

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: P647392

Luminaire Tested: **GALN-SA4D-835-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P647392
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-SA4D-835-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 1200mA 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: 20654.8 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

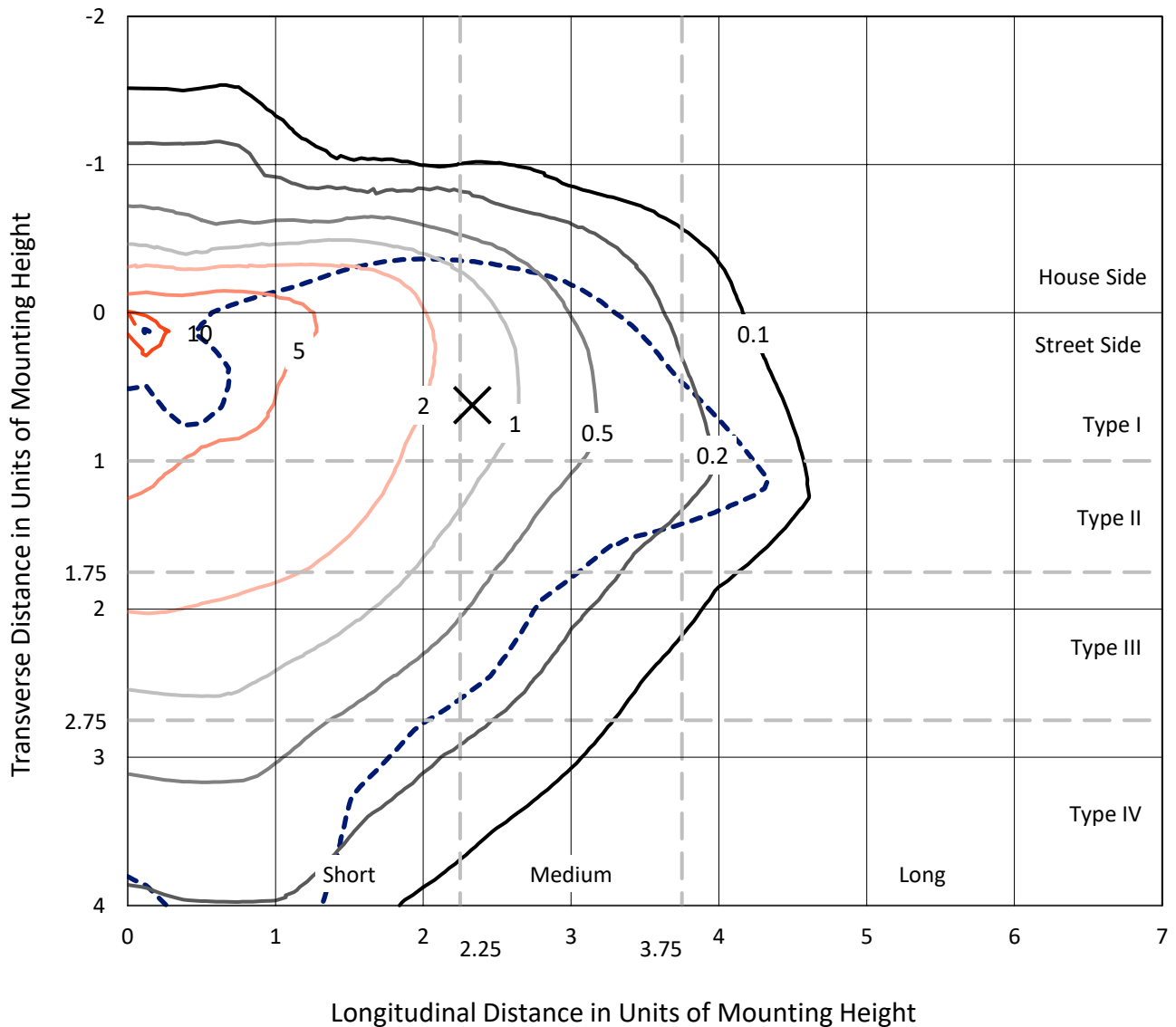
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P647392
 CATALOG NUMBER: GALN-SA4D-835-U-SLL

Iso-Footcandle Lines of Horizontal Illumination

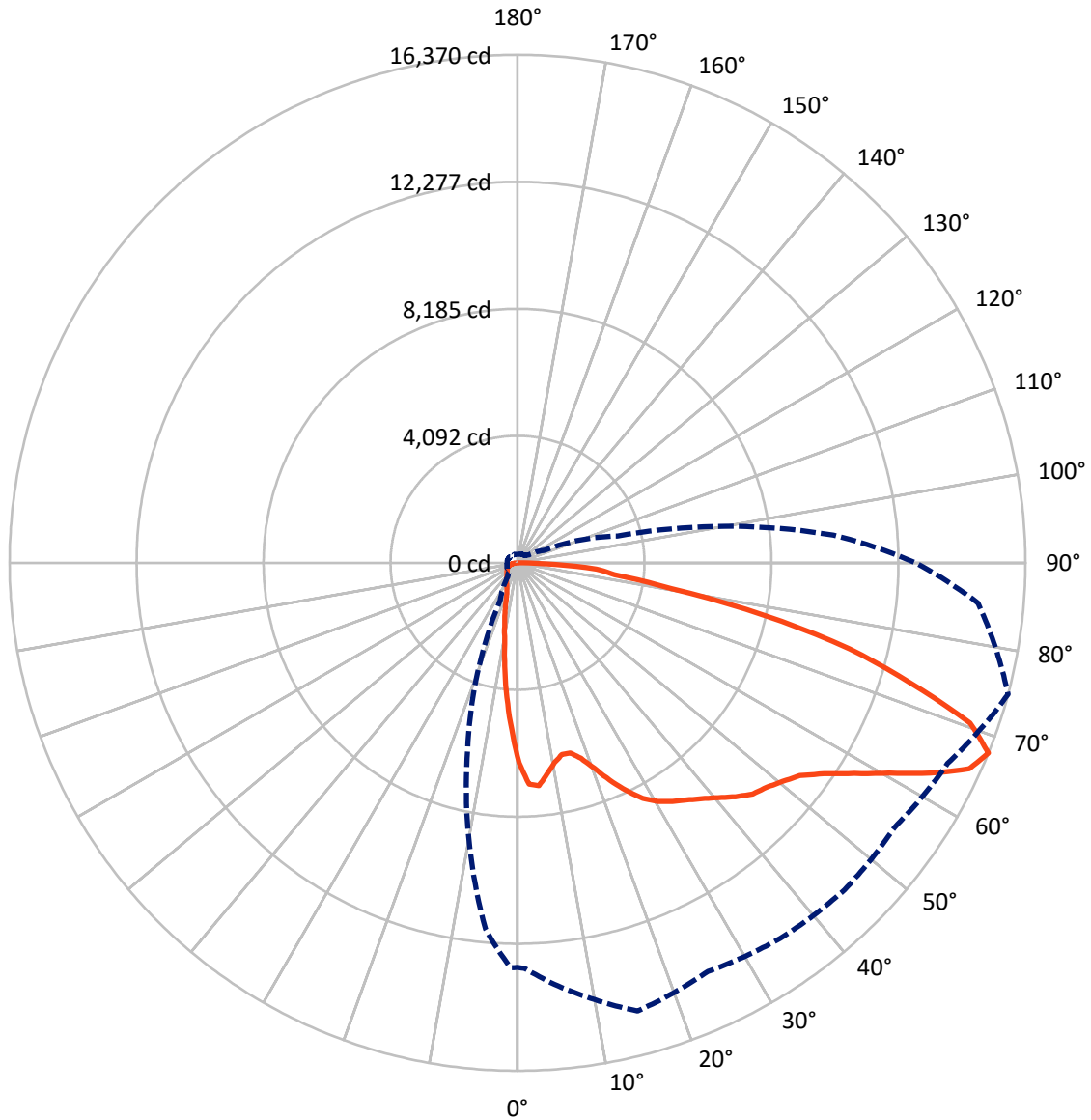
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 fc
 Type III - Medium - N/A

REPORT NUMBER: P647392
CATALOG NUMBER: GALN-SA4D-835-U-SLL

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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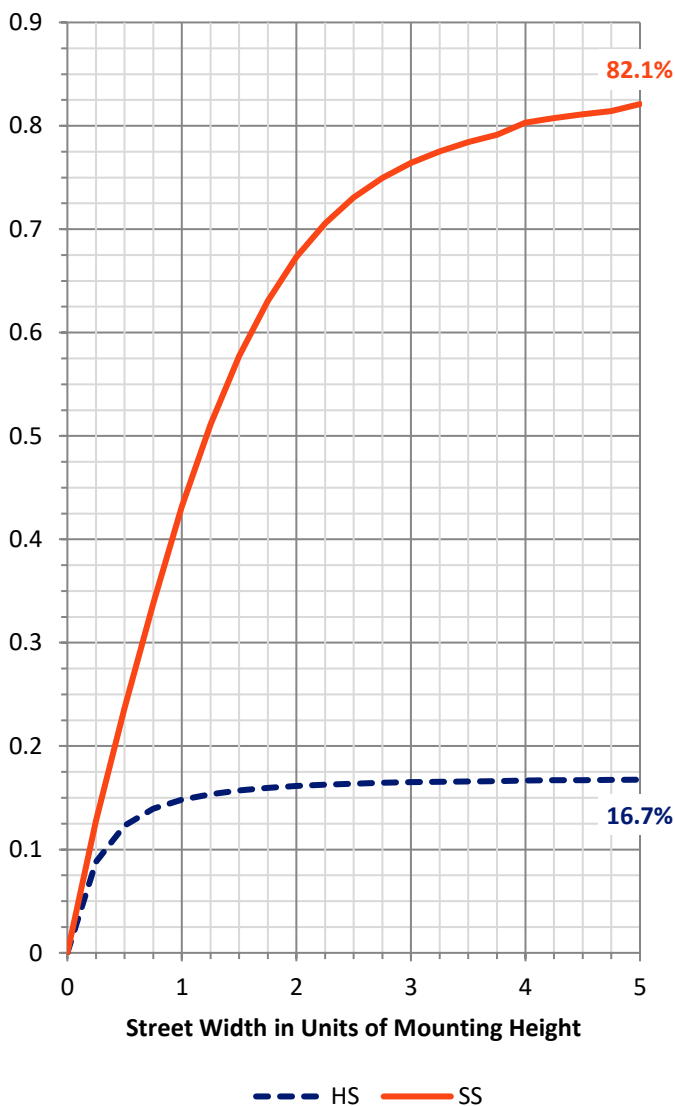
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3491.1	0.0	3491.1
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	17163.7	0.0	17163.7
	% Fixture	83.1	0.0	83.1
Total	Lumens	20654.8	0.0	20654.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	489.4	2.4
10°-20°	1020.8	4.9
20°-30°	1468.9	7.1
30°-40°	2115.6	10.2
40°-50°	2971.8	14.4
50°-60°	4144.7	20.1
60°-70°	4927.7	23.9
70°-80°	2902.2	14.1
80°-90°	613.7	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°	20654.8	100.0
0°-180°	20654.8	100.0

Coefficient of Utilization

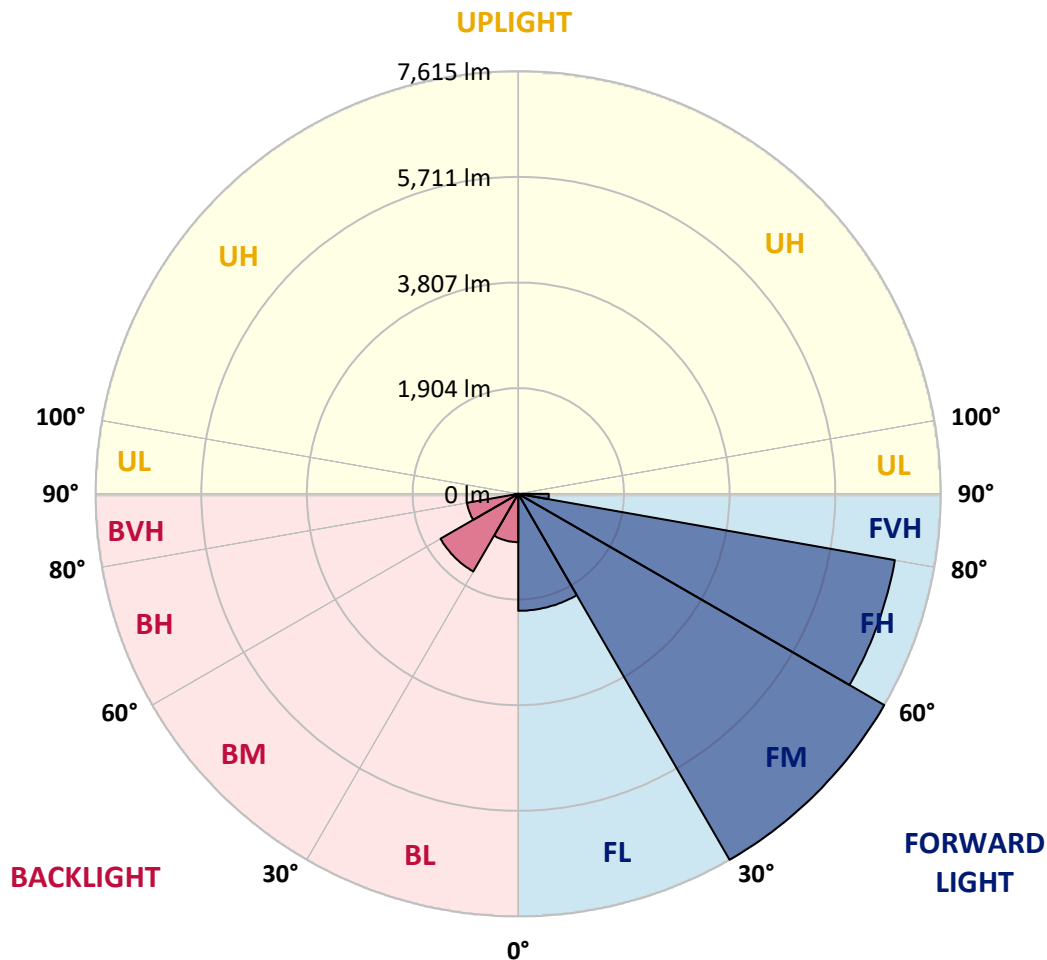


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2108.3	10.2			
FM (30°-60°)	7614.6	36.9			
FH (60°-80°)	6890.5	33.4			G3/7500
FVH (80°-90°)	550.2	2.7			G4/750
BL (0°-30°)	870.8	4.2	B2/1000		
BM (30°-60°)	1617.4	7.8	B2/2500		
BH (60°-80°)	939.4	4.5	B2/1000		G2/1000
BVH (80°-90°)	63.5	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-G4
 Type III Medium





REPORT NUMBER: P647392
 CATALOG NUMBER: GALN-SA4D-835-U-SLL

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0
2.5°	6957.7	6967.0	7026.6	7200.1	7319.2	7362.9	7393.5	7336.5	7280.9	7145.7	6941.8
5°	6936.5	6990.8	7145.7	7535.2	7842.4	7974.9	8014.6	7843.8	7561.7	7214.6	6797.4
7.5°	6531.2	6604.1	6842.5	7495.4	8037.2	8347.1	8306.1	7997.4	7488.8	6870.3	6287.5
10°	6050.4	6131.2	6418.6	7208.0	7906.0	8332.5	8332.5	7956.4	7280.9	6545.7	5874.2
12.5°	5668.9	5753.7	6082.2	6912.6	7633.2	8037.2	8104.7	7781.5	7131.2	6340.4	5602.7
15°	5543.1	5625.2	5978.8	6733.8	7344.5	7590.8	7613.3	7507.3	7058.4	6355.0	5590.8
17.5°	5699.4	5805.3	6163.0	6786.8	7079.5	7094.1	7111.3	7194.8	7066.3	6621.3	5831.9
20°	6151.0	6264.9	6638.4	6957.7	6847.7	6696.8	6706.0	6920.6	7160.3	7061.0	6408.0
22.5°	6802.7	6902.1	7284.8	7258.3	6749.7	6438.5	6373.5	6672.9	7299.4	7609.4	7021.2
25°	7506.0	7622.6	8062.3	7704.7	6777.6	6284.8	6243.8	6527.2	7443.7	8121.9	7729.9
27.5°	8311.3	8425.2	8772.3	8155.0	6923.2	6272.9	6223.9	6513.9	7573.6	8596.1	8406.7
30°	8910.0	9014.7	9250.4	8533.8	7102.0	6352.4	6291.4	6618.6	7684.8	8920.6	9066.3
32.5°	9380.2	9488.8	9617.3	8769.6	7337.8	6496.7	6384.2	6809.4	7830.5	9168.3	9555.0
35°	9870.3	9998.8	9989.5	8978.9	7557.7	6663.6	6553.7	7084.8	8059.7	9384.2	10174.9
37.5°	10491.5	10543.2	10476.9	9167.0	7821.2	6964.3	6903.4	7494.1	8385.5	9645.2	10899.4
40°	11122.0	11225.2	10884.9	9394.7	8141.8	7529.9	7523.2	8099.4	8772.3	9951.1	11601.4
42.5°	11662.3	11749.8	11266.4	9593.5	8529.8	8219.9	8270.3	8911.3	9279.6	10306.1	12165.6
45°	12069.0	12147.1	11618.6	9785.5	9041.1	9017.3	9314.0	9781.5	9919.3	10625.2	12496.8
47.5°	12414.7	12490.2	11863.7	10076.9	9672.9	9969.6	10486.2	10688.8	10466.3	10808.1	12867.7
50°	12706.1	12728.6	12031.9	10423.9	10457.0	11136.5	11637.2	11768.3	11006.7	11070.3	13189.5
52.5°	13009.4	12980.3	12322.0	10861.0	11304.7	12243.8	12608.0	12744.5	11524.6	11393.5	13658.4
55°	13688.9	13716.7	12972.3	11412.0	12161.7	13331.2	13810.7	13679.6	12098.1	11988.2	14254.4
57.5°	14510.1	14486.2	13887.5	12274.3	13034.5	14343.2	14700.8	14490.2	12863.7	12805.4	14858.4
60°	14829.2	14861.0	14653.1	13201.5	13895.5	15229.3	15594.9	15267.7	13781.6	13755.1	15314.1
62.5°	14508.8	14687.5	14827.9	14026.6	14629.3	15881.0	16243.9	15870.3	14739.2	14931.3	15633.2
65°	13870.3	13908.7	14386.8	14726.0	14982.9	15988.2	16177.6	15978.9	15539.2	16002.8	15618.7
67.5°	13041.2	13074.3	13634.5	14955.1	14527.3	14769.7	14902.1	14843.8	15291.5	16369.7	14899.5
70°	12251.8	12225.3	12817.3	14370.9	12646.5	12278.2	12388.2	12205.4	13194.8	15472.9	13488.8
72.5°	10715.4	10810.7	11446.4	12747.2	10013.3	9414.6	9654.4	9181.5	10148.5	13251.8	10948.5
75°	8393.4	8416.0	9476.9	10698.1	7553.7	6609.3	6933.9	6736.5	7773.5	11054.4	7560.3
77.5°	5812.0	5761.6	6902.1	8170.9	5386.8	4838.5	4843.7	4749.7	5427.8	8139.1	5136.5
80°	3691.5	3614.6	4320.6	5047.7	3702.0	3960.3	3830.5	3826.5	3533.8	5021.2	3106.0
82.5°	1994.7	2079.5	2729.9	3164.3	2655.6	3061.0	2805.3	2723.2	2425.2	3143.0	1986.8
85°	908.6	988.1	1455.7	2152.3	2017.2	2039.7	1362.9	1608.0	2006.7	2552.3	1061.0
87.5°	88.7	113.9	300.7	1015.9	688.7	543.1	202.6	390.7	504.6	907.3	84.8
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: P647392
 CATALOG NUMBER: GALN-SA4D-835-U-SLL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0
2.5°	6858.4	6789.5	6555.0	6361.6	6156.3	6000.1	5796.1	5659.7	5565.6	5423.9	5406.7
5°	6543.1	6374.9	5966.9	5551.1	5192.1	4921.9	4647.7	4396.1	4247.7	4201.3	4141.8
7.5°	6012.0	5728.5	5204.1	4727.2	4315.3	3912.7	3602.7	3382.8	3235.8	3149.7	3046.4
10°	5574.9	5246.4	4608.0	4023.8	3684.8	3434.5	3161.6	2925.8	2744.4	2589.5	2504.7
12.5°	5280.9	4910.0	4192.1	3717.9	3455.7	3189.4	2870.2	2605.4	2337.8	2161.6	2086.1
15°	5192.1	4800.0	4063.6	3565.6	3189.4	2841.1	2483.4	2137.7	1872.9	1706.0	1650.3
17.5°	5409.4	4935.2	4062.3	3362.9	2876.8	2461.0	2002.7	1678.1	1406.7	1282.2	1242.4
20°	5814.6	5194.7	4074.2	3162.9	2537.8	1952.3	1456.9	1190.7	1061.0	1008.0	988.1
22.5°	6380.2	5590.8	4110.0	2965.6	2166.9	1499.4	1091.4	956.3	909.9	900.7	896.7
25°	7076.9	6080.9	4230.5	2788.1	1854.3	1144.4	912.6	851.7	825.2	815.9	814.6
27.5°	7718.0	6714.0	4376.2	2635.8	1552.3	986.7	825.2	773.5	747.1	745.7	748.3
30°	8296.7	7243.8	4498.0	2464.9	1323.2	876.8	768.2	716.5	691.4	690.1	698.0
32.5°	8797.4	7679.5	4588.1	2296.7	1196.0	809.3	716.5	660.9	639.7	635.8	639.7
35°	9332.5	8114.0	4547.0	2165.5	1123.2	753.6	678.2	623.8	598.7	586.8	586.8
37.5°	9943.2	8561.6	4476.9	2056.9	1090.1	707.3	645.0	592.0	566.9	555.0	553.7
40°	10609.3	9009.4	4380.2	1960.3	1057.0	679.5	622.5	566.9	536.4	524.5	521.9
42.5°	11197.4	9392.2	4300.7	1896.7	1002.6	684.8	602.7	548.3	510.0	494.1	492.7
45°	11708.7	9777.6	4286.1	1859.6	957.6	676.8	597.4	533.8	488.7	471.5	468.9
47.5°	12108.7	10178.9	4369.6	1838.4	908.6	634.5	631.8	524.5	470.2	451.6	449.0
50°	12596.1	10748.4	4560.3	1794.7	863.6	594.7	667.6	523.2	455.6	431.8	425.2
52.5°	13245.1	11490.1	4818.6	1716.6	798.7	557.7	637.1	523.2	438.4	414.6	406.6
55°	14226.6	12435.8	5071.6	1606.6	707.3	508.6	574.8	507.3	413.3	392.0	386.7
57.5°	14876.9	13127.2	5233.2	1454.3	593.4	472.9	495.4	482.1	388.1	365.6	365.6
60°	14910.0	13312.7	5156.4	1262.3	521.9	439.7	430.5	486.1	365.6	341.7	339.0
62.5°	14528.6	12858.4	4756.3	1090.1	483.4	403.9	389.4	426.5	343.0	319.2	315.2
65°	13932.5	11699.4	4062.3	1008.0	462.3	372.2	351.0	349.7	319.2	296.7	291.4
67.5°	12837.2	10223.9	3337.8	960.3	451.6	336.5	316.6	309.9	291.4	272.9	270.2
70°	11222.6	8563.0	2676.8	940.4	446.4	299.3	283.4	275.5	259.6	245.0	243.7
72.5°	8731.2	6945.8	2209.3	927.2	443.7	264.9	247.7	237.1	227.9	214.5	214.5
75°	6271.6	5110.0	1686.1	835.8	410.6	227.9	209.3	202.6	189.4	178.8	181.4
77.5°	3953.7	3441.1	1110.0	614.6	317.9	182.8	166.9	162.9	152.3	137.7	147.0
80°	2670.2	2419.9	647.7	386.7	200.0	133.8	128.5	127.2	115.3	99.4	100.7
82.5°	1817.3	1782.8	336.5	219.9	115.3	78.1	75.5	78.1	64.9	53.0	53.0
85°	709.9	969.5	158.9	86.1	37.1	11.9	17.2	18.6	10.6	5.3	6.7
87.5°	13.2	99.4	4.0	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: P647392

CATALOG NUMBER: GALN-SA4D-835-U-SLL

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0
2.5°	5380.1	5368.2	5388.1	5303.3	5320.6	5352.4	5368.2	5377.6	5508.6	5478.2	5561.6
5°	4197.3	4185.4	4262.3	4272.9	4312.6	4304.7	4343.1	4352.4	4400.1	4417.3	4533.8
7.5°	3053.0	3104.7	3192.1	3237.1	3304.7	3325.9	3306.0	3355.0	3255.6	3327.2	3348.3
10°	2453.0	2390.7	2353.7	2457.0	2470.2	2568.2	2528.5	2496.7	2555.0	2557.7	2613.3
12.5°	2042.4	1908.6	1819.8	1849.1	1880.8	1923.2	1929.8	1993.4	2035.8	2075.5	2108.6
15°	1601.3	1555.0	1474.2	1434.5	1479.5	1496.7	1537.7	1590.7	1635.8	1647.7	1692.8
17.5°	1229.2	1237.1	1223.8	1200.0	1227.8	1241.1	1243.7	1245.0	1256.9	1249.0	1315.2
20°	989.4	1017.2	1050.3	1055.6	1064.9	1071.5	1059.6	1014.6	1015.9	1043.7	1064.9
22.5°	895.4	900.7	937.7	949.7	978.8	966.9	932.5	911.3	908.6	915.2	925.8
25°	821.2	829.1	855.7	874.1	896.7	875.5	850.3	830.4	827.8	834.4	845.0
27.5°	755.0	766.9	790.8	809.3	830.4	810.6	786.8	769.5	768.2	766.9	773.5
30°	702.0	715.3	732.4	753.6	768.2	751.0	728.5	719.2	717.9	715.3	717.9
32.5°	649.0	670.2	687.4	698.0	712.6	699.4	682.1	676.8	667.6	659.6	655.6
35°	589.4	611.9	638.4	651.7	666.3	653.0	641.0	618.6	602.7	601.3	604.0
37.5°	555.0	564.2	585.4	607.9	622.5	615.9	593.4	570.9	566.9	566.9	569.6
40°	524.5	528.4	537.8	566.9	593.4	573.5	545.7	539.1	539.1	537.8	539.1
42.5°	494.1	498.0	498.0	520.5	562.9	531.1	510.0	510.0	510.0	511.3	515.2
45°	466.2	467.5	466.2	482.1	521.9	495.4	480.8	484.8	487.4	490.1	492.7
47.5°	442.4	443.7	442.4	455.6	475.5	464.9	457.0	462.3	467.5	471.5	474.2
50°	421.2	419.8	422.5	430.5	439.7	442.4	437.1	445.1	447.7	453.0	459.6
52.5°	402.6	401.4	403.9	407.9	421.2	421.2	421.2	427.8	433.1	438.4	447.7
55°	381.5	382.8	386.7	392.0	409.3	406.6	407.9	413.3	418.5	426.5	431.8
57.5°	361.6	364.3	369.6	377.5	394.7	393.4	394.7	397.4	403.9	407.9	413.3
60°	339.0	344.4	351.0	356.3	373.5	372.2	378.8	384.1	388.1	388.1	390.7
62.5°	316.6	324.5	331.1	335.1	353.7	354.9	364.3	368.2	370.8	368.2	372.2
65°	294.0	306.0	308.6	313.9	332.5	333.8	344.4	353.7	351.0	348.4	354.9
67.5°	271.5	286.1	284.8	291.4	309.9	312.6	321.9	337.8	332.5	329.8	335.1
70°	246.3	257.0	258.3	262.2	287.4	283.4	298.0	312.6	308.6	309.9	309.9
72.5°	218.5	227.9	227.9	235.8	262.2	255.6	267.6	283.4	283.4	282.1	282.1
75°	185.4	190.7	196.1	208.0	235.8	227.9	235.8	250.3	253.0	250.3	250.3
77.5°	149.6	157.6	160.3	176.2	196.1	194.7	202.6	209.3	214.5	212.0	212.0
80°	105.9	113.9	124.5	141.7	153.6	157.6	161.6	166.9	169.5	169.5	172.2
82.5°	59.6	71.5	80.8	98.0	103.3	123.2	121.8	125.8	121.8	107.3	119.2
85°	13.2	25.1	35.8	45.0	51.7	71.5	75.5	84.8	70.2	64.9	64.9
87.5°	0.0	0.0	0.0	0.0	0.0	10.6	21.2	29.1	25.1	21.2	21.2
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: P647392
 CATALOG NUMBER: GALN-SA4D-835-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0	6453.0
2.5°	5631.8	5747.1	5886.1	6125.9	6294.1	6475.6	6658.3	6853.1	6904.7	6957.7
5°	4565.6	4792.1	4915.3	5237.1	5574.9	6004.0	6355.0	6739.1	6899.4	6936.5
7.5°	3458.3	3612.0	3935.1	4260.9	4679.5	5129.8	5667.6	6266.3	6453.0	6531.2
10°	2741.8	2951.0	3234.5	3584.1	3951.0	4435.8	5042.4	5741.7	6006.7	6050.4
12.5°	2333.8	2566.9	2875.5	3245.1	3592.1	3957.7	4569.6	5291.4	5574.9	5668.9
15°	1866.2	2148.4	2504.7	2894.0	3271.5	3671.6	4291.4	5106.0	5433.2	5543.1
17.5°	1466.2	1694.0	2079.5	2502.0	2949.7	3455.7	4233.1	5194.7	5597.4	5699.4
20°	1121.9	1284.7	1609.3	2055.6	2580.1	3242.4	4247.7	5529.9	6012.0	6151.0
22.5°	969.5	1053.0	1250.4	1675.5	2262.2	3057.0	4307.3	5989.5	6570.9	6802.7
25°	878.1	921.8	1033.1	1311.3	1959.0	2876.8	4443.8	6608.0	7352.4	7506.0
27.5°	800.0	831.8	900.7	1100.7	1683.4	2710.0	4602.7	7294.1	8082.2	8311.3
30°	725.8	768.2	833.1	977.5	1507.3	2557.7	4802.7	7850.4	8696.8	8910.0
32.5°	668.9	711.3	770.9	891.4	1357.6	2397.4	4921.9	8339.1	9198.8	9380.2
35°	622.5	658.3	720.5	822.5	1243.7	2275.6	4898.1	8727.2	9684.8	9870.3
37.5°	589.4	619.9	682.1	757.6	1157.6	2148.4	4886.2	9239.8	10276.9	10491.5
40°	559.0	590.7	647.7	715.3	1071.5	1998.7	4892.7	9748.4	10907.3	11122.0
42.5°	535.1	570.9	617.2	703.3	982.8	1878.2	4892.7	10190.8	11455.8	11662.3
45°	515.2	553.7	598.7	702.0	912.6	1786.8	4859.6	10571.0	11892.8	12069.0
47.5°	498.0	540.4	605.3	678.2	895.4	1720.6	4830.5	10875.6	12249.1	12414.7
50°	486.1	536.4	643.7	650.4	900.7	1700.7	4970.9	11259.7	12563.0	12706.1
52.5°	476.8	537.8	642.4	609.3	891.4	1713.9	5263.6	11859.7	12998.8	13009.4
55°	458.3	536.4	609.3	562.9	853.0	1736.5	5639.8	12731.3	13680.9	13688.9
57.5°	439.7	521.9	565.6	523.2	774.9	1736.5	6092.8	13556.4	14503.4	14510.1
60°	421.2	543.1	496.7	488.7	672.8	1704.7	6570.9	13919.3	14761.7	14829.2
62.5°	402.6	547.0	443.7	458.3	598.7	1627.9	6927.2	13518.0	14412.1	14508.8
65°	381.5	441.1	409.3	426.5	560.2	1499.4	6814.6	12782.9	13755.1	13870.3
67.5°	356.3	373.5	372.2	393.4	547.0	1310.0	6221.2	11853.1	13047.8	13041.2
70°	325.8	335.1	339.0	361.6	521.9	1162.9	5184.2	10646.5	12103.4	12251.8
72.5°	294.0	302.0	306.0	325.8	496.7	1079.4	4023.8	8984.2	10483.5	10715.4
75°	259.6	264.9	270.2	287.4	470.2	956.3	2866.2	6858.4	8029.2	8393.4
77.5°	223.9	223.9	230.4	247.7	396.0	789.4	1923.2	4810.7	5439.8	5812.0
80°	181.4	182.8	180.2	198.6	291.4	540.4	1092.8	3213.3	3619.9	3691.5
82.5°	139.1	135.1	136.4	145.7	217.2	368.2	582.8	1996.0	2034.5	1994.7
85°	87.4	87.4	84.8	95.4	139.1	192.1	317.9	1222.5	954.9	908.6
87.5°	35.8	29.1	33.1	38.4	66.2	78.1	124.5	251.7	96.7	88.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)