

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: P236998

Luminaire Tested: **ARCH-L-AF72-250-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236998
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1070mA 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: 22536 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

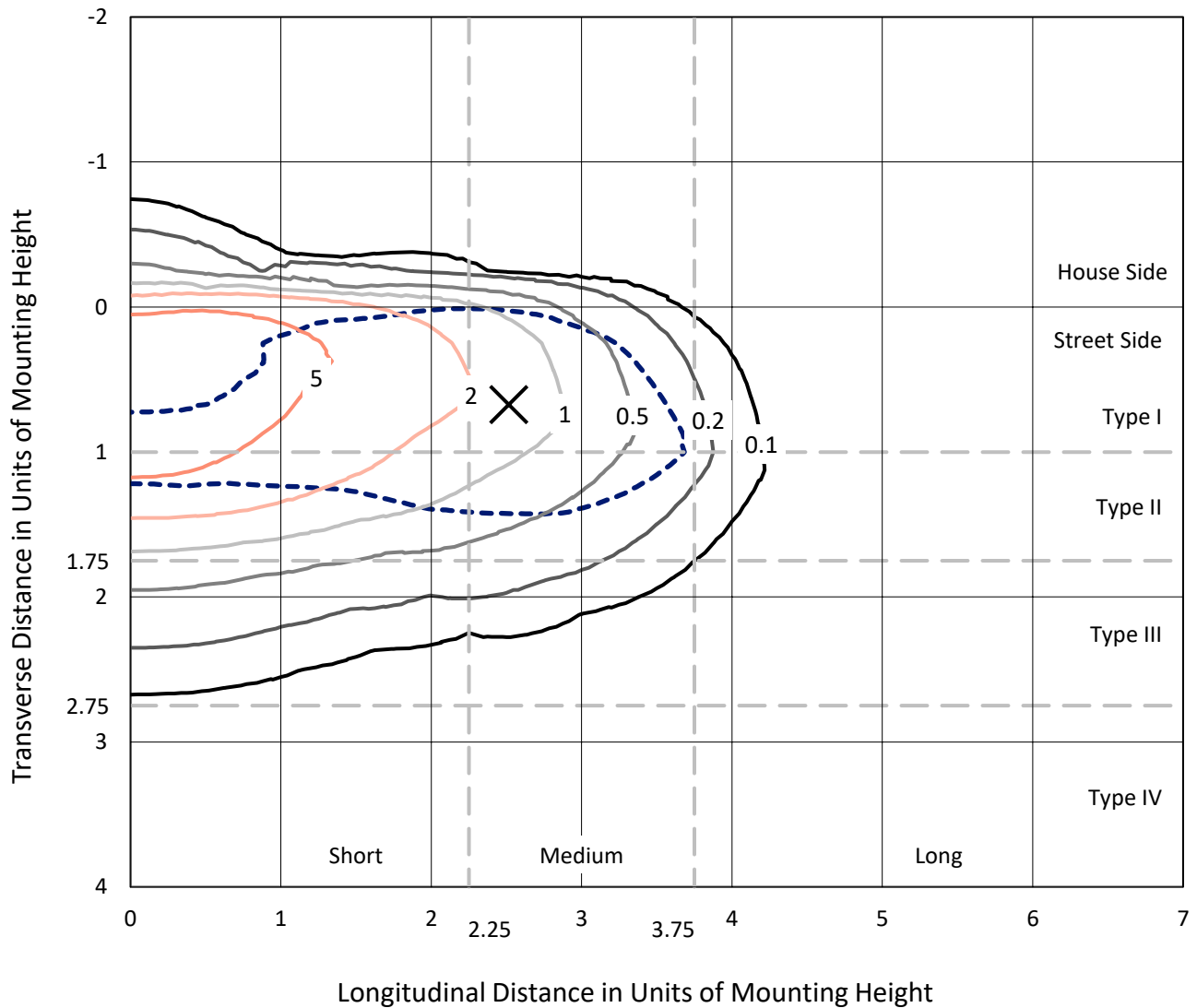
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

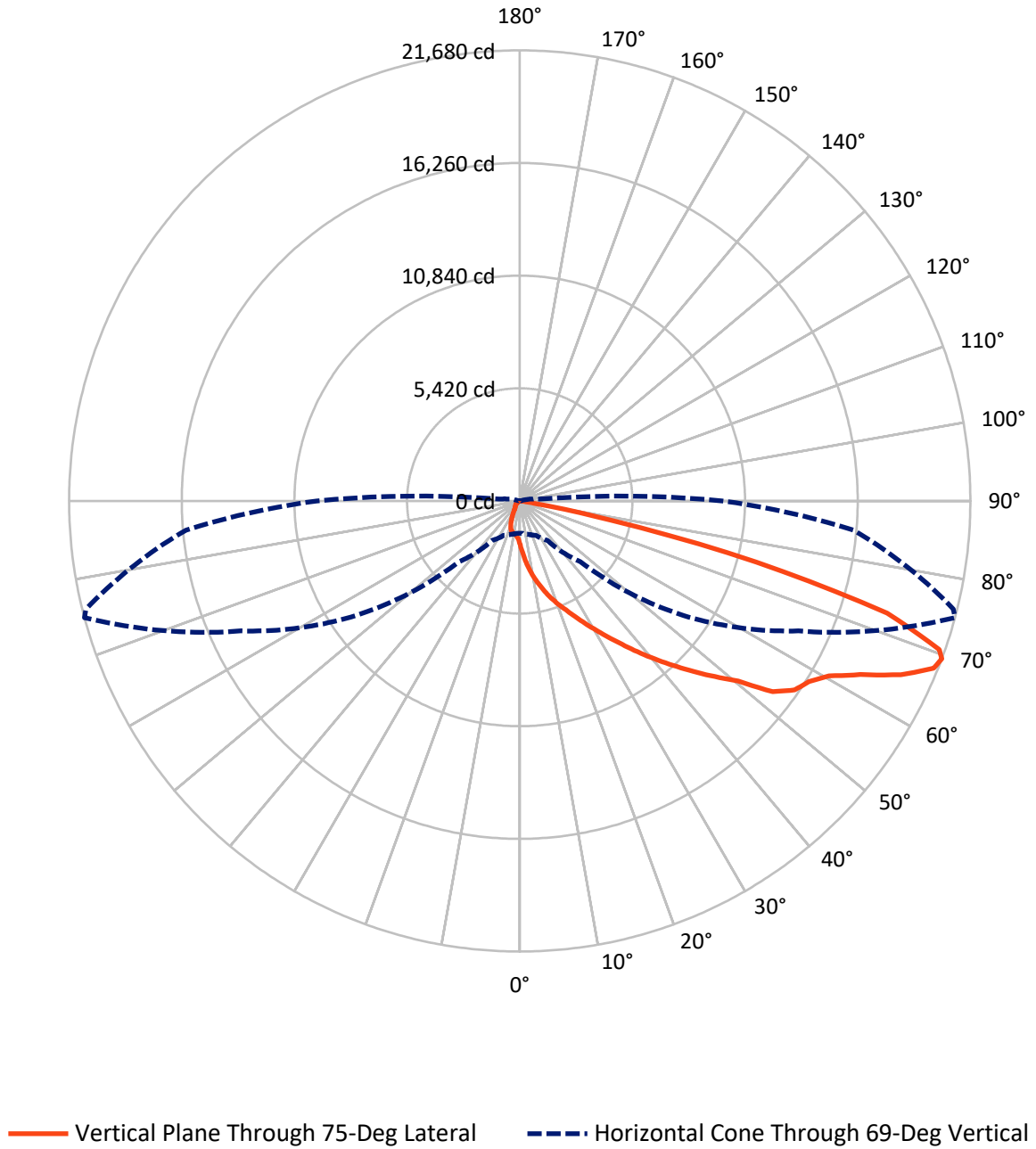
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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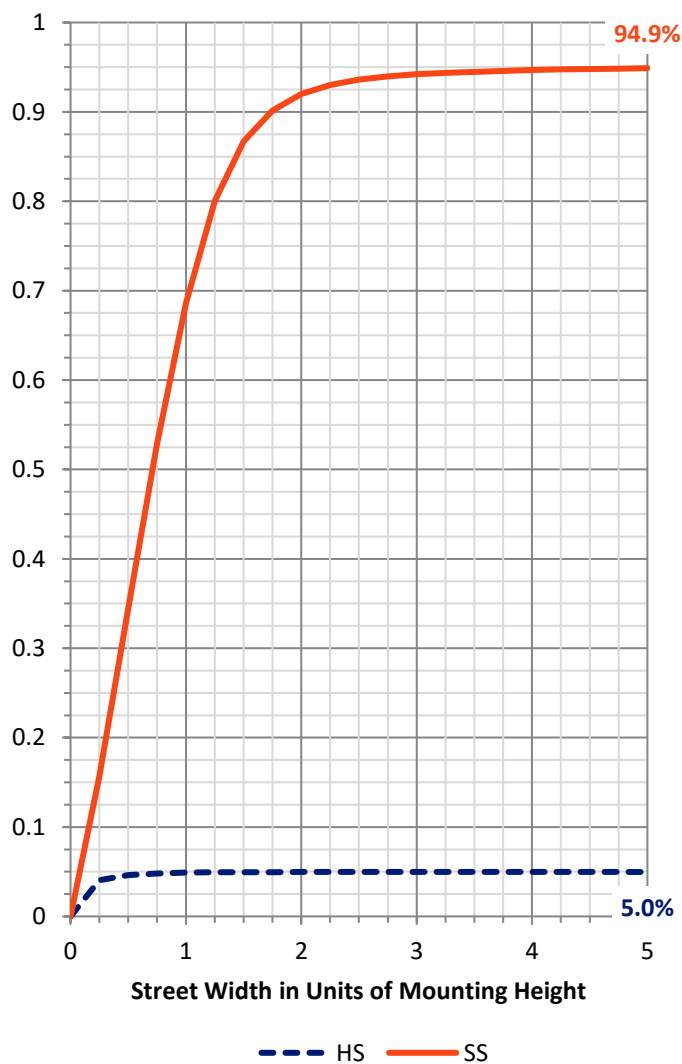
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1124.4	0.0	1124.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	21411.6	0.0	21411.6
	% Fixture	95.0	0.0	95.0
Total	Lumens	22536.0	0.0	22536.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.5	1.1
10°-20°	874.2	3.9
20°-30°	1668.8	7.4
30°-40°	2993.6	13.3
40°-50°	4586.4	20.4
50°-60°	5330.6	23.7
60°-70°	4720.3	20.9
70°-80°	2036.0	9.0
80°-90°	81.6	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°	22536.0	100.0
0°-180°	22536.0	100.0

Coefficient of Utilization



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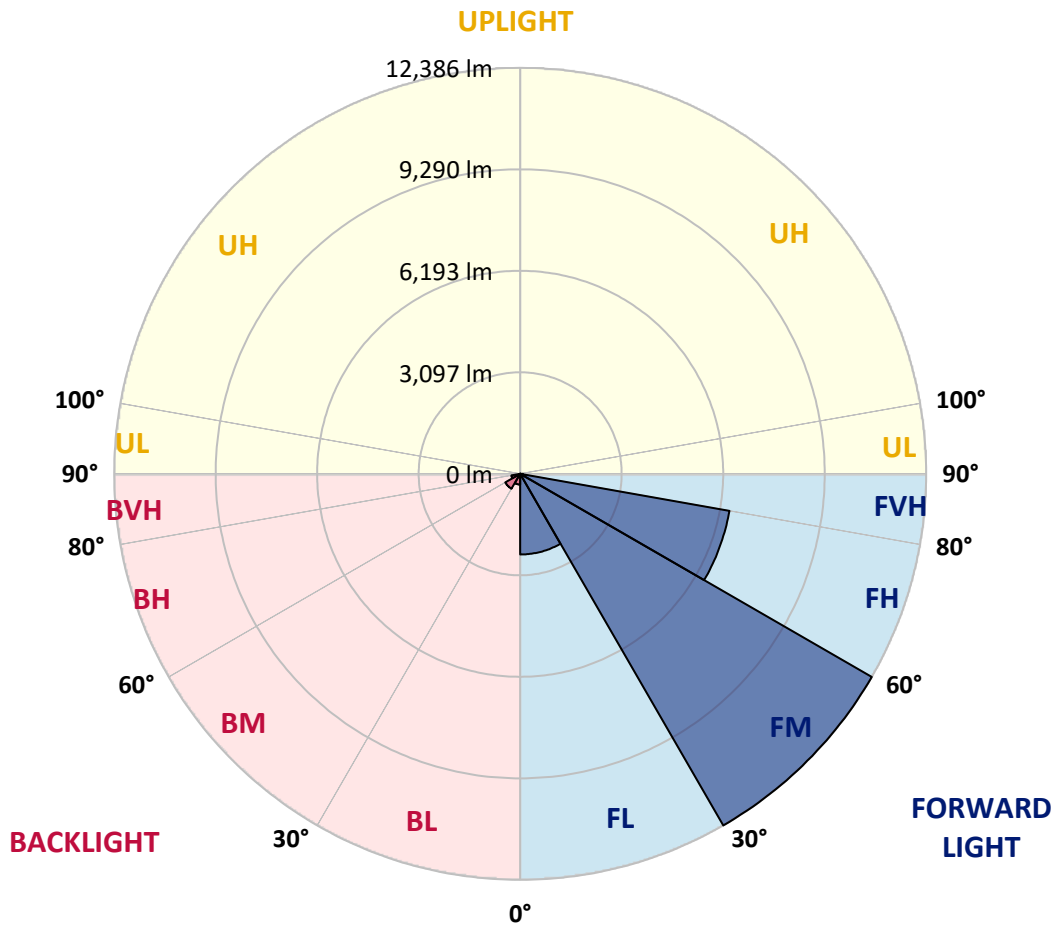
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2461.0	10.9			
FM (30°-60°)	12386.4	55.0			
FH (60°-80°)	6483.9	28.8			G3/7500
FVH (80°-90°)	80.4	0.4			G1/100
BL (0°-30°)	326.6	1.4	B1/500		
BM (30°-60°)	524.2	2.3	B1/1000		
BH (60°-80°)	272.4	1.2	B1/500		G1/500
BVH (80°-90°)	1.2	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°	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0
2.5°	3454.4	3420.3	3386.3	3347.4	3259.8	3109.0	2919.2	2714.9	2461.9	2418.1	2213.7
5°	4193.9	4179.3	4145.3	4091.8	3994.5	3829.0	3615.0	3313.3	2890.0	2817.0	2384.0
7.5°	4714.5	4704.8	4675.6	4612.4	4524.8	4359.4	4135.5	3809.6	3318.2	3235.5	2598.1
10°	5181.6	5176.7	5152.4	5094.0	5006.4	4826.4	4588.0	4247.5	3726.9	3634.4	2846.2
12.5°	5604.9	5609.8	5600.0	5570.8	5507.6	5337.3	5064.8	4695.1	4121.0	4018.8	3143.0
15°	5853.0	5867.6	5906.5	5964.9	5984.4	5848.2	5566.0	5157.3	4524.8	4437.2	3483.6
17.5°	5770.3	5784.9	5906.5	6106.0	6295.8	6315.2	6062.2	5595.2	4923.7	4836.2	3819.3
20°	5570.8	5590.3	5716.8	5989.2	6359.0	6616.9	6514.7	6072.0	5303.2	5196.2	4140.4
22.5°	5794.6	5794.6	5833.6	5999.0	6334.7	6738.5	6874.7	6548.8	5692.5	5561.1	4461.5
25°	6563.4	6548.8	6466.1	6397.9	6505.0	6865.0	7147.2	7035.3	6149.8	5999.0	4802.1
27.5°	7536.4	7604.5	7448.9	7200.7	6957.5	7113.1	7390.5	7517.0	6655.8	6500.1	5152.4
30°	8626.3	8655.5	8470.6	8139.7	7711.6	7560.8	7677.5	7930.5	7205.6	7035.3	5517.3
32.5°	9609.1	9584.7	9429.1	9083.6	8553.3	8227.3	8047.3	8261.4	7804.0	7609.4	5891.9
35°	10480.0	10499.4	10309.7	9910.7	9390.1	9044.7	8616.5	8636.0	8475.4	8251.6	6325.0
37.5°	11263.3	11229.2	11049.2	10650.3	10178.3	9803.7	9351.2	9025.2	9210.1	8976.6	6811.5
40°	11900.6	11866.6	11676.8	11287.6	10844.9	10538.4	10183.2	9545.8	9983.7	9716.1	7332.1
42.5°	12406.6	12367.7	12207.2	11832.5	11404.4	11131.9	10961.6	10188.0	10810.8	10543.2	7915.9
45°	12654.8	12620.7	12523.4	12241.2	11866.6	11628.2	11710.9	10927.6	11696.3	11472.5	8558.2
47.5°	12362.9	12348.3	12460.2	12411.5	12197.4	12070.9	12358.0	11735.2	12625.6	12406.6	9297.7
50°	11477.4	11501.7	11827.7	12231.5	12333.7	12484.5	12888.3	12586.7	13623.0	13389.4	10149.1
52.5°	9292.8	9458.2	10441.0	11414.1	12168.2	12737.5	13511.1	13803.0	15248.0	15019.3	11477.4
55°	6938.0	7006.1	8076.5	9740.4	11501.7	12718.0	13973.3	14518.2	16050.8	15817.3	11827.7
57.5°	5502.7	5527.0	6057.4	7755.4	10129.7	12280.1	14216.6	14776.1	16401.1	16206.5	12348.3
60°	4320.4	4349.6	4734.0	5901.7	8198.1	11097.9	13866.3	14999.9	17087.1	16931.4	13258.1
62.5°	3362.0	3391.1	3624.7	4310.7	6149.8	9278.2	13160.8	15359.9	18391.0	18318.0	14746.9
65°	2603.0	2612.7	2773.3	3094.4	4344.8	7307.8	12299.6	15695.6	20152.3	20089.0	15953.5
67.5°	1921.8	1936.4	2048.3	2247.8	2933.8	5249.7	10888.7	15437.8	21480.5	21295.6	16391.4
69°	1552.0	1566.6	1664.0	1824.5	2315.9	4135.5	9599.3	14800.4	21680.0	21504.9	16114.0
70°	1328.2	1338.0	1435.3	1571.5	1975.3	3512.8	8577.6	14250.6	21417.3	21247.0	15481.5
72.5°	851.4	900.1	997.4	1085.0	1308.8	2325.6	5789.8	11817.9	18478.6	18186.7	12124.5
75°	471.9	486.5	661.7	768.7	870.9	1513.1	3220.9	7371.0	11754.7	11550.3	6485.5
77.5°	389.2	399.0	467.1	583.8	583.8	846.6	1216.3	2904.6	4471.3	4033.4	1756.4
80°	272.5	282.2	355.2	384.4	418.4	476.8	394.1	637.4	690.9	613.0	262.7
82.5°	189.7	199.5	243.3	316.2	335.7	223.8	146.0	189.7	199.5	199.5	102.2
85°	34.1	48.7	180.0	262.7	199.5	68.1	82.7	68.1	63.2	68.1	24.3
87.5°	0.0	0.0	111.9	126.5	107.0	29.2	34.1	24.3	14.6	19.5	9.7
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°	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0	2097.0
2.5°	2111.6	2009.4	1834.2	1707.7	1600.7	1518.0	1483.9	1430.4	1391.5	1411.0	1386.6
5°	2169.9	1989.9	1707.7	1527.7	1401.2	1294.2	1206.6	1138.5	1085.0	1075.2	1065.5
7.5°	2262.4	2004.5	1634.8	1411.0	1221.2	1055.8	919.6	817.4	739.5	739.5	710.3
10°	2388.9	2043.4	1591.0	1294.2	1012.0	788.2	652.0	554.7	515.7	510.9	501.1
12.5°	2564.0	2116.4	1556.9	1143.4	788.2	574.1	491.4	457.3	442.7	437.9	433.0
15°	2802.4	2223.5	1518.0	958.5	598.4	471.9	437.9	408.7	394.1	389.2	384.4
17.5°	3031.1	2320.8	1435.3	768.7	486.5	428.2	389.2	364.9	345.4	340.6	340.6
20°	3245.2	2403.5	1294.2	598.4	437.9	384.4	345.4	316.2	296.8	291.9	291.9
22.5°	3469.0	2471.6	1119.0	486.5	399.0	340.6	301.7	272.5	253.0	248.1	243.3
25°	3707.4	2520.3	919.6	433.0	360.0	301.7	257.9	233.5	218.9	214.1	209.2
27.5°	3965.3	2539.7	729.8	394.1	316.2	262.7	223.8	199.5	189.7	184.9	184.9
30°	4198.8	2520.3	564.4	350.3	277.3	228.7	194.6	175.2	165.4	160.6	160.6
32.5°	4442.1	2471.6	452.5	311.4	243.3	194.6	165.4	150.8	146.0	141.1	141.1
35°	4699.9	2408.3	389.2	277.3	209.2	170.3	146.0	136.2	131.4	126.5	126.5
37.5°	5001.6	2330.5	355.2	248.1	184.9	150.8	126.5	121.6	116.8	116.8	116.8
40°	5342.2	2233.2	330.8	223.8	165.4	131.4	111.9	107.0	102.2	102.2	102.2
42.5°	5702.2	2121.3	306.5	199.5	146.0	111.9	97.3	97.3	92.4	92.4	87.6
45°	6106.0	2009.4	282.2	175.2	126.5	97.3	82.7	77.8	77.8	73.0	73.0
47.5°	6582.8	1907.2	257.9	155.7	111.9	82.7	73.0	68.1	63.2	58.4	58.4
50°	7254.2	1897.5	228.7	136.2	102.2	68.1	58.4	53.5	48.7	43.8	43.8
52.5°	7920.8	1809.9	194.6	111.9	82.7	58.4	43.8	38.9	34.1	34.1	29.2
55°	8071.6	1664.0	170.3	97.3	63.2	43.8	34.1	24.3	24.3	19.5	19.5
57.5°	8402.5	1595.8	146.0	77.8	48.7	34.1	19.5	14.6	14.6	14.6	14.6
60°	9054.4	1576.4	126.5	68.1	34.1	24.3	14.6	9.7	9.7	4.9	4.9
62.5°	9954.5	1556.9	107.0	58.4	24.3	14.6	9.7	4.9	0.0	0.0	0.0
65°	10450.8	1425.5	87.6	43.8	19.5	14.6	4.9	0.0	0.0	0.0	0.0
67.5°	10319.4	1177.4	77.8	29.2	14.6	9.7	4.9	0.0	0.0	0.0	0.0
69°	9769.6	992.5	63.2	24.3	14.6	9.7	4.9	0.0	0.0	0.0	0.0
70°	9107.9	856.3	58.4	19.5	9.7	4.9	4.9	0.0	0.0	0.0	0.0
72.5°	6466.1	447.6	38.9	14.6	9.7	4.9	0.0	0.0	0.0	0.0	0.0
75°	3021.4	199.5	24.3	9.7	4.9	4.9	0.0	0.0	0.0	0.0	0.0
77.5°	666.6	92.4	14.6	9.7	4.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	126.5	34.1	9.7	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	43.8	14.6	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	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)