

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: P651634

Luminaire Tested: **GALN-SA9D-840-U-T2-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651634  
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-SA9D-840-U-T2-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 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: 49471.8 lumens  
Efficiency: N/A  
Efficacy: 89.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

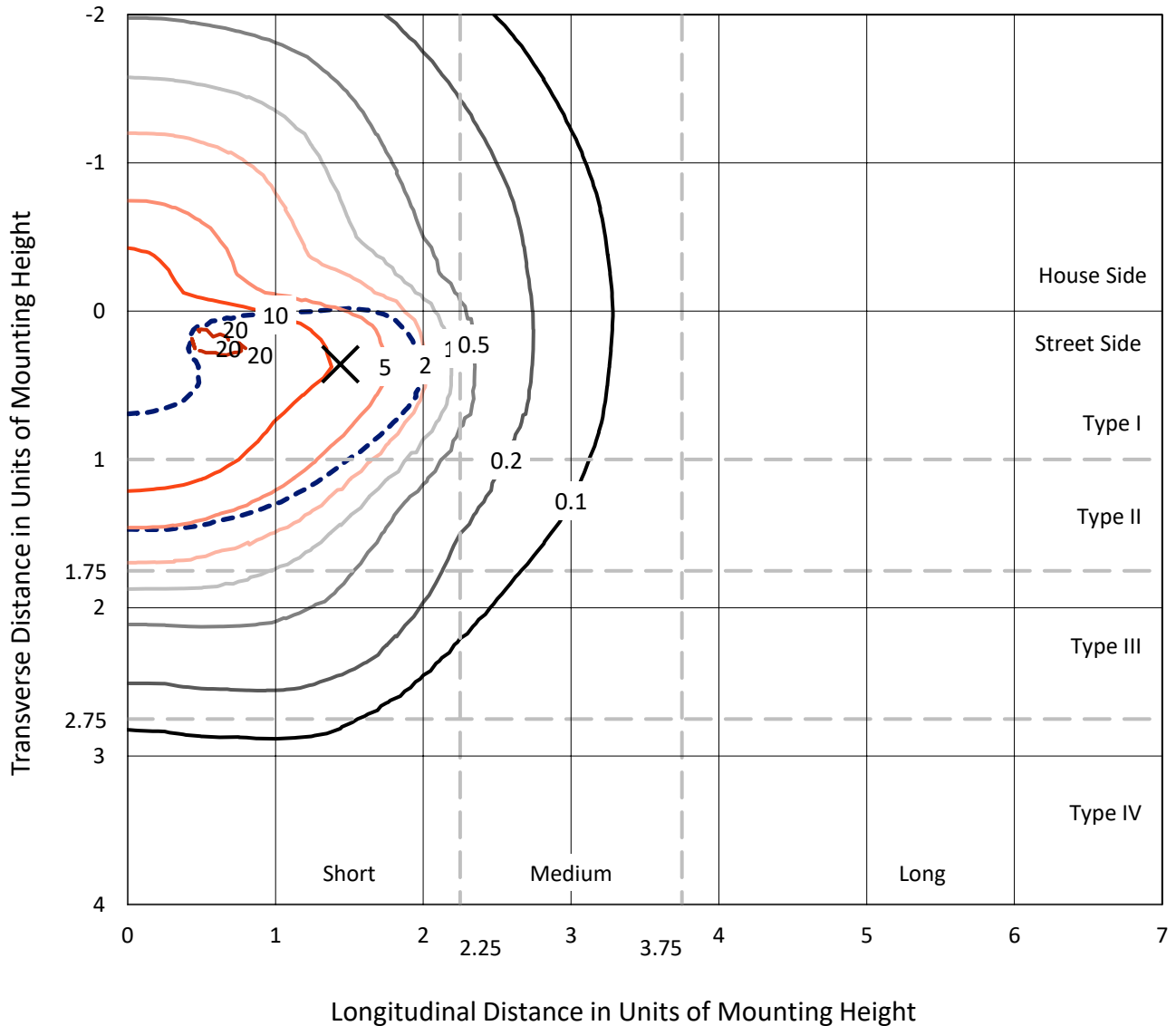
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

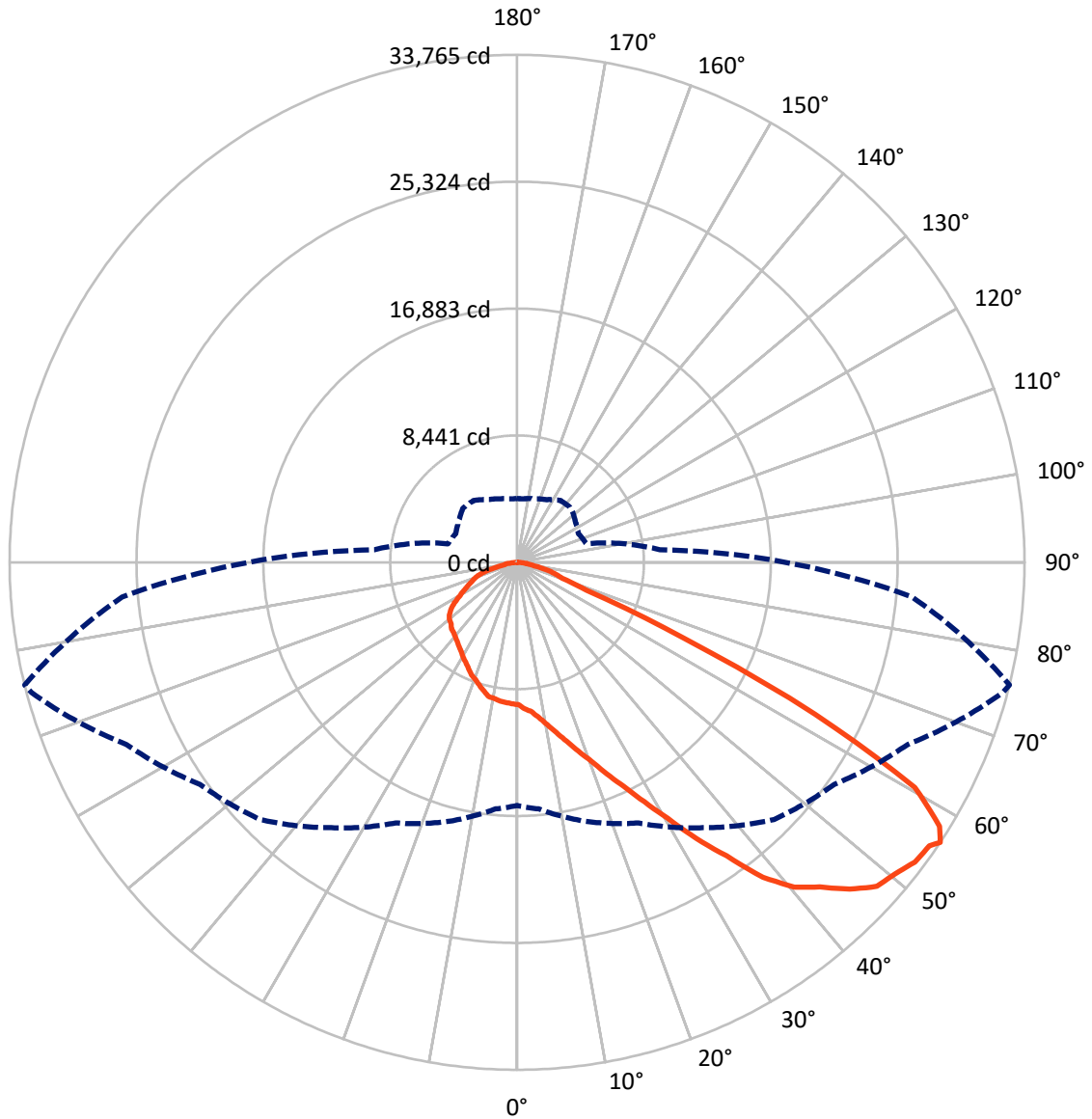
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 21.1 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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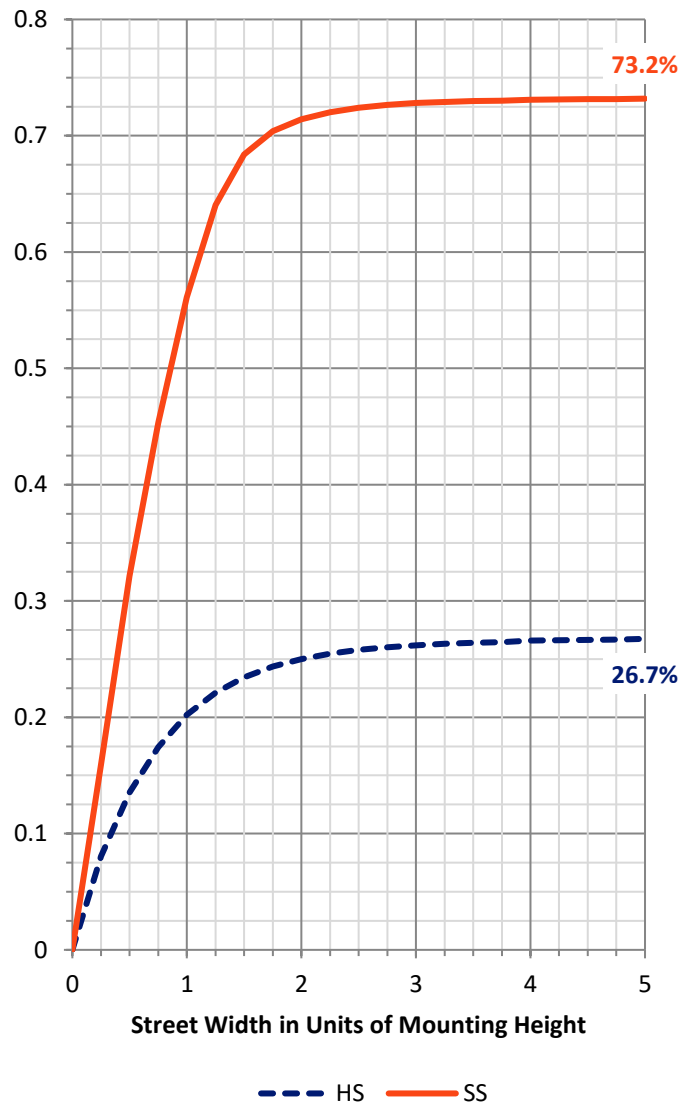
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13301.5	0.0	13301.5
	% Fixture	26.9	0.0	26.9
<b>Street Side</b>	Lumens	36170.3	0.0	36170.3
	% Fixture	73.1	0.0	73.1
<b>Total</b>	Lumens	49471.8	0.0	49471.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	938.7	1.9
10°-20°	2948.8	6.0
20°-30°	5157.1	10.4
30°-40°	8074.5	16.3
40°-50°	11746.2	23.7
50°-60°	12909.8	26.1
60°-70°	5762.4	11.6
70°-80°	1664.4	3.4
80°-90°	270.0	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°	49471.8	100.0
0°-180°	49471.8	100.0

**Coefficient of Utilization**

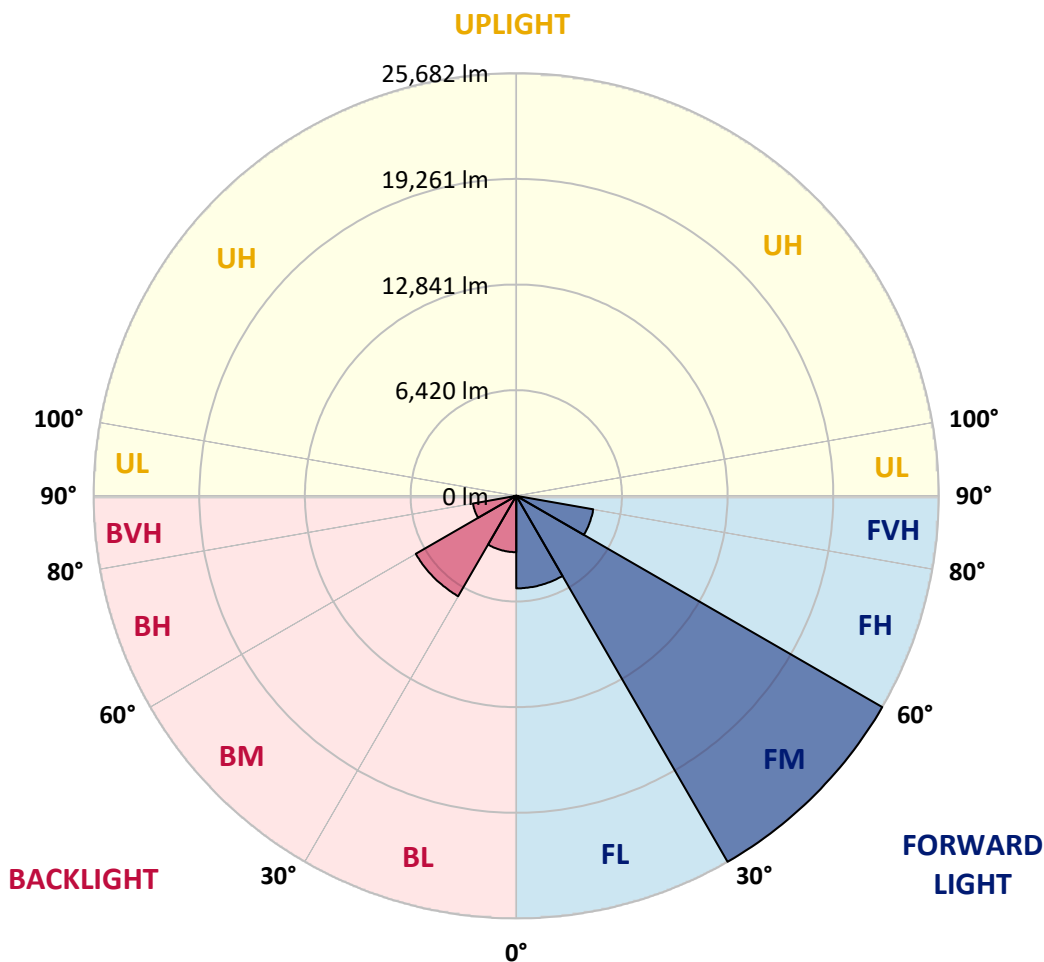


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5621.9	11.4			
FM (30°-60°)	25681.7	51.9			
FH (60°-80°)	4750.5	9.6			G2/5000
FVH (80°-90°)	116.2	0.2			G2/225
BL (0°-30°)	3422.7	6.9	B4/5000		
BM (30°-60°)	7048.7	14.2	B4/8500		
BH (60°-80°)	2676.3	5.4	B4/5000		G4/5000
BVH (80°-90°)	153.8	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8
2.5°	10427.8	10261.0	10248.2	10203.3	10229.0	10113.5	9991.7	9831.4	9664.6	9767.2	9523.5
5°	11158.9	10934.4	11024.2	10870.3	10889.5	10735.6	10485.5	10299.5	10094.3	9972.4	9799.2
7.5°	11415.4	11434.7	11498.7	11473.1	11344.8	11344.8	11178.1	10851.0	10491.9	10421.3	10132.8
10°	11761.7	11768.1	11697.6	11716.8	11896.4	11813.0	11665.5	11524.4	11062.7	10979.3	10466.2
12.5°	11883.6	11768.1	11883.6	11986.2	12197.8	12313.2	12281.2	12178.5	11684.8	11627.0	10876.7
15°	11902.8	11832.3	11928.4	12159.3	12345.3	12832.7	13076.4	13005.8	12351.7	12358.2	11338.4
17.5°	11813.0	11909.2	11947.7	12146.5	12576.1	13031.5	13737.0	13833.2	13294.4	13211.1	11922.0
20°	11934.9	11864.3	11915.6	12095.2	12666.0	13377.8	14301.3	14936.2	14179.4	14121.7	12524.8
22.5°	12403.0	12306.9	12294.0	12409.5	12819.9	13557.4	14897.7	16039.3	15256.8	15289.0	13275.2
25°	12768.6	12819.9	12775.0	12768.6	13025.1	13826.7	15686.6	17354.0	16719.1	16533.1	14160.3
27.5°	13397.0	13518.9	13429.1	13550.9	13493.3	14230.7	16250.9	18809.7	18296.7	18046.6	14961.9
30°	14269.2	14333.4	14250.0	14250.0	14076.8	14795.1	16764.0	20329.7	20118.1	19778.1	15904.6
32.5°	15417.2	15513.4	15346.7	15250.4	15224.8	15635.3	17687.4	21830.3	22189.4	21900.9	17155.1
35°	16937.2	16879.4	16680.6	16590.8	16244.5	16924.3	19059.8	23555.5	24498.2	23985.2	18668.7
37.5°	18277.5	18187.6	18174.9	17674.6	17758.0	18316.0	20227.1	24863.7	26736.4	26588.9	20265.5
40°	19528.0	19611.4	19746.1	19463.9	19335.6	19951.3	21586.6	25864.2	28474.3	28416.6	21496.9
42.5°	20868.4	20791.4	21028.7	20791.4	20599.0	21471.2	23061.6	26556.8	30000.7	29526.1	22785.9
45°	22811.5	22567.8	22651.2	22670.5	22529.4	22850.1	23670.9	27057.1	31071.7	31020.4	23728.6
47.5°	24434.1	24440.5	24299.4	24190.4	23760.7	24081.4	24350.7	27371.3	32303.0	32219.6	24094.1
50°	25036.9	24953.6	25364.0	25601.3	25627.0	24972.7	24883.0	27544.4	32950.7	32585.2	24459.7
52.5°	22869.2	22946.3	23593.9	25004.9	25819.3	25889.8	25505.1	27903.6	33213.7	33136.7	24754.8
55°	18405.7	18777.7	19842.3	21471.2	23401.6	25524.3	26178.5	28275.5	33354.7	33290.6	26063.0
56°	16180.3	16469.0	17854.2	19130.4	21554.6	24196.7	25755.2	28673.1	33463.8	33765.2	26370.8
57.5°	13025.1	13358.6	14352.6	15802.0	18662.2	21670.0	24588.0	28185.8	33040.5	33155.9	26595.3
60°	8144.7	8176.8	9369.6	10325.1	12338.9	15276.1	18764.9	24523.9	30577.8	30411.1	23888.9
62.5°	5342.1	5348.6	6432.4	7214.8	8131.9	8805.3	11043.4	16263.8	22561.4	22266.4	17007.6
65°	3751.7	3835.0	4675.2	5720.5	6092.5	5739.7	5669.2	8574.3	12601.8	12178.5	9138.7
67.5°	2744.9	2751.2	3495.2	4617.4	5156.2	4367.3	3546.5	4187.8	4989.4	4976.6	4232.7
70°	1814.9	1891.9	2462.6	3450.3	4065.9	3508.0	2898.8	2995.0	3174.5	3174.5	3148.9
72.5°	1058.1	1128.7	1507.1	2186.9	2283.1	2193.3	2295.9	2565.2	2680.7	2674.3	2642.3
75°	602.8	634.9	718.3	910.6	1135.1	1340.4	1686.6	1943.2	2058.6	2129.2	2045.8
77.5°	352.7	372.0	423.3	519.5	590.0	724.7	917.1	1096.7	1250.6	1231.3	1244.2
80°	185.9	185.9	237.2	307.8	410.4	513.0	609.2	711.8	795.2	814.5	833.7
82.5°	109.0	115.5	153.9	224.5	295.0	365.6	468.2	538.7	615.7	622.1	634.9
85°	57.7	64.2	96.2	147.5	198.8	224.5	230.9	218.1	237.2	224.5	256.5
87.5°	19.3	19.3	32.0	25.7	25.7	32.0	38.5	38.5	51.3	51.3	51.3
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°	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8	9465.8
2.5°	9517.1	9517.1	9408.1	9202.9	9170.8	9087.4	9010.5	9004.1	8946.3	8895.0	8869.4
5°	9696.6	9497.8	9337.5	9151.6	8933.5	8830.9	8715.5	8587.2	8535.9	8587.2	8580.8
7.5°	9901.9	9735.2	9254.2	8907.9	8657.8	8555.2	8426.9	8292.2	8305.0	8305.0	8215.2
10°	10100.7	9876.2	9106.7	8664.2	8298.6	8221.6	8151.1	8202.4	8266.5	8279.4	8221.6
12.5°	10434.2	9927.6	9036.1	8420.4	8189.6	8022.8	8067.7	8208.8	8343.5	8305.0	8350.0
15°	10684.3	9972.4	8715.5	8170.3	7881.8	7958.7	8119.0	8215.2	8439.7	8414.0	8458.9
17.5°	10928.0	9998.1	8401.3	7836.9	7715.0	7926.7	8048.5	8324.2	8394.8	8548.7	8606.5
20°	11428.2	10049.4	8080.6	7631.7	7593.1	7836.9	8048.5	8176.8	8330.7	8465.3	8465.3
22.5°	11684.8	10023.7	7868.9	7362.3	7484.1	7638.0	7830.5	8048.5	8048.5	8176.8	8183.2
25°	12005.4	9921.1	7535.4	7234.0	7323.8	7471.3	7689.3	7612.4	7695.7	7695.7	7798.3
27.5°	12370.9	9703.1	7246.8	7003.2	7182.7	7343.0	7375.1	7323.8	7227.6	7214.8	7176.3
30°	12666.0	9433.7	7035.2	6926.2	7073.7	7163.5	7060.9	6951.9	6785.1	6772.2	6682.5
32.5°	13070.0	9100.2	6772.2	6733.8	6900.6	6907.0	6874.9	6708.2	6464.4	6361.8	6259.2
35°	13749.8	8907.9	6573.5	6631.2	6682.5	6663.2	6605.6	6426.0	6182.3	6137.4	6098.9
37.5°	14250.0	8766.8	6368.2	6438.8	6483.7	6509.3	6336.2	6137.4	6143.8	6054.0	6028.4
40°	14814.4	8677.0	6201.5	6233.6	6240.0	6323.4	6111.7	6015.5	6060.4	6002.7	6041.2
42.5°	15539.1	8702.7	6028.4	6002.7	6124.6	6092.5	5989.9	5861.6	5887.3	5714.1	5739.7
45°	15923.8	8875.8	5925.8	5810.3	5944.9	5938.6	5803.9	5682.0	5528.1	5194.6	5207.5
47.5°	16180.3	8920.7	5682.0	5605.1	5746.2	5829.6	5675.7	5393.4	5175.4	4938.1	4880.4
50°	16443.3	9004.1	5566.6	5406.3	5464.0	5662.8	5470.4	5201.1	4989.4	4777.8	4809.8
52.5°	16674.2	9164.4	5342.1	5104.9	5207.5	5425.5	5322.9	4995.9	4764.9	4591.8	4540.5
55°	17700.3	9523.5	4963.8	4655.9	4899.7	5175.4	5117.7	4720.1	4470.0	4380.2	4367.3
56°	17860.6	9536.4	4764.9	4502.0	4726.5	5092.0	5021.5	4598.3	4373.8	4232.7	4239.1
57.5°	17886.2	9382.4	4482.8	4360.9	4553.3	4970.2	4880.4	4502.0	4194.2	4065.9	4027.5
60°	15737.9	7323.8	4130.1	4053.1	4277.6	4598.3	4566.1	4239.1	3892.7	3745.3	3815.8
62.5°	10729.2	5367.8	3854.3	3841.4	3956.9	4271.2	4187.8	3892.7	3604.2	3508.0	3463.1
65°	6246.4	4072.4	3584.9	3533.6	3629.8	3796.6	3854.3	3546.5	3245.1	3180.9	3161.7
67.5°	3687.5	3366.9	3238.6	3155.3	3123.2	3225.8	3270.7	3091.1	2789.7	2699.9	2776.9
70°	3084.7	2995.0	3001.4	2860.2	2783.3	2712.7	2674.3	2513.9	2263.8	2148.4	2116.4
72.5°	2661.4	2623.0	2597.3	2469.1	2398.5	2238.2	2071.5	1911.1	1725.1	1628.9	1635.3
75°	2032.9	2020.2	2032.9	1968.9	1847.0	1718.8	1564.8	1359.6	1218.5	1096.7	1122.3
77.5°	1212.0	1250.6	1269.8	1244.2	1192.9	1077.4	981.2	846.6	711.8	615.7	602.8
80°	833.7	865.8	897.9	865.8	814.5	731.1	628.5	525.9	429.7	378.4	365.6
82.5°	634.9	667.0	686.2	654.1	590.0	500.2	429.7	359.1	282.2	230.9	218.1
85°	230.9	263.0	256.5	307.8	333.5	320.7	275.8	211.6	160.3	115.5	109.0
87.5°	64.2	57.7	64.2	64.2	64.2	57.7	51.3	51.3	51.3	32.0	25.7
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)