

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: P841445

Luminaire Tested: **ARCH4-180-727-U-T2U**

Issue Date: 5/27/2024

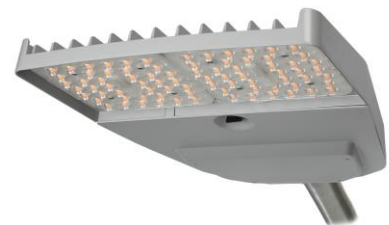
Test Information

Test Method: LM-79-08
Report Number: P841445
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: ARCH4-180-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27637 lumens
Efficiency: N/A
Efficacy: 153.5 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

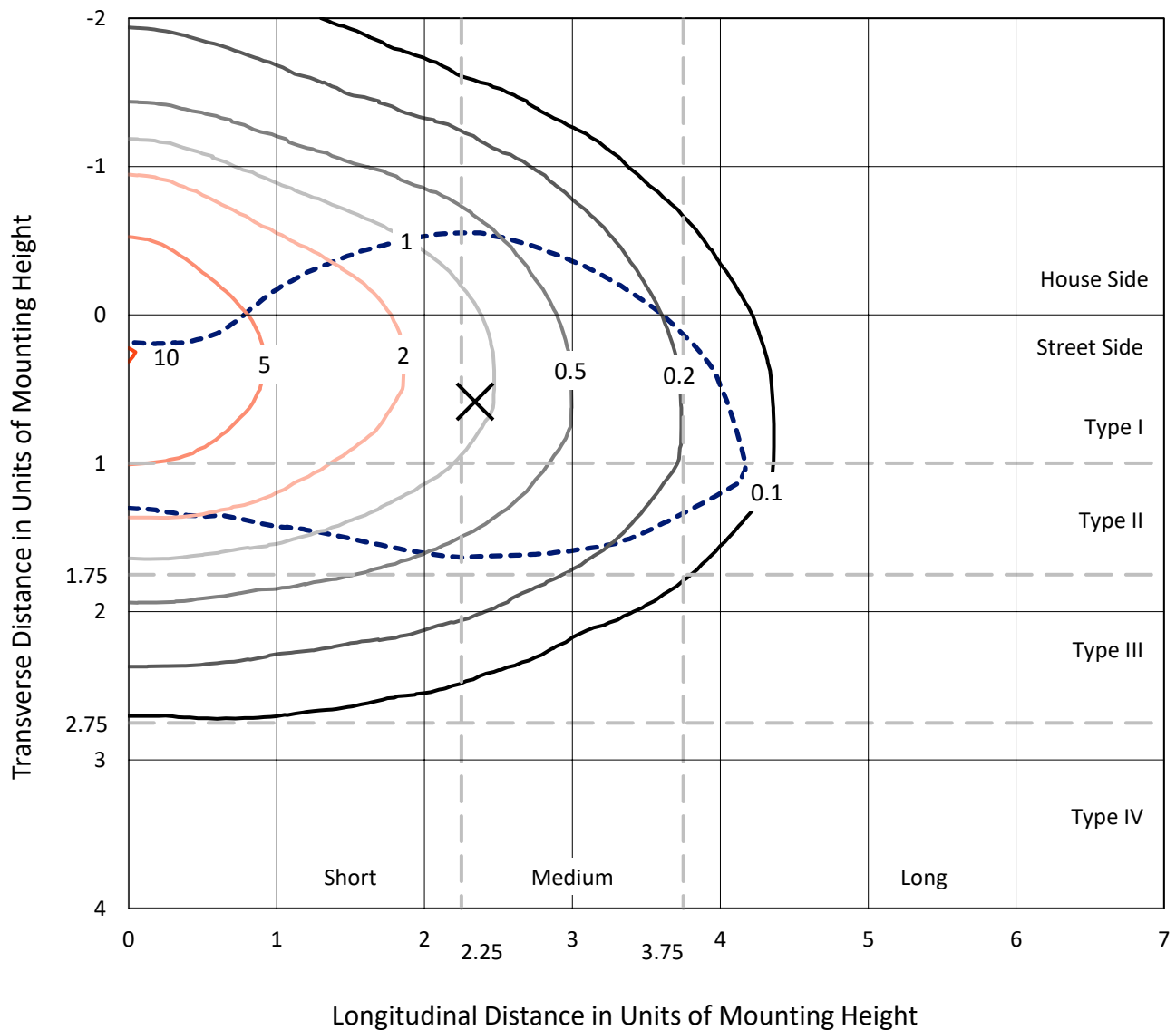
Input Watts (W): 180
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

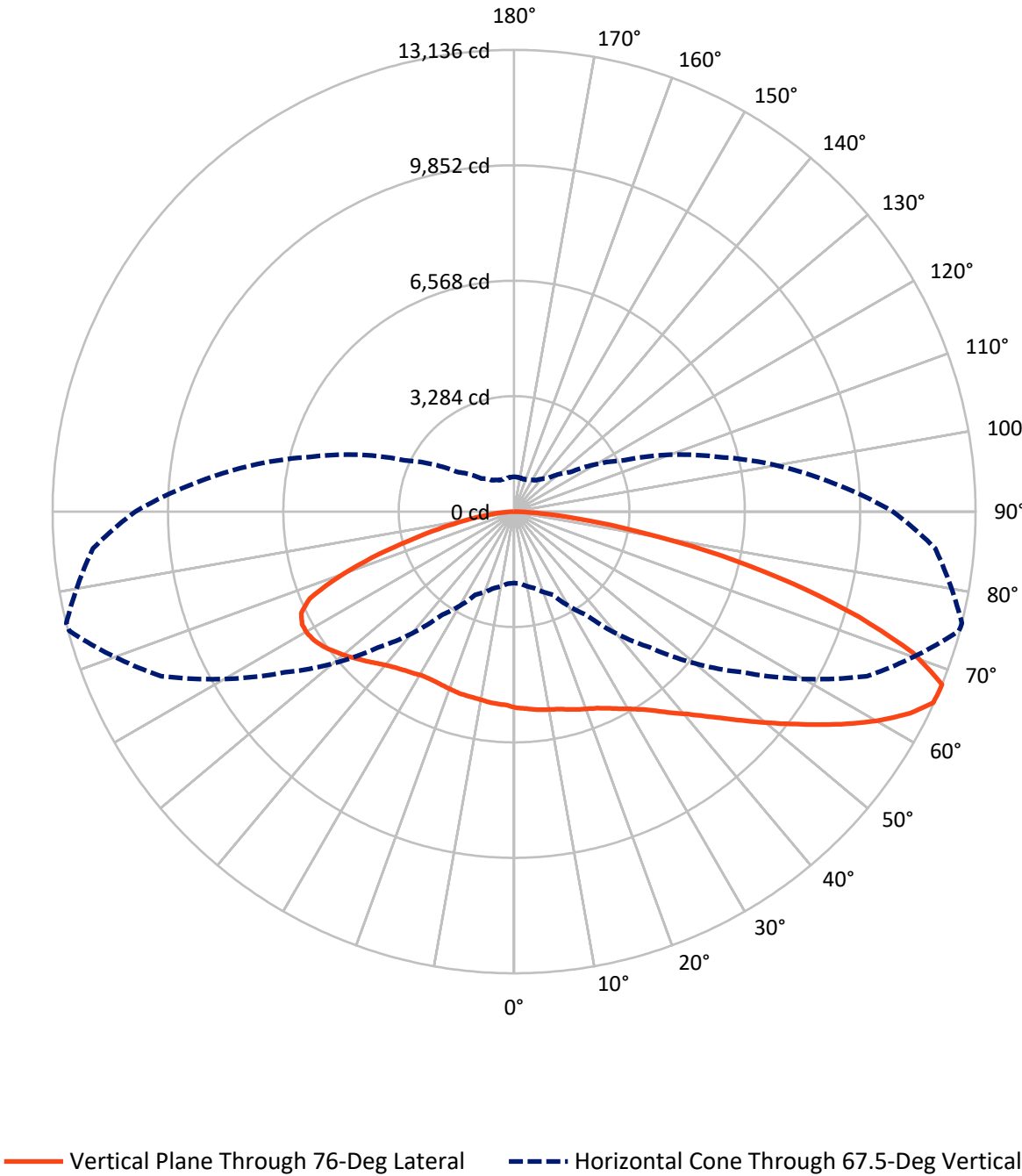
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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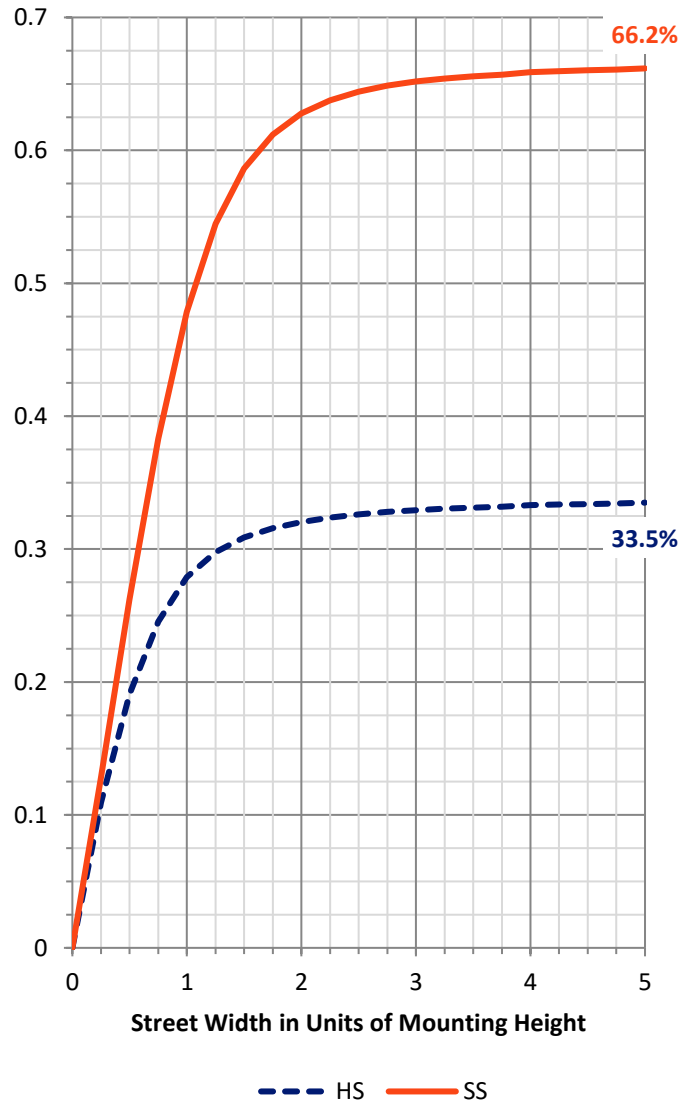
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9338.7	0.0	9338.7
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	18298.3	0.0	18298.3
	% Fixture	66.2	0.0	66.2
Total	Lumens	27637.0	0.0	27637.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	538.3	1.9
10°-20°	1645.7	6.0
20°-30°	2796.2	10.1
30°-40°	3978.6	14.4
40°-50°	5024.8	18.2
50°-60°	5440.3	19.7
60°-70°	5060.0	18.3
70°-80°	2717.7	9.8
80°-90°	435.5	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°	27637.0	100.0
0°-180°	27637.0	100.0

Coefficient of Utilization



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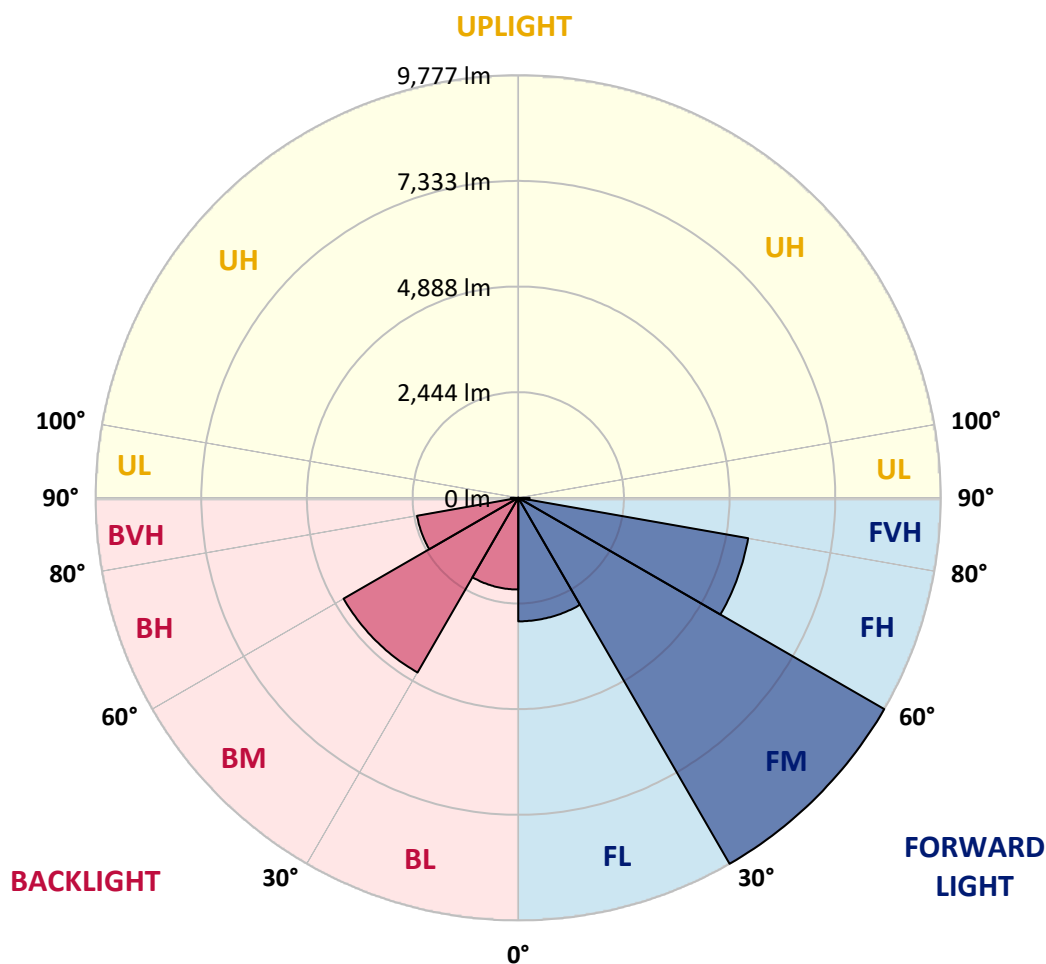
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2858.0	10.3			
FM	(30°-60°)	9776.9	35.4			
FH	(60°-80°)	5400.0	19.5			G3/7500
FVH	(80°-90°)	263.4	1.0			G3/500
BL	(0°-30°)	2122.2	7.7	B3/2500		
BM	(30°-60°)	4666.7	16.9	B3/5000		
BH	(60°-80°)	2377.7	8.6	B3/2500		G3/2500
BVH	(80°-90°)	172.1	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°	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6
2.5°	5751.9	5741.7	5700.6	5705.8	5705.8	5700.6	5639.1	5613.4	5613.4	5608.3	5551.8
5°	5957.2	5941.8	5895.6	5885.3	5864.8	5839.2	5741.7	5685.2	5659.6	5654.4	5577.5
7.5°	6198.3	6177.8	6121.4	6090.6	6039.3	5972.6	5849.4	5762.2	5700.6	5695.5	5587.7
10°	6439.5	6419.0	6352.3	6295.8	6224.0	6116.2	5957.2	5828.9	5731.4	5721.2	5592.9
12.5°	6726.8	6706.3	6624.2	6552.4	6444.6	6301.0	6090.6	5916.1	5782.7	5767.3	5608.3
15°	7029.6	6998.8	6916.7	6834.6	6701.2	6516.5	6265.0	6034.1	5864.8	5839.2	5654.4
17.5°	7281.0	7240.0	7173.2	7091.1	6942.3	6726.8	6439.5	6152.2	5941.8	5921.3	5700.6
20°	7496.5	7465.7	7393.9	7316.9	7157.9	6921.8	6603.7	6270.2	6013.6	5988.0	5736.5
22.5°	7701.7	7660.7	7619.7	7563.2	7388.8	7127.1	6793.5	6413.8	6106.0	6075.2	5782.7
25°	7937.8	7891.6	7876.2	7845.4	7640.2	7373.4	7024.4	6593.4	6234.3	6198.3	5864.8
27.5°	8230.2	8178.9	8148.2	8148.2	7901.9	7624.8	7270.7	6803.8	6383.1	6352.3	5967.4
30°	8538.1	8476.5	8430.4	8430.4	8153.3	7876.2	7511.9	7014.2	6552.4	6516.5	6100.9
32.5°	8810.1	8748.5	8697.2	8692.0	8404.7	8127.6	7763.3	7245.1	6757.6	6711.5	6265.0
35°	9020.4	8964.0	8917.8	8928.1	8656.1	8384.2	8045.5	7552.9	7014.2	6962.9	6480.6
37.5°	9148.7	9128.2	9102.5	9138.5	8887.0	8630.5	8338.0	7850.5	7306.7	7260.5	6747.4
40°	9215.4	9200.0	9302.6	9348.8	9082.0	8851.1	8630.5	8158.4	7624.8	7573.5	7055.2
42.5°	9312.9	9441.2	9482.2	9472.0	9225.7	9020.4	8897.3	8491.9	7999.4	7953.2	7424.7
45°	8964.0	8933.2	9159.0	9282.1	9235.9	9128.2	9148.7	8892.2	8435.5	8389.3	7850.5
47.5°	8497.1	8456.0	8584.3	8887.0	9066.6	9169.2	9374.5	9307.8	8938.3	8897.3	8348.3
50°	7511.9	7568.3	8045.5	8450.9	8804.9	9159.0	9564.3	9754.2	9492.5	9451.4	8881.9
52.5°	6419.0	6475.4	6973.1	7907.0	8486.8	9082.0	9702.9	10200.6	10092.8	10046.7	9451.4
55°	5623.7	5746.8	6311.2	6988.5	8035.3	8840.8	9785.0	10657.2	10739.3	10698.3	10072.3
57.5°	4833.5	4925.8	5351.7	5952.1	7419.5	8420.1	9779.8	11083.1	11416.6	11375.6	10703.4
60°	3904.8	4022.8	4361.4	5007.9	6598.6	7917.3	9636.2	11416.6	12068.3	12037.5	11314.0
62.5°	3268.5	3304.4	3545.6	4104.9	5541.6	7281.0	9312.9	11596.2	12658.4	12637.8	11863.1
65°	2632.2	2637.4	2858.0	3324.9	4520.5	6490.8	8763.9	11529.5	13104.8	13115.0	12258.1
67.5°	2031.9	2057.6	2257.7	2611.7	3591.8	5464.6	7978.8	11078.0	13109.9	13135.6	12032.4
70°	1405.9	1426.4	1729.2	2073.0	2775.9	4356.3	6916.7	9882.5	12032.4	12052.9	10785.5
72.5°	990.3	1000.6	1323.8	1657.3	2170.4	3283.9	5218.3	8173.8	10257.0	10272.4	9071.7
75°	738.9	749.1	933.9	1257.1	1662.5	2273.1	3566.1	6259.9	8194.3	8194.3	7163.0
77.5°	523.4	528.5	605.5	867.2	1108.3	1534.2	2144.8	4099.7	6013.6	6023.9	5218.3
80°	354.0	359.2	395.1	584.9	692.7	831.2	1164.8	2149.9	3791.9	3807.3	3314.7
82.5°	184.7	195.0	220.6	297.6	348.9	461.8	600.3	1092.9	2098.6	2139.7	1990.9
85°	71.8	71.8	82.1	97.5	128.3	179.6	277.1	415.6	949.2	980.0	877.4
87.5°	25.7	25.7	30.8	30.8	35.9	41.0	46.2	61.6	107.8	107.8	102.6
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°	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6	5582.6
2.5°	5531.3	5531.3	5505.6	5515.9	5510.8	5500.5	5490.3	5505.6	5490.3	5454.3	5449.2
5°	5541.6	5531.3	5490.3	5485.1	5469.7	5449.2	5423.5	5433.8	5408.2	5377.4	5372.2
7.5°	5546.7	5526.2	5469.7	5449.2	5418.4	5377.4	5336.3	5336.3	5300.4	5269.6	5264.5
10°	5536.4	5510.8	5433.8	5392.8	5336.3	5274.7	5218.3	5202.9	5161.9	5125.9	5125.9
12.5°	5541.6	5505.6	5408.2	5341.5	5264.5	5187.5	5115.7	5095.2	5059.2	5023.3	5018.2
15°	5572.4	5521.0	5397.9	5310.7	5197.8	5110.6	5033.6	5018.2	4987.4	4961.8	4961.8
17.5°	5603.1	5536.4	5382.5	5259.4	5120.8	5023.3	4951.5	4951.5	4931.0	4915.6	4915.6
20°	5618.5	5541.6	5351.7	5187.5	5028.5	4925.8	4859.1	4869.4	4864.3	4859.1	4859.1
22.5°	5654.4	5551.8	5326.1	5120.8	4931.0	4823.2	4761.6	4777.0	4771.9	4771.9	4777.0
25°	5710.9	5577.5	5305.5	5059.2	4838.6	4720.6	4653.9	4664.1	4664.1	4664.1	4664.1
27.5°	5787.9	5628.8	5300.4	5002.8	4746.2	4612.8	4530.7	4530.7	4510.2	4515.3	4520.5
30°	5905.9	5726.3	5310.7	4951.5	4648.8	4479.4	4381.9	4366.5	4361.4	4371.7	4376.8
32.5°	6049.5	5859.7	5372.2	4915.6	4546.1	4330.6	4207.5	4202.4	4187.0	4187.0	4187.0
35°	6229.1	5988.0	5428.7	4910.4	4443.5	4171.6	4038.2	4022.8	3986.8	3971.5	3971.5
37.5°	6460.0	6188.1	5495.4	4874.5	4356.3	4017.6	3858.6	3807.3	3766.2	3761.1	3761.1
40°	6742.2	6413.8	5592.9	4833.5	4263.9	3858.6	3648.2	3561.0	3566.1	3586.6	3586.6
42.5°	7075.8	6690.9	5716.0	4813.0	4130.5	3694.4	3401.9	3299.3	3335.2	3355.7	3360.9
45°	7465.7	7019.3	5854.6	4787.3	4007.4	3509.7	3140.2	3011.9	3027.3	3032.5	3037.6
47.5°	7917.3	7383.6	5998.2	4766.8	3868.8	3278.8	2852.9	2683.6	2678.4	2647.6	2657.9
50°	8389.3	7768.5	6147.0	4730.9	3699.5	3006.8	2550.1	2350.0	2309.0	2262.8	2267.9
52.5°	8892.2	8163.5	6285.6	4674.4	3489.1	2729.7	2262.8	2047.3	1965.2	1913.9	1924.2
55°	9446.3	8568.9	6419.0	4587.2	3268.5	2452.7	2006.3	1785.6	1683.0	1641.9	1647.1
57.5°	9954.3	8958.9	6516.5	4479.4	3027.3	2201.2	1780.5	1565.0	1498.3	1493.1	1498.3
60°	10446.9	9287.3	6557.5	4330.6	2781.0	1970.3	1570.1	1405.9	1359.7	1385.4	1390.5
62.5°	10862.5	9497.6	6537.0	4130.5	2529.6	1749.7	1400.8	1282.8	1252.0	1303.3	1308.4
65°	11103.7	9564.3	6393.3	3843.2	2257.7	1534.2	1241.7	1113.4	1098.1	1128.8	1144.2
67.5°	10785.5	9148.7	6003.4	3448.1	1954.9	1334.1	1087.8	985.2	959.5	985.2	985.2
70°	9559.2	7927.5	5079.8	2822.1	1621.4	1139.1	944.1	872.3	851.8	872.3	867.2
72.5°	7963.4	6593.4	4002.2	2201.2	1277.6	959.5	821.0	754.3	733.7	713.2	703.0
75°	6177.8	5007.9	2904.2	1616.3	964.6	769.7	687.6	626.0	574.7	595.2	584.9
77.5°	4525.6	3514.8	2057.6	1118.6	692.7	595.2	538.8	492.6	456.7	497.7	492.6
80°	2914.5	2273.1	1375.1	749.1	477.2	415.6	395.1	369.4	405.4	528.5	538.8
82.5°	1780.5	1441.8	821.0	487.5	313.0	277.1	256.6	256.6	415.6	456.7	461.8
85°	795.3	764.5	446.4	251.4	174.5	159.1	143.7	184.7	169.3	123.1	128.3
87.5°	128.3	133.4	97.5	87.2	66.7	66.7	51.3	35.9	25.7	15.4	15.4
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)