

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: P841157

Luminaire Tested: **ARCH4-140-727-U-T2U**

Issue Date: 5/27/2024

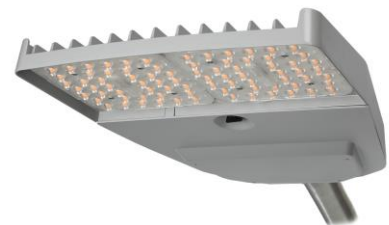
Test Information

Test Method: LM-79-08
Report Number: P841157
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22614 lumens
Efficiency: N/A
Efficacy: 160.0 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

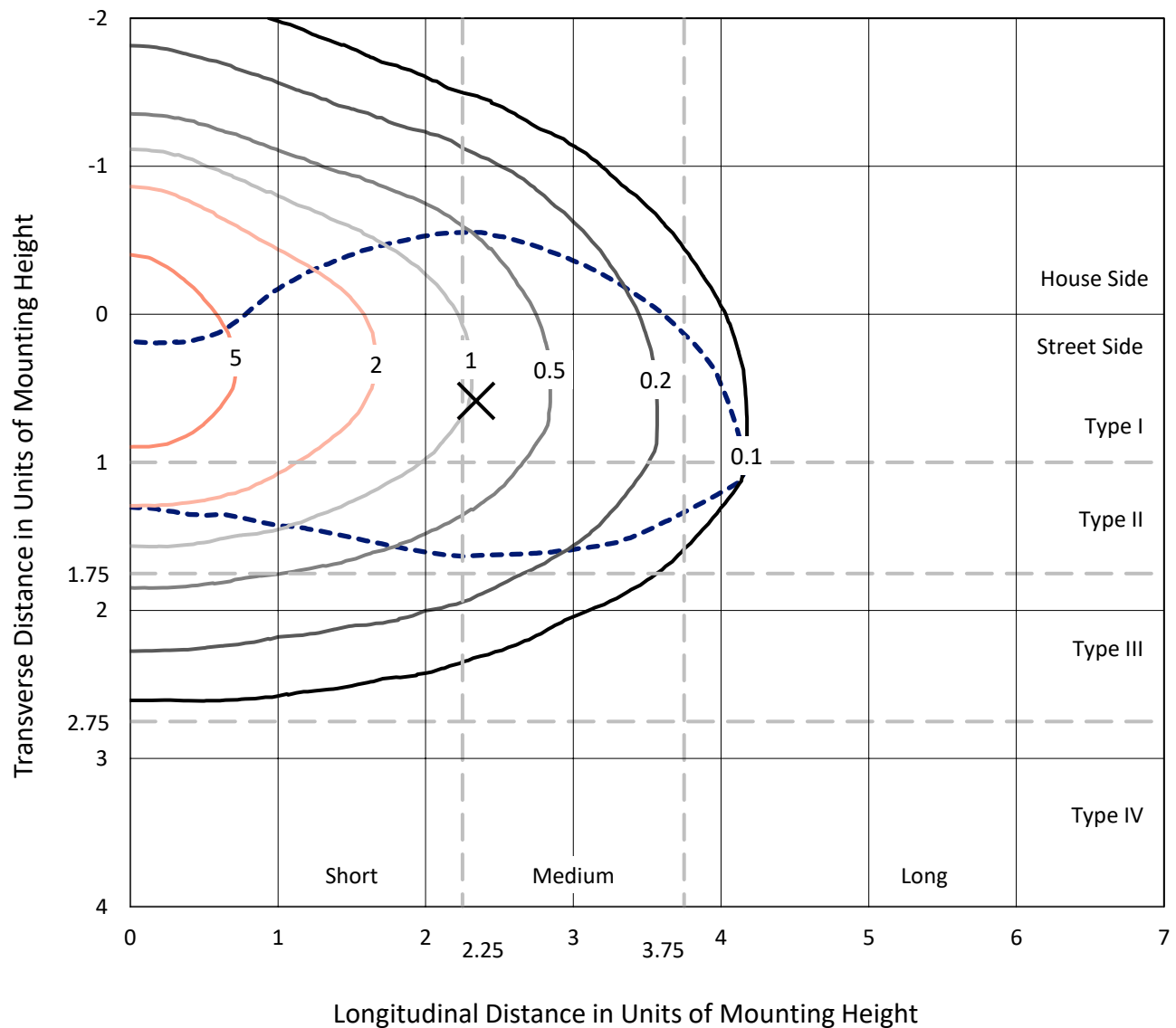
Input Watts (W): 141.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

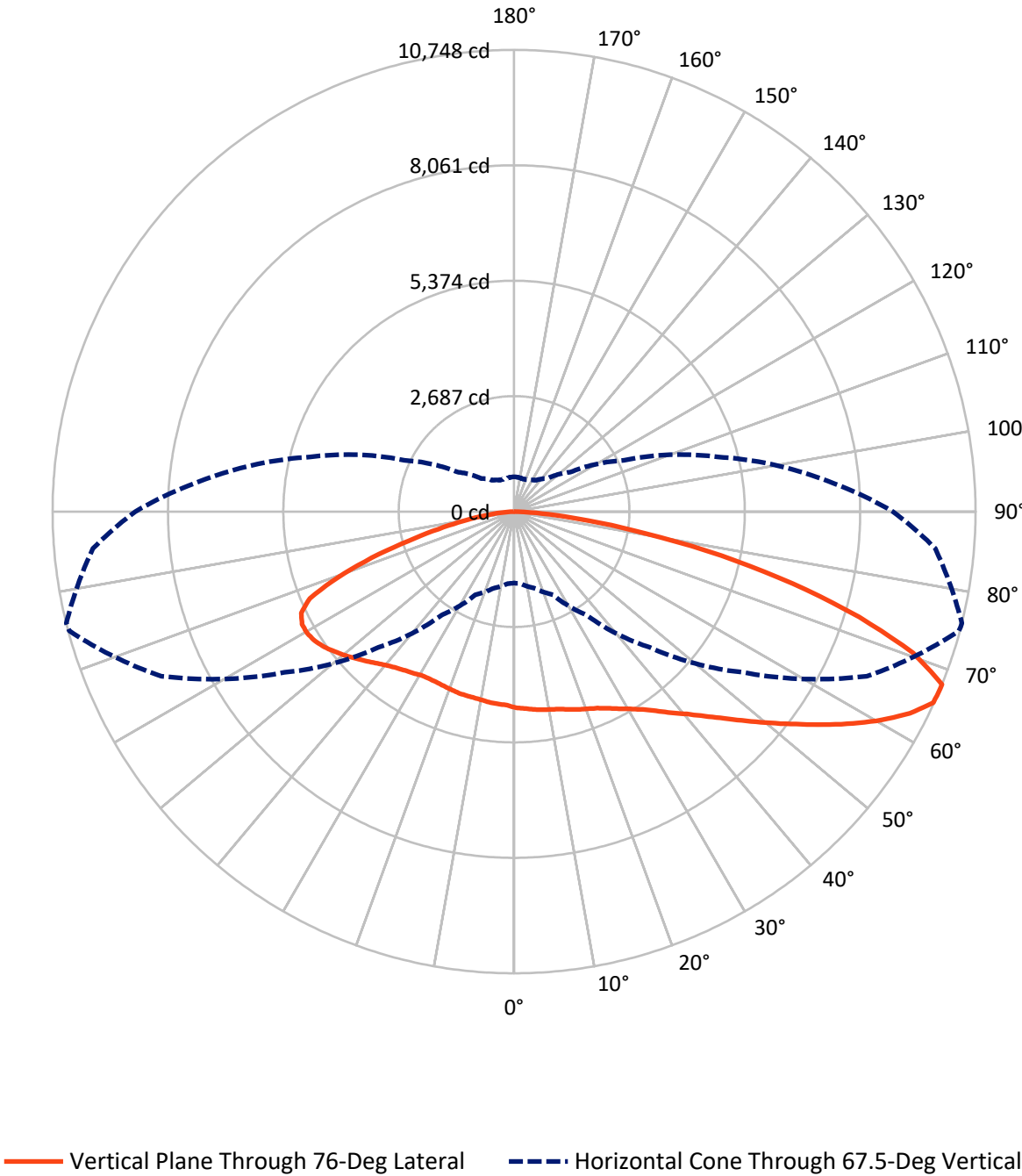
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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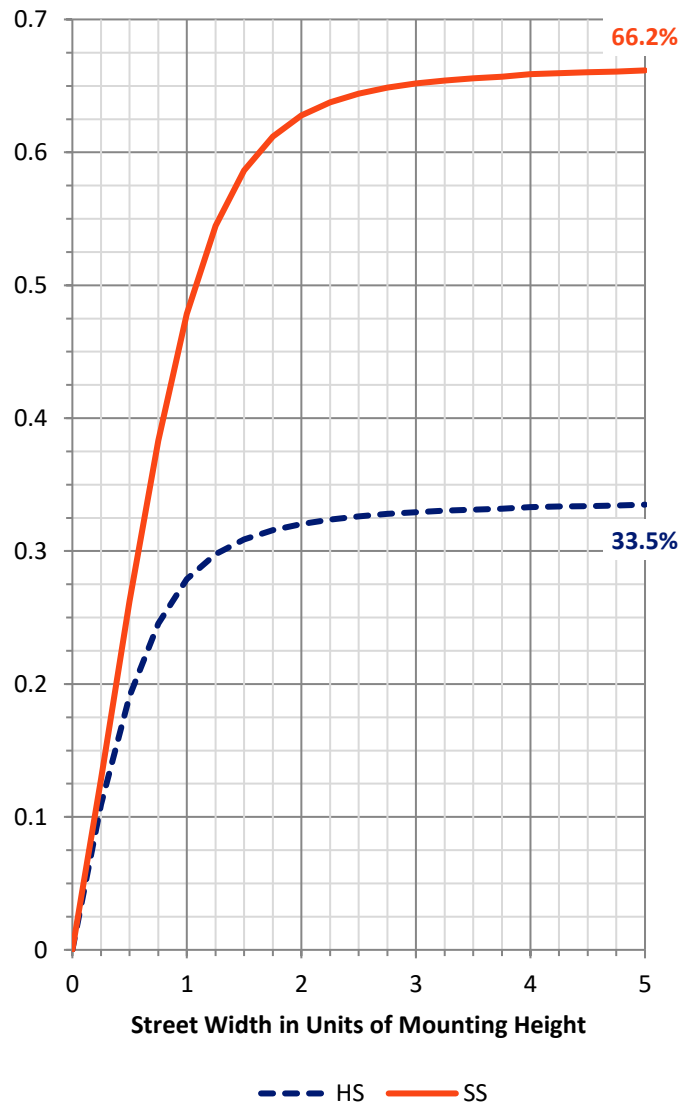
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7641.4	0.0	7641.4
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	14972.6	0.0	14972.6
	% Fixture	66.2	0.0	66.2
Total	Lumens	22614.0	0.0	22614.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	440.5	1.9
10°-20°	1346.6	6.0
20°-30°	2288.0	10.1
30°-40°	3255.5	14.4
40°-50°	4111.5	18.2
50°-60°	4451.5	19.7
60°-70°	4140.4	18.3
70°-80°	2223.8	9.8
80°-90°	356.3	1.6
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°	22614.0	100.0
0°-180°	22614.0	100.0

Coefficient of Utilization



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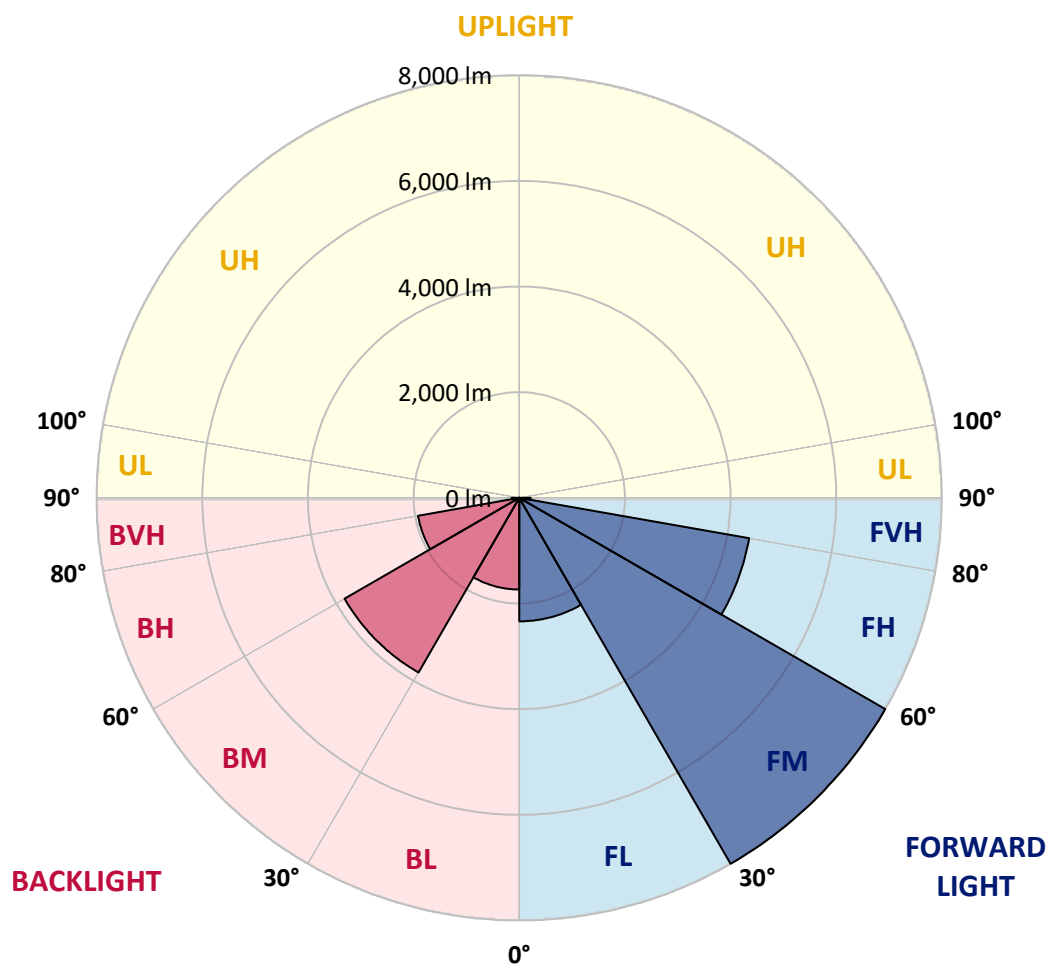
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2338.5	10.3			
FM	(30°-60°)	8000.0	35.4			
FH	(60°-80°)	4418.6	19.5			G2/5000
FVH	(80°-90°)	215.6	1.0			G2/225
BL	(0°-30°)	1736.5	7.7	B3/2500		
BM	(30°-60°)	3818.5	16.9	B3/5000		
BH	(60°-80°)	1945.6	8.6	B3/2500		G3/2500
BVH	(80°-90°)	140.8	0.6			G2/225
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°	76°	85°
0°	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0
2.5°	4706.5	4698.1	4664.5	4668.7	4668.7	4664.5	4614.2	4593.2	4593.2	4589.0	4542.8
5°	4874.5	4861.9	4824.1	4815.7	4798.9	4777.9	4698.1	4651.9	4631.0	4626.8	4563.8
7.5°	5071.8	5055.0	5008.8	4983.6	4941.6	4887.1	4786.3	4714.9	4664.5	4660.3	4572.2
10°	5269.1	5252.3	5197.8	5151.6	5092.8	5004.6	4874.5	4769.5	4689.7	4681.3	4576.4
12.5°	5504.2	5487.5	5420.3	5361.5	5273.3	5155.8	4983.6	4840.9	4731.7	4719.1	4589.0
15°	5752.0	5726.8	5659.6	5592.4	5483.3	5332.1	5126.4	4937.4	4798.9	4777.9	4626.8
17.5°	5957.7	5924.1	5869.5	5802.3	5680.6	5504.2	5269.1	5034.0	4861.9	4845.1	4664.5
20°	6134.0	6108.8	6050.1	5987.1	5856.9	5663.8	5403.5	5130.6	4920.7	4899.7	4693.9
22.5°	6302.0	6268.4	6234.8	6188.6	6045.9	5831.7	5558.8	5248.1	4996.2	4971.0	4731.7
25°	6495.1	6457.3	6444.7	6419.5	6251.6	6033.3	5747.8	5395.1	5101.2	5071.8	4798.9
27.5°	6734.4	6692.4	6667.2	6667.2	6465.7	6239.0	5949.3	5567.2	5222.9	5197.8	4882.9
30°	6986.3	6935.9	6898.2	6898.2	6671.4	6444.7	6146.6	5739.4	5361.5	5332.1	4992.0
32.5°	7208.8	7158.5	7116.5	7112.3	6877.2	6650.4	6352.3	5928.3	5529.4	5491.7	5126.4
35°	7381.0	7334.8	7297.0	7305.4	7082.9	6860.4	6583.3	6180.2	5739.4	5697.4	5302.7
37.5°	7485.9	7469.1	7448.2	7477.5	7271.8	7061.9	6822.6	6423.7	5978.7	5940.9	5521.0
40°	7540.5	7527.9	7611.9	7649.7	7431.4	7242.4	7061.9	6675.6	6239.0	6197.0	5773.0
42.5°	7620.3	7725.3	7758.8	7750.4	7548.9	7381.0	7280.2	6948.5	6545.5	6507.7	6075.2
45°	7334.8	7309.6	7494.3	7595.1	7557.3	7469.1	7485.9	7276.0	6902.3	6864.6	6423.7
47.5°	6952.7	6919.1	7024.1	7271.8	7418.8	7502.7	7670.7	7616.1	7313.8	7280.2	6831.0
50°	6146.6	6192.8	6583.3	6914.9	7204.6	7494.3	7826.0	7981.4	7767.2	7733.7	7267.6
52.5°	5252.3	5298.5	5705.8	6469.9	6944.3	7431.4	7939.4	8346.6	8258.5	8220.7	7733.7
55°	4601.6	4702.3	5164.2	5718.4	6574.9	7234.0	8006.6	8720.3	8787.5	8753.9	8241.7
57.5°	3955.0	4030.6	4379.0	4870.3	6071.0	6889.8	8002.4	9068.8	9341.7	9308.1	8758.1
60°	3195.1	3291.6	3568.7	4097.7	5399.3	6478.3	7884.8	9341.7	9874.9	9849.7	9257.7
62.5°	2674.5	2703.8	2901.2	3358.8	4534.4	5957.7	7620.3	9488.6	10357.7	10340.9	9707.0
65°	2153.8	2158.0	2338.6	2720.6	3698.9	5311.1	7171.1	9434.1	10723.0	10731.4	10030.2
67.5°	1662.6	1683.6	1847.3	2137.0	2939.0	4471.4	6528.7	9064.6	10727.2	10748.2	9845.5
70°	1150.4	1167.2	1414.9	1696.2	2271.4	3564.5	5659.6	8086.3	9845.5	9862.3	8825.3
72.5°	810.3	818.7	1083.2	1356.1	1776.0	2687.0	4269.9	6688.2	8392.8	8405.4	7423.0
75°	604.6	613.0	764.1	1028.6	1360.3	1859.9	2918.0	5122.2	6705.0	6705.0	5861.1
77.5°	428.2	432.4	495.4	709.5	906.9	1255.4	1755.0	3354.6	4920.7	4929.0	4269.9
80°	289.7	293.9	323.3	478.6	566.8	680.2	953.1	1759.2	3102.7	3115.3	2712.2
82.5°	151.1	159.5	180.5	243.5	285.5	377.9	491.2	894.3	1717.2	1750.8	1629.0
85°	58.8	58.8	67.2	79.8	105.0	146.9	226.7	340.1	776.7	801.9	717.9
87.5°	21.0	21.0	25.2	25.2	29.4	33.6	37.8	50.4	88.2	88.2	84.0
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°	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0	4568.0
2.5°	4526.0	4526.0	4505.0	4513.4	4509.2	4500.8	4492.4	4505.0	4492.4	4463.0	4458.8
5°	4534.4	4526.0	4492.4	4488.2	4475.6	4458.8	4437.8	4446.2	4425.2	4400.0	4395.8
7.5°	4538.6	4521.8	4475.6	4458.8	4433.6	4400.0	4366.4	4366.4	4337.1	4311.9	4307.7
10°	4530.2	4509.2	4446.2	4412.6	4366.4	4316.1	4269.9	4257.3	4223.7	4194.3	4194.3
12.5°	4534.4	4505.0	4425.2	4370.6	4307.7	4244.7	4185.9	4169.1	4139.7	4110.3	4106.1
15°	4559.6	4517.6	4416.8	4345.5	4253.1	4181.7	4118.7	4106.1	4081.0	4060.0	4060.0
17.5°	4584.8	4530.2	4404.2	4303.5	4190.1	4110.3	4051.6	4051.6	4034.8	4022.2	4022.2
20°	4597.4	4534.4	4379.0	4244.7	4114.5	4030.6	3976.0	3984.4	3980.2	3976.0	3976.0
22.5°	4626.8	4542.8	4358.1	4190.1	4034.8	3946.6	3896.2	3908.8	3904.6	3904.6	3908.8
25°	4672.9	4563.8	4341.3	4139.7	3959.2	3862.6	3808.0	3816.4	3816.4	3816.4	3816.4
27.5°	4735.9	4605.8	4337.1	4093.5	3883.6	3774.5	3707.3	3707.3	3690.5	3694.7	3698.9
30°	4832.5	4685.5	4345.5	4051.6	3803.8	3665.3	3585.5	3572.9	3568.7	3577.1	3581.3
32.5°	4950.0	4794.7	4395.8	4022.2	3719.9	3543.5	3442.8	3438.6	3426.0	3426.0	3426.0
35°	5097.0	4899.7	4442.0	4018.0	3635.9	3413.4	3304.2	3291.6	3262.2	3249.6	3249.6
37.5°	5285.9	5063.4	4496.6	3988.6	3564.5	3287.4	3157.3	3115.3	3081.7	3077.5	3077.5
40°	5516.8	5248.1	4576.4	3955.0	3489.0	3157.3	2985.1	2913.8	2918.0	2934.8	2934.8
42.5°	5789.7	5474.9	4677.1	3938.2	3379.8	3022.9	2783.6	2699.6	2729.0	2745.8	2750.0
45°	6108.8	5743.6	4790.5	3917.2	3279.0	2871.8	2569.5	2464.5	2477.1	2481.3	2485.5
47.5°	6478.3	6041.7	4908.1	3900.4	3165.7	2682.8	2334.4	2195.8	2191.6	2166.4	2174.8
50°	6864.6	6356.5	5029.8	3871.0	3027.1	2460.3	2086.7	1922.9	1889.3	1851.5	1855.7
52.5°	7276.0	6679.8	5143.2	3824.8	2855.0	2233.6	1851.5	1675.2	1608.0	1566.0	1574.4
55°	7729.5	7011.5	5252.3	3753.5	2674.5	2006.9	1641.6	1461.1	1377.1	1343.5	1347.7
57.5°	8145.1	7330.6	5332.1	3665.3	2477.1	1801.2	1456.9	1280.5	1226.0	1221.8	1226.0
60°	8548.2	7599.3	5365.7	3543.5	2275.6	1612.2	1284.7	1150.4	1112.6	1133.6	1137.8
62.5°	8888.2	7771.4	5348.9	3379.8	2069.9	1431.7	1146.2	1049.6	1024.4	1066.4	1070.6
65°	9085.6	7826.0	5231.3	3144.7	1847.3	1255.4	1016.0	911.1	898.5	923.7	936.3
67.5°	8825.3	7485.9	4912.3	2821.4	1599.6	1091.6	890.1	806.1	785.1	806.1	806.1
70°	7821.8	6486.7	4156.5	2309.2	1326.7	932.1	772.5	713.7	697.0	713.7	709.5
72.5°	6516.1	5395.1	3274.8	1801.2	1045.4	785.1	671.8	617.2	600.4	583.6	575.2
75°	5055.0	4097.7	2376.4	1322.5	789.3	629.8	562.6	512.2	470.2	487.0	478.6
77.5°	3703.1	2876.0	1683.6	915.3	566.8	487.0	440.8	403.1	373.7	407.3	403.1
80°	2384.8	1859.9	1125.2	613.0	390.5	340.1	323.3	302.3	331.7	432.4	440.8
82.5°	1456.9	1179.8	671.8	398.9	256.1	226.7	209.9	209.9	340.1	373.7	377.9
85°	650.8	625.6	365.3	205.7	142.7	130.2	117.6	151.1	138.6	100.8	105.0
87.5°	105.0	109.2	79.8	71.4	54.6	54.6	42.0	29.4	21.0	12.6	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

(END OF REPORT)