

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: P265591

Luminaire Tested: **ARCH-L-AF72-110-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265591  
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-AF72-110-D-U-T2R-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 485mA 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: 10669.7 lumens  
Efficiency: N/A  
Efficacy: 94.4 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): 113  
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

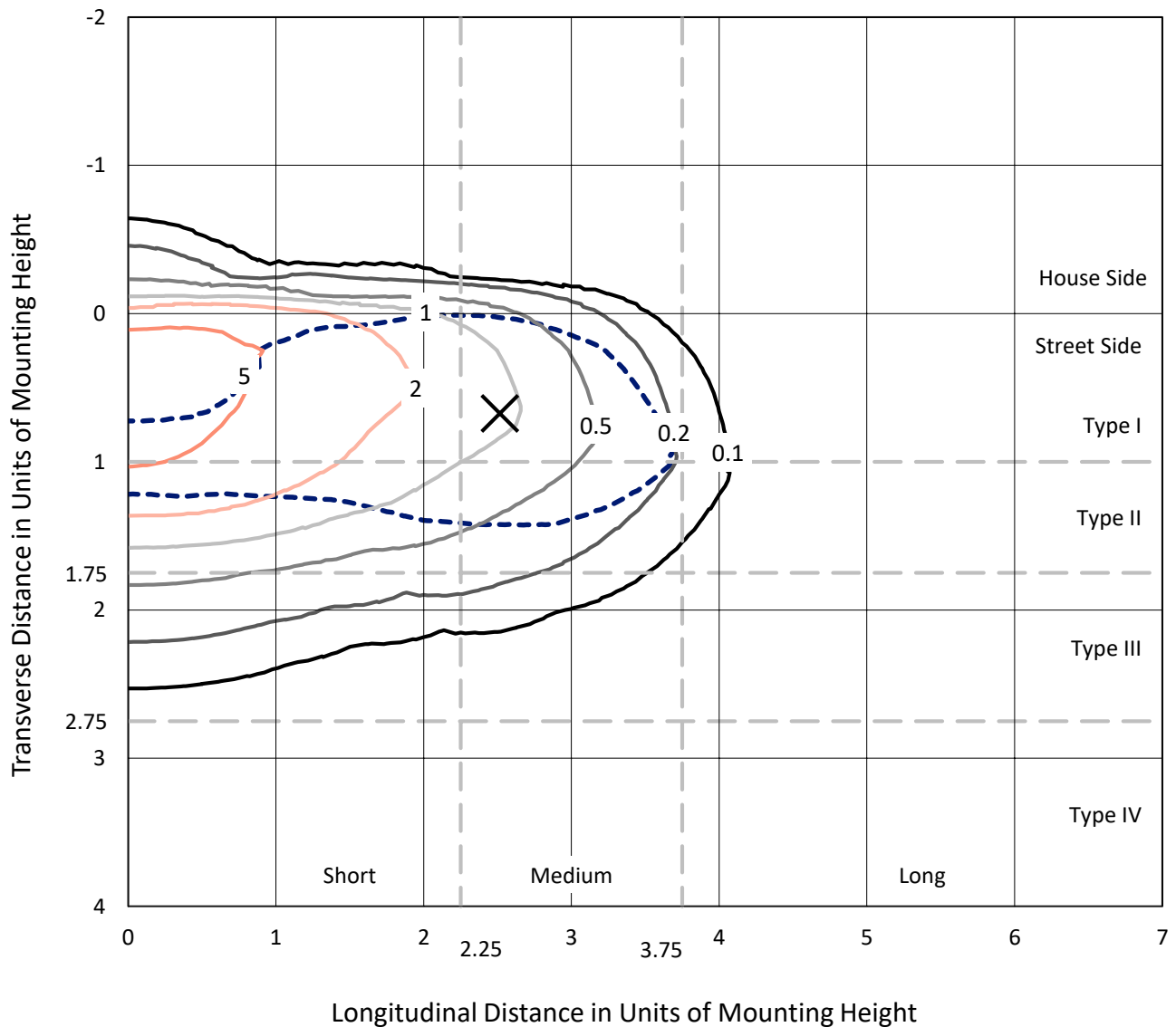


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

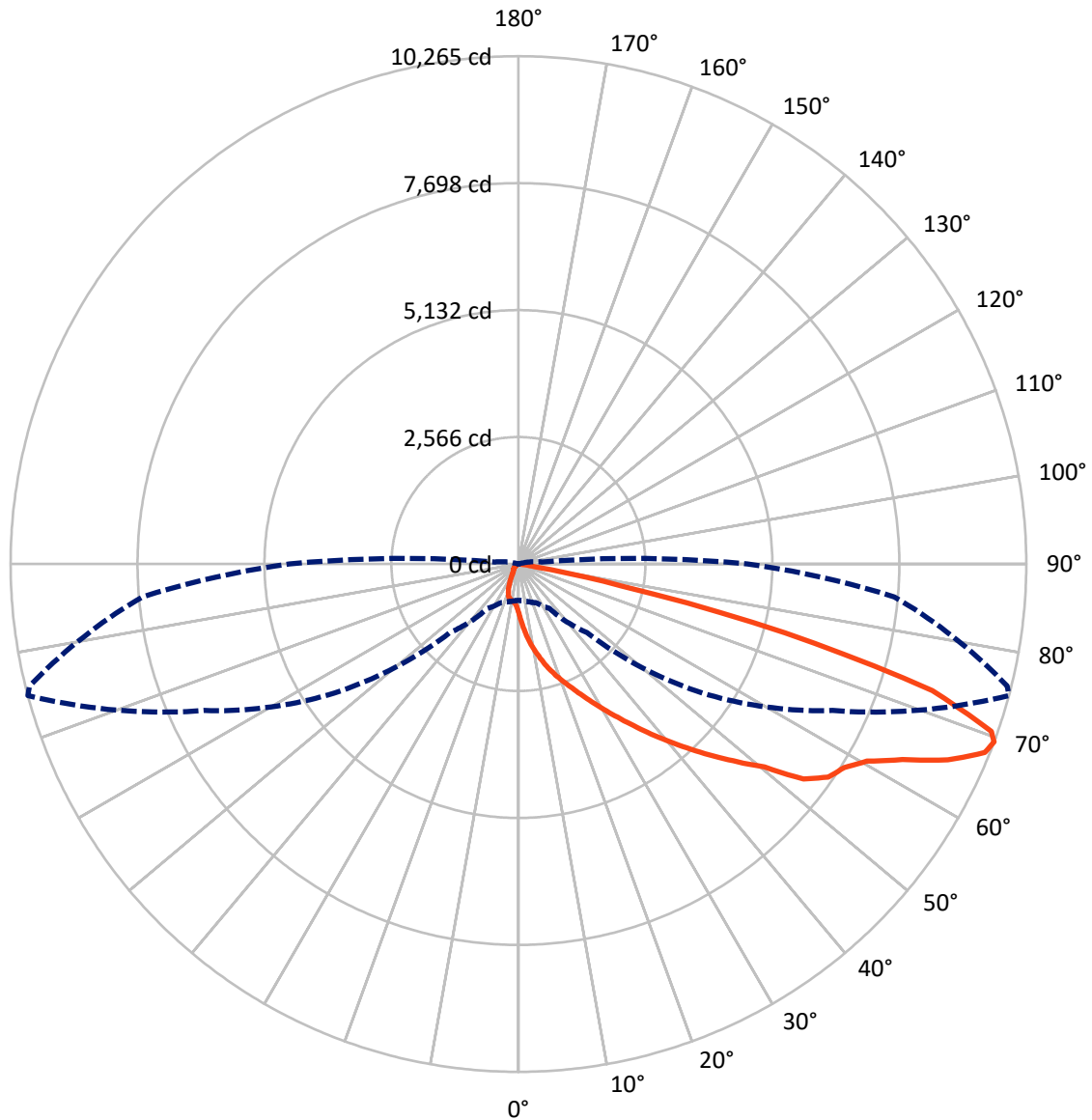


Based on 20 foot mounting height. Maximum calculated value = 6.8 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



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

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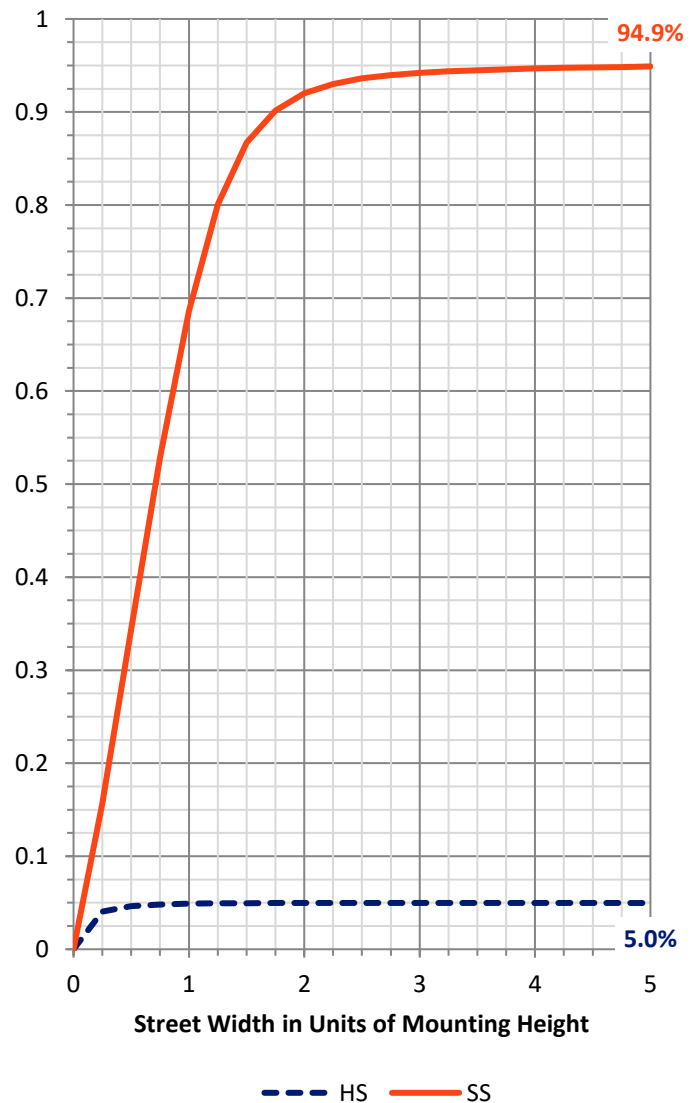
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	532.3	0.0	532.3
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	10137.3	0.0	10137.3
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	10669.7	0.0	10669.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.8	1.1
10°-20°	413.9	3.9
20°-30°	790.1	7.4
30°-40°	1417.3	13.3
40°-50°	2171.5	20.4
50°-60°	2523.8	23.7
60°-70°	2234.8	20.9
70°-80°	964.0	9.0
80°-90°	38.6	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°	10669.7	100.0
0°-180°	10669.7	100.0

**Coefficient of Utilization**



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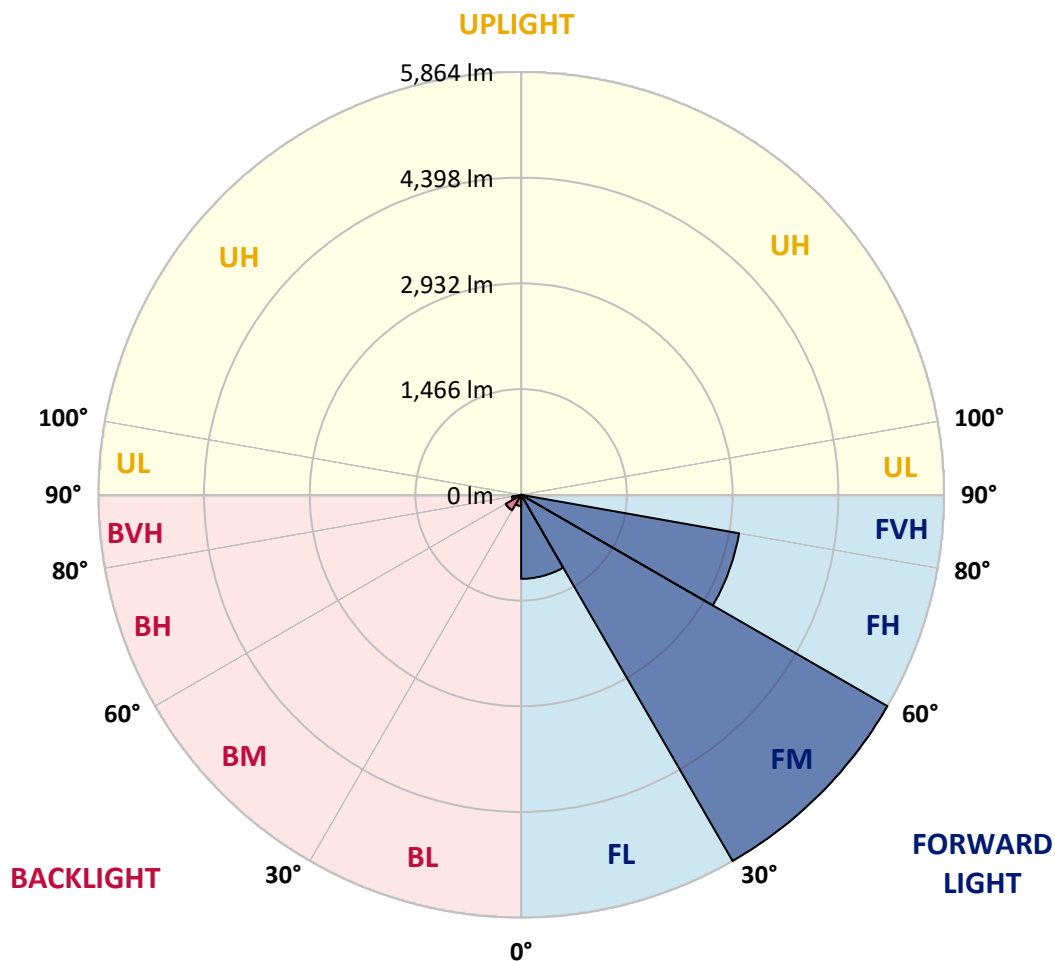
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1165.1	10.9			
FM (30°-60°)	5864.3	55.0			
FH (60°-80°)	3069.8	28.8			G2/5000
FVH (80°-90°)	38.0	0.4			G1/100
BL (0°-30°)	154.6	1.4	B1/500		
BM (30°-60°)	248.2	2.3	B1/1000		
BH (60°-80°)	129.0	1.2	B1/500		G1/500
BVH (80°-90°)	0.6	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°	992.7	992.7	992.7	992.7	992.7	992.7	992.7	992.7	992.7	992.7	992.7
2.5°	1635.5	1619.4	1603.2	1584.8	1543.4	1472.0	1382.1	1285.4	1165.6	1144.8	1048.1
5°	1985.7	1978.6	1962.5	1937.3	1891.2	1812.9	1711.5	1568.7	1368.3	1333.8	1128.7
7.5°	2232.1	2227.4	2213.7	2183.7	2142.3	2063.9	1957.9	1803.6	1571.0	1531.8	1230.0
10°	2453.2	2450.9	2439.3	2411.8	2370.3	2285.1	2172.2	2010.9	1764.5	1720.8	1347.5
12.5°	2653.7	2656.0	2651.3	2637.6	2607.6	2526.9	2397.9	2222.9	1951.1	1902.7	1488.0
15°	2771.1	2778.0	2796.5	2824.1	2833.3	2768.8	2635.2	2441.8	2142.3	2100.7	1649.3
17.5°	2731.9	2738.8	2796.5	2890.8	2980.8	2990.0	2870.2	2649.0	2331.1	2289.7	1808.3
20°	2637.6	2646.8	2706.7	2835.6	3010.7	3132.7	3084.4	2874.8	2510.9	2460.2	1960.3
22.5°	2743.5	2743.5	2761.8	2840.3	2999.3	3190.3	3254.9	3100.5	2695.2	2632.9	2112.4
25°	3107.4	3100.5	3061.3	3029.2	3079.7	3250.2	3383.8	3330.8	2911.6	2840.3	2273.6
27.5°	3568.2	3600.3	3526.7	3409.2	3294.1	3367.7	3499.0	3558.9	3151.2	3077.5	2439.3
30°	4084.1	4098.0	4010.5	3853.8	3651.0	3579.7	3634.9	3754.7	3411.6	3330.8	2612.2
32.5°	4549.5	4537.9	4464.1	4300.6	4049.6	3895.2	3810.0	3911.3	3694.8	3602.7	2789.5
35°	4961.8	4971.0	4881.1	4692.2	4445.7	4282.2	4079.6	4088.7	4012.6	3906.8	2994.6
37.5°	5332.6	5316.4	5231.3	5042.4	4819.0	4641.5	4427.3	4273.0	4360.6	4250.1	3224.9
40°	5634.3	5618.3	5528.3	5344.1	5134.5	4989.4	4821.3	4519.5	4726.8	4600.1	3471.4
42.5°	5873.9	5855.5	5779.4	5602.1	5399.4	5270.4	5189.8	4823.4	5118.5	4991.7	3747.8
45°	5991.4	5975.3	5929.3	5795.7	5618.3	5505.4	5544.5	5173.7	5537.6	5431.6	4051.9
47.5°	5853.1	5846.3	5899.3	5876.3	5774.8	5714.9	5850.9	5556.0	5977.6	5873.9	4402.1
50°	5433.9	5445.4	5599.9	5791.1	5839.4	5910.8	6101.9	5959.1	6449.8	6339.2	4805.2
52.5°	4399.7	4478.1	4943.4	5404.1	5761.1	6030.6	6396.8	6535.0	7219.1	7111.0	5433.9
55°	3284.8	3317.0	3823.8	4611.5	5445.4	6021.3	6615.7	6873.7	7599.2	7488.7	5599.9
57.5°	2605.3	2616.9	2867.8	3671.8	4796.0	5814.0	6730.8	6995.7	7765.0	7673.0	5846.3
60°	2045.5	2059.4	2241.4	2794.2	3881.3	5254.2	6565.1	7101.7	8089.9	8016.1	6277.0
62.5°	1591.7	1605.5	1716.1	2040.9	2911.6	4392.8	6231.0	7272.1	8707.2	8672.6	6981.9
65°	1232.4	1237.0	1313.1	1465.0	2056.9	3459.8	5823.3	7431.0	9541.1	9511.2	7553.2
67.5°	910.0	916.8	969.8	1064.2	1389.0	2485.5	5155.3	7309.0	10170.0	10082.4	7760.5
69°	734.9	741.7	787.9	863.8	1096.6	1957.9	4544.9	7007.3	10264.5	10181.5	7629.2
70°	628.9	633.5	679.6	744.1	935.2	1663.1	4061.1	6747.0	10140.0	10059.4	7329.7
72.5°	403.1	426.2	472.1	513.7	619.7	1101.1	2741.2	5595.3	8748.8	8610.6	5740.3
75°	223.5	230.3	313.2	364.0	412.3	716.4	1525.0	3489.8	5565.3	5468.5	3070.5
77.5°	184.3	189.0	221.2	276.4	276.4	400.9	575.9	1375.1	2116.9	1909.5	831.7
80°	128.9	133.6	168.2	181.9	198.0	225.7	186.6	301.8	327.2	290.2	124.3
82.5°	89.8	94.4	115.2	149.7	158.9	106.0	69.1	89.8	94.4	94.4	48.4
85°	16.1	23.0	85.2	124.3	94.4	32.2	39.2	32.2	30.0	32.2	11.5
87.5°	0.0	0.0	53.0	59.8	50.7	13.8	16.1	11.5	6.8	9.3	4.6
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°	992.7	992.7	992.7	992.7	992.7	992.7	992.7	992.7	992.7	992.7	992.7
2.5°	999.8	951.3	868.4	808.6	757.9	718.7	702.6	677.2	658.7	668.0	656.5
5°	1027.3	942.1	808.6	723.2	663.4	612.7	571.2	539.1	513.7	509.1	504.5
7.5°	1071.0	949.1	774.0	668.0	578.1	499.8	435.4	387.0	350.1	350.1	336.3
10°	1131.1	967.5	753.3	612.7	479.2	373.2	308.7	262.7	244.2	241.9	237.2
12.5°	1214.0	1002.0	737.1	541.3	373.2	271.7	232.7	216.5	209.7	207.2	205.1
15°	1326.8	1052.8	718.7	453.9	283.3	223.5	207.2	193.4	186.6	184.3	181.9
17.5°	1435.1	1098.7	679.6	364.0	230.3	202.7	184.3	172.7	163.5	161.2	161.2
20°	1536.5	1138.0	612.7	283.3	207.2	181.9	163.5	149.7	140.6	138.2	138.2
22.5°	1642.5	1170.2	529.8	230.3	189.0	161.2	142.8	128.9	119.7	117.5	115.2
25°	1755.3	1193.2	435.4	205.1	170.5	142.8	122.1	110.6	103.7	101.4	99.1
27.5°	1877.4	1202.4	345.5	186.6	149.7	124.3	106.0	94.4	89.8	87.6	87.6
30°	1987.9	1193.2	267.2	165.8	131.3	108.2	92.2	83.0	78.3	75.9	75.9
32.5°	2103.1	1170.2	214.2	147.4	115.2	92.2	78.3	71.4	69.1	66.8	66.8
35°	2225.2	1140.2	184.3	131.3	99.1	80.6	69.1	64.5	62.3	59.8	59.8
37.5°	2368.0	1103.4	168.2	117.5	87.6	71.4	59.8	57.6	55.2	55.2	55.2
40°	2529.3	1057.3	156.7	106.0	78.3	62.3	53.0	50.7	48.4	48.4	48.4
42.5°	2699.6	1004.3	145.2	94.4	69.1	53.0	46.1	46.1	43.7	43.7	41.4
45°	2890.8	951.3	133.6	83.0	59.8	46.1	39.2	36.9	36.9	34.6	34.6
47.5°	3116.6	902.9	122.1	73.8	53.0	39.2	34.6	32.2	30.0	27.7	27.7
50°	3434.5	898.3	108.2	64.5	48.4	32.2	27.7	25.3	23.0	20.8	20.8
52.5°	3750.2	857.0	92.2	53.0	39.2	27.7	20.8	18.4	16.1	16.1	13.8
55°	3821.5	787.9	80.6	46.1	30.0	20.8	16.1	11.5	11.5	9.3	9.3
57.5°	3978.1	755.6	69.1	36.9	23.0	16.1	9.3	6.8	6.8	6.8	6.8
60°	4286.8	746.3	59.8	32.2	16.1	11.5	6.8	4.6	4.6	2.2	2.2
62.5°	4713.0	737.1	50.7	27.7	11.5	6.8	4.6	2.2	0.0	0.0	0.0
65°	4948.0	674.9	41.4	20.8	9.3	6.8	2.2	0.0	0.0	0.0	0.0
67.5°	4885.7	557.5	36.9	13.8	6.8	4.6	2.2	0.0	0.0	0.0	0.0
69°	4625.5	470.0	30.0	11.5	6.8	4.6	2.2	0.0	0.0	0.0	0.0
70°	4312.1	405.5	27.7	9.3	4.6	2.2	2.2	0.0	0.0	0.0	0.0
72.5°	3061.3	211.9	18.4	6.8	4.6	2.2	0.0	0.0	0.0	0.0	0.0
75°	1430.6	94.4	11.5	4.6	2.2	2.2	0.0	0.0	0.0	0.0	0.0
77.5°	315.6	43.7	6.8	4.6	2.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	59.8	16.1	4.6	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	20.8	6.8	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	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)