

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: P237446

Luminaire Tested: **ARCH-L-AF72-130-D-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237446  
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-AF72-130-D-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 575mA 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: 13110.1 lumens  
Efficiency: N/A  
Efficacy: 98.6 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): 133  
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

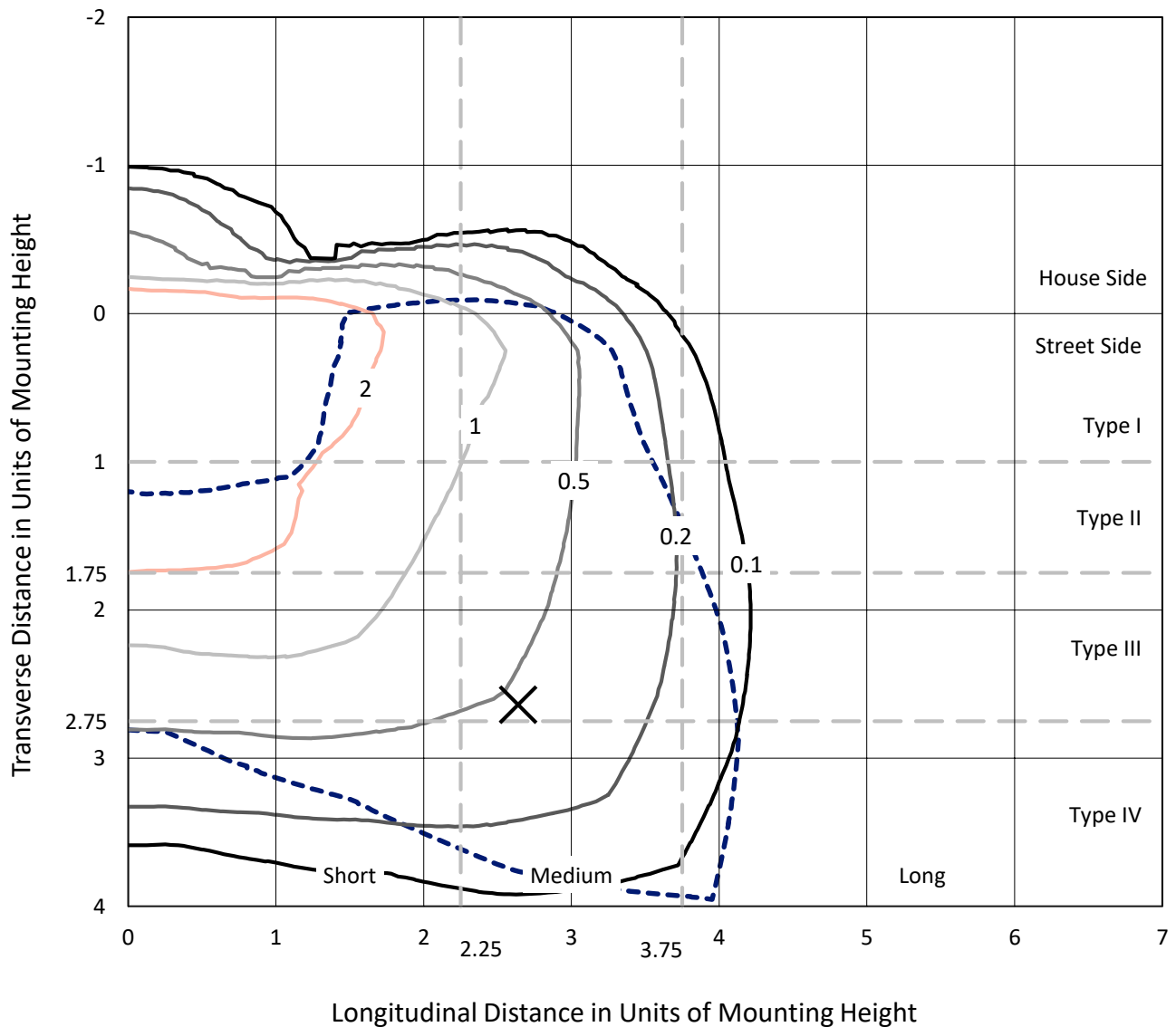


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### Iso-Footcandle Lines of Horizontal Illumination

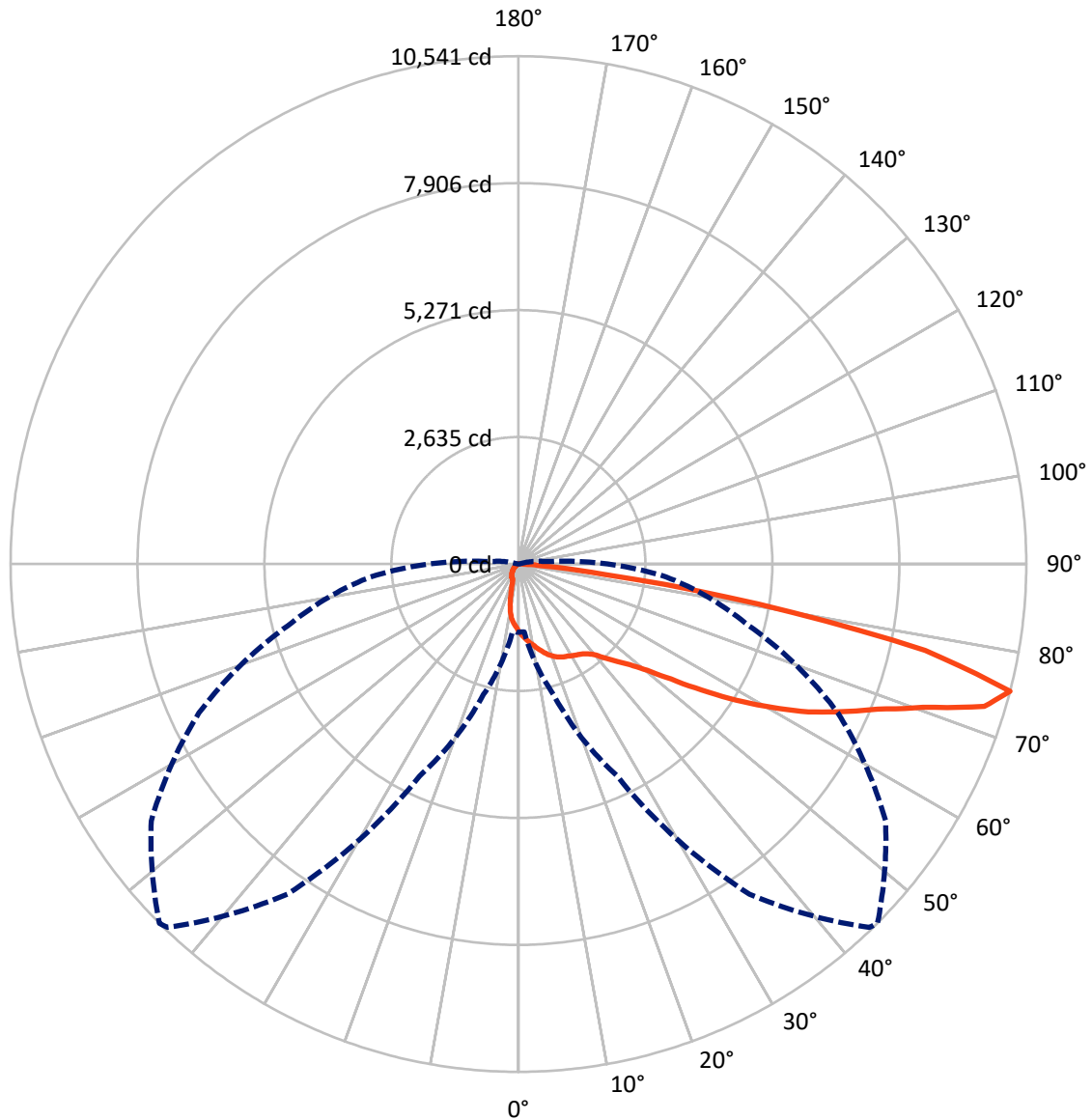
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.7 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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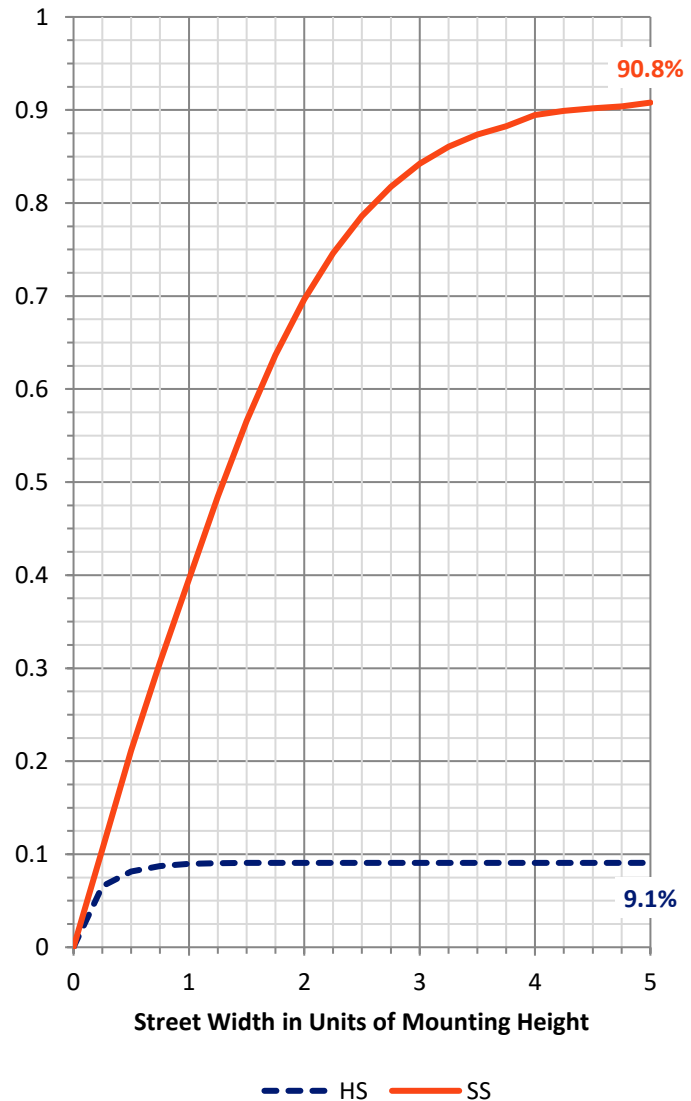
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1199.2	0.0	1199.2
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	11911.0	0.0	11911.0
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	13110.1	0.0	13110.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.3	1.0
10°-20°	374.9	2.9
20°-30°	620.9	4.7
30°-40°	898.6	6.9
40°-50°	1471.4	11.2
50°-60°	2621.8	20.0
60°-70°	3854.3	29.4
70°-80°	2907.7	22.2
80°-90°	228.1	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°	13110.1	100.0
0°-180°	13110.1	100.0



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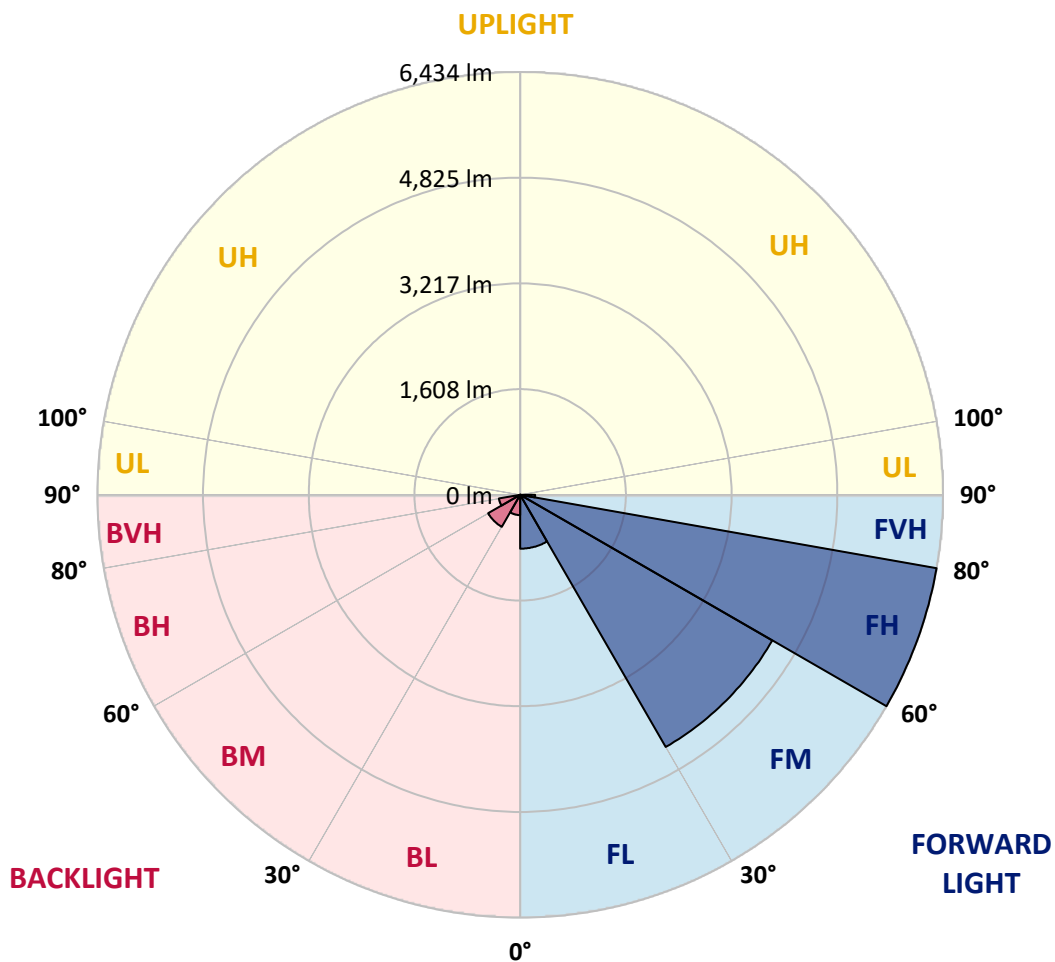
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	820.0	6.3			
FM	(30°-60°)	4429.8	33.8			
FH	(60°-80°)	6433.6	49.1			G3/7500
FVH	(80°-90°)	227.5	1.7			G3/500
BL	(0°-30°)	308.1	2.4	B1/500		
BM	(30°-60°)	561.9	4.3	B1/1000		
BH	(60°-80°)	328.4	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°	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2
2.5°	1523.2	1523.2	1520.1	1516.9	1501.5	1485.9	1482.9	1473.6	1445.6	1427.0	1408.4
5°	1650.3	1653.5	1647.3	1631.8	1597.6	1563.5	1560.4	1535.6	1482.9	1445.6	1405.3
7.5°	1771.3	1777.6	1762.0	1734.1	1693.8	1644.2	1641.1	1594.6	1526.2	1473.6	1414.6
10°	1873.7	1873.7	1852.1	1817.9	1774.5	1721.7	1715.5	1662.8	1585.3	1520.1	1442.6
12.5°	1985.4	1982.3	1951.3	1904.7	1855.1	1805.5	1802.3	1737.3	1662.8	1579.0	1482.9
15°	2087.7	2081.6	2041.3	1997.8	1945.0	1892.4	1889.3	1824.1	1746.6	1647.3	1541.8
17.5°	2143.6	2140.5	2103.3	2059.9	2016.4	1976.1	1973.0	1904.7	1821.0	1718.7	1600.7
20°	2152.9	2156.1	2125.0	2087.7	2063.0	2041.3	2041.3	1979.2	1889.3	1780.7	1662.8
22.5°	2156.1	2165.4	2143.6	2094.0	2087.7	2090.9	2097.0	2047.4	1954.3	1852.1	1728.0
25°	2177.8	2190.1	2174.7	2115.7	2109.5	2131.2	2137.5	2115.7	2032.0	1929.6	1802.3
27.5°	2221.2	2233.6	2221.2	2146.8	2137.5	2159.1	2165.4	2177.8	2115.7	2004.1	1880.0
30°	2308.1	2311.2	2283.2	2190.1	2171.5	2199.4	2208.8	2242.9	2193.3	2075.4	1954.3
32.5°	2460.1	2429.0	2345.3	2221.2	2205.7	2236.7	2246.0	2283.2	2264.6	2143.6	2032.0
35°	2770.3	2608.9	2416.6	2264.6	2249.1	2280.2	2292.5	2345.3	2354.6	2239.8	2128.1
37.5°	2767.2	2621.4	2584.2	2348.4	2326.7	2348.4	2363.9	2429.0	2466.2	2367.0	2267.7
40°	2962.6	2900.6	2900.6	2506.6	2435.2	2466.2	2481.8	2546.9	2612.1	2534.5	2432.2
42.5°	3576.8	3536.5	3493.1	2810.6	2587.2	2674.1	2683.4	2723.7	2801.2	2776.5	2655.5
45°	4262.4	4225.2	4057.7	3325.6	2847.8	2863.3	2885.0	2950.2	3061.9	3108.4	2965.7
47.5°	4799.2	4761.9	4619.2	3946.0	3254.2	3117.7	3117.7	3244.9	3418.6	3536.5	3400.0
50°	5230.3	5186.9	5100.0	4606.8	3921.2	3483.8	3465.1	3614.1	3871.6	4054.6	3961.5
52.5°	5649.1	5521.9	5469.2	5289.3	4675.0	4014.3	3964.7	4070.1	4426.8	4653.3	4575.8
55°	5928.3	5909.7	5853.8	5915.9	5466.1	4659.5	4616.1	4637.9	5084.6	5236.5	5140.3
57.5°	6189.0	6185.8	6309.9	6598.4	6328.5	5397.8	5329.6	5295.5	5720.4	5683.2	5767.0
60°	6511.6	6455.7	6744.2	7156.8	7119.5	6117.6	6040.0	5971.8	6207.6	6102.0	6517.7
62.5°	6527.0	6511.6	7097.8	7690.3	7904.4	6849.7	6759.8	6514.7	6632.5	6511.6	7234.4
65°	5934.5	6012.1	7246.8	7972.7	8562.1	7491.9	7383.2	7001.7	7011.0	6930.4	8078.1
67.5°	5801.2	5841.5	6837.3	8276.7	9036.7	8140.2	8037.8	7563.2	7451.5	7457.7	8577.6
70°	5469.2	5531.2	6328.5	8255.0	9412.1	9005.8	8903.4	8388.4	8118.4	7817.6	8192.9
72.5°	4178.7	4284.1	5332.7	7237.5	9309.8	10138.1	10110.1	9433.9	8385.3	7178.6	6198.3
75°	1414.6	1411.5	2801.2	4861.2	8363.5	10485.5	10541.3	9303.5	7315.0	4951.1	3077.4
77.5°	304.0	307.1	577.0	1969.9	5556.1	8419.4	8633.5	7017.2	4718.5	2205.7	704.2
80°	148.9	152.0	238.9	521.2	2221.2	4721.5	5056.7	3607.8	1743.4	440.5	117.8
82.5°	74.5	77.5	124.1	276.1	822.0	1678.3	1793.0	1327.8	499.5	248.2	58.9
85°	27.9	27.9	62.1	164.4	375.3	393.9	484.0	384.6	301.0	201.6	15.5
87.5°	6.2	6.2	34.2	80.6	167.6	124.1	124.1	117.8	183.0	136.5	6.2
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°	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2
2.5°	1399.1	1386.7	1364.9	1343.2	1327.8	1309.2	1299.9	1290.6	1287.4	1284.3	1290.6
5°	1383.5	1364.9	1324.6	1290.6	1259.5	1234.7	1216.1	1197.5	1188.2	1181.9	1185.1
7.5°	1383.5	1355.7	1296.7	1244.0	1194.4	1141.6	1088.8	1048.5	1017.5	998.9	1002.0
10°	1399.1	1361.9	1284.3	1213.0	1119.9	1008.2	893.4	806.6	747.7	713.5	713.5
12.5°	1433.3	1383.5	1287.4	1175.8	1017.5	822.0	648.3	542.9	499.5	474.6	477.7
15°	1479.8	1420.8	1302.9	1126.1	874.8	611.1	453.0	384.6	384.6	390.9	393.9
17.5°	1532.5	1467.3	1315.3	1051.7	691.8	437.4	356.8	350.6	359.9	375.3	375.3
20°	1585.3	1513.9	1321.6	933.7	518.0	347.5	338.2	338.2	344.3	359.9	362.9
22.5°	1650.3	1572.8	1315.3	788.0	387.8	328.9	325.7	325.7	325.7	344.3	344.3
25°	1718.7	1641.1	1290.6	632.9	328.9	316.4	313.3	310.3	310.3	325.7	328.9
27.5°	1796.2	1712.4	1231.5	484.0	310.3	304.0	301.0	294.7	294.7	307.1	307.1
30°	1873.7	1793.0	1141.6	366.0	294.7	291.6	285.4	279.2	273.0	285.4	285.4
32.5°	1957.5	1876.8	1023.8	291.6	273.0	273.0	269.9	260.5	254.4	260.5	263.7
35°	2069.2	1973.0	890.4	254.4	245.1	245.1	245.1	241.9	229.6	235.8	235.8
37.5°	2218.1	2106.4	735.2	235.8	223.3	217.2	217.2	217.2	207.9	210.9	210.9
40°	2407.3	2261.5	586.4	220.2	207.9	192.3	186.2	189.2	183.0	183.0	179.9
42.5°	2664.8	2429.0	440.5	207.9	195.5	173.7	161.3	158.3	152.0	148.9	148.9
45°	3034.0	2633.8	316.4	195.5	186.2	152.0	139.6	130.3	114.8	105.5	105.5
47.5°	3511.7	2866.4	235.8	183.0	176.9	133.4	117.8	99.2	77.5	71.4	71.4
50°	4094.9	3127.1	198.6	164.4	161.3	117.8	93.1	65.2	43.5	37.2	40.3
52.5°	4662.6	3372.1	176.9	145.8	142.7	102.4	68.2	34.2	18.6	18.6	18.6
55°	5140.3	3545.9	161.3	130.3	124.1	80.6	37.2	15.5	9.3	9.3	9.3
57.5°	5571.6	3645.1	145.8	114.8	99.2	55.9	15.5	6.2	6.2	3.1	3.1
60°	5965.5	3704.0	127.2	99.2	77.5	31.0	6.2	3.1	3.1	0.0	0.0
62.5°	6353.3	3747.5	108.5	80.6	58.9	12.4	3.1	3.1	0.0	0.0	0.0
65°	6648.1	3731.9	86.8	65.2	37.2	6.2	3.1	0.0	0.0	0.0	0.0
67.5°	6638.7	3521.0	65.2	49.6	18.6	3.1	0.0	0.0	0.0	0.0	0.0
70°	5937.6	2965.7	43.5	31.0	6.2	3.1	0.0	0.0	0.0	0.0	0.0
72.5°	4212.8	1901.7	27.9	18.6	3.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	1855.1	577.0	15.5	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	362.9	133.4	9.3	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	86.8	15.5	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	37.2	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.2	3.1	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)