

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: P647649

Luminaire Tested: **GALN-SA9D-835-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647649  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9D-835-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 44990.4 lumens  
Efficiency: N/A  
Efficacy: 81.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G3

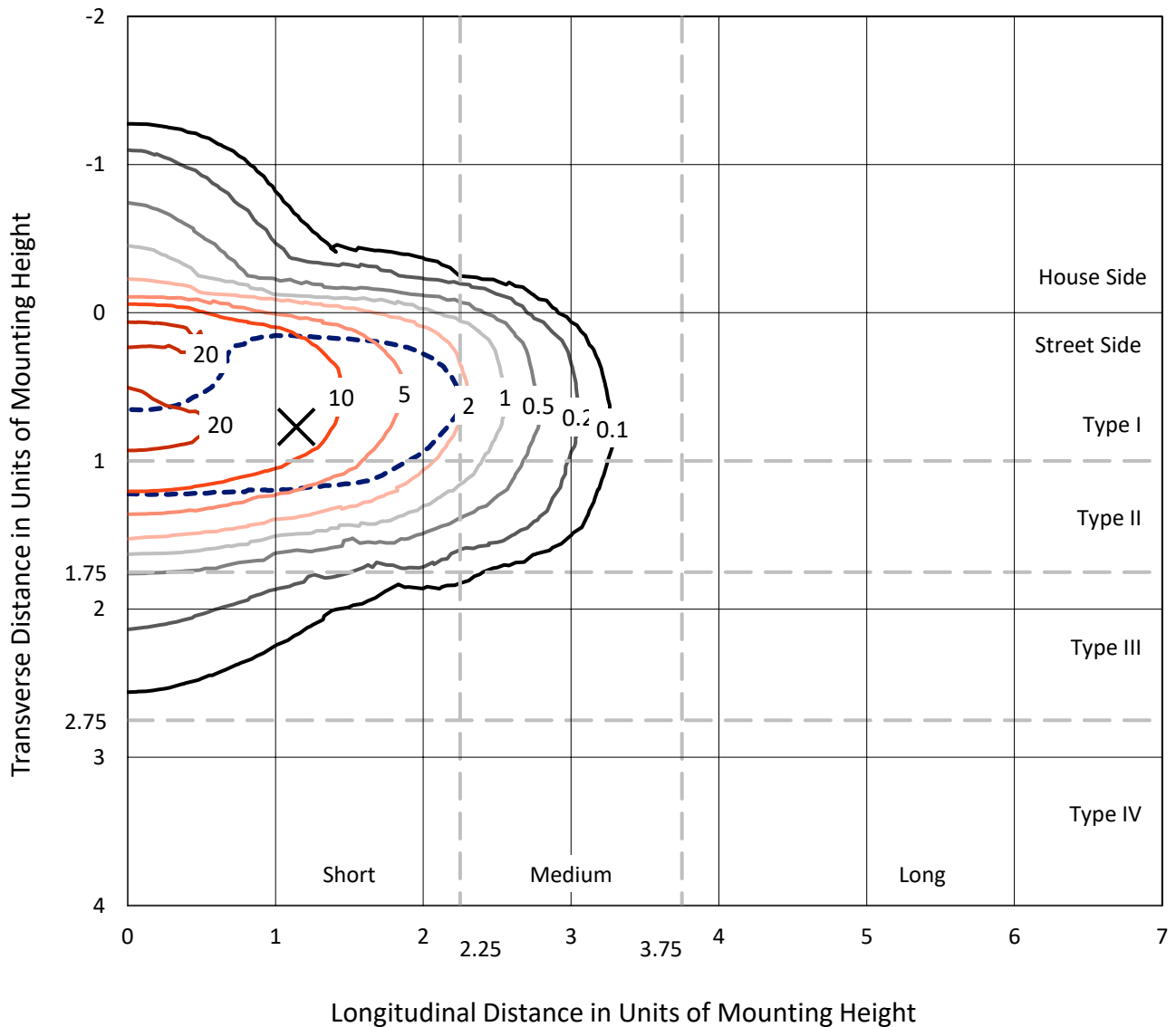
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P647649  
 CATALOG NUMBER: GALN-SA9D-835-U-AFL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

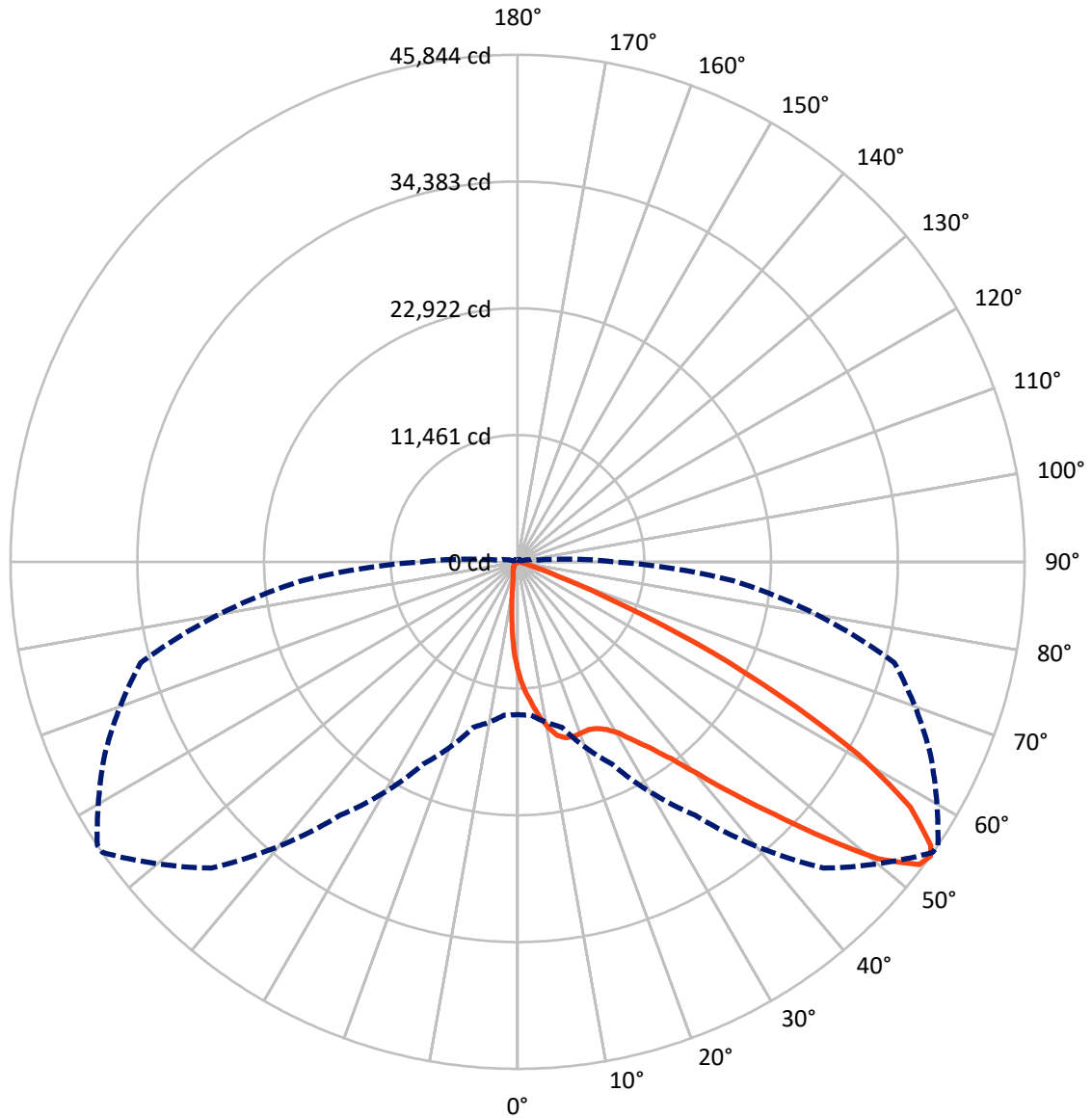
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 24 fc  
 Type II - Short - N/A

REPORT NUMBER: P647649  
CATALOG NUMBER: GALN-SA9D-835-U-AFL-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 54-Deg Vertical

REPORT NUMBER: P647649  
 CATALOG NUMBER: GALN-SA9D-835-U-AFL-HSS

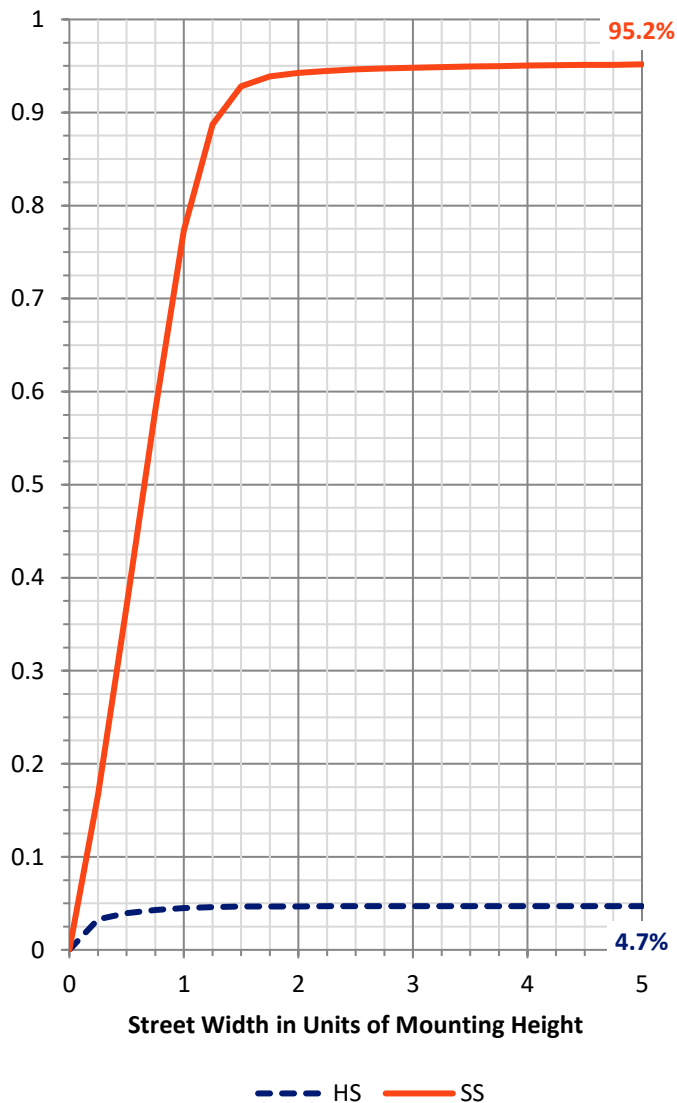
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2127.5	0.0	2127.5
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	42862.9	0.0	42862.9
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	44990.4	0.0	44990.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	883.3	2.0
10°-20°	2387.8	5.3
20°-30°	4135.4	9.2
30°-40°	7138.4	15.9
40°-50°	12149.8	27.0
50°-60°	12023.7	26.7
60°-70°	5487.9	12.2
70°-80°	704.8	1.6
80°-90°	79.4	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°	44990.4	100.0
0°-180°	44990.4	100.0

**Coefficient of Utilization**

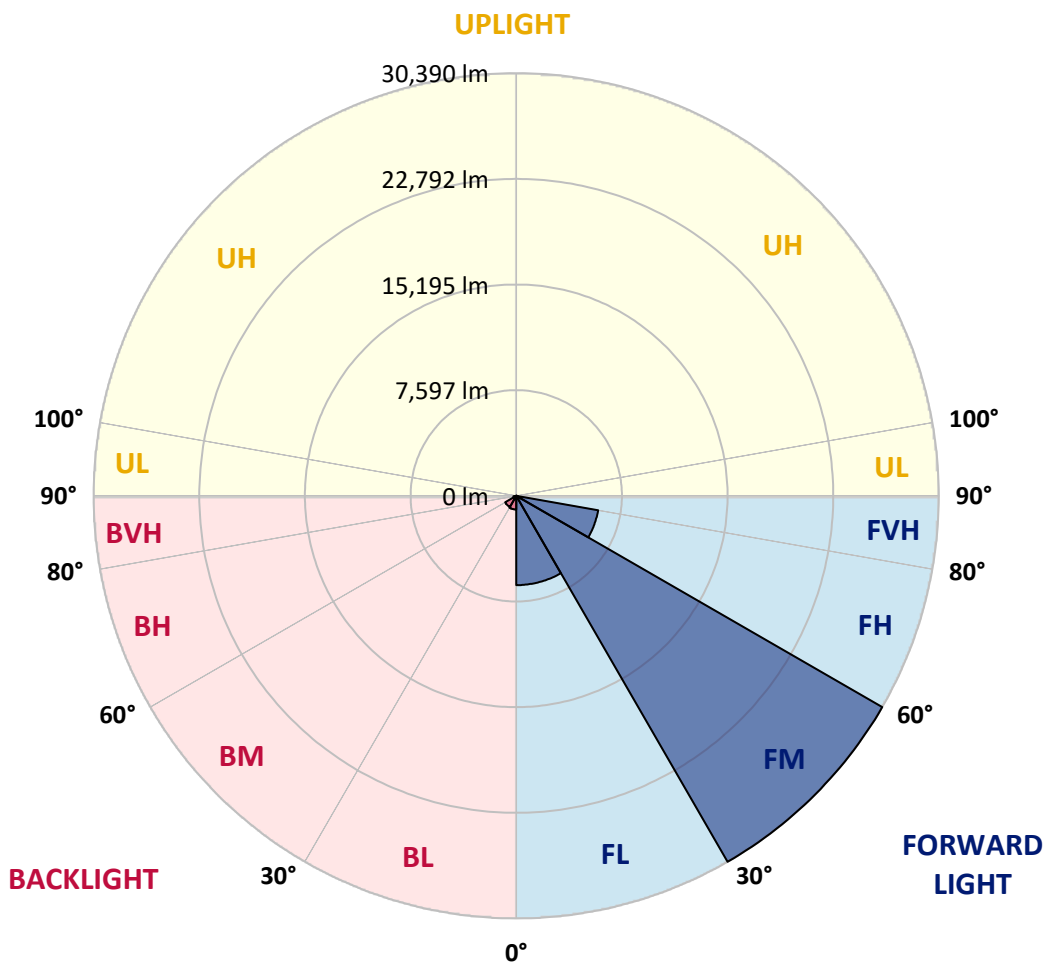


REPORT NUMBER: P647649  
 CATALOG NUMBER: GALN-SA9D-835-U-AFL-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6422.5	14.3			
FM (30°-60°)	30389.8	67.5			
FH (60°-80°)	5979.6	13.3			G3/7500
FVH (80°-90°)	70.9	0.2			G1/100
BL (0°-30°)	983.9	2.2	B2/1000		
BM (30°-60°)	922.0	2.0	B1/1000		
BH (60°-80°)	213.0	0.5	B1/500		G1/500
BVH (80°-90°)	8.5	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-G3**  
 Type II Short





REPORT NUMBER: P647649

CATALOG NUMBER: GALN-SA9D-835-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5
2.5°	12703.2	12615.1	12493.7	12399.6	12178.0	11859.3	11522.4	11522.4	11197.6	10745.3	10283.9
5°	14651.9	14594.2	14475.8	14233.0	13984.1	13537.9	12861.0	12742.6	12162.9	11343.3	10481.2
7.5°	15444.1	15471.5	15477.5	15413.7	15295.4	14855.2	14184.4	14102.5	13176.6	12077.9	10739.2
10°	14685.2	14818.8	14949.3	15213.5	15586.8	15693.0	15313.6	15228.6	14318.0	12821.5	11018.5
12.5°	13556.1	13629.0	13701.8	14117.6	14867.4	15726.4	16124.1	16121.0	15350.0	13562.2	11373.6
15°	13031.0	13094.7	13100.8	13285.9	13935.5	15186.1	16470.1	16515.6	16357.8	14475.8	11756.1
17.5°	13140.2	13191.8	13149.4	13194.9	13534.9	14591.2	16430.6	16582.4	17174.3	15353.1	12102.1
20°	13853.5	13953.8	13789.8	13662.3	13765.5	14433.4	16297.0	16509.6	17751.0	16209.0	12417.8
22.5°	15134.5	15189.1	14982.7	14633.6	14451.5	14764.2	16260.6	16470.1	18242.7	16910.2	12600.0
25°	16558.1	16539.9	16312.2	15920.7	15538.2	15432.0	16500.5	16688.6	18649.5	17541.5	12654.6
27.5°	17981.7	18036.3	17653.9	17168.2	16709.8	16433.7	17037.7	17177.3	19107.9	18261.0	12721.4
30°	19636.0	19548.0	19171.6	18616.1	18091.0	17705.5	17902.8	17942.3	19739.2	19214.1	12897.4
32.5°	21788.1	21545.3	21123.4	20152.0	19775.6	19123.1	19171.6	19220.1	20507.2	20158.1	13109.9
35°	24708.2	24696.1	23870.4	22562.1	21645.4	20835.0	20622.5	20662.0	21669.8	21560.5	13580.4
37.5°	28223.2	28271.7	27330.8	26013.4	24325.7	23038.7	22601.6	22607.6	23436.3	23497.0	14296.7
40°	31085.6	31213.0	30651.5	29762.1	28095.7	26083.2	25348.6	25281.8	25919.3	25843.4	15319.6
42.5°	32317.9	32436.3	32645.7	32955.4	32038.6	30378.3	28645.0	28736.1	28930.4	28399.2	16467.0
45°	31713.8	31902.1	32724.6	34636.9	35499.0	34940.5	32873.4	32554.6	31732.1	31176.6	17620.5
47.5°	29197.5	29655.9	31030.9	34215.1	37232.2	39120.2	37645.0	37223.1	34536.8	33204.2	18355.1
50°	25060.2	25087.6	27002.9	31073.4	36333.7	41758.0	42516.8	42201.2	37150.3	34342.5	18725.4
52.5°	18166.9	18764.8	20519.3	25233.3	32442.4	41357.4	45622.0	45491.5	39845.7	34925.3	19259.6
54°	13811.1	13926.4	15486.6	20164.1	27971.2	39156.7	45813.3	45843.6	41184.3	35277.4	19575.3
55°	11322.0	11045.9	12684.9	17177.3	24920.6	37211.0	45188.0	45333.7	41785.3	35459.6	19809.0
57.5°	5366.6	5369.7	6623.2	9060.6	15608.0	28894.0	41366.4	41882.4	41852.1	35772.2	20528.4
60°	2716.7	2734.9	3011.1	4182.8	7709.9	19208.0	34202.9	35432.2	38631.6	35817.7	20765.2
62.5°	1900.2	1878.9	1833.4	2012.5	3244.8	9761.8	25463.9	26532.4	32821.8	34084.5	20012.4
65°	1627.0	1581.4	1454.0	1426.6	1639.1	3888.4	15860.0	17602.3	25060.2	29513.2	17869.4
67.5°	1390.2	1372.0	1256.6	1186.9	1159.5	1693.8	8183.4	9100.1	17128.8	21214.4	13534.9
70°	1180.8	1171.7	1101.8	1013.8	938.0	1013.8	3035.4	3760.8	9546.3	11422.2	6386.5
72.5°	959.2	968.3	980.5	868.1	789.2	719.4	1296.1	1508.6	3994.6	4082.6	2234.1
75°	840.8	831.7	831.7	755.8	658.7	534.2	713.3	768.0	1223.3	1135.3	519.1
77.5°	591.9	570.7	667.8	622.3	549.4	379.4	406.8	431.0	506.9	434.1	242.8
80°	409.7	409.7	428.0	558.5	494.8	276.2	248.9	267.1	300.5	258.0	139.6
82.5°	230.7	236.8	279.2	297.5	288.4	185.2	163.9	166.9	200.4	176.0	88.0
85°	27.3	45.5	160.9	157.9	118.4	82.0	91.1	94.1	124.4	109.3	51.6
87.5°	3.1	6.1	33.4	42.5	30.4	33.4	33.4	33.4	42.5	48.5	36.4
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: P647649

CATALOG NUMBER: GALN-SA9D-835-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5	9995.5
2.5°	10035.0	9804.3	9254.9	8617.5	8210.8	7549.1	6990.5	6586.8	6486.7	6292.4	6350.1
5°	10022.9	9543.3	8423.2	7239.5	5976.7	5035.7	4334.5	3782.1	3539.2	3378.4	3266.1
7.5°	10029.0	9279.3	7482.3	5597.3	4088.7	3165.9	2516.3	2179.4	1954.8	1860.7	1872.9
10°	10047.1	8981.7	6389.5	4146.4	2759.2	2045.8	1648.2	1487.3	1411.4	1399.3	1396.2
12.5°	10089.7	8656.9	5345.3	3077.9	1930.5	1487.3	1335.6	1280.9	1256.6	1256.6	1247.6
15°	10135.2	8298.8	4477.2	2288.7	1487.3	1277.9	1208.1	1180.8	1165.6	1165.6	1162.5
17.5°	10135.2	7886.0	3666.8	1775.7	1280.9	1174.7	1120.1	1083.7	1071.5	1071.5	1068.5
20°	10071.5	7406.4	2947.4	1429.7	1162.5	1077.6	1022.9	983.4	968.3	962.2	959.2
22.5°	9849.9	6765.9	2346.3	1229.3	1065.4	992.6	922.8	877.2	865.1	859.0	862.1
25°	9455.3	6043.5	1857.7	1080.6	977.4	889.4	828.6	795.3	783.2	783.2	786.1
27.5°	9048.5	5287.7	1472.2	968.3	871.2	792.2	743.7	722.4	719.4	728.5	731.6
30°	8672.1	4528.8	1192.9	877.2	777.0	710.3	676.9	670.8	670.8	673.8	676.9
32.5°	8253.3	3864.0	998.6	798.3	701.2	643.5	625.3	625.3	631.3	631.3	637.4
35°	7989.2	3293.4	877.2	722.4	643.5	594.9	582.8	585.8	594.9	607.1	613.2
37.5°	7846.5	2838.1	798.3	661.7	588.9	555.5	543.3	549.4	570.7	591.9	594.9
40°	7858.7	2495.1	734.5	610.1	546.4	510.0	500.8	519.1	540.3	561.6	564.6
42.5°	7992.2	2240.2	673.8	549.4	510.0	458.4	455.3	473.6	482.6	503.9	506.9
45°	8150.0	2055.0	610.1	485.7	443.2	397.6	400.7	415.9	428.0	461.3	467.5
47.5°	8198.6	1927.5	537.3	412.8	364.3	349.1	352.1	361.2	385.5	415.9	418.9
50°	8253.3	1848.6	467.5	349.1	309.6	306.5	309.6	315.7	330.9	343.0	340.0
52.5°	8487.0	1845.5	409.7	303.6	264.1	270.1	273.2	270.1	258.0	239.8	233.7
54°	8705.6	1854.6	382.5	282.3	242.8	252.0	248.9	233.7	203.3	185.2	176.0
55°	8881.6	1863.7	367.3	267.1	230.7	233.7	236.8	206.4	166.9	148.8	142.7
57.5°	9227.7	1842.5	330.9	233.7	203.3	191.2	188.2	136.6	91.1	78.9	72.8
60°	9054.6	1663.4	300.5	200.4	173.0	154.8	127.5	75.9	45.5	33.4	33.4
62.5°	8374.7	1411.4	267.1	163.9	142.7	118.4	66.8	42.5	21.2	12.1	9.1
65°	7491.4	1186.9	239.8	130.5	112.3	75.9	36.4	27.3	9.1	0.0	0.0
67.5°	5569.9	880.2	203.3	103.2	85.0	48.5	24.3	15.2	3.1	0.0	0.0
70°	2580.1	537.3	173.0	78.9	60.7	36.4	18.2	9.1	0.0	0.0	0.0
72.5°	740.6	336.9	142.7	57.7	42.5	30.4	15.2	6.1	3.1	0.0	0.0
75°	258.0	270.1	106.3	42.5	33.4	21.2	12.1	6.1	3.1	0.0	0.0
77.5°	154.8	218.5	66.8	36.4	27.3	18.2	12.1	6.1	3.1	3.1	0.0
80°	88.0	145.7	42.5	30.4	24.3	15.2	9.1	6.1	3.1	3.1	0.0
82.5°	48.5	69.8	33.4	27.3	21.2	15.2	9.1	6.1	3.1	3.1	3.1
85°	39.5	36.4	27.3	24.3	18.2	12.1	9.1	3.1	0.0	0.0	0.0
87.5°	30.4	24.3	24.3	24.3	18.2	12.1	9.1	3.1	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

(END OF REPORT)