

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: P452012

Luminaire Tested: **GALN-SA2D-830-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P452012
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2D-830-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12651 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 125
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



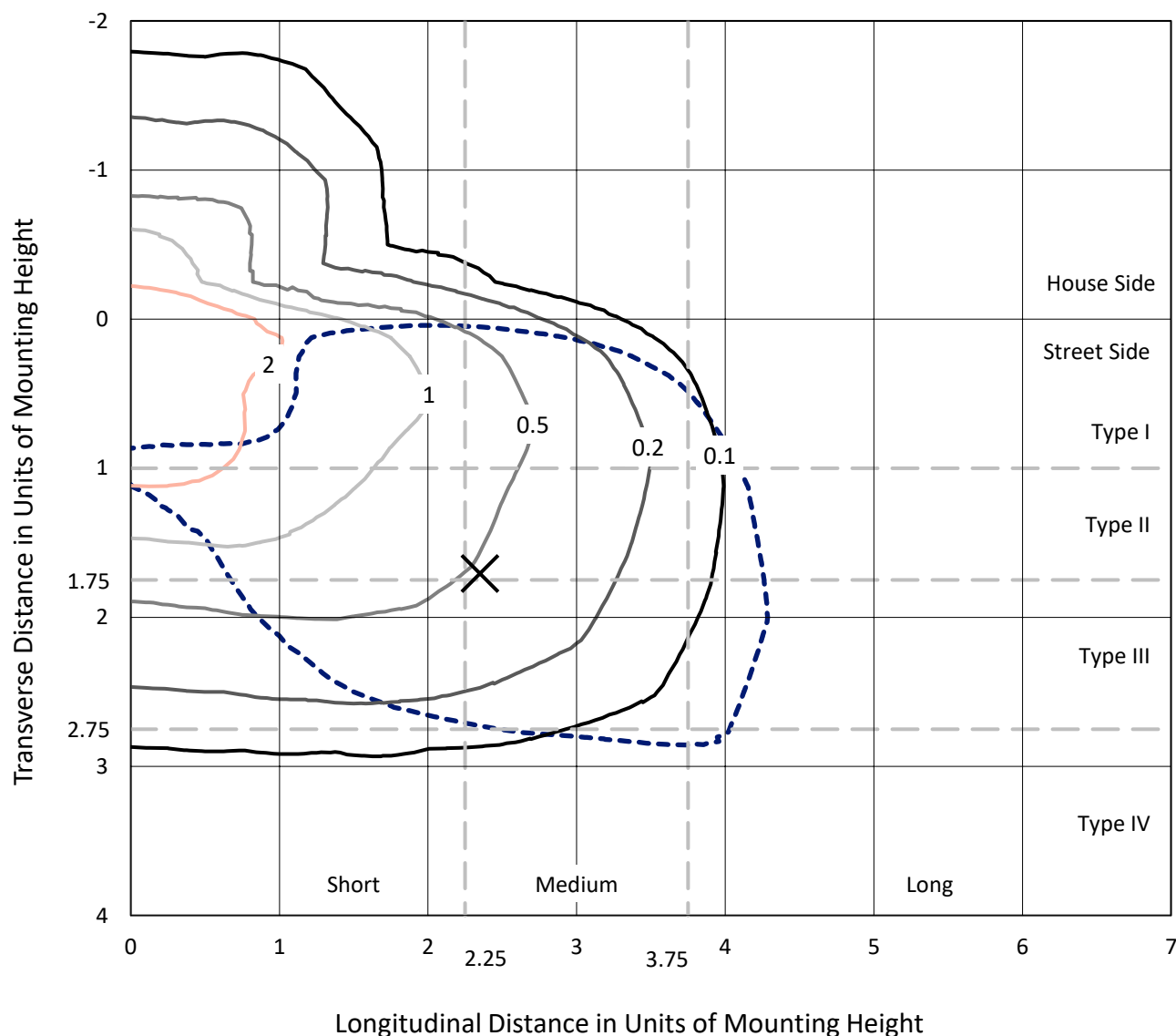
REPORT NUMBER: P452012

CATALOG NUMBER: GALN-SA2D-830-U-T3R

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

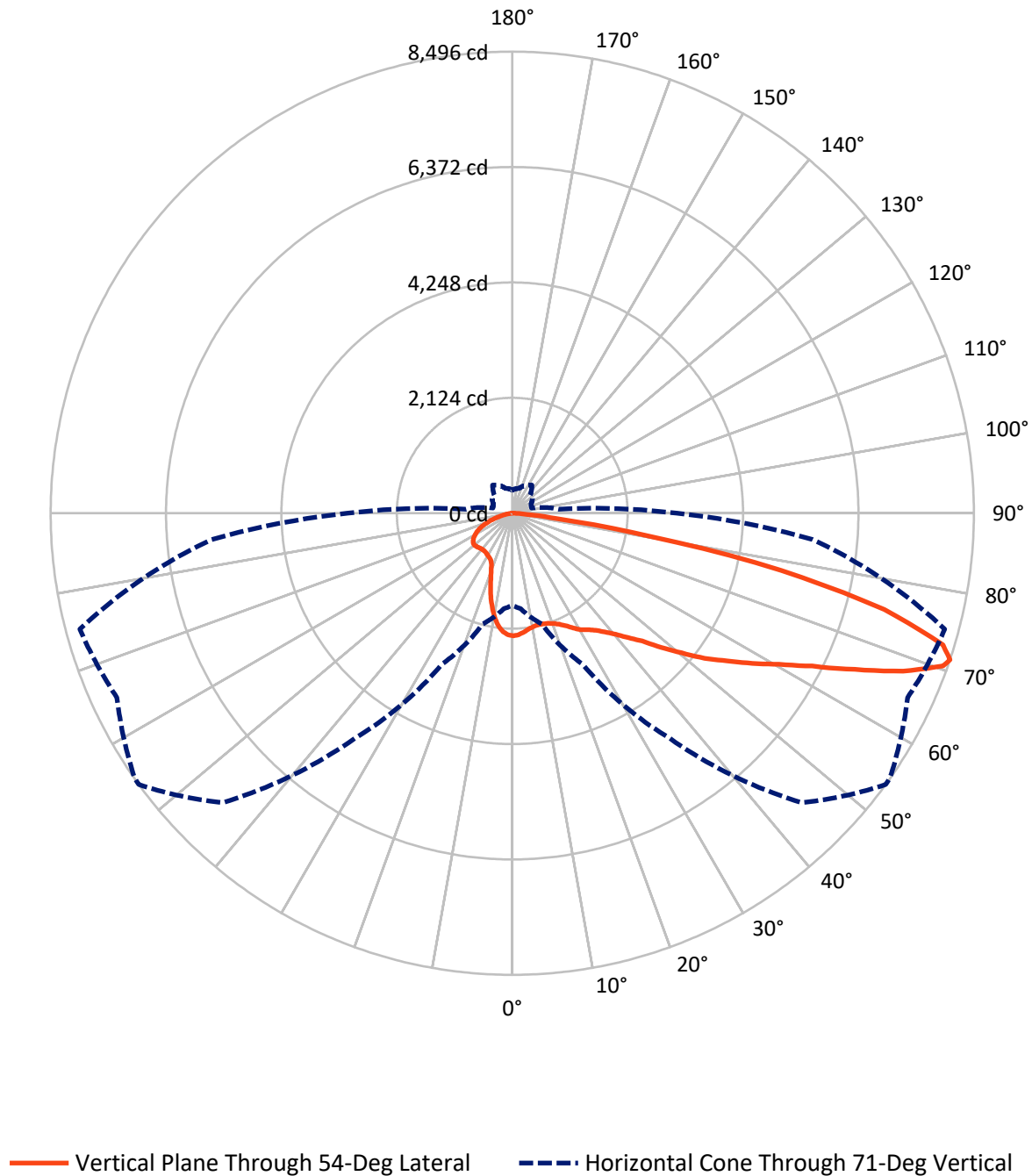


Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Medium - N/A

REPORT NUMBER: P452012

CATALOG NUMBER: GALN-SA2D-830-U-T3R

Luminous Intensity Polar Plot



REPORT NUMBER: P452012

CATALOG NUMBER: GALN-SA2D-830-U-T3R

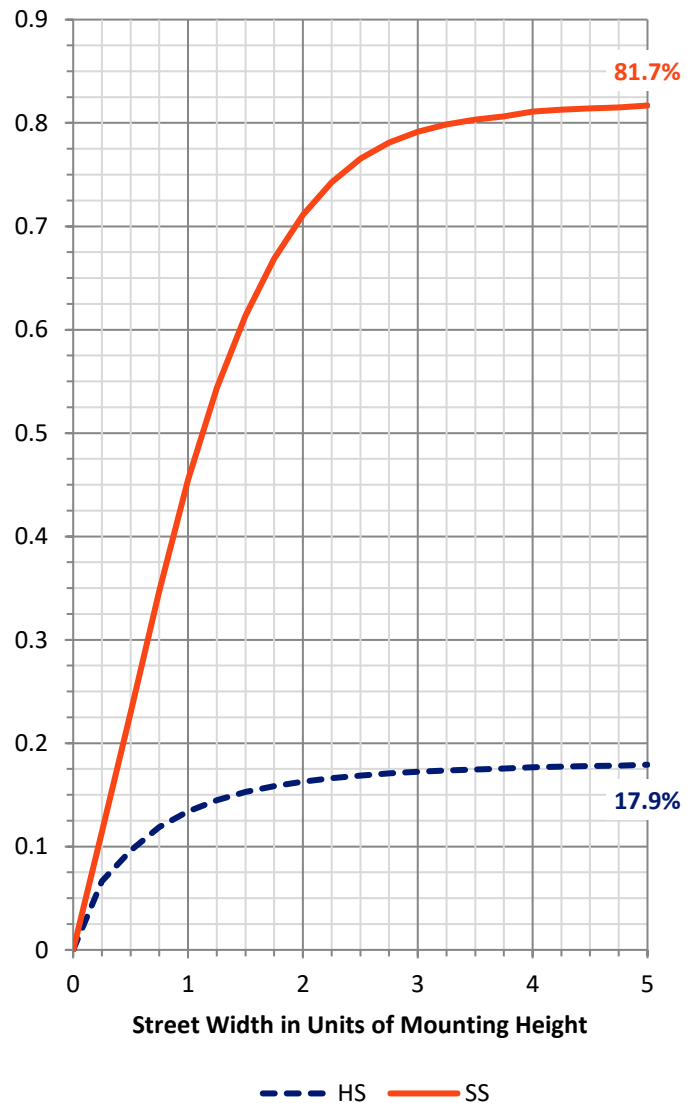
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2284.1	0.0	2284.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	10366.9	0.0	10366.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	12651.0	0.0	12651.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.1	1.6
10°-20°	531.1	4.2
20°-30°	884.3	7.0
30°-40°	1307.6	10.3
40°-50°	1841.9	14.6
50°-60°	2466.3	19.5
60°-70°	3108.6	24.6
70°-80°	2123.2	16.8
80°-90°	186.7	1.5
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°	12651.0	100.0
0°-180°	12651.0	100.0

Coefficient of Utilization



REPORT NUMBER: P452012

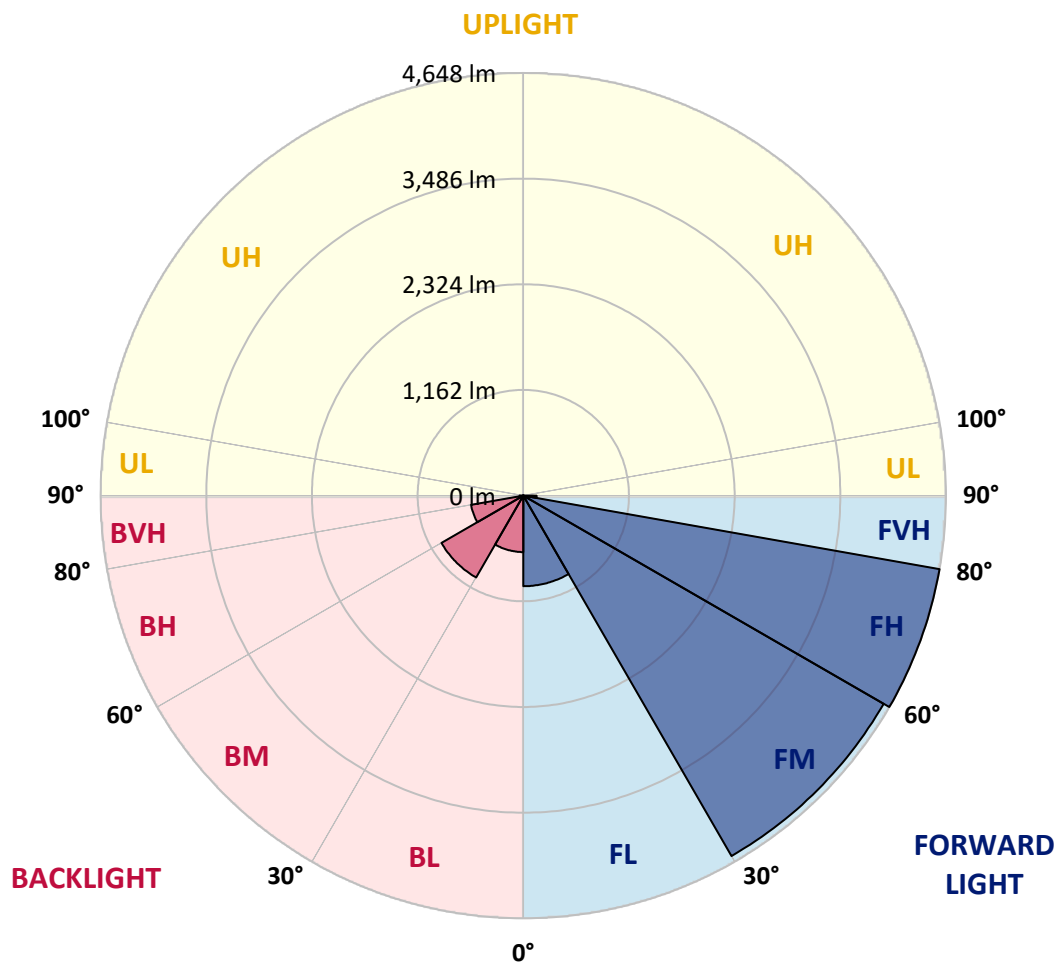
CATALOG NUMBER: GALN-SA2D-830-U-T3R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	995.8	7.9			
FM	(30°-60°)	4576.7	36.2			
FH	(60°-80°)	4648.5	36.7			G2/5000
FVH	(80°-90°)	145.9	1.2			G2/225
BL	(0°-30°)	620.8	4.9	B2/1000		
BM	(30°-60°)	1039.2	8.2	B2/2500		
BH	(60°-80°)	583.3	4.6	B2/1000		G2/1000
BVH	(80°-90°)	40.8	0.3			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 IV Medium



REPORT NUMBER: P452012

CATALOG NUMBER: GALN-SA2D-830-U-T3R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1
2.5°	2180.6	2190.8	2193.6	2200.4	2214.8	2226.4	2238.0	2236.6	2253.0	2259.9	2266.0
5°	2083.6	2086.3	2096.5	2110.2	2135.5	2167.6	2199.0	2199.7	2240.0	2272.2	2287.9
7.5°	2012.5	2021.4	2028.2	2042.6	2069.2	2104.1	2153.9	2158.0	2229.8	2293.3	2326.8
10°	1966.0	1976.3	1983.8	2001.6	2028.2	2067.2	2121.1	2128.7	2222.3	2326.8	2385.6
12.5°	1923.6	1933.9	1940.7	1964.0	1998.8	2046.7	2107.5	2116.4	2225.0	2365.8	2449.8
15°	1949.6	1957.8	1955.1	1961.9	1985.1	2039.8	2112.9	2121.8	2235.3	2403.4	2513.4
17.5°	2065.1	2071.9	2049.4	2023.4	2012.5	2052.8	2130.0	2139.6	2255.8	2442.3	2578.3
20°	2235.3	2253.7	2204.5	2146.4	2093.8	2099.3	2165.6	2175.8	2284.5	2481.3	2644.6
22.5°	2456.7	2470.3	2410.2	2314.5	2217.5	2167.6	2218.9	2225.0	2327.5	2531.8	2717.0
25°	2717.0	2725.2	2641.9	2518.9	2378.8	2284.5	2292.0	2302.9	2398.6	2589.2	2781.3
27.5°	2969.9	2995.8	2899.5	2749.1	2564.6	2407.5	2392.4	2399.3	2475.8	2621.4	2825.7
30°	3269.9	3267.8	3166.0	2991.7	2755.3	2541.4	2487.4	2486.1	2517.5	2637.1	2857.8
32.5°	3509.0	3537.1	3437.3	3247.3	2973.3	2680.1	2553.0	2550.3	2549.6	2664.4	2905.6
35°	3781.0	3785.1	3693.5	3502.2	3209.0	2854.4	2644.6	2630.9	2615.2	2723.2	2970.5
37.5°	4024.3	4043.4	3959.4	3744.8	3440.7	3035.5	2770.3	2761.4	2713.6	2825.0	3074.4
40°	4214.3	4228.6	4178.0	3973.7	3668.9	3230.9	2930.2	2913.8	2855.7	2991.7	3213.1
42.5°	4276.4	4305.8	4325.6	4225.2	3931.3	3462.6	3127.0	3106.5	3062.1	3244.6	3373.0
45°	4281.2	4327.7	4432.2	4437.0	4195.1	3740.0	3356.6	3342.3	3338.9	3568.5	3597.9
47.5°	4245.0	4292.2	4467.8	4562.8	4430.2	4020.2	3688.1	3665.5	3667.6	3968.9	3850.0
50°	4157.5	4213.6	4426.8	4643.4	4614.0	4311.3	4038.0	4030.4	4072.8	4426.1	4111.8
52.5°	3992.9	4060.5	4384.4	4694.0	4750.7	4562.1	4435.7	4414.5	4521.8	4922.2	4398.1
55°	3537.1	3638.9	4229.3	4722.0	4880.5	4801.9	4793.7	4832.0	4974.2	5463.4	4713.1
57.5°	3299.2	3375.8	3892.4	4726.8	5044.5	5080.8	5212.0	5221.5	5470.3	6038.1	5069.1
60°	3169.4	3237.1	3707.9	4695.3	5273.5	5425.8	5639.7	5673.9	5954.8	6660.7	5438.1
62.5°	3056.0	3114.1	3597.2	4586.7	5531.8	5937.7	6193.9	6210.3	6504.9	7348.1	5802.4
65°	2788.8	2855.1	3374.4	4478.0	5754.5	6577.3	6929.2	6910.1	7090.5	7941.3	6030.6
67.5°	2428.6	2512.7	2958.2	4102.9	5864.6	7276.4	7757.5	7733.5	7668.6	8330.1	6096.2
70°	1968.7	2013.9	2425.9	3454.4	5425.2	7643.3	8411.4	8386.1	8026.7	8381.4	5786.0
71°	1694.0	1764.4	2112.3	3068.3	5059.6	7531.3	8495.5	8488.7	8027.4	8239.9	5552.3
72.5°	1322.3	1365.3	1672.9	2377.4	4300.4	6894.4	8287.7	8313.7	7853.1	7847.0	5070.5
75°	836.4	855.6	1049.6	1399.5	2359.6	4882.6	7074.8	7145.2	6973.0	6422.9	3770.8
77.5°	485.9	510.5	628.7	824.8	1019.6	2650.1	5062.3	5138.8	4845.0	3536.4	1543.7
80°	282.9	310.2	414.1	479.0	468.1	983.3	2577.6	2708.1	2097.9	893.1	433.2
82.5°	157.2	175.6	291.1	291.8	249.4	321.2	811.1	848.7	598.6	360.1	177.0
85°	114.1	129.2	187.9	170.2	119.6	138.0	282.2	295.9	241.9	151.7	57.4
87.5°	40.3	57.4	103.2	82.0	32.8	28.7	81.3	66.3	61.5	42.4	13.0
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: P452012

CATALOG NUMBER: GALN-SA2D-830-U-T3R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1	2257.1
2.5°	2269.4	2270.8	2264.0	2251.7	2239.4	2223.6	2205.9	2192.2	2186.1	2185.4	2184.7
5°	2294.0	2297.4	2271.5	2233.2	2190.8	2138.9	2094.5	2043.9	2030.9	2010.4	2016.6
7.5°	2333.7	2331.6	2280.4	2199.0	2100.0	1989.9	1897.0	1843.0	1787.0	1771.3	1771.9
10°	2390.4	2377.4	2280.4	2129.3	1964.0	1800.6	1670.8	1588.8	1544.4	1507.5	1493.8
12.5°	2450.5	2417.7	2258.5	2031.6	1789.0	1588.8	1449.4	1338.7	1310.0	1279.9	1280.6
15°	2507.9	2453.2	2215.4	1894.3	1600.4	1362.6	1227.3	1161.0	1152.1	1155.6	1154.9
17.5°	2559.9	2478.5	2149.8	1741.2	1380.4	1168.5	1096.8	1101.6	1125.5	1142.6	1144.6
20°	2612.5	2493.6	2052.1	1536.2	1172.6	1051.0	1053.7	1091.3	1127.5	1150.8	1154.2
22.5°	2662.4	2500.4	1937.3	1338.0	1022.3	1001.1	1041.4	1081.8	1117.3	1139.8	1143.3
25°	2695.2	2484.7	1774.7	1131.0	948.5	983.3	1025.7	1059.9	1090.0	1113.2	1118.7
27.5°	2704.0	2434.1	1573.1	963.5	914.3	966.3	1005.2	1030.5	1053.7	1075.6	1079.7
30°	2699.3	2359.6	1351.7	865.1	894.5	946.4	976.5	995.0	1023.0	1040.1	1043.5
32.5°	2691.7	2272.8	1120.7	812.5	878.1	928.0	945.8	962.2	961.5	954.6	959.4
35°	2694.5	2169.0	933.5	781.1	863.8	914.3	929.4	908.9	850.1	847.4	844.6
37.5°	2708.8	2066.5	797.5	759.2	856.2	912.3	920.5	826.2	774.2	750.3	744.2
40°	2745.7	1946.9	708.0	742.8	855.6	928.0	880.2	784.5	684.7	638.3	634.8
42.5°	2794.9	1829.3	653.3	732.6	863.8	951.9	863.8	725.7	617.1	589.7	585.6
45°	2868.0	1694.7	623.2	727.8	876.1	960.8	858.3	682.7	589.7	567.9	567.9
47.5°	2950.7	1566.3	606.8	724.4	891.8	954.6	809.8	669.0	576.8	579.5	592.5
50°	3032.7	1454.9	594.5	716.8	905.4	951.2	790.0	668.3	580.2	615.0	638.3
52.5°	3127.7	1376.3	579.5	704.5	905.4	929.4	783.8	682.0	589.7	600.0	610.2
55°	3242.5	1351.7	560.4	677.9	889.0	874.7	780.4	701.8	596.6	572.7	576.8
57.5°	3394.2	1391.3	541.9	644.4	851.5	818.0	779.0	707.3	580.9	561.0	556.9
60°	3570.5	1469.9	536.4	610.2	800.2	769.5	770.8	691.6	559.0	538.5	541.9
62.5°	3694.2	1517.1	533.0	584.3	744.2	716.2	751.0	672.4	549.4	531.7	535.1
65°	3694.2	1459.6	501.6	544.6	671.7	651.9	727.1	648.5	537.1	516.6	513.2
67.5°	3554.1	1292.2	453.7	485.2	591.8	578.8	693.6	619.8	518.7	503.0	494.7
70°	3189.2	979.9	393.6	415.5	490.6	502.3	650.6	580.9	487.9	468.8	456.5
71°	3028.6	853.5	368.3	379.9	451.7	468.8	630.1	564.5	474.2	446.9	425.0
72.5°	2719.1	718.9	330.1	334.8	386.1	416.8	587.0	533.0	448.3	409.3	384.7
75°	2065.8	524.8	265.8	263.1	285.6	330.7	496.8	474.9	392.9	340.3	326.0
77.5°	892.5	285.6	198.9	200.9	194.1	250.8	390.9	408.0	336.9	276.8	263.8
80°	270.6	164.7	136.0	138.7	129.8	168.1	275.4	319.8	270.6	215.3	197.5
82.5°	138.7	98.4	92.9	91.6	82.7	95.0	166.7	218.7	193.4	134.6	118.9
85°	60.1	52.6	45.8	44.4	39.0	34.2	59.5	109.3	102.5	75.2	71.8
87.5°	15.0	13.7	8.9	8.2	4.8	0.7	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)