

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: P651359

Luminaire Tested: **GALN-SA4D-840-U-T2-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651359  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-840-U-T2-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21587.6 lumens  
Efficiency: N/A  
Efficacy: 88.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

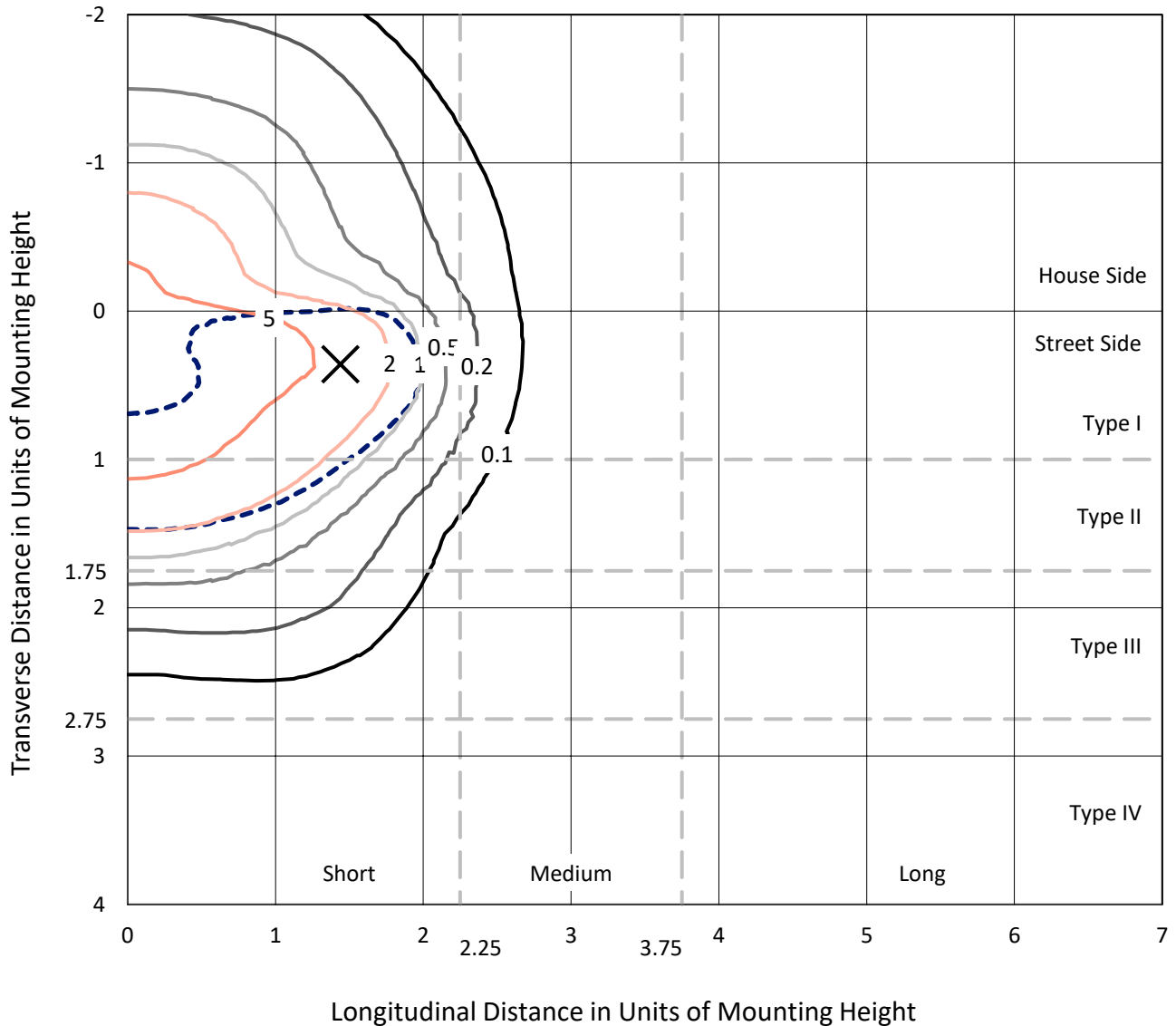
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P651359  
 CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSWH

### Iso-Footcandle Lines of Horizontal Illumination

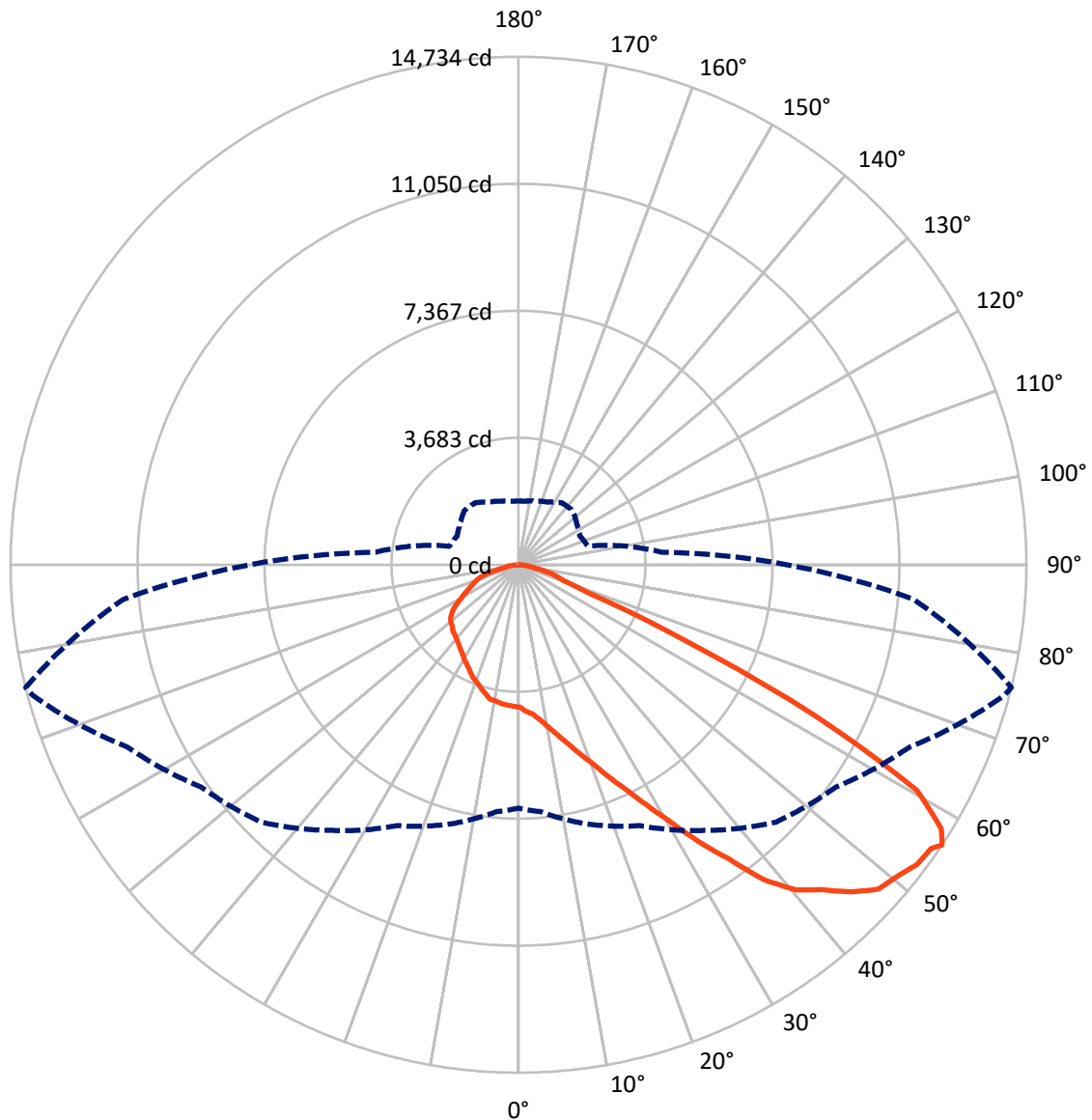
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc  
 Type II - Short - N/A

REPORT NUMBER: P651359  
CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSWH

### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

REPORT NUMBER: P651359  
 CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSWH

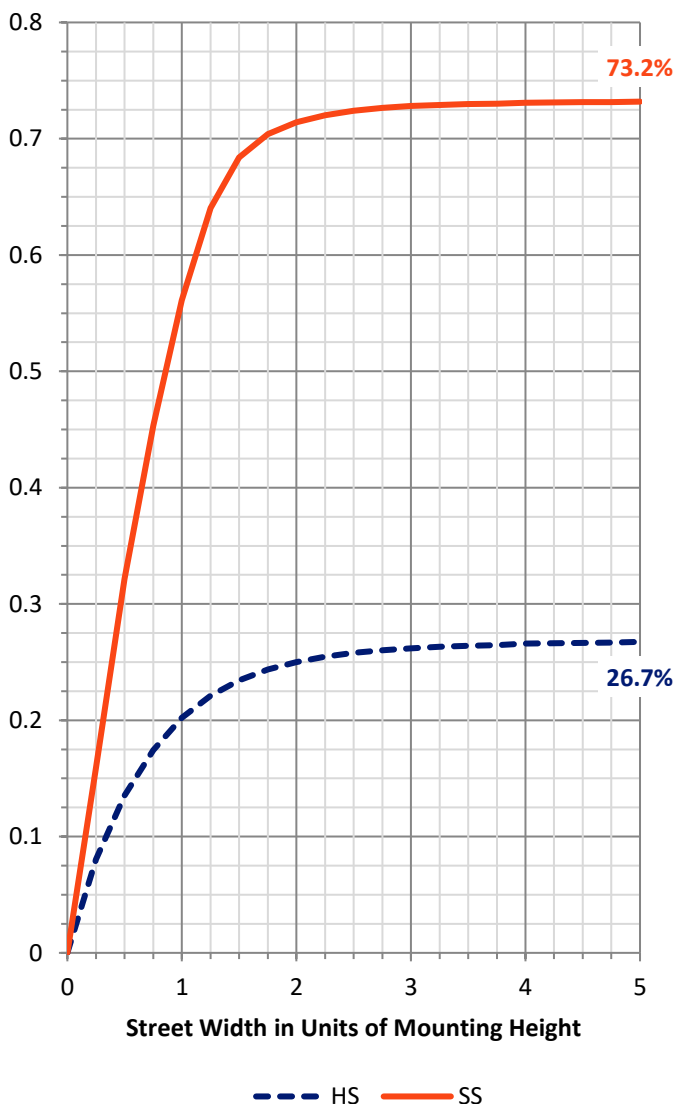
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5804.3	0.0	5804.3
	% Fixture	26.9	0.0	26.9
<b>Street Side</b>	Lumens	15783.4	0.0	15783.4
	% Fixture	73.1	0.0	73.1
<b>Total</b>	Lumens	21587.6	0.0	21587.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	409.6	1.9
10°-20°	1286.7	6.0
20°-30°	2250.4	10.4
30°-40°	3523.4	16.3
40°-50°	5125.6	23.7
50°-60°	5633.3	26.1
60°-70°	2514.5	11.6
70°-80°	726.3	3.4
80°-90°	117.8	0.5
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°	21587.6	100.0
0°-180°	21587.6	100.0



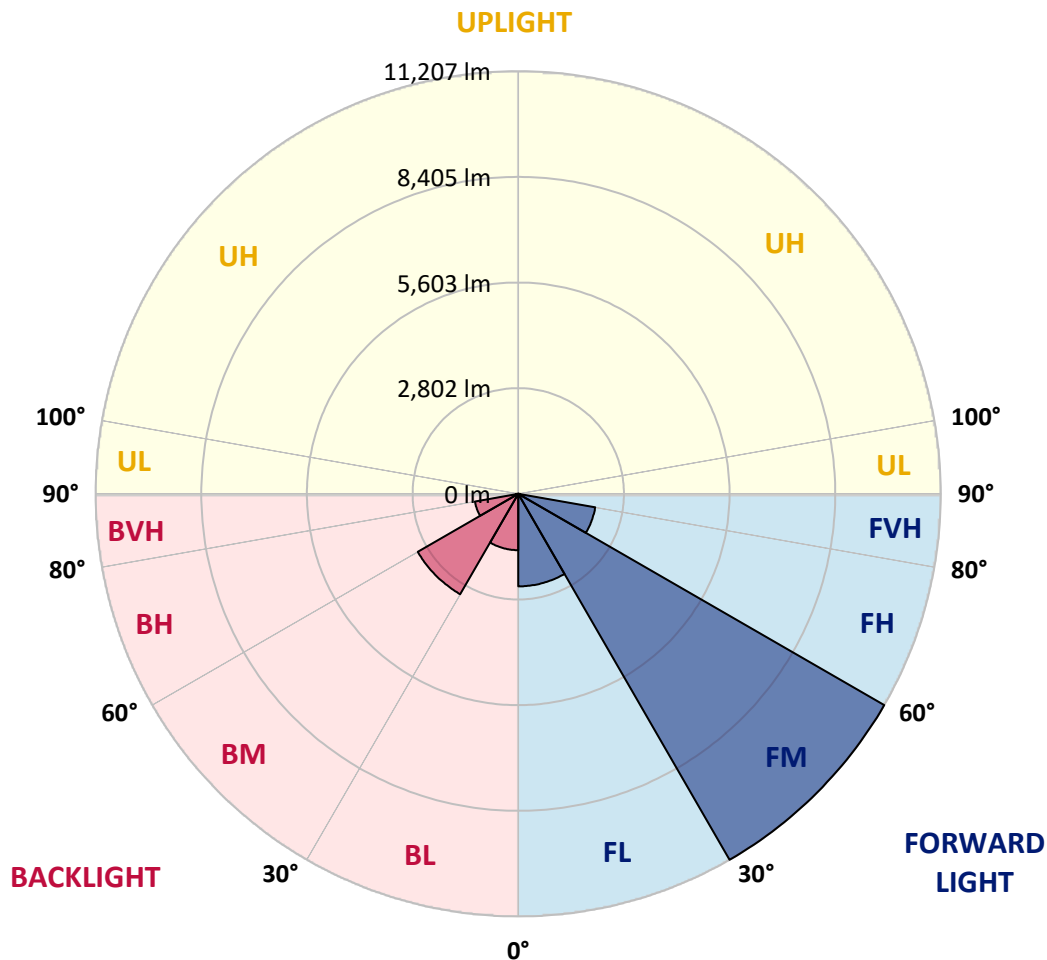
REPORT NUMBER: P651359  
 CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSWH

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2453.2	11.4			
FM (30°-60°)	11206.5	51.9			
FH (60°-80°)	2072.9	9.6			G2/5000
FVH (80°-90°)	50.7	0.2			G1/100
BL (0°-30°)	1493.5	6.9	B3/2500		
BM (30°-60°)	3075.8	14.2	B3/5000		
BH (60°-80°)	1167.8	5.4	B3/2500		G3/2500
BVH (80°-90°)	67.1	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-G3**

Type II Short





REPORT NUMBER: P651359

CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSWH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5
2.5°	4550.3	4477.5	4471.9	4452.3	4463.5	4413.1	4360.0	4290.0	4217.3	4262.0	4155.7
5°	4869.3	4771.3	4810.5	4743.4	4751.7	4684.6	4575.5	4494.3	4404.7	4351.6	4276.1
7.5°	4981.2	4989.7	5017.7	5006.5	4950.5	4950.5	4877.7	4735.0	4578.2	4547.5	4421.6
10°	5132.4	5135.1	5104.4	5112.8	5191.2	5154.7	5090.4	5028.8	4827.3	4790.9	4567.1
12.5°	5185.5	5135.1	5185.5	5230.3	5322.7	5373.1	5359.0	5314.3	5098.8	5073.6	4746.2
15°	5193.9	5163.2	5205.1	5305.9	5387.0	5599.7	5706.0	5675.2	5389.8	5392.6	4947.7
17.5°	5154.7	5196.7	5213.5	5300.2	5487.8	5686.4	5994.3	6036.3	5801.2	5764.8	5202.3
20°	5207.9	5177.1	5199.5	5277.9	5527.0	5837.5	6240.6	6517.6	6187.4	6162.2	5465.4
22.5°	5412.2	5370.2	5364.7	5415.0	5594.1	5915.9	6500.8	6999.0	6657.5	6671.5	5792.8
25°	5571.7	5594.1	5574.5	5571.7	5683.6	6033.5	6845.0	7572.6	7295.6	7214.4	6179.0
27.5°	5846.0	5899.1	5859.9	5913.2	5887.9	6209.8	7091.3	8207.8	7983.9	7874.9	6528.8
30°	6226.6	6254.5	6218.2	6218.2	6142.6	6456.0	7315.2	8871.1	8778.8	8630.4	6940.2
32.5°	6727.5	6769.5	6696.7	6654.7	6643.6	6822.6	7718.1	9525.9	9682.7	9556.7	7485.8
35°	7390.7	7365.6	7278.8	7239.6	7088.5	7385.2	8317.0	10278.7	10690.1	10466.2	8146.3
37.5°	7975.6	7936.4	7930.8	7712.6	7748.9	7992.4	8826.3	10849.6	11666.8	11602.4	8843.1
40°	8521.3	8557.7	8616.5	8493.3	8437.3	8705.9	9419.6	11286.1	12425.1	12400.0	9380.4
42.5°	9106.2	9072.6	9176.2	9072.6	8988.6	9369.2	10063.2	11588.4	13091.2	12884.0	9942.9
45°	9954.1	9847.8	9884.1	9892.5	9831.0	9970.9	10329.1	11806.6	13558.5	13536.1	10354.3
47.5°	10662.1	10664.9	10603.3	10555.7	10368.3	10508.2	10625.7	11943.8	14095.8	14059.4	10513.8
50°	10925.2	10888.8	11067.9	11171.4	11182.6	10897.2	10858.0	12019.3	14378.4	14219.0	10673.3
52.5°	9979.3	10012.9	10295.5	10911.1	11266.5	11297.3	11129.5	12176.1	14493.2	14459.6	10802.1
55°	8031.6	8193.9	8658.4	9369.2	10211.6	11137.9	11423.3	12338.4	14554.8	14526.8	11372.9
56°	7060.5	7186.4	7790.9	8347.8	9405.6	10558.6	11238.6	12511.9	14602.3	14733.8	11507.2
57.5°	5683.6	5829.1	6262.9	6895.4	8143.5	9456.0	10729.2	12299.2	14417.6	14468.0	11605.2
60°	3554.1	3568.0	4088.5	4505.5	5384.3	6665.9	8188.3	10701.3	13343.1	13270.2	10424.2
62.5°	2331.1	2333.9	2806.8	3148.3	3548.4	3842.3	4818.9	7096.9	9844.9	9716.2	7421.5
65°	1637.1	1673.5	2040.1	2496.3	2658.6	2504.6	2473.8	3741.5	5499.0	5314.3	3987.8
67.5°	1197.8	1200.5	1525.2	2014.9	2249.9	1905.7	1547.5	1827.4	2177.2	2171.6	1847.0
70°	792.0	825.5	1074.6	1505.6	1774.3	1530.8	1264.9	1306.9	1385.2	1385.2	1374.0
72.5°	461.7	492.5	657.7	954.3	996.2	957.1	1001.9	1119.4	1169.7	1167.0	1152.9
75°	263.1	277.0	313.4	397.4	495.3	584.9	736.0	847.9	898.3	929.1	892.7
77.5°	153.9	162.3	184.7	226.6	257.4	316.2	400.1	478.5	545.7	537.3	542.9
80°	81.2	81.2	103.5	134.3	179.1	223.9	265.8	310.7	347.0	355.4	363.8
82.5°	47.6	50.4	67.2	98.0	128.8	159.5	204.3	235.1	268.6	271.5	277.0
85°	25.1	28.0	42.0	64.3	86.8	98.0	100.8	95.1	103.5	98.0	111.9
87.5°	8.4	8.4	14.0	11.2	11.2	14.0	16.8	16.8	22.4	22.4	22.4
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: P651359

CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSWH

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5	4130.5
2.5°	4152.9	4152.9	4105.3	4015.8	4001.8	3965.4	3931.8	3929.1	3903.8	3881.5	3870.3
5°	4231.2	4144.5	4074.6	3993.4	3898.2	3853.5	3803.1	3747.2	3724.7	3747.2	3744.3
7.5°	4320.8	4248.1	4038.1	3887.0	3777.9	3733.1	3677.2	3618.4	3624.0	3624.0	3584.8
10°	4407.6	4309.6	3973.8	3780.7	3621.2	3587.6	3556.8	3579.2	3607.2	3612.8	3587.6
12.5°	4553.1	4332.0	3943.0	3674.3	3573.7	3500.8	3520.4	3582.0	3640.8	3624.0	3643.5
15°	4662.3	4351.6	3803.1	3565.3	3439.3	3472.9	3542.9	3584.8	3682.7	3671.6	3691.1
17.5°	4768.6	4362.8	3666.0	3419.7	3366.5	3458.9	3512.0	3632.4	3663.1	3730.3	3755.5
20°	4986.9	4385.1	3526.1	3330.2	3313.4	3419.7	3512.0	3568.0	3635.2	3693.9	3693.9
22.5°	5098.8	4374.0	3433.7	3212.6	3265.8	3333.0	3416.9	3512.0	3512.0	3568.0	3570.8
25°	5238.7	4329.2	3288.1	3156.7	3195.8	3260.2	3355.3	3321.8	3358.1	3358.1	3402.9
27.5°	5398.2	4234.1	3162.2	3055.9	3134.2	3204.2	3218.3	3195.8	3153.8	3148.3	3131.5
30°	5527.0	4116.5	3069.9	3022.3	3086.7	3125.9	3081.1	3033.5	2960.7	2955.2	2916.0
32.5°	5703.2	3971.0	2955.2	2938.4	3011.1	3013.9	2999.9	2927.2	2820.8	2776.1	2731.3
35°	5999.9	3887.0	2868.4	2893.6	2916.0	2907.6	2882.4	2804.1	2697.7	2678.1	2661.3
37.5°	6218.2	3825.5	2778.8	2809.6	2829.2	2840.4	2764.9	2678.1	2680.9	2641.7	2630.6
40°	6464.4	3786.3	2706.1	2720.1	2722.9	2759.2	2666.9	2624.9	2644.5	2619.4	2636.1
42.5°	6780.6	3797.5	2630.6	2619.4	2672.5	2658.6	2613.7	2557.8	2569.0	2493.4	2504.6
45°	6948.6	3873.1	2585.7	2535.4	2594.1	2591.4	2532.6	2479.4	2412.2	2266.7	2272.4
47.5°	7060.5	3892.7	2479.4	2445.9	2507.4	2543.8	2476.7	2353.5	2258.3	2154.8	2129.6
50°	7175.2	3929.1	2429.1	2359.1	2384.3	2471.0	2387.1	2269.5	2177.2	2084.8	2098.8
52.5°	7276.0	3999.0	2331.1	2227.6	2272.4	2367.5	2322.7	2180.0	2079.3	2003.7	1981.3
55°	7723.7	4155.7	2166.0	2031.7	2138.0	2258.3	2233.2	2059.7	1950.5	1911.3	1905.7
56°	7793.7	4161.3	2079.3	1964.5	2062.5	2222.0	2191.2	2006.5	1908.6	1847.0	1849.8
57.5°	7804.9	4094.2	1956.1	1902.9	1986.9	2168.8	2129.6	1964.5	1830.2	1774.3	1757.4
60°	6867.4	3195.8	1802.2	1768.6	1866.6	2006.5	1992.5	1849.8	1698.7	1634.3	1665.1
62.5°	4681.8	2342.3	1681.8	1676.3	1726.7	1863.7	1827.4	1698.7	1572.8	1530.8	1511.2
65°	2725.7	1777.0	1564.3	1542.0	1583.9	1656.7	1681.8	1547.5	1416.0	1388.1	1379.7
67.5°	1609.1	1469.2	1413.2	1376.8	1362.8	1407.6	1427.2	1348.9	1217.3	1178.2	1211.7
70°	1346.0	1306.9	1309.7	1248.1	1214.5	1183.7	1167.0	1097.0	987.8	937.5	923.5
72.5°	1161.3	1144.6	1133.3	1077.4	1046.6	976.7	903.9	833.9	752.8	710.8	713.6
75°	887.1	881.5	887.1	859.2	805.9	750.0	682.8	593.2	531.7	478.5	489.7
77.5°	528.9	545.7	554.1	542.9	520.5	470.1	428.2	369.4	310.7	268.6	263.1
80°	363.8	377.8	391.8	377.8	355.4	319.0	274.3	229.5	187.5	165.1	159.5
82.5°	277.0	291.1	299.4	285.4	257.4	218.2	187.5	156.7	123.1	100.8	95.1
85°	100.8	114.7	111.9	134.3	145.5	139.9	120.3	92.3	70.0	50.4	47.6
87.5°	28.0	25.1	28.0	28.0	28.0	25.1	22.4	22.4	22.4	14.0	11.2
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)