

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: P457783

Luminaire Tested: **GALN-SA9A-827-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457783  
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-SA9A-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31188 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

Input Watts (W): 274  
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

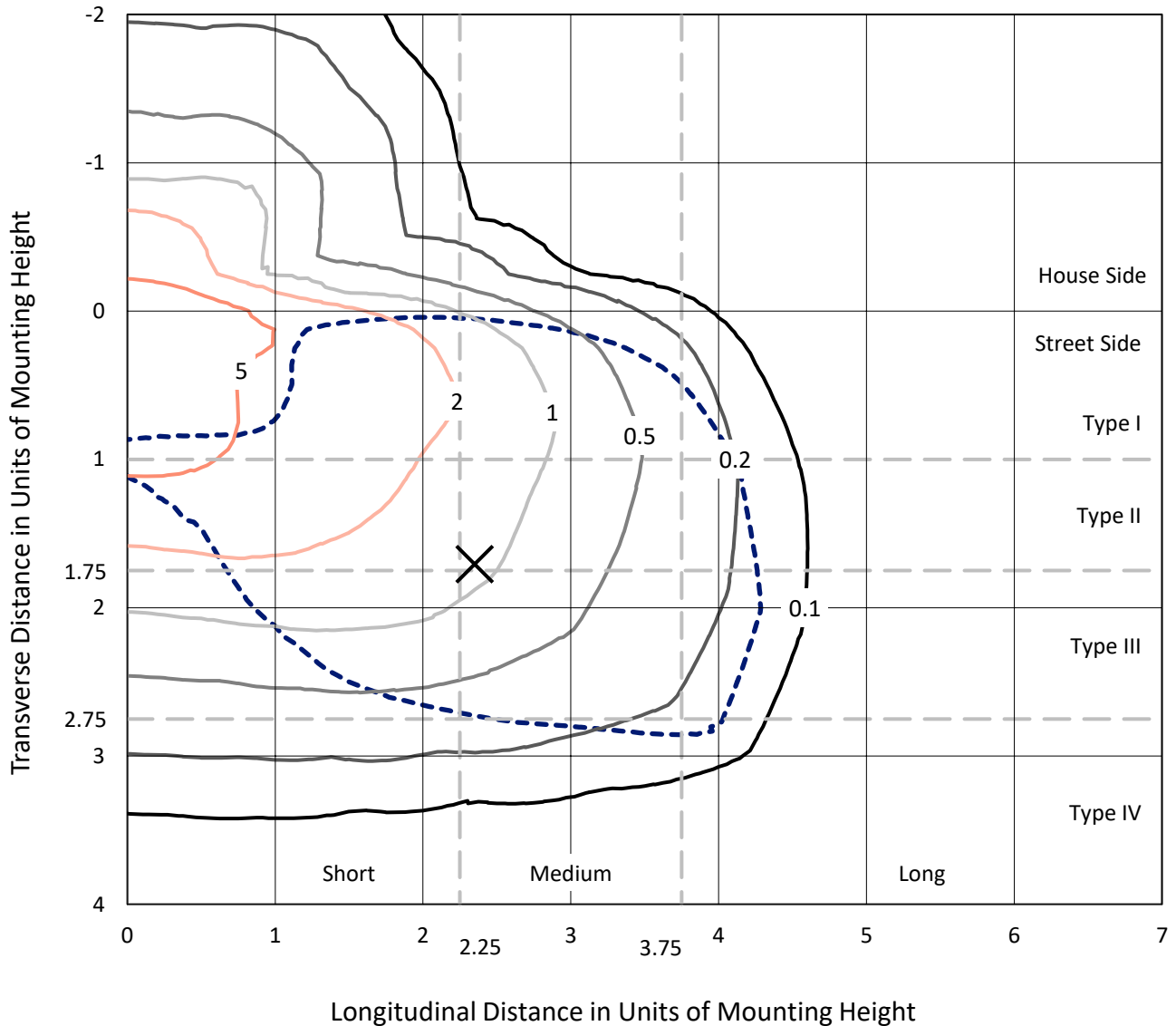




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### Iso-Footcandle Lines of Horizontal Illumination

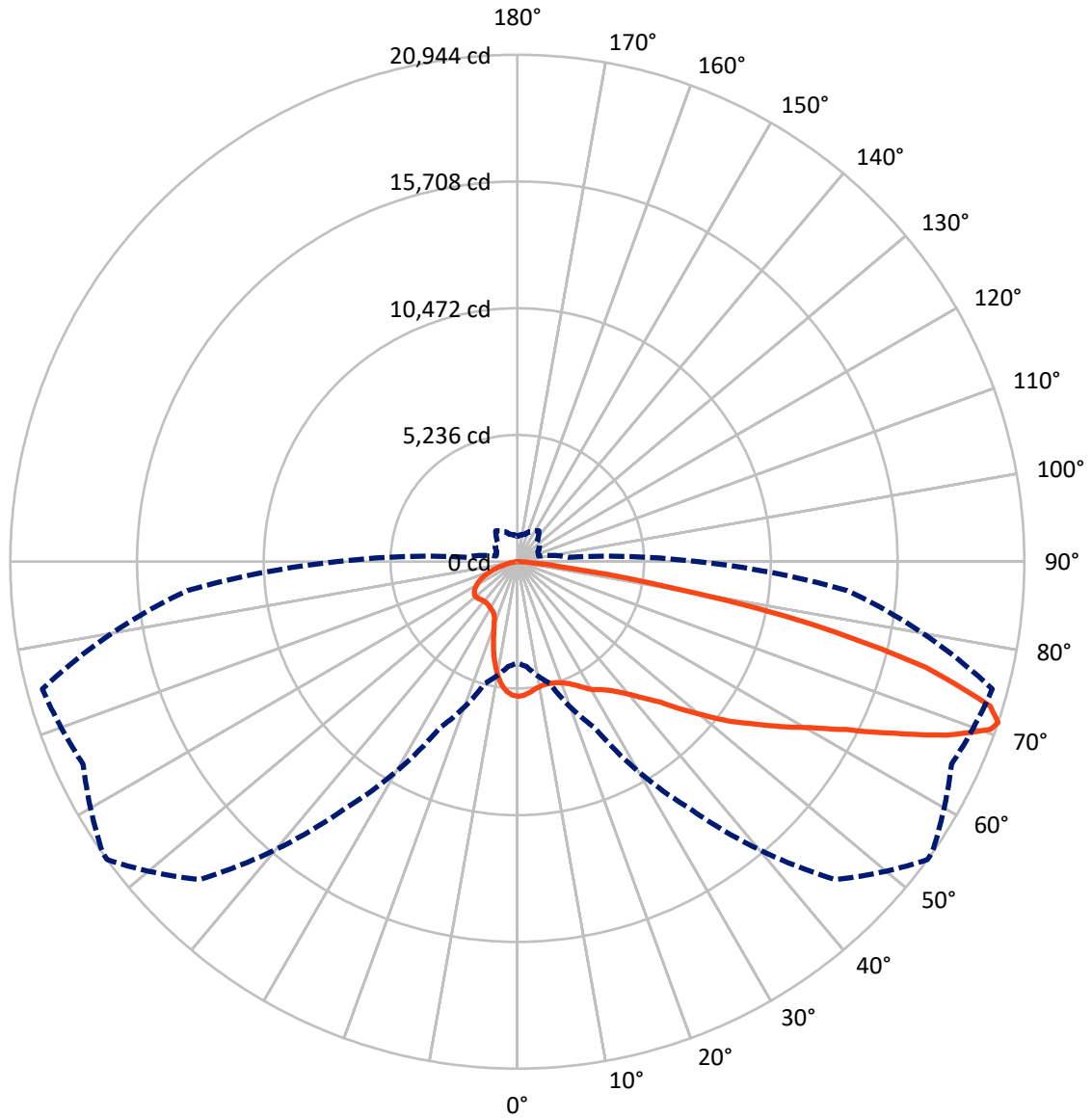
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 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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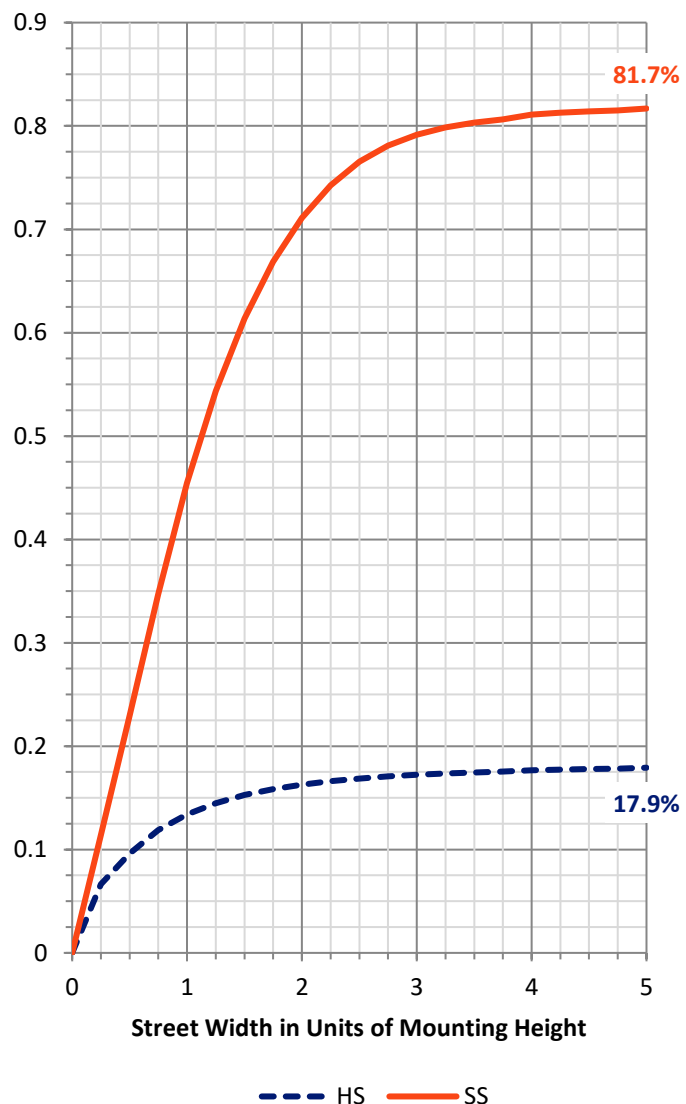
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5630.8	0.0	5630.8
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	25557.2	0.0	25557.2
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	31188.0	0.0	31188.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	495.9	1.6
10°-20°	1309.4	4.2
20°-30°	2180.1	7.0
30°-40°	3223.7	10.3
40°-50°	4540.7	14.6
50°-60°	6080.2	19.5
60°-70°	7663.6	24.6
70°-80°	5234.2	16.8
80°-90°	460.3	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°	31188.0	100.0
0°-180°	31188.0	100.0

**Coefficient of Utilization**



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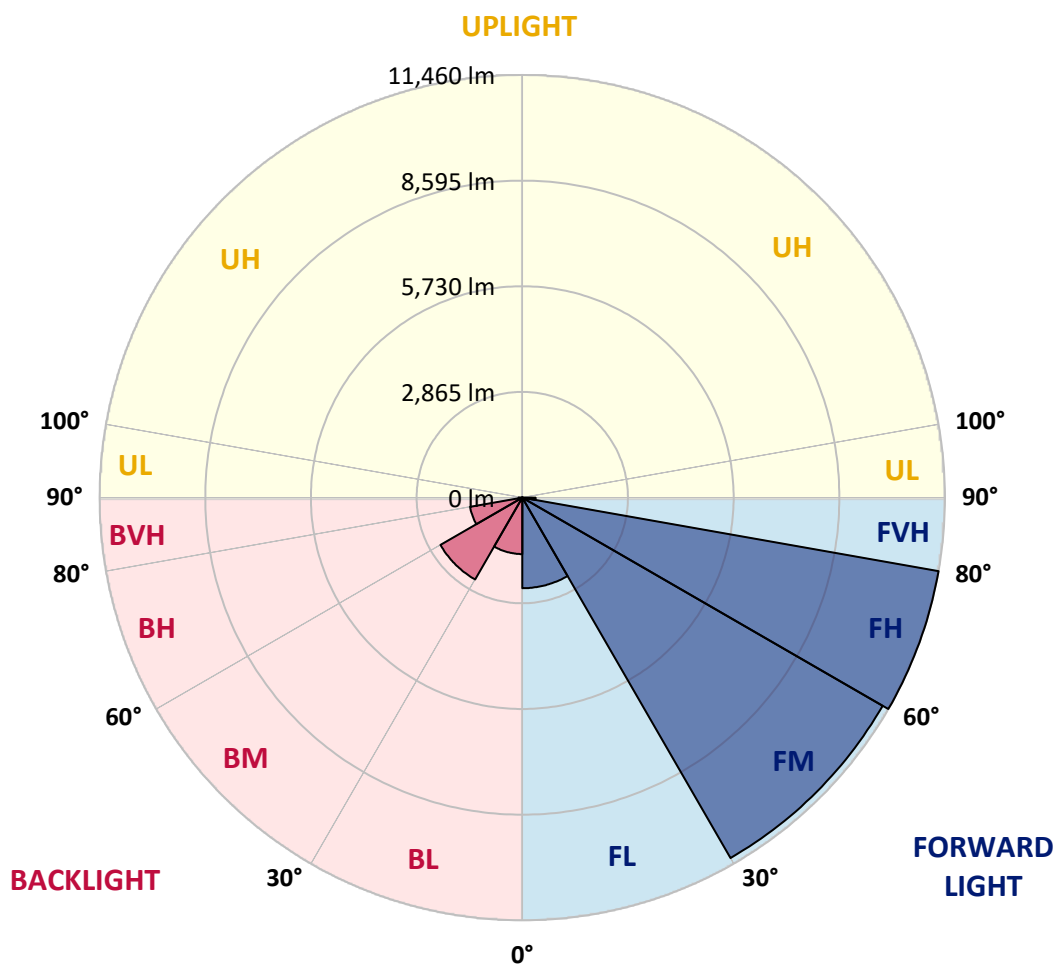
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2455.0	7.9			
FM (30°-60°)	11282.7	36.2			
FH (60°-80°)	11459.7	36.7			G4/12000
FVH (80°-90°)	359.8	1.2			G3/500
BL (0°-30°)	1530.3	4.9	B3/2500		
BM (30°-60°)	2561.8	8.2	B3/5000		
BH (60°-80°)	1438.1	4.6	B3/2500		G3/2500
BVH (80°-90°)	100.5	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-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4
2.5°	5375.7	5401.0	5407.7	5424.6	5460.0	5488.6	5517.2	5513.9	5554.3	5571.1	5586.3
5°	5136.5	5143.2	5168.5	5202.2	5264.5	5343.7	5421.2	5422.9	5522.3	5601.5	5640.2
7.5°	4961.3	4983.2	5000.0	5035.4	5101.1	5187.0	5310.0	5320.1	5497.0	5653.7	5736.2
10°	4846.7	4872.0	4890.5	4934.3	5000.0	5096.1	5229.2	5247.7	5478.5	5736.2	5881.1
12.5°	4742.3	4767.6	4784.4	4841.7	4927.6	5045.5	5195.5	5217.4	5485.2	5832.3	6039.5
15°	4806.3	4826.5	4819.8	4836.6	4893.9	5028.7	5208.9	5230.8	5510.5	5924.9	6196.1
17.5°	5091.0	5107.9	5052.3	4988.3	4961.3	5060.7	5251.1	5274.6	5561.0	6020.9	6356.2
20°	5510.5	5556.0	5434.7	5291.5	5161.8	5175.2	5338.7	5363.9	5631.8	6117.0	6519.6
22.5°	6056.3	6090.0	5941.8	5705.9	5466.7	5343.7	5470.1	5485.2	5737.9	6241.6	6698.2
25°	6698.2	6718.4	6512.9	6209.6	5864.3	5631.8	5650.3	5677.3	5913.1	6383.1	6856.5
27.5°	7321.5	7385.5	7148.0	6777.3	6322.5	5935.0	5898.0	5914.8	6103.5	6462.3	6966.0
30°	8061.1	8056.0	7805.0	7375.4	6792.5	6265.2	6132.1	6128.8	6206.3	6501.1	7045.2
32.5°	8650.7	8719.8	8473.8	8005.5	7329.9	6607.2	6293.9	6287.1	6285.4	6568.5	7163.1
35°	9321.2	9331.3	9105.5	8633.8	7911.1	7036.8	6519.6	6485.9	6447.2	6713.3	7323.2
37.5°	9920.9	9968.1	9760.9	9231.9	8482.2	7483.2	6829.6	6807.7	6689.7	6964.3	7579.2
40°	10389.2	10424.6	10300.0	9796.2	9044.9	7965.0	7223.8	7183.4	7040.2	7375.4	7921.2
42.5°	10542.5	10615.0	10663.8	10416.2	9691.8	8536.1	7709.0	7658.4	7548.9	7998.7	8315.4
45°	10554.3	10668.9	10926.6	10938.4	10342.1	9220.1	8275.0	8239.6	8231.2	8797.2	8869.7
47.5°	10465.0	10581.3	11014.2	11248.4	10921.6	9910.8	9092.1	9036.5	9041.5	9784.5	9491.3
50°	10249.4	10387.6	10913.2	11447.2	11374.8	10628.5	9954.6	9936.1	10040.5	10911.5	10136.5
52.5°	9843.4	10010.2	10808.7	11571.9	11711.7	11246.7	10935.1	10882.8	11147.3	12134.5	10842.4
55°	8719.8	8970.8	10426.3	11640.9	12031.8	11838.0	11817.8	11912.2	12262.6	13468.8	11619.0
57.5°	8133.5	8322.2	9595.8	11652.7	12436.1	12525.4	12848.8	12872.4	13485.6	14885.6	12496.7
60°	7813.4	7980.2	9140.9	11575.2	13000.4	13376.1	13903.4	13987.7	14680.0	16420.3	13406.4
62.5°	7533.8	7677.0	8868.0	11307.4	13637.2	14637.9	15269.7	15310.1	16036.2	18115.0	14304.4
65°	6875.1	7038.5	8318.8	11039.5	14186.4	16214.8	17082.4	17035.2	17479.9	19577.3	14867.0
67.5°	5987.2	6194.5	7292.9	10114.6	14457.7	17938.2	19124.2	19065.2	18905.1	20535.9	15028.8
70°	4853.5	4964.7	5980.5	8515.9	13374.4	18842.8	20736.4	20674.0	19787.9	20662.2	14263.9
71°	4176.2	4349.8	5207.3	7564.1	12473.2	18566.5	20943.6	20926.7	19789.6	20313.5	13687.8
72.5°	3259.8	3365.9	4124.0	5860.9	10601.5	16996.4	20431.4	20495.5	19360.0	19344.8	12500.1
75°	2062.0	2109.2	2587.6	3450.2	5817.1	12036.8	17441.2	17614.7	17190.2	15834.0	9295.9
77.5°	1197.8	1258.4	1549.9	2033.4	2513.5	6533.1	12479.9	12668.6	11944.2	8718.1	3805.6
80°	697.4	764.8	1020.9	1180.9	1154.0	2424.2	6354.5	6676.3	5171.9	2201.8	1068.1
82.5°	387.5	433.0	717.7	719.3	614.9	791.8	1999.7	2092.3	1475.8	887.8	436.3
85°	281.3	318.4	463.3	419.5	294.8	340.3	695.8	729.5	596.4	374.0	141.5
87.5°	99.4	141.5	254.4	202.2	80.9	70.8	200.5	163.4	151.6	104.4	32.0
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°	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4	5564.4
2.5°	5594.7	5598.1	5581.2	5550.9	5520.6	5481.9	5438.1	5404.4	5389.2	5387.5	5385.8
5°	5655.4	5663.8	5599.8	5505.4	5401.0	5273.0	5163.5	5038.8	5006.8	4956.2	4971.4
7.5°	5753.1	5748.0	5621.7	5421.2	5176.9	4905.7	4676.6	4543.5	4405.4	4366.6	4368.3
10°	5892.9	5860.9	5621.7	5249.4	4841.7	4439.1	4119.0	3916.8	3807.3	3716.3	3682.6
12.5°	6041.2	5960.3	5567.8	5008.5	4410.4	3916.8	3573.1	3300.2	3229.5	3155.4	3157.0
15°	6182.7	6047.9	5461.6	4669.9	3945.5	3359.2	3025.6	2862.2	2840.3	2848.7	2847.1
17.5°	6310.7	6110.2	5299.9	4292.5	3403.0	2880.8	2703.9	2715.7	2774.6	2816.7	2821.8
20°	6440.4	6147.3	5059.0	3787.1	2890.9	2591.0	2597.7	2690.4	2779.7	2837.0	2845.4
22.5°	6563.4	6164.1	4776.0	3298.5	2520.2	2468.0	2567.4	2666.8	2754.4	2810.0	2818.4
25°	6644.3	6125.4	4375.0	2788.1	2338.3	2424.2	2528.7	2612.9	2687.0	2744.3	2757.8
27.5°	6666.2	6000.7	3878.1	2375.4	2254.1	2382.1	2478.1	2540.5	2597.7	2651.6	2661.7
30°	6654.4	5817.1	3332.2	2132.8	2205.2	2333.2	2407.4	2452.9	2521.9	2564.0	2572.5
32.5°	6635.8	5603.1	2762.8	2003.0	2164.8	2287.8	2331.6	2372.0	2370.3	2353.5	2365.2
35°	6642.6	5347.1	2301.2	1925.6	2129.4	2254.1	2291.1	2240.6	2095.7	2089.0	2082.2
37.5°	6678.0	5094.4	1966.0	1871.6	2110.9	2249.0	2269.2	2036.7	1908.7	1849.7	1834.6
40°	6768.9	4799.6	1745.3	1831.2	2109.2	2287.8	2169.8	1934.0	1688.0	1573.5	1565.0
42.5°	6890.2	4509.8	1610.5	1805.9	2129.4	2346.7	2129.4	1789.1	1521.2	1453.9	1443.7
45°	7070.5	4177.9	1536.4	1794.2	2159.7	2368.6	2115.9	1683.0	1453.9	1399.9	1399.9
47.5°	7274.3	3861.2	1496.0	1785.7	2198.5	2353.5	1996.3	1649.3	1421.8	1428.6	1460.6
50°	7476.5	3586.6	1465.6	1767.2	2232.2	2345.0	1947.5	1647.6	1430.3	1516.2	1573.5
52.5°	7710.6	3392.9	1428.6	1736.9	2232.2	2291.1	1932.3	1681.3	1453.9	1479.1	1504.4
55°	7993.7	3332.2	1381.4	1671.2	2191.7	2156.4	1923.9	1730.1	1470.7	1411.7	1421.8
57.5°	8367.7	3429.9	1335.9	1588.6	2099.1	2016.5	1920.5	1743.6	1432.0	1383.1	1373.0
60°	8802.3	3623.7	1322.5	1504.4	1972.7	1896.9	1900.3	1704.9	1378.0	1327.5	1335.9
62.5°	9107.2	3739.9	1314.0	1440.4	1834.6	1765.5	1851.4	1657.7	1354.5	1310.7	1319.1
65°	9107.2	3598.4	1236.5	1342.7	1656.0	1607.2	1792.5	1598.7	1324.1	1273.6	1265.2
67.5°	8761.9	3185.7	1118.6	1196.1	1458.9	1426.9	1709.9	1528.0	1278.6	1239.9	1219.7
70°	7862.3	2415.8	970.4	1024.3	1209.6	1238.2	1603.8	1432.0	1202.8	1155.7	1125.3
71°	7466.4	2104.1	908.0	936.7	1113.6	1155.7	1553.2	1391.5	1169.1	1101.8	1047.9
72.5°	6703.2	1772.3	813.7	825.5	951.8	1027.6	1447.1	1314.0	1105.1	1009.1	948.5
75°	5092.7	1293.8	655.3	648.6	704.2	815.4	1224.7	1170.8	968.7	839.0	803.6
77.5°	2200.2	704.2	490.2	495.3	478.4	618.3	963.6	1005.7	830.5	682.3	650.3
80°	667.1	406.0	335.2	342.0	320.1	414.4	678.9	788.4	667.1	530.7	486.9
82.5°	342.0	242.6	229.1	225.7	203.8	234.2	411.1	539.1	476.8	331.9	293.1
85°	148.2	129.7	112.9	109.5	96.0	84.2	146.6	269.5	252.7	185.3	176.9
87.5°	37.1	33.7	21.9	20.2	11.8	1.7	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)