

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: P459535

Luminaire Tested: **GALN-SA9D-735-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459535  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9D-735-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 65211 lumens  
Efficiency: N/A  
Efficacy: 118.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B4 - U0 - G5

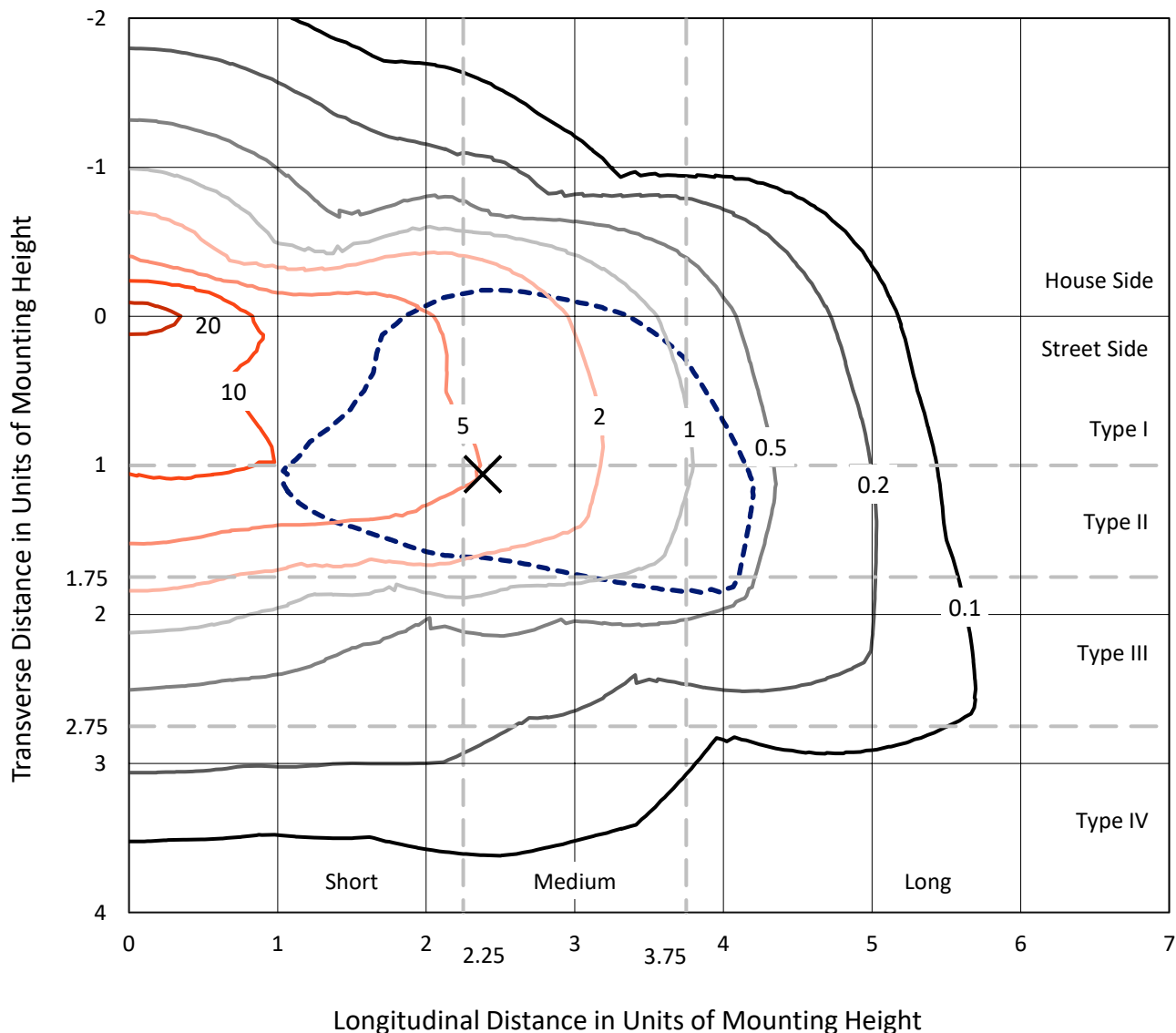
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

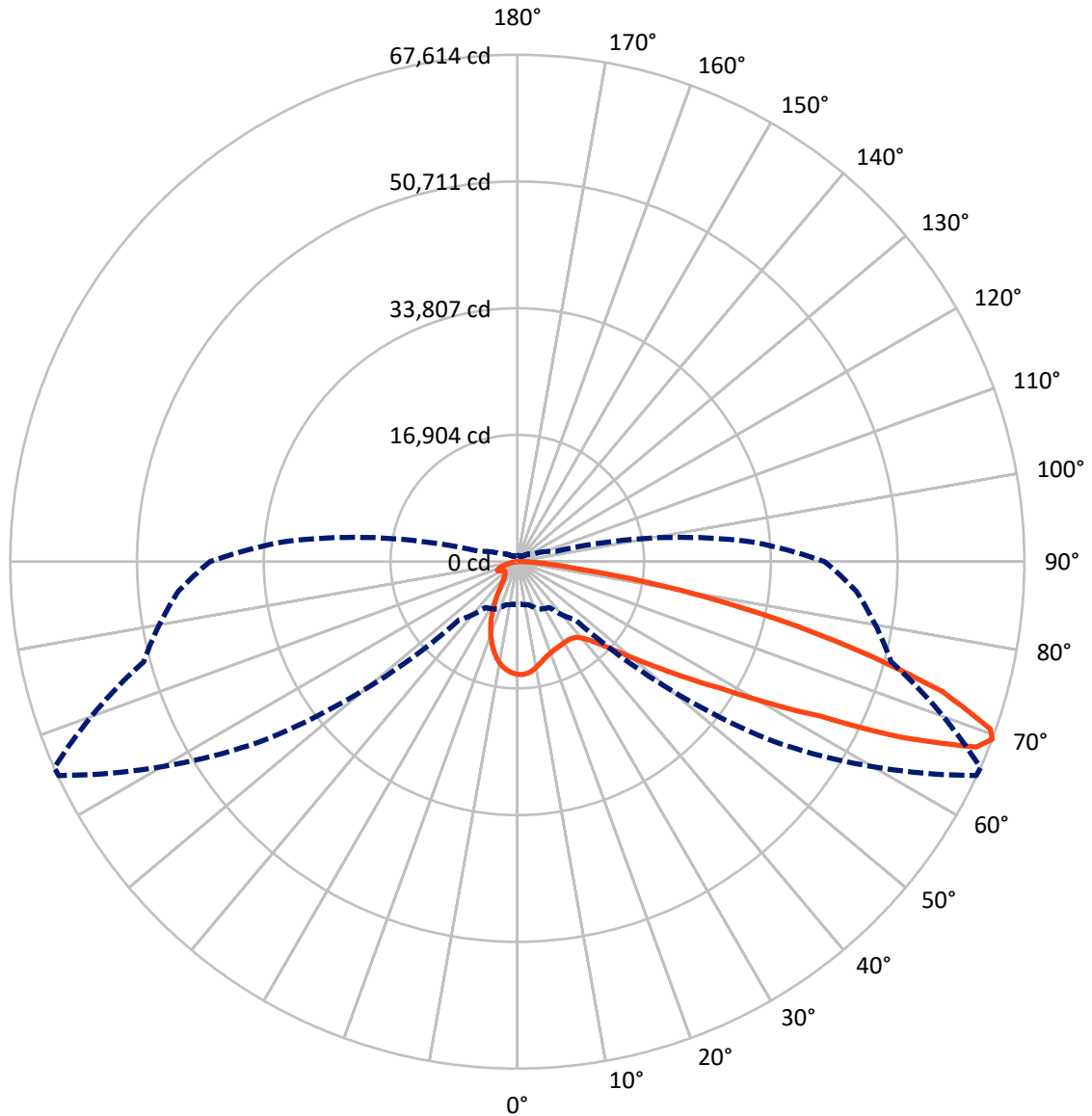
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 24.1 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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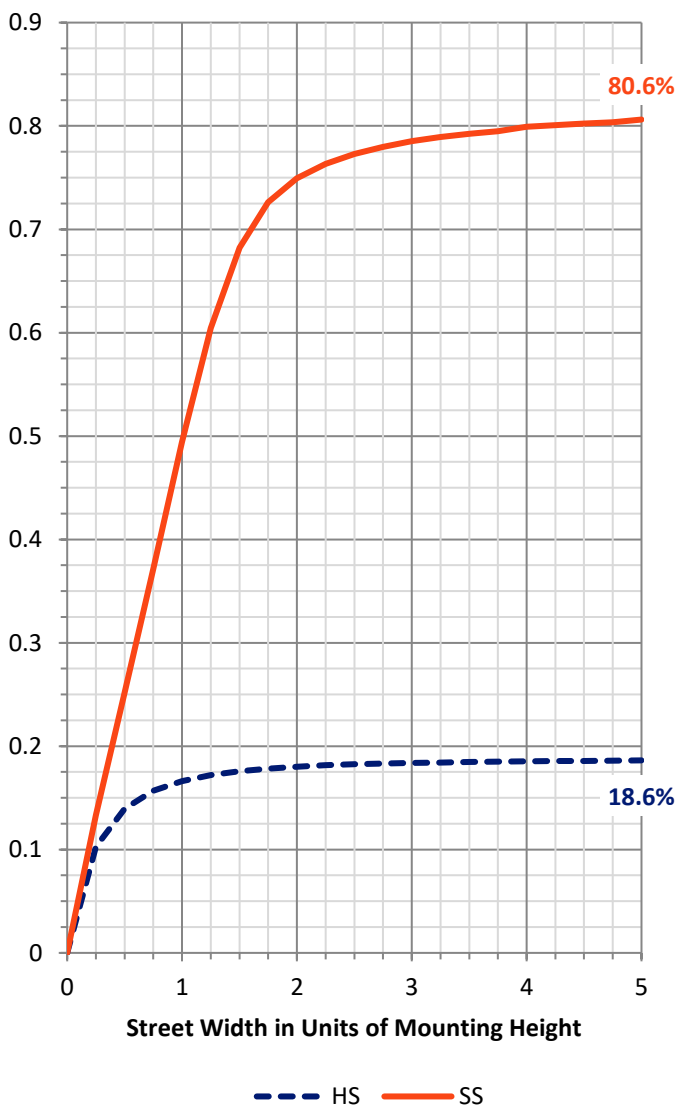
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12263.7	0.0	12263.7
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	52947.3	0.0	52947.3
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	65211.0	0.0	65211.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1307.7	2.0
10°-20°	3101.8	4.8
20°-30°	4222.7	6.5
30°-40°	5674.4	8.7
40°-50°	8472.8	13.0
50°-60°	13477.3	20.7
60°-70°	16576.4	25.4
70°-80°	10785.3	16.5
80°-90°	1592.7	2.4
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°	65211.0	100.0
0°-180°	65211.0	100.0



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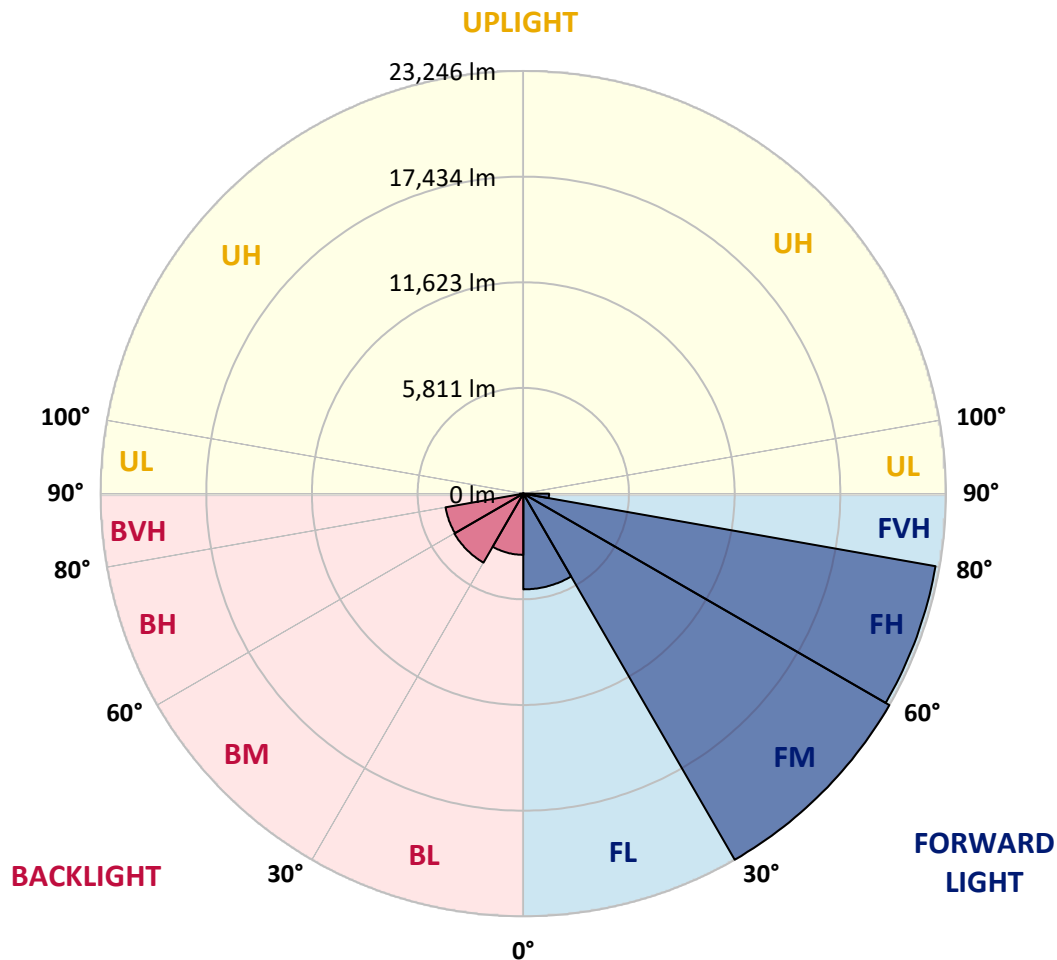
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5265.7	8.1			
FM (30°-60°)	23245.8	35.6			
FH (60°-80°)	23019.8	35.3			G5
FVH (80°-90°)	1416.0	2.2			G5
BL (0°-30°)	3366.4	5.2	B4/5000		
BM (30°-60°)	4378.7	6.7	B3/5000		
BH (60°-80°)	4341.9	6.7	B4/5000		G4/5000
BVH (80°-90°)	176.7	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0
2.5°	14531.8	14589.6	14654.6	14726.8	14864.0	14939.9	14994.0	15055.4	15062.6	15095.1	15069.9
5°	13459.2	13527.8	13625.4	13762.6	13968.4	14289.8	14622.1	14892.9	14925.4	15077.1	15120.4
7.5°	12563.6	12603.4	12682.8	12903.1	13195.6	13553.1	14037.0	14586.0	14665.4	15026.5	15152.9
10°	11834.2	11873.9	11967.8	12195.3	12484.2	12932.0	13462.8	14185.1	14250.1	14871.2	15160.1
12.5°	11288.9	11325.0	11426.1	11650.0	11982.2	12401.1	12986.2	13751.7	13845.6	14665.4	15091.5
15°	10873.6	10942.2	11025.2	11209.4	11559.7	11964.2	12531.1	13354.5	13430.3	14448.7	15044.6
17.5°	10696.6	10729.1	10786.9	10956.6	11213.0	11610.3	12180.8	13043.9	13134.2	14297.1	15033.8
20°	10703.8	10736.3	10747.2	10841.1	11025.2	11368.3	11931.7	12798.4	12906.7	14163.4	15051.8
22.5°	10949.4	10953.0	10913.3	10880.8	10953.0	11238.3	11754.7	12614.2	12740.6	14105.7	15066.3
25°	11328.6	11393.6	11335.8	11184.1	11050.5	11187.7	11686.1	12513.1	12632.3	14022.6	15048.2
27.5°	11942.5	11953.3	11906.4	11700.5	11353.9	11252.7	11657.2	12437.2	12538.4	13961.2	14957.9
30°	12765.9	12733.4	12690.0	12462.5	11917.2	11501.9	11718.6	12368.6	12473.4	13870.9	14849.6
32.5°	13600.1	13701.2	13661.5	13394.2	12686.4	11985.8	11917.2	12361.4	12448.1	13802.3	14730.4
35°	14484.8	14531.8	14719.6	14582.3	13856.5	12769.5	12289.2	12473.4	12542.0	13805.9	14647.3
37.5°	15178.2	15304.6	15745.2	15864.3	15181.8	13805.9	12892.3	12791.1	12820.0	13982.9	14679.8
40°	16016.0	16232.7	16799.7	17287.2	16839.4	15152.9	13917.9	13379.8	13415.9	14409.0	14892.9
42.5°	17077.7	17229.4	17991.4	18652.3	18580.0	16933.3	15160.1	14344.0	14362.1	15257.7	15488.8
45°	18320.0	18536.7	19392.6	20385.7	20555.4	18948.4	16955.0	15803.0	15792.1	16575.8	16601.0
47.5°	19909.0	20042.6	20891.2	21974.6	22660.8	21479.9	19132.6	17897.5	17781.9	18497.0	18291.1
50°	21371.5	21581.0	22223.8	23408.3	25116.4	24444.7	21996.3	20613.2	20342.3	21010.4	20663.7
52.5°	21985.5	22205.8	22747.4	24217.2	27221.8	28279.9	25632.9	23852.5	23401.1	23913.9	23787.5
55°	20920.1	21205.4	21711.0	23498.6	28146.3	32703.7	30537.0	27597.4	27268.8	27048.5	27084.6
57.5°	18056.4	18327.2	19009.8	20981.5	27041.3	35914.2	37539.2	32411.2	31707.0	30692.3	30865.6
60°	13744.5	13914.3	14268.2	16453.0	23765.8	36748.4	45491.3	38496.2	38048.4	34321.6	34444.4
62.5°	9761.3	9952.7	10198.3	11288.9	17399.1	34397.4	51717.1	46993.6	45393.8	38080.9	37961.8
65°	7926.8	7796.8	8092.9	8602.1	10209.1	26658.5	53118.3	58788.0	56585.1	43032.0	41378.0
67.5°	6518.4	6381.1	6673.6	7580.1	7764.2	15474.3	48069.7	66443.9	66003.3	48416.4	44848.5
69°	5770.8	5698.6	5955.0	6987.8	7453.7	10989.1	41876.4	67509.2	67614.0	51590.7	45382.9
70°	5200.2	5229.1	5478.3	6688.1	7312.8	9060.7	35791.4	66039.5	66927.8	53176.1	44805.1
72.5°	3828.0	3889.3	4236.0	5539.7	7179.2	7688.4	21299.3	57683.0	59253.9	53270.0	40988.0
75°	2676.0	2647.1	2954.0	4171.0	6782.0	7619.8	12509.5	44610.1	46390.5	46043.8	34440.8
77.5°	1751.5	1798.4	2044.0	2946.8	5705.8	7562.0	8154.3	31649.2	32804.9	30793.4	20371.2
80°	1235.1	1231.4	1368.7	2011.5	4232.4	7265.9	6677.3	19948.7	19656.2	12101.4	6041.7
82.5°	707.8	758.4	917.3	1415.6	2831.2	6395.6	6142.8	9541.0	8710.4	3448.8	2040.4
85°	393.6	411.7	545.3	855.9	1654.0	4817.4	5362.7	4340.8	4095.2	1440.9	877.5
87.5°	126.4	137.2	227.5	433.4	751.1	2275.1	3037.1	2004.3	1849.0	520.0	353.9
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°	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0	15059.0
2.5°	15080.7	15124.0	15008.5	14896.5	14795.4	14654.6	14528.2	14423.4	14351.2	14340.4	14304.3
5°	15131.3	15134.9	14914.6	14618.5	14329.6	14011.8	13683.1	13448.4	13228.1	13105.3	13043.9
7.5°	15167.4	15134.9	14737.6	14257.3	13701.2	13123.4	12545.6	12083.3	11725.8	11585.0	11639.2
10°	15152.9	15051.8	14470.4	13701.2	12892.3	12029.2	11198.6	10548.5	9952.7	9645.7	9652.9
12.5°	15073.5	14907.4	14073.2	13076.4	11888.3	10732.7	9461.5	8584.0	7894.3	7486.2	7359.8
15°	15004.9	14716.0	13607.3	12227.8	10750.8	9100.4	7551.2	6467.8	5890.0	5568.6	5565.0
17.5°	14932.6	14531.8	13098.1	11328.6	9443.5	7320.1	5695.0	4868.0	4597.2	4629.7	4575.5
20°	14856.8	14315.1	12567.2	10328.3	7850.9	5460.3	4264.9	3929.1	4004.9	4153.0	4174.6
22.5°	14770.1	14084.0	11996.7	9226.8	6175.3	4109.6	3459.6	3409.0	3604.1	3835.2	3867.7
25°	14636.5	13795.1	11278.0	8074.8	4763.3	3311.5	3029.9	3066.0	3257.4	3452.4	3474.1
27.5°	14448.7	13437.6	10552.2	6637.5	3578.8	2842.1	2769.9	2816.8	2910.7	3029.9	3058.8
30°	14195.9	13033.1	9718.0	5395.3	2867.4	2607.3	2578.5	2603.7	2657.9	2708.5	2722.9
32.5°	13943.1	12643.1	8876.5	4131.3	2556.8	2452.1	2423.2	2423.2	2423.2	2430.4	2434.0
35°	13708.4	12274.7	7973.7	3217.6	2394.3	2329.3	2289.6	2246.2	2239.0	2213.7	2213.7
37.5°	13578.4	11938.9	7013.1	2694.0	2275.1	2228.2	2174.0	2101.8	2062.0	2065.7	2058.4
40°	13603.7	11718.6	6139.2	2397.9	2177.6	2127.0	2044.0	1960.9	1935.6	1935.6	1928.4
42.5°	13889.0	11646.4	5301.4	2242.6	2083.7	2025.9	1921.2	1845.4	1830.9	1827.3	1834.5
45°	14546.2	11823.3	4550.2	2141.5	2004.3	1917.6	1812.9	1744.2	1729.8	1729.8	1726.2
47.5°	15828.2	12397.5	4012.1	2076.5	1946.5	1834.5	1726.2	1657.6	1632.3	1625.1	1625.1
50°	17821.7	13643.4	3611.3	2018.7	1874.3	1758.7	1646.7	1567.3	1527.6	1524.0	1520.3
52.5°	20591.5	15586.3	3456.0	1975.4	1794.8	1679.2	1556.5	1480.6	1430.1	1419.2	1412.0
55°	23830.8	18298.3	3669.1	1942.9	1711.7	1589.0	1462.6	1383.1	1336.2	1314.5	1310.9
57.5°	27582.9	21555.7	4478.0	1899.5	1635.9	1491.5	1368.7	1289.2	1238.7	1213.4	1206.2
60°	30952.3	24903.4	5890.0	1874.3	1570.9	1386.7	1260.3	1188.1	1141.2	1115.9	1112.3
62.5°	34653.8	28095.7	7576.5	1942.9	1542.0	1285.6	1159.2	1094.2	1054.5	1029.2	1029.2
65°	38608.2	31291.7	8692.3	2174.0	1585.4	1206.2	1050.9	996.7	960.6	942.5	938.9
67.5°	41273.3	32396.8	7161.2	2412.3	1693.7	1119.5	946.2	902.8	881.2	863.1	863.1
69°	40984.4	30999.2	5283.3	2473.7	1726.2	1076.2	888.4	855.9	827.0	819.8	812.5
70°	40070.7	29406.6	4427.4	2434.0	1700.9	1036.4	852.3	812.5	787.3	780.0	776.4
72.5°	35690.3	25502.8	3297.1	2116.2	1448.1	899.2	754.8	718.6	697.0	686.1	686.1
75°	29652.2	20844.3	2574.8	1682.9	1133.9	758.4	646.4	617.5	599.5	592.2	588.6
77.5°	16619.1	11639.2	1849.0	1318.1	859.5	613.9	541.7	516.4	498.4	491.1	491.1
80°	4629.7	3326.0	1087.0	870.3	585.0	465.9	429.7	411.7	386.4	368.4	379.2
82.5°	1744.2	1440.9	621.1	523.6	372.0	310.6	299.7	285.3	274.5	249.2	249.2
85°	848.7	700.6	397.2	278.1	205.8	162.5	155.3	148.1	140.8	122.8	126.4
87.5°	292.5	310.6	173.3	101.1	61.4	39.7	32.5	18.1	18.1	18.1	18.1
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)