

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: P841227

Luminaire Tested: **ARCH4-150-727-U-T2R**

Issue Date: 5/27/2024

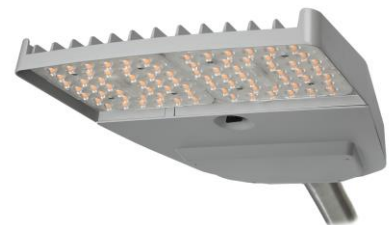
Test Information

Test Method: LM-79-08
Report Number: P841227
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-150-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1230mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23892 lumens
Efficiency: N/A
Efficacy: 158.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

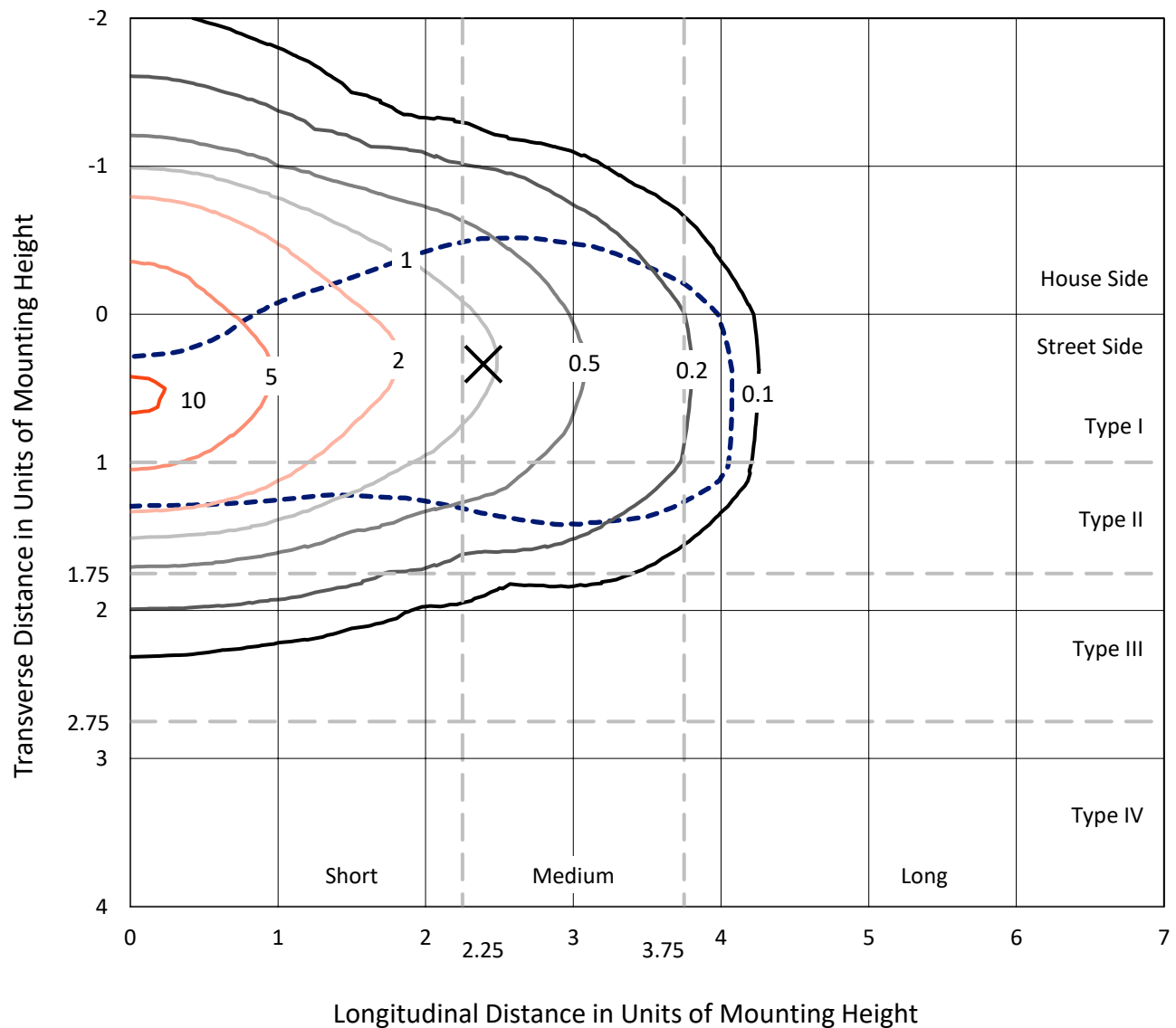
Input Watts (W): 150.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

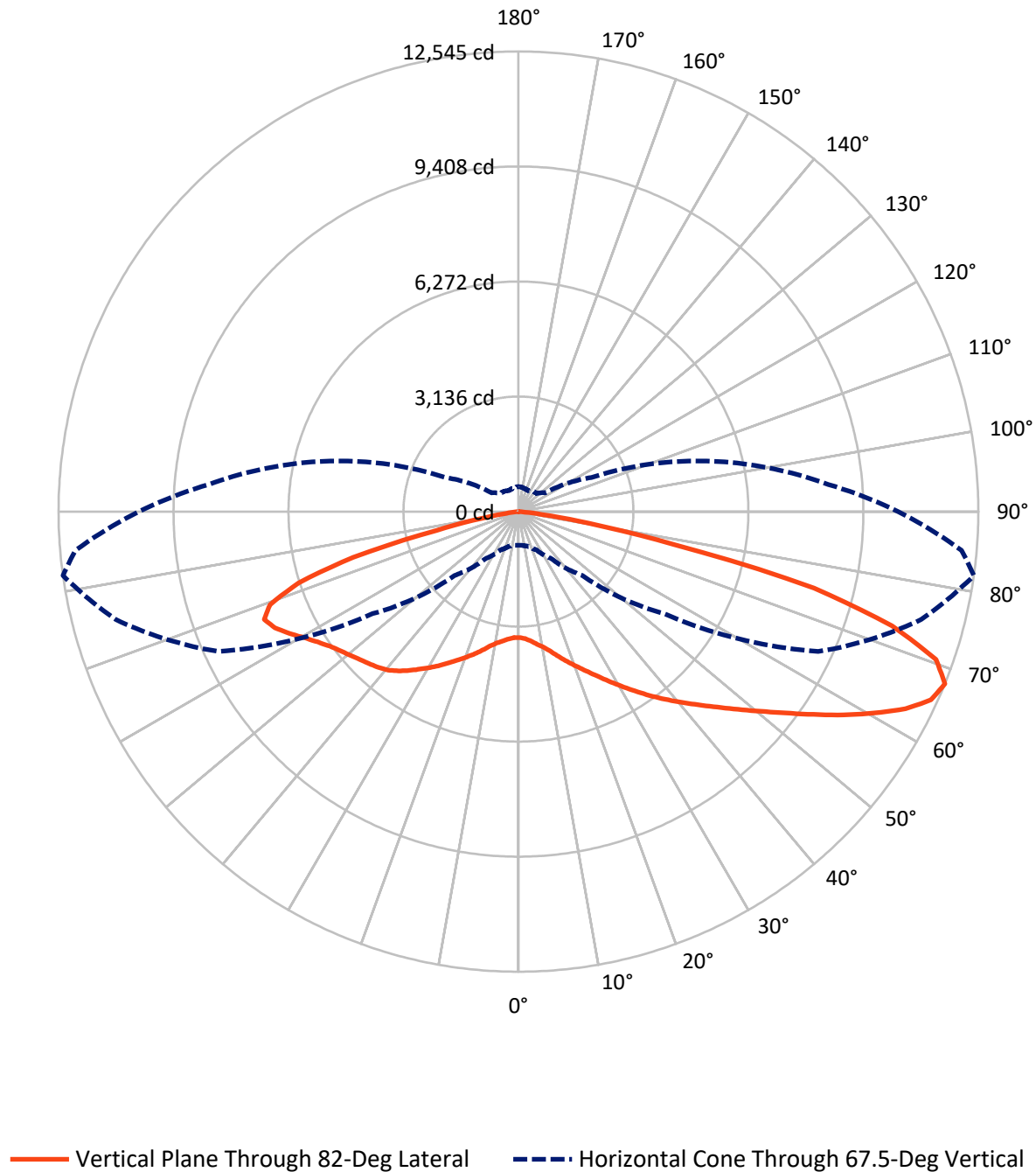
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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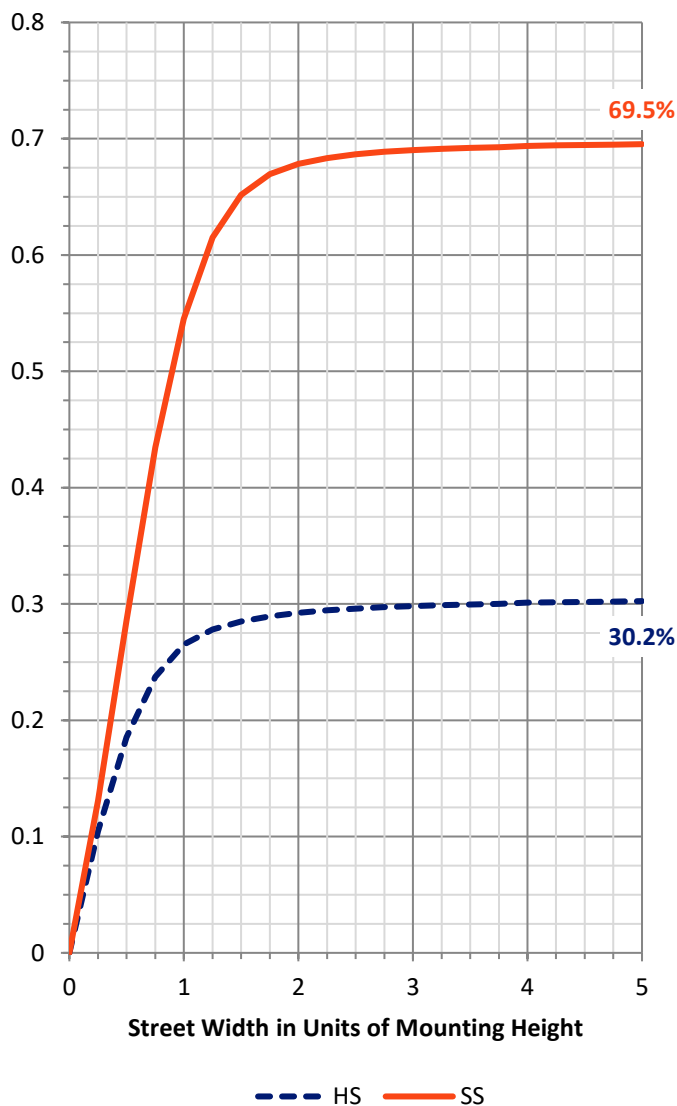
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7276.1	0.0	7276.1
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	16615.9	0.0	16615.9
	% Fixture	69.5	0.0	69.5
Total	Lumens	23892.0	0.0	23892.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	354.9	1.5
10°-20°	1278.5	5.4
20°-30°	2569.5	10.8
30°-40°	4036.3	16.9
40°-50°	4917.0	20.6
50°-60°	4645.9	19.4
60°-70°	3836.5	16.1
70°-80°	2089.1	8.7
80°-90°	164.3	0.7
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°	23892.0	100.0
0°-180°	23892.0	100.0

Coefficient of Utilization



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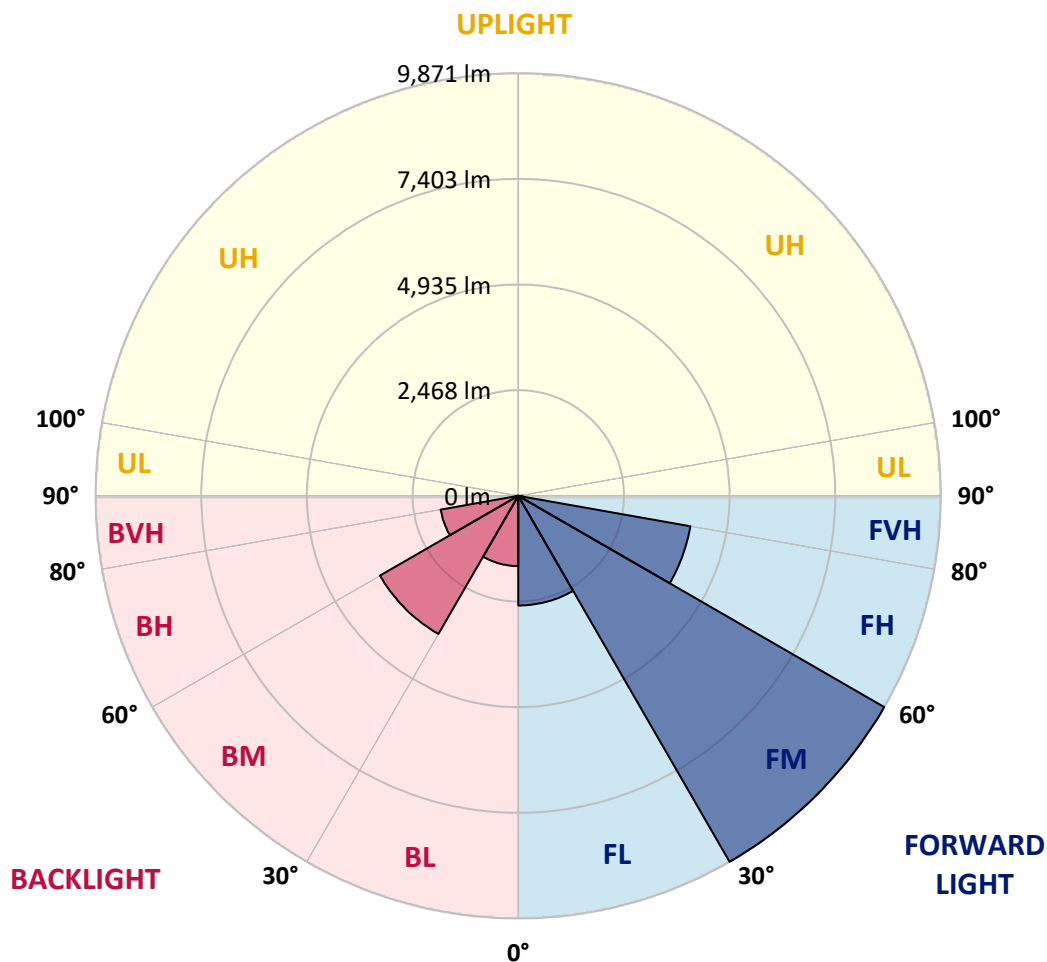
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2562.1	10.7			
FM	(30°-60°)	9870.8	41.3			
FH	(60°-80°)	4084.0	17.1			G2/5000
FVH	(80°-90°)	99.0	0.4			G1/100
BL	(0°-30°)	1640.8	6.9	B3/2500		
BM	(30°-60°)	3728.4	15.6	B3/5000		
BH	(60°-80°)	1841.6	7.7	B3/2500		G3/2500
BVH	(80°-90°)	65.2	0.3			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5
2.5°	3590.6	3590.6	3618.3	3618.3	3594.0	3555.9	3545.5	3503.8	3465.7	3465.7	3469.2
5°	3934.0	3930.6	3951.4	3923.6	3864.6	3788.3	3736.3	3646.1	3569.8	3545.5	3542.0
7.5°	4353.8	4350.3	4360.7	4315.6	4204.6	4079.7	3975.7	3829.9	3705.1	3653.0	3639.1
10°	4822.1	4818.7	4808.2	4731.9	4582.8	4388.5	4232.4	4031.2	3843.8	3760.6	3743.2
12.5°	5359.8	5352.9	5328.6	5217.6	5012.9	4763.1	4537.7	4277.5	4027.7	3913.2	3875.0
15°	5960.0	5949.6	5904.5	5769.2	5495.1	5179.4	4888.0	4555.0	4249.7	4100.5	4048.5
17.5°	6591.4	6591.4	6522.0	6320.8	6015.5	5623.5	5262.7	4839.5	4482.1	4298.3	4235.8
20°	7233.2	7229.7	7143.0	6900.1	6539.4	6088.4	5630.4	5165.6	4721.5	4499.5	4423.2
22.5°	7909.7	7902.7	7795.2	7517.7	7087.5	6577.5	6043.3	5488.2	4985.2	4718.0	4620.9
25°	8686.8	8676.4	8544.5	8204.5	7694.6	7118.7	6508.1	5866.3	5287.0	4960.9	4846.4
27.5°	9512.4	9498.5	9342.4	8946.9	8388.4	7694.6	7021.6	6303.5	5620.0	5231.5	5103.1
30°	10247.9	10237.5	10067.5	9661.6	9019.8	8267.0	7510.7	6740.6	5970.4	5519.4	5359.8
32.5°	10802.9	10802.9	10650.3	10251.4	9585.3	8815.1	8003.3	7153.4	6334.7	5828.2	5640.8
35°	11139.5	11149.9	11018.0	10698.9	10071.0	9332.0	8513.3	7639.1	6723.2	6157.7	5956.5
37.5°	11188.0	11222.7	11146.4	10931.3	10407.5	9762.2	9012.9	8107.4	7125.6	6490.8	6265.3
40°	10962.5	10986.8	10990.3	10907.0	10546.2	10071.0	9453.4	8603.5	7552.3	6841.2	6581.0
42.5°	10511.5	10528.9	10560.1	10584.4	10445.6	10206.3	9790.0	9064.9	8006.8	7198.5	6893.2
45°	9928.7	9925.3	9977.3	10081.4	10074.4	10129.9	9977.3	9484.7	8478.6	7604.4	7240.1
47.5°	9058.0	9040.6	9224.5	9460.4	9578.3	9838.5	9980.8	9814.2	8992.0	8051.9	7635.6
50°	7694.6	7677.2	8079.7	8634.7	8981.6	9377.1	9790.0	10012.0	9529.8	8554.9	8065.8
52.5°	6036.3	6019.0	6528.9	7500.3	8256.6	8832.5	9404.9	10057.1	10039.7	9116.9	8551.5
55°	4489.1	4475.2	4971.3	6022.5	7247.1	8201.1	8933.1	9939.1	10518.5	9762.2	9141.2
57.5°	3163.9	3156.9	3587.1	4457.9	5949.6	7430.9	8478.6	9710.2	10959.1	10463.0	9807.3
60°	2220.3	2209.9	2522.1	3195.1	4499.5	6268.8	8027.6	9404.9	11288.6	11153.3	10515.0
62.5°	1495.2	1488.3	1710.3	2272.3	3195.1	4825.6	7344.2	9200.2	11476.0	11847.2	11229.7
65°	1134.4	1130.9	1231.5	1540.3	2261.9	3465.7	6258.4	9175.9	11500.2	12367.5	11836.8
67.5°	915.9	919.3	974.8	1151.8	1564.6	2463.1	4853.3	9023.3	11371.9	12544.5	12131.6
70°	749.3	749.3	773.6	891.6	1155.2	1661.7	3389.4	8329.4	11014.6	12083.1	11781.2
72.5°	572.4	575.9	652.2	721.6	870.8	1165.6	2171.7	6893.2	10171.6	10653.8	10424.8
75°	454.5	451.0	496.1	593.2	676.5	832.6	1332.2	4943.5	8655.5	8326.0	8180.3
77.5°	326.1	322.6	357.3	440.6	513.4	589.8	794.4	2494.3	4707.6	4326.0	4218.5
80°	222.0	215.1	246.3	305.3	340.0	346.9	388.5	957.5	2053.7	1935.8	1911.5
82.5°	114.5	114.5	131.8	173.5	176.9	180.4	173.5	308.8	680.0	634.9	607.1
85°	45.1	45.1	48.6	59.0	59.0	62.4	62.4	79.8	72.9	69.4	65.9
87.5°	3.5	3.5	6.9	6.9	10.4	10.4	10.4	13.9	17.3	17.3	17.3
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°	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5	3434.5
2.5°	3462.2	3448.3	3403.2	3392.8	3385.9	3375.5	3379.0	3354.7	3344.3	3347.7	3333.9
5°	3524.7	3500.4	3444.9	3420.6	3413.6	3403.2	3413.6	3396.3	3379.0	3385.9	3379.0
7.5°	3611.4	3576.7	3507.3	3483.0	3479.6	3469.2	3483.0	3469.2	3455.3	3462.2	3448.3
10°	3701.6	3656.5	3580.2	3555.9	3555.9	3552.4	3566.3	3545.5	3531.6	3535.1	3528.1
12.5°	3833.4	3774.4	3691.2	3670.4	3660.0	3670.4	3673.8	3646.1	3621.8	3625.3	3614.9
15°	3993.0	3927.1	3836.9	3805.7	3798.7	3795.3	3781.4	3746.7	3715.5	3712.0	3701.6
17.5°	4166.5	4083.2	3975.7	3944.4	3913.2	3902.8	3868.1	3823.0	3774.4	3774.4	3760.6
20°	4333.0	4239.3	4110.9	4065.8	4020.7	3979.1	3920.1	3847.3	3784.8	3774.4	3760.6
22.5°	4513.4	4402.4	4253.2	4187.3	4107.5	4024.2	3923.6	3826.5	3746.7	3729.3	3718.9
25°	4714.6	4575.8	4398.9	4301.8	4173.4	4045.0	3895.9	3771.0	3677.3	3649.6	3642.6
27.5°	4936.6	4770.1	4555.0	4412.8	4225.4	4024.2	3833.4	3684.2	3569.8	3535.1	3524.7
30°	5162.1	4964.4	4697.2	4489.1	4225.4	3958.3	3718.9	3545.5	3413.6	3365.1	3358.1
32.5°	5387.6	5165.6	4825.6	4530.7	4183.8	3847.3	3569.8	3365.1	3215.9	3156.9	3170.8
35°	5658.2	5387.6	4943.5	4548.1	4114.4	3712.0	3399.8	3160.4	3007.8	2955.7	2966.1
37.5°	5939.2	5609.6	5037.2	4534.2	4017.3	3559.4	3209.0	2976.5	2785.7	2695.5	2705.9
40°	6182.0	5810.8	5103.1	4485.6	3892.4	3385.9	3021.6	2716.3	2452.7	2366.0	2355.6
42.5°	6411.0	5960.0	5137.8	4412.8	3750.2	3184.7	2754.5	2362.5	2098.8	1991.3	1994.8
45°	6650.4	6105.7	5123.9	4315.6	3573.2	2948.8	2411.1	2015.6	1783.1	1686.0	1689.5
47.5°	6924.4	6261.8	5110.1	4211.6	3358.1	2643.5	2081.5	1710.3	1509.1	1439.7	1432.8
50°	7215.8	6435.3	5092.7	4083.2	3118.8	2303.5	1755.4	1425.8	1255.8	1210.7	1200.3
52.5°	7545.4	6622.6	5082.3	3930.6	2830.8	1942.7	1464.0	1176.0	1061.6	1030.3	1026.9
55°	7940.9	6841.2	5096.2	3746.7	2483.9	1602.7	1217.7	1013.0	936.7	919.3	915.9
57.5°	8423.1	7122.2	5137.8	3531.6	2119.7	1307.9	1037.3	912.4	863.8	849.9	849.9
60°	8946.9	7441.3	5214.1	3288.8	1755.4	1078.9	919.3	832.6	811.8	829.1	829.1
62.5°	9512.4	7816.0	5349.4	2993.9	1415.4	912.4	825.7	766.7	752.8	787.5	791.0
65°	10036.3	8180.3	5436.2	2640.0	1124.0	791.0	752.8	700.8	707.7	742.4	738.9
67.5°	10358.9	8482.1	5314.7	2196.0	891.6	700.8	676.5	631.4	648.7	676.5	680.0
70°	10161.2	8312.1	4714.6	1658.3	697.3	610.6	593.2	565.5	579.3	614.0	627.9
72.5°	9193.3	7444.8	3666.9	1120.5	562.0	513.4	520.4	506.5	523.8	555.1	586.3
75°	7462.2	5627.0	2459.6	718.1	444.1	437.1	447.5	437.1	444.1	475.3	492.6
77.5°	3895.9	2744.1	1224.6	447.5	329.6	340.0	357.3	360.8	381.6	388.5	395.5
80°	1817.8	1235.0	510.0	249.8	218.6	239.4	274.1	277.5	284.5	294.9	298.3
82.5°	593.2	371.2	235.9	135.3	124.9	135.3	176.9	211.6	215.1	235.9	235.9
85°	62.4	38.2	52.0	55.5	48.6	59.0	79.8	76.3	34.7	20.8	20.8
87.5°	17.3	13.9	17.3	17.3	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)