

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: P453130

Luminaire Tested: **GALN-SA4A-827-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453130  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4A-827-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13017 lumens  
Efficiency: N/A  
Efficacy: 107.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

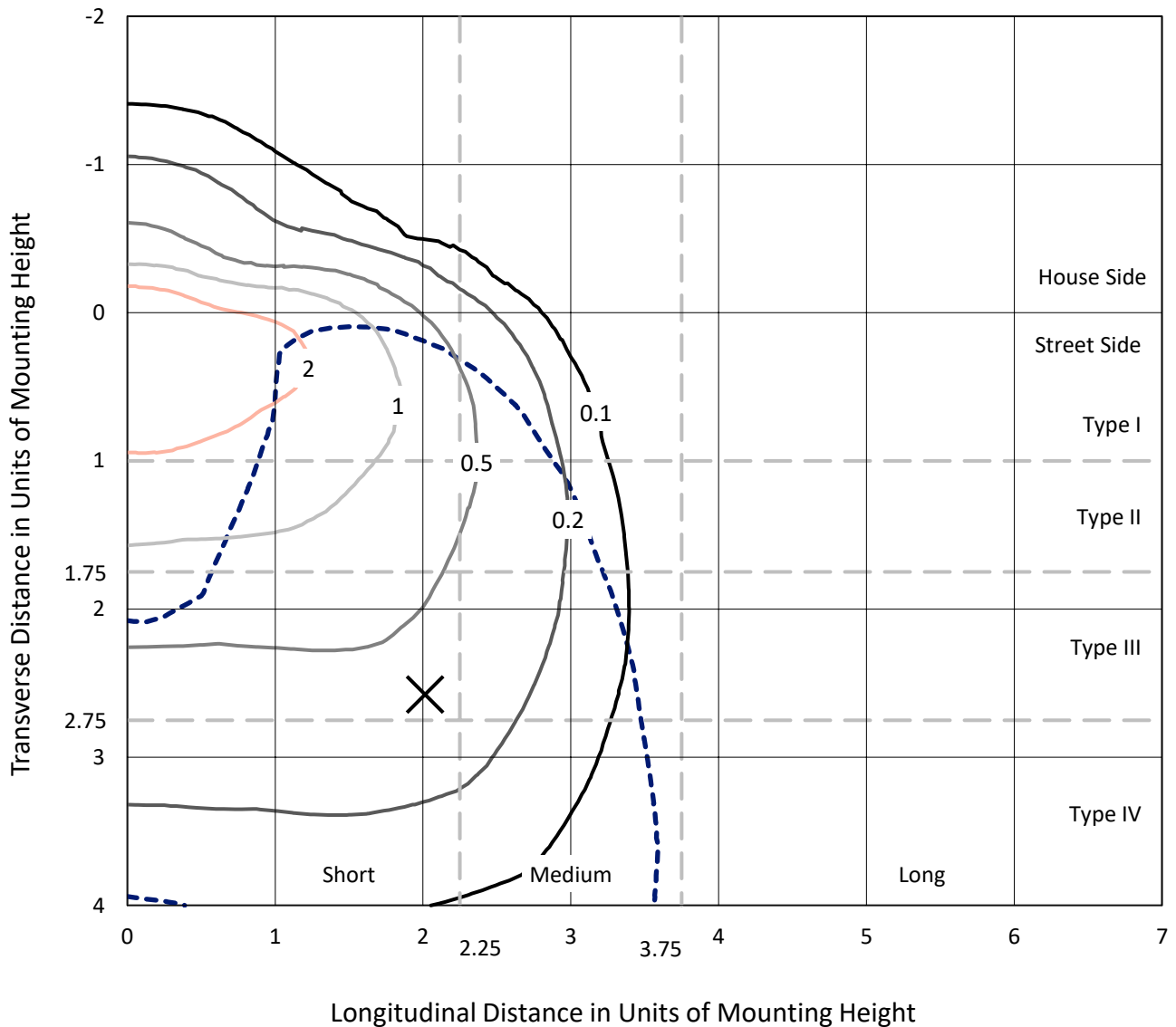
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P453130  
 CATALOG NUMBER: GALN-SA4A-827-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

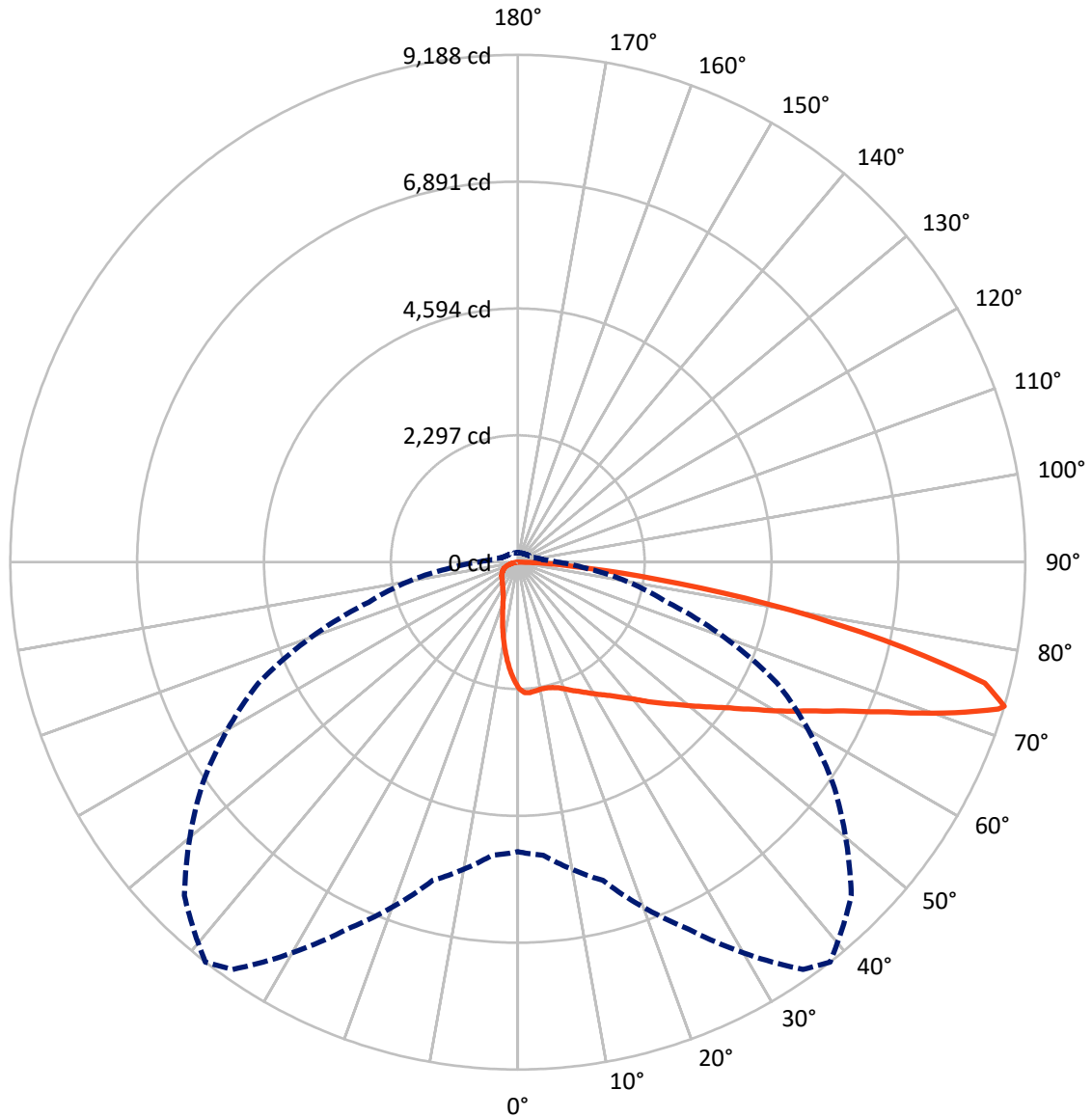
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc  
 Type IV - Short - N/A

REPORT NUMBER: P453130  
CATALOG NUMBER: GALN-SA4A-827-U-SL4

### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

REPORT NUMBER: P453130

CATALOG NUMBER: GALN-SA4A-827-U-SL4

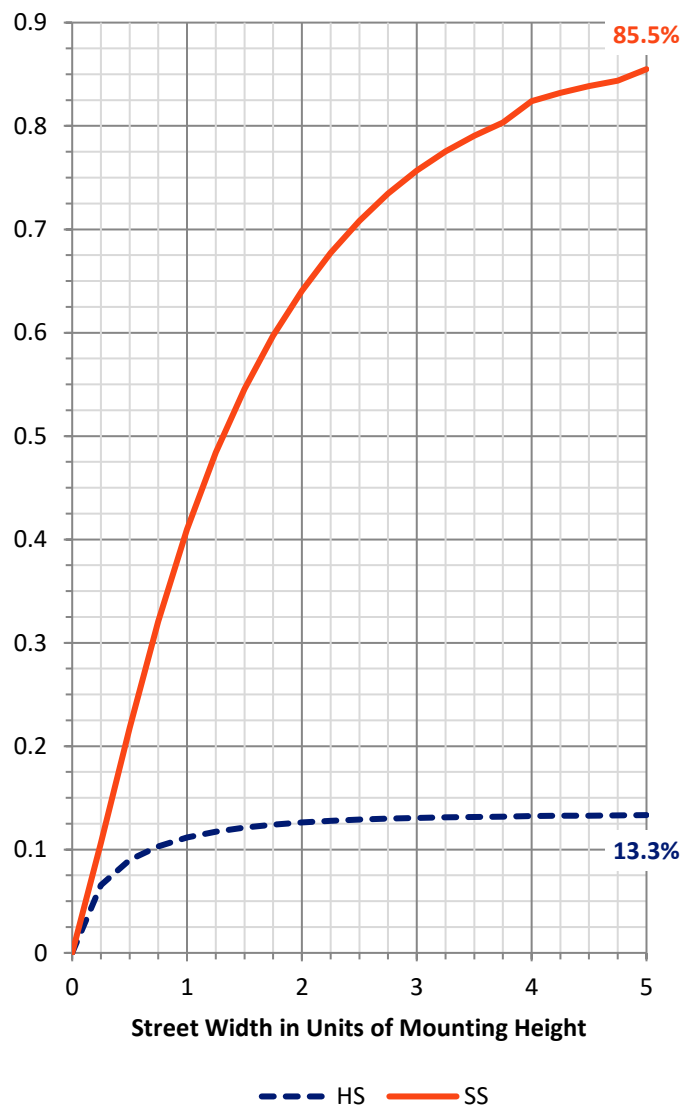
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1749.9	0.0	1749.9
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	11267.1	0.0	11267.1
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	13017.0	0.0	13017.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.6	1.5
10°-20°	511.9	3.9
20°-30°	797.1	6.1
30°-40°	1169.2	9.0
40°-50°	1734.3	13.3
50°-60°	2457.2	18.9
60°-70°	3117.0	23.9
70°-80°	2594.7	19.9
80°-90°	435.9	3.3
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°	13017.0	100.0
0°-180°	13017.0	100.0

**Coefficient of Utilization**

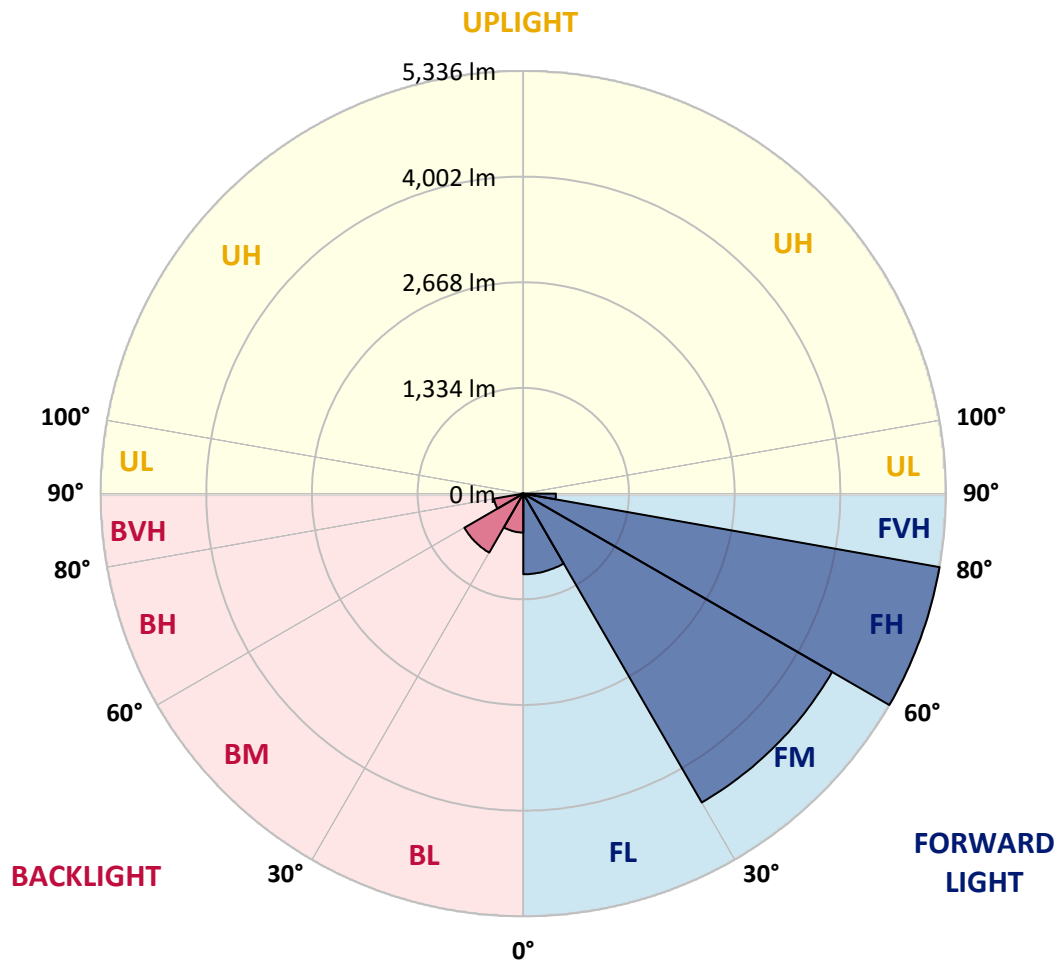


REPORT NUMBER: P453130  
 CATALOG NUMBER: GALN-SA4A-827-U-SL4

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1017.6	7.8			
FM (30°-60°)	4501.6	34.6			
FH (60°-80°)	5335.6	41.0			G3/7500
FVH (80°-90°)	412.3	3.2			G3/500
BL (0°-30°)	491.0	3.8	B1/500		
BM (30°-60°)	859.1	6.6	B1/1000		
BH (60°-80°)	376.1	2.9	B1/500		G1/500
BVH (80°-90°)	23.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**  
 Type IV Short





REPORT NUMBER: P453130  
 CATALOG NUMBER: GALN-SA4A-827-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9
2.5°	2378.8	2390.5	2384.6	2376.5	2371.4	2366.3	2358.9	2337.6	2320.7	2302.3	2273.6
5°	2396.4	2403.7	2398.6	2388.3	2376.5	2371.4	2357.4	2329.5	2302.3	2271.4	2228.8
7.5°	2386.1	2389.0	2383.2	2370.7	2360.4	2350.8	2334.6	2303.8	2270.7	2233.2	2177.3
10°	2349.3	2360.4	2360.4	2350.1	2339.8	2334.6	2318.5	2289.1	2258.9	2216.3	2150.1
12.5°	2319.2	2331.0	2340.5	2337.6	2336.9	2336.9	2324.4	2302.3	2267.0	2226.6	2147.9
15°	2298.6	2312.6	2333.2	2344.9	2352.3	2354.5	2349.3	2330.2	2294.2	2247.2	2156.8
17.5°	2294.2	2311.1	2348.6	2374.3	2393.5	2392.7	2391.2	2364.8	2325.1	2276.6	2167.8
20°	2314.1	2336.1	2388.3	2428.7	2456.7	2451.5	2443.4	2408.9	2362.6	2308.2	2178.1
22.5°	2373.6	2396.4	2453.7	2497.8	2525.0	2525.0	2500.8	2455.2	2406.0	2344.9	2192.0
25°	2458.9	2483.9	2544.9	2589.7	2602.2	2592.7	2568.4	2513.3	2456.7	2397.9	2221.4
27.5°	2563.3	2593.4	2650.0	2687.5	2683.8	2676.5	2651.5	2580.9	2524.3	2470.6	2271.4
30°	2693.4	2715.4	2774.2	2783.1	2769.8	2768.4	2733.1	2662.5	2609.6	2568.4	2342.7
32.5°	2816.1	2836.0	2883.0	2886.7	2863.2	2866.1	2833.0	2768.4	2738.2	2723.5	2462.6
35°	2946.2	2956.5	2997.0	2992.6	2977.1	2974.9	2961.7	2899.9	2909.5	2936.0	2632.4
37.5°	3055.0	3075.6	3098.4	3102.1	3101.3	3108.7	3117.5	3088.1	3143.2	3226.3	2855.1
40°	3155.0	3172.7	3206.5	3218.2	3246.9	3261.6	3291.7	3292.5	3419.6	3556.4	3129.3
42.5°	3222.6	3252.8	3316.0	3337.3	3407.1	3451.2	3496.1	3543.9	3728.4	3904.1	3452.7
45°	3281.4	3321.1	3426.3	3492.4	3587.2	3640.9	3735.7	3835.7	4101.1	4331.2	3781.3
47.5°	3370.4	3405.7	3526.2	3643.1	3786.5	3848.2	3990.1	4139.3	4486.3	4738.4	4095.9
50°	3493.9	3515.2	3638.0	3828.4	4011.4	4090.8	4278.2	4493.6	4897.9	5140.5	4372.3
52.5°	3651.9	3660.8	3758.5	4012.1	4253.2	4351.7	4600.2	4851.6	5258.1	5489.7	4591.4
55°	3838.6	3823.9	3900.4	4206.9	4529.6	4658.3	4925.1	5214.0	5663.1	5771.9	4750.9
57.5°	4023.1	4000.4	4061.4	4443.6	4870.7	5025.8	5336.8	5587.4	6024.8	6035.8	4862.6
60°	4218.7	4201.8	4274.6	4721.5	5289.0	5472.7	5760.2	5974.8	6374.7	6219.6	4880.3
62.5°	4419.4	4392.2	4495.8	5033.9	5760.2	5927.0	6205.6	6386.5	6718.0	6288.0	4710.5
65°	4614.2	4601.7	4761.9	5405.1	6296.8	6486.4	6757.0	6879.7	6992.9	6185.1	4289.3
67.5°	4821.5	4846.5	5102.3	5900.6	6996.6	7234.8	7526.6	7411.2	7071.6	5697.7	3612.2
70°	5137.5	5153.7	5549.2	6549.7	7898.5	8186.0	8327.1	7600.1	6692.3	4772.2	2715.4
72.5°	5273.5	5344.8	5948.4	7231.1	8923.3	9098.9	8596.1	7178.9	5574.9	3241.7	1426.8
73°	5243.4	5328.7	5966.7	7334.7	9003.4	9187.9	8538.8	6962.0	5182.4	2791.9	1223.2
75°	4867.8	4972.9	5727.8	7248.0	8847.5	8737.3	7617.0	5933.6	3502.0	1269.5	557.2
77.5°	3840.8	3871.0	4538.4	5852.8	6967.2	6762.8	5700.6	3708.5	1430.5	471.9	316.1
80°	1926.7	2037.7	2558.1	3352.7	4659.0	4592.1	3598.3	1753.9	596.2	277.1	209.5
82.5°	926.9	1005.6	1246.0	1634.8	2574.3	2513.3	1781.9	958.6	378.6	161.7	123.5
85°	596.9	655.7	793.2	779.9	1058.5	1010.7	800.5	725.5	224.2	84.5	86.0
87.5°	394.0	431.5	517.5	413.9	385.2	348.4	353.6	408.7	44.1	32.3	11.8
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: P453130  
 CATALOG NUMBER: GALN-SA4A-827-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9	2286.9
2.5°	2261.9	2252.3	2220.7	2189.8	2160.4	2132.5	2114.1	2089.9	2073.7	2078.1	2084.7
5°	2205.3	2184.0	2128.1	2073.7	2022.2	1961.2	1912.0	1872.3	1842.1	1831.1	1828.9
7.5°	2145.7	2109.7	2029.6	1936.2	1848.8	1773.0	1685.6	1642.2	1591.5	1573.8	1567.9
10°	2109.7	2061.2	1948.7	1818.6	1687.0	1561.3	1466.5	1389.3	1319.5	1306.3	1299.6
12.5°	2099.4	2035.5	1884.0	1716.4	1541.5	1387.1	1246.7	1145.3	1077.6	1062.2	1039.4
15°	2093.5	2014.1	1823.8	1613.5	1391.5	1203.3	1055.6	937.2	875.5	834.3	835.1
17.5°	2088.4	1989.9	1756.1	1501.1	1262.2	1045.3	882.1	775.5	718.9	696.9	694.7
20°	2081.0	1961.2	1678.2	1382.7	1114.4	901.2	753.5	674.1	635.9	617.5	616.7
22.5°	2078.1	1933.3	1601.8	1262.2	983.6	790.2	668.2	612.3	588.1	575.6	575.6
25°	2085.5	1913.4	1521.6	1147.5	867.4	695.4	609.4	571.2	557.2	550.6	548.4
27.5°	2108.2	1904.6	1442.2	1032.8	760.8	630.7	569.7	543.2	532.9	527.8	528.5
30°	2151.6	1903.9	1364.3	919.6	681.4	581.5	538.1	519.7	511.6	508.7	507.9
32.5°	2221.4	1920.1	1287.9	826.2	614.5	540.3	508.7	495.5	491.8	489.6	488.8
35°	2339.8	1965.6	1212.2	741.0	563.1	503.5	480.7	474.1	469.0	471.2	471.9
37.5°	2499.3	2044.3	1140.1	674.1	524.1	476.3	457.2	451.3	448.4	450.6	452.8
40°	2713.2	2157.5	1079.8	620.4	496.2	453.6	436.6	431.5	428.6	432.2	433.0
42.5°	2949.2	2288.3	1029.9	578.5	473.4	434.4	418.3	412.4	410.2	412.4	413.1
45°	3191.8	2440.5	1004.1	548.4	454.3	420.5	403.6	396.9	391.8	390.3	392.5
47.5°	3430.7	2572.8	1003.4	530.0	438.8	408.0	389.6	382.2	375.6	372.0	371.2
50°	3625.5	2677.9	1021.0	521.9	425.6	394.0	375.6	368.3	359.5	352.1	353.6
52.5°	3772.5	2746.3	1029.1	518.2	418.3	379.3	360.9	354.3	344.0	334.5	334.5
55°	3867.3	2762.5	1009.3	514.6	412.4	363.9	344.0	338.1	327.9	318.3	318.3
57.5°	3899.7	2712.5	938.0	505.7	406.5	350.6	327.1	322.0	313.9	304.3	302.9
60°	3824.7	2543.4	813.0	479.3	394.7	336.7	308.7	306.5	303.6	295.5	294.8
62.5°	3535.8	2184.7	677.0	444.7	374.9	322.0	291.8	295.5	297.7	293.3	292.6
65°	3055.0	1773.8	578.5	396.9	348.4	301.4	273.5	283.0	288.9	288.9	287.4
67.5°	2478.0	1362.1	487.4	355.8	315.4	273.5	252.9	260.2	264.6	263.2	266.8
70°	1761.3	922.5	396.9	308.7	273.5	241.8	226.4	226.4	223.5	222.0	222.0
72.5°	854.2	527.1	322.0	258.0	233.0	206.6	194.1	188.9	183.0	182.3	178.6
73°	713.8	472.7	307.3	248.5	223.5	201.4	187.4	179.4	175.7	172.7	172.0
75°	434.4	358.7	256.5	209.5	190.4	173.5	161.0	153.6	150.0	147.8	147.0
77.5°	286.0	267.6	199.2	160.2	145.5	135.3	130.1	122.8	120.6	117.6	117.6
80°	213.2	204.4	142.6	113.2	104.4	95.6	94.1	92.6	86.7	83.1	81.6
82.5°	137.5	145.5	97.0	75.7	66.2	58.8	59.5	61.7	55.9	50.7	49.3
85°	97.8	105.1	58.8	34.5	27.9	24.3	27.2	24.3	25.0	19.8	16.2
87.5°	16.2	27.9	10.3	4.4	2.2	1.5	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)