

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: P265584

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265584  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-100-D-U-T2U-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8452.5 lumens  
Efficiency: N/A  
Efficacy: 82.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - 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

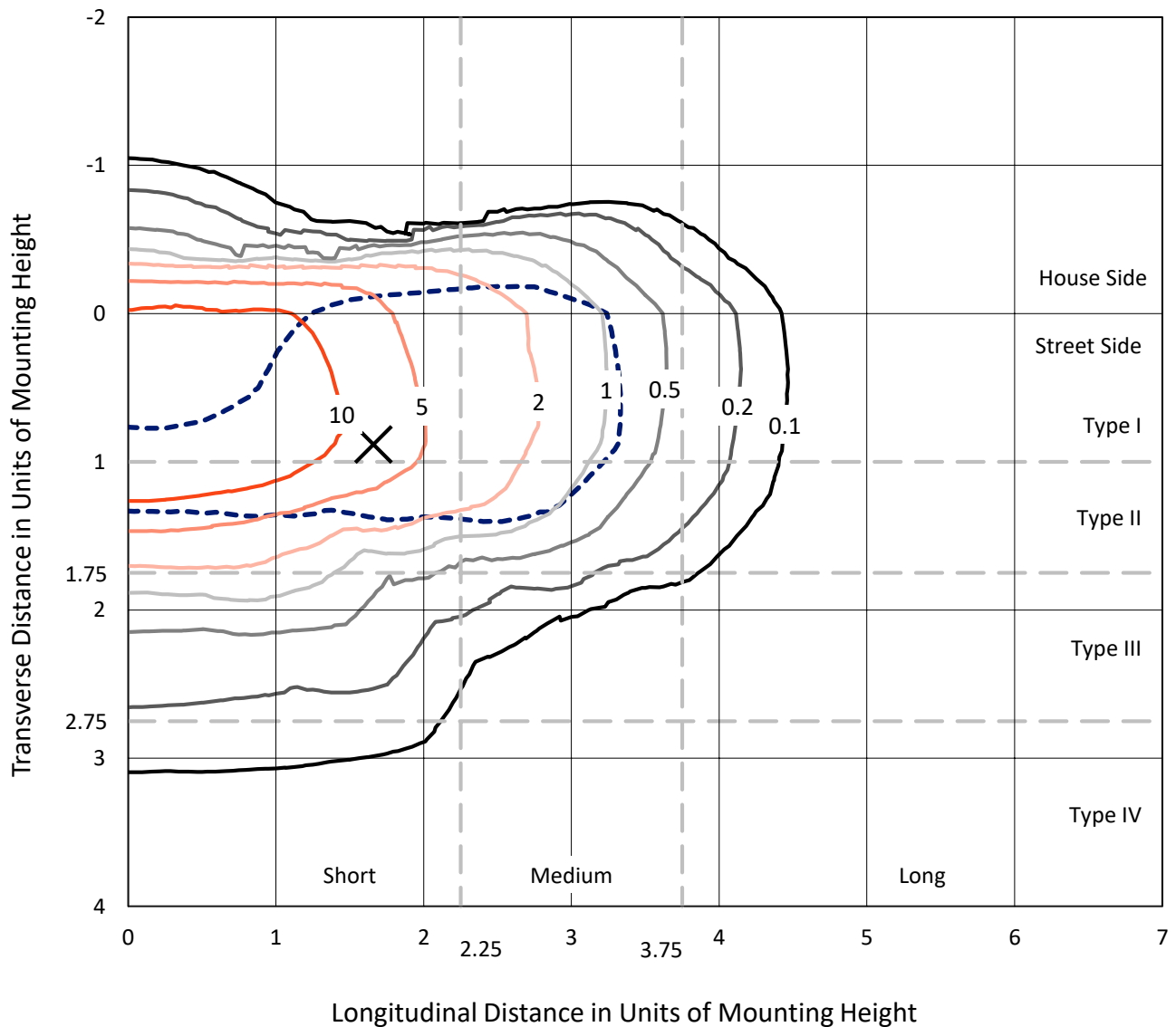


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

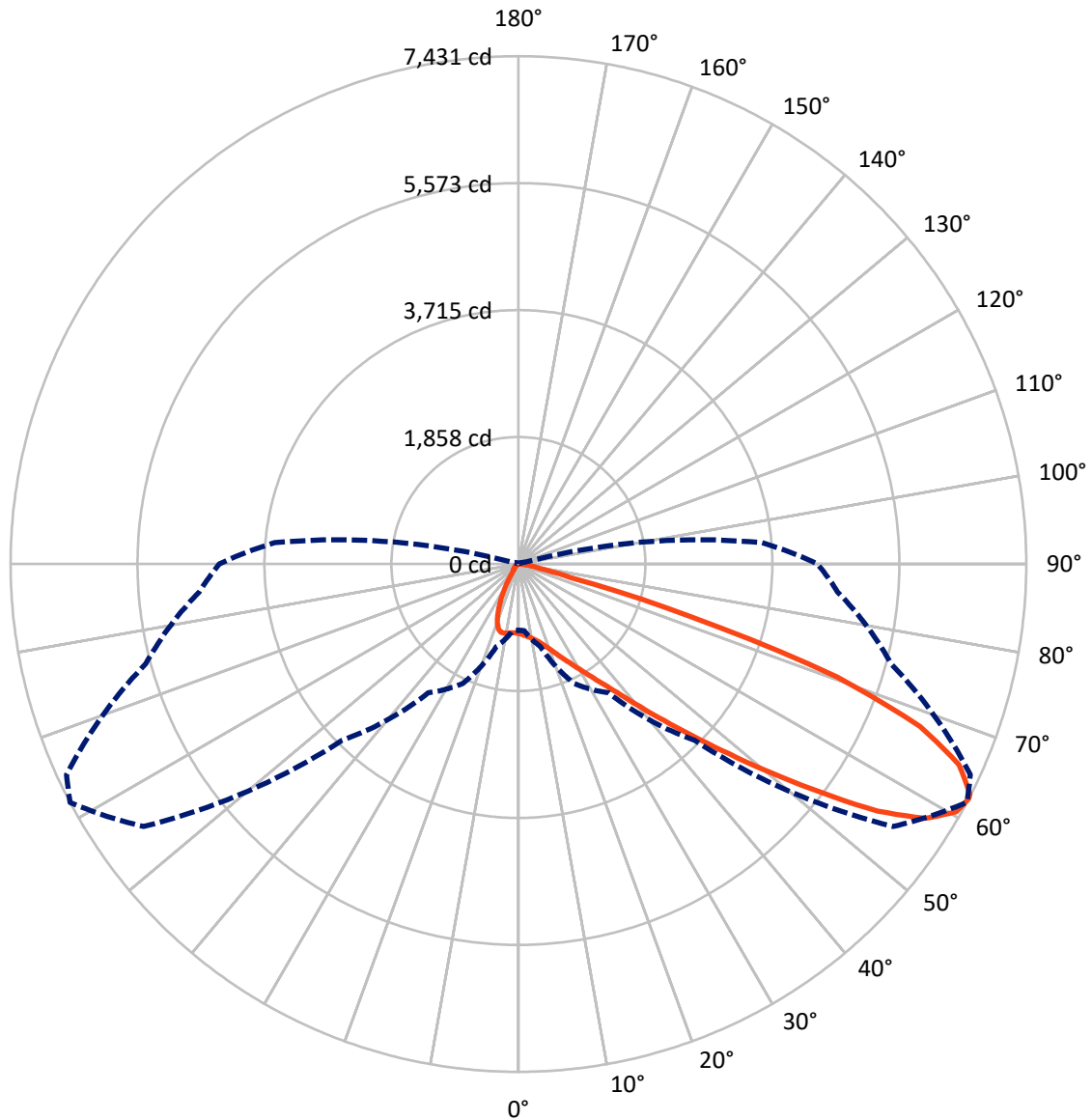


Based on 10 foot mounting height. Maximum calculated value = 19.4 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral      - - - Horizontal Cone Through 62-Deg Vertical

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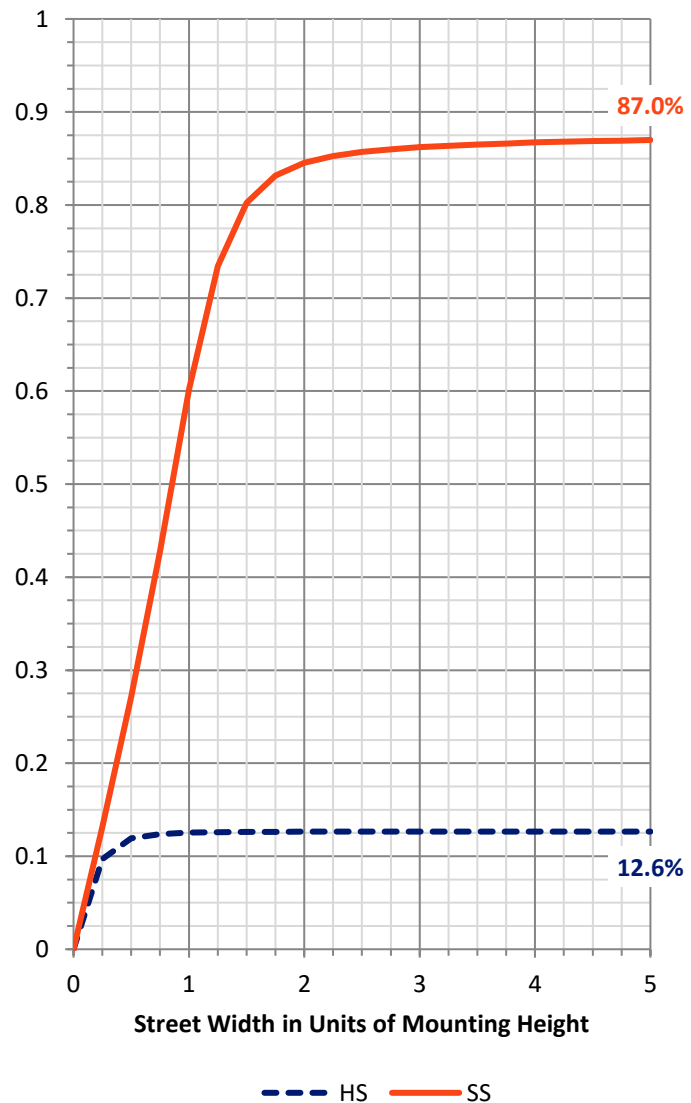
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1080.8	0.0	1080.8
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	7371.8	0.0	7371.8
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	8452.5	0.0	8452.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.0	1.2
10°-20°	273.6	3.2
20°-30°	459.6	5.4
30°-40°	880.9	10.4
40°-50°	1799.3	21.3
50°-60°	2381.1	28.2
60°-70°	1849.7	21.9
70°-80°	667.7	7.9
80°-90°	42.6	0.5
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°	8452.5	100.0
0°-180°	8452.5	100.0

**Coefficient of Utilization**



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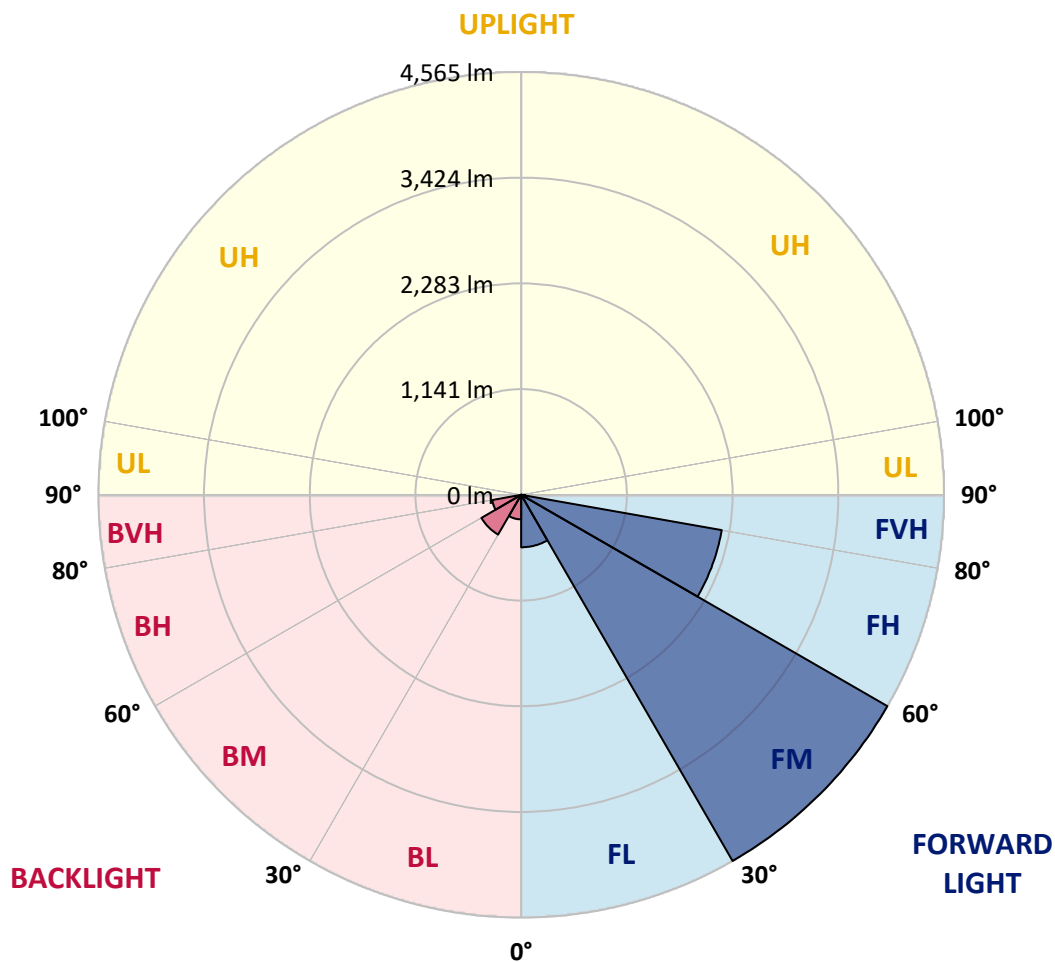
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	566.7	6.7			
FM	(30°-60°)	4565.2	54.0			
FH	(60°-80°)	2199.2	26.0			G2/5000
FVH	(80°-90°)	40.7	0.5			G1/100
BL	(0°-30°)	264.5	3.1	B1/500		
BM	(30°-60°)	496.2	5.9	B1/1000		
BH	(60°-80°)	318.3	3.8	B1/500		G1/500
BVH	(80°-90°)	1.9	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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1
2.5°	1045.3	1043.1	1041.0	1039.0	1039.0	1037.0	1034.8	1030.6	1026.6	1022.5	1020.3
5°	1064.0	1061.8	1059.8	1061.8	1059.8	1059.8	1057.8	1053.5	1049.4	1043.1	1037.0
7.5°	1078.4	1076.3	1074.4	1076.3	1078.4	1080.5	1082.6	1078.4	1076.3	1068.1	1061.8
10°	1097.2	1095.2	1093.0	1097.2	1097.2	1107.6	1109.6	1107.6	1105.5	1099.3	1088.8
12.5°	1124.1	1126.3	1126.3	1130.4	1134.6	1147.0	1151.2	1145.0	1145.0	1136.6	1124.1
15°	1174.1	1174.1	1174.1	1178.2	1180.4	1196.9	1201.0	1194.8	1199.0	1184.4	1172.0
17.5°	1221.9	1223.9	1228.2	1236.3	1236.3	1251.0	1259.2	1259.2	1267.6	1248.9	1232.3
20°	1269.7	1271.7	1278.0	1296.7	1296.7	1315.4	1329.9	1336.1	1344.5	1325.8	1296.7
22.5°	1321.5	1321.5	1331.9	1361.1	1354.9	1392.3	1419.2	1429.7	1437.9	1413.0	1367.3
25°	1400.5	1392.3	1400.5	1427.5	1423.5	1475.3	1525.2	1535.7	1546.1	1517.0	1448.3
27.5°	1550.1	1537.7	1508.7	1510.7	1510.7	1571.0	1641.7	1656.1	1662.5	1637.5	1552.2
30°	1849.4	1849.4	1741.4	1668.6	1620.8	1674.9	1774.6	1799.6	1807.8	1770.5	1658.2
32.5°	2370.9	2370.9	2171.6	1986.5	1805.8	1805.8	1920.0	1965.9	1974.0	1930.5	1799.6
35°	3035.9	3031.8	2732.6	2479.1	2125.7	1992.8	2090.4	2167.3	2192.3	2134.2	1982.4
37.5°	3742.5	3715.5	3393.3	3102.4	2618.3	2292.0	2321.1	2423.0	2445.7	2397.9	2219.4
40°	4315.9	4284.8	4025.0	3782.0	3254.1	2770.0	2653.7	2747.0	2774.1	2707.6	2501.9
42.5°	4835.4	4758.6	4579.9	4405.4	3985.6	3597.1	3096.2	3133.6	3162.8	3092.1	2819.8
45°	5211.5	5093.2	5001.8	4947.8	4725.4	4505.1	3669.8	3594.9	3605.3	3518.0	3166.9
47.5°	5221.9	5138.8	5147.2	5288.5	5379.9	5371.7	4415.7	4149.7	4110.3	3964.8	3536.7
50°	4723.3	4771.1	4922.7	5326.0	5820.5	6119.8	5303.1	4806.4	4688.0	4426.0	3904.6
52.5°	3892.0	3966.8	4251.6	4931.1	5884.8	6612.2	6223.5	5556.6	5344.6	4883.2	4187.2
55°	3048.4	3052.6	3351.8	4043.8	5454.7	6701.5	6959.2	6381.5	6057.4	5230.3	4374.1
57.5°	2096.7	2211.0	2591.3	3056.8	4484.2	6256.9	7235.6	7021.5	6603.9	5444.4	4505.1
60°	1373.6	1379.7	1822.4	2360.6	3052.6	5091.1	7067.2	7360.3	7046.5	5571.1	4594.4
62°	968.4	978.8	1253.0	1928.4	2300.3	3648.9	6695.2	7430.9	7295.9	5645.8	4688.0
62.5°	897.6	906.0	1136.6	1820.3	2161.1	3272.9	6562.3	7414.3	7333.3	5670.8	4721.2
65°	658.7	658.7	743.9	1251.0	1583.4	1768.4	5560.7	7083.9	7283.4	5870.3	4845.8
67.5°	509.1	513.2	542.3	770.9	1194.8	1072.2	3549.3	6340.0	6763.9	6165.3	4916.6
70°	438.5	436.3	457.1	511.1	862.4	712.7	1562.6	4947.8	5664.6	6090.6	4852.1
72.5°	324.2	326.3	374.1	448.9	600.5	463.3	706.4	2626.6	3673.9	4766.9	4158.1
75°	207.8	209.8	263.9	353.3	432.3	303.4	407.3	783.4	1504.5	2643.3	2543.6
77.5°	139.2	143.4	172.5	247.3	378.1	189.2	255.6	328.3	452.9	991.2	912.3
80°	93.6	93.6	110.1	166.2	238.9	157.9	137.1	218.2	234.7	307.5	153.8
82.5°	62.3	62.3	72.8	110.1	155.9	141.4	83.2	118.4	137.1	153.8	54.0
85°	37.4	37.4	49.9	68.6	101.8	79.1	54.0	66.6	70.6	97.6	29.0
87.5°	22.8	20.8	33.2	47.8	54.0	47.8	35.4	35.4	37.4	54.0	14.6
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°	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1	1018.1
2.5°	1016.2	1014.0	1012.0	1007.8	1001.6	997.5	993.3	989.2	985.0	985.0	991.2
5°	1034.8	1028.6	1020.3	1012.0	999.5	991.2	985.0	976.6	972.4	972.4	974.7
7.5°	1057.8	1051.5	1037.0	1022.5	1003.6	989.2	974.7	955.8	941.3	935.0	941.3
10°	1082.6	1074.4	1053.5	1030.6	1010.0	972.4	924.7	866.5	816.6	793.8	804.3
12.5°	1113.8	1103.4	1078.4	1047.3	999.5	908.0	789.6	654.5	569.3	529.9	538.3
15°	1159.5	1145.0	1109.6	1061.8	955.8	758.4	565.3	409.4	330.3	297.2	301.3
17.5°	1213.5	1194.8	1147.0	1057.8	843.7	546.4	336.7	238.9	205.7	197.4	197.4
20°	1271.7	1246.8	1184.4	1026.6	673.3	342.9	209.8	182.8	170.4	164.2	164.2
22.5°	1331.9	1298.7	1215.6	953.8	480.1	214.1	172.5	153.8	139.2	132.9	132.9
25°	1404.7	1361.1	1246.8	827.0	305.5	172.5	147.5	128.8	114.3	106.0	108.1
27.5°	1489.8	1433.9	1273.7	669.1	197.4	149.6	122.6	103.9	91.4	87.2	87.2
30°	1579.3	1512.7	1280.1	500.7	160.0	128.8	101.8	85.2	76.8	72.8	72.8
32.5°	1701.8	1614.7	1261.3	332.6	135.0	108.1	85.2	70.6	64.4	62.3	62.3
35°	1864.0	1747.7	1217.7	205.7	114.3	89.3	70.6	62.3	56.1	54.0	54.0
37.5°	2069.7	1932.6	1140.8	141.4	97.6	72.8	60.2	54.0	49.9	47.8	47.8
40°	2343.9	2157.0	1041.0	122.6	83.2	62.3	51.9	47.8	43.7	43.7	43.7
42.5°	2634.9	2429.1	912.3	108.1	70.6	54.0	45.8	41.5	39.4	37.4	37.4
45°	2952.8	2707.6	752.2	95.6	60.2	47.8	41.5	35.4	33.2	33.2	33.2
47.5°	3268.8	2994.4	577.7	83.2	51.9	41.5	35.4	31.3	29.0	26.9	26.9
50°	3592.9	3254.1	423.9	72.8	45.8	37.4	31.3	26.9	22.8	20.8	20.8
52.5°	3827.7	3410.0	309.6	62.3	39.4	31.3	25.0	20.8	16.6	14.6	14.6
55°	4000.2	3505.5	226.6	51.9	35.4	26.9	20.8	16.6	12.4	12.4	10.4
57.5°	4135.2	3551.3	170.4	45.8	31.3	22.8	16.6	12.4	10.4	8.4	8.4
60°	4239.1	3553.3	126.8	37.4	26.9	18.8	12.4	8.4	6.3	6.3	6.3
62°	4376.3	3580.4	103.9	31.3	25.0	16.6	10.4	6.3	4.1	2.1	2.1
62.5°	4415.7	3590.7	99.7	31.3	22.8	14.6	8.4	6.3	4.1	2.1	2.1
65°	4598.7	3609.5	76.8	25.0	18.8	12.4	6.3	4.1	0.0	0.0	0.0
67.5°	4764.8	3580.4	56.1	18.8	14.6	8.4	6.3	2.1	0.0	0.0	0.0
70°	4748.3	3381.0	39.4	12.4	10.4	6.3	4.1	0.0	0.0	0.0	0.0
72.5°	3912.8	2531.0	26.9	10.4	6.3	4.1	2.1	0.0	0.0	0.0	0.0
75°	2362.7	1107.6	18.8	6.3	6.3	4.1	2.1	0.0	0.0	0.0	0.0
77.5°	775.1	401.1	12.4	4.1	4.1	2.1	2.1	0.0	0.0	0.0	0.0
80°	126.8	66.6	6.3	4.1	4.1	2.1	2.1	0.0	0.0	0.0	0.0
82.5°	39.4	16.6	4.1	4.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0
85°	14.6	6.3	4.1	4.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0
87.5°	6.3	4.1	4.1	4.1	2.1	2.1	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)