

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: P836389

Luminaire Tested: **ARCH3-180-727-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836389
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: ARCH3-180-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1375mA 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: 15900 lumens
Efficiency: N/A
Efficacy: 88.1 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): 180.5
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

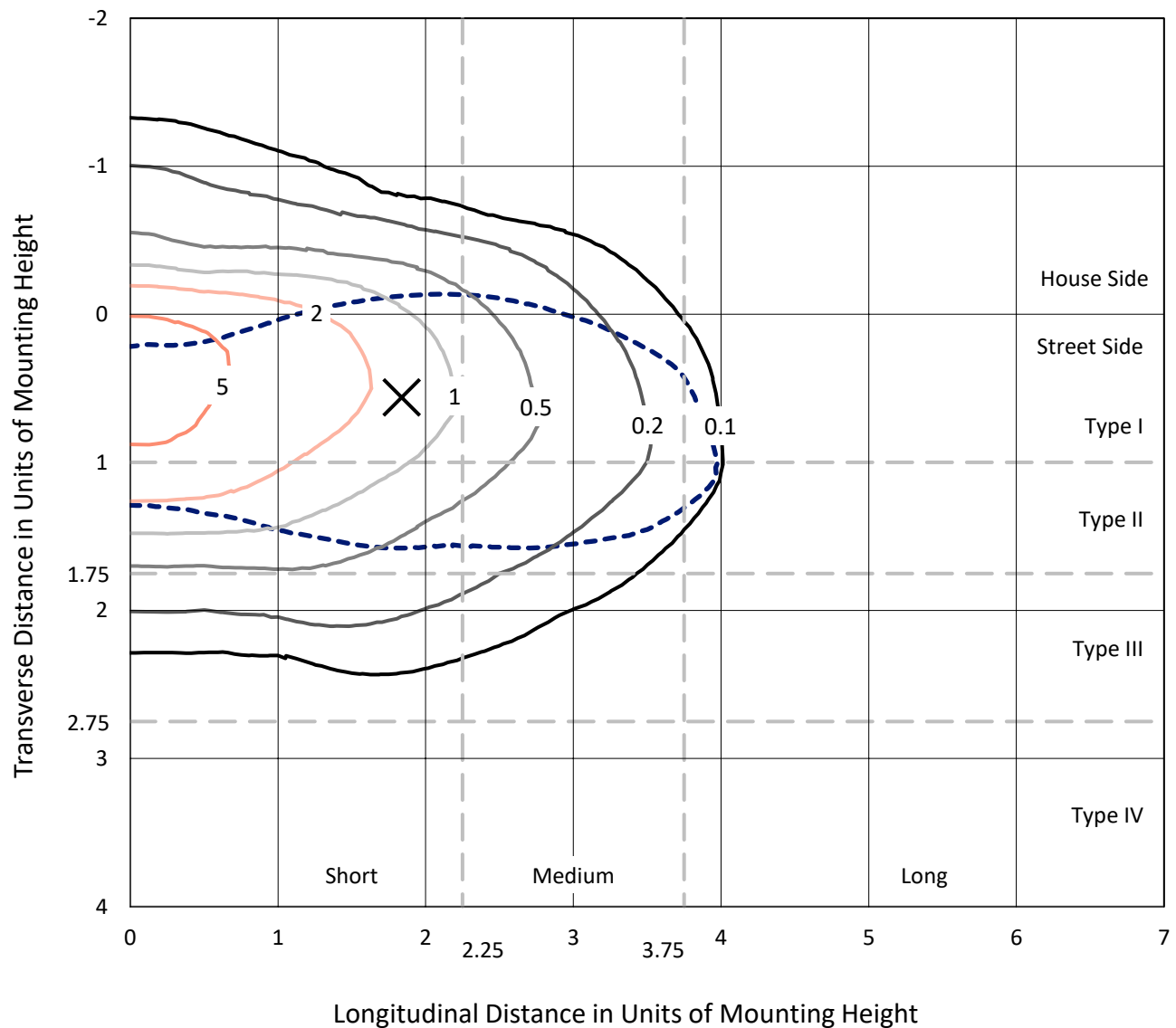


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Iso-Footcandle Lines of Horizontal Illumination

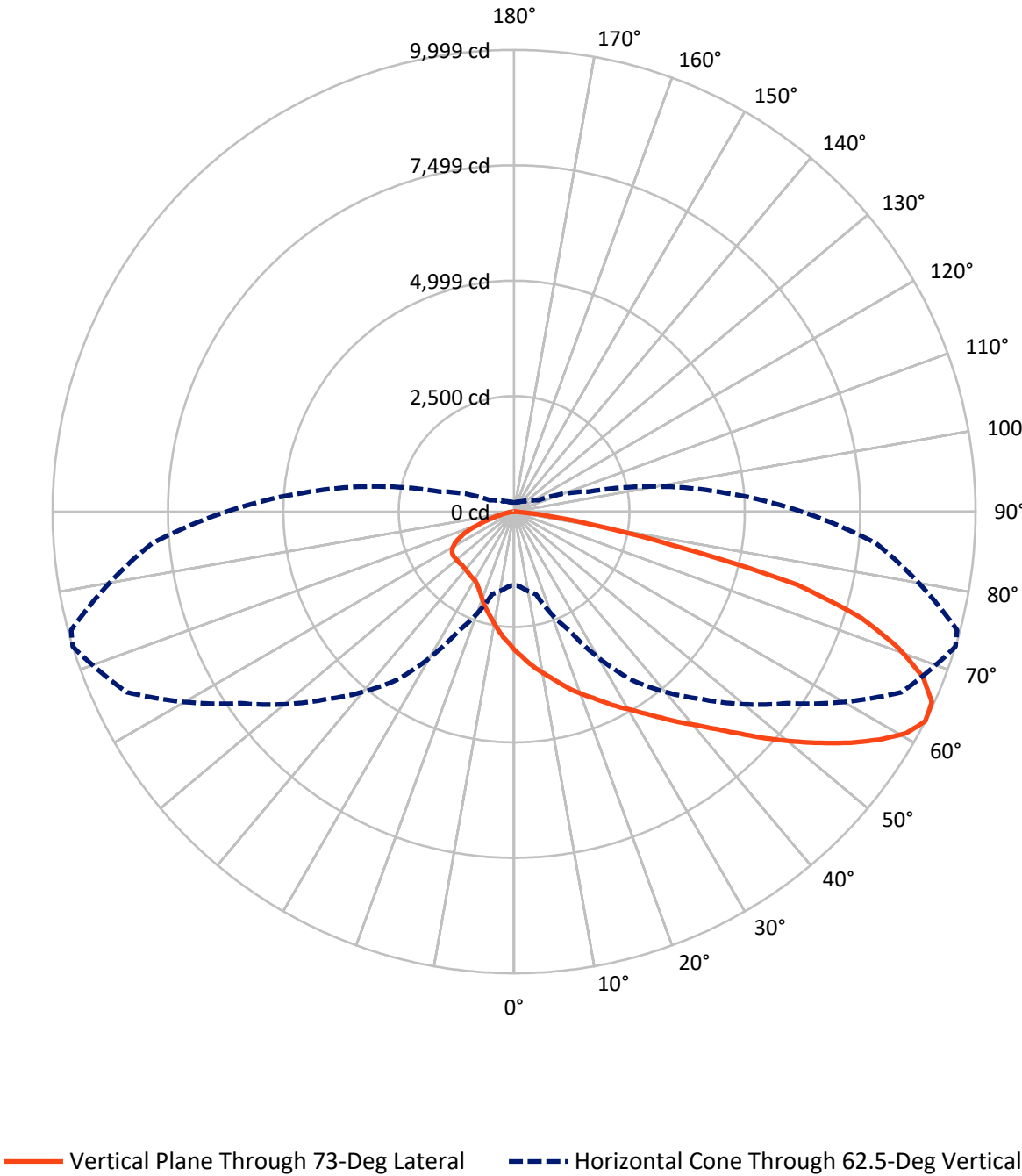
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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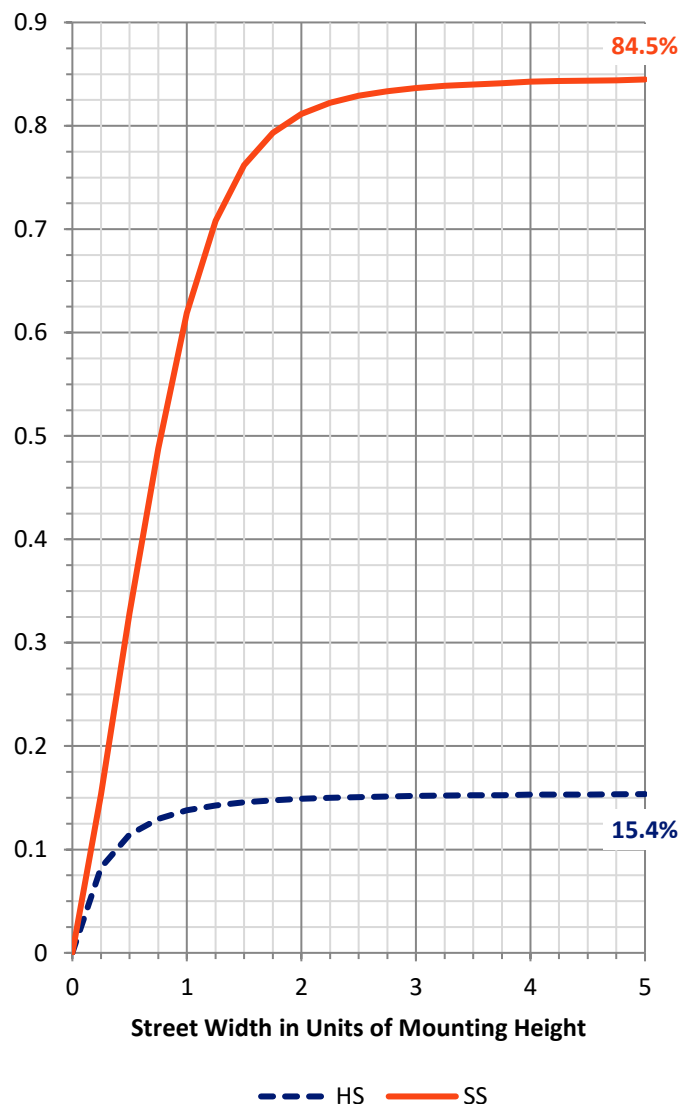
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2464.7	0.0	2464.7
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	13435.3	0.0	13435.3
	% Fixture	84.5	0.0	84.5
Total	Lumens	15900.0	0.0	15900.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.8	1.8
10°-20°	877.7	5.5
20°-30°	1460.9	9.2
30°-40°	2204.2	13.9
40°-50°	3081.0	19.4
50°-60°	3403.1	21.4
60°-70°	2964.6	18.6
70°-80°	1497.5	9.4
80°-90°	120.2	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°	15900.0	100.0
0°-180°	15900.0	100.0

Coefficient of Utilization



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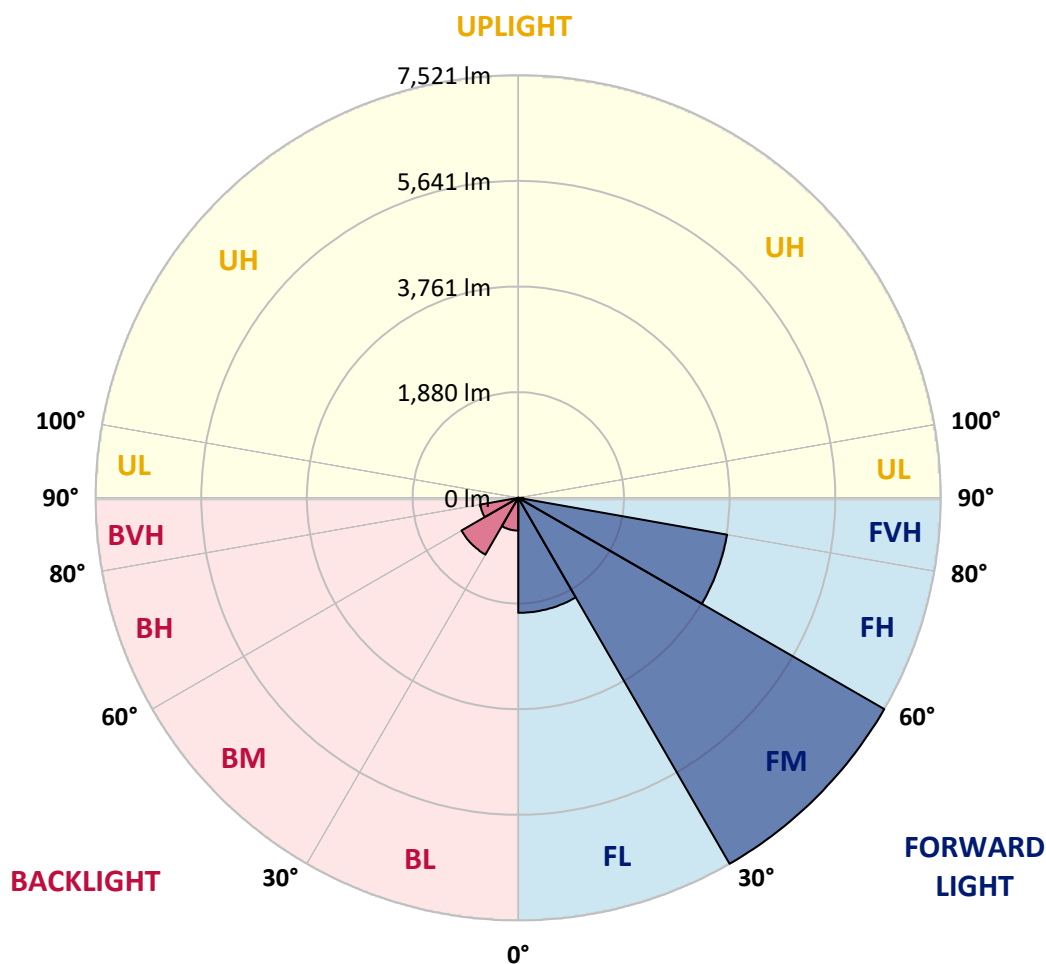
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2046.8	12.9			
FM	(30°-60°)	7521.3	47.3			
FH	(60°-80°)	3774.1	23.7			G2/5000
FVH	(80°-90°)	93.0	0.6			G1/100
BL	(0°-30°)	582.6	3.7	B2/1000		
BM	(30°-60°)	1167.0	7.3	B2/2500		
BH	(60°-80°)	687.9	4.3	B2/1000		G2/1000
BVH	(80°-90°)	27.2	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7
2.5°	3426.4	3464.6	3443.8	3457.6	3388.3	3343.3	3291.3	3190.9	3135.4	3128.5	3062.7
5°	3928.8	3970.4	3935.7	3925.3	3804.1	3700.1	3582.4	3405.7	3287.9	3267.1	3121.6
7.5°	4431.2	4469.3	4427.7	4396.5	4233.7	4050.1	3876.8	3617.0	3433.4	3398.7	3170.1
10°	4784.6	4819.2	4788.0	4756.8	4587.1	4400.0	4154.0	3814.5	3565.0	3509.6	3201.2
12.5°	5051.3	5072.1	5058.3	5030.5	4871.2	4670.2	4434.6	4036.2	3714.0	3644.7	3249.8
15°	5269.6	5304.2	5286.9	5266.1	5113.7	4912.7	4687.5	4268.3	3887.2	3800.6	3322.5
17.5°	5415.1	5439.4	5442.8	5442.8	5307.7	5110.2	4892.0	4479.7	4060.5	3949.6	3391.8
20°	5480.9	5508.6	5526.0	5553.7	5442.8	5273.1	5051.3	4659.8	4223.3	4098.6	3457.6
22.5°	5512.1	5536.4	5581.4	5643.8	5553.7	5411.6	5207.2	4826.1	4386.1	4254.5	3533.8
25°	5536.4	5567.5	5633.4	5751.2	5688.8	5567.5	5390.8	5016.7	4580.1	4445.0	3644.7
27.5°	5602.2	5640.3	5702.7	5844.7	5768.5	5709.6	5584.9	5221.1	4784.6	4646.0	3779.8
30°	5830.8	5862.0	5858.6	5948.6	5855.1	5837.8	5751.2	5418.6	4982.0	4843.4	3939.2
32.5°	6246.6	6277.8	6201.6	6166.9	5962.5	5966.0	5931.3	5629.9	5217.6	5075.6	4122.8
35°	6693.5	6728.2	6627.7	6568.8	6225.8	6125.3	6142.7	5893.2	5480.9	5338.9	4351.5
37.5°	7091.9	7133.5	7046.9	6960.3	6613.8	6381.7	6378.2	6187.7	5782.3	5636.8	4604.4
40°	7310.2	7358.7	7410.7	7362.2	6998.4	6742.0	6631.2	6489.1	6080.3	5931.3	4878.1
42.5°	7414.1	7549.3	7642.8	7611.6	7313.7	7053.8	6922.2	6804.4	6444.1	6298.6	5203.8
45°	7123.1	7126.6	7324.1	7493.8	7438.4	7265.2	7240.9	7157.8	6859.8	6721.2	5571.0
47.5°	6759.3	6731.6	6870.2	7171.6	7327.5	7372.6	7514.6	7549.3	7334.5	7195.9	5945.2
50°	5886.3	5903.6	6354.0	6787.1	7091.9	7383.0	7708.6	7951.2	7823.0	7691.3	6340.1
52.5°	4788.0	4829.6	5345.8	6298.6	6780.1	7279.0	7823.0	8353.0	8321.9	8197.1	6735.1
55°	3838.7	3904.6	4452.0	5484.4	6381.7	7046.9	7871.5	8720.3	8838.1	8723.8	7123.1
57.5°	2934.5	3003.8	3464.6	4524.7	5872.4	6669.3	7836.8	9042.5	9319.7	9246.9	7480.0
60°	2210.4	2279.7	2574.2	3669.0	5234.9	6246.6	7663.6	9253.8	9752.7	9676.5	7739.8
62.5°	1583.3	1638.7	1857.0	2854.8	4458.9	5744.2	7237.5	9257.3	9998.7	9936.3	7864.5
65°	1139.8	1139.8	1316.5	2037.2	3731.3	5141.4	6593.0	8831.2	9946.7	9929.4	7777.9
67.5°	821.1	828.0	970.1	1423.9	2976.1	4410.4	5758.1	8072.4	9544.9	9631.5	7466.1
70°	582.0	599.4	665.2	994.3	2248.5	3481.9	4864.2	7078.1	8820.8	8973.2	6863.3
72.5°	450.4	460.8	505.8	692.9	1642.2	2588.0	3876.8	5969.4	7854.1	8027.4	6042.2
75°	346.5	356.8	391.5	509.3	1177.9	1815.4	2754.3	4632.1	6333.2	6641.6	4853.8
77.5°	252.9	266.8	291.0	370.7	686.0	1153.7	1669.9	2605.3	3495.7	3641.2	2543.0
80°	117.8	135.1	169.8	239.1	370.7	543.9	592.4	1004.7	1680.3	1756.5	1378.9
82.5°	65.8	83.1	97.0	145.5	187.1	194.0	200.9	252.9	634.0	699.8	578.6
85°	31.2	41.6	45.0	62.4	62.4	55.4	65.8	48.5	103.9	124.7	121.3
87.5°	0.0	3.5	6.9	17.3	13.9	10.4	10.4	10.4	10.4	13.9	10.4
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°	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7
2.5°	3031.5	2986.4	2882.5	2792.4	2733.5	2681.6	2612.3	2581.1	2525.7	2536.1	2504.9
5°	3048.8	2965.7	2782.0	2612.3	2487.6	2376.7	2255.4	2186.1	2109.9	2103.0	2078.7
7.5°	3059.2	2931.0	2667.7	2428.7	2238.1	2068.3	1905.5	1815.4	1721.9	1701.1	1680.3
10°	3048.8	2879.0	2549.9	2238.1	1985.2	1773.9	1590.2	1475.9	1378.9	1354.6	1333.9
12.5°	3059.2	2851.3	2439.0	2061.4	1760.0	1520.9	1313.1	1195.3	1105.2	1080.9	1067.1
15°	3083.5	2834.0	2345.5	1902.0	1559.0	1292.3	1087.9	987.4	914.6	890.4	883.5
17.5°	3104.2	2816.7	2245.0	1746.1	1358.1	1091.3	914.6	831.5	769.1	744.9	738.0
20°	3132.0	2792.4	2144.6	1597.2	1181.4	932.0	776.1	703.3	654.8	637.5	634.0
22.5°	3156.2	2775.1	2051.0	1448.2	1018.6	803.8	672.1	613.2	578.6	561.3	561.3
25°	3218.6	2782.0	1971.3	1309.6	897.3	703.3	592.4	547.4	519.7	509.3	509.3
27.5°	3291.3	2809.8	1909.0	1191.8	793.4	627.1	537.0	498.9	485.0	471.2	474.6
30°	3395.3	2865.2	1867.4	1094.8	717.2	568.2	492.0	464.3	450.4	446.9	446.9
32.5°	3526.9	2955.3	1863.9	1032.4	661.7	523.1	460.8	436.5	429.6	426.1	426.1
35°	3682.8	3035.0	1843.1	1004.7	627.1	492.0	436.5	419.2	415.7	415.7	415.7
37.5°	3869.9	3166.6	1829.3	966.6	609.8	474.6	419.2	405.4	405.4	405.4	405.4
40°	4063.9	3274.0	1808.5	932.0	602.8	464.3	408.8	391.5	391.5	391.5	391.5
42.5°	4296.0	3429.9	1801.6	914.6	592.4	457.3	395.0	374.2	377.6	377.6	381.1
45°	4576.7	3606.6	1798.1	897.3	589.0	450.4	381.1	356.8	360.3	356.8	356.8
47.5°	4860.8	3811.0	1808.5	886.9	585.5	443.5	370.7	339.5	339.5	336.1	336.1
50°	5158.7	3998.1	1815.4	876.5	578.6	429.6	353.4	325.7	318.7	311.8	315.3
52.5°	5439.4	4171.3	1818.9	859.2	557.8	408.8	339.5	308.3	298.0	287.6	291.0
55°	5720.0	4337.6	1825.8	838.4	530.1	388.0	322.2	291.0	277.2	263.3	263.3
57.5°	5972.9	4483.1	1808.5	786.5	498.9	367.2	304.9	270.2	249.4	235.6	235.6
60°	6146.1	4587.1	1756.5	710.2	457.3	343.0	287.6	249.4	225.2	214.8	214.8
62.5°	6229.3	4604.4	1663.0	585.5	405.4	318.7	266.8	228.7	207.9	200.9	200.9
65°	6149.6	4528.2	1517.5	440.0	349.9	291.0	246.0	211.3	190.6	173.2	173.2
67.5°	5872.4	4313.4	1316.5	332.6	298.0	263.3	225.2	194.0	169.8	155.9	155.9
70°	5314.6	3866.4	1018.6	266.8	252.9	228.7	204.4	173.2	152.4	135.1	135.1
72.5°	4583.6	3277.5	717.2	214.8	214.8	194.0	173.2	152.4	131.7	117.8	117.8
75°	3516.5	2425.2	481.6	173.2	176.7	162.8	142.0	124.7	110.9	100.5	100.5
77.5°	1919.4	1198.7	294.5	128.2	131.7	124.7	110.9	100.5	93.5	83.1	83.1
80°	932.0	526.6	169.8	90.1	93.5	90.1	83.1	72.8	72.8	65.8	65.8
82.5°	391.5	197.5	90.1	62.4	62.4	55.4	52.0	52.0	52.0	48.5	48.5
85°	97.0	38.1	38.1	34.6	34.6	34.6	31.2	31.2	31.2	24.3	27.7
87.5°	13.9	13.9	13.9	13.9	13.9	13.9	10.4	3.5	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)