

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: P453393

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

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453393
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-20)
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
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15419 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

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

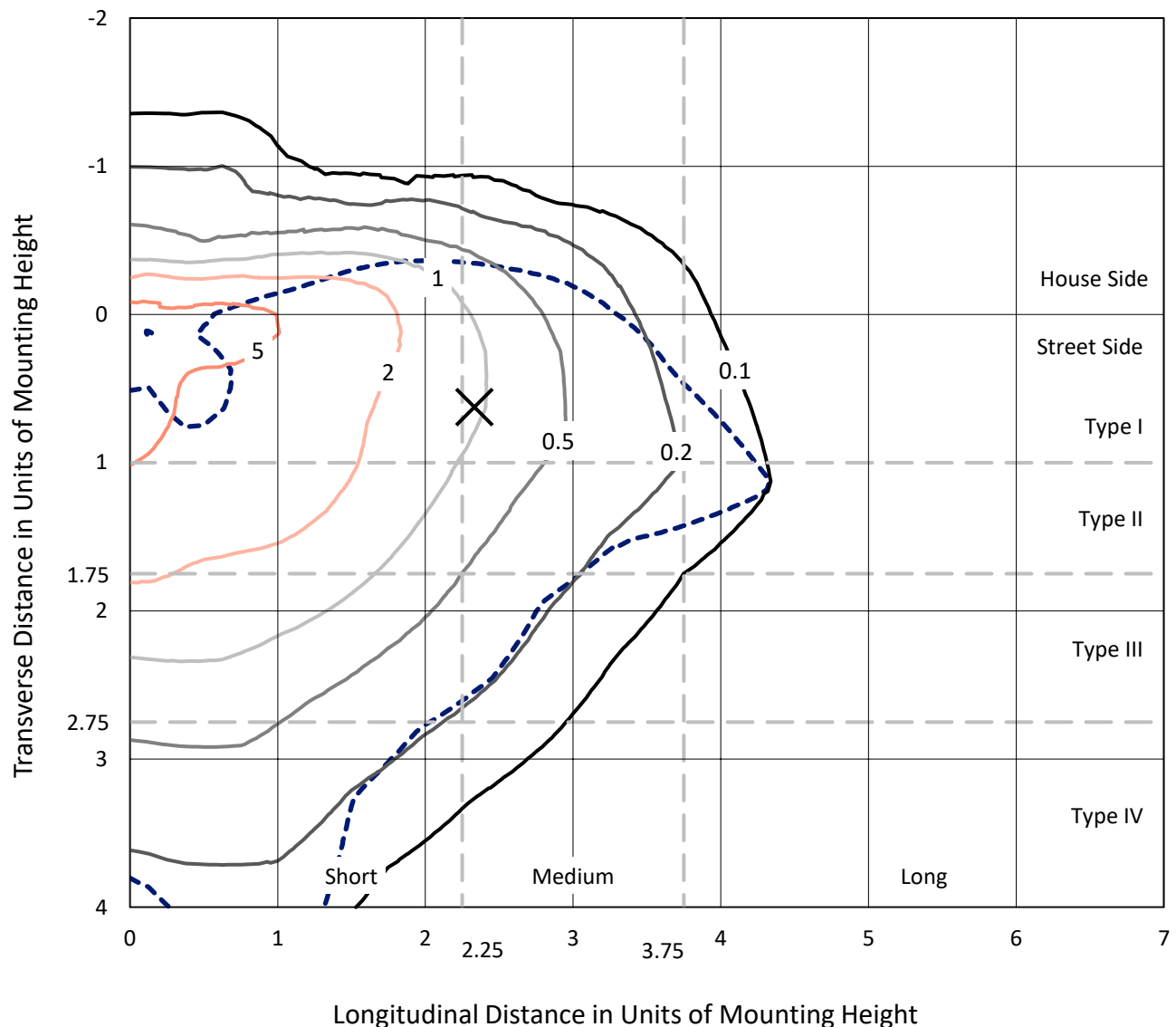


REPORT NUMBER: P453393

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

Iso-Footcandle Lines of Horizontal Illumination

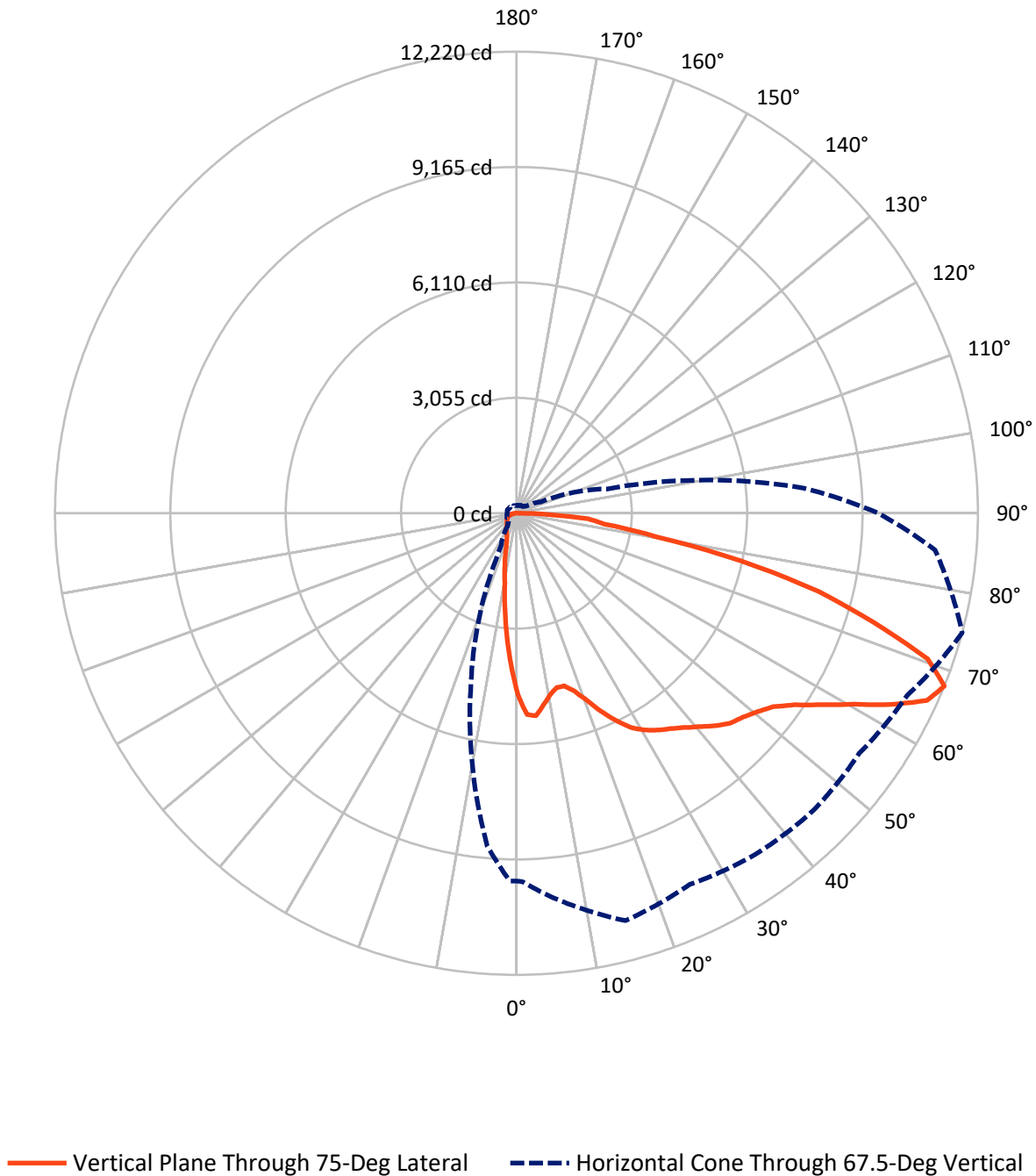
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
 Type III - Medium - N/A

REPORT NUMBER: P453393
CATALOG NUMBER: GALN-SA4B-830-U-SLL

Luminous Intensity Polar Plot



REPORT NUMBER: P453393

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

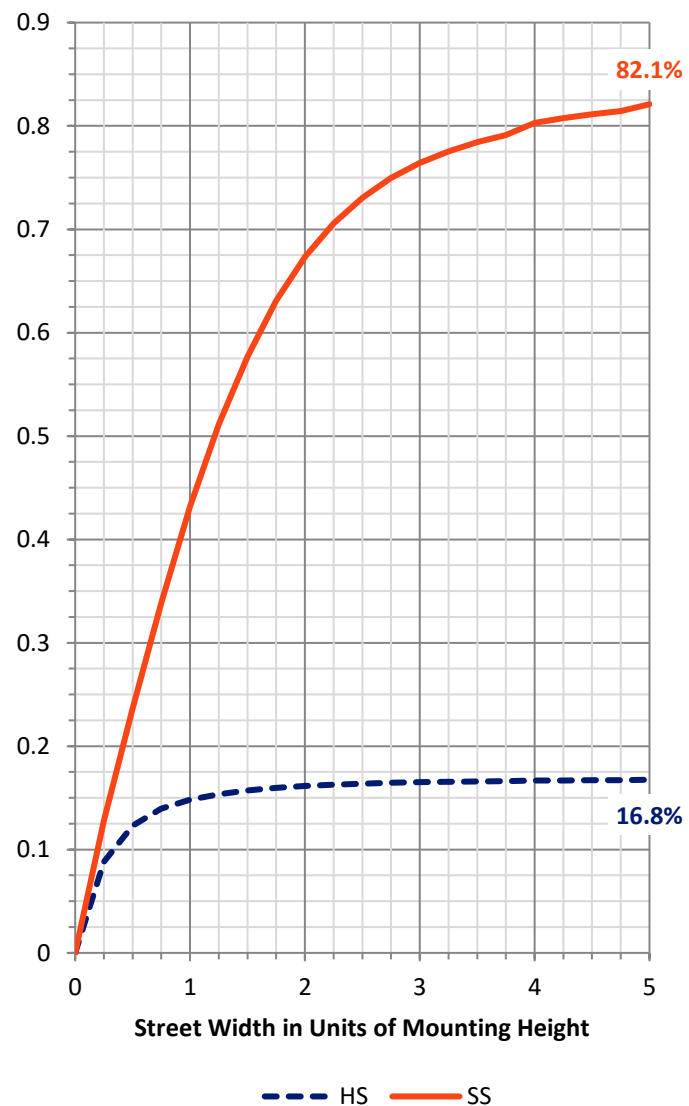
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2606.1	0.0	2606.1
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	12812.9	0.0	12812.9
	% Fixture	83.1	0.0	83.1
Total	Lumens	15419.0	0.0	15419.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	365.4	2.4
10°-20°	762.0	4.9
20°-30°	1096.5	7.1
30°-40°	1579.3	10.2
40°-50°	2218.5	14.4
50°-60°	3094.0	20.1
60°-70°	3678.6	23.9
70°-80°	2166.5	14.1
80°-90°	458.1	3.0
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°	15419.0	100.0
0°-180°	15419.0	100.0

Coefficient of Utilization



REPORT NUMBER: P453393

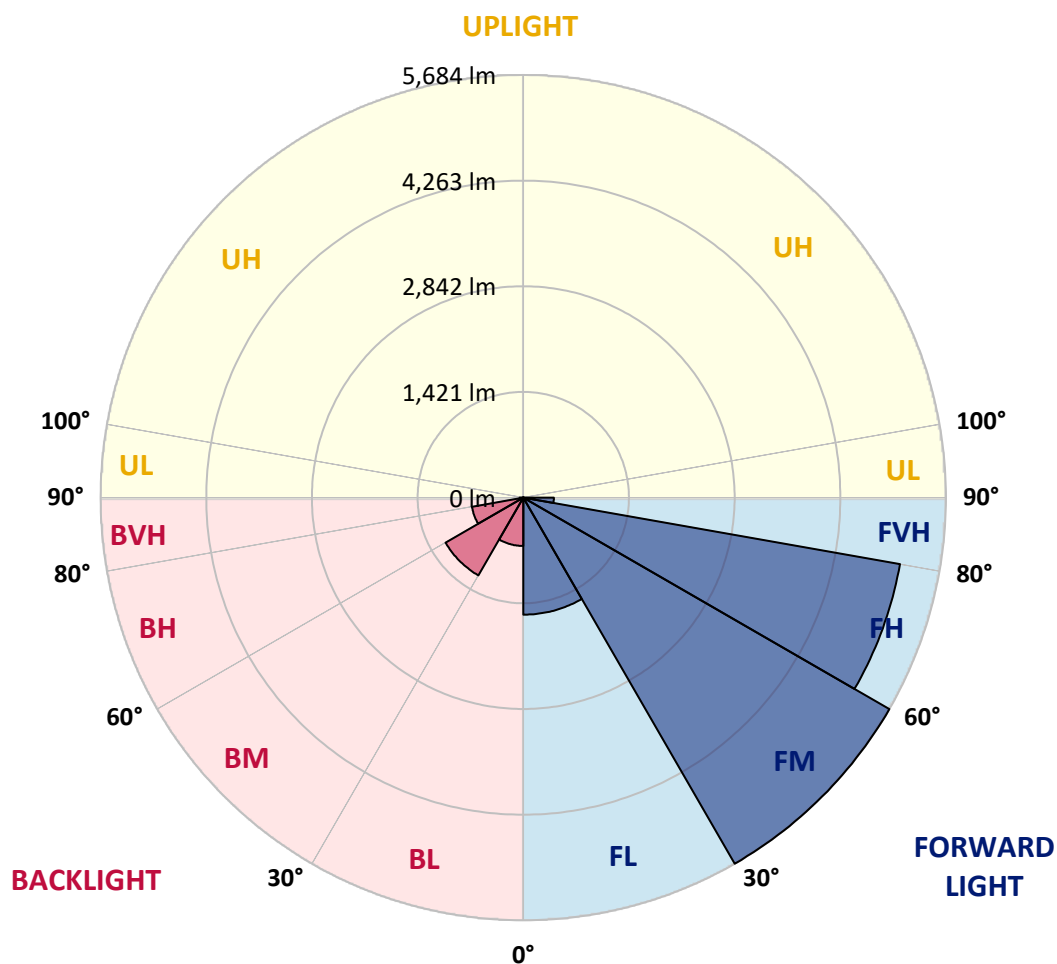
CATALOG NUMBER: GALN-SA4B-830-U-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1573.9	10.2			
FM	(30°-60°)	5684.4	36.9			
FH	(60°-80°)	5143.8	33.4			G3/7500
FVH	(80°-90°)	410.7	2.7			G3/500
BL	(0°-30°)	650.1	4.2	B2/1000		
BM	(30°-60°)	1207.4	7.8	B2/2500		
BH	(60°-80°)	701.3	4.5	B2/1000		G2/1000
BVH	(80°-90°)	47.4	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-G3

Type III Medium





REPORT NUMBER: P453393

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

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3
2.5°	5194.0	5200.9	5245.4	5374.9	5463.9	5496.5	5519.3	5476.8	5435.2	5334.4	5182.1
5°	5178.2	5218.7	5334.4	5625.1	5854.5	5953.4	5983.0	5855.5	5644.9	5385.8	5074.3
7.5°	4875.6	4930.0	5108.0	5595.4	5999.8	6231.2	6200.5	5970.2	5590.5	5128.7	4693.7
10°	4516.7	4577.0	4791.6	5380.9	5901.9	6220.3	6220.3	5939.5	5435.2	4886.5	4385.2
12.5°	4231.9	4295.2	4540.4	5160.4	5698.2	5999.8	6050.2	5809.0	5323.5	4733.2	4182.5
15°	4138.0	4199.3	4463.3	5026.9	5482.7	5666.6	5683.4	5604.3	5269.1	4744.1	4173.6
17.5°	4254.7	4333.8	4600.7	5066.4	5284.9	5295.8	5308.7	5371.0	5275.1	4942.8	4353.5
20°	4591.8	4676.9	4955.7	5194.0	5111.9	4999.2	5006.1	5166.3	5345.3	5271.1	4783.6
22.5°	5078.3	5152.5	5438.2	5418.4	5038.7	4806.4	4757.9	4981.4	5449.1	5680.5	5241.4
25°	5603.3	5690.3	6018.6	5751.6	5059.5	4691.7	4661.0	4872.6	5556.9	6063.1	5770.4
27.5°	6204.5	6289.5	6548.6	6087.8	5168.3	4682.8	4646.2	4862.7	5653.8	6417.1	6275.7
30°	6651.4	6729.5	6905.5	6370.6	5301.8	4742.1	4696.6	4940.9	5736.8	6659.3	6768.1
32.5°	7002.4	7083.5	7179.4	6546.6	5477.8	4849.9	4765.8	5083.2	5845.6	6844.2	7132.9
35°	7368.3	7464.2	7457.3	6702.8	5641.9	4974.5	4892.4	5288.9	6016.6	7005.4	7595.7
37.5°	7832.0	7870.6	7821.1	6843.2	5838.7	5198.9	5153.4	5594.4	6259.9	7200.2	8136.5
40°	8302.7	8379.8	8125.7	7013.3	6077.9	5621.1	5616.2	6046.3	6548.6	7428.6	8660.6
42.5°	8706.1	8771.3	8410.4	7161.6	6367.6	6136.3	6173.8	6652.4	6927.3	7693.6	9081.8
45°	9009.6	9068.0	8673.4	7305.0	6749.3	6731.5	6953.0	7302.0	7404.9	7931.9	9329.0
47.5°	9267.7	9324.0	8856.4	7522.5	7220.9	7442.4	7828.0	7979.3	7813.2	8068.3	9605.8
50°	9485.2	9502.0	8981.9	7781.6	7806.3	8313.5	8687.3	8785.2	8216.6	8264.1	9846.1
52.5°	9711.6	9689.9	9198.5	8107.9	8439.1	9140.1	9412.0	9513.9	8603.2	8505.4	10196.1
55°	10218.9	10239.6	9684.0	8519.2	9078.8	9951.9	10309.8	10212.0	9031.4	8949.3	10641.1
57.5°	10831.9	10814.1	10367.2	9162.9	9730.4	10707.3	10974.3	10817.1	9602.9	9559.4	11092.0
60°	11070.2	11093.9	10938.7	9855.0	10373.1	11368.8	11641.7	11397.5	10288.1	10268.3	11432.1
62.5°	10830.9	10964.4	11069.2	10471.0	10920.9	11855.3	12126.2	11847.4	11003.0	11146.3	11670.4
65°	10354.3	10383.0	10740.0	10993.1	11184.9	11935.4	12076.8	11928.5	11600.2	11946.3	11659.5
67.5°	9735.4	9760.1	10178.3	11164.1	10844.8	11025.7	11124.6	11081.1	11415.3	12220.1	11122.6
70°	9146.1	9126.3	9568.3	10728.1	9440.7	9165.8	9247.9	9111.5	9850.1	11550.7	10069.6
72.5°	7999.1	8070.3	8544.9	9515.9	7475.1	7028.1	7207.1	6854.1	7575.9	9892.6	8173.1
75°	6265.8	6282.6	7074.6	7986.3	5638.9	4933.9	5176.2	5028.9	5803.1	8252.2	5643.9
77.5°	4338.7	4301.1	5152.5	6099.7	4021.3	3612.0	3615.9	3545.7	4052.0	6076.0	3834.4
80°	2755.7	2698.3	3225.3	3768.2	2763.6	2956.4	2859.5	2856.5	2638.0	3748.4	2318.7
82.5°	1489.1	1552.4	2037.8	2362.2	1982.5	2285.0	2094.2	2032.9	1810.4	2346.3	1483.1
85°	678.3	737.6	1086.7	1606.7	1505.9	1522.7	1017.4	1200.4	1498.0	1905.3	792.0
87.5°	66.2	85.0	224.4	758.4	514.2	405.4	151.3	291.7	376.7	677.3	63.3
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: P453393

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

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3
2.5°	5119.8	5068.4	4893.4	4749.0	4595.8	4479.1	4326.8	4225.0	4154.8	4049.0	4036.1
5°	4884.5	4758.9	4454.4	4143.9	3876.0	3674.2	3469.6	3281.7	3171.0	3136.4	3091.9
7.5°	4488.0	4276.4	3884.9	3528.9	3221.4	2920.8	2689.4	2525.3	2415.6	2351.3	2274.2
10°	4161.7	3916.5	3439.9	3003.9	2750.7	2563.9	2360.2	2184.2	2048.7	1933.0	1869.8
12.5°	3942.2	3665.3	3129.4	2775.5	2579.7	2380.9	2142.7	1944.9	1745.2	1613.7	1557.3
15°	3876.0	3583.3	3033.5	2661.8	2380.9	2120.9	1853.9	1595.9	1398.1	1273.5	1232.0
17.5°	4038.1	3684.1	3032.5	2510.5	2147.6	1837.1	1495.0	1252.8	1050.1	957.1	927.5
20°	4340.7	3877.9	3041.4	2361.2	1894.5	1457.4	1087.6	888.9	792.0	752.4	737.6
22.5°	4762.9	4173.6	3068.1	2213.8	1617.6	1119.3	814.7	713.9	679.3	672.4	669.4
25°	5283.0	4539.4	3158.1	2081.3	1384.3	854.3	681.3	635.8	616.0	609.1	608.1
27.5°	5761.5	5012.0	3266.9	1967.6	1158.8	736.6	616.0	577.4	557.7	556.7	558.7
30°	6193.6	5407.6	3357.8	1840.1	987.8	654.6	573.5	534.9	516.1	515.1	521.1
32.5°	6567.4	5732.9	3425.1	1714.5	892.9	604.1	534.9	493.4	477.6	474.6	477.6
35°	6966.8	6057.2	3394.4	1616.6	838.5	562.6	506.2	465.7	446.9	438.0	438.0
37.5°	7422.7	6391.4	3342.0	1535.6	813.8	528.0	481.5	442.0	423.2	414.3	413.3
40°	7920.0	6725.6	3269.8	1463.4	789.0	507.2	464.7	423.2	400.4	391.6	389.6
42.5°	8359.0	7011.3	3210.5	1415.9	748.5	511.2	449.9	409.3	380.7	368.8	367.8
45°	8740.7	7299.1	3199.6	1388.2	714.9	505.3	445.9	398.5	364.9	352.0	350.0
47.5°	9039.3	7598.7	3261.9	1372.4	678.3	473.6	471.6	391.6	351.0	337.2	335.2
50°	9403.2	8023.8	3404.3	1339.8	644.7	444.0	498.3	390.6	340.1	322.3	317.4
52.5°	9887.6	8577.5	3597.1	1281.4	596.2	416.3	475.6	390.6	327.3	309.5	303.6
55°	10620.3	9283.5	3786.0	1199.4	528.0	379.7	429.1	378.7	308.5	292.7	288.7
57.5°	11105.8	9799.6	3906.6	1085.7	443.0	353.0	369.8	359.9	289.7	272.9	272.9
60°	11130.5	9938.1	3849.3	942.3	389.6	328.3	321.3	362.9	272.9	255.1	253.1
62.5°	10845.8	9598.9	3550.7	813.8	360.9	301.6	290.7	318.4	256.1	238.3	235.3
65°	10400.8	8733.8	3032.5	752.4	345.1	277.8	262.0	261.0	238.3	221.5	217.5
67.5°	9583.1	7632.3	2491.7	716.9	337.2	251.1	236.3	231.4	217.5	203.7	201.7
70°	8377.8	6392.4	1998.3	702.0	333.2	223.5	211.6	205.7	193.8	182.9	181.9
72.5°	6517.9	5185.1	1649.3	692.1	331.2	197.8	184.9	177.0	170.1	160.2	160.2
75°	4681.8	3814.7	1258.7	623.9	306.5	170.1	156.2	151.3	141.4	133.5	135.5
77.5°	2951.5	2568.8	828.6	458.8	237.3	136.4	124.6	121.6	113.7	102.8	109.8
80°	1993.3	1806.5	483.5	288.7	149.3	99.9	95.9	94.9	86.0	74.2	75.1
82.5°	1356.6	1330.9	251.1	164.1	86.0	58.3	56.4	58.3	48.4	39.6	39.6
85°	530.0	723.8	118.7	64.3	27.7	8.9	12.9	13.8	7.9	4.0	4.9
87.5°	9.9	74.2	3.0	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: P453393

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

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3
2.5°	4016.4	4007.5	4022.3	3959.0	3971.9	3995.6	4007.5	4014.4	4112.3	4089.5	4151.8
5°	3133.4	3124.5	3181.8	3189.8	3219.4	3213.5	3242.2	3249.1	3284.7	3297.5	3384.5
7.5°	2279.1	2317.7	2382.9	2416.5	2467.0	2482.8	2468.0	2504.5	2430.4	2483.8	2499.6
10°	1831.2	1784.7	1757.0	1834.2	1844.0	1917.2	1887.6	1863.8	1907.3	1909.3	1950.8
12.5°	1524.7	1424.8	1358.6	1380.3	1404.0	1435.7	1440.6	1488.1	1519.7	1549.4	1574.1
15°	1195.4	1160.8	1100.5	1070.8	1104.4	1117.3	1148.0	1187.5	1221.1	1230.0	1263.6
17.5°	917.6	923.5	913.6	895.8	916.6	926.5	928.4	929.4	938.3	932.4	981.8
20°	738.6	759.4	784.1	788.0	795.0	799.9	791.0	757.4	758.4	779.1	795.0
22.5°	668.4	672.4	700.0	708.9	730.7	721.8	696.1	680.3	678.3	683.2	691.1
25°	613.0	619.0	638.7	652.6	669.4	653.6	634.8	620.0	618.0	622.9	630.8
27.5°	563.6	572.5	590.3	604.1	620.0	605.1	587.3	574.5	573.5	572.5	577.4
30°	524.0	533.9	546.8	562.6	573.5	560.6	543.8	536.9	535.9	533.9	535.9
32.5°	484.5	500.3	513.2	521.1	532.0	522.1	509.2	505.3	498.3	492.4	489.4
35°	440.0	456.8	476.6	486.5	497.3	487.5	478.6	461.8	449.9	448.9	450.9
37.5°	414.3	421.2	437.0	453.8	464.7	459.8	443.0	426.2	423.2	423.2	425.2
40°	391.6	394.5	401.4	423.2	443.0	428.1	407.4	402.4	402.4	401.4	402.4
42.5°	368.8	371.8	371.8	388.6	420.2	396.5	380.7	380.7	380.7	381.7	384.6
45°	348.0	349.0	348.0	359.9	389.6	369.8	358.9	361.9	363.9	365.8	367.8
47.5°	330.2	331.2	330.2	340.1	355.0	347.1	341.1	345.1	349.0	352.0	354.0
50°	314.4	313.4	315.4	321.3	328.3	330.2	326.3	332.2	334.2	338.2	343.1
52.5°	300.6	299.6	301.6	304.5	314.4	314.4	314.4	319.4	323.3	327.3	334.2
55°	284.8	285.8	288.7	292.7	305.5	303.6	304.5	308.5	312.4	318.4	322.3
57.5°	269.9	271.9	275.9	281.8	294.7	293.7	294.7	296.6	301.6	304.5	308.5
60°	253.1	257.1	262.0	266.0	278.8	277.8	282.8	286.7	289.7	289.7	291.7
62.5°	236.3	242.2	247.2	250.2	264.0	265.0	271.9	274.9	276.9	274.9	277.8
65°	219.5	228.4	230.4	234.3	248.2	249.2	257.1	264.0	262.0	260.0	265.0
67.5°	202.7	213.6	212.6	217.5	231.4	233.3	240.3	252.1	248.2	246.2	250.2
70°	183.9	191.8	192.8	195.8	214.6	211.6	222.5	233.3	230.4	231.4	231.4
72.5°	163.1	170.1	170.1	176.0	195.8	190.8	199.7	211.6	211.6	210.6	210.6
75°	138.4	142.4	146.3	155.2	176.0	170.1	176.0	186.9	188.9	186.9	186.9
77.5°	111.7	117.7	119.6	131.5	146.3	145.3	151.3	156.2	160.2	158.2	158.2
80°	79.1	85.0	92.9	105.8	114.7	117.7	120.6	124.6	126.6	126.6	128.5
82.5°	44.5	53.4	60.3	73.2	77.1	92.0	91.0	93.9	91.0	80.1	89.0
85°	9.9	18.8	26.7	33.6	38.6	53.4	56.4	63.3	52.4	48.4	48.4
87.5°	0.0	0.0	0.0	0.0	0.0	7.9	15.8	21.8	18.8	15.8	15.8
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: P453393

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

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3	4817.3
2.5°	4204.2	4290.2	4394.1	4573.0	4698.6	4834.1	4970.5	5115.9	5154.4	5194.0
5°	3408.3	3577.3	3669.3	3909.6	4161.7	4482.1	4744.1	5030.8	5150.5	5178.2
7.5°	2581.7	2696.4	2937.6	3180.9	3493.3	3829.5	4230.9	4677.8	4817.3	4875.6
10°	2046.7	2203.0	2414.6	2675.6	2949.5	3311.4	3764.2	4286.3	4484.0	4516.7
12.5°	1742.2	1916.2	2146.6	2422.5	2681.5	2954.4	3411.2	3950.1	4161.7	4231.9
15°	1393.2	1603.8	1869.8	2160.5	2442.2	2740.9	3203.6	3811.7	4055.9	4138.0
17.5°	1094.6	1264.6	1552.4	1867.8	2202.0	2579.7	3160.1	3877.9	4178.5	4254.7
20°	837.5	959.1	1201.3	1534.6	1926.1	2420.5	3171.0	4128.1	4488.0	4591.8
22.5°	723.8	786.1	933.4	1250.8	1688.8	2282.1	3215.5	4471.2	4905.3	5078.3
25°	655.6	688.2	771.2	978.9	1462.4	2147.6	3317.3	4932.9	5488.6	5603.3
27.5°	597.2	620.9	672.4	821.7	1256.7	2023.0	3436.0	5445.1	6033.4	6204.5
30°	541.8	573.5	621.9	729.7	1125.2	1909.3	3585.3	5860.4	6492.2	6651.4
32.5°	499.3	531.0	575.5	665.4	1013.5	1789.7	3674.2	6225.3	6867.0	7002.4
35°	464.7	491.4	537.9	614.0	928.4	1698.7	3656.5	6515.0	7229.8	7368.3
37.5°	440.0	462.7	509.2	565.6	864.2	1603.8	3647.6	6897.6	7671.8	7832.0
40°	417.3	441.0	483.5	533.9	799.9	1492.0	3652.5	7277.3	8142.5	8302.7
42.5°	399.5	426.2	460.8	525.0	733.7	1402.1	3652.5	7607.6	8551.8	8706.1
45°	384.6	413.3	446.9	524.0	681.3	1333.8	3627.8	7891.3	8878.1	9009.6
47.5°	371.8	403.4	451.9	506.2	668.4	1284.4	3606.0	8118.7	9144.1	9267.7
50°	362.9	400.4	480.5	485.5	672.4	1269.6	3710.8	8405.5	9378.4	9485.2
52.5°	356.0	401.4	479.6	454.8	665.4	1279.5	3929.3	8853.4	9703.7	9711.6
55°	342.1	400.4	454.8	420.2	636.8	1296.3	4210.2	9504.0	10212.9	10218.9
57.5°	328.3	389.6	422.2	390.6	578.4	1296.3	4548.3	10120.0	10827.0	10831.9
60°	314.4	405.4	370.8	364.9	502.3	1272.5	4905.3	10390.9	11019.8	11070.2
62.5°	300.6	408.4	331.2	342.1	446.9	1215.2	5171.2	10091.3	10758.7	10830.9
65°	284.8	329.3	305.5	318.4	418.2	1119.3	5087.2	9542.6	10268.3	10354.3
67.5°	266.0	278.8	277.8	293.7	408.4	977.9	4644.2	8848.5	9740.3	9735.4
70°	243.2	250.2	253.1	269.9	389.6	868.1	3870.0	7947.7	9035.3	9146.1
72.5°	219.5	225.4	228.4	243.2	370.8	805.8	3003.9	6706.8	7826.1	7999.1
75°	193.8	197.8	201.7	214.6	351.0	713.9	2139.7	5119.8	5993.9	6265.8
77.5°	167.1	167.1	172.0	184.9	295.6	589.3	1435.7	3591.2	4060.9	4338.7
80°	135.5	136.4	134.5	148.3	217.5	403.4	815.7	2398.7	2702.3	2755.7
82.5°	103.8	100.9	101.8	108.8	162.2	274.9	435.1	1490.1	1518.7	1489.1
85°	65.3	65.3	63.3	71.2	103.8	143.4	237.3	912.6	712.9	678.3
87.5°	26.7	21.8	24.7	28.7	49.4	58.3	92.9	187.9	72.2	66.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)