

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: P236964

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P236964  
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-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 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: 12562.9 lumens  
Efficiency: N/A  
Efficacy: 111.2 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

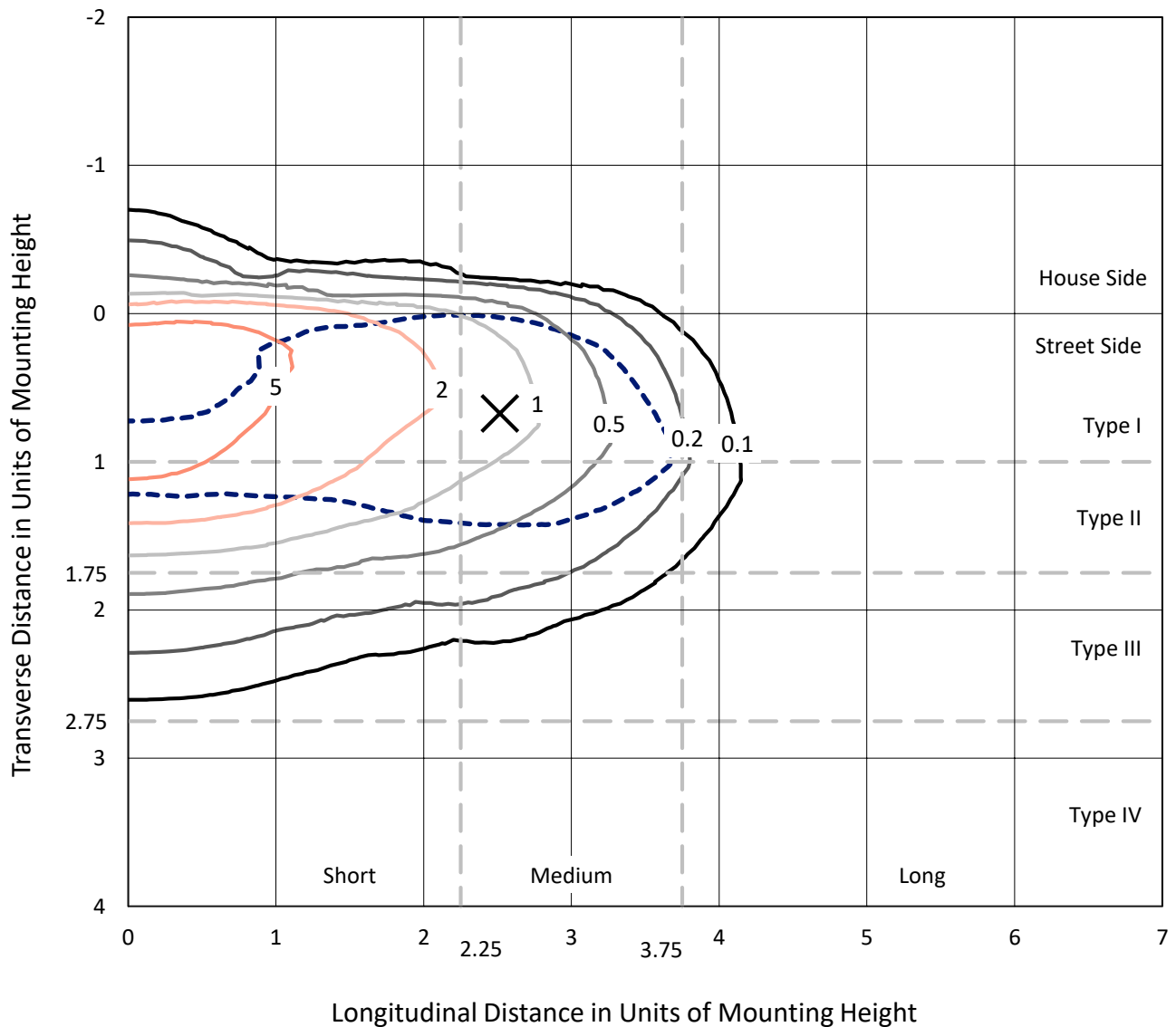
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

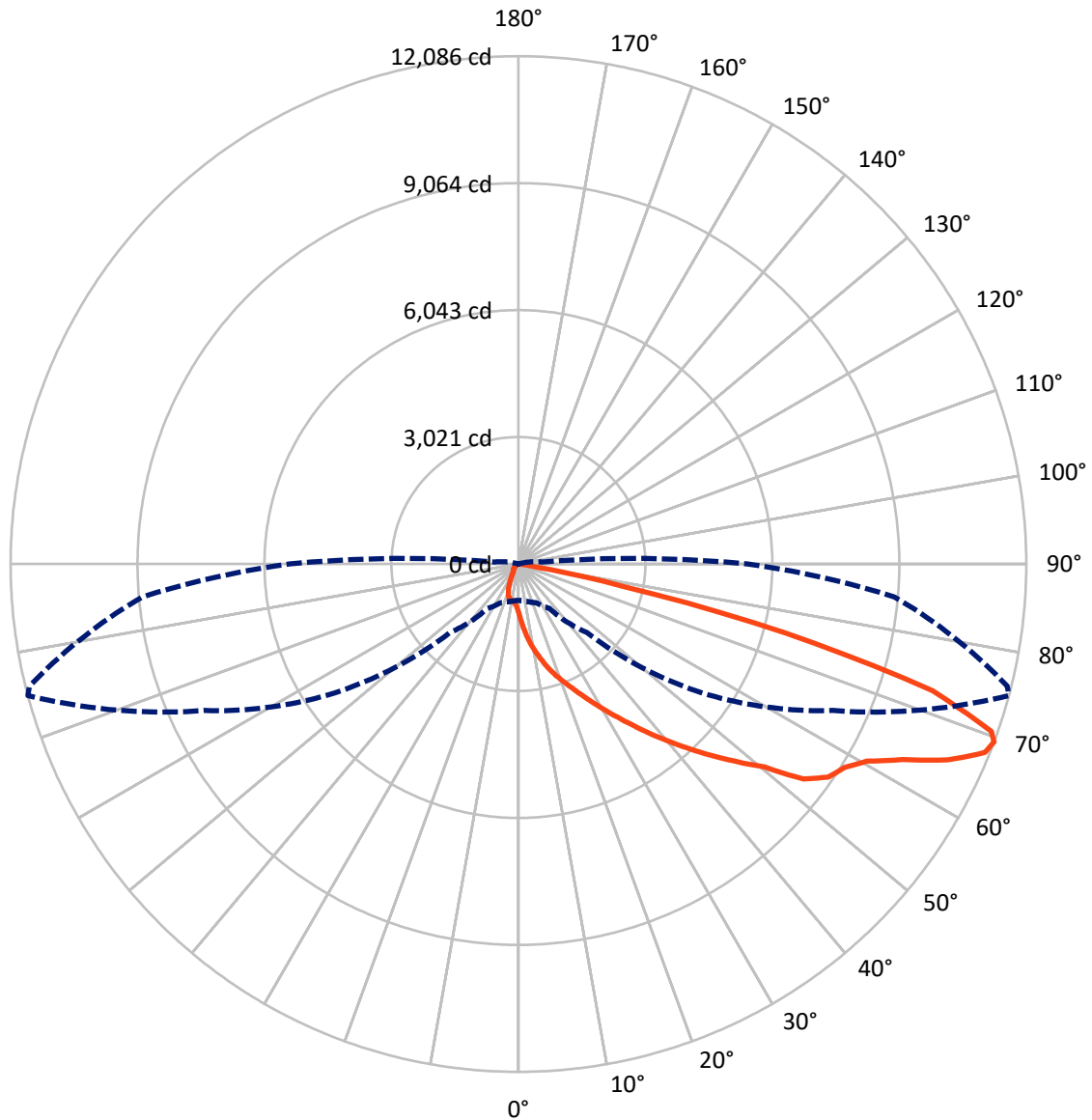
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 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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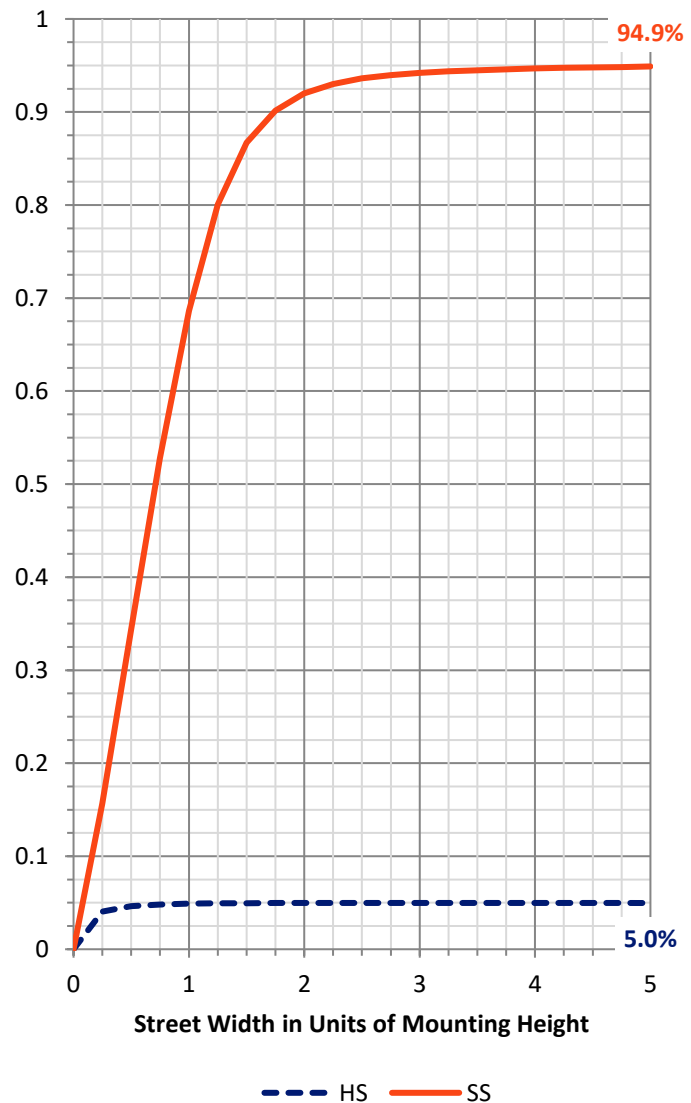
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	626.8	0.0	626.8
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	11936.1	0.0	11936.1
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	12562.9	0.0	12562.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.3	1.1
10°-20°	487.3	3.9
20°-30°	930.3	7.4
30°-40°	1668.8	13.3
40°-50°	2556.7	20.4
50°-60°	2971.6	23.7
60°-70°	2631.4	20.9
70°-80°	1135.0	9.0
80°-90°	45.5	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°	12562.9	100.0
0°-180°	12562.9	100.0

**Coefficient of Utilization**



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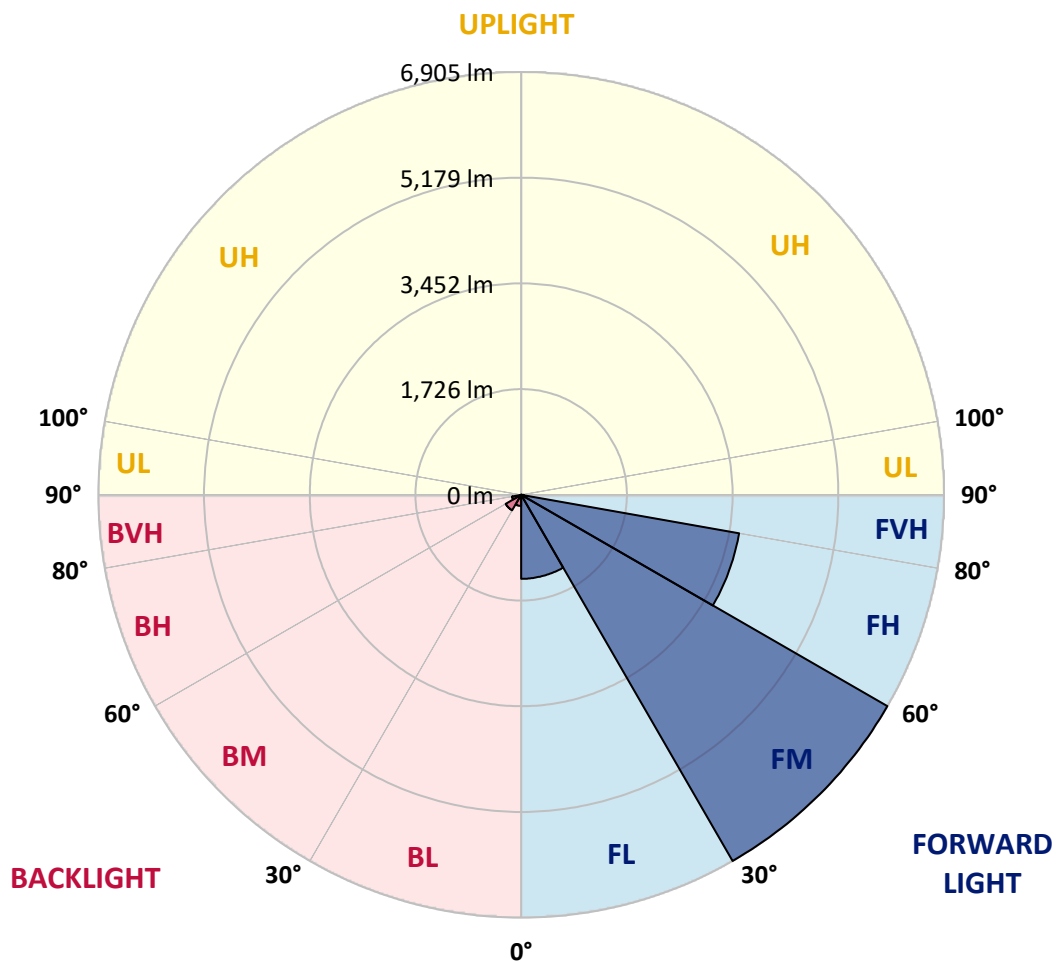
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1371.9	10.9			
FM	(30°-60°)	6904.9	55.0			
FH	(60°-80°)	3614.5	28.8			G2/5000
FVH	(80°-90°)	44.8	0.4			G1/100
BL	(0°-30°)	182.0	1.4	B1/500		
BM	(30°-60°)	292.2	2.3	B1/1000		
BH	(60°-80°)	151.9	1.2	B1/500		G1/500
BVH	(80°-90°)	0.7	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°	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9
2.5°	1925.7	1906.7	1887.8	1866.0	1817.2	1733.1	1627.3	1513.5	1372.4	1347.9	1234.1
5°	2338.0	2329.8	2310.8	2281.0	2226.8	2134.5	2015.2	1847.0	1611.0	1570.3	1329.0
7.5°	2628.2	2622.7	2606.5	2571.2	2522.4	2430.1	2305.4	2123.6	1849.7	1803.7	1448.3
10°	2888.5	2885.8	2872.2	2839.7	2790.9	2690.6	2557.6	2367.8	2077.6	2026.1	1586.7
12.5°	3124.5	3127.2	3121.7	3105.5	3070.3	2975.4	2823.4	2617.3	2297.2	2240.3	1752.1
15°	3262.8	3271.0	3292.7	3325.2	3336.0	3260.1	3102.8	2875.0	2522.4	2473.6	1942.0
17.5°	3216.7	3224.9	3292.7	3403.9	3509.6	3520.5	3379.4	3119.1	2744.8	2696.0	2129.1
20°	3105.5	3116.3	3186.9	3338.7	3544.8	3688.7	3631.7	3384.8	2956.3	2896.7	2308.1
22.5°	3230.3	3230.3	3252.0	3344.1	3531.3	3756.5	3832.4	3650.7	3173.3	3100.1	2487.1
25°	3658.8	3650.7	3604.6	3566.6	3626.3	3827.0	3984.3	3921.9	3428.2	3344.1	2677.0
27.5°	4201.3	4239.2	4152.5	4014.1	3878.5	3965.3	4119.8	4190.4	3710.3	3623.5	2872.2
30°	4808.8	4825.1	4721.9	4537.5	4298.8	4214.8	4279.9	4420.9	4016.8	3921.9	3075.7
32.5°	5356.7	5343.1	5256.3	5063.7	4768.1	4586.4	4486.0	4605.3	4350.4	4241.9	3284.5
35°	5842.2	5853.0	5747.2	5524.9	5234.6	5042.0	4803.4	4814.2	4724.7	4599.9	3525.9
37.5°	6278.8	6259.8	6159.5	5937.1	5674.0	5465.1	5212.9	5031.2	5134.3	5004.1	3797.1
40°	6634.1	6615.1	6509.3	6292.4	6045.5	5874.7	5676.7	5321.4	5565.5	5416.3	4087.3
42.5°	6916.2	6894.5	6805.0	6596.1	6357.4	6205.5	6110.6	5679.4	6026.6	5877.4	4412.8
45°	7054.5	7035.5	6981.2	6824.0	6615.1	6482.2	6528.4	6091.7	6520.2	6395.4	4770.8
47.5°	6891.7	6883.6	6946.0	6918.9	6799.6	6729.1	6889.1	6541.9	7038.2	6916.2	5183.1
50°	6398.1	6411.7	6593.4	6818.6	6875.5	6959.5	7184.7	7016.5	7594.2	7464.1	5657.7
52.5°	5180.3	5272.6	5820.4	6362.9	6783.3	7100.6	7531.9	7694.5	8500.1	8372.6	6398.1
55°	3867.7	3905.6	4502.3	5429.9	6411.7	7089.8	7789.5	8093.3	8947.6	8817.4	6593.4
57.5°	3067.5	3081.1	3376.8	4323.3	5646.9	6845.7	7925.1	8237.0	9142.9	9034.4	6883.6
60°	2408.4	2424.7	2639.0	3289.9	4570.1	6186.6	7729.8	8361.8	9525.3	9438.6	7390.8
62.5°	1874.1	1890.4	2020.6	2403.0	3428.2	5172.2	7336.6	8562.5	10252.2	10211.5	8220.7
65°	1451.1	1456.5	1546.0	1725.0	2422.0	4073.8	6856.5	8749.6	11234.0	11198.8	8893.4
67.5°	1071.3	1079.4	1141.8	1253.0	1635.5	2926.5	6070.0	8605.9	11974.5	11871.4	9137.5
69°	865.2	873.3	927.6	1017.1	1291.1	2305.4	5351.3	8250.6	12085.7	11988.1	8982.9
70°	740.4	745.8	800.2	876.1	1101.2	1958.2	4781.7	7944.1	11939.3	11844.3	8630.3
72.5°	474.6	501.8	556.0	604.9	729.6	1296.5	3227.5	6588.0	10301.0	10138.3	6758.8
75°	263.1	271.2	368.9	428.5	485.5	843.5	1795.5	4109.0	6552.7	6438.9	3615.4
77.5°	217.0	222.4	260.3	325.5	325.5	471.9	678.0	1619.2	2492.5	2248.4	979.1
80°	151.9	157.3	198.0	214.3	233.2	265.8	219.7	355.3	385.1	341.8	146.5
82.5°	105.8	111.2	135.6	176.3	187.1	124.8	81.3	105.8	111.2	111.2	57.0
85°	19.0	27.1	100.4	146.5	111.2	38.0	46.1	38.0	35.3	38.0	13.6
87.5°	0.0	0.0	62.4	70.5	59.6	16.3	19.0	13.6	8.2	10.8	5.4
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°	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9	1168.9
2.5°	1177.1	1120.1	1022.5	952.0	892.3	846.2	827.3	797.4	775.7	786.5	772.9
5°	1209.6	1109.3	952.0	851.6	781.1	721.5	672.6	634.6	604.9	599.4	594.0
7.5°	1261.2	1117.5	911.3	786.5	680.8	588.5	512.6	455.6	412.2	412.2	396.0
10°	1331.7	1139.2	886.9	721.5	564.2	439.4	363.5	309.2	287.4	284.8	279.4
12.5°	1429.4	1179.8	867.9	637.4	439.4	320.1	273.9	254.9	246.8	244.1	241.4
15°	1562.3	1239.5	846.2	534.3	333.6	263.1	244.1	227.8	219.7	217.0	214.3
17.5°	1689.7	1293.7	800.2	428.5	271.2	238.7	217.0	203.5	192.5	189.9	189.9
20°	1809.1	1339.9	721.5	333.6	244.1	214.3	192.5	176.3	165.4	162.8	162.8
22.5°	1933.8	1377.8	623.8	271.2	222.4	189.9	168.2	151.9	141.1	138.3	135.6
25°	2066.7	1404.9	512.6	241.4	200.7	168.2	143.7	130.2	122.0	119.4	116.6
27.5°	2210.5	1415.8	406.8	219.7	176.3	146.5	124.8	111.2	105.8	103.1	103.1
30°	2340.6	1404.9	314.7	195.3	154.6	127.5	108.5	97.6	92.2	89.5	89.5
32.5°	2476.3	1377.8	252.3	173.6	135.6	108.5	92.2	84.1	81.3	78.7	78.7
35°	2620.0	1342.5	217.0	154.6	116.6	94.9	81.3	75.9	73.2	70.5	70.5
37.5°	2788.2	1299.1	198.0	138.3	103.1	84.1	70.5	67.8	65.1	65.1	65.1
40°	2978.0	1244.9	184.4	124.8	92.2	73.2	62.4	59.6	57.0	57.0	57.0
42.5°	3178.7	1182.5	170.8	111.2	81.3	62.4	54.2	54.2	51.6	51.6	48.8
45°	3403.9	1120.1	157.3	97.6	70.5	54.2	46.1	43.4	43.4	40.7	40.7
47.5°	3669.6	1063.2	143.7	86.7	62.4	46.1	40.7	38.0	35.3	32.5	32.5
50°	4043.9	1057.7	127.5	75.9	57.0	38.0	32.5	29.9	27.1	24.4	24.4
52.5°	4415.5	1008.9	108.5	62.4	46.1	32.5	24.4	21.7	19.0	19.0	16.3
55°	4499.6	927.6	94.9	54.2	35.3	24.4	19.0	13.6	13.6	10.8	10.8
57.5°	4684.0	889.7	81.3	43.4	27.1	19.0	10.8	8.2	8.2	8.2	8.2
60°	5047.4	878.7	70.5	38.0	19.0	13.6	8.2	5.4	5.4	2.8	2.8
62.5°	5549.2	867.9	59.6	32.5	13.6	8.2	5.4	2.8	0.0	0.0	0.0
65°	5825.9	794.7	48.8	24.4	10.8	8.2	2.8	0.0	0.0	0.0	0.0
67.5°	5752.7	656.3	43.4	16.3	8.2	5.4	2.8	0.0	0.0	0.0	0.0
69°	5446.2	553.3	35.3	13.6	8.2	5.4	2.8	0.0	0.0	0.0	0.0
70°	5077.3	477.3	32.5	10.8	5.4	2.8	2.8	0.0	0.0	0.0	0.0
72.5°	3604.6	249.5	21.7	8.2	5.4	2.8	0.0	0.0	0.0	0.0	0.0
75°	1684.3	111.2	13.6	5.4	2.8	2.8	0.0	0.0	0.0	0.0	0.0
77.5°	371.5	51.6	8.2	5.4	2.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	70.5	19.0	5.4	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.4	8.2	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.2	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	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)