

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: P841736

Luminaire Tested: **ARCH4-220-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841736
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22377 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

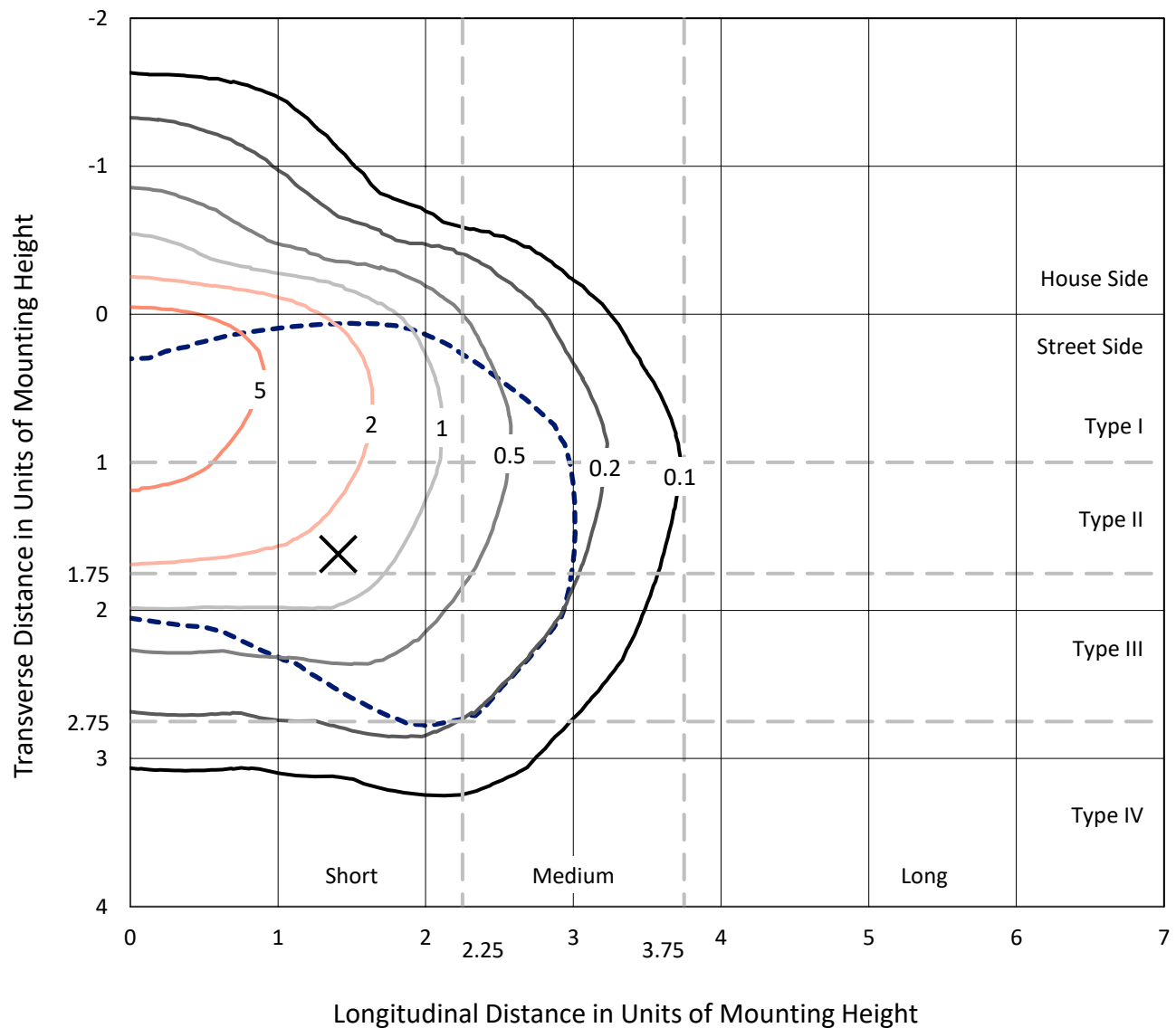
Input Watts (W): 221.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

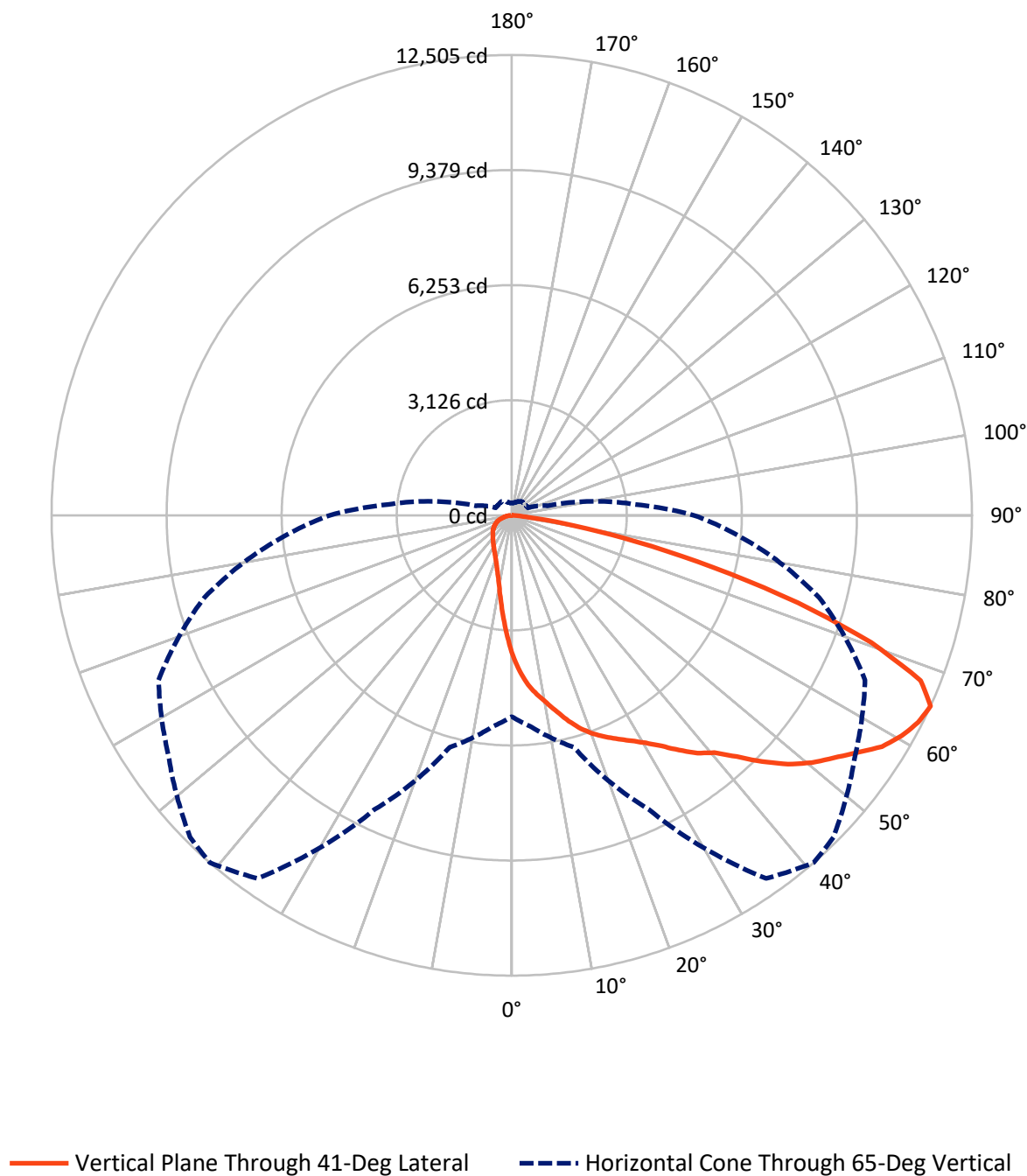
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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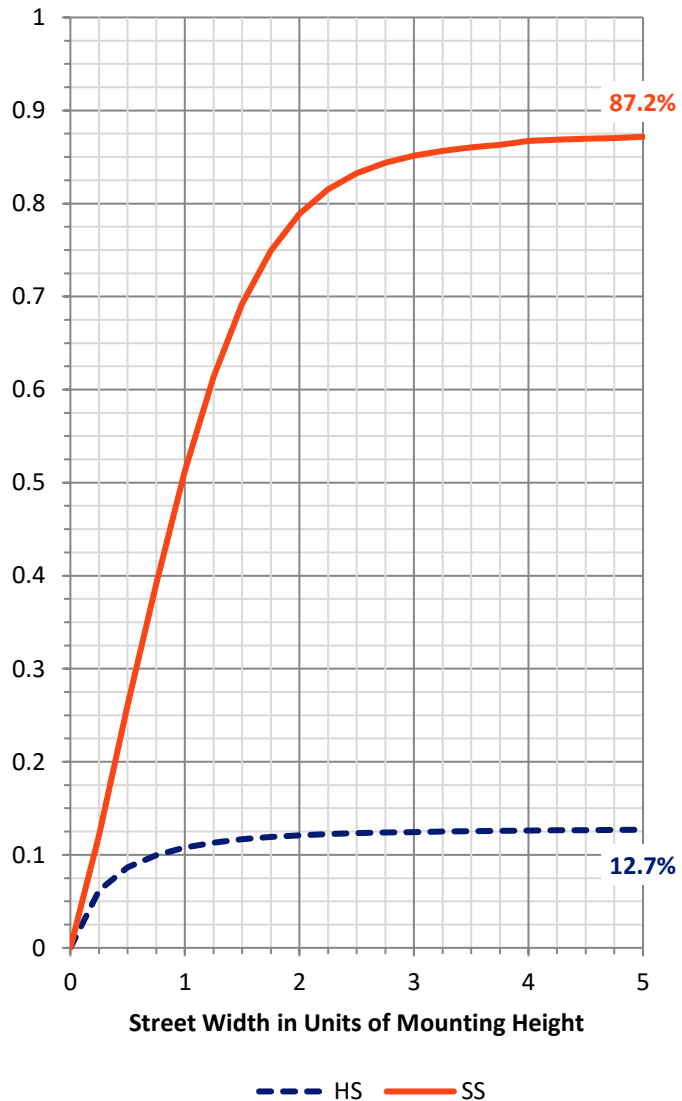
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2872.9	0.0	2872.9
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	19504.1	0.0	19504.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	22377.0	0.0	22377.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.3	1.6
10°-20°	1065.3	4.8
20°-30°	1832.7	8.2
30°-40°	2779.5	12.4
40°-50°	4072.1	18.2
50°-60°	5142.2	23.0
60°-70°	4821.7	21.5
70°-80°	2149.0	9.6
80°-90°	159.2	0.7
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°	22377.0	100.0
0°-180°	22377.0	100.0

Coefficient of Utilization



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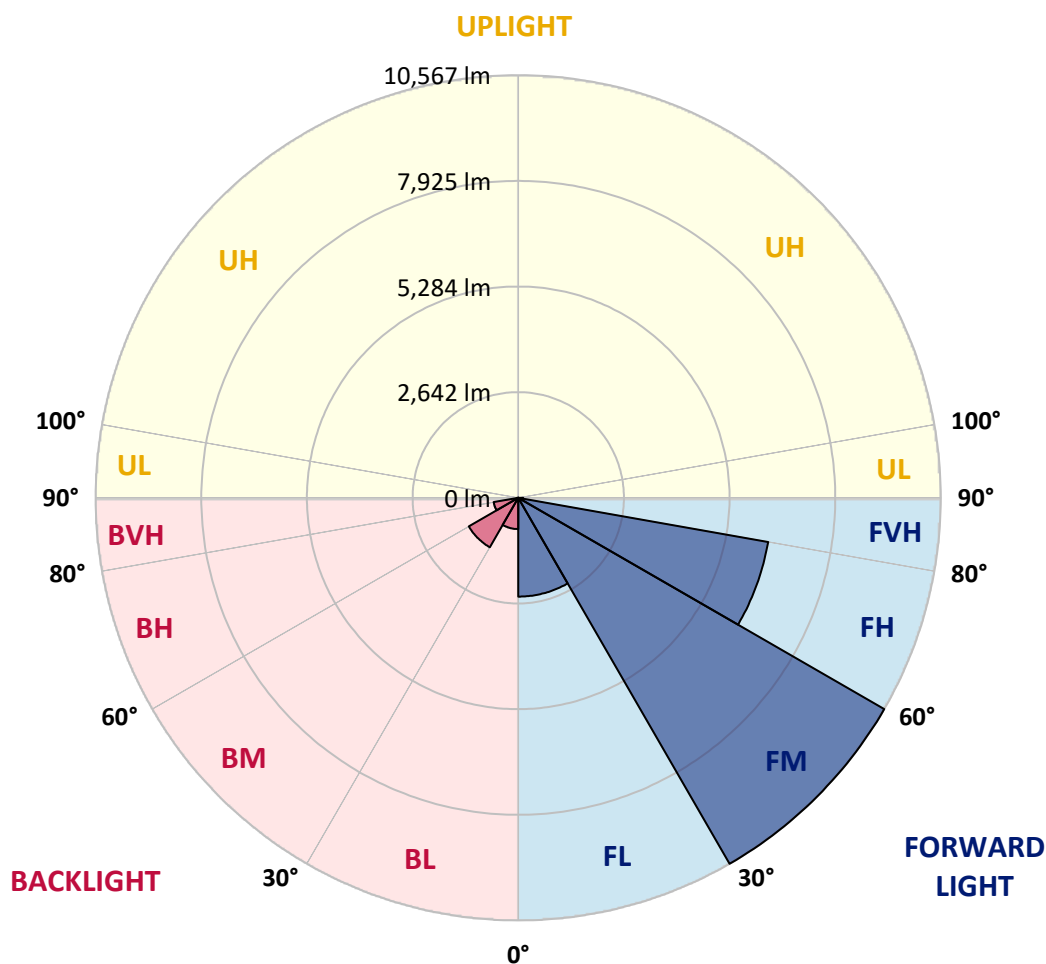
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2471.3	11.0			
FM	(30°-60°)	10567.3	47.2			
FH	(60°-80°)	6346.7	28.4			G3/7500
FVH	(80°-90°)	118.9	0.5			G2/225
BL	(0°-30°)	782.0	3.5	B2/1000		
BM	(30°-60°)	1426.5	6.4	B2/2500		
BH	(60°-80°)	624.1	2.8	B2/1000		G2/1000
BVH	(80°-90°)	40.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9
2.5°	4398.1	4383.9	4374.5	4322.6	4322.6	4251.8	4256.5	4190.4	4110.2	3982.8	3846.0
5°	4813.3	4794.5	4770.9	4719.0	4700.1	4629.3	4619.9	4525.5	4388.6	4166.8	3921.5
7.5°	5176.7	5157.8	5124.8	5049.3	4997.4	4912.4	4888.8	4766.2	4615.1	4341.4	3997.0
10°	5507.0	5492.9	5450.4	5356.0	5285.2	5181.4	5139.0	4973.8	4785.0	4483.0	4058.3
12.5°	5842.1	5823.2	5766.6	5686.4	5601.4	5478.7	5426.8	5214.5	4973.8	4638.7	4148.0
15°	6153.5	6125.2	6082.7	5997.8	5922.3	5804.3	5747.7	5497.6	5205.0	4813.3	4265.9
17.5°	6356.4	6332.9	6295.1	6247.9	6186.6	6096.9	6040.3	5794.9	5436.2	4983.2	4388.6
20°	6479.1	6469.7	6455.5	6427.2	6398.9	6337.6	6295.1	6063.9	5686.4	5148.4	4506.6
22.5°	6573.5	6564.1	6559.4	6559.4	6564.1	6540.5	6512.2	6314.0	5927.0	5323.0	4615.1
25°	6719.8	6715.1	6705.6	6696.2	6729.2	6734.0	6724.5	6587.7	6229.0	5554.2	4752.0
27.5°	6922.7	6908.6	6889.7	6880.3	6913.3	6936.9	6955.8	6861.4	6549.9	5790.2	4907.7
30°	7234.2	7191.7	7144.5	7111.5	7135.1	7172.8	7215.3	7158.7	6880.3	6082.7	5068.2
32.5°	7602.3	7550.3	7441.8	7380.5	7441.8	7470.1	7503.2	7474.8	7224.7	6398.9	5228.6
35°	8050.6	7989.2	7876.0	7786.3	7894.8	7833.5	7819.3	7791.0	7550.3	6710.4	5407.9
37.5°	8796.2	8706.5	8527.2	8329.0	8329.0	8196.8	8144.9	8060.0	7842.9	6988.8	5582.5
40°	9659.7	9541.7	9310.5	9017.9	8749.0	8475.3	8442.2	8380.9	8187.4	7309.7	5780.7
42.5°	10608.2	10381.7	10060.8	9706.9	9272.8	8961.3	8885.8	8711.2	8522.5	7635.3	5978.9
45°	11660.6	11188.7	10721.5	10542.2	9824.9	9541.7	9400.2	9084.0	8871.7	7975.1	6186.6
47.5°	11830.4	11462.4	11150.9	11122.6	10339.3	10103.3	9942.9	9489.8	9249.2	8338.4	6403.6
50°	11736.1	11514.3	11547.3	11434.1	10716.8	10561.0	10438.4	9924.0	9622.0	8687.6	6601.8
52.5°	11339.7	11462.4	11651.1	11443.5	11075.4	10948.0	10886.7	10391.2	9971.2	9008.5	6781.2
55°	10867.8	10952.7	11358.5	11613.4	11490.7	11377.4	11320.8	10933.8	10315.7	9277.5	6946.3
57.5°	10178.8	10141.1	10589.4	11585.1	11924.8	11858.8	11797.4	11467.1	10636.5	9471.0	7050.1
60°	9145.4	9065.1	9631.4	11018.8	12066.4	12170.2	12141.9	11821.0	10881.9	9466.2	7007.7
62.5°	7356.9	7555.1	8338.4	10093.9	12127.7	12392.0	12340.1	11849.3	10962.2	9192.5	6738.7
65°	5469.3	5752.4	6521.6	8819.7	12042.8	12505.3	12363.7	11386.9	10589.4	8649.9	6148.8
67.5°	3940.3	4190.4	4752.0	7257.8	11226.4	11986.2	11821.0	10631.8	9730.5	7880.7	5332.4
70°	2694.5	2873.8	3256.1	5285.2	9584.2	10362.8	10259.0	9504.0	8376.2	6965.2	4332.0
72.5°	1901.7	1977.2	2222.6	3487.3	7281.4	8130.8	8008.1	7819.3	6729.2	5790.2	3369.3
75°	1425.1	1472.3	1604.4	2255.7	4912.4	5634.4	5521.2	5629.7	5025.7	4383.9	2453.9
77.5°	538.0	585.2	910.8	1439.3	2906.9	3459.0	3345.7	3411.8	2793.6	2213.2	1222.2
80°	146.3	155.7	302.0	684.2	1321.3	1722.4	1566.7	1344.9	1038.2	1019.3	646.5
82.5°	61.3	70.8	136.8	368.1	471.9	471.9	396.4	490.8	396.4	476.6	311.5
85°	23.6	28.3	33.0	94.4	61.3	66.1	70.8	94.4	80.2	99.1	70.8
87.5°	0.0	0.0	0.0	4.7	4.7	9.4	4.7	9.4	14.2	14.2	14.2
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°	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9	3812.9
2.5°	3789.3	3737.4	3661.9	3539.2	3411.8	3341.0	3251.4	3237.2	3142.8	3133.4	3095.6
5°	3812.9	3704.4	3510.9	3275.0	3043.7	2864.4	2732.3	2661.5	2524.6	2524.6	2486.9
7.5°	3831.8	3661.9	3350.5	3001.3	2685.1	2444.4	2265.1	2189.6	2066.9	2057.5	2029.2
10°	3836.5	3610.0	3175.9	2722.8	2335.9	2090.5	1915.9	1831.0	1722.4	1713.0	1694.1
12.5°	3874.3	3581.7	3020.1	2482.2	2085.8	1821.5	1651.6	1580.9	1495.9	1486.5	1467.6
15°	3935.6	3581.7	2888.0	2279.3	1864.0	1618.6	1472.3	1406.3	1344.9	1335.5	1326.0
17.5°	3997.0	3572.3	2755.9	2090.5	1680.0	1458.2	1330.7	1278.8	1231.6	1226.9	1217.5
20°	4053.6	3567.5	2623.7	1930.1	1538.4	1326.0	1226.9	1179.7	1142.0	1142.0	1137.3
22.5°	4110.2	3558.1	2496.3	1779.0	1415.7	1226.9	1142.0	1090.1	1061.8	1061.8	1057.0
25°	4195.2	3558.1	2378.4	1651.6	1316.6	1151.4	1066.5	1028.7	1005.1	1000.4	1000.4
27.5°	4294.3	3586.4	2274.5	1538.4	1231.6	1075.9	1009.9	972.1	943.8	934.4	939.1
30°	4402.8	3610.0	2180.2	1439.3	1151.4	1019.3	948.5	910.8	882.4	873.0	877.7
32.5°	4511.3	3638.3	2095.2	1349.6	1071.2	967.4	896.6	854.1	825.8	821.1	821.1
35°	4629.3	3666.6	2010.3	1274.1	1005.1	915.5	849.4	802.2	783.3	773.9	778.6
37.5°	4747.3	3713.8	1930.1	1203.3	957.9	868.3	806.9	759.8	745.6	740.9	740.9
40°	4888.8	3784.6	1897.0	1156.1	915.5	825.8	773.9	726.7	712.6	712.6	712.6
42.5°	5006.8	3841.2	1868.7	1104.2	882.4	788.1	740.9	703.1	693.7	689.0	693.7
45°	5124.8	3893.1	1831.0	1057.0	840.0	750.3	712.6	674.8	665.4	665.4	665.4
47.5°	5242.8	3921.5	1779.0	1009.9	802.2	717.3	684.2	651.2	641.8	641.8	641.8
50°	5337.1	3945.1	1703.5	957.9	759.8	689.0	655.9	622.9	613.5	613.5	613.5
52.5°	5431.5	3949.8	1623.3	896.6	717.3	655.9	627.6	594.6	585.2	580.4	580.4
55°	5516.5	3945.1	1528.9	825.8	670.1	618.2	594.6	566.3	547.4	528.5	538.0
57.5°	5577.8	3940.3	1420.4	755.0	622.9	580.4	571.0	533.2	495.5	448.3	457.7
60°	5554.2	3888.4	1302.4	665.4	571.0	542.7	542.7	490.8	424.7	401.1	405.8
62.5°	5403.2	3742.1	1179.7	571.0	519.1	504.9	500.2	443.6	391.7	368.1	372.8
65°	4950.2	3374.1	1000.4	486.1	467.2	462.5	462.5	410.5	363.4	335.0	339.8
67.5°	4261.2	2831.4	816.4	410.5	415.3	424.7	424.7	377.5	330.3	302.0	306.7
70°	3416.5	2213.2	651.2	353.9	358.6	372.8	382.2	339.8	297.3	269.0	269.0
72.5°	2571.8	1680.0	523.8	297.3	320.9	320.9	335.0	302.0	259.5	231.2	235.9
75°	1864.0	1203.3	415.3	250.1	278.4	273.7	273.7	254.8	221.8	202.9	202.9
77.5°	882.4	632.3	330.3	179.3	217.1	212.4	217.1	202.9	188.8	169.9	174.6
80°	434.1	311.5	212.4	127.4	151.0	155.7	169.9	160.4	155.7	141.6	141.6
82.5°	207.6	122.7	99.1	89.7	103.8	108.5	118.0	118.0	122.7	113.3	113.3
85°	56.6	33.0	42.5	56.6	66.1	70.8	80.2	84.9	84.9	80.2	84.9
87.5°	14.2	14.2	18.9	28.3	33.0	37.8	42.5	42.5	18.9	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)