

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: P842167

Luminaire Tested: **ARCH4-280-727-U-T3**

Issue Date: 5/27/2024

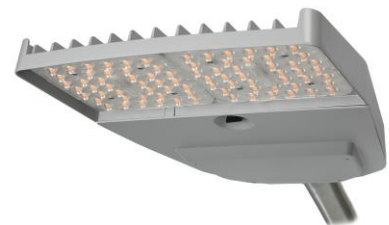
Test Information

Test Method: LM-79-08
Report Number: P842167
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-280-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38622 lumens
Efficiency: N/A
Efficacy: 138.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 279.7
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



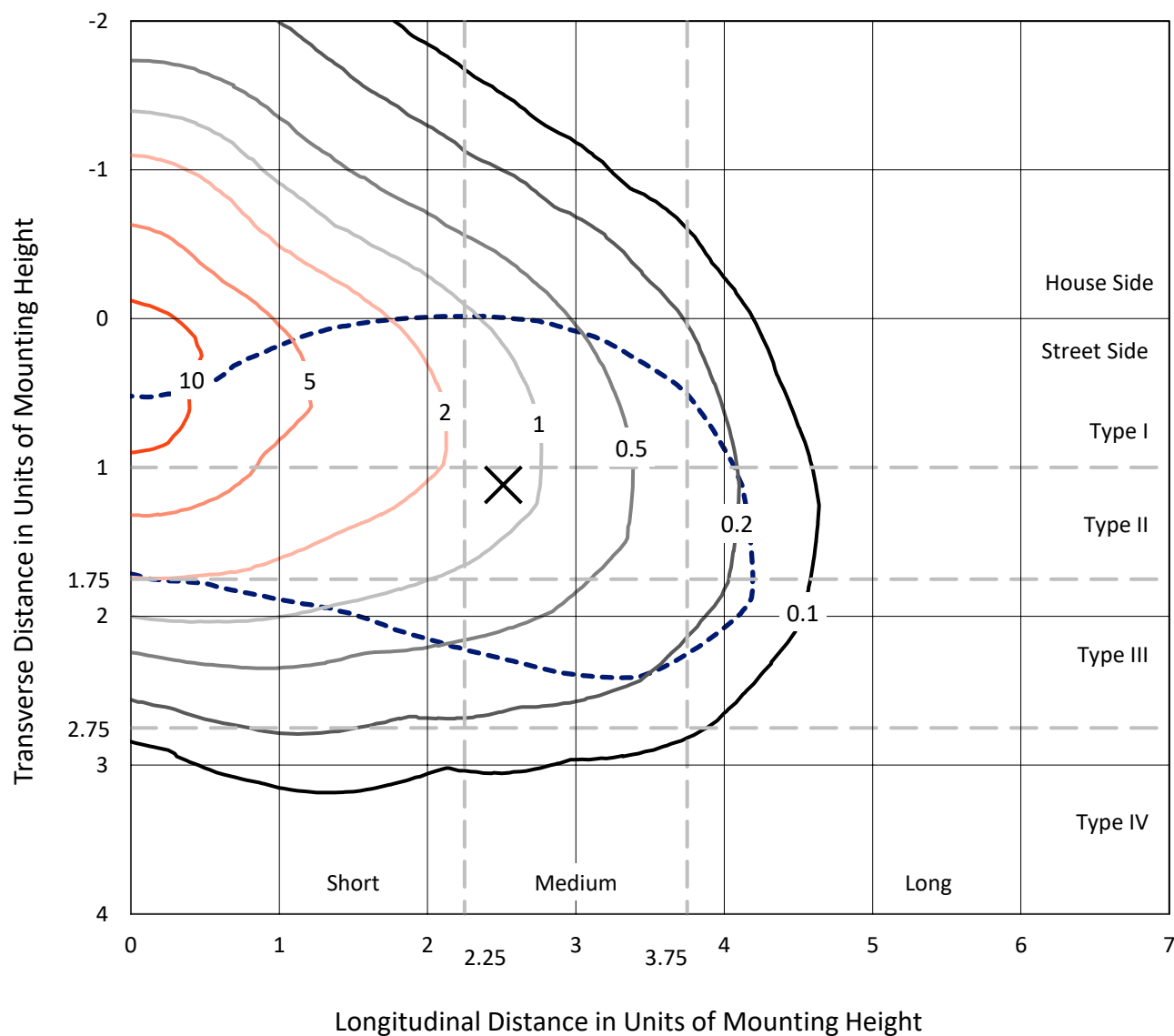
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

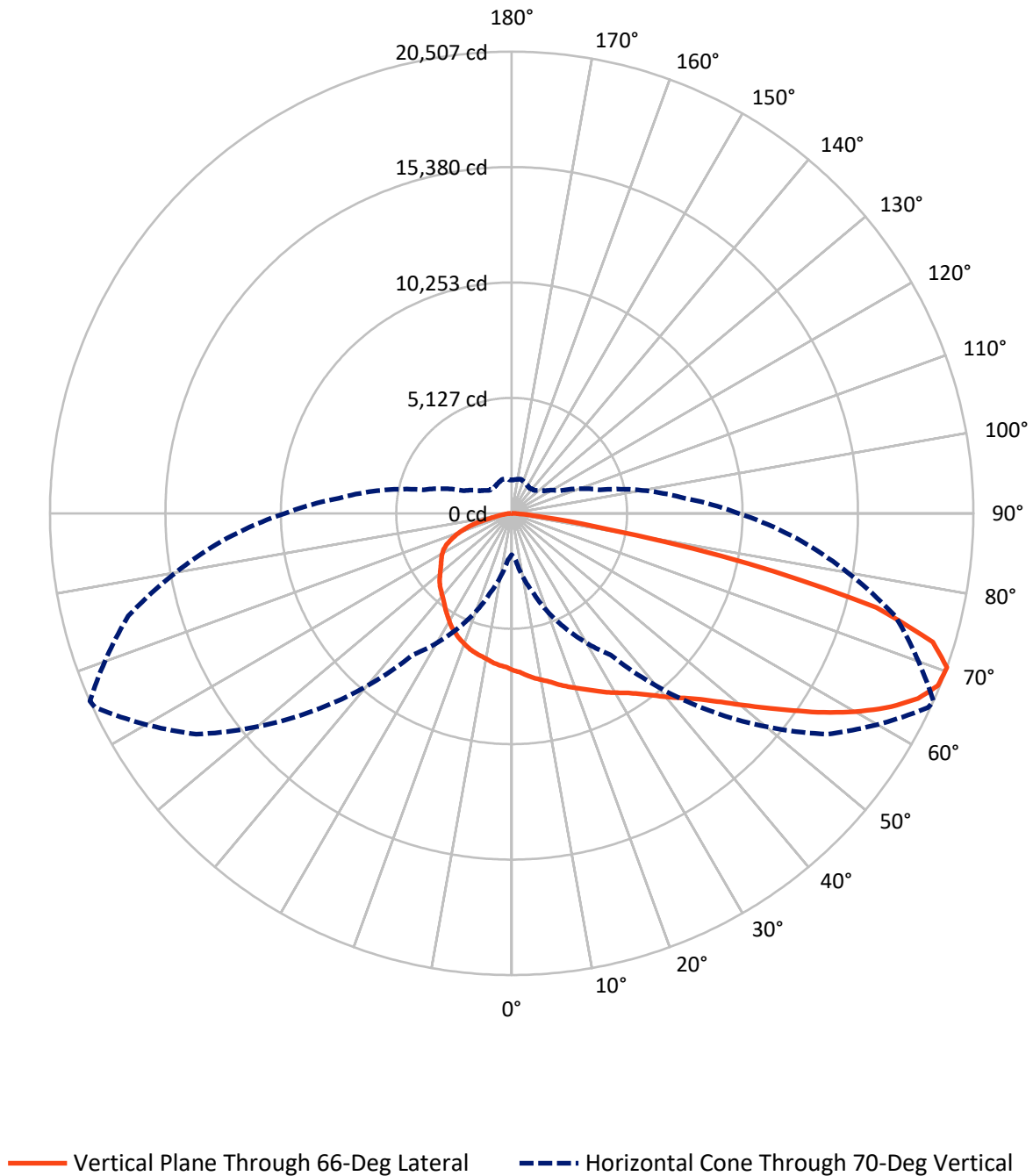
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.1 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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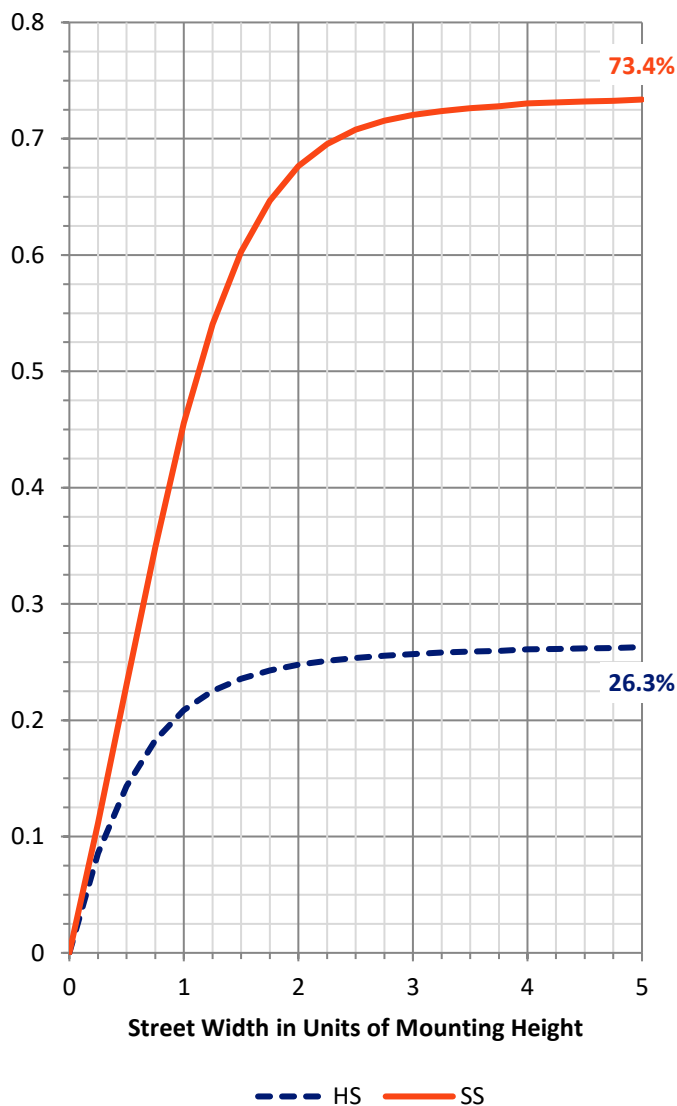
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10233.9	0.0	10233.9
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	28388.0	0.0	28388.0
	% Fixture	73.5	0.0	73.5
Total	Lumens	38622.0	0.0	38622.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	669.8	1.7
10°-20°	2009.1	5.2
20°-30°	3367.9	8.7
30°-40°	5042.9	13.1
40°-50°	6742.3	17.5
50°-60°	7871.9	20.4
60°-70°	7827.4	20.3
70°-80°	4633.9	12.0
80°-90°	456.7	1.2
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°	38622.0	100.0
0°-180°	38622.0	100.0

Coefficient of Utilization



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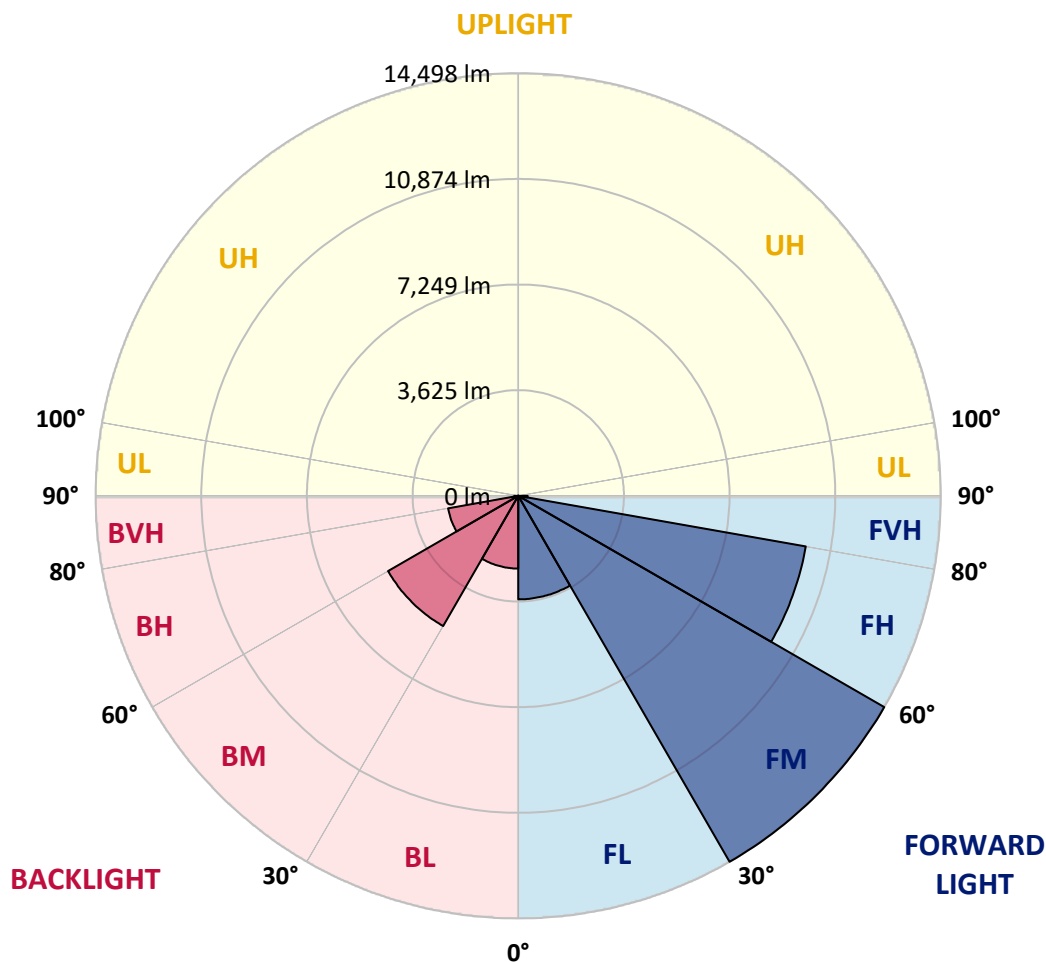
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3552.2	9.2			
FM	(30°-60°)	14498.2	37.5			
FH	(60°-80°)	10016.7	25.9			G4/12000
FVH	(80°-90°)	321.0	0.8			G3/500
BL	(0°-30°)	2494.6	6.5	B3/2500		
BM	(30°-60°)	5159.0	13.4	B4/8500		
BH	(60°-80°)	2444.6	6.3	B3/2500		G3/2500
BVH	(80°-90°)	135.7	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4
2.5°	7226.7	7215.3	7209.6	7186.8	7135.5	7158.3	7107.1	7072.9	7067.2	6987.5	6941.9
5°	7522.8	7517.1	7505.7	7471.5	7391.8	7403.2	7317.8	7255.1	7238.0	7112.8	7015.9
7.5°	7773.4	7762.0	7756.3	7710.7	7625.3	7619.6	7517.1	7426.0	7397.5	7226.7	7078.6
10°	7967.0	7949.9	7961.3	7915.7	7824.6	7807.5	7676.5	7557.0	7528.5	7312.1	7107.1
12.5°	8132.1	8120.7	8137.8	8098.0	8023.9	8006.8	7875.9	7722.1	7687.9	7437.4	7169.7
15°	8314.4	8274.5	8308.7	8291.6	8240.3	8234.6	8115.0	7944.2	7898.6	7596.8	7266.5
17.5°	8411.2	8388.4	8428.3	8433.9	8411.2	8451.0	8337.1	8132.1	8092.3	7744.9	7351.9
20°	8479.5	8445.3	8490.9	8525.1	8542.1	8621.9	8530.8	8331.4	8285.9	7887.2	7431.7
22.5°	8713.0	8639.0	8644.7	8667.4	8678.8	8792.7	8735.8	8542.1	8496.6	8063.8	7528.5
25°	9299.6	9151.5	9054.7	8986.3	8906.6	9003.4	8969.3	8781.3	8741.5	8274.5	7648.1
27.5°	10210.7	10022.8	9829.2	9629.8	9316.6	9276.8	9219.8	9049.0	9003.4	8485.2	7767.7
30°	11247.2	11059.2	10831.4	10512.5	9926.0	9618.5	9487.5	9299.6	9248.3	8673.1	7881.6
32.5°	12277.9	12112.8	11885.0	11497.7	10660.6	10034.2	9755.1	9561.5	9510.3	8878.1	8018.2
35°	13080.9	12978.4	12830.3	12346.2	11389.5	10523.9	10142.4	9908.9	9851.9	9202.7	8268.8
37.5°	13730.1	13656.0	13530.8	13023.9	11919.1	11013.7	10586.6	10318.9	10256.3	9555.8	8536.5
40°	14686.8	14493.2	14390.7	13656.0	12380.4	11457.9	11087.7	10808.7	10740.3	9931.7	8752.9
42.5°	15501.1	15358.8	15233.5	14219.8	12818.9	11839.4	11560.4	11304.1	11213.0	10301.8	8986.3
45°	15637.8	15694.8	15632.1	14498.9	13513.7	12215.3	12038.7	11873.6	11788.2	10803.0	9339.4
47.5°	15643.5	15643.5	15273.4	14658.3	14373.6	12636.7	12551.3	12608.2	12517.1	11440.8	9760.8
50°	15233.5	15307.5	15113.9	14698.2	14601.4	13058.1	13177.7	13485.2	13394.1	12118.5	10216.4
52.5°	14385.0	14629.8	14624.2	14635.5	14271.1	13416.9	13838.3	14538.7	14385.0	12881.6	10700.5
55°	12887.3	13377.0	13815.5	14191.4	13986.3	13633.3	14646.9	15660.6	15501.1	13735.8	11190.2
57.5°	11605.9	11919.1	12465.8	13530.8	13650.3	13821.2	15404.3	16833.7	16691.4	14681.1	11702.7
60°	10142.4	10575.2	11121.9	12636.7	13240.3	14066.1	16235.8	17978.4	17841.7	15637.8	12198.2
62.5°	7892.9	8451.0	9544.4	11264.2	12642.4	14219.8	16890.7	18986.3	18923.7	16543.3	12642.4
65°	5501.1	5996.6	7528.5	9578.6	11691.4	14151.5	17414.6	19886.1	19829.2	17283.6	12955.6
67.5°	3211.8	3787.0	5518.2	7710.7	10011.4	13678.8	17585.4	20415.7	20415.7	17733.5	13041.0
70°	1833.7	2101.4	3639.0	5620.7	7676.5	12374.7	17107.1	20410.0	20506.8	17631.0	12687.9
72.5°	1281.3	1400.9	2448.7	3781.3	5205.0	10011.4	15854.2	19424.8	19555.8	16662.9	11480.6
75°	996.6	1082.0	1725.5	2579.7	3280.2	6799.5	13115.0	16378.1	16725.5	14202.7	9282.5
77.5°	757.4	820.0	1008.0	1611.6	2101.4	3906.6	8656.0	10740.3	10763.1	8695.9	4977.2
80°	552.4	615.0	672.0	985.2	1116.2	1828.0	3268.8	4487.5	4362.2	4208.4	2693.6
82.5°	330.3	392.9	410.0	535.3	546.7	780.2	1144.6	1446.5	1389.5	1850.8	1264.2
85°	142.4	199.3	210.7	244.9	233.5	318.9	455.6	381.5	341.7	392.9	273.3
87.5°	34.2	56.9	56.9	62.6	51.3	79.7	85.4	62.6	56.9	68.3	68.3
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°	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4	6970.4
2.5°	6930.5	6913.4	6919.1	6822.3	6793.9	6765.4	6748.3	6736.9	6725.5	6742.6	6759.7
5°	6981.8	6941.9	6896.4	6754.0	6697.0	6634.4	6588.8	6549.0	6531.9	6531.9	6549.0
7.5°	7021.6	6953.3	6856.5	6668.6	6566.1	6480.6	6406.6	6355.4	6326.9	6326.9	6344.0
10°	7027.3	6930.5	6776.8	6549.0	6412.3	6287.0	6201.6	6144.7	6104.8	6104.8	6116.2
12.5°	7061.5	6930.5	6731.2	6457.9	6287.0	6133.3	6030.8	5945.3	5928.2	5928.2	5939.6
15°	7118.5	6959.0	6702.7	6378.1	6173.1	5996.6	5882.7	5791.6	5757.4	5780.2	5785.9
17.5°	7169.7	6976.1	6651.5	6275.6	6030.8	5837.1	5711.8	5632.1	5586.6	5637.8	5637.8
20°	7203.9	6976.1	6577.5	6144.7	5877.0	5660.6	5541.0	5444.2	5410.0	5472.7	5478.4
22.5°	7255.1	6970.4	6497.7	6013.7	5711.8	5484.1	5364.5	5290.4	5273.4	5341.7	5364.5
25°	7312.1	6981.8	6412.3	5865.6	5529.6	5307.5	5216.4	5182.2	5193.6	5279.0	5307.5
27.5°	7374.7	7004.6	6326.9	5700.5	5330.3	5131.0	5079.7	5096.8	5142.4	5250.6	5284.7
30°	7431.7	7010.3	6207.3	5506.8	5102.5	4914.6	4937.4	5011.4	5079.7	5187.9	5227.8
32.5°	7505.7	7015.9	6082.0	5296.1	4857.6	4721.0	4823.5	4943.1	5011.4	5113.9	5159.5
35°	7687.9	7112.8	5985.2	5091.1	4629.8	4555.8	4726.7	4880.4	4920.3	5011.4	5051.3
37.5°	7898.6	7272.2	5933.9	4880.4	4407.7	4390.7	4607.1	4760.8	4772.2	4829.2	4869.0
40°	8029.6	7340.6	5877.0	4703.9	4208.4	4219.8	4441.9	4561.5	4538.7	4578.6	4607.1
42.5°	8160.6	7363.3	5757.4	4555.8	4020.5	4031.9	4202.7	4288.2	4299.5	4385.0	4424.8
45°	8382.7	7426.0	5626.4	4419.1	3849.7	3809.8	3912.3	4026.2	4174.3	4339.4	4385.0
47.5°	8678.8	7557.0	5489.8	4254.0	3684.5	3553.5	3593.4	3792.7	3946.5	4100.2	4128.7
50°	8980.6	7687.9	5364.5	4054.7	3519.4	3280.2	3297.3	3479.5	3604.8	3724.4	3741.5
52.5°	9276.8	7801.8	5256.3	3866.7	3331.4	2955.6	3023.9	3211.8	3297.3	3354.2	3371.3
55°	9572.9	7898.6	5159.5	3707.3	3115.0	2699.3	2762.0	2938.5	3023.9	3052.4	3063.8
57.5°	9880.4	8012.5	5085.4	3570.6	2870.2	2471.5	2511.4	2636.7	2716.4	2750.6	2739.2
60°	10136.7	8109.3	5045.6	3428.2	2625.3	2260.8	2249.4	2363.3	2477.2	2511.4	2500.0
62.5°	10336.0	8172.0	4982.9	3246.0	2408.9	2050.1	1993.2	2141.2	2260.8	2283.6	2300.7
65°	10444.2	8177.7	4829.2	3012.5	2186.8	1822.3	1782.5	1930.5	2004.6	2027.3	2027.3
67.5°	10427.1	8086.6	4527.3	2699.3	1981.8	1617.3	1583.1	1674.3	1782.5	1799.5	1782.5
70°	10074.0	7710.7	4043.3	2369.0	1736.9	1435.1	1372.4	1463.6	1566.1	1503.4	1474.9
72.5°	9071.8	6736.9	3331.4	2004.6	1463.6	1207.3	1178.8	1269.9	1275.6	1287.0	1258.5
75°	7158.3	5017.1	2494.3	1560.4	1184.5	1013.7	1008.0	990.9	1013.7	1059.2	1025.1
77.5°	3758.5	2505.7	1349.7	956.7	859.9	814.4	774.5	768.8	837.1	865.6	831.4
80°	2038.7	1406.6	774.5	575.2	523.9	529.6	580.9	569.5	643.5	660.6	632.1
82.5°	888.4	666.3	381.5	347.4	347.4	341.7	358.8	398.6	478.4	478.4	381.5
85°	193.6	165.1	148.1	170.8	193.6	193.6	193.6	193.6	136.7	74.0	51.3
87.5°	62.6	62.6	62.6	68.3	74.0	74.0	62.6	45.6	28.5	5.7	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)