

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: P651348

Luminaire Tested: **GALN-SA4D-840-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651348  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-840-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25192.2 lumens  
Efficiency: N/A  
Efficacy: 102.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G5

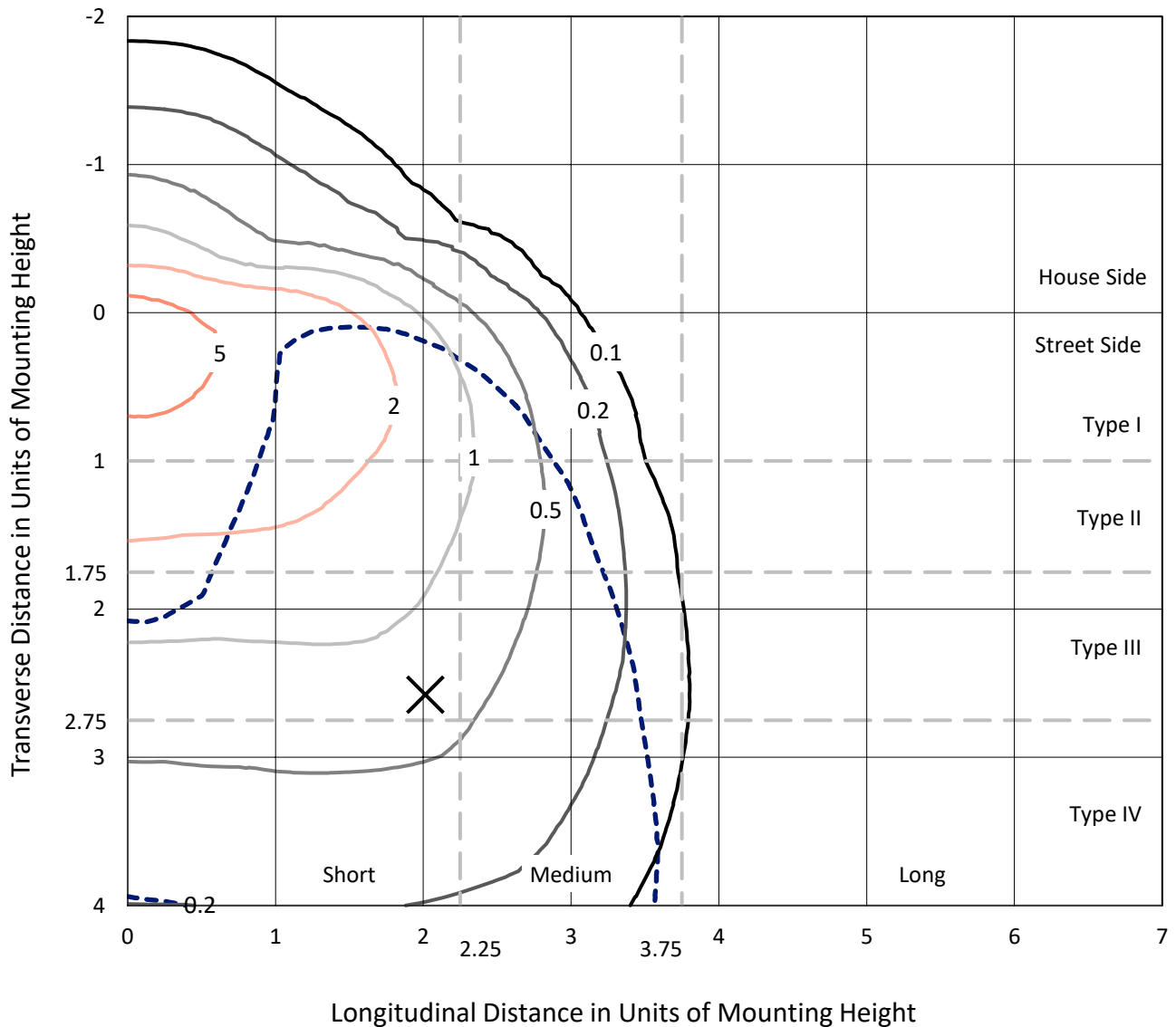
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

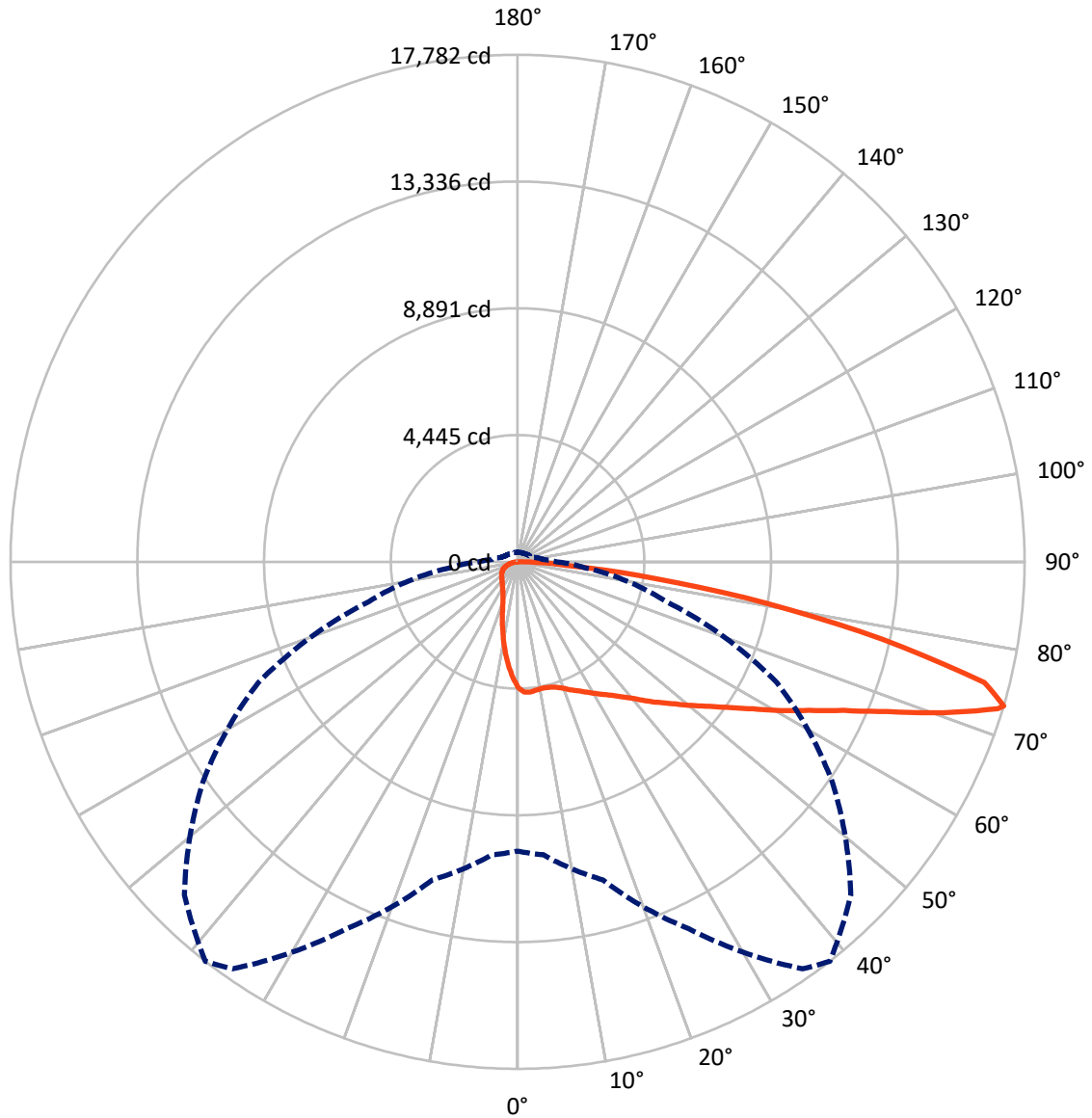
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral      - - - Horizontal Cone Through 73-Deg Vertical

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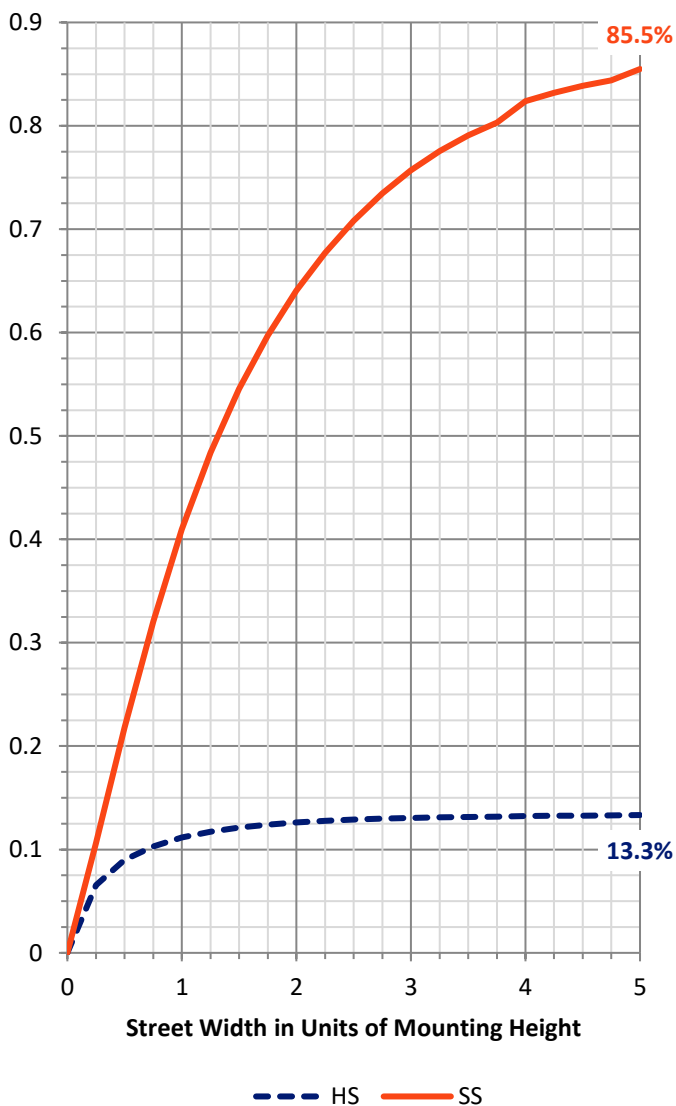
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3386.6	0.0	3386.6
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	21805.6	0.0	21805.6
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	25192.2	0.0	25192.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	386.3	1.5
10°-20°	990.7	3.9
20°-30°	1542.7	6.1
30°-40°	2262.7	9.0
40°-50°	3356.5	13.3
50°-60°	4755.5	18.9
60°-70°	6032.5	23.9
70°-80°	5021.6	19.9
80°-90°	843.7	3.3
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°	25192.2	100.0
0°-180°	25192.2	100.0

**Coefficient of Utilization**

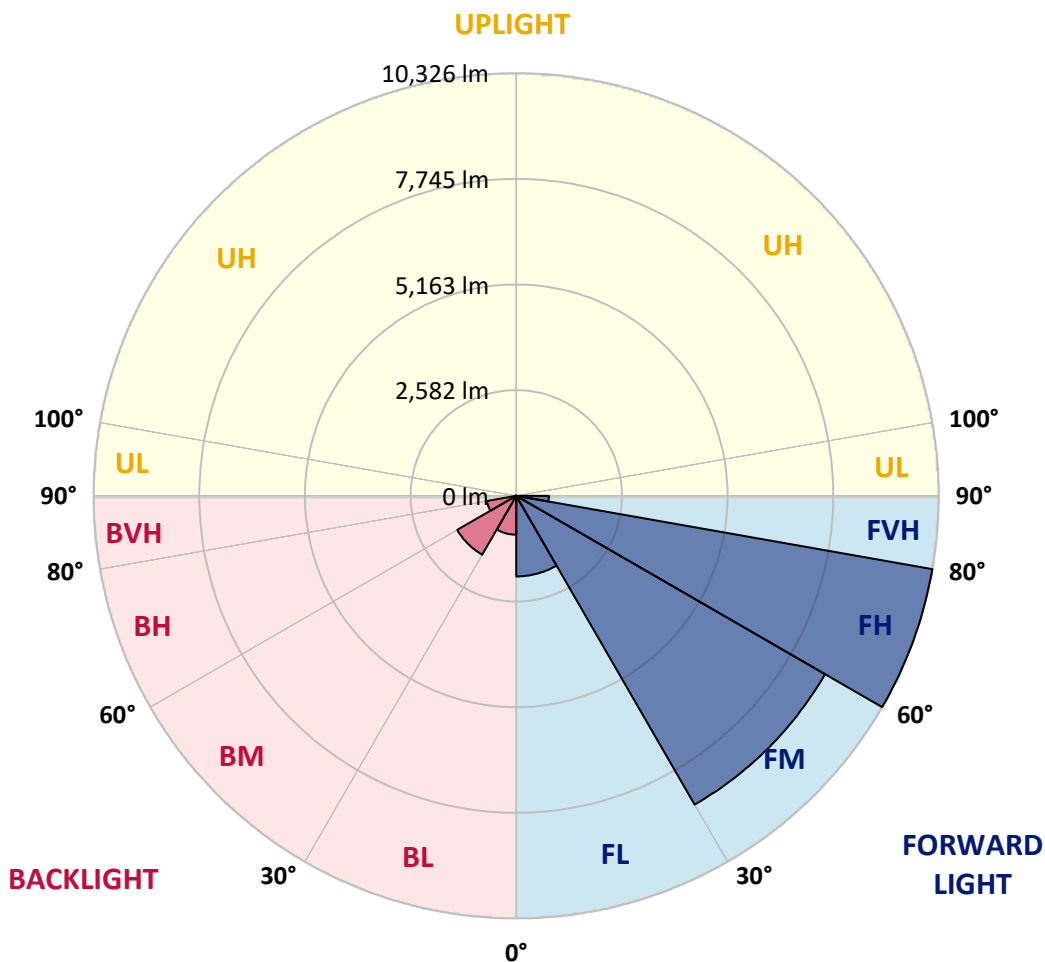


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1969.3	7.8			
FM (30°-60°)	8712.1	34.6			
FH (60°-80°)	10326.2	41.0			G4/12000
FVH (80°-90°)	798.0	3.2			G5
BL (0°-30°)	950.3	3.8	B2/1000		
BM (30°-60°)	1662.6	6.6	B2/2500		
BH (60°-80°)	727.9	2.9	B2/1000		G2/1000
BVH (80°-90°)	45.8	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G5**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8
2.5°	4603.6	4626.4	4615.1	4599.4	4589.4	4579.5	4565.3	4524.0	4491.3	4455.7	4400.2
5°	4637.8	4652.1	4642.1	4622.1	4599.4	4589.4	4562.4	4508.3	4455.7	4396.0	4313.4
7.5°	4617.9	4623.6	4612.2	4588.0	4568.1	4549.6	4518.3	4458.6	4394.6	4322.0	4213.8
10°	4546.8	4568.1	4568.1	4548.2	4528.3	4518.3	4487.0	4430.1	4371.8	4289.3	4161.2
12.5°	4488.4	4511.2	4529.7	4524.0	4522.6	4522.6	4498.4	4455.7	4387.4	4309.2	4157.0
15°	4448.6	4475.6	4515.5	4538.2	4552.4	4556.7	4546.8	4509.8	4440.1	4349.0	4174.1
17.5°	4440.1	4472.8	4545.4	4595.1	4632.1	4630.7	4627.9	4576.6	4499.8	4405.9	4195.3
20°	4478.5	4521.1	4622.1	4700.4	4754.4	4744.5	4728.9	4662.0	4572.3	4467.1	4215.3
22.5°	4593.7	4637.8	4748.8	4834.2	4886.8	4886.8	4839.8	4751.6	4656.3	4538.2	4242.3
25°	4758.7	4807.1	4925.1	5011.9	5036.2	5017.7	4970.7	4864.0	4754.4	4640.6	4299.2
27.5°	4960.7	5019.1	5128.6	5201.2	5194.1	5179.8	5131.4	4994.9	4885.4	4781.5	4396.0
30°	5212.5	5255.2	5369.0	5386.1	5360.5	5357.7	5289.4	5152.8	5050.4	4970.7	4533.9
32.5°	5450.1	5488.5	5579.6	5586.7	5541.2	5546.9	5482.8	5357.7	5299.3	5270.9	4765.9
35°	5702.0	5721.8	5800.1	5791.5	5761.7	5757.4	5731.8	5612.3	5630.8	5682.0	5094.4
37.5°	5912.5	5952.3	5996.4	6003.6	6002.1	6016.3	6033.4	5976.5	6083.2	6244.0	5525.5
40°	6106.0	6140.1	6205.6	6228.4	6283.8	6312.3	6370.6	6372.0	6618.2	6882.7	6056.2
42.5°	6236.9	6295.2	6417.5	6458.8	6593.9	6679.3	6766.1	6858.5	7215.6	7555.6	6682.2
45°	6350.6	6427.5	6630.9	6758.9	6942.5	7046.3	7229.8	7423.3	7936.9	8382.2	7318.0
47.5°	6522.8	6591.1	6824.4	7050.6	7328.1	7447.6	7722.1	8010.9	8682.4	9170.3	7926.9
50°	6761.8	6803.1	7040.7	7409.1	7763.4	7917.0	8279.7	8696.6	9479.1	9948.5	8461.9
52.5°	7067.7	7084.8	7274.0	7764.8	8231.4	8422.0	8902.9	9389.4	10176.2	10624.3	8885.8
55°	7429.1	7400.5	7548.6	8141.8	8766.3	9015.3	9531.7	10090.8	10960.0	11170.6	9194.5
57.5°	7786.1	7742.0	7860.1	8599.9	9426.4	9726.6	10328.4	10813.5	11660.0	11681.3	9410.8
60°	8164.5	8131.8	8272.7	9137.6	10235.9	10591.6	11147.8	11563.2	12337.1	12037.0	9444.9
62.5°	8552.9	8500.2	8700.9	9742.2	11147.8	11470.7	12009.9	12359.9	13001.5	12169.3	9116.3
65°	8929.9	8905.8	9215.8	10460.7	12186.3	12553.4	13076.9	13314.5	13533.5	11970.1	8301.1
67.5°	9331.1	9379.5	9874.5	11419.5	13540.7	14001.6	14566.5	14343.1	13685.8	11026.9	6990.9
70°	9942.8	9974.1	10739.5	12675.7	15286.3	15842.5	16115.7	14708.7	12951.7	9235.8	5255.2
72.5°	10206.0	10344.0	11512.0	13994.5	17269.4	17609.4	16636.3	13893.5	10789.3	6273.9	2761.3
73°	10147.7	10312.8	11547.6	14195.1	17424.5	17781.6	16525.4	13473.8	10029.6	5403.2	2367.2
75°	9420.7	9624.2	11085.2	14027.2	17122.9	16909.5	14741.4	11483.5	6777.5	2456.9	1078.3
77.5°	7433.3	7491.6	8783.4	11327.1	13483.8	13088.3	11032.6	7177.3	2768.5	913.3	611.7
80°	3728.7	3943.5	4950.8	6488.7	9016.7	8887.3	6963.8	3394.4	1153.8	536.3	405.4
82.5°	1793.9	1946.2	2411.4	3163.9	4982.1	4864.0	3448.5	1855.2	732.7	313.0	239.0
85°	1155.2	1269.0	1535.0	1509.4	2048.6	1956.2	1549.3	1404.1	433.9	163.6	166.4
87.5°	762.5	835.1	1001.5	801.0	745.5	674.3	684.3	791.0	85.4	62.6	22.8
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°	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8	4425.8
2.5°	4377.5	4359.0	4297.8	4238.1	4181.1	4127.0	4091.5	4044.5	4013.3	4021.8	4034.6
5°	4267.9	4226.7	4118.5	4013.3	3913.7	3795.6	3700.3	3623.4	3565.2	3543.8	3539.5
7.5°	4152.7	4083.0	3927.9	3747.2	3578.0	3431.4	3262.2	3178.1	3080.0	3045.8	3034.5
10°	4083.0	3989.1	3771.4	3519.6	3264.9	3021.7	2838.2	2688.8	2553.6	2528.0	2515.3
12.5°	4063.0	3939.3	3646.2	3321.9	2983.3	2684.6	2412.8	2216.5	2085.6	2055.7	2011.6
15°	4051.7	3898.0	3529.6	3122.7	2693.1	2328.9	2042.9	1813.9	1694.4	1614.7	1616.1
17.5°	4041.8	3851.1	3398.6	2905.1	2442.7	2023.0	1707.1	1500.8	1391.4	1348.6	1344.4
20°	4027.5	3795.6	3247.9	2676.0	2156.7	1744.1	1458.2	1304.6	1230.6	1195.0	1193.6
22.5°	4021.8	3741.5	3099.9	2442.7	1903.5	1529.4	1293.2	1185.1	1138.1	1113.9	1113.9
25°	4036.0	3703.2	2944.8	2220.7	1678.7	1345.9	1179.3	1105.4	1078.3	1065.5	1061.3
27.5°	4080.1	3686.1	2791.2	1998.8	1472.4	1220.6	1102.6	1051.3	1031.4	1021.5	1022.9
30°	4164.0	3684.7	2640.4	1779.7	1318.8	1125.3	1041.4	1005.8	990.2	984.5	983.0
32.5°	4299.2	3716.0	2492.5	1599.1	1189.3	1045.6	984.5	958.8	951.8	947.5	946.0
35°	4528.3	3804.2	2346.0	1434.0	1089.8	974.6	930.4	917.6	907.6	911.9	913.3
37.5°	4837.0	3956.4	2206.5	1304.6	1014.3	921.9	884.9	873.5	867.8	872.1	876.3
40°	5251.0	4175.5	2089.9	1200.7	960.3	877.8	845.0	835.1	829.4	836.5	838.0
42.5°	5707.6	4428.7	1993.1	1119.6	916.2	840.7	809.5	798.1	793.8	798.1	799.5
45°	6177.1	4723.1	1943.3	1061.3	879.2	813.8	781.0	768.3	758.2	755.4	759.7
47.5°	6639.4	4979.2	1941.9	1025.7	849.3	789.5	754.0	739.7	727.0	719.9	718.5
50°	7016.5	5182.7	1976.0	1010.0	823.7	762.5	727.0	712.7	695.7	681.5	684.3
52.5°	7301.0	5315.0	1991.7	1003.0	809.5	734.1	698.5	685.8	665.8	647.3	647.3
55°	7484.5	5346.3	1953.3	995.8	798.1	704.2	665.8	654.4	634.5	616.0	616.0
57.5°	7547.1	5249.5	1815.3	978.8	786.8	678.6	633.1	623.1	607.5	589.0	586.1
60°	7402.0	4922.4	1573.4	927.5	764.0	651.6	597.5	593.2	587.5	571.9	570.5
62.5°	6842.9	4228.1	1310.3	860.7	725.5	623.1	564.8	571.9	576.2	567.7	566.2
65°	5912.5	3432.8	1119.6	768.3	674.3	583.3	529.2	547.7	559.1	559.1	556.2
67.5°	4795.7	2636.1	943.2	688.5	610.3	529.2	489.4	503.6	512.2	509.3	516.5
70°	3408.7	1785.4	768.3	597.5	529.2	468.0	438.2	438.2	432.4	429.7	429.7
72.5°	1653.1	1020.0	623.1	499.4	450.9	399.7	375.6	365.6	354.2	352.8	345.7
73°	1381.3	914.8	594.7	480.9	432.4	389.8	362.8	347.2	340.0	334.3	332.9
75°	840.7	694.2	496.5	405.4	368.4	335.7	311.6	297.3	290.2	285.9	284.5
77.5°	553.4	517.8	385.5	310.2	281.7	261.8	251.8	237.6	233.3	227.7	227.7
80°	412.6	395.5	276.0	219.1	202.0	184.9	182.1	179.2	167.9	160.8	157.9
82.5°	266.0	281.7	187.8	146.5	128.0	113.8	115.2	119.5	108.2	98.1	95.3
85°	189.2	203.4	113.8	66.9	54.1	46.9	52.6	46.9	48.4	38.4	31.3
87.5°	31.3	54.1	19.9	8.5	4.3	2.9	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)