

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: P841458

Luminaire Tested: **ARCH4-180-730-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841458
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: ARCH4-180-730-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27878 lumens
Efficiency: N/A
Efficacy: 154.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 180
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



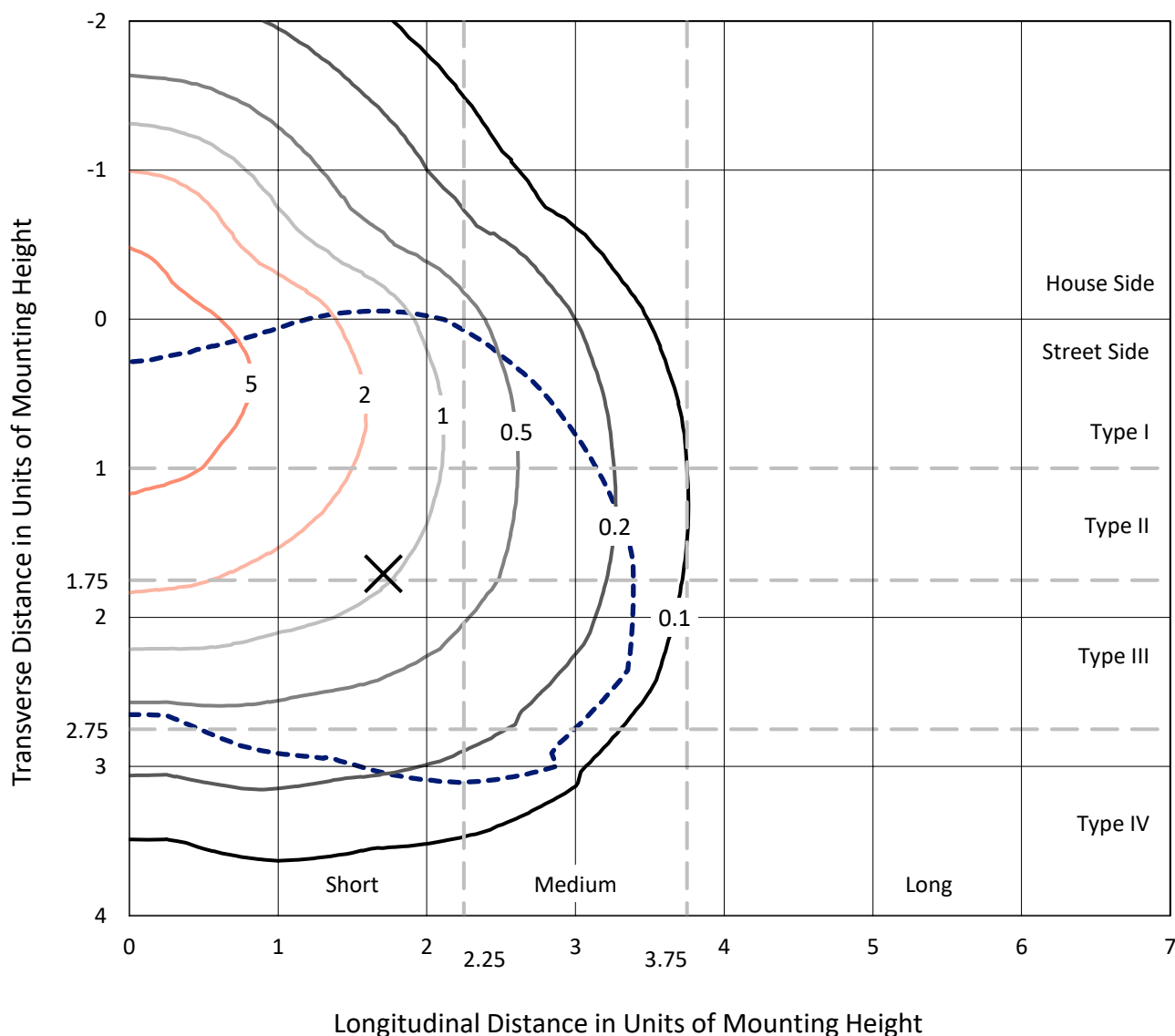
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

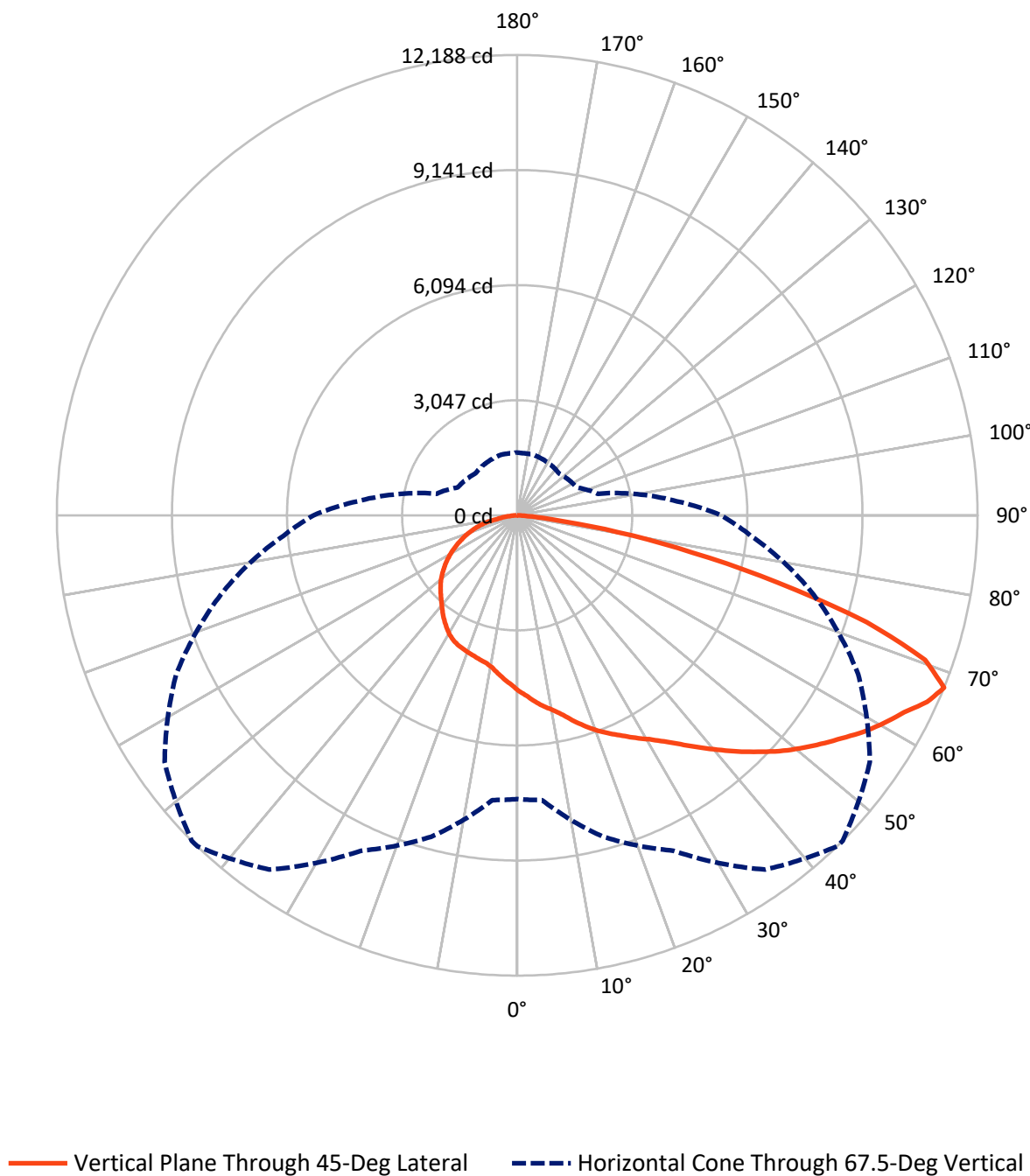


Based on 25 foot mounting height. Maximum calculated value = 8.6 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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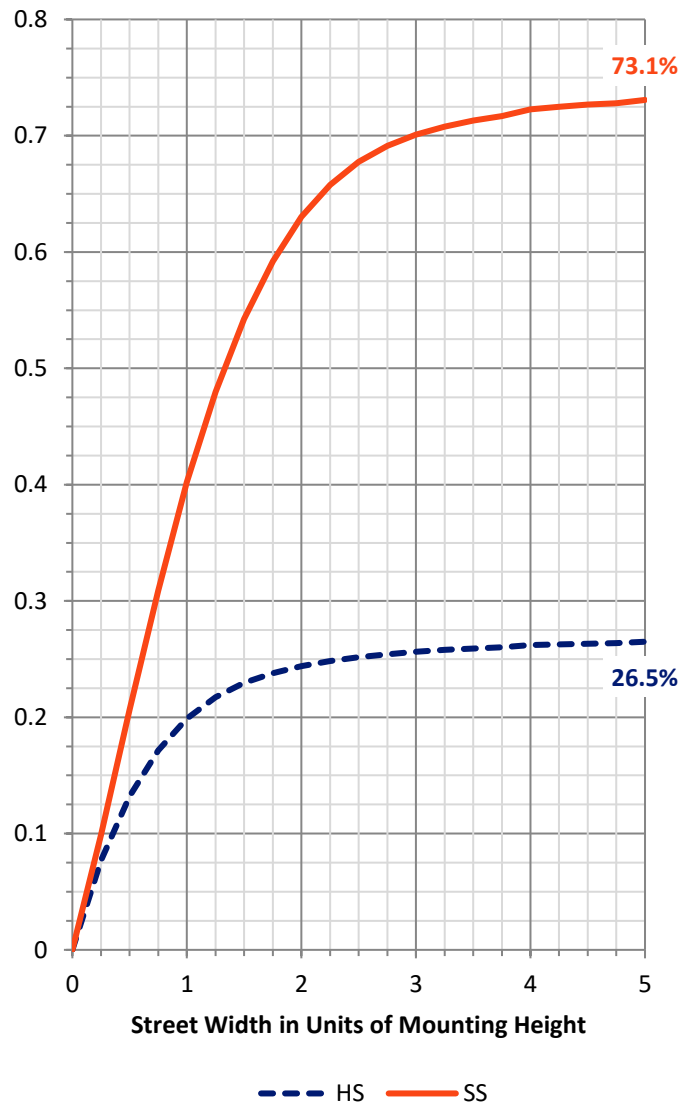
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7447.6	0.0	7447.6
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	20430.4	0.0	20430.4
	% Fixture	73.3	0.0	73.3
Total	Lumens	27878.0	0.0	27878.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	445.2	1.6
10°-20°	1375.2	4.9
20°-30°	2373.7	8.5
30°-40°	3500.4	12.6
40°-50°	4742.4	17.0
50°-60°	5796.3	20.8
60°-70°	5978.1	21.4
70°-80°	3274.4	11.7
80°-90°	392.5	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°	27878.0	100.0
0°-180°	27878.0	100.0

Coefficient of Utilization



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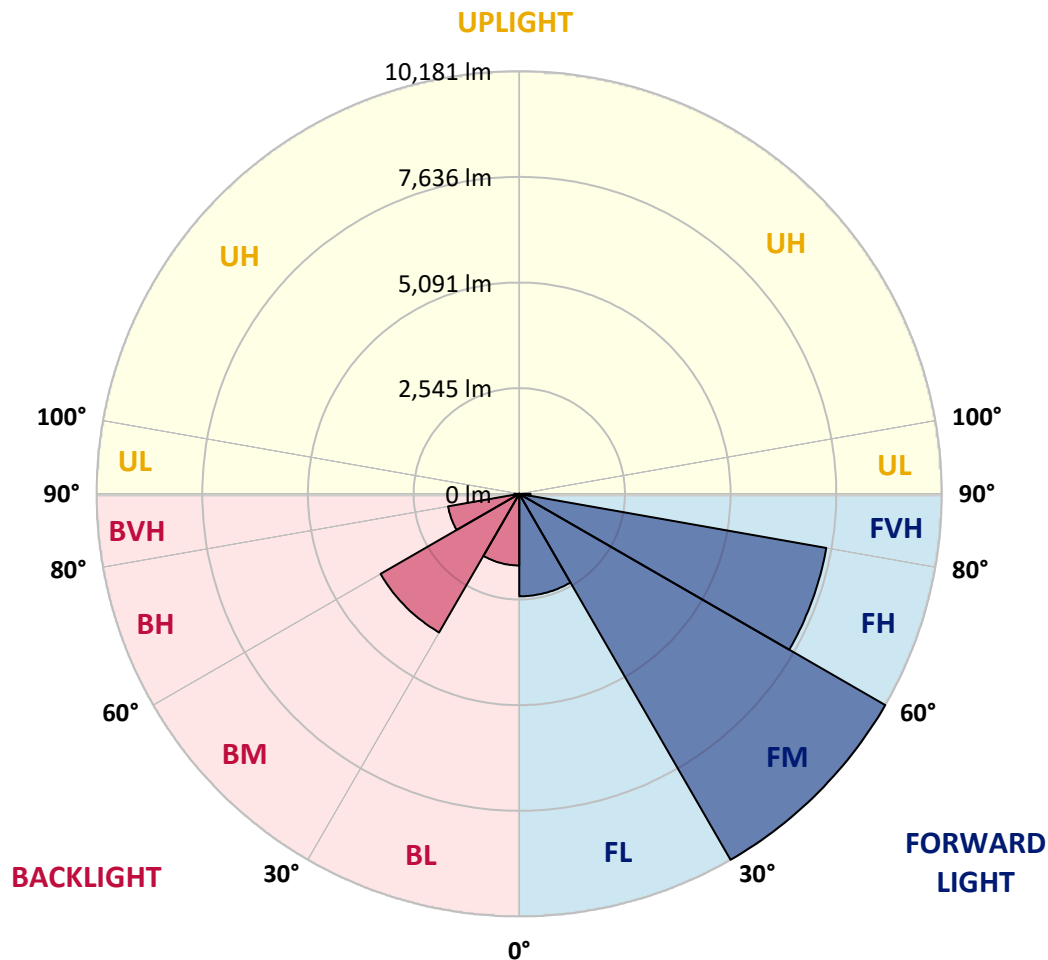
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2468.0	8.9			
FM	(30°-60°)	10181.3	36.5			
FH	(60°-80°)	7510.7	26.9			G4/12000
FVH	(80°-90°)	270.4	1.0			G3/500
BL	(0°-30°)	1726.1	6.2	B3/2500		
BM	(30°-60°)	3857.8	13.8	B3/5000		
BH	(60°-80°)	1741.7	6.2	B3/2500		G3/2500
BVH	(80°-90°)	122.1	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5
2.5°	4853.2	4848.9	4857.4	4827.7	4789.5	4785.3	4785.3	4759.8	4730.1	4670.7	4624.1
5°	5082.2	5073.7	5078.0	5035.6	4984.7	4959.2	4955.0	4899.8	4831.9	4738.6	4653.8
7.5°	5294.3	5285.9	5281.6	5235.0	5158.6	5116.2	5111.9	5031.3	4950.7	4806.5	4683.5
10°	5493.7	5485.2	5476.8	5413.1	5319.8	5256.2	5247.7	5145.9	5044.1	4865.9	4708.9
12.5°	5748.3	5731.3	5722.8	5646.5	5510.7	5442.8	5430.1	5294.3	5167.1	4950.7	4759.8
15°	6015.5	6002.8	5990.1	5918.0	5765.2	5676.1	5654.9	5485.2	5311.3	5061.0	4836.2
17.5°	6214.9	6202.2	6202.2	6138.6	5998.6	5896.7	5879.8	5676.1	5459.8	5162.8	4895.6
20°	6337.9	6325.2	6337.9	6299.8	6193.7	6108.9	6091.9	5867.1	5608.3	5256.2	4946.5
22.5°	6427.0	6414.3	6435.5	6418.5	6342.2	6291.3	6278.6	6058.0	5761.0	5353.7	4997.4
25°	6584.0	6584.0	6584.0	6554.3	6482.2	6465.2	6465.2	6274.3	5956.1	5481.0	5073.7
27.5°	6897.9	6881.0	6859.7	6774.9	6651.9	6647.6	6673.1	6494.9	6181.0	5646.5	5167.1
30°	7360.3	7351.8	7271.2	7093.1	6885.2	6864.0	6881.0	6732.5	6422.8	5820.4	5273.1
32.5°	7958.5	7928.8	7763.3	7496.1	7199.1	7101.6	7135.5	6978.5	6677.3	5998.6	5374.9
35°	8382.7	8391.2	8272.4	8030.6	7678.5	7419.7	7445.2	7254.3	6953.1	6197.9	5502.2
37.5°	8870.6	8900.3	8722.1	8539.7	8213.0	7771.8	7797.3	7538.5	7228.8	6448.2	5638.0
40°	9545.1	9485.7	9184.5	8968.1	8607.6	8140.9	8162.1	7856.7	7547.0	6685.8	5794.9
42.5°	10109.3	10003.3	9638.4	9362.7	8930.0	8531.2	8552.4	8200.3	7869.4	6948.8	5968.9
45°	10919.6	10626.9	10100.8	9965.1	9260.9	8913.0	8934.2	8565.1	8208.8	7228.8	6155.5
47.5°	11390.5	10923.8	10588.7	10516.6	9625.7	9307.5	9333.0	8951.2	8573.6	7547.0	6350.7
50°	11360.8	11059.6	10962.0	10783.8	9948.1	9676.6	9702.1	9350.0	8942.7	7860.9	6537.3
52.5°	11165.6	11220.8	11169.9	10872.9	10270.5	10033.0	10062.7	9744.5	9320.3	8153.6	6711.3
55°	11466.8	11505.0	11407.4	11017.2	10626.9	10389.3	10423.2	10160.2	9693.6	8412.4	6859.7
57.5°	11827.4	11691.7	11594.1	11271.7	10995.9	10775.4	10813.5	10584.4	10016.0	8620.3	6974.3
60°	11810.5	11526.2	11623.8	11288.7	11246.2	11131.7	11165.6	10932.3	10262.0	8773.0	7020.9
62.5°	10940.8	10788.1	11280.2	11165.6	11449.9	11449.9	11492.3	11144.4	10410.5	8836.6	6995.5
65°	9430.6	9439.0	10304.5	10779.6	11691.7	11886.8	11920.8	11275.9	10325.7	8650.0	6757.9
67.5°	7513.1	7568.2	8811.2	9799.6	11449.9	12183.8	12188.0	11394.7	9960.8	8123.9	6206.4
70°	5498.0	5540.4	7008.2	8208.8	10308.7	11526.2	11458.4	11059.6	9167.5	7207.6	5345.3
72.5°	3716.2	3754.4	5264.6	6304.0	8459.1	9816.6	9668.1	9774.2	7814.3	5922.2	4297.4
75°	2498.7	2545.4	3745.9	4509.5	6223.4	7453.7	7122.8	7402.8	6045.2	4484.1	3135.0
77.5°	1573.9	1603.6	2379.9	2956.9	4250.7	5073.7	4742.9	4747.1	3482.9	2413.8	1684.2
80°	1001.2	1009.7	1442.4	1705.4	2460.5	3050.2	2698.1	2193.3	1569.6	1281.2	1005.4
82.5°	581.2	568.5	861.2	963.0	1170.9	1158.1	958.8	907.8	687.2	640.6	513.3
85°	233.3	216.4	377.6	352.1	356.4	377.6	280.0	280.0	224.8	173.9	127.3
87.5°	46.7	46.7	50.9	46.7	46.7	50.9	38.2	38.2	33.9	33.9	33.9
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°	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5	4649.5
2.5°	4615.6	4607.1	4585.9	4530.7	4501.0	4484.1	4458.6	4450.1	4445.9	4450.1	4462.9
5°	4628.3	4598.6	4539.2	4450.1	4390.7	4352.6	4310.1	4293.2	4280.4	4280.4	4293.2
7.5°	4636.8	4590.1	4488.3	4356.8	4272.0	4212.6	4161.7	4140.4	4136.2	4148.9	4153.2
10°	4641.0	4573.2	4428.9	4263.5	4153.2	4076.8	4025.9	4013.2	4025.9	4051.4	4055.6
12.5°	4670.7	4577.4	4395.0	4199.8	4068.3	3992.0	3953.8	3953.8	3987.7	4034.4	4038.6
15°	4721.6	4607.1	4378.0	4148.9	4013.2	3945.3	3932.6	3953.8	4004.7	4076.8	4085.3
17.5°	4759.8	4624.1	4339.8	4081.1	3941.1	3898.6	3919.9	3970.8	4042.9	4140.4	4148.9
20°	4785.3	4624.1	4284.7	4000.5	3868.9	3860.5	3919.9	4000.5	4076.8	4191.4	4204.1
22.5°	4810.7	4615.6	4221.1	3902.9	3788.3	3813.8	3924.1	4025.9	4102.3	4225.3	4246.5
25°	4857.4	4628.3	4157.4	3805.3	3703.5	3775.6	3919.9	4042.9	4123.5	4250.7	4284.7
27.5°	4921.0	4658.0	4110.8	3716.2	3618.7	3716.2	3890.2	4038.6	4123.5	4246.5	4284.7
30°	4988.9	4691.9	4055.6	3618.7	3521.1	3631.4	3826.5	3992.0	4089.5	4204.1	4250.7
32.5°	5061.0	4730.1	4008.9	3512.6	3402.3	3516.8	3733.2	3919.9	4025.9	4132.0	4182.9
35°	5158.6	4798.0	3983.5	3427.7	3296.2	3398.1	3614.4	3826.5	3941.1	4038.6	4098.0
37.5°	5277.4	4882.8	3970.8	3342.9	3181.7	3266.5	3487.1	3712.0	3835.0	3915.6	3970.8
40°	5413.1	4988.9	3966.5	3262.3	3067.2	3130.8	3355.6	3580.5	3699.3	3762.9	3809.6
42.5°	5565.9	5107.7	3958.0	3181.7	2952.6	3003.5	3228.4	3449.0	3550.8	3605.9	3648.3
45°	5727.1	5226.5	3941.1	3084.1	2829.6	2889.0	3096.9	3292.0	3398.1	3444.7	3491.4
47.5°	5888.3	5345.3	3907.1	2973.8	2719.3	2774.4	2956.9	3126.5	3211.4	3253.8	3300.5
50°	6045.2	5451.3	3826.5	2846.6	2604.8	2655.7	2795.7	2910.2	2973.8	3007.8	3054.4
52.5°	6185.2	5523.4	3712.0	2698.1	2490.2	2515.7	2609.0	2706.6	2757.5	2761.7	2804.1
55°	6304.0	5561.6	3546.5	2545.4	2367.2	2371.4	2422.3	2498.7	2519.9	2502.9	2532.6
57.5°	6371.9	5540.4	3364.1	2388.4	2239.9	2222.9	2261.1	2299.3	2303.5	2261.1	2290.8
60°	6388.9	5442.8	3126.5	2231.4	2112.6	2066.0	2078.7	2070.2	2061.7	2044.8	2070.2
62.5°	6304.0	5235.0	2863.5	2078.7	1976.9	1904.8	1900.5	1896.3	1909.0	1913.3	1917.5
65°	5994.3	4844.7	2549.6	1921.7	1832.7	1735.1	1730.8	1781.8	1798.7	1773.3	1781.8
67.5°	5396.2	4246.5	2206.0	1739.3	1650.2	1565.4	1599.3	1629.0	1658.7	1650.2	1658.7
70°	4547.7	3487.1	1892.0	1535.7	1450.9	1404.2	1442.4	1467.8	1472.1	1463.6	1472.1
72.5°	3576.2	2723.5	1599.3	1327.8	1251.5	1230.3	1276.9	1298.1	1336.3	1353.3	1357.5
75°	2583.5	2010.8	1310.9	1103.0	1039.4	1039.4	1081.8	1120.0	1153.9	1132.7	1120.0
77.5°	1442.4	1200.6	941.8	759.4	772.1	831.5	848.5	890.9	924.8	920.6	912.1
80°	873.9	750.9	636.3	492.1	487.9	534.5	644.8	716.9	733.9	695.7	691.5
82.5°	453.9	394.5	339.4	275.7	305.4	356.4	373.3	449.7	496.3	479.4	500.6
85°	114.5	110.3	123.0	127.3	157.0	173.9	190.9	224.8	148.5	72.1	72.1
87.5°	33.9	33.9	42.4	42.4	55.1	67.9	63.6	63.6	33.9	4.2	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)