

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: P842119

Luminaire Tested: **ARCH4-270-740-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842119
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: ARCH4-270-740-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1045mA 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: 28224 lumens
Efficiency: N/A
Efficacy: 104.9 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): 269
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

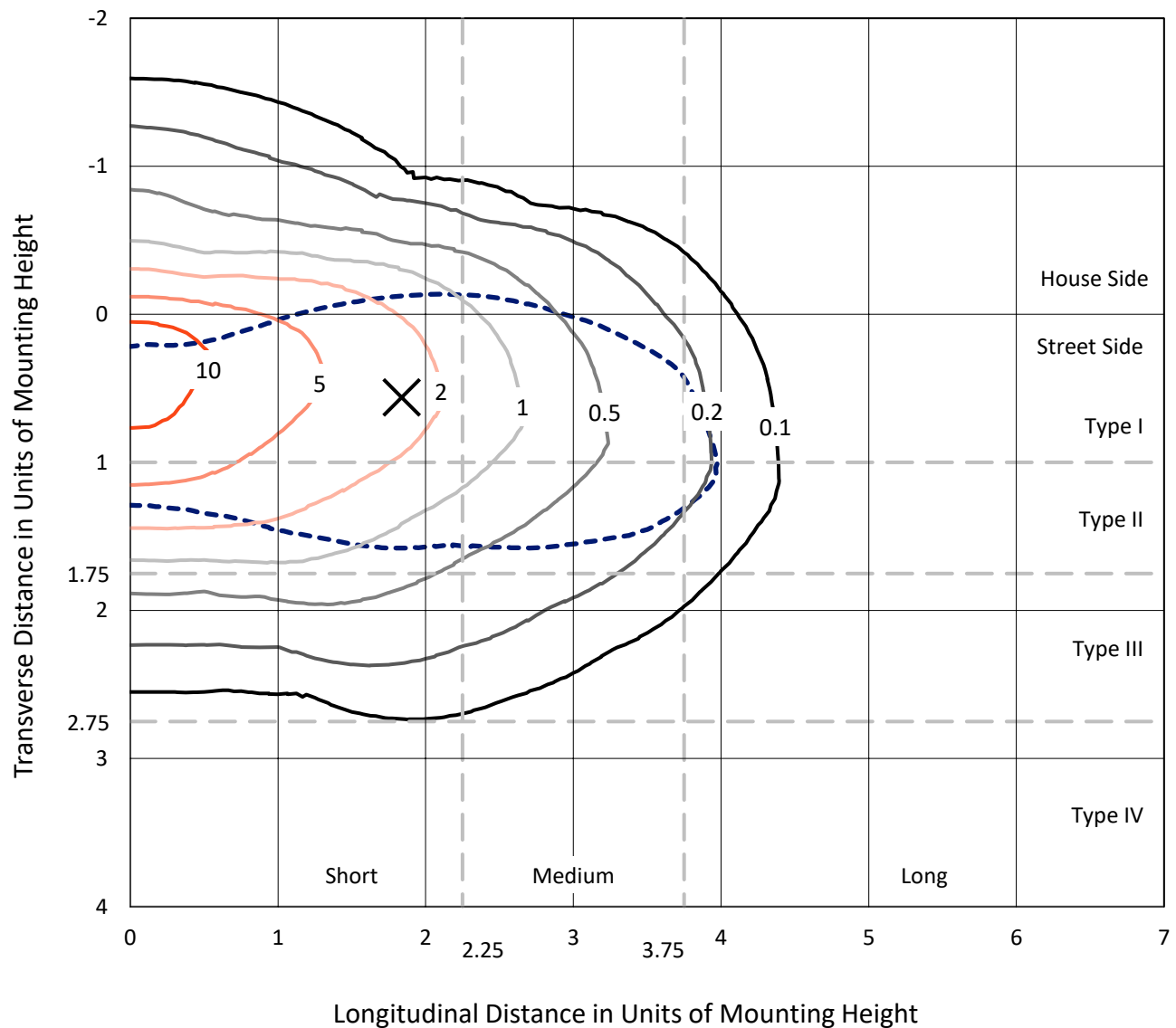


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Iso-Footcandle Lines of Horizontal Illumination

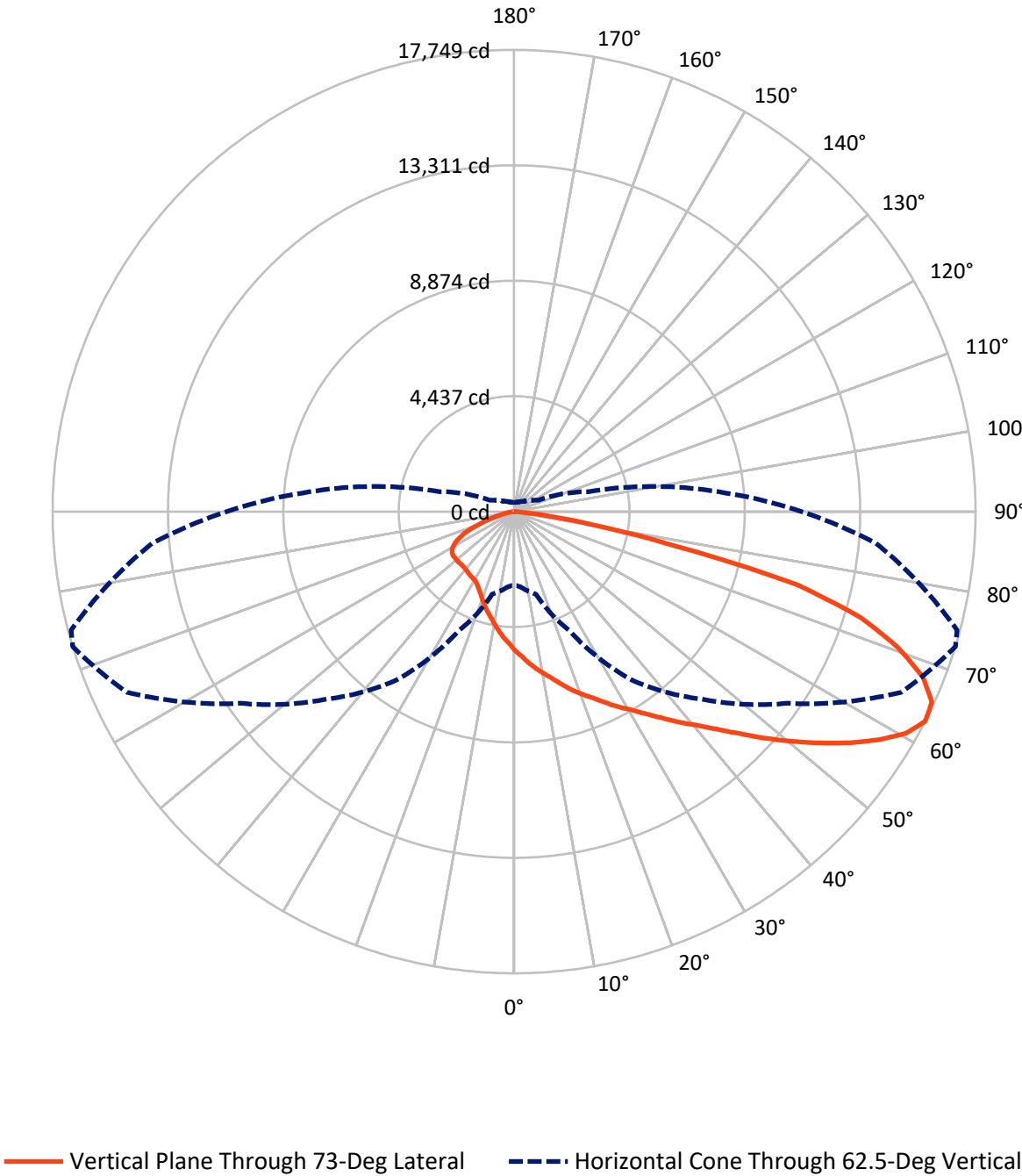
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.4 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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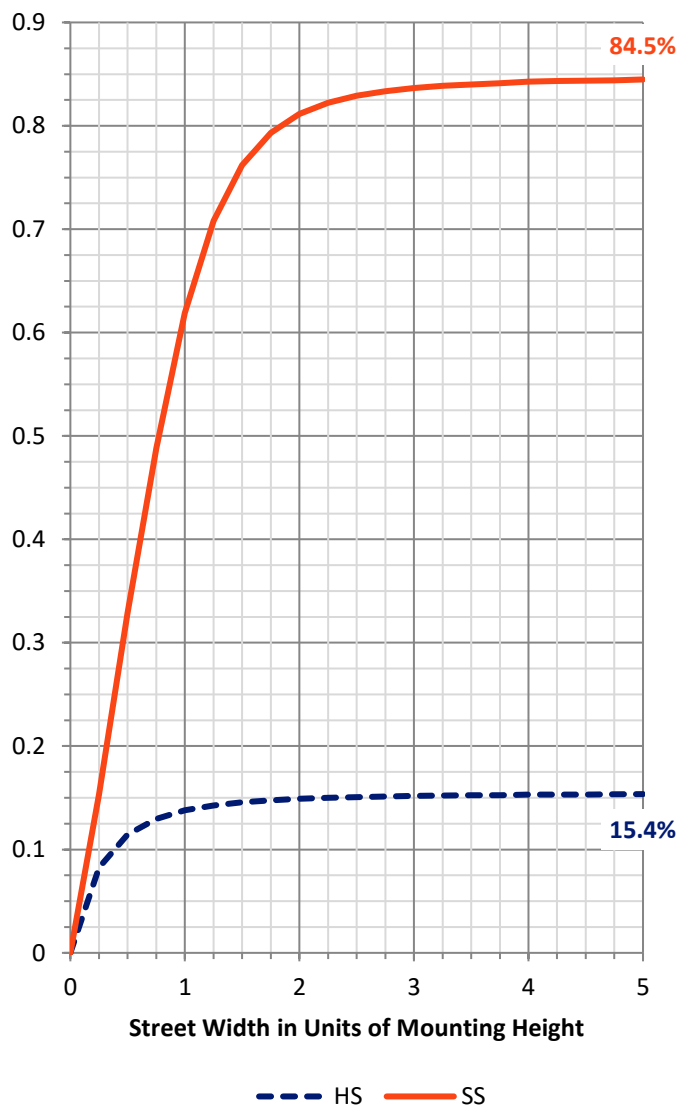
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4375.1	0.0	4375.1
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	23848.9	0.0	23848.9
	% Fixture	84.5	0.0	84.5
Total	Lumens	28224.0	0.0	28224.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	516.3	1.8
10°-20°	1557.9	5.5
20°-30°	2593.2	9.2
30°-40°	3912.7	13.9
40°-50°	5469.0	19.4
50°-60°	6040.9	21.4
60°-70°	5262.4	18.6
70°-80°	2658.2	9.4
80°-90°	213.3	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°	28224.0	100.0
0°-180°	28224.0	100.0

Coefficient of Utilization



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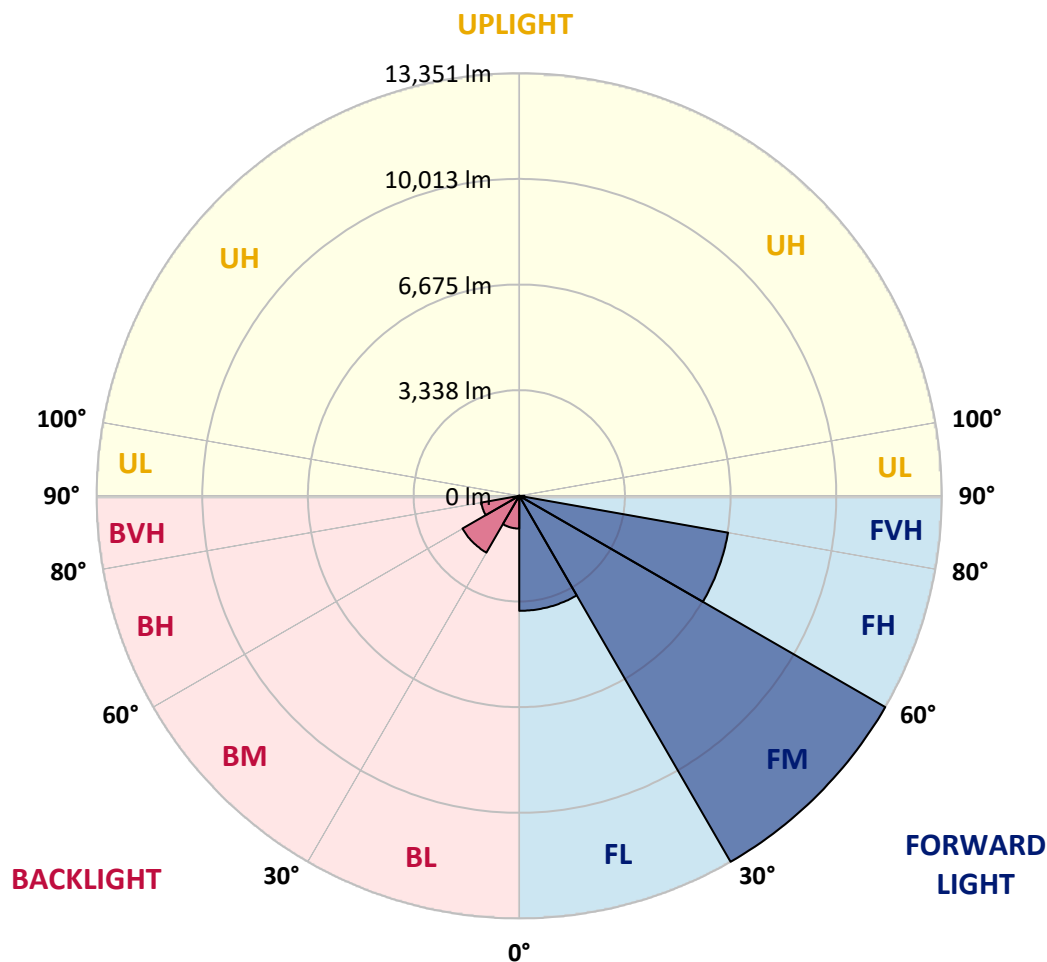
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3633.3	12.9			
FM	(30°-60°)	13351.0	47.3			
FH	(60°-80°)	6699.5	23.7			G3/7500
FVH	(80°-90°)	165.1	0.6			G2/225
BL	(0°-30°)	1034.1	3.7	B3/2500		
BM	(30°-60°)	2071.6	7.3	B2/2500		
BH	(60°-80°)	1221.1	4.3	B3/2500		G3/2500
BVH	(80°-90°)	48.2	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°	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3
2.5°	6082.3	6149.9	6113.0	6137.6	6014.6	5934.7	5842.4	5664.1	5565.7	5553.4	5436.5
5°	6974.0	7047.8	6986.3	6967.9	6752.6	6568.1	6359.0	6045.4	5836.3	5799.4	5541.1
7.5°	7865.7	7933.4	7859.6	7804.2	7515.2	7189.2	6881.8	6420.5	6094.6	6033.1	5627.2
10°	8493.0	8554.5	8499.2	8443.8	8142.5	7810.4	7373.7	6771.1	6328.3	6229.9	5682.5
12.5°	8966.6	9003.5	8978.9	8929.7	8646.8	8290.1	7871.9	7164.6	6592.7	6469.7	5768.6
15°	9354.0	9415.5	9384.8	9347.9	9077.3	8720.6	8320.8	7576.7	6900.2	6746.5	5897.8
17.5°	9612.3	9655.4	9661.5	9661.5	9421.7	9071.1	8683.7	7951.8	7207.7	7010.9	6020.8
20°	9729.2	9778.4	9809.1	9858.3	9661.5	9360.2	8966.6	8271.6	7496.7	7275.3	6137.6
22.5°	9784.5	9827.6	9907.5	10018.2	9858.3	9606.2	9243.3	8566.8	7785.8	7552.1	6272.9
25°	9827.6	9882.9	9999.8	10208.9	10098.2	9882.9	9569.3	8905.1	8130.2	7890.3	6469.7
27.5°	9944.4	10012.1	10122.8	10374.9	10239.6	10135.1	9913.7	9267.9	8493.0	8247.0	6709.6
30°	10350.3	10405.7	10399.5	10559.4	10393.4	10362.6	10208.9	9618.5	8843.6	8597.6	6992.5
32.5°	11088.3	11143.6	11008.3	10946.8	10584.0	10590.1	10528.7	9993.6	9261.8	9009.6	7318.4
35°	11881.6	11943.1	11764.8	11660.2	11051.4	10873.0	10903.8	10461.0	9729.2	9477.0	7724.3
37.5°	12588.9	12662.7	12508.9	12355.2	11740.2	11328.1	11322.0	10983.7	10264.2	10005.9	8173.2
40°	12976.3	13062.4	13154.7	13068.6	12422.8	11967.7	11770.9	11518.8	10793.1	10528.7	8659.1
42.5°	13160.8	13400.7	13566.7	13511.4	12982.5	12521.2	12287.5	12078.4	11438.8	11180.5	9237.2
45°	12644.2	12650.4	13000.9	13302.3	13203.9	12896.4	12853.3	12705.7	12176.8	11930.8	9889.1
47.5°	11998.5	11949.3	12195.3	12730.3	13007.1	13087.0	13339.2	13400.7	13019.4	12773.4	10553.3
50°	10448.7	10479.5	11278.9	12047.7	12588.9	13105.5	13683.6	14114.0	13886.5	13652.8	11254.3
52.5°	8499.2	8573.0	9489.3	11180.5	12035.4	12921.0	13886.5	14827.4	14772.1	14550.7	11955.4
55°	6814.1	6931.0	7902.6	9735.3	11328.1	12508.9	13972.6	15479.3	15688.4	15485.5	12644.2
57.5°	5209.0	5332.0	6149.9	8031.8	10424.1	11838.6	13911.1	16051.3	16543.3	16414.1	13277.7
60°	3923.6	4046.6	4569.4	6512.8	9292.5	11088.3	13603.6	16426.4	17312.0	17176.7	13738.9
62.5°	2810.5	2908.9	3296.4	5067.5	7914.9	10196.6	12847.2	16432.6	17748.6	17637.9	13960.3
65°	2023.3	2023.3	2337.0	3616.1	6623.5	9126.5	11703.3	15676.1	17656.4	17625.7	13806.6
67.5°	1457.5	1469.8	1722.0	2527.6	5282.8	7828.8	10221.2	14329.3	16943.0	17096.8	13253.1
70°	1033.2	1063.9	1180.8	1765.0	3991.3	6180.7	8634.5	12564.3	15657.7	15928.3	12183.0
72.5°	799.5	817.9	897.9	1230.0	2915.1	4594.0	6881.8	10596.3	13941.9	14249.3	10725.4
75°	615.0	633.4	694.9	904.0	2091.0	3222.6	4889.2	8222.4	11242.0	11789.4	8616.0
77.5°	448.9	473.5	516.6	658.0	1217.7	2047.9	2964.3	4624.7	6205.3	6463.6	4514.0
80°	209.1	239.8	301.3	424.3	658.0	965.5	1051.6	1783.5	2982.7	3118.0	2447.7
82.5°	116.8	147.6	172.2	258.3	332.1	344.4	356.7	448.9	1125.4	1242.3	1027.0
85°	55.3	73.8	79.9	110.7	110.7	98.4	116.8	86.1	184.5	221.4	215.2
87.5°	0.0	6.1	12.3	30.7	24.6	18.4	18.4	18.4	18.4	24.6	18.4
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°	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3	5344.3
2.5°	5381.2	5301.2	5116.7	4956.8	4852.3	4760.0	4637.0	4581.7	4483.3	4501.7	4446.4
5°	5411.9	5264.3	4938.4	4637.0	4415.6	4218.8	4003.6	3880.6	3745.3	3733.0	3689.9
7.5°	5430.4	5202.8	4735.4	4311.1	3972.8	3671.5	3382.5	3222.6	3056.5	3019.6	2982.7
10°	5411.9	5110.6	4526.3	3972.8	3523.9	3148.8	2822.8	2619.9	2447.7	2404.6	2367.7
12.5°	5430.4	5061.4	4329.5	3659.2	3124.2	2699.8	2330.8	2121.7	1961.8	1918.8	1894.2
15°	5473.4	5030.6	4163.5	3376.3	2767.5	2293.9	1931.1	1752.7	1623.6	1580.5	1568.2
17.5°	5510.3	4999.9	3985.1	3099.6	2410.8	1937.2	1623.6	1476.0	1365.3	1322.2	1309.9
20°	5559.5	4956.8	3806.8	2835.1	2097.1	1654.3	1377.6	1248.4	1162.3	1131.6	1125.4
22.5°	5602.6	4926.1	3640.7	2570.7	1808.1	1426.8	1193.1	1088.5	1027.0	996.3	996.3
25°	5713.3	4938.4	3499.3	2324.7	1592.8	1248.4	1051.6	971.7	922.5	904.0	904.0
27.5°	5842.4	4987.6	3388.6	2115.6	1408.3	1113.1	953.2	885.6	861.0	836.4	842.5
30°	6026.9	5086.0	3314.8	1943.4	1273.0	1008.6	873.3	824.1	799.5	793.3	793.3
32.5°	6260.6	5245.9	3308.7	1832.7	1174.6	928.6	817.9	774.9	762.6	756.4	756.4
35°	6537.4	5387.3	3271.8	1783.5	1113.1	873.3	774.9	744.1	738.0	738.0	738.0
37.5°	6869.5	5621.0	3247.2	1715.8	1082.4	842.5	744.1	719.5	719.5	719.5	719.5
40°	7213.8	5811.7	3210.3	1654.3	1070.1	824.1	725.7	694.9	694.9	694.9	694.9
42.5°	7625.9	6088.4	3198.0	1623.6	1051.6	811.8	701.1	664.2	670.3	670.3	676.5
45°	8124.0	6402.1	3191.8	1592.8	1045.5	799.5	676.5	633.4	639.6	633.4	633.4
47.5°	8628.3	6764.9	3210.3	1574.4	1039.3	787.2	658.0	602.7	602.7	596.5	596.5
50°	9157.2	7097.0	3222.6	1555.9	1027.0	762.6	627.3	578.1	565.8	553.5	559.6
52.5°	9655.4	7404.5	3228.7	1525.2	990.1	725.7	602.7	547.3	528.9	510.4	516.6
55°	10153.5	7699.7	3241.0	1488.3	940.9	688.8	571.9	516.6	492.0	467.4	467.4
57.5°	10602.4	7958.0	3210.3	1396.0	885.6	651.9	541.2	479.7	442.8	418.2	418.2
60°	10909.9	8142.5	3118.0	1260.7	811.8	608.8	510.4	442.8	399.7	381.3	381.3
62.5°	11057.5	8173.2	2952.0	1039.3	719.5	565.8	473.5	405.9	369.0	356.7	356.7
65°	10916.1	8037.9	2693.7	781.0	621.1	516.6	436.6	375.1	338.2	307.5	307.5
67.5°	10424.1	7656.6	2337.0	590.4	528.9	467.4	399.7	344.4	301.3	276.7	276.7
70°	9434.0	6863.3	1808.1	473.5	448.9	405.9	362.8	307.5	270.6	239.8	239.8
72.5°	8136.3	5817.8	1273.0	381.3	381.3	344.4	307.5	270.6	233.7	209.1	209.1
75°	6242.2	4304.9	854.8	307.5	313.6	289.0	252.1	221.4	196.8	178.3	178.3
77.5°	3407.1	2127.9	522.7	227.5	233.7	221.4	196.8	178.3	166.0	147.6	147.6
80°	1654.3	934.8	301.3	159.9	166.0	159.9	147.6	129.1	129.1	116.8	116.8
82.5°	694.9	350.5	159.9	110.7	110.7	98.4	92.2	92.2	92.2	86.1	86.1
85°	172.2	67.6	67.6	61.5	61.5	61.5	55.3	55.3	55.3	43.0	49.2
87.5°	24.6	24.6	24.6	24.6	24.6	24.6	18.4	6.1	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)