

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: P651847

Luminaire Tested: **GALN-SA4A-840-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651847
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-SA4A-840-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 615mA 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: 13114.6 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

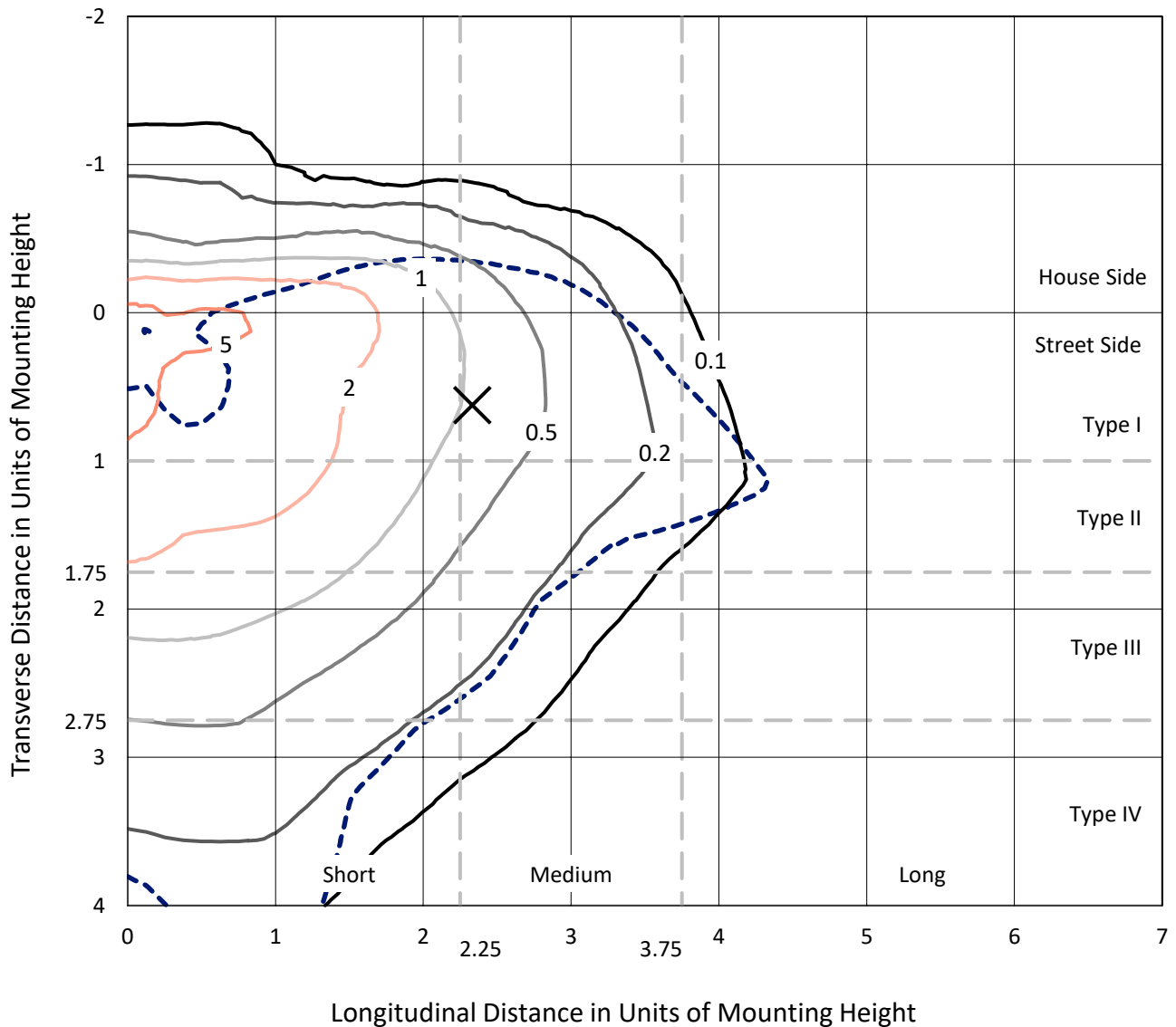
Input Watts (W): 121
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651847
 CATALOG NUMBER: GALN-SA4A-840-U-SLL

Iso-Footcandle Lines of Horizontal Illumination

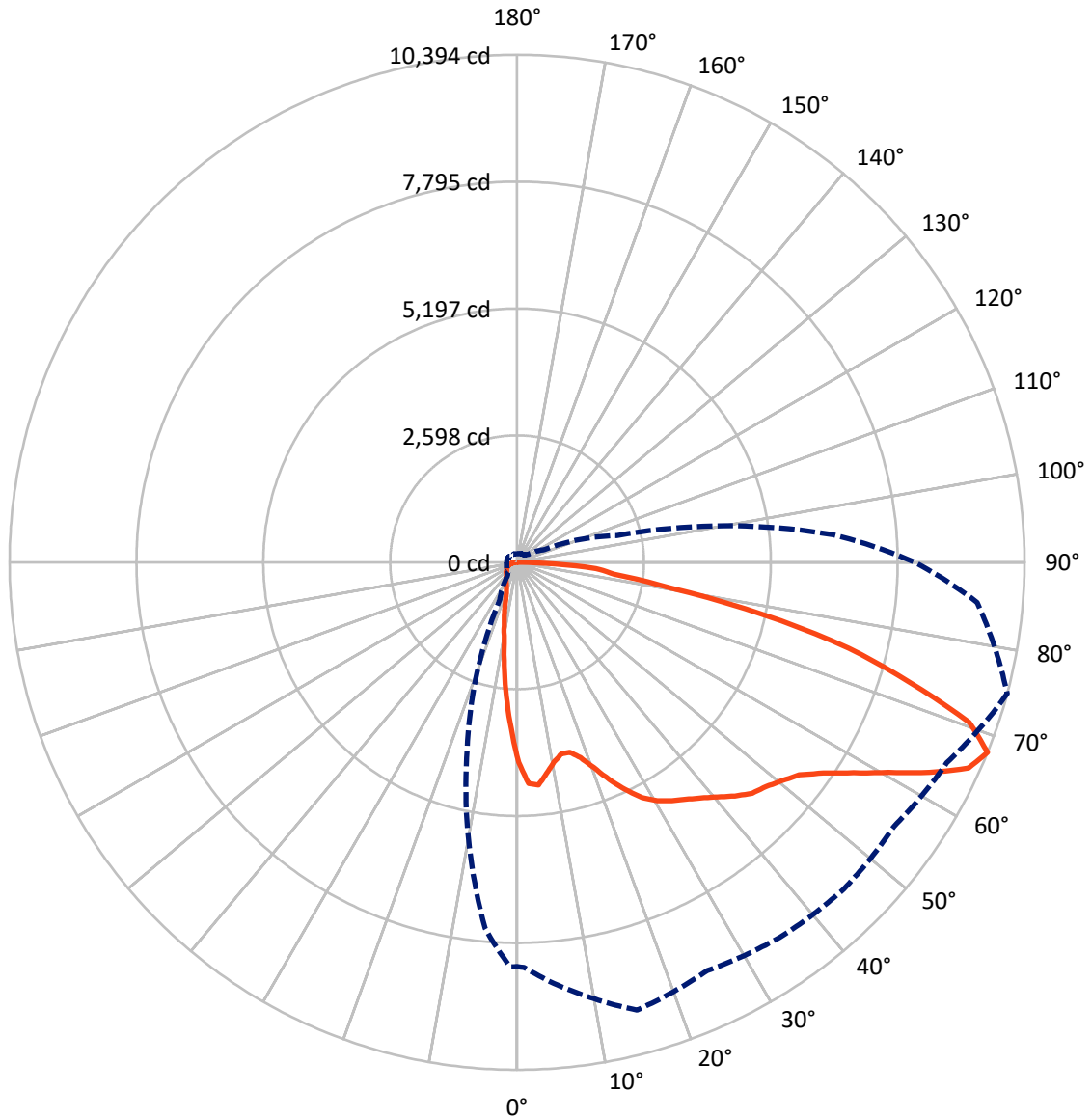
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
 Type III - Medium - N/A

REPORT NUMBER: P651847
CATALOG NUMBER: GALN-SA4A-840-U-SLL

Luminous Intensity Polar Plot



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

REPORT NUMBER: P651847
 CATALOG NUMBER: GALN-SA4A-840-U-SLL

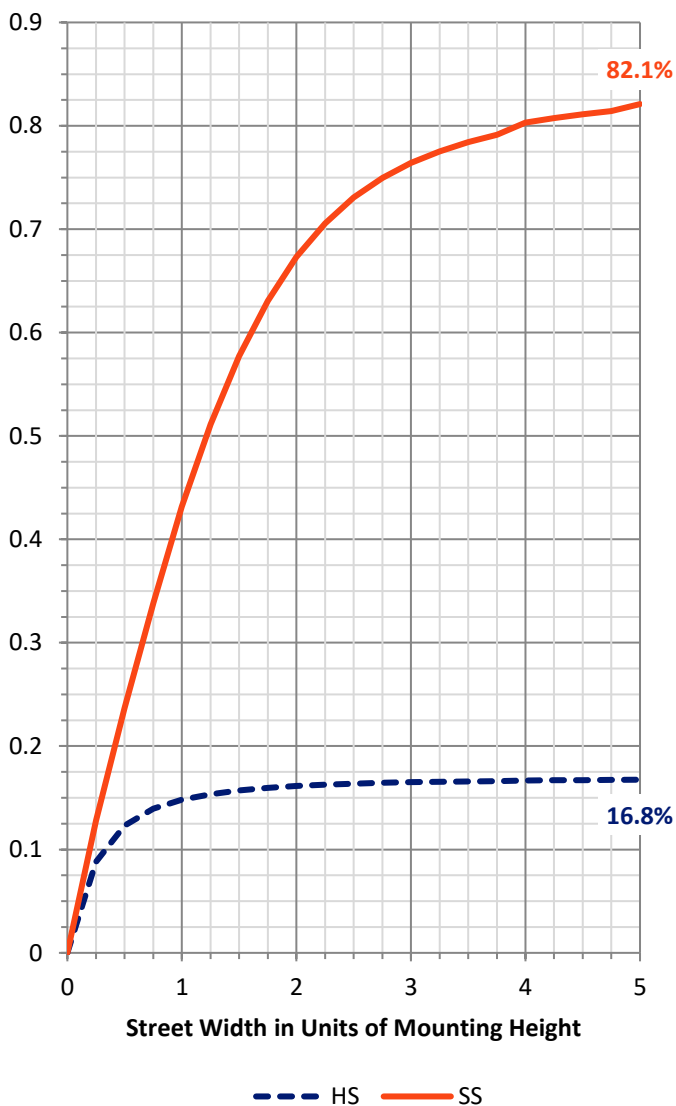
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2216.7	0.0	2216.7
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	10897.9	0.0	10897.9
	% Fixture	83.1	0.0	83.1
Total	Lumens	13114.6	0.0	13114.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.8	2.4
10°-20°	648.1	4.9
20°-30°	932.7	7.1
30°-40°	1343.3	10.2
40°-50°	1886.9	14.4
50°-60°	2631.6	20.1
60°-70°	3128.8	23.9
70°-80°	1842.7	14.1
80°-90°	389.7	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°	13114.6	100.0
0°-180°	13114.6	100.0

Coefficient of Utilization

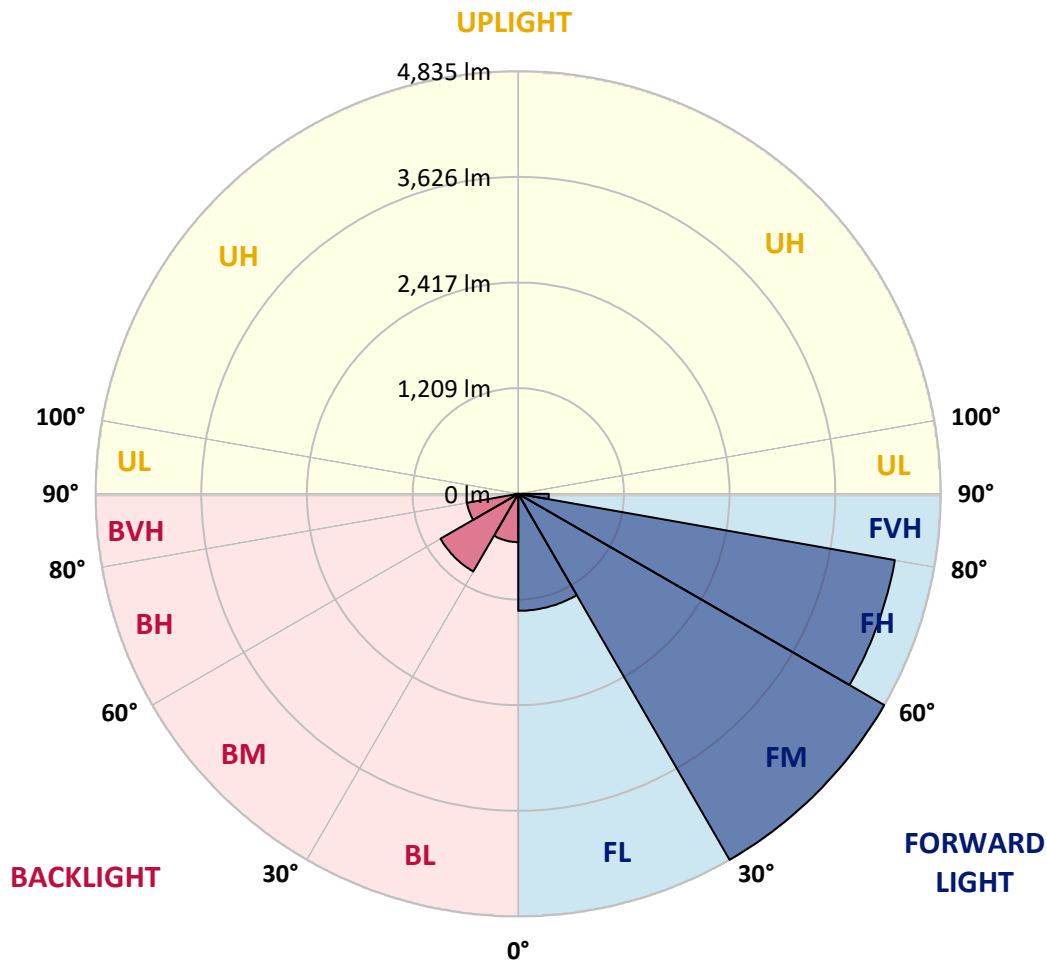


REPORT NUMBER: P651847
 CATALOG NUMBER: GALN-SA4A-840-U-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1338.6	10.2			
FM (30°-60°)	4834.9	36.9			
FH (60°-80°)	4375.1	33.4			G2/5000
FVH (80°-90°)	349.4	2.7			G3/500
BL (0°-30°)	552.9	4.2	B2/1000		
BM (30°-60°)	1027.0	7.8	B2/2500		
BH (60°-80°)	596.5	4.5	B2/1000		G2/1000
BVH (80°-90°)	40.3	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: P651847
 CATALOG NUMBER: GALN-SA4A-840-U-SLL

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3
2.5°	4417.7	4423.6	4461.4	4571.6	4647.3	4675.0	4694.4	4658.2	4622.9	4537.1	4407.6
5°	4404.2	4438.7	4537.1	4784.4	4979.5	5063.6	5088.8	4980.3	4801.2	4580.8	4315.9
7.5°	4146.9	4193.1	4344.5	4759.1	5103.1	5299.9	5273.8	5077.9	4754.9	4362.2	3992.1
10°	3841.6	3892.9	4075.4	4576.6	5019.8	5290.6	5290.6	5051.8	4622.9	4156.1	3729.8
12.5°	3599.4	3653.2	3861.8	4389.1	4846.6	5103.1	5146.0	4940.8	4527.9	4025.8	3557.3
15°	3519.5	3571.6	3796.2	4275.6	4663.3	4819.7	4834.0	4766.7	4481.6	4035.0	3549.8
17.5°	3618.7	3686.0	3913.1	4309.2	4495.1	4504.3	4515.2	4568.2	4486.7	4204.1	3702.8
20°	3905.5	3977.8	4215.0	4417.7	4347.9	4252.0	4257.9	4394.1	4546.4	4483.3	4068.7
22.5°	4319.3	4382.4	4625.4	4608.6	4285.7	4088.0	4046.8	4236.9	4634.7	4831.5	4458.1
25°	4765.9	4839.9	5119.1	4892.0	4303.3	3990.5	3964.4	4144.4	4726.3	5156.9	4908.0
27.5°	5277.2	5349.5	5569.9	5178.0	4395.8	3982.9	3951.8	4136.0	4808.8	5458.0	5337.7
30°	5657.3	5723.8	5873.5	5418.5	4509.4	4033.4	3994.7	4202.4	4879.4	5664.1	5756.6
32.5°	5955.9	6024.8	6106.4	5568.2	4659.1	4125.0	4053.5	4323.5	4971.9	5821.3	6066.9
35°	6267.0	6348.6	6342.7	5701.1	4798.7	4231.0	4161.2	4498.4	5117.4	5958.4	6460.5
37.5°	6661.5	6694.3	6652.2	5820.5	4966.0	4421.9	4383.2	4758.3	5324.3	6124.1	6920.5
40°	7061.8	7127.4	6911.3	5965.1	5169.5	4781.0	4776.8	5142.6	5569.9	6318.3	7366.2
42.5°	7404.9	7460.4	7153.5	6091.3	5416.0	5219.2	5251.1	5658.2	5892.0	6543.7	7724.5
45°	7663.1	7712.7	7377.2	6213.2	5740.6	5725.4	5913.8	6210.7	6298.2	6746.4	7934.8
47.5°	7882.6	7930.5	7532.8	6398.2	6141.7	6330.1	6658.1	6786.8	6645.5	6862.5	8170.2
50°	8067.6	8081.9	7639.6	6618.6	6639.6	7071.0	7388.9	7472.2	6988.6	7029.0	8374.6
52.5°	8260.2	8241.7	7823.7	6896.1	7177.9	7774.1	8005.4	8092.0	7317.5	7234.2	8672.3
55°	8691.7	8709.3	8236.7	7246.0	7722.0	8464.6	8769.0	8685.8	7681.6	7611.8	9050.8
57.5°	9213.1	9197.9	8817.8	7793.5	8276.2	9107.1	9334.2	9200.5	8167.7	8130.7	9434.2
60°	9415.7	9435.9	9303.9	8382.2	8822.8	9669.6	9901.8	9694.0	8750.5	8733.7	9723.5
62.5°	9212.2	9325.8	9414.8	8906.1	9288.8	10083.4	10313.9	10076.7	9358.6	9480.4	9926.2
65°	8806.9	8831.3	9134.9	9350.2	9513.2	10151.5	10271.8	10145.7	9866.4	10160.8	9916.9
67.5°	8280.4	8301.4	8657.2	9495.6	9224.0	9377.9	9461.9	9424.9	9709.2	10393.8	9460.2
70°	7779.2	7762.3	8138.3	9124.8	8029.8	7796.0	7865.8	7749.7	8378.0	9824.4	8564.7
72.5°	6803.6	6864.2	7267.8	8093.7	6357.9	5977.7	6130.0	5829.7	6443.7	8414.1	6951.6
75°	5329.3	5343.6	6017.3	6792.7	4796.1	4196.5	4402.6	4277.2	4935.7	7018.9	4800.3
77.5°	3690.2	3658.3	4382.4	5188.0	3420.3	3072.2	3075.5	3015.8	3446.3	5167.9	3261.3
80°	2343.9	2295.1	2743.3	3205.0	2350.6	2514.6	2432.2	2429.6	2243.8	3188.1	1972.1
82.5°	1266.5	1320.4	1733.3	2009.1	1686.2	1943.6	1781.2	1729.1	1539.9	1995.7	1261.5
85°	576.9	627.4	924.3	1366.6	1280.8	1295.1	865.4	1021.0	1274.1	1620.6	673.6
87.5°	56.3	72.3	190.9	645.0	437.3	344.8	128.7	248.1	320.4	576.1	53.8
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: P651847

CATALOG NUMBER: GALN-SA4A-840-U-SLL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3
2.5°	4354.6	4310.9	4162.0	4039.2	3908.9	3809.6	3680.1	3593.5	3533.8	3443.8	3432.9
5°	4154.5	4047.6	3788.6	3524.5	3296.6	3125.2	2951.1	2791.3	2697.1	2667.7	2629.8
7.5°	3817.2	3637.2	3304.2	3001.5	2740.0	2484.3	2287.5	2147.9	2054.6	1999.9	1934.3
10°	3539.7	3331.1	2925.8	2555.0	2339.7	2180.7	2007.5	1857.8	1742.6	1644.2	1590.3
12.5°	3353.0	3117.6	2661.8	2360.7	2194.2	2025.1	1822.4	1654.2	1484.4	1372.5	1324.6
15°	3296.6	3047.8	2580.2	2264.0	2025.1	1803.9	1576.9	1357.4	1189.2	1083.2	1047.9
17.5°	3434.6	3133.6	2579.3	2135.3	1826.7	1562.6	1271.6	1065.5	893.1	814.1	788.9
20°	3691.9	3298.3	2586.9	2008.3	1611.4	1239.6	925.1	756.1	673.6	640.0	627.4
22.5°	4051.0	3549.8	2609.6	1883.0	1375.9	952.0	693.0	607.2	577.8	571.9	569.4
25°	4493.4	3860.9	2686.2	1770.3	1177.4	726.6	579.4	540.8	523.9	518.1	517.2
27.5°	4900.4	4262.9	2778.7	1673.6	985.7	626.5	523.9	491.1	474.3	473.5	475.2
30°	5267.9	4599.3	2856.0	1565.1	840.2	556.7	487.8	455.0	439.0	438.2	443.2
32.5°	5585.8	4876.0	2913.2	1458.3	759.4	513.9	455.0	419.7	406.2	403.7	406.2
35°	5925.6	5151.9	2887.2	1375.0	713.2	478.5	430.6	396.1	380.1	372.6	372.6
37.5°	6313.3	5436.1	2842.6	1306.1	692.1	449.1	409.6	375.9	359.9	352.4	351.5
40°	6736.3	5720.4	2781.2	1244.7	671.1	431.4	395.3	359.9	340.6	333.0	331.4
42.5°	7109.7	5963.4	2730.7	1204.3	636.6	434.8	382.7	348.2	323.8	313.7	312.9
45°	7434.4	6208.2	2721.5	1180.8	608.0	429.8	379.3	338.9	310.3	299.4	297.7
47.5°	7688.3	6463.0	2774.5	1167.3	576.9	402.8	401.2	333.0	298.6	286.8	285.1
50°	7997.8	6824.6	2895.6	1139.6	548.3	377.6	423.9	332.2	289.3	274.2	270.0
52.5°	8409.9	7295.6	3059.6	1089.9	507.1	354.1	404.5	332.2	278.4	263.2	258.2
55°	9033.1	7896.1	3220.1	1020.1	449.1	322.9	365.0	322.1	262.4	248.9	245.6
57.5°	9445.9	8335.1	3322.7	923.4	376.8	300.2	314.5	306.1	246.4	232.1	232.1
60°	9467.0	8452.8	3273.9	801.5	331.4	279.2	273.3	308.6	232.1	217.0	215.3
62.5°	9224.8	8164.3	3020.0	692.1	307.0	256.5	247.3	270.8	217.8	202.7	200.2
65°	8846.4	7428.5	2579.3	640.0	293.5	236.3	222.9	222.0	202.7	188.4	185.0
67.5°	8150.9	6491.6	2119.3	609.7	286.8	213.6	201.0	196.8	185.0	173.2	171.6
70°	7125.7	5437.0	1699.7	597.1	283.4	190.1	180.0	174.9	164.8	155.6	154.7
72.5°	5543.8	4410.1	1402.8	588.7	281.7	168.2	157.3	150.5	144.7	136.2	136.2
75°	3982.1	3244.5	1070.6	530.7	260.7	144.7	132.9	128.7	120.3	113.5	115.2
77.5°	2510.4	2184.9	704.8	390.2	201.8	116.1	106.0	103.4	96.7	87.5	93.4
80°	1695.5	1536.5	411.2	245.6	127.0	84.9	81.6	80.7	73.2	63.1	63.9
82.5°	1153.9	1132.0	213.6	139.6	73.2	49.6	47.9	49.6	41.2	33.6	33.6
85°	450.8	615.6	100.9	54.7	23.5	7.6	10.9	11.8	6.7	3.4	4.2
87.5°	8.4	63.1	2.5	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: P651847
 CATALOG NUMBER: GALN-SA4A-840-U-SLL

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3
2.5°	3416.1	3408.5	3421.1	3367.3	3378.2	3398.4	3408.5	3414.4	3497.6	3478.3	3531.3
5°	2665.1	2657.6	2706.3	2713.1	2738.3	2733.2	2757.6	2763.5	2793.8	2804.7	2878.7
7.5°	1938.5	1971.3	2026.8	2055.4	2098.3	2111.8	2099.1	2130.3	2067.2	2112.6	2126.0
10°	1557.5	1518.0	1494.5	1560.1	1568.5	1630.7	1605.5	1585.3	1622.3	1624.0	1659.3
12.5°	1296.8	1211.9	1155.5	1174.0	1194.2	1221.1	1225.3	1265.7	1292.6	1317.8	1338.9
15°	1016.8	987.3	936.0	910.8	939.4	950.3	976.4	1010.0	1038.6	1046.2	1074.8
17.5°	780.4	785.5	777.1	761.9	779.6	788.0	789.7	790.5	798.1	793.1	835.1
20°	628.2	645.9	666.9	670.3	676.2	680.4	672.8	644.2	645.0	662.7	676.2
22.5°	568.5	571.9	595.4	603.0	621.5	613.9	592.1	578.6	576.9	581.1	587.9
25°	521.4	526.5	543.3	555.1	569.4	555.9	539.9	527.3	525.6	529.8	536.6
27.5°	479.4	486.9	502.1	513.9	527.3	514.7	499.6	488.6	487.8	486.9	491.1
30°	445.7	454.1	465.1	478.5	487.8	476.8	462.6	456.7	455.8	454.1	455.8
32.5°	412.1	425.5	436.5	443.2	452.5	444.0	433.1	429.8	423.9	418.8	416.3
35°	374.2	388.5	405.4	413.8	423.0	414.6	407.0	392.7	382.7	381.8	383.5
37.5°	352.4	358.3	371.7	386.0	395.3	391.1	376.8	362.5	359.9	359.9	361.6
40°	333.0	335.6	341.4	359.9	376.8	364.2	346.5	342.3	342.3	341.4	342.3
42.5°	313.7	316.2	316.2	330.5	357.4	337.2	323.8	323.8	323.8	324.6	327.1
45°	296.0	296.9	296.0	306.1	331.4	314.5	305.3	307.8	309.5	311.2	312.9
47.5°	280.9	281.7	280.9	289.3	301.9	295.2	290.1	293.5	296.9	299.4	301.1
50°	267.4	266.6	268.3	273.3	279.2	280.9	277.5	282.6	284.3	287.6	291.8
52.5°	255.7	254.8	256.5	259.0	267.4	267.4	267.4	271.6	275.0	278.4	284.3
55°	242.2	243.0	245.6	248.9	259.9	258.2	259.0	262.4	265.8	270.8	274.2
57.5°	229.6	231.3	234.6	239.7	250.6	249.8	250.6	252.3	256.5	259.0	262.4
60°	215.3	218.7	222.9	226.2	237.2	236.3	240.5	243.9	246.4	246.4	248.1
62.5°	201.0	206.0	210.2	212.8	224.5	225.4	231.3	233.8	235.5	233.8	236.3
65°	186.7	194.3	196.0	199.3	211.1	211.9	218.7	224.5	222.9	221.2	225.4
67.5°	172.4	181.7	180.8	185.0	196.8	198.5	204.4	214.5	211.1	209.4	212.8
70°	156.4	163.2	164.0	166.5	182.5	180.0	189.2	198.5	196.0	196.8	196.8
72.5°	138.8	144.7	144.7	149.7	166.5	162.3	169.9	180.0	180.0	179.1	179.1
75°	117.7	121.1	124.5	132.0	149.7	144.7	149.7	158.9	160.6	158.9	158.9
77.5°	95.0	100.1	101.8	111.9	124.5	123.6	128.7	132.9	136.2	134.6	134.6
80°	67.3	72.3	79.1	90.0	97.6	100.1	102.6	106.0	107.6	107.6	109.3
82.5°	37.8	45.4	51.3	62.2	65.6	78.2	77.4	79.9	77.4	68.1	75.7
85°	8.4	16.0	22.7	28.6	32.8	45.4	47.9	53.8	44.6	41.2	41.2
87.5°	0.0	0.0	0.0	0.0	0.0	6.7	13.5	18.5	16.0	13.5	13.5
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: P651847
 CATALOG NUMBER: GALN-SA4A-840-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3	4097.3
2.5°	3575.8	3649.0	3737.3	3889.5	3996.3	4111.6	4227.6	4351.2	4384.0	4417.7
5°	2898.9	3042.7	3121.0	3325.2	3539.7	3812.2	4035.0	4278.9	4380.7	4404.2
7.5°	2195.9	2293.4	2498.6	2705.5	2971.3	3257.1	3598.6	3978.7	4097.3	4146.9
10°	1740.9	1873.7	2053.7	2275.7	2508.7	2816.5	3201.6	3645.7	3813.9	3841.6
12.5°	1481.8	1629.9	1825.8	2060.4	2280.8	2512.9	2901.4	3359.7	3539.7	3599.4
15°	1185.0	1364.1	1590.3	1837.6	2077.3	2331.3	2724.8	3242.0	3449.7	3519.5
17.5°	931.0	1075.6	1320.4	1588.6	1872.9	2194.2	2687.8	3298.3	3554.0	3618.7
20°	712.3	815.8	1021.8	1305.2	1638.3	2058.8	2697.1	3511.1	3817.2	3905.5
22.5°	615.6	668.6	793.9	1063.9	1436.4	1941.0	2734.9	3802.9	4172.1	4319.3
25°	557.6	585.3	656.0	832.6	1243.8	1826.7	2821.6	4195.7	4668.3	4765.9
27.5°	508.0	528.1	571.9	698.9	1068.9	1720.7	2922.5	4631.3	5131.7	5277.2
30°	460.9	487.8	529.0	620.7	957.1	1624.0	3049.5	4984.5	5521.9	5657.3
32.5°	424.7	451.6	489.5	566.0	862.0	1522.2	3125.2	5294.9	5840.7	5955.9
35°	395.3	418.0	457.5	522.3	789.7	1444.8	3110.0	5541.3	6149.3	6267.0
37.5°	374.2	393.6	433.1	481.1	735.0	1364.1	3102.4	5866.7	6525.2	6661.5
40°	354.9	375.1	411.2	454.1	680.4	1269.1	3106.7	6189.7	6925.6	7061.8
42.5°	339.8	362.5	391.9	446.6	624.0	1192.5	3106.7	6470.6	7273.7	7404.9
45°	327.1	351.5	380.1	445.7	579.4	1134.5	3085.6	6711.9	7551.3	7663.1
47.5°	316.2	343.1	384.3	430.6	568.5	1092.5	3067.1	6905.4	7777.5	7882.6
50°	308.6	340.6	408.7	412.9	571.9	1079.8	3156.2	7149.3	7976.8	8067.6
52.5°	302.8	341.4	407.9	386.9	566.0	1088.3	3342.0	7530.2	8253.5	8260.2
55°	291.0	340.6	386.9	357.4	541.6	1102.6	3580.9	8083.6	8686.6	8691.7
57.5°	279.2	331.4	359.1	332.2	492.0	1102.6	3868.5	8607.6	9208.9	9213.1
60°	267.4	344.8	315.4	310.3	427.2	1082.4	4172.1	8838.0	9372.9	9415.7
62.5°	255.7	347.3	281.7	291.0	380.1	1033.6	4398.3	8583.2	9150.8	9212.2
65°	242.2	280.1	259.9	270.8	355.7	952.0	4326.9	8116.4	8733.7	8806.9
67.5°	226.2	237.2	236.3	249.8	347.3	831.7	3950.1	7526.0	8284.6	8280.4
70°	206.9	212.8	215.3	229.6	331.4	738.4	3291.6	6759.9	7685.0	7779.2
72.5°	186.7	191.7	194.3	206.9	315.4	685.4	2555.0	5704.4	6656.4	6803.6
75°	164.8	168.2	171.6	182.5	298.6	607.2	1819.9	4354.6	5098.1	5329.3
77.5°	142.1	142.1	146.3	157.3	251.5	501.2	1221.1	3054.5	3453.9	3690.2
80°	115.2	116.1	114.4	126.2	185.0	343.1	693.8	2040.3	2298.5	2343.9
82.5°	88.3	85.8	86.6	92.5	137.9	233.8	370.0	1267.4	1291.8	1266.5
85°	55.5	55.5	53.8	60.6	88.3	121.9	201.8	776.2	606.4	576.9
87.5°	22.7	18.5	21.0	24.4	42.0	49.6	79.1	159.8	61.4	56.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)