

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: P651352

Luminaire Tested: **GALN-SA4D-840-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651352
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-840-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 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: 22184.7 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

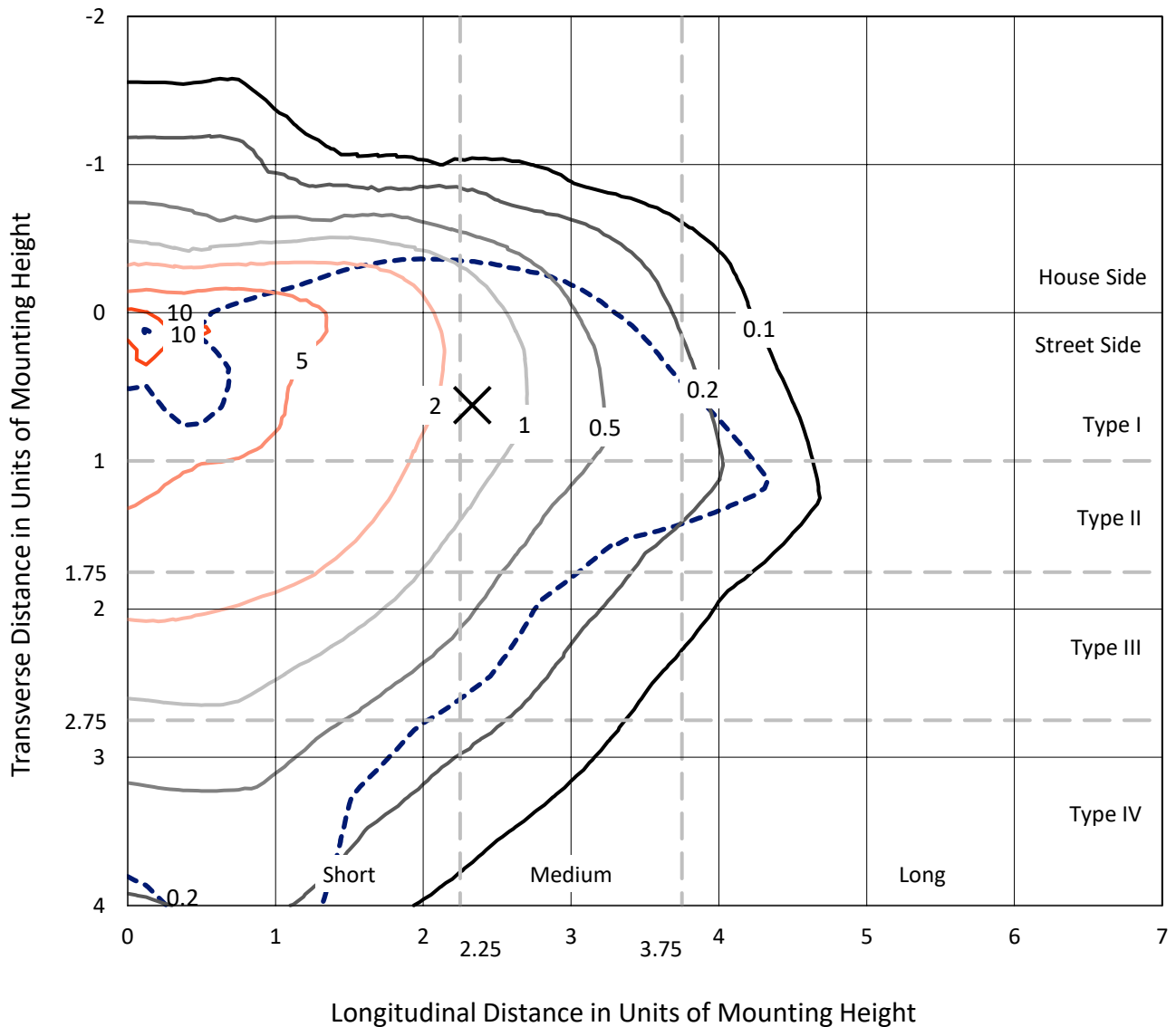
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651352
 CATALOG NUMBER: GALN-SA4D-840-U-SLL

Iso-Footcandle Lines of Horizontal Illumination

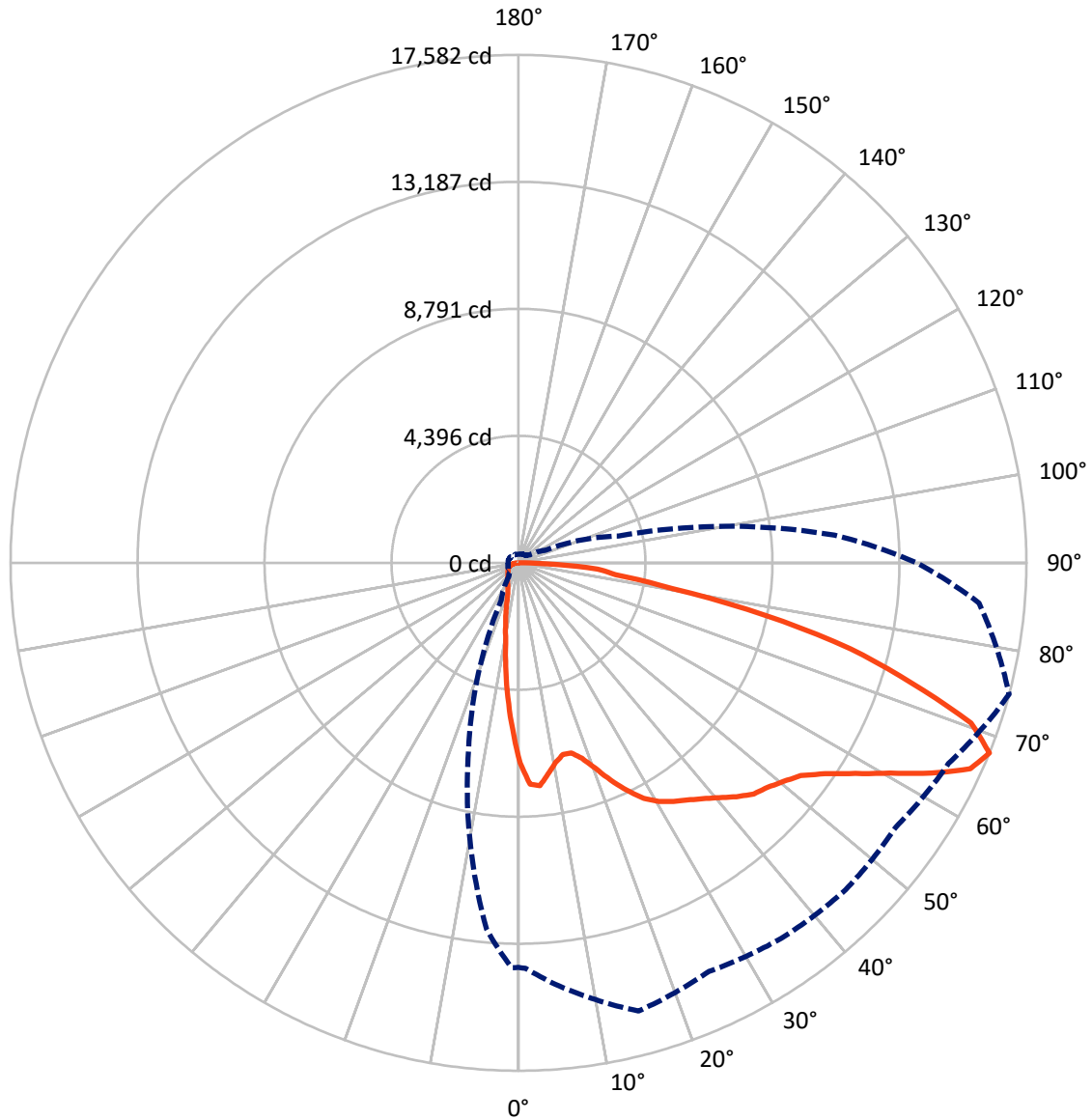
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.7 fc
 Type III - Medium - N/A

REPORT NUMBER: P651352
CATALOG NUMBER: GALN-SA4D-840-U-SLL

Luminous Intensity Polar Plot



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

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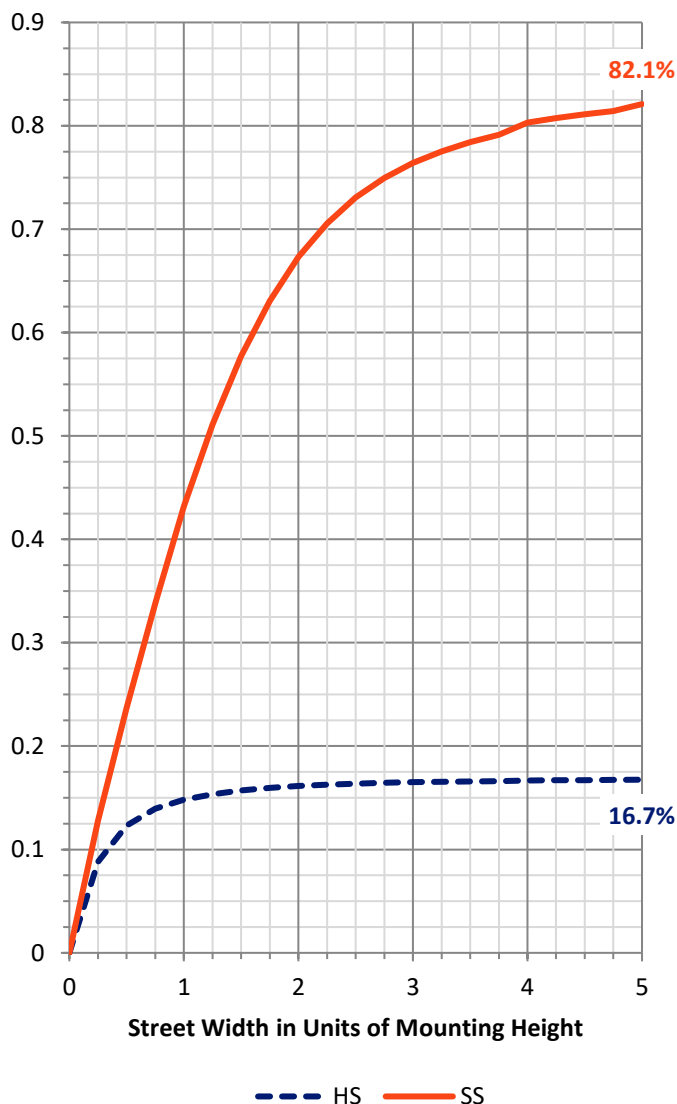
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3749.7	0.0	3749.7
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	18435.0	0.0	18435.0
	% Fixture	83.1	0.0	83.1
Total	Lumens	22184.7	0.0	22184.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	525.7	2.4
10°-20°	1096.4	4.9
20°-30°	1577.7	7.1
30°-40°	2272.3	10.2
40°-50°	3192.0	14.4
50°-60°	4451.7	20.1
60°-70°	5292.7	23.9
70°-80°	3117.1	14.1
80°-90°	659.2	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°	22184.7	100.0
0°-180°	22184.7	100.0

Coefficient of Utilization

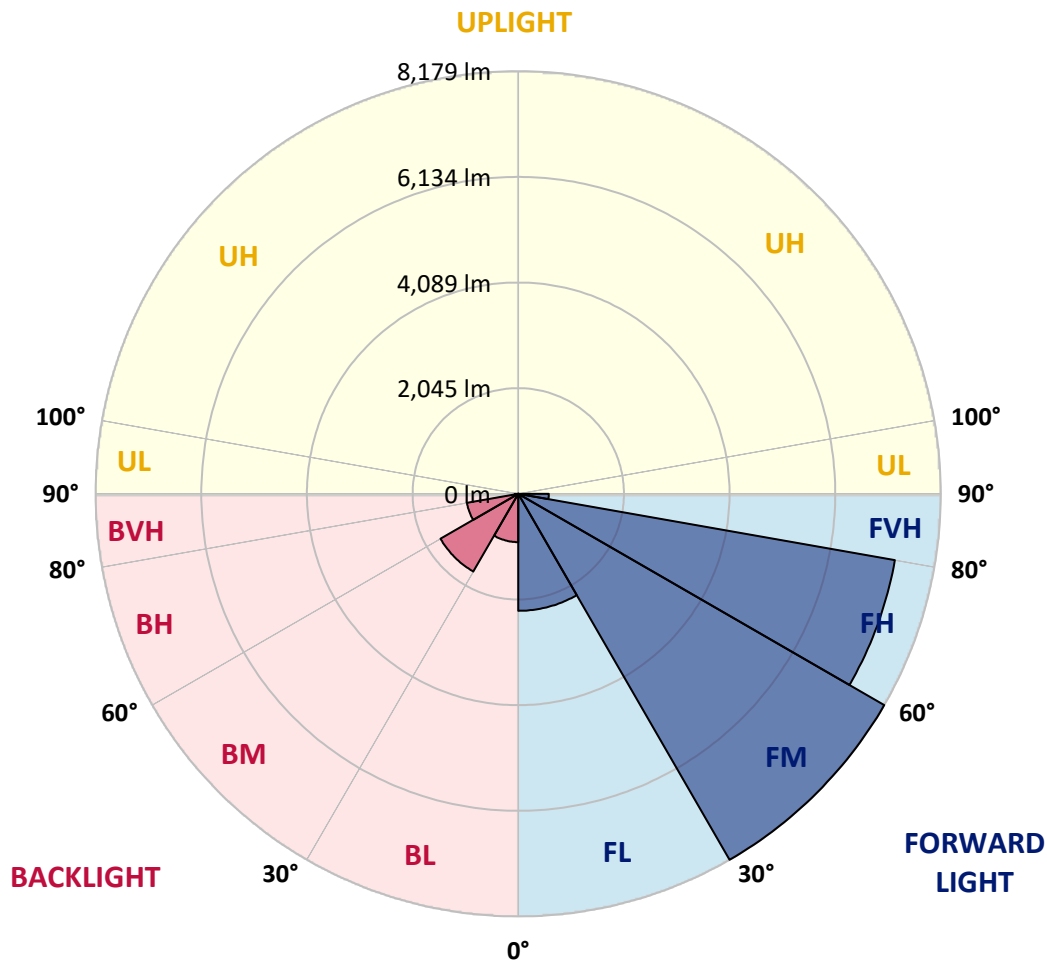


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2264.5	10.2			
FM (30°-60°)	8178.7	36.9			
FH (60°-80°)	7400.9	33.4			G3/7500
FVH (80°-90°)	591.0	2.7			G4/750
BL (0°-30°)	935.3	4.2	B2/1000		
BM (30°-60°)	1737.3	7.8	B2/2500		
BH (60°-80°)	1009.0	4.5	B3/2500		G3/2500
BVH (80°-90°)	68.2	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type III Medium





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 CATALOG NUMBER: GALN-SA4D-840-U-SLL

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0
2.5°	7473.0	7483.0	7547.0	7733.4	7861.4	7908.3	7941.1	7879.9	7820.2	7675.1	7456.0
5°	7450.3	7508.6	7675.1	8093.4	8423.4	8565.7	8608.3	8424.8	8121.8	7749.1	7300.9
7.5°	7014.9	7093.2	7349.3	8050.6	8632.5	8965.4	8921.3	8589.8	8043.5	7379.2	6753.2
10°	6498.6	6585.4	6894.0	7741.9	8491.7	8949.8	8949.8	8545.7	7820.2	7030.6	6309.4
12.5°	6088.8	6179.9	6532.7	7424.7	8198.6	8632.5	8705.0	8357.9	7659.4	6810.1	6017.7
15°	5953.7	6041.9	6421.7	7232.6	7888.5	8153.1	8177.3	8063.4	7581.2	6825.7	6004.9
17.5°	6121.6	6235.3	6619.5	7289.5	7603.9	7619.6	7638.0	7727.7	7589.7	7111.7	6263.9
20°	6606.6	6729.0	7130.2	7473.0	7355.0	7192.8	7202.7	7433.3	7690.7	7584.1	6882.7
22.5°	7306.6	7413.3	7824.4	7796.0	7249.7	6915.4	6845.7	7167.2	7840.1	8173.0	7541.3
25°	8062.0	8187.2	8659.5	8275.4	7279.6	6750.4	6706.3	7010.7	7995.1	8723.5	8302.4
27.5°	8927.0	9049.3	9422.1	8759.1	7436.0	6737.6	6684.9	6996.4	8134.6	9232.8	9029.4
30°	9570.0	9682.4	9935.7	9166.0	7628.1	6822.9	6757.4	7108.9	8254.1	9581.4	9737.9
32.5°	10075.0	10191.7	10329.7	9419.2	7881.3	6977.9	6857.1	7313.8	8410.6	9847.4	10262.8
35°	10601.4	10739.4	10729.5	9644.0	8117.5	7157.2	7039.2	7609.6	8656.7	10079.3	10928.6
37.5°	11268.6	11324.1	11253.0	9846.0	8400.6	7480.2	7414.8	8049.2	9006.7	10359.6	11706.8
40°	11945.8	12056.7	11691.2	10090.7	8744.9	8087.6	8080.5	8699.4	9422.1	10688.2	12460.8
42.5°	12526.2	12620.1	12100.9	10304.1	9161.7	8828.8	8882.9	9571.4	9966.9	11069.5	13066.8
45°	12963.0	13046.9	12479.3	10510.4	9710.9	9685.2	10003.9	10506.1	10654.0	11412.3	13422.4
47.5°	13334.3	13415.4	12742.5	10823.3	10389.5	10708.1	11262.9	11480.6	11241.6	11608.7	13820.8
50°	13647.2	13671.5	12923.1	11196.1	11231.6	11961.5	12499.2	12640.1	11822.0	11890.3	14166.5
52.5°	13973.0	13941.8	13234.7	11665.5	12142.1	13150.8	13542.0	13688.5	12378.3	12237.5	14670.2
55°	14702.9	14732.7	13933.2	12257.3	13062.6	14318.7	14833.7	14692.9	12994.3	12876.2	15310.3
57.5°	15584.9	15559.3	14916.2	13183.5	14000.0	15405.6	15789.8	15563.5	13816.5	13754.0	15959.1
60°	15927.7	15961.8	15738.6	14179.3	14924.8	16357.4	16750.0	16398.7	14802.4	14774.0	16448.4
62.5°	15583.5	15775.5	15926.3	15065.6	15712.9	17057.3	17447.1	17045.9	15831.0	16037.3	16791.2
65°	14897.7	14939.0	15452.5	15816.8	16092.8	17172.5	17376.0	17162.5	16690.2	17188.2	16775.6
67.5°	14007.2	14042.8	14644.5	16062.8	15603.4	15863.7	16006.0	15943.3	16424.2	17582.3	16003.1
70°	13159.3	13130.9	13766.7	15435.5	13583.2	13187.7	13305.8	13109.5	14172.2	16619.1	14488.0
72.5°	11509.1	11611.5	12294.3	13691.4	10755.0	10112.0	10369.5	9861.7	10900.2	14233.4	11759.5
75°	9015.2	9039.4	10178.9	11490.6	8113.2	7098.9	7447.5	7235.5	8349.4	11873.2	8120.4
77.5°	6242.5	6188.4	7413.3	8776.2	5785.8	5196.9	5202.5	5101.5	5829.9	8742.0	5517.0
80°	3964.9	3882.3	4640.6	5421.6	3976.2	4253.7	4114.3	4110.0	3795.6	5393.2	3336.1
82.5°	2142.4	2233.5	2932.1	3398.6	2852.3	3287.7	3013.1	2924.9	2604.8	3375.9	2134.0
85°	975.9	1061.3	1563.5	2311.7	2166.7	2190.8	1463.8	1727.1	2155.3	2741.4	1139.6
87.5°	95.3	122.4	322.9	1091.1	739.7	583.3	217.7	419.7	542.0	974.5	91.1
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: P651352
 CATALOG NUMBER: GALN-SA4D-840-U-SLL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0
2.5°	7366.4	7292.4	7040.6	6832.9	6612.4	6444.5	6225.4	6078.9	5977.9	5825.7	5807.2
5°	7027.8	6847.1	6408.9	5962.3	5576.7	5286.4	4992.0	4721.7	4562.3	4512.6	4448.6
7.5°	6457.3	6152.8	5589.5	5077.4	4634.9	4202.5	3869.5	3633.4	3475.5	3383.0	3272.1
10°	5987.8	5635.0	4949.3	4321.9	3957.7	3688.9	3395.8	3142.6	2947.7	2781.3	2690.2
12.5°	5672.0	5273.7	4502.6	3993.3	3711.7	3425.6	3082.9	2798.3	2511.0	2321.7	2240.7
15°	5576.7	5155.6	4364.6	3829.7	3425.6	3051.6	2667.4	2296.1	2011.6	1832.4	1772.6
17.5°	5810.0	5300.7	4363.2	3612.0	3089.9	2643.3	2151.0	1802.4	1510.9	1377.1	1334.4
20°	6245.4	5579.5	4376.0	3397.2	2725.8	2096.9	1564.8	1278.9	1139.6	1082.6	1061.3
22.5°	6852.8	6004.9	4414.4	3185.3	2327.4	1610.4	1172.3	1027.1	977.3	967.4	963.1
25°	7601.1	6531.3	4543.8	2994.6	1991.7	1229.1	980.2	914.8	886.3	876.3	874.9
27.5°	8289.7	7211.3	4700.3	2831.1	1667.3	1059.8	886.3	830.8	802.4	801.0	803.7
30°	8911.3	7780.3	4831.2	2647.5	1421.2	941.8	825.1	769.6	742.6	741.2	749.8
32.5°	9449.1	8248.4	4928.0	2466.8	1284.6	869.3	769.6	709.9	687.1	682.9	687.1
35°	10023.8	8715.0	4883.9	2326.0	1206.4	809.5	728.4	670.0	643.0	630.2	630.2
37.5°	10679.7	9195.8	4808.5	2209.3	1170.8	759.7	692.8	635.9	608.9	596.1	594.7
40°	11395.2	9676.7	4704.6	2105.5	1135.3	729.8	668.6	608.9	576.2	563.4	560.5
42.5°	12026.9	10087.9	4619.3	2037.2	1076.9	735.5	647.3	589.0	547.7	530.7	529.2
45°	12576.1	10501.8	4603.6	1997.4	1028.5	727.0	641.6	573.3	525.0	506.5	503.6
47.5°	13005.6	10932.9	4693.3	1974.6	975.9	681.5	678.6	563.4	505.0	485.1	482.2
50°	13529.2	11544.6	4898.1	1927.7	927.5	638.7	717.0	562.0	489.4	463.8	456.7
52.5°	14226.3	12341.3	5175.5	1843.7	857.8	599.0	684.3	562.0	470.9	445.3	436.7
55°	15280.5	13357.0	5447.2	1725.6	759.7	546.3	617.4	544.9	443.9	421.1	415.4
57.5°	15978.9	14099.6	5620.8	1562.1	637.3	507.9	532.1	517.8	416.8	392.7	392.7
60°	16014.5	14298.9	5538.3	1355.8	560.5	472.3	462.4	522.1	392.7	367.0	364.2
62.5°	15604.8	13810.9	5108.7	1170.8	519.2	433.9	418.2	458.1	368.4	342.9	338.6
65°	14964.6	12566.1	4363.2	1082.6	496.5	399.7	377.0	375.6	342.9	318.7	312.9
67.5°	13788.1	10981.3	3585.0	1031.4	485.1	361.4	340.0	332.9	312.9	293.1	290.2
70°	12053.9	9197.3	2875.1	1010.0	479.5	321.5	304.4	295.9	278.9	263.1	261.8
72.5°	9378.0	7460.3	2373.0	995.8	476.6	284.5	266.0	254.7	244.7	230.4	230.4
75°	6736.2	5488.5	1811.0	897.7	441.0	244.7	224.8	217.7	203.4	192.1	194.9
77.5°	4246.5	3695.9	1192.2	660.1	341.4	196.3	179.2	175.0	163.6	147.9	157.9
80°	2868.0	2599.1	695.7	415.4	214.8	143.7	138.0	136.6	123.8	106.7	108.2
82.5°	1951.9	1914.9	361.4	236.2	123.8	83.9	81.1	83.9	69.7	56.9	56.9
85°	762.5	1041.3	170.7	92.5	39.9	12.8	18.5	19.9	11.4	5.7	7.1
87.5°	14.2	106.7	4.3	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: P651352
 CATALOG NUMBER: GALN-SA4D-840-U-SLL

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0
2.5°	5778.7	5765.9	5787.3	5696.2	5714.7	5748.8	5765.9	5775.9	5916.7	5884.0	5973.6
5°	4508.3	4495.5	4578.0	4589.4	4632.1	4623.6	4664.8	4674.8	4726.0	4744.5	4869.6
7.5°	3279.1	3334.6	3428.5	3476.9	3549.4	3572.2	3550.9	3603.5	3496.8	3573.7	3596.4
10°	2634.7	2567.8	2528.0	2639.0	2653.2	2758.5	2715.8	2681.6	2744.3	2747.1	2806.8
12.5°	2193.7	2050.0	1954.7	1986.0	2020.2	2065.7	2072.7	2141.0	2186.6	2229.2	2264.8
15°	1719.9	1670.1	1583.4	1540.7	1589.1	1607.6	1651.6	1708.6	1756.9	1769.7	1818.2
17.5°	1320.2	1328.7	1314.5	1288.9	1318.8	1333.0	1335.8	1337.3	1350.1	1341.6	1412.6
20°	1062.7	1092.5	1128.1	1133.8	1143.8	1150.9	1138.1	1089.8	1091.1	1121.1	1143.8
22.5°	961.7	967.4	1007.2	1020.0	1051.3	1038.6	1001.5	978.8	975.9	983.0	994.4
25°	882.0	890.5	919.0	938.9	963.1	940.3	913.3	892.0	889.1	896.3	907.6
27.5°	810.9	823.7	849.3	869.3	892.0	870.7	845.0	826.5	825.1	823.7	830.8
30°	754.0	768.3	786.7	809.5	825.1	806.6	782.5	772.5	771.0	768.3	771.0
32.5°	697.1	719.8	738.3	749.8	765.4	751.2	732.7	727.0	717.0	708.5	704.2
35°	633.1	657.2	685.7	700.0	715.6	701.4	688.5	664.4	647.3	645.9	648.7
37.5°	596.1	606.0	628.8	653.0	668.6	661.5	637.3	613.2	608.9	608.9	611.7
40°	563.4	567.6	577.6	608.9	637.3	616.0	586.1	579.0	579.0	577.6	579.0
42.5°	530.7	534.9	534.9	559.1	604.6	570.5	547.7	547.7	547.7	549.2	553.4
45°	500.7	502.2	500.7	517.8	560.5	532.1	516.4	520.7	523.5	526.4	529.2
47.5°	475.2	476.6	475.2	489.4	510.7	499.3	490.8	496.5	502.2	506.5	509.3
50°	452.4	450.9	453.8	462.4	472.3	475.2	469.4	478.0	480.9	486.5	493.7
52.5°	432.4	431.1	433.9	438.2	452.4	452.4	452.4	459.5	465.2	470.9	480.9
55°	409.7	411.2	415.4	421.1	439.6	436.7	438.2	443.9	449.5	458.1	463.8
57.5°	388.4	391.2	397.0	405.4	423.9	422.5	423.9	426.8	433.9	438.2	443.9
60°	364.2	369.9	377.0	382.7	401.2	399.7	406.9	412.6	416.8	416.8	419.7
62.5°	340.0	348.5	355.7	359.9	379.9	381.2	391.2	395.5	398.3	395.5	399.7
65°	315.8	328.7	331.4	337.2	357.1	358.5	369.9	379.9	377.0	374.2	381.2
67.5°	291.7	307.3	305.9	312.9	332.9	335.7	345.7	362.8	357.1	354.2	359.9
70°	264.6	276.0	277.4	281.7	308.7	304.4	320.1	335.7	331.4	332.9	332.9
72.5°	234.7	244.7	244.7	253.2	281.7	274.6	287.4	304.4	304.4	303.0	303.0
75°	199.1	204.9	210.6	223.4	253.2	244.7	253.2	268.9	271.7	268.9	268.9
77.5°	160.7	169.3	172.2	189.2	210.6	209.2	217.7	224.8	230.4	227.7	227.7
80°	113.8	122.4	133.7	152.2	165.0	169.3	173.6	179.2	182.1	182.1	184.9
82.5°	64.0	76.8	86.8	105.3	110.9	132.3	130.9	135.1	130.9	115.2	128.0
85°	14.2	27.0	38.4	48.4	55.5	76.8	81.1	91.1	75.4	69.7	69.7
87.5°	0.0	0.0	0.0	0.0	0.0	11.4	22.8	31.3	27.0	22.8	22.8
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: P651352
 CATALOG NUMBER: GALN-SA4D-840-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0	6931.0
2.5°	6049.0	6172.8	6322.1	6579.6	6760.3	6955.2	7151.5	7360.7	7416.2	7473.0
5°	4903.8	5147.1	5279.4	5625.0	5987.8	6448.8	6825.7	7238.3	7410.5	7450.3
7.5°	3714.4	3879.5	4226.6	4576.6	5026.2	5509.8	6087.4	6730.4	6931.0	7014.9
10°	2944.8	3169.6	3474.1	3849.6	4243.7	4764.3	5416.0	6167.1	6451.6	6498.6
12.5°	2506.7	2757.1	3088.5	3485.4	3858.2	4250.8	4908.1	5683.4	5987.8	6088.8
15°	2004.4	2307.5	2690.2	3108.4	3513.9	3943.5	4609.3	5484.2	5835.6	5953.7
17.5°	1574.9	1819.5	2233.5	2687.3	3168.2	3711.7	4546.7	5579.5	6012.1	6121.6
20°	1205.0	1379.9	1728.5	2207.9	2771.3	3482.6	4562.3	5939.5	6457.3	6606.6
22.5°	1041.3	1131.0	1343.0	1799.7	2429.8	3283.4	4626.3	6433.1	7057.7	7306.6
25°	943.2	990.1	1109.6	1408.4	2104.1	3089.9	4772.9	7097.5	7897.0	8062.0
27.5°	859.2	893.4	967.4	1182.2	1808.2	2910.7	4943.7	7834.4	8680.9	8927.0
30°	779.6	825.1	894.8	1049.9	1618.9	2747.1	5158.4	8432.0	9341.0	9570.0
32.5°	718.5	764.0	828.0	957.4	1458.2	2575.0	5286.4	8956.8	9880.2	10075.0
35°	668.6	707.0	773.9	883.5	1335.8	2444.1	5260.9	9373.7	10402.2	10601.4
37.5°	633.1	665.8	732.7	813.8	1243.3	2307.5	5248.1	9924.2	11038.1	11268.6
40°	600.4	634.5	695.7	768.3	1150.9	2146.7	5255.2	10470.5	11715.3	11945.8
42.5°	574.7	613.2	663.0	755.4	1055.6	2017.3	5255.2	10945.7	12304.3	12526.2
45°	553.4	594.7	643.0	754.0	980.2	1919.2	5219.6	11354.0	12773.8	12963.0
47.5°	534.9	580.5	650.2	728.4	961.7	1848.0	5188.3	11681.2	13156.4	13334.3
50°	522.1	576.2	691.4	698.5	967.4	1826.7	5339.1	12093.7	13493.6	13647.2
52.5°	512.2	577.6	690.0	654.4	957.4	1840.9	5653.5	12738.2	13961.7	13973.0
55°	492.2	576.2	654.4	604.6	916.2	1865.1	6057.6	13674.3	14694.3	14702.9
57.5°	472.3	560.5	607.5	562.0	832.3	1865.1	6544.1	14560.6	15577.8	15584.9
60°	452.4	583.3	533.4	525.0	722.7	1830.9	7057.7	14950.4	15855.2	15927.7
62.5°	432.4	587.5	476.6	492.2	643.0	1748.4	7440.3	14519.4	15479.6	15583.5
65°	409.7	473.7	439.6	458.1	601.7	1610.4	7319.4	13729.7	14774.0	14897.7
67.5°	382.7	401.2	399.7	422.5	587.5	1407.0	6682.1	12731.1	14014.3	14007.2
70°	349.9	359.9	364.2	388.4	560.5	1249.1	5568.2	11435.1	12999.9	13159.3
72.5°	315.8	324.4	328.7	349.9	533.4	1159.4	4321.9	9649.7	11260.1	11509.1
75°	278.9	284.5	290.2	308.7	505.0	1027.1	3078.6	7366.4	8624.0	9015.2
77.5°	240.4	240.4	247.5	266.0	425.4	847.9	2065.7	5167.0	5842.8	6242.5
80°	194.9	196.3	193.5	213.4	312.9	580.5	1173.7	3451.3	3888.0	3964.9
82.5°	149.4	145.1	146.5	156.5	233.3	395.5	626.0	2143.9	2185.2	2142.4
85°	93.9	93.9	91.1	102.4	149.4	206.3	341.4	1313.1	1025.7	975.9
87.5°	38.4	31.3	35.6	41.3	71.1	83.9	133.7	270.3	103.9	95.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)