

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: P836344

Luminaire Tested: **ARCH3-170-740-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836344
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-170-740-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1310mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16691 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

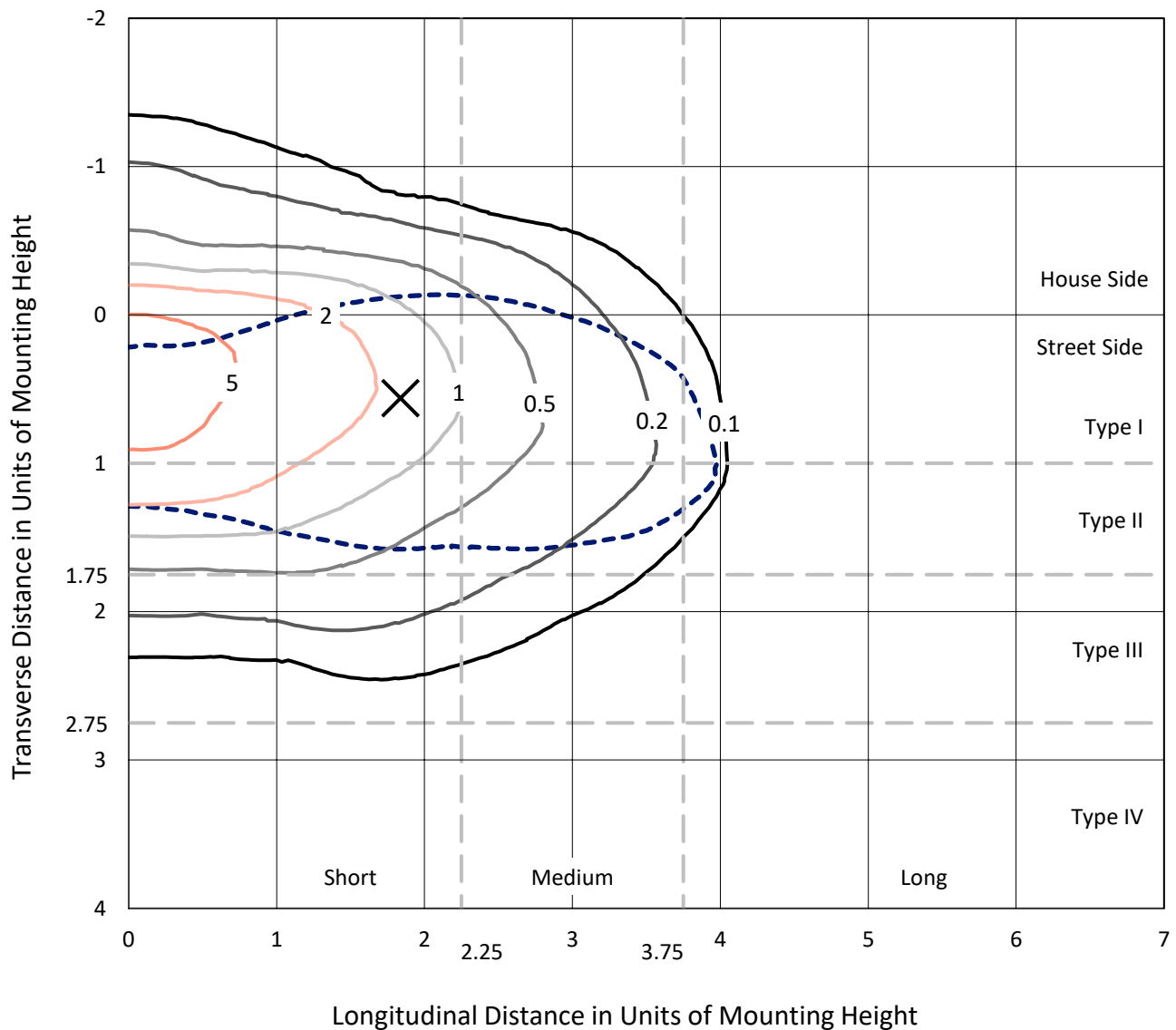
Input Watts (W): 170.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

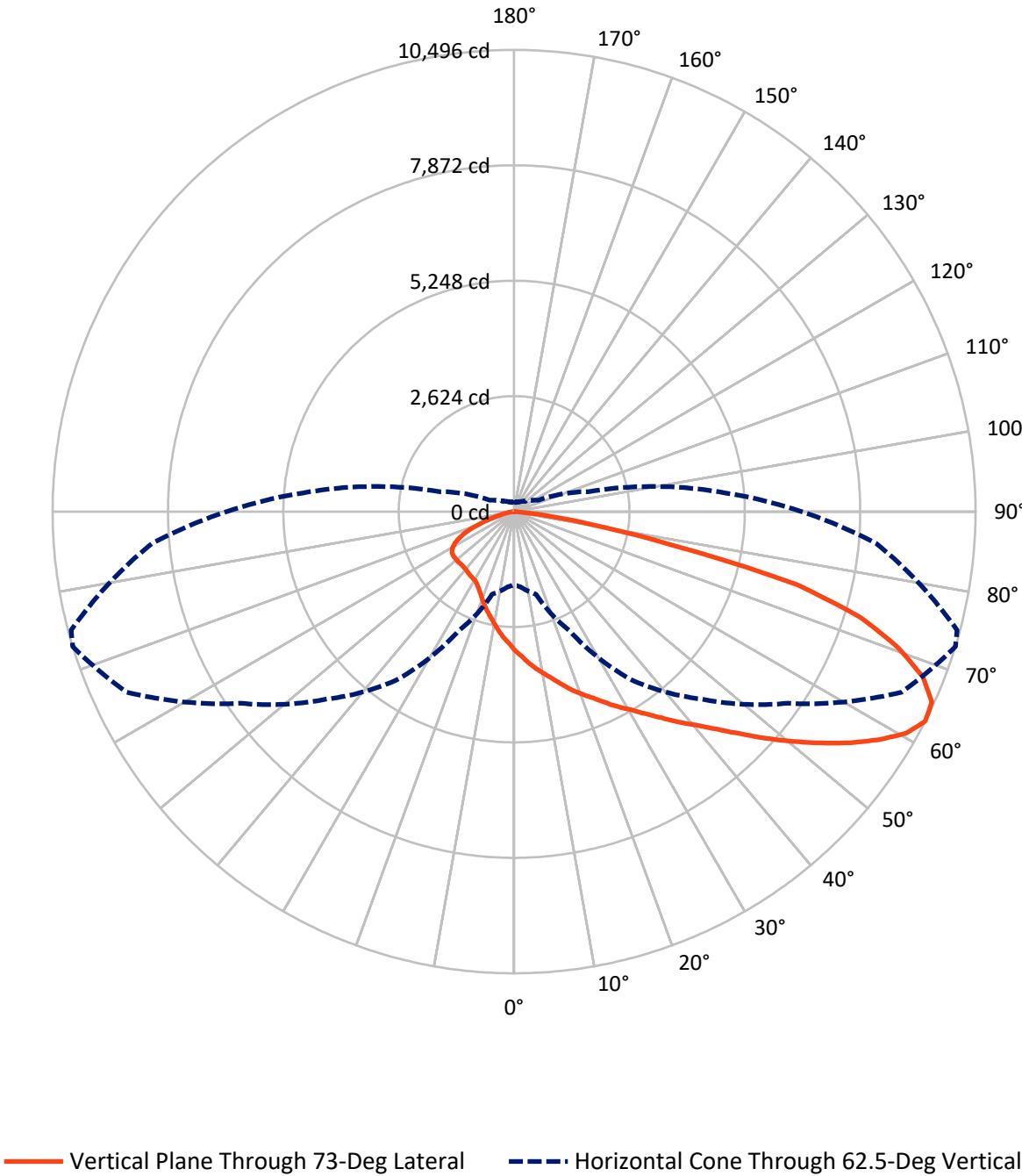
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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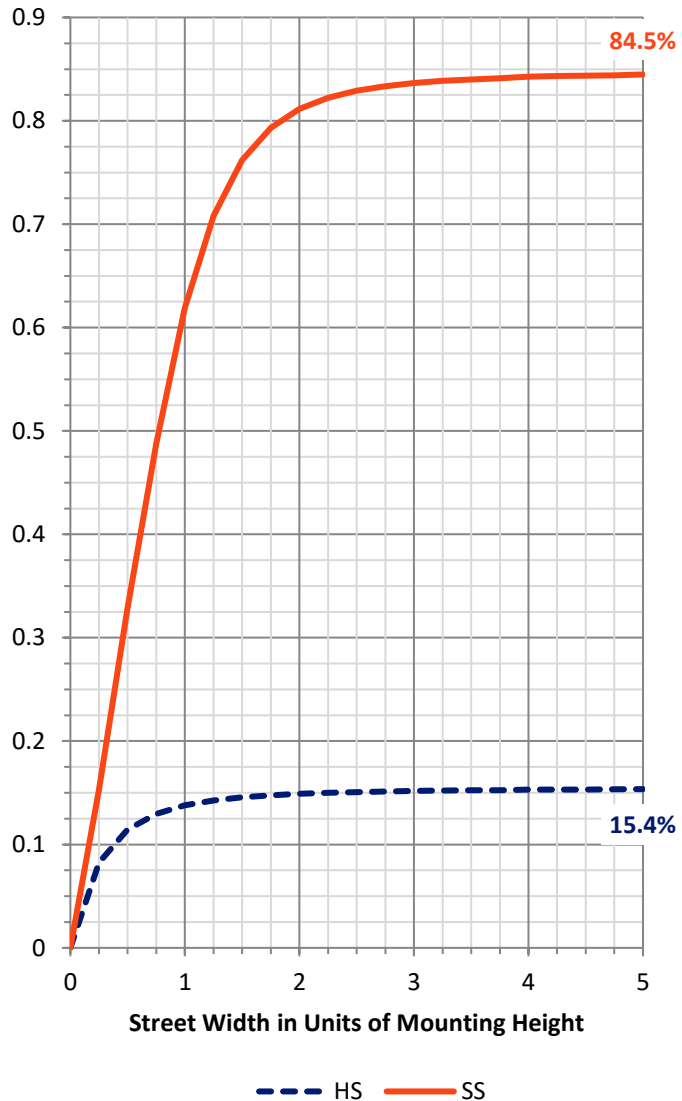
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2587.3	0.0	2587.3
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	14103.6	0.0	14103.6
	% Fixture	84.5	0.0	84.5
Total	Lumens	16691.0	0.0	16691.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.3	1.8
10°-20°	921.3	5.5
20°-30°	1533.6	9.2
30°-40°	2313.9	13.9
40°-50°	3234.2	19.4
50°-60°	3572.4	21.4
60°-70°	3112.0	18.6
70°-80°	1572.0	9.4
80°-90°	126.2	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°	16691.0	100.0
0°-180°	16691.0	100.0

Coefficient of Utilization



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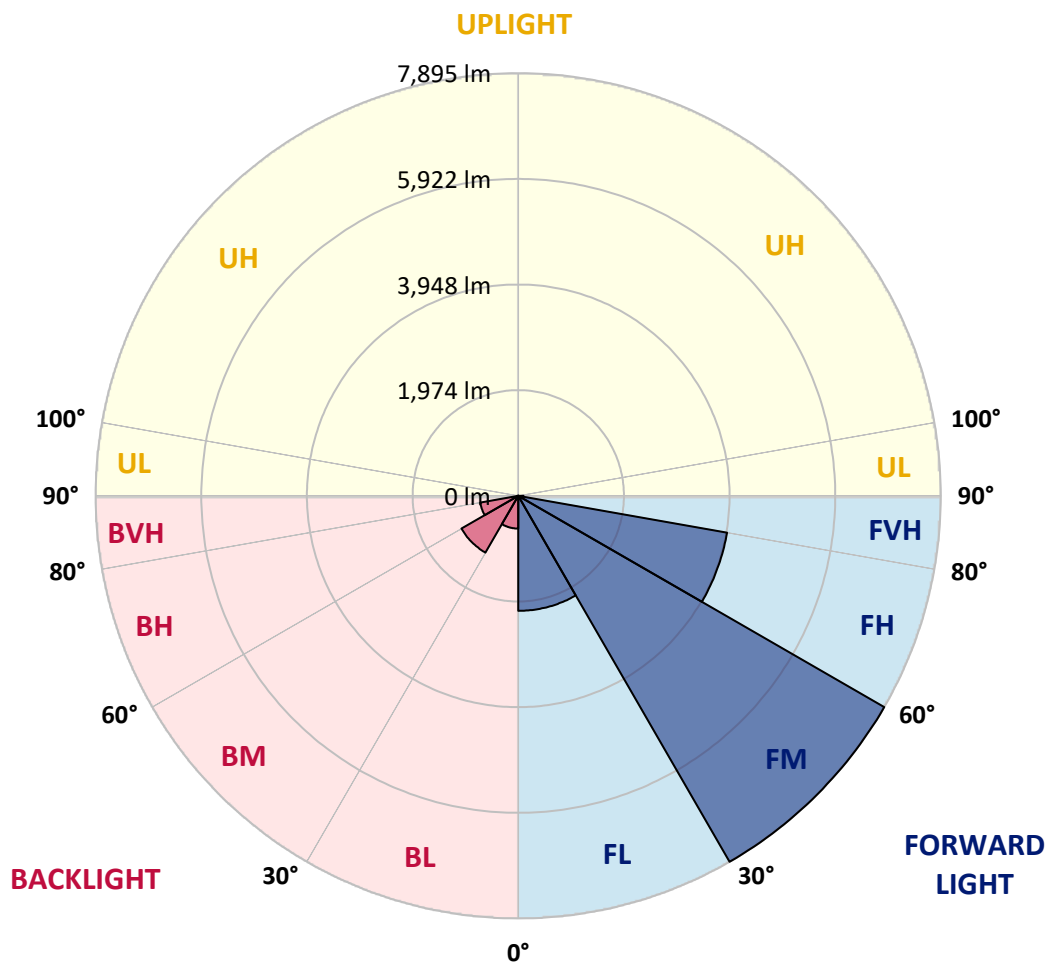
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2148.6	12.9			
FM	(30°-60°)	7895.5	47.3			
FH	(60°-80°)	3961.9	23.7			G2/5000
FVH	(80°-90°)	97.6	0.6			G1/100
BL	(0°-30°)	611.5	3.7	B2/1000		
BM	(30°-60°)	1225.1	7.3	B2/2500		
BH	(60°-80°)	722.2	4.3	B2/1000		G2/1000
BVH	(80°-90°)	28.5	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°	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5
2.5°	3596.9	3636.9	3615.1	3629.6	3556.9	3509.6	3455.1	3349.6	3291.4	3284.1	3215.0
5°	4124.3	4167.9	4131.5	4120.6	3993.3	3884.2	3760.6	3575.1	3451.4	3429.6	3276.9
7.5°	4651.6	4691.6	4648.0	4615.2	4444.3	4251.5	4069.7	3796.9	3604.2	3567.8	3327.8
10°	5022.6	5058.9	5026.2	4993.5	4815.3	4618.9	4360.7	4004.2	3742.4	3684.2	3360.5
12.5°	5302.6	5324.4	5309.9	5280.8	5113.5	4902.6	4655.2	4237.0	3898.8	3826.0	3411.4
15°	5531.7	5568.1	5549.9	5528.1	5368.1	5157.1	4920.7	4480.7	4080.6	3989.7	3487.8
17.5°	5684.5	5710.0	5713.6	5713.6	5571.7	5364.4	5135.3	4702.5	4262.5	4146.1	3560.5
20°	5753.6	5782.7	5800.9	5830.0	5713.6	5535.4	5302.6	4891.6	4433.4	4302.5	3629.6
22.5°	5786.3	5811.8	5859.1	5924.5	5830.0	5680.9	5466.3	5066.2	4604.3	4466.1	3709.6
25°	5811.8	5844.5	5913.6	6037.3	5971.8	5844.5	5659.0	5266.2	4808.0	4666.2	3826.0
27.5°	5880.9	5920.9	5986.4	6135.5	6055.5	5993.6	5862.7	5480.8	5022.6	4877.1	3967.9
30°	6120.9	6153.7	6150.0	6244.6	6146.4	6128.2	6037.3	5688.1	5229.9	5084.4	4135.2
32.5°	6557.4	6590.1	6510.1	6473.7	6259.1	6262.8	6226.4	5910.0	5477.2	5328.1	4327.9
35°	7026.5	7062.9	6957.4	6895.6	6535.5	6430.1	6448.2	6186.4	5753.6	5604.5	4568.0
37.5°	7444.8	7488.4	7397.5	7306.6	6942.9	6699.2	6695.6	6495.5	6070.0	5917.3	4833.5
40°	7673.9	7724.8	7779.4	7728.4	7346.6	7077.4	6961.0	6811.9	6382.8	6226.4	5120.8
42.5°	7783.0	7924.8	8023.0	7990.3	7677.5	7404.8	7266.5	7142.9	6764.7	6611.9	5462.6
45°	7477.5	7481.1	7688.4	7866.6	7808.4	7626.6	7601.1	7513.9	7201.1	7055.6	5848.2
47.5°	7095.6	7066.5	7212.0	7528.4	7692.1	7739.3	7888.5	7924.8	7699.3	7553.9	6240.9
50°	6179.1	6197.3	6670.1	7124.7	7444.8	7750.3	8092.1	8346.7	8212.1	8073.9	6655.5
52.5°	5026.2	5069.9	5611.8	6611.9	7117.4	7641.2	8212.1	8768.6	8735.9	8604.9	7070.2
55°	4029.7	4098.8	4673.4	5757.2	6699.2	7397.5	8263.1	9154.1	9277.8	9157.7	7477.5
57.5°	3080.5	3153.2	3636.9	4749.8	6164.6	7001.1	8226.7	9492.3	9783.3	9706.9	7852.1
60°	2320.3	2393.1	2702.2	3851.5	5495.4	6557.4	8044.8	9714.2	10237.9	10157.9	8124.9
62.5°	1662.1	1720.3	1949.4	2996.8	4680.7	6030.0	7597.5	9717.8	10496.1	10430.7	8255.8
65°	1196.5	1196.5	1382.0	2138.5	3917.0	5397.2	6921.0	9270.5	10441.6	10423.4	8164.9
67.5°	861.9	869.2	1018.3	1494.8	3124.1	4629.8	6044.5	8474.0	10019.7	10110.6	7837.5
70°	611.0	629.2	698.3	1043.8	2360.4	3655.1	5106.2	7430.2	9259.6	9419.6	7204.7
72.5°	472.8	483.7	531.0	727.4	1723.9	2716.8	4069.7	6266.4	8244.9	8426.7	6342.8
75°	363.7	374.6	411.0	534.6	1236.5	1905.7	2891.3	4862.6	6648.3	6972.0	5095.3
77.5°	265.5	280.0	305.5	389.1	720.1	1211.1	1753.0	2735.0	3669.6	3822.4	2669.5
80°	123.7	141.8	178.2	250.9	389.1	571.0	621.9	1054.7	1763.9	1843.9	1447.5
82.5°	69.1	87.3	101.8	152.8	196.4	203.7	210.9	265.5	665.6	734.7	607.4
85°	32.7	43.6	47.3	65.5	65.5	58.2	69.1	50.9	109.1	130.9	127.3
87.5°	0.0	3.6	7.3	18.2	14.5	10.9	10.9	10.9	10.9	14.5	10.9
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°	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5	3160.5
2.5°	3182.3	3135.0	3025.9	2931.4	2869.5	2815.0	2742.2	2709.5	2651.3	2662.2	2629.5
5°	3200.5	3113.2	2920.4	2742.2	2611.3	2494.9	2367.6	2294.9	2214.9	2207.6	2182.1
7.5°	3211.4	3076.8	2800.4	2549.5	2349.4	2171.2	2000.3	1905.7	1807.5	1785.7	1763.9
10°	3200.5	3022.3	2676.8	2349.4	2084.0	1862.1	1669.3	1549.3	1447.5	1422.0	1400.2
12.5°	3211.4	2993.2	2560.4	2164.0	1847.6	1596.6	1378.4	1254.7	1160.2	1134.7	1120.2
15°	3236.9	2975.0	2462.2	1996.7	1636.6	1356.6	1142.0	1036.5	960.1	934.7	927.4
17.5°	3258.7	2956.8	2356.7	1833.0	1425.7	1145.6	960.1	872.9	807.4	781.9	774.7
20°	3287.8	2931.4	2251.2	1676.6	1240.2	978.3	814.7	738.3	687.4	669.2	665.6
22.5°	3313.2	2913.2	2153.1	1520.2	1069.3	843.8	705.6	643.7	607.4	589.2	589.2
25°	3378.7	2920.4	2069.4	1374.8	942.0	738.3	621.9	574.6	545.5	534.6	534.6
27.5°	3455.1	2949.5	2003.9	1251.1	832.9	658.3	563.7	523.7	509.2	494.6	498.3
30°	3564.2	3007.7	1960.3	1149.3	752.8	596.5	516.4	487.3	472.8	469.2	469.2
32.5°	3702.4	3102.3	1956.7	1083.8	694.7	549.2	483.7	458.3	451.0	447.3	447.3
35°	3866.0	3185.9	1934.8	1054.7	658.3	516.4	458.3	440.1	436.4	436.4	436.4
37.5°	4062.4	3324.1	1920.3	1014.7	640.1	498.3	440.1	425.5	425.5	425.5	425.5
40°	4266.1	3436.9	1898.5	978.3	632.8	487.3	429.2	411.0	411.0	411.0	411.0
42.5°	4509.8	3600.5	1891.2	960.1	621.9	480.1	414.6	392.8	396.4	396.4	400.1
45°	4804.4	3786.0	1887.6	942.0	618.3	472.8	400.1	374.6	378.2	374.6	374.6
47.5°	5102.6	4000.6	1898.5	931.0	614.6	465.5	389.1	356.4	356.4	352.8	352.8
50°	5415.4	4197.0	1905.7	920.1	607.4	451.0	371.0	341.9	334.6	327.3	331.0
52.5°	5710.0	4378.8	1909.4	902.0	585.5	429.2	356.4	323.7	312.8	301.9	305.5
55°	6004.5	4553.4	1916.7	880.1	556.4	407.3	338.2	305.5	291.0	276.4	276.4
57.5°	6270.0	4706.2	1898.5	825.6	523.7	385.5	320.0	283.7	261.9	247.3	247.3
60°	6451.9	4815.3	1843.9	745.6	480.1	360.1	301.9	261.9	236.4	225.5	225.5
62.5°	6539.2	4833.5	1745.7	614.6	425.5	334.6	280.0	240.0	218.2	210.9	210.9
65°	6455.5	4753.4	1593.0	461.9	367.3	305.5	258.2	221.9	200.0	181.8	181.8
67.5°	6164.6	4528.0	1382.0	349.1	312.8	276.4	236.4	203.7	178.2	163.7	163.7
70°	5579.0	4058.8	1069.3	280.0	265.5	240.0	214.6	181.8	160.0	141.8	141.8
72.5°	4811.6	3440.5	752.8	225.5	225.5	203.7	181.8	160.0	138.2	123.7	123.7
75°	3691.5	2545.8	505.5	181.8	185.5	170.9	149.1	130.9	116.4	105.5	105.5
77.5°	2014.8	1258.4	309.1	134.6	138.2	130.9	116.4	105.5	98.2	87.3	87.3
80°	978.3	552.8	178.2	94.6	98.2	94.6	87.3	76.4	76.4	69.1	69.1
82.5°	411.0	207.3	94.6	65.5	65.5	58.2	54.6	54.6	54.6	50.9	50.9
85°	101.8	40.0	40.0	36.4	36.4	36.4	32.7	32.7	32.7	25.5	29.1
87.5°	14.5	14.5	14.5	14.5	14.5	14.5	10.9	3.6	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)