0	692.0
2.5°	705.7	691.6	667.4	648.8	635.5	623.7	616.5	612.0	610.4	610.0	610.4
5°	729.6	704.5	666.2	641.9	628.6	620.9	616.5	616.1	616.5	616.9	615.7
7.5°	762.3	726.4	676.3	653.6	643.5	637.9	635.9	635.1	635.5	635.1	635.1
10°	805.9	756.6	696.1	672.6	664.1	657.7	654.4	652.4	650.8	649.2	648.4
12.5°	854.0	790.2	717.5	694.8	682.7	672.6	665.4	660.1	656.5	652.8	652.0
15°	907.7	825.7	741.3	709.8	692.4	677.5	664.9	656.5	650.0	644.7	644.3
17.5°	959.0	859.3	757.5	716.7	691.2	670.2	653.6	641.9	633.8	627.0	626.2
20°	1014.0	891.2	764.7	712.2	679.1	653.6	631.8	617.7	608.4	600.7	599.5
22.5°	1069.3	918.2	763.9	698.1	658.1	628.2	605.2	590.2	579.3	571.6	568.8
25°	1122.2	940.1	753.8	675.5	629.0	597.9	574.5	560.7	551.0	541.7	541.7
27.5°	1169.9	953.0	734.8	648.0	599.1	566.4	547.8	535.3	526.4	520.3	516.7
30°	1216.8	959.0	709.0	613.2	567.6	539.7	524.8	517.5	509.4	502.5	501.7
32.5°	1258.8	957.8	676.7	579.3	537.7	517.9	511.8	506.2	497.7	488.0	485.6
35°	1299.6	949.8	638.3	542.1	512.6	505.0	506.6	498.5	483.2	471.0	469.0
37.5°	1344.0	935.2	596.3	511.8	491.6	498.9	503.0	485.2	460.1	441.1	436.7
40°	1395.3	918.6	552.6	481.5	475.1	493.3	493.3	460.5	426.2	414.5	411.2
42.5°	1455.5	904.9	516.3	456.1	461.3	479.5	477.5	427.8	413.7	407.6	406.0
45°	1550.9	900.1	478.7	433.9	450.0	463.4	446.8	416.5	408.4	403.6	402.0
47.5°	1701.6	905.7	445.6	417.3	437.1	447.2	412.5	408.8	403.2	396.3	395.5
50°	1841.3	900.5	422.2	408.0	425.8	427.8	398.3	399.5	396.3	388.6	387.0
52.5°	1955.7	883.9	407.2	403.2	416.1	393.9	385.0	389.4	388.2	378.5	376.9
55°	2081.3	873.8	399.9	403.2	409.6	364.4	372.5	378.9	377.3	370.4	370.0
57.5°	2233.6	875.8	394.7	404.4	403.2	349.4	359.9	367.6	367.2	365.2	365.2
60°	2389.5	876.6	386.6	404.0	395.5	337.7	347.0	357.9	358.7	359.9	359.9
62.5°	2441.2	841.5	370.9	396.7	378.5	326.4	334.9	349.8	349.0	352.3	352.7
65°	2344.7	744.1	347.4	380.1	356.7	318.3	325.6	339.3	334.9	343.4	345.0
67.5°	2134.2	615.7	311.1	350.2	332.5	309.9	319.5	324.8	316.7	333.3	333.7
70°	1844.6	480.7	265.0	307.8	305.0	301.0	314.7	306.6	295.3	315.5	311.5
72.5°	1542.4	367.2	211.7	251.7	268.2	287.6	306.2	283.2	267.4	273.5	266.2
75°	1158.6	271.5	170.1	197.1	223.4	268.6	298.5	254.9	230.7	225.0	223.4
77.5°	590.6	177.3	127.3	147.5	167.7	242.8	288.0	221.8	191.1	182.2	178.2
80°	210.9	110.3	89.7	101.8	113.1	208.9	251.7	183.4	148.3	146.6	148.3
82.5°	97.8	71.1	60.2	66.7	67.1	139.4	191.9	136.9	112.7	171.3	144.6
85°	42.0	35.6	33.9	33.1	30.7	62.2	107.9	73.5	114.7	51.3	47.3
87.5°	12.5	14.1	12.5	9.3	6.9	6.9	10.9	4.0	2.8	2.0	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)