

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: P458869

Luminaire Tested: **GALN-SA4A-735-U-SL3-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458869  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4A-735-U-SL3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13941 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G3

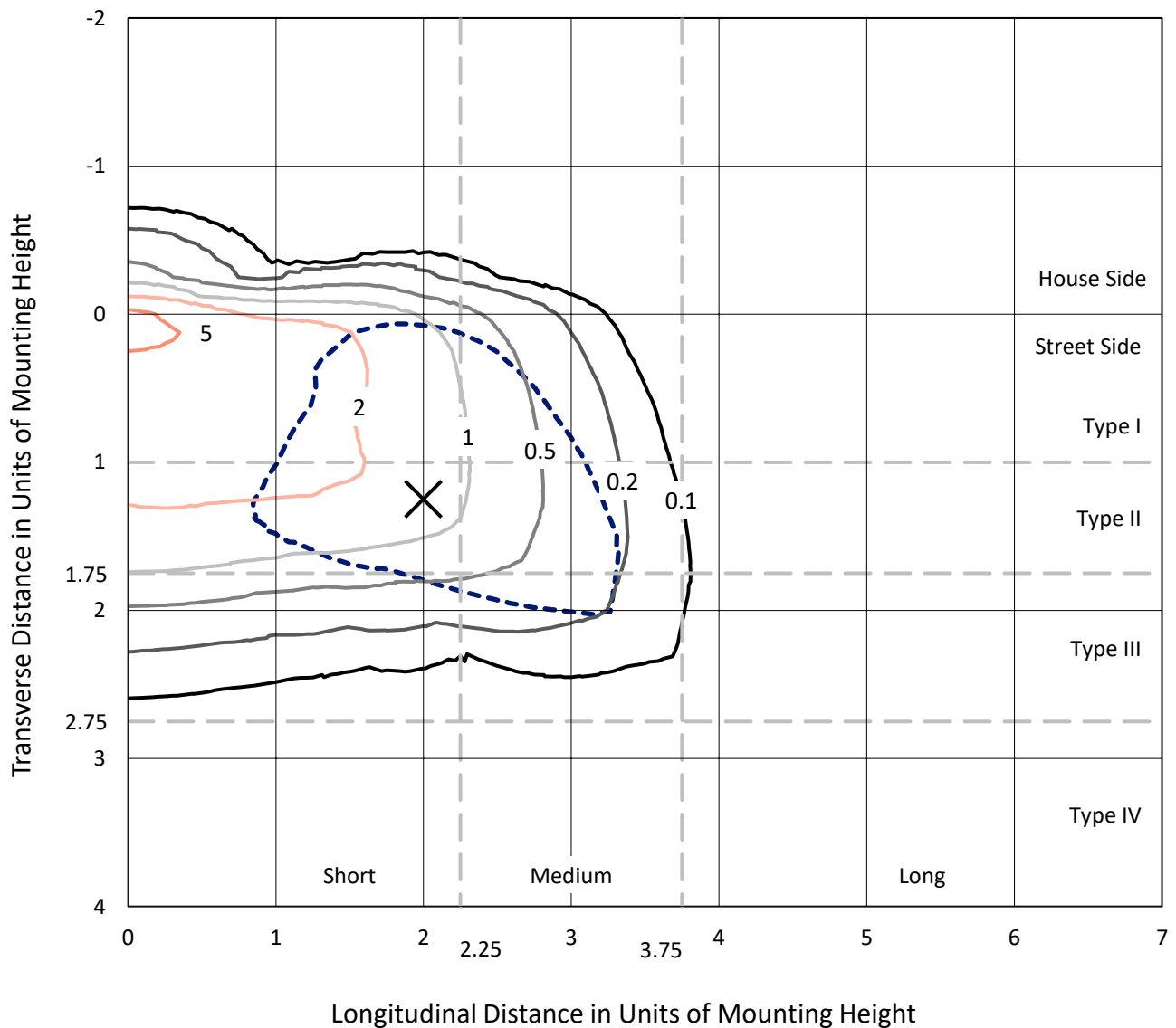
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P458869  
 CATALOG NUMBER: GALN-SA4A-735-U-SL3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

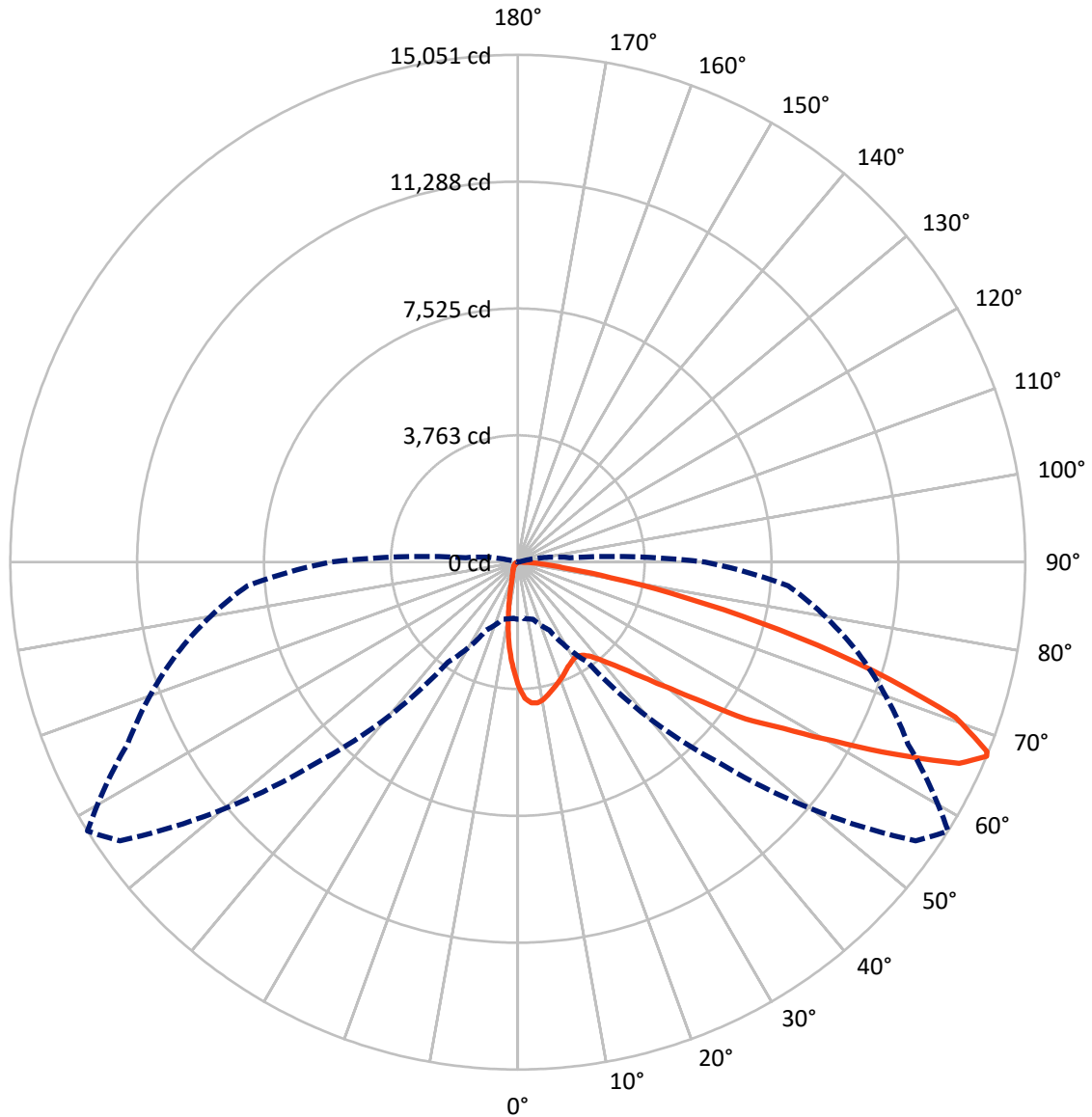
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc  
 Type III - Short - N/A

REPORT NUMBER: P458869  
CATALOG NUMBER: GALN-SA4A-735-U-SL3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P458869  
 CATALOG NUMBER: GALN-SA4A-735-U-SL3-HSS

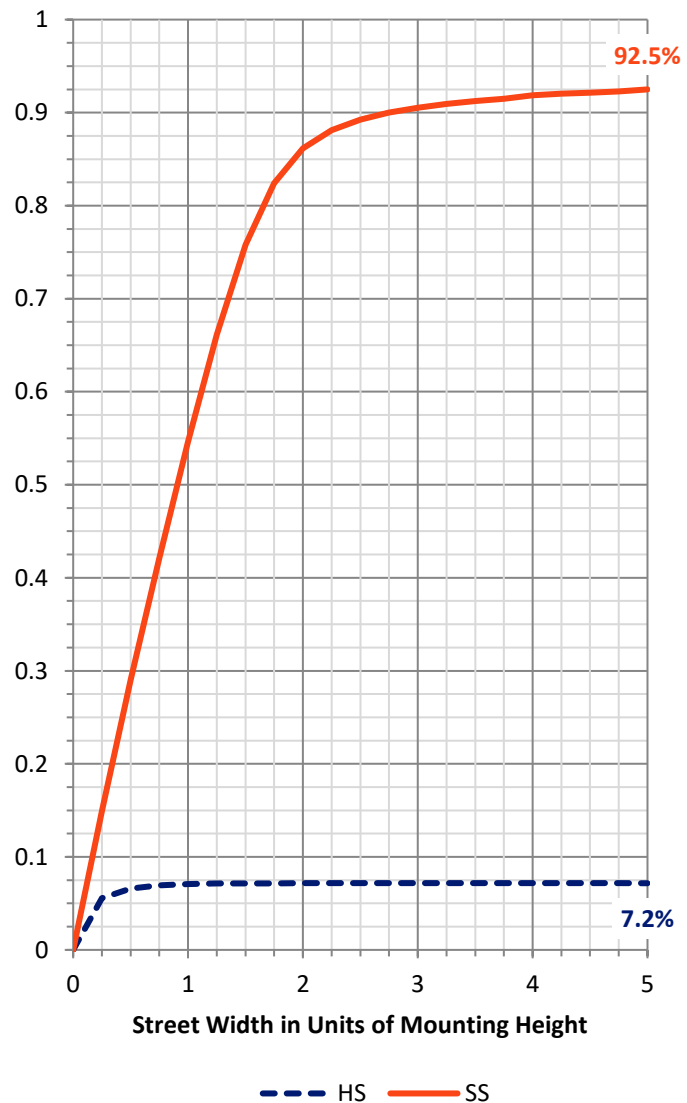
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1006.1	0.0	1006.1
	% Fixture	7.2	0.0	7.2
<b>Street Side</b>	Lumens	12934.9	0.0	12934.9
	% Fixture	92.8	0.0	92.8
<b>Total</b>	Lumens	13941.0	0.0	13941.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	299.9	2.2
10°-20°	647.7	4.6
20°-30°	877.7	6.3
30°-40°	1217.3	8.7
40°-50°	1941.4	13.9
50°-60°	3355.9	24.1
60°-70°	3833.5	27.5
70°-80°	1598.2	11.5
80°-90°	169.5	1.2
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°	13941.0	100.0
0°-180°	13941.0	100.0



REPORT NUMBER: P458869

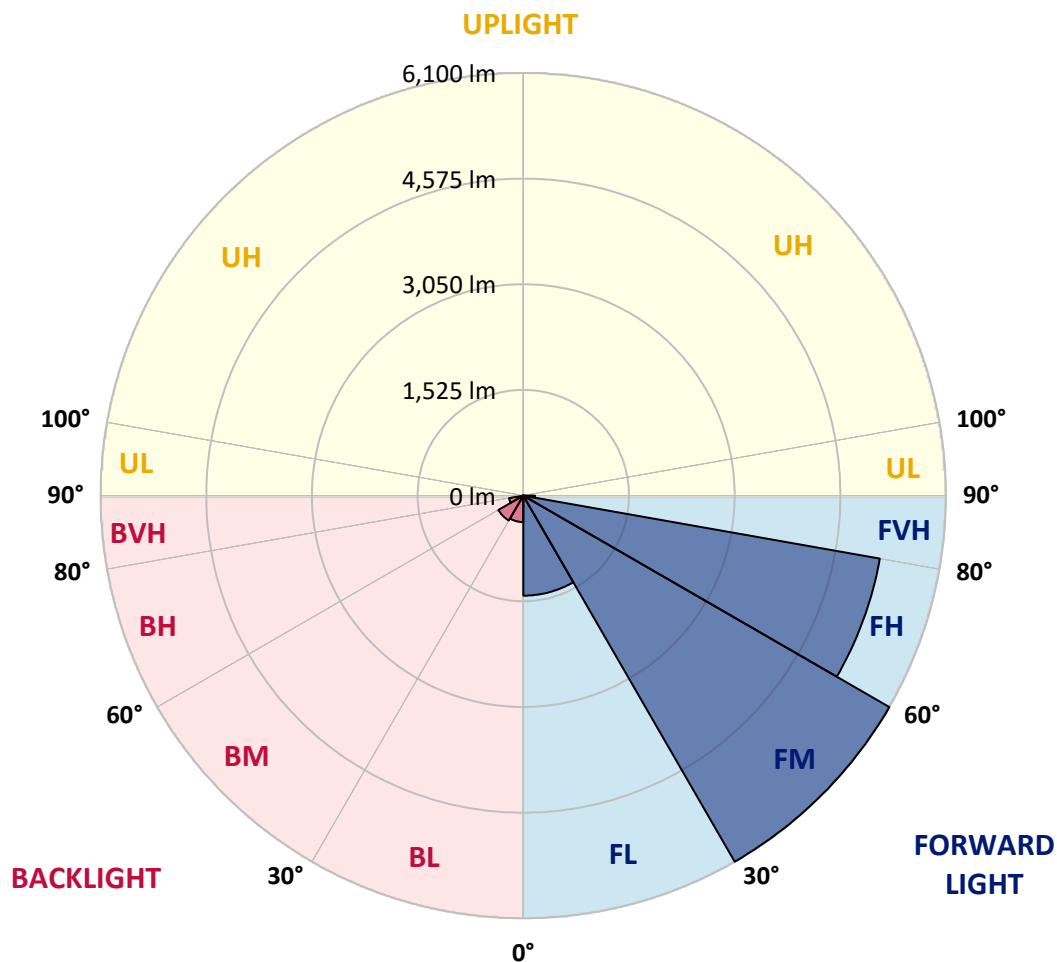
CATALOG NUMBER: GALN-SA4A-735-U-SL3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1443.2	10.4			
FM (30°-60°)	6099.8	43.8			
FH (60°-80°)	5223.7	37.5			G3/7500
FVH (80°-90°)	168.2	1.2			G2/225
BL (0°-30°)	382.0	2.7	B1/500		
BM (30°-60°)	414.8	3.0	B1/1000		
BH (60°-80°)	208.0	1.5	B1/500		G1/500
BVH (80°-90°)	1.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type III Short





REPORT NUMBER: P458869

CATALOG NUMBER: GALN-SA4A-735-U-SL3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6
2.5°	4289.1	4295.6	4271.4	4251.8	4201.5	4147.5	4075.7	4037.5	3972.3	3859.6	3734.8
5°	4389.7	4398.1	4394.3	4389.7	4370.1	4317.9	4226.6	4193.1	4097.1	3913.6	3688.2
7.5°	4166.1	4196.8	4200.6	4236.9	4271.4	4276.0	4241.5	4216.4	4127.9	3912.7	3605.3
10°	3869.8	3890.3	3920.1	3962.1	4045.0	4113.9	4147.5	4143.7	4092.5	3883.8	3508.4
12.5°	3570.8	3582.0	3627.6	3699.4	3800.9	3918.3	4007.7	4025.4	4026.3	3849.3	3427.3
15°	3313.7	3309.0	3344.4	3427.3	3569.9	3717.1	3877.3	3905.2	3950.0	3815.8	3351.9
17.5°	3093.8	3118.0	3123.6	3214.9	3346.3	3537.3	3741.3	3790.7	3880.1	3786.9	3289.5
20°	2957.8	2970.9	2983.0	3034.2	3152.5	3353.7	3613.7	3681.7	3814.9	3760.8	3219.6
22.5°	2917.8	2926.1	2915.9	2931.7	3015.6	3194.4	3474.8	3565.2	3752.5	3736.6	3162.8
25°	2948.5	2956.9	2932.7	2914.0	2942.9	3064.9	3340.7	3450.6	3702.2	3732.0	3119.9
27.5°	3023.0	3038.9	3005.3	2971.8	2955.0	2995.1	3235.4	3363.1	3667.7	3754.3	3100.3
30°	3139.5	3148.8	3123.6	3082.6	3044.4	3004.4	3180.5	3302.5	3658.4	3806.5	3098.5
32.5°	3266.2	3285.7	3271.8	3244.7	3195.4	3100.3	3196.3	3304.4	3680.7	3881.9	3121.8
35°	3422.7	3445.0	3458.1	3452.5	3389.1	3270.8	3296.9	3388.2	3740.3	4020.8	3185.1
37.5°	3576.4	3596.0	3669.5	3694.7	3638.8	3527.0	3492.5	3553.1	3871.7	4202.4	3299.7
40°	3752.5	3778.5	3881.9	3977.9	3950.9	3833.5	3770.2	3820.5	4072.9	4476.3	3516.8
42.5°	3921.1	3967.7	4125.1	4294.6	4319.8	4188.4	4146.5	4163.3	4371.0	4870.4	3819.5
45°	4160.5	4204.3	4407.4	4637.5	4755.8	4653.3	4610.5	4607.7	4780.0	5424.7	4310.5
47.5°	4506.1	4545.2	4784.7	5012.0	5222.5	5236.5	5155.4	5183.4	5294.2	6073.1	4912.3
50°	4930.0	5022.2	5179.7	5416.3	5697.6	5924.9	5950.1	5912.8	6007.8	6823.9	5635.2
52.5°	5545.8	5581.2	5725.6	5920.3	6250.1	6635.7	6934.8	6883.5	6853.7	7539.4	6365.6
55°	6005.1	6052.6	6277.1	6544.4	7027.9	7536.6	8185.0	8202.7	7826.3	8226.9	7080.1
57.5°	5866.2	5938.9	6278.9	6816.5	7879.4	8809.1	9291.7	9303.8	8726.2	8894.9	7886.9
60°	5153.6	5188.0	5675.3	6392.6	7952.1	10187.9	10861.4	10763.6	9642.0	9642.0	8599.5
62.5°	3654.6	3708.7	4103.7	5159.2	7181.7	10666.7	12741.4	12539.2	10903.4	10356.5	9024.3
65°	2335.5	2283.3	2545.1	3256.9	5350.1	9959.7	14378.2	14390.3	12090.2	10642.5	8792.4
67°	1691.8	1671.3	1746.7	2226.5	3627.6	8372.2	14412.7	15050.8	12772.1	10461.8	8050.8
67.5°	1547.4	1563.2	1618.2	2008.5	3296.0	7618.6	14256.2	15011.7	12925.9	10352.8	7782.5
70°	1172.9	1145.9	1205.5	1420.7	1975.9	4806.1	12263.5	13768.0	12734.9	9271.2	6218.4
72.5°	862.7	859.9	942.8	1161.7	1521.3	2560.0	9206.0	11039.4	10404.0	7059.6	3915.5
75°	582.2	608.3	740.6	970.7	1378.8	1660.1	6276.1	8008.9	7222.6	4008.6	1600.5
77.5°	331.6	333.5	477.0	779.7	1238.1	1335.9	3718.9	5102.3	3823.3	1333.1	475.1
80°	143.5	157.4	236.6	566.4	1026.6	1183.1	2132.4	2804.1	1546.4	282.3	153.7
82.5°	53.1	62.4	104.3	348.4	749.0	974.4	1288.4	1338.7	524.5	99.7	96.0
85°	0.0	1.9	38.2	163.0	390.3	435.1	860.8	793.7	232.0	47.5	62.4
87.5°	0.0	0.0	0.0	16.8	51.2	162.1	267.4	298.1	55.9	16.8	14.9
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: P458869  
 CATALOG NUMBER: GALN-SA4A-735-U-SL3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6	3695.6
2.5°	3667.7	3607.1	3455.3	3303.4	3190.7	3096.6	2955.0	2877.7	2836.7	2776.1	2779.9
5°	3575.5	3452.5	3185.1	2908.4	2684.9	2466.9	2206.0	2100.7	2012.2	1961.9	1928.4
7.5°	3438.5	3256.9	2860.9	2492.0	2148.3	1767.2	1481.2	1290.3	1161.7	1114.2	1068.5
10°	3288.5	3047.2	2532.1	2020.6	1543.7	1150.5	908.3	733.2	670.7	613.0	618.6
12.5°	3149.7	2856.3	2230.2	1594.9	1081.6	731.3	570.1	498.4	477.9	471.4	471.4
15°	3036.1	2673.7	1906.0	1199.0	741.5	525.4	456.5	436.9	429.5	427.6	427.6
17.5°	2915.0	2500.4	1613.5	885.9	539.4	439.7	416.4	403.4	400.6	398.7	398.7
20°	2806.9	2326.2	1335.9	659.6	436.0	395.9	381.0	372.6	369.8	368.0	368.9
22.5°	2704.4	2171.5	1075.1	498.4	383.8	360.5	345.6	337.2	331.6	327.0	327.9
25°	2613.1	2022.5	864.5	408.0	345.6	325.1	310.2	298.1	286.0	280.4	279.5
27.5°	2548.8	1892.1	673.5	349.3	311.2	288.8	270.2	255.3	239.4	231.0	229.2
30°	2495.7	1759.8	532.9	308.4	276.7	255.3	232.0	210.5	193.8	185.4	181.7
32.5°	2461.3	1634.0	420.1	274.8	247.8	221.7	195.6	174.2	155.6	147.2	145.3
35°	2455.7	1528.7	343.8	246.9	221.7	193.8	166.8	143.5	127.6	119.2	117.4
37.5°	2495.7	1447.7	287.9	224.5	200.3	169.6	139.7	118.3	104.3	97.8	96.9
40°	2602.9	1396.5	249.7	205.9	180.7	147.2	119.2	100.6	86.6	80.1	80.1
42.5°	2806.9	1398.3	224.5	188.2	161.2	125.8	101.5	83.8	71.7	66.1	64.3
45°	3125.5	1461.7	203.1	170.5	142.5	109.0	86.6	68.9	56.8	52.2	52.2
47.5°	3552.2	1587.4	184.5	152.8	125.8	93.2	73.6	55.9	45.6	41.0	41.0
50°	4110.2	1789.6	168.6	137.9	111.8	80.1	59.6	45.6	35.4	31.7	30.7
52.5°	4693.4	2039.3	150.0	124.8	96.0	68.0	48.4	35.4	27.0	24.2	23.3
55°	5337.1	2283.3	132.3	111.8	78.3	56.8	38.2	27.9	19.6	16.8	16.8
57.5°	5986.4	2522.8	110.9	93.2	61.5	41.9	29.8	20.5	13.0	10.2	10.2
60°	6536.1	2600.1	94.1	75.5	46.6	29.8	21.4	13.0	7.5	4.7	4.7
62.5°	6611.5	2339.2	79.2	57.8	33.5	20.5	11.2	7.5	2.8	1.9	1.9
65°	6201.6	1900.5	66.1	43.8	22.4	10.2	4.7	2.8	0.9	0.0	0.0
67°	5557.0	1540.9	54.0	32.6	15.8	6.5	2.8	0.9	0.0	0.0	0.0
67.5°	5392.1	1469.1	52.2	30.7	14.0	5.6	1.9	0.9	0.0	0.0	0.0
70°	4231.3	1100.2	37.3	18.6	8.4	3.7	0.0	0.0	0.0	0.0	0.0
72.5°	2629.9	622.3	27.0	11.2	5.6	1.9	0.0	0.0	0.0	0.0	0.0
75°	994.0	218.0	18.6	7.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	309.3	82.9	11.2	5.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	104.3	31.7	7.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	64.3	13.0	4.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	40.1	5.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	1.9	0.9	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

(END OF REPORT)