

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: P265582

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265582  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-100-D-U-T2R-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 440mA 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: 9761.8 lumens  
Efficiency: N/A  
Efficacy: 95.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 102  
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

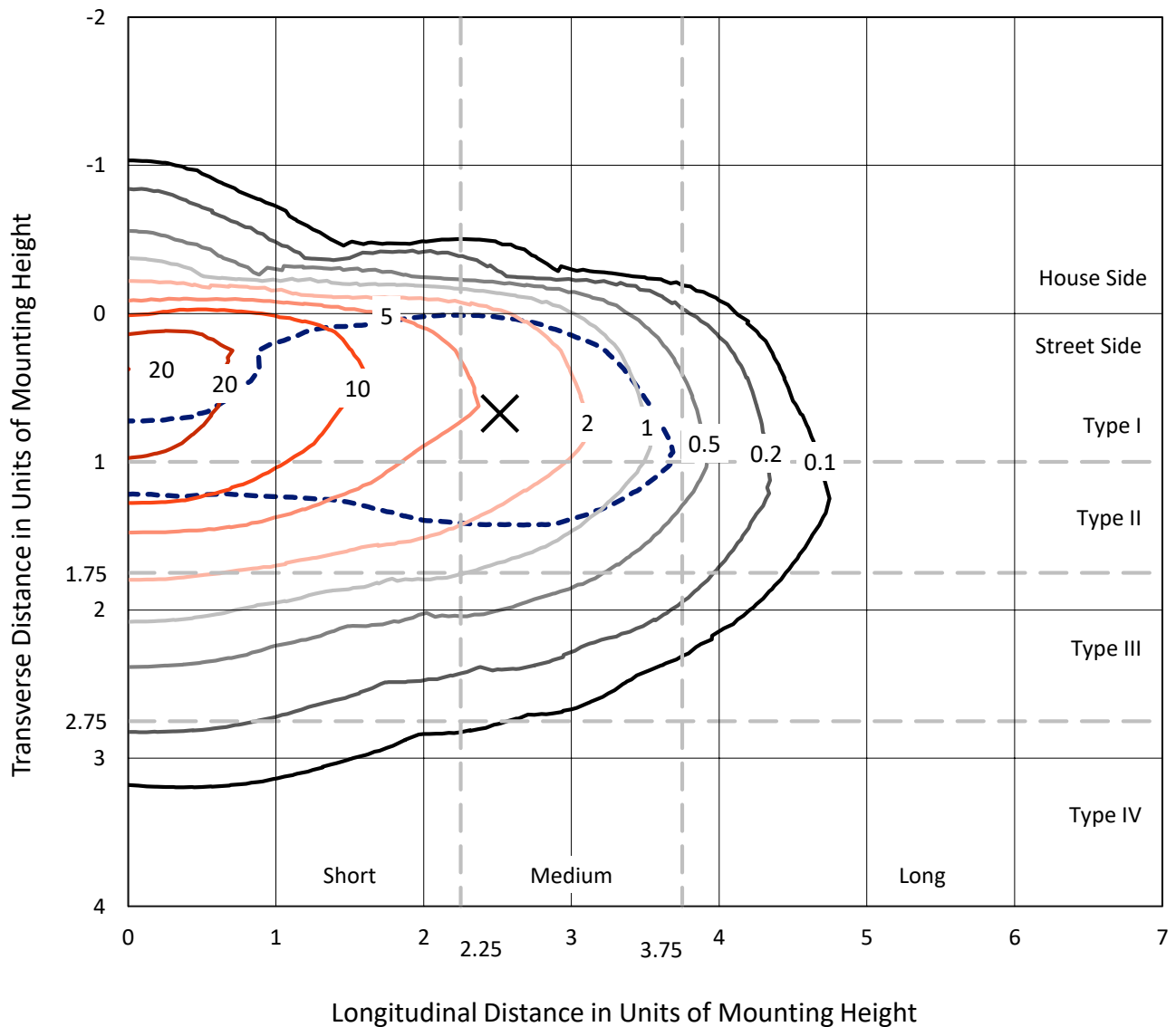


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

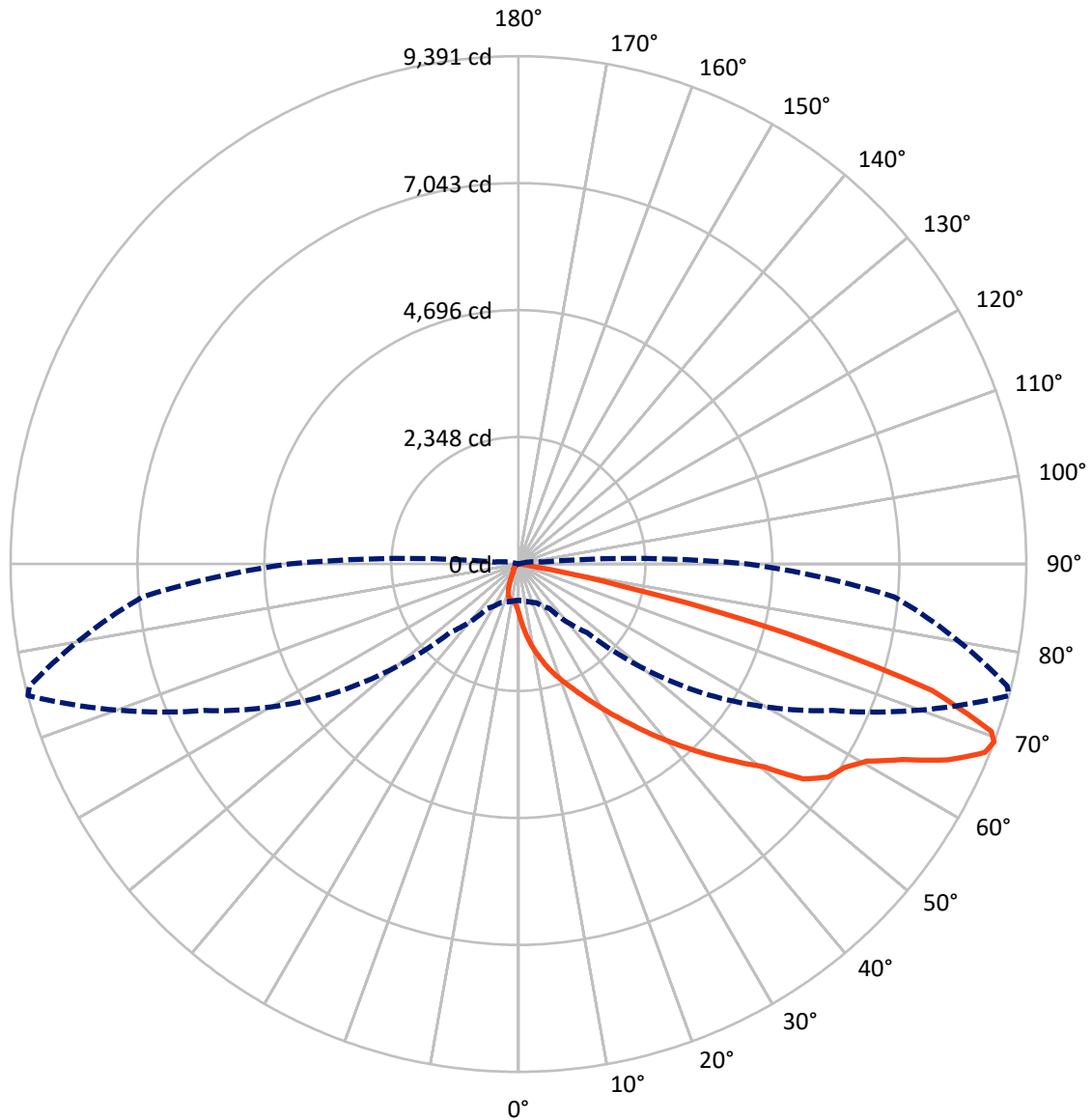


Based on 10 foot mounting height. Maximum calculated value = 24.9 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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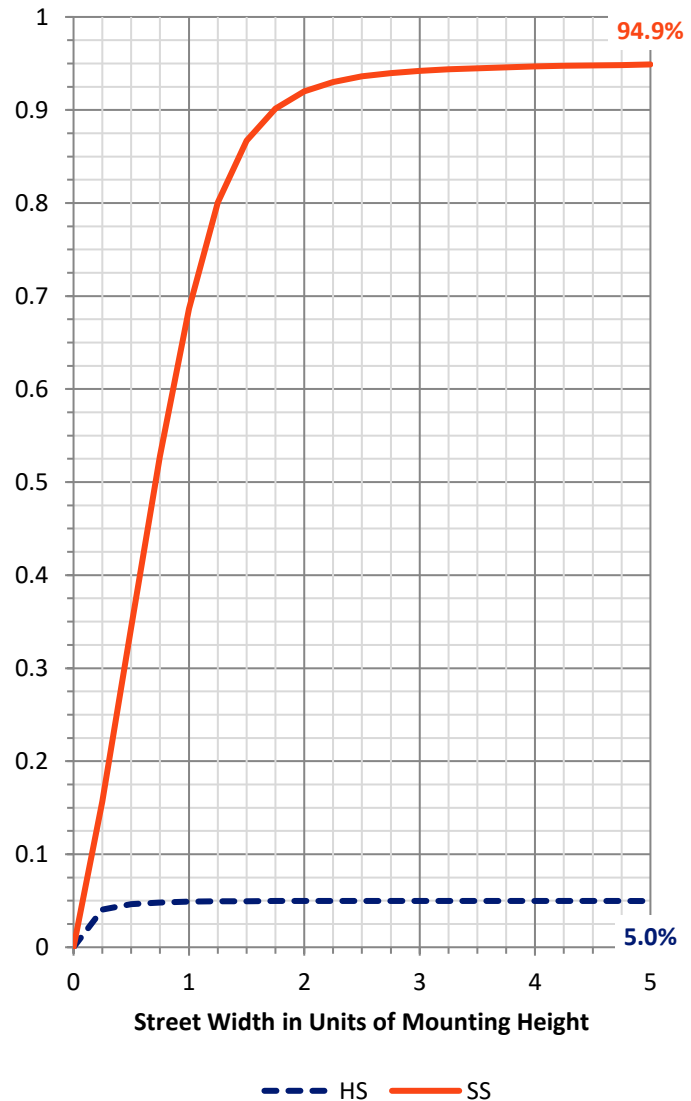
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	487.0	0.0	487.0
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	9274.8	0.0	9274.8
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	9761.8	0.0	9761.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.9	1.1
10°-20°	378.7	3.9
20°-30°	722.9	7.4
30°-40°	1296.7	13.3
40°-50°	1986.7	20.4
50°-60°	2309.0	23.7
60°-70°	2044.7	20.9
70°-80°	881.9	9.0
80°-90°	35.3	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°	9761.8	100.0
0°-180°	9761.8	100.0

**Coefficient of Utilization**



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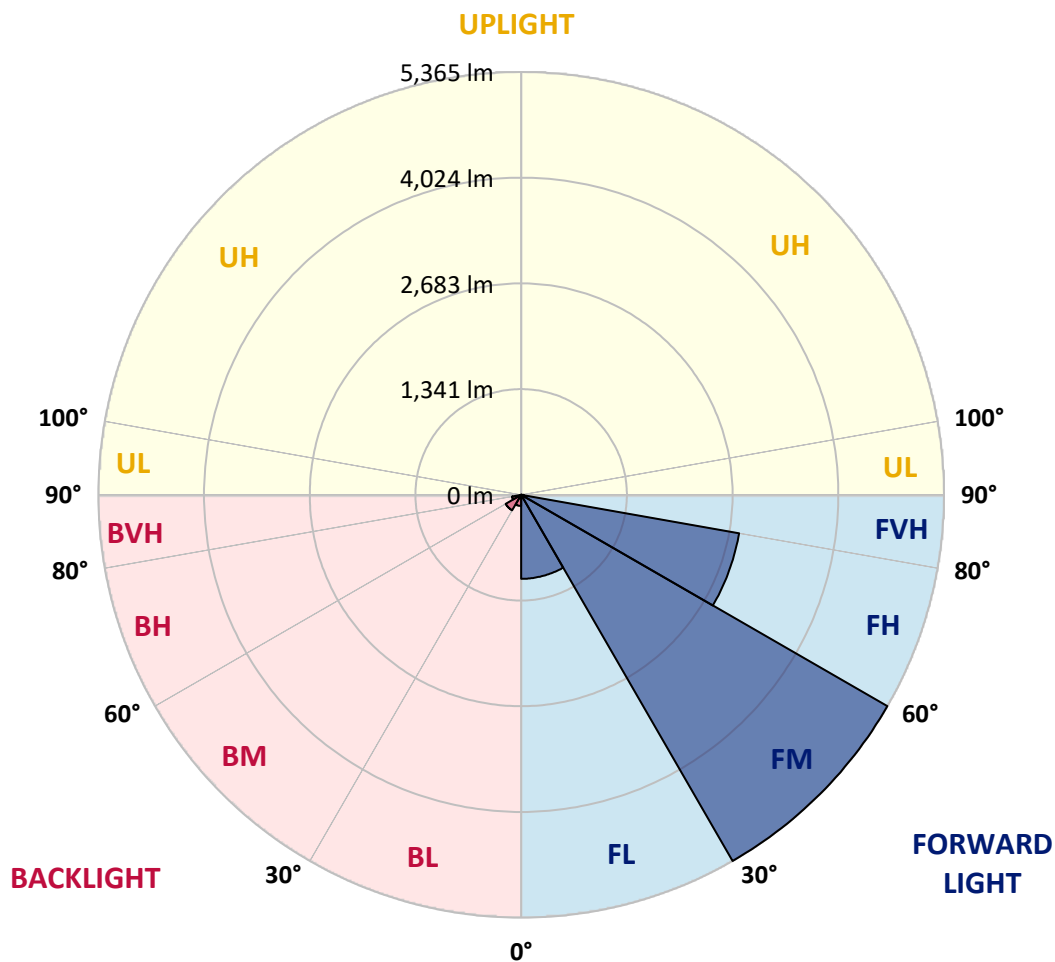
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1066.0	10.9			
FM	(30°-60°)	5365.3	55.0			
FH	(60°-80°)	2808.6	28.8			G2/5000
FVH	(80°-90°)	34.8	0.4			G1/100
BL	(0°-30°)	141.5	1.4	B1/500		
BM	(30°-60°)	227.1	2.3	B1/1000		
BH	(60°-80°)	118.0	1.2	B1/500		G1/500
BVH	(80°-90°)	0.5	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-G2**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	1496.3	1481.6	1466.8	1450.0	1412.0	1346.6	1264.5	1176.1	1066.4	1047.5	958.9
5°	1816.6	1810.4	1795.6	1772.4	1730.2	1658.6	1565.8	1435.2	1251.9	1220.3	1032.7
7.5°	2042.1	2038.0	2025.3	1997.9	1960.0	1888.3	1791.4	1650.1	1437.3	1401.4	1125.3
10°	2244.4	2242.3	2231.8	2206.5	2168.6	2090.6	1987.4	1839.9	1614.3	1574.3	1233.0
12.5°	2427.8	2429.9	2425.8	2413.0	2385.7	2312.0	2193.9	2033.8	1785.0	1740.7	1361.4
15°	2535.3	2541.7	2558.6	2583.7	2592.1	2533.2	2411.1	2233.9	1960.0	1922.1	1509.0
17.5°	2499.5	2505.8	2558.6	2644.9	2727.2	2735.6	2625.9	2423.6	2132.8	2094.8	1654.4
20°	2413.0	2421.6	2476.3	2594.3	2754.6	2866.2	2821.9	2630.1	2297.1	2250.9	1793.5
22.5°	2510.0	2510.0	2526.9	2598.5	2744.0	2919.0	2977.9	2836.7	2465.8	2408.8	1932.6
25°	2843.0	2836.7	2800.8	2771.5	2817.8	2973.7	3095.9	3047.4	2663.8	2598.5	2080.1
27.5°	3264.5	3294.1	3226.6	3119.2	3013.8	3081.1	3201.3	3256.0	2883.1	2815.6	2231.8
30°	3736.6	3749.3	3669.1	3525.8	3340.3	3275.1	3325.6	3435.2	3121.3	3047.4	2389.9
32.5°	4162.3	4151.7	4084.4	3934.7	3705.0	3563.8	3485.9	3578.6	3380.4	3296.2	2552.2
35°	4539.6	4547.9	4465.8	4293.0	4067.4	3917.9	3732.4	3740.8	3671.3	3574.4	2739.7
37.5°	4878.9	4864.1	4786.1	4613.3	4408.9	4246.6	4050.5	3909.5	3989.6	3888.4	2950.6
40°	5155.0	5140.2	5057.9	4889.5	4697.6	4564.8	4410.9	4134.9	4324.6	4208.6	3176.0
42.5°	5374.1	5357.2	5287.8	5125.5	4940.0	4821.9	4748.3	4413.2	4682.9	4567.0	3428.9
45°	5481.5	5466.8	5424.8	5302.4	5140.2	5036.9	5072.8	4733.4	5066.4	4969.6	3707.0
47.5°	5355.2	5348.9	5397.2	5376.3	5283.6	5228.8	5353.1	5083.2	5469.1	5374.1	4027.5
50°	4971.6	4982.1	5123.4	5298.3	5342.5	5407.8	5582.7	5452.2	5901.0	5799.8	4396.2
52.5°	4025.3	4097.0	4522.6	4944.2	5270.9	5517.4	5852.5	5978.9	6604.9	6505.9	4971.6
55°	3005.3	3034.8	3498.4	4219.2	4982.1	5509.0	6052.7	6288.8	6952.6	6851.6	5123.4
57.5°	2383.7	2394.2	2623.8	3359.3	4387.9	5319.4	6158.2	6400.5	7104.3	7020.1	5348.9
60°	1871.4	1884.1	2050.7	2556.3	3551.1	4807.2	6006.3	6497.4	7401.6	7334.1	5743.0
62.5°	1456.3	1468.9	1570.1	1867.2	2663.8	4018.9	5700.9	6653.3	7966.3	7934.8	6387.8
65°	1127.6	1131.8	1201.3	1340.5	1881.9	3165.4	5327.8	6798.8	8729.3	8701.9	6910.5
67.5°	832.5	838.7	887.3	973.7	1270.8	2274.0	4716.6	6687.2	9304.6	9224.5	7100.2
69°	672.3	678.6	720.8	790.2	1003.1	1791.4	4158.2	6411.1	9391.1	9315.2	6980.0
70°	575.4	579.5	621.6	680.7	855.6	1521.5	3715.5	6172.9	9277.2	9203.5	6706.0
72.5°	368.8	389.9	432.1	470.0	566.9	1007.4	2507.9	5119.1	8004.3	7877.9	5251.9
75°	204.5	210.7	286.6	333.0	377.3	655.5	1395.2	3192.8	5091.8	5003.2	2809.3
77.5°	168.6	172.8	202.3	253.0	253.0	366.7	526.9	1258.2	1936.7	1747.2	760.9
80°	117.9	122.2	153.9	166.5	181.3	206.5	170.7	276.0	299.2	265.5	113.8
82.5°	82.1	86.3	105.5	137.0	145.4	96.9	63.2	82.1	86.3	86.3	44.2
85°	14.7	21.1	78.0	113.8	86.3	29.6	35.8	29.6	27.4	29.6	10.5
87.5°	0.0	0.0	48.5	54.7	46.4	12.7	14.7	10.5	6.3	8.4	4.2
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°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	914.7	870.4	794.6	739.8	693.4	657.5	642.7	619.7	602.8	611.1	600.6
5°	939.9	862.0	739.8	661.7	607.0	560.6	522.6	493.2	470.0	465.7	461.5
7.5°	980.1	868.3	708.1	611.1	529.0	457.3	398.3	354.0	320.3	320.3	307.7
10°	1034.8	885.2	689.2	560.6	438.4	341.4	282.3	240.2	223.4	221.3	217.1
12.5°	1110.7	916.8	674.4	495.2	341.4	248.7	212.9	198.0	191.8	189.7	187.6
15°	1213.9	963.2	657.5	415.1	259.3	204.5	189.7	177.1	170.7	168.6	166.5
17.5°	1313.0	1005.3	621.6	333.0	210.7	185.5	168.6	158.0	149.7	147.5	147.5
20°	1405.7	1041.0	560.6	259.3	189.7	166.5	149.7	137.0	128.5	126.4	126.4
22.5°	1502.7	1070.6	484.7	210.7	172.8	147.5	130.7	117.9	109.7	107.4	105.5
25°	1605.9	1091.7	398.3	187.6	155.9	130.7	111.7	101.1	94.9	92.7	90.5
27.5°	1717.6	1100.2	316.2	170.7	137.0	113.8	96.9	86.3	82.1	80.0	80.0
30°	1818.8	1091.7	244.5	151.8	120.2	99.1	84.4	75.8	71.7	69.6	69.6
32.5°	1924.2	1070.6	196.0	134.8	105.5	84.4	71.7	65.3	63.2	61.2	61.2
35°	2035.9	1043.2	168.6	120.2	90.5	73.8	63.2	59.0	57.0	54.7	54.7
37.5°	2166.5	1009.4	153.9	107.4	80.0	65.3	54.7	52.7	50.6	50.6	50.6
40°	2314.0	967.4	143.3	96.9	71.7	57.0	48.5	46.4	44.2	44.2	44.2
42.5°	2470.0	918.8	132.8	86.3	63.2	48.5	42.1	42.1	40.1	40.1	38.0
45°	2644.9	870.4	122.2	75.8	54.7	42.1	35.8	33.7	33.7	31.6	31.6
47.5°	2851.5	826.1	111.7	67.5	48.5	35.8	31.6	29.6	27.4	25.3	25.3
50°	3142.4	821.9	99.1	59.0	44.2	29.6	25.3	23.1	21.1	19.0	19.0
52.5°	3430.9	784.0	84.4	48.5	35.8	25.3	19.0	16.9	14.7	14.7	12.7
55°	3496.4	720.8	73.8	42.1	27.4	19.0	14.7	10.5	10.5	8.4	8.4
57.5°	3639.7	691.2	63.2	33.7	21.1	14.7	8.4	6.3	6.3	6.3	6.3
60°	3922.1	682.8	54.7	29.6	14.7	10.5	6.3	4.2	4.2	2.1	2.1
62.5°	4312.0	674.4	46.4	25.3	10.5	6.3	4.2	2.1	0.0	0.0	0.0
65°	4526.9	617.5	38.0	19.0	8.4	6.3	2.1	0.0	0.0	0.0	0.0
67.5°	4470.1	510.0	33.7	12.7	6.3	4.2	2.1	0.0	0.0	0.0	0.0
69°	4231.8	429.8	27.4	10.5	6.3	4.2	2.1	0.0	0.0	0.0	0.0
70°	3945.3	370.9	25.3	8.4	4.2	2.1	2.1	0.0	0.0	0.0	0.0
72.5°	2800.8	193.9	16.9	6.3	4.2	2.1	0.0	0.0	0.0	0.0	0.0
75°	1308.8	86.3	10.5	4.2	2.1	2.1	0.0	0.0	0.0	0.0	0.0
77.5°	288.7	40.1	6.3	4.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	54.7	14.7	4.2	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	19.0	6.3	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.3	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	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)