

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: P265669

Luminaire Tested: **ARCH-L-AF72-190-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265669  
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-AF72-190-D-U-T4W-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 810mA 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: 14587.7 lumens  
Efficiency: N/A  
Efficacy: 77.2 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): 189  
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

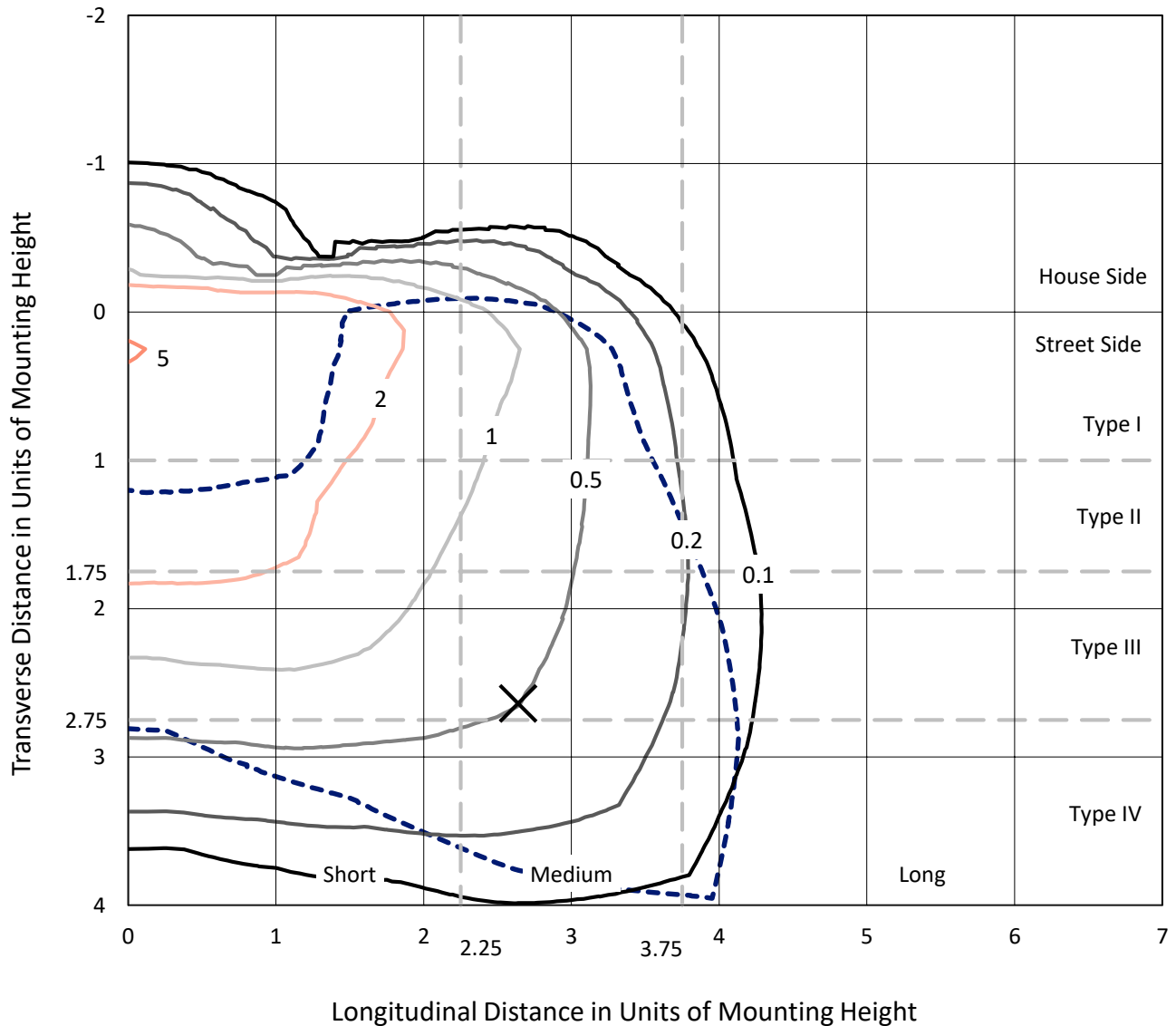


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

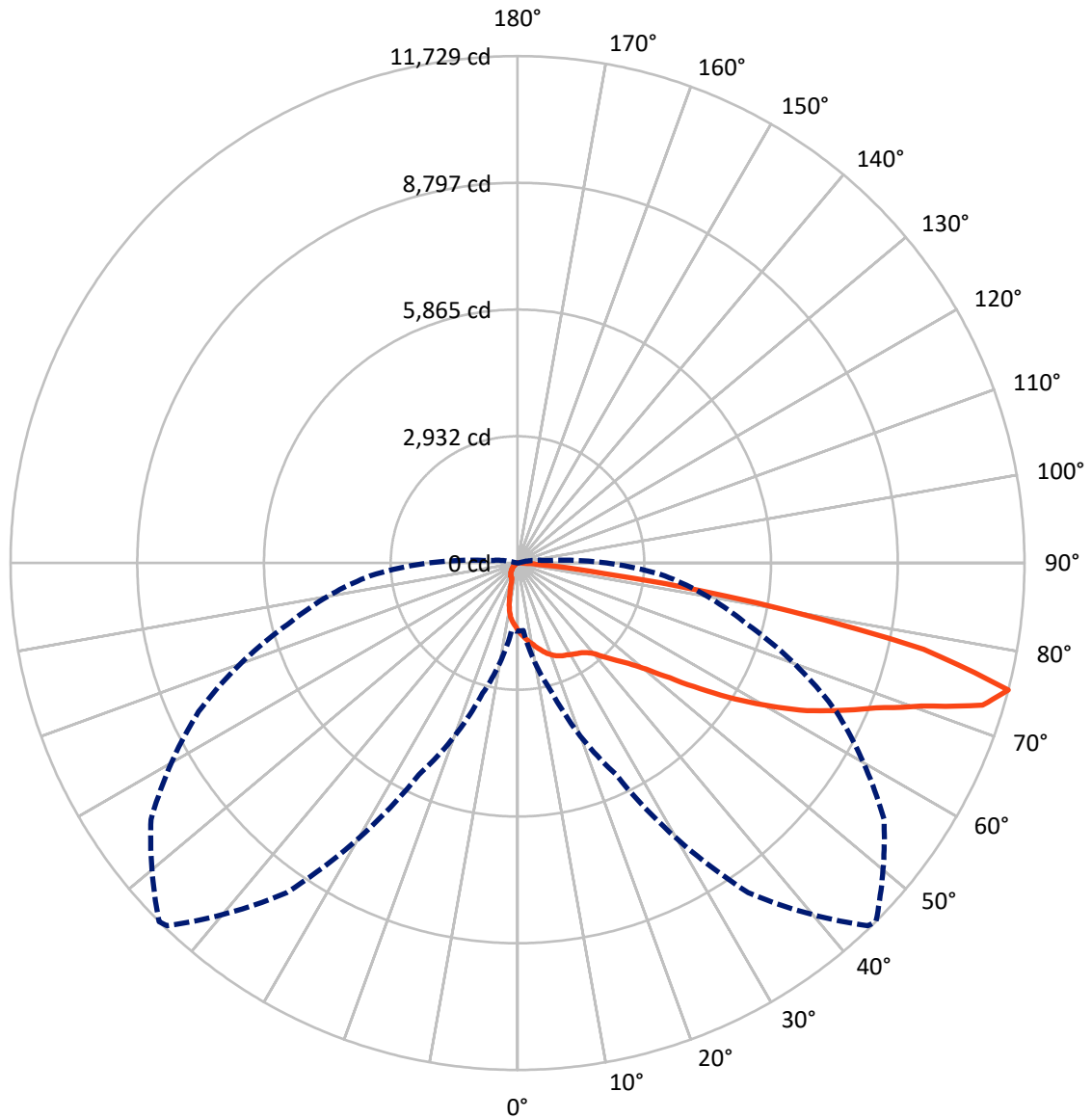


Based on 20 foot mounting height. Maximum calculated value = 5.2 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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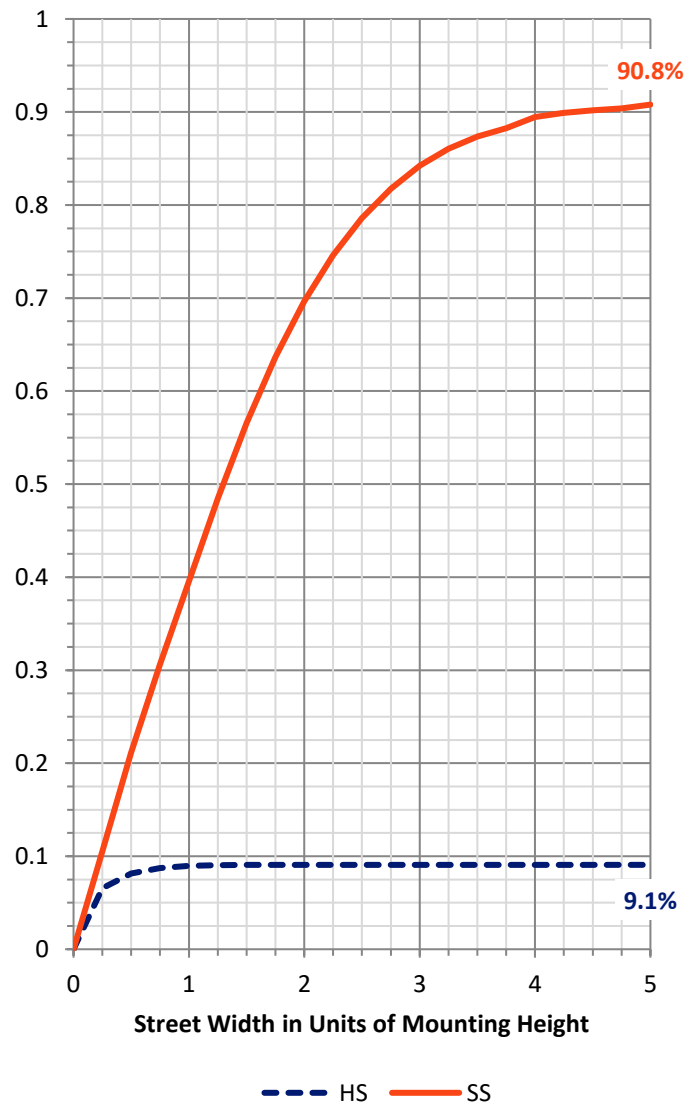
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1334.3	0.0	1334.3
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	13253.4	0.0	13253.4
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	14587.7	0.0	14587.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.2	1.0
10°-20°	417.2	2.9
20°-30°	690.9	4.7
30°-40°	999.9	6.9
40°-50°	1637.3	11.2
50°-60°	2917.3	20.0
60°-70°	4288.7	29.4
70°-80°	3235.5	22.2
80°-90°	253.8	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°	14587.7	100.0
0°-180°	14587.7	100.0



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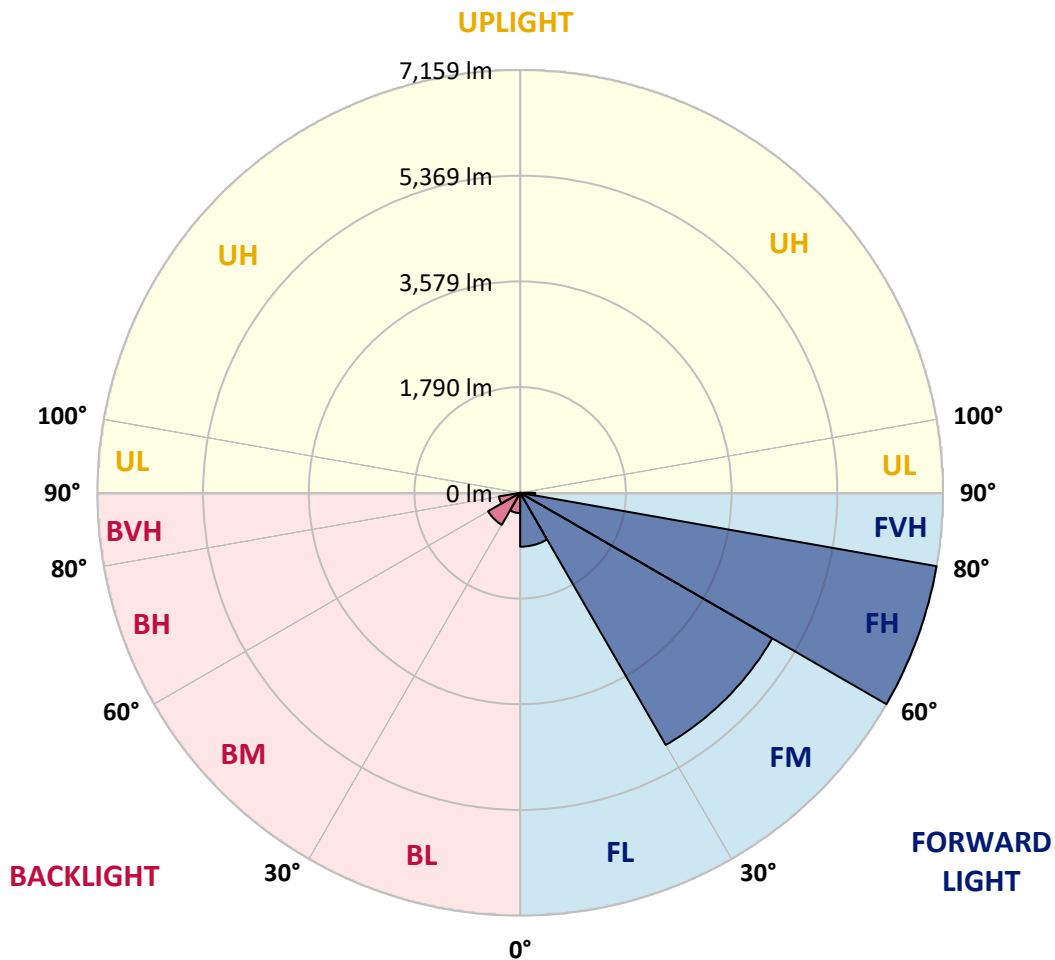
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	912.4	6.3			
FM	(30°-60°)	4929.1	33.8			
FH	(60°-80°)	7158.7	49.1			G3/7500
FVH	(80°-90°)	253.1	1.7			G3/500
BL	(0°-30°)	342.9	2.4	B1/500		
BM	(30°-60°)	625.3	4.3	B1/1000		
BH	(60°-80°)	365.5	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°	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3
2.5°	1694.8	1694.8	1691.4	1687.9	1670.7	1653.4	1649.9	1639.6	1608.5	1587.8	1567.2
5°	1836.3	1839.9	1832.9	1815.7	1777.7	1739.7	1736.2	1708.7	1649.9	1608.5	1563.7
7.5°	1971.1	1977.9	1960.6	1929.6	1884.7	1829.5	1826.1	1774.2	1698.3	1639.6	1574.0
10°	2085.0	2085.0	2060.7	2022.9	1974.5	1915.7	1908.9	1850.1	1763.9	1691.4	1605.1
12.5°	2209.2	2205.8	2171.3	2119.5	2064.2	2009.0	2005.6	1933.1	1850.1	1756.9	1649.9
15°	2323.0	2316.2	2271.4	2222.9	2164.3	2105.6	2102.2	2029.7	1943.5	1832.9	1715.6
17.5°	2385.2	2381.8	2340.4	2292.0	2243.6	2198.8	2195.4	2119.5	2026.2	1912.3	1781.2
20°	2395.6	2399.1	2364.5	2323.0	2295.4	2271.4	2271.4	2202.3	2102.2	1981.4	1850.1
22.5°	2399.1	2409.4	2385.2	2330.1	2323.0	2326.5	2333.4	2278.2	2174.6	2060.7	1922.7
25°	2423.2	2437.0	2419.8	2354.2	2347.4	2371.4	2378.4	2354.2	2260.9	2147.0	2005.6
27.5°	2471.5	2485.3	2471.5	2388.8	2378.4	2402.4	2409.4	2423.2	2354.2	2230.0	2091.9
30°	2568.2	2571.7	2540.5	2437.0	2416.4	2447.3	2457.8	2495.8	2440.4	2309.4	2174.6
32.5°	2737.3	2702.8	2609.5	2471.5	2454.3	2488.8	2499.2	2540.5	2519.8	2385.2	2260.9
35°	3082.5	2903.1	2688.9	2519.8	2502.6	2537.2	2550.9	2609.5	2619.9	2492.3	2368.0
37.5°	3079.1	2916.8	2875.5	2613.1	2588.8	2613.1	2630.2	2702.8	2744.2	2633.8	2523.2
40°	3296.5	3227.5	3227.5	2789.1	2709.6	2744.2	2761.5	2834.0	2906.5	2820.1	2706.2
42.5°	3980.0	3935.1	3886.7	3127.4	2878.9	2975.5	2985.8	3030.7	3116.9	3089.5	2954.7
45°	4742.8	4701.4	4515.1	3700.4	3168.9	3186.1	3210.3	3282.8	3407.0	3458.7	3300.0
47.5°	5340.1	5298.7	5139.8	4390.7	3621.0	3469.2	3469.2	3610.6	3804.0	3935.1	3783.2
50°	5819.8	5771.5	5674.9	5126.0	4363.2	3876.5	3855.7	4021.4	4307.9	4511.6	4408.1
52.5°	6285.8	6144.2	6085.6	5885.4	5201.9	4466.7	4411.4	4528.9	4925.8	5177.8	5091.6
55°	6596.6	6575.9	6513.7	6582.7	6082.2	5184.7	5136.4	5160.6	5657.5	5826.8	5719.7
57.5°	6886.4	6883.1	7021.2	7342.0	7041.9	6006.2	5930.3	5892.3	6365.2	6323.8	6417.0
60°	7245.5	7183.3	7504.4	7963.5	7922.1	6807.0	6720.8	6644.9	6907.2	6789.7	7252.3
62.5°	7262.6	7245.5	7897.9	8557.2	8795.3	7621.7	7521.6	7249.0	7380.0	7245.5	8049.7
65°	6603.4	6689.7	8063.5	8871.3	9527.2	8336.2	8215.4	7790.8	7801.2	7711.5	8988.6
67.5°	6455.0	6499.9	7607.8	9209.6	10055.3	9057.7	8943.7	8415.6	8291.4	8298.3	9544.4
70°	6085.6	6154.6	7041.9	9185.3	10472.9	10020.8	9906.9	9333.7	9033.5	8698.6	9116.4
72.5°	4649.6	4767.0	5933.8	8053.1	10359.1	11280.6	11249.7	10497.1	9330.3	7987.5	6896.7
75°	1574.0	1570.5	3116.9	5409.1	9306.3	11667.2	11729.3	10352.1	8139.5	5509.1	3424.2
77.5°	338.3	341.7	642.1	2192.0	6182.2	9368.3	9606.6	7808.1	5250.2	2454.3	783.6
80°	165.6	169.2	265.8	579.9	2471.5	5253.7	5626.5	4014.5	1939.9	490.1	131.2
82.5°	82.9	86.2	138.1	307.2	914.7	1867.4	1995.1	1477.4	555.7	276.1	65.5
85°	31.1	31.1	69.0	183.0	417.7	438.5	538.5	428.0	334.8	224.3	17.2
87.5°	6.8	6.8	38.0	89.7	186.4	138.1	138.1	131.2	203.6	151.9	6.8
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°	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3
2.5°	1556.9	1543.0	1518.9	1494.7	1477.4	1456.7	1446.4	1436.0	1432.4	1429.1	1436.0
5°	1539.5	1518.9	1473.9	1436.0	1401.4	1373.9	1353.1	1332.5	1322.0	1315.2	1318.6
7.5°	1539.5	1508.4	1442.9	1384.2	1329.0	1270.4	1211.6	1166.7	1132.3	1111.6	1114.9
10°	1556.9	1515.4	1429.1	1349.7	1246.0	1121.9	994.2	897.4	831.9	793.9	793.9
12.5°	1594.8	1539.5	1432.4	1308.2	1132.3	914.7	721.5	604.1	555.7	528.2	531.5
15°	1646.6	1580.9	1449.8	1253.0	973.5	679.9	503.9	428.0	428.0	434.9	438.5
17.5°	1705.3	1632.7	1463.6	1170.2	769.8	486.7	397.1	390.0	400.5	417.7	417.7
20°	1763.9	1684.5	1470.4	1039.0	576.4	386.6	376.3	376.3	383.1	400.5	403.9
22.5°	1836.3	1750.1	1463.6	876.7	431.5	365.9	362.5	362.5	362.5	383.1	383.1
25°	1912.3	1826.1	1436.0	704.2	365.9	352.0	348.6	345.2	345.2	362.5	365.9
27.5°	1998.5	1905.5	1370.4	538.5	345.2	338.3	334.8	327.9	327.9	341.7	341.7
30°	2085.0	1995.1	1270.4	407.3	327.9	324.5	317.6	310.6	303.7	317.6	317.6
32.5°	2178.1	2088.4	1139.1	324.5	303.7	303.7	300.4	290.0	283.1	290.0	293.3
35°	2302.4	2195.4	990.7	283.1	272.6	272.6	272.6	269.2	255.5	262.3	262.3
37.5°	2468.1	2343.8	818.0	262.3	248.6	241.6	241.6	241.6	231.3	234.7	234.7
40°	2678.7	2516.4	652.3	245.1	231.3	214.1	207.1	210.6	203.6	203.6	200.2
42.5°	2965.1	2702.8	490.1	231.3	217.5	193.3	179.5	176.1	169.2	165.6	165.6
45°	3375.9	2930.6	352.0	217.5	207.1	169.2	155.3	144.9	127.6	117.4	117.4
47.5°	3907.4	3189.5	262.3	203.6	196.8	148.4	131.2	110.4	86.2	79.4	79.4
50°	4556.5	3479.4	221.0	183.0	179.5	131.2	103.6	72.6	48.2	41.4	44.8
52.5°	5188.2	3752.2	196.8	162.2	158.8	113.9	75.9	38.0	20.8	20.8	20.8
55°	5719.7	3945.4	179.5	144.9	138.1	89.7	41.4	17.2	10.4	10.4	10.4
57.5°	6199.6	4055.9	162.2	127.6	110.4	62.2	17.2	6.8	6.8	3.5	3.5
60°	6637.9	4121.6	141.6	110.4	86.2	34.6	6.8	3.5	3.5	0.0	0.0
62.5°	7069.4	4169.8	120.8	89.7	65.5	13.8	3.5	3.5	0.0	0.0	0.0
65°	7397.4	4152.5	96.7	72.6	41.4	6.8	3.5	0.0	0.0	0.0	0.0
67.5°	7387.0	3917.9	72.6	55.2	20.8	3.5	0.0	0.0	0.0	0.0	0.0
70°	6606.9	3300.0	48.2	34.6	6.8	3.5	0.0	0.0	0.0	0.0	0.0
72.5°	4687.6	2116.0	31.1	20.8	3.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	2064.2	642.1	17.2	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	403.9	148.4	10.4	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	96.7	17.2	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.4	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.8	3.5	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)