

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: P651243

Luminaire Tested: **GALN-SA2D-840-U-SLR-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651243
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA2D-840-U-SLR-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7233.4 lumens
Efficiency: N/A
Efficacy: 57.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

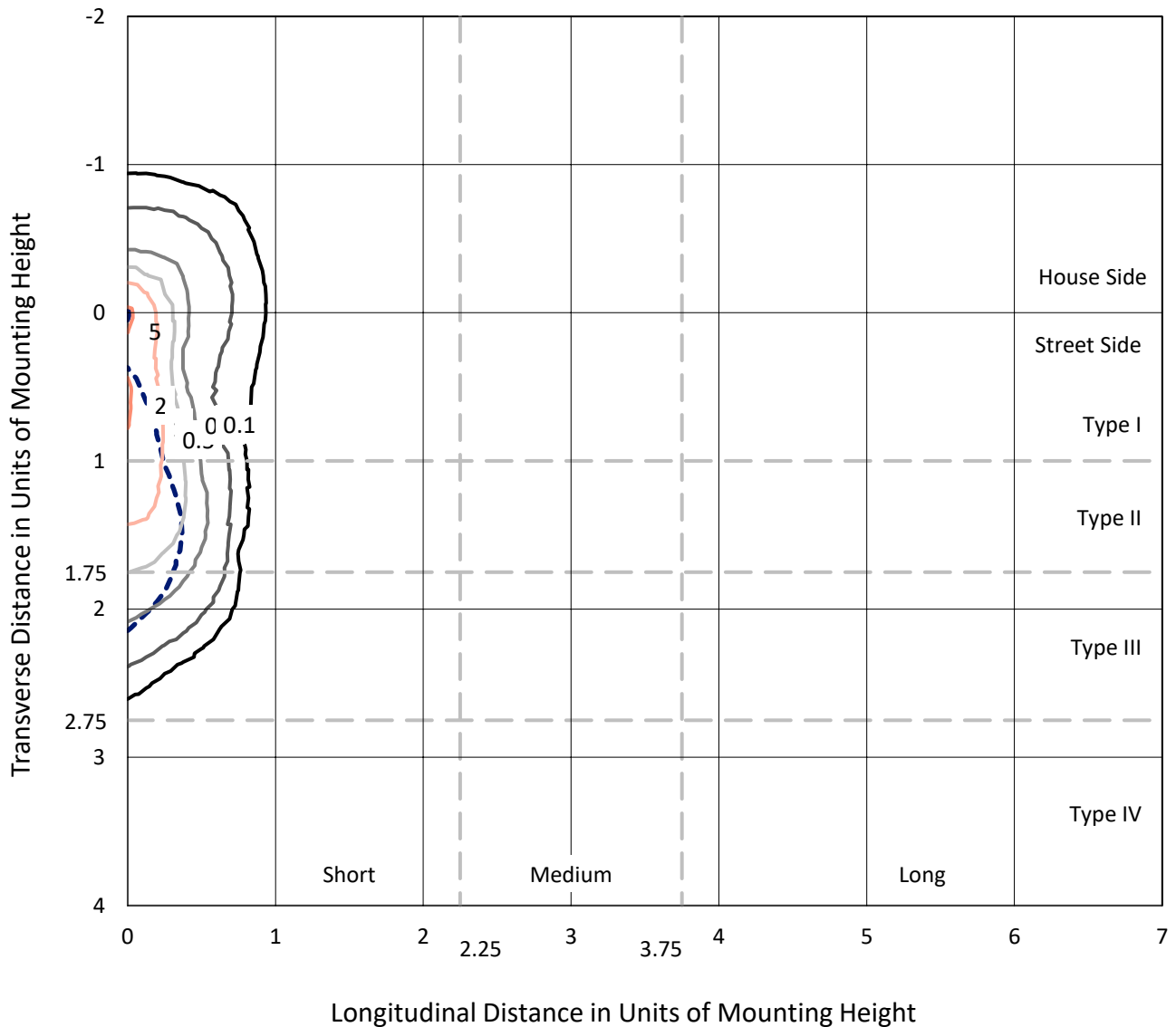
Input Watts (W): 125
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

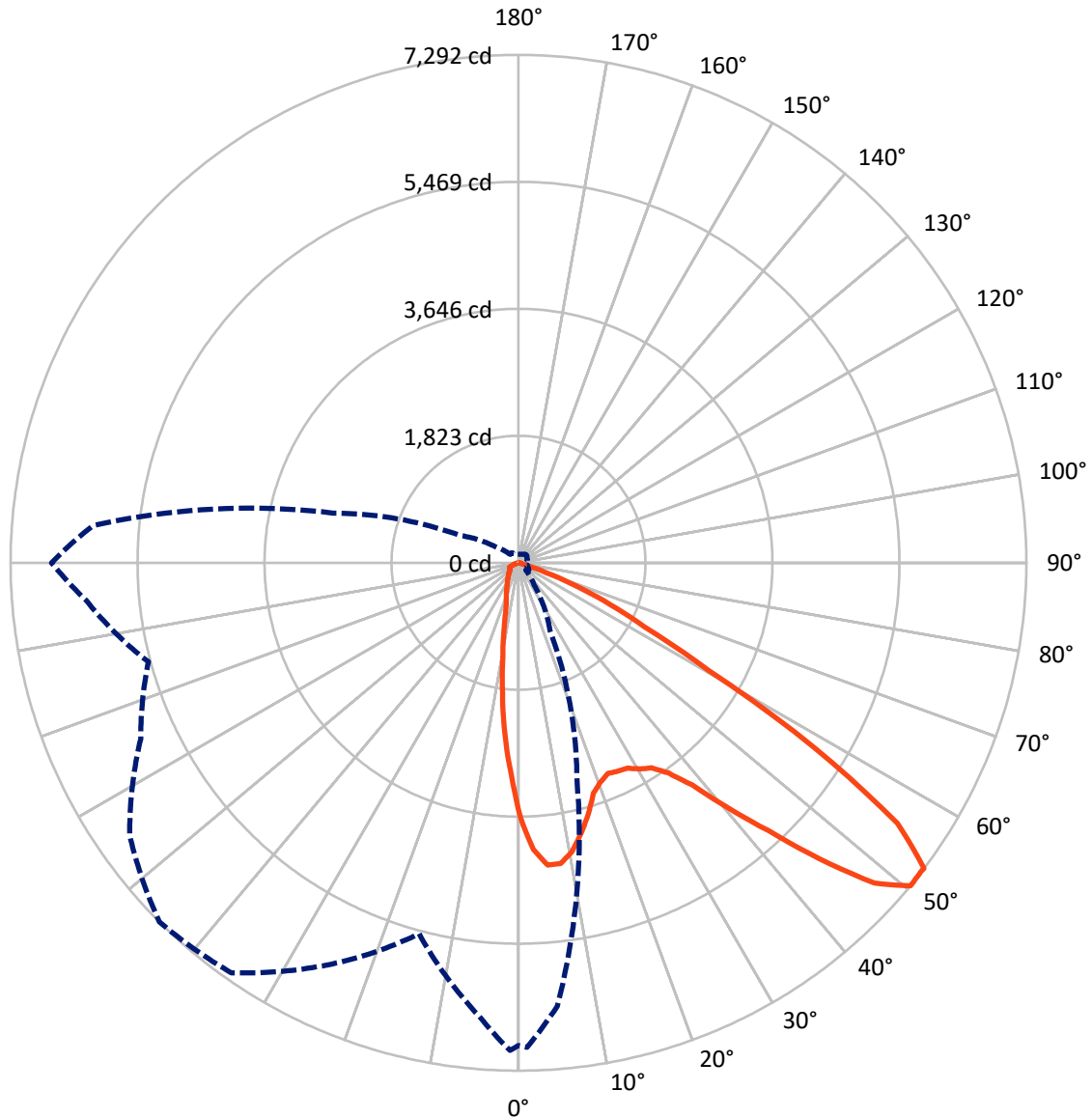
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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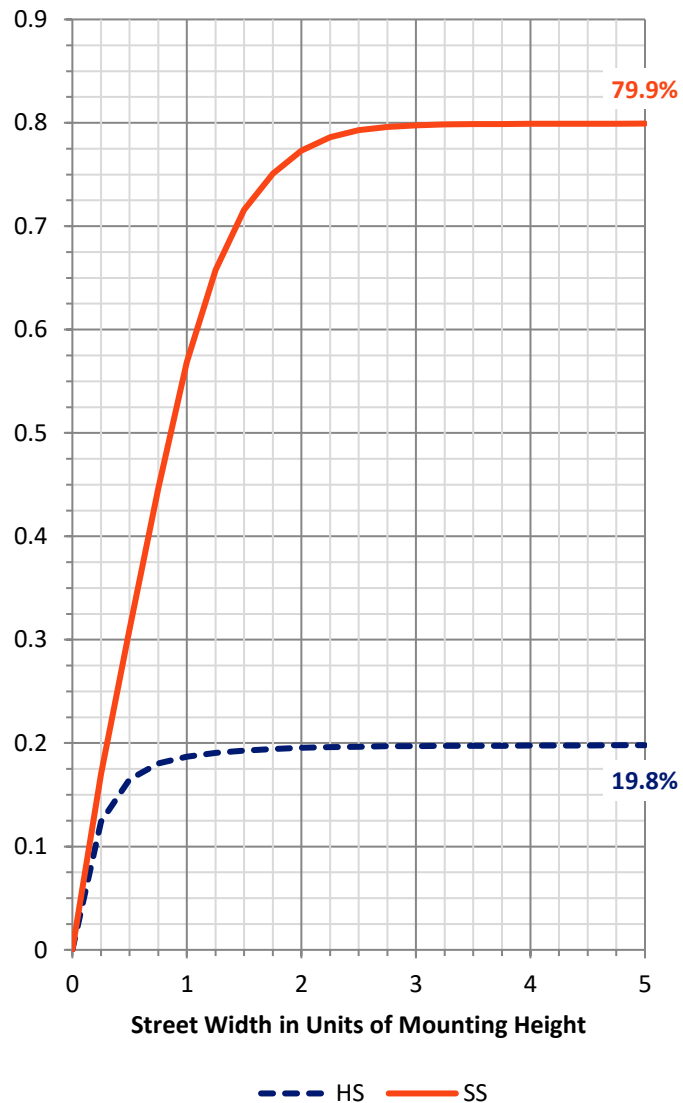
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1448.9	0.0	1448.9
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	5784.6	0.0	5784.6
	% Fixture	80.0	0.0	80.0
Total	Lumens	7233.4	0.0	7233.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.4	3.7
10°-20°	531.4	7.3
20°-30°	798.3	11.0
30°-40°	1198.3	16.6
40°-50°	1684.1	23.3
50°-60°	1816.6	25.1
60°-70°	843.4	11.7
70°-80°	79.4	1.1
80°-90°	14.6	0.2
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°	7233.4	100.0
0°-180°	7233.4	100.0

Coefficient of Utilization



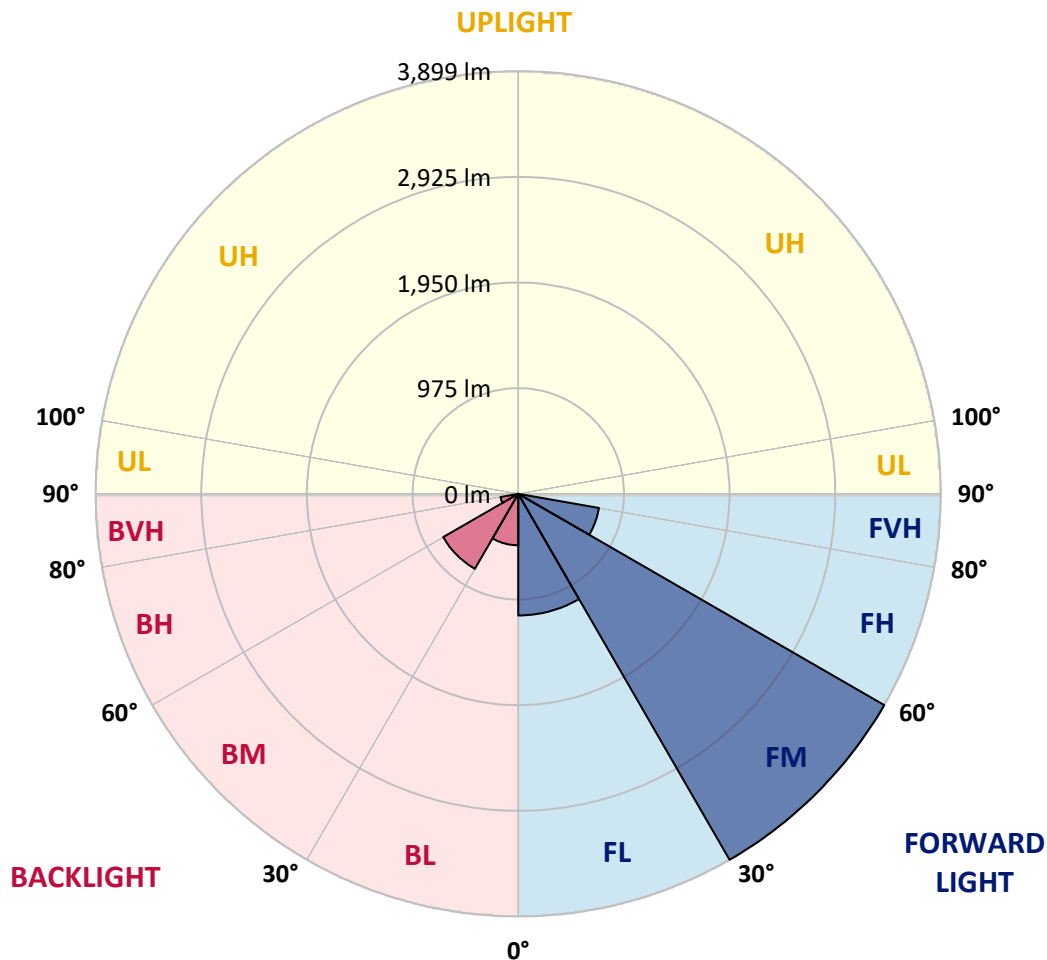
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1122.2	15.5			
FM (30°-60°)	3899.4	53.9			
FH (60°-80°)	756.4	10.5			G1/1800
FVH (80°-90°)	6.6	0.1			G0/10
BL (0°-30°)	474.9	6.6	B1/500		
BM (30°-60°)	799.6	11.1	B1/1000		
BH (60°-80°)	166.4	2.3	B1/500		G1/500
BVH (80°-90°)	8.0	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3
2.5°	3813.2	3754.4	3679.7	3618.1	3526.1	3341.0	3290.8	3230.5	3180.3	3112.9	3018.2
5°	3467.4	3448.7	3414.2	3181.8	3013.8	2789.9	2606.3	2528.7	2426.9	2343.6	2283.3
7.5°	3203.3	3128.7	3019.6	2785.6	2517.3	2277.6	2073.8	1954.7	1819.8	1773.8	1692.1
10°	2920.5	2937.8	2777.1	2448.4	2124.0	1930.3	1804.0	1689.1	1567.2	1486.8	1370.6
12.5°	2830.1	2774.1	2650.7	2244.6	1967.6	1786.8	1633.2	1491.1	1362.0	1232.8	1120.9
15°	2889.0	2802.9	2630.6	2201.6	1847.1	1621.7	1429.4	1237.1	1118.0	952.9	836.7
17.5°	3099.9	3031.0	2800.0	2247.5	1785.4	1463.8	1178.2	980.2	797.9	648.7	589.9
20°	3451.5	3354.0	3064.1	2306.3	1693.5	1273.0	955.8	711.8	539.6	476.5	443.5
22.5°	3796.0	3742.9	3377.0	2419.6	1611.7	1103.6	717.5	479.4	403.3	391.8	370.3
25°	4451.8	4292.5	3854.8	2624.9	1548.5	944.4	541.0	386.0	341.5	333.0	335.8
27.5°	4842.2	4708.8	4296.8	2761.3	1478.2	822.3	457.8	354.5	324.4	305.7	298.6
30°	5216.8	5061.8	4516.4	2841.7	1327.5	693.2	406.1	340.1	333.0	305.7	297.0
32.5°	5505.3	5353.1	4833.6	2962.2	1265.8	610.0	334.4	265.5	246.8	244.0	269.8
35°	5947.3	5785.2	5104.9	3028.2	1218.4	566.9	289.9	236.8	215.3	206.6	208.1
37.5°	6359.2	6248.7	5356.0	3054.0	1168.2	554.0	259.8	212.4	193.8	188.0	186.5
40°	6703.6	6456.8	5594.2	3081.3	1146.7	529.6	241.1	193.8	180.8	172.2	172.2
42.5°	6861.5	6610.3	5861.2	3065.5	1141.0	490.8	241.1	178.0	167.9	159.3	157.9
45°	6827.1	6725.1	5980.3	3058.3	1141.0	452.0	219.6	173.7	159.3	147.8	145.0
47.5°	6916.0	6782.6	6129.5	3088.5	1118.0	424.8	185.1	182.2	150.7	136.3	133.5
50°	6931.9	6957.7	6389.3	3244.9	1067.7	390.4	145.0	179.4	145.0	123.5	120.5
52°	7035.1	6874.4	6468.3	3328.2	1014.7	364.5	122.0	153.6	139.2	114.8	111.9
52.5°	6893.1	6997.9	6486.9	3358.3	1020.4	347.3	117.7	150.7	136.3	114.8	107.6
55°	6733.8	6834.2	6410.9	3422.9	935.7	272.7	91.8	109.1	123.5	100.5	96.1
57.5°	5852.6	5954.4	5571.3	3134.4	762.0	192.3	76.0	81.8	109.1	93.3	89.0
60°	5202.4	5129.3	4675.7	2614.8	541.0	107.6	60.3	63.2	119.1	86.1	84.7
62.5°	4754.7	4598.3	3908.0	2019.2	330.1	71.7	47.3	48.8	91.8	80.4	80.4
65°	3517.6	3342.5	2596.2	1221.3	162.1	50.2	35.9	38.8	57.4	68.9	68.9
67.5°	2007.8	1940.4	1254.4	551.1	67.4	31.5	27.2	30.1	44.5	56.0	53.1
70°	922.8	828.0	482.2	116.2	31.5	21.5	21.5	24.4	35.9	41.6	38.8
72.5°	269.8	255.5	117.7	18.7	13.0	13.0	14.4	18.7	27.2	31.5	28.7
75°	20.1	13.0	8.6	5.7	5.7	8.6	11.5	18.7	27.2	30.1	24.4
77.5°	1.4	2.9	1.4	1.4	4.3	8.6	13.0	23.0	35.9	37.3	27.2
80°	1.4	1.4	0.0	1.4	4.3	8.6	14.4	25.8	40.2	43.1	23.0
82.5°	0.0	0.0	0.0	1.4	5.7	11.5	17.2	27.2	37.3	45.9	24.4
85°	0.0	0.0	0.0	1.4	8.6	15.8	20.1	7.1	4.3	0.0	0.0
87.5°	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3
2.5°	3085.6	3048.3	3033.9	3046.9	3042.6	3038.2	3117.2	3099.9	3097.1	3122.9	3117.2
5°	2316.4	2250.3	2431.2	2358.0	2434.0	2479.9	2488.6	2492.9	2546.0	2490.0	2563.2
7.5°	1650.5	1667.6	1666.2	1715.1	1802.6	1880.1	1926.0	1890.1	1887.2	1880.1	1848.5
10°	1318.9	1288.7	1283.0	1271.6	1298.8	1364.9	1420.8	1376.3	1344.8	1387.8	1374.9
12.5°	1077.8	1036.2	1013.2	967.3	968.7	1013.2	1013.2	1013.2	1044.8	1069.2	1087.8
15°	826.6	792.2	792.2	746.3	736.2	737.6	760.6	763.5	813.8	828.0	835.3
17.5°	578.4	559.7	581.2	599.9	588.4	591.3	599.9	602.7	610.0	604.2	618.6
20°	444.9	442.0	447.7	480.8	505.2	519.5	509.5	495.1	486.5	466.4	466.4
22.5°	377.4	383.2	393.3	420.5	452.0	460.7	449.2	416.2	390.4	387.5	389.0
25°	335.8	341.5	357.3	374.6	391.8	406.1	394.7	370.3	355.9	343.0	343.0
27.5°	310.0	312.9	321.5	334.4	348.8	360.2	355.9	343.0	327.2	321.5	308.6
30°	289.9	294.2	304.3	307.1	320.0	325.8	318.6	315.7	305.7	298.6	294.2
32.5°	279.9	278.5	285.6	288.5	289.9	294.2	285.6	289.9	288.5	277.0	272.7
35°	211.0	222.4	241.1	256.9	261.2	266.9	265.5	259.8	244.0	231.0	215.3
37.5°	189.5	196.6	206.6	219.6	236.8	244.0	241.1	226.7	208.1	199.5	196.6
40°	175.1	179.4	188.0	196.6	213.9	226.7	216.7	203.8	189.5	182.2	178.0
42.5°	162.1	163.6	167.9	176.5	189.5	209.5	192.3	175.1	169.4	165.0	162.1
45°	147.8	147.8	153.6	157.9	172.2	190.9	173.7	157.9	155.0	152.1	150.7
47.5°	136.3	137.8	140.6	146.4	157.9	170.8	159.3	146.4	139.2	137.8	134.9
50°	122.0	123.5	129.2	134.9	149.3	156.4	149.3	134.9	127.7	123.5	123.5
52°	110.5	114.8	120.5	132.0	142.0	153.6	145.0	129.2	120.5	116.2	113.4
52.5°	109.1	111.9	117.7	130.6	142.0	152.1	143.5	127.7	117.7	114.8	111.9
55°	97.6	101.9	111.9	127.7	140.6	152.1	140.6	126.3	111.9	104.8	101.9
57.5°	93.3	96.1	109.1	129.2	139.2	152.1	140.6	126.3	111.9	99.0	96.1
60°	89.0	94.7	109.1	124.9	137.8	153.6	142.0	124.9	109.1	93.3	93.3
62.5°	84.7	89.0	107.6	122.0	132.0	147.8	136.3	122.0	104.8	89.0	87.5
65°	73.2	80.4	94.7	101.9	113.4	127.7	116.2	106.2	91.8	79.0	77.5
67.5°	56.0	58.9	70.3	79.0	86.1	99.0	93.3	80.4	70.3	60.3	60.3
70°	38.8	41.6	50.2	54.5	61.7	68.9	64.6	54.5	47.3	41.6	40.2
72.5°	27.2	28.7	31.5	34.5	37.3	40.2	38.8	31.5	27.2	25.8	24.4
75°	21.5	24.4	25.8	24.4	23.0	21.5	21.5	18.7	15.8	14.4	14.4
77.5°	21.5	23.0	21.5	18.7	15.8	14.4	13.0	11.5	8.6	7.1	8.6
80°	18.7	18.7	18.7	15.8	14.4	13.0	11.5	10.0	8.6	7.1	7.1
82.5°	20.1	20.1	18.7	15.8	15.8	13.0	13.0	11.5	10.0	7.1	7.1
85°	0.0	0.0	0.0	2.9	7.1	13.0	13.0	11.5	10.0	8.6	8.6
87.5°	0.0	0.0	0.0	0.0	1.4	2.9	5.7	7.1	8.6	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3
2.5°	3168.8	3223.4	3326.7	3430.0	3493.2	3567.8	3702.7	3774.5	3867.8	3913.7	4004.1
5°	2553.1	2682.3	2728.2	2845.9	2972.2	3098.5	3299.4	3520.4	3704.2	3830.4	3994.1
7.5°	1862.8	1893.0	2071.0	2149.8	2356.6	2586.2	2860.2	3138.7	3371.1	3577.9	3702.7
10°	1396.4	1506.9	1618.8	1769.5	1936.1	2172.8	2435.5	2742.6	3044.0	3250.6	3408.5
12.5°	1122.3	1209.9	1359.1	1521.3	1726.5	1882.9	2147.0	2451.3	2841.7	3044.0	3252.1
15°	849.6	961.5	1130.9	1298.8	1515.6	1680.6	1947.5	2330.7	2833.0	3111.4	3290.8
17.5°	630.0	706.1	858.2	1046.2	1267.2	1499.8	1860.0	2317.8	2929.1	3260.6	3445.8
20°	482.2	508.0	604.2	772.1	1011.8	1316.1	1717.9	2373.7	3213.3	3623.8	3811.7
22.5°	390.4	401.8	439.2	555.4	787.9	1155.3	1650.5	2412.5	3533.4	4058.7	4309.8
25°	340.1	337.2	361.6	411.9	615.7	1004.6	1564.3	2558.9	3925.2	4569.6	4794.9
27.5°	310.0	310.0	321.5	357.3	510.9	907.0	1509.8	2663.6	4319.8	5018.8	5140.8
30°	294.2	297.0	330.1	341.5	424.8	790.8	1419.4	2769.8	4697.2	5305.8	5473.7
32.5°	272.7	261.2	254.0	282.7	357.3	686.0	1328.9	2814.3	5002.9	5657.4	5800.9
35°	209.5	203.8	212.4	234.0	307.1	597.0	1228.5	2864.6	5354.6	6065.0	6093.7
37.5°	189.5	188.0	193.8	212.4	258.4	519.5	1156.7	2851.7	5622.9	6402.3	6324.7
40°	175.1	175.1	179.4	195.2	231.0	465.0	1082.1	2840.1	5882.7	6781.2	6554.3
42.5°	163.6	163.6	170.8	180.8	219.6	429.1	1026.1	2824.4	6100.9	7013.6	6689.3
45°	147.8	152.1	163.6	173.7	222.4	404.7	984.6	2764.1	6175.5	7010.7	6624.7
47.5°	136.3	142.0	153.6	167.9	200.9	397.5	955.8	2711.0	6149.6	6838.5	6422.3
50°	123.5	130.6	146.4	170.8	170.8	383.2	925.7	2758.4	6131.0	6705.0	6228.6
52°	114.8	120.5	140.6	166.5	149.3	353.1	907.0	2850.2	6207.1	6687.8	6142.5
52.5°	113.4	117.7	136.3	163.6	142.0	347.3	894.1	2871.8	6231.5	6644.8	6201.3
55°	100.5	106.2	124.9	127.7	116.2	285.6	852.5	2920.5	6110.9	6560.1	6145.4
57.5°	94.7	97.6	110.5	104.8	100.5	215.3	733.4	2844.5	5427.7	5826.8	5717.7
60°	87.5	90.4	103.4	81.8	84.7	150.7	551.1	2469.9	4358.6	4855.2	5051.7
62.5°	84.7	83.3	97.6	66.0	71.7	109.1	389.0	2007.8	3358.3	3996.9	4337.0
65°	74.6	73.2	70.3	56.0	61.7	84.7	232.5	1310.3	2366.6	3023.9	3210.4
67.5°	57.4	60.3	51.6	44.5	51.6	66.0	129.2	587.0	1241.4	1814.0	1964.7
70°	40.2	43.1	41.6	38.8	45.9	54.5	74.6	200.9	513.8	952.9	1050.6
72.5°	24.4	30.1	31.5	33.0	40.2	47.3	53.1	64.6	136.3	337.2	419.1
75°	14.4	20.1	24.4	28.7	33.0	40.2	44.5	45.9	47.3	63.2	101.9
77.5°	10.0	14.4	21.5	27.2	33.0	40.2	47.3	50.2	47.3	44.5	47.3
80°	8.6	14.4	20.1	25.8	34.5	41.6	47.3	47.3	45.9	40.2	43.1
82.5°	8.6	14.4	21.5	27.2	33.0	40.2	45.9	47.3	43.1	40.2	41.6
85°	10.0	15.8	23.0	28.7	35.9	33.0	30.1	24.4	23.0	18.7	20.1
87.5°	10.0	14.4	14.4	15.8	17.2	17.2	17.2	15.8	13.0	11.5	11.5
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: P651243

CATALOG NUMBER: GALN-SA2D-840-U-SLR-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3	3668.3
2.5°	4008.4	4123.2	4118.9	4121.7	4104.6	3988.3	3932.3	3790.2	3830.4	3813.2
5°	4161.9	4275.3	4372.9	4361.4	4229.4	4071.5	3837.7	3616.6	3556.3	3467.4
7.5°	4008.4	4281.1	4371.5	4358.6	4163.4	3961.0	3587.9	3366.9	3262.2	3203.3
10°	3764.4	4080.2	4192.1	4215.1	4083.1	3775.9	3432.9	3078.4	3022.5	2920.5
12.5°	3625.2	3854.8	3923.7	3985.4	3939.5	3709.9	3315.2	2975.1	2897.6	2830.1
15°	3511.8	3648.2	3676.9	3747.2	3774.5	3651.0	3377.0	3087.1	2896.2	2889.0
17.5°	3616.6	3560.6	3455.8	3477.4	3563.5	3652.5	3536.2	3308.1	3122.9	3099.9
20°	3790.2	3543.4	3306.6	3359.7	3431.4	3704.2	3777.4	3616.6	3510.4	3451.5
22.5°	3989.7	3573.6	3259.2	3285.1	3421.4	3820.4	4167.7	4078.7	3880.7	3796.0
25°	4358.6	3656.8	3296.6	3313.8	3500.3	3982.6	4520.7	4586.7	4469.1	4451.8
27.5°	4718.8	3872.0	3378.4	3339.6	3540.5	4140.4	4734.6	5089.1	4882.4	4842.2
30°	4902.5	4047.1	3500.3	3434.3	3707.0	4236.6	4863.8	5416.3	5235.5	5216.8
32.5°	5183.8	4206.4	3595.1	3510.4	3800.3	4355.7	5104.9	5773.6	5598.5	5505.3
35°	5301.5	4380.1	3803.2	3704.2	4067.2	4522.2	5228.2	6092.3	6037.7	5947.3
37.5°	5528.2	4566.7	4048.6	4042.9	4390.2	4738.9	5450.8	6525.7	6515.6	6359.2
40°	5546.9	4770.5	4436.1	4616.9	4889.6	5116.3	5645.9	6646.3	6809.8	6703.6
42.5°	5575.6	5127.8	5106.3	5255.6	5489.5	5440.7	5653.1	6674.9	6924.6	6861.5
45°	5588.5	5485.2	5788.0	6063.5	6161.2	5865.5	5585.7	6620.4	6984.9	6827.1
47.5°	5485.2	5792.3	6339.1	6871.6	6900.2	6126.7	5556.9	6564.4	7020.8	6916.0
50°	5499.6	5984.6	6815.5	7292.1	7187.3	6357.8	5512.4	6529.9	7002.2	6931.9
52°	5465.1	5988.9	6883.0	7283.4	7210.2	6230.0	5436.4	6397.9	6984.9	7035.1
52.5°	5503.8	5963.1	6812.7	7289.2	7194.4	6293.2	5426.3	6471.2	6994.9	6893.1
55°	5370.4	5656.0	6400.9	6603.2	6588.8	5711.9	5117.7	6228.6	6732.3	6733.8
57.5°	4853.7	4902.5	5020.2	5015.9	4949.9	4490.6	4377.2	5727.7	6001.8	5852.6
60°	4276.7	3589.3	3272.2	3143.0	3069.8	2995.1	3872.0	5239.8	5265.6	5202.4
62.5°	3695.5	2488.6	2066.6	2030.8	2048.0	2320.7	3742.9	5046.0	4891.0	4754.7
65°	2982.3	1814.0	1501.2	1453.8	1621.7	1916.0	3029.6	3869.2	3630.9	3517.6
67.5°	1872.9	1323.2	1014.7	925.7	1128.0	1318.9	1990.6	2431.2	2164.2	2007.8
70°	1110.8	739.1	459.3	411.9	463.6	703.2	1115.1	1212.7	1003.1	922.8
72.5°	437.7	271.2	127.7	109.1	113.4	246.8	410.5	400.4	302.8	269.8
75°	117.7	81.8	44.5	35.9	30.1	45.9	66.0	43.1	15.8	20.1
77.5°	54.5	48.8	38.8	30.1	23.0	17.2	8.6	2.9	2.9	1.4
80°	47.3	41.6	35.9	30.1	23.0	14.4	7.1	1.4	1.4	1.4
82.5°	44.5	38.8	33.0	27.2	21.5	14.4	7.1	1.4	0.0	0.0
85°	18.7	24.4	27.2	25.8	23.0	14.4	7.1	1.4	0.0	0.0
87.5°	10.0	8.6	7.1	5.7	4.3	2.9	2.9	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

(END OF REPORT)