

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: P841733

Luminaire Tested: **ARCH4-220-727-U-T2U**

Issue Date: 5/27/2024

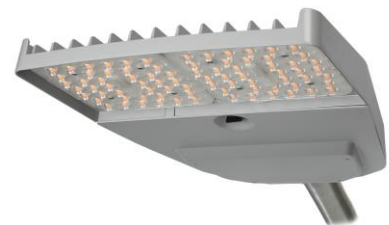
Test Information

Test Method: LM-79-08
Report Number: P841733
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: ARCH4-220-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32486 lumens
Efficiency: N/A
Efficacy: 146.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 221.8
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



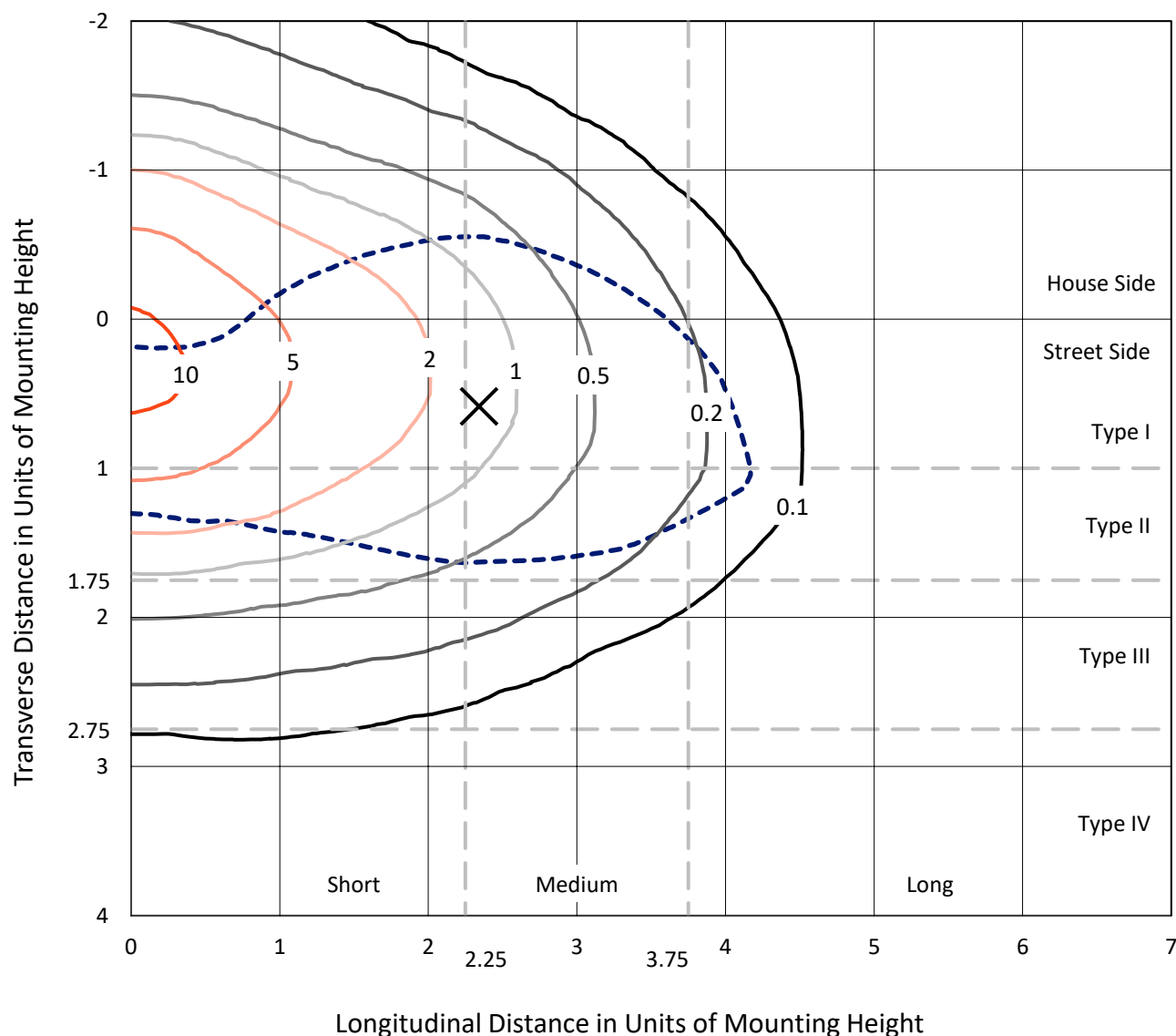
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

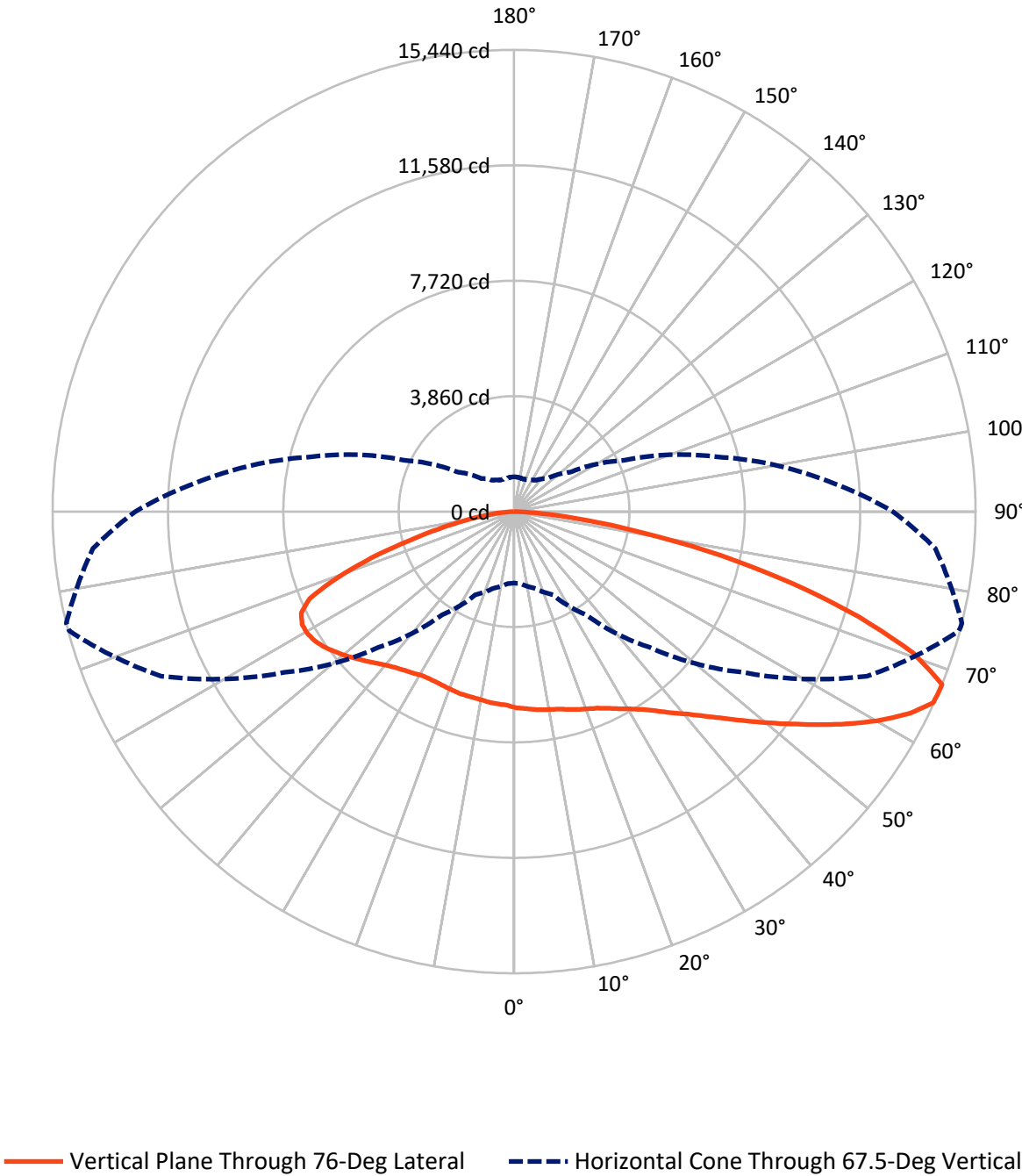
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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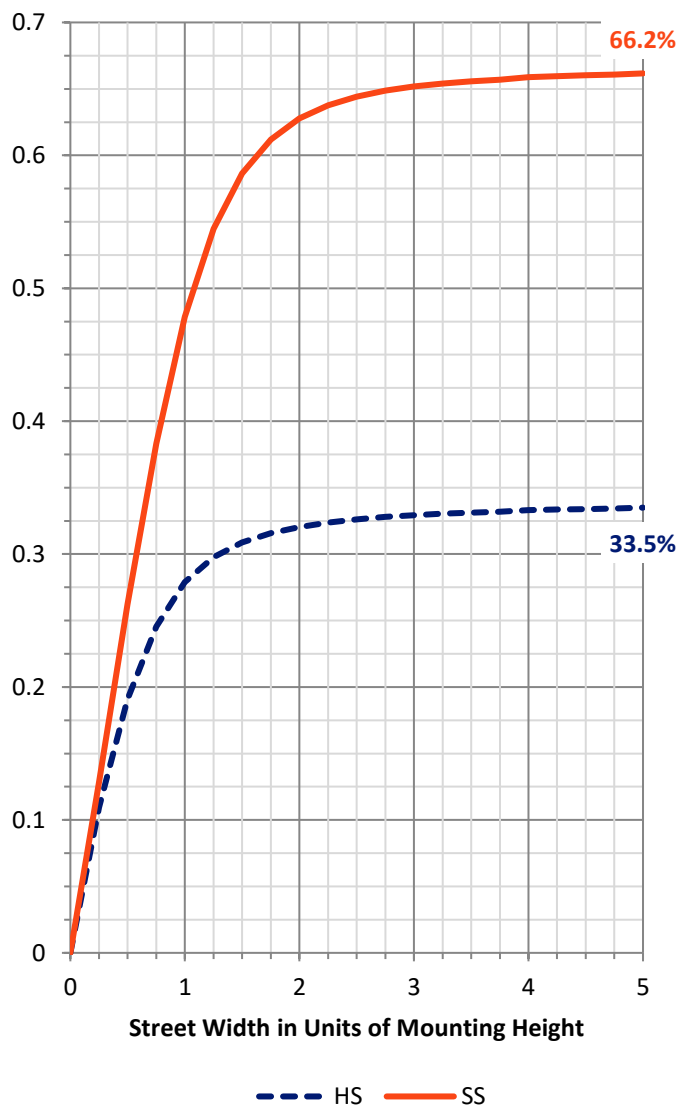
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10977.2	0.0	10977.2
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	21508.8	0.0	21508.8
	% Fixture	66.2	0.0	66.2
Total	Lumens	32486.0	0.0	32486.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	632.8	1.9
10°-20°	1934.5	6.0
20°-30°	3286.8	10.1
30°-40°	4676.6	14.4
40°-50°	5906.4	18.2
50°-60°	6394.8	19.7
60°-70°	5947.8	18.3
70°-80°	3194.5	9.8
80°-90°	511.9	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°	32486.0	100.0
0°-180°	32486.0	100.0

Coefficient of Utilization



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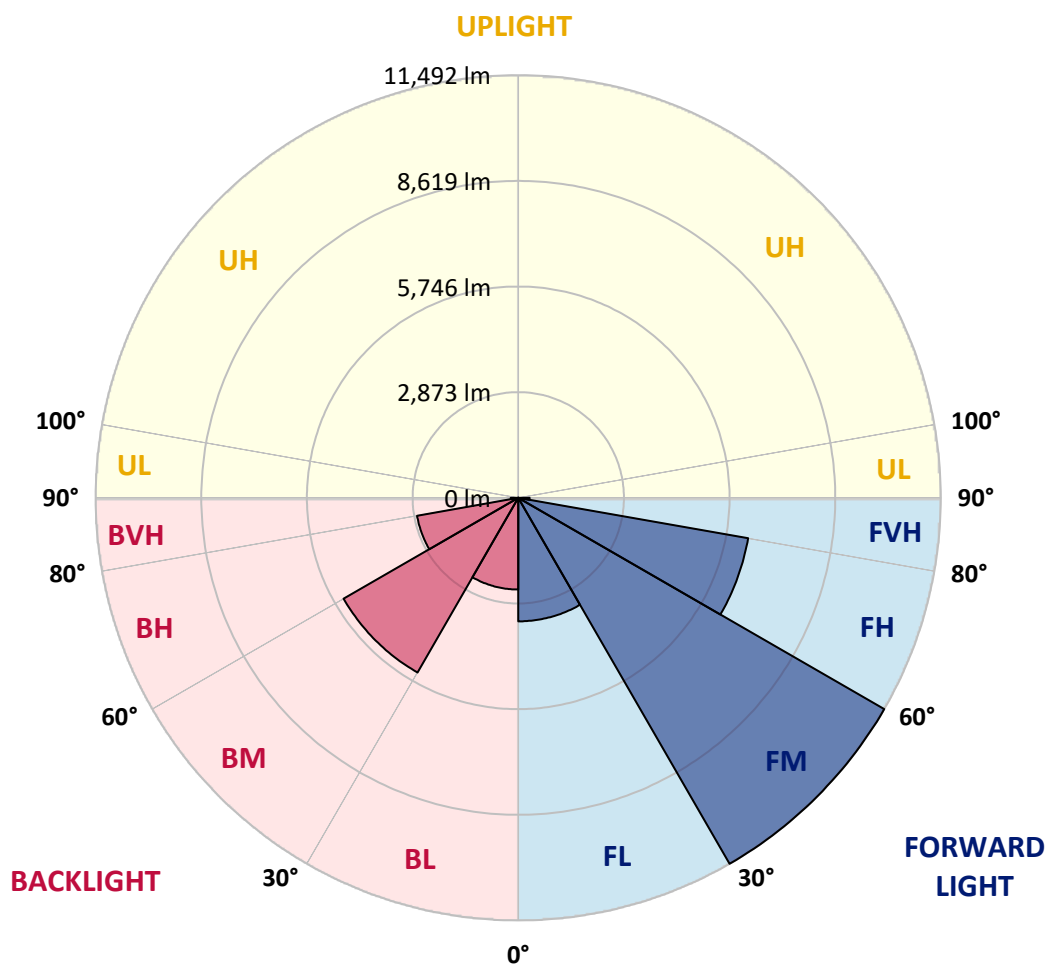
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3359.4	10.3			
FM	(30°-60°)	11492.3	35.4			
FH	(60°-80°)	6347.5	19.5			G3/7500
FVH	(80°-90°)	309.6	1.0			G3/500
BL	(0°-30°)	2494.6	7.7	B3/2500		
BM	(30°-60°)	5485.5	16.9	B4/8500		
BH	(60°-80°)	2794.9	8.6	B4/5000		G4/5000
BVH	(80°-90°)	202.2	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1
2.5°	6761.1	6749.1	6700.8	6706.9	6706.9	6700.8	6628.4	6598.3	6598.3	6592.3	6525.9
5°	7002.4	6984.3	6930.0	6917.9	6893.8	6863.7	6749.1	6682.7	6652.6	6646.5	6556.1
7.5°	7285.9	7261.7	7195.4	7159.2	7098.9	7020.5	6875.7	6773.2	6700.8	6694.8	6568.1
10°	7569.3	7545.2	7466.8	7400.5	7316.0	7189.4	7002.4	6851.6	6737.0	6724.9	6574.2
12.5°	7907.1	7883.0	7786.5	7702.0	7575.4	7406.5	7159.2	6954.1	6797.3	6779.2	6592.3
15°	8262.9	8226.8	8130.2	8033.7	7876.9	7659.8	7364.3	7092.9	6893.8	6863.7	6646.5
17.5°	8558.5	8510.2	8431.8	8335.3	8160.4	7907.1	7569.3	7231.6	6984.3	6960.2	6700.8
20°	8811.8	8775.6	8691.2	8600.7	8413.7	8136.3	7762.3	7370.3	7068.7	7038.6	6743.0
22.5°	9053.0	9004.8	8956.5	8890.2	8685.1	8377.5	7985.5	7539.2	7177.3	7141.1	6797.3
25°	9330.5	9276.2	9258.1	9221.9	8980.7	8667.0	8256.9	7750.3	7328.1	7285.9	6893.8
27.5°	9674.3	9614.0	9577.8	9577.8	9288.3	8962.6	8546.4	7997.6	7503.0	7466.8	7014.5
30°	10036.2	9963.8	9909.5	9909.5	9583.8	9258.1	8829.9	8244.8	7702.0	7659.8	7171.3
32.5°	10355.8	10283.4	10223.1	10217.1	9879.3	9553.6	9125.4	8516.3	7943.3	7889.0	7364.3
35°	10603.1	10536.8	10482.5	10494.5	10174.9	9855.2	9457.1	8878.1	8244.8	8184.5	7617.6
37.5°	10753.9	10729.8	10699.6	10741.8	10446.3	10144.7	9800.9	9228.0	8588.6	8534.3	7931.2
40°	10832.3	10814.2	10934.8	10989.1	10675.5	10404.1	10144.7	9589.8	8962.6	8902.3	8293.1
42.5°	10946.9	11097.7	11145.9	11133.9	10844.4	10603.1	10458.3	9981.9	9402.9	9348.6	8727.4
45°	10536.8	10500.6	10765.9	10910.7	10856.4	10729.8	10753.9	10452.3	9915.5	9861.2	9228.0
47.5°	9987.9	9939.7	10090.4	10446.3	10657.4	10778.0	11019.3	10940.9	10506.6	10458.3	9813.0
50°	8829.9	8896.2	9457.1	9933.6	10349.8	10765.9	11242.4	11465.6	11158.0	11109.7	10440.3
52.5°	7545.2	7611.6	8196.6	9294.3	9975.8	10675.5	11405.3	11990.3	11863.7	11809.4	11109.7
55°	6610.4	6755.1	7418.6	8214.7	9445.1	10392.0	11501.8	12527.1	12623.6	12575.3	11839.5
57.5°	5681.5	5790.1	6290.7	6996.4	8721.3	9897.4	11495.7	13027.7	13419.7	13371.5	12581.4
60°	4589.9	4728.6	5126.6	5886.6	7756.3	9306.4	11326.9	13419.7	14185.7	14149.5	13299.1
62.5°	3842.0	3884.2	4167.7	4825.1	6513.8	8558.5	10946.9	13630.8	14879.3	14855.2	13944.5
65°	3094.1	3100.1	3359.5	3908.3	5313.6	7629.6	10301.5	13552.4	15404.0	15416.1	14408.9
67.5°	2388.4	2418.6	2653.8	3070.0	4221.9	6423.4	9378.7	13021.7	15410.1	15440.2	14143.5
70°	1652.6	1676.7	2032.6	2436.7	3263.0	5120.6	8130.2	11616.4	14143.5	14167.6	12677.9
72.5°	1164.0	1176.1	1556.1	1948.1	2551.3	3860.1	6133.9	9607.9	12056.7	12074.7	10663.4
75°	868.5	880.6	1097.7	1477.7	1954.2	2671.9	4191.8	7358.2	9632.1	9632.1	8419.8
77.5°	615.2	621.2	711.7	1019.3	1302.8	1803.4	2521.1	4819.0	7068.7	7080.8	6133.9
80°	416.2	422.2	464.4	687.6	814.2	977.1	1369.1	2527.1	4457.2	4475.3	3896.2
82.5°	217.1	229.2	259.3	349.8	410.1	542.8	705.7	1284.7	2466.8	2515.1	2340.2
85°	84.4	84.4	96.5	114.6	150.8	211.1	325.7	488.5	1115.8	1152.0	1031.4
87.5°	30.2	30.2	36.2	36.2	42.2	48.3	54.3	72.4	126.7	126.7	120.6
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°	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1	6562.1
2.5°	6501.8	6501.8	6471.6	6483.7	6477.7	6465.6	6453.5	6471.6	6453.5	6411.3	6405.3
5°	6513.8	6501.8	6453.5	6447.5	6429.4	6405.3	6375.1	6387.2	6357.0	6320.8	6314.8
7.5°	6519.9	6495.8	6429.4	6405.3	6369.1	6320.8	6272.6	6272.6	6230.4	6194.2	6188.2
10°	6507.8	6477.7	6387.2	6338.9	6272.6	6200.2	6133.9	6115.8	6067.5	6025.3	6025.3
12.5°	6513.8	6471.6	6357.0	6278.6	6188.2	6097.7	6013.2	5989.1	5946.9	5904.7	5898.7
15°	6550.0	6489.7	6345.0	6242.4	6109.7	6007.2	5916.7	5898.7	5862.5	5832.3	5832.3
17.5°	6586.2	6507.8	6326.9	6182.1	6019.3	5904.7	5820.2	5820.2	5796.1	5778.0	5778.0
20°	6604.3	6513.8	6290.7	6097.7	5910.7	5790.1	5711.7	5723.7	5717.7	5711.7	5711.7
22.5°	6646.5	6525.9	6260.5	6019.3	5796.1	5669.5	5597.1	5615.2	5609.1	5609.1	5615.2
25°	6712.9	6556.1	6236.4	5946.9	5687.6	5548.8	5470.4	5482.5	5482.5	5482.5	5482.5
27.5°	6803.4	6616.4	6230.4	5880.6	5579.0	5422.2	5325.7	5325.7	5301.5	5307.6	5313.6
30°	6942.1	6731.0	6242.4	5820.2	5464.4	5265.4	5150.8	5132.7	5126.6	5138.7	5144.7
32.5°	7111.0	6887.8	6314.8	5778.0	5343.8	5090.5	4945.7	4939.7	4921.6	4921.6	4921.6
35°	7322.0	7038.6	6381.2	5772.0	5223.1	4903.5	4746.7	4728.6	4686.4	4668.3	4668.3
37.5°	7593.5	7273.8	6459.6	5729.8	5120.6	4722.5	4535.6	4475.3	4427.0	4421.0	4421.0
40°	7925.2	7539.2	6574.2	5681.5	5012.0	4535.6	4288.3	4185.8	4191.8	4215.9	4215.9
42.5°	8317.2	7864.9	6718.9	5657.4	4855.2	4342.6	3998.8	3878.2	3920.4	3944.5	3950.5
45°	8775.6	8250.9	6881.8	5627.2	4710.5	4125.4	3691.2	3540.4	3558.5	3564.5	3570.6
47.5°	9306.4	8679.1	7050.6	5603.1	4547.6	3854.0	3353.4	3154.4	3148.4	3112.2	3124.2
50°	9861.2	9131.5	7225.5	5560.9	4348.6	3534.4	2997.6	2762.4	2714.1	2659.8	2665.9
52.5°	10452.3	9595.9	7388.4	5494.6	4101.3	3208.7	2659.8	2406.5	2310.0	2249.7	2261.8
55°	11103.7	10072.3	7545.2	5392.0	3842.0	2883.0	2358.3	2098.9	1978.3	1930.0	1936.1
57.5°	11700.8	10530.7	7659.8	5265.4	3558.5	2587.4	2092.9	1839.6	1761.2	1755.1	1761.2
60°	12279.8	10916.7	7708.1	5090.5	3269.0	2316.0	1845.6	1652.6	1598.3	1628.5	1634.5
62.5°	12768.4	11164.0	7683.9	4855.2	2973.5	2056.7	1646.6	1507.8	1471.6	1532.0	1538.0
65°	13051.8	11242.4	7515.1	4517.5	2653.8	1803.4	1459.6	1308.8	1290.7	1326.9	1345.0
67.5°	12677.9	10753.9	7056.7	4053.1	2297.9	1568.1	1278.6	1158.0	1127.9	1158.0	1158.0
70°	11236.4	9318.4	5971.0	3317.2	1905.9	1339.0	1109.8	1025.3	1001.2	1025.3	1019.3
72.5°	9360.6	7750.3	4704.4	2587.4	1501.8	1127.9	965.0	886.6	862.5	838.4	826.3
75°	7261.7	5886.6	3413.7	1899.9	1133.9	904.7	808.2	735.8	675.5	699.6	687.6
77.5°	5319.6	4131.5	2418.6	1314.8	814.2	699.6	633.3	579.0	536.8	585.0	579.0
80°	3425.8	2671.9	1616.4	880.6	560.9	488.5	464.4	434.3	476.5	621.2	633.3
82.5°	2092.9	1694.8	965.0	573.0	367.9	325.7	301.6	301.6	488.5	536.8	542.8
85°	934.9	898.7	524.7	295.5	205.1	187.0	168.9	217.1	199.0	144.8	150.8
87.5°	150.8	156.8	114.6	102.5	78.4	78.4	60.3	42.2	30.2	18.1	18.1
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)