

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: P265633

Luminaire Tested: **ARCH-L-AF72-150-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265633  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-150-D-U-T4W-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12551.2 lumens  
Efficiency: N/A  
Efficacy: 82.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G3

Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

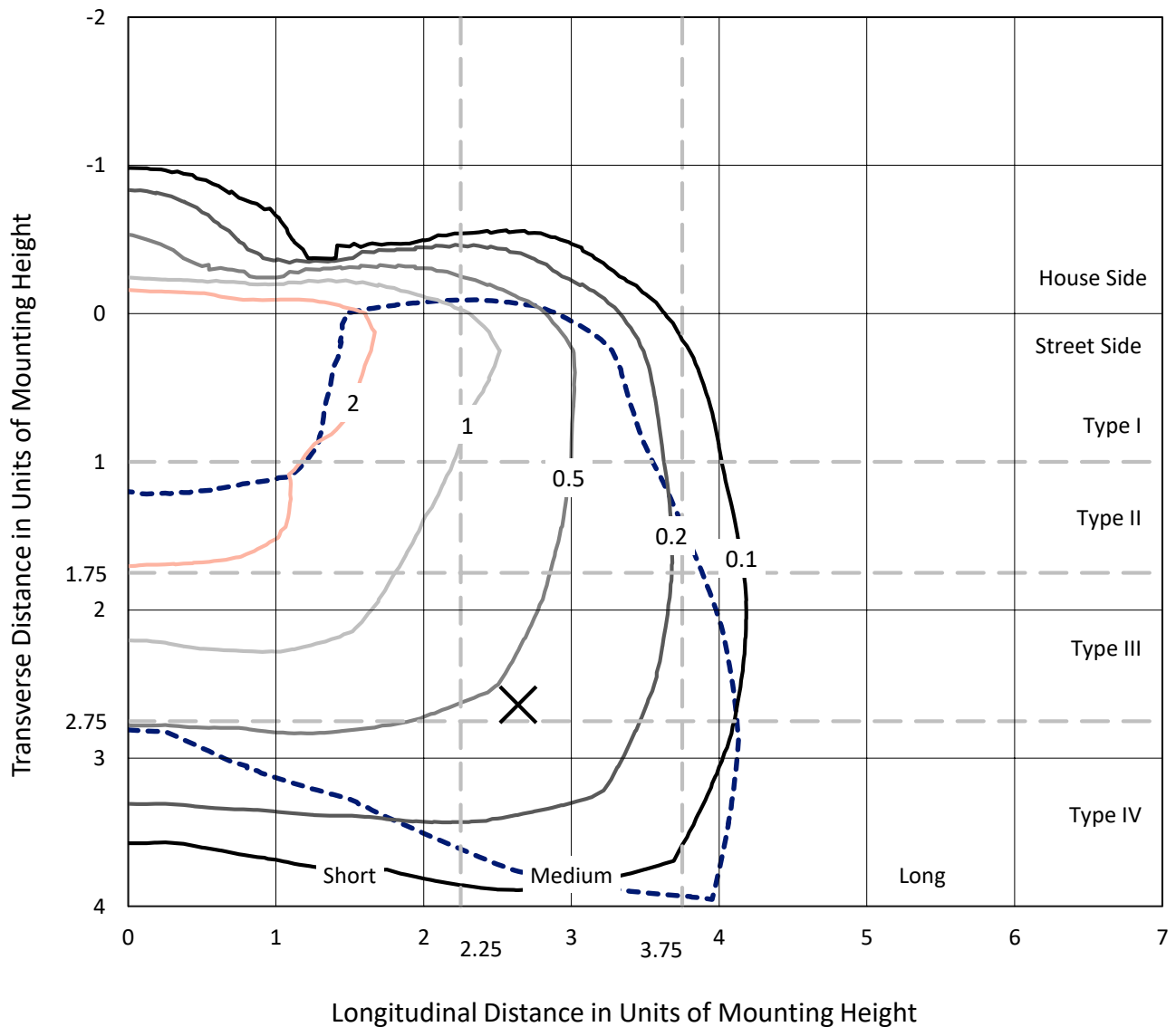


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

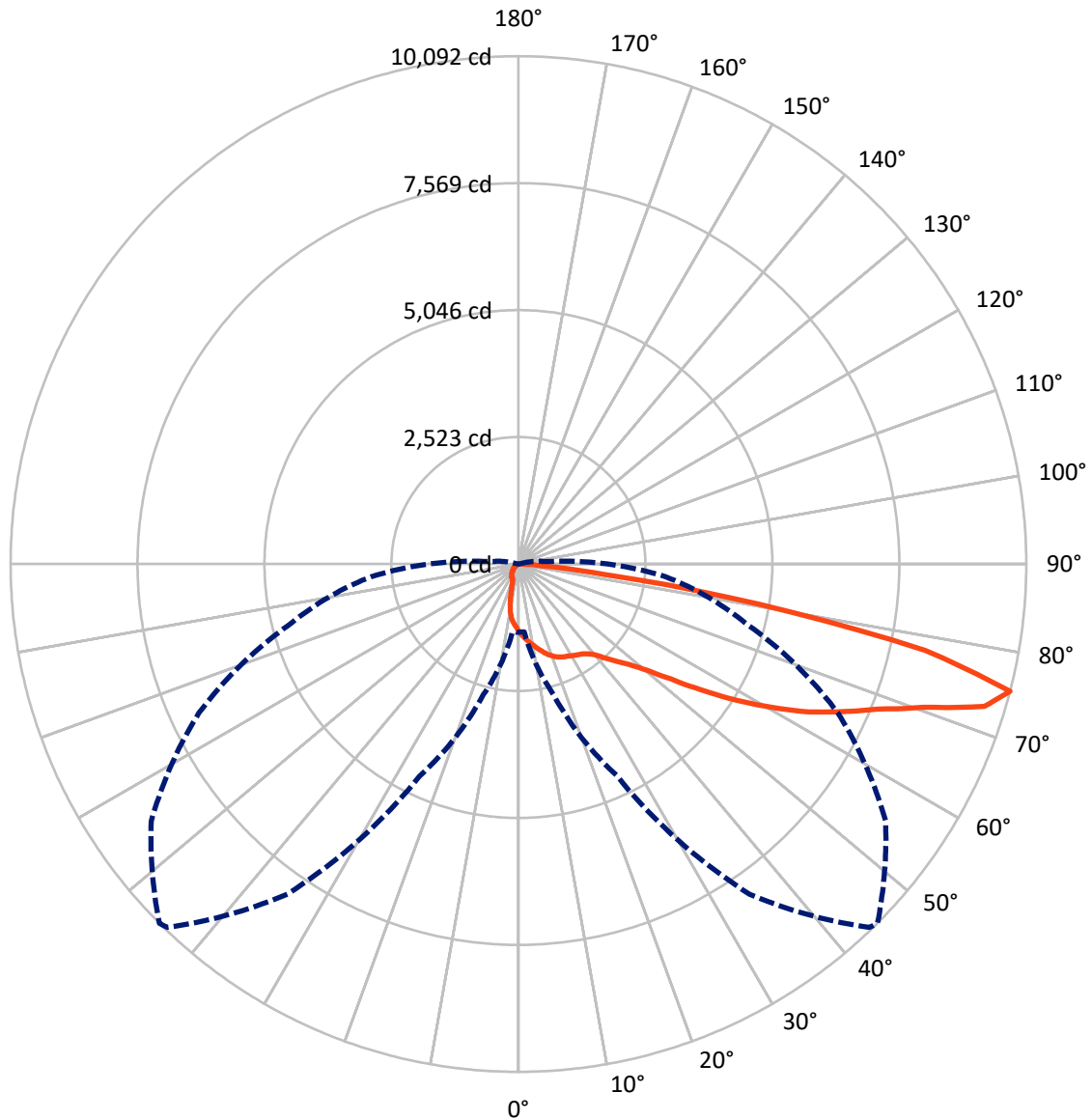


Based on 20 foot mounting height. Maximum calculated value = 4.5 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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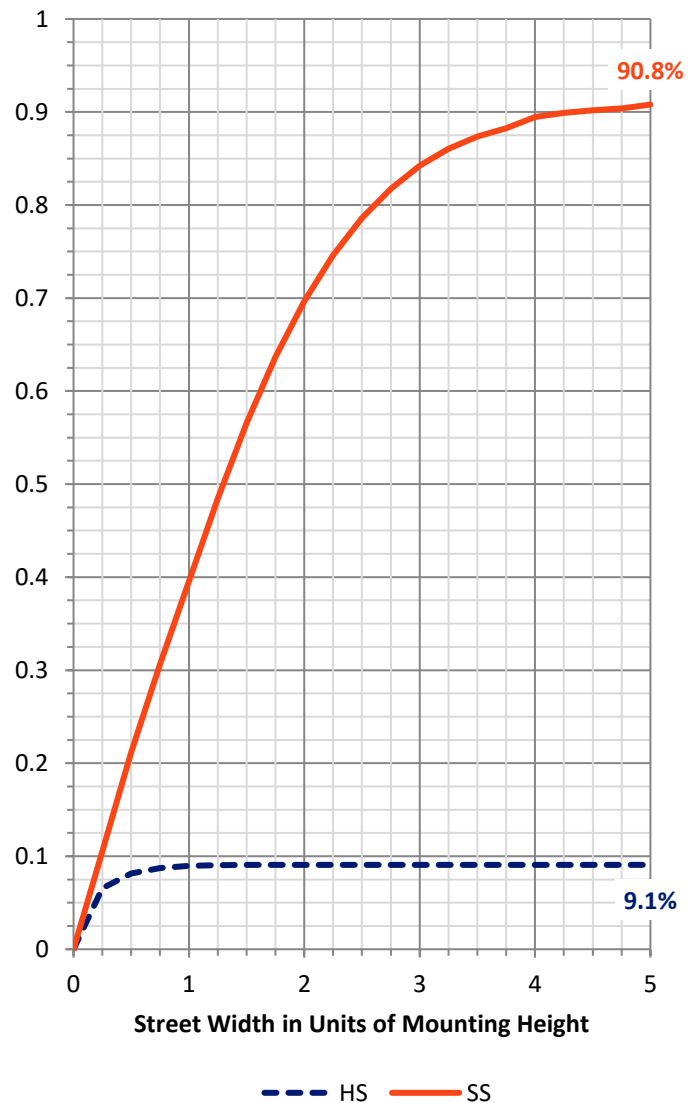
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1148.1	0.0	1148.1
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	11403.1	0.0	11403.1
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	12551.2	0.0	12551.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.7	1.0
10°-20°	358.9	2.9
20°-30°	594.4	4.7
30°-40°	860.3	6.9
40°-50°	1408.7	11.2
50°-60°	2510.0	20.0
60°-70°	3690.0	29.4
70°-80°	2783.8	22.2
80°-90°	218.4	1.7
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°	12551.2	100.0
0°-180°	12551.2	100.0



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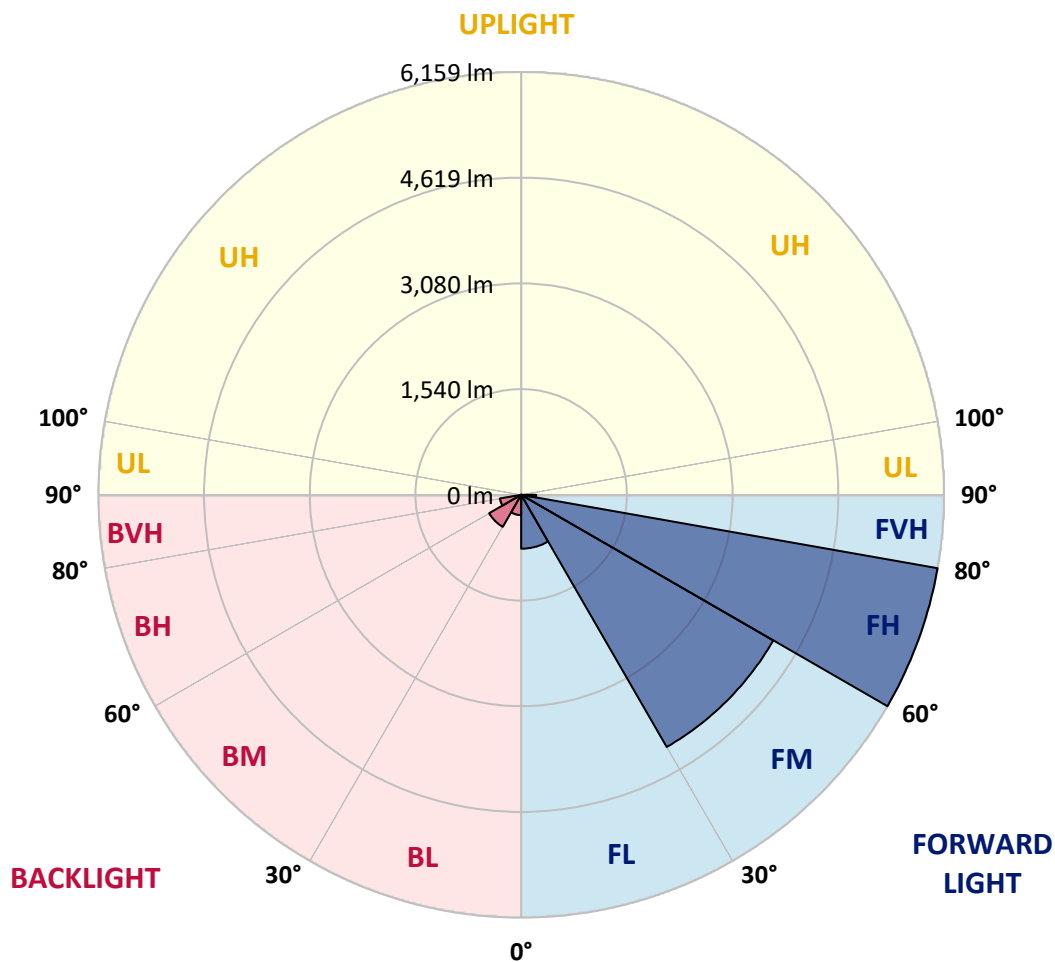
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	785.0	6.3			
FM	(30°-60°)	4241.0	33.8			
FH	(60°-80°)	6159.3	49.1			G3/7500
FVH	(80°-90°)	217.8	1.7			G2/225
BL	(0°-30°)	295.0	2.4	B1/500		
BM	(30°-60°)	538.0	4.3	B1/1000		
BH	(60°-80°)	314.5	2.5	B1/500		G1/500
BVH	(80°-90°)	0.6	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-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3
2.5°	1458.3	1458.3	1455.3	1452.3	1437.5	1422.6	1419.6	1410.7	1384.0	1366.2	1348.4
5°	1579.9	1583.1	1577.1	1562.2	1529.5	1496.8	1493.9	1470.2	1419.6	1384.0	1345.4
7.5°	1695.8	1701.7	1686.9	1660.2	1621.6	1574.1	1571.0	1526.6	1461.3	1410.7	1354.3
10°	1793.8	1793.8	1773.1	1740.3	1698.9	1648.3	1642.5	1591.8	1517.6	1455.3	1381.1
12.5°	1900.8	1897.8	1868.0	1823.6	1775.9	1728.5	1725.6	1663.2	1591.8	1511.7	1419.6
15°	1998.8	1992.8	1954.3	1912.6	1862.1	1811.7	1808.6	1746.3	1672.0	1577.1	1476.1
17.5°	2052.3	2049.3	2013.6	1972.0	1930.5	1891.9	1888.9	1823.6	1743.4	1645.3	1532.5
20°	2061.2	2064.1	2034.4	1998.8	1975.1	1954.3	1954.3	1894.9	1808.6	1704.8	1591.8
22.5°	2064.1	2073.0	2052.3	2004.7	1998.8	2001.8	2007.7	1960.2	1871.1	1773.1	1654.3
25°	2084.8	2096.7	2081.9	2025.5	2019.6	2040.4	2046.2	2025.5	1945.3	1847.4	1725.6
27.5°	2126.5	2138.3	2126.5	2055.2	2046.2	2067.1	2073.0	2084.8	2025.5	1918.6	1799.8
30°	2209.7	2212.6	2185.8	2096.7	2078.9	2105.6	2114.6	2147.3	2099.8	1987.0	1871.1
32.5°	2355.1	2325.4	2245.3	2126.5	2111.6	2141.3	2150.3	2185.8	2168.1	2052.3	1945.3
35°	2652.2	2497.7	2313.6	2168.1	2153.1	2182.9	2194.7	2245.3	2254.1	2144.3	2037.4
37.5°	2649.2	2509.7	2473.9	2248.3	2227.4	2248.3	2263.1	2325.4	2361.1	2266.1	2171.1
40°	2836.3	2776.9	2776.9	2399.7	2331.5	2361.1	2375.9	2438.3	2500.7	2426.4	2328.4
42.5°	3424.3	3385.7	3344.2	2690.8	2476.9	2560.1	2569.1	2607.6	2681.9	2658.2	2542.3
45°	4080.7	4045.1	3884.7	3183.9	2726.4	2741.3	2762.1	2824.5	2931.3	2975.8	2839.3
47.5°	4594.6	4558.9	4422.3	3777.8	3115.5	2984.8	2984.8	3106.6	3272.9	3385.7	3255.1
50°	5007.3	4965.7	4882.6	4410.4	3753.9	3335.2	3317.4	3460.0	3706.4	3881.8	3792.6
52.5°	5408.2	5286.5	5236.0	5063.7	4475.7	3843.0	3795.6	3896.6	4238.2	4455.0	4380.7
55°	5675.6	5657.7	5604.3	5663.8	5233.0	4460.9	4419.3	4440.1	4867.7	5013.4	4921.3
57.5°	5925.0	5922.0	6040.9	6317.2	6058.7	5167.7	5102.4	5069.8	5476.5	5440.9	5521.2
60°	6233.9	6180.5	6456.7	6851.7	6816.0	5856.7	5782.5	5717.2	5942.8	5841.9	6239.8
62.5°	6248.8	6233.9	6795.3	7362.5	7567.4	6557.6	6471.5	6236.9	6349.8	6233.9	6925.9
65°	5681.5	5755.8	6937.8	7632.8	8197.0	7172.4	7068.5	6703.2	6712.0	6634.9	7733.8
67.5°	5553.9	5592.4	6545.8	7923.8	8651.4	7793.2	7695.2	7240.8	7133.8	7139.8	8211.9
70°	5236.0	5295.4	6058.7	7903.1	9010.8	8621.8	8523.7	8030.8	7772.3	7484.3	7843.6
72.5°	4000.5	4101.5	5105.3	6928.8	8912.9	9705.7	9679.1	9031.6	8027.8	6872.5	5933.9
75°	1354.3	1351.3	2681.9	4653.8	8007.0	10038.4	10091.9	8906.9	7003.1	4740.0	2946.3
77.5°	291.1	294.0	552.4	1885.9	5319.1	8060.4	8265.3	6718.1	4517.2	2111.6	674.2
80°	142.6	145.5	228.7	499.0	2126.5	4520.4	4841.1	3454.1	1669.1	421.8	112.8
82.5°	71.2	74.2	118.8	264.3	787.0	1606.8	1716.7	1271.1	478.2	237.6	56.5
85°	26.7	26.7	59.4	157.5	359.3	377.2	463.3	368.2	288.0	193.0	14.8
87.5°	6.0	6.0	32.7	77.3	160.3	118.8	118.8	112.8	175.2	130.7	6.0
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°	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3	1342.3
2.5°	1339.5	1327.5	1306.8	1286.1	1271.1	1253.3	1244.4	1235.4	1232.6	1229.6	1235.4
5°	1324.6	1306.8	1268.1	1235.4	1205.9	1182.0	1164.3	1146.3	1137.6	1131.5	1134.5
7.5°	1324.6	1298.0	1241.5	1191.0	1143.5	1093.0	1042.5	1003.9	974.1	956.3	959.3
10°	1339.5	1303.8	1229.6	1161.2	1072.1	965.1	855.4	772.3	715.8	683.2	683.2
12.5°	1372.2	1324.6	1232.6	1125.5	974.1	787.0	620.6	519.7	478.2	454.5	457.3
15°	1416.6	1360.3	1247.3	1078.1	837.5	585.1	433.6	368.2	368.2	374.2	377.2
17.5°	1467.1	1404.8	1259.2	1006.8	662.3	418.8	341.5	335.5	344.5	359.3	359.3
20°	1517.6	1449.3	1265.3	894.0	496.0	332.6	323.7	323.7	329.7	344.5	347.5
22.5°	1579.9	1505.7	1259.2	754.3	371.2	314.9	311.8	311.8	311.8	329.7	329.7
25°	1645.3	1571.0	1235.4	605.8	314.9	303.0	299.9	297.0	297.0	311.8	314.9
27.5°	1719.5	1639.3	1179.0	463.3	297.0	291.1	288.0	282.2	282.2	294.0	294.0
30°	1793.8	1716.7	1093.0	350.5	282.2	279.2	273.3	267.2	261.3	273.3	273.3
32.5°	1874.0	1796.8	980.1	279.2	261.3	261.3	258.4	249.5	243.5	249.5	252.5
35°	1980.9	1888.9	852.4	243.5	234.6	234.6	234.6	231.7	219.7	225.7	225.7
37.5°	2123.6	2016.5	703.9	225.7	213.8	207.9	207.9	207.9	199.0	201.9	201.9
40°	2304.7	2165.1	561.4	210.8	199.0	184.2	178.3	181.2	175.2	175.2	172.2
42.5°	2551.1	2325.4	421.8	199.0	187.0	166.4	154.5	151.5	145.5	142.6	142.6
45°	2904.6	2521.5	303.0	187.0	178.3	145.5	133.7	124.8	110.0	101.0	101.0
47.5°	3361.9	2744.2	225.7	175.2	169.3	127.6	112.8	95.0	74.2	68.4	68.4
50°	3920.4	2993.7	190.1	157.5	154.5	112.8	89.1	62.3	41.6	35.7	38.5
52.5°	4463.9	3228.2	169.3	139.5	136.6	98.1	65.3	32.7	17.8	17.8	17.8
55°	4921.3	3394.7	154.5	124.8	118.8	77.3	35.7	14.8	9.0	9.0	9.0
57.5°	5334.0	3489.6	139.5	110.0	95.0	53.4	14.8	6.0	6.0	3.0	3.0
60°	5711.2	3546.1	121.8	95.0	74.2	29.7	6.0	3.0	3.0	0.0	0.0
62.5°	6082.5	3587.7	103.9	77.3	56.5	11.9	3.0	3.0	0.0	0.0	0.0
65°	6364.6	3572.9	83.2	62.3	35.7	6.0	3.0	0.0	0.0	0.0	0.0
67.5°	6355.7	3370.9	62.3	47.5	17.8	3.0	0.0	0.0	0.0	0.0	0.0
70°	5684.5	2839.3	41.6	29.7	6.0	3.0	0.0	0.0	0.0	0.0	0.0
72.5°	4033.2	1820.5	26.7	17.8	3.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	1775.9	552.4	14.8	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	347.5	127.6	9.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	83.2	14.8	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	35.7	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.0	3.0	0.0	0.0	0.0	0.0	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)