

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: P647389

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

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647389  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-23)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-835-U-SLL-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR LEFT OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13246.8 lumens  
Efficiency: N/A  
Efficacy: 54.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G1

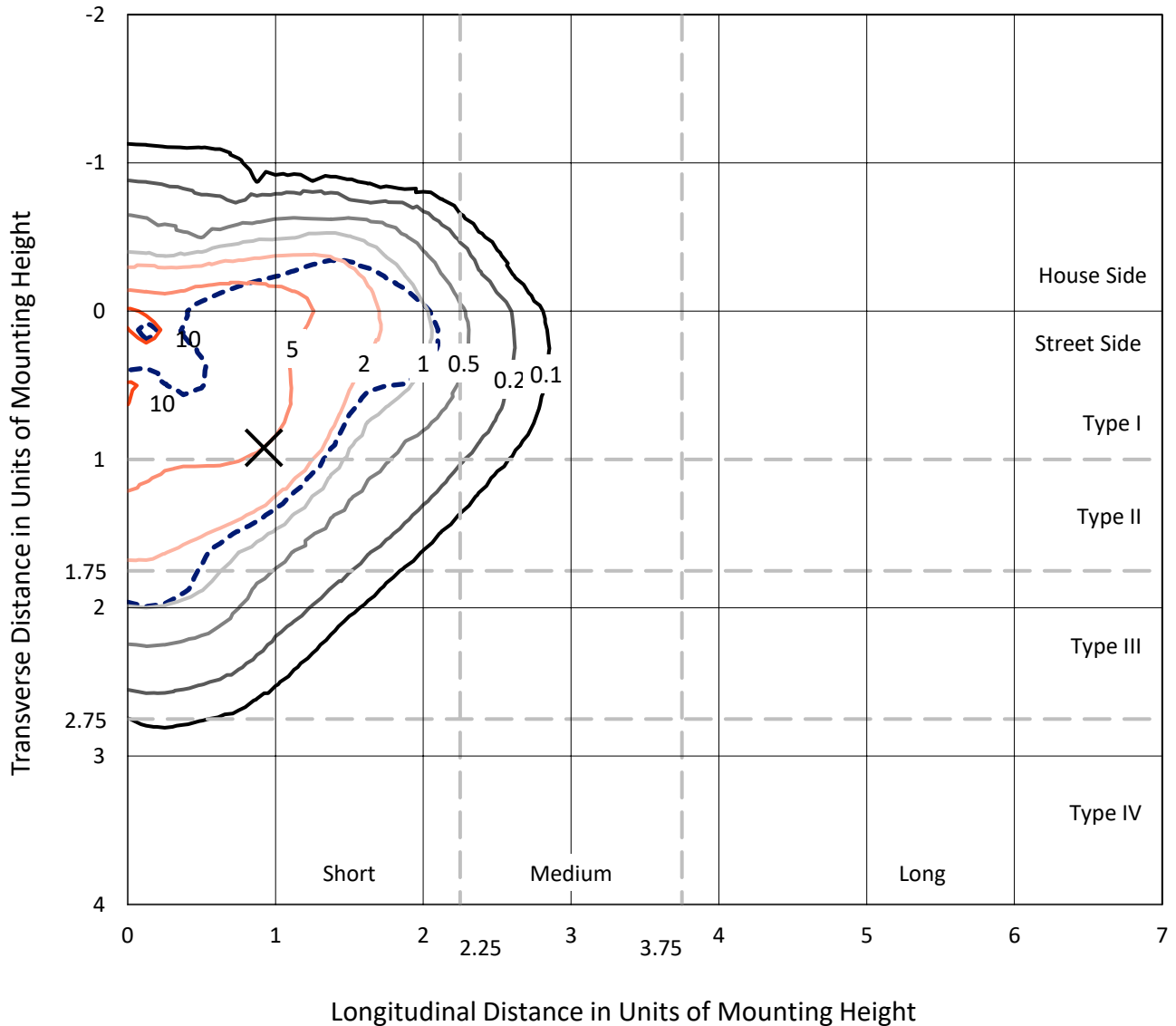
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

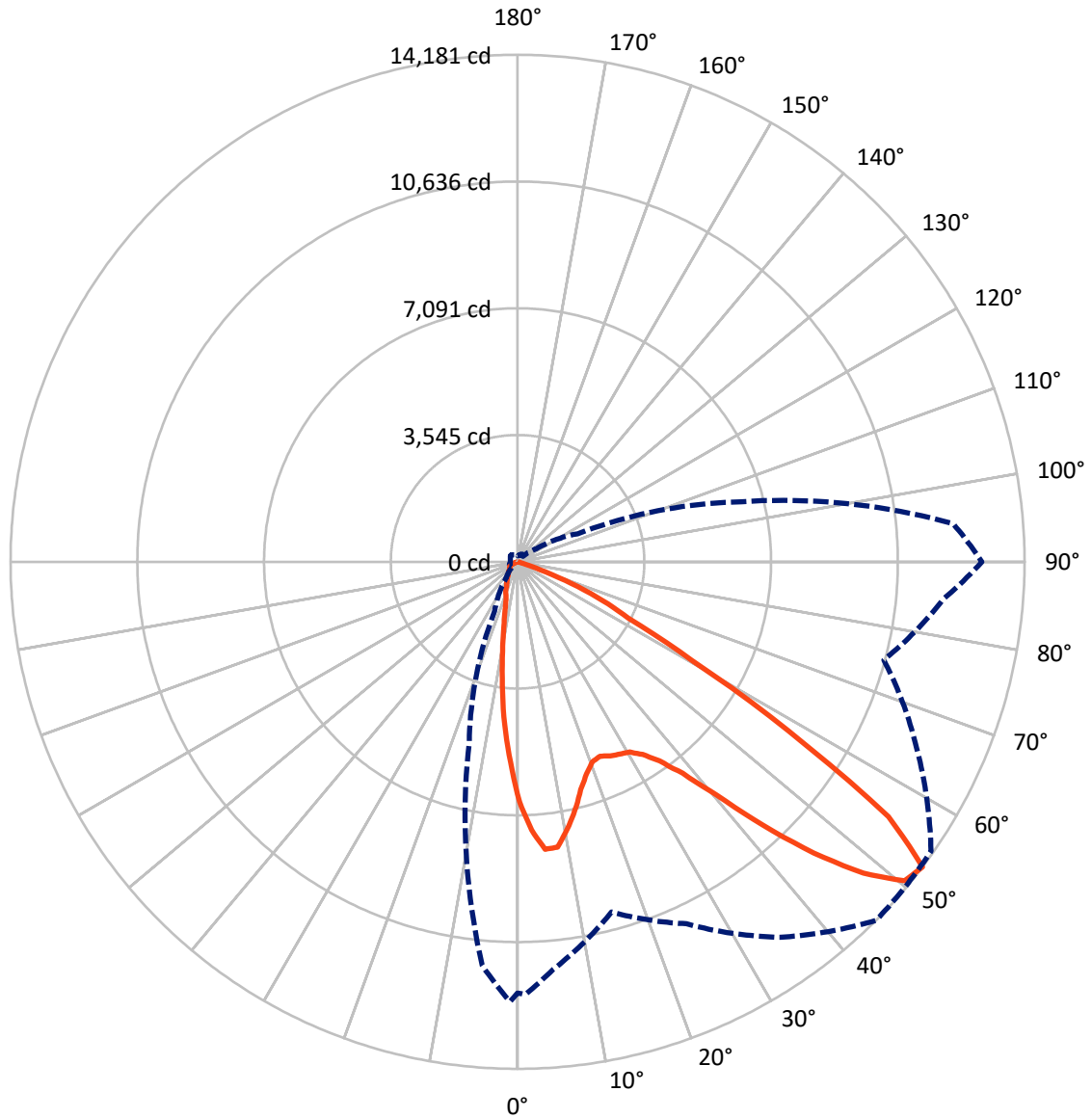
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 52.5-Deg Vertical

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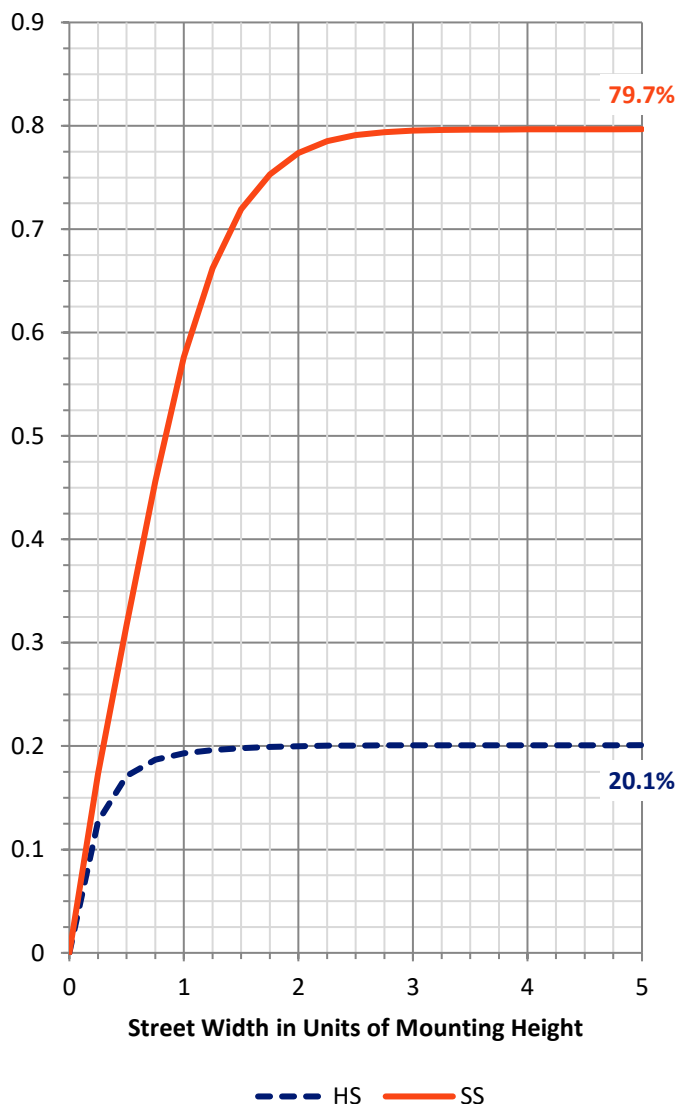
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2688.4	0.0	2688.4
	% Fixture	20.3	0.0	20.3
<b>Street Side</b>	Lumens	10558.4	0.0	10558.4
	% Fixture	79.7	0.0	79.7
<b>Total</b>	Lumens	13246.8	0.0	13246.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	489.8	3.7
10°-20°	966.4	7.3
20°-30°	1470.8	11.1
30°-40°	2198.2	16.6
40°-50°	3130.5	23.6
50°-60°	3365.2	25.4
60°-70°	1491.2	11.3
70°-80°	120.6	0.9
80°-90°	14.1	0.1
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°	13246.8	100.0
0°-180°	13246.8	100.0

**Coefficient of Utilization**



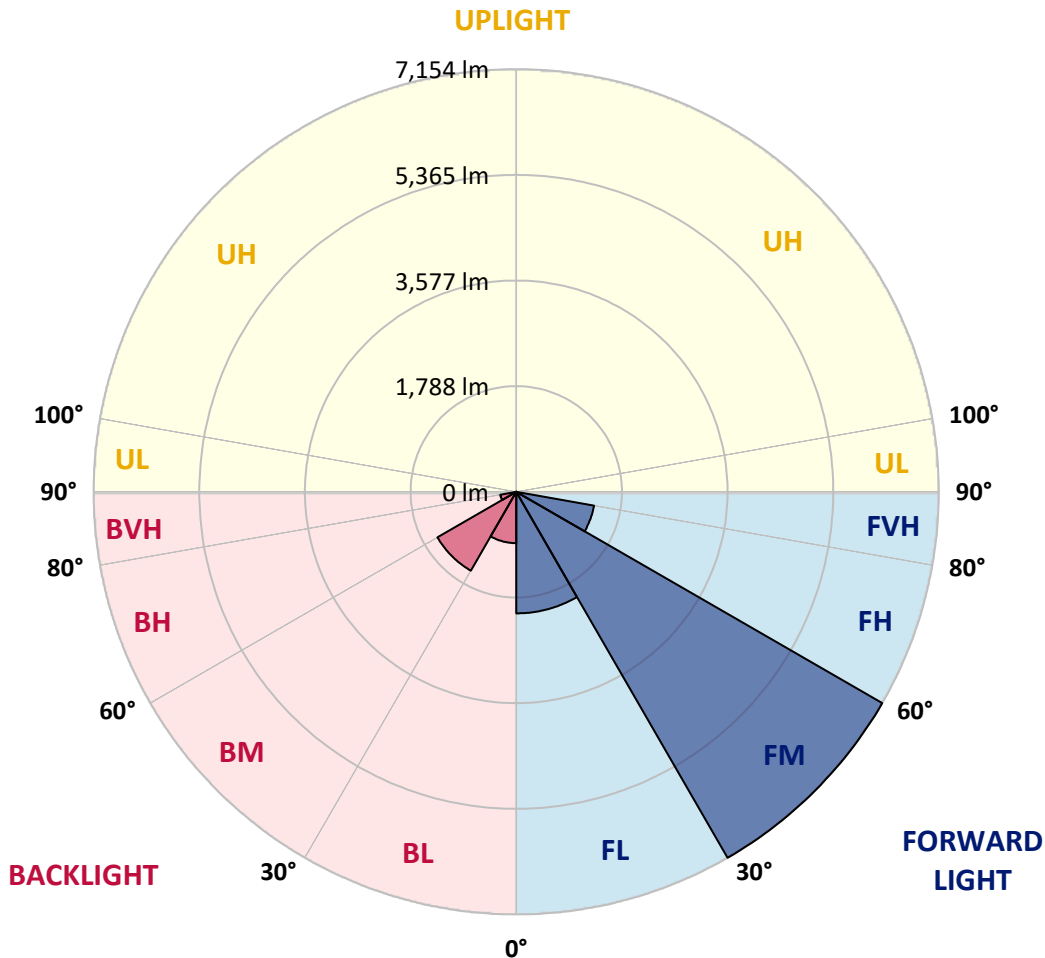
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2057.5	15.5			
FM (30°-60°)	7153.7	54.0			
FH (60°-80°)	1336.8	10.1			G1/1800
FVH (80°-90°)	10.4	0.1			G1/100
BL (0°-30°)	869.5	6.6	B2/1000		
BM (30°-60°)	1540.2	11.6	B2/2500		
BH (60°-80°)	275.1	2.1	B1/500		G1/500
BVH (80°-90°)	3.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7
2.5°	7107.5	7128.4	7243.1	7386.4	7461.9	7633.9	7514.0	7545.2	7480.2	7250.8	7071.0
5°	6891.3	6888.7	7034.6	7388.9	7725.0	8066.3	8076.8	7894.4	7573.9	7222.2	6719.3
7.5°	6240.0	6341.6	6492.7	7058.0	7680.8	7936.1	8058.6	7844.9	7352.4	6849.6	6305.1
10°	5747.5	5799.6	6054.9	6737.6	7193.5	7534.8	7610.4	7487.9	7110.2	6482.2	5872.6
12.5°	5463.5	5489.6	5789.2	6362.4	6844.4	7097.1	7133.6	7190.9	6920.0	6331.1	5599.0
15°	5466.1	5487.0	5890.8	6370.3	6560.4	6492.7	6612.5	6609.9	6727.1	6302.4	5828.3
17.5°	5859.6	5883.0	6247.8	6484.9	6401.5	6242.5	6234.7	6354.6	6602.1	6659.4	6174.8
20°	6537.0	6591.7	6860.0	6847.0	6378.0	6057.6	5969.0	6060.2	6636.0	6961.7	6873.1
22.5°	7448.8	7524.4	7712.0	7352.4	6484.9	5932.5	5903.8	6081.0	6860.0	7636.4	7665.1
25°	8506.7	8634.3	8725.5	8264.3	6865.3	6148.7	6013.3	6318.1	7162.3	8368.5	8673.4
27.5°	9207.5	9340.4	9319.6	8660.4	7120.6	6206.1	6091.4	6375.4	7425.4	8543.2	9199.7
30°	9754.6	9835.4	9981.3	8874.1	7375.9	6367.6	6172.2	6617.8	7511.4	8845.4	9835.4
32.5°	10393.0	10447.6	10458.1	9251.8	7769.3	6570.9	6422.3	6920.0	7891.8	9134.6	10398.2
35°	11036.5	11117.3	10947.9	9718.2	8011.7	6948.7	6839.2	7443.7	8196.6	9434.2	11018.3
37.5°	11734.7	11776.5	11385.6	9911.0	8358.1	7563.5	7503.6	8009.0	8725.5	9976.1	11706.1
40°	12321.0	12360.0	11852.0	10148.1	8722.9	8423.3	8577.0	9087.7	9444.6	10327.8	12050.0
42.5°	12646.6	12737.8	12008.3	10017.8	9455.0	9397.7	10080.3	10260.1	10278.4	10426.8	12357.5
45°	12735.3	12693.5	11750.4	10124.6	10095.9	11000.1	11620.1	11857.2	11106.9	10609.2	12435.6
47.5°	12326.2	12380.9	11370.0	10030.9	10937.5	12214.2	13016.6	13457.0	11724.3	10450.3	12242.8
50°	11995.3	11924.9	11247.6	9963.0	11164.2	12787.3	14024.9	14123.9	12292.3	10645.7	12031.7
52.5°	12060.4	12104.7	11442.9	10142.8	11169.4	12821.2	14181.2	14113.5	12310.6	10601.4	11956.3
55°	12198.5	12003.1	11359.6	9746.9	10421.7	11875.4	12586.7	12482.5	11362.2	10129.8	11771.2
57.5°	10525.9	10828.1	10445.1	8702.0	8553.6	8946.9	8934.0	9254.4	8475.4	8717.7	10716.1
60°	8543.2	8595.2	8738.5	7443.7	5919.5	5784.0	5596.4	5393.2	5703.2	7454.1	9746.9
62.5°	7514.0	7451.5	7962.1	6771.5	4179.1	3499.1	3467.8	3592.9	4400.5	7110.2	9142.4
65°	5461.0	5539.1	5909.1	5255.1	3136.9	2670.6	2623.7	2993.6	3561.6	5698.0	6977.3
67.5°	3335.0	3486.1	3519.9	3241.2	2128.6	1690.9	1623.2	1959.3	2571.5	3686.7	4090.5
70°	1539.8	1722.2	1894.2	1769.1	1232.4	695.6	656.5	823.3	1297.5	2120.8	2170.3
72.5°	466.4	468.9	656.5	685.2	398.6	156.3	138.1	182.4	440.3	700.9	737.4
75°	33.9	36.5	88.6	101.6	75.6	39.1	41.7	49.5	93.8	156.3	117.2
77.5°	2.6	2.6	2.6	13.0	23.4	26.1	33.9	39.1	49.5	57.3	52.1
80°	2.6	0.0	2.6	10.4	18.2	26.1	31.2	36.5	39.1	44.3	39.1
82.5°	0.0	0.0	0.0	7.8	18.2	26.1	28.7	39.1	44.3	52.1	44.3
85°	0.0	0.0	0.0	7.8	18.2	28.7	26.1	13.0	0.0	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°	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7
2.5°	7102.4	7000.7	6768.9	6651.6	6375.4	6336.3	6065.4	6021.1	5929.9	5880.4	5760.5
5°	6497.9	6375.4	5997.6	5679.8	5309.8	5051.9	4853.9	4674.1	4569.9	4473.5	4517.8
7.5°	6005.5	5648.6	5229.0	4697.5	4270.2	3994.1	3691.8	3444.3	3298.5	3199.4	3222.9
10°	5489.6	5257.7	4674.1	4077.5	3561.6	3366.2	3129.1	2938.9	2733.1	2555.9	2472.6
12.5°	5328.1	4984.1	4252.0	3644.9	3254.1	3064.0	2793.0	2574.1	2311.0	2094.8	2019.2
15°	5356.7	5025.8	4137.4	3488.7	3027.5	2699.2	2376.2	2105.2	1815.9	1664.9	1586.7
17.5°	5823.1	5249.9	4212.9	3324.5	2712.2	2256.3	1857.7	1513.8	1297.5	1141.1	1107.3
20°	6396.2	5734.5	4374.5	3204.7	2454.3	1795.1	1357.4	1060.4	880.6	854.6	846.7
22.5°	7235.2	6526.5	4721.0	3123.9	2139.1	1399.1	930.1	771.2	721.7	716.5	719.1
25°	8407.6	7519.2	5098.8	3056.1	1902.0	1078.7	760.8	654.0	638.3	630.5	643.5
27.5°	8915.7	8118.5	5299.4	2910.3	1685.7	971.8	750.3	648.7	604.5	591.4	599.2
30°	9543.6	8517.1	5614.7	2660.1	1367.8	799.8	700.9	706.0	685.2	620.1	599.2
32.5°	10377.3	9014.7	5773.6	2483.0	1221.9	661.8	513.3	471.6	526.3	536.7	555.0
35°	10911.4	9520.2	5854.3	2378.8	1146.4	565.4	435.1	396.0	383.0	385.6	396.0
37.5°	11904.1	10202.8	5956.0	2269.3	1089.1	492.4	393.4	357.0	338.7	338.7	349.1
40°	12498.2	10744.7	6094.0	2209.4	1031.8	448.1	357.0	325.6	310.1	310.1	315.2
42.5°	12646.6	11013.1	6047.2	2188.6	966.6	437.7	325.6	302.2	284.0	281.4	278.7
45°	12912.4	11422.1	6054.9	2165.1	898.9	398.6	307.4	281.4	255.3	252.8	250.1
47.5°	13204.2	11716.5	6070.6	2073.9	833.7	333.5	320.5	260.5	229.3	224.1	224.1
50°	12954.1	11951.0	6206.1	1982.7	750.3	271.0	315.2	244.9	203.2	195.4	198.0
52.5°	12985.4	12227.2	6492.7	1855.1	646.1	216.3	255.3	231.8	185.0	171.9	174.5
55°	12485.1	11935.3	6531.8	1719.5	505.4	166.8	195.4	203.2	156.3	151.1	151.1
57.5°	10747.3	10106.3	5763.2	1393.9	333.5	138.1	140.7	177.2	135.5	130.3	132.9
60°	9197.1	8113.2	4637.6	919.7	208.4	109.5	101.6	179.8	119.9	117.2	125.0
62.5°	8384.2	6667.2	3517.3	570.6	143.3	83.4	70.3	145.9	104.2	104.2	114.6
65°	6057.6	4478.7	2045.3	299.7	101.6	65.1	52.1	83.4	86.0	88.6	93.8
67.5°	3751.8	2261.5	862.4	145.9	67.7	44.3	33.9	52.1	57.3	57.3	62.6
70°	1852.4	901.5	286.6	83.4	52.1	36.5	23.4	28.7	28.7	26.1	28.7
72.5°	573.2	271.0	73.0	52.1	36.5	23.4	13.0	10.4	5.2	0.0	2.6
75°	65.1	52.1	46.9	36.5	23.4	10.4	2.6	0.0	0.0	0.0	0.0
77.5°	39.1	44.3	44.3	36.5	23.4	7.8	0.0	0.0	0.0	0.0	0.0
80°	31.2	33.9	36.5	33.9	20.8	10.4	0.0	0.0	0.0	0.0	0.0
82.5°	39.1	44.3	49.5	44.3	28.7	13.0	5.2	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	7.8	2.6	0.0	0.0	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):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7
2.5°	5711.0	5653.7	5734.5	5614.7	5612.1	5614.7	5580.8	5549.5	5599.0	5731.9	5744.9
5°	4358.9	4481.3	4520.4	4648.0	4577.7	4473.5	4494.3	4424.0	4596.0	4671.5	4611.6
7.5°	3173.4	3165.6	3428.7	3444.3	3478.2	3480.8	3475.6	3337.5	3196.8	3228.1	3321.9
10°	2462.1	2329.3	2456.9	2443.9	2527.2	2503.8	2537.7	2389.2	2438.7	2438.7	2498.6
12.5°	2006.2	1865.5	1842.0	1808.2	1842.0	1855.1	1868.1	1839.4	1922.8	1961.9	2003.5
15°	1532.0	1453.8	1433.0	1367.8	1378.2	1414.7	1446.0	1459.0	1433.0	1492.9	1498.1
17.5°	1112.5	1109.9	1122.9	1120.3	1109.9	1102.1	1099.5	1065.6	1055.2	1060.4	1081.2
20°	844.2	865.0	909.3	953.6	977.0	948.4	909.3	852.0	828.5	833.7	836.3
22.5°	721.7	752.9	812.9	862.4	885.8	833.7	763.3	713.9	703.4	700.9	698.3
25°	654.0	690.4	734.7	750.3	747.8	716.5	664.4	643.5	638.3	633.1	609.6
27.5°	617.5	630.5	638.3	656.5	664.4	643.5	630.5	599.2	594.1	594.1	578.4
30°	596.6	588.8	599.2	586.2	596.6	581.0	583.6	583.6	570.6	575.8	575.8
32.5°	555.0	557.6	557.6	531.5	539.3	521.1	539.3	555.0	557.6	560.2	581.0
35°	406.5	453.4	476.8	476.8	484.6	471.6	468.9	450.8	427.3	403.9	393.4
37.5°	357.0	375.2	406.5	424.7	437.7	427.3	403.9	375.2	362.1	351.7	341.3
40°	317.9	333.5	354.3	375.2	401.2	388.2	351.7	338.7	323.1	323.1	312.7
42.5°	286.6	294.4	307.4	338.7	367.4	341.3	315.2	304.8	297.0	294.4	291.8
45°	257.9	260.5	273.6	299.7	333.5	307.4	281.4	268.3	271.0	273.6	271.0
47.5°	231.8	237.1	244.9	276.2	297.0	284.0	255.3	247.5	247.5	247.5	250.1
50°	200.6	213.7	229.3	255.3	271.0	263.2	239.7	229.3	224.1	224.1	226.7
52.5°	179.8	190.2	211.0	242.3	263.2	250.1	226.7	211.0	200.6	198.0	203.2
55°	156.3	174.5	208.4	231.8	260.5	247.5	221.4	203.2	185.0	182.4	182.4
57.5°	140.7	169.4	200.6	229.3	252.8	242.3	221.4	198.0	174.5	171.9	171.9
60°	132.9	164.1	195.4	221.4	252.8	237.1	218.8	192.8	166.8	166.8	164.1
62.5°	125.0	153.7	185.0	211.0	242.3	229.3	211.0	185.0	158.9	158.9	153.7
65°	104.2	132.9	153.7	177.2	211.0	198.0	179.8	161.5	140.7	135.5	138.1
67.5°	73.0	91.2	112.0	135.5	156.3	151.1	143.3	130.3	112.0	109.5	106.8
70°	36.5	49.5	67.7	91.2	109.5	104.2	99.0	88.6	78.1	75.6	75.6
72.5°	5.2	15.7	28.7	41.7	57.3	59.9	57.3	54.7	52.1	49.5	52.1
75°	0.0	0.0	0.0	10.4	23.4	28.7	33.9	39.1	39.1	33.9	41.7
77.5°	0.0	0.0	0.0	0.0	2.6	13.0	26.1	33.9	41.7	36.5	49.5
80°	0.0	0.0	0.0	0.0	2.6	15.7	26.1	36.5	41.7	36.5	52.1
82.5°	0.0	0.0	0.0	0.0	2.6	18.2	26.1	33.9	39.1	36.5	46.9
85°	0.0	0.0	0.0	0.0	7.8	15.7	10.4	5.2	2.6	2.6	7.8
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



REPORT NUMBER: P647389

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

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7	6716.7
2.5°	5817.8	6002.9	6200.9	6276.4	6510.9	6688.1	6808.0	7065.9	7104.9	7107.5
5°	4674.1	4767.9	5106.6	5265.5	5614.7	5885.7	6174.8	6591.7	6870.4	6891.3
7.5°	3321.9	3582.5	3725.7	4140.0	4569.9	4994.6	5424.5	5909.1	6232.1	6240.0
10°	2673.2	2842.5	3097.9	3407.9	3770.0	4202.5	4775.7	5338.5	5666.7	5747.5
12.5°	2152.1	2449.1	2740.9	3061.4	3337.5	3663.2	4280.7	5031.0	5302.0	5463.5
15°	1657.1	1928.0	2272.0	2647.1	2959.7	3394.9	4098.3	4955.5	5411.5	5466.1
17.5°	1221.9	1464.2	1782.1	2136.4	2605.4	3222.9	4129.5	5338.5	5768.4	5859.6
20°	878.1	1018.7	1268.9	1680.5	2277.1	3022.3	4160.9	5726.7	6380.7	6537.0
22.5°	695.6	752.9	917.1	1281.8	1909.7	2811.2	4382.3	6469.2	7222.2	7448.8
25°	604.5	635.7	713.9	1010.9	1677.9	2790.4	4736.6	7360.3	8342.6	8506.7
27.5°	583.6	588.8	656.5	927.5	1552.8	2652.3	4872.1	7993.4	9040.8	9207.5
30°	614.9	698.3	703.4	784.3	1320.9	2378.8	4942.5	8605.6	9632.2	9754.6
32.5°	531.5	505.4	523.7	607.1	1162.1	2219.8	5075.3	9139.8	10307.0	10393.0
35°	370.0	388.2	429.9	526.3	1016.1	2053.0	5109.2	9728.6	10947.9	11036.5
37.5°	341.3	351.7	385.6	448.1	893.6	1959.3	5062.3	10158.5	11612.3	11734.7
40°	317.9	330.9	349.1	406.5	802.5	1855.1	4997.2	10546.7	12018.7	12321.0
42.5°	299.7	310.1	325.6	388.2	724.3	1750.9	4906.0	11093.9	12383.5	12646.6
45°	278.7	294.4	312.7	377.8	680.0	1680.5	4838.2	11060.0	12594.6	12735.3
47.5°	257.9	284.0	304.8	351.7	667.0	1646.6	4866.9	10932.3	12422.6	12326.2
50°	237.1	271.0	307.4	291.8	635.7	1578.8	4900.8	11106.9	12013.6	11995.3
52.5°	218.8	257.9	286.6	239.7	565.4	1513.8	5229.0	11336.1	12302.7	12060.4
55°	192.8	231.8	229.3	192.8	458.5	1464.2	5487.0	11341.4	12107.3	12198.5
57.5°	174.5	205.9	179.8	161.5	338.7	1224.5	5067.5	9509.8	10364.3	10525.9
60°	161.5	200.6	135.5	127.6	221.4	883.2	4424.0	7365.5	8238.3	8543.2
62.5°	148.5	190.2	106.8	104.2	153.7	627.9	3637.1	6164.4	7099.8	7514.0
65°	130.3	135.5	86.0	80.8	109.5	338.7	2214.6	4244.2	5307.3	5461.0
67.5°	106.8	104.2	70.3	65.1	73.0	164.1	977.0	2126.0	3077.0	3335.0
70°	86.0	86.0	59.9	52.1	52.1	75.6	255.3	846.7	1391.3	1539.8
72.5°	62.6	65.1	46.9	41.7	39.1	36.5	41.7	169.4	364.7	466.4
75°	54.7	57.3	46.9	36.5	28.7	23.4	18.2	15.7	20.8	33.9
77.5°	59.9	59.9	49.5	33.9	26.1	18.2	10.4	5.2	5.2	2.6
80°	75.6	78.1	65.1	44.3	31.2	20.8	13.0	5.2	2.6	2.6
82.5°	80.8	88.6	73.0	54.7	39.1	23.4	13.0	2.6	0.0	0.0
85°	20.8	33.9	57.3	49.5	39.1	23.4	13.0	2.6	0.0	0.0
87.5°	0.0	2.6	7.8	7.8	10.4	10.4	7.8	2.6	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)