

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: P258074

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2U-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258074  
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-AF72-180-D-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 775mA 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: 15908.9 lumens  
Efficiency: N/A  
Efficacy: 87.9 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

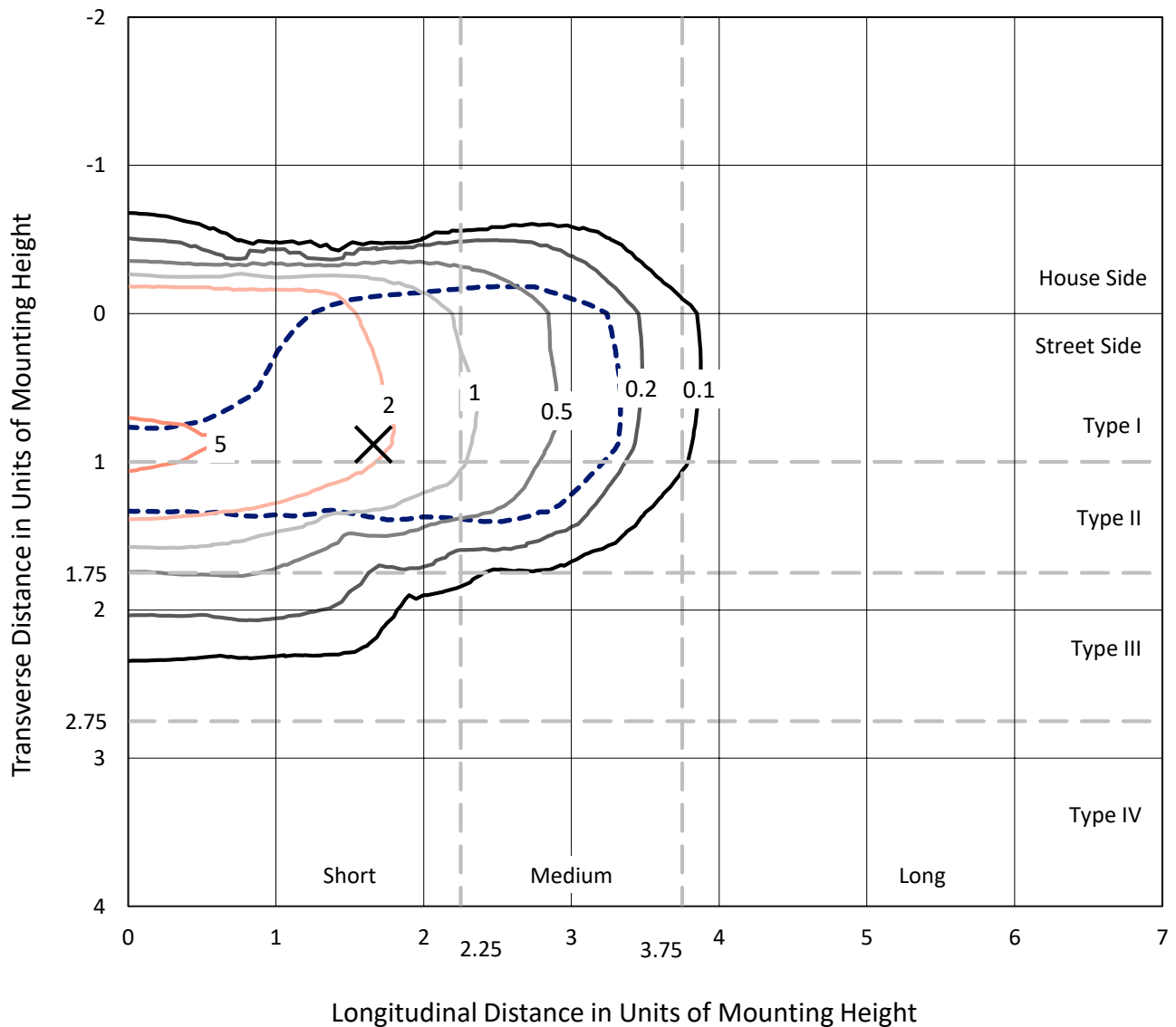
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

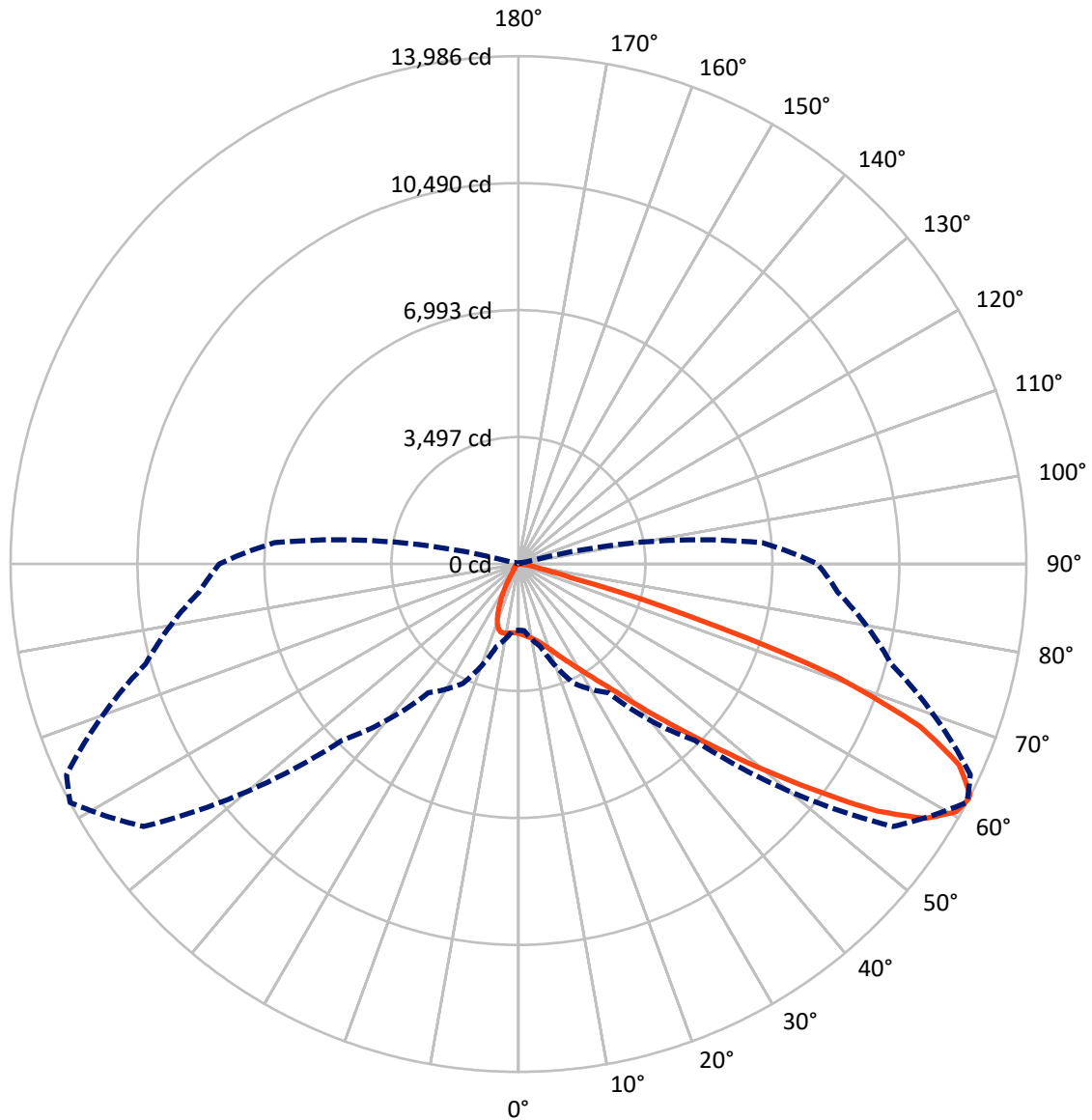
✕ Max cd  
 - - - 1/2 Max cd



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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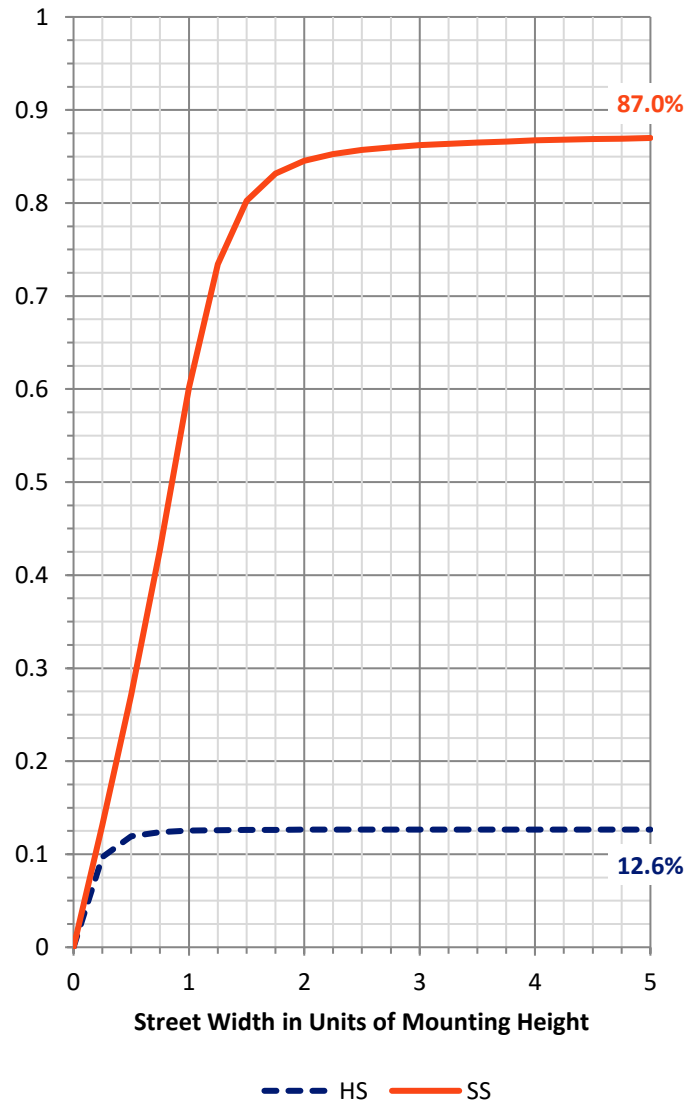
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2034.2	0.0	2034.2
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	13874.8	0.0	13874.8
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	15908.9	0.0	15908.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.4	1.2
10°-20°	515.0	3.2
20°-30°	865.0	5.4
30°-40°	1658.1	10.4
40°-50°	3386.6	21.3
50°-60°	4481.6	28.2
60°-70°	3481.5	21.9
70°-80°	1256.6	7.9
80°-90°	80.1	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°	15908.9	100.0
0°-180°	15908.9	100.0



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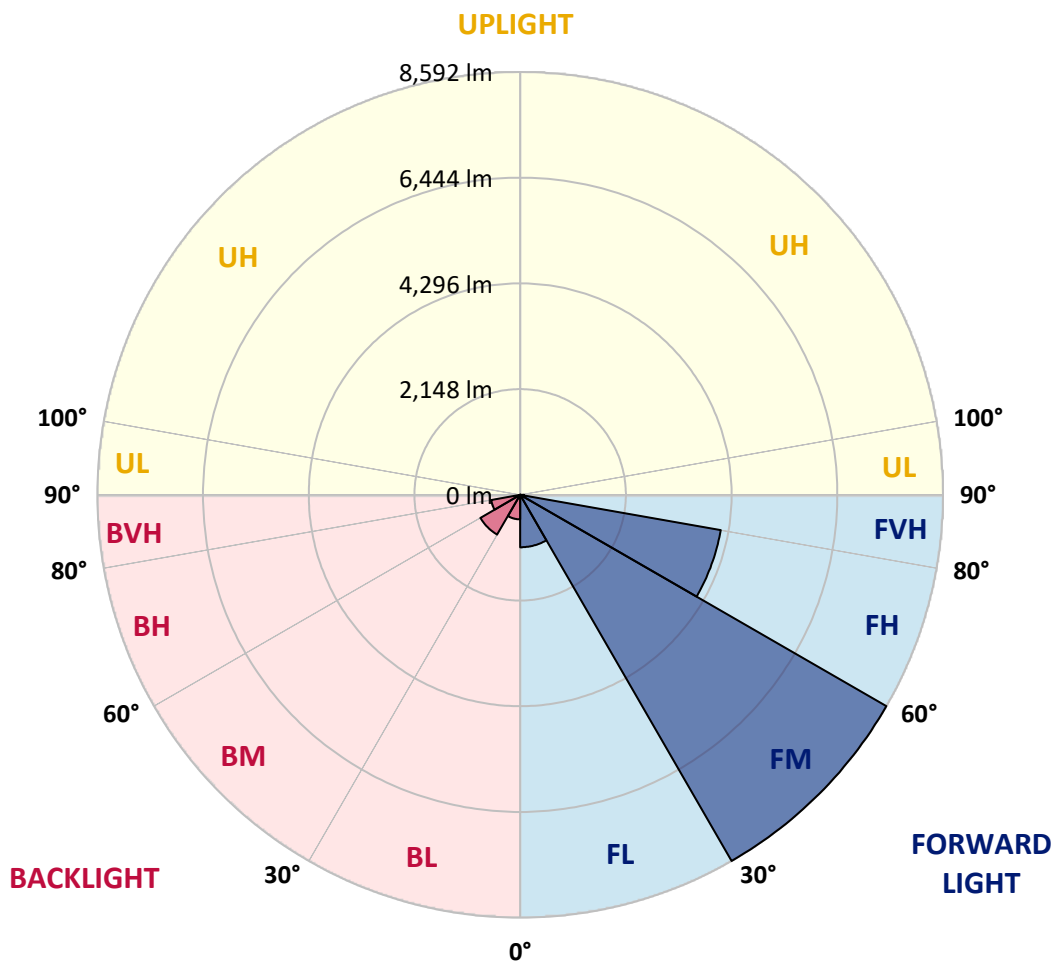
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1066.6	6.7			
FM	(30°-60°)	8592.5	54.0			
FH	(60°-80°)	4139.2	26.0			G2/5000
FVH	(80°-90°)	76.6	0.5			G1/100
BL	(0°-30°)	497.8	3.1	B1/500		
BM	(30°-60°)	933.8	5.9	B1/1000		
BH	(60°-80°)	599.0	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°	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4
2.5°	1967.2	1963.3	1959.5	1955.6	1955.6	1951.7	1947.7	1939.9	1932.0	1924.3	1920.4
5°	2002.5	1998.5	1994.7	1998.5	1994.7	1994.7	1990.8	1982.9	1975.1	1963.3	1951.7
7.5°	2029.8	2026.0	2022.1	2026.0	2029.8	2033.7	2037.7	2029.8	2026.0	2010.3	1998.5
10°	2065.0	2061.1	2057.3	2065.0	2065.0	2084.6	2088.6	2084.6	2080.7	2069.0	2049.4
12.5°	2115.9	2119.9	2119.9	2127.6	2135.4	2158.9	2166.7	2155.1	2155.1	2139.4	2115.9
15°	2209.8	2209.8	2209.8	2217.6	2221.5	2252.7	2260.6	2248.9	2256.7	2229.3	2205.9
17.5°	2299.7	2303.7	2311.5	2327.1	2327.1	2354.5	2370.1	2370.1	2385.7	2350.5	2319.2
20°	2389.7	2393.6	2405.4	2440.6	2440.6	2475.7	2503.1	2514.8	2530.5	2495.3	2440.6
22.5°	2487.5	2487.5	2507.0	2561.8	2550.0	2620.4	2671.2	2690.9	2706.5	2659.6	2573.5
25°	2636.0	2620.4	2636.0	2686.9	2679.1	2776.9	2870.7	2890.3	2909.9	2855.1	2726.1
27.5°	2917.7	2894.2	2839.5	2843.4	2843.4	2956.8	3089.7	3117.1	3128.9	3081.9	2921.5
30°	3480.9	3480.9	3277.5	3140.6	3050.6	3152.3	3340.0	3387.0	3402.6	3332.3	3121.0
32.5°	4462.5	4462.5	4087.1	3739.0	3398.8	3398.8	3613.9	3699.9	3715.6	3633.4	3387.0
35°	5714.1	5706.3	5143.1	4666.0	4001.1	3750.8	3934.6	4079.3	4126.2	4016.7	3731.2
37.5°	7043.9	6993.0	6386.8	5839.3	4928.0	4314.0	4368.7	4560.3	4603.4	4513.4	4177.0
40°	8123.4	8064.6	7575.8	7118.2	6124.8	5213.5	4994.5	5170.5	5221.3	5096.1	4708.9
42.5°	9101.1	8956.4	8620.1	8291.5	7501.5	6770.1	5827.5	5897.9	5952.7	5819.7	5307.4
45°	9809.1	9586.1	9414.0	9312.3	8893.8	8479.2	6907.0	6766.2	6785.7	6621.5	5960.5
47.5°	9828.6	9672.1	9687.8	9953.7	10125.9	10110.2	8311.1	7810.4	7736.2	7462.4	6656.6
50°	8890.0	8979.9	9265.4	10024.1	10955.0	11518.2	9981.1	9046.4	8823.5	8330.6	7349.0
52.5°	7325.5	7466.3	8002.1	9281.0	11076.2	12445.1	11713.7	10458.2	10059.4	9191.1	7880.8
55°	5737.6	5745.4	6308.6	7611.0	10266.6	12613.3	13098.3	12011.0	11400.9	9844.3	8232.9
57.5°	3946.3	4161.4	4877.1	5753.2	8440.2	11776.3	13618.4	13215.6	12429.5	10247.1	8479.2
60°	2585.2	2597.0	3430.1	4443.0	5745.4	9582.2	13301.6	13853.1	13262.6	10485.7	8647.4
62°	1822.6	1842.1	2358.4	3629.5	4329.5	6867.9	12601.5	13986.1	13731.9	10626.4	8823.5
62.5°	1689.6	1705.3	2139.4	3426.2	4067.6	6160.0	12351.2	13954.8	13802.3	10673.4	8886.0
65°	1239.8	1239.8	1400.2	2354.5	2980.3	3328.4	10466.1	13332.9	13708.4	11048.9	9120.7
67.5°	958.2	966.1	1020.8	1451.1	2248.9	2018.1	6680.2	11932.7	12730.6	11604.3	9253.6
70°	825.2	821.3	860.4	962.1	1623.1	1341.5	2941.2	9312.3	10661.7	11463.4	9132.4
72.5°	610.1	614.1	704.0	844.8	1130.3	872.2	1329.7	4943.6	6914.8	8972.1	7826.1
75°	391.1	395.1	496.7	664.9	813.6	571.0	766.6	1474.5	2831.6	4974.9	4787.2
77.5°	262.1	269.9	324.6	465.4	711.8	355.9	481.1	618.0	852.6	1865.6	1717.0
80°	176.0	176.0	207.2	312.9	449.8	297.3	258.1	410.7	441.9	578.9	289.4
82.5°	117.3	117.3	136.9	207.2	293.4	266.0	156.4	222.9	258.1	289.4	101.7
85°	70.4	70.4	93.9	129.1	191.6	148.6	101.7	125.1	133.0	183.8	54.7
87.5°	43.1	39.1	62.6	89.9	101.7	89.9	66.5	66.5	70.4	101.7	27.4
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°	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4	1916.4
2.5°	1912.5	1908.6	1904.7	1896.9	1885.2	1877.3	1869.5	1861.7	1853.9	1853.9	1865.6
5°	1947.7	1936.0	1920.4	1904.7	1881.2	1865.6	1853.9	1838.2	1830.4	1830.4	1834.4
7.5°	1990.8	1979.0	1951.7	1924.3	1889.1	1861.7	1834.4	1799.1	1771.8	1760.0	1771.8
10°	2037.7	2022.1	1982.9	1939.9	1900.7	1830.4	1740.4	1630.9	1537.1	1494.0	1513.6
12.5°	2096.3	2076.8	2029.8	1971.2	1881.2	1709.1	1486.2	1232.0	1071.6	997.4	1012.9
15°	2182.4	2155.1	2088.6	1998.5	1799.1	1427.5	1063.9	770.5	621.9	559.2	567.1
17.5°	2284.0	2248.9	2158.9	1990.8	1587.9	1028.6	633.6	449.8	387.2	371.5	371.5
20°	2393.6	2346.6	2229.3	1932.0	1267.2	645.4	395.1	344.2	320.7	308.9	308.9
22.5°	2507.0	2444.4	2288.0	1795.2	903.5	402.8	324.6	289.4	262.1	250.3	250.3
25°	2643.9	2561.8	2346.6	1556.6	574.9	324.6	277.7	242.4	215.1	199.5	203.4
27.5°	2804.2	2698.6	2397.5	1259.4	371.5	281.6	230.8	195.6	172.1	164.3	164.3
30°	2972.4	2847.3	2409.3	942.5	301.2	242.4	191.6	160.4	144.7	136.9	136.9
32.5°	3203.2	3038.9	2374.1	625.7	254.2	203.4	160.4	133.0	121.2	117.3	117.3
35°	3508.2	3289.2	2291.9	387.2	215.1	168.2	133.0	117.3	105.6	101.7	101.7
37.5°	3895.5	3637.3	2147.2	266.0	183.8	136.9	113.4	101.7	93.9	89.9	89.9
40°	4411.7	4059.7	1959.5	230.8	156.4	117.3	97.8	89.9	82.1	82.1	82.1
42.5°	4959.3	4572.1	1717.0	203.4	133.0	101.7	86.0	78.3	74.3	70.4	70.4
45°	5557.7	5096.1	1415.9	179.9	113.4	89.9	78.3	66.5	62.6	62.6	62.6
47.5°	6152.1	5635.8	1087.3	156.4	97.8	78.3	66.5	58.7	54.7	50.8	50.8
50°	6762.3	6124.8	797.9	136.9	86.0	70.4	58.7	50.8	43.1	39.1	39.1
52.5°	7204.2	6418.1	582.8	117.3	74.3	58.7	47.0	39.1	31.3	27.4	27.4
55°	7528.8	6598.0	426.3	97.8	66.5	50.8	39.1	31.3	23.4	23.4	19.5
57.5°	7783.1	6684.1	320.7	86.0	58.7	43.1	31.3	23.4	19.5	15.7	15.7
60°	7978.6	6688.0	238.6	70.4	50.8	35.2	23.4	15.7	11.8	11.8	11.8
62°	8236.8	6738.8	195.6	58.7	47.0	31.3	19.5	11.8	7.8	3.9	3.9
62.5°	8311.1	6758.3	187.7	58.7	43.1	27.4	15.7	11.8	7.8	3.9	3.9
65°	8655.3	6793.6	144.7	47.0	35.2	23.4	11.8	7.8	0.0	0.0	0.0
67.5°	8968.1	6738.8	105.6	35.2	27.4	15.7	11.8	3.9	0.0	0.0	0.0
70°	8936.9	6363.4	74.3	23.4	19.5	11.8	7.8	0.0	0.0	0.0	0.0
72.5°	7364.6	4763.7	50.8	19.5	11.8	7.8	3.9	0.0	0.0	0.0	0.0
75°	4446.9	2084.6	35.2	11.8	11.8	7.8	3.9	0.0	0.0	0.0	0.0
77.5°	1458.8	754.8	23.4	7.8	7.8	3.9	3.9	0.0	0.0	0.0	0.0
80°	238.6	125.1	11.8	7.8	7.8	3.9	3.9	0.0	0.0	0.0	0.0
82.5°	74.3	31.3	7.8	7.8	3.9	3.9	0.0	0.0	0.0	0.0	0.0
85°	27.4	11.8	7.8	7.8	3.9	3.9	0.0	0.0	0.0	0.0	0.0
87.5°	11.8	7.8	7.8	7.8	3.9	3.9	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)