

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: P258068

Luminaire Tested: **ARCH-L-AF72-120-D-U-T2U-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258068  
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-AF72-120-D-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 530mA 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: 11724 lumens  
Efficiency: N/A  
Efficacy: 95.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G2

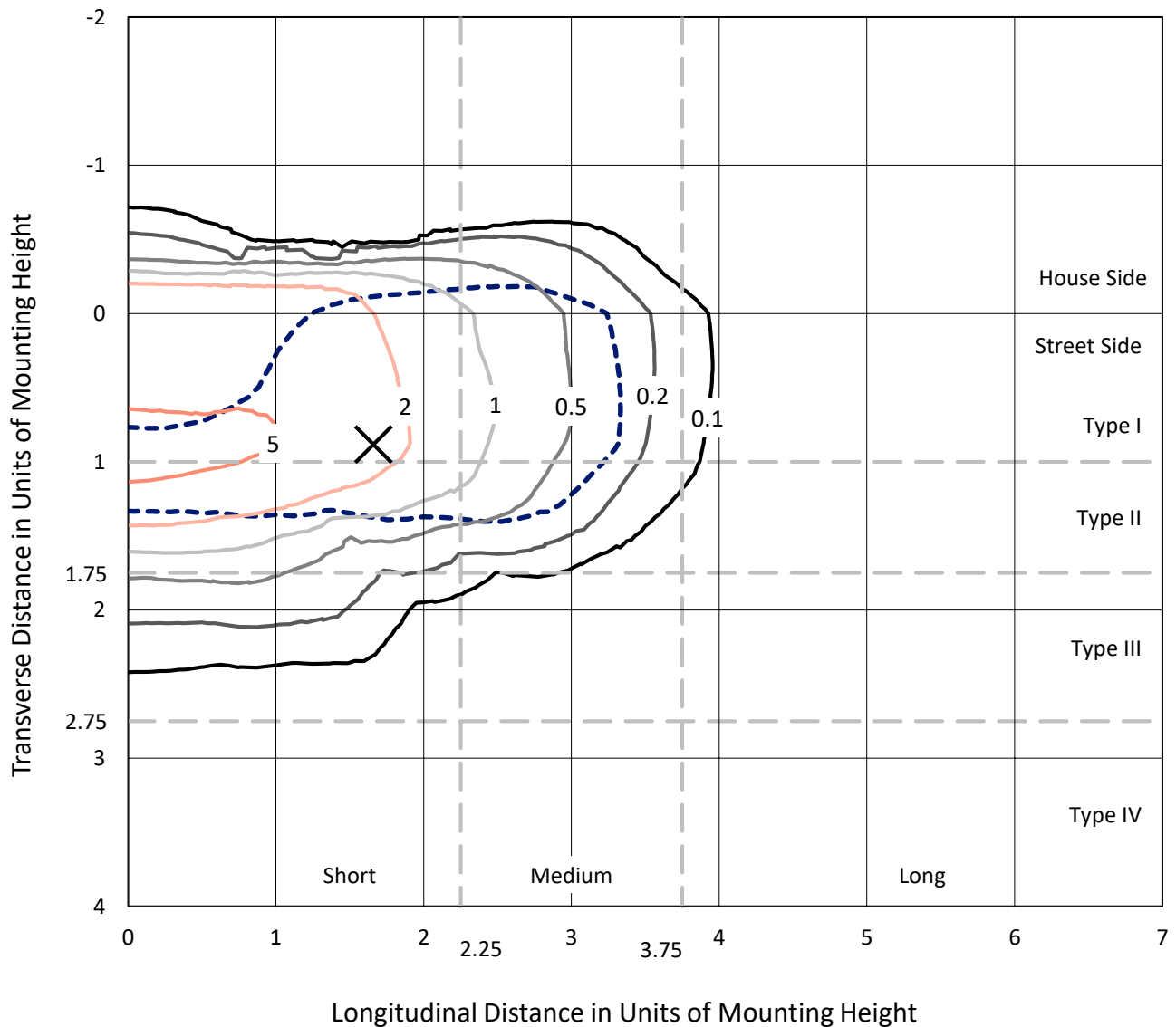
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

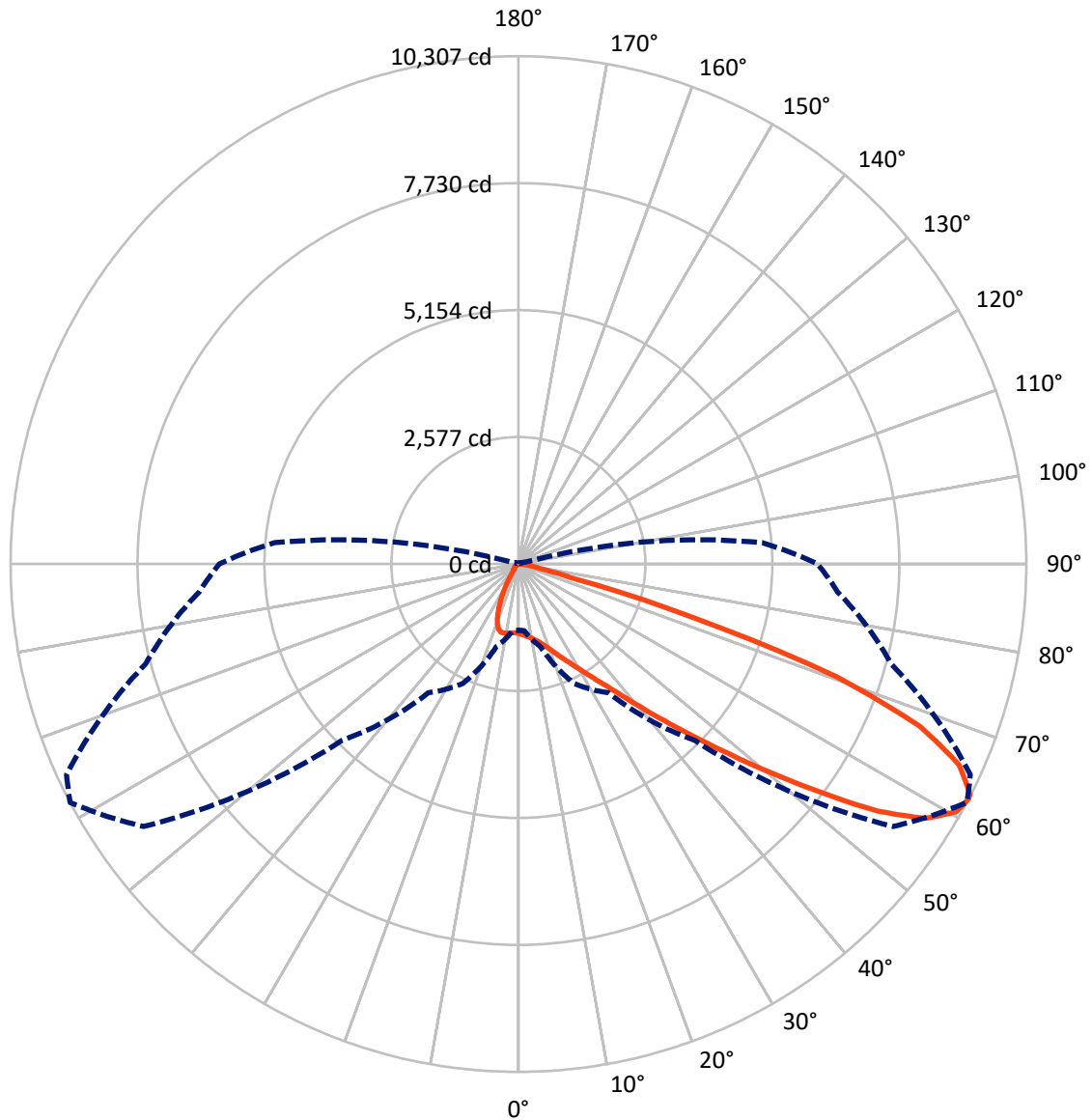
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.7 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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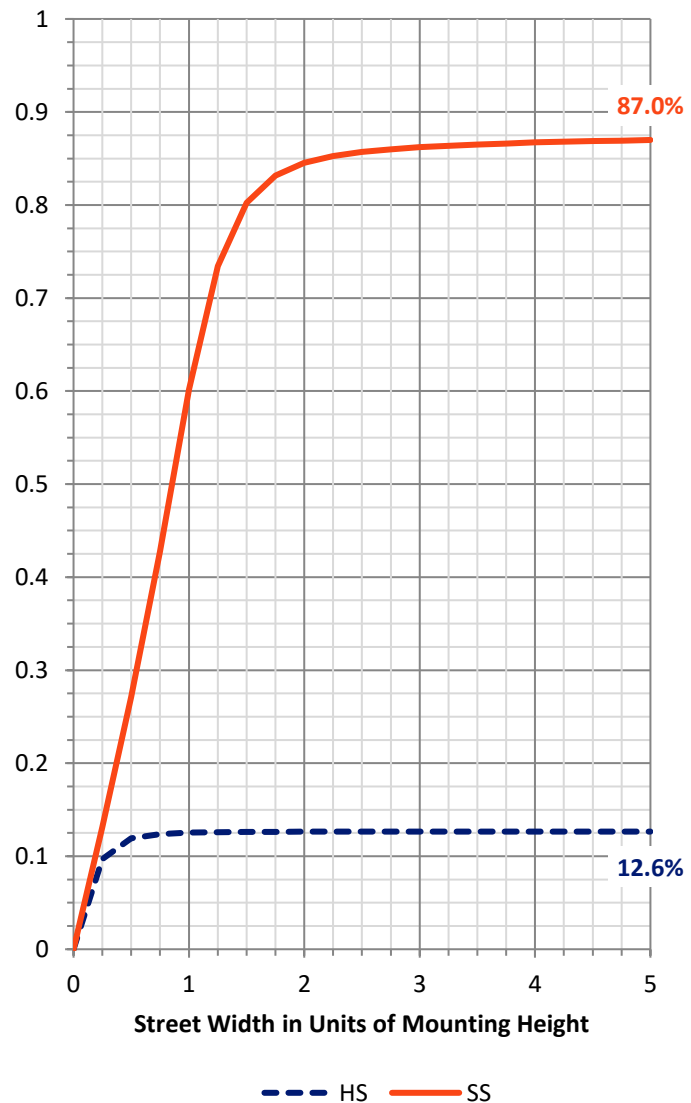
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1499.1	0.0	1499.1
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	10225.0	0.0	10225.0
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	11724.0	0.0	11724.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.9	1.2
10°-20°	379.5	3.2
20°-30°	637.4	5.4
30°-40°	1221.9	10.4
40°-50°	2495.7	21.3
50°-60°	3302.7	28.2
60°-70°	2565.7	21.9
70°-80°	926.1	7.9
80°-90°	59.0	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°	11724.0	100.0
0°-180°	11724.0	100.0



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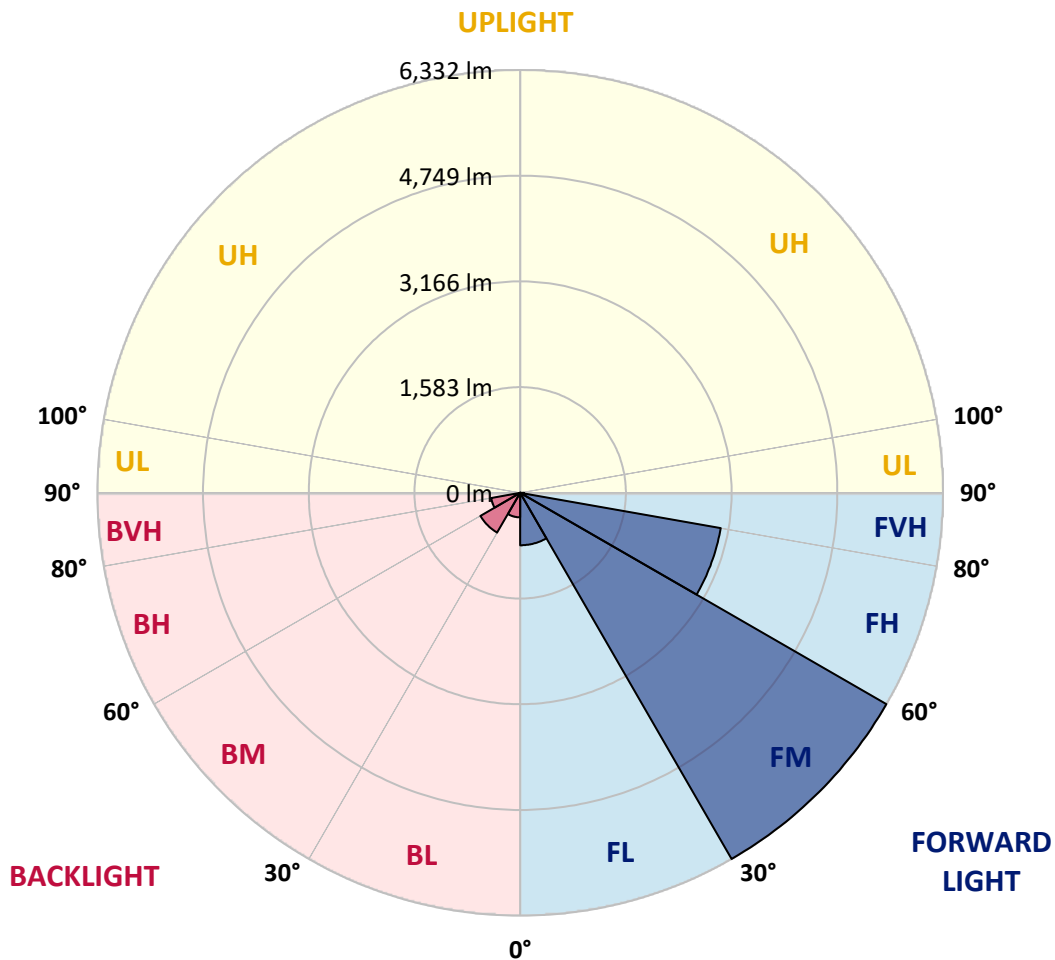
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	786.0	6.7			
FM	(30°-60°)	6332.2	54.0			
FH	(60°-80°)	3050.3	26.0			G2/5000
FVH	(80°-90°)	56.5	0.5			G1/100
BL	(0°-30°)	366.9	3.1	B1/500		
BM	(30°-60°)	688.2	5.9	B1/1000		
BH	(60°-80°)	441.4	3.8	B1/500		G1/500
BVH	(80°-90°)	2.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3
2.5°	1449.8	1446.9	1444.0	1441.1	1441.1	1438.3	1435.4	1429.6	1423.8	1418.1	1415.2
5°	1475.7	1472.8	1470.0	1472.8	1470.0	1470.0	1467.1	1461.3	1455.6	1446.9	1438.3
7.5°	1495.9	1493.0	1490.1	1493.0	1495.9	1498.8	1501.7	1495.9	1493.0	1481.4	1472.8
10°	1521.8	1519.0	1516.1	1521.8	1521.8	1536.3	1539.1	1536.3	1533.4	1524.7	1510.3
12.5°	1559.3	1562.1	1562.1	1568.0	1573.7	1591.0	1596.8	1588.1	1588.1	1576.6	1559.3
15°	1628.4	1628.4	1628.4	1634.3	1637.1	1660.1	1666.0	1657.3	1663.1	1642.9	1625.6
17.5°	1694.8	1697.7	1703.4	1715.0	1715.0	1735.1	1746.7	1746.7	1758.1	1732.3	1709.1
20°	1761.1	1764.0	1772.6	1798.6	1798.6	1824.4	1844.7	1853.3	1864.8	1838.9	1798.6
22.5°	1833.1	1833.1	1847.6	1887.9	1879.3	1931.1	1968.6	1983.0	1994.5	1960.0	1896.6
25°	1942.7	1931.1	1942.7	1980.1	1974.4	2046.4	2115.6	2130.0	2144.4	2104.1	2009.0
27.5°	2150.1	2132.9	2092.5	2095.4	2095.4	2179.0	2277.0	2297.1	2305.8	2271.3	2153.1
30°	2565.3	2565.3	2415.4	2314.4	2248.1	2323.1	2461.4	2496.0	2507.6	2455.7	2300.0
32.5°	3288.7	3288.7	3012.0	2755.4	2504.7	2504.7	2663.3	2726.7	2738.1	2677.7	2496.0
35°	4211.0	4205.2	3790.2	3438.5	2948.6	2764.1	2899.6	3006.2	3040.8	2960.1	2749.7
37.5°	5191.0	5153.5	4706.8	4303.2	3631.7	3179.1	3219.5	3360.7	3392.4	3326.1	3078.3
40°	5986.5	5943.2	5583.0	5245.7	4513.7	3842.1	3680.7	3810.4	3847.8	3755.6	3470.3
42.5°	6707.1	6600.4	6352.5	6110.4	5528.2	4989.2	4294.6	4346.4	4386.8	4288.8	3911.3
45°	7228.8	7064.5	6937.7	6862.7	6554.3	6248.8	5090.1	4986.4	5000.7	4879.7	4392.6
47.5°	7243.1	7127.8	7139.4	7335.4	7462.2	7450.7	6124.8	5755.9	5701.1	5499.4	4905.7
50°	6551.4	6617.7	6828.1	7387.2	8073.2	8488.2	7355.5	6666.7	6502.4	6139.2	5415.8
52.5°	5398.5	5502.2	5897.1	6839.7	8162.6	9171.4	8632.4	7707.2	7413.2	6773.4	5807.8
55°	4228.3	4234.1	4649.1	5608.9	7565.9	9295.3	9652.8	8851.5	8401.8	7254.7	6067.2
57.5°	2908.2	3066.7	3594.2	4239.8	6220.0	8678.5	10036.1	9739.2	9159.9	7551.5	6248.8
60°	1905.1	1913.8	2527.7	3274.3	4234.1	7061.5	9802.6	10209.0	9773.8	7727.4	6372.7
62°	1343.1	1357.6	1738.0	2674.7	3190.7	5061.3	9286.7	10307.0	10119.6	7831.1	6502.4
62.5°	1245.1	1256.7	1576.6	2524.8	2997.6	4539.5	9102.2	10283.9	10171.5	7865.7	6548.5
65°	913.7	913.7	1031.9	1735.1	2196.3	2452.8	7712.9	9825.6	10102.4	8142.4	6721.5
67.5°	706.1	711.9	752.3	1069.3	1657.3	1487.3	4923.0	8793.8	9381.8	8551.7	6819.5
70°	608.1	605.3	634.1	709.0	1196.1	988.6	2167.4	6862.7	7857.1	8447.9	6730.1
72.5°	449.6	452.6	518.8	622.6	833.0	642.7	980.0	3643.2	5095.8	6611.9	5767.4
75°	288.3	291.1	366.0	490.0	599.6	420.8	565.0	1086.6	2086.7	3666.3	3527.9
77.5°	193.1	198.9	239.3	343.0	524.6	262.3	354.6	455.4	628.3	1374.8	1265.3
80°	129.7	129.7	152.7	230.6	331.4	219.0	190.3	302.6	325.7	426.6	213.3
82.5°	86.4	86.4	100.9	152.7	216.1	196.0	115.3	164.3	190.3	213.3	75.0
85°	51.9	51.9	69.2	95.1	141.3	109.6	75.0	92.3	98.0	135.4	40.3
87.5°	31.7	28.8	46.1	66.3	75.0	66.3	49.0	49.0	51.9	75.0	20.2
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°	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3	1412.3
2.5°	1409.4	1406.6	1403.7	1397.9	1389.3	1383.5	1377.7	1372.0	1366.2	1366.2	1374.8
5°	1435.4	1426.7	1415.2	1403.7	1386.4	1374.8	1366.2	1354.7	1348.9	1348.9	1351.8
7.5°	1467.1	1458.4	1438.3	1418.1	1392.1	1372.0	1351.8	1325.8	1305.7	1297.0	1305.7
10°	1501.7	1490.1	1461.3	1429.6	1400.8	1348.9	1282.6	1201.9	1132.7	1101.0	1115.4
12.5°	1544.9	1530.4	1495.9	1452.7	1386.4	1259.6	1095.3	907.9	789.7	735.0	746.5
15°	1608.3	1588.1	1539.1	1472.8	1325.8	1052.0	784.0	567.8	458.3	412.1	418.0
17.5°	1683.3	1657.3	1591.0	1467.1	1170.2	758.0	467.0	331.4	285.3	273.8	273.8
20°	1764.0	1729.4	1642.9	1423.8	933.9	475.6	291.1	253.6	236.3	227.7	227.7
22.5°	1847.6	1801.4	1686.1	1323.0	665.8	296.9	239.3	213.3	193.1	184.4	184.4
25°	1948.4	1887.9	1729.4	1147.1	423.7	239.3	204.7	178.7	158.6	147.0	149.9
27.5°	2066.6	1988.7	1766.8	928.1	273.8	207.6	170.0	144.1	126.8	121.0	121.0
30°	2190.5	2098.3	1775.4	694.6	222.0	178.7	141.3	118.2	106.7	100.9	100.9
32.5°	2360.6	2239.5	1749.6	461.1	187.3	149.9	118.2	98.0	89.3	86.4	86.4
35°	2585.4	2424.0	1689.0	285.3	158.6	124.0	98.0	86.4	77.8	75.0	75.0
37.5°	2870.7	2680.5	1582.4	196.0	135.4	100.9	83.6	75.0	69.2	66.3	66.3
40°	3251.2	2991.8	1444.0	170.0	115.3	86.4	72.0	66.3	60.6	60.6	60.6
42.5°	3654.7	3369.4	1265.3	149.9	98.0	75.0	63.4	57.7	54.7	51.9	51.9
45°	4095.7	3755.6	1043.4	132.6	83.6	66.3	57.7	49.0	46.1	46.1	46.1
47.5°	4533.8	4153.4	801.3	115.3	72.0	57.7	49.0	43.3	40.3	37.4	37.4
50°	4983.4	4513.7	588.0	100.9	63.4	51.9	43.3	37.4	31.7	28.8	28.8
52.5°	5309.1	4729.8	429.4	86.4	54.7	43.3	34.6	28.8	23.0	20.2	20.2
55°	5548.4	4862.4	314.1	72.0	49.0	37.4	28.8	23.0	17.3	17.3	14.4
57.5°	5735.7	4925.8	236.3	63.4	43.3	31.7	23.0	17.3	14.4	11.6	11.6
60°	5879.8	4928.7	175.8	51.9	37.4	26.0	17.3	11.6	8.7	8.7	8.7
62°	6070.1	4966.1	144.1	43.3	34.6	23.0	14.4	8.7	5.7	2.9	2.9
62.5°	6124.8	4980.5	138.3	43.3	31.7	20.2	11.6	8.7	5.7	2.9	2.9
65°	6378.5	5006.5	106.7	34.6	26.0	17.3	8.7	5.7	0.0	0.0	0.0
67.5°	6609.1	4966.1	77.8	26.0	20.2	11.6	8.7	2.9	0.0	0.0	0.0
70°	6586.0	4689.4	54.7	17.3	14.4	8.7	5.7	0.0	0.0	0.0	0.0
72.5°	5427.4	3510.6	37.4	14.4	8.7	5.7	2.9	0.0	0.0	0.0	0.0
75°	3277.1	1536.3	26.0	8.7	8.7	5.7	2.9	0.0	0.0	0.0	0.0
77.5°	1075.1	556.3	17.3	5.7	5.7	2.9	2.9	0.0	0.0	0.0	0.0
80°	175.8	92.3	8.7	5.7	5.7	2.9	2.9	0.0	0.0	0.0	0.0
82.5°	54.7	23.0	5.7	5.7	2.9	2.9	0.0	0.0	0.0	0.0	0.0
85°	20.2	8.7	5.7	5.7	2.9	2.9	0.0	0.0	0.0	0.0	0.0
87.5°	8.7	5.7	5.7	5.7	2.9	2.9	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)