

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: P265651

Luminaire Tested: **ARCH-L-AF72-170-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265651  
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-AF72-170-D-U-T4W-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 750mA 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: 13767.2 lumens  
Efficiency: N/A  
Efficacy: 79.6 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): 173  
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

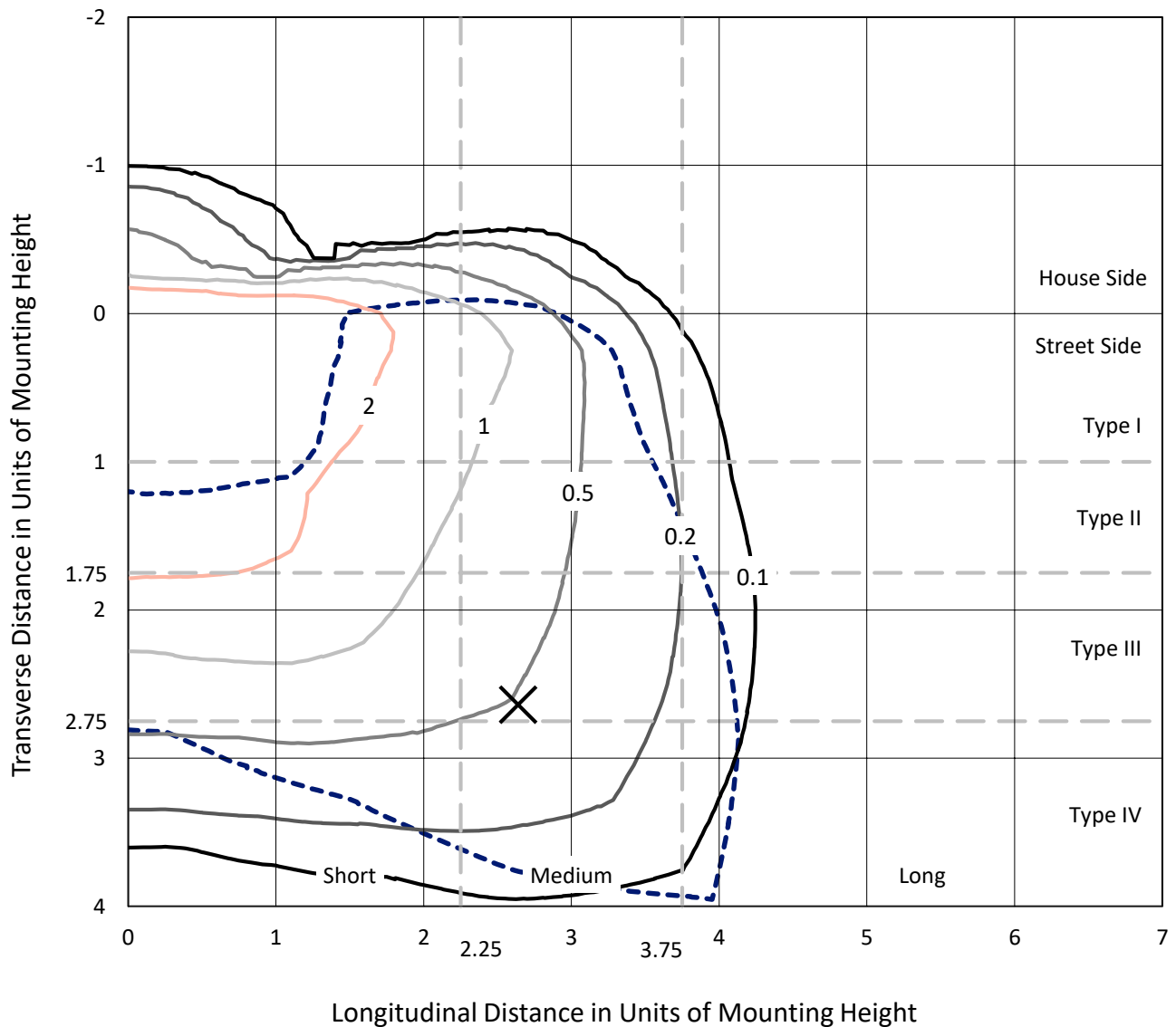


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

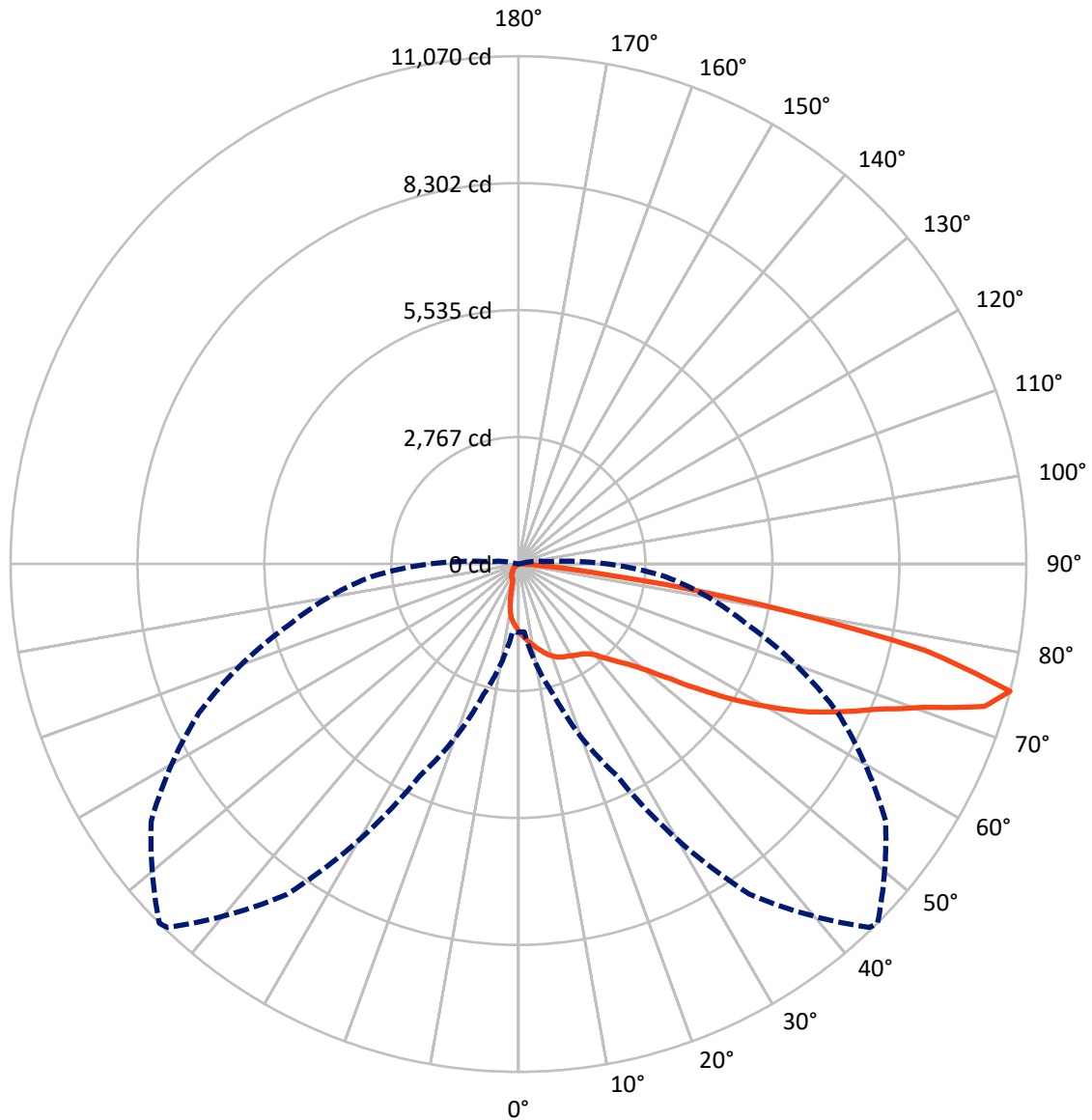


Based on 20 foot mounting height. Maximum calculated value = 4.9 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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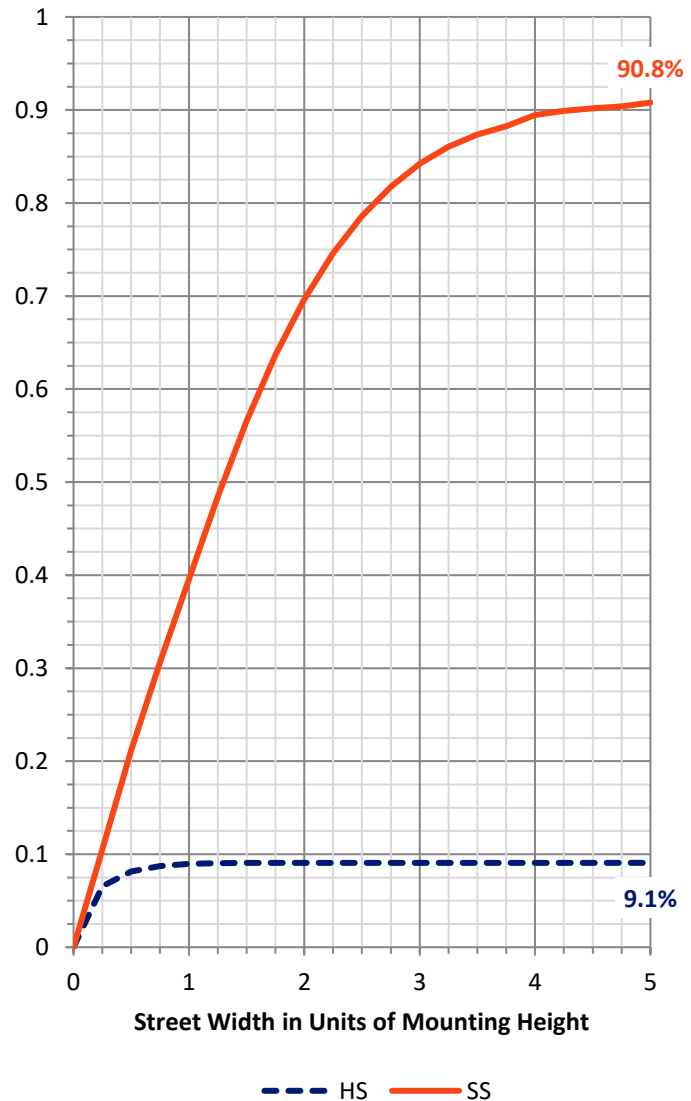
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1259.3	0.0	1259.3
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	12508.0	0.0	12508.0
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	13767.2	0.0	13767.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.0	1.0
10°-20°	393.7	2.9
20°-30°	652.0	4.7
30°-40°	943.6	6.9
40°-50°	1545.2	11.2
50°-60°	2753.2	20.0
60°-70°	4047.5	29.4
70°-80°	3053.5	22.2
80°-90°	239.6	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°	13767.2	100.0
0°-180°	13767.2	100.0



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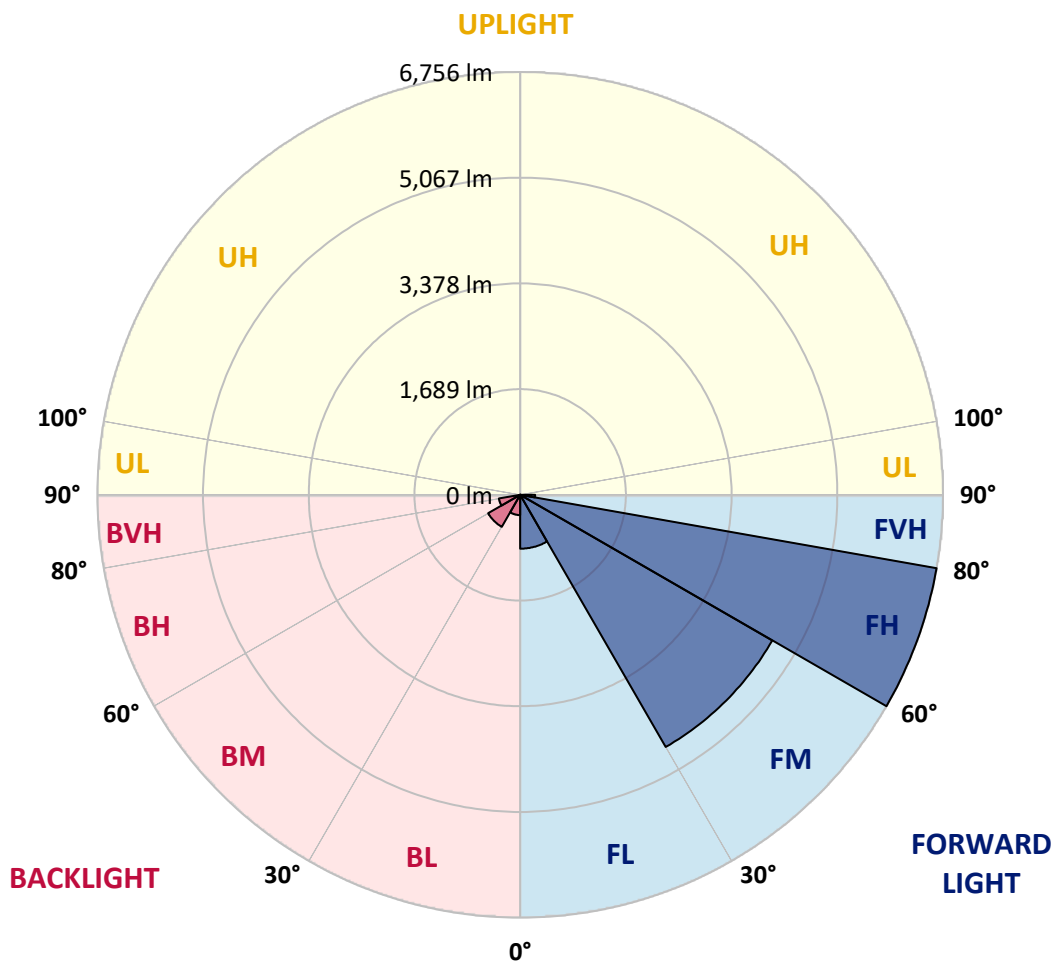
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	861.1	6.3			
FM	(30°-60°)	4651.9	33.8			
FH	(60°-80°)	6756.1	49.1			G3/7500
FVH	(80°-90°)	238.9	1.7			G3/500
BL	(0°-30°)	323.6	2.4	B1/500		
BM	(30°-60°)	590.1	4.3	B1/1000		
BH	(60°-80°)	344.9	2.5	B1/500		G1/500
BVH	(80°-90°)	0.7	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°	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5
2.5°	1599.5	1599.5	1596.3	1593.1	1576.7	1560.4	1557.2	1547.4	1518.0	1498.6	1479.0
5°	1733.1	1736.3	1729.9	1713.5	1677.8	1641.9	1638.6	1612.5	1557.2	1518.0	1475.7
7.5°	1860.1	1866.7	1850.4	1821.0	1778.7	1726.6	1723.3	1674.5	1602.8	1547.4	1485.4
10°	1967.6	1967.6	1944.8	1909.0	1863.4	1808.0	1801.6	1746.1	1664.6	1596.3	1514.8
12.5°	2085.0	2081.6	2049.2	2000.3	1948.2	1896.1	1892.6	1824.3	1746.1	1658.2	1557.2
15°	2192.5	2185.9	2143.5	2097.9	2042.6	1987.2	1983.9	1915.5	1834.1	1729.9	1619.0
17.5°	2251.1	2247.7	2208.8	2163.1	2117.6	2075.2	2071.9	2000.3	1912.3	1804.8	1681.0
20°	2260.9	2264.1	2231.5	2192.5	2166.4	2143.5	2143.5	2078.4	1983.9	1869.9	1746.1
22.5°	2264.1	2273.9	2251.1	2199.0	2192.5	2195.6	2202.3	2150.2	2052.4	1944.8	1814.5
25°	2286.9	2299.9	2283.6	2221.8	2215.2	2238.0	2244.5	2221.8	2133.8	2026.2	1892.6
27.5°	2332.4	2345.6	2332.4	2254.3	2244.5	2267.3	2273.9	2286.9	2221.8	2104.5	1974.1
30°	2423.7	2427.0	2397.7	2299.9	2280.3	2309.7	2319.5	2355.4	2303.3	2179.4	2052.4
32.5°	2583.3	2550.7	2462.9	2332.4	2316.2	2348.8	2358.6	2397.7	2378.2	2251.1	2133.8
35°	2909.2	2739.7	2537.7	2378.2	2361.9	2394.4	2407.5	2462.9	2472.6	2352.0	2234.8
37.5°	2905.8	2752.8	2713.7	2466.0	2443.3	2466.0	2482.3	2550.7	2589.9	2485.6	2381.3
40°	3111.1	3046.0	3046.0	2632.3	2557.3	2589.9	2606.2	2674.6	2743.0	2661.6	2554.1
42.5°	3756.2	3713.9	3668.1	2951.6	2717.0	2808.1	2818.0	2860.3	2941.7	2915.7	2788.6
45°	4476.1	4437.0	4261.1	3492.3	2990.5	3006.8	3029.7	3098.1	3215.4	3264.3	3114.3
47.5°	5039.8	5000.5	4850.7	4143.8	3417.3	3274.1	3274.1	3407.5	3589.9	3713.9	3570.5
50°	5492.4	5446.9	5355.6	4837.7	4117.7	3658.3	3638.9	3795.2	4065.5	4257.8	4160.1
52.5°	5932.2	5798.6	5743.4	5554.4	4909.3	4215.4	4163.4	4274.0	4648.8	4886.6	4805.2
55°	6225.4	6205.9	6147.3	6212.5	5740.1	4893.1	4847.4	4870.3	5339.3	5499.1	5398.1
57.5°	6499.1	6495.9	6626.2	6929.2	6645.8	5668.5	5596.7	5560.9	6007.1	5968.1	6056.1
60°	6837.9	6779.2	7082.2	7515.5	7476.5	6424.1	6342.8	6271.1	6518.7	6407.9	6844.5
62.5°	6854.2	6837.9	7453.6	8075.9	8300.6	7193.0	7098.5	6841.2	6965.0	6837.9	7597.0
65°	6232.0	6313.4	7610.0	8372.4	8991.2	7867.4	7753.4	7352.6	7362.4	7277.7	8483.1
67.5°	6091.9	6134.3	7180.0	8691.6	9489.6	8548.2	8440.7	7942.3	7825.0	7831.6	9007.6
70°	5743.4	5808.5	6645.8	8668.7	9884.0	9457.0	9349.6	8808.8	8525.5	8209.4	8603.5
72.5°	4388.1	4498.9	5599.9	7600.2	9776.3	10646.2	10616.9	9906.7	8805.5	7538.3	6508.8
75°	1485.4	1482.3	2941.7	5104.8	8782.8	11011.1	11069.6	9769.8	7681.6	5199.3	3231.7
77.5°	319.3	322.5	605.9	2068.6	5834.5	8841.4	9066.1	7368.9	4955.1	2316.2	739.6
80°	156.3	159.5	250.8	547.2	2332.4	4958.3	5310.1	3788.7	1830.8	462.5	123.7
82.5°	78.2	81.4	130.3	290.0	863.4	1762.5	1882.9	1394.3	524.5	260.6	62.0
85°	29.4	29.4	65.1	172.7	394.1	413.7	508.3	404.0	316.1	211.7	16.3
87.5°	6.5	6.5	35.8	84.7	175.9	130.3	130.3	123.7	192.1	143.3	6.5
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°	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5	1472.5
2.5°	1469.2	1456.2	1433.3	1410.6	1394.3	1374.8	1365.0	1355.3	1351.9	1348.6	1355.3
5°	1452.9	1433.3	1391.0	1355.3	1322.7	1296.6	1277.0	1257.4	1247.7	1241.2	1244.4
7.5°	1452.9	1423.6	1361.7	1306.3	1254.3	1198.9	1143.5	1101.1	1068.5	1049.0	1052.3
10°	1469.2	1430.1	1348.6	1273.7	1176.1	1058.7	938.2	847.0	785.1	749.2	749.2
12.5°	1505.1	1452.9	1351.9	1234.7	1068.5	863.4	680.8	570.2	524.5	498.4	501.8
15°	1553.9	1492.1	1368.3	1182.6	918.6	641.7	475.7	404.0	404.0	410.4	413.7
17.5°	1609.4	1541.0	1381.2	1104.3	726.5	459.4	374.7	368.1	377.8	394.1	394.1
20°	1664.6	1589.8	1387.8	980.6	544.1	364.8	355.1	355.1	361.6	377.8	381.2
22.5°	1733.1	1651.7	1381.2	827.5	407.2	345.3	342.1	342.1	342.1	361.6	361.6
25°	1804.8	1723.3	1355.3	664.6	345.3	332.4	329.0	325.7	325.7	342.1	345.3
27.5°	1886.3	1798.2	1293.3	508.3	325.7	319.3	316.1	309.5	309.5	322.5	322.5
30°	1967.6	1882.9	1198.9	384.5	309.5	306.2	299.8	293.1	286.6	299.8	299.8
32.5°	2055.6	1970.9	1075.0	306.2	286.6	286.6	283.4	273.7	267.2	273.7	276.9
35°	2172.9	2071.9	935.0	267.2	257.4	257.4	257.4	254.1	241.0	247.7	247.7
37.5°	2329.2	2211.9	772.1	247.7	234.5	228.0	228.0	228.0	218.3	221.5	221.5
40°	2528.0	2374.8	615.7	231.4	218.3	201.9	195.6	198.7	192.1	192.1	189.0
42.5°	2798.4	2550.7	462.5	218.3	205.3	182.4	169.4	166.1	159.5	156.3	156.3
45°	3186.0	2765.8	332.4	205.3	195.6	159.5	146.7	136.8	120.6	110.9	110.9
47.5°	3687.7	3010.1	247.7	192.1	185.7	140.0	123.7	104.3	81.4	74.9	74.9
50°	4300.1	3283.8	208.4	172.7	169.4	123.7	97.7	68.5	45.6	39.0	42.3
52.5°	4896.3	3541.1	185.7	153.2	149.8	107.4	71.7	35.8	19.6	19.6	19.6
55°	5398.1	3723.6	169.4	136.8	130.3	84.7	39.0	16.3	9.8	9.8	9.8
57.5°	5850.8	3827.8	153.2	120.6	104.3	58.6	16.3	6.5	6.5	3.2	3.2
60°	6264.6	3889.8	133.6	104.3	81.4	32.6	6.5	3.2	3.2	0.0	0.0
62.5°	6671.8	3935.4	114.1	84.7	62.0	13.0	3.2	3.2	0.0	0.0	0.0
65°	6981.3	3919.0	91.2	68.5	39.0	6.5	3.2	0.0	0.0	0.0	0.0
67.5°	6971.4	3697.6	68.5	52.1	19.6	3.2	0.0	0.0	0.0	0.0	0.0
70°	6235.2	3114.3	45.6	32.6	6.5	3.2	0.0	0.0	0.0	0.0	0.0
72.5°	4424.0	1996.9	29.4	19.6	3.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	1948.2	605.9	16.3	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	381.2	140.0	9.8	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	91.2	16.3	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	39.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.8	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.5	3.2	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)