

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: P191137

Luminaire Tested: **GLEON-AF-09-LED-E1-SL3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191137  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24289)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-09-LED-E1-SL3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46505.4 lumens  
Efficiency: N/A  
Efficacy: 92.8 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G5

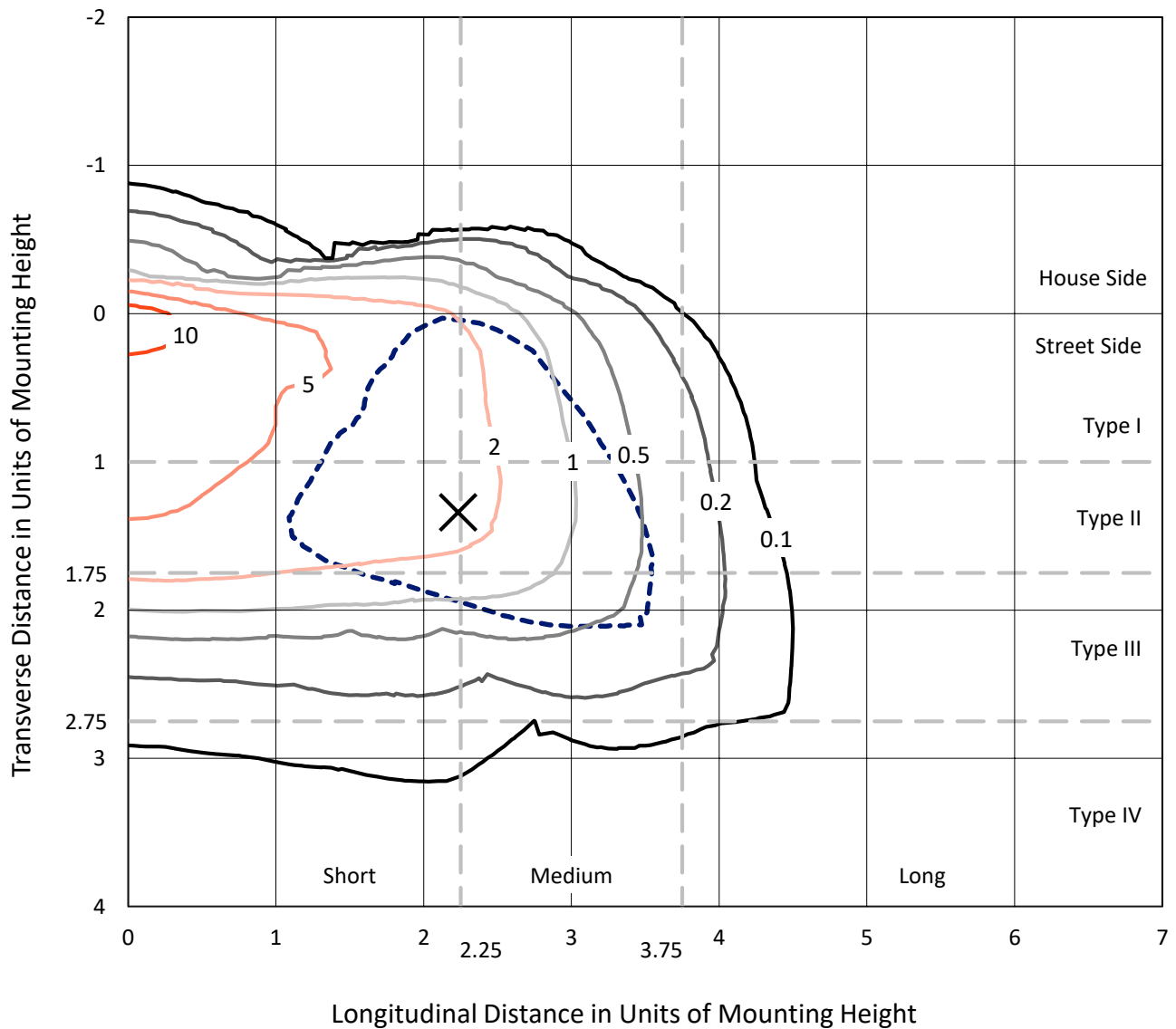
Input Watts (W): 501  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

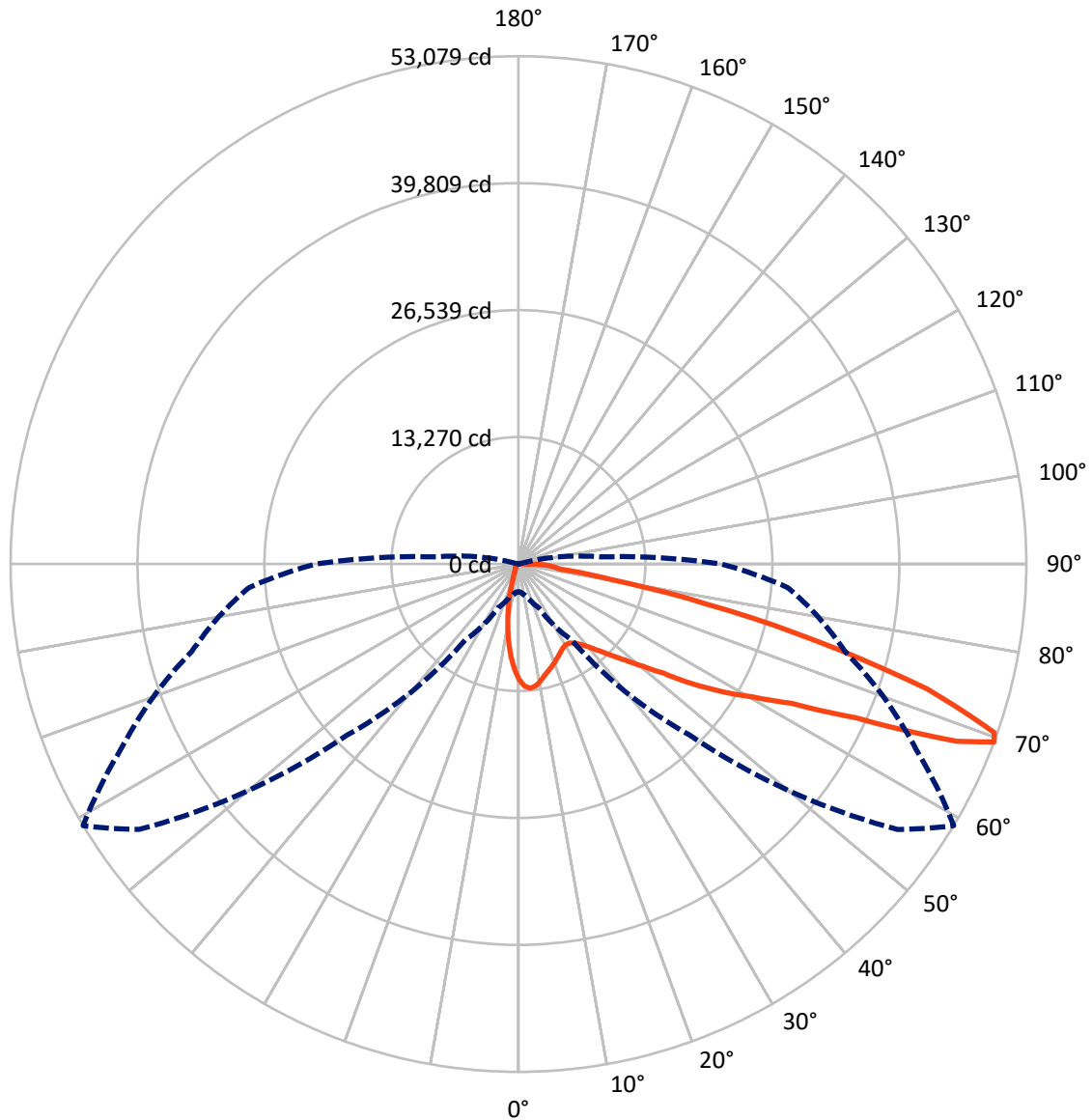
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.5 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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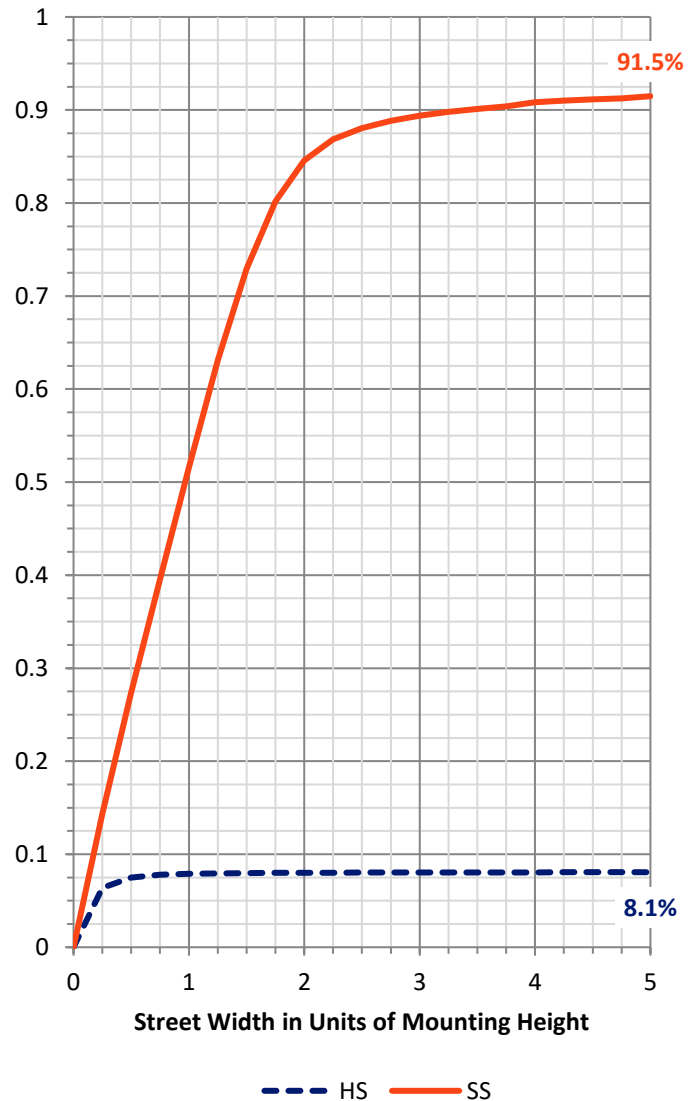
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3787.2	0.0	3787.2
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	42718.1	0.0	42718.1
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	46505.4	0.0	46505.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	982.5	2.1
10°-20°	2030.2	4.4
20°-30°	2731.9	5.9
30°-40°	3966.6	8.5
40°-50°	6604.6	14.2
50°-60°	10303.1	22.2
60°-70°	12749.3	27.4
70°-80°	6461.2	13.9
80°-90°	676.1	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°	46505.4	100.0
0°-180°	46505.4	100.0



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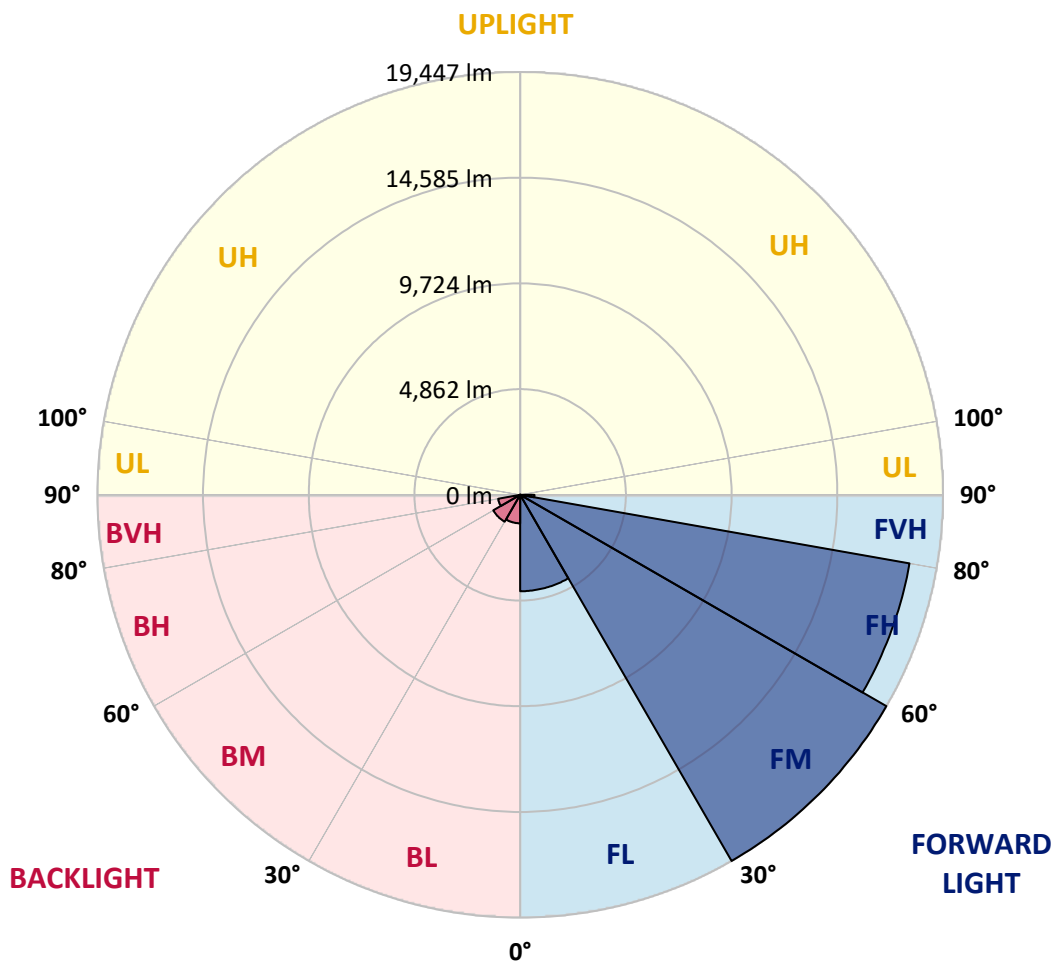
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4433.8	9.5			
FM	(30°-60°)	19447.2	41.8			
FH	(60°-80°)	18181.9	39.1			G5
FVH	(80°-90°)	655.3	1.4			G4/750
BL	(0°-30°)	1310.9	2.8	B3/2500		
BM	(30°-60°)	1427.0	3.1	B2/2500		
BH	(60°-80°)	1028.5	2.2	B3/2500		G3/2500
BVH	(80°-90°)	20.8	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7
2.5°	13267.1	13261.8	13203.9	13177.7	13130.3	13030.3	12875.3	12793.7	12662.2	12433.5	12125.8
5°	13146.0	13209.2	13243.4	13246.0	13280.3	13243.4	13104.0	13035.7	12854.2	12486.0	11933.7
7.5°	12325.6	12349.3	12446.5	12530.7	12693.8	12849.0	12898.9	12869.9	12762.1	12367.7	11634.0
10°	11447.2	11471.0	11586.7	11697.1	11918.0	12157.3	12409.7	12462.4	12507.1	12199.4	11344.7
12.5°	10689.9	10713.6	10831.9	10976.6	11234.3	11528.8	11920.7	12007.4	12204.6	12039.0	11113.3
15°	10037.7	10048.2	10163.9	10342.7	10650.5	11029.1	11473.6	11612.9	11915.3	11925.9	10910.8
17.5°	9482.9	9509.1	9580.1	9751.1	10087.7	10555.8	11073.9	11273.7	11628.7	11831.2	10713.6
20°	9143.6	9169.9	9167.3	9262.0	9564.4	10064.0	10674.1	10913.5	11344.7	11734.0	10537.4
22.5°	9077.9	9077.9	9009.5	8996.3	9175.2	9593.3	10258.7	10550.5	11089.6	11691.8	10413.7
25°	9311.9	9301.4	9130.4	8991.1	8999.0	9248.8	9856.2	10203.4	10874.0	11720.8	10348.1
27.5°	9806.3	9793.1	9577.5	9311.9	9098.9	9096.3	9551.2	9924.7	10703.0	11857.5	10374.4
30°	10490.1	10484.8	10250.8	9916.8	9530.2	9175.2	9446.0	9785.2	10592.7	12104.7	10434.8
32.5°	11236.9	11229.0	11052.8	10700.5	10211.3	9530.2	9556.5	9840.5	10624.2	12433.5	10582.1
35°	12028.5	12015.3	11939.1	11631.4	11092.3	10185.0	9919.3	10140.3	10824.0	12925.2	10871.4
37.5°	12885.7	12898.9	12954.1	12659.6	12094.1	11102.8	10526.9	10676.7	11226.4	13593.2	11342.1
40°	14150.7	14148.0	14166.4	13779.9	13235.4	12225.7	11376.2	11423.6	11899.6	14479.4	12057.4
42.5°	16446.4	16286.0	15799.5	15010.6	14463.6	13509.0	12446.5	12396.6	12722.7	15576.0	13059.3
45°	19531.1	19189.2	17927.0	16414.9	15715.4	14955.3	13764.1	13603.7	13811.4	16893.5	14295.3
47.5°	22184.5	21829.5	20043.9	17877.0	17043.4	16328.0	15307.7	15018.5	15086.9	18368.7	15862.6
50°	23086.6	22913.0	21353.5	19149.8	18329.3	18055.8	17098.6	16746.2	16648.9	20075.5	17679.8
52.5°	22773.5	22760.5	21721.6	19975.6	19507.5	19844.0	19352.3	18944.6	18587.0	21874.2	19528.4
55°	22271.3	22337.1	21871.6	20698.7	20682.9	21477.2	22434.3	22095.1	21059.0	23828.1	21122.1
57.5°	20885.4	21166.8	21787.4	22066.2	22713.1	23525.7	25001.0	25200.8	23975.4	25324.5	22444.9
60°	16946.1	17564.1	19594.2	22263.4	25329.7	27354.6	28098.8	28269.8	26368.4	26568.3	24230.4
62.5°	12028.5	12659.6	15234.1	19749.4	25369.2	32385.3	32714.0	32043.4	29003.4	28411.7	27309.9
65°	6385.1	6871.6	8975.3	14255.8	21995.2	33552.9	40784.7	38786.1	33652.8	32038.2	31288.7
67.5°	3266.2	3413.4	4249.6	6976.7	15121.1	29802.9	48019.2	49426.0	41665.7	35635.6	31096.7
69°	2890.0	2976.9	3531.7	5043.9	9682.7	25242.9	48371.5	53078.8	45860.1	35335.9	28259.2
70°	2798.1	2874.3	3379.2	4565.2	7568.4	21169.5	47022.5	52757.9	46933.1	34194.6	26139.7
72.5°	2374.7	2440.4	3008.4	4034.0	6151.0	10508.5	38197.0	44705.6	42115.3	28485.4	18921.0
75°	1588.3	1804.0	2887.5	3781.5	5722.3	5969.5	25182.4	32306.4	30010.6	19212.9	9856.2
77.5°	381.4	410.2	815.2	3008.4	5233.2	5254.2	12951.5	20083.4	16380.7	6847.8	2330.0
80°	205.1	197.2	228.8	597.0	4872.9	4930.7	5830.1	9748.4	5848.5	1136.1	767.9
82.5°	144.6	136.8	147.3	249.8	1533.1	4491.6	4218.1	4412.7	2424.6	436.5	344.5
85°	52.6	49.9	81.5	226.2	481.2	2582.4	4333.8	3639.6	1964.4	199.9	252.5
87.5°	18.4	15.8	31.5	123.6	147.3	1099.3	2674.4	2750.7	773.1	121.0	118.4
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°	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7	12104.7
2.5°	11996.9	11833.8	11534.1	11226.4	10942.4	10600.5	10429.6	10261.2	10190.2	10163.9	10040.4
5°	11649.8	11373.7	10737.2	10098.3	9509.1	8883.3	8470.4	8139.0	7944.4	7849.8	7699.9
7.5°	11205.3	10753.1	9787.9	8801.8	7884.0	6979.4	6308.7	5793.3	5438.3	5267.4	5112.2
10°	10774.0	10171.8	8799.1	7455.4	6208.8	5009.7	4084.0	3413.4	2984.8	2787.5	2661.3
12.5°	10387.5	9606.4	7844.5	6143.1	4578.4	3174.1	2232.7	1698.8	1433.3	1341.2	1296.5
15°	10043.0	9085.7	6942.6	4896.6	3100.5	1814.5	1220.2	1038.7	996.7	996.7	991.4
17.5°	9716.9	8575.6	6072.0	3726.3	1946.0	1109.8	928.3	904.6	904.6	915.1	915.1
20°	9404.0	8089.1	5230.6	2674.4	1225.5	881.0	838.9	833.6	838.9	852.0	852.0
22.5°	9135.8	7647.3	4444.3	1835.6	909.9	794.2	773.1	765.3	767.9	775.8	781.0
25°	8935.9	7273.9	3702.7	1243.9	783.7	723.2	699.5	686.4	675.9	675.9	681.1
27.5°	8809.7	6958.3	2984.8	904.6	704.8	657.5	620.6	599.6	575.9	562.7	568.0
30°	8717.6	6658.5	2311.6	739.0	631.2	583.8	536.4	502.3	468.1	452.3	457.6
32.5°	8683.4	6416.6	1727.8	652.1	565.4	512.8	454.9	410.2	373.4	360.3	362.9
35°	8775.5	6224.6	1264.9	589.0	512.8	447.0	381.4	331.3	302.4	294.5	297.2
37.5°	9017.4	6122.1	946.7	536.4	465.4	391.8	318.2	270.9	252.5	252.5	255.1
40°	9475.0	6119.4	760.0	499.6	423.4	339.2	263.0	228.8	218.3	223.5	226.2
42.5°	10143.0	6258.8	662.7	465.4	386.6	289.3	218.3	194.6	192.0	197.2	199.9
45°	11055.4	6513.8	610.1	436.5	347.1	241.9	184.1	168.3	168.3	176.2	178.8
47.5°	12173.1	6887.3	565.4	407.6	307.7	202.4	157.7	147.3	149.9	157.7	160.4
50°	13519.5	7358.0	520.7	376.0	278.8	168.3	136.8	128.9	131.4	142.0	144.6
52.5°	15052.6	7991.8	483.9	347.1	241.9	139.3	115.7	110.5	115.7	126.2	128.9
55°	16367.5	8559.8	439.2	323.5	194.6	115.7	94.6	94.6	99.9	113.0	115.7
57.5°	17632.4	9154.2	399.8	278.8	152.5	92.1	78.9	81.5	89.4	102.6	105.2
60°	19489.1	10161.4	352.4	234.1	115.7	73.7	65.8	68.3	78.9	92.1	94.6
62.5°	22642.1	11694.5	305.0	194.6	89.4	57.9	52.6	57.9	71.0	86.7	89.4
65°	25487.4	12317.8	249.8	163.1	68.3	44.7	44.7	52.6	68.3	84.2	86.7
67.5°	23901.8	10369.0	194.6	128.9	52.6	34.2	36.8	49.9	65.8	84.2	86.7
69°	<b>21137.8</b>	<b>8478.3</b>	<b>165.7</b>	<b>102.6</b>	<b>44.7</b>	<b>31.5</b>	<b>34.2</b>	<b>49.9</b>	<b>65.8</b>	<b>81.5</b>	<b>84.2</b>
70°	18984.1	7158.2	147.3	86.7	39.5	31.5	34.2	47.4	65.8	81.5	84.2
72.5°	12714.8	3865.7	118.4	63.1	36.8	28.9	28.9	47.4	63.1	78.9	81.5
75°	5464.6	1067.7	94.6	44.7	31.5	26.3	26.3	44.7	60.5	76.3	81.5
77.5°	999.3	270.9	76.3	39.5	31.5	26.3	23.6	42.0	57.9	73.7	76.3
80°	397.1	134.1	60.5	34.2	28.9	23.6	21.1	39.5	55.2	71.0	73.7
82.5°	239.3	76.3	49.9	31.5	28.9	21.1	18.4	34.2	52.6	68.3	71.0
85°	194.6	52.6	39.5	31.5	26.3	21.1	15.8	31.5	47.4	65.8	68.3
87.5°	94.6	36.8	36.8	28.9	26.3	21.1	15.8	28.9	44.7	63.1	65.8
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)