

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: P841480

Luminaire Tested: **ARCH4-180-750-U-T2U-HSS**

Issue Date: 5/27/2024

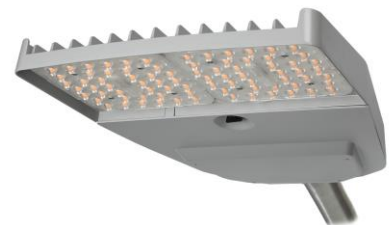
Test Information

Test Method: LM-79-08
Report Number: P841480
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: ARCH4-180-750-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1455mA 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: 20953 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 180
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



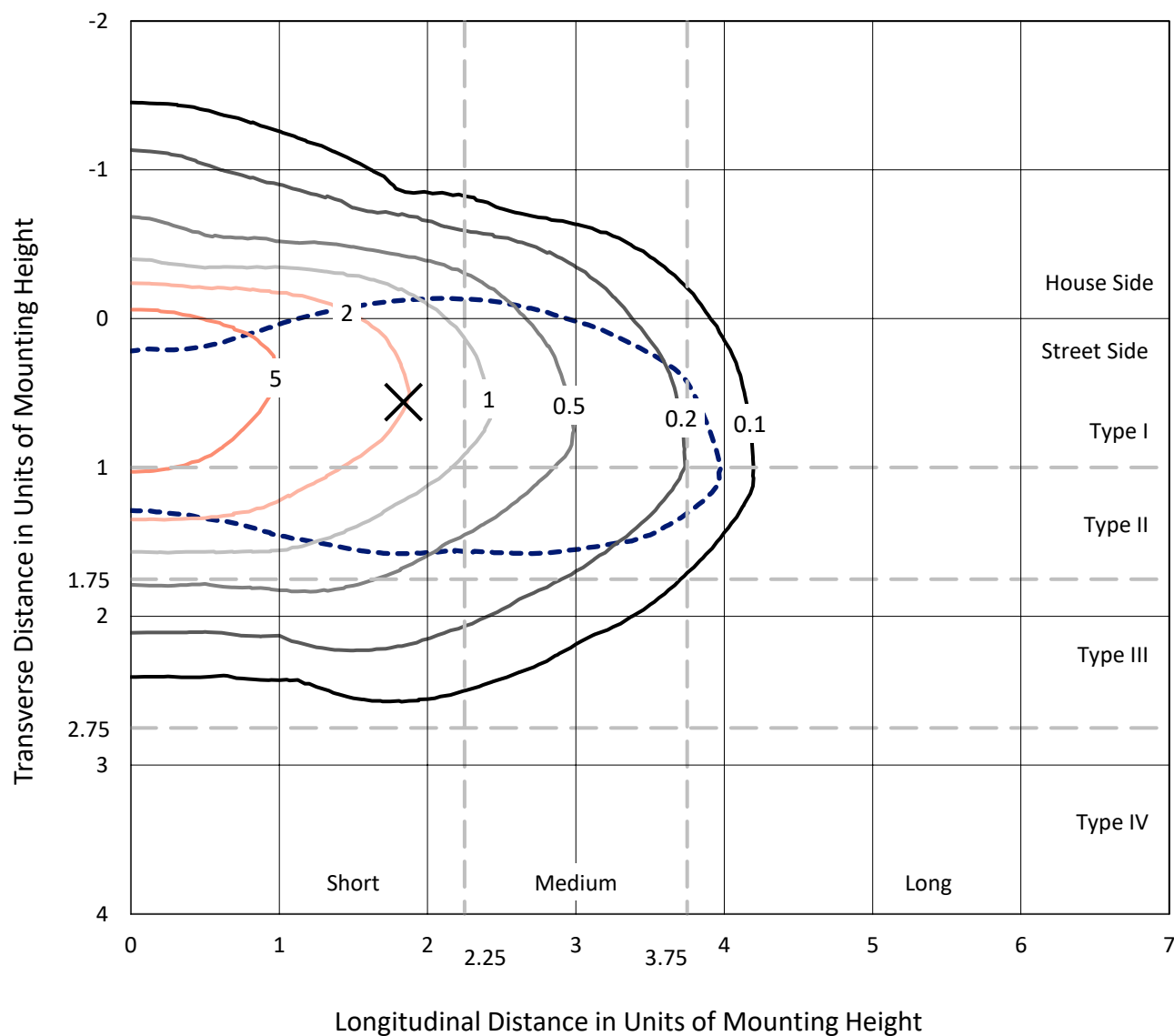
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

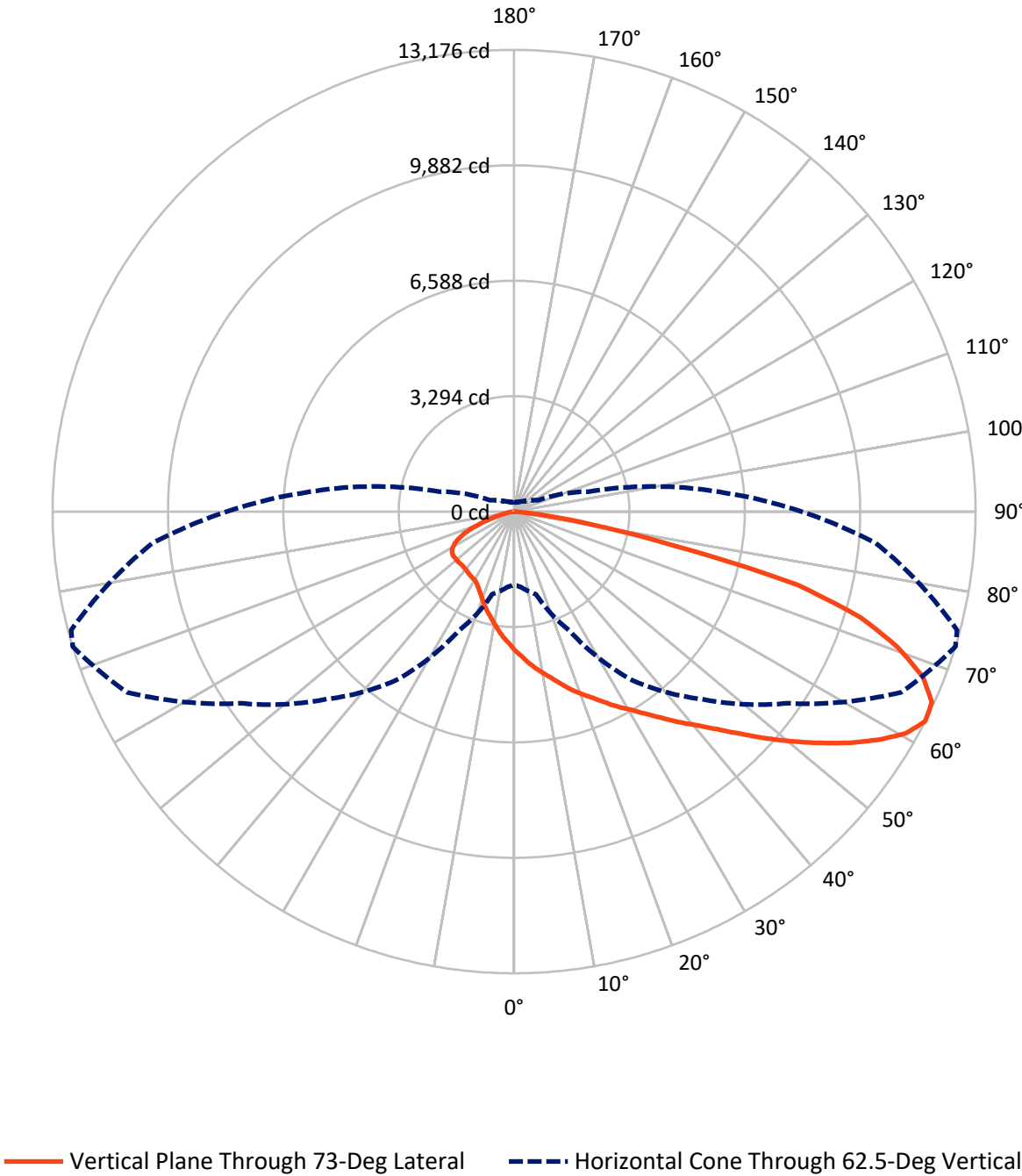


Based on 25 foot mounting height. Maximum calculated value = 10 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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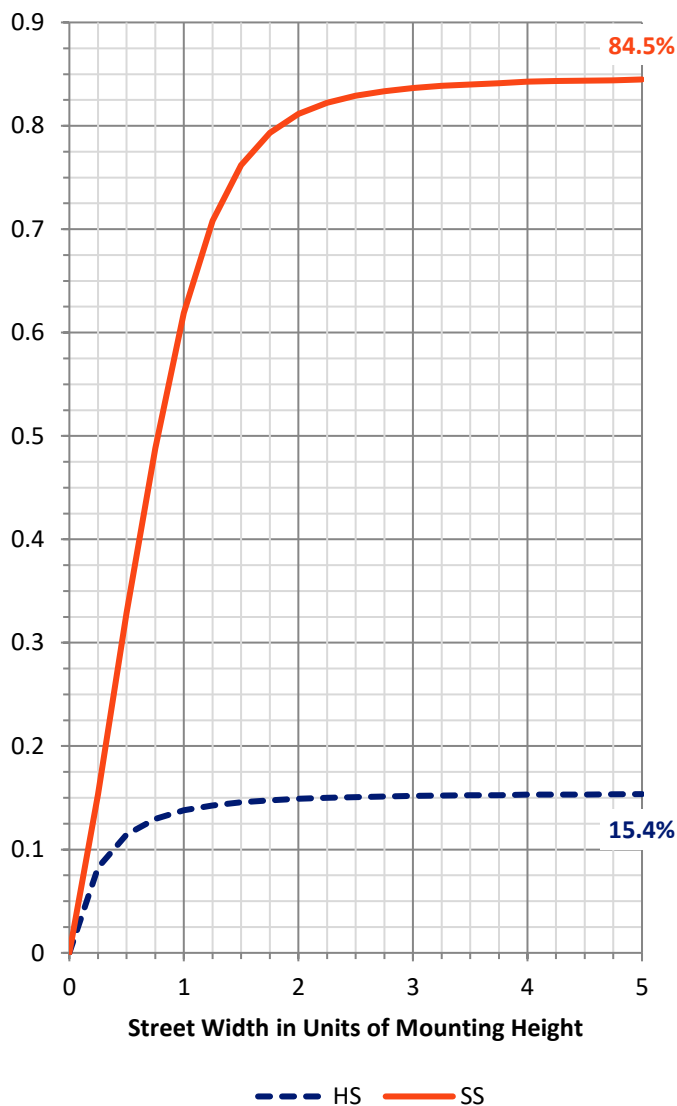
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3248.0	0.0	3248.0
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	17705.0	0.0	17705.0
	% Fixture	84.5	0.0	84.5
Total	Lumens	20953.0	0.0	20953.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	383.3	1.8
10°-20°	1156.6	5.5
20°-30°	1925.1	9.2
30°-40°	2904.8	13.9
40°-50°	4060.1	19.4
50°-60°	4484.6	21.4
60°-70°	3906.7	18.6
70°-80°	1973.4	9.4
80°-90°	158.4	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°	20953.0	100.0
0°-180°	20953.0	100.0

Coefficient of Utilization



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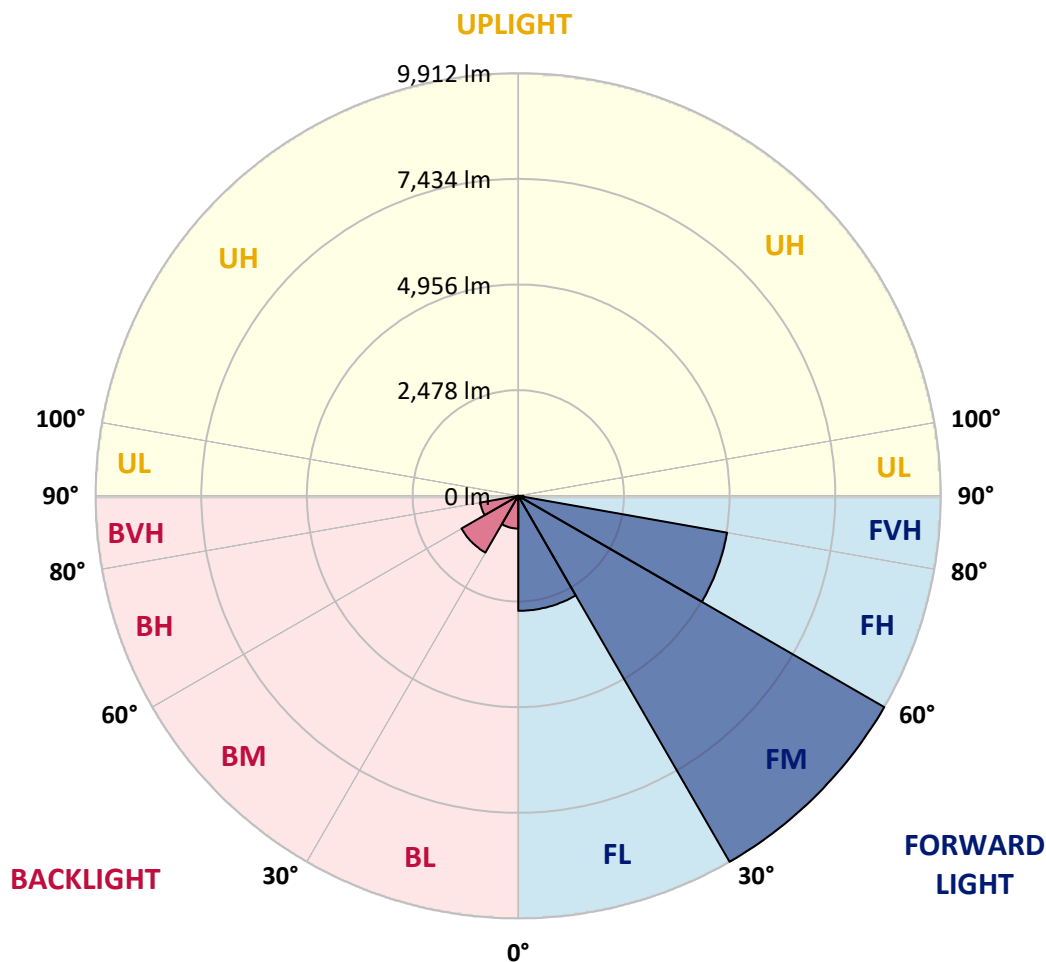
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2697.3	12.9			
FM	(30°-60°)	9911.5	47.3			
FH	(60°-80°)	4973.6	23.7			G2/5000
FVH	(80°-90°)	122.6	0.6			G2/225
BL	(0°-30°)	767.7	3.7	B2/1000		
BM	(30°-60°)	1537.9	7.3	B2/2500		
BH	(60°-80°)	906.6	4.3	B2/1000		G2/1000
BVH	(80°-90°)	35.8	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5
2.5°	4515.4	4565.6	4538.2	4556.5	4465.1	4405.8	4337.3	4204.9	4131.9	4122.7	4036.0
5°	5177.4	5232.2	5186.5	5172.8	5013.0	4876.0	4720.8	4488.0	4332.7	4305.3	4113.6
7.5°	5839.4	5889.6	5834.8	5793.7	5579.1	5337.2	5108.9	4766.5	4524.5	4478.8	4177.5
10°	6305.1	6350.7	6309.6	6268.6	6044.8	5798.3	5474.1	5026.7	4698.0	4624.9	4218.6
12.5°	6656.6	6684.0	6665.8	6629.2	6419.2	6154.4	5844.0	5318.9	4894.3	4803.0	4282.5
15°	6944.3	6989.9	6967.1	6939.7	6738.8	6474.0	6177.2	5624.8	5122.6	5008.4	4378.4
17.5°	7136.0	7168.0	7172.5	7172.5	6994.5	6734.2	6446.6	5903.3	5350.9	5204.8	4469.7
20°	7222.8	7259.3	7282.1	7318.6	7172.5	6948.8	6656.6	6140.7	5565.5	5401.1	4556.5
22.5°	7263.8	7295.8	7355.2	7437.3	7318.6	7131.4	6862.1	6359.9	5780.0	5606.5	4656.9
25°	7295.8	7336.9	7423.6	7578.9	7496.7	7336.9	7104.1	6611.0	6035.7	5857.6	4803.0
27.5°	7382.6	7432.8	7515.0	7702.1	7601.7	7524.1	7359.7	6880.3	6305.1	6122.5	4981.1
30°	7683.9	7725.0	7720.4	7839.1	7715.8	7693.0	7578.9	7140.6	6565.3	6382.7	5191.1
32.5°	8231.8	8272.8	8172.4	8126.7	7857.4	7861.9	7816.3	7419.1	6875.8	6688.6	5433.0
35°	8820.7	8866.4	8734.0	8656.4	8204.4	8072.0	8094.8	7766.1	7222.8	7035.6	5734.4
37.5°	9345.8	9400.5	9286.4	9172.3	8715.7	8409.8	8405.2	8154.1	7620.0	7428.2	6067.7
40°	9633.4	9697.3	9765.8	9701.9	9222.5	8884.6	8738.5	8551.3	8012.6	7816.3	6428.3
42.5°	9770.4	9948.4	10071.7	10030.6	9638.0	9295.5	9122.0	8966.8	8492.0	8300.2	6857.5
45°	9386.8	9391.4	9651.7	9875.4	9802.3	9574.0	9542.1	9432.5	9039.9	8857.2	7341.5
47.5°	8907.5	8870.9	9053.6	9450.8	9656.2	9715.6	9902.8	9948.4	9665.3	9482.7	7834.5
50°	7756.9	7779.8	8373.3	8944.0	9345.8	9729.3	10158.4	10478.0	10309.1	10135.6	8355.0
52.5°	6309.6	6364.4	7044.7	8300.2	8934.9	9592.3	10309.1	11007.6	10966.5	10802.2	8875.5
55°	5058.7	5145.4	5866.8	7227.3	8409.8	9286.4	10373.0	11491.6	11646.8	11496.1	9386.8
57.5°	3867.1	3958.4	4565.6	5962.7	7738.7	8788.8	10327.4	11916.2	12281.4	12185.6	9857.1
60°	2912.8	3004.2	3392.2	4835.0	6898.6	8231.8	10099.1	12194.7	12852.1	12751.7	10199.5
62.5°	2086.5	2159.5	2447.2	3762.0	5875.9	7569.7	9537.5	12199.2	13176.3	13094.1	10363.9
65°	1502.1	1502.1	1734.9	2684.6	4917.1	6775.3	8688.3	11637.7	13107.8	13085.0	10249.7
67.5°	1082.0	1091.2	1278.4	1876.5	3921.8	5812.0	7588.0	10637.8	12578.2	12692.3	9838.8
70°	767.0	789.8	876.6	1310.3	2963.1	4588.4	6410.1	9327.5	11624.0	11824.9	9044.4
72.5°	593.5	607.2	666.6	913.1	2164.1	3410.5	5108.9	7866.5	10350.2	10578.5	7962.4
75°	456.6	470.3	515.9	671.1	1552.3	2392.4	3629.6	6104.2	8345.9	8752.2	6396.4
77.5°	333.3	351.6	383.5	488.5	904.0	1520.3	2200.6	3433.3	4606.7	4798.4	3351.1
80°	155.2	178.1	223.7	315.0	488.5	716.8	780.7	1324.0	2214.3	2314.8	1817.1
82.5°	86.7	109.6	127.8	191.8	246.5	255.7	264.8	333.3	835.5	922.2	762.5
85°	41.1	54.8	59.4	82.2	82.2	73.0	86.7	63.9	137.0	164.4	159.8
87.5°	0.0	4.6	9.1	22.8	18.3	13.7	13.7	13.7	13.7	18.3	13.7
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°	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5	3967.5
2.5°	3994.9	3935.5	3798.6	3679.9	3602.2	3533.8	3442.5	3401.4	3328.3	3342.0	3300.9
5°	4017.7	3908.1	3666.2	3442.5	3278.1	3132.0	2972.2	2880.9	2780.4	2771.3	2739.4
7.5°	4031.4	3862.5	3515.5	3200.5	2949.4	2725.7	2511.1	2392.4	2269.1	2241.7	2214.3
10°	4017.7	3794.0	3360.3	2949.4	2616.1	2337.6	2095.6	1944.9	1817.1	1785.1	1757.8
12.5°	4031.4	3757.5	3214.2	2716.5	2319.3	2004.3	1730.4	1575.1	1456.4	1424.5	1406.2
15°	4063.4	3734.7	3090.9	2506.5	2054.5	1703.0	1433.6	1301.2	1205.3	1173.4	1164.2
17.5°	4090.8	3711.8	2958.5	2301.1	1789.7	1438.2	1205.3	1095.7	1013.6	981.6	972.5
20°	4127.3	3679.9	2826.1	2104.7	1556.9	1228.1	1022.7	926.8	862.9	840.1	835.5
22.5°	4159.2	3657.0	2702.8	1908.4	1342.3	1059.2	885.7	808.1	762.5	739.6	739.6
25°	4241.4	3666.2	2597.8	1725.8	1182.5	926.8	780.7	721.4	684.8	671.1	671.1
27.5°	4337.3	3702.7	2515.6	1570.6	1045.5	826.4	707.7	657.4	639.2	620.9	625.5
30°	4474.3	3775.7	2460.9	1442.7	945.1	748.8	648.3	611.8	593.5	589.0	589.0
32.5°	4647.8	3894.4	2456.3	1360.5	872.0	689.4	607.2	575.3	566.1	561.6	561.6
35°	4853.2	3999.5	2428.9	1324.0	826.4	648.3	575.3	552.4	547.9	547.9	547.9
37.5°	5099.8	4172.9	2410.6	1273.8	803.5	625.5	552.4	534.2	534.2	534.2	534.2
40°	5355.4	4314.5	2383.2	1228.1	794.4	611.8	538.7	515.9	515.9	515.9	515.9
42.5°	5661.3	4519.9	2374.1	1205.3	780.7	602.7	520.5	493.1	497.6	497.6	502.2
45°	6031.1	4752.8	2369.5	1182.5	776.1	593.5	502.2	470.3	474.8	470.3	470.3
47.5°	6405.5	5022.1	2383.2	1168.8	771.6	584.4	488.5	447.4	447.4	442.9	442.9
50°	6798.2	5268.7	2392.4	1155.1	762.5	566.1	465.7	429.2	420.0	410.9	415.5
52.5°	7168.0	5497.0	2396.9	1132.3	735.1	538.7	447.4	406.3	392.6	378.9	383.5
55°	7537.8	5716.1	2406.1	1104.9	698.5	511.3	424.6	383.5	365.2	347.0	347.0
57.5°	7871.1	5907.9	2383.2	1036.4	657.4	484.0	401.8	356.1	328.7	310.5	310.5
60°	8099.4	6044.8	2314.8	935.9	602.7	452.0	378.9	328.7	296.8	283.1	283.1
62.5°	8208.9	6067.7	2191.5	771.6	534.2	420.0	351.6	301.3	273.9	264.8	264.8
65°	8103.9	5967.2	1999.7	579.8	461.1	383.5	324.2	278.5	251.1	228.3	228.3
67.5°	7738.7	5684.2	1734.9	438.3	392.6	347.0	296.8	255.7	223.7	205.5	205.5
70°	7003.6	5095.2	1342.3	351.6	333.3	301.3	269.4	228.3	200.9	178.1	178.1
72.5°	6040.3	4319.0	945.1	283.1	283.1	255.7	228.3	200.9	173.5	155.2	155.2
75°	4634.1	3195.9	634.6	228.3	232.8	214.6	187.2	164.4	146.1	132.4	132.4
77.5°	2529.3	1579.7	388.1	168.9	173.5	164.4	146.1	132.4	123.3	109.6	109.6
80°	1228.1	694.0	223.7	118.7	123.3	118.7	109.6	95.9	95.9	86.7	86.7
82.5°	515.9	260.2	118.7	82.2	82.2	73.0	68.5	68.5	68.5	63.9	63.9
85°	127.8	50.2	50.2	45.7	45.7	45.7	41.1	41.1	41.1	32.0	36.5
87.5°	18.3	18.3	18.3	18.3	18.3	18.3	13.7	4.6	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)