

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: P320141

Luminaire Tested: **GLEON-SA7D-827-U-SL4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P320141  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA7D-827-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 2700K, 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: 38335 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

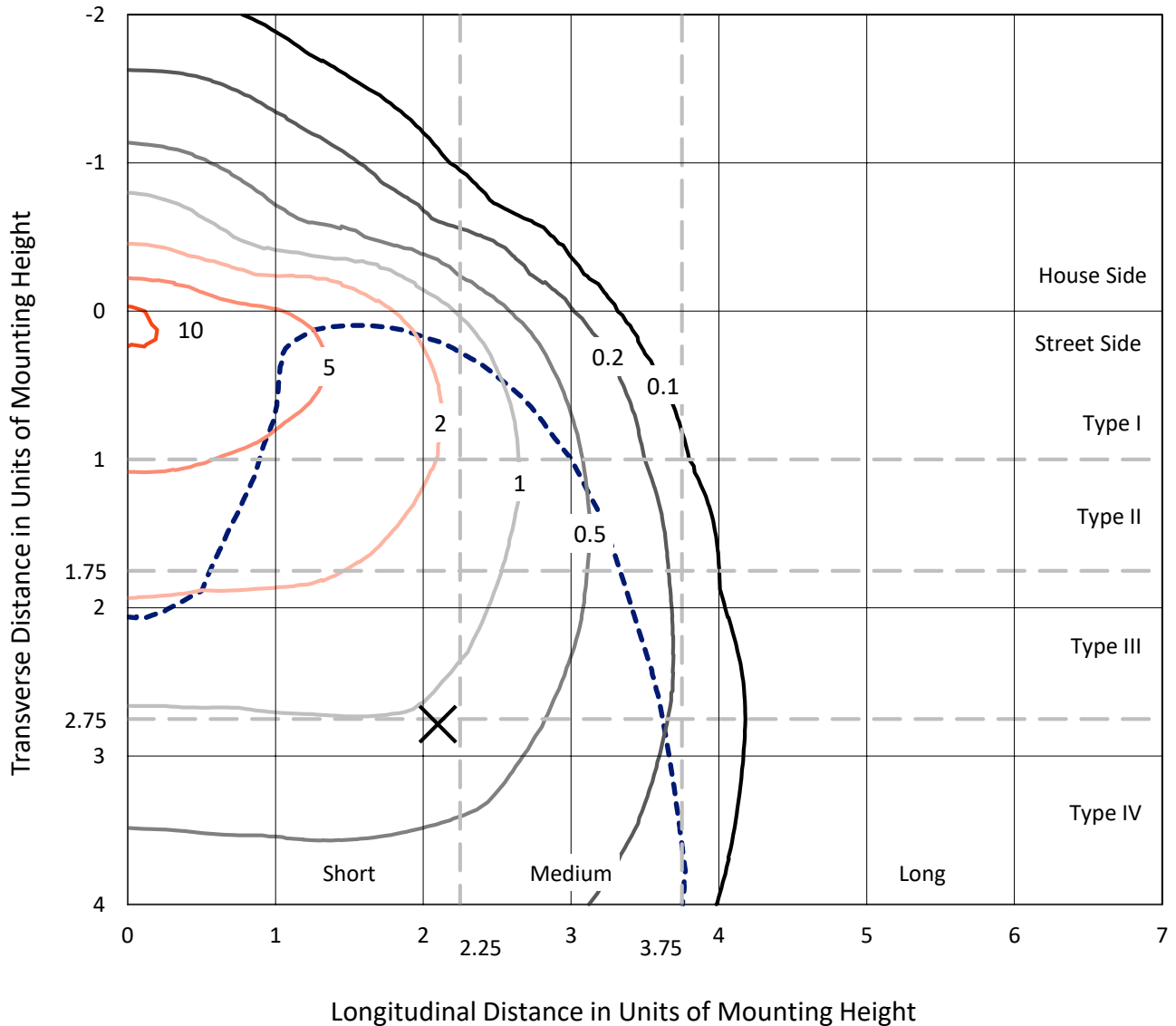
Input Watts (W): 448  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

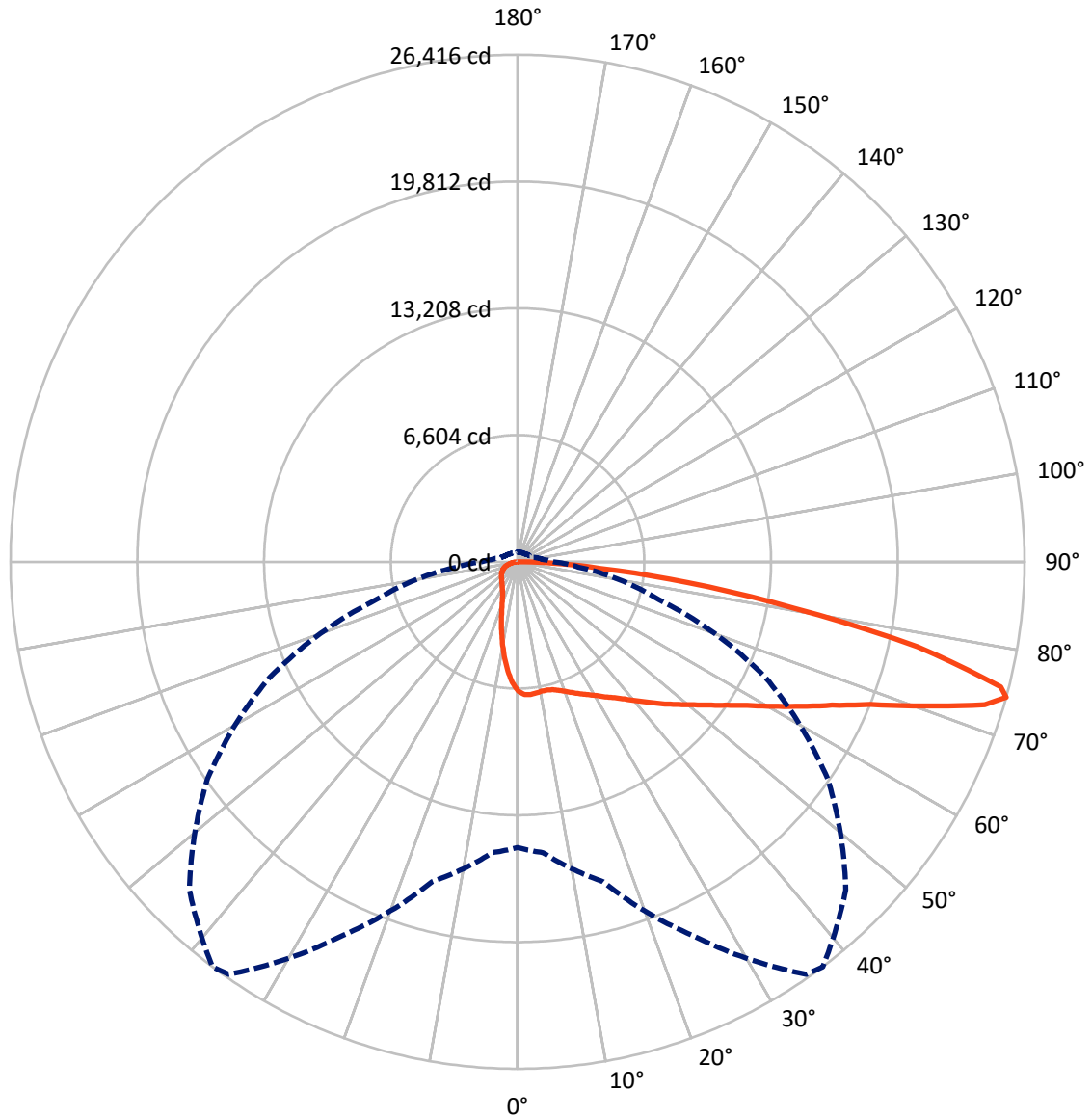
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 37-Deg Lateral      - - - Horizontal Cone Through 74-Deg Vertical

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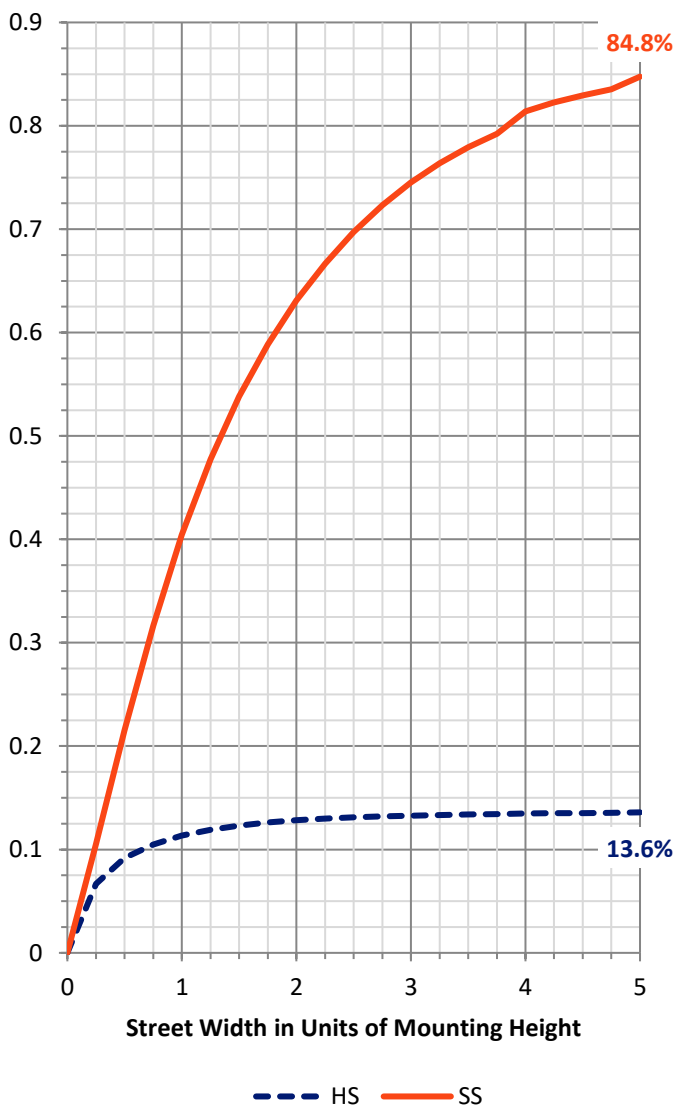
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5274.6	0.0	5274.6
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	33060.4	0.0	33060.4
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	38335.0	0.0	38335.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	594.8	1.6
10°-20°	1524.7	4.0
20°-30°	2349.2	6.1
30°-40°	3416.1	8.9
40°-50°	5027.9	13.1
50°-60°	7060.7	18.4
60°-70°	8936.7	23.3
70°-80°	7869.1	20.5
80°-90°	1555.9	4.1
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°	38335.0	100.0
0°-180°	38335.0	100.0

**Coefficient of Utilization**



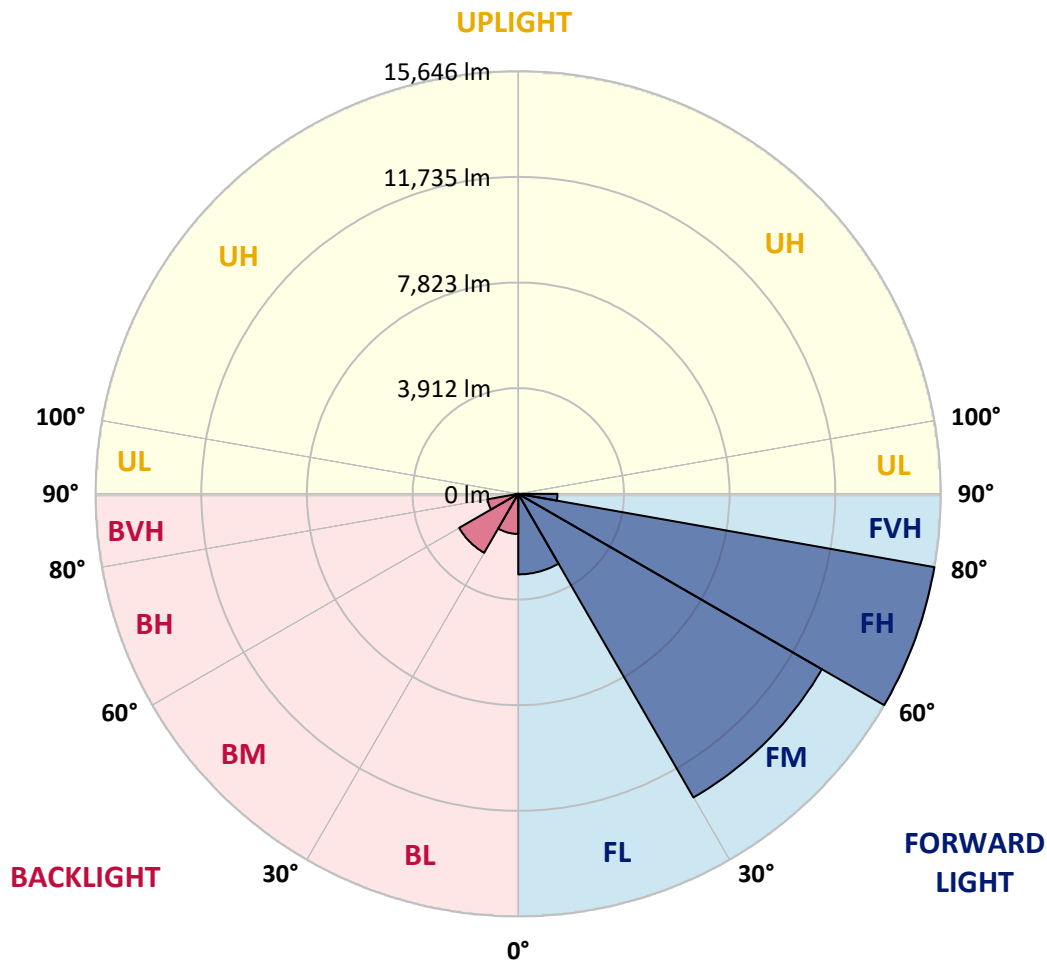
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 CATALOG NUMBER: GLEON-SA7D-827-U-SL4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2982.9	7.8			
FM (30°-60°)	12980.5	33.9			
FH (60°-80°)	15646.4	40.8			G5
FVH (80°-90°)	1450.5	3.8			G5
BL (0°-30°)	1485.7	3.9	B3/2500		
BM (30°-60°)	2524.1	6.6	B3/5000		
BH (60°-80°)	1159.4	3.0	B3/2500		G3/2500
BVH (80°-90°)	105.4	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

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

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5
2.5°	6985.4	6986.7	6985.4	6974.6	6948.9	6927.3	6909.8	6884.1	6827.4	6784.2	6719.4
5°	7051.6	7043.5	7038.1	7017.8	6977.3	6953.0	6919.2	6870.6	6777.4	6691.0	6585.7
7.5°	7020.5	7011.0	6998.9	6974.6	6928.7	6908.4	6861.2	6797.7	6685.6	6572.2	6420.9
10°	6924.6	6921.9	6916.5	6911.1	6872.0	6855.8	6812.5	6745.0	6634.3	6496.6	6319.7
12.5°	6817.9	6824.7	6846.3	6874.7	6857.1	6849.0	6822.0	6776.1	6662.7	6514.1	6300.8
15°	6750.4	6769.3	6827.4	6901.7	6916.5	6913.8	6907.1	6877.4	6757.2	6592.4	6344.0
17.5°	6727.5	6758.5	6869.3	6992.1	7035.4	7044.8	7047.5	6996.2	6862.5	6688.3	6388.5
20°	6769.3	6808.5	6970.5	7139.3	7208.2	7213.6	7201.4	7112.3	6962.4	6770.7	6412.8
22.5°	6896.3	6931.4	7133.9	7324.3	7402.6	7410.8	7374.3	7239.3	7067.8	6867.9	6446.6
25°	7140.7	7183.9	7386.4	7576.8	7617.4	7618.7	7566.0	7398.6	7205.5	7004.3	6519.5
27.5°	7459.4	7502.6	7684.9	7871.2	7849.6	7837.5	7765.9	7598.5	7385.1	7192.0	6649.2
30°	7814.5	7861.8	8034.6	8167.0	8115.6	8091.3	8033.3	7817.2	7634.9	7448.6	6847.7
32.5°	8181.8	8225.0	8376.3	8466.7	8401.9	8391.1	8303.3	8106.2	7960.3	7840.2	7169.0
35°	8558.6	8589.6	8738.2	8789.5	8703.0	8700.3	8676.0	8495.1	8403.3	8460.0	7636.3
37.5°	8943.4	8951.5	9078.4	9081.1	9055.5	9066.3	9091.9	8978.5	9004.2	9181.1	8243.9
40°	9286.4	9308.0	9399.8	9428.2	9472.7	9510.6	9638.8	9564.6	9763.1	10076.4	9000.1
42.5°	9540.3	9582.1	9729.3	9802.2	9946.7	10006.1	10187.1	10256.0	10655.7	11125.6	9899.5
45°	9755.0	9819.8	10056.1	10206.0	10450.4	10554.4	10813.6	11044.6	11664.4	12263.9	10846.1
47.5°	9987.2	10069.6	10365.3	10651.6	10983.8	11101.3	11572.5	11918.2	12740.6	13409.0	11738.6
50°	10328.9	10392.3	10681.3	11131.0	11545.5	11696.8	12349.0	12844.6	13834.4	14500.1	12512.4
52.5°	10805.5	10781.2	11025.7	11656.3	12212.6	12399.0	13178.1	13830.3	14943.0	15487.2	13166.0
55°	11284.9	11244.4	11415.9	12205.9	12990.4	13186.2	14091.0	14820.2	15997.7	16375.8	13666.9
57.5°	11818.3	11741.3	11885.8	12825.7	13876.3	14109.9	15113.2	15872.1	17034.7	17094.2	13985.6
60°	12367.9	12263.9	12426.0	13594.0	15001.1	15276.6	16309.6	16898.3	18012.4	17669.4	14088.3
62.5°	12848.6	12775.7	13025.5	14451.5	16269.1	16571.6	17484.4	17989.4	18976.5	17908.4	13718.3
65°	13268.6	13280.7	13712.9	15415.7	17682.9	18005.6	18832.1	19334.4	19735.4	17766.6	12852.7
67.5°	13769.6	13838.4	14575.7	16685.0	19462.7	19816.5	20792.8	20800.9	20159.5	16934.8	11148.5
70°	14500.1	14641.9	15762.7	18445.9	21993.2	22479.4	23232.9	21662.4	19564.0	14679.7	8771.9
72.5°	15148.3	15413.0	17025.3	20460.6	25077.5	25446.1	24660.2	21165.5	17075.2	11001.3	5464.9
74°	14885.0	15213.1	17254.8	21453.1	26238.8	26415.7	24178.1	19715.2	14236.8	7618.7	3176.0
75°	14317.8	14674.3	16920.0	21443.6	26091.6	25993.0	23014.1	18058.3	11725.1	5196.2	2113.3
77.5°	11555.0	11931.7	14257.1	18378.3	21393.7	21300.5	17678.9	12114.0	5135.4	1704.1	1073.5
80°	6718.0	7005.6	8850.2	11671.1	14425.8	14594.6	11626.6	5994.2	2020.1	957.4	727.8
82.5°	2984.3	3182.8	4275.2	5957.8	8705.7	8923.1	6088.8	3140.9	1247.7	582.0	437.5
85°	1958.0	2105.2	2595.4	2837.1	4145.6	4294.1	2980.2	2445.5	823.7	320.0	321.4
87.5°	1408.4	1550.2	1928.3	1683.9	1902.7	1801.4	1621.8	2263.2	330.8	182.3	108.0
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°	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5	6754.5
2.5°	6691.0	6669.4	6620.8	6529.0	6477.7	6434.4	6362.9	6321.0	6302.1	6300.8	6308.9
5°	6524.9	6475.0	6349.4	6195.4	6072.5	5960.5	5821.4	5737.7	5678.2	5643.1	5652.6
7.5°	6331.8	6253.5	6056.3	5810.6	5613.4	5396.0	5181.3	5053.0	4953.1	4878.8	4892.3
10°	6199.5	6091.5	5803.8	5450.0	5121.9	4805.9	4510.2	4333.3	4192.9	4084.8	4092.9
12.5°	6154.9	6009.1	5610.7	5138.1	4677.6	4245.5	3859.3	3587.9	3443.4	3320.5	3330.0
15°	6161.7	5965.9	5448.7	4857.2	4277.9	3733.7	3265.2	2947.8	2752.0	2667.0	2668.3
17.5°	6167.1	5915.9	5278.5	4556.1	3882.3	3255.7	2746.6	2425.2	2240.2	2161.9	2163.3
20°	6149.5	5834.9	5067.9	4210.4	3469.1	2816.8	2324.0	2051.2	1910.8	1850.0	1850.0
22.5°	6126.6	5739.0	4830.2	3863.4	3061.3	2436.0	2021.5	1813.5	1732.5	1692.0	1690.6
25°	6137.4	5667.4	4587.2	3506.9	2685.9	2132.2	1820.3	1682.5	1628.5	1602.9	1601.5
27.5°	6195.4	5633.7	4363.0	3151.7	2357.7	1904.0	1685.2	1588.0	1552.9	1536.7	1536.7
30°	6300.8	5633.7	4129.4	2849.3	2084.9	1735.2	1581.3	1515.1	1490.8	1480.0	1480.0
32.5°	6484.4	5664.7	3903.9	2549.5	1867.5	1602.9	1494.8	1450.3	1431.4	1426.0	1426.0
35°	6800.4	5770.1	3683.8	2265.9	1692.0	1494.8	1412.5	1386.8	1373.3	1372.0	1376.0
37.5°	7244.7	5984.8	3477.2	2056.6	1567.8	1407.1	1343.6	1323.3	1315.2	1322.0	1327.4
40°	7803.7	6276.5	3289.5	1867.5	1473.2	1336.9	1280.1	1266.6	1262.6	1272.0	1280.1
42.5°	8478.9	6670.8	3135.5	1731.2	1400.3	1277.4	1226.1	1209.9	1205.9	1216.7	1227.5
45°	9209.4	7094.8	3027.5	1629.9	1343.6	1232.9	1178.9	1161.3	1153.2	1158.6	1170.8
47.5°	9873.8	7495.8	2984.3	1558.3	1289.6	1195.1	1137.0	1115.4	1101.9	1099.2	1108.6
50°	10434.2	7794.3	3004.5	1515.1	1246.4	1153.2	1096.5	1072.2	1051.9	1039.8	1046.5
52.5°	10842.0	7982.0	3023.4	1496.2	1212.6	1107.3	1051.9	1029.0	1002.0	981.7	981.7
55°	11137.7	8025.2	2981.6	1481.3	1187.0	1057.3	1002.0	980.4	953.4	930.4	927.7
57.5°	11253.9	7903.6	2826.3	1459.7	1169.4	1010.1	949.3	933.1	910.1	883.1	881.8
60°	11097.2	7528.2	2526.5	1413.8	1146.5	970.9	896.6	885.8	875.0	849.4	848.0
62.5°	10468.0	6704.5	2139.0	1320.6	1100.5	929.0	848.0	853.4	854.8	837.2	834.5
65°	9326.9	5572.9	1760.9	1199.1	1031.7	879.1	798.1	823.7	838.6	835.9	831.8
67.5°	7668.7	4337.3	1492.1	1070.8	941.2	810.2	744.0	773.8	785.9	795.4	792.7
70°	5691.7	3058.6	1234.2	935.8	831.8	729.2	673.8	688.7	680.6	691.4	695.4
72.5°	3173.3	1835.1	1006.0	800.8	718.4	634.7	595.5	592.8	575.3	575.3	575.3
74°	1904.0	1346.3	884.5	717.0	649.5	572.6	538.8	526.6	510.4	511.8	510.4
75°	1531.3	1157.3	811.6	661.7	600.9	536.1	502.3	486.1	474.0	474.0	472.6
77.5°	966.9	879.1	653.6	526.6	480.7	441.6	418.6	397.0	397.0	395.7	394.3
80°	730.5	699.5	509.1	398.4	368.6	338.9	324.1	314.6	314.6	318.7	317.3
82.5°	501.0	526.6	357.8	278.2	263.3	241.7	239.0	240.4	236.3	230.9	229.6
85°	365.9	395.7	241.7	175.5	160.7	147.2	158.0	163.4	156.6	144.5	139.1
87.5°	140.4	259.3	129.6	72.9	67.5	58.1	67.5	70.2	75.6	59.4	60.8
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)