

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: P651128

Luminaire Tested: **GALN-SA9C-840-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651128  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9C-840-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 4000K, 1050mA 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: 52466.6 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

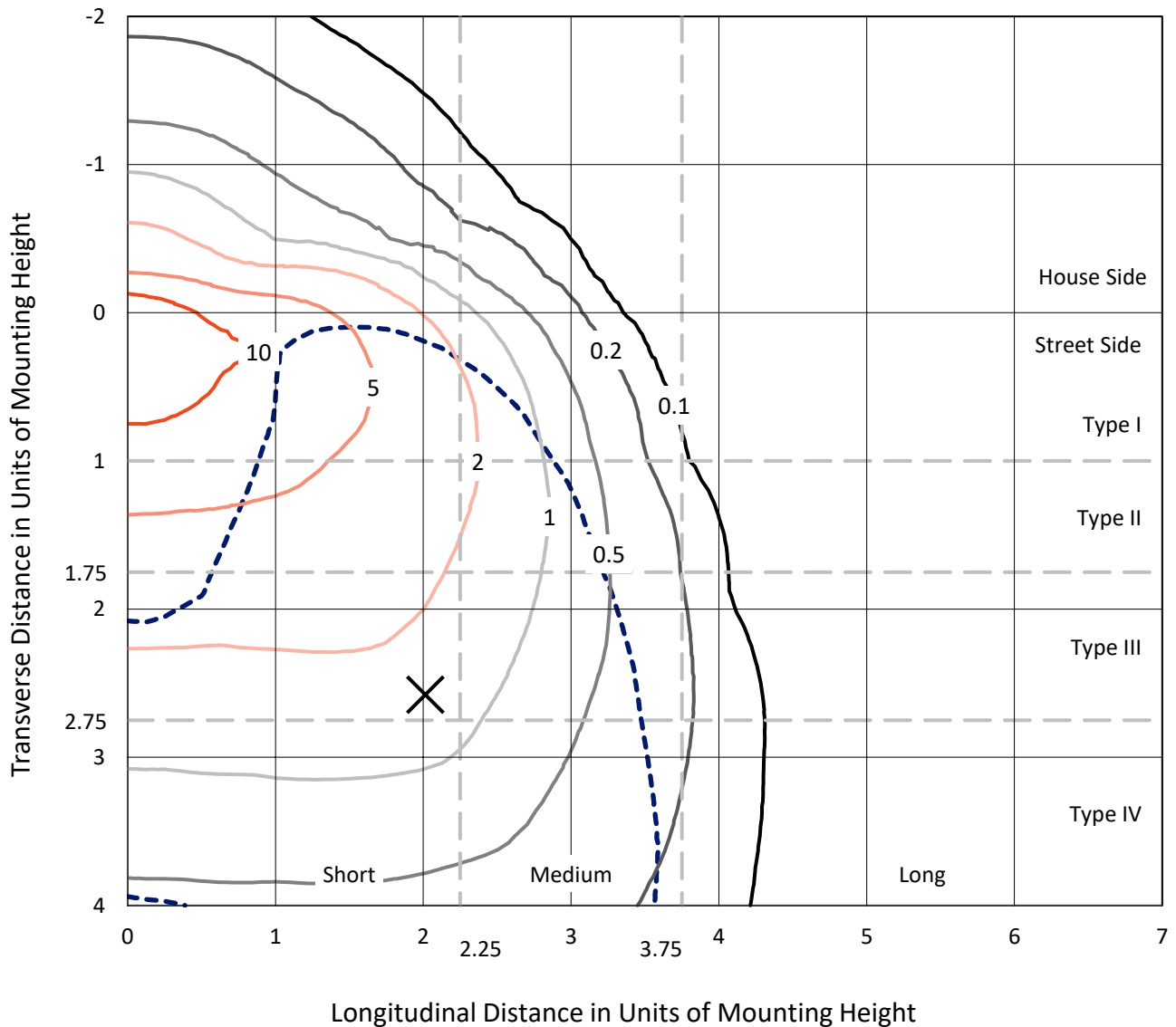
Input Watts (W): 481  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P651128  
 CATALOG NUMBER: GALN-SA9C-840-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

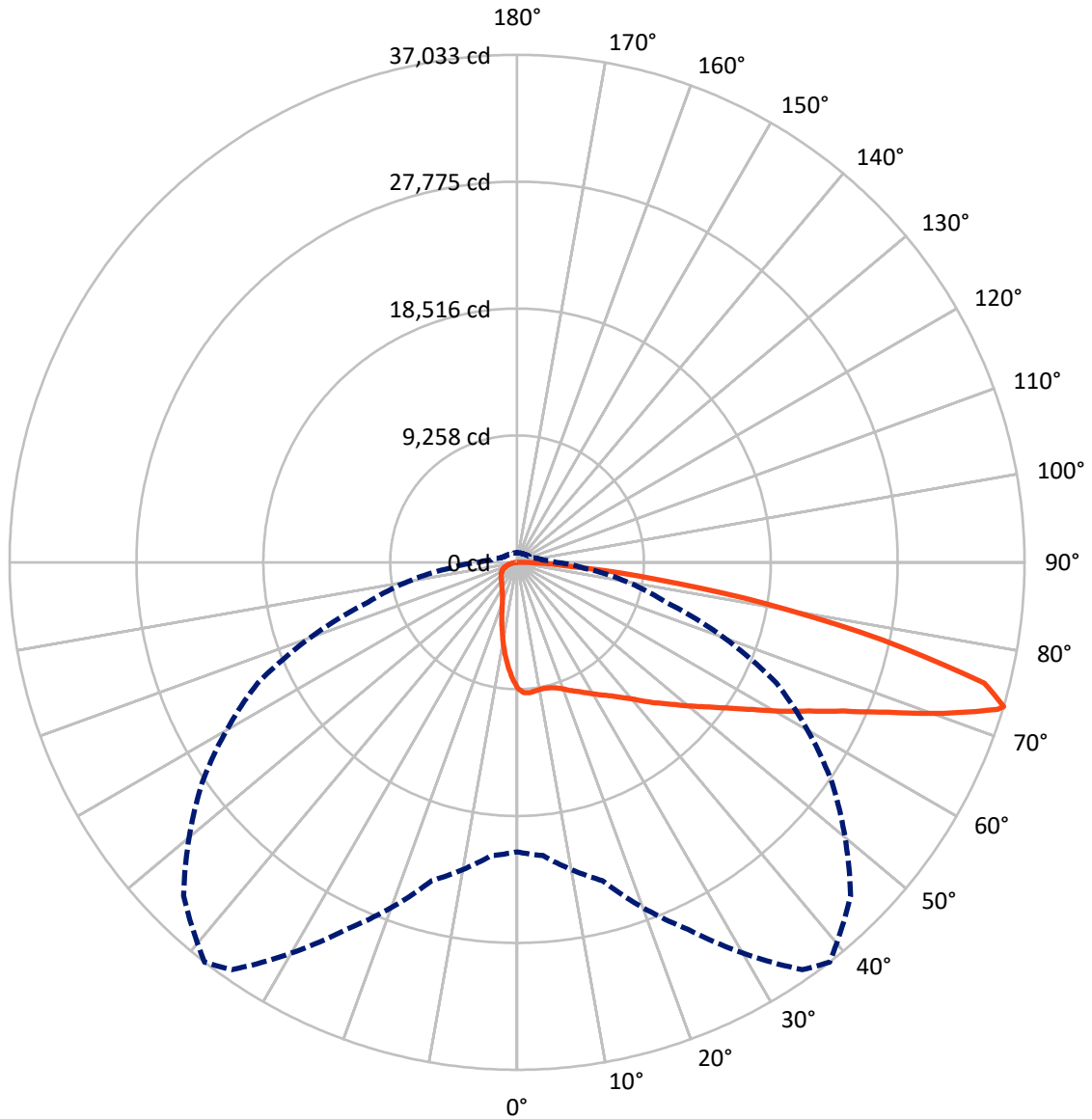
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15 fc  
 Type IV - Short - N/A

REPORT NUMBER: P651128  
CATALOG NUMBER: GALN-SA9C-840-U-SL4

### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral      - - - Horizontal Cone Through 73-Deg Vertical

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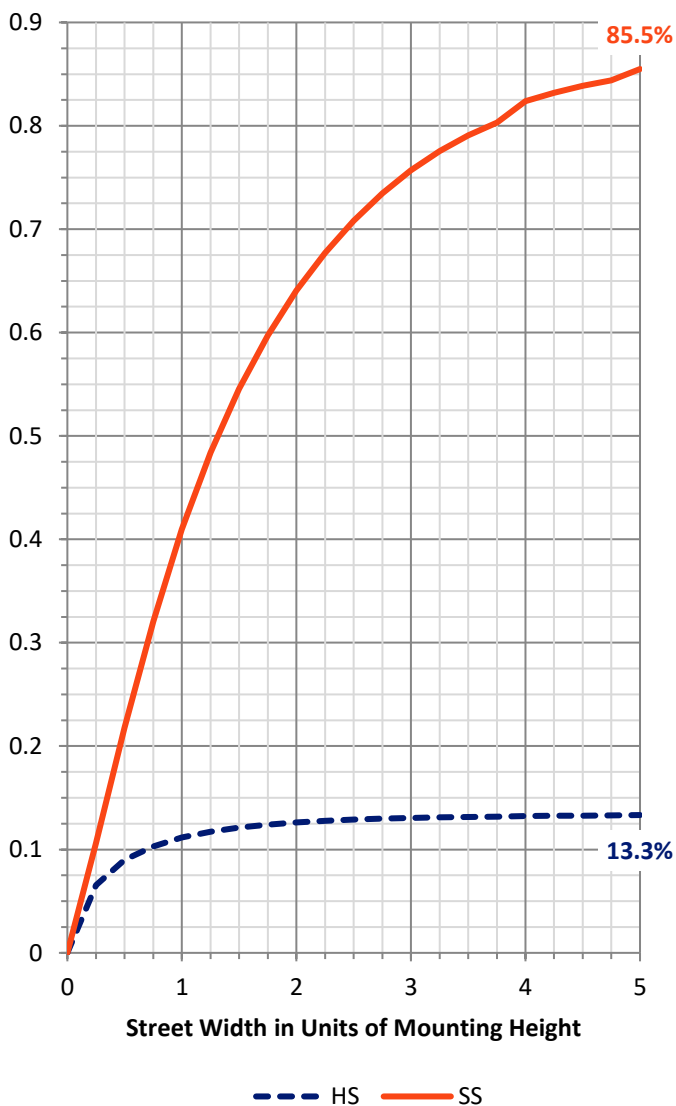
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7053.1	0.0	7053.1
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	45413.6	0.0	45413.6
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	52466.6	0.0	52466.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	804.6	1.5
10°-20°	2063.2	3.9
20°-30°	3212.8	6.1
30°-40°	4712.5	9.0
40°-50°	6990.4	13.3
50°-60°	9904.1	18.9
60°-70°	12563.6	23.9
70°-80°	10458.2	19.9
80°-90°	1757.2	3.3
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°	52466.6	100.0
0°-180°	52466.6	100.0

**Coefficient of Utilization**



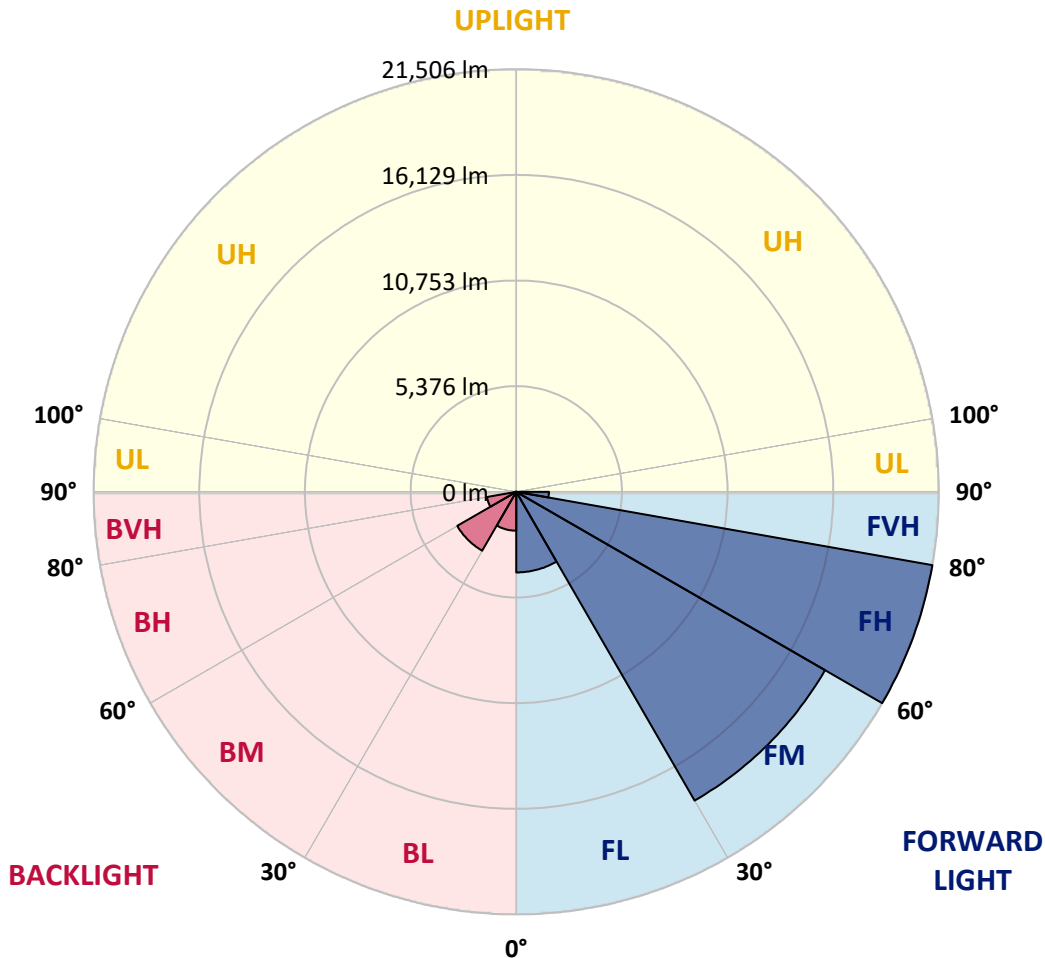
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 CATALOG NUMBER: GALN-SA9C-840-U-SL4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4101.5	7.8			
FM (30°-60°)	18144.4	34.6			
FH (60°-80°)	21505.9	41.0			G5
FVH (80°-90°)	1661.9	3.2			G5
BL (0°-30°)	1979.2	3.8	B3/2500		
BM (30°-60°)	3462.6	6.6	B3/5000		
BH (60°-80°)	1516.0	2.9	B3/2500		G3/2500
BVH (80°-90°)	95.3	0.2			G1/100
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°	38°	45°	55°	65°	75°	85°
0°	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5
2.5°	9587.8	9635.3	9611.5	9579.0	9558.2	9537.5	9507.8	9422.0	9353.8	9279.7	9164.1
5°	9659.0	9688.6	9667.9	9626.3	9579.0	9558.2	9502.0	9389.3	9279.7	9155.3	8983.4
7.5°	9617.5	9629.4	9605.6	9555.3	9513.8	9475.3	9410.1	9285.6	9152.4	9001.2	8776.0
10°	9469.3	9513.8	9513.8	9472.3	9430.8	9410.1	9344.9	9226.4	9104.9	8933.1	8666.4
12.5°	9347.9	9395.2	9433.7	9422.0	9418.9	9418.9	9368.6	9279.7	9137.5	8974.6	8657.5
15°	9264.9	9321.2	9404.1	9451.6	9481.2	9490.1	9469.3	9392.3	9247.1	9057.5	8693.1
17.5°	9247.1	9315.3	9466.4	9570.1	9647.1	9644.2	9638.2	9531.6	9371.6	9176.0	8737.5
20°	9327.1	9416.0	9626.3	9789.3	9901.9	9881.2	9848.6	9709.3	9522.6	9303.4	8779.0
22.5°	9567.1	9659.0	9890.1	10067.9	10177.4	10177.4	10079.7	9896.0	9697.5	9451.6	8835.3
25°	9910.8	10011.5	10257.4	10438.2	10488.5	10450.0	10352.3	10130.1	9901.9	9664.9	8953.8
27.5°	10331.5	10453.0	10681.1	10832.2	10817.4	10787.8	10687.1	10402.7	10174.5	9958.2	9155.3
30°	10856.0	10944.9	11181.9	11217.4	11164.1	11158.2	11015.9	10731.5	10518.2	10352.3	9442.7
32.5°	11350.7	11430.8	11620.3	11635.2	11540.4	11552.2	11418.9	11158.2	11036.7	10977.4	9925.7
35°	11875.2	11916.6	12079.6	12061.9	11999.6	11990.7	11937.4	11688.6	11727.1	11833.7	10610.1
37.5°	12313.7	12396.7	12488.5	12503.3	12500.4	12530.0	12565.5	12447.1	12669.2	13004.0	11507.8
40°	12716.7	12787.7	12924.1	12971.4	13087.0	13146.3	13267.8	13270.7	13783.3	14334.3	12613.0
42.5°	12989.2	13110.7	13365.5	13451.5	13732.9	13910.7	14091.5	14284.0	15027.7	15735.8	13916.6
45°	13226.2	13386.3	13810.0	14076.6	14458.8	14675.1	15057.3	15460.3	16529.9	17457.2	15241.0
47.5°	13584.8	13727.0	14212.9	14684.0	15261.8	15510.6	16082.4	16683.9	18082.4	19098.7	16509.2
50°	14082.5	14168.5	14663.3	15430.7	16168.4	16488.4	17243.9	18112.0	19741.6	20719.4	17623.2
52.5°	14719.5	14755.1	15149.2	16171.3	17143.2	17540.2	18541.7	19554.9	21193.5	22126.7	18506.1
55°	15472.1	15412.8	15721.0	16956.5	18257.2	18775.7	19851.2	21015.7	22826.0	23264.5	19149.1
57.5°	16215.8	16124.0	16369.9	17910.5	19632.0	20257.2	21510.4	22520.8	24283.7	24328.1	19599.4
60°	17003.9	16935.8	17229.1	19030.6	21317.8	22058.6	23217.1	24082.2	25694.1	25068.9	19670.5
62.5°	17812.8	17703.1	18120.9	20289.7	23217.1	23889.6	25012.6	25741.4	27077.7	25344.4	18986.1
65°	18598.0	18547.6	19193.5	21786.0	25380.0	26144.4	27234.7	27729.5	28185.8	24929.6	17288.4
67.5°	19433.5	19534.2	20565.3	23783.0	28200.7	29160.6	30336.9	29871.6	28502.8	22965.2	14559.6
70°	20707.5	20772.7	22366.7	26399.2	31836.1	32994.5	33563.4	30633.2	26974.0	19234.9	10944.9
72.5°	21255.7	21543.1	23975.6	29145.8	35966.3	36674.4	34647.9	28935.4	22470.4	13066.3	5750.9
73°	21134.2	21477.9	24049.7	29563.5	36289.2	37032.9	34416.7	28061.4	20888.3	11253.0	4930.2
75°	19620.1	20043.8	23086.7	29213.9	35661.2	35216.7	30701.3	23916.3	14115.1	5116.9	2245.9
77.5°	15481.0	15602.5	18292.8	23590.4	28082.1	27258.4	22977.0	14947.7	5765.7	1902.2	1274.0
80°	7765.7	8213.1	10310.8	13513.7	18778.7	18509.1	14503.3	7069.4	2402.9	1117.0	844.4
82.5°	3736.1	4053.2	5022.0	6589.4	10376.0	10130.1	7182.0	3863.6	1525.9	651.9	497.8
85°	2405.8	2642.8	3197.0	3143.6	4266.6	4074.0	3226.6	2924.3	903.7	340.7	346.7
87.5°	1588.1	1739.2	2085.8	1668.1	1552.6	1404.4	1425.2	1647.4	177.8	130.4	47.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P651128  
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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5	9217.5
2.5°	9116.8	9078.3	8950.8	8826.4	8707.9	8595.3	8521.2	8423.5	8358.3	8376.0	8402.7
5°	8888.6	8802.7	8577.5	8358.3	8150.9	7905.0	7706.4	7546.5	7424.9	7380.5	7371.6
7.5°	8648.6	8503.4	8180.5	7804.2	7451.6	7146.5	6793.9	6619.1	6414.6	6343.5	6319.8
10°	8503.4	8307.9	7854.6	7330.2	6799.8	6293.1	5911.0	5599.8	5318.3	5265.0	5238.3
12.5°	8462.0	8204.2	7593.8	6918.3	6213.1	5591.0	5025.1	4616.2	4343.6	4281.4	4189.5
15°	8438.3	8118.3	7350.9	6503.5	5608.7	4850.2	4254.7	3777.7	3528.8	3362.8	3365.9
17.5°	8417.5	8020.5	7078.3	6050.2	5087.3	4213.2	3555.4	3125.8	2897.7	2808.8	2799.9
20°	8387.9	7905.0	6764.2	5573.1	4491.7	3632.4	3036.9	2716.9	2562.9	2488.8	2485.8
22.5°	8376.0	7792.4	6456.1	5087.3	3964.3	3185.1	2693.2	2468.1	2370.3	2319.9	2319.9
25°	8405.7	7712.4	6133.2	4625.1	3496.2	2802.9	2456.2	2302.2	2245.9	2219.2	2210.3
27.5°	8497.5	7676.8	5813.2	4162.9	3066.5	2542.2	2296.3	2189.5	2148.1	2127.3	2130.3
30°	8672.3	7673.9	5499.1	3706.5	2746.6	2343.6	2168.9	2094.8	2062.1	2050.3	2047.3
32.5°	8953.8	7739.1	5191.0	3330.3	2477.0	2177.7	2050.3	1997.0	1982.2	1973.2	1970.3
35°	9430.8	7922.7	4885.8	2986.6	2269.5	2029.6	1937.7	1911.1	1890.3	1899.2	1902.2
37.5°	10073.8	8239.8	4595.4	2716.9	2112.5	1919.9	1842.9	1819.2	1807.4	1816.2	1825.1
40°	10935.9	8696.0	4352.4	2500.6	1999.9	1828.1	1760.0	1739.2	1727.3	1742.1	1745.2
42.5°	11887.0	9223.4	4151.0	2331.8	1908.1	1751.0	1685.9	1662.2	1653.3	1662.2	1665.1
45°	12864.8	9836.8	4047.3	2210.3	1831.0	1694.8	1626.6	1599.9	1579.2	1573.3	1582.2
47.5°	13827.7	10370.0	4044.3	2136.2	1768.9	1644.4	1570.3	1540.7	1514.1	1499.3	1496.2
50°	14612.9	10793.7	4115.4	2103.7	1715.5	1588.1	1514.1	1484.4	1448.9	1419.2	1425.2
52.5°	15205.4	11069.3	4148.0	2088.8	1685.9	1528.9	1454.8	1428.1	1386.6	1348.1	1348.1
55°	15587.7	11134.5	4068.0	2074.0	1662.2	1466.6	1386.6	1362.9	1321.5	1282.9	1282.9
57.5°	15718.0	10933.0	3780.6	2038.4	1638.4	1413.3	1318.5	1297.7	1265.1	1226.6	1220.7
60°	15415.9	10251.5	3277.0	1931.8	1591.1	1357.0	1244.4	1235.5	1223.7	1191.1	1188.1
62.5°	14251.4	8805.7	2728.8	1792.5	1511.0	1297.7	1176.2	1191.1	1199.9	1182.2	1179.3
65°	12313.7	7149.4	2331.8	1599.9	1404.4	1214.7	1102.2	1140.7	1164.4	1164.4	1158.5
67.5°	9987.9	5490.2	1964.4	1434.0	1271.1	1102.2	1019.2	1048.9	1066.6	1060.7	1075.6
70°	7099.0	3718.4	1599.9	1244.4	1102.2	974.8	912.6	912.6	900.7	894.8	894.8
72.5°	3442.9	2124.4	1297.7	1040.0	939.2	832.6	782.2	761.4	737.7	734.8	720.0
73°	2877.0	1905.1	1238.5	1001.5	900.7	811.8	755.6	722.9	708.1	696.3	693.3
75°	1751.0	1445.8	1034.0	844.4	767.4	699.2	648.8	619.2	604.4	595.5	592.6
77.5°	1152.6	1078.5	802.9	645.9	586.7	545.1	524.4	494.8	485.9	474.1	474.1
80°	859.2	823.7	574.8	456.2	420.8	385.2	379.2	373.3	349.6	334.8	328.9
82.5°	554.1	586.7	391.1	305.2	266.7	237.0	240.0	248.9	225.2	204.4	198.5
85°	394.1	423.7	237.0	139.3	112.6	97.8	109.7	97.8	100.8	80.0	65.2
87.5°	65.2	112.6	41.5	17.7	8.9	5.9	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)