

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: P841161

Luminaire Tested: **ARCH4-140-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841161
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22013 lumens
Efficiency: N/A
Efficacy: 155.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 141.3
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

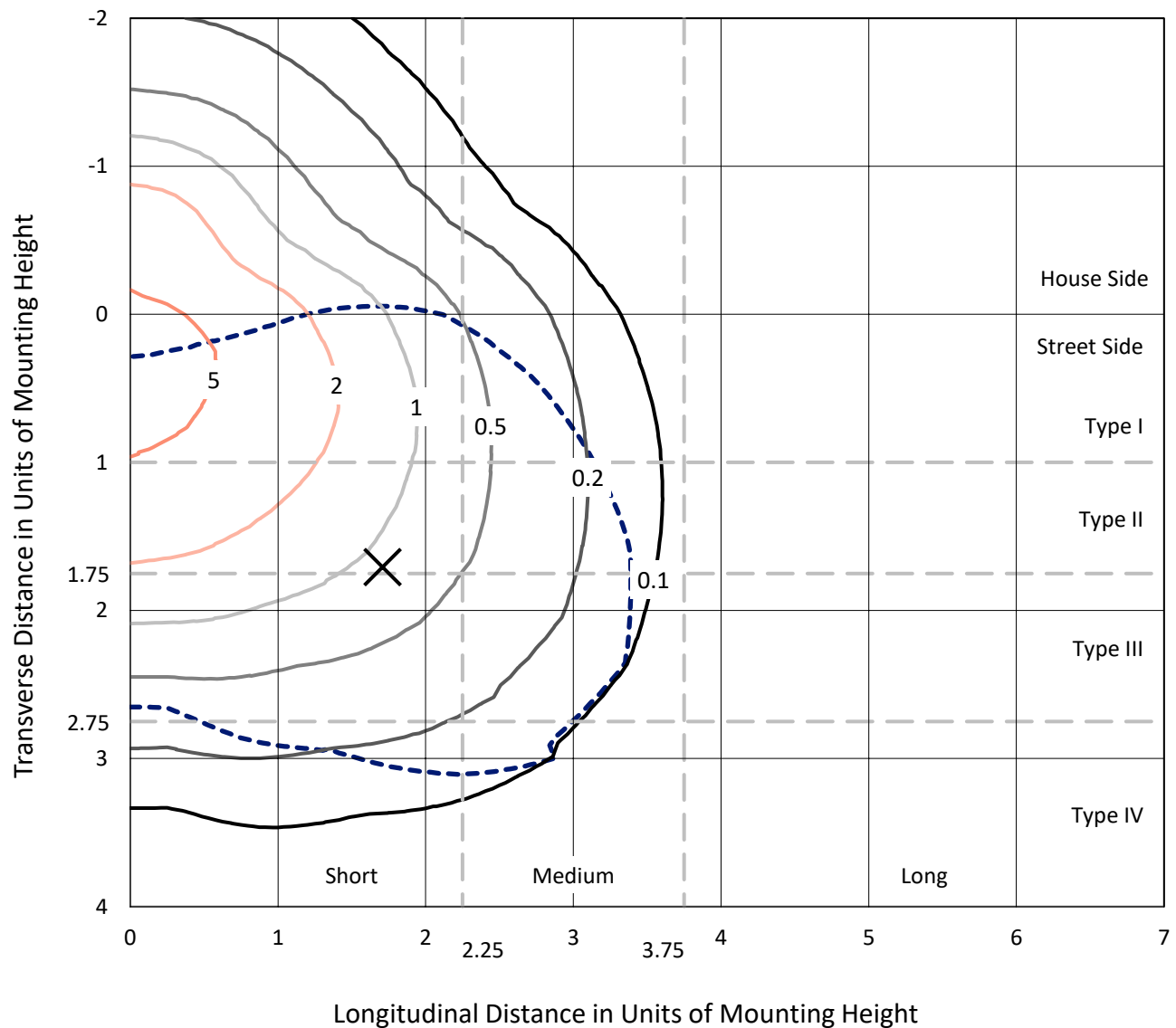


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Iso-Footcandle Lines of Horizontal Illumination

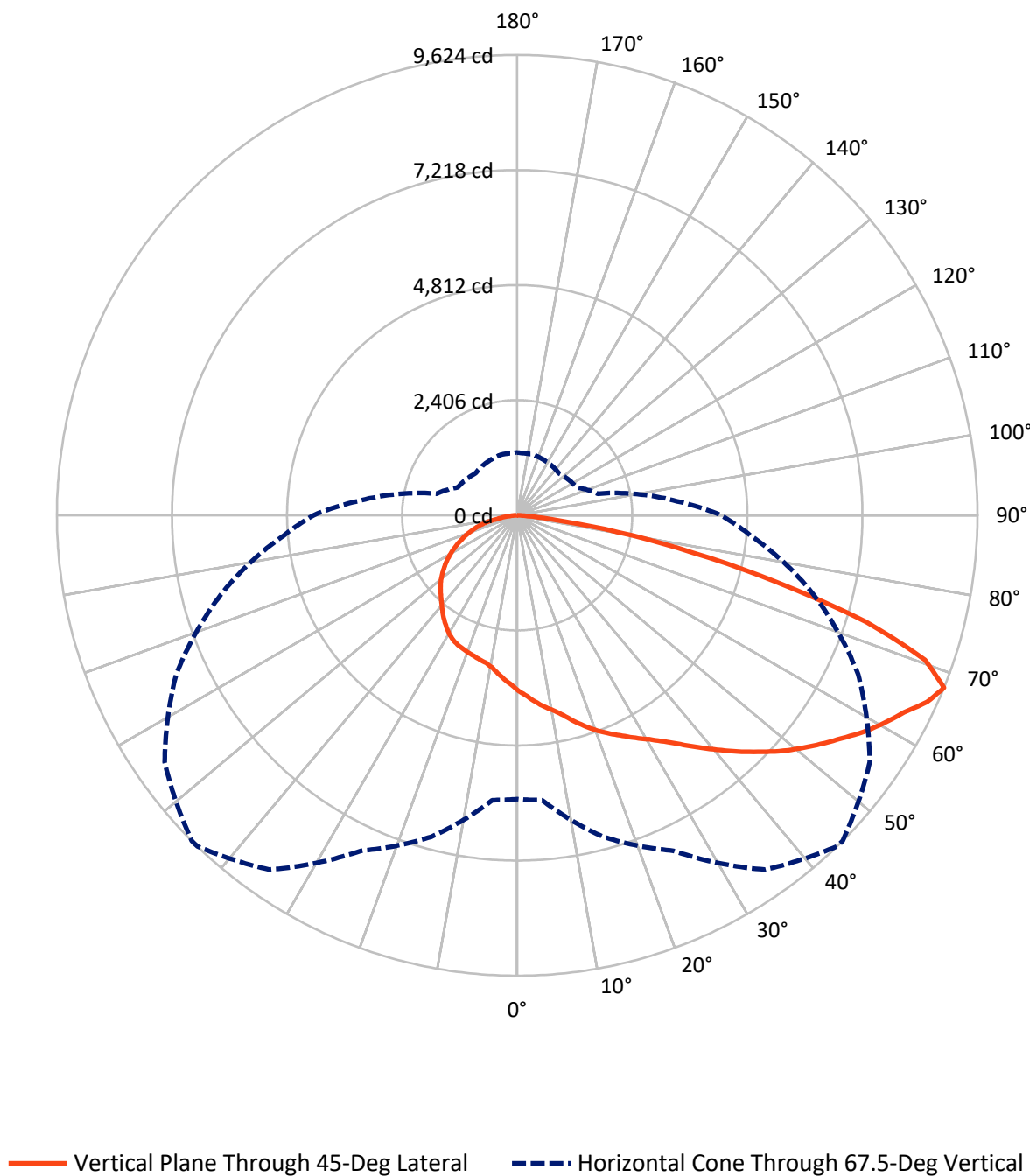
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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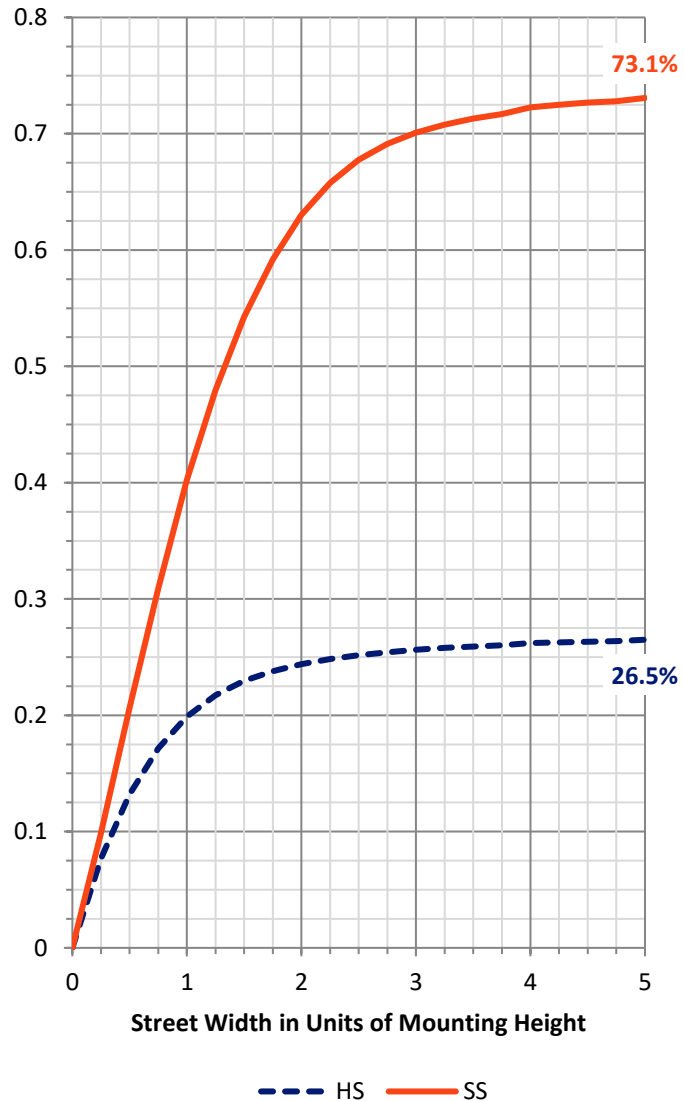
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5880.8	0.0	5880.8
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	16132.2	0.0	16132.2
	% Fixture	73.3	0.0	73.3
Total	Lumens	22013.0	0.0	22013.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.5	1.6
10°-20°	1085.9	4.9
20°-30°	1874.3	8.5
30°-40°	2764.0	12.6
40°-50°	3744.7	17.0
50°-60°	4576.9	20.8
60°-70°	4720.4	21.4
70°-80°	2585.5	11.7
80°-90°	309.9	1.4
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°	22013.0	100.0
0°-180°	22013.0	100.0

Coefficient of Utilization



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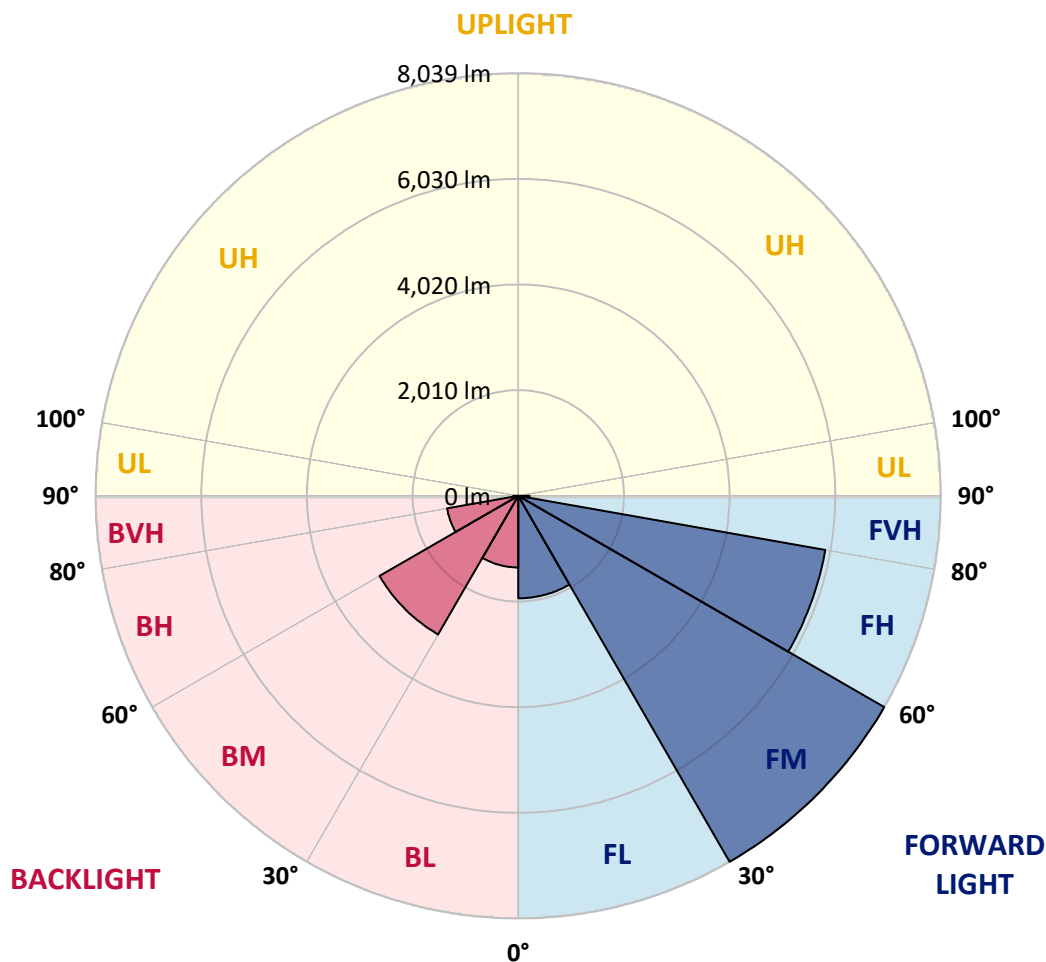
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1948.7	8.9			
FM	(30°-60°)	8039.4	36.5			
FH	(60°-80°)	5930.6	26.9			G3/7500
FVH	(80°-90°)	213.5	1.0			G2/225
BL	(0°-30°)	1363.0	6.2	B3/2500		
BM	(30°-60°)	3046.2	13.8	B3/5000		
BH	(60°-80°)	1375.3	6.2	B3/2500		G3/2500
BVH	(80°-90°)	96.4	0.4			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4
2.5°	3832.1	3828.8	3835.5	3812.0	3781.9	3778.5	3778.5	3758.4	3735.0	3688.1	3651.3
5°	4013.0	4006.3	4009.7	3976.2	3936.0	3915.9	3912.5	3869.0	3815.4	3741.7	3674.7
7.5°	4180.5	4173.8	4170.5	4133.6	4073.3	4039.8	4036.5	3972.8	3909.2	3795.3	3698.1
10°	4338.0	4331.3	4324.6	4274.3	4200.6	4150.4	4143.7	4063.3	3982.9	3842.2	3718.2
12.5°	4538.9	4525.5	4518.8	4458.5	4351.4	4297.8	4287.7	4180.5	4080.0	3909.2	3758.4
15°	4750.0	4739.9	4729.9	4672.9	4552.3	4482.0	4465.2	4331.3	4193.9	3996.3	3818.7
17.5°	4907.4	4897.4	4897.4	4847.1	4736.6	4656.2	4642.8	4482.0	4311.2	4076.7	3865.6
20°	5004.6	4994.5	5004.6	4974.4	4890.7	4823.7	4810.3	4632.7	4428.4	4150.4	3905.8
22.5°	5074.9	5064.9	5081.6	5068.2	5007.9	4967.7	4957.7	4783.5	4549.0	4227.4	3946.0
25°	5198.8	5198.8	5198.8	5175.4	5118.5	5105.1	5105.1	4954.3	4703.1	4327.9	4006.3
27.5°	5446.7	5433.3	5416.6	5349.6	5252.4	5249.1	5269.2	5128.5	4880.6	4458.5	4080.0
30°	5811.9	5805.2	5741.5	5600.8	5436.7	5419.9	5433.3	5316.1	5071.6	4595.9	4163.8
32.5°	6284.2	6260.7	6130.1	5919.0	5684.6	5607.5	5634.3	5510.4	5272.5	4736.6	4244.2
35°	6619.2	6625.9	6532.1	6341.1	6063.1	5858.8	5878.9	5728.1	5490.3	4894.0	4344.7
37.5°	7004.4	7027.8	6887.1	6743.1	6485.2	6136.8	6156.9	5952.5	5708.0	5091.7	4451.8
40°	7537.0	7490.1	7252.3	7081.4	6796.7	6428.2	6445.0	6203.8	5959.2	5279.2	4575.8
42.5°	7982.5	7898.8	7610.7	7392.9	7051.3	6736.4	6753.1	6475.1	6213.8	5486.9	4713.1
45°	8622.3	8391.2	7975.8	7868.6	7312.6	7037.9	7054.6	6763.2	6481.8	5708.0	4860.5
47.5°	8994.1	8625.7	8361.0	8304.1	7600.6	7349.4	7369.5	7068.0	6769.9	5959.2	5014.6
50°	8970.7	8732.9	8655.8	8515.1	7855.2	7640.8	7660.9	7382.9	7061.3	6207.1	5162.0
52.5°	8816.6	8860.1	8820.0	8585.5	8109.8	7922.2	7945.7	7694.4	7359.5	6438.3	5299.3
55°	9054.4	9084.6	9007.5	8699.4	8391.2	8203.6	8230.4	8022.7	7654.2	6642.6	5416.6
57.5°	9339.2	9232.0	9154.9	8900.3	8682.6	8508.4	8538.6	8357.7	7908.8	6806.7	5507.0
60°	9325.8	9101.3	9178.4	8913.7	8880.2	8789.8	8816.6	8632.4	8103.1	6927.3	5543.9
62.5°	8639.1	8518.5	8907.0	8816.6	9041.0	9041.0	9074.5	8799.9	8220.3	6977.6	5523.8
65°	7446.5	7453.2	8136.6	8511.8	9232.0	9386.1	9412.9	8903.7	8153.3	6830.2	5336.2
67.5°	5932.4	5976.0	6957.5	7738.0	9041.0	9620.5	9623.9	8997.5	7865.3	6414.8	4900.7
70°	4341.3	4374.8	5533.8	6481.8	8139.9	9101.3	9047.7	8732.9	7238.9	5691.3	4220.7
72.5°	2934.4	2964.5	4157.1	4977.8	6679.4	7751.4	7634.1	7717.9	6170.3	4676.3	3393.3
75°	1973.0	2009.9	2957.8	3560.8	4914.1	5885.6	5624.3	5845.4	4773.4	3540.7	2475.5
77.5°	1242.8	1266.2	1879.2	2334.8	3356.5	4006.3	3745.0	3748.4	2750.2	1906.0	1329.9
80°	790.5	797.2	1138.9	1346.6	1942.9	2408.5	2130.5	1731.8	1239.4	1011.6	793.9
82.5°	458.9	448.9	680.0	760.4	924.5	914.5	757.0	716.9	542.7	505.8	405.3
85°	184.2	170.8	298.1	278.0	281.4	298.1	221.1	221.1	177.5	137.3	100.5
87.5°	36.8	36.8	40.2	36.8	36.8	40.2	30.1	30.1	26.8	26.8	26.8
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°	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4	3671.4
2.5°	3644.6	3637.9	3621.1	3577.6	3554.1	3540.7	3520.6	3513.9	3510.6	3513.9	3524.0
5°	3654.6	3631.2	3584.3	3513.9	3467.0	3436.9	3403.4	3390.0	3379.9	3379.9	3390.0
7.5°	3661.3	3624.5	3544.1	3440.2	3373.2	3326.3	3286.1	3269.4	3266.0	3276.1	3279.4
10°	3664.7	3611.1	3497.2	3366.5	3279.4	3219.1	3178.9	3168.9	3178.9	3199.0	3202.4
12.5°	3688.1	3614.4	3470.4	3316.3	3212.4	3152.1	3122.0	3122.0	3148.8	3185.6	3189.0
15°	3728.3	3637.9	3457.0	3276.1	3168.9	3115.3	3105.2	3122.0	3162.2	3219.1	3225.8
17.5°	3758.4	3651.3	3426.8	3222.5	3111.9	3078.4	3095.2	3135.4	3192.3	3269.4	3276.1
20°	3778.5	3651.3	3383.3	3158.8	3055.0	3048.3	3095.2	3158.8	3219.1	3309.6	3319.6
22.5°	3798.6	3644.6	3333.0	3081.8	2991.3	3011.4	3098.5	3178.9	3239.2	3336.4	3353.1
25°	3835.5	3654.6	3282.8	3004.7	2924.4	2981.3	3095.2	3192.3	3256.0	3356.5	3383.3
27.5°	3885.7	3678.1	3245.9	2934.4	2857.4	2934.4	3071.7	3189.0	3256.0	3353.1	3383.3
30°	3939.3	3704.8	3202.4	2857.4	2780.3	2867.4	3021.5	3152.1	3229.2	3319.6	3356.5
32.5°	3996.3	3735.0	3165.5	2773.6	2686.5	2777.0	2947.8	3095.2	3178.9	3262.7	3302.9
35°	4073.3	3788.6	3145.4	2706.6	2602.8	2683.2	2854.0	3021.5	3111.9	3189.0	3235.9
37.5°	4167.1	3855.6	3135.4	2639.6	2512.3	2579.3	2753.5	2931.1	3028.2	3091.8	3135.4
40°	4274.3	3939.3	3132.0	2576.0	2421.9	2472.1	2649.7	2827.2	2921.0	2971.2	3008.1
42.5°	4394.9	4033.1	3125.3	2512.3	2331.4	2371.6	2549.2	2723.4	2803.8	2847.3	2880.8
45°	4522.2	4126.9	3111.9	2435.3	2234.3	2281.2	2445.3	2599.4	2683.2	2720.0	2756.9
47.5°	4649.5	4220.7	3085.1	2348.2	2147.2	2190.8	2334.8	2468.8	2535.8	2569.3	2606.1
50°	4773.4	4304.5	3021.5	2247.7	2056.8	2097.0	2207.5	2297.9	2348.2	2375.0	2411.8
52.5°	4884.0	4361.4	2931.1	2130.5	1966.3	1986.4	2060.1	2137.2	2177.4	2180.7	2214.2
55°	4977.8	4391.6	2800.4	2009.9	1869.2	1872.5	1912.7	1973.0	1989.8	1976.4	1999.8
57.5°	5031.4	4374.8	2656.4	1885.9	1768.7	1755.3	1785.4	1815.6	1818.9	1785.4	1808.9
60°	5044.8	4297.8	2468.8	1762.0	1668.2	1631.3	1641.4	1634.7	1628.0	1614.6	1634.7
62.5°	4977.8	4133.6	2261.1	1641.4	1561.0	1504.0	1500.7	1497.3	1507.4	1510.7	1514.1
65°	4733.2	3825.4	2013.2	1517.4	1447.1	1370.1	1366.7	1406.9	1420.3	1400.2	1406.9
67.5°	4260.9	3353.1	1741.9	1373.4	1303.1	1236.1	1262.9	1286.3	1309.8	1303.1	1309.8
70°	3591.0	2753.5	1494.0	1212.6	1145.6	1108.8	1138.9	1159.0	1162.4	1155.7	1162.4
72.5°	2823.9	2150.6	1262.9	1048.5	988.2	971.4	1008.3	1025.0	1055.2	1068.6	1071.9
75°	2040.0	1587.8	1035.1	870.9	820.7	820.7	854.2	884.3	911.1	894.4	884.3
77.5°	1138.9	948.0	743.6	599.6	609.7	656.6	670.0	703.5	730.3	726.9	720.2
80°	690.1	592.9	502.5	388.6	385.2	422.1	509.2	566.1	579.5	549.4	546.0
82.5°	358.4	311.5	268.0	217.7	241.2	281.4	294.8	355.1	391.9	378.5	395.3
85°	90.4	87.1	97.1	100.5	123.9	137.3	150.7	177.5	117.2	56.9	56.9
87.5°	26.8	26.8	33.5	33.5	43.5	53.6	50.2	50.2	26.8	3.3	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)