

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: P651867

Luminaire Tested: **GALN-SA4A-840-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651867  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-840-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15569.5 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

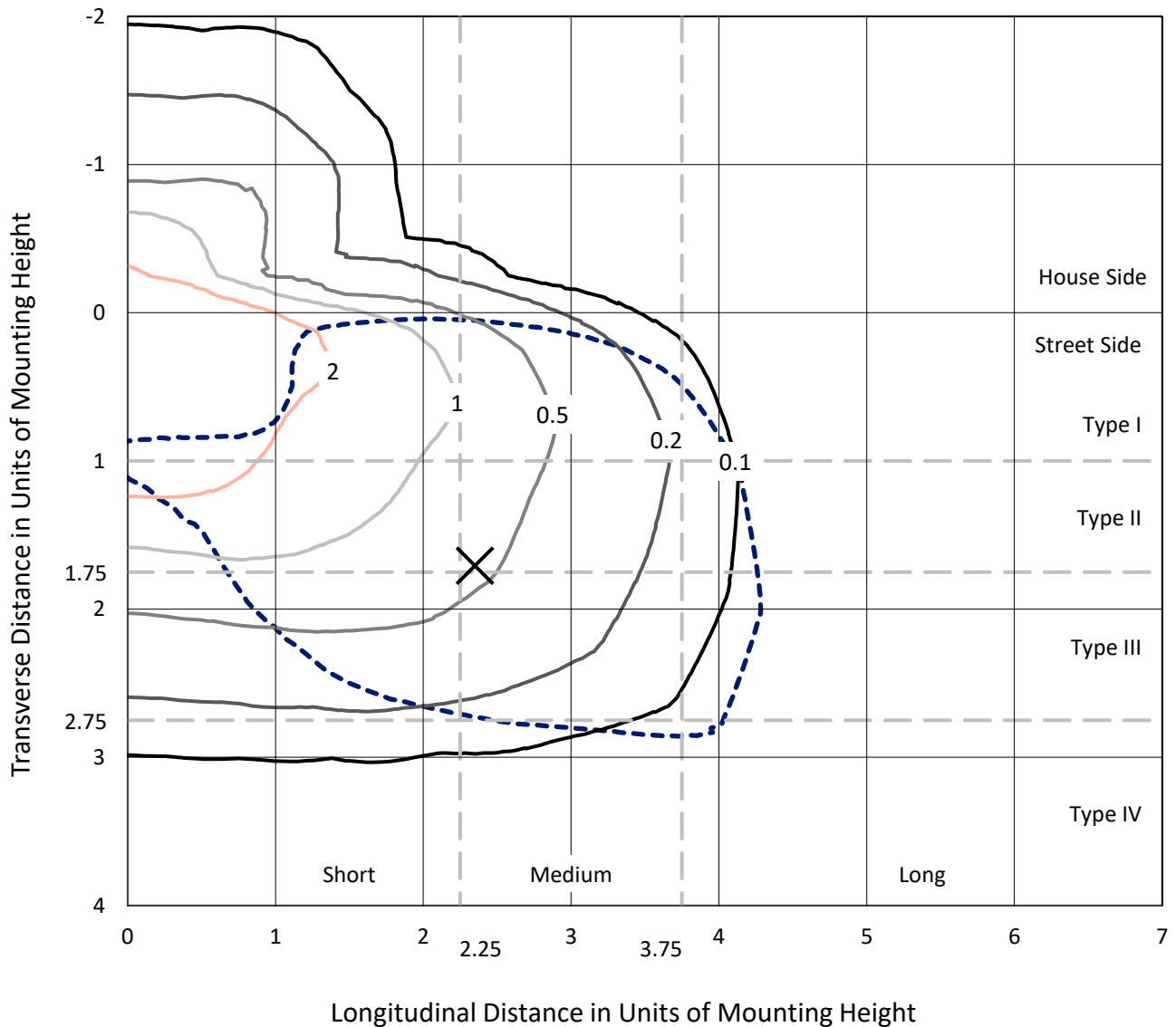
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P651867  
 CATALOG NUMBER: GALN-SA4A-840-U-T3R

### Iso-Footcandle Lines of Horizontal Illumination

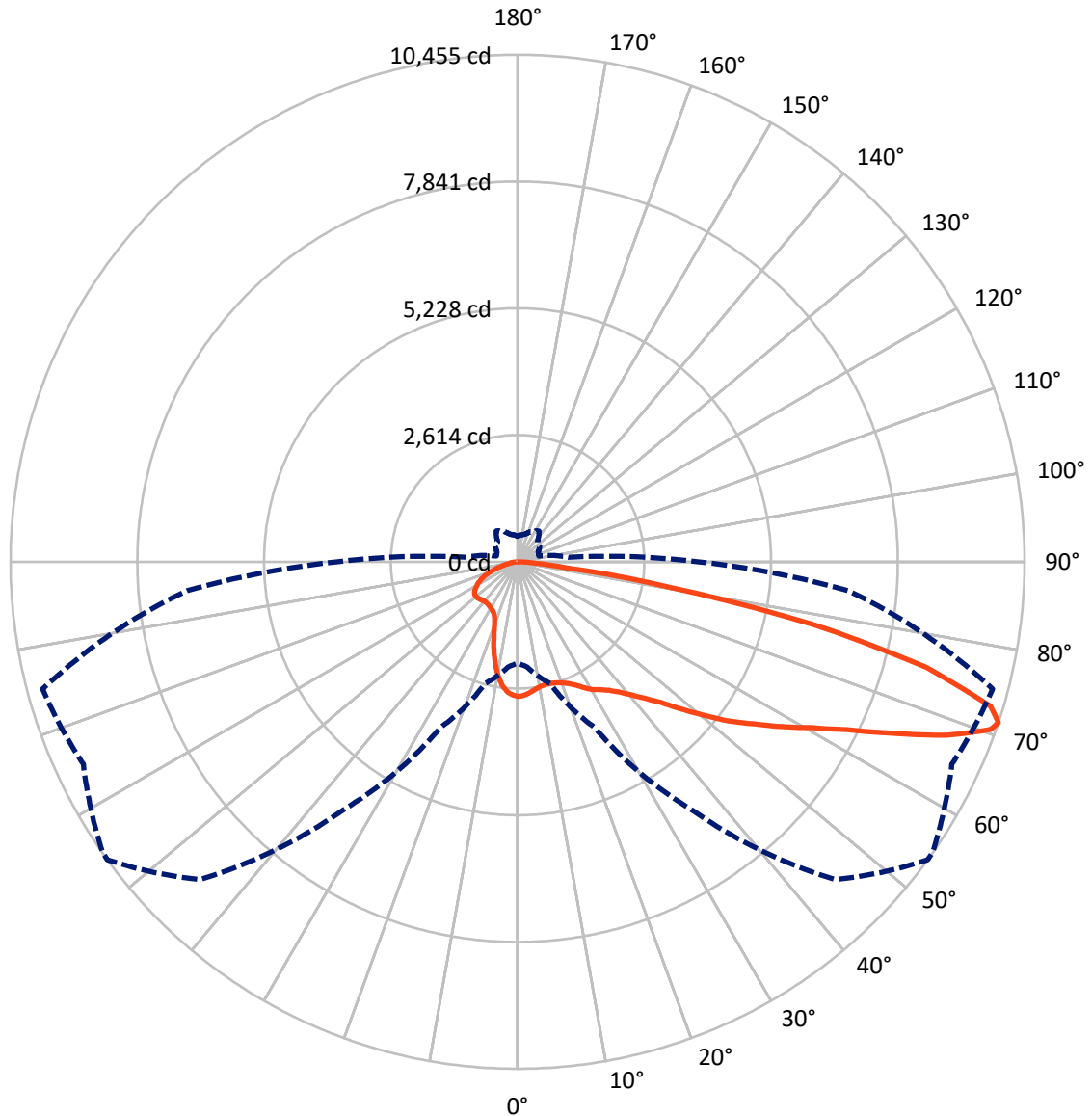
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P651867  
CATALOG NUMBER: GALN-SA4A-840-U-T3R

### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P651867  
 CATALOG NUMBER: GALN-SA4A-840-U-T3R

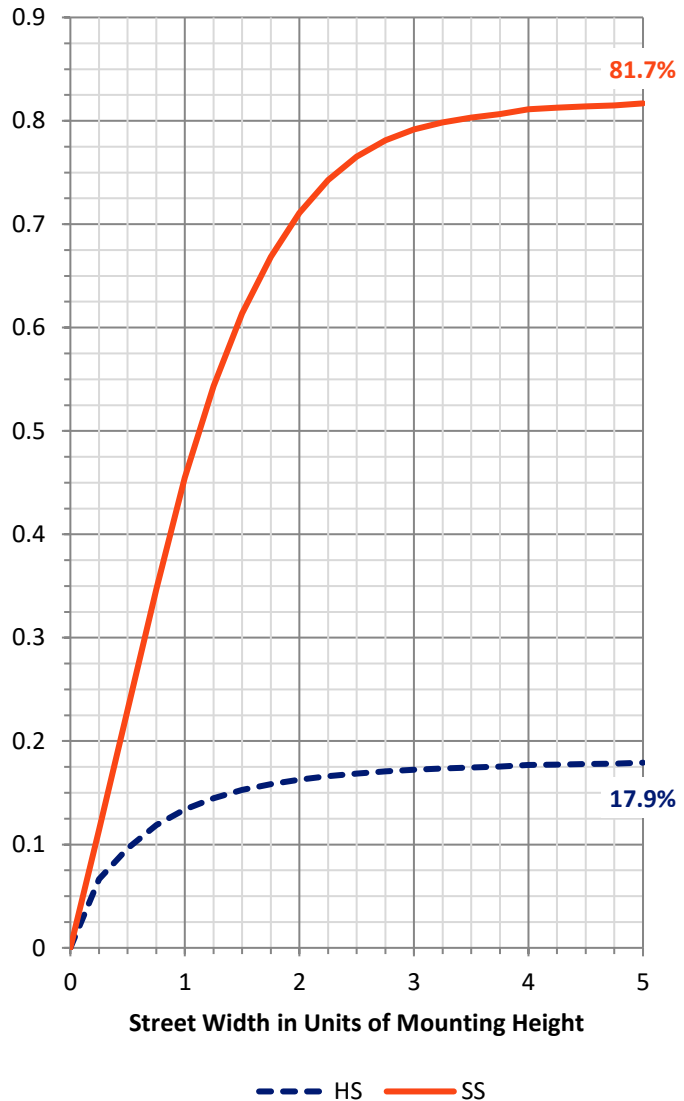
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2811.0	0.0	2811.0
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	12758.5	0.0	12758.5
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	15569.5	0.0	15569.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	247.5	1.6
10°-20°	653.6	4.2
20°-30°	1088.3	7.0
30°-40°	1609.3	10.3
40°-50°	2266.8	14.6
50°-60°	3035.3	19.5
60°-70°	3825.8	24.6
70°-80°	2613.0	16.8
80°-90°	229.8	1.5
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°	15569.5	100.0
0°-180°	15569.5	100.0

**Coefficient of Utilization**



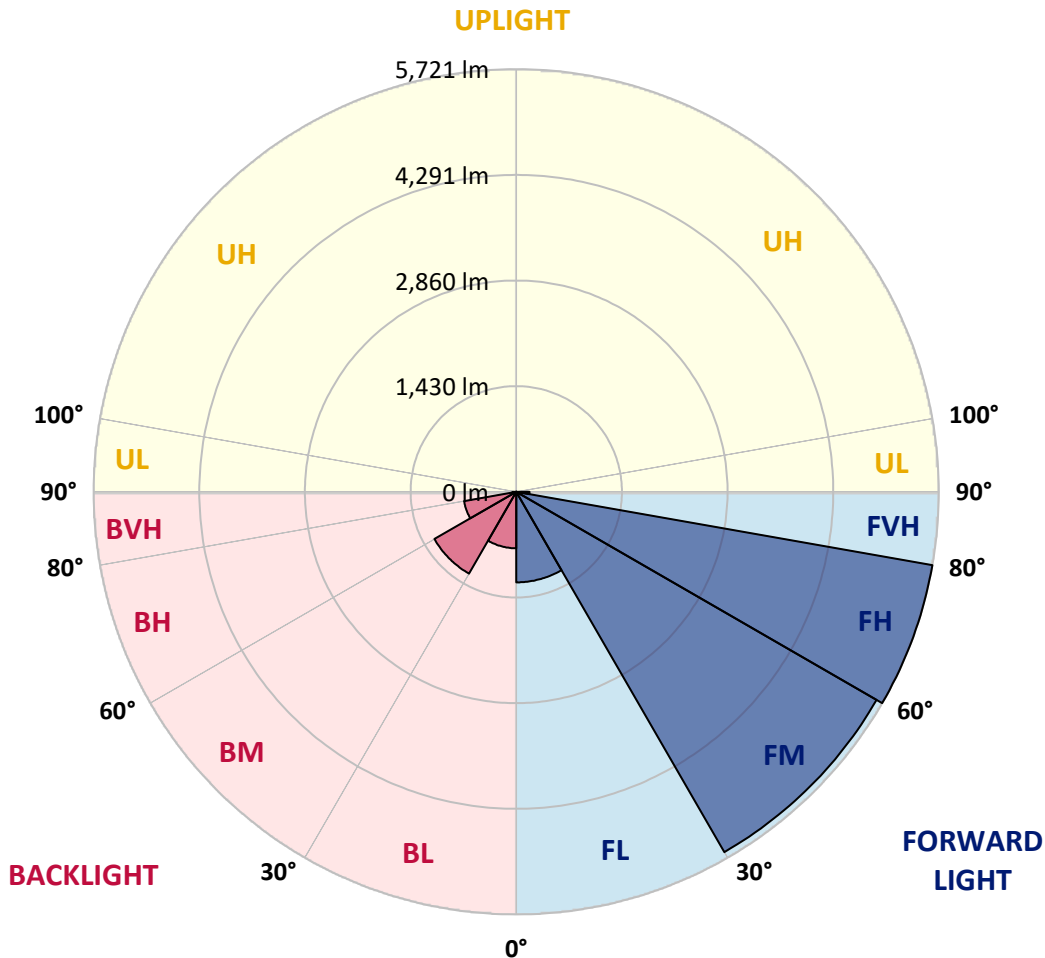
REPORT NUMBER: P651867  
 CATALOG NUMBER: GALN-SA4A-840-U-T3R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1225.6	7.9			
FM (30°-60°)	5632.5	36.2			
FH (60°-80°)	5720.8	36.7			G3/7500
FVH (80°-90°)	179.6	1.2			G2/225
BL (0°-30°)	764.0	4.9	B2/1000		
BM (30°-60°)	1278.9	8.2	B2/2500		
BH (60°-80°)	717.9	4.6	B2/1000		G2/1000
BVH (80°-90°)	50.2	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Medium





REPORT NUMBER: P651867  
 CATALOG NUMBER: GALN-SA4A-840-U-T3R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8
2.5°	2683.6	2696.2	2699.6	2708.0	2725.7	2740.0	2754.3	2752.6	2772.8	2781.2	2788.8
5°	2564.2	2567.6	2580.2	2597.0	2628.1	2667.7	2706.3	2707.2	2756.8	2796.3	2815.7
7.5°	2476.7	2487.7	2496.1	2513.7	2546.5	2589.4	2650.8	2655.9	2744.2	2822.4	2863.6
10°	2419.6	2432.2	2441.4	2463.3	2496.1	2544.0	2610.5	2619.7	2734.9	2863.6	2935.9
12.5°	2367.4	2380.0	2388.4	2417.0	2459.9	2518.8	2593.6	2604.6	2738.3	2911.5	3015.0
15°	2399.4	2409.5	2406.1	2414.5	2443.1	2510.4	2600.4	2611.3	2750.9	2957.8	3093.2
17.5°	2541.5	2549.9	2522.2	2490.2	2476.7	2526.4	2621.4	2633.2	2776.1	3005.7	3173.1
20°	2750.9	2773.6	2713.1	2641.6	2576.8	2583.6	2665.1	2677.7	2811.5	3053.7	3254.7
22.5°	3023.4	3040.2	2966.2	2848.5	2729.0	2667.7	2730.7	2738.3	2864.4	3115.9	3343.8
25°	3343.8	3353.9	3251.3	3099.9	2927.5	2811.5	2820.7	2834.2	2951.9	3186.5	3422.9
27.5°	3655.0	3686.9	3568.4	3383.3	3156.3	2962.8	2944.3	2952.8	3046.9	3226.1	3477.5
30°	4024.2	4021.7	3896.4	3681.9	3390.9	3127.7	3061.2	3059.6	3098.2	3245.4	3517.1
32.5°	4318.5	4353.0	4230.2	3996.4	3659.2	3298.4	3142.0	3138.6	3137.8	3279.1	3575.9
35°	4653.3	4658.3	4545.6	4310.1	3949.3	3512.9	3254.7	3237.8	3218.5	3351.4	3655.8
37.5°	4952.6	4976.2	4872.8	4608.7	4234.4	3735.7	3409.4	3398.5	3339.6	3476.7	3783.7
40°	5186.4	5204.1	5141.9	4890.4	4515.3	3976.2	3606.2	3586.0	3514.5	3681.9	3954.4
42.5°	5263.0	5299.1	5323.5	5199.9	4838.3	4261.3	3848.4	3823.2	3768.5	3993.1	4151.2
45°	5268.9	5326.1	5454.7	5460.6	5162.9	4602.8	4131.0	4113.3	4109.1	4391.7	4427.9
47.5°	5224.3	5282.3	5498.5	5615.4	5452.2	4947.6	4538.9	4511.1	4513.6	4884.5	4738.2
50°	5116.6	5185.6	5448.0	5714.6	5678.4	5305.9	4969.5	4960.2	5012.4	5447.2	5060.3
52.5°	4914.0	4997.2	5395.9	5776.8	5846.6	5614.5	5458.9	5432.9	5564.9	6057.7	5412.7
55°	4353.0	4478.3	5204.9	5811.3	6006.4	5909.7	5899.6	5946.7	6121.6	6723.8	5800.4
57.5°	4060.3	4154.5	4790.3	5817.2	6208.3	6252.8	6414.3	6426.1	6732.2	7431.1	6238.5
60°	3900.6	3983.8	4563.3	5778.5	6490.0	6677.5	6940.8	6982.8	7328.5	8197.2	6692.7
62.5°	3761.0	3832.4	4427.0	5644.8	6807.9	7307.4	7622.8	7643.0	8005.5	9043.3	7140.9
65°	3432.1	3513.7	4152.9	5511.1	7082.1	8094.6	8527.7	8504.2	8726.2	9773.3	7421.8
67.5°	2988.9	3092.4	3640.7	5049.4	7217.5	8955.0	9547.0	9517.6	9437.7	10251.8	7502.6
70°	2422.9	2478.4	2985.5	4251.3	6676.7	9406.6	10351.9	10320.8	9878.4	10314.9	7120.7
71°	2084.8	2171.5	2599.5	3776.1	6226.8	9268.7	10455.3	10446.9	9879.2	10140.8	6833.1
72.5°	1627.3	1680.3	2058.8	2925.8	5292.4	8484.8	10199.6	10231.6	9664.8	9657.2	6240.2
75°	1029.4	1052.9	1291.8	1722.4	2904.0	6008.9	8706.9	8793.5	8581.6	7904.6	4640.6
77.5°	598.0	628.2	773.7	1015.1	1254.8	3261.4	6230.1	6324.3	5962.7	4352.2	1899.8
80°	348.2	381.8	509.6	589.5	576.1	1210.2	3172.3	3332.9	2581.9	1099.2	533.2
82.5°	193.4	216.1	358.3	359.1	307.0	395.3	998.3	1044.5	736.7	443.2	217.8
85°	140.4	158.9	231.3	209.4	147.2	169.9	347.3	364.2	297.7	186.7	70.6
87.5°	49.6	70.6	127.0	100.9	40.4	35.3	100.1	81.6	75.7	52.1	16.0
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: P651867  
 CATALOG NUMBER: GALN-SA4A-840-U-T3R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8	2777.8
2.5°	2793.0	2794.6	2786.2	2771.1	2756.0	2736.6	2714.7	2697.9	2690.4	2689.5	2688.7
5°	2823.2	2827.4	2795.5	2748.4	2696.2	2632.3	2577.7	2515.4	2499.5	2474.2	2481.8
7.5°	2872.0	2869.5	2806.4	2706.3	2584.4	2449.0	2334.6	2268.2	2199.2	2179.9	2180.7
10°	2941.8	2925.8	2806.4	2620.6	2417.0	2216.0	2056.2	1955.3	1900.7	1855.2	1838.4
12.5°	3015.8	2975.5	2779.5	2500.3	2201.7	1955.3	1783.8	1647.5	1612.2	1575.2	1576.0
15°	3086.5	3019.2	2726.5	2331.3	1969.6	1677.0	1510.4	1428.9	1417.9	1422.1	1421.3
17.5°	3150.4	3050.3	2645.8	2142.9	1698.8	1438.1	1349.8	1355.7	1385.1	1406.2	1408.7
20°	3215.1	3068.8	2525.5	1890.6	1443.2	1293.5	1296.8	1343.1	1387.6	1416.2	1420.4
22.5°	3276.5	3077.2	2384.2	1646.7	1258.1	1232.1	1281.7	1331.3	1375.0	1402.8	1407.0
25°	3316.9	3057.9	2184.1	1391.9	1167.3	1210.2	1262.3	1304.4	1341.4	1370.0	1376.7
27.5°	3327.8	2995.6	1936.0	1185.8	1125.3	1189.2	1237.1	1268.2	1296.8	1323.7	1328.8
30°	3322.0	2904.0	1663.5	1064.7	1100.9	1164.8	1201.8	1224.5	1259.0	1280.0	1284.2
32.5°	3312.7	2797.2	1379.2	999.9	1080.7	1142.1	1163.9	1184.1	1183.3	1174.9	1180.8
35°	3316.1	2669.3	1148.8	961.3	1063.0	1125.3	1143.8	1118.5	1046.2	1042.8	1039.5
37.5°	3333.7	2543.2	981.4	934.4	1053.8	1122.7	1132.8	1016.8	952.9	923.4	915.8
40°	3379.1	2396.0	871.3	914.2	1052.9	1142.1	1083.2	965.5	842.7	785.5	781.3
42.5°	3439.7	2251.4	804.0	901.6	1063.0	1171.5	1063.0	893.1	759.4	725.8	720.7
45°	3529.7	2085.7	767.0	895.7	1078.2	1182.4	1056.3	840.2	725.8	698.9	698.9
47.5°	3631.4	1927.6	746.8	891.5	1097.5	1174.9	996.6	823.3	709.8	713.2	729.1
50°	3732.4	1790.5	731.7	882.2	1114.3	1170.7	972.2	822.5	714.0	756.9	785.5
52.5°	3849.3	1693.8	713.2	867.1	1114.3	1143.8	964.6	839.3	725.8	738.4	751.0
55°	3990.5	1663.5	689.6	834.3	1094.1	1076.5	960.4	863.7	734.2	704.8	709.8
57.5°	4177.2	1712.3	666.9	793.1	1047.9	1006.7	958.7	870.4	714.8	690.5	685.4
60°	4394.2	1809.0	660.2	751.0	984.8	947.0	948.6	851.1	687.9	662.7	666.9
62.5°	4546.4	1867.0	656.0	719.1	915.8	881.4	924.3	827.5	676.2	654.3	658.5
65°	4546.4	1796.4	617.3	670.3	826.7	802.3	894.8	798.1	661.0	635.8	631.6
67.5°	4374.0	1590.3	558.4	597.1	728.3	712.3	853.6	762.8	638.3	619.0	608.9
70°	3924.9	1206.0	484.4	511.3	603.8	618.1	800.6	714.8	600.5	576.9	561.8
71°	3727.3	1050.4	453.3	467.6	555.9	576.9	775.4	694.7	583.7	550.0	523.1
72.5°	3346.3	884.7	406.2	412.1	475.2	513.0	722.4	656.0	551.7	503.8	473.5
75°	2542.3	645.9	327.1	323.8	351.5	407.0	611.4	584.5	483.6	418.8	401.2
77.5°	1098.3	351.5	244.7	247.3	238.8	308.6	481.1	502.1	414.6	340.6	324.6
80°	333.0	202.7	167.4	170.7	159.8	206.9	338.9	393.6	333.0	264.9	243.0
82.5°	170.7	121.1	114.4	112.7	101.8	116.9	205.2	269.1	238.0	165.7	146.3
85°	74.0	64.8	56.3	54.7	47.9	42.0	73.2	134.6	126.2	92.5	88.3
87.5°	18.5	16.8	10.9	10.1	5.9	0.8	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)