

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: P456623

Luminaire Tested: **GALN-SA7D-827-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P456623  
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-SA7D-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 2700K, 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: 40534 lumens  
Efficiency: N/A  
Efficacy: 93.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5

Input Watts (W): 433  
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

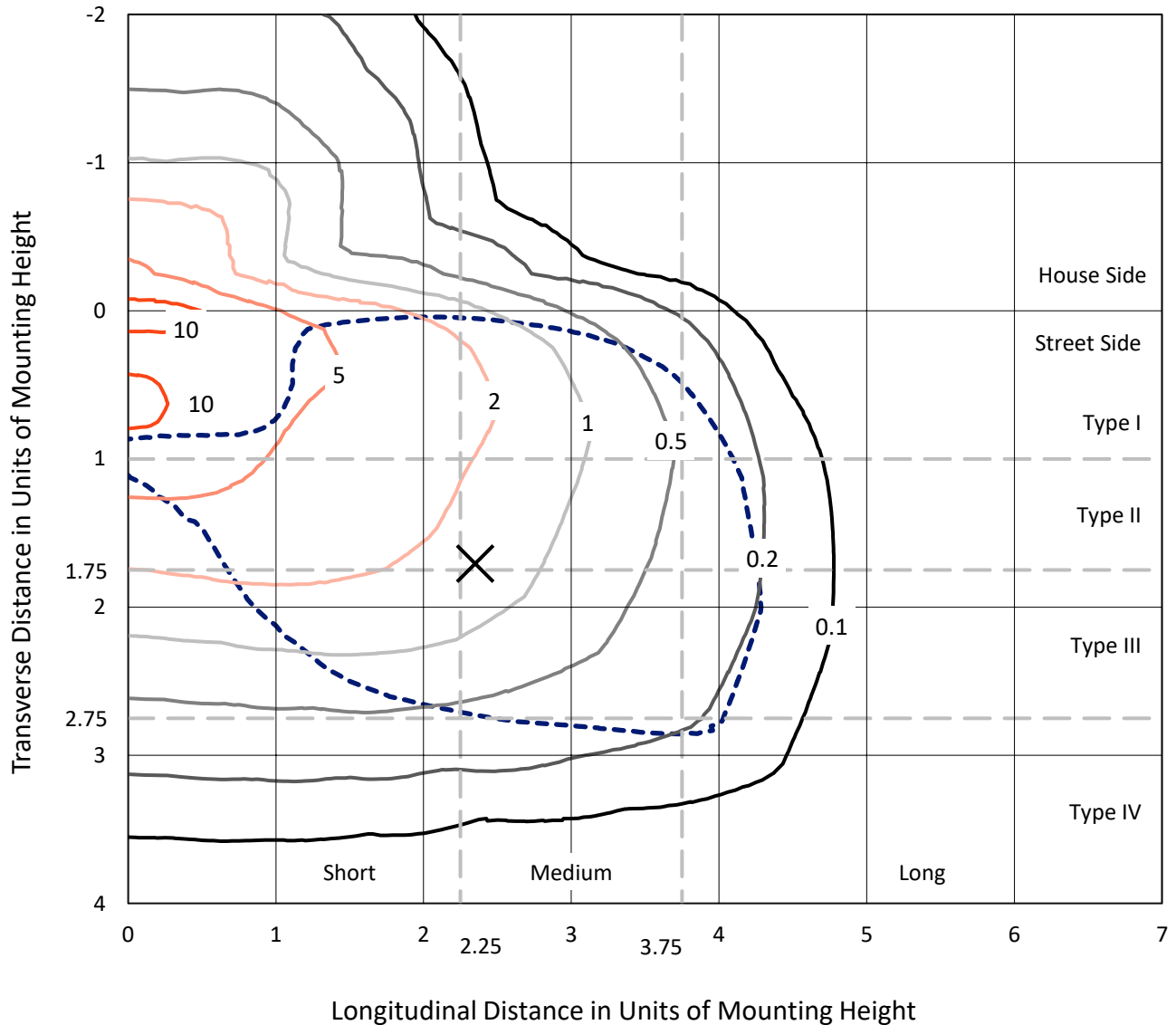




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### Iso-Footcandle Lines of Horizontal Illumination

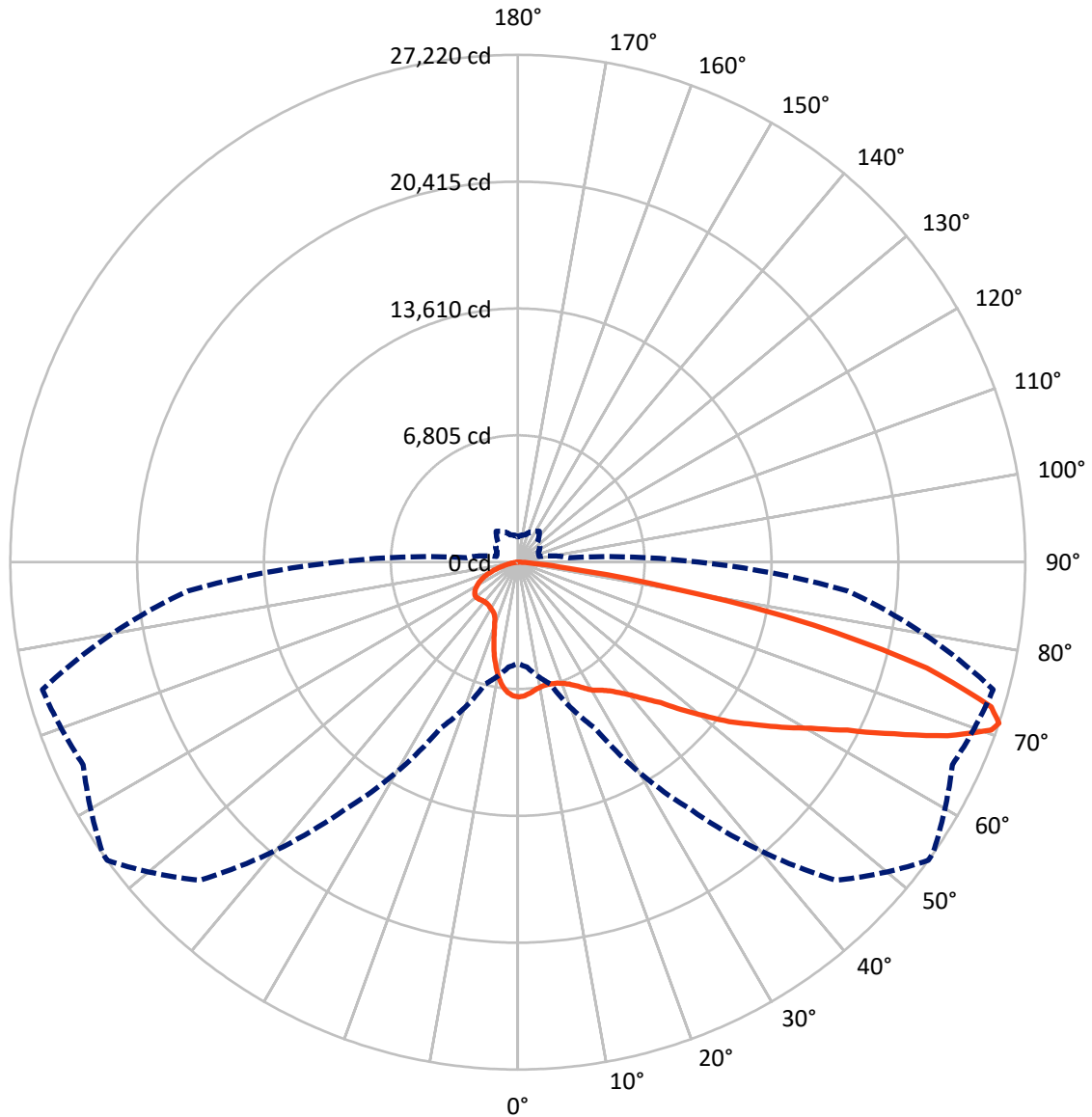
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.7 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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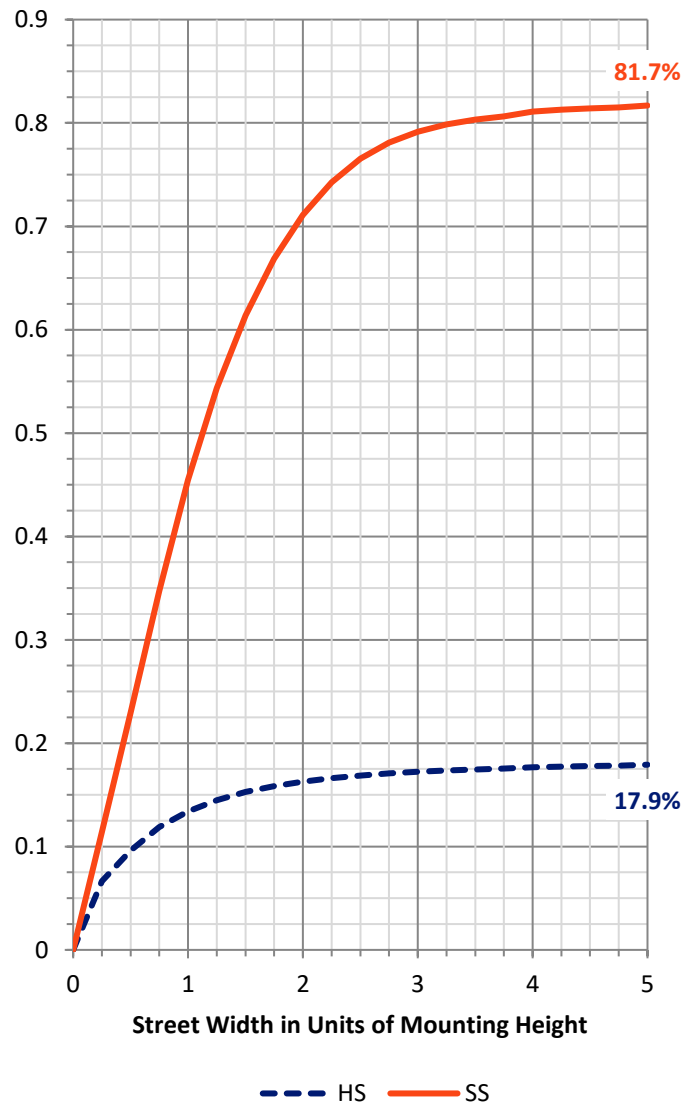
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7318.2	0.0	7318.2
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	33215.8	0.0	33215.8
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	40534.0	0.0	40534.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	644.5	1.6
10°-20°	1701.7	4.2
20°-30°	2833.4	7.0
30°-40°	4189.7	10.3
40°-50°	5901.4	14.6
50°-60°	7902.2	19.5
60°-70°	9960.1	24.6
70°-80°	6802.7	16.8
80°-90°	598.3	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°	40534.0	100.0
0°-180°	40534.0	100.0



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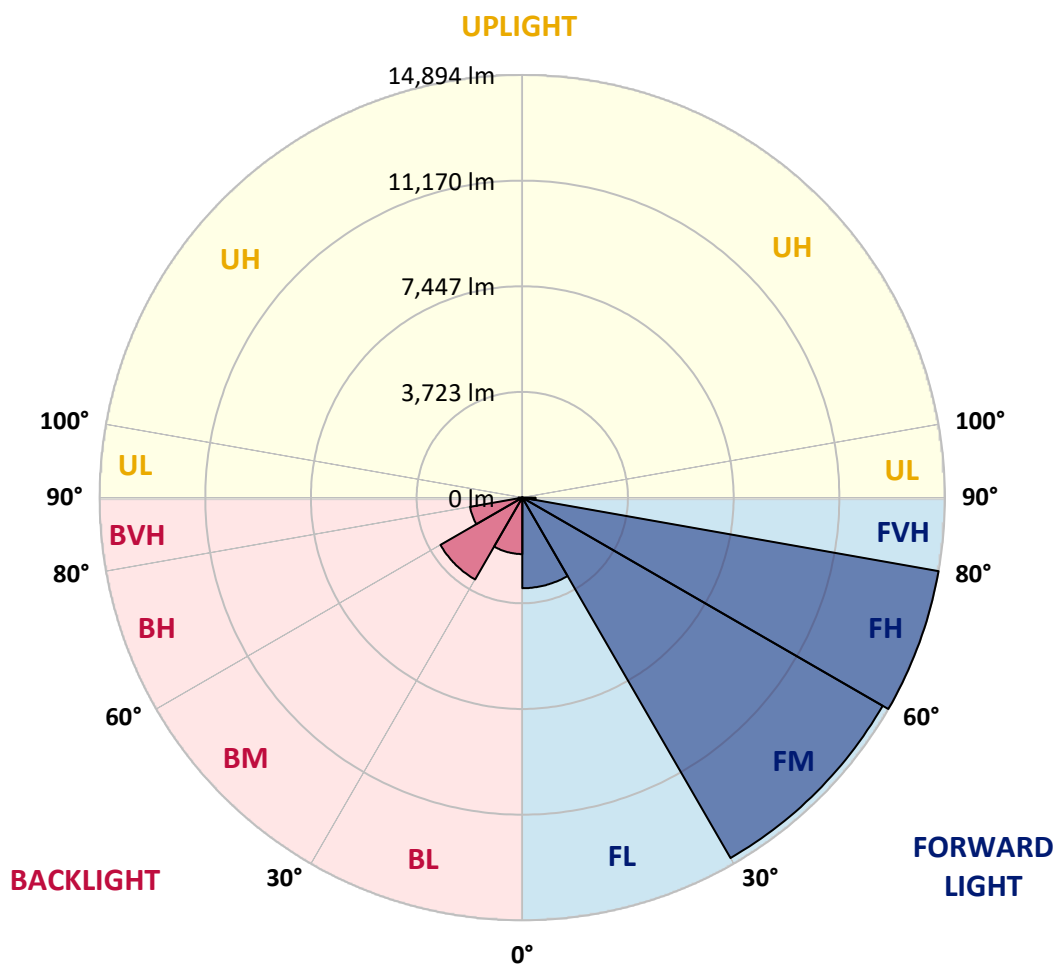
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3190.7	7.9			
FM	(30°-60°)	14663.7	36.2			
FH	(60°-80°)	14893.8	36.7			G5
FVH	(80°-90°)	467.6	1.2			G3/500
BL	(0°-30°)	1988.9	4.9	B3/2500		
BM	(30°-60°)	3329.6	8.2	B3/5000		
BH	(60°-80°)	1869.0	4.6	B3/2500		G3/2500
BVH	(80°-90°)	130.6	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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9
2.5°	6986.6	7019.5	7028.2	7050.1	7096.1	7133.3	7170.6	7166.2	7218.7	7240.6	7260.3
5°	6675.7	6684.5	6717.3	6761.1	6842.1	6945.0	7045.8	7047.9	7177.1	7280.0	7330.4
7.5°	6448.0	6476.5	6498.4	6544.4	6629.8	6741.4	6901.3	6914.4	7144.3	7347.9	7455.2
10°	6299.1	6332.0	6356.1	6413.0	6498.4	6623.2	6796.2	6820.2	7120.2	7455.2	7643.5
12.5°	6163.4	6196.2	6218.1	6292.6	6404.2	6557.5	6752.4	6780.8	7129.0	7580.0	7849.3
15°	6246.6	6272.9	6264.1	6286.0	6360.5	6535.6	6769.9	6798.3	7161.8	7700.4	8052.9
17.5°	6616.6	6638.5	6566.3	6483.1	6448.0	6577.2	6824.6	6855.3	7227.5	7825.2	8260.9
20°	7161.8	7220.9	7063.3	6877.2	6708.6	6726.1	6938.5	6971.3	7319.4	7950.0	8473.3
22.5°	7871.2	7915.0	7722.3	7415.8	7104.9	6945.0	7109.3	7129.0	7457.4	8112.0	8705.4
25°	8705.4	8731.7	8464.5	8070.4	7621.6	7319.4	7343.5	7378.6	7685.1	8296.0	8911.2
27.5°	9515.5	9598.7	9290.0	8808.3	8217.1	7713.6	7665.4	7687.3	7932.5	8398.9	9053.5
30°	10476.7	10470.1	10143.9	9585.6	8828.0	8142.7	7969.7	7965.3	8066.1	8449.2	9156.4
32.5°	11243.0	11332.8	11013.1	10404.4	9526.4	8587.2	8179.9	8171.2	8169.0	8536.8	9309.7
35°	12114.4	12127.6	11834.2	11221.1	10281.8	9145.5	8473.3	8429.5	8379.2	8725.1	9517.7
37.5°	12893.9	12955.2	12685.9	11998.4	11024.1	9725.7	8876.2	8847.7	8694.4	9051.3	9850.5
40°	13502.5	13548.5	13386.5	12731.8	11755.3	10351.9	9388.5	9336.0	9149.9	9585.6	10295.0
42.5°	13701.8	13795.9	13859.4	13537.6	12596.1	11094.1	10019.1	9953.4	9811.1	10395.7	10807.3
45°	13717.1	13866.0	14201.0	14216.3	13441.2	11983.0	10754.7	10708.8	10697.8	11433.5	11527.6
47.5°	13601.1	13752.1	14314.8	14619.2	14194.4	12880.7	11816.6	11744.4	11751.0	12716.5	12335.6
50°	13320.8	13500.4	14183.5	14877.5	14783.4	13813.5	12937.7	12913.6	13049.3	14181.3	13174.1
52.5°	12793.2	13009.9	14047.7	15039.6	15221.3	14617.0	14211.9	14144.1	14487.8	15770.9	14091.5
55°	11332.8	11659.0	13550.7	15129.3	15637.3	15385.5	15359.2	15481.8	15937.3	17504.9	15100.9
57.5°	10570.8	10816.1	12471.3	15144.7	16162.8	16278.8	16699.2	16729.8	17526.8	19346.3	16241.6
60°	10154.8	10371.6	11880.1	15043.9	16896.2	17384.5	18069.8	18179.3	19079.2	21340.9	17423.9
62.5°	9791.4	9977.5	11525.4	14695.8	17723.9	19024.4	19845.5	19898.0	20841.7	23543.5	18590.9
65°	8935.3	9147.7	10811.7	14347.7	18437.6	21073.8	22201.4	22140.1	22718.1	25444.0	19322.2
67.5°	7781.4	8050.7	9478.3	13145.7	18790.2	23313.6	24855.0	24778.4	24570.4	26689.8	19532.4
70°	6307.9	6452.4	7772.7	11067.8	17382.3	24489.4	26950.4	26869.3	25717.7	26854.0	18538.4
71°	5427.7	5653.2	6767.7	9830.8	16210.9	24130.3	27219.7	27197.8	25719.9	26400.8	17789.6
72.5°	4236.7	4374.6	5359.9	7617.2	13778.4	22089.7	26554.1	26637.3	25161.6	25141.8	16246.0
75°	2679.9	2741.2	3363.0	4484.1	7560.3	15643.9	22667.7	22893.2	22341.5	20579.0	12081.6
77.5°	1556.7	1635.5	2014.3	2642.7	3266.7	8490.8	16219.7	16464.9	15523.4	11330.6	4946.0
80°	906.4	994.0	1326.8	1534.8	1499.8	3150.7	8258.7	8676.9	6721.7	2861.7	1388.1
82.5°	503.6	562.7	932.7	934.9	799.2	1029.1	2598.9	2719.3	1918.0	1153.9	567.1
85°	365.6	413.8	602.1	545.2	383.2	442.3	904.3	948.0	775.1	486.1	183.9
87.5°	129.2	183.9	330.6	262.7	105.1	92.0	260.5	212.4	197.1	135.7	41.6
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°	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9	7231.9
2.5°	7271.3	7275.7	7253.8	7214.3	7174.9	7124.6	7067.7	7023.9	7004.2	7002.0	6999.8
5°	7350.1	7361.0	7277.8	7155.2	7019.5	6853.1	6710.8	6548.7	6507.1	6441.5	6461.2
7.5°	7477.1	7470.5	7306.3	7045.8	6728.3	6375.8	6078.0	5905.0	5725.5	5675.1	5677.3
10°	7658.8	7617.2	7306.3	6822.4	6292.6	5769.3	5353.3	5090.6	4948.2	4830.0	4786.2
12.5°	7851.5	7746.4	7236.2	6509.3	5732.1	5090.6	4643.9	4289.2	4197.2	4100.9	4103.1
15°	8035.4	7860.2	7098.3	6069.2	5127.8	4365.8	3932.3	3719.9	3691.5	3702.4	3700.2
17.5°	8201.8	7941.3	6888.1	5578.8	4422.8	3744.0	3514.1	3529.4	3606.1	3660.8	3667.4
20°	8370.4	7989.4	6575.0	4922.0	3757.2	3367.4	3376.2	3496.6	3612.6	3687.1	3698.0
22.5°	8530.2	8011.3	6207.2	4287.0	3275.5	3207.6	3336.8	3466.0	3579.8	3652.1	3663.0
25°	8635.3	7961.0	5686.1	3623.6	3039.0	3150.7	3286.4	3395.9	3492.2	3566.7	3584.2
27.5°	8663.8	7798.9	5040.2	3087.2	2929.5	3095.9	3220.7	3301.7	3376.2	3446.2	3459.4
30°	8648.5	7560.3	4330.8	2771.9	2866.0	3032.4	3128.8	3187.9	3277.7	3332.4	3343.3
32.5°	8624.4	7282.2	3590.8	2603.3	2813.5	2973.3	3030.2	3082.8	3080.6	3058.7	3074.0
35°	8633.1	6949.4	2990.8	2502.6	2767.5	2929.5	2977.7	2912.0	2723.7	2715.0	2706.2
37.5°	8679.1	6621.0	2555.1	2432.5	2743.4	2923.0	2949.2	2647.1	2480.7	2404.1	2384.3
40°	8797.3	6237.8	2268.3	2380.0	2741.2	2973.3	2820.1	2513.5	2193.9	2045.0	2034.0
42.5°	8955.0	5861.2	2093.1	2347.1	2767.5	3050.0	2767.5	2325.2	1977.1	1889.5	1876.4
45°	9189.3	5429.9	1996.8	2331.8	2806.9	3078.4	2750.0	2187.3	1889.5	1819.5	1819.5
47.5°	9454.2	5018.3	1944.3	2320.9	2857.3	3058.7	2594.5	2143.5	1847.9	1856.7	1898.3
50°	9716.9	4661.4	1904.9	2296.8	2901.1	3047.8	2531.0	2141.3	1858.9	1970.5	2045.0
52.5°	10021.3	4409.6	1856.7	2257.4	2901.1	2977.7	2511.3	2185.1	1889.5	1922.4	1955.2
55°	10389.1	4330.8	1795.4	2172.0	2848.5	2802.5	2500.4	2248.6	1911.4	1834.8	1847.9
57.5°	10875.2	4457.8	1736.3	2064.7	2728.1	2620.8	2496.0	2266.1	1861.1	1797.6	1784.4
60°	11440.1	4709.6	1718.7	1955.2	2563.9	2465.4	2469.7	2215.8	1791.0	1725.3	1736.3
62.5°	11836.4	4860.7	1707.8	1872.0	2384.3	2294.6	2406.2	2154.5	1760.3	1703.4	1714.4
65°	11836.4	4676.7	1607.1	1745.0	2152.3	2088.8	2329.6	2077.8	1720.9	1655.2	1644.3
67.5°	11387.5	4140.3	1453.8	1554.5	1896.1	1854.5	2222.3	1985.9	1661.8	1611.5	1585.2
70°	10218.3	3139.7	1261.1	1331.2	1572.0	1609.3	2084.4	1861.1	1563.3	1502.0	1462.6
71°	9703.8	2734.7	1180.1	1217.4	1447.2	1502.0	2018.7	1808.5	1519.5	1431.9	1361.9
72.5°	8712.0	2303.3	1057.5	1072.8	1237.1	1335.6	1880.8	1707.8	1436.3	1311.5	1232.7
75°	6618.8	1681.5	851.7	843.0	915.2	1059.7	1591.8	1521.7	1259.0	1090.4	1044.4
77.5°	2859.5	915.2	637.1	643.7	621.8	803.5	1252.4	1307.1	1079.4	886.7	845.1
80°	867.0	527.7	435.7	444.5	416.0	538.6	882.4	1024.7	867.0	689.7	632.8
82.5°	444.5	315.3	297.8	293.4	264.9	304.3	534.2	700.6	619.6	431.3	381.0
85°	192.7	168.6	146.7	142.3	124.8	109.5	190.5	350.3	328.4	240.8	229.9
87.5°	48.2	43.8	28.5	26.3	15.3	2.2	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)