

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: P236994

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236994  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-210-D-U-T2R-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20084 lumens  
Efficiency: N/A  
Efficacy: 95.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

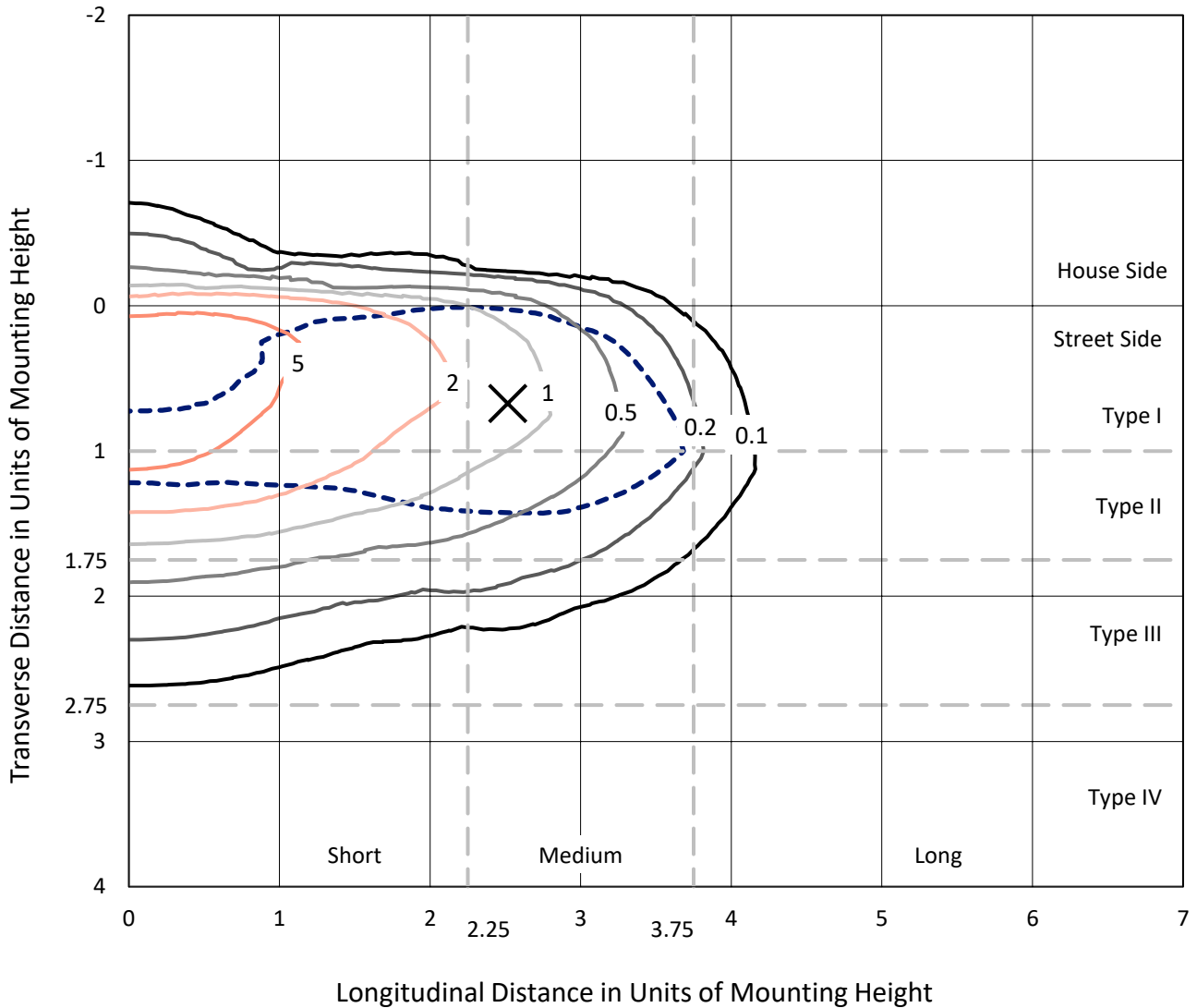
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

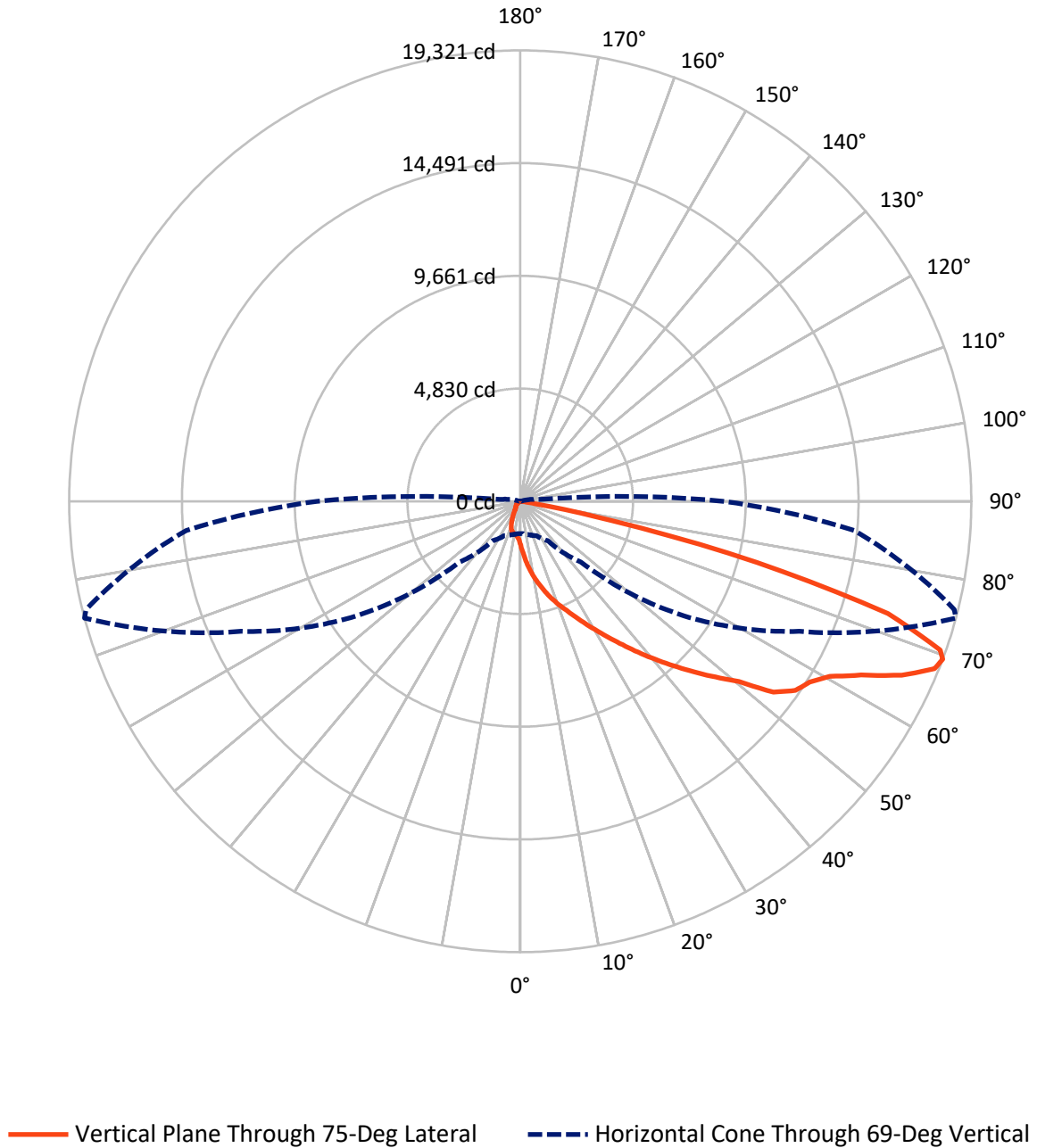
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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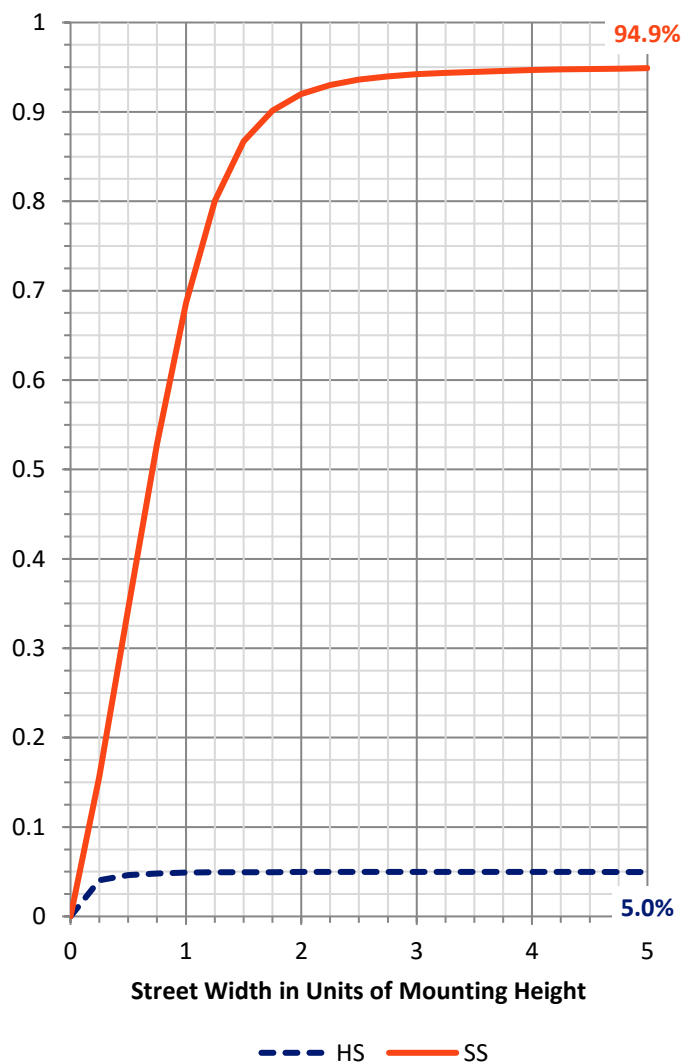
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1002.0	0.0	1002.0
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	19081.9	0.0	19081.9
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	20084.0	0.0	20084.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	217.9	1.1
10°-20°	779.1	3.9
20°-30°	1487.3	7.4
30°-40°	2667.9	13.3
40°-50°	4087.4	20.4
50°-60°	4750.6	23.7
60°-70°	4206.7	20.9
70°-80°	1814.5	9.0
80°-90°	72.7	0.4
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°	20084.0	100.0
0°-180°	20084.0	100.0

**Coefficient of Utilization**



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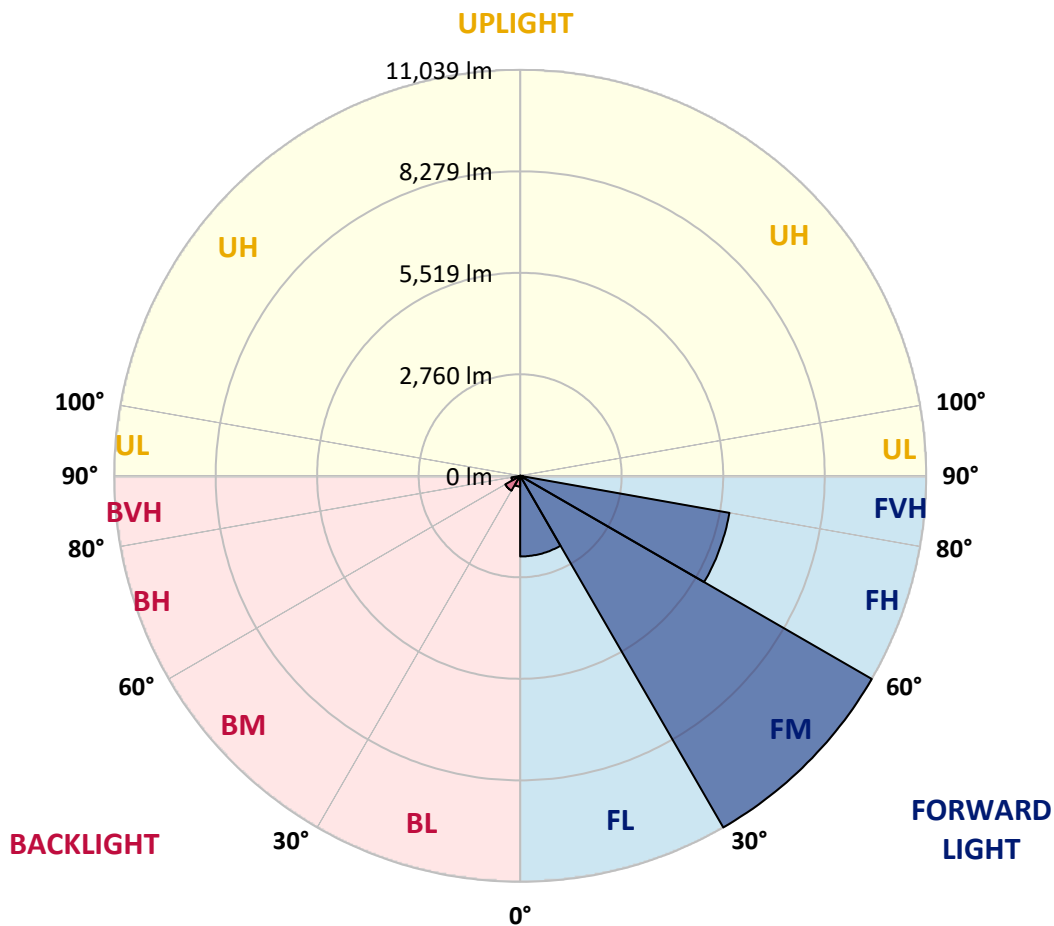
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2193.2	10.9			
FM (30°-60°)	11038.7	55.0			
FH (60°-80°)	5778.4	28.8			G3/7500
FVH (80°-90°)	71.6	0.4			G1/100
BL (0°-30°)	291.0	1.4	B1/500		
BM (30°-60°)	467.2	2.3	B1/1000		
BH (60°-80°)	242.8	1.2	B1/500		G1/500
BVH (80°-90°)	1.1	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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8
2.5°	3078.5	3048.2	3017.8	2983.2	2905.1	2770.7	2601.6	2419.5	2194.0	2155.0	1972.9
5°	3737.6	3724.6	3694.3	3646.6	3559.8	3412.4	3221.6	2952.8	2575.6	2510.5	2124.6
7.5°	4201.6	4192.9	4166.9	4110.5	4032.5	3885.0	3685.6	3395.1	2957.1	2883.4	2315.4
10°	4617.8	4613.5	4591.8	4539.8	4461.7	4301.3	4088.8	3785.3	3321.4	3239.0	2536.6
12.5°	4995.1	4999.4	4990.7	4964.7	4908.3	4756.6	4513.8	4184.2	3672.6	3581.5	2801.0
15°	5216.2	5229.2	5263.9	5315.9	5333.3	5211.9	4960.4	4596.1	4032.5	3954.4	3104.6
17.5°	5142.5	5155.5	5263.9	5441.7	5610.8	5628.1	5402.6	4986.4	4388.0	4310.0	3403.7
20°	4964.7	4982.0	5094.8	5337.6	5667.1	5896.9	5805.9	5411.3	4726.2	4630.8	3689.9
22.5°	5164.2	5164.2	5198.8	5346.3	5645.4	6005.3	6126.7	5836.2	5073.1	4956.0	3976.1
25°	5849.2	5836.2	5762.5	5701.8	5797.2	6118.1	6369.6	6269.8	5480.7	5346.3	4279.6
27.5°	6716.4	6777.1	6638.4	6417.3	6200.5	6339.2	6586.4	6699.1	5931.6	5792.9	4591.8
30°	7687.7	7713.7	7548.9	7254.1	6872.5	6738.1	6842.2	7067.7	6421.6	6269.8	4917.0
32.5°	8563.6	8541.9	8403.1	8095.3	7622.7	7332.1	7171.7	7362.5	6954.9	6781.5	5250.9
35°	9339.7	9357.1	9187.9	8832.4	8368.4	8060.6	7679.0	7696.4	7553.3	7353.8	5636.8
37.5°	10037.8	10007.4	9847.0	9491.5	9070.9	8737.0	8333.8	8043.2	8208.0	7999.9	6070.4
40°	10605.8	10575.5	10406.4	10059.5	9664.9	9391.7	9075.2	8507.2	8897.4	8659.0	6534.3
42.5°	11056.8	11022.1	10879.0	10545.1	10163.5	9920.7	9769.0	9079.5	9634.6	9396.1	7054.6
45°	11277.9	11247.5	11160.8	10909.3	10575.5	10363.0	10436.7	9738.6	10423.7	10224.2	7627.0
47.5°	11017.7	11004.7	11104.5	11061.1	10870.3	10757.6	11013.4	10458.4	11251.9	11056.8	8286.1
50°	10228.6	10250.3	10540.8	10900.7	10991.7	11126.1	11486.0	11217.2	12140.8	11932.6	9044.9
52.5°	8281.7	8429.2	9305.0	10172.2	10844.3	11351.6	12041.0	12301.2	13589.0	13385.2	10228.6
55°	6183.1	6243.8	7197.7	8680.6	10250.3	11334.3	12452.9	12938.6	14304.4	14096.3	10540.8
57.5°	4904.0	4925.7	5398.3	6911.6	9027.5	10944.0	12669.7	13168.4	14616.6	14443.2	11004.7
60°	3850.4	3876.4	4218.9	5259.5	7306.1	9890.4	12357.6	13367.8	15228.0	15089.2	11815.6
62.5°	2996.2	3022.2	3230.3	3841.7	5480.7	8268.7	11728.8	13688.7	16390.0	16325.0	13142.4
65°	2319.8	2328.4	2471.5	2757.7	3872.0	6512.6	10961.4	13987.9	17959.6	17903.3	14217.7
67.5°	1712.7	1725.7	1825.4	2003.2	2614.6	4678.5	9703.9	13758.1	19143.4	18978.6	14607.9
69°	1383.2	1396.2	1482.9	1626.0	2063.9	3685.6	8554.9	13190.1	19321.1	19165.0	14360.8
70°	1183.7	1192.4	1279.1	1400.5	1760.4	3130.6	7644.3	12700.1	19087.0	18935.2	13797.1
72.5°	758.8	802.2	888.9	966.9	1166.4	2072.6	5159.8	10532.1	16468.1	16207.9	10805.3
75°	420.6	433.6	589.7	685.1	776.1	1348.5	2870.4	6569.0	10475.7	10293.6	5779.9
77.5°	346.9	355.6	416.3	520.3	520.3	754.5	1084.0	2588.6	3984.8	3594.5	1565.3
80°	242.8	251.5	316.5	342.5	372.9	424.9	351.2	568.0	615.7	546.3	234.1
82.5°	169.1	177.8	216.8	281.8	299.2	199.5	130.1	169.1	177.8	177.8	91.1
85°	30.4	43.4	160.4	234.1	177.8	60.7	73.7	60.7	56.4	60.7	21.7
87.5°	0.0	0.0	99.7	112.7	95.4	26.0	30.4	21.7	13.0	17.3	8.7
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°	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8	1868.8
2.5°	1881.8	1790.8	1634.7	1521.9	1426.5	1352.8	1322.5	1274.8	1240.1	1257.4	1235.8
5°	1933.8	1773.4	1521.9	1361.5	1248.8	1153.4	1075.3	1014.6	966.9	958.3	949.6
7.5°	2016.2	1786.4	1456.9	1257.4	1088.3	940.9	819.5	728.4	659.1	659.1	633.1
10°	2129.0	1821.1	1417.9	1153.4	901.9	702.4	581.0	494.3	459.6	455.3	446.6
12.5°	2285.1	1886.2	1387.5	1019.0	702.4	511.6	437.9	407.6	394.6	390.2	385.9
15°	2497.5	1981.5	1352.8	854.2	533.3	420.6	390.2	364.2	351.2	346.9	342.5
17.5°	2701.3	2068.3	1279.1	685.1	433.6	381.6	346.9	325.2	307.9	303.5	303.5
20°	2892.1	2142.0	1153.4	533.3	390.2	342.5	307.9	281.8	264.5	260.2	260.2
22.5°	3091.6	2202.7	997.3	433.6	355.6	303.5	268.8	242.8	225.5	221.1	216.8
25°	3304.0	2246.0	819.5	385.9	320.9	268.8	229.8	208.1	195.1	190.8	186.4
27.5°	3533.8	2263.4	650.4	351.2	281.8	234.1	199.5	177.8	169.1	164.8	164.8
30°	3742.0	2246.0	503.0	312.2	247.2	203.8	173.4	156.1	147.4	143.1	143.1
32.5°	3958.8	2202.7	403.2	277.5	216.8	173.4	147.4	134.4	130.1	125.7	125.7
35°	4188.6	2146.3	346.9	247.2	186.4	151.8	130.1	121.4	117.1	112.7	112.7
37.5°	4457.4	2076.9	316.5	221.1	164.8	134.4	112.7	108.4	104.1	104.1	104.1
40°	4760.9	1990.2	294.8	199.5	147.4	117.1	99.7	95.4	91.1	91.1	91.1
42.5°	5081.8	1890.5	273.2	177.8	130.1	99.7	86.7	86.7	82.4	82.4	78.0
45°	5441.7	1790.8	251.5	156.1	112.7	86.7	73.7	69.4	69.4	65.0	65.0
47.5°	5866.6	1699.7	229.8	138.8	99.7	73.7	65.0	60.7	56.4	52.0	52.0
50°	6465.0	1691.0	203.8	121.4	91.1	60.7	52.0	47.7	43.4	39.0	39.0
52.5°	7059.0	1613.0	173.4	99.7	73.7	52.0	39.0	34.7	30.4	30.4	26.0
55°	7193.4	1482.9	151.8	86.7	56.4	39.0	30.4	21.7	21.7	17.3	17.3
57.5°	7488.2	1422.2	130.1	69.4	43.4	30.4	17.3	13.0	13.0	13.0	13.0
60°	8069.3	1404.9	112.7	60.7	30.4	21.7	13.0	8.7	8.7	4.3	4.3
62.5°	8871.4	1387.5	95.4	52.0	21.7	13.0	8.7	4.3	0.0	0.0	0.0
65°	9313.7	1270.4	78.0	39.0	17.3	13.0	4.3	0.0	0.0	0.0	0.0
67.5°	9196.6	1049.3	69.4	26.0	13.0	8.7	4.3	0.0	0.0	0.0	0.0
69°	8706.7	884.5	56.4	21.7	13.0	8.7	4.3	0.0	0.0	0.0	0.0
70°	8117.0	763.1	52.0	17.3	8.7	4.3	4.3	0.0	0.0	0.0	0.0
72.5°	5762.5	398.9	34.7	13.0	8.7	4.3	0.0	0.0	0.0	0.0	0.0
75°	2692.6	177.8	21.7	8.7	4.3	4.3	0.0	0.0	0.0	0.0	0.0
77.5°	594.0	82.4	13.0	8.7	4.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	112.7	30.4	8.7	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	39.0	13.0	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.3	0.0	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)