

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: P842178

Luminaire Tested: **ARCH4-280-730-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842178
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: ARCH4-280-730-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39017 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
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

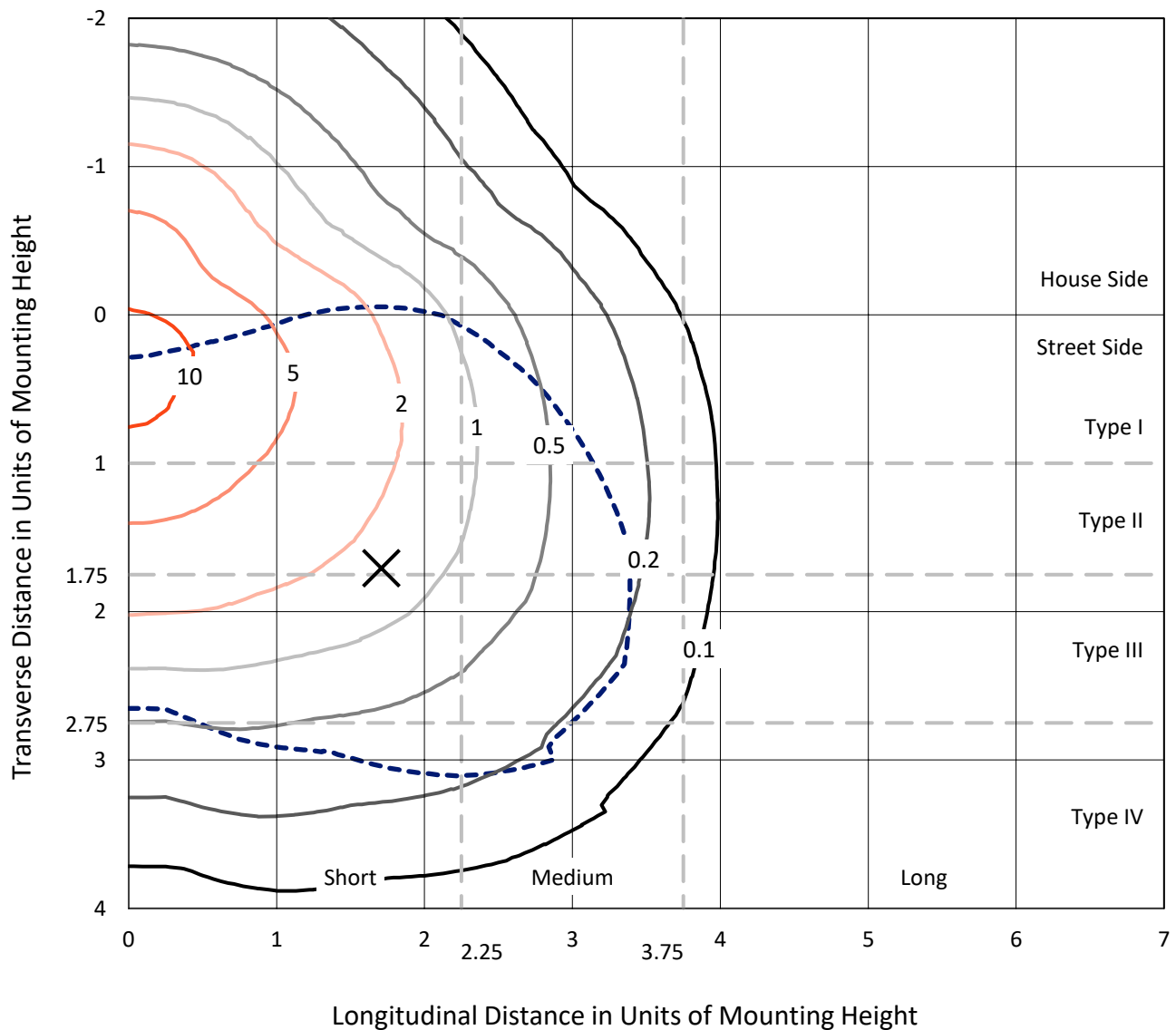


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Iso-Footcandle Lines of Horizontal Illumination

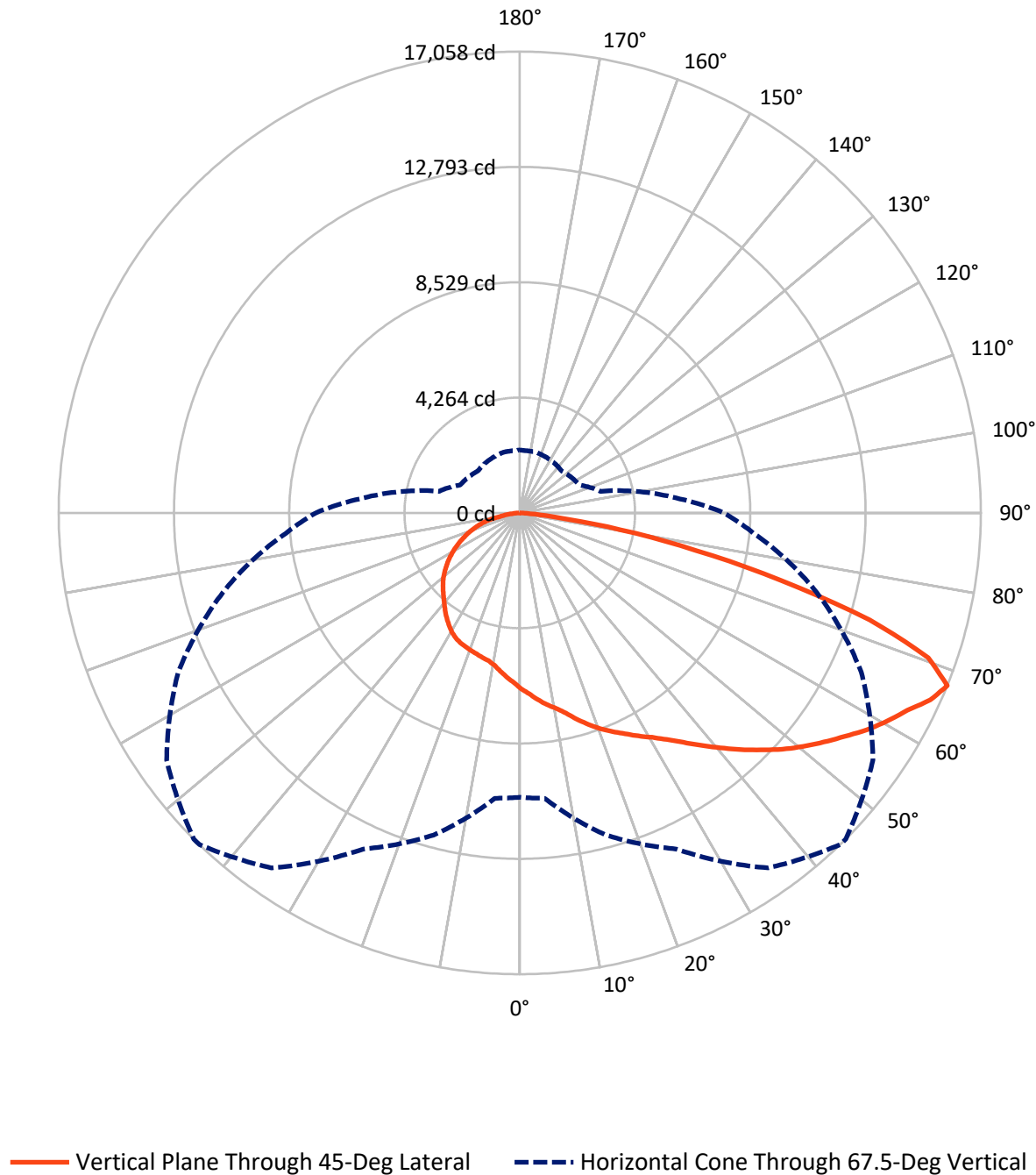
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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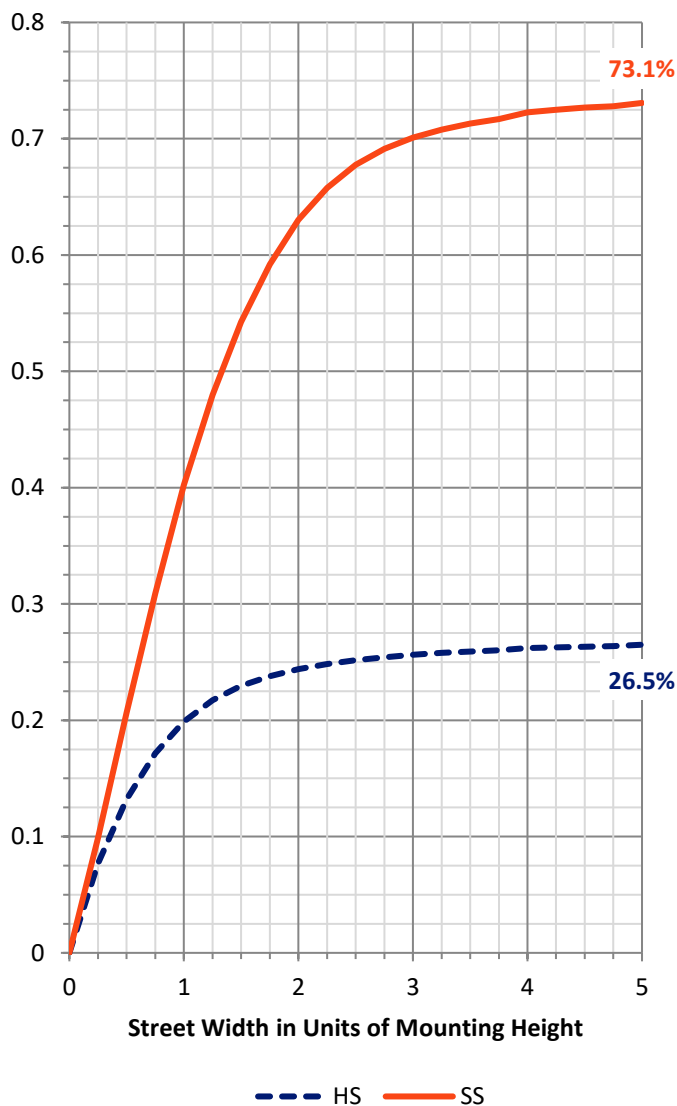
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10423.4	0.0	10423.4
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	28593.6	0.0	28593.6
	% Fixture	73.3	0.0	73.3
Total	Lumens	39017.0	0.0	39017.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	623.0	1.6
10°-20°	1924.6	4.9
20°-30°	3322.2	8.5
30°-40°	4899.0	12.6
40°-50°	6637.2	17.0
50°-60°	8112.3	20.8
60°-70°	8366.7	21.4
70°-80°	4582.7	11.7
80°-90°	549.3	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°	39017.0	100.0
0°-180°	39017.0	100.0

Coefficient of Utilization



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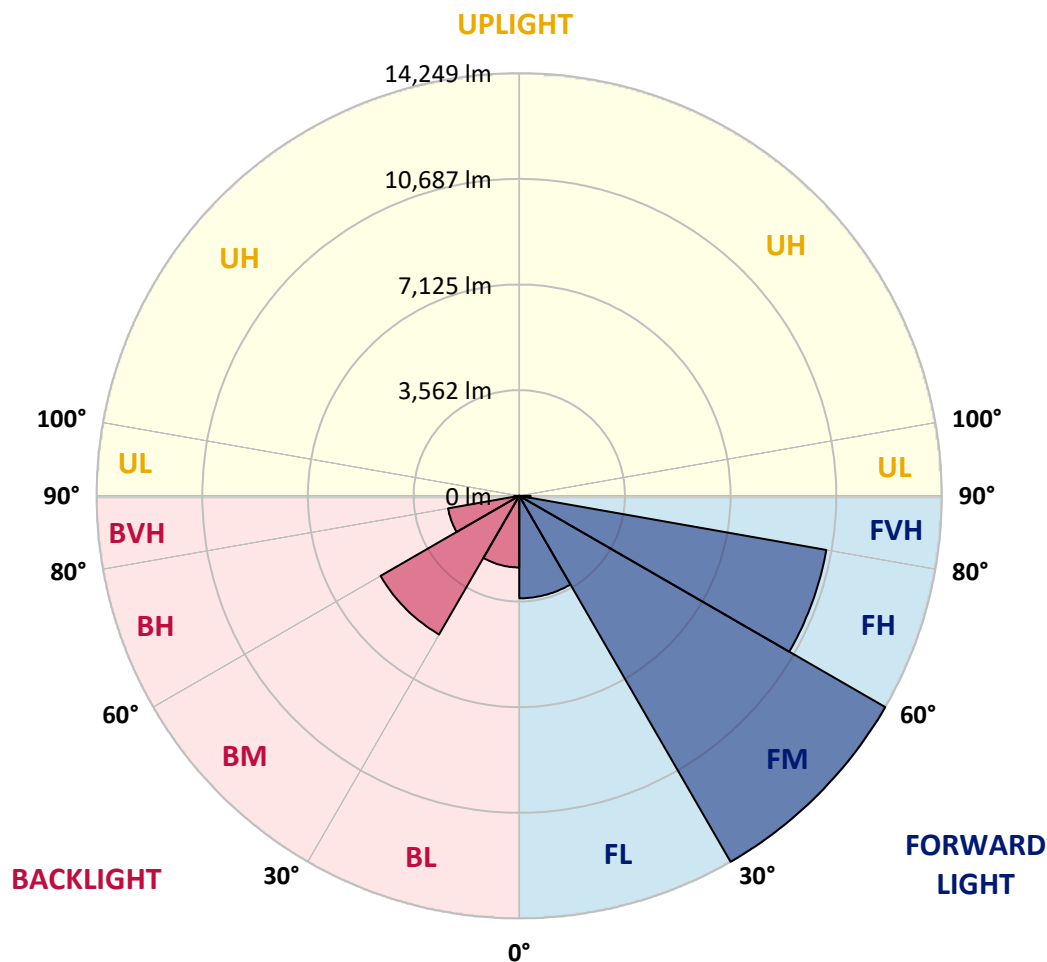
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3454.1	8.9			
FM	(30°-60°)	14249.4	36.5			
FH	(60°-80°)	10511.7	26.9			G4/12000
FVH	(80°-90°)	378.4	1.0			G3/500
BL	(0°-30°)	2415.8	6.2	B3/2500		
BM	(30°-60°)	5399.2	13.8	B4/8500		
BH	(60°-80°)	2437.6	6.2	B3/2500		G3/2500
BVH	(80°-90°)	170.9	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3
2.5°	6792.3	6786.3	6798.2	6756.7	6703.2	6697.3	6697.3	6661.7	6620.1	6537.0	6471.7
5°	7112.9	7101.0	7107.0	7047.6	6976.3	6940.7	6934.8	6857.6	6762.6	6632.0	6513.2
7.5°	7409.8	7397.9	7392.0	7326.6	7219.8	7160.4	7154.5	7041.7	6928.8	6727.0	6554.8
10°	7688.8	7676.9	7665.1	7576.0	7445.4	7356.3	7344.5	7202.0	7059.5	6810.1	6590.4
12.5°	8045.1	8021.3	8009.4	7902.6	7712.6	7617.6	7599.8	7409.8	7231.6	6928.8	6661.7
15°	8419.1	8401.3	8383.5	8282.6	8068.8	7944.1	7914.4	7676.9	7433.5	7083.2	6768.5
17.5°	8698.2	8680.4	8680.4	8591.3	8395.4	8252.9	8229.1	7944.1	7641.3	7225.7	6851.7
20°	8870.3	8852.5	8870.3	8816.9	8668.5	8549.7	8526.0	8211.3	7849.1	7356.3	6922.9
22.5°	8995.0	8977.2	9006.9	8983.2	8876.3	8805.0	8787.2	8478.5	8062.9	7492.9	6994.2
25°	9214.7	9214.7	9214.7	9173.1	9072.2	9048.5	9048.5	8781.3	8336.0	7671.0	7101.0
27.5°	9654.1	9630.3	9600.6	9481.9	9309.7	9303.8	9339.4	9090.0	8650.7	7902.6	7231.6
30°	10301.2	10289.4	10176.6	9927.2	9636.3	9606.6	9630.3	9422.5	8989.1	8146.0	7380.1
32.5°	11138.4	11096.8	10865.3	10491.2	10075.6	9939.1	9986.6	9766.9	9345.3	8395.4	7522.6
35°	11732.1	11744.0	11577.8	11239.3	10746.5	10384.4	10420.0	10152.8	9731.3	8674.4	7700.7
37.5°	12414.9	12456.5	12207.1	11951.8	11494.6	10877.2	10912.8	10550.6	10117.2	9024.7	7890.7
40°	13359.0	13275.8	12854.3	12551.5	12046.8	11393.7	11423.4	10995.9	10562.5	9357.2	8110.4
42.5°	14148.6	14000.2	13489.6	13103.7	12498.0	11939.9	11969.6	11476.8	11013.7	9725.3	8353.8
45°	15282.6	14873.0	14136.7	13946.7	12961.2	12474.3	12504.0	11987.4	11488.7	10117.2	8615.0
47.5°	15941.7	15288.6	14819.5	14718.6	13471.8	13026.5	13062.1	12527.7	11999.3	10562.5	8888.2
50°	15900.1	15478.6	15342.0	15092.7	13923.0	13543.0	13578.6	13085.8	12515.9	11001.8	9149.4
52.5°	15627.0	15704.2	15632.9	15217.3	14374.2	14041.7	14083.3	13638.0	13044.3	11411.5	9392.8
55°	16048.6	16102.0	15965.4	15419.2	14873.0	14540.5	14588.0	14219.9	13566.8	11773.7	9600.6
57.5°	16553.2	16363.2	16226.7	15775.4	15389.5	15080.8	15134.2	14813.6	14018.0	12064.6	9760.9
60°	16529.5	16131.7	16268.2	15799.2	15739.8	15579.5	15627.0	15300.5	14362.4	12278.4	9826.3
62.5°	15312.3	15098.6	15787.3	15627.0	16024.8	16024.8	16084.2	15597.3	14570.2	12367.4	9790.6
65°	13198.6	13210.5	14421.7	15086.7	16363.2	16636.4	16683.9	15781.4	14451.4	12106.2	9458.1
67.5°	10515.0	10592.2	12331.8	13715.2	16024.8	17052.0	17057.9	15947.6	13940.8	11370.0	8686.3
70°	7694.8	7754.1	9808.4	11488.7	14427.7	16131.7	16036.7	15478.6	12830.5	10087.5	7481.0
72.5°	5201.1	5254.5	7368.2	8822.8	11839.0	13738.9	13531.1	13679.6	10936.5	8288.5	6014.5
75°	3497.1	3562.4	5242.6	6311.4	8710.0	10431.9	9968.7	10360.6	8460.7	6275.7	4387.7
77.5°	2202.7	2244.3	3330.8	4138.3	5949.2	7101.0	6637.9	6643.9	4874.5	3378.3	2357.1
80°	1401.2	1413.1	2018.7	2386.8	3443.6	4268.9	3776.1	3069.6	2196.8	1793.1	1407.1
82.5°	813.4	795.6	1205.3	1347.8	1638.7	1620.9	1341.8	1270.6	961.8	896.5	718.4
85°	326.6	302.8	528.4	492.8	498.7	528.4	391.9	391.9	314.7	243.4	178.1
87.5°	65.3	65.3	71.2	65.3	65.3	71.2	53.4	53.4	47.5	47.5	47.5
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°	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3	6507.3
2.5°	6459.8	6447.9	6418.2	6341.1	6299.5	6275.7	6240.1	6228.2	6222.3	6228.2	6246.1
5°	6477.6	6436.0	6352.9	6228.2	6145.1	6091.7	6032.3	6008.6	5990.7	5990.7	6008.6
7.5°	6489.5	6424.2	6281.7	6097.6	5978.9	5895.8	5824.5	5794.8	5788.9	5806.7	5812.6
10°	6495.4	6400.4	6198.6	5967.0	5812.6	5705.8	5634.5	5616.7	5634.5	5670.1	5676.1
12.5°	6537.0	6406.4	6151.1	5877.9	5693.9	5587.0	5533.6	5533.6	5581.1	5646.4	5652.3
15°	6608.2	6447.9	6127.3	5806.7	5616.7	5521.7	5503.9	5533.6	5604.8	5705.8	5717.6
17.5°	6661.7	6471.7	6073.9	5711.7	5515.8	5456.4	5486.1	5557.3	5658.3	5794.8	5806.7
20°	6697.3	6471.7	5996.7	5598.9	5414.8	5403.0	5486.1	5598.9	5705.8	5866.1	5883.9
22.5°	6732.9	6459.8	5907.6	5462.3	5302.0	5337.6	5492.0	5634.5	5741.4	5913.6	5943.3
25°	6798.2	6477.6	5818.6	5325.8	5183.3	5284.2	5486.1	5658.3	5771.1	5949.2	5996.7
27.5°	6887.3	6519.2	5753.3	5201.1	5064.5	5201.1	5444.5	5652.3	5771.1	5943.3	5996.7
30°	6982.3	6566.7	5676.1	5064.5	4928.0	5082.3	5355.5	5587.0	5723.6	5883.9	5949.2
32.5°	7083.2	6620.1	5610.8	4916.1	4761.7	4922.0	5224.8	5486.1	5634.5	5782.9	5854.2
35°	7219.8	6715.1	5575.1	4797.3	4613.3	4755.8	5058.6	5355.5	5515.8	5652.3	5735.4
37.5°	7386.0	6833.8	5557.3	4678.6	4453.0	4571.7	4880.5	5195.1	5367.3	5480.1	5557.3
40°	7576.0	6982.3	5551.4	4565.8	4292.7	4381.7	4696.4	5011.1	5177.3	5266.4	5331.7
42.5°	7789.8	7148.5	5539.5	4453.0	4132.4	4203.6	4518.3	4827.0	4969.5	5046.7	5106.1
45°	8015.4	7314.8	5515.8	4316.4	3960.2	4043.3	4334.2	4607.4	4755.8	4821.1	4886.4
47.5°	8241.0	7481.0	5468.3	4162.1	3805.8	3883.0	4138.3	4375.8	4494.5	4553.9	4619.2
50°	8460.7	7629.4	5355.5	3983.9	3645.5	3716.8	3912.7	4073.0	4162.1	4209.6	4274.9
52.5°	8656.6	7730.4	5195.1	3776.1	3485.2	3520.8	3651.4	3788.0	3859.3	3865.2	3924.6
55°	8822.8	7783.8	4963.6	3562.4	3313.0	3319.0	3390.2	3497.1	3526.8	3503.0	3544.6
57.5°	8917.8	7754.1	4708.3	3342.7	3134.9	3111.2	3164.6	3218.0	3224.0	3164.6	3206.1
60°	8941.6	7617.6	4375.8	3123.0	2956.8	2891.5	2909.3	2897.4	2885.5	2861.8	2897.4
62.5°	8822.8	7326.6	4007.7	2909.3	2766.8	2665.9	2659.9	2654.0	2671.8	2677.7	2683.7
65°	8389.4	6780.4	3568.3	2689.6	2564.9	2428.4	2422.4	2493.7	2517.4	2481.8	2493.7
67.5°	7552.3	5943.3	3087.4	2434.3	2309.6	2190.9	2238.4	2279.9	2321.5	2309.6	2321.5
70°	6364.8	4880.5	2648.0	2149.3	2030.6	1965.3	2018.7	2054.3	2060.2	2048.4	2060.2
72.5°	5005.2	3811.8	2238.4	1858.4	1751.5	1721.8	1787.1	1816.8	1870.3	1894.0	1899.9
75°	3615.8	2814.3	1834.6	1543.7	1454.6	1454.6	1514.0	1567.5	1614.9	1585.3	1567.5
77.5°	2018.7	1680.3	1318.1	1062.8	1080.6	1163.7	1187.5	1246.8	1294.3	1288.4	1276.5
80°	1223.1	1050.9	890.6	688.7	682.8	748.1	902.5	1003.4	1027.2	973.7	967.8
82.5°	635.3	552.2	475.0	385.9	427.5	498.7	522.5	629.4	694.7	670.9	700.6
85°	160.3	154.4	172.2	178.1	219.7	243.4	267.2	314.7	207.8	100.9	100.9
87.5°	47.5	47.5	59.4	59.4	77.2	95.0	89.1	89.1	47.5	5.9	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)