

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: P651645

Luminaire Tested: **GALN-SA9D-840-U-T3R-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651645  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-12)  
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-T3R-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 51486 lumens  
Efficiency: N/A  
Efficacy: 93.3 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

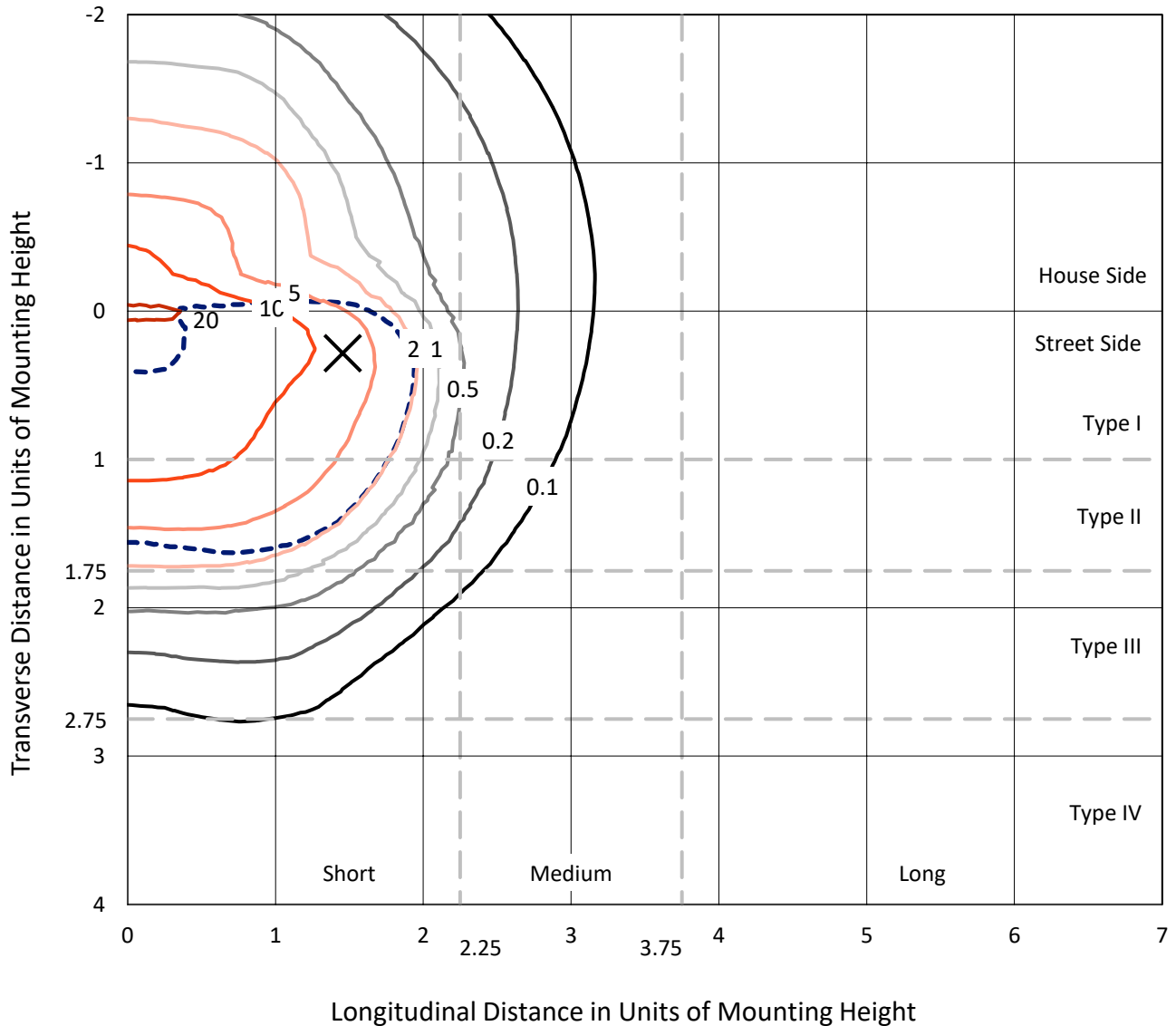
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

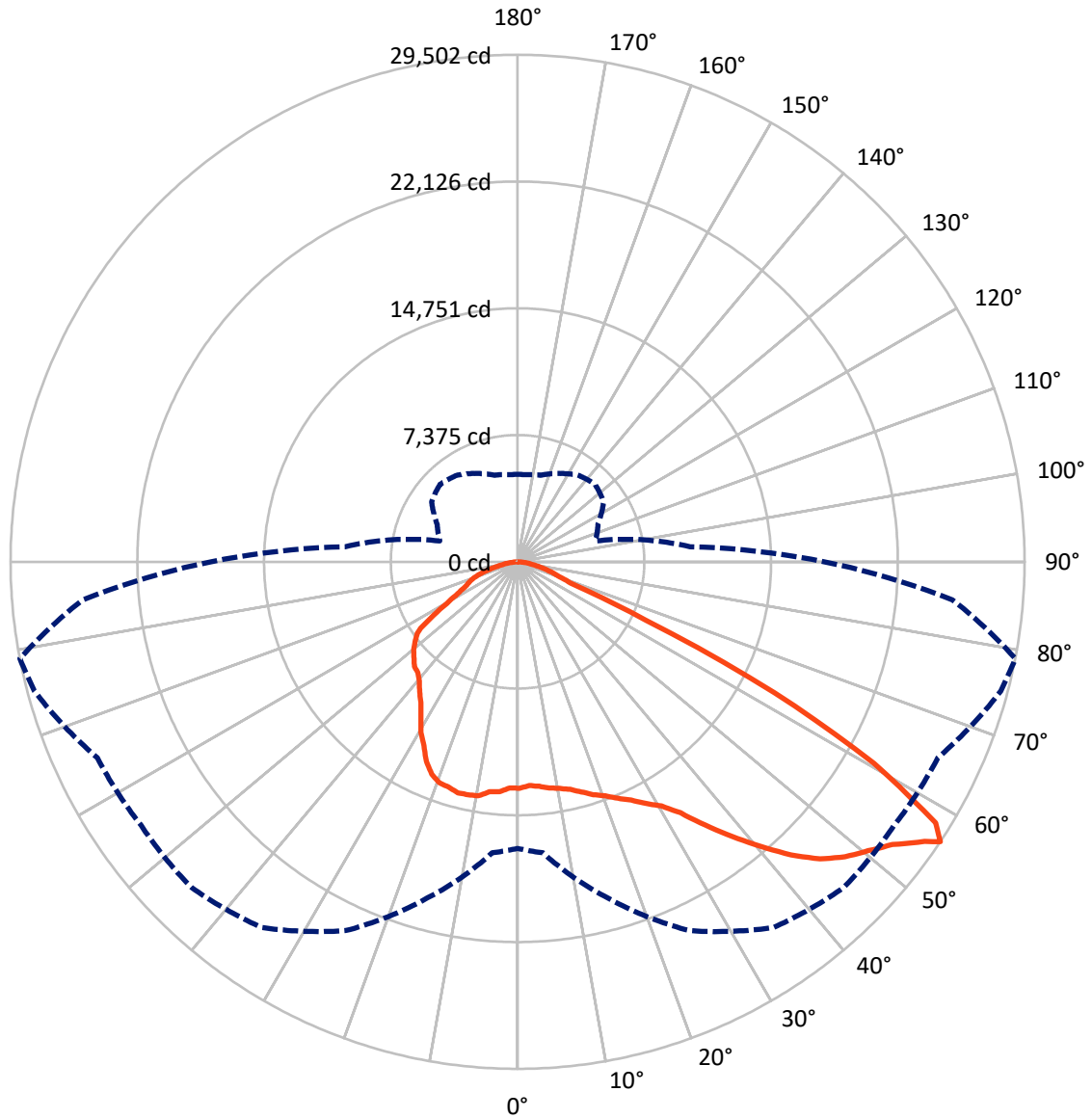
✕ Max cd  
 - - - 1/2 Max cd



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 79-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

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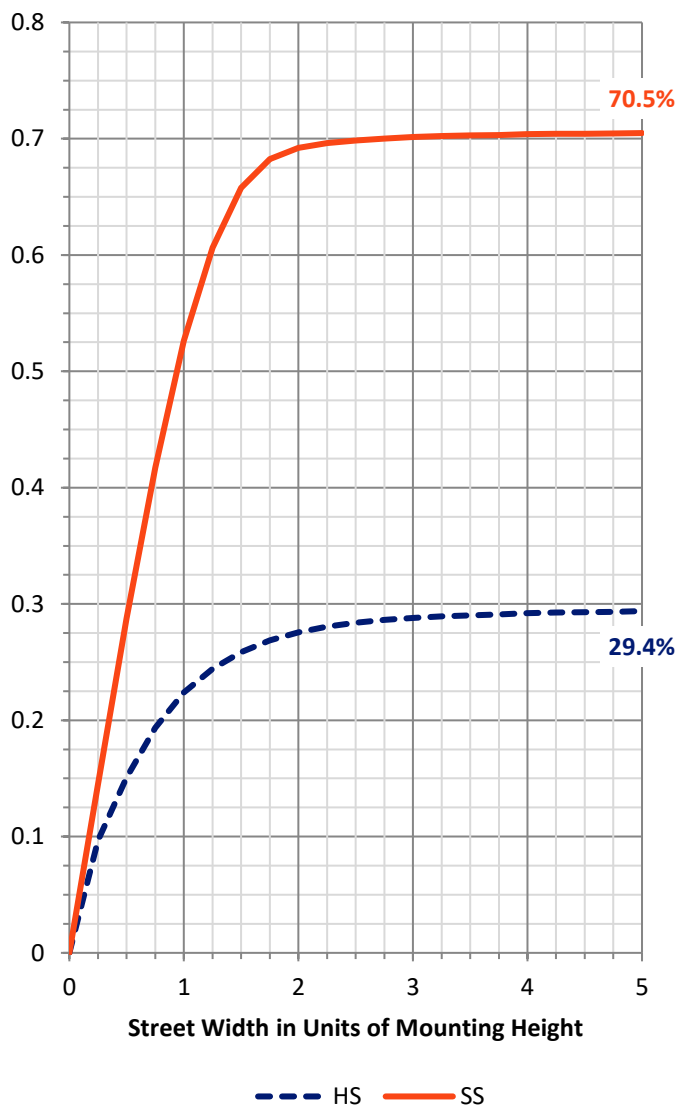
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15204.9	0.0	15204.9
	% Fixture	29.5	0.0	29.5
<b>Street Side</b>	Lumens	36281.1	0.0	36281.1
	% Fixture	70.5	0.0	70.5
<b>Total</b>	Lumens	51486.0	0.0	51486.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1197.7	2.3
10°-20°	3277.8	6.4
20°-30°	5607.6	10.9
30°-40°	8594.4	16.7
40°-50°	11615.3	22.6
50°-60°	13340.5	25.9
60°-70°	6081.0	11.8
70°-80°	1499.3	2.9
80°-90°	272.5	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°	51486.0	100.0
0°-180°	51486.0	100.0

**Coefficient of Utilization**



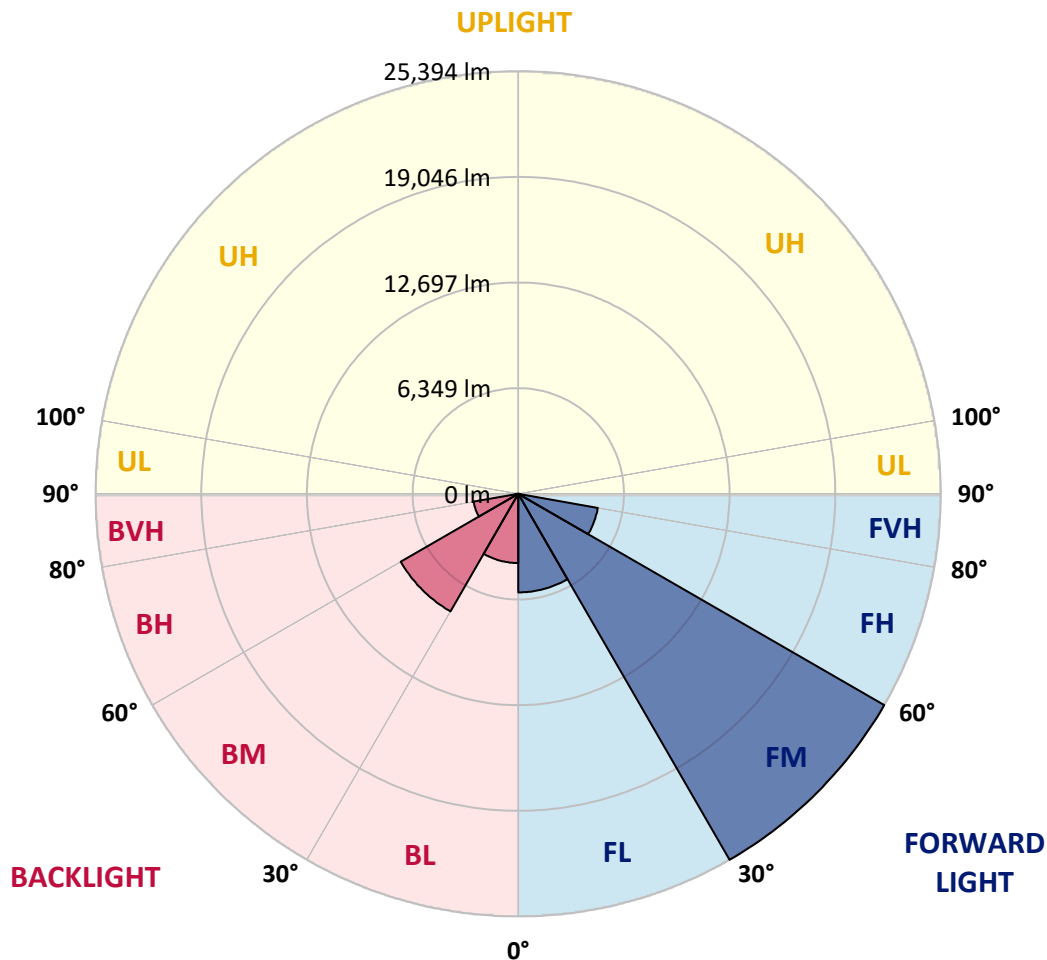
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5923.9	11.5			
FM (30°-60°)	25394.4	49.3			
FH (60°-80°)	4853.9	9.4			G2/5000
FVH (80°-90°)	108.8	0.2			G2/225
BL (0°-30°)	4159.2	8.1	B4/5000		
BM (30°-60°)	8155.7	15.8	B4/8500		
BH (60°-80°)	2726.3	5.3	B4/5000		G4/5000
BVH (80°-90°)	163.7	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°	79°	85°
0°	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3
2.5°	12531.9	12499.8	12576.8	12634.5	12705.1	12794.8	12839.7	12865.4	13089.8	13032.1	13205.3
5°	12262.5	12179.1	12236.9	12281.8	12403.7	12512.7	12634.5	12826.9	13032.1	13122.0	13333.6
7.5°	12025.2	11980.3	11967.5	11999.6	12166.3	12307.4	12519.0	12801.3	13134.7	13282.2	13404.1
10°	11634.0	11569.9	11666.1	11877.7	11922.6	12217.6	12461.3	12865.4	13154.0	13410.5	13769.7
12.5°	11460.8	11396.7	11416.0	11537.8	11852.0	12134.3	12422.8	12878.2	13487.5	13590.1	14071.1
15°	11736.7	11672.5	11691.8	11659.6	11961.1	12108.6	12564.0	13134.7	13718.4	13891.6	14404.6
17.5°	12365.1	12371.5	12288.2	12217.6	12147.1	12461.3	12775.6	13288.6	13808.1	14244.3	14629.1
20°	13564.5	13352.8	13186.0	12788.4	12679.4	12814.1	13211.7	13705.5	14173.7	14532.9	14969.0
22.5°	14488.0	14507.2	14269.9	13615.8	13378.5	13436.2	13776.1	14180.2	14693.2	14949.8	15450.0
25°	15828.4	15693.7	15437.1	14917.7	14385.4	14430.3	14680.4	15046.0	15187.0	15366.7	15911.8
27.5°	17053.4	17091.9	16585.2	16097.7	15437.1	15308.9	15757.8	15822.0	15584.7	15924.6	16110.6
30°	18297.6	18265.5	17932.1	17361.2	16713.4	16739.1	16937.9	16623.7	16296.6	16482.6	16610.8
32.5°	19586.7	19221.1	19208.3	18695.2	18201.3	17964.1	17720.4	17874.3	17367.7	17406.1	17284.2
35°	20619.2	20670.6	20375.6	20010.0	19766.3	19349.4	18682.4	18958.2	18861.9	18817.0	18291.2
37.5°	21369.6	21170.8	21318.3	21196.5	20965.5	20446.1	19753.4	20016.4	20061.3	20279.4	19670.1
40°	21985.3	21901.9	22293.1	22357.3	22196.9	21074.6	19830.4	20612.8	21286.2	21760.9	21036.1
42.5°	22280.4	22459.9	22870.4	23364.2	23005.1	21805.7	20228.1	21068.2	22568.9	23319.3	22331.7
45°	22678.0	22447.0	23056.4	23960.7	23967.1	22421.4	20612.8	21683.9	23569.4	24659.7	23216.7
47.5°	22273.9	22389.4	23017.9	24165.9	24460.9	23069.2	21651.8	22556.1	24672.6	25641.0	24037.6
50°	21369.6	21600.5	22748.5	23941.4	24832.9	23755.4	22844.8	23498.9	25692.3	26429.9	24172.3
52.5°	20426.9	20555.1	22350.9	24114.6	24999.7	24640.5	24441.6	24800.8	26936.5	27321.3	24339.0
55°	17861.5	18470.7	21036.1	24037.6	25814.2	26237.4	26083.5	26609.4	28347.5	28732.3	25249.8
56°	16675.0	16995.7	20247.2	23678.4	25974.5	26821.1	26744.1	26981.4	29097.8	29501.9	25390.9
57.5°	14481.6	14507.2	17265.1	22087.9	25371.6	26994.2	26917.3	27103.2	28950.3	28674.6	24153.1
60°	9062.2	9459.8	11749.4	16989.2	21574.8	25044.6	25480.6	23986.3	24409.6	23826.0	18791.4
62.5°	4694.6	4636.9	6156.9	9934.5	14321.2	17932.1	18336.1	18265.5	17611.4	16758.4	12275.3
65°	2340.9	2353.7	3219.5	4919.1	7337.0	9389.3	10518.1	10639.9	8901.9	8190.0	5823.4
67.5°	1699.6	1763.7	2315.3	3007.9	3456.8	3867.3	4739.5	4649.7	3521.0	3347.9	3104.1
70°	1321.2	1378.9	1879.1	2296.0	2084.3	2084.3	2270.4	2347.3	2507.7	2578.2	2661.6
72.5°	962.0	1006.9	1436.6	1584.1	1366.0	1468.7	1699.6	1879.1	2045.9	2071.6	2167.8
75°	660.6	699.0	942.8	872.2	820.9	1013.3	1244.2	1410.9	1532.8	1597.0	1654.7
77.5°	429.7	442.5	538.7	455.3	525.9	654.2	808.1	949.2	1071.0	1122.3	1135.2
80°	192.4	211.7	230.9	288.6	365.6	468.2	577.2	692.6	769.6	788.9	827.4
82.5°	109.0	109.0	141.1	205.2	269.4	339.9	416.9	500.2	590.0	609.3	602.8
85°	57.7	57.7	83.3	121.9	166.8	198.8	192.4	198.8	211.7	243.7	237.3
87.5°	19.3	19.3	25.7	25.7	32.0	38.5	32.0	44.9	57.7	57.7	57.7
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°	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3	13173.3
2.5°	13154.0	13211.7	13134.7	13301.5	13301.5	13269.5	13109.1	13160.4	13198.9	13198.9	13230.9
5°	13404.1	13384.9	13436.2	13237.3	13115.5	13070.7	12807.7	12679.4	12570.3	12564.0	12467.7
7.5°	13545.2	13493.9	13474.7	13327.2	12788.4	12461.3	11897.0	11569.9	11499.3	11249.2	11345.4
10°	13769.7	13865.9	13769.7	12968.0	12217.6	11467.3	10915.7	10409.1	10210.2	10049.9	9953.7
12.5°	14231.5	14186.6	13628.6	12544.7	11492.9	10601.5	9780.5	9248.2	9049.4	8908.3	8895.4
15°	14622.6	14398.2	13545.2	11877.7	10364.1	9414.9	8741.5	8363.2	8273.3	8286.2	8343.9
17.5°	14757.4	14603.5	13109.1	11185.0	9524.0	8408.1	8093.8	8036.1	8119.4	8215.6	8241.3
20°	14969.0	14725.3	12929.5	10242.3	8485.0	7779.5	7760.2	7965.5	8119.4	8260.6	8279.7
22.5°	15411.5	14795.8	12345.9	9350.8	7773.1	7593.6	7779.5	7952.7	8190.0	8305.5	8202.8
25°	15539.8	14641.9	11525.0	8279.7	7324.2	7478.1	7676.9	7914.2	8080.9	8145.1	8190.0
27.5°	15648.8	14404.6	10415.4	7567.9	7183.1	7471.7	7676.9	7875.7	7965.5	8023.2	8074.5
30°	15956.7	14334.1	9453.4	7093.2	7093.2	7343.4	7606.3	7657.6	7779.5	7850.1	7939.9
32.5°	16110.6	13846.6	8465.8	6791.8	7003.5	7407.5	7426.8	7523.0	7529.4	7587.1	7491.0
35°	16514.6	13500.3	7548.6	6573.8	7041.9	7343.4	7439.6	7381.9	7067.6	6913.7	6945.7
37.5°	16809.7	13327.2	6888.0	6548.1	7048.4	7413.9	7465.2	7029.2	6702.1	6445.5	6509.7
40°	17604.9	12897.5	6387.8	6503.2	7106.1	7491.0	7349.8	6875.3	6285.2	6022.2	5977.3
42.5°	18214.2	12589.6	6073.5	6451.9	7151.0	7599.9	7292.1	6567.4	5964.5	5720.8	5784.9
45°	18919.7	12519.0	5906.8	6464.8	7228.0	7657.6	7221.6	6330.0	5688.7	5592.6	5573.3
47.5°	19169.8	12012.4	5727.2	6355.8	7208.7	7638.4	6984.3	6150.5	5586.1	5599.0	5650.3
50°	18753.0	11492.9	5592.6	6131.2	7080.5	7465.2	6612.3	5913.2	5528.4	5688.7	5778.5
52.5°	18220.6	10960.6	5316.7	5829.8	6817.5	7195.9	6439.1	5900.4	5470.7	5419.4	5438.6
55°	18381.0	10524.4	4932.0	5419.4	6394.2	6695.6	6246.7	5778.5	5329.6	5137.2	5201.3
56°	17861.5	10075.5	4681.8	5162.8	6105.6	6374.9	6150.5	5669.5	5214.1	5085.9	5085.9
57.5°	16392.8	8568.4	4354.7	4752.4	5496.4	5817.0	5964.5	5605.3	5085.9	4861.4	4867.8
60°	12089.4	6092.8	3905.8	4188.0	4553.5	4810.1	5496.4	5425.8	4765.2	4611.3	4553.5
62.5°	7452.4	4450.9	3585.1	3694.2	3880.1	4091.8	4797.2	4912.7	4425.3	4258.6	4220.1
65°	4175.1	3405.5	3341.4	3386.3	3476.1	3585.1	3982.7	4239.3	3905.8	3649.3	3636.4
67.5°	3052.8	3046.4	3097.7	3136.2	3174.7	3174.7	3270.9	3373.5	3328.6	3123.4	3104.1
70°	2712.9	2732.2	2770.6	2777.1	2789.8	2744.9	2668.0	2635.9	2687.2	2559.0	2533.3
72.5°	2238.3	2302.4	2347.3	2353.7	2283.2	2225.5	2122.9	2013.9	1975.3	1949.7	1943.3
75°	1718.8	1763.7	1782.9	1776.5	1750.9	1667.5	1545.7	1436.6	1366.0	1289.1	1327.6
77.5°	1160.8	1225.0	1257.0	1257.0	1218.5	1090.3	1032.6	949.2	878.7	795.2	808.1
80°	814.5	859.4	910.7	904.3	840.2	776.0	692.6	615.7	558.0	493.8	487.4
82.5°	609.3	635.0	660.6	647.7	602.8	538.7	481.0	410.5	346.3	301.4	301.4
85°	218.1	237.3	288.6	301.4	327.1	327.1	275.8	230.9	186.0	153.9	153.9
87.5°	64.2	64.2	70.6	70.6	64.2	70.6	57.7	64.2	70.6	44.9	44.9
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)