

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: P647687

Luminaire Tested: **GALN-SA9D-835-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647687  
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-SA9D-835-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 56193.6 lumens  
Efficiency: N/A  
Efficacy: 101.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B4 - U0 - G5

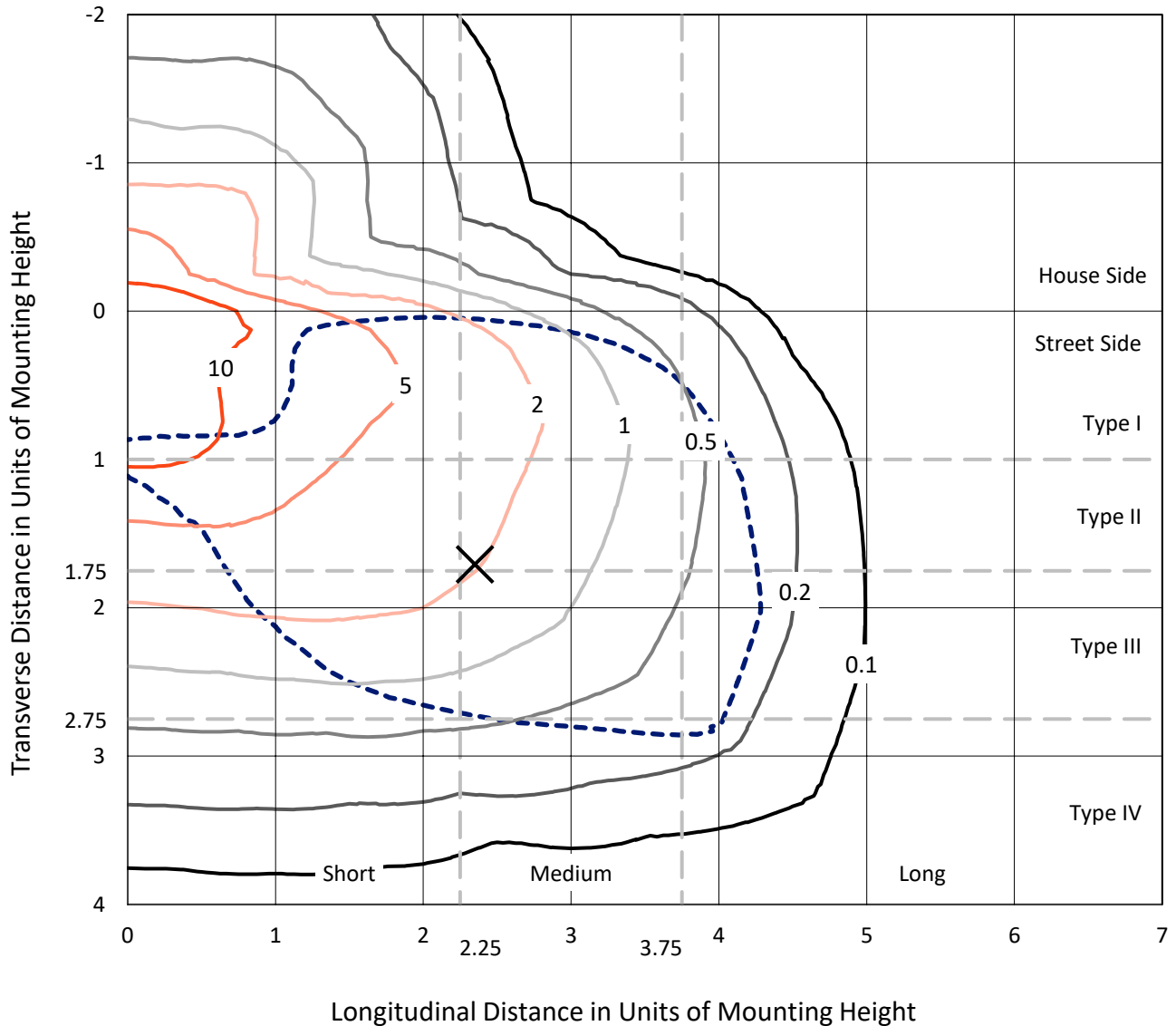
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

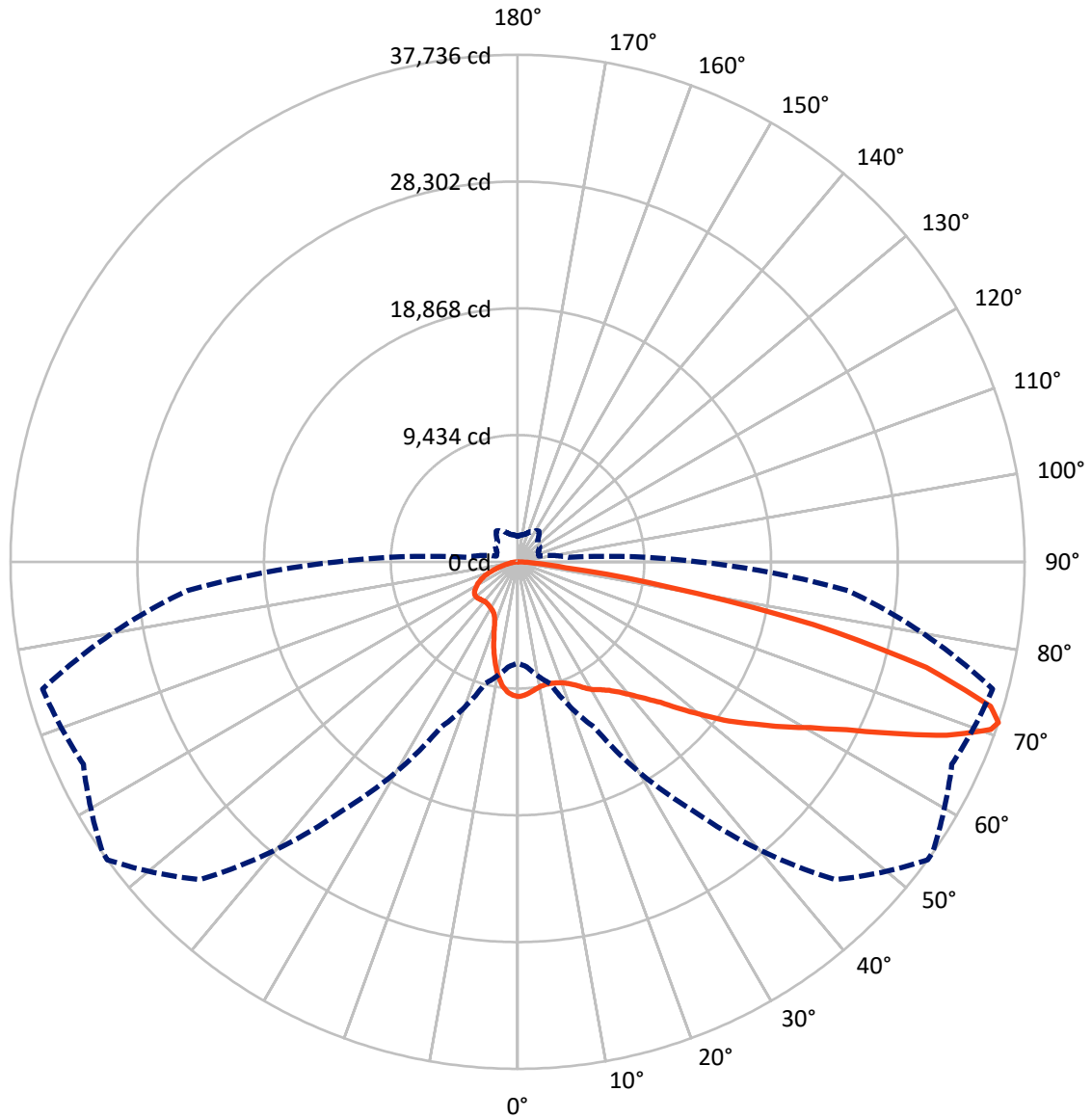
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.2 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



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

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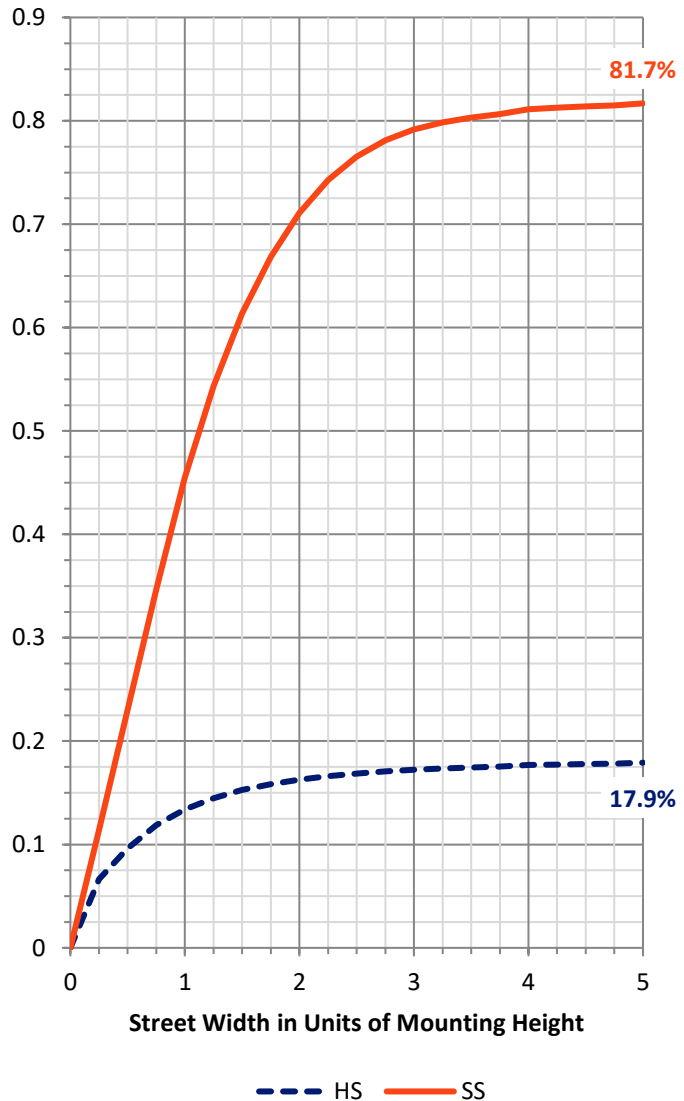
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10145.4	0.0	10145.4
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	46048.2	0.0	46048.2
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	56193.6	0.0	56193.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	893.5	1.6
10°-20°	2359.2	4.2
20°-30°	3928.1	7.0
30°-40°	5808.3	10.3
40°-50°	8181.3	14.6
50°-60°	10955.1	19.5
60°-70°	13808.0	24.6
70°-80°	9430.8	16.8
80°-90°	829.4	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°	56193.6	100.0
0°-180°	56193.6	100.0

**Coefficient of Utilization**

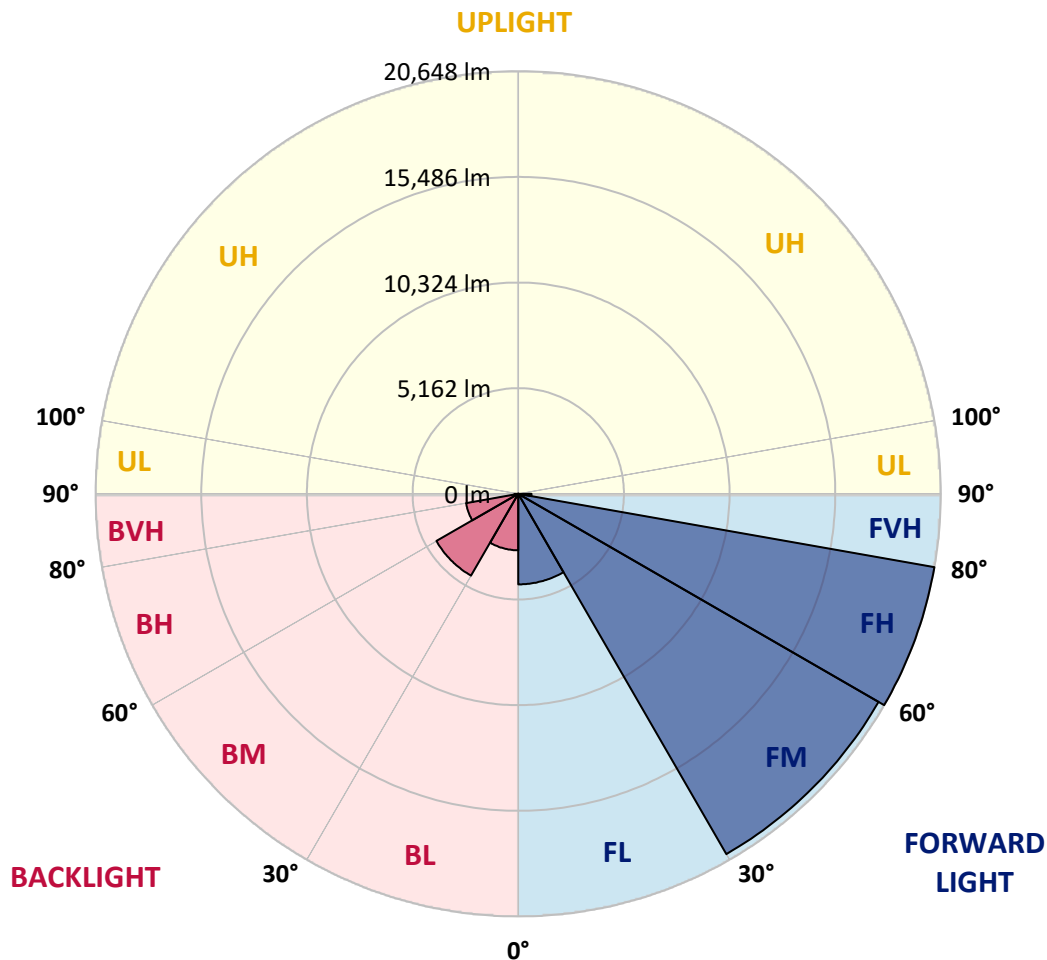


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4423.3	7.9			
FM (30°-60°)	20328.8	36.2			
FH (60°-80°)	20647.7	36.7			G5
FVH (80°-90°)	648.3	1.2			G4/750
BL (0°-30°)	2757.3	4.9	B4/5000		
BM (30°-60°)	4615.9	8.2	B3/5000		
BH (60°-80°)	2591.1	4.6	B4/5000		G4/5000
BVH (80°-90°)	181.1	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-G5**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8
2.5°	9685.8	9731.4	9743.5	9773.8	9837.5	9889.1	9940.8	9934.7	10007.5	10037.9	10065.2
5°	9254.7	9267.0	9312.5	9373.1	9485.5	9628.2	9767.8	9770.8	9949.9	10092.6	10162.3
7.5°	8939.1	8978.6	9008.9	9072.7	9191.0	9345.8	9567.4	9585.6	9904.3	10186.7	10335.4
10°	8732.7	8778.2	8811.6	8890.6	9008.9	9181.9	9421.8	9455.1	9871.0	10335.4	10596.4
12.5°	8544.5	8590.1	8620.4	8723.6	8878.4	9090.9	9361.0	9400.5	9883.1	10508.4	10881.7
15°	8659.8	8696.3	8684.2	8714.5	8817.7	9060.5	9385.3	9424.7	9928.6	10675.3	11164.0
17.5°	9172.8	9203.1	9103.0	8987.7	8939.1	9118.2	9461.2	9503.7	10019.7	10848.3	11452.4
20°	9928.6	10010.6	9792.0	9534.0	9300.3	9324.6	9619.0	9664.6	10147.2	11021.4	11746.8
22.5°	10912.1	10972.8	10705.6	10280.7	9849.7	9628.2	9855.8	9883.1	10338.4	11246.0	12068.5
25°	12068.5	12104.9	11734.7	11188.3	10566.0	10147.2	10180.6	10229.1	10654.0	11500.9	12353.9
27.5°	13191.7	13307.0	12879.0	12211.2	11391.6	10693.5	10626.8	10657.1	10997.1	11643.6	12551.2
30°	14524.2	14515.0	14062.8	13288.8	12238.5	11288.4	11048.7	11042.6	11182.3	11713.4	12693.8
32.5°	15586.6	15711.0	15267.8	14424.0	13206.8	11904.7	11340.0	11327.9	11324.9	11834.8	12906.3
35°	16794.6	16812.8	16406.0	15556.2	14254.0	12678.6	11746.8	11686.1	11616.3	12095.9	13194.6
37.5°	17875.2	17960.1	17586.8	16633.7	15283.0	13483.0	12305.3	12265.9	12053.3	12548.1	13656.1
40°	18719.0	18782.8	18558.1	17650.5	16296.8	14351.1	13015.6	12942.8	12684.8	13288.8	14272.2
42.5°	18995.2	19125.7	19213.8	18767.6	17462.4	15380.2	13889.8	13798.7	13601.4	14411.8	14982.5
45°	19016.5	19222.9	19687.3	19708.5	18634.0	16612.4	14909.7	14845.9	14830.7	15850.6	15981.1
47.5°	18855.6	19065.0	19845.1	20267.0	19678.2	17856.9	16381.8	16281.6	16290.7	17629.3	17101.2
50°	18467.1	18716.0	19663.0	20625.2	20494.7	19150.1	17935.9	17902.5	18090.7	19660.0	18263.7
52.5°	17735.6	18036.1	19474.8	20849.8	21101.8	20264.0	19702.5	19608.4	20084.9	21863.6	19535.5
55°	15711.0	16163.2	18785.8	20974.3	21678.5	21329.4	21293.0	21463.0	22094.3	24267.6	20934.8
57.5°	14654.7	14994.6	17289.3	20995.5	22407.0	22567.9	23150.6	23193.1	24298.0	26820.3	22516.3
60°	14077.9	14378.5	16469.8	20855.9	23423.8	24100.7	25050.8	25202.5	26450.1	29585.6	24155.3
62.5°	13574.1	13832.1	15978.1	20373.3	24571.2	26374.2	27512.4	27585.2	28893.5	32639.1	25773.1
65°	12387.3	12681.7	14988.6	19890.6	25560.7	29215.2	30778.5	30693.4	31494.8	35273.8	26787.0
67.5°	10787.6	11161.0	13140.1	18224.2	26049.4	32320.4	34457.3	34351.1	34062.7	37000.9	27078.3
70°	8744.9	8945.1	10775.5	15343.7	24097.7	33950.4	37362.1	37249.8	35653.2	37228.6	25700.3
71°	7524.6	7837.3	9382.3	13628.7	22473.7	33452.6	37735.5	37705.1	35656.3	36600.2	24662.2
72.5°	5873.4	6064.6	7430.5	10560.0	19101.4	30623.7	36812.7	36928.1	34882.3	34854.9	22522.3
75°	3715.3	3800.3	4662.3	6216.4	10481.1	21687.6	31425.0	31737.7	30972.7	28529.2	16749.1
77.5°	2158.1	2267.4	2792.5	3663.7	4528.7	11771.1	22485.9	22825.9	21520.6	15707.9	6856.9
80°	1256.6	1378.1	1839.4	2127.8	2079.2	4367.9	11449.3	12029.1	9318.6	3967.2	1924.4
82.5°	698.1	780.1	1293.0	1296.1	1107.9	1426.6	3603.0	3769.9	2659.0	1599.6	786.1
85°	506.9	573.7	834.8	755.8	531.2	613.2	1253.6	1314.3	1074.5	673.8	254.9
87.5°	179.1	254.9	458.4	364.3	145.7	127.5	361.2	294.4	273.2	188.2	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°	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8	10025.8
2.5°	10080.4	10086.4	10056.1	10001.5	9946.8	9877.0	9798.1	9737.4	9710.1	9707.1	9704.0
5°	10189.6	10204.8	10089.5	9919.5	9731.4	9500.6	9303.4	9078.7	9021.1	8930.0	8957.3
7.5°	10365.7	10356.6	10129.0	9767.8	9327.6	8839.0	8426.1	8186.3	7937.4	7867.7	7870.6
10°	10617.6	10560.0	10129.0	9458.2	8723.6	7998.1	7421.4	7057.2	6859.9	6696.0	6635.3
12.5°	10884.8	10739.1	10031.8	9024.1	7946.5	7057.2	6438.0	5946.3	5818.8	5685.2	5688.3
15°	11139.7	10896.9	9840.6	8414.0	7108.8	6052.5	5451.5	5157.1	5117.6	5132.8	5129.7
17.5°	11370.4	11009.2	9549.2	7734.1	6131.4	5190.4	4871.7	4893.0	4999.2	5075.1	5084.2
20°	11604.1	11076.0	9115.1	6823.5	5208.7	4668.4	4680.5	4847.5	5008.3	5111.5	5126.7
22.5°	11825.7	11106.4	8605.2	5943.2	4540.9	4446.8	4625.9	4805.0	4962.8	5063.0	5078.1
25°	11971.4	11036.5	7882.8	5023.5	4213.1	4367.9	4556.0	4707.9	4841.4	4944.6	4968.8
27.5°	12010.9	10811.9	6987.4	4279.9	4061.3	4292.0	4465.0	4577.3	4680.5	4777.6	4795.9
30°	11989.6	10481.1	6003.9	3842.7	3973.3	4203.9	4337.5	4419.5	4543.9	4619.8	4635.0
32.5°	11956.3	10095.6	4978.0	3609.0	3900.4	4122.0	4201.0	4273.8	4270.7	4240.4	4261.6
35°	11968.4	9634.2	4146.3	3469.4	3836.7	4061.3	4128.1	4037.0	3775.9	3763.8	3751.7
37.5°	12032.1	9178.9	3542.3	3372.3	3803.3	4052.2	4088.6	3669.8	3439.0	3332.8	3305.5
40°	12196.0	8647.7	3144.6	3299.4	3800.3	4122.0	3909.5	3484.6	3041.4	2835.0	2819.8
42.5°	12414.6	8125.7	2901.8	3253.9	3836.7	4228.3	3836.7	3223.5	2740.9	2619.5	2601.3
45°	12739.3	7527.7	2768.2	3232.6	3891.4	4267.7	3812.4	3032.3	2619.5	2522.4	2522.4
47.5°	13106.6	6957.0	2695.4	3217.5	3961.1	4240.4	3596.9	2971.6	2561.8	2574.0	2631.7
50°	13470.9	6462.3	2640.7	3184.1	4021.8	4225.2	3508.9	2968.6	2577.0	2731.8	2835.0
52.5°	13892.8	6113.2	2574.0	3129.4	4021.8	4128.1	3481.5	3029.3	2619.5	2665.0	2710.6
55°	14402.7	6003.9	2489.0	3011.1	3949.0	3885.2	3466.3	3117.3	2649.8	2543.7	2561.8
57.5°	15076.6	6180.0	2407.0	2862.3	3782.0	3633.3	3460.3	3141.6	2580.1	2492.1	2473.8
60°	15859.7	6529.0	2382.7	2710.6	3554.4	3417.8	3423.9	3071.8	2482.9	2391.8	2407.0
62.5°	16409.1	6738.5	2367.6	2595.3	3305.5	3181.0	3335.8	2986.8	2440.5	2361.5	2376.7
65°	16409.1	6483.5	2227.9	2419.2	2983.8	2895.7	3229.6	2880.6	2385.8	2294.7	2279.5
67.5°	15786.8	5739.9	2015.4	2155.1	2628.6	2571.0	3080.9	2753.0	2303.8	2234.1	2197.6
70°	14166.0	4352.7	1748.4	1845.5	2179.4	2231.0	2889.7	2580.1	2167.3	2082.2	2027.6
71°	13452.6	3791.1	1636.1	1687.7	2006.4	2082.2	2798.6	2507.2	2106.5	1985.1	1888.0
72.5°	12077.7	3193.2	1466.1	1487.3	1715.0	1851.6	2607.4	2367.6	1991.2	1818.2	1708.9
75°	9175.9	2331.1	1180.8	1168.6	1268.8	1469.1	2206.7	2109.6	1745.3	1511.6	1447.8
77.5°	3964.2	1268.8	883.3	892.4	862.0	1114.0	1736.2	1812.1	1496.4	1229.3	1171.7
80°	1202.0	731.6	604.0	616.1	576.7	746.7	1223.3	1420.5	1202.0	956.1	877.2
82.5°	616.1	437.1	412.8	406.8	367.3	421.9	740.6	971.3	859.0	598.0	528.1
85°	267.1	233.7	203.3	197.3	173.0	151.7	264.1	485.7	455.3	333.9	318.7
87.5°	66.8	60.7	39.5	36.4	21.2	3.1	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)