

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: P265701

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265701  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-230-D-U-T2U-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16030.5 lumens  
Efficiency: N/A  
Efficacy: 70.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 229  
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: 28.75 FT

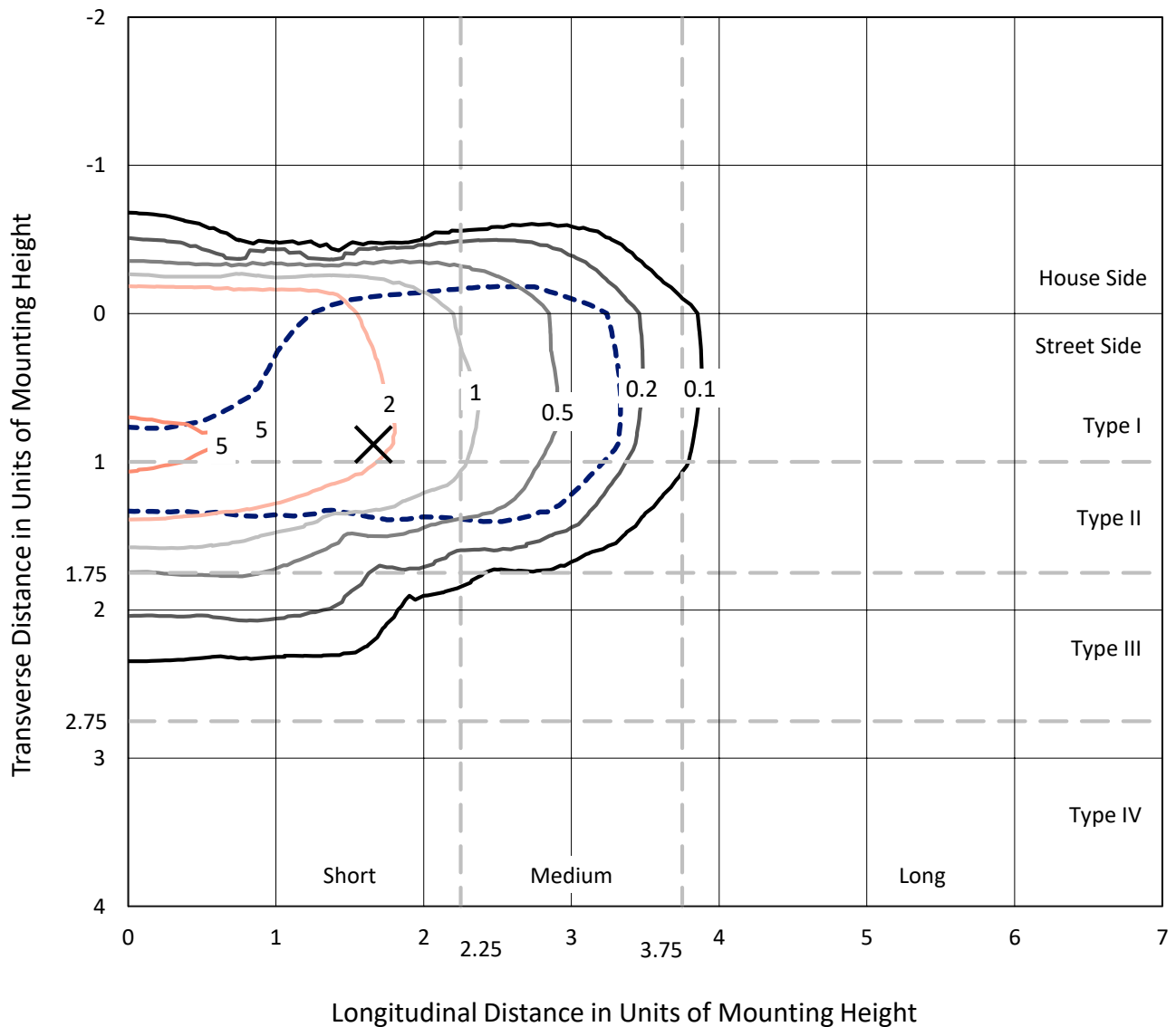


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

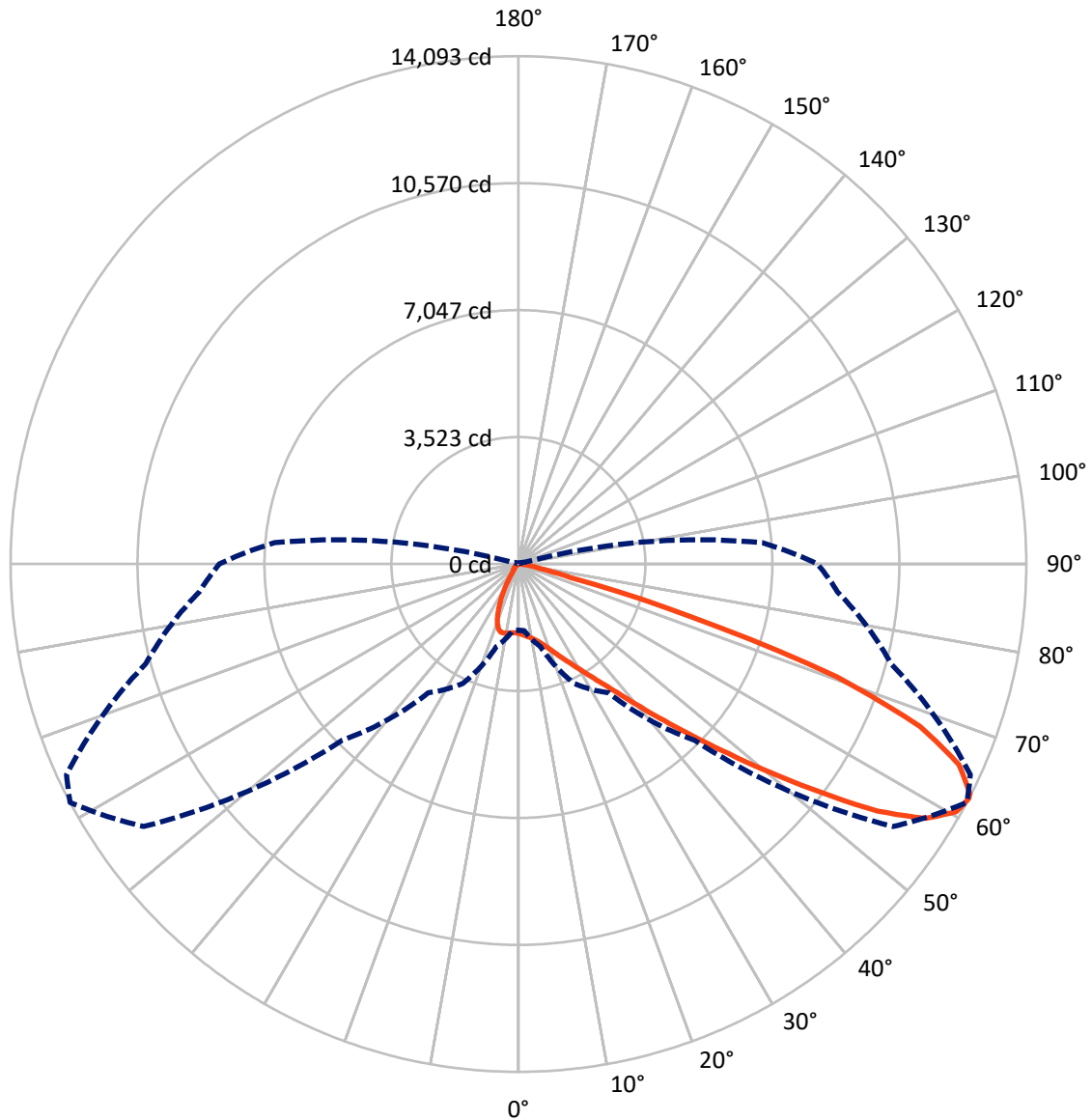


Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral    - - - Horizontal Cone Through 62-Deg Vertical



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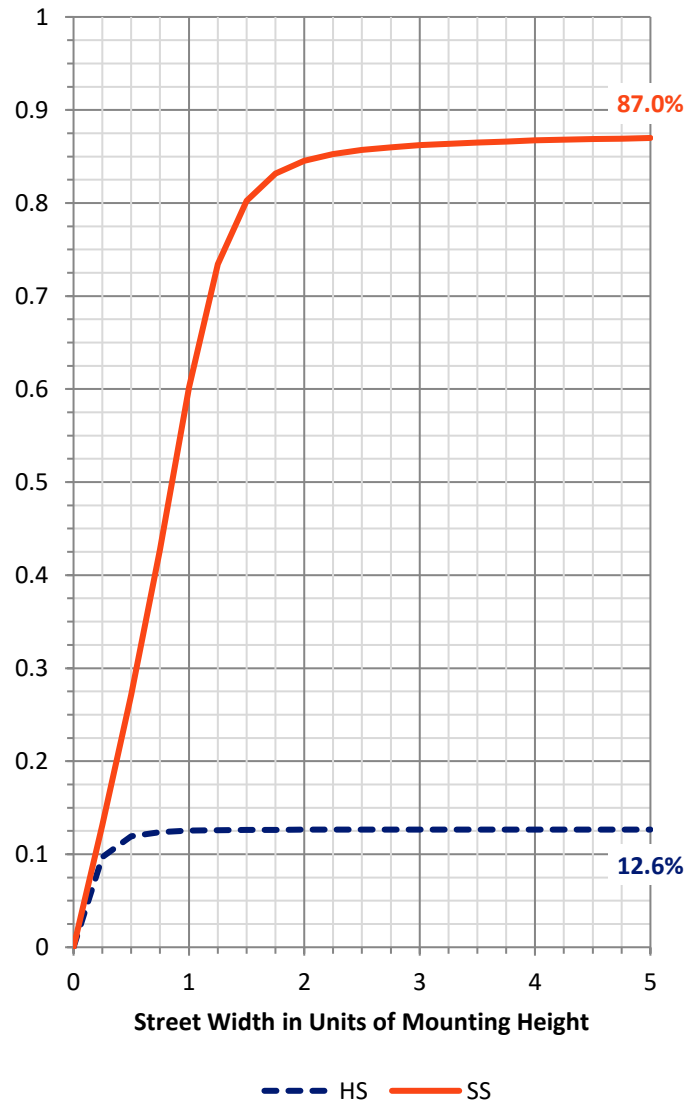
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2049.7	0.0	2049.7
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	13980.8	0.0	13980.8
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	16030.5	0.0	16030.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.8	1.2
10°-20°	519.0	3.2
20°-30°	871.6	5.4
30°-40°	1670.7	10.4
40°-50°	3412.5	21.3
50°-60°	4515.9	28.2
60°-70°	3508.1	21.9
70°-80°	1266.2	7.9
80°-90°	80.7	0.5
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°	16030.5	100.0
0°-180°	16030.5	100.0



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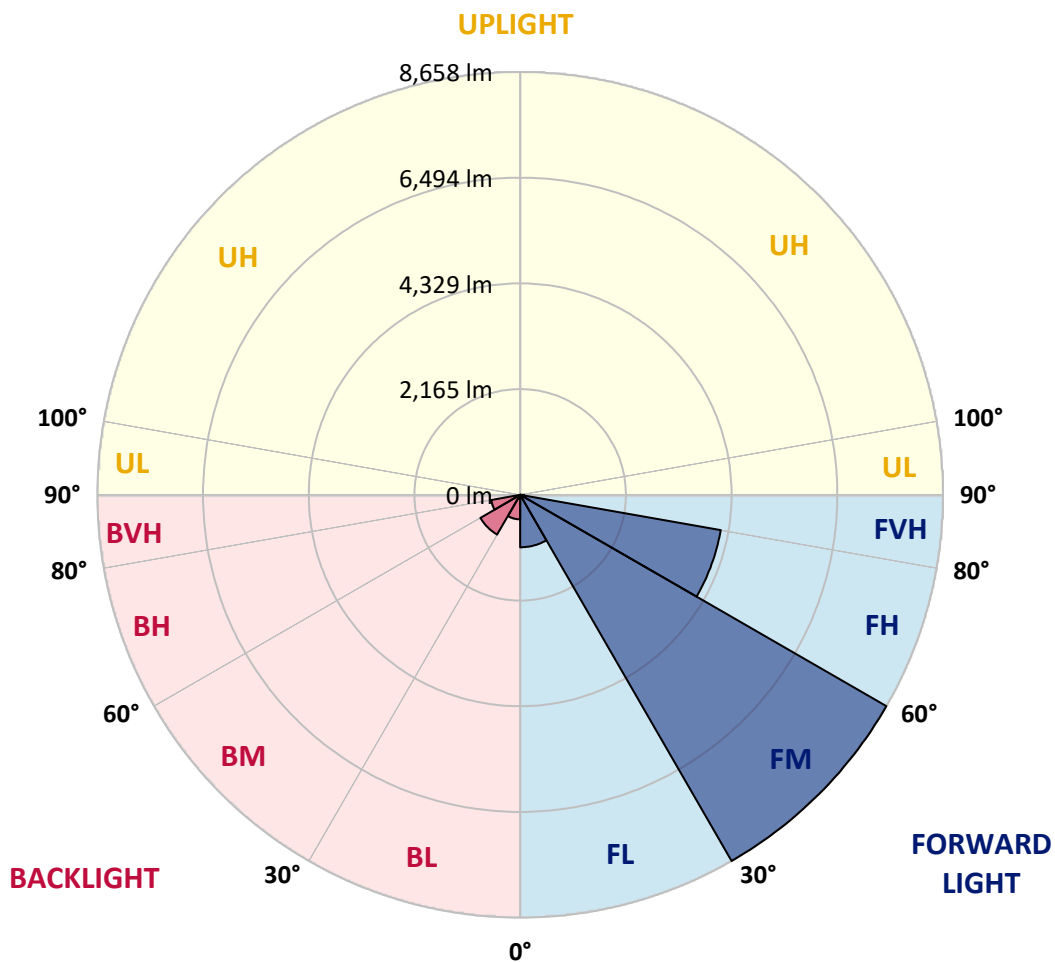
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1074.7	6.7			
FM	(30°-60°)	8658.1	54.0			
FH	(60°-80°)	4170.8	26.0			G2/5000
FVH	(80°-90°)	77.2	0.5			G1/100
BL	(0°-30°)	501.7	3.1	B2/1000		
BM	(30°-60°)	941.0	5.9	B1/1000		
BH	(60°-80°)	603.6	3.8	B2/1000		G2/1000
BVH	(80°-90°)	3.5	0.0			G0/10
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°	62°	65°	75°	85°
0°	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0
2.5°	1982.3	1978.3	1974.5	1970.5	1970.5	1966.6	1962.5	1954.7	1946.8	1939.0	1934.9
5°	2017.9	2013.8	2009.9	2013.8	2009.9	2009.9	2005.9	1998.1	1990.3	1978.3	1966.6
7.5°	2045.4	2041.5	2037.4	2041.5	2045.4	2049.4	2053.3	2045.4	2041.5	2025.7	2013.8
10°	2080.8	2076.9	2073.0	2080.8	2080.8	2100.5	2104.5	2100.5	2096.6	2084.7	2065.1
12.5°	2132.0	2136.0	2136.0	2144.0	2151.8	2175.4	2183.3	2171.6	2171.6	2155.8	2132.0
15°	2226.7	2226.7	2226.7	2234.5	2238.4	2269.9	2277.9	2266.1	2274.0	2246.4	2222.8
17.5°	2317.3	2321.2	2329.1	2344.8	2344.8	2372.5	2388.2	2388.2	2404.0	2368.6	2337.0
20°	2407.9	2411.9	2423.6	2459.2	2459.2	2494.7	2522.3	2534.1	2549.7	2514.4	2459.2
22.5°	2506.5	2506.5	2526.2	2581.4	2569.5	2640.5	2691.7	2711.4	2727.2	2679.9	2593.1
25°	2656.2	2640.5	2656.2	2707.4	2699.5	2798.1	2892.7	2912.3	2932.1	2876.9	2746.8
27.5°	2940.1	2916.3	2861.1	2865.1	2865.1	2979.4	3113.3	3141.0	3152.8	3105.5	2943.9
30°	3507.5	3507.5	3302.6	3164.5	3074.0	3176.4	3365.6	3412.9	3428.7	3357.8	3145.0
32.5°	4496.6	4496.6	4118.3	3767.6	3424.7	3424.7	3641.5	3728.1	3744.0	3661.2	3412.9
35°	5757.7	5750.0	5182.4	4701.5	4031.7	3779.3	3964.6	4110.5	4157.7	4047.5	3759.6
37.5°	7097.7	7046.6	6435.6	5883.9	4965.7	4346.9	4402.1	4595.2	4638.6	4547.8	4209.0
40°	8185.4	8126.3	7633.6	7172.5	6171.5	5253.4	5032.7	5210.0	5261.3	5135.2	4744.9
42.5°	9170.6	9024.9	8685.9	8354.9	7558.8	6821.9	5872.1	5943.0	5998.3	5864.1	5347.9
45°	9884.1	9659.4	9486.0	9383.5	8961.9	8544.0	6959.8	6818.0	6837.5	6672.2	6006.1
47.5°	9903.8	9746.2	9761.8	10029.8	10203.2	10187.5	8374.5	7870.2	7795.3	7519.4	6707.6
50°	8957.9	9048.4	9336.3	10100.7	11038.7	11606.2	10057.5	9115.6	8890.9	8394.3	7405.1
52.5°	7381.6	7523.3	8063.2	9352.0	11160.9	12540.2	11803.3	10538.2	10136.3	9261.3	7941.0
55°	5781.4	5789.3	6356.9	7669.2	10345.2	12709.7	13198.3	12102.8	11488.1	9919.4	8295.8
57.5°	3976.4	4193.2	4914.4	5797.2	8504.7	11866.3	13722.6	13316.7	12524.4	10325.4	8544.0
60°	2604.9	2616.9	3456.3	4477.0	5789.3	9655.4	13403.3	13959.0	13363.9	10565.9	8713.5
62°	1836.6	1856.2	2376.5	3657.2	4362.7	6920.5	12697.9	14093.0	13836.9	10707.6	8890.9
62.5°	1702.5	1718.3	2155.8	3452.2	4098.6	6207.1	12445.7	14061.4	13907.7	10755.0	8953.9
65°	1249.4	1249.4	1410.9	2372.5	3003.0	3353.8	10546.1	13434.8	13813.1	11133.4	9190.4
67.5°	965.6	973.5	1028.6	1462.1	2266.1	2033.6	6731.2	12024.0	12827.9	11693.0	9324.3
70°	831.6	827.6	867.0	969.5	1635.5	1351.8	2963.6	9383.5	10743.2	11551.0	9202.1
72.5°	614.8	618.8	709.4	851.2	1139.0	878.8	1339.9	4981.5	6967.7	9040.6	7886.0
75°	394.0	398.0	500.4	670.0	819.8	575.4	772.5	1485.7	2853.2	5012.9	4823.8
77.5°	264.0	271.9	327.2	468.9	717.2	358.7	484.7	622.6	859.0	1879.9	1730.0
80°	177.3	177.3	208.9	315.2	453.3	299.6	260.1	413.8	445.3	583.3	291.6
82.5°	118.2	118.2	137.9	208.9	295.6	268.0	157.7	224.7	260.1	291.6	102.4
85°	71.0	71.0	94.6	130.1	193.1	149.7	102.4	126.1	133.9	185.2	55.2
87.5°	43.4	39.4	63.1	90.6	102.4	90.6	67.1	67.1	71.0	102.4	27.6
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°	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0	1931.0
2.5°	1927.1	1923.2	1919.3	1911.4	1899.6	1891.7	1883.7	1875.9	1868.0	1868.0	1879.9
5°	1962.5	1950.8	1934.9	1919.3	1895.7	1879.9	1868.0	1852.2	1844.4	1844.4	1848.4
7.5°	2005.9	1994.1	1966.6	1939.0	1903.5	1875.9	1848.4	1812.9	1785.3	1773.4	1785.3
10°	2053.3	2037.4	1998.1	1954.7	1915.4	1844.4	1753.8	1643.4	1548.8	1505.5	1525.1
12.5°	2112.4	2092.7	2045.4	1986.2	1895.7	1722.2	1497.6	1241.4	1079.9	1004.9	1020.7
15°	2199.1	2171.6	2104.5	2013.8	1812.9	1438.5	1071.9	776.3	626.6	563.5	571.4
17.5°	2301.5	2266.1	2175.4	2005.9	1600.1	1036.5	638.4	453.3	390.1	374.5	374.5
20°	2411.9	2364.6	2246.4	1946.8	1276.9	650.3	398.0	346.8	323.2	311.4	311.4
22.5°	2526.2	2463.2	2305.5	1808.8	910.3	405.9	327.2	291.6	264.0	252.2	252.2
25°	2664.2	2581.4	2364.6	1568.5	579.3	327.2	279.8	244.3	216.8	201.0	205.0
27.5°	2825.7	2719.3	2415.8	1268.9	374.5	283.8	232.5	197.1	173.5	165.5	165.5
30°	2995.2	2869.0	2427.7	949.8	303.4	244.3	193.1	161.5	145.9	137.9	137.9
32.5°	3227.7	3062.1	2392.1	630.6	256.1	205.0	161.5	133.9	122.2	118.2	118.2
35°	3535.1	3314.3	2309.5	390.1	216.8	169.5	133.9	118.2	106.4	102.4	102.4
37.5°	3925.2	3665.2	2163.6	268.0	185.2	137.9	114.3	102.4	94.6	90.6	90.6
40°	4445.4	4090.7	1974.5	232.5	157.7	118.2	98.5	90.6	82.7	82.7	82.7
42.5°	4997.2	4607.0	1730.0	205.0	133.9	102.4	86.6	78.8	74.9	71.0	71.0
45°	5600.2	5135.2	1426.7	181.3	114.3	90.6	78.8	67.1	63.1	63.1	63.1
47.5°	6199.2	5678.9	1095.7	157.7	98.5	78.8	67.1	59.1	55.2	51.3	51.3
50°	6814.0	6171.5	804.0	137.9	86.6	71.0	59.1	51.3	43.4	39.4	39.4
52.5°	7259.4	6467.2	587.2	118.2	74.9	59.1	47.3	39.4	31.5	27.6	27.6
55°	7586.5	6648.4	429.6	98.5	67.1	51.3	39.4	31.5	23.6	23.6	19.8
57.5°	7842.7	6735.1	323.2	86.6	59.1	43.4	31.5	23.6	19.8	15.8	15.8
60°	8039.7	6739.2	240.3	71.0	51.3	35.5	23.6	15.8	11.8	11.8	11.8
62°	8299.7	6790.4	197.1	59.1	47.3	31.5	19.8	11.8	7.8	4.0	4.0
62.5°	8374.5	6810.1	189.2	59.1	43.4	27.6	15.8	11.8	7.8	4.0	4.0
65°	8721.5	6845.5	145.9	47.3	35.5	23.6	11.8	7.8	0.0	0.0	0.0
67.5°	9036.7	6790.4	106.4	35.5	27.6	15.8	11.8	4.0	0.0	0.0	0.0
70°	9005.1	6412.0	74.9	23.6	19.8	11.8	7.8	0.0	0.0	0.0	0.0
72.5°	7420.9	4800.2	51.3	19.8	11.8	7.8	4.0	0.0	0.0	0.0	0.0
75°	4480.9	2100.5	35.5	11.8	11.8	7.8	4.0	0.0	0.0	0.0	0.0
77.5°	1469.9	760.7	23.6	7.8	7.8	4.0	4.0	0.0	0.0	0.0	0.0
80°	240.3	126.1	11.8	7.8	7.8	4.0	4.0	0.0	0.0	0.0	0.0
82.5°	74.9	31.5	7.8	7.8	4.0	4.0	0.0	0.0	0.0	0.0	0.0
85°	27.6	11.8	7.8	7.8	4.0	4.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.8	7.8	7.8	7.8	4.0	4.0	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)