

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: P454090

Luminaire Tested: **GALN-SA5A-830-U-SLR-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454090
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-23)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5A-830-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13069 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 154
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



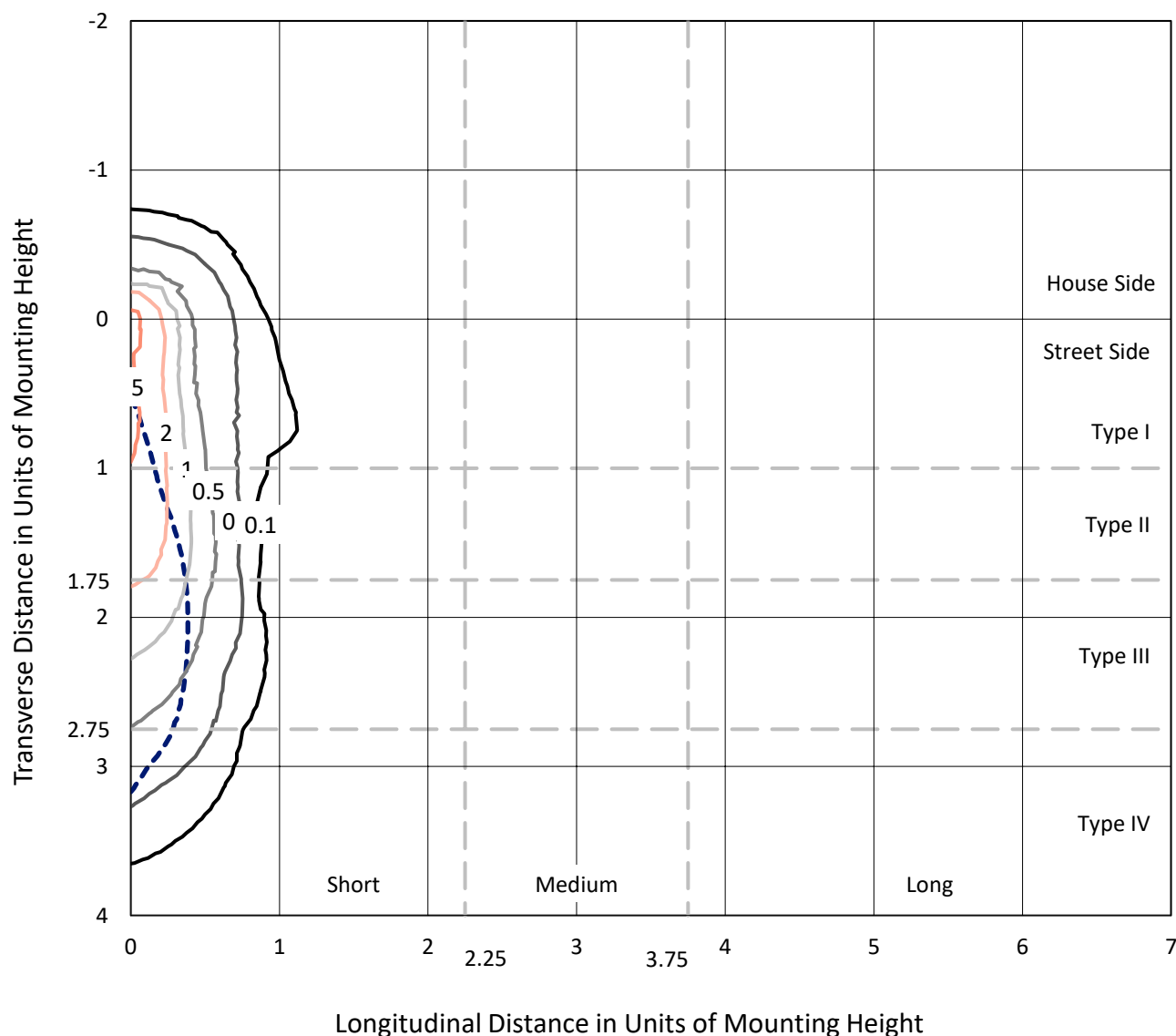
REPORT NUMBER: P454090

CATALOG NUMBER: GALN-SA5A-830-U-SLR-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

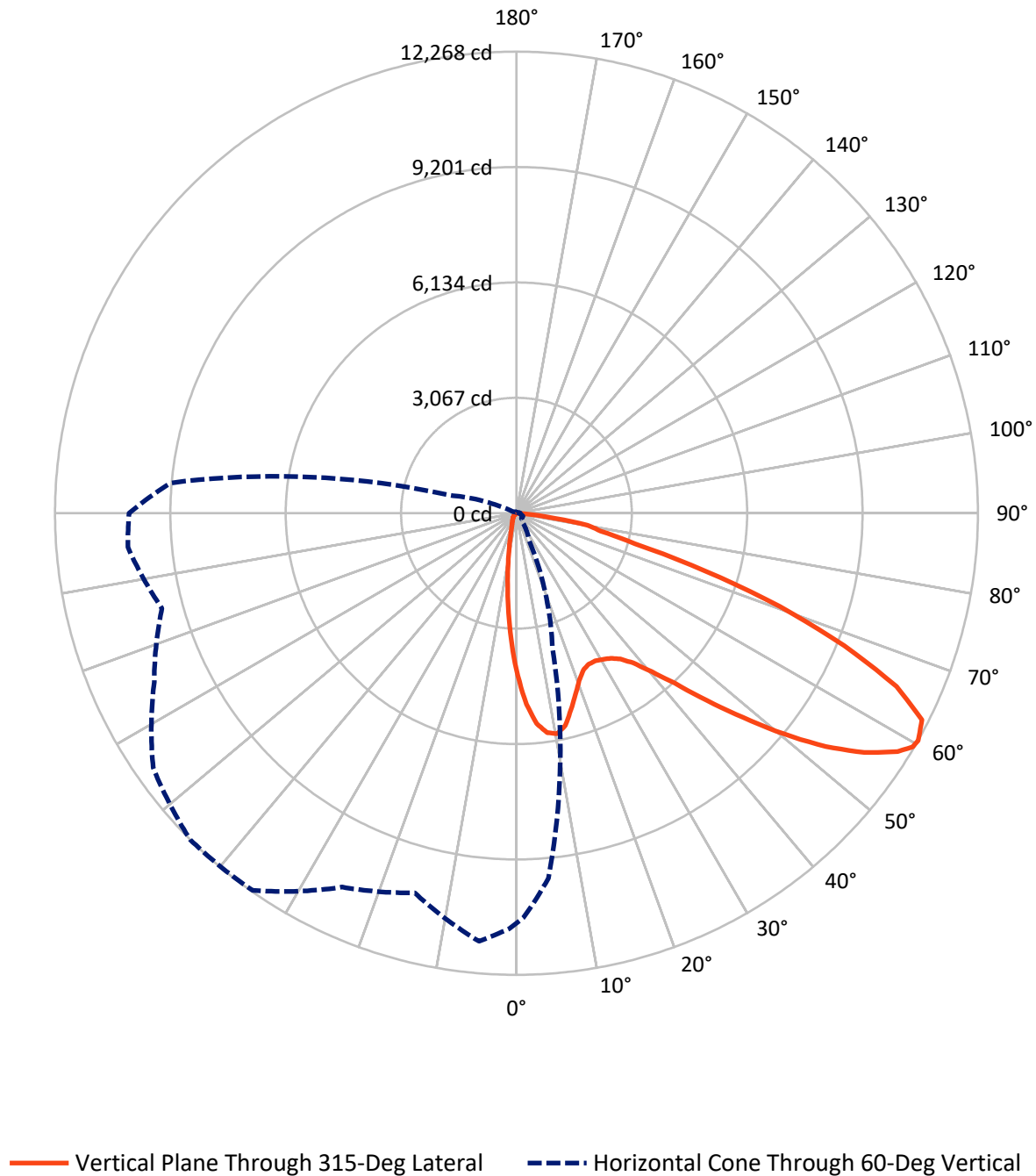


Based on 25 foot mounting height. Maximum calculated value = 6.9 fc

Type IV - Short - N/A

REPORT NUMBER: P454090
CATALOG NUMBER: GALN-SA5A-830-U-SLR-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P454090

CATALOG NUMBER: GALN-SA5A-830-U-SLR-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1611.9	0.0	1611.9
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	11457.1	0.0	11457.1
	% Fixture	87.7	0.0	87.7
Total	Lumens	13069.0	0.0	13069.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.3	2.5
10°-20°	638.0	4.9
20°-30°	935.5	7.2
30°-40°	1391.3	10.6
40°-50°	2024.8	15.5
50°-60°	2919.9	22.3
60°-70°	3211.6	24.6
70°-80°	1438.5	11.0
80°-90°	188.0	1.4
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°	13069.0	100.0
0°-180°	13069.0	100.0

Coefficient of Utilization



REPORT NUMBER: P454090

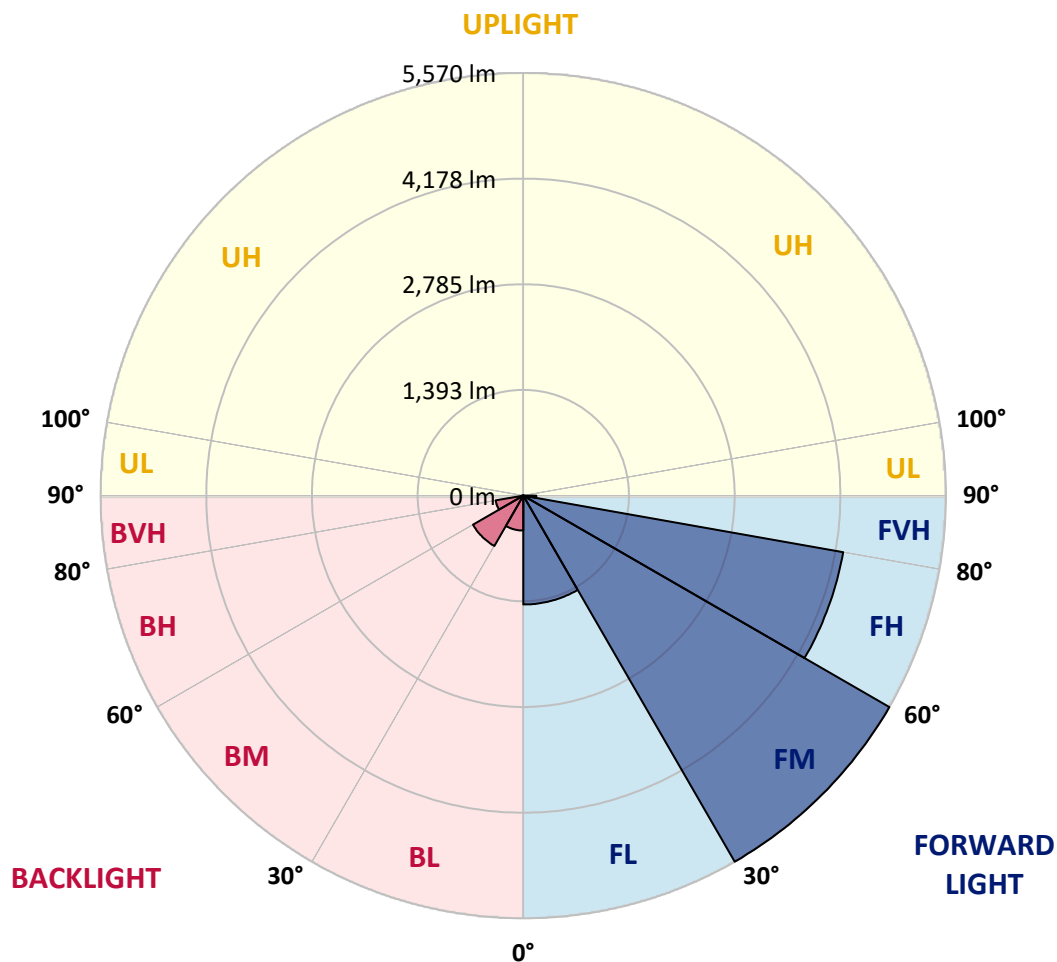
CATALOG NUMBER: GALN-SA5A-830-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1434.3	11.0			
FM	(30°-60°)	5570.4	42.6			
FH	(60°-80°)	4280.5	32.8			G2/5000
FVH	(80°-90°)	171.9	1.3			G2/225
BL	(0°-30°)	460.6	3.5	B1/500		
BM	(30°-60°)	765.6	5.9	B1/1000		
BH	(60°-80°)	369.7	2.8	B1/500		G1/500
BVH	(80°-90°)	16.1	0.1			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 IV Short





REPORT NUMBER: P454090

CATALOG NUMBER: GALN-SA5A-830-U-SLR-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5
2.5°	4748.7	4727.8	4680.1	4535.1	4408.9	4244.0	4077.1	3946.0	3865.5	3717.5	3649.9
5°	4600.6	4610.6	4472.5	4174.4	3842.6	3616.1	3368.8	3172.1	2955.5	2818.4	2674.3
7.5°	4214.2	4194.3	4044.3	3629.0	3225.7	2897.9	2584.9	2330.6	2170.7	2042.5	1935.2
10°	3883.4	3868.5	3676.7	3142.3	2709.1	2463.7	2252.1	2029.6	1857.7	1670.0	1520.0
12.5°	3675.7	3642.0	3421.4	2863.1	2510.4	2281.9	2051.5	1820.0	1582.6	1392.8	1211.0
15°	3606.2	3557.5	3312.1	2766.7	2383.3	2093.2	1804.1	1537.9	1264.7	1055.0	917.9
17.5°	3732.4	3651.9	3390.6	2749.9	2231.3	1846.8	1491.2	1144.4	860.3	700.4	615.9
20°	4021.5	3929.1	3589.3	2733.0	2062.4	1570.6	1133.5	808.7	595.1	507.6	461.0
22.5°	4450.6	4323.5	3883.4	2759.8	1906.4	1301.4	818.6	571.2	472.9	418.2	385.5
25°	4966.2	4859.9	4255.9	2855.2	1783.2	1089.8	632.8	466.9	398.4	364.6	339.8
27.5°	5531.5	5361.6	4737.7	2969.4	1671.0	925.9	555.3	417.2	354.7	323.9	310.9
30°	5933.8	5801.7	5141.1	3048.9	1530.9	802.7	507.6	411.3	355.7	318.9	295.1
32.5°	6331.2	6162.3	5478.8	3085.6	1428.6	717.3	439.1	358.6	311.9	293.1	269.2
35°	6756.4	6579.6	5815.6	3065.8	1352.1	660.6	398.4	319.9	267.2	235.4	211.6
37.5°	7186.6	6999.8	6150.4	2994.2	1304.4	637.8	366.6	304.0	252.3	219.6	193.7
40°	7697.2	7447.8	6464.3	2935.6	1254.7	625.9	345.7	294.1	241.4	206.6	180.8
42.5°	8114.4	7877.0	6761.4	2904.8	1220.9	598.1	345.7	286.1	234.5	195.7	168.9
45°	8509.8	8263.5	7082.3	2929.7	1207.0	563.3	349.7	285.1	229.5	187.8	160.9
47.5°	8840.7	8627.1	7412.1	3023.0	1189.2	525.5	328.8	299.0	226.5	180.8	153.0
50°	9231.1	9024.4	7848.2	3211.8	1157.4	487.8	303.0	321.9	225.5	174.8	146.0
52.5°	9781.4	9557.9	8450.2	3426.4	1106.7	430.2	279.2	318.9	221.5	164.9	139.1
55°	10454.0	10273.2	9147.6	3683.7	1037.2	365.6	241.4	283.1	209.6	148.0	127.2
57.5°	10885.2	10731.2	9670.2	3795.0	930.9	299.0	212.6	237.4	191.7	132.1	113.3
59°	10935.8	10796.7	9779.5	3758.2	861.3	273.2	198.7	203.7	186.8	123.2	105.3
60°	10893.1	10749.1	9735.7	3686.7	796.7	255.3	186.8	180.8	187.8	118.2	99.3
62.5°	10618.9	10372.5	9311.5	3324.1	696.4	234.5	165.9	148.0	165.9	106.3	88.4
65°	10089.4	9719.8	8472.1	2813.4	656.7	222.5	141.1	124.2	126.2	93.4	76.5
67.5°	9164.5	8698.6	7354.5	2285.9	639.8	223.5	119.2	111.3	97.4	79.5	67.6
70°	7702.2	7237.2	5901.1	1880.6	631.8	223.5	101.3	95.4	81.5	66.6	58.6
72.5°	5458.0	4957.3	3980.7	1477.3	569.2	222.5	86.4	86.4	66.6	55.6	47.7
75°	3083.6	3087.6	2502.5	1045.1	472.9	183.8	69.5	68.5	48.7	42.7	35.8
77.5°	1797.1	1765.3	1686.9	449.0	219.6	83.4	48.7	41.7	33.8	30.8	25.8
80°	923.9	760.0	740.1	162.9	78.5	52.7	33.8	23.8	21.9	19.9	17.9
82.5°	273.2	274.2	244.4	65.6	43.7	34.8	16.9	12.9	11.9	10.9	10.9
85°	18.9	11.9	13.9	19.9	26.8	13.9	1.0	3.0	3.0	4.0	5.0
87.5°	2.0	1.0	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: P454090

CATALOG NUMBER: GALN-SA5A-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5
2.5°	3575.4	3619.1	3537.7	3539.6	3472.1	3493.9	3414.5	3440.3	3393.6	3429.4	3534.7
5°	2690.2	2700.2	2634.6	2613.7	2623.7	2664.4	2680.3	2607.8	2638.6	2578.0	2574.0
7.5°	1895.5	1907.4	1869.7	1864.7	1936.2	1919.3	1950.1	1875.6	1805.1	1835.9	1779.3
10°	1472.3	1422.6	1345.1	1323.3	1309.4	1318.3	1318.3	1250.7	1240.8	1214.0	1254.7
12.5°	1162.3	1101.7	1028.2	928.9	904.0	902.0	865.3	805.7	786.8	764.0	797.7
15°	844.4	819.6	758.0	702.4	645.7	634.8	575.2	526.5	462.0	453.0	450.0
17.5°	594.1	557.3	556.3	524.5	491.8	469.9	414.3	358.6	333.8	330.8	330.8
20°	445.1	432.1	411.3	407.3	397.4	372.5	322.9	293.1	281.1	282.1	286.1
22.5°	374.5	365.6	346.7	337.8	333.8	311.9	275.2	255.3	249.4	249.4	250.3
25°	334.8	326.8	306.0	292.1	287.1	271.2	242.4	227.5	222.5	222.5	222.5
27.5°	305.0	295.1	273.2	261.3	252.3	234.5	216.6	201.7	196.7	196.7	197.7
30°	284.1	273.2	253.3	237.4	223.5	207.6	192.7	179.8	173.9	172.9	173.9
32.5°	256.3	246.4	226.5	216.6	200.7	181.8	169.9	158.0	152.0	153.0	152.0
35°	199.7	196.7	182.8	185.8	176.8	160.9	150.0	137.1	130.1	129.1	131.1
37.5°	181.8	169.9	154.0	155.0	152.0	146.0	128.2	114.2	109.3	109.3	110.3
40°	167.9	156.0	138.1	129.1	130.1	130.1	111.3	96.4	91.4	90.4	92.4
42.5°	156.0	144.0	124.2	109.3	105.3	110.3	94.4	79.5	74.5	72.5	74.5
45°	148.0	135.1	112.3	95.4	83.4	89.4	77.5	65.6	59.6	59.6	58.6
47.5°	140.1	128.2	103.3	82.5	69.5	66.6	63.6	52.7	46.7	45.7	46.7
50°	133.1	121.2	93.4	71.5	58.6	51.7	51.7	41.7	37.8	35.8	36.8
52.5°	126.2	113.3	84.4	63.6	50.7	41.7	36.8	33.8	30.8	29.8	30.8
55°	116.2	103.3	75.5	54.6	43.7	34.8	28.8	27.8	25.8	23.8	25.8
57.5°	104.3	92.4	66.6	46.7	34.8	26.8	23.8	22.8	20.9	19.9	19.9
59°	97.4	86.4	61.6	40.7	30.8	23.8	21.9	20.9	18.9	16.9	17.9
60°	93.4	84.4	58.6	37.8	27.8	21.9	19.9	18.9	16.9	15.9	16.9
62.5°	82.5	75.5	51.7	30.8	21.9	15.9	13.9	14.9	13.9	12.9	13.9
65°	72.5	66.6	43.7	23.8	16.9	10.9	9.9	12.9	11.9	10.9	11.9
67.5°	64.6	57.6	36.8	17.9	11.9	6.0	7.0	10.9	10.9	9.9	10.9
70°	55.6	49.7	29.8	12.9	6.0	3.0	5.0	7.9	9.9	8.9	9.9
72.5°	45.7	38.7	22.8	8.9	3.0	0.0	3.0	7.0	9.9	8.9	9.9
75°	35.8	28.8	16.9	5.0	0.0	0.0	1.0	6.0	9.9	8.9	9.9
77.5°	25.8	20.9	9.9	1.0	0.0	0.0	1.0	6.0	9.9	8.9	9.9
80°	16.9	14.9	4.0	0.0	0.0	0.0	1.0	6.0	9.9	9.9	10.9
82.5°	10.9	7.9	0.0	0.0	0.0	0.0	2.0	7.9	10.9	11.9	11.9
85°	5.0	0.0	0.0	0.0	0.0	0.0	4.0	9.9	12.9	12.9	12.9
87.5°	0.0	0.0	0.0	0.0	0.0	2.0	7.0	11.9	14.9	14.9	14.9
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: P454090

CATALOG NUMBER: GALN-SA5A-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5
2.5°	3552.6	3615.1	3703.6	3839.7	3949.9	4123.8	4256.9	4438.7	4622.5	4678.1	4764.6
5°	2614.7	2695.2	2895.9	3078.7	3193.9	3561.5	3794.0	4160.5	4489.4	4647.3	4819.2
7.5°	1816.0	1911.4	2064.4	2319.7	2562.1	2861.1	3236.6	3655.9	4137.7	4363.2	4605.6
10°	1274.6	1393.8	1609.4	1819.0	2124.0	2408.1	2778.7	3241.6	3773.1	4039.3	4343.3
12.5°	804.7	911.0	1196.1	1431.6	1812.0	2141.9	2483.6	2902.8	3518.8	3792.0	4110.9
15°	460.0	549.4	682.5	984.5	1406.7	1842.8	2269.0	2755.8	3388.6	3725.4	4070.1
17.5°	342.7	366.6	426.2	597.1	981.5	1491.2	2071.3	2711.1	3477.1	3872.4	4265.8
20°	288.1	304.0	331.8	399.4	625.9	1148.4	1878.6	2719.1	3763.2	4259.9	4633.4
22.5°	258.3	268.2	291.1	334.8	427.2	836.5	1653.1	2765.7	4109.9	4735.7	5166.9
25°	226.5	239.4	259.3	297.0	355.7	580.2	1430.6	2870.1	4595.7	5339.8	5745.1
27.5°	201.7	213.6	233.5	268.2	311.9	443.1	1171.3	2959.5	5108.3	5947.7	6279.6
30°	176.8	188.8	208.6	236.4	276.2	358.6	892.1	3012.1	5606.0	6403.7	6659.1
32.5°	156.0	165.9	184.8	209.6	242.4	304.0	703.4	2957.5	5986.5	6818.0	6988.9
35°	135.1	147.0	162.9	185.8	214.6	259.3	585.1	2768.7	6313.3	7244.2	7305.8
37.5°	113.3	127.2	144.0	164.9	187.8	238.4	469.9	2560.1	6663.0	7775.7	7674.3
40°	95.4	108.3	124.2	147.0	167.9	218.6	361.6	2337.6	7040.5	8274.4	8076.7
42.5°	77.5	91.4	110.3	131.1	165.9	190.7	280.2	2107.1	7379.3	8708.5	8440.3
45°	61.6	73.5	93.4	120.2	164.9	163.9	216.6	1879.6	7634.6	9018.5	8711.5
47.5°	48.7	58.6	78.5	117.2	152.0	139.1	173.9	1738.5	7902.8	9297.6	8919.1
50°	38.7	48.7	67.6	122.2	133.1	119.2	146.0	1761.4	8162.1	9439.7	9004.6
52.5°	32.8	42.7	58.6	96.4	102.3	104.3	128.2	1866.7	8496.9	9591.7	9174.4
55°	28.8	37.8	49.7	67.6	79.5	93.4	117.2	1943.2	8945.0	9917.5	9549.0
57.5°	22.8	32.8	44.7	57.6	65.6	81.5	108.3	1949.1	9350.3	10335.8	10046.7
59°	20.9	29.8	41.7	54.6	58.6	73.5	102.3	1898.5	9365.2	10398.4	10275.2
60°	18.9	28.8	39.7	50.7	55.6	69.5	97.4	1839.9	9230.1	10299.0	10369.6
62.5°	15.9	24.8	34.8	40.7	47.7	57.6	84.4	1627.3	8575.4	9849.0	10194.7
65°	13.9	21.9	29.8	33.8	39.7	49.7	74.5	1302.4	7852.2	9239.0	9694.0
67.5°	12.9	19.9	25.8	28.8	34.8	45.7	66.6	919.9	6915.4	8465.1	8942.0
70°	11.9	18.9	22.8	26.8	30.8	38.7	56.6	536.5	5326.8	7108.1	7611.8
72.5°	11.9	17.9	19.9	22.8	26.8	34.8	52.7	290.1	3642.0	5422.2	6072.9
75°	11.9	16.9	17.9	19.9	23.8	31.8	46.7	152.0	2354.5	3767.1	4649.3
77.5°	11.9	15.9	17.9	18.9	22.8	27.8	40.7	95.4	1568.6	2638.6	3142.3
80°	12.9	15.9	16.9	18.9	21.9	25.8	33.8	63.6	921.9	1587.5	1912.4
82.5°	13.9	15.9	17.9	19.9	22.8	24.8	29.8	39.7	425.2	1050.1	1188.2
85°	14.9	16.9	18.9	20.9	23.8	24.8	27.8	28.8	69.5	473.9	640.8
87.5°	15.9	17.9	19.9	21.9	25.8	25.8	25.8	25.8	23.8	50.7	129.1
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: P454090

CATALOG NUMBER: GALN-SA5A-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5	4319.5
2.5°	4873.8	4986.1	5064.6	5084.4	5027.8	5002.0	4930.5	4819.2	4751.6	4748.7
5°	5136.1	5399.4	5582.2	5613.0	5503.7	5318.9	5099.3	4816.2	4650.3	4600.6
7.5°	5091.4	5552.4	5846.4	5889.1	5705.3	5352.7	4927.5	4471.5	4290.7	4214.2
10°	4907.6	5469.9	5890.1	5957.7	5712.3	5215.6	4675.1	4166.5	3942.0	3883.4
12.5°	4750.6	5318.9	5692.4	5785.8	5600.0	5104.3	4524.1	3970.8	3730.4	3675.7
15°	4682.1	5140.1	5368.6	5416.3	5385.5	5034.8	4508.2	3941.0	3665.8	3606.2
17.5°	4750.6	4988.1	5016.9	5065.6	5134.1	5027.8	4661.2	4102.9	3805.9	3732.4
20°	4930.5	4856.0	4736.7	4757.6	4914.6	5056.6	4933.4	4461.6	4099.9	4021.5
22.5°	5236.4	4823.2	4553.0	4535.1	4733.8	5153.0	5332.8	4947.3	4528.1	4450.6
25°	5612.0	4905.6	4485.4	4446.7	4663.2	5294.1	5766.9	5542.4	5084.4	4966.2
27.5°	6021.3	5076.5	4485.4	4447.6	4657.3	5419.2	6138.5	6068.9	5660.6	5531.5
30°	6245.8	5217.6	4550.0	4507.3	4730.8	5491.8	6337.2	6536.9	6093.8	5933.8
32.5°	6446.5	5413.3	4676.1	4595.7	4884.8	5599.0	6515.0	6934.2	6438.5	6331.2
35°	6631.2	5622.9	4850.0	4756.6	5087.4	5746.1	6711.7	7351.5	6918.3	6756.4
37.5°	6834.9	5866.3	5121.2	5041.7	5426.2	6032.2	6945.2	7899.9	7390.2	7186.6
40°	7056.4	6148.4	5567.3	5533.5	5964.6	6356.0	7240.2	8485.0	7928.7	7697.2
42.5°	7281.9	6473.3	6113.6	6169.3	6574.6	6810.1	7543.2	8935.0	8369.8	8114.4
45°	7486.6	6888.5	6824.0	7099.1	7285.9	7253.1	7767.7	9251.9	8754.2	8509.8
47.5°	7744.9	7493.5	7683.3	8107.5	8112.5	7734.9	7937.6	9511.2	9085.0	8840.7
50°	8034.0	8207.8	8793.0	9225.1	9108.9	8208.8	8136.3	9818.2	9426.8	9231.1
52.5°	8368.8	9007.6	9818.2	10298.0	10026.8	8725.4	8467.1	10150.0	9969.2	9781.4
55°	8758.2	9553.0	10840.5	11222.9	10949.7	9367.2	8969.8	10600.0	10582.2	10454.0
57.5°	9198.3	10129.1	11432.5	11950.1	11706.7	10120.2	9672.2	11024.2	10956.7	10885.2
59°	9546.0	10425.2	11693.8	12230.3	12083.3	10647.7	10144.0	11288.5	11043.1	10935.8
60°	9756.6	10625.9	11790.2	12268.0	12234.3	10961.7	10443.1	11417.6	11042.1	10893.1
62.5°	10381.5	10976.6	11753.4	12100.1	12232.3	11563.7	11320.3	11559.7	10837.5	10618.9
65°	10604.0	10860.3	11144.4	11101.7	11215.0	11532.9	11880.6	11403.7	10400.4	10089.4
67.5°	10170.9	9585.7	9686.1	9401.0	9345.3	10253.3	11653.1	10640.8	9545.0	9164.5
70°	8573.4	7343.5	7292.9	7424.0	7064.4	8301.2	10463.9	9171.5	8133.3	7702.2
72.5°	6748.5	5189.7	4762.6	5245.4	5234.5	6333.2	8692.6	6508.0	5494.7	5458.0
75°	5307.0	3613.2	3171.1	3249.6	3400.6	4584.7	6923.3	4132.7	3383.7	3083.6
77.5°	3562.5	2560.1	2388.2	2291.9	2454.8	2943.6	4380.1	2241.2	1897.5	1797.1
80°	2053.4	1859.7	2112.1	1917.3	2004.8	1854.8	2178.6	1028.2	853.4	923.9
82.5°	1336.2	1059.0	1128.6	838.5	1146.4	1156.4	699.4	304.0	257.3	273.2
85°	835.5	496.7	279.2	198.7	395.4	727.2	218.6	18.9	21.9	18.9
87.5°	216.6	82.5	34.8	51.7	63.6	56.6	50.7	3.0	1.0	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)