

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: P453168

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

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453168
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-SA4A-830-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 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: 14651 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 121
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

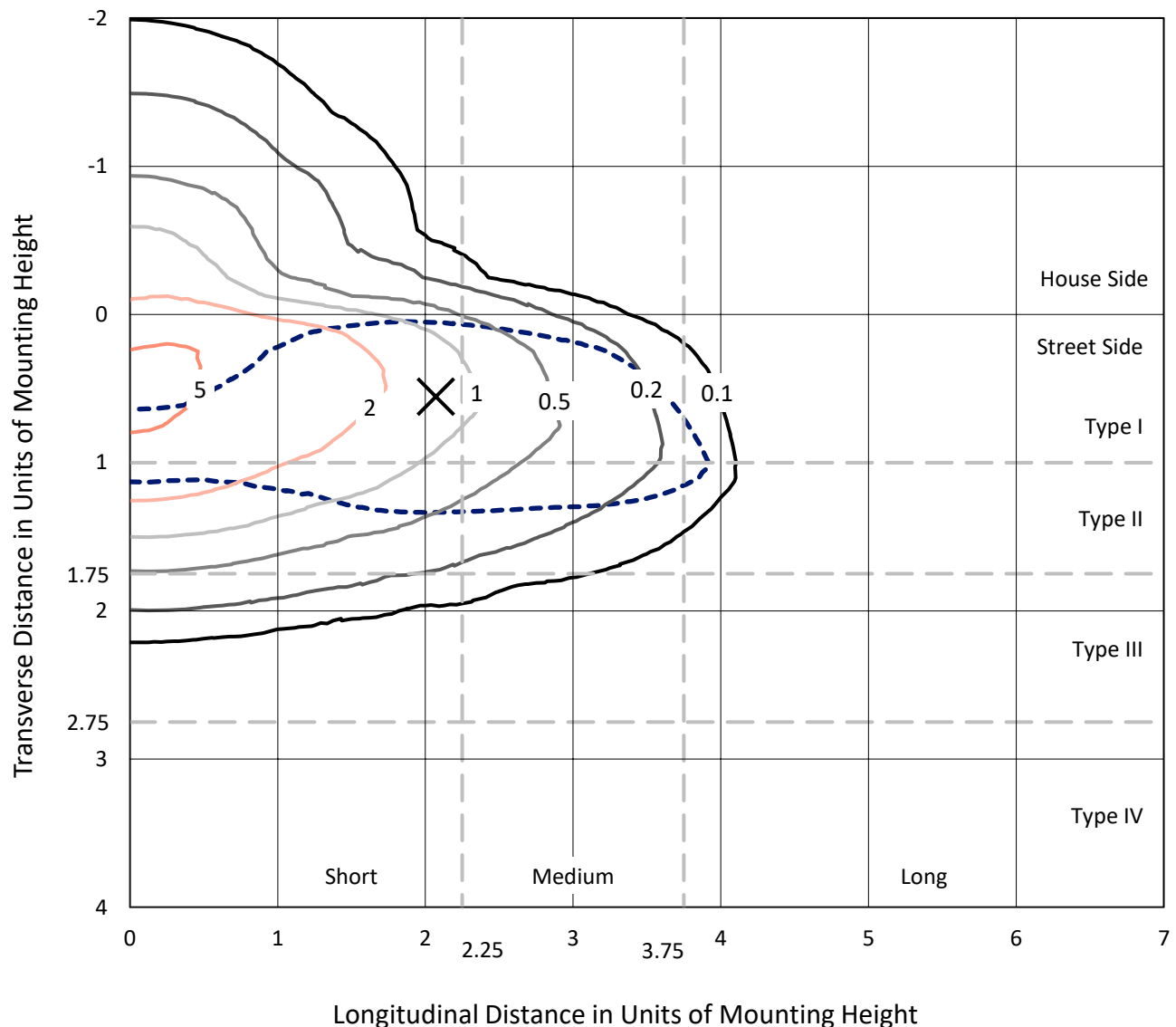


REPORT NUMBER: P453168

CATALOG NUMBER: GALN-SA4A-830-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

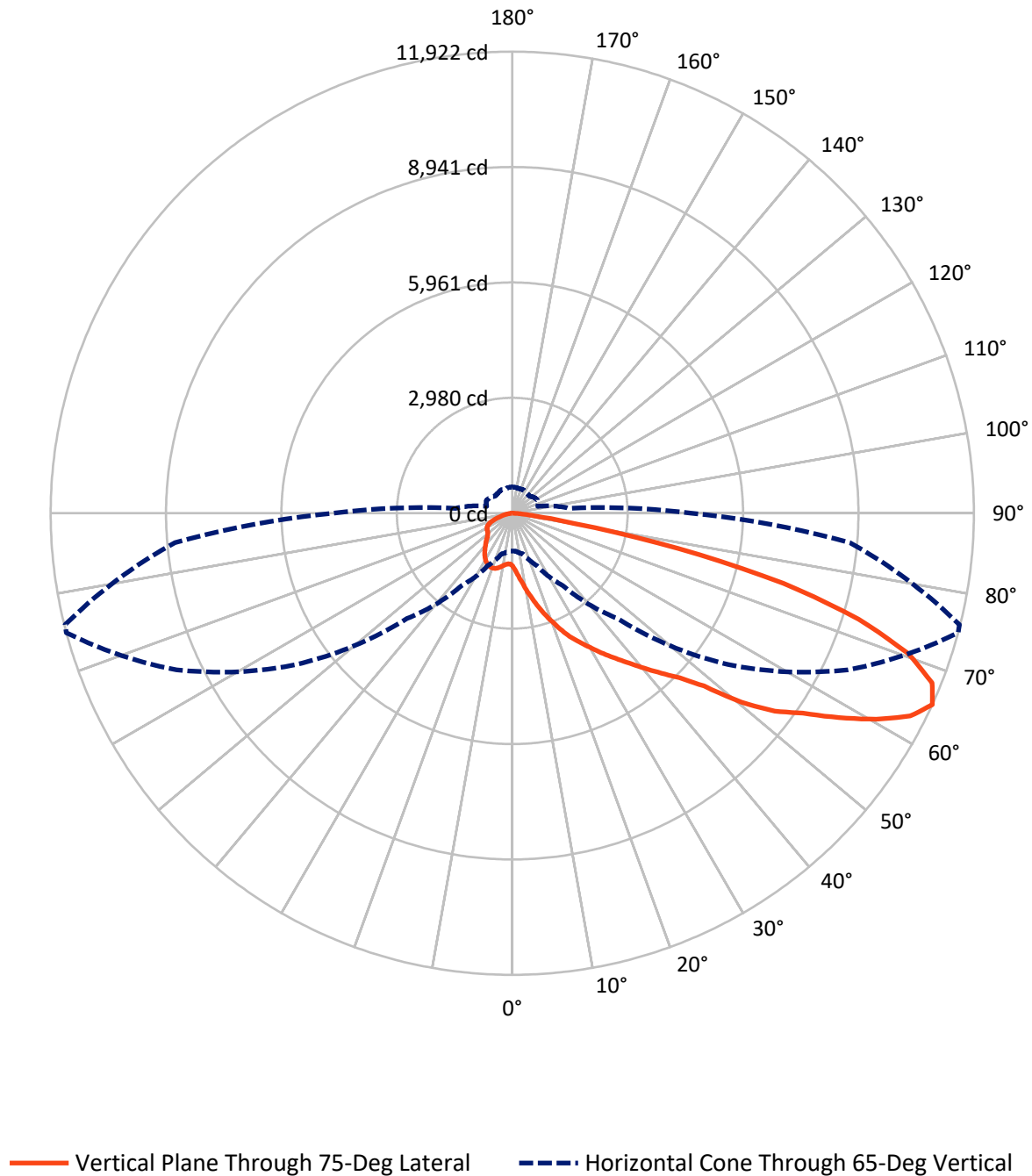


Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type II - Short - N/A

REPORT NUMBER: P453168

CATALOG NUMBER: GALN-SA4A-830-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P453168

CATALOG NUMBER: GALN-SA4A-830-U-T2R

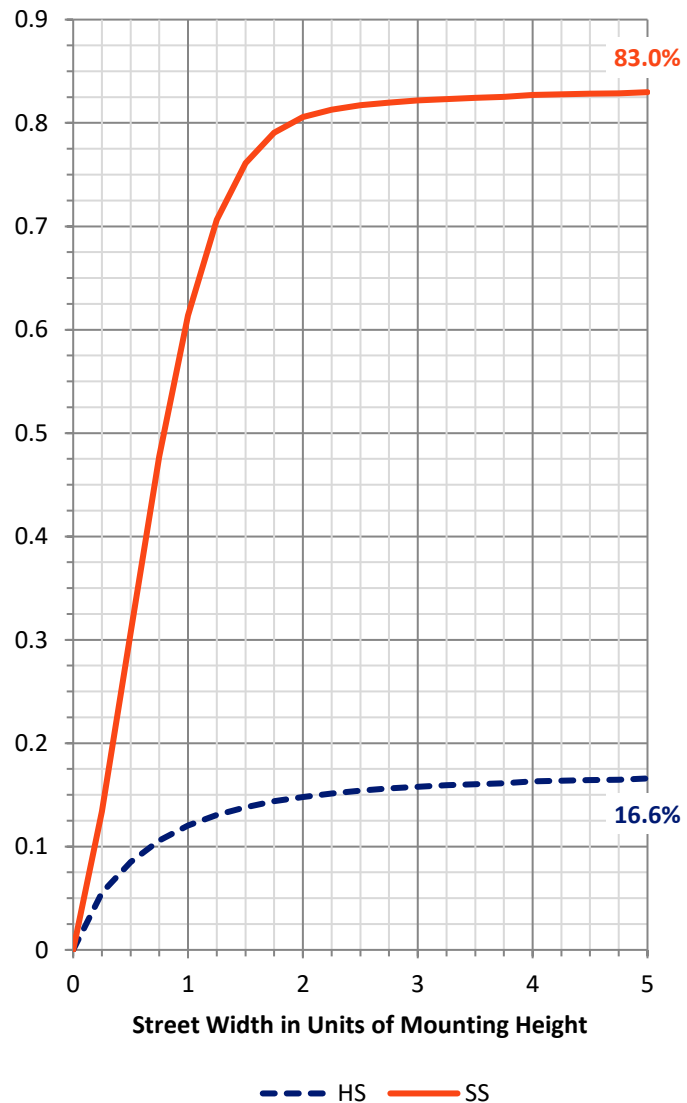
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2463.0	0.0	2463.0
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	12188.0	0.0	12188.0
	% Fixture	83.2	0.0	83.2
Total	Lumens	14651.0	0.0	14651.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.4	1.1
10°-20°	647.8	4.4
20°-30°	1251.3	8.5
30°-40°	2032.6	13.9
40°-50°	2796.0	19.1
50°-60°	3301.1	22.5
60°-70°	2892.3	19.7
70°-80°	1380.8	9.4
80°-90°	183.7	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°	14651.0	100.0
0°-180°	14651.0	100.0

Coefficient of Utilization



REPORT NUMBER: P453168

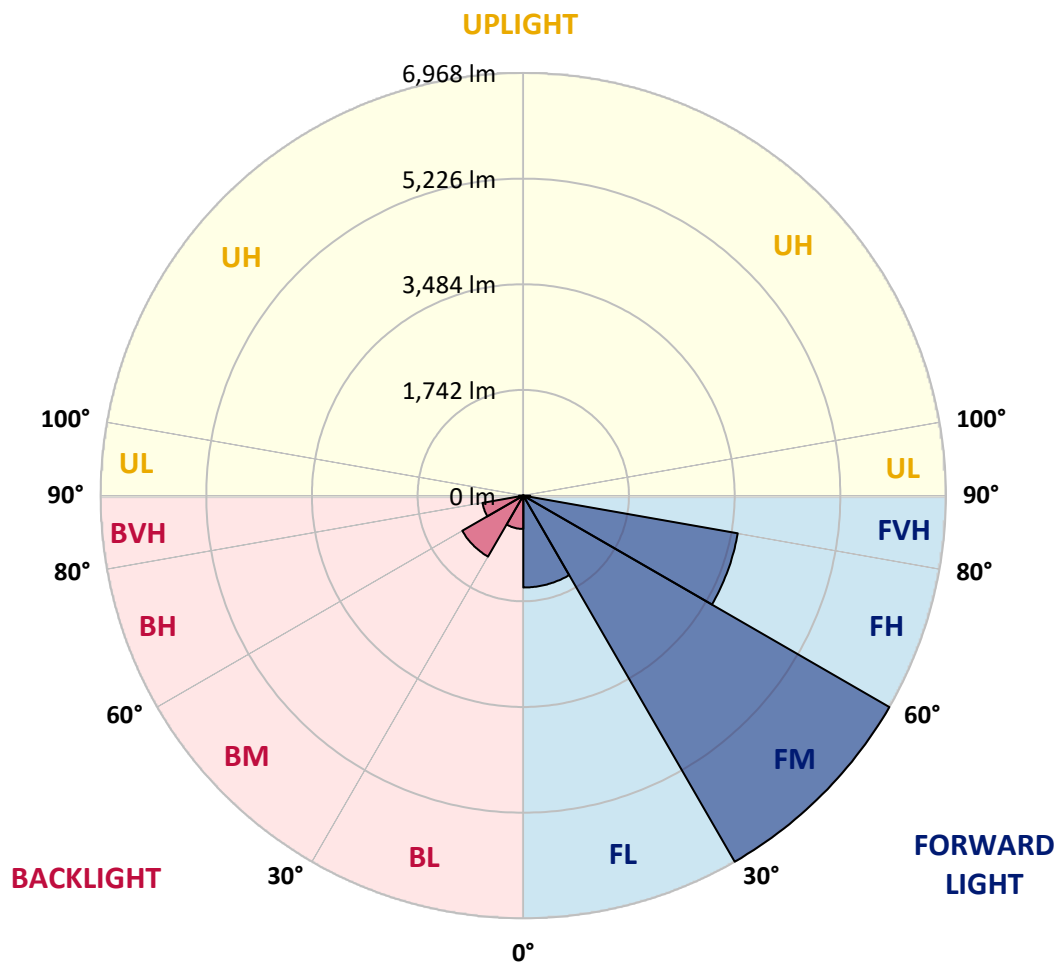
CATALOG NUMBER: GALN-SA4A-830-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1514.7	10.3			
FM	(30°-60°)	6968.3	47.6			
FH	(60°-80°)	3590.2	24.5			G2/5000
FVH	(80°-90°)	114.8	0.8			G2/225
BL	(0°-30°)	549.9	3.8	B2/1000		
BM	(30°-60°)	1161.3	7.9	B2/2500		
BH	(60°-80°)	683.0	4.7	B2/1000		G2/1000
BVH	(80°-90°)	68.9	0.5			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





REPORT NUMBER: P453168

CATALOG NUMBER: GALN-SA4A-830-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3
2.5°	1808.7	1796.7	1784.0	1749.1	1711.7	1669.6	1609.2	1551.2	1474.1	1471.7	1414.5
5°	2310.1	2302.1	2245.7	2213.1	2126.5	2011.3	1913.6	1761.8	1621.1	1604.4	1493.2
7.5°	2771.0	2740.0	2718.6	2659.7	2573.9	2426.1	2237.0	2032.0	1796.7	1774.5	1590.1
10°	3118.3	3115.1	3104.0	3053.1	2988.7	2841.7	2631.9	2337.9	2019.2	1975.5	1707.7
12.5°	3378.1	3380.5	3378.9	3378.1	3332.0	3207.3	2980.0	2670.1	2244.1	2213.1	1843.6
15°	3549.0	3572.8	3582.4	3622.1	3626.1	3542.6	3347.1	2991.1	2497.6	2451.5	1989.8
17.5°	3661.8	3673.7	3718.2	3785.8	3840.6	3825.5	3651.5	3288.3	2756.7	2679.6	2141.6
20°	3769.9	3790.6	3824.7	3916.9	4013.9	4058.4	3936.0	3592.7	3013.4	2964.1	2309.3
22.5°	3994.8	4024.2	4036.1	4083.0	4165.6	4244.3	4188.7	3884.3	3294.7	3227.9	2487.3
25°	4375.4	4406.4	4373.0	4361.9	4388.9	4427.9	4416.0	4159.3	3560.1	3464.7	2655.8
27.5°	4871.3	4875.3	4810.1	4748.1	4681.4	4661.5	4625.0	4403.2	3790.6	3711.1	2825.0
30°	5403.7	5384.7	5276.6	5164.5	5051.7	4940.4	4835.5	4638.5	4047.2	3955.8	2991.1
32.5°	5898.0	5887.7	5767.7	5593.7	5402.9	5298.0	5085.9	4876.1	4322.2	4234.0	3162.0
35°	6268.3	6283.4	6151.5	5961.6	5753.4	5660.4	5392.6	5125.6	4606.7	4510.5	3347.9
37.5°	6531.4	6523.4	6406.6	6242.1	6059.3	5978.3	5751.0	5398.2	4912.6	4820.4	3551.4
40°	6625.1	6620.4	6533.7	6413.7	6297.7	6269.1	6126.1	5692.2	5263.1	5155.0	3796.1
42.5°	6565.5	6575.9	6518.6	6486.1	6464.6	6485.3	6498.8	6077.6	5645.3	5546.0	4061.5
45°	6382.8	6377.2	6369.2	6422.5	6543.3	6679.2	6867.5	6441.6	6060.9	5981.5	4417.5
47.5°	6056.1	6095.9	6115.7	6262.8	6526.6	6848.4	7291.9	6929.5	6664.1	6594.9	4960.3
50°	5599.2	5631.0	5748.6	6010.1	6403.4	6912.0	7706.7	7727.3	7670.1	7540.6	5549.9
52.5°	4885.6	4934.9	5177.2	5656.4	6150.7	6885.8	7957.8	8411.5	8487.0	8390.1	6130.8
55°	4087.0	4156.1	4412.0	5040.6	5802.7	6742.7	8131.0	8808.1	9109.3	9019.5	6690.3
57.5°	3305.0	3378.1	3641.2	4249.9	5195.5	6426.5	8244.7	9249.9	9956.4	9839.6	7386.4
60°	2477.0	2553.3	2778.9	3405.9	4330.9	5808.2	8167.6	9632.9	10802.7	10752.6	8083.3
62.5°	1598.1	1682.3	1878.6	2397.5	3328.9	4963.5	7755.1	9844.3	11535.4	11475.0	8591.9
65°	973.5	983.0	1091.1	1488.4	2278.3	3843.0	6811.9	9563.8	11921.6	11903.3	8746.9
67.5°	629.4	644.5	693.7	891.6	1366.0	2669.3	5446.6	8638.0	11695.9	11689.5	8426.6
70°	531.6	536.4	558.7	601.6	793.9	1618.7	3824.7	7162.3	10838.5	10838.5	7656.6
72.5°	475.2	481.6	489.5	503.0	566.6	917.0	2282.3	5575.4	9358.0	9420.0	6517.1
75°	431.5	429.9	434.7	437.1	483.2	599.2	1180.1	4123.5	7239.4	7115.4	4719.5
77.5°	369.5	371.9	369.5	379.9	426.7	456.1	599.2	2767.0	4387.4	4226.8	2368.9
80°	303.6	307.5	311.5	317.9	364.8	346.5	360.0	1261.1	1622.7	1588.5	731.9
82.5°	228.1	233.6	240.0	255.1	286.9	228.9	227.3	538.8	585.7	536.4	269.4
85°	92.2	108.9	164.5	179.6	180.4	125.6	139.9	224.9	239.2	233.6	105.7
87.5°	21.5	25.4	53.2	80.3	73.9	46.9	51.7	73.1	83.4	77.1	35.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P453168

CATALOG NUMBER: GALN-SA4A-830-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3	1361.3
2.5°	1388.3	1360.5	1312.8	1276.2	1250.0	1227.0	1212.7	1203.9	1200.7	1199.9	1200.7
5°	1435.2	1385.9	1310.4	1262.7	1236.5	1221.4	1212.7	1211.9	1212.7	1213.5	1211.1
7.5°	1499.5	1428.8	1330.3	1285.8	1265.9	1254.8	1250.8	1249.2	1250.0	1249.2	1249.2
10°	1585.4	1488.4	1369.2	1323.1	1306.4	1293.7	1287.4	1283.4	1280.2	1277.0	1275.4
12.5°	1679.9	1554.4	1411.3	1366.8	1343.0	1323.1	1308.8	1298.5	1291.3	1284.2	1282.6
15°	1785.6	1624.3	1458.2	1396.2	1362.1	1332.7	1308.0	1291.3	1278.6	1268.3	1267.5
17.5°	1886.5	1690.3	1490.0	1409.7	1359.7	1318.4	1285.8	1262.7	1246.8	1233.3	1231.7
20°	1994.6	1753.0	1504.3	1401.0	1335.8	1285.8	1242.9	1215.0	1196.8	1181.7	1179.3
22.5°	2103.5	1806.3	1502.7	1373.2	1294.5	1235.7	1190.4	1161.0	1139.6	1124.5	1118.9
25°	2207.6	1849.2	1482.8	1328.7	1237.3	1176.1	1130.0	1103.0	1083.9	1065.6	1065.6
27.5°	2301.4	1874.6	1445.5	1274.6	1178.5	1114.1	1077.6	1052.9	1035.4	1023.5	1016.4
30°	2393.5	1886.5	1394.6	1206.3	1116.5	1061.7	1032.3	1018.0	1002.1	988.6	987.0
32.5°	2476.2	1884.2	1331.1	1139.6	1057.7	1018.8	1006.8	995.7	979.0	960.0	955.2
35°	2556.4	1868.3	1255.6	1066.4	1008.4	993.3	996.5	980.6	950.4	926.6	922.6
37.5°	2643.9	1839.7	1172.9	1006.8	967.1	981.4	989.4	954.4	905.1	867.8	859.0
40°	2744.8	1807.1	1087.1	947.2	934.5	970.3	970.3	905.9	838.4	815.3	809.0
42.5°	2863.2	1780.1	1015.6	897.2	907.5	943.3	939.3	841.6	813.7	801.8	798.6
45°	3050.7	1770.5	941.7	853.5	885.3	911.5	878.9	819.3	803.4	793.9	790.7
47.5°	3347.1	1781.6	876.5	820.9	859.8	879.7	811.4	804.2	793.1	779.6	778.0
50°	3622.1	1771.3	830.4	802.6	837.6	841.6	783.5	785.9	779.6	764.5	761.3
52.5°	3847.0	1738.7	801.0	793.1	818.5	774.8	757.3	766.1	763.7	744.6	741.4
55°	4094.1	1718.9	786.7	793.1	805.8	716.8	732.7	745.4	742.2	728.7	727.9
57.5°	4393.7	1722.8	776.4	795.5	793.1	687.4	708.0	723.1	722.4	718.4	718.4
60°	4700.4	1724.4	760.5	794.7	778.0	664.3	682.6	704.1	705.7	708.0	708.0
62.5°	4802.2	1655.3	729.5	780.4	744.6	642.1	658.8	688.2	686.6	692.9	693.7
65°	4612.2	1463.8	683.4	747.8	701.7	626.2	640.5	667.5	658.8	675.5	678.6
67.5°	4198.2	1211.1	611.9	689.0	654.0	609.5	628.6	638.9	623.0	655.6	656.4
70°	3628.4	945.7	521.3	605.5	600.0	592.0	619.0	603.2	580.9	620.6	612.7
72.5°	3034.0	722.4	416.4	495.1	527.7	565.8	602.4	557.1	526.1	538.0	523.7
75°	2279.1	534.0	334.6	387.8	439.5	528.5	587.3	501.4	453.8	442.6	439.5
77.5°	1161.8	348.9	250.3	290.1	329.8	477.6	566.6	436.3	375.9	358.4	350.4
80°	414.8	216.9	176.4	200.3	222.5	410.8	495.1	360.8	291.6	288.5	291.6
82.5°	192.3	139.9	118.4	131.1	131.9	274.2	377.5	269.4	221.7	336.9	284.5
85°	82.6	69.9	66.8	65.2	60.4	122.4	212.2	144.6	225.7	100.9	93.0
87.5°	24.6	27.8	24.6	18.3	13.5	13.5	21.5	7.9	5.6	4.0	4.0
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)