

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: P454216

Luminaire Tested: **GALN-SA5B-740-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454216  
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-SA5B-740-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29161 lumens  
Efficiency: N/A  
Efficacy: 142.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

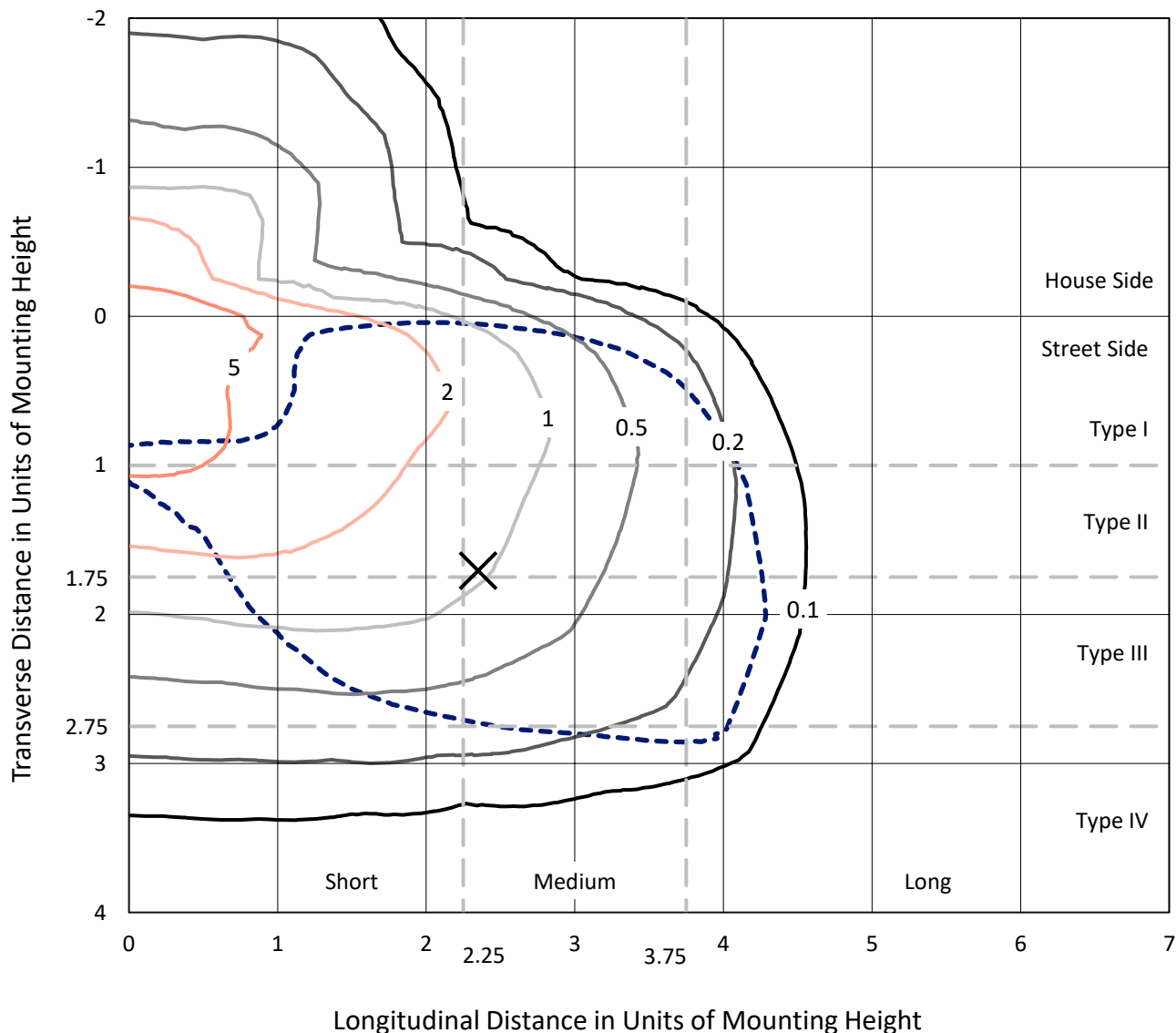
Input Watts (W): 204  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

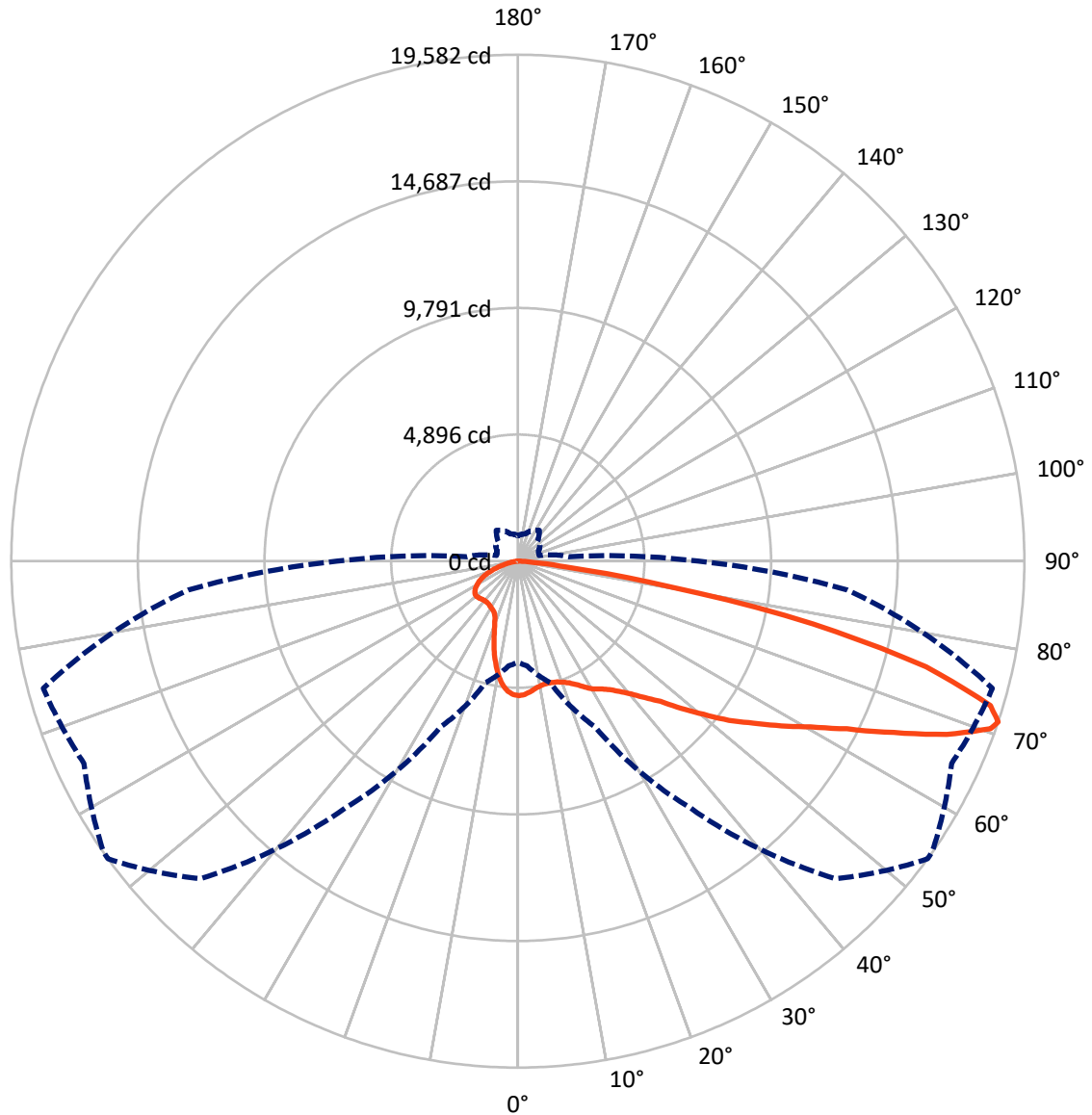
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 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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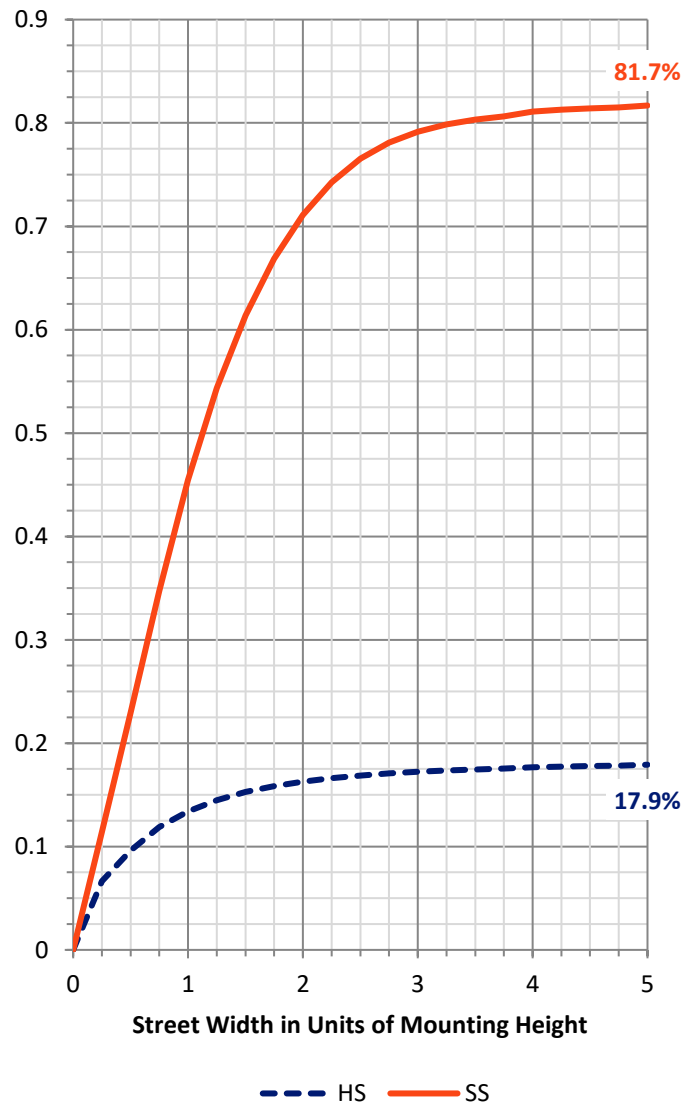
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5264.8	0.0	5264.8
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	23896.2	0.0	23896.2
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	29161.0	0.0	29161.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	463.6	1.6
10°-20°	1224.3	4.2
20°-30°	2038.4	7.0
30°-40°	3014.2	10.3
40°-50°	4245.6	14.6
50°-60°	5685.0	19.5
60°-70°	7165.5	24.6
70°-80°	4894.0	16.8
80°-90°	430.4	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°	29161.0	100.0
0°-180°	29161.0	100.0



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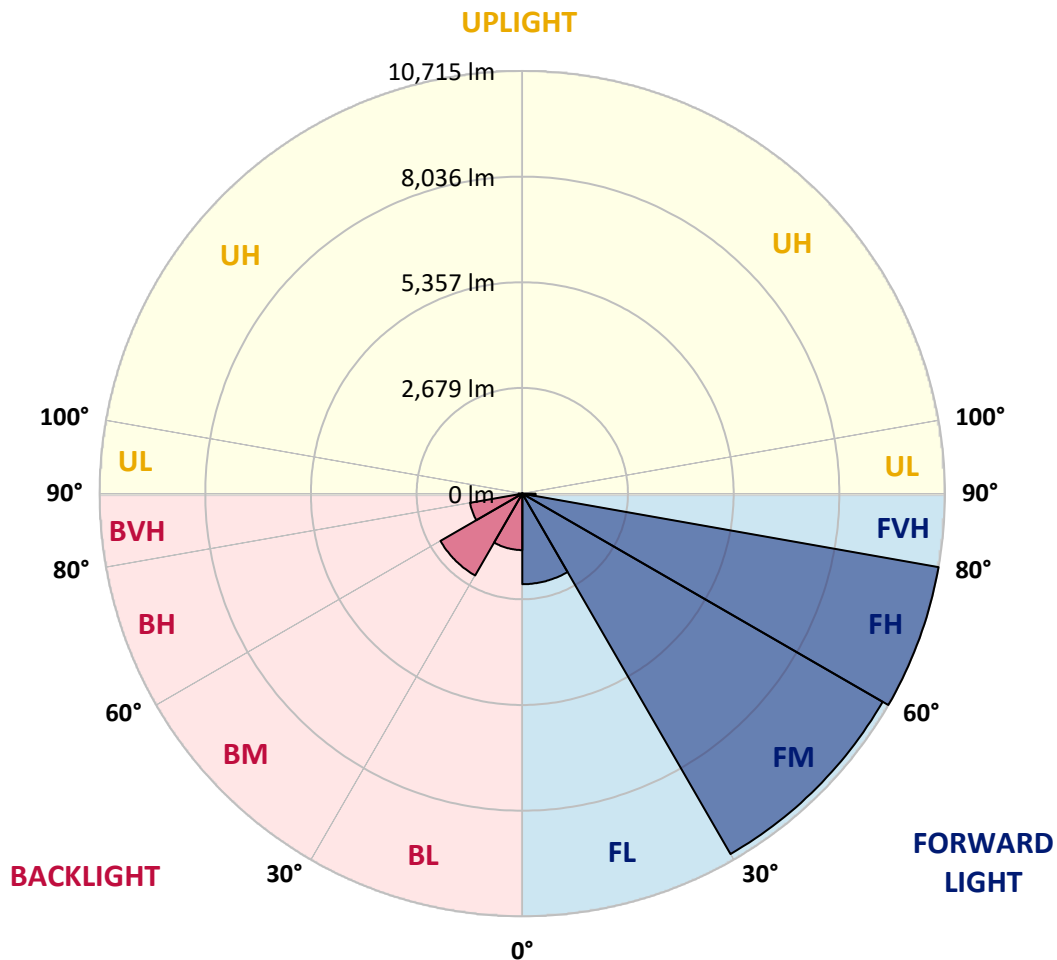
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2295.4	7.9			
FM	(30°-60°)	10549.4	36.2			
FH	(60°-80°)	10714.9	36.7			G4/12000
FVH	(80°-90°)	336.4	1.2			G3/500
BL	(0°-30°)	1430.9	4.9	B3/2500		
BM	(30°-60°)	2395.4	8.2	B2/2500		
BH	(60°-80°)	1344.6	4.6	B3/2500		G3/2500
BVH	(80°-90°)	94.0	0.3			G1/100
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°	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8
2.5°	5026.3	5050.0	5056.3	5072.0	5105.1	5131.9	5158.6	5155.5	5193.3	5209.1	5223.2
5°	4802.7	4809.0	4832.6	4864.1	4922.4	4996.4	5068.9	5070.4	5163.4	5237.4	5273.6
7.5°	4638.8	4659.3	4675.1	4708.2	4769.6	4849.9	4964.9	4974.4	5139.7	5286.2	5363.4
10°	4531.7	4555.4	4572.7	4613.6	4675.1	4764.9	4889.3	4906.6	5122.4	5363.4	5498.9
12.5°	4434.1	4457.7	4473.5	4527.0	4607.3	4717.6	4857.8	4878.3	5128.7	5453.2	5646.9
15°	4493.9	4512.8	4506.5	4522.3	4575.8	4701.9	4870.4	4890.9	5152.3	5539.8	5793.4
17.5°	4760.1	4775.9	4723.9	4664.0	4638.8	4731.8	4909.8	4931.8	5199.6	5629.6	5943.1
20°	5152.3	5194.9	5081.5	4947.6	4826.3	4838.9	4991.7	5015.3	5265.8	5719.4	6095.9
22.5°	5662.7	5694.2	5555.6	5335.1	5111.4	4996.4	5114.5	5128.7	5365.0	5836.0	6262.8
25°	6262.8	6281.7	6089.6	5806.0	5483.1	5265.8	5283.1	5308.3	5528.8	5968.3	6410.9
27.5°	6845.6	6905.5	6683.4	6336.9	5911.6	5549.3	5514.6	5530.4	5706.8	6042.3	6513.3
30°	7537.1	7532.4	7297.7	6896.1	6351.0	5858.0	5733.6	5730.4	5802.9	6078.5	6587.3
32.5°	8088.4	8153.0	7923.1	7485.2	6853.5	6177.8	5884.8	5878.5	5876.9	6141.5	6697.6
35°	8715.4	8724.8	8513.7	8072.7	7397.0	6579.4	6095.9	6064.4	6028.1	6277.0	6847.2
37.5°	9276.1	9320.2	9126.5	8631.9	7930.9	6996.9	6385.7	6365.2	6255.0	6511.7	7086.6
40°	9714.0	9747.1	9630.5	9159.6	8457.0	7447.4	6754.3	6716.5	6582.6	6896.1	7406.4
42.5°	9857.4	9925.1	9970.8	9739.2	9061.9	7981.3	7207.9	7160.7	7058.3	7478.9	7775.0
45°	9868.4	9975.5	10216.5	10227.5	9669.9	8620.9	7737.2	7704.1	7696.2	8225.5	8293.2
47.5°	9784.9	9893.6	10298.4	10517.3	10211.8	9266.7	8501.1	8449.2	8453.9	9148.5	8874.5
50°	9583.3	9712.4	10203.9	10703.2	10635.5	9937.7	9307.6	9290.3	9388.0	10202.3	9477.7
52.5°	9203.7	9359.6	10106.2	10819.8	10950.5	10515.8	10224.4	10175.5	10422.8	11345.9	10137.7
55°	8153.0	8387.7	9748.7	10884.4	11249.8	11068.7	11049.7	11138.0	11465.6	12593.4	10863.9
57.5°	7604.9	7781.3	8972.1	10895.4	11627.8	11711.3	12013.7	12035.8	12609.2	13918.1	11684.5
60°	7305.6	7461.5	8546.8	10822.9	12155.5	12506.8	12999.8	13078.6	13725.9	15353.1	12535.1
62.5°	7044.1	7178.0	8291.6	10572.5	12750.9	13686.6	14277.3	14315.1	14994.0	16937.7	13374.7
65°	6428.2	6581.0	7778.1	10322.0	13264.4	15160.9	15972.1	15928.0	16343.9	18304.9	13900.8
67.5°	5598.1	5791.9	6818.9	9457.3	13518.0	16772.3	17881.2	17826.1	17676.4	19201.2	14052.0
70°	4538.0	4642.0	5591.8	7962.4	12505.2	17618.2	19388.6	19330.4	18501.8	19319.3	13336.9
71°	3904.8	4067.1	4868.8	7072.5	11662.5	17359.8	19582.4	19566.6	18503.4	18993.3	12798.2
72.5°	3047.9	3147.2	3856.0	5480.0	9912.5	15891.8	19103.5	19163.4	18101.7	18087.6	11687.7
75°	1928.0	1972.1	2419.4	3225.9	5439.0	11254.5	16307.6	16469.9	16072.9	14804.9	8691.7
77.5°	1119.9	1176.6	1449.1	1901.2	2350.1	6108.5	11668.8	11845.2	11167.9	8151.5	3558.3
80°	652.1	715.1	954.5	1104.2	1079.0	2266.7	5941.5	6242.4	4835.7	2058.7	998.7
82.5°	362.3	404.8	671.0	672.6	574.9	740.3	1869.7	1956.3	1379.8	830.1	408.0
85°	263.1	297.7	433.2	392.2	275.7	318.2	650.5	682.0	557.6	349.7	132.3
87.5°	92.9	132.3	237.8	189.0	75.6	66.2	187.4	152.8	141.8	97.7	29.9
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°	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8	5202.8
2.5°	5231.1	5234.3	5218.5	5190.2	5161.8	5125.6	5084.6	5053.1	5038.9	5037.4	5035.8
5°	5287.8	5295.7	5235.8	5147.6	5050.0	4930.3	4827.9	4711.3	4681.4	4634.1	4648.3
7.5°	5379.2	5374.4	5256.3	5068.9	4840.5	4586.9	4372.6	4248.2	4119.0	4082.8	4084.4
10°	5509.9	5480.0	5256.3	4908.2	4527.0	4150.5	3851.3	3662.2	3559.9	3474.8	3443.3
12.5°	5648.5	5572.9	5205.9	4683.0	4123.8	3662.2	3340.9	3085.7	3019.6	2950.3	2951.9
15°	5780.8	5654.8	5106.7	4366.3	3689.0	3140.9	2829.0	2676.2	2655.7	2663.6	2662.0
17.5°	5900.6	5713.1	4955.5	4013.5	3181.8	2693.5	2528.1	2539.2	2594.3	2633.7	2638.4
20°	6021.8	5747.8	4730.2	3541.0	2703.0	2422.6	2428.9	2515.5	2599.0	2652.6	2660.4
22.5°	6136.8	5763.5	4465.6	3084.2	2356.4	2307.6	2400.5	2493.5	2575.4	2627.4	2635.2
25°	6212.4	5727.3	4090.7	2606.9	2186.3	2266.7	2364.3	2443.1	2512.4	2565.9	2578.5
27.5°	6232.9	5610.7	3626.0	2221.0	2107.6	2227.3	2317.1	2375.3	2428.9	2479.3	2488.8
30°	6221.9	5439.0	3115.7	1994.2	2061.9	2181.6	2250.9	2293.4	2358.0	2397.4	2405.3
32.5°	6204.6	5239.0	2583.3	1872.9	2024.1	2139.1	2180.0	2217.8	2216.3	2200.5	2211.5
35°	6210.9	4999.6	2151.7	1800.4	1991.0	2107.6	2142.2	2095.0	1959.5	1953.2	1946.9
37.5°	6243.9	4763.3	1838.2	1750.0	1973.7	2102.8	2121.7	1904.4	1784.7	1729.5	1715.3
40°	6329.0	4487.6	1631.9	1712.2	1972.1	2139.1	2028.8	1808.3	1578.3	1471.2	1463.3
42.5°	6442.4	4216.7	1505.9	1688.6	1991.0	2194.2	1991.0	1672.8	1422.4	1359.4	1349.9
45°	6610.9	3906.4	1436.5	1677.5	2019.4	2214.7	1978.4	1573.6	1359.4	1309.0	1309.0
47.5°	6801.5	3610.3	1398.7	1669.7	2055.6	2200.5	1866.6	1542.1	1329.4	1335.7	1365.7
50°	6990.6	3353.5	1370.4	1652.3	2087.1	2192.6	1820.9	1540.5	1337.3	1417.6	1471.2
52.5°	7209.5	3172.4	1335.7	1624.0	2087.1	2142.2	1806.7	1572.0	1359.4	1383.0	1406.6
55°	7474.1	3115.7	1291.6	1562.6	2049.3	2016.2	1798.8	1617.7	1375.1	1320.0	1329.4
57.5°	7823.8	3207.0	1249.1	1485.4	1962.6	1885.5	1795.7	1630.3	1338.9	1293.2	1283.8
60°	8230.2	3388.2	1236.5	1406.6	1844.5	1773.6	1776.8	1594.1	1288.5	1241.2	1249.1
62.5°	8515.3	3496.9	1228.6	1346.8	1715.3	1650.8	1731.1	1550.0	1266.4	1225.5	1233.4
65°	8515.3	3364.5	1156.2	1255.4	1548.4	1502.7	1676.0	1494.8	1238.1	1190.8	1182.9
67.5°	8192.4	2978.6	1045.9	1118.4	1364.1	1334.2	1598.8	1428.7	1195.5	1159.3	1140.4
70°	7351.3	2258.8	907.3	957.7	1131.0	1157.7	1499.6	1338.9	1124.7	1080.6	1052.2
71°	6981.1	1967.4	849.0	875.8	1041.2	1080.6	1452.3	1301.1	1093.2	1030.2	979.7
72.5°	6267.6	1657.1	760.8	771.8	890.0	960.8	1353.1	1228.6	1033.3	943.5	886.8
75°	4761.7	1209.7	612.7	606.4	658.4	762.4	1145.1	1094.7	905.7	784.4	751.4
77.5°	2057.2	658.4	458.4	463.1	447.3	578.1	901.0	940.4	776.6	637.9	608.0
80°	623.8	379.6	313.5	319.8	299.3	387.5	634.8	737.2	623.8	496.2	455.2
82.5°	319.8	226.8	214.2	211.1	190.6	218.9	384.3	504.1	445.8	310.3	274.1
85°	138.6	121.3	105.5	102.4	89.8	78.8	137.0	252.0	236.3	173.3	165.4
87.5°	34.7	31.5	20.5	18.9	11.0	1.6	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)