

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: STREETWORKS

Report Number: P321069

Luminaire Tested: **GAN-SA5A-827-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321069
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA5A-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17566 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

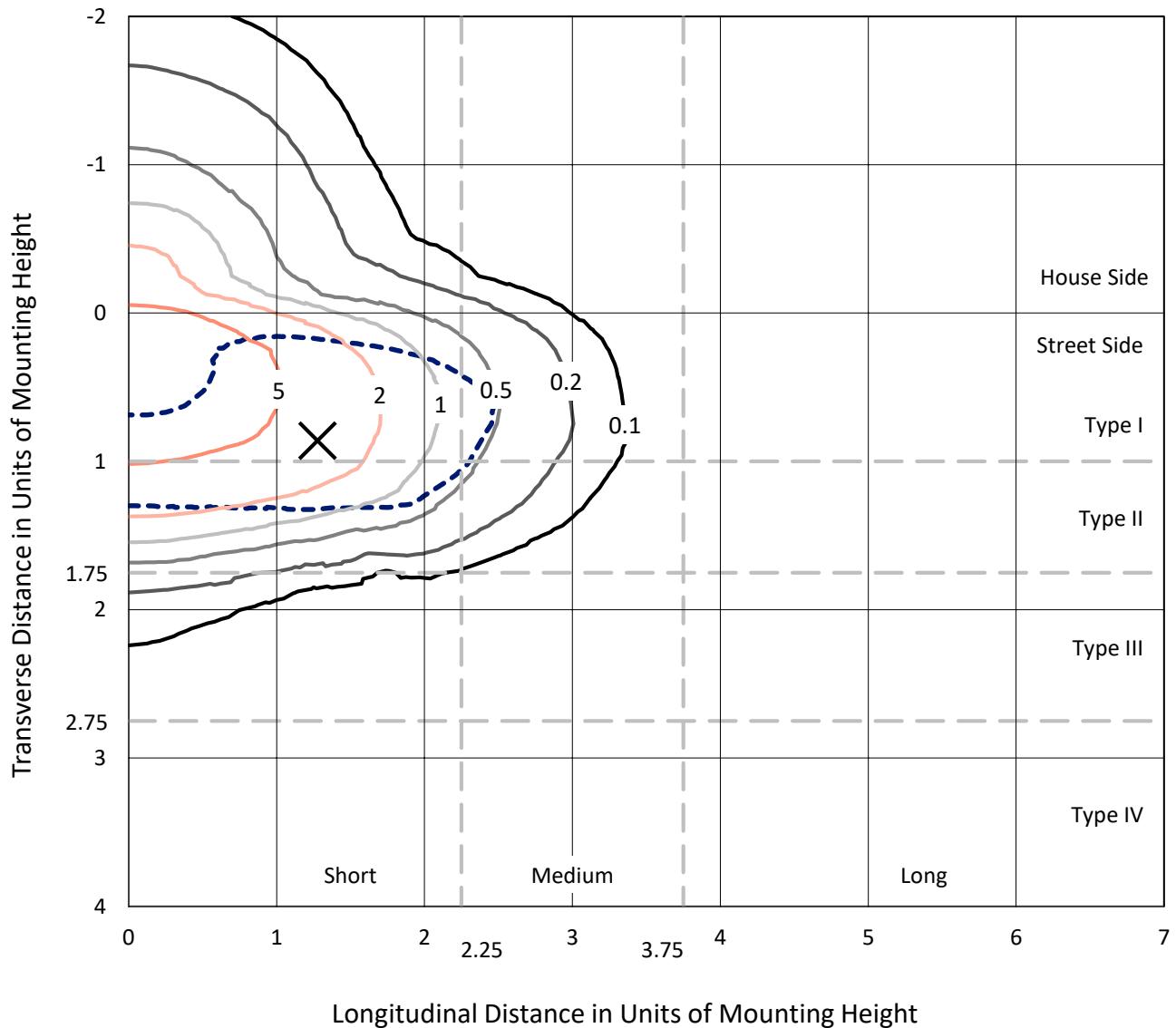
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

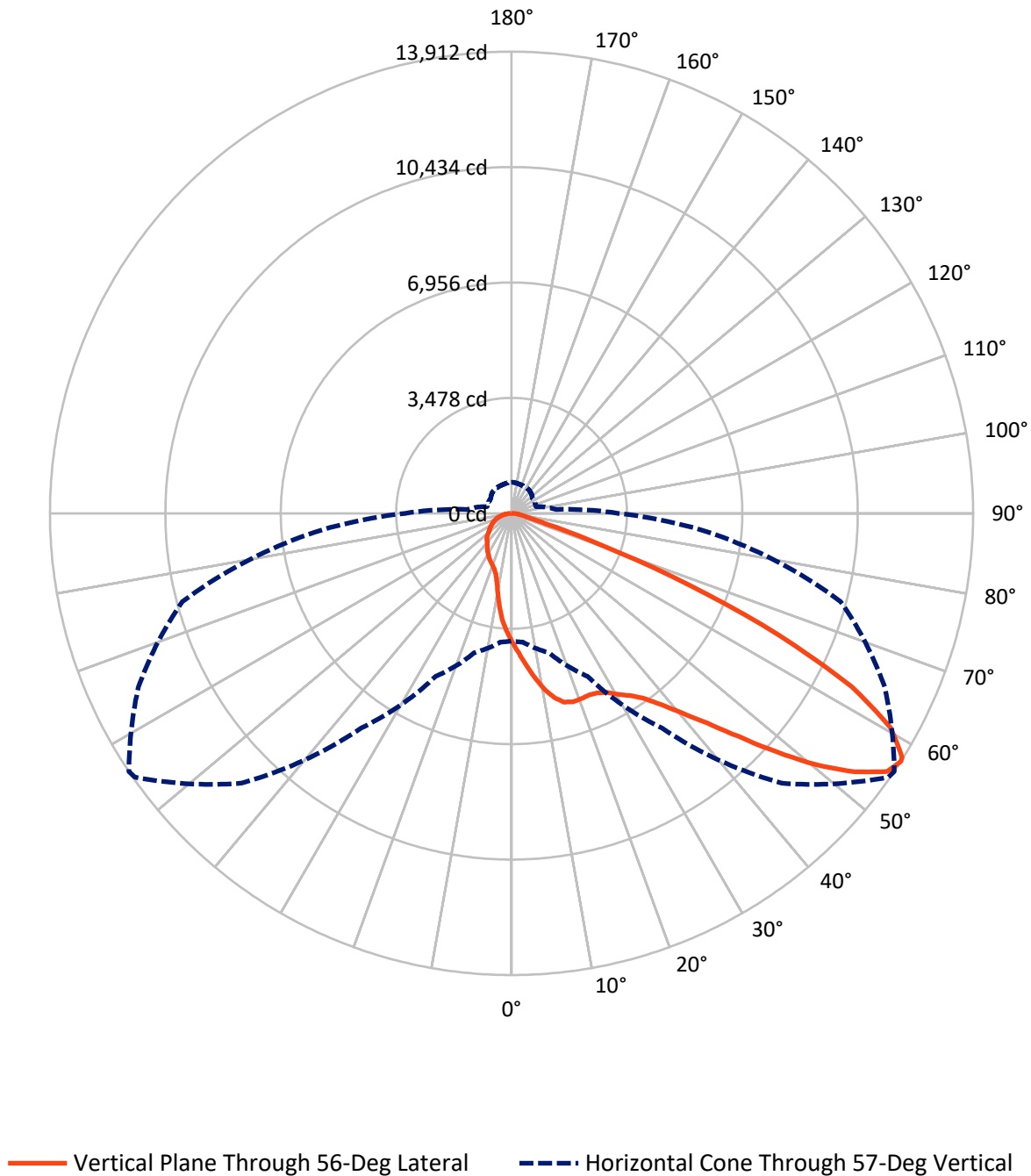
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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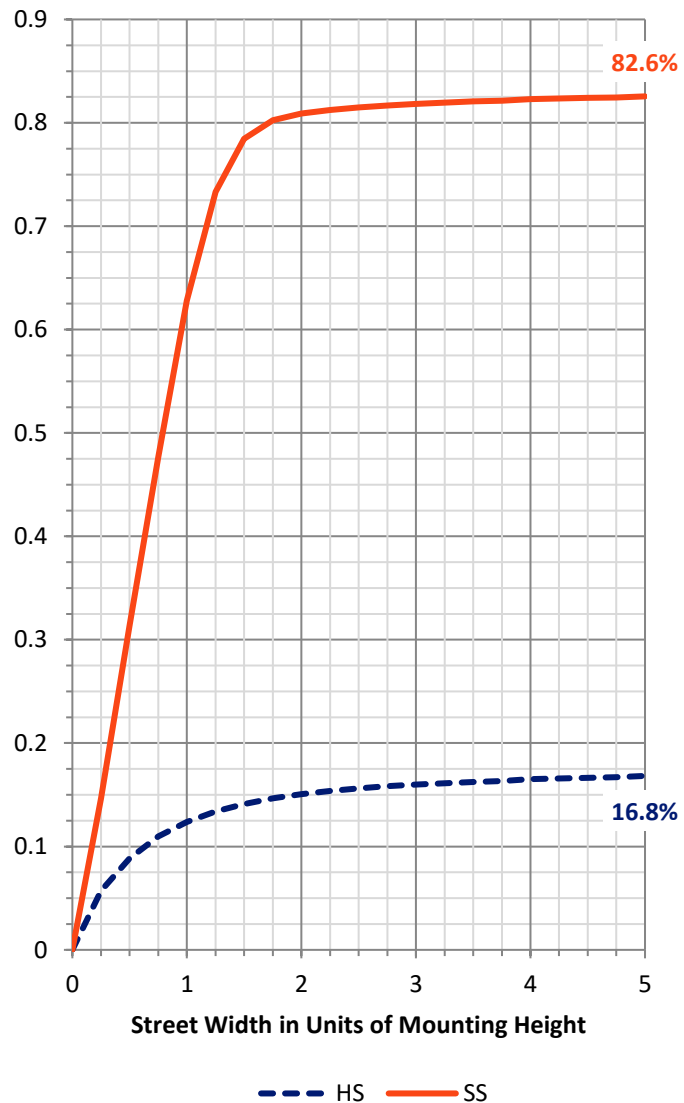
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3028.0	0.0	3028.0
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	14538.0	0.0	14538.0
	% Fixture	82.8	0.0	82.8
Total	Lumens	17566.0	0.0	17566.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.2	2.1
10°-20°	1052.2	6.0
20°-30°	1713.9	9.8
30°-40°	2562.1	14.6
40°-50°	3886.1	22.1
50°-60°	4355.7	24.8
60°-70°	2572.6	14.6
70°-80°	842.9	4.8
80°-90°	208.2	1.2
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°	17566.0	100.0
0°-180°	17566.0	100.0

Coefficient of Utilization



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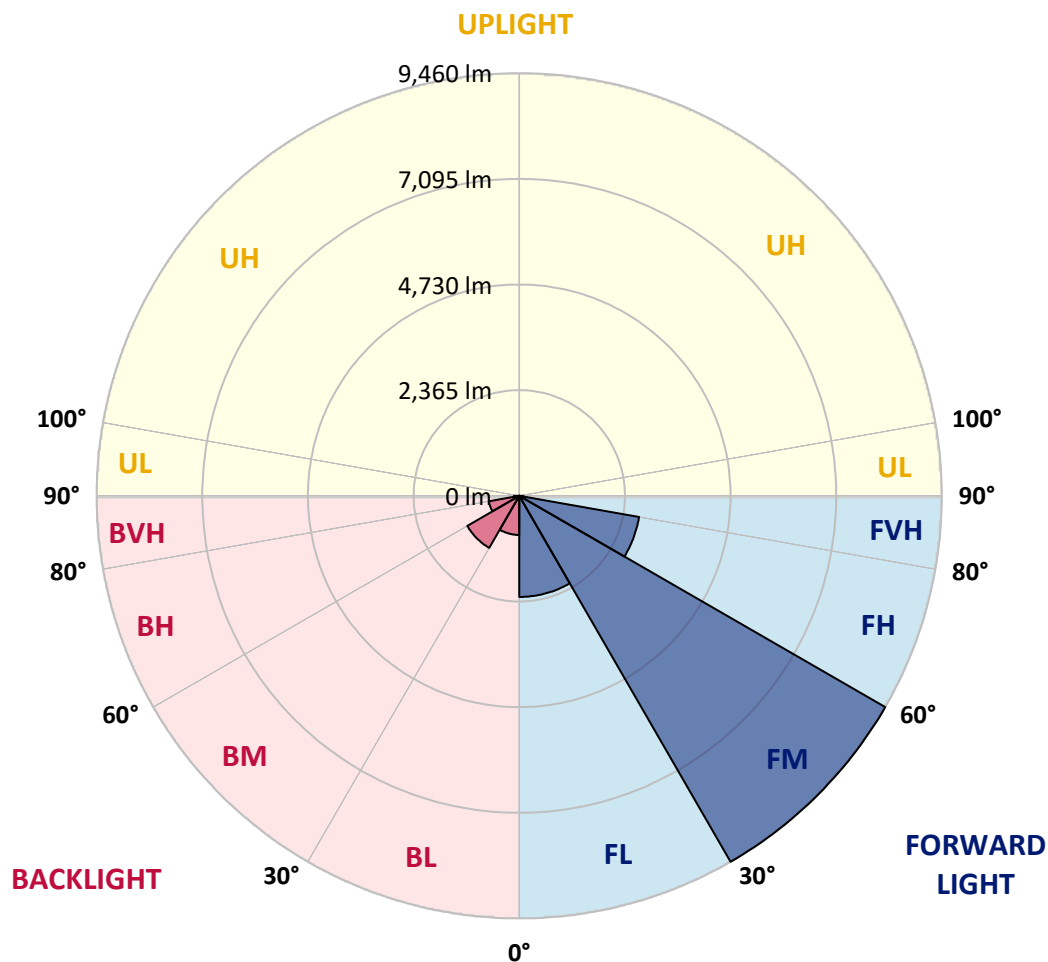
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2262.8	12.9			
FM	(30°-60°)	9459.9	53.9			
FH	(60°-80°)	2723.7	15.5			G2/5000
FVH	(80°-90°)	91.7	0.5			G1/100
BL	(0°-30°)	875.6	5.0	B2/1000		
BM	(30°-60°)	1344.0	7.7	B2/2500		
BH	(60°-80°)	691.9	3.9	B2/1000		G2/1000
BVH	(80°-90°)	116.6	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2
2.5°	4473.9	4514.9	4496.8	4434.0	4385.7	4317.5	4241.5	4218.5	4138.2	4048.3	3940.2
5°	5182.0	5161.5	5131.9	5034.1	4930.9	4810.7	4620.0	4589.8	4411.1	4207.7	3992.7
7.5°	5585.3	5583.4	5565.9	5508.6	5414.4	5257.5	5027.5	4991.8	4722.0	4394.8	4061.6
10°	5526.7	5522.5	5551.4	5611.2	5639.6	5607.0	5413.2	5377.6	5046.2	4601.9	4141.2
12.5°	5194.1	5196.5	5243.0	5368.5	5539.4	5744.6	5713.2	5695.7	5382.4	4836.1	4237.8
15°	4935.1	4940.5	4977.3	5086.6	5288.2	5660.7	5895.5	5901.6	5707.8	5094.5	4350.7
17.5°	4821.6	4833.1	4850.0	4926.6	5111.4	5493.5	5939.0	5971.6	5992.7	5362.5	4459.4
20°	4857.8	4868.7	4873.5	4922.4	5073.9	5392.1	5908.8	5967.4	6211.3	5614.8	4568.1
22.5°	5020.2	5026.8	5029.9	5042.5	5160.3	5421.1	5888.9	5950.5	6369.4	5841.2	4650.2
25°	5289.4	5284.6	5265.3	5249.0	5328.1	5535.8	5934.8	5993.3	6498.0	6046.5	4703.9
27.5°	5611.8	5605.8	5568.4	5523.7	5569.0	5714.4	6067.0	6113.5	6613.3	6238.4	4731.0
30°	5998.8	5983.1	5912.4	5859.3	5876.8	5982.5	6284.9	6327.2	6791.4	6456.4	4757.6
32.5°	6446.1	6429.2	6327.2	6239.0	6239.0	6327.2	6509.5	6544.5	6942.3	6702.7	4800.5
35°	7006.3	6985.2	6852.4	6704.5	6662.8	6707.5	6815.6	6840.3	7214.0	7013.0	4878.3
37.5°	7666.7	7638.4	7466.3	7268.3	7177.2	7174.7	7252.6	7303.3	7648.0	7420.4	5010.5
40°	8329.0	8309.1	8158.7	8003.0	7824.3	7767.0	7887.1	7902.8	8215.5	7926.3	5179.6
42.5°	8840.9	8837.3	8809.5	8830.0	8647.1	8531.2	8625.4	8638.1	8908.5	8473.9	5359.5
45°	9111.4	9117.4	9252.0	9550.2	9617.8	9533.3	9579.8	9583.4	9700.5	9026.2	5524.3
47.5°	8894.6	8926.0	9266.5	9933.6	10487.1	10767.9	10690.6	10735.3	10468.4	9500.7	5653.5
50°	8050.1	8088.7	8668.3	9762.7	10892.8	11962.5	11922.1	11911.8	11087.8	9848.4	5723.5
52.5°	7003.9	7034.1	7512.2	8874.7	10595.2	12623.0	12994.2	12941.1	11638.4	10108.6	5736.8
55°	5410.8	5457.9	5916.1	7102.3	9391.5	12370.6	13782.6	13734.9	12140.0	10245.1	5721.1
57°	3846.7	3896.2	4351.3	5420.4	7900.4	11497.1	13861.1	13911.8	12411.1	10268.0	5738.6
57.5°	3432.5	3483.2	3934.2	4972.5	7435.5	11181.4	13793.5	13878.0	12460.0	10264.4	5748.2
60°	1728.3	1747.7	2035.0	2775.7	4700.3	9039.5	12911.5	13129.5	12504.0	10086.9	5789.9
62.5°	1074.6	1060.7	1051.6	1278.6	2286.7	5994.5	11091.4	11511.0	11660.7	9657.1	5689.1
65°	944.8	918.8	819.2	801.1	1010.0	2911.6	8352.5	8874.7	9858.7	8979.7	5448.8
67.5°	887.4	862.1	749.8	682.2	682.8	1154.2	5185.6	5773.6	7680.0	7834.6	4882.0
70°	828.2	805.3	700.3	620.6	581.3	639.3	2385.7	2831.9	5006.3	6158.1	4080.3
72.5°	752.2	736.5	636.9	554.8	513.1	478.7	913.4	1078.8	2898.3	4135.8	2833.7
75°	672.5	658.0	572.9	494.4	443.7	376.7	514.3	554.2	1472.4	2115.9	1395.1
77.5°	585.0	576.5	509.5	437.1	396.6	312.1	364.0	383.3	631.4	907.3	699.7
80°	465.4	481.7	445.5	389.4	351.9	249.9	257.8	270.4	367.6	443.1	397.2
82.5°	303.0	331.4	348.9	316.3	289.8	196.8	185.3	190.8	239.7	270.4	172.7
85°	126.2	141.9	229.4	207.1	192.6	143.7	124.4	126.8	148.5	153.9	70.6
87.5°	56.1	59.8	100.8	94.8	81.5	49.5	53.1	58.0	79.1	74.9	27.2
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°	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2	3896.2
2.5°	3899.8	3849.1	3762.1	3666.2	3587.7	3524.9	3461.5	3418.0	3367.3	3340.2	3326.3
5°	3902.8	3803.2	3620.3	3432.5	3264.7	3111.4	2965.3	2853.0	2748.0	2691.2	2675.5
7.5°	3915.5	3765.8	3470.0	3160.9	2862.7	2590.4	2380.3	2248.7	2153.9	2111.7	2099.6
10°	3925.7	3721.7	3284.0	2826.4	2420.8	2144.9	1981.9	1908.2	1875.6	1870.2	1864.8
12.5°	3949.9	3676.4	3088.4	2477.5	2077.3	1886.5	1829.8	1824.9	1834.0	1847.3	1847.3
15°	3987.9	3631.7	2865.1	2178.1	1858.7	1791.7	1803.2	1829.8	1854.5	1875.0	1878.1
17.5°	4015.7	3576.8	2624.8	1938.4	1742.2	1760.3	1801.4	1838.8	1864.2	1884.1	1885.9
20°	4035.6	3491.7	2368.2	1755.5	1675.2	1731.4	1782.7	1815.9	1833.4	1853.3	1856.3
22.5°	4025.3	3377.6	2140.7	1624.5	1620.9	1689.1	1738.0	1777.8	1764.6	1745.2	1757.9
25°	3975.8	3220.6	1906.4	1526.7	1563.5	1632.4	1692.7	1666.2	1621.5	1613.0	1617.9
27.5°	3887.7	3020.2	1689.7	1436.2	1497.1	1579.8	1576.2	1549.6	1534.0	1523.1	1529.7
30°	3792.9	2802.9	1500.1	1357.1	1423.5	1491.7	1477.8	1477.2	1461.5	1444.0	1452.5
32.5°	3699.4	2584.4	1349.8	1291.9	1367.9	1377.0	1407.2	1416.2	1385.4	1348.6	1346.2
35°	3617.9	2377.9	1235.7	1232.7	1300.9	1302.1	1346.2	1333.5	1256.9	1218.8	1218.8
37.5°	3556.9	2172.0	1148.8	1179.6	1212.8	1244.2	1266.5	1214.0	1201.3	1180.2	1179.6
40°	3530.3	1990.9	1094.5	1139.1	1150.6	1190.5	1133.1	1153.6	1159.7	1148.8	1148.8
42.5°	3502.6	1833.4	1047.4	1108.4	1106.5	1101.1	1072.1	1098.7	1122.8	1123.4	1121.6
45°	3474.8	1697.5	1005.7	1042.6	1067.9	1009.4	1014.8	1043.2	1077.0	1089.0	1089.0
47.5°	3444.0	1590.1	967.7	973.1	1012.4	973.1	968.9	990.6	1030.5	1049.8	1054.0
50°	3376.4	1493.5	924.2	912.2	923.0	936.3	939.9	950.2	994.3	1025.0	1032.3
52.5°	3282.8	1407.2	868.7	856.0	856.0	906.1	923.0	926.0	963.5	1000.3	1007.5
55°	3204.9	1352.2	811.3	808.9	806.5	874.1	903.1	907.9	933.9	962.9	966.5
57°	3210.4	1348.0	767.3	769.7	769.1	841.5	884.4	894.7	907.9	932.7	936.9
57.5°	3213.4	1351.0	757.6	758.8	758.2	832.5	879.0	890.4	900.7	926.6	930.9
60°	3258.7	1358.9	718.4	705.1	708.1	784.2	848.2	862.7	869.3	903.7	909.1
62.5°	3191.7	1323.9	687.0	655.0	655.0	733.5	805.3	828.2	838.5	885.0	894.1
65°	2997.3	1225.5	650.2	598.2	604.3	682.8	754.0	791.4	807.1	865.1	874.7
67.5°	2697.2	1111.4	610.9	547.5	553.6	629.6	700.9	741.3	766.1	843.3	851.2
70°	2306.7	971.9	557.8	493.8	501.1	571.7	638.1	684.0	720.8	822.8	825.2
72.5°	1700.6	796.9	483.5	434.7	442.5	504.1	574.7	627.8	677.3	771.5	770.3
75°	1011.2	623.0	401.4	374.9	380.3	437.7	517.4	581.9	656.2	751.6	763.1
77.5°	613.3	469.1	327.2	313.9	320.6	379.1	476.3	545.1	647.1	708.7	705.1
80°	370.7	335.0	261.4	252.9	259.6	324.2	440.7	517.4	565.6	605.5	605.5
82.5°	193.8	204.6	192.0	185.3	194.4	263.2	400.8	451.6	499.8	429.2	400.8
85°	79.1	106.9	116.5	115.9	121.3	182.3	345.9	386.4	322.4	306.1	313.3
87.5°	26.6	45.3	56.7	48.9	51.3	114.7	239.7	186.5	221.6	154.5	146.7
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)