

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: P841444

Luminaire Tested: **ARCH4-180-727-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841444
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: ARCH4-180-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 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: 19257 lumens
Efficiency: N/A
Efficacy: 107.0 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



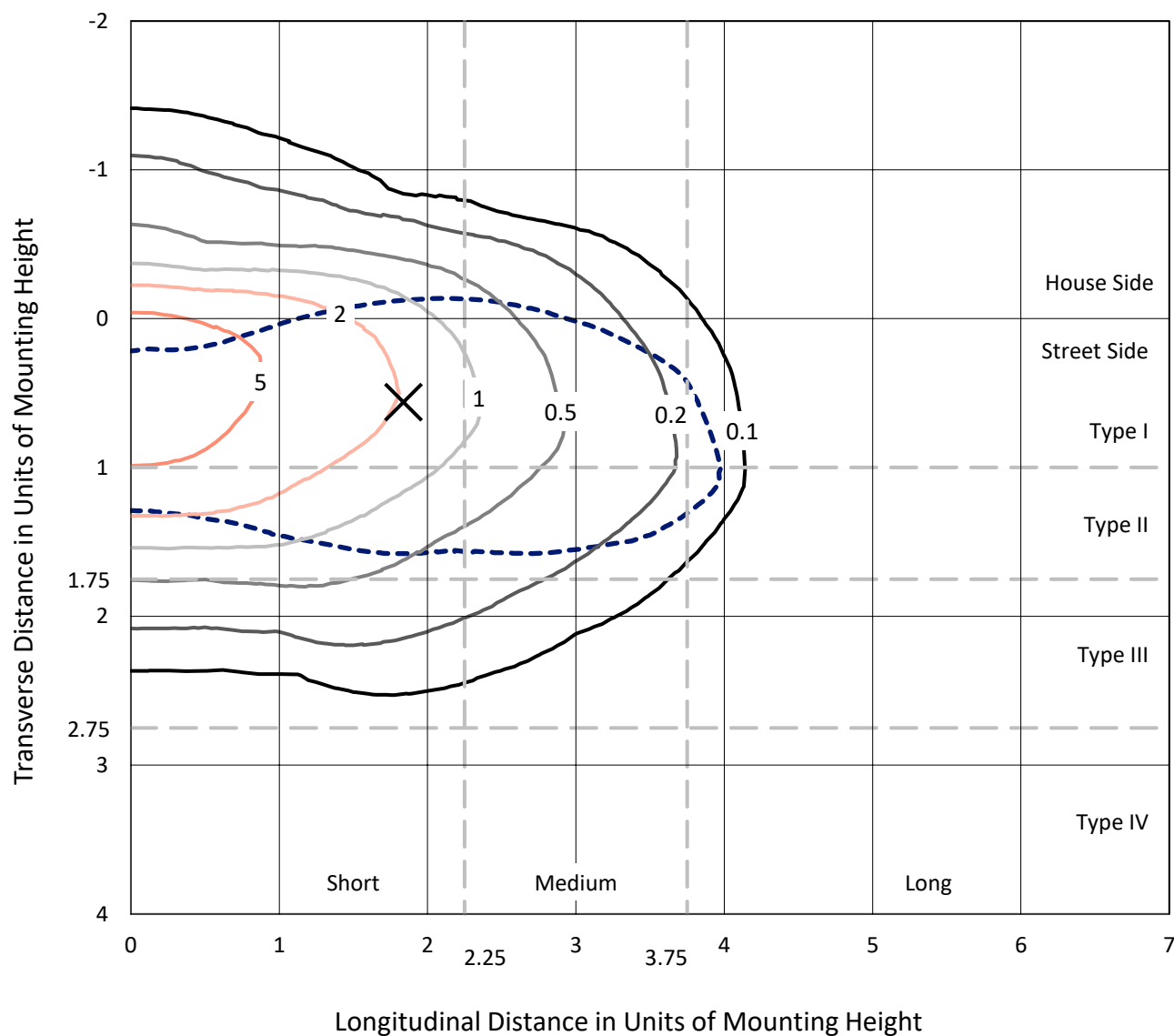
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

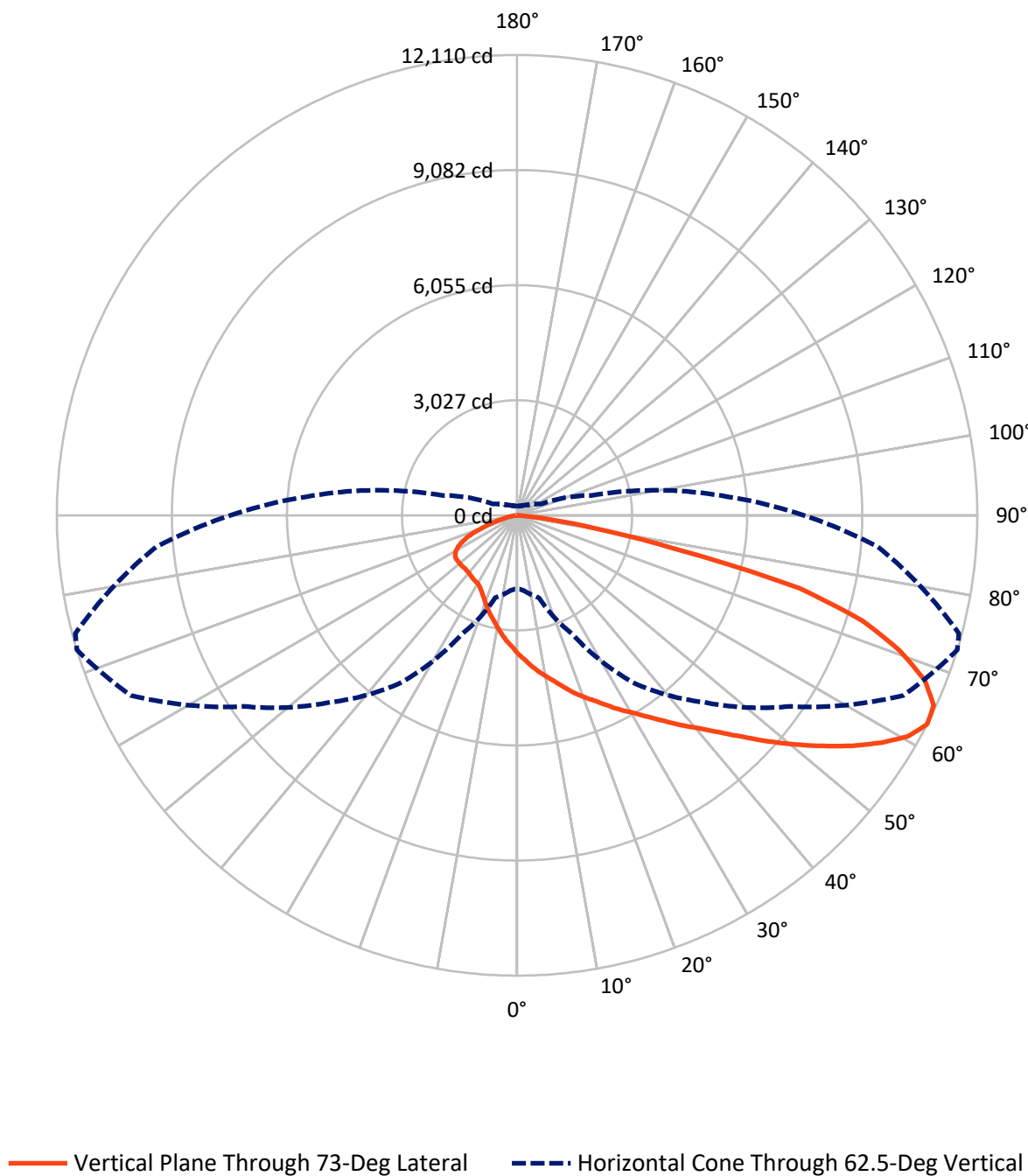


Based on 25 foot mounting height. Maximum calculated value = 9.2 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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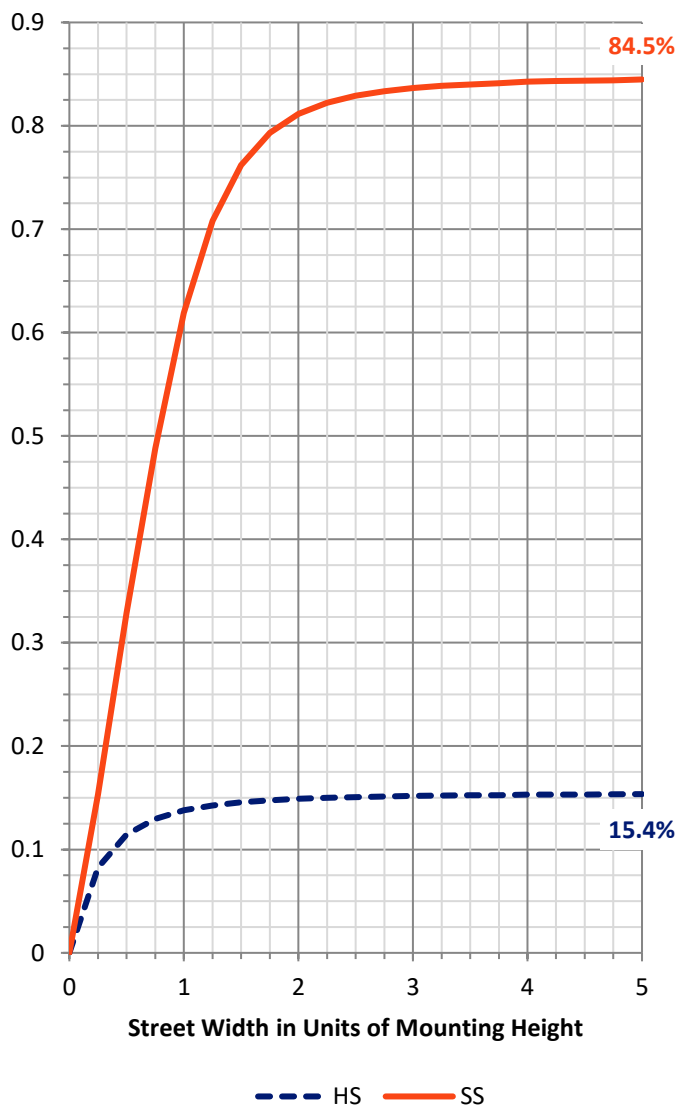
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2985.1	0.0	2985.1
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	16271.9	0.0	16271.9
	% Fixture	84.5	0.0	84.5
Total	Lumens	19257.0	0.0	19257.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.3	1.8
10°-20°	1063.0	5.5
20°-30°	1769.3	9.2
30°-40°	2669.6	13.9
40°-50°	3731.5	19.4
50°-60°	4121.6	21.4
60°-70°	3590.5	18.6
70°-80°	1813.7	9.4
80°-90°	145.6	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°	19257.0	100.0
0°-180°	19257.0	100.0

Coefficient of Utilization



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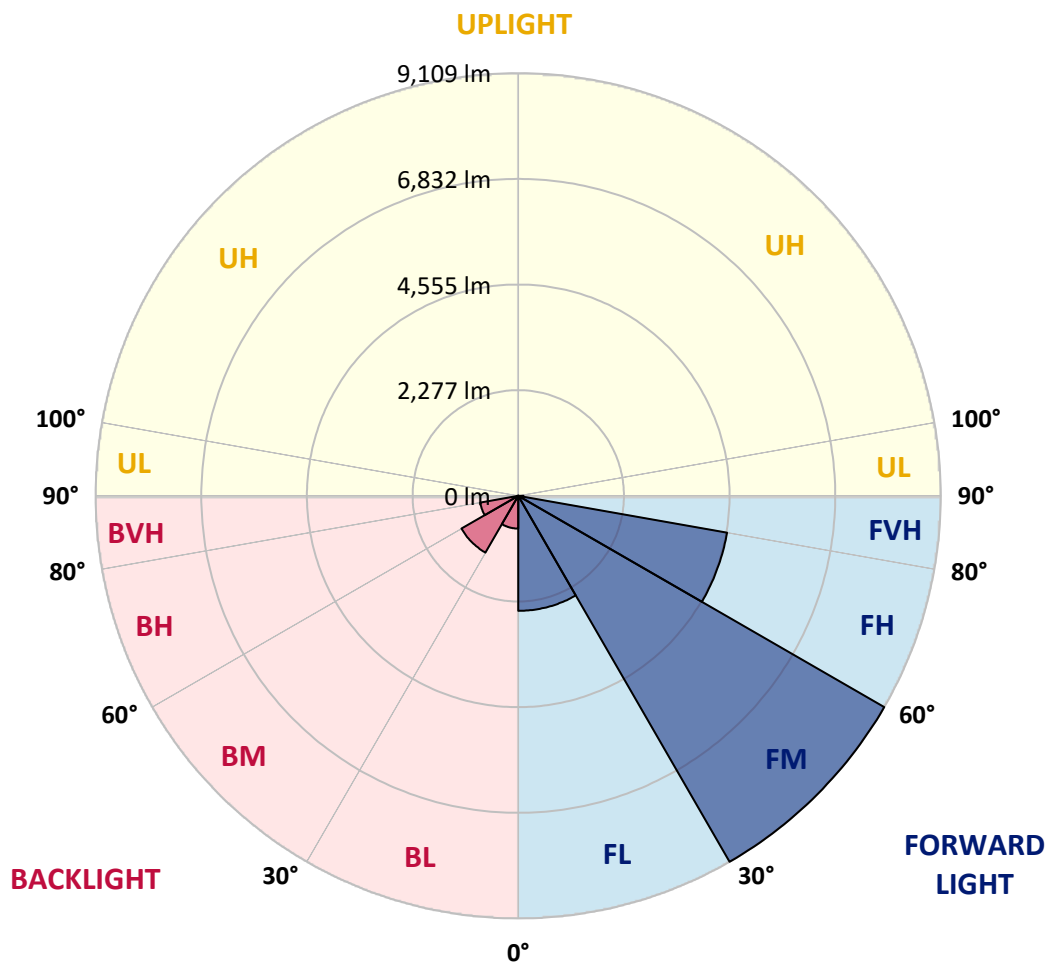
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2479.0	12.9			
FM	(30°-60°)	9109.3	47.3			
FH	(60°-80°)	4571.0	23.7			G2/5000
FVH	(80°-90°)	112.7	0.6			G2/225
BL	(0°-30°)	705.6	3.7	B2/1000		
BM	(30°-60°)	1413.4	7.3	B2/2500		
BH	(60°-80°)	833.2	4.3	B2/1000		G2/1000
BVH	(80°-90°)	32.9	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°	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4
2.5°	4149.9	4196.0	4170.9	4187.6	4103.7	4049.2	3986.2	3864.5	3797.4	3789.0	3709.3
5°	4758.3	4808.7	4766.7	4754.1	4607.2	4481.4	4338.7	4124.7	3982.0	3956.9	3780.6
7.5°	5366.7	5412.9	5362.5	5324.8	5127.6	4905.2	4695.4	4380.7	4158.3	4116.3	3839.4
10°	5794.7	5836.7	5798.9	5761.2	5555.5	5329.0	5031.0	4619.8	4317.7	4250.6	3877.1
12.5°	6117.8	6143.0	6126.2	6092.6	5899.6	5656.3	5370.9	4888.4	4498.1	4414.2	3935.9
15°	6382.2	6424.1	6403.1	6378.0	6193.3	5950.0	5677.2	5169.5	4708.0	4603.0	4024.0
17.5°	6558.4	6587.8	6592.0	6592.0	6428.3	6189.2	5924.8	5425.5	4917.8	4783.5	4107.9
20°	6638.1	6671.7	6692.7	6726.2	6592.0	6386.4	6117.8	5643.7	5115.0	4963.9	4187.6
22.5°	6675.9	6705.3	6759.8	6835.3	6726.2	6554.2	6306.6	5845.1	5312.2	5152.7	4280.0
25°	6705.3	6743.0	6822.8	6965.4	6889.9	6743.0	6529.0	6075.9	5547.2	5383.5	4414.2
27.5°	6785.0	6831.1	6906.7	7078.7	6986.4	6915.1	6764.0	6323.4	5794.7	5626.9	4577.9
30°	7061.9	7099.7	7095.5	7204.6	7091.3	7070.3	6965.4	6562.6	6033.9	5866.1	4770.9
32.5°	7565.4	7603.2	7510.9	7468.9	7221.4	7225.6	7183.6	6818.6	6319.2	6147.2	4993.3
35°	8106.7	8148.7	8027.0	7955.7	7540.3	7418.6	7439.6	7137.5	6638.1	6466.1	5270.2
37.5°	8589.3	8639.6	8534.7	8429.8	8010.2	7729.1	7724.9	7494.1	7003.2	6826.9	5576.5
40°	8853.6	8912.4	8975.3	8916.6	8476.0	8165.5	8031.2	7859.2	7364.0	7183.6	5908.0
42.5°	8979.5	9143.2	9256.5	9218.7	8857.8	8543.1	8383.7	8241.0	7804.6	7628.4	6302.4
45°	8627.0	8631.2	8870.4	9076.0	9008.9	8799.1	8769.7	8669.0	8308.1	8140.3	6747.2
47.5°	8186.5	8152.9	8320.7	8685.8	8874.6	8929.2	9101.2	9143.2	8883.0	8715.2	7200.4
50°	7129.1	7150.0	7695.5	8220.0	8589.3	8941.7	9336.2	9629.9	9474.6	9315.2	7678.7
52.5°	5798.9	5849.3	6474.5	7628.4	8211.6	8815.9	9474.6	10116.6	10078.9	9927.8	8157.1
55°	4649.2	4728.9	5391.9	6642.3	7729.1	8534.7	9533.4	10561.4	10704.1	10565.6	8627.0
57.5°	3554.0	3638.0	4196.0	5480.0	7112.3	8077.4	9491.4	10951.6	11287.3	11199.2	9059.2
60°	2677.1	2761.0	3117.7	4443.6	6340.2	7565.4	9281.6	11207.6	11811.8	11719.5	9373.9
62.5°	1917.6	1984.7	2249.1	3457.5	5400.3	6957.0	8765.5	11211.8	12109.8	12034.2	9525.0
65°	1380.5	1380.5	1594.5	2467.3	4519.1	6226.9	7985.1	10695.7	12046.8	12025.8	9420.1
67.5°	994.5	1002.9	1174.9	1724.6	3604.4	5341.6	6973.8	9776.8	11560.1	11665.0	9042.5
70°	704.9	725.9	805.6	1204.3	2723.2	4217.0	5891.2	8572.5	10683.1	10867.7	8312.3
72.5°	545.5	558.1	612.6	839.2	1988.9	3134.4	4695.4	7229.8	9512.4	9722.2	7317.9
75°	419.6	432.2	474.2	616.8	1426.7	2198.7	3335.8	5610.1	7670.4	8043.8	5878.6
77.5°	306.3	323.1	352.5	449.0	830.8	1397.3	2022.5	3155.4	4233.8	4410.0	3079.9
80°	142.7	163.6	205.6	289.5	449.0	658.8	717.5	1216.8	2035.1	2127.4	1670.0
82.5°	79.7	100.7	117.5	176.2	226.6	235.0	243.4	306.3	767.9	847.6	700.7
85°	37.8	50.4	54.5	75.5	75.5	67.1	79.7	58.7	125.9	151.1	146.9
87.5°	0.0	4.2	8.4	21.0	16.8	12.6	12.6	12.6	12.6	16.8	12.6
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°	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4	3646.4
2.5°	3671.5	3617.0	3491.1	3382.0	3310.7	3247.7	3163.8	3126.0	3058.9	3071.5	3033.7
5°	3692.5	3591.8	3369.4	3163.8	3012.8	2878.5	2731.6	2647.7	2555.4	2547.0	2517.6
7.5°	3705.1	3549.8	3230.9	2941.4	2710.6	2505.0	2307.8	2198.7	2085.4	2060.3	2035.1
10°	3692.5	3486.9	3088.3	2710.6	2404.3	2148.4	1926.0	1787.5	1670.0	1640.6	1615.5
12.5°	3705.1	3453.3	2954.0	2496.6	2131.6	1842.1	1590.3	1447.6	1338.5	1309.2	1292.4
15°	3734.5	3432.4	2840.7	2303.6	1888.2	1565.1	1317.6	1195.9	1107.8	1078.4	1070.0
17.5°	3759.6	3411.4	2719.0	2114.8	1644.8	1321.8	1107.8	1007.0	931.5	902.1	893.8
20°	3793.2	3382.0	2597.3	1934.4	1430.8	1128.7	939.9	851.8	793.1	772.1	767.9
22.5°	3822.6	3361.0	2484.1	1753.9	1233.6	973.5	814.0	742.7	700.7	679.8	679.8
25°	3898.1	3369.4	2387.5	1586.1	1086.8	851.8	717.5	663.0	629.4	616.8	616.8
27.5°	3986.2	3403.0	2312.0	1443.4	960.9	759.5	650.4	604.2	587.4	570.7	574.9
30°	4112.1	3470.1	2261.7	1325.9	868.6	688.1	595.8	562.3	545.5	541.3	541.3
32.5°	4271.6	3579.2	2257.5	1250.4	801.4	633.6	558.1	528.7	520.3	516.1	516.1
35°	4460.4	3675.7	2232.3	1216.8	759.5	595.8	528.7	507.7	503.5	503.5	503.5
37.5°	4687.0	3835.2	2215.5	1170.7	738.5	574.9	507.7	490.9	490.9	490.9	490.9
40°	4921.9	3965.3	2190.3	1128.7	730.1	562.3	495.1	474.2	474.2	474.2	474.2
42.5°	5203.1	4154.1	2181.9	1107.8	717.5	553.9	478.3	453.2	457.4	457.4	461.6
45°	5543.0	4368.1	2177.7	1086.8	713.3	545.5	461.6	432.2	436.4	432.2	432.2
47.5°	5887.0	4615.6	2190.3	1074.2	709.1	537.1	449.0	411.2	411.2	407.0	407.0
50°	6247.9	4842.2	2198.7	1061.6	700.7	520.3	428.0	394.4	386.0	377.6	381.8
52.5°	6587.8	5052.0	2202.9	1040.6	675.6	495.1	411.2	373.4	360.9	348.3	352.5
55°	6927.7	5253.4	2211.3	1015.4	642.0	470.0	390.2	352.5	335.7	318.9	318.9
57.5°	7234.0	5429.7	2190.3	952.5	604.2	444.8	369.3	327.3	302.1	285.3	285.3
60°	7443.8	5555.5	2127.4	860.2	553.9	415.4	348.3	302.1	272.7	260.2	260.2
62.5°	7544.5	5576.5	2014.1	709.1	490.9	386.0	323.1	276.9	251.8	243.4	243.4
65°	7448.0	5484.2	1837.9	532.9	423.8	352.5	297.9	256.0	230.8	209.8	209.8
67.5°	7112.3	5224.1	1594.5	402.8	360.9	318.9	272.7	235.0	205.6	188.8	188.8
70°	6436.7	4682.8	1233.6	323.1	306.3	276.9	247.6	209.8	184.6	163.6	163.6
72.5°	5551.4	3969.4	868.6	260.2	260.2	235.0	209.8	184.6	159.4	142.7	142.7
75°	4259.0	2937.2	583.2	209.8	214.0	197.2	172.0	151.1	134.3	121.7	121.7
77.5°	2324.6	1451.8	356.7	155.3	159.4	151.1	134.3	121.7	113.3	100.7	100.7
80°	1128.7	637.8	205.6	109.1	113.3	109.1	100.7	88.1	88.1	79.7	79.7
82.5°	474.2	239.2	109.1	75.5	75.5	67.1	62.9	62.9	62.9	58.7	58.7
85°	117.5	46.2	46.2	42.0	42.0	42.0	37.8	37.8	37.8	29.4	33.6
87.5°	16.8	16.8	16.8	16.8	16.8	16.8	12.6	4.2	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)