

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: P300876

Luminaire Tested: **GLNA-AF-07-LED-E1-SL4-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300876  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-07-LED-E1-SL4-7027  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Wide OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 34638 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G5

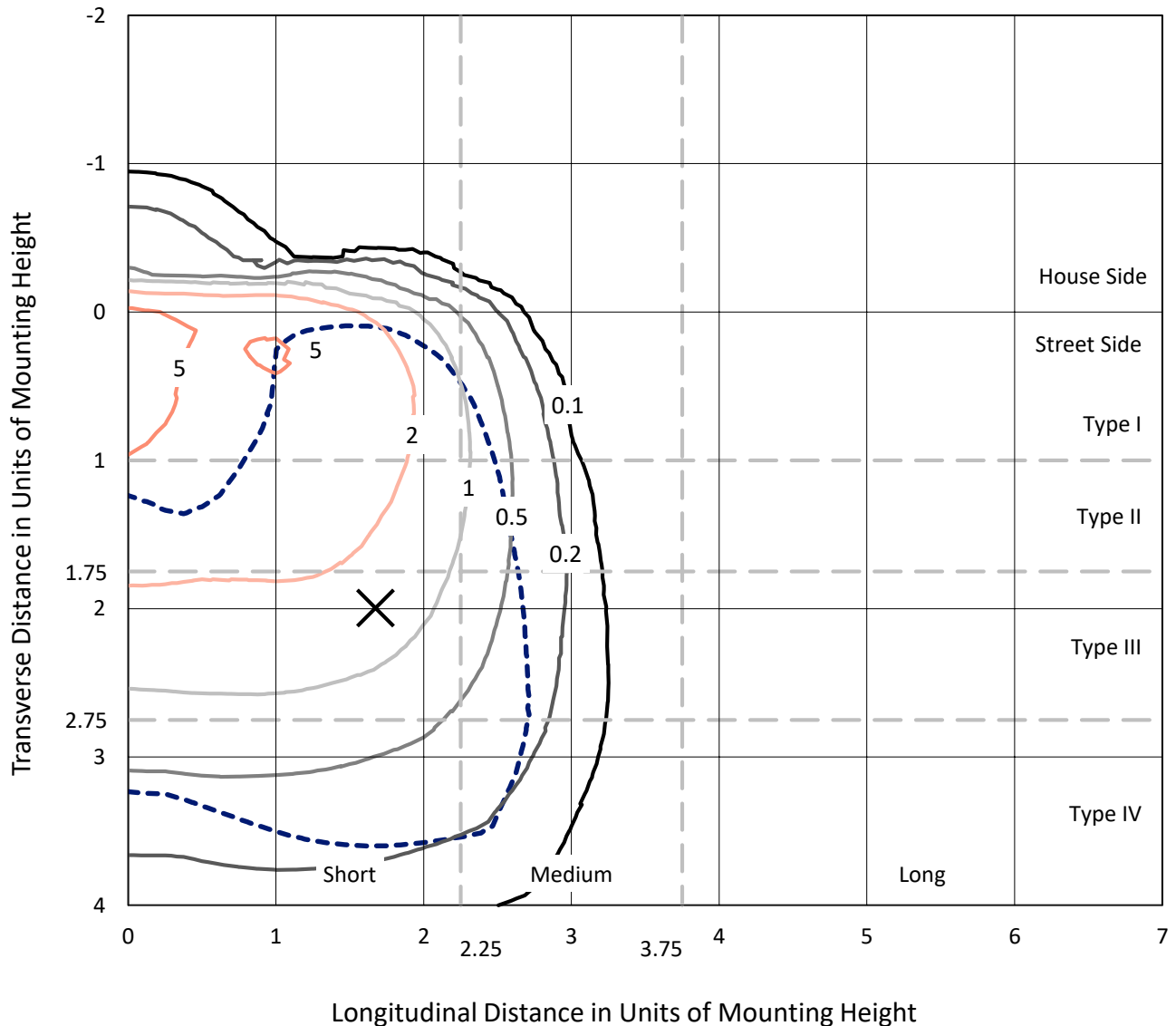
Input Watts (W): 391  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

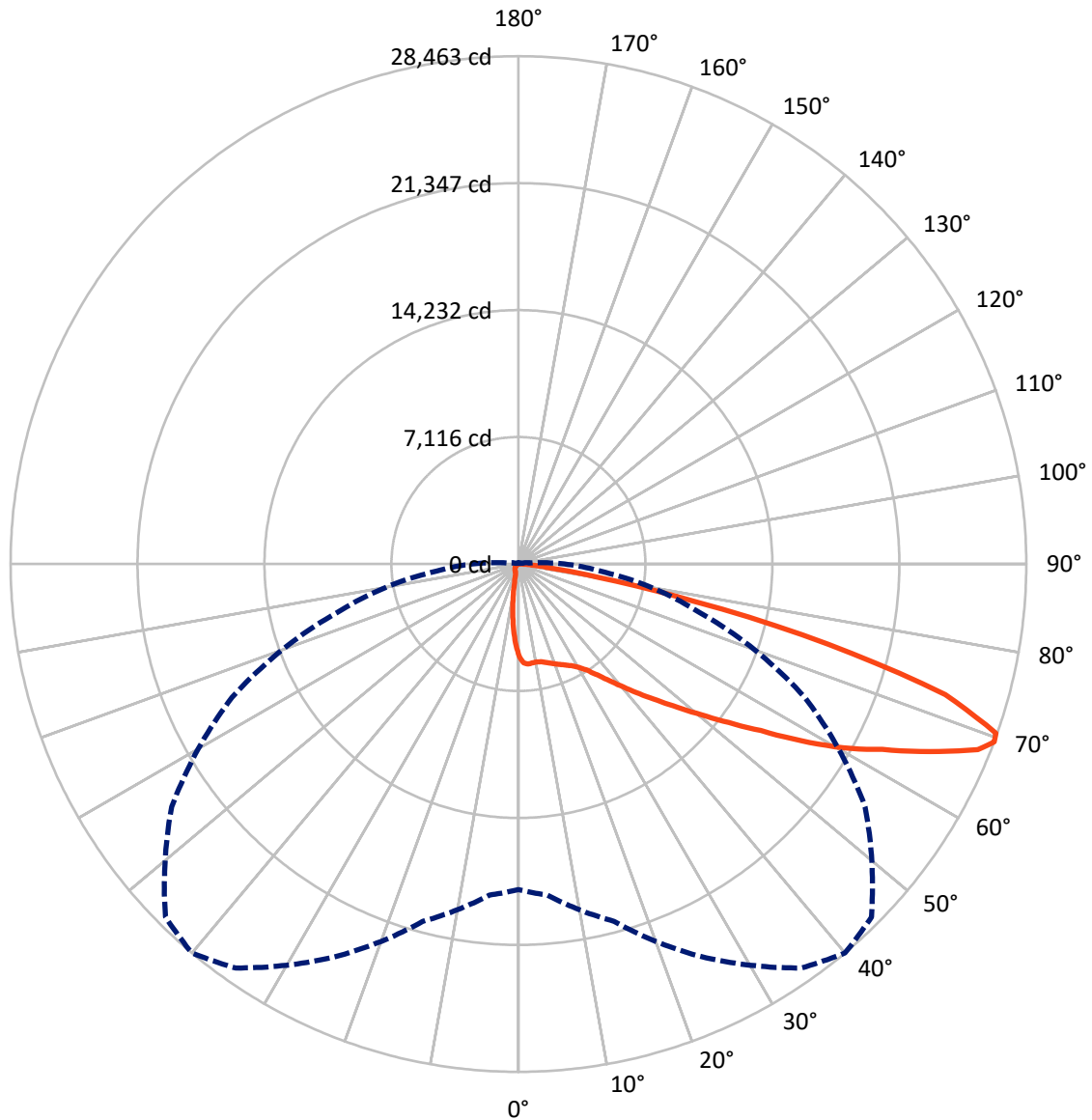
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.3 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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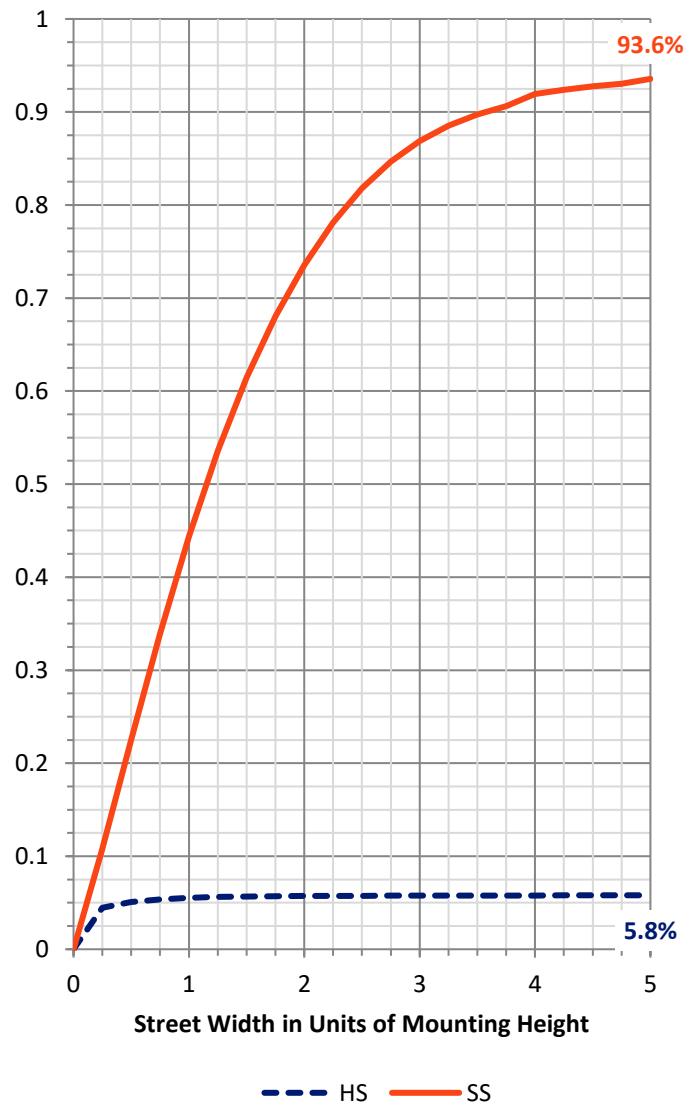
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2026.5	0.0	2026.5
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	32611.5	0.0	32611.5
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	34638.0	0.0	34638.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	419.6	1.2
10°-20°	1031.9	3.0
20°-30°	1738.0	5.0
30°-40°	2845.2	8.2
40°-50°	4926.4	14.2
50°-60°	7759.5	22.4
60°-70°	10133.6	29.3
70°-80°	5219.3	15.1
80°-90°	564.6	1.6
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°	34638.0	100.0
0°-180°	34638.0	100.0



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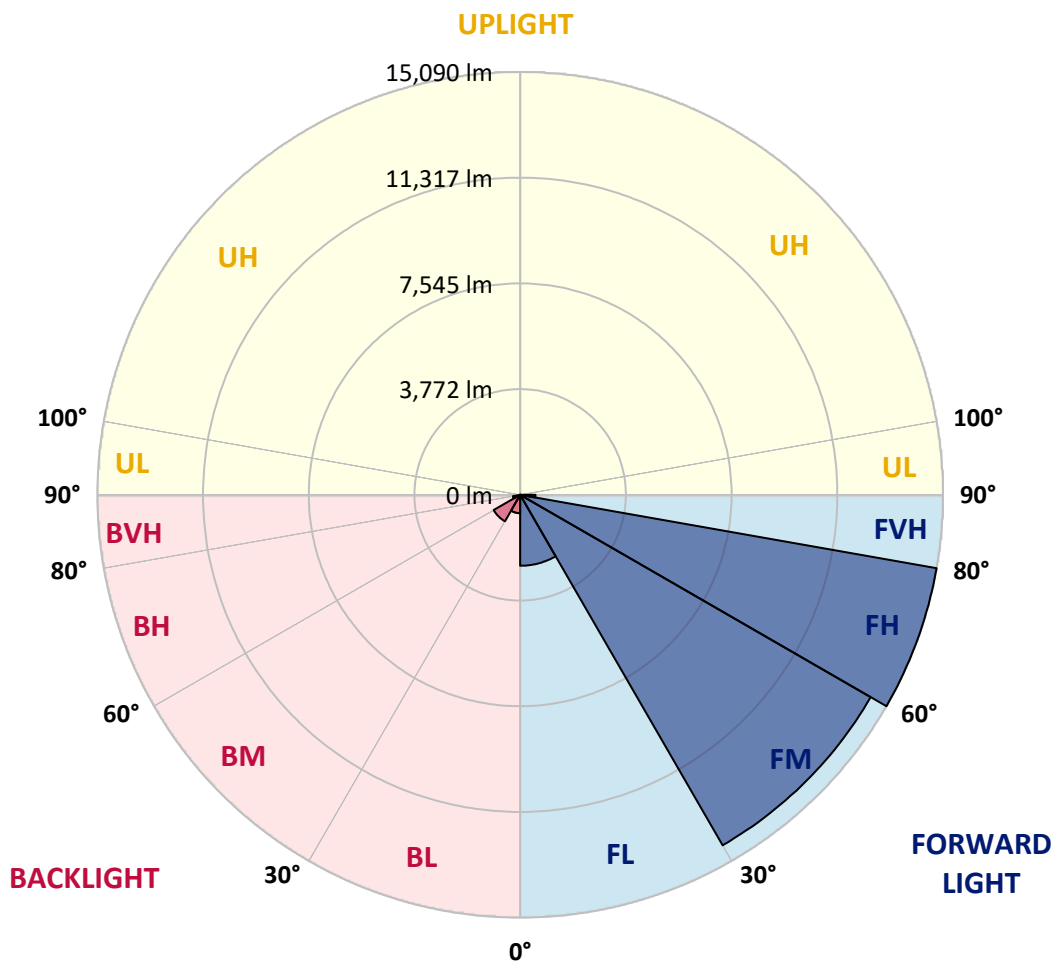
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2533.0	7.3			
FM	(30°-60°)	14441.9	41.7			
FH	(60°-80°)	15089.8	43.6			G5
FVH	(80°-90°)	546.8	1.6			G4/750
BL	(0°-30°)	656.5	1.9	B2/1000		
BM	(30°-60°)	1089.2	3.1	B2/2500		
BH	(60°-80°)	263.1	0.8	B1/500		G1/500
BVH	(80°-90°)	17.7	0.1			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°	40°	45°	55°	65°	75°	85°
0°	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1
2.5°	5682.3	5651.4	5632.8	5608.1	5577.2	5550.3	5540.0	5463.8	5391.6	5292.6	5179.2
5°	5787.5	5777.1	5744.2	5711.2	5674.1	5632.8	5610.1	5519.4	5416.3	5272.0	5074.1
7.5°	5797.8	5785.4	5744.2	5698.8	5647.3	5597.8	5558.6	5467.9	5373.0	5226.6	4985.4
10°	5781.3	5766.8	5735.9	5686.4	5622.5	5575.1	5535.9	5449.3	5368.9	5237.0	4968.9
12.5°	5762.7	5748.3	5733.8	5709.1	5653.4	5620.4	5587.5	5505.0	5432.8	5321.5	5028.7
15°	5781.3	5773.0	5789.5	5779.2	5748.3	5719.4	5686.4	5612.2	5546.2	5453.4	5138.0
17.5°	5859.6	5859.6	5911.2	5917.3	5888.5	5847.2	5799.8	5725.6	5669.9	5591.6	5267.9
20°	6043.1	6036.9	6102.9	6115.3	6045.2	5981.3	5911.2	5820.4	5777.1	5727.7	5395.7
22.5°	6358.6	6329.7	6368.9	6356.5	6218.4	6119.4	6032.8	5921.5	5898.8	5876.1	5538.0
25°	6768.9	6752.4	6779.2	6657.5	6414.2	6280.2	6177.1	6051.4	6051.4	6074.0	5698.8
27.5°	7364.7	7302.9	7212.2	6997.7	6632.8	6461.7	6350.3	6216.3	6251.4	6335.9	5911.2
30°	7975.0	7907.0	7698.7	7368.8	6898.8	6719.4	6589.5	6449.3	6531.8	6686.4	6195.7
32.5°	8577.1	8500.8	8205.9	7789.5	7280.2	7100.8	6975.0	6820.4	6958.6	7218.3	6612.2
35°	9160.5	9092.5	8752.3	8261.6	7787.4	7638.9	7523.5	7389.5	7566.8	7929.7	7199.8
37.5°	9816.2	9742.0	9327.6	8795.6	8403.9	8296.7	8212.1	8078.1	8387.4	8919.3	8018.3
40°	10622.4	10496.6	9937.8	9408.0	9117.2	9065.7	9008.0	8989.4	9469.8	10205.9	9109.0
42.5°	11546.0	11339.9	10577.0	10053.3	9900.7	9937.8	9923.4	10005.9	10824.4	11805.8	10436.8
45°	12469.7	12203.8	11288.3	10741.9	10762.6	10892.5	10972.9	11302.8	12521.3	13640.8	11865.6
47.5°	13253.2	12991.4	11970.8	11486.3	11733.7	11989.3	12207.9	12832.6	14265.5	15447.0	12976.9
50°	13923.3	13675.9	12694.5	12304.8	12861.5	13273.8	13628.5	14554.2	16141.8	16822.2	13756.3
52.5°	14471.7	14306.8	13445.0	13242.9	14150.1	14754.2	15273.8	16383.0	17803.6	17939.7	14362.5
55°	15005.7	14888.2	14251.1	14358.3	15663.4	16486.1	17143.8	18323.2	19234.5	18871.6	14943.9
57.5°	15620.1	15512.9	15170.7	15772.7	17653.1	18688.1	19405.6	20042.7	20494.2	19824.1	15492.3
60°	16246.9	16185.1	16193.3	17343.8	19937.5	20931.3	21327.2	21492.1	21731.3	20721.0	15523.2
62.5°	16844.9	16962.4	17362.4	19092.2	22125.1	22888.0	23088.0	23250.8	22970.4	20863.3	14341.8
65°	17857.2	18048.9	19003.5	21432.3	24531.2	25347.7	25553.9	24995.1	23166.3	19024.2	11665.6
67.5°	18352.0	18702.5	20405.6	23613.7	26865.2	27772.4	27696.1	25108.5	20789.1	14506.8	7486.4
69°	18248.9	18622.1	20729.3	24281.7	27640.4	28463.1	27978.5	23720.9	17710.8	10509.0	4595.7
70°	17840.7	18218.0	20562.3	24257.0	27739.4	28390.9	27454.8	22007.6	14974.8	7684.3	2874.1
72.5°	14898.5	15224.3	18255.1	21925.1	25553.9	25024.0	22968.4	15247.0	7296.7	2092.7	647.4
75°	9170.9	9352.3	13098.6	16517.0	19300.4	17939.7	15302.6	7585.3	2175.2	591.7	358.8
77.5°	4845.2	4927.7	7170.9	9735.8	12234.7	10123.4	7843.1	2958.7	1002.0	371.1	259.8
80°	2863.8	2925.7	3861.7	4451.4	5294.7	4422.5	3136.0	1816.4	717.5	233.0	230.9
82.5°	1639.1	1678.3	2799.9	2474.2	2086.5	1781.4	1560.8	1721.6	430.9	156.7	239.2
85°	602.0	610.3	1575.2	1882.4	1241.2	738.1	775.2	1426.8	115.5	99.0	187.6
87.5°	280.4	274.2	810.3	1152.5	725.8	468.0	604.1	313.4	45.4	63.9	51.5
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°	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1	5175.1
2.5°	5113.2	5037.0	4898.8	4756.6	4612.2	4500.9	4391.6	4305.0	4276.2	4222.6	4226.7
5°	4956.6	4816.3	4527.7	4234.9	3929.8	3678.2	3441.1	3249.4	3156.6	3061.8	3061.8
7.5°	4820.5	4616.4	4164.8	3688.5	3195.8	2781.4	2408.2	2127.8	1973.1	1849.4	1847.4
10°	4768.9	4492.6	3861.7	3179.3	2492.7	1927.8	1484.5	1200.0	1053.6	958.7	954.6
12.5°	4791.6	4449.3	3628.8	2709.2	1847.4	1239.1	859.8	676.3	614.4	585.5	585.5
15°	4857.6	4437.0	3395.8	2249.4	1305.1	775.2	571.1	521.6	517.5	517.5	517.5
17.5°	4938.0	4441.1	3156.6	1802.0	888.6	554.6	492.8	486.6	490.7	490.7	490.7
20°	5020.5	4443.2	2898.9	1387.6	626.8	482.5	463.9	461.8	466.0	466.0	468.0
22.5°	5121.5	4453.5	2641.2	1037.1	517.5	455.7	441.2	441.2	443.3	443.3	441.2
25°	5237.0	4474.1	2373.1	769.0	472.2	437.1	424.7	422.7	424.7	422.7	420.6
27.5°	5381.3	4503.0	2074.2	602.0	451.5	418.5	408.2	408.2	406.2	404.1	402.0
30°	5562.7	4535.9	1738.1	511.3	430.9	402.0	391.7	389.7	387.6	383.5	383.5
32.5°	5839.0	4608.1	1406.1	463.9	408.2	379.4	371.1	371.1	367.0	362.9	360.8
35°	6263.7	4750.4	1109.2	435.0	383.5	354.6	344.3	344.3	340.2	338.1	336.1
37.5°	6851.3	4966.9	861.8	408.2	358.8	327.8	317.5	315.5	311.3	307.2	305.1
40°	7632.8	5234.9	678.3	383.5	334.0	301.0	292.8	288.7	280.4	274.2	274.2
42.5°	8614.2	5540.0	550.5	356.7	305.1	276.3	270.1	263.9	249.5	243.3	241.2
45°	9640.9	5814.3	466.0	325.8	276.3	251.5	247.4	237.1	218.6	212.4	212.4
47.5°	10381.1	5878.2	410.3	296.9	249.5	224.7	222.7	204.1	187.6	183.5	181.4
50°	10843.0	5752.4	364.9	268.0	224.7	200.0	193.8	171.1	160.8	156.7	154.6
52.5°	11154.3	5527.7	327.8	243.3	202.1	177.3	162.9	146.4	138.1	134.0	134.0
55°	11403.8	5210.2	290.7	220.6	183.5	158.8	138.1	125.8	117.5	113.4	113.4
57.5°	11473.9	4779.2	253.6	202.1	164.9	140.2	117.5	109.3	99.0	96.9	96.9
60°	10964.6	4001.9	224.7	179.4	148.4	121.6	103.1	92.8	82.5	80.4	78.3
62.5°	9622.4	3096.8	197.9	158.8	129.9	105.2	88.7	76.3	68.0	68.0	68.0
65°	7340.0	2076.2	173.2	138.1	113.4	88.7	76.3	61.9	57.7	57.7	59.8
67.5°	4393.7	1129.9	148.4	117.5	96.9	74.2	63.9	53.6	51.5	53.6	53.6
69°	2575.2	663.9	134.0	105.2	84.5	66.0	55.7	47.4	51.5	53.6	53.6
70°	1589.6	447.4	123.7	94.8	76.3	59.8	51.5	45.4	49.5	51.5	51.5
72.5°	443.3	230.9	99.0	74.2	61.9	49.5	41.2	41.2	47.4	49.5	49.5
75°	288.7	171.1	76.3	55.7	47.4	39.2	35.1	39.2	45.4	47.4	47.4
77.5°	239.2	140.2	61.9	45.4	39.2	37.1	33.0	35.1	41.2	43.3	43.3
80°	218.6	99.0	49.5	41.2	35.1	33.0	30.9	28.9	37.1	39.2	39.2
82.5°	208.2	78.3	43.3	37.1	33.0	28.9	26.8	28.9	33.0	35.1	37.1
85°	129.9	51.5	39.2	35.1	28.9	26.8	26.8	26.8	30.9	33.0	33.0
87.5°	47.4	41.2	35.1	28.9	24.7	24.7	24.7	24.7	26.8	30.9	30.9
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)