

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: P453392

Luminaire Tested: **GALN-SA4B-830-U-SLL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453392
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-21)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-830-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12846 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 164
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

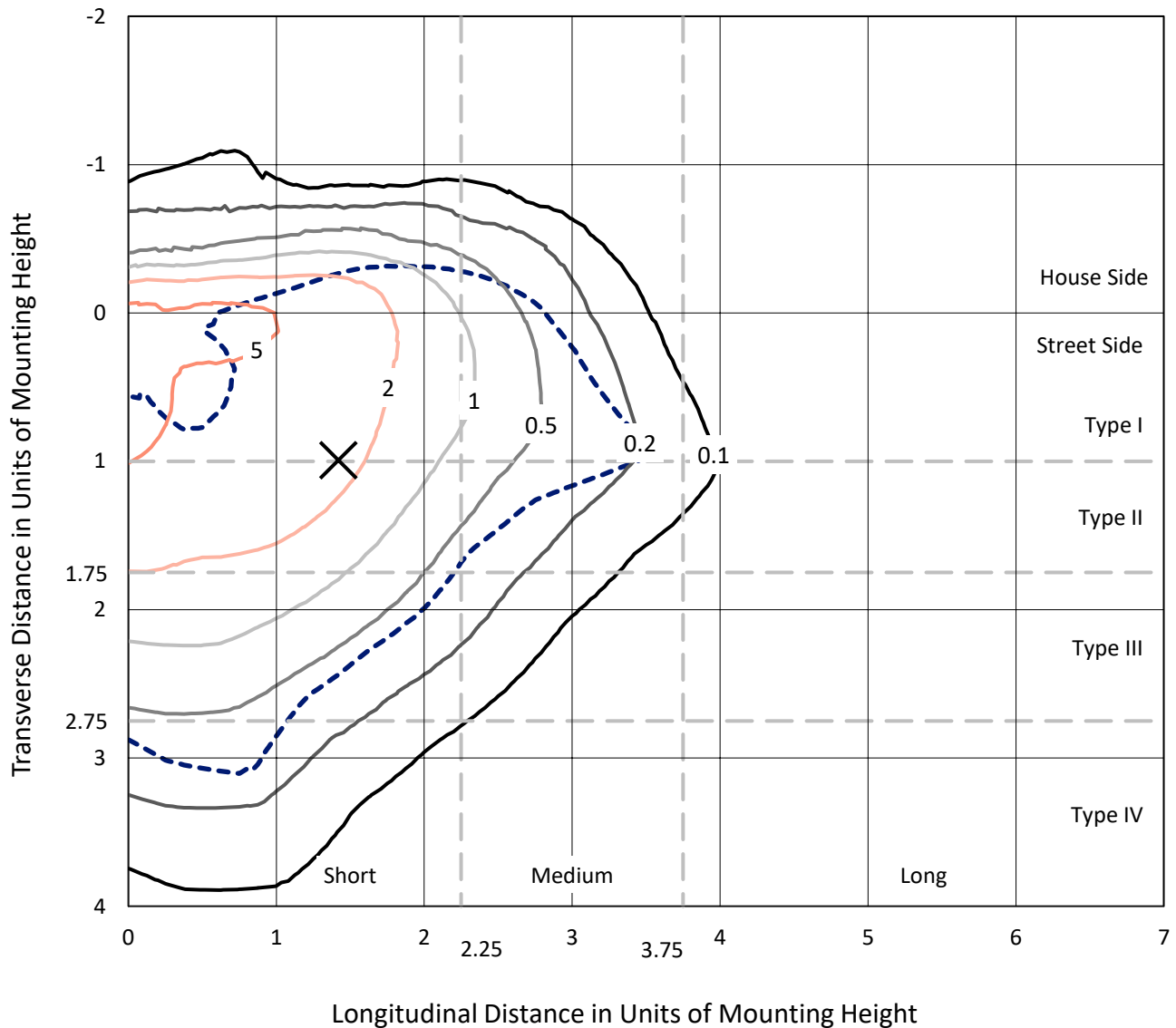


REPORT NUMBER: P453392

CATALOG NUMBER: GALN-SA4B-830-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

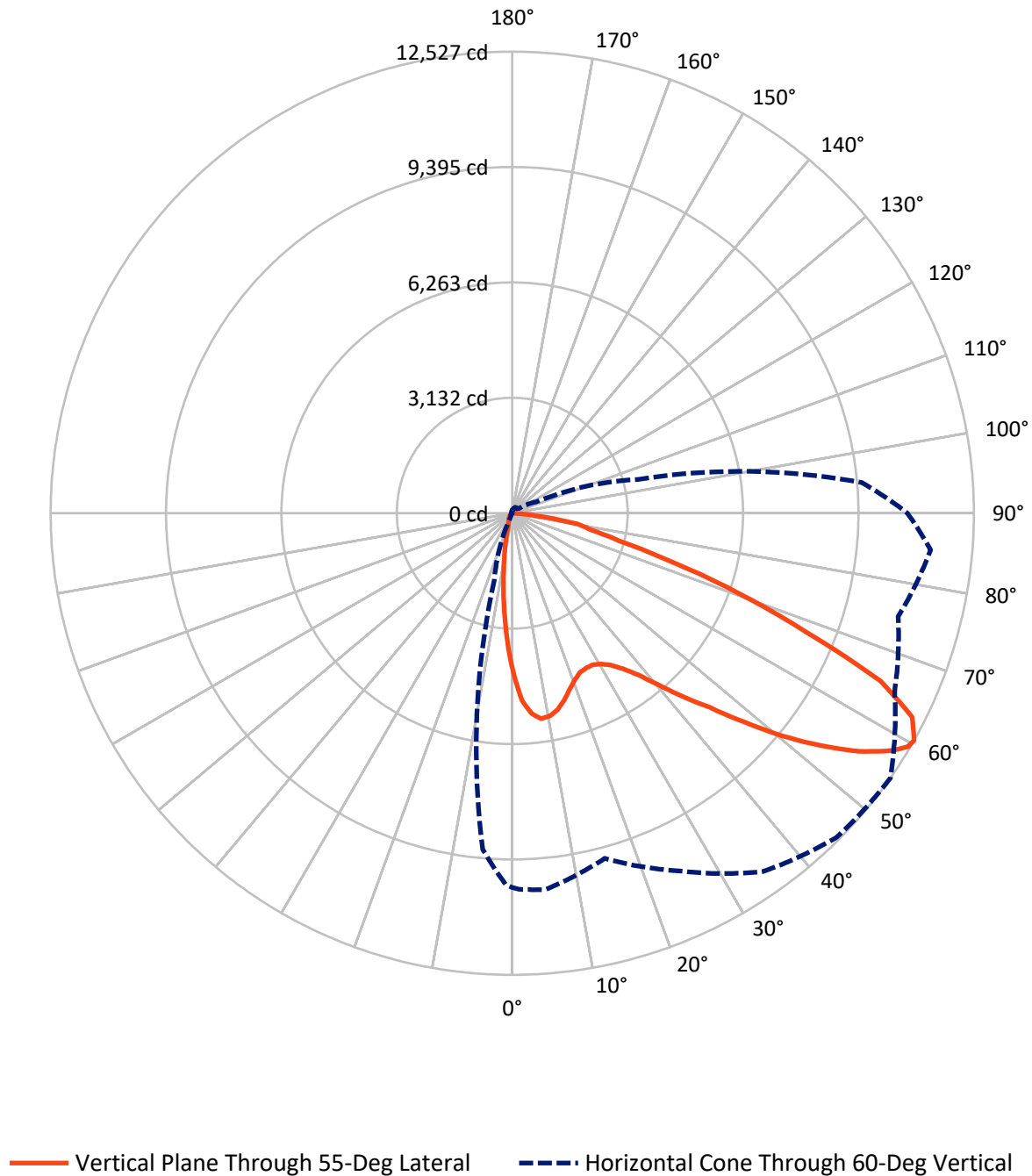
× Max cd
 --- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc
 Type III - Short - N/A

REPORT NUMBER: P453392
CATALOG NUMBER: GALN-SA4B-830-U-SLL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P453392

CATALOG NUMBER: GALN-SA4B-830-U-SLL-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1906.5	0.0	1906.5
	% Fixture	14.8	0.0	14.8
Street Side	Lumens	10939.5	0.0	10939.5
	% Fixture	85.2	0.0	85.2
Total	Lumens	12846.0	0.0	12846.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.1	2.5
10°-20°	634.3	4.9
20°-30°	938.9	7.3
30°-40°	1399.5	10.9
40°-50°	2049.5	16.0
50°-60°	2958.9	23.0
60°-70°	3112.6	24.2
70°-80°	1280.4	10.0
80°-90°	150.0	1.2
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°	12846.0	100.0
0°-180°	12846.0	100.0

Coefficient of Utilization



REPORT NUMBER: P453392

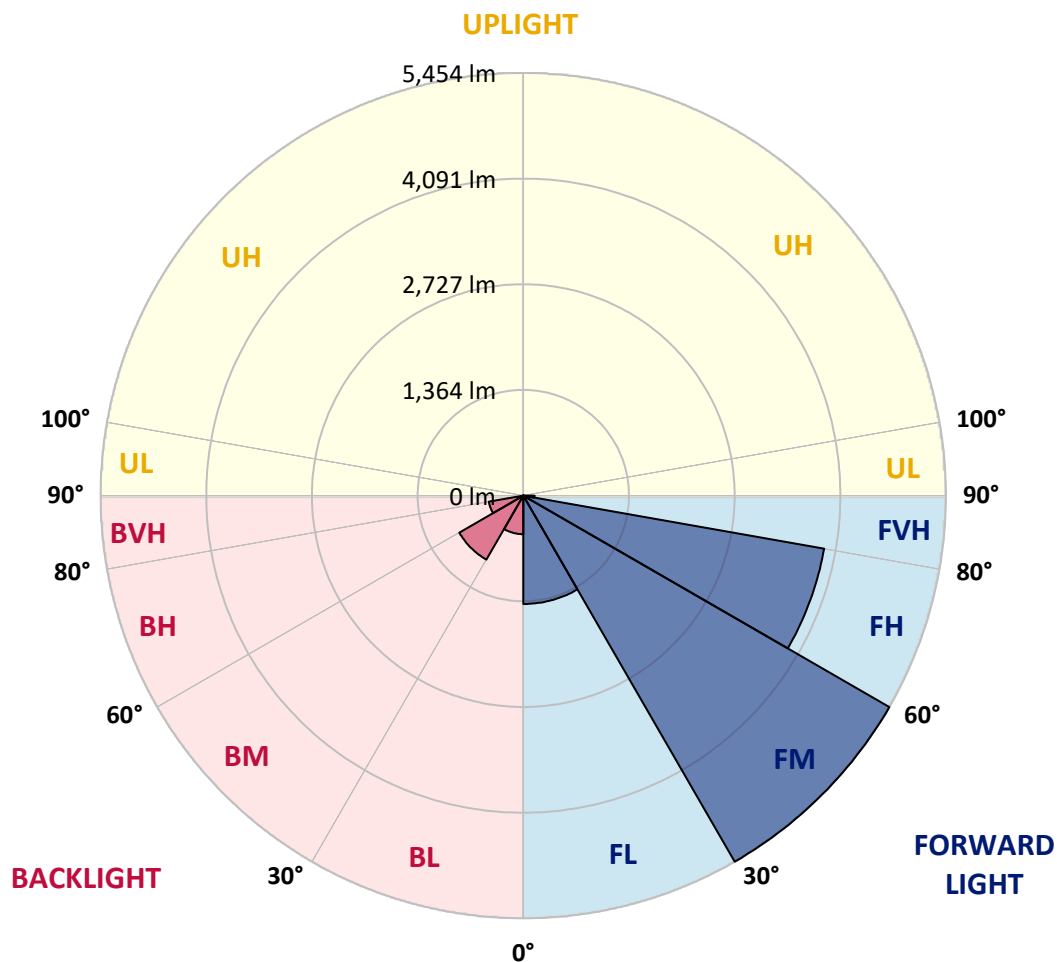
CATALOG NUMBER: GALN-SA4B-830-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1397.8	10.9			
FM	(30°-60°)	5454.4	42.5			
FH	(60°-80°)	3941.7	30.7			G2/5000
FVH	(80°-90°)	145.6	1.1			G2/225
BL	(0°-30°)	497.4	3.9	B1/500		
BM	(30°-60°)	953.4	7.4	B1/1000		
BH	(60°-80°)	451.2	3.5	B1/500		G1/500
BVH	(80°-90°)	4.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



REPORT NUMBER: P453392

CATALOG NUMBER: GALN-SA4B-830-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6
2.5°	4752.1	4744.1	4814.3	4929.0	5044.7	5105.0	5093.2	5088.2	4992.3	4922.1	4774.8
5°	4742.2	4782.7	4908.3	5218.8	5454.1	5567.8	5601.4	5460.0	5273.1	5002.2	4668.0
7.5°	4458.4	4508.8	4713.5	5199.0	5617.2	5864.4	5855.5	5629.1	5243.5	4824.2	4347.6
10°	4106.4	4165.7	4406.0	4995.3	5538.1	5864.4	5882.2	5595.5	5115.9	4578.0	4076.7
12.5°	3858.2	3928.4	4194.4	4805.4	5334.4	5655.8	5676.6	5468.9	5020.0	4483.1	3929.4
15°	3774.2	3840.4	4110.3	4709.5	5117.9	5290.9	5286.0	5264.2	4982.4	4505.8	3937.3
17.5°	3918.5	3972.9	4277.4	4753.0	4915.2	4897.4	4923.1	5027.9	4990.3	4696.7	4186.5
20°	4291.3	4346.7	4673.9	4886.5	4760.0	4647.2	4659.1	4834.1	5063.5	5055.6	4576.0
22.5°	4804.5	4898.4	5195.0	5145.6	4739.2	4492.0	4467.3	4694.7	5188.1	5468.9	5102.1
25°	5454.1	5549.0	5780.4	5558.9	4841.0	4455.4	4432.7	4652.2	5339.4	5872.3	5694.4
27.5°	5999.9	6072.1	6302.5	5961.3	4991.3	4471.2	4433.7	4658.1	5462.0	6215.4	6193.7
30°	6436.9	6490.3	6625.8	6149.2	5120.9	4540.5	4496.9	4745.1	5516.4	6382.5	6598.1
32.5°	6788.9	6878.9	6921.4	6349.9	5306.8	4671.0	4596.8	4912.2	5648.9	6589.2	7022.3
35°	7191.4	7295.2	7240.8	6541.7	5552.0	4874.7	4783.7	5183.2	5849.6	6780.0	7514.7
37.5°	7701.6	7821.2	7608.6	6743.4	5811.0	5181.2	5138.7	5563.8	6154.1	7052.9	8042.7
40°	8229.6	8298.8	7965.6	6988.7	6129.4	5627.1	5667.7	6129.4	6552.6	7380.2	8604.3
42.5°	8641.9	8707.2	8332.4	7194.3	6454.7	6156.1	6325.2	6811.7	7009.4	7715.4	9023.6
45°	8957.3	9012.7	8586.5	7418.8	6893.7	6922.4	7241.8	7514.7	7467.2	7920.1	9346.9
47.5°	9202.5	9250.0	8782.3	7660.0	7551.3	7859.8	8348.2	8463.9	7941.8	8141.6	9639.6
50°	9303.4	9317.2	8843.6	7967.5	8297.8	9054.2	9563.4	9493.2	8485.7	8387.8	9951.0
52.5°	9434.9	9431.9	9018.6	8260.2	8999.8	10122.1	10630.3	10471.1	9100.7	8756.6	10301.1
55°	9780.0	9783.9	9393.4	8675.5	9598.0	10984.3	11528.1	11412.4	9749.3	9379.5	10709.4
57.5°	10199.2	10214.0	9926.3	9161.0	10169.5	11609.2	12198.5	12154.0	10626.4	10072.6	11095.0
59°	10253.6	10283.3	10178.4	9503.1	10508.7	11801.0	12427.9	12471.4	11096.0	10529.5	11303.7
60°	10154.7	10204.2	10251.6	9696.9	10707.4	11870.2	12441.8	12526.8	11449.0	10839.9	11398.6
62.5°	9723.6	9801.7	10040.0	10293.1	10955.6	11654.7	11999.8	12177.7	11886.1	11655.7	11407.5
65°	9159.0	9199.6	9543.7	10398.9	10474.1	10648.1	10754.9	10983.3	11361.0	11970.1	10999.1
67.5°	8233.5	8353.2	8774.4	9784.9	9053.2	8847.6	8820.9	8593.4	9574.3	11220.6	9992.6
70°	6801.8	6855.2	7374.3	8021.9	6832.4	6516.0	6642.6	6557.6	7421.7	9659.3	8042.7
72.5°	5143.6	5264.2	5771.5	6394.4	4649.2	4238.9	4587.9	4556.3	5574.7	7762.9	5525.3
75°	3659.5	3737.6	4384.2	5004.2	3256.0	2758.7	2884.3	3001.9	3891.8	6129.4	3264.9
77.5°	2514.5	2581.7	3067.2	3309.4	2375.0	2275.2	2081.4	2195.1	2550.1	3636.7	1776.8
80°	1516.8	1513.8	1833.2	1892.5	1654.2	1921.2	1611.7	1809.5	1541.5	1556.3	688.2
82.5°	984.8	974.9	1121.3	1222.1	920.5	968.0	649.6	936.4	1004.6	434.1	217.5
85°	441.0	459.8	538.9	710.9	403.4	214.6	132.5	287.7	428.1	218.5	0.0
87.5°	45.5	35.6	94.9	173.0	55.4	5.9	19.8	9.9	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



REPORT NUMBER: P453392

CATALOG NUMBER: GALN-SA4B-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6
2.5°	4706.6	4649.2	4478.2	4318.0	4180.5	4012.4	3903.7	3732.6	3628.8	3597.2	3602.1
5°	4517.7	4352.6	4027.3	3767.2	3477.5	3312.4	3061.2	2820.0	2689.5	2641.0	2619.3
7.5°	4122.2	3945.2	3552.7	3144.3	2833.8	2544.1	2357.2	2144.7	1999.3	1879.7	1858.9
10°	3828.5	3596.2	3109.7	2670.7	2425.5	2207.9	2021.1	1808.5	1637.4	1501.0	1463.4
12.5°	3652.5	3392.5	2849.6	2481.8	2249.5	2026.0	1782.8	1536.6	1361.5	1214.2	1146.0
15°	3620.9	3319.3	2776.5	2346.4	2059.6	1789.7	1466.4	1200.4	1020.4	881.0	838.5
17.5°	3811.7	3450.8	2765.6	2205.0	1811.4	1428.8	1092.6	872.1	669.4	591.3	560.6
20°	4151.9	3683.2	2764.6	2040.8	1556.3	1100.5	767.3	568.5	486.5	448.9	431.1
22.5°	4615.6	3999.6	2817.0	1899.4	1291.3	811.8	547.8	452.9	405.4	374.7	367.8
25°	5182.2	4468.3	2945.6	1803.5	1088.6	636.8	451.9	387.6	348.0	334.2	328.3
27.5°	5685.5	4917.2	3087.0	1704.6	943.3	563.6	419.2	355.0	323.3	312.5	303.6
30°	6119.5	5324.6	3155.2	1574.1	826.6	516.1	425.2	379.7	338.2	305.5	290.7
32.5°	6481.4	5637.0	3199.7	1455.5	727.7	422.2	336.2	293.7	274.9	263.0	253.1
35°	6934.3	5975.2	3173.0	1388.2	677.3	384.6	306.5	253.1	221.5	197.8	187.9
37.5°	7408.9	6313.3	3126.5	1332.9	654.6	356.9	291.7	240.3	205.7	180.9	168.1
40°	7900.3	6626.8	3072.1	1281.5	633.8	339.1	282.8	229.4	194.8	168.1	154.2
42.5°	8350.2	6932.3	3050.4	1247.8	600.2	342.1	275.9	224.5	183.9	156.2	144.4
45°	8714.1	7222.0	3080.0	1230.0	563.6	337.2	277.8	218.5	175.0	148.3	136.5
47.5°	9102.7	7631.4	3175.9	1212.2	528.0	313.4	292.7	217.5	171.1	143.4	130.5
50°	9554.5	8155.4	3395.5	1168.7	484.5	287.7	311.5	216.5	166.1	137.4	124.6
52.5°	10156.7	8750.7	3621.9	1092.6	421.2	263.0	297.6	213.6	156.2	130.5	117.7
55°	10697.6	9377.5	3813.7	1002.6	341.1	227.4	268.0	200.7	139.4	118.7	106.8
57.5°	10921.0	9731.5	3807.8	878.0	272.9	199.7	220.5	183.9	121.6	104.8	94.9
59°	10838.9	9687.0	3680.2	786.1	249.2	184.9	182.9	181.9	113.7	94.9	87.0
60°	10723.3	9524.9	3542.8	740.6	234.3	175.0	168.1	180.0	106.8	89.0	81.1
62.5°	10280.3	8852.5	3087.0	663.5	214.6	148.3	134.5	152.3	94.9	77.1	70.2
65°	9638.6	7819.2	2613.3	641.7	208.6	122.6	111.7	108.8	81.1	65.3	59.3
67.5°	8386.8	6616.9	2117.0	626.9	210.6	102.8	97.9	82.1	67.2	54.4	50.4
70°	6714.8	5159.4	1733.3	610.1	212.6	84.0	82.1	65.3	54.4	45.5	41.5
72.5°	4079.7	3058.3	1364.5	530.0	206.7	67.2	73.2	49.4	39.6	32.6	30.7
75°	2522.4	2093.2	846.4	412.3	136.5	49.4	51.4	30.7	26.7	20.8	20.8
77.5°	1461.4	1322.0	302.6	148.3	60.3	29.7	22.7	15.8	14.8	8.9	8.9
80°	606.1	485.5	104.8	50.4	32.6	13.8	4.9	1.0	0.0	0.0	0.0
82.5°	177.0	157.2	28.7	22.7	9.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P453392

CATALOG NUMBER: GALN-SA4B-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6
2.5°	3518.1	3485.4	3470.6	3521.0	3474.6	3533.9	3488.4	3508.2	3566.5	3592.2	3658.5
5°	2633.1	2599.5	2583.7	2659.8	2655.8	2693.4	2689.5	2724.1	2753.7	2687.5	2755.7
7.5°	1834.2	1811.4	1849.0	1908.3	1971.6	1950.9	1950.9	1904.4	1920.2	1910.3	1907.3
10°	1395.2	1317.0	1297.3	1295.3	1319.0	1324.0	1297.3	1233.0	1256.7	1263.7	1305.2
12.5°	1097.5	1037.2	945.3	903.7	892.9	901.8	813.8	757.4	784.1	768.3	808.8
15°	787.1	737.6	683.2	636.8	623.9	606.1	510.2	443.0	435.1	438.0	444.9
17.5°	561.6	528.0	528.0	478.6	451.9	398.5	350.0	320.4	317.4	320.4	325.3
20°	414.3	396.5	394.5	381.7	352.0	316.4	282.8	276.9	274.9	279.8	281.8
22.5°	356.9	338.2	322.3	321.4	293.7	264.0	248.2	240.3	241.3	243.2	248.2
25°	319.4	299.6	282.8	272.9	253.1	232.4	217.5	213.6	213.6	216.5	217.5
27.5°	292.7	268.0	253.1	239.3	221.5	203.7	190.8	187.9	185.9	187.9	192.8
30°	273.9	249.2	230.4	209.6	195.8	179.0	168.1	164.1	163.1	164.1	168.1
32.5°	234.3	219.5	204.7	185.9	169.1	158.2	146.3	139.4	139.4	141.4	145.3
35°	177.0	169.1	168.1	163.1	149.3	137.4	123.6	116.7	116.7	120.6	122.6
37.5°	156.2	141.4	139.4	137.4	131.5	115.7	102.8	96.9	95.9	98.9	102.8
40°	142.4	125.6	116.7	114.7	115.7	97.9	84.0	78.1	78.1	79.1	83.1
42.5°	131.5	111.7	95.9	93.9	97.9	82.1	68.2	62.3	62.3	62.3	67.2
45°	122.6	99.9	81.1	71.2	77.1	67.2	55.4	49.4	47.5	49.4	51.4
47.5°	116.7	91.0	71.2	57.3	57.3	53.4	44.5	37.6	35.6	36.6	39.6
50°	111.7	83.1	60.3	46.5	41.5	42.5	33.6	28.7	26.7	26.7	29.7
52.5°	103.8	75.1	52.4	39.6	31.6	28.7	24.7	20.8	19.8	20.8	22.7
55°	93.9	68.2	45.5	32.6	24.7	19.8	17.8	14.8	13.8	14.8	17.8
57.5°	83.1	57.3	36.6	25.7	16.8	12.9	11.9	9.9	7.9	8.9	10.9
59°	76.1	51.4	31.6	20.8	12.9	8.9	8.9	6.9	4.9	5.9	8.9
60°	73.2	47.5	26.7	17.8	10.9	6.9	6.9	4.9	3.0	4.0	6.9
62.5°	62.3	39.6	20.8	10.9	4.9	1.0	3.0	1.0	0.0	1.0	3.0
65°	52.4	31.6	13.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0	1.0
67.5°	43.5	23.7	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	34.6	15.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	23.7	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	14.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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

REPORT NUMBER: P453392

CATALOG NUMBER: GALN-SA4B-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6	4349.6
2.5°	3662.4	3803.8	3890.8	4055.0	4223.1	4352.6	4514.7	4660.1	4720.4	4752.1
5°	2824.9	3021.7	3188.8	3439.0	3671.3	3954.1	4240.9	4579.0	4708.5	4742.2
7.5°	1982.5	2183.2	2358.2	2647.9	2979.2	3357.9	3787.0	4216.1	4405.0	4458.4
10°	1431.7	1646.3	1859.9	2149.6	2459.1	2869.4	3316.4	3847.3	4064.9	4106.4
12.5°	903.7	1134.1	1481.2	1839.1	2166.4	2496.7	2964.3	3541.8	3782.1	3858.2
15°	524.1	696.1	958.1	1424.8	1841.1	2278.1	2788.3	3427.1	3696.0	3774.2
17.5°	351.0	410.3	590.3	947.2	1497.0	2076.4	2743.8	3521.0	3818.6	3918.5
20°	295.6	322.3	385.6	577.4	1152.9	1896.5	2755.7	3776.1	4166.7	4291.3
22.5°	260.0	284.8	325.3	415.3	804.9	1673.0	2812.1	4141.0	4645.3	4804.5
25°	229.4	254.1	289.7	344.1	540.9	1414.9	2935.7	4674.9	5279.1	5454.1
27.5°	203.7	226.4	257.1	303.6	416.3	1127.2	3045.4	5195.0	5857.5	5999.9
30°	180.0	198.7	228.4	264.0	346.1	869.1	3100.8	5649.9	6278.7	6436.9
32.5°	156.2	174.0	202.7	231.4	284.8	662.5	3062.2	5984.1	6688.1	6788.9
35°	133.5	152.3	176.0	202.7	246.2	534.9	2869.4	6359.8	7112.3	7191.4
37.5°	114.7	130.5	155.2	176.0	222.5	428.1	2636.1	6698.0	7587.9	7701.6
40°	96.9	112.7	137.4	156.2	204.7	337.2	2425.5	7073.7	8089.2	8229.6
42.5°	79.1	97.9	119.6	150.3	176.0	257.1	2170.4	7378.2	8465.9	8641.9
45°	63.3	84.0	107.8	149.3	153.3	195.8	1924.2	7615.5	8799.1	8957.3
47.5°	50.4	71.2	103.8	139.4	125.6	155.2	1783.7	7863.7	9076.0	9202.5
50°	40.5	59.3	108.8	122.6	104.8	131.5	1779.8	8140.6	9219.3	9303.4
52.5°	32.6	48.4	92.0	93.9	89.0	115.7	1886.6	8452.0	9365.7	9434.9
55°	27.7	40.5	60.3	69.2	80.1	104.8	1966.7	8931.6	9714.7	9780.0
57.5°	21.8	34.6	46.5	55.4	71.2	95.9	1977.5	9301.4	10156.7	10199.2
59°	18.8	29.7	41.5	49.4	65.3	90.0	1933.1	9324.1	10185.4	10253.6
60°	15.8	26.7	36.6	46.5	60.3	85.0	1884.6	9159.0	10078.6	10154.7
62.5°	11.9	20.8	26.7	37.6	49.4	73.2	1655.2	8582.6	9670.2	9723.6
65°	7.9	14.8	19.8	27.7	38.6	63.3	1348.7	7835.1	9039.4	9159.0
67.5°	4.9	10.9	15.8	20.8	31.6	53.4	961.1	6718.7	8156.4	8233.5
70°	3.0	6.9	11.9	16.8	24.7	42.5	570.5	5310.7	6786.0	6801.8
72.5°	2.0	4.9	7.9	11.9	19.8	38.6	276.9	3461.7	4954.8	5143.6
75°	1.0	3.0	4.9	8.9	15.8	31.6	132.5	2312.7	3605.1	3659.5
77.5°	0.0	1.0	3.0	5.9	11.9	24.7	77.1	1518.8	2458.1	2514.5
80°	0.0	0.0	2.0	4.9	8.9	15.8	46.5	895.8	1489.1	1516.8
82.5°	0.0	0.0	1.0	4.0	5.9	11.9	23.7	393.5	974.9	984.8
85°	0.0	0.0	1.0	4.0	4.9	7.9	8.9	53.4	433.1	441.0
87.5°	0.0	0.0	1.0	4.9	4.9	4.9	4.9	3.0	36.6	45.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)