

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: P841948

Luminaire Tested: **ARCH4-250-727-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841948
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-250-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 975mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24811 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 249.5
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

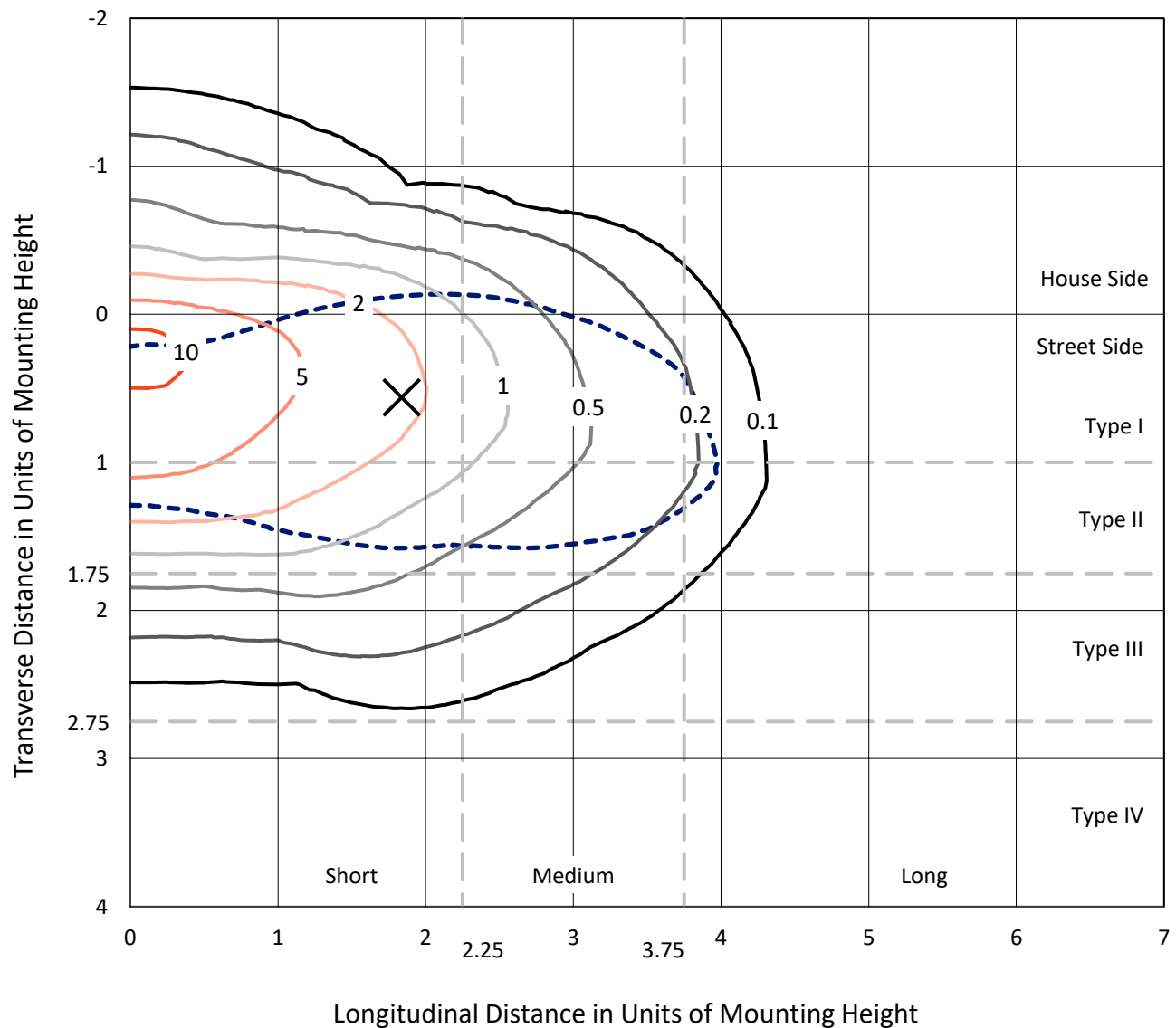


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Iso-Footcandle Lines of Horizontal Illumination

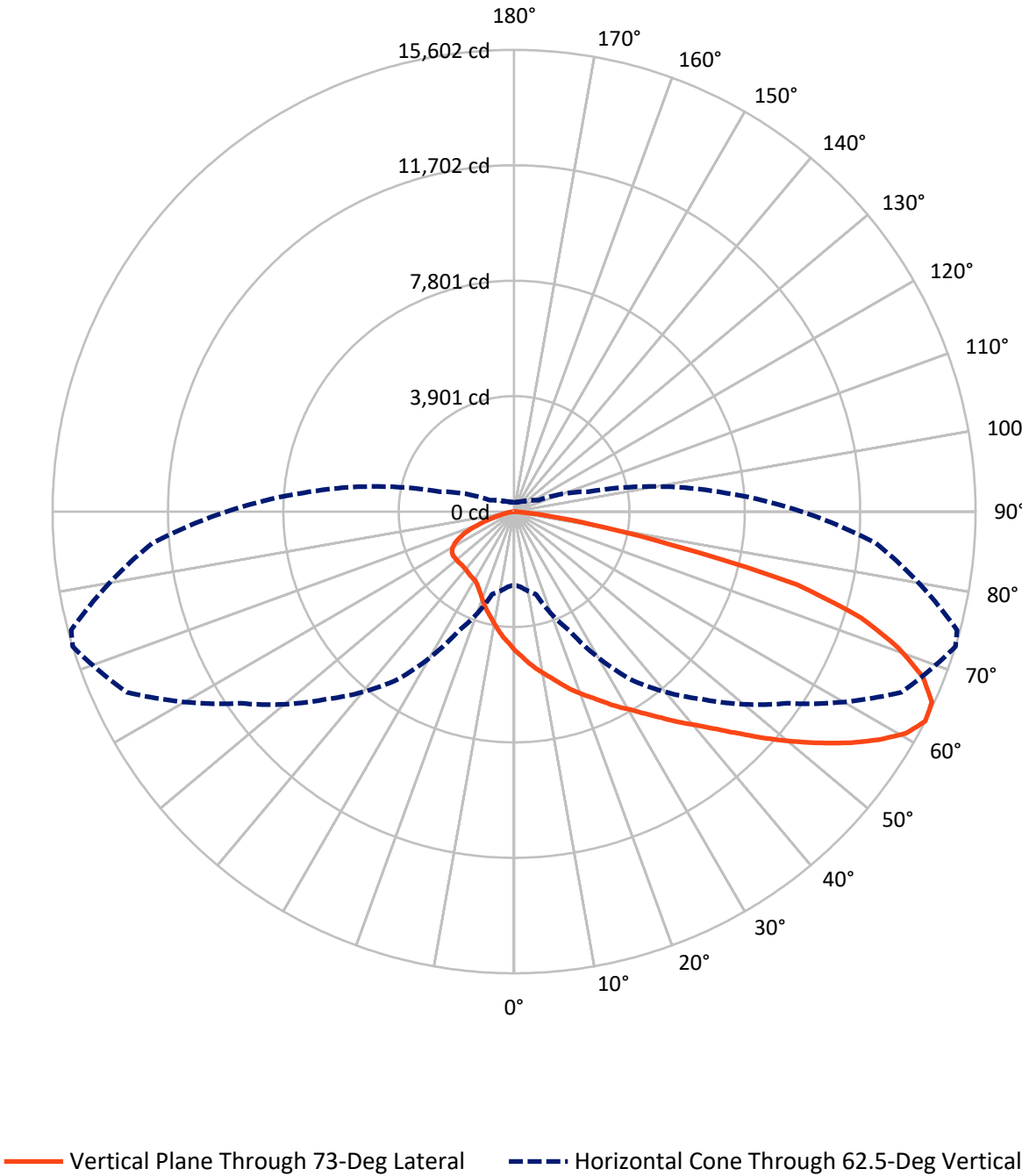
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.8 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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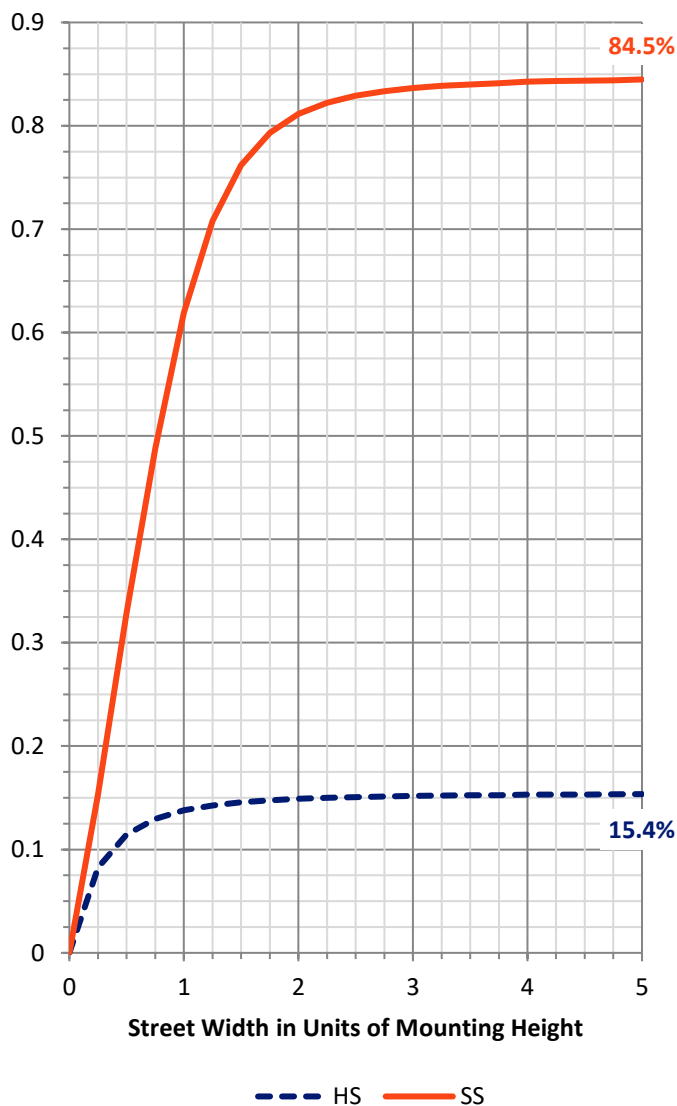
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3846.1	0.0	3846.1
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	20964.9	0.0	20964.9
	% Fixture	84.5	0.0	84.5
Total	Lumens	24811.0	0.0	24811.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.9	1.8
10°-20°	1369.5	5.5
20°-30°	2279.6	9.2
30°-40°	3439.6	13.9
40°-50°	4807.7	19.4
50°-60°	5310.4	21.4
60°-70°	4626.0	18.6
70°-80°	2336.8	9.4
80°-90°	187.6	0.8
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°	24811.0	100.0
0°-180°	24811.0	100.0

Coefficient of Utilization



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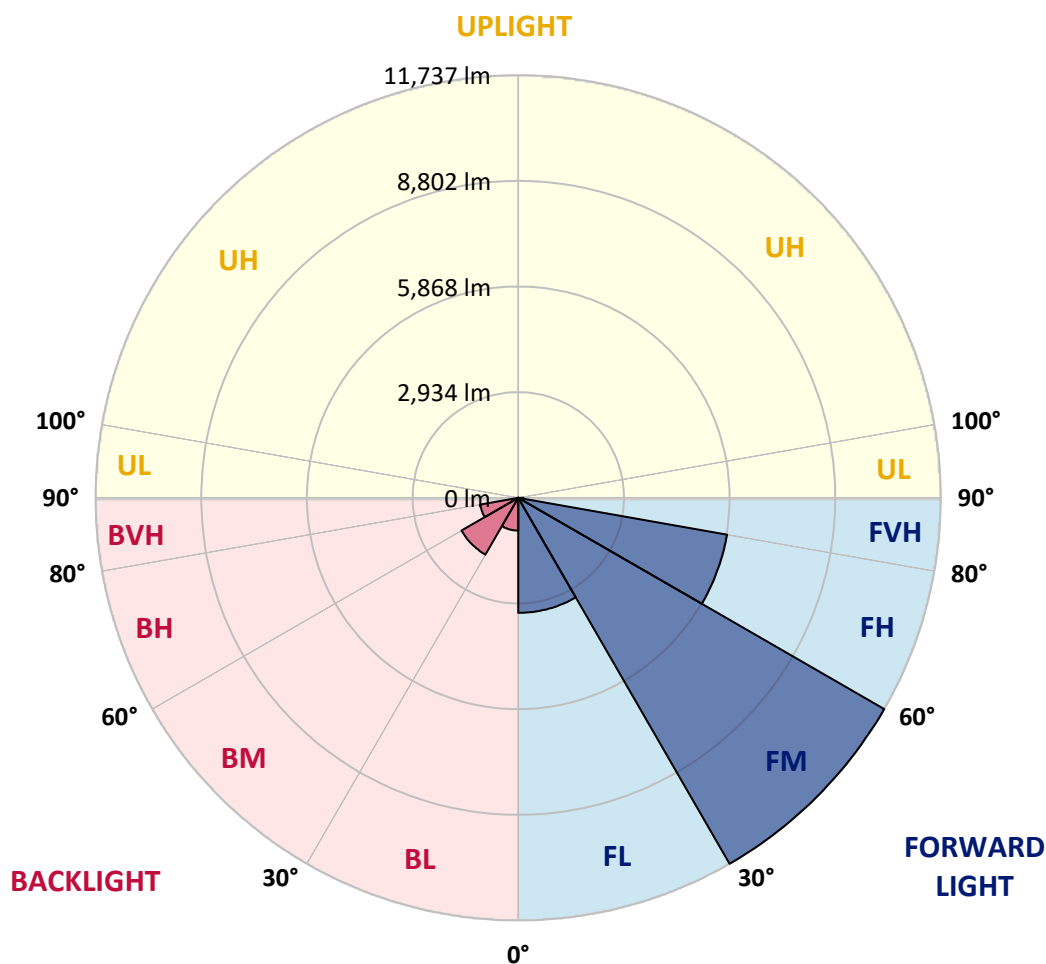
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3193.9	12.9			
FM	(30°-60°)	11736.5	47.3			
FH	(60°-80°)	5889.3	23.7			G3/7500
FVH	(80°-90°)	145.1	0.6			G2/225
BL	(0°-30°)	909.1	3.7	B2/1000		
BM	(30°-60°)	1821.1	7.3	B2/2500		
BH	(60°-80°)	1073.5	4.3	B3/2500		G3/2500
BVH	(80°-90°)	42.4	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0
2.5°	5346.8	5406.2	5373.8	5395.4	5287.3	5217.0	5135.9	4979.1	4892.6	4881.8	4779.1
5°	6130.7	6195.5	6141.5	6125.3	5936.0	5773.9	5590.0	5314.3	5130.5	5098.1	4871.0
7.5°	6914.6	6974.0	6909.2	6860.5	6606.4	6319.9	6049.6	5644.1	5357.6	5303.5	4946.7
10°	7466.0	7520.1	7471.4	7422.8	7157.9	6865.9	6482.1	5952.3	5563.0	5476.5	4995.4
12.5°	7882.3	7914.7	7893.1	7849.8	7601.2	7287.6	6920.0	6298.3	5795.5	5687.4	5071.0
15°	8222.9	8276.9	8249.9	8217.5	7979.6	7666.0	7314.6	6660.5	6065.8	5930.6	5184.6
17.5°	8449.9	8487.8	8493.2	8493.2	8282.3	7974.2	7633.6	6990.3	6336.1	6163.1	5292.7
20°	8552.7	8595.9	8622.9	8666.2	8493.2	8228.3	7882.3	7271.4	6590.2	6395.6	5395.4
22.5°	8601.3	8639.2	8709.4	8806.8	8666.2	8444.5	8125.6	7530.9	6844.3	6638.9	5514.4
25°	8639.2	8687.8	8790.5	8974.3	8877.0	8687.8	8412.1	7828.2	7147.0	6936.2	5687.4
27.5°	8741.9	8801.3	8898.7	9120.3	9001.4	8909.5	8714.8	8147.2	7466.0	7249.8	5898.2
30°	9098.7	9147.3	9141.9	9282.5	9136.5	9109.5	8974.3	8455.3	7774.2	7557.9	6146.9
32.5°	9747.4	9796.1	9677.2	9623.1	9304.1	9309.5	9255.5	8785.1	8141.8	7920.1	6433.4
35°	10444.8	10498.9	10342.1	10250.2	9715.0	9558.2	9585.2	9196.0	8552.7	8331.0	6790.2
37.5°	11066.6	11131.4	10996.3	10861.1	10320.5	9958.3	9952.9	9655.5	9023.0	8795.9	7184.9
40°	11407.1	11482.8	11563.9	11488.2	10920.6	10520.5	10347.5	10125.9	9487.9	9255.5	7612.0
42.5°	11569.3	11780.2	11926.1	11877.5	11412.6	11007.1	10801.7	10617.8	10055.6	9828.5	8120.2
45°	11115.2	11120.6	11428.8	11693.7	11607.2	11336.9	11299.0	11169.3	10704.3	10488.1	8693.2
47.5°	10547.6	10504.3	10720.6	11190.9	11434.2	11504.5	11726.1	11780.2	11445.0	11228.7	9277.1
50°	9185.2	9212.2	9915.0	10590.8	11066.6	11520.7	12028.9	12407.3	12207.3	12001.8	9893.4
52.5°	7471.4	7536.3	8341.8	9828.5	10580.0	11358.5	12207.3	13034.4	12985.8	12791.1	10509.7
55°	5990.1	6092.8	6947.0	8558.1	9958.3	10996.3	12283.0	13607.5	13791.3	13612.9	11115.2
57.5°	4579.1	4687.2	5406.2	7060.5	9163.6	10407.0	12228.9	14110.3	14542.8	14429.2	11672.1
60°	3449.2	3557.3	4016.8	5725.2	8168.8	9747.4	11958.6	14440.0	15218.5	15099.6	12077.5
62.5°	2470.6	2557.1	2897.7	4454.7	6957.8	8963.5	11293.6	14445.5	15602.4	15505.1	12272.1
65°	1778.7	1778.7	2054.4	3178.9	5822.5	8022.8	10288.1	13780.5	15521.3	15494.3	12137.0
67.5°	1281.3	1292.1	1513.7	2222.0	4644.0	6882.1	8985.2	12596.5	14894.2	15029.3	11650.4
70°	908.2	935.3	1038.0	1551.6	3508.6	5433.3	7590.3	11044.9	13764.3	14002.1	10709.7
72.5°	702.8	719.0	789.3	1081.2	2562.6	4038.5	6049.6	9314.9	12255.9	12526.2	9428.5
75°	540.6	556.8	610.9	794.7	1838.1	2832.9	4298.0	7228.1	9882.6	10363.7	7574.1
77.5°	394.7	416.3	454.1	578.5	1070.4	1800.3	2605.8	4065.5	5454.9	5681.9	3968.2
80°	183.8	210.8	264.9	373.0	578.5	848.8	924.5	1567.8	2622.0	2741.0	2151.7
82.5°	102.7	129.7	151.4	227.1	291.9	302.7	313.6	394.7	989.3	1092.1	902.8
85°	48.7	64.9	70.3	97.3	97.3	86.5	102.7	75.7	162.2	194.6	189.2
87.5°	0.0	5.4	10.8	27.0	21.6	16.2	16.2	16.2	16.2	21.6	16.2
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°	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0	4698.0
2.5°	4730.5	4660.2	4498.0	4357.4	4265.5	4184.4	4076.3	4027.6	3941.1	3957.4	3908.7
5°	4757.5	4627.7	4341.2	4076.3	3881.7	3708.7	3519.5	3411.3	3292.4	3281.6	3243.7
7.5°	4773.7	4573.7	4162.8	3789.8	3492.4	3227.5	2973.4	2832.9	2686.9	2654.5	2622.0
10°	4757.5	4492.6	3979.0	3492.4	3097.8	2768.0	2481.5	2303.1	2151.7	2113.8	2081.4
12.5°	4773.7	4449.3	3806.0	3216.7	2746.4	2373.3	2049.0	1865.1	1724.6	1686.7	1665.1
15°	4811.5	4422.3	3660.0	2968.0	2432.8	2016.5	1697.6	1540.8	1427.2	1389.4	1378.6
17.5°	4844.0	4395.3	3503.2	2724.7	2119.2	1703.0	1427.2	1297.5	1200.2	1162.3	1151.5
20°	4887.2	4357.4	3346.5	2492.3	1843.5	1454.3	1211.0	1097.5	1021.8	994.7	989.3
22.5°	4925.1	4330.4	3200.5	2259.8	1589.4	1254.2	1048.8	956.9	902.8	875.8	875.8
25°	5022.4	4341.2	3076.1	2043.6	1400.2	1097.5	924.5	854.2	810.9	794.7	794.7
27.5°	5135.9	4384.5	2978.8	1859.7	1238.0	978.5	838.0	778.5	756.9	735.2	740.7
30°	5298.1	4471.0	2914.0	1708.4	1119.1	886.6	767.7	724.4	702.8	697.4	697.4
32.5°	5503.5	4611.5	2908.6	1611.1	1032.6	816.3	719.0	681.2	670.4	665.0	665.0
35°	5746.8	4735.9	2876.1	1567.8	978.5	767.7	681.2	654.2	648.7	648.7	648.7
37.5°	6038.8	4941.3	2854.5	1508.3	951.5	740.7	654.2	632.5	632.5	632.5	632.5
40°	6341.5	5108.9	2822.1	1454.3	940.7	724.4	637.9	610.9	610.9	610.9	610.9
42.5°	6703.7	5352.2	2811.2	1427.2	924.5	713.6	616.3	583.9	589.3	589.3	594.7
45°	7141.6	5627.9	2805.8	1400.2	919.1	702.8	594.7	556.8	562.2	556.8	556.8
47.5°	7584.9	5946.9	2822.1	1384.0	913.7	692.0	578.5	529.8	529.8	524.4	524.4
50°	8049.9	6238.8	2832.9	1367.8	902.8	670.4	551.4	508.2	497.4	486.6	492.0
52.5°	8487.8	6509.1	2838.3	1340.7	870.4	637.9	529.8	481.2	464.9	448.7	454.1
55°	8925.7	6768.6	2849.1	1308.3	827.2	605.5	502.8	454.1	432.5	410.9	410.9
57.5°	9320.3	6995.7	2822.1	1227.2	778.5	573.1	475.7	421.7	389.2	367.6	367.6
60°	9590.7	7157.9	2741.0	1108.3	713.6	535.2	448.7	389.2	351.4	335.2	335.2
62.5°	9720.4	7184.9	2595.0	913.7	632.5	497.4	416.3	356.8	324.4	313.6	313.6
65°	9596.1	7065.9	2367.9	686.6	546.0	454.1	383.8	329.8	297.3	270.3	270.3
67.5°	9163.6	6730.8	2054.4	519.0	464.9	410.9	351.4	302.7	264.9	243.3	243.3
70°	8293.2	6033.4	1589.4	416.3	394.7	356.8	319.0	270.3	237.9	210.8	210.8
72.5°	7152.4	5114.3	1119.1	335.2	335.2	302.7	270.3	237.9	205.4	183.8	183.8
75°	5487.3	3784.4	751.5	270.3	275.7	254.1	221.7	194.6	173.0	156.8	156.8
77.5°	2995.1	1870.6	459.5	200.0	205.4	194.6	173.0	156.8	146.0	129.7	129.7
80°	1454.3	821.7	264.9	140.6	146.0	140.6	129.7	113.5	113.5	102.7	102.7
82.5°	610.9	308.2	140.6	97.3	97.3	86.5	81.1	81.1	81.1	75.7	75.7
85°	151.4	59.5	59.5	54.1	54.1	54.1	48.7	48.7	48.7	37.8	43.2
87.5°	21.6	21.6	21.6	21.6	21.6	21.6	16.2	5.4	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)