

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: P236980

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P236980  
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-AF72-270-D-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 1155mA 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: 24247 lumens  
Efficiency: N/A  
Efficacy: 88.8 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 - G3

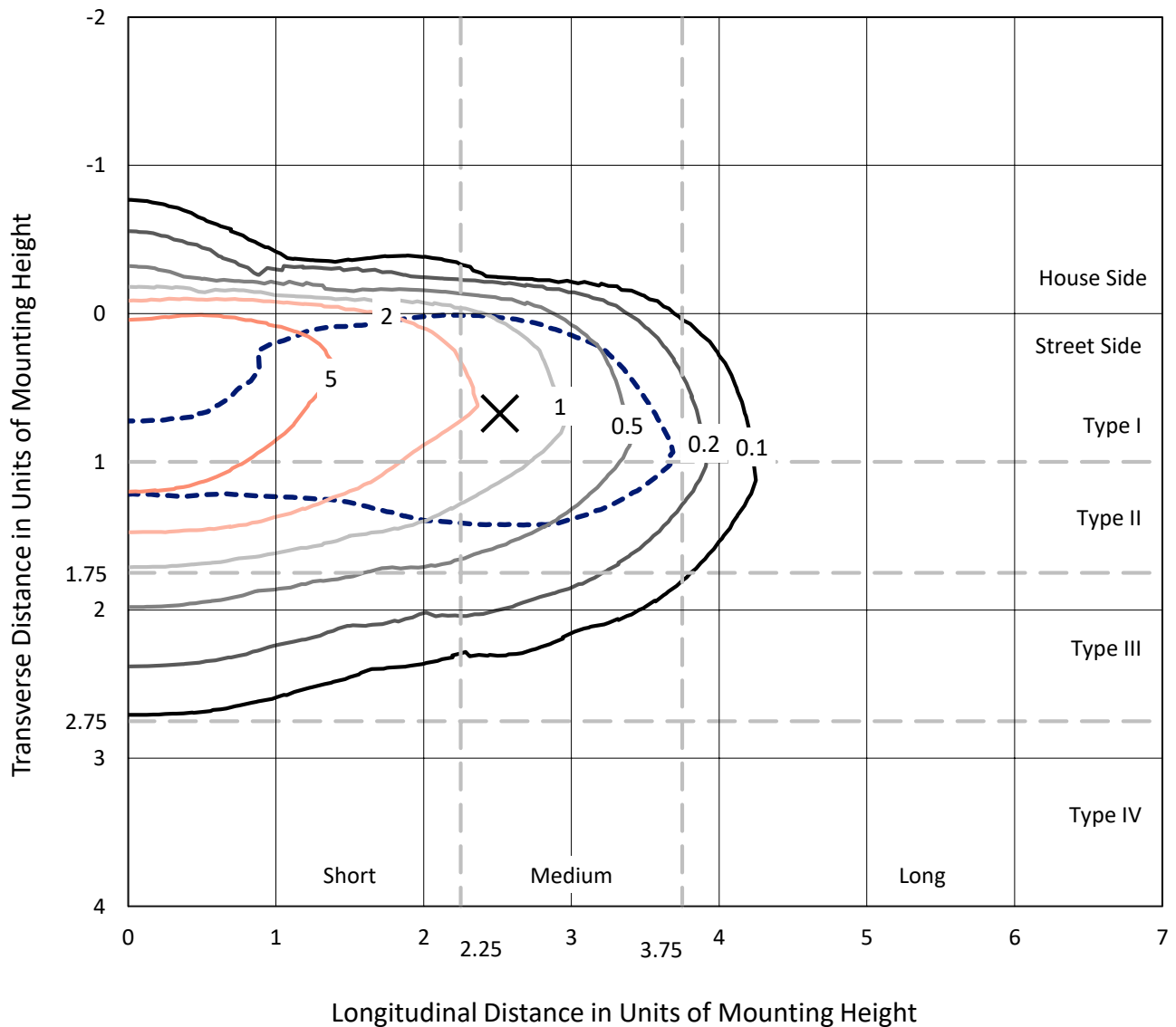
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

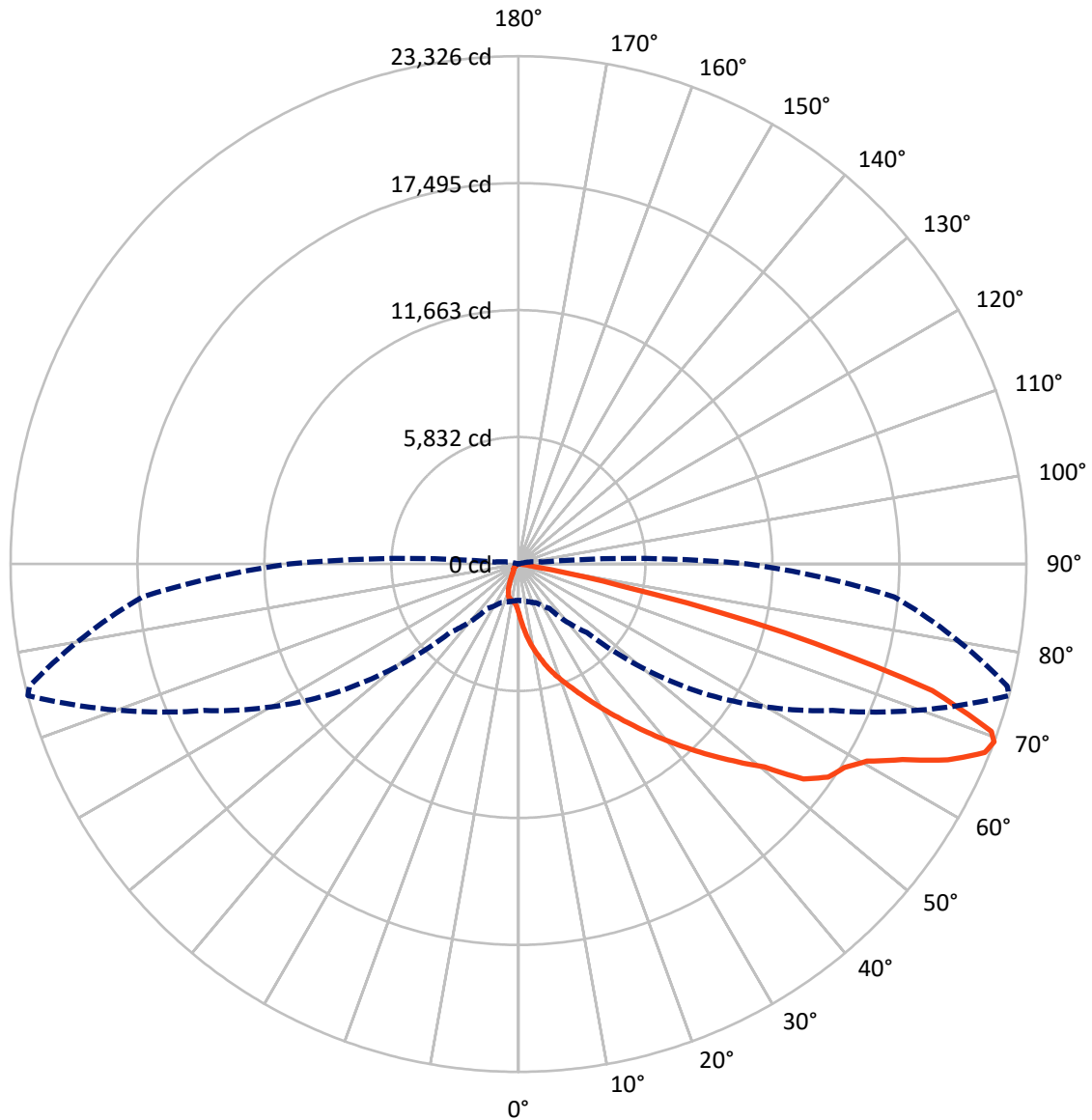
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 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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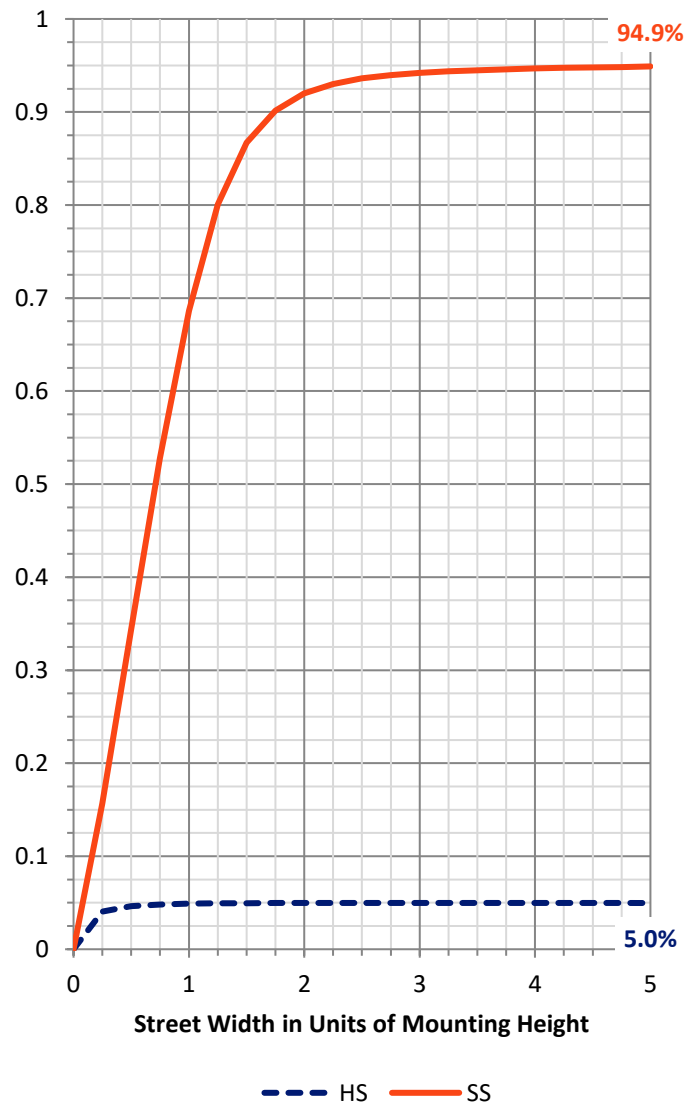
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1209.8	0.0	1209.8
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	23037.2	0.0	23037.2
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	24247.0	0.0	24247.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	263.1	1.1
10°-20°	940.5	3.9
20°-30°	1795.5	7.4
30°-40°	3220.9	13.3
40°-50°	4934.6	20.4
50°-60°	5735.3	23.7
60°-70°	5078.7	20.9
70°-80°	2190.6	9.0
80°-90°	87.8	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°	24247.0	100.0
0°-180°	24247.0	100.0



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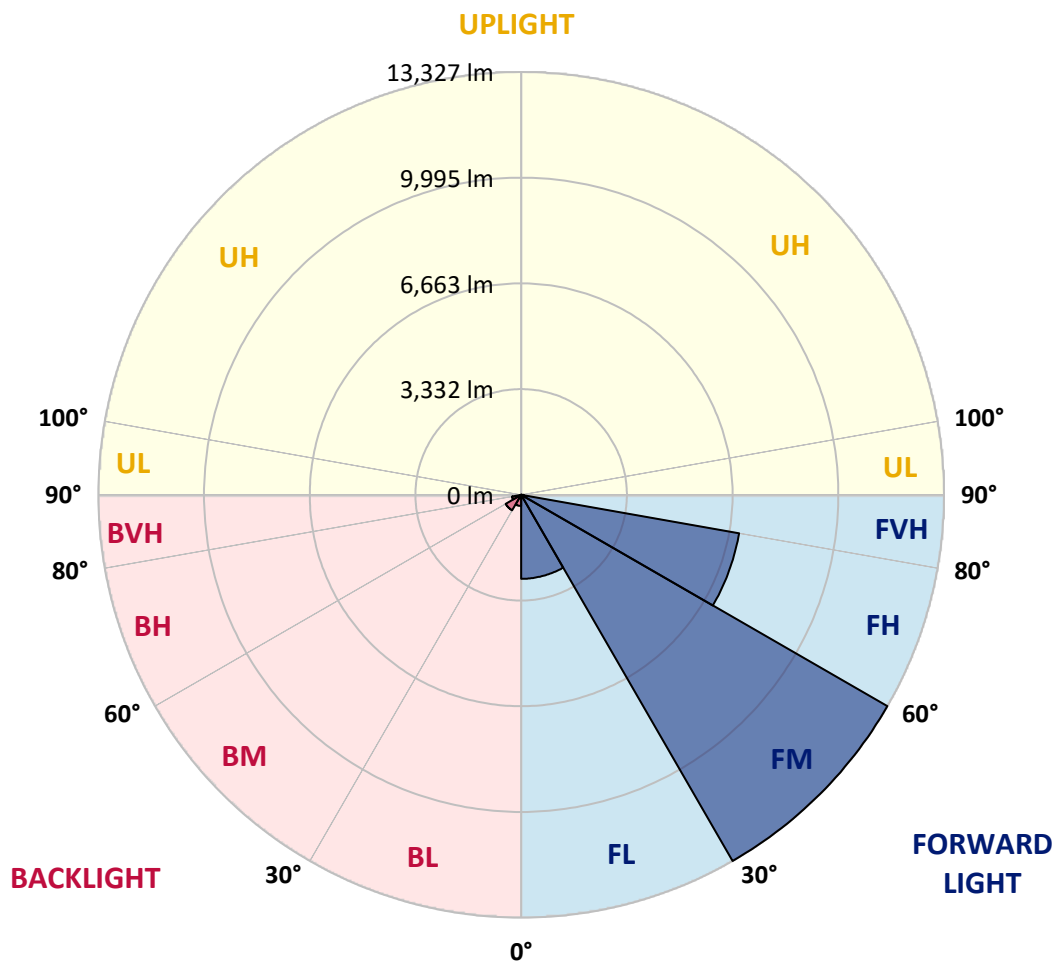
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2647.8	10.9			
FM	(30°-60°)	13326.8	55.0			
FH	(60°-80°)	6976.2	28.8			G3/7500
FVH	(80°-90°)	86.5	0.4			G1/100
BL	(0°-30°)	351.4	1.4	B1/500		
BM	(30°-60°)	564.0	2.3	B1/1000		
BH	(60°-80°)	293.1	1.2	B1/500		G1/500
BVH	(80°-90°)	1.3	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°	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2
2.5°	3716.7	3680.1	3643.3	3601.5	3507.3	3345.0	3140.9	2921.0	2648.8	2601.7	2381.8
5°	4512.3	4496.7	4460.0	4402.4	4297.7	4119.7	3889.5	3564.9	3109.5	3030.9	2565.0
7.5°	5072.5	5062.0	5030.6	4962.5	4868.3	4690.3	4449.5	4098.8	3570.1	3481.1	2795.3
10°	5575.0	5569.8	5543.6	5480.8	5386.6	5192.9	4936.4	4569.9	4009.9	3910.3	3062.3
12.5°	6030.4	6035.6	6025.2	5993.8	5925.7	5742.5	5449.4	5051.5	4433.9	4323.9	3381.7
15°	6297.4	6313.1	6355.0	6417.8	6438.8	6292.2	5988.6	5548.8	4868.3	4774.1	3748.1
17.5°	6208.4	6224.1	6355.0	6569.6	6773.8	6794.7	6522.5	6020.0	5297.6	5203.3	4109.3
20°	5993.8	6014.7	6150.8	6444.0	6841.8	7119.2	7009.4	6533.0	5705.9	5590.7	4454.7
22.5°	6234.6	6234.6	6276.4	6454.4	6815.6	7250.2	7396.7	7046.0	6124.6	5983.3	4800.3
25°	7061.6	7046.0	6957.0	6883.6	6998.8	7386.2	7689.8	7569.4	6616.8	6454.4	5166.7
27.5°	8108.6	8181.9	8014.4	7747.4	7485.6	7653.2	7951.6	8087.7	7161.2	6993.6	5543.6
30°	9281.2	9312.6	9113.7	8757.7	8297.1	8134.8	8260.4	8532.6	7752.6	7569.4	5936.2
32.5°	10338.7	10312.5	10144.9	9773.3	9202.7	8852.0	8658.3	8888.6	8396.5	8187.2	6339.2
35°	11275.7	11296.5	11092.5	10663.1	10103.1	9731.4	9270.7	9291.7	9118.9	8878.1	6805.2
37.5°	12118.4	12081.8	11888.1	11458.9	10951.1	10548.1	10061.1	9710.5	9909.3	9658.1	7328.6
40°	12804.2	12767.6	12563.4	12144.6	11668.3	11338.5	10956.3	10270.5	10741.7	10453.7	7888.8
42.5°	13348.6	13306.7	13134.0	12730.9	12270.2	11977.1	11793.9	10961.5	11631.6	11343.7	8516.9
45°	13615.6	13579.0	13474.2	13170.6	12767.6	12511.0	12600.0	11757.3	12584.3	12343.5	9207.9
47.5°	13301.5	13285.8	13406.2	13353.8	13123.5	12987.4	13296.2	12626.2	13584.2	13348.6	10003.6
50°	12348.8	12374.9	12725.7	13160.2	13270.0	13432.4	13866.8	13542.2	14657.2	14406.0	10919.7
52.5°	9998.3	10176.3	11233.7	12280.7	13092.1	13704.6	14536.8	14851.0	16405.7	16159.7	12348.8
55°	7464.8	7538.0	8689.7	10479.9	12374.9	13683.6	15034.2	15620.5	17269.5	17018.1	12725.7
57.5°	5920.5	5946.7	6517.2	8344.2	10898.7	13212.5	15295.9	15897.9	17646.3	17436.9	13285.8
60°	4648.5	4679.9	5093.4	6349.8	8820.5	11940.5	14919.0	16138.7	18384.4	18216.9	14264.6
62.5°	3617.3	3648.7	3899.9	4638.0	6616.8	9982.7	14160.0	16526.1	19787.3	19708.8	15866.5
65°	2800.6	2811.1	2983.8	3329.3	4674.6	7862.6	13233.4	16887.3	21682.3	21614.2	17164.7
67.5°	2067.7	2083.4	2203.8	2418.5	3156.5	5648.3	11715.3	16609.9	23111.4	22912.5	17635.9
69°	1669.9	1685.6	1790.3	1963.0	2491.7	4449.5	10328.1	15924.1	23326.0	23137.6	17337.5
70°	1429.1	1439.6	1544.2	1690.8	2125.3	3779.5	9228.9	15332.6	23043.3	22860.1	16656.9
72.5°	916.1	968.4	1073.1	1167.4	1408.2	2502.2	6229.4	12715.2	19881.6	19567.5	13045.0
75°	507.8	523.4	712.0	827.1	937.0	1628.0	3465.5	7930.6	12647.2	12427.3	6978.0
77.5°	418.8	429.2	502.6	628.2	628.2	910.8	1308.7	3125.1	4810.7	4339.6	1889.7
80°	293.2	303.6	382.2	413.6	450.2	513.0	424.0	685.8	743.4	659.6	282.6
82.5°	204.2	214.6	261.8	340.2	361.2	240.8	157.0	204.2	214.6	214.6	110.0
85°	36.6	52.4	193.6	282.6	214.6	73.2	89.0	73.2	68.0	73.2	26.2
87.5°	0.0	0.0	120.4	136.1	115.2	31.4	36.6	26.2	15.8	21.0	10.4
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°	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2	2256.2
2.5°	2271.9	2161.9	1973.5	1837.4	1722.2	1633.2	1596.6	1539.0	1497.1	1518.1	1491.9
5°	2334.7	2141.0	1837.4	1643.7	1507.6	1392.4	1298.2	1224.9	1167.4	1156.9	1146.4
7.5°	2434.1	2156.7	1758.9	1518.1	1313.9	1136.0	989.4	879.4	795.7	795.7	764.2
10°	2570.3	2198.6	1711.8	1392.4	1088.8	848.0	701.4	596.8	554.8	549.6	539.2
12.5°	2758.7	2277.1	1675.1	1230.2	848.0	617.7	528.7	492.0	476.4	471.2	465.9
15°	3015.2	2392.3	1633.2	1031.2	643.8	507.8	471.2	439.8	424.0	418.8	413.6
17.5°	3261.3	2497.0	1544.2	827.1	523.4	460.6	418.8	392.6	371.6	366.4	366.4
20°	3491.5	2585.9	1392.4	643.8	471.2	413.6	371.6	340.2	319.4	314.0	314.0
22.5°	3732.3	2659.3	1204.0	523.4	429.2	366.4	324.6	293.2	272.2	267.0	261.8
25°	3988.9	2711.6	989.4	465.9	387.4	324.6	277.4	251.2	235.6	230.4	225.0
27.5°	4266.3	2732.5	785.2	424.0	340.2	282.6	240.8	214.6	204.2	199.0	199.0
30°	4517.6	2711.6	607.2	376.9	298.4	246.0	209.4	188.4	178.0	172.8	172.8
32.5°	4779.3	2659.3	486.8	335.0	261.8	209.4	178.0	162.2	157.0	151.8	151.8
35°	5056.8	2591.2	418.8	298.4	225.0	183.2	157.0	146.6	141.4	136.1	136.1
37.5°	5381.3	2507.5	382.2	267.0	199.0	162.2	136.1	130.8	125.6	125.6	125.6
40°	5747.8	2402.7	356.0	240.8	178.0	141.4	120.4	115.2	110.0	110.0	110.0
42.5°	6135.1	2282.3	329.8	214.6	157.0	120.4	104.6	104.6	99.4	99.4	94.2
45°	6569.6	2161.9	303.6	188.4	136.1	104.6	89.0	83.8	83.8	78.6	78.6
47.5°	7082.6	2052.0	277.4	167.6	120.4	89.0	78.6	73.2	68.0	62.8	62.8
50°	7805.0	2041.5	246.0	146.6	110.0	73.2	62.8	57.6	52.4	47.2	47.2
52.5°	8522.2	1947.3	209.4	120.4	89.0	62.8	47.2	41.8	36.6	36.6	31.4
55°	8684.4	1790.3	183.2	104.6	68.0	47.2	36.6	26.2	26.2	21.0	21.0
57.5°	9040.4	1717.0	157.0	83.8	52.4	36.6	21.0	15.8	15.8	15.8	15.8
60°	9741.9	1696.1	136.1	73.2	36.6	26.2	15.8	10.4	10.4	5.2	5.2
62.5°	10710.3	1675.1	115.2	62.8	26.2	15.8	10.4	5.2	0.0	0.0	0.0
65°	11244.3	1533.8	94.2	47.2	21.0	15.8	5.2	0.0	0.0	0.0	0.0
67.5°	11102.9	1266.8	83.8	31.4	15.8	10.4	5.2	0.0	0.0	0.0	0.0
69°	10511.3	1067.9	68.0	26.2	15.8	10.4	5.2	0.0	0.0	0.0	0.0
70°	9799.5	921.3	62.8	21.0	10.4	5.2	5.2	0.0	0.0	0.0	0.0
72.5°	6957.0	481.6	41.8	15.8	10.4	5.2	0.0	0.0	0.0	0.0	0.0
75°	3250.7	214.6	26.2	10.4	5.2	5.2	0.0	0.0	0.0	0.0	0.0
77.5°	717.2	99.4	15.8	10.4	5.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	136.1	36.6	10.4	5.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	47.2	15.8	5.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.8	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.2	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)