

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: P399679

Luminaire Tested: **ARCH-L-PA3-170-830-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399679  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-170-830-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20900 lumens  
Efficiency: N/A  
Efficacy: 120.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G3

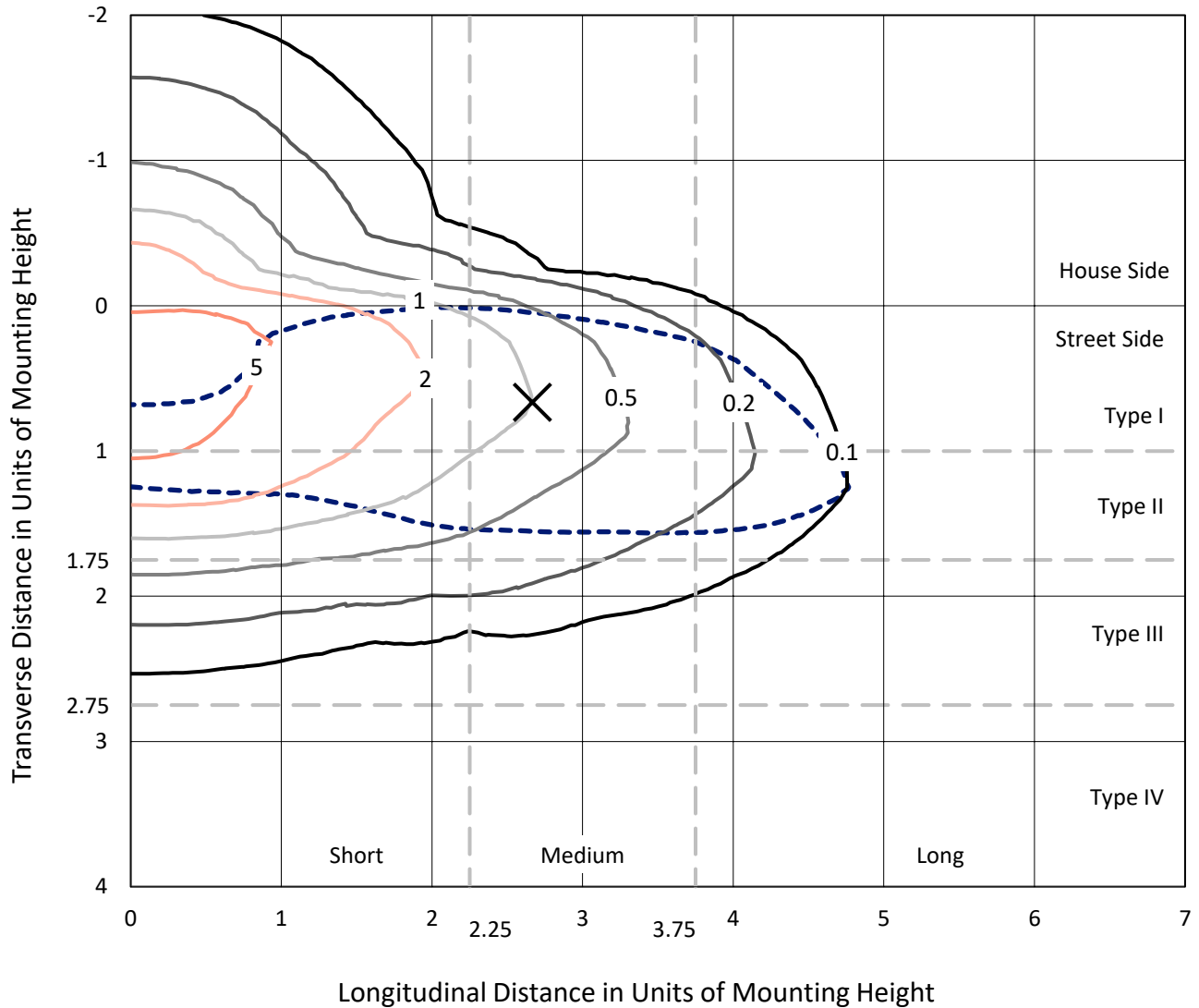
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

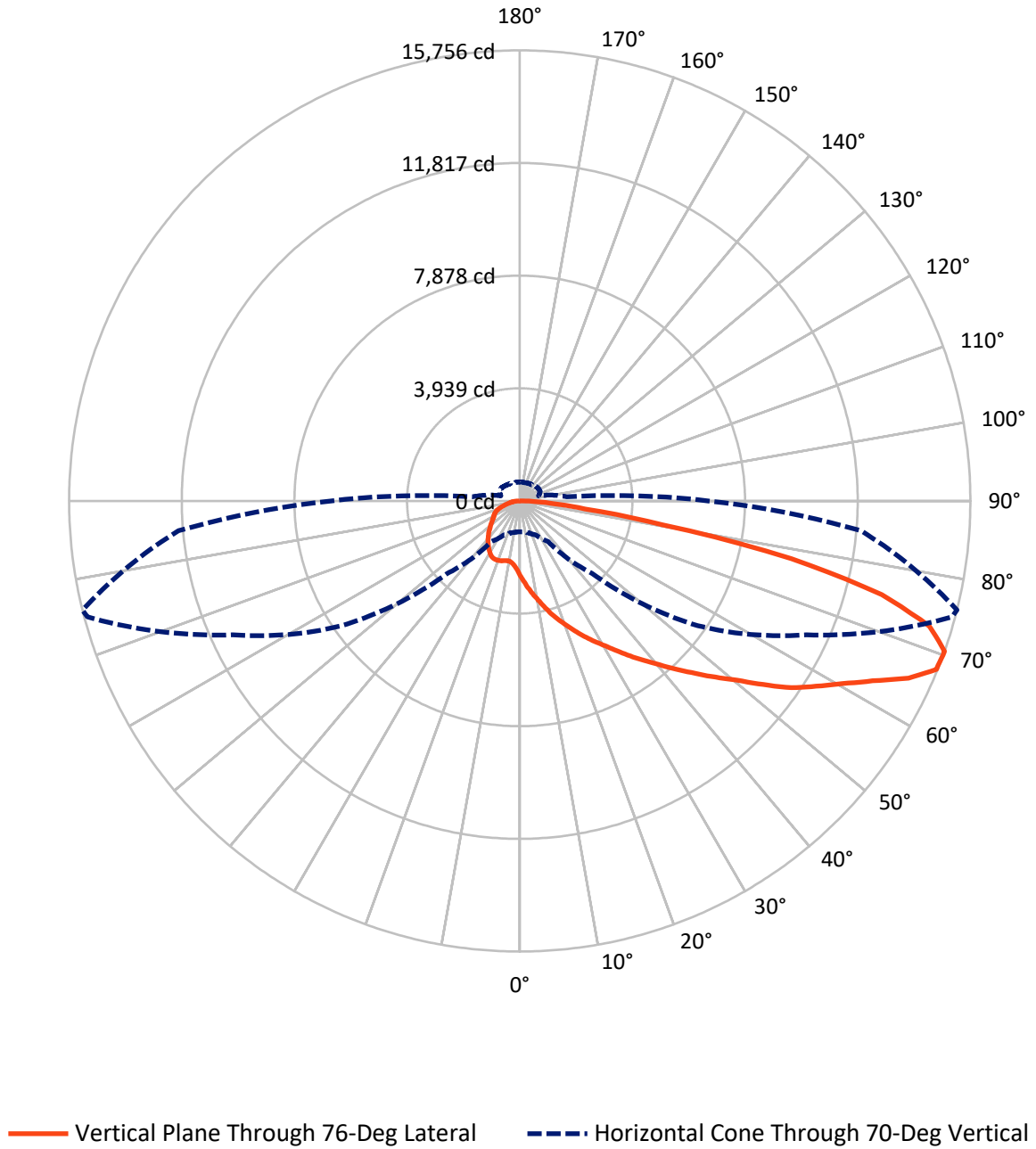
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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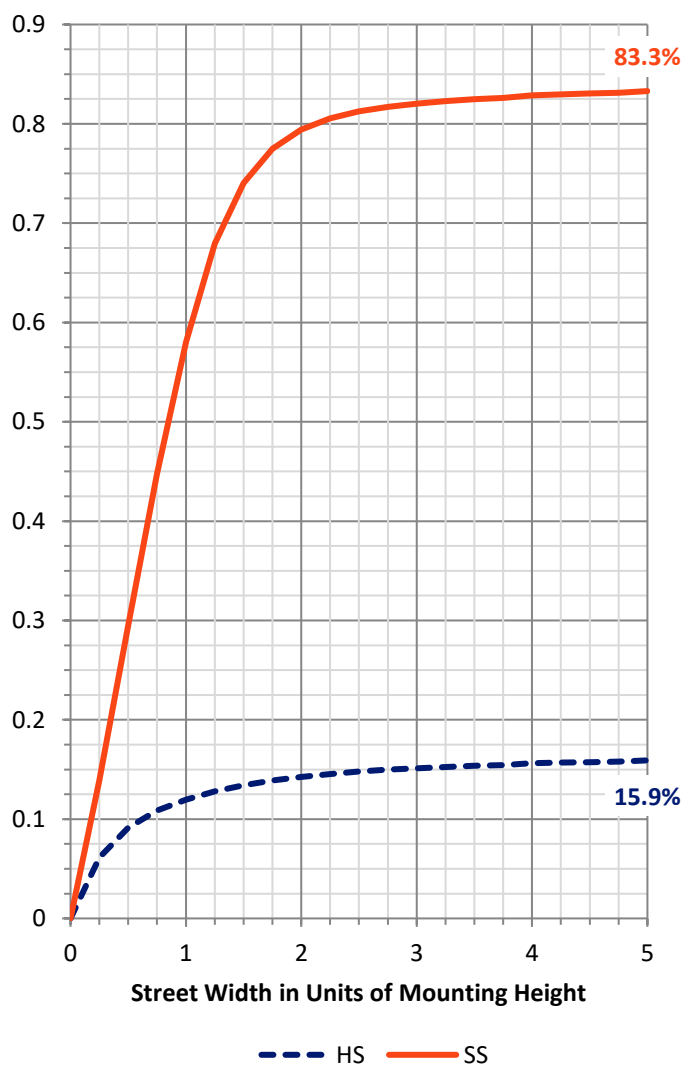
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3412.1	0.0	3412.1
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	17487.9	0.0	17487.9
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	20900.0	0.0	20900.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	271.6	1.3
10°-20°	923.0	4.4
20°-30°	1651.3	7.9
30°-40°	2671.2	12.8
40°-50°	3864.4	18.5
50°-60°	4423.0	21.2
60°-70°	4068.7	19.5
70°-80°	2516.0	12.0
80°-90°	510.9	2.4
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°	20900.0	100.0
0°-180°	20900.0	100.0

**Coefficient of Utilization**



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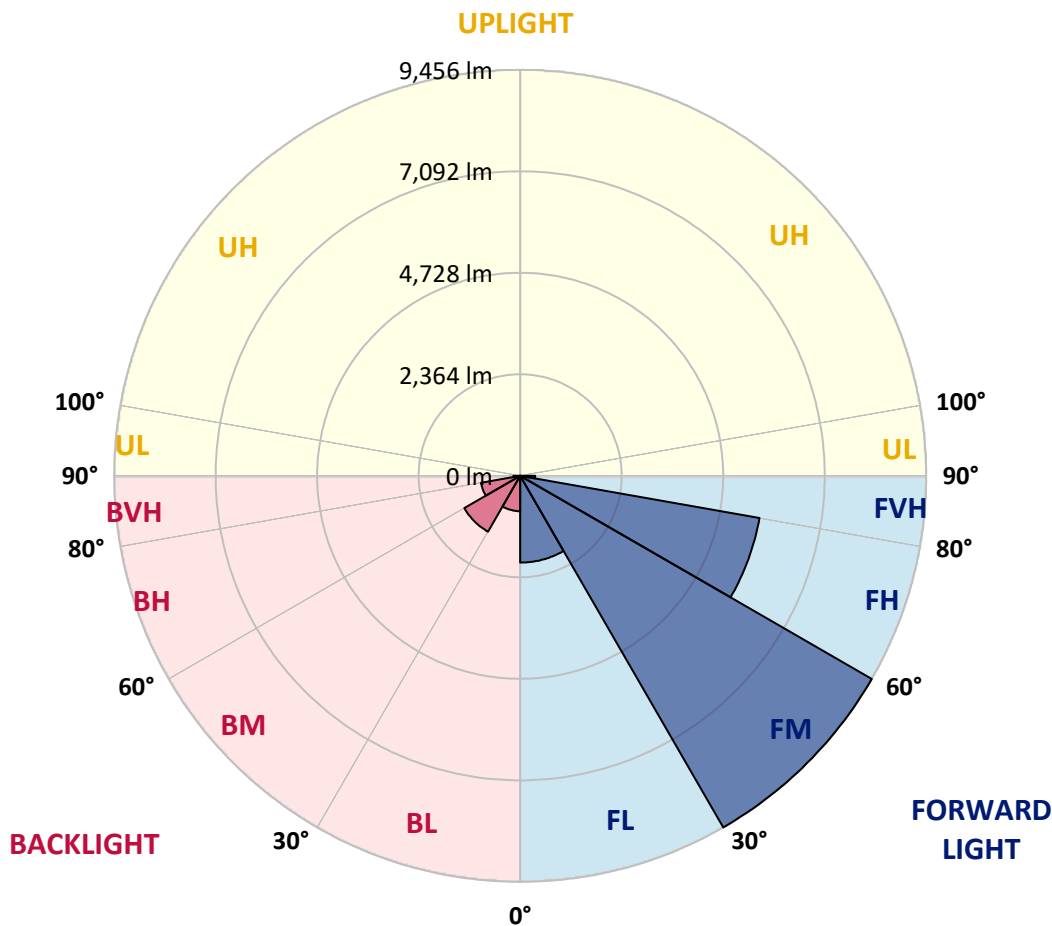
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2021.7	9.7			
FM (30°-60°)	9456.3	45.2			
FH (60°-80°)	5659.2	27.1			G3/7500
FVH (80°-90°)	350.7	1.7			G3/500
BL (0°-30°)	824.1	3.9	B2/1000		
BM (30°-60°)	1502.3	7.2	B2/2500		
BH (60°-80°)	925.5	4.4	B2/1000		G2/1000
BVH (80°-90°)	160.2	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6
2.5°	3330.9	3306.2	3303.5	3265.0	3229.3	3133.1	3064.4	2943.4	2822.5	2819.8	2698.8
5°	3850.4	3825.6	3811.9	3765.2	3704.7	3578.3	3454.6	3267.7	3061.6	3047.9	2819.8
7.5°	4202.2	4180.2	4152.7	4133.4	4075.7	3963.1	3811.9	3589.3	3306.2	3278.7	2959.9
10°	4438.5	4424.8	4419.3	4405.5	4369.8	4279.1	4133.4	3897.1	3550.8	3520.6	3108.3
12.5°	4540.2	4534.7	4559.4	4597.9	4611.6	4575.9	4435.8	4213.1	3820.1	3787.2	3287.0
15°	4422.0	4427.5	4490.7	4622.6	4762.8	4839.8	4757.3	4540.2	4125.2	4078.5	3495.8
17.5°	4367.1	4375.3	4419.3	4545.7	4743.6	4982.7	5021.1	4850.8	4419.3	4353.3	3715.7
20°	4463.2	4474.2	4507.2	4606.2	4743.6	4999.2	5199.8	5147.6	4707.8	4639.1	3927.3
22.5°	4707.8	4721.6	4718.8	4782.0	4875.5	5051.4	5298.7	5427.9	5010.2	4933.2	4147.2
25°	5230.0	5219.0	5125.6	5095.4	5120.1	5232.8	5430.6	5697.2	5326.2	5249.3	4378.0
27.5°	5939.1	5925.3	5754.9	5601.0	5463.6	5513.1	5617.5	5914.3	5647.8	5559.8	4597.9
30°	6697.6	6681.1	6483.2	6233.1	5928.1	5856.6	5842.9	6104.0	5972.1	5878.6	4831.5
32.5°	7436.9	7423.2	7211.5	6920.2	6499.7	6285.4	6153.4	6315.6	6340.3	6249.6	5087.1
35°	8110.2	8110.2	7928.8	7582.6	7107.1	6782.8	6565.7	6576.7	6763.6	6659.1	5378.4
37.5°	8709.4	8706.6	8508.7	8168.0	7711.7	7340.7	7071.4	6892.7	7167.6	7076.9	5683.5
40°	9184.8	9165.6	9019.9	8723.1	8264.1	7895.9	7623.8	7263.8	7618.3	7535.8	6007.8
42.5°	9531.1	9520.1	9421.2	9162.8	8725.9	8379.6	8192.7	7731.0	8129.5	8047.0	6387.1
45°	9665.8	9687.8	9687.8	9443.2	9096.9	8780.8	8698.4	8244.9	8681.9	8599.4	6793.8
47.5°	9448.7	9506.4	9624.6	9641.0	9336.0	9121.6	9149.1	8761.6	9250.8	9206.8	7239.0
50°	8769.8	8877.0	9135.4	9602.6	9432.2	9382.7	9533.9	9289.3	9860.9	9847.2	7780.4
52.5°	7019.2	7280.2	8085.5	8923.7	9366.2	9503.6	9915.9	9882.9	10646.9	10668.9	8486.8
55°	5383.9	5482.9	6414.5	7840.9	8962.2	9465.1	10171.5	10462.8	11498.9	11526.4	9135.4
57.5°	4353.3	4419.3	4927.7	6414.5	8041.5	9256.3	10372.1	10800.8	12153.0	12224.4	9712.5
60°	3449.1	3545.3	3886.1	4908.5	6752.6	8753.3	10512.3	11177.3	12856.6	12963.7	10402.3
62.5°	2564.2	2610.9	2932.4	3636.0	5345.4	7849.1	10438.0	11586.8	13719.5	13848.7	11232.3
65°	1824.9	1866.1	2094.2	2586.2	3952.1	6626.2	10006.6	11891.9	14802.4	14934.3	12067.8
67.5°	1365.9	1382.4	1511.6	1808.4	2663.1	5147.6	9132.6	11839.7	15593.9	15712.0	12403.1
70°	1080.1	1085.6	1148.8	1308.2	1731.4	3583.8	7601.8	11072.9	15651.6	15756.0	11979.8
72.5°	895.9	893.2	928.9	1005.9	1206.5	2267.3	5631.3	9649.3	14909.5	14981.0	10798.1
75°	739.3	744.8	769.5	813.5	920.7	1495.1	3649.7	7698.0	13153.4	13076.4	9061.1
77.5°	621.1	618.4	629.4	667.8	744.8	1074.6	2138.2	5562.6	9748.2	9709.7	5947.3
80°	500.2	505.7	522.2	555.2	626.6	819.0	1264.2	3471.1	5230.0	5089.9	2841.7
82.5°	335.3	387.5	420.5	459.0	541.4	604.6	802.5	1764.4	2338.8	2303.1	1289.0
85°	159.4	211.6	313.3	357.3	439.7	379.3	544.2	841.0	1170.8	1157.0	464.5
87.5°	33.0	33.0	167.6	200.6	272.1	162.1	302.3	365.5	566.2	530.4	189.6
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°	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6	2613.6
2.5°	2627.4	2553.2	2404.8	2286.6	2165.7	2097.0	2011.8	1970.5	1962.3	1940.3	1956.8
5°	2674.1	2528.4	2248.1	2064.0	1940.3	1879.8	1849.6	1838.6	1835.9	1830.4	1830.4
7.5°	2737.3	2514.7	2149.2	1962.3	1882.6	1863.3	1871.6	1888.1	1890.8	1896.3	1893.6
10°	2814.3	2517.4	2094.2	1937.6	1899.1	1901.8	1929.3	1951.3	1962.3	1970.5	1967.8
12.5°	2921.4	2550.4	2086.0	1954.0	1937.6	1948.5	1976.0	1998.0	2009.0	2011.8	2011.8
15°	3061.6	2619.1	2105.2	1989.8	1976.0	1984.3	2000.8	2009.0	2011.8	2009.0	2009.0
17.5°	3215.5	2701.6	2132.7	2011.8	1989.8	1981.5	1976.0	1967.8	1951.3	1940.3	1940.3
20°	3363.9	2775.8	2146.4	2009.0	1970.5	1937.6	1904.6	1863.3	1835.9	1813.9	1813.9
22.5°	3512.3	2844.5	2146.4	1978.8	1918.3	1855.1	1786.4	1720.4	1679.2	1651.7	1651.7
25°	3669.0	2910.5	2129.9	1926.6	1835.9	1745.2	1651.7	1569.3	1528.1	1500.6	1495.1
27.5°	3800.9	2948.9	2086.0	1852.4	1734.2	1618.7	1511.6	1426.4	1396.1	1371.4	1371.4
30°	3941.1	2973.7	2003.5	1756.2	1618.7	1486.8	1376.9	1308.2	1275.2	1239.5	1236.7
32.5°	4097.7	2990.2	1910.1	1654.5	1500.6	1360.4	1267.0	1212.0	1140.5	1102.1	1096.6
35°	4279.1	3012.1	1811.1	1539.0	1382.4	1256.0	1201.0	1110.3	1041.6	1008.6	1005.9
37.5°	4471.5	3028.6	1703.9	1437.4	1275.2	1187.3	1132.3	1025.1	964.7	915.2	909.7
40°	4674.9	3028.6	1594.0	1338.4	1190.0	1157.0	1052.6	956.4	854.7	830.0	824.5
42.5°	4900.2	3023.1	1484.1	1242.2	1110.3	1088.3	1005.9	904.2	852.0	830.0	824.5
45°	5139.3	3003.9	1379.6	1132.3	1027.9	983.9	920.7	893.2	871.2	871.2	871.2
47.5°	5411.4	2987.4	1261.5	1033.4	967.4	917.9	871.2	854.7	852.0	860.2	868.5
50°	5760.4	2981.9	1162.5	961.9	920.7	863.0	857.5	843.7	846.5	846.5	846.5
52.5°	6183.7	2932.4	1069.1	909.7	874.0	805.3	821.7	835.5	841.0	838.2	835.5
55°	6494.2	2844.5	989.4	874.0	841.0	783.3	805.3	827.2	832.7	824.5	824.5
57.5°	6774.6	2720.8	926.2	846.5	819.0	769.5	794.3	816.2	810.7	808.0	805.3
60°	7096.1	2602.6	876.7	832.7	797.0	764.0	786.0	799.8	791.5	786.0	783.3
62.5°	7445.1	2487.2	841.0	832.7	780.5	761.3	777.8	783.3	766.8	761.3	761.3
65°	7607.3	2305.8	802.5	832.7	772.3	755.8	761.3	755.8	739.3	739.3	736.5
67.5°	7340.7	2006.3	753.0	821.7	783.3	747.5	736.5	728.3	709.1	709.1	703.6
70°	6604.2	1649.0	681.6	786.0	786.0	744.8	703.6	684.3	662.3	670.6	659.6
72.5°	5642.3	1308.2	593.6	725.6	769.5	742.0	667.8	637.6	618.4	626.6	610.1
75°	4570.4	1014.1	489.2	629.4	728.3	728.3	632.1	590.9	568.9	568.9	549.7
77.5°	2913.2	750.3	398.5	522.2	654.1	709.1	601.9	538.7	505.7	497.4	483.7
80°	1442.9	527.7	327.0	415.0	557.9	665.1	579.9	478.2	431.5	415.0	390.3
82.5°	766.8	365.5	261.1	324.3	445.2	599.1	552.4	412.2	354.5	329.8	302.3
85°	343.5	225.4	208.9	247.3	338.0	491.9	497.4	338.0	272.1	324.3	239.1
87.5°	126.4	101.7	101.7	126.4	195.1	206.1	351.8	217.1	173.1	118.2	93.4
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)