

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: P265687

Luminaire Tested: **ARCH-L-AF72-210-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265687  
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-AF72-210-D-U-T4W-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 900mA 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: 15762.6 lumens  
Efficiency: N/A  
Efficacy: 74.7 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 - G4

Input Watts (W): 211  
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

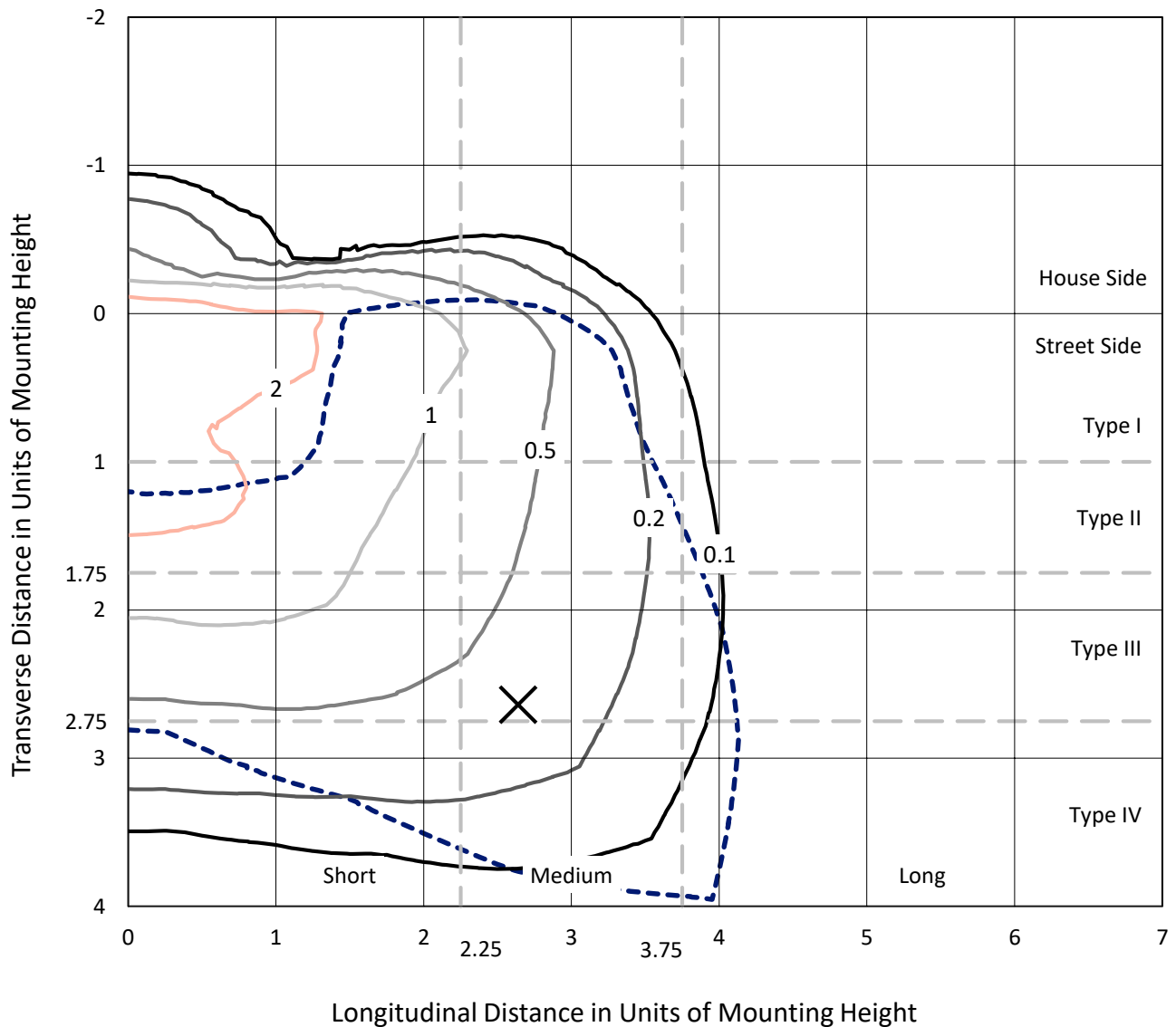


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

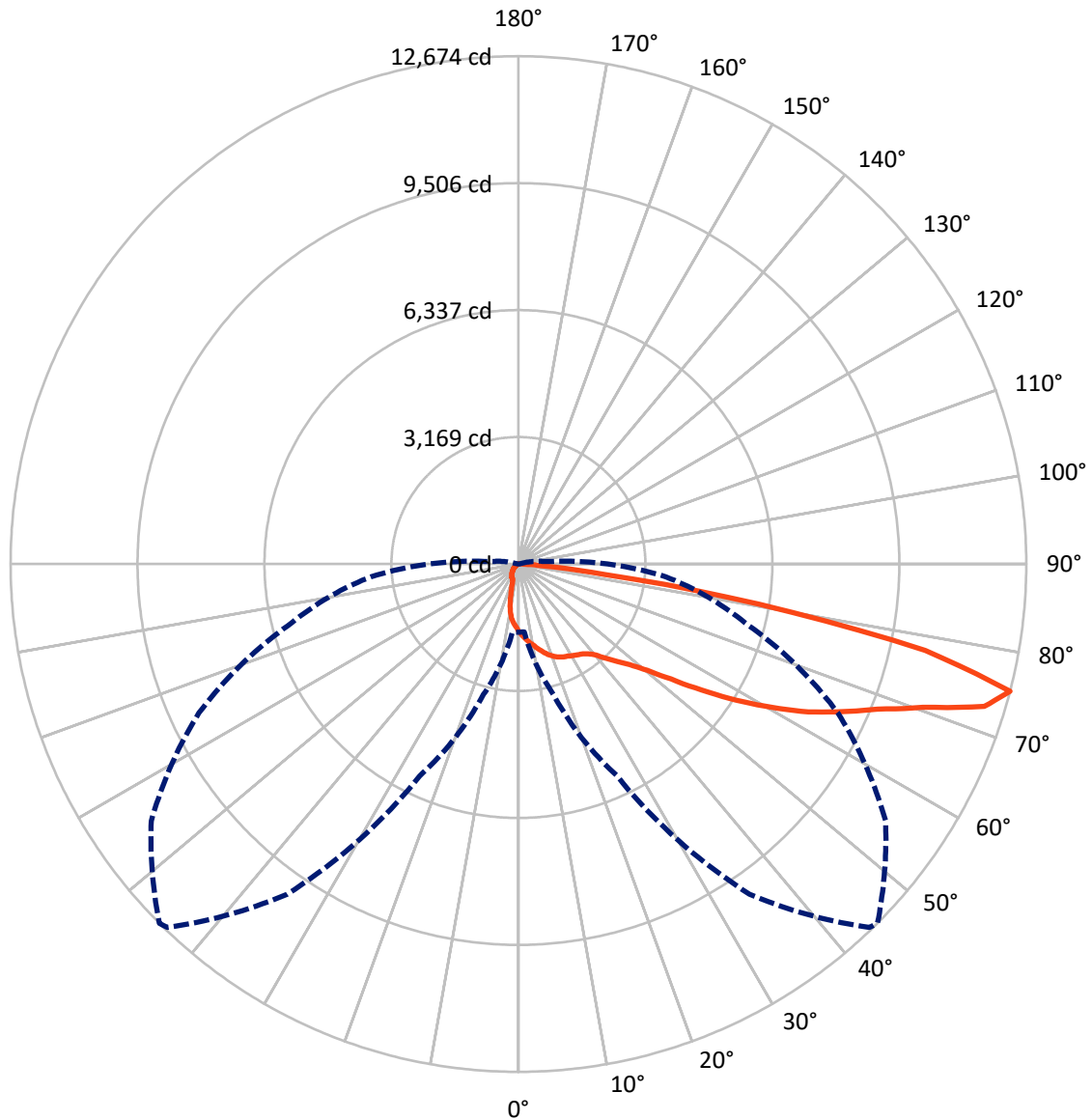


Based on 25 foot mounting height. Maximum calculated value = 3.6 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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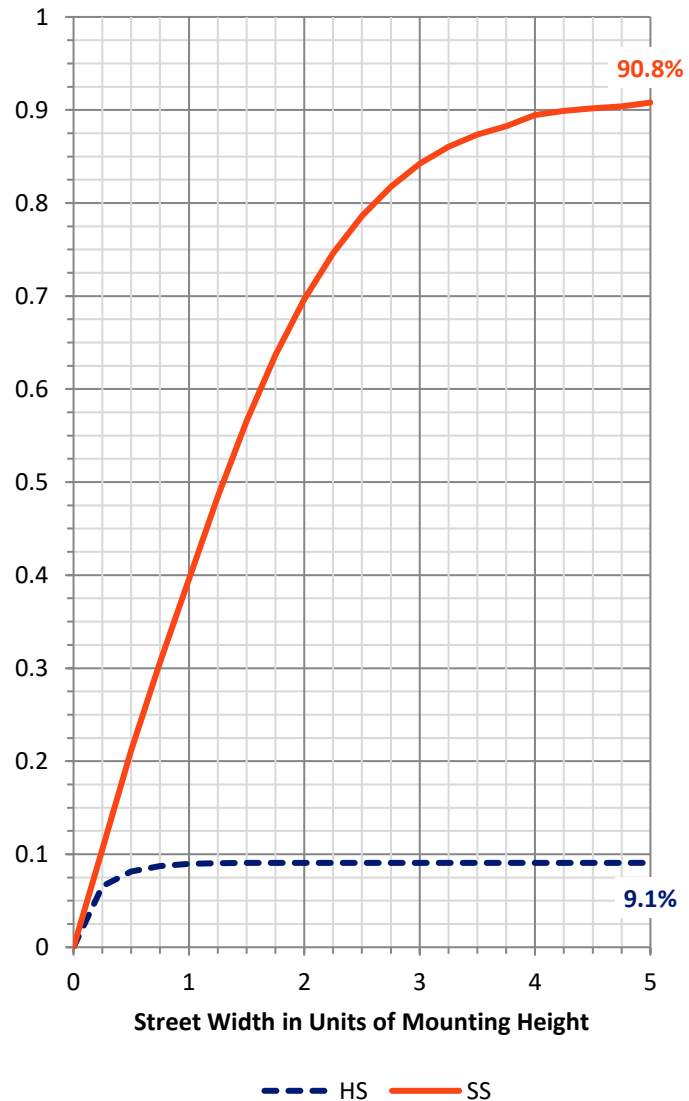
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1441.8	0.0	1441.8
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	14320.8	0.0	14320.8
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	15762.6	0.0	15762.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.1	1.0
10°-20°	450.8	2.9
20°-30°	746.5	4.7
30°-40°	1080.4	6.9
40°-50°	1769.1	11.2
50°-60°	3152.2	20.0
60°-70°	4634.1	29.4
70°-80°	3496.0	22.2
80°-90°	274.3	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°	15762.6	100.0
0°-180°	15762.6	100.0



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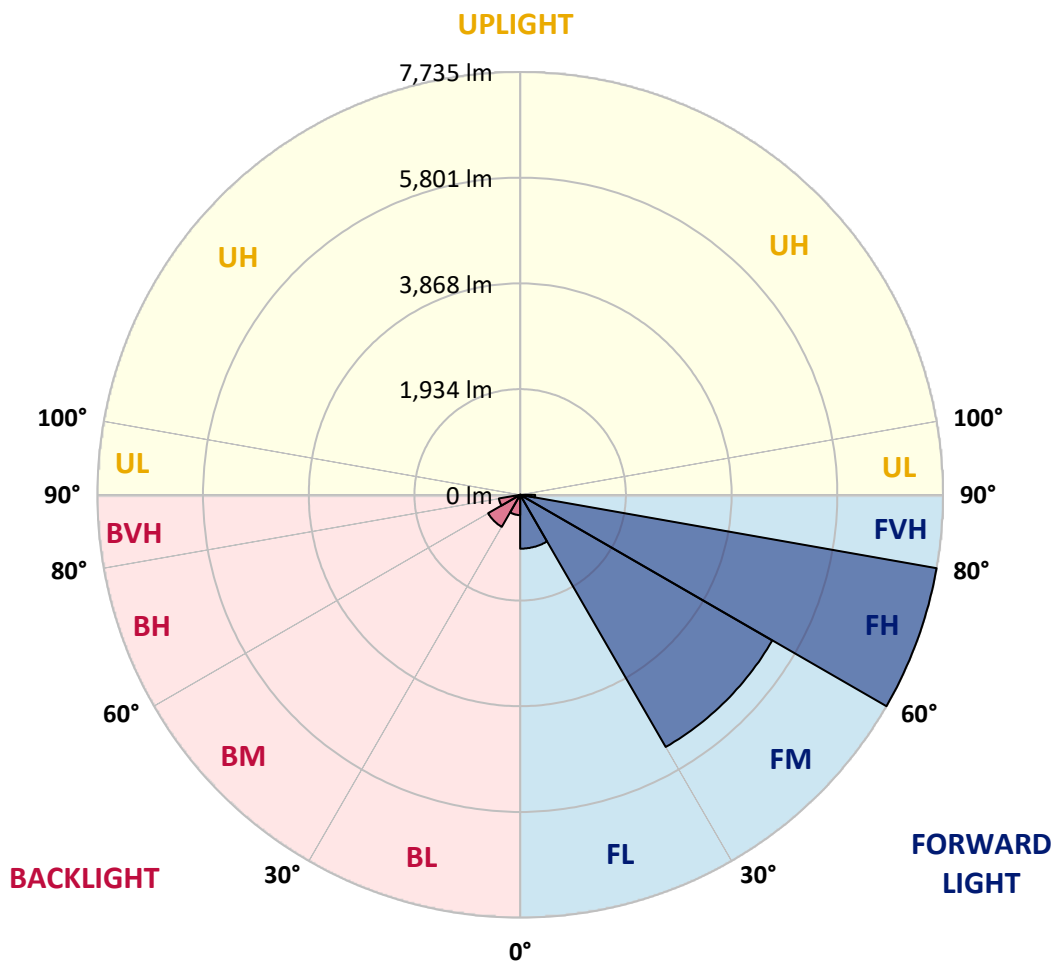
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	985.9	6.3			
FM	(30°-60°)	5326.1	33.8			
FH	(60°-80°)	7735.3	49.1			G4/12000
FVH	(80°-90°)	273.5	1.7			G3/500
BL	(0°-30°)	370.5	2.4	B1/500		
BM	(30°-60°)	675.6	4.3	B1/1000		
BH	(60°-80°)	394.9	2.5	B1/500		G1/500
BVH	(80°-90°)	0.8	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-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8
2.5°	1831.4	1831.4	1827.6	1823.9	1805.2	1786.5	1782.9	1771.6	1738.1	1715.8	1693.3
5°	1984.3	1987.9	1980.6	1961.9	1920.8	1879.9	1876.1	1846.2	1782.9	1738.1	1689.6
7.5°	2129.7	2137.2	2118.6	2085.0	2036.5	1976.8	1973.0	1917.2	1835.1	1771.6	1700.9
10°	2252.8	2252.8	2226.7	2185.7	2133.5	2070.1	2062.6	1999.2	1905.9	1827.6	1734.4
12.5°	2387.1	2383.4	2346.1	2290.0	2230.4	2170.8	2167.0	2088.6	1999.2	1898.5	1782.9
15°	2510.3	2502.8	2454.3	2402.0	2338.6	2275.1	2271.5	2193.1	2099.9	1980.6	1853.7
17.5°	2577.3	2573.6	2528.9	2476.6	2424.3	2375.8	2372.2	2290.0	2189.3	2066.3	1924.6
20°	2588.6	2592.2	2555.0	2510.3	2480.4	2454.3	2454.3	2379.6	2271.5	2140.9	1999.2
22.5°	2592.2	2603.5	2577.3	2517.7	2510.3	2513.9	2521.5	2461.7	2349.7	2226.7	2077.5
25°	2618.4	2633.3	2614.6	2543.8	2536.4	2562.4	2570.0	2543.8	2443.1	2320.0	2167.0
27.5°	2670.7	2685.6	2670.7	2581.1	2570.0	2596.0	2603.5	2618.4	2543.8	2409.4	2260.2
30°	2775.0	2778.7	2745.2	2633.3	2611.0	2644.5	2655.7	2696.7	2637.1	2495.3	2349.7
32.5°	2957.8	2920.5	2819.8	2670.7	2651.9	2689.3	2700.5	2745.2	2722.9	2577.3	2443.1
35°	3330.7	3136.8	2905.6	2722.9	2704.2	2741.4	2756.4	2819.8	2831.0	2692.9	2558.7
37.5°	3327.1	3151.8	3107.0	2823.6	2797.4	2823.6	2842.1	2920.5	2965.2	2845.9	2726.5
40°	3562.0	3487.4	3487.4	3013.8	2927.9	2965.2	2983.9	3062.2	3140.6	3047.3	2924.3
42.5°	4300.5	4252.0	4199.8	3379.2	3110.7	3215.2	3226.4	3274.9	3368.0	3338.2	3192.8
45°	5124.8	5080.1	4878.6	3998.4	3424.0	3442.7	3468.7	3547.0	3681.3	3737.3	3565.7
47.5°	5770.2	5725.3	5553.7	4744.4	3912.6	3748.4	3748.4	3901.3	4110.4	4252.0	4087.9
50°	6288.6	6236.4	6131.9	5538.8	4714.6	4188.6	4166.2	4345.3	4654.8	4874.9	4763.1
52.5°	6792.1	6639.2	6575.8	6359.5	5620.9	4826.5	4766.8	4893.5	5322.5	5594.7	5501.5
55°	7127.7	7105.4	7038.2	7112.8	6572.0	5602.2	5550.0	5576.0	6113.2	6296.0	6180.3
57.5°	7441.1	7437.3	7586.5	7933.4	7609.0	6490.0	6407.9	6366.8	6877.9	6833.0	6933.7
60°	7829.0	7761.9	8108.7	8604.8	8559.9	7355.3	7262.0	7180.0	7463.5	7336.6	7836.5
62.5°	7847.7	7829.0	8533.9	9246.3	9503.7	8235.5	8127.3	7832.7	7974.4	7829.0	8698.0
65°	7135.1	7228.4	8712.9	9585.8	10294.3	9007.7	8877.1	8418.2	8429.4	8332.5	9712.6
67.5°	6974.8	7023.3	8220.6	9951.2	10865.1	9787.2	9664.1	9093.5	8959.2	8966.6	10313.0
70°	6575.8	6650.3	7609.0	9925.2	11316.4	10827.8	10704.7	10085.5	9761.1	9399.2	9850.5
72.5°	5024.1	5150.9	6411.7	8701.7	11193.3	12189.2	12155.7	11342.4	10081.8	8630.8	7452.2
75°	1700.9	1697.1	3368.0	5844.7	10055.6	12607.0	12674.0	11185.9	8794.9	5952.9	3699.9
77.5°	365.5	369.3	693.8	2368.4	6680.2	10122.8	10380.2	8436.9	5673.2	2651.9	846.7
80°	179.0	182.7	287.2	626.6	2670.7	5676.8	6079.6	4337.8	2096.1	529.6	141.8
82.5°	89.6	93.2	149.2	332.0	988.5	2017.9	2155.8	1596.4	600.4	298.3	70.8
85°	33.5	33.5	74.6	197.6	451.3	473.6	581.8	462.4	361.7	242.5	18.7
87.5°	7.5	7.5	41.1	96.9	201.4	149.2	149.2	141.8	220.1	164.1	7.5
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°	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8
2.5°	1682.2	1667.3	1641.2	1615.1	1596.4	1574.0	1562.8	1551.6	1547.9	1544.1	1551.6
5°	1663.5	1641.2	1592.7	1551.6	1514.4	1484.4	1462.1	1439.8	1428.6	1421.1	1424.8
7.5°	1663.5	1630.0	1559.1	1495.7	1436.0	1372.6	1309.2	1260.7	1223.4	1201.0	1204.7
10°	1682.2	1637.4	1544.1	1458.4	1346.5	1212.3	1074.3	969.8	898.9	857.9	857.9
12.5°	1723.2	1663.5	1547.9	1413.7	1223.4	988.5	779.5	652.7	600.4	570.7	574.3
15°	1779.2	1708.2	1566.6	1353.9	1051.8	734.8	544.6	462.4	462.4	470.0	473.6
17.5°	1842.6	1764.2	1581.5	1264.5	831.8	525.9	428.9	421.5	432.7	451.3	451.3
20°	1905.9	1820.1	1588.9	1122.7	622.9	417.7	406.6	406.6	413.9	432.7	436.3
22.5°	1984.3	1891.0	1581.5	947.4	466.2	395.3	391.7	391.7	391.7	413.9	413.9
25°	2066.3	1973.0	1551.6	760.9	395.3	380.4	376.7	372.9	372.9	391.7	395.3
27.5°	2159.5	2058.8	1480.8	581.8	372.9	365.5	361.7	354.3	354.3	369.3	369.3
30°	2252.8	2155.8	1372.6	440.1	354.3	350.6	343.2	335.6	328.2	343.2	343.2
32.5°	2353.5	2256.5	1230.9	350.6	328.2	328.2	324.5	313.2	305.9	313.2	317.0
35°	2487.9	2372.2	1070.5	305.9	294.6	294.6	294.6	291.0	276.0	283.4	283.4
37.5°	2666.9	2532.6	884.0	283.4	268.6	261.0	261.0	261.0	249.9	253.6	253.6
40°	2894.3	2719.1	704.9	264.8	249.9	231.3	223.8	227.5	220.1	220.1	216.3
42.5°	3204.0	2920.5	529.6	249.9	234.9	208.9	193.9	190.3	182.7	179.0	179.0
45°	3647.7	3166.6	380.4	234.9	223.8	182.7	167.9	156.7	138.0	126.8	126.8
47.5°	4222.3	3446.3	283.4	220.1	212.5	160.3	141.8	119.4	93.2	85.8	85.8
50°	4923.4	3759.6	238.7	197.6	193.9	141.8	111.8	78.3	52.2	44.7	48.5
52.5°	5606.0	4054.4	212.5	175.3	171.5	123.1	82.0	41.1	22.4	22.4	22.4
55°	6180.3	4263.3	193.9	156.7	149.2	96.9	44.7	18.7	11.1	11.1	11.1
57.5°	6698.8	4382.7	175.3	138.0	119.4	67.2	18.7	7.5	7.5	3.8	3.8
60°	7172.4	4453.4	152.9	119.4	93.2	37.3	7.5	3.8	3.8	0.0	0.0
62.5°	7638.7	4505.7	130.6	96.9	70.8	14.9	3.8	3.8	0.0	0.0	0.0
65°	7993.1	4487.0	104.5	78.3	44.7	7.5	3.8	0.0	0.0	0.0	0.0
67.5°	7981.9	4233.4	78.3	59.6	22.4	3.8	0.0	0.0	0.0	0.0	0.0
70°	7138.9	3565.7	52.2	37.3	7.5	3.8	0.0	0.0	0.0	0.0	0.0
72.5°	5065.2	2286.4	33.5	22.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	2230.4	693.8	18.7	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	436.3	160.3	11.1	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	104.5	18.7	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	44.7	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.1	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	3.8	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)