

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: P841305

Luminaire Tested: **ARCH4-160-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841305
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: ARCH4-160-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24525 lumens
Efficiency: N/A
Efficacy: 152.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 160.7
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



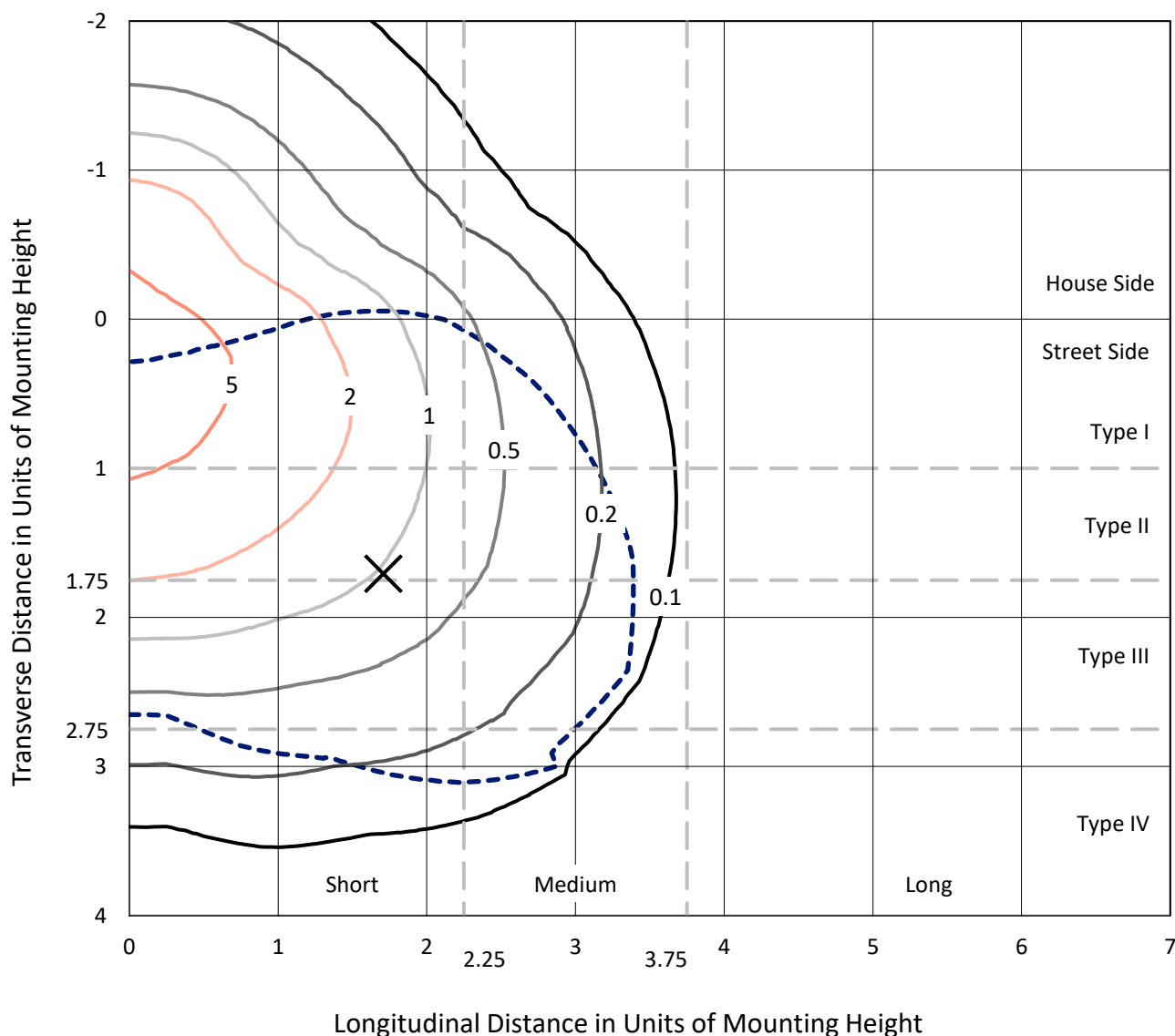
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

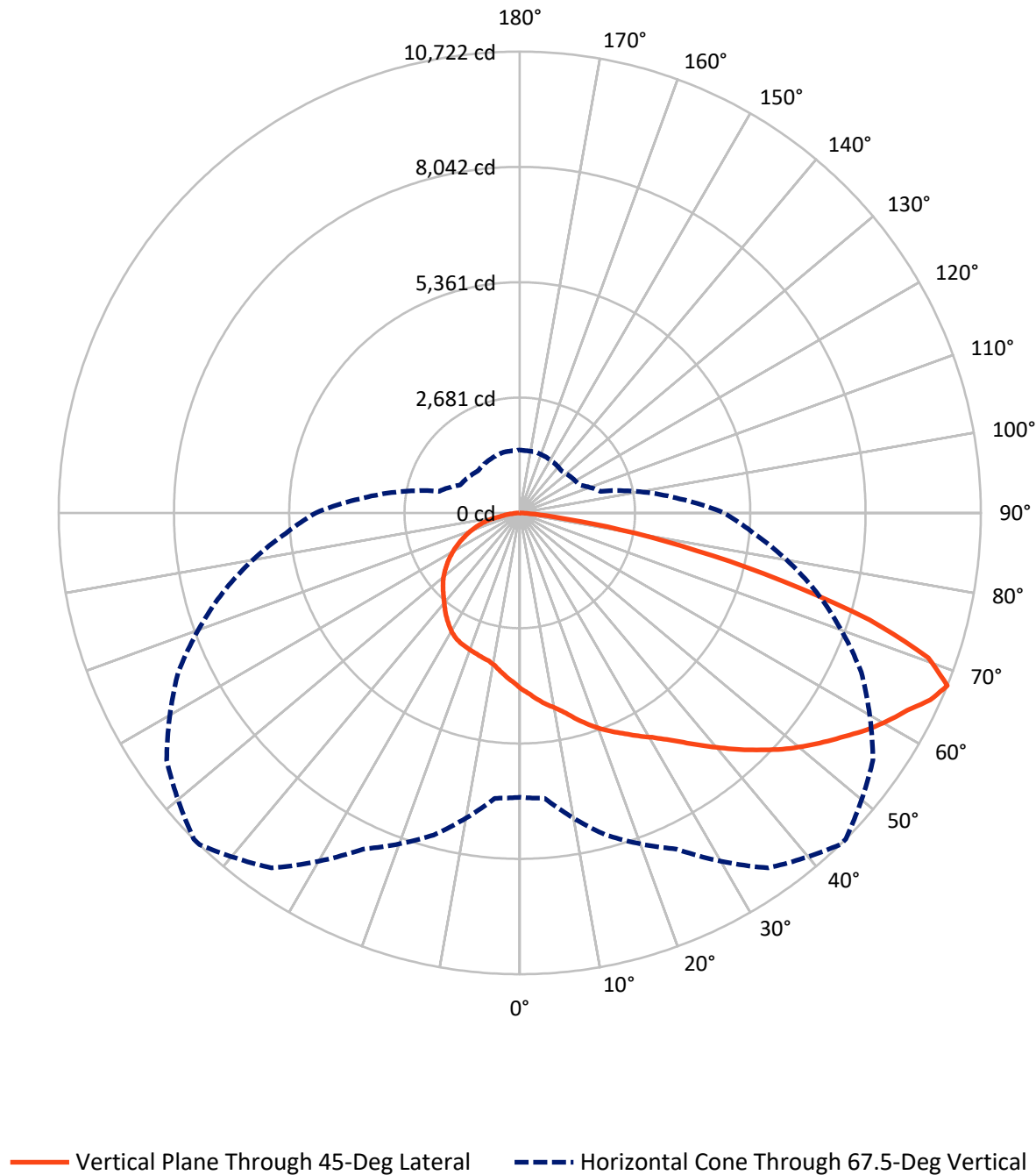


Based on 25 foot mounting height. Maximum calculated value = 7.6 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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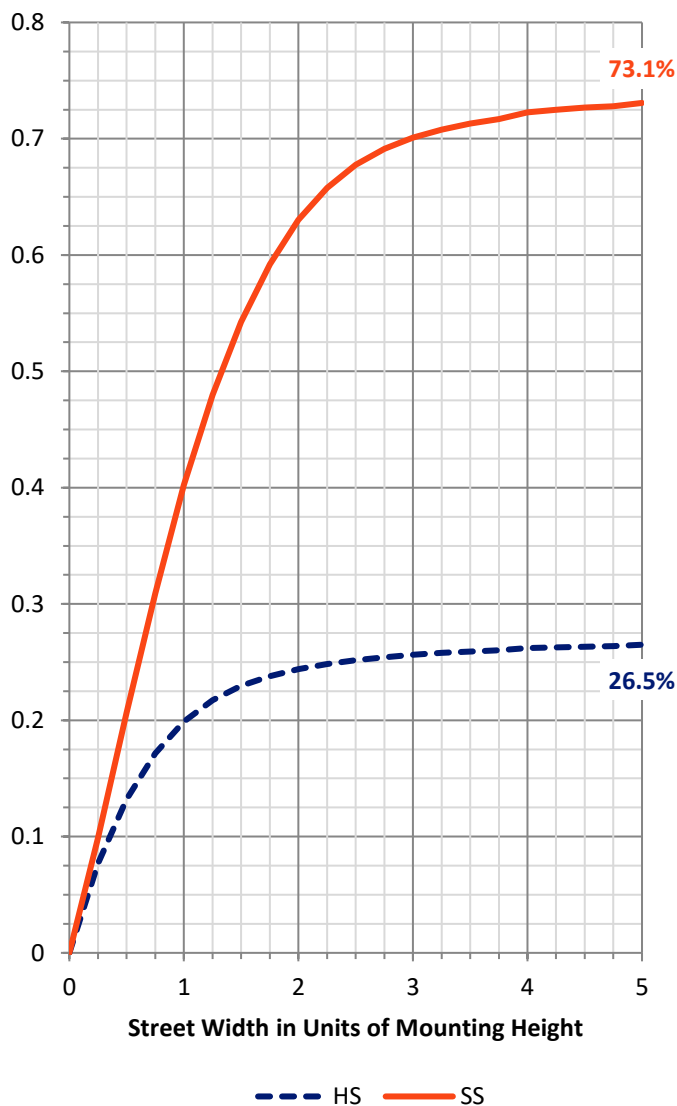
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6551.9	0.0	6551.9
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	17973.1	0.0	17973.1
	% Fixture	73.3	0.0	73.3
Total	Lumens	24525.0	0.0	24525.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	391.6	1.6
10°-20°	1209.8	4.9
20°-30°	2088.2	8.5
30°-40°	3079.4	12.6
40°-50°	4172.0	17.0
50°-60°	5099.1	20.8
60°-70°	5259.1	21.4
70°-80°	2880.5	11.7
80°-90°	345.3	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°	24525.0	100.0
0°-180°	24525.0	100.0

Coefficient of Utilization



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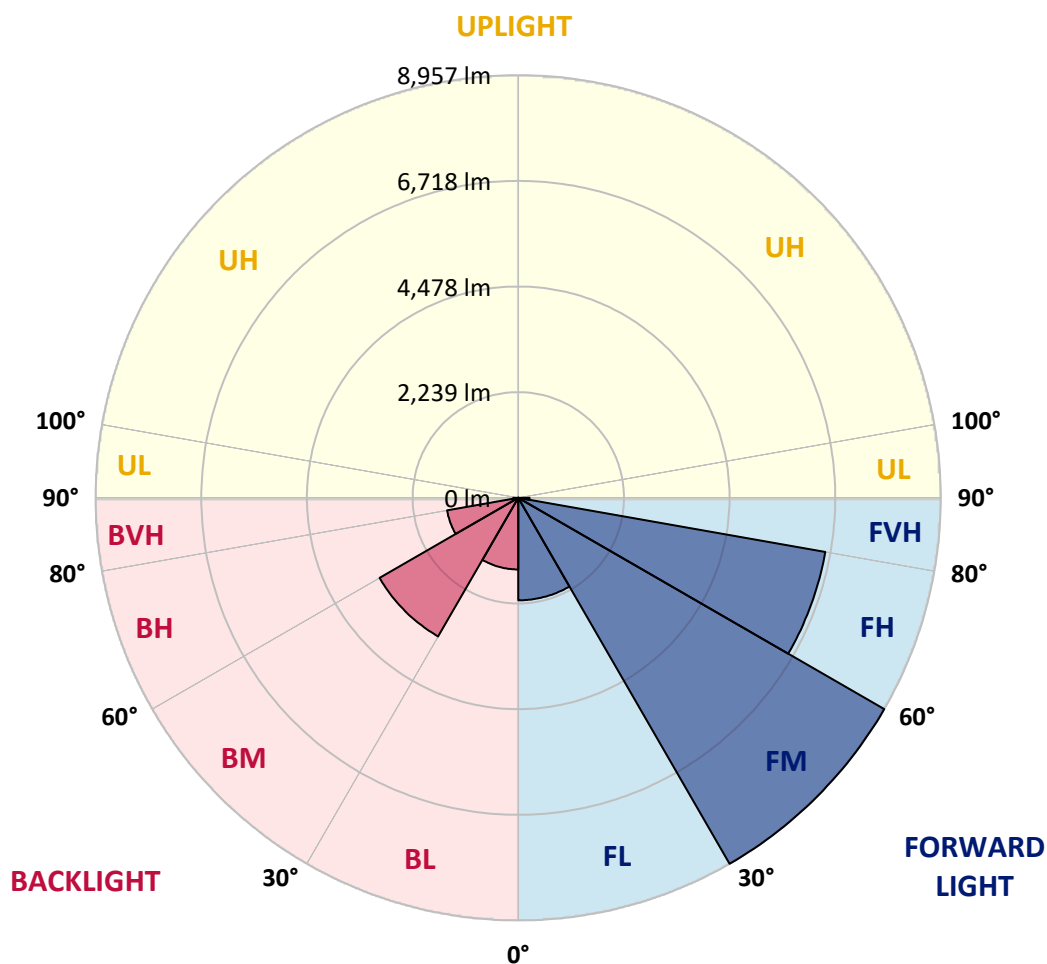
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2171.1	8.9			
FM	(30°-60°)	8956.8	36.5			
FH	(60°-80°)	6607.4	26.9			G3/7500
FVH	(80°-90°)	237.8	1.0			G3/500
BL	(0°-30°)	1518.5	6.2	B3/2500		
BM	(30°-60°)	3393.8	13.8	B3/5000		
BH	(60°-80°)	1532.2	6.2	B3/2500		G3/2500
BVH	(80°-90°)	107.4	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-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3
2.5°	4269.4	4265.7	4273.2	4247.1	4213.5	4209.7	4209.7	4187.3	4161.2	4109.0	4067.9
5°	4471.0	4463.5	4467.2	4429.9	4385.1	4362.7	4359.0	4310.5	4250.8	4168.7	4094.0
7.5°	4657.6	4650.1	4646.4	4605.3	4538.1	4500.8	4497.1	4426.2	4355.3	4228.4	4120.2
10°	4833.0	4825.5	4818.1	4762.1	4680.0	4624.0	4616.5	4527.0	4437.4	4280.6	4142.6
12.5°	5056.9	5042.0	5034.5	4967.3	4847.9	4788.2	4777.0	4657.6	4545.6	4355.3	4187.3
15°	5292.0	5280.8	5269.6	5206.2	5071.8	4993.5	4974.8	4825.5	4672.5	4452.3	4254.5
17.5°	5467.4	5456.2	5456.2	5400.2	5277.1	5187.5	5172.6	4993.5	4803.1	4541.9	4306.8
20°	5575.7	5564.5	5575.7	5542.1	5448.8	5374.1	5359.2	5161.4	4933.7	4624.0	4351.5
22.5°	5654.0	5642.8	5661.5	5646.6	5579.4	5534.6	5523.4	5329.3	5068.1	4709.8	4396.3
25°	5792.1	5792.1	5792.1	5766.0	5702.5	5687.6	5687.6	5519.7	5239.8	4821.8	4463.5
27.5°	6068.3	6053.4	6034.7	5960.1	5851.8	5848.1	5870.5	5713.7	5437.6	4967.3	4545.6
30°	6475.1	6467.6	6396.7	6240.0	6057.1	6038.4	6053.4	5922.7	5650.3	5120.3	4638.9
32.5°	7001.3	6975.2	6829.6	6594.5	6333.3	6247.4	6277.3	6139.2	5874.2	5277.1	4728.5
35°	7374.5	7382.0	7277.5	7064.7	6755.0	6527.3	6549.7	6381.8	6116.8	5452.5	4840.4
37.5°	7803.7	7829.8	7673.1	7512.6	7225.2	6837.1	6859.5	6631.8	6359.4	5672.7	4959.9
40°	8397.1	8344.8	8079.8	7889.5	7572.3	7161.8	7180.4	6911.7	6639.3	5881.7	5098.0
42.5°	8893.4	8800.1	8479.2	8236.6	7855.9	7505.1	7523.8	7214.0	6922.9	6113.1	5251.0
45°	9606.2	9348.7	8886.0	8766.5	8147.0	7841.0	7859.7	7535.0	7221.5	6359.4	5415.2
47.5°	10020.5	9610.0	9315.1	9251.7	8468.0	8188.1	8210.5	7874.6	7542.4	6639.3	5586.8
50°	9994.4	9729.4	9643.6	9486.8	8751.6	8512.8	8535.2	8225.4	7867.1	6915.5	5751.1
52.5°	9822.7	9871.2	9826.4	9565.2	9035.2	8826.3	8852.4	8572.5	8199.3	7173.0	5904.1
55°	10087.7	10121.3	10035.4	9692.1	9348.7	9139.7	9169.6	8938.2	8527.7	7400.6	6034.7
57.5°	10404.9	10285.5	10199.6	9916.0	9673.4	9479.4	9512.9	9311.4	8811.3	7583.5	6135.5
60°	10390.0	10139.9	10225.8	9930.9	9893.6	9792.8	9822.7	9617.4	9027.8	7717.8	6176.5
62.5°	9624.9	9490.6	9923.5	9822.7	10072.7	10072.7	10110.1	9804.0	9158.4	7773.8	6154.1
65°	8296.3	8303.8	9065.1	9483.1	10285.5	10457.1	10487.0	9919.7	9083.8	7609.6	5945.1
67.5°	6609.4	6657.9	7751.4	8621.0	10072.7	10718.4	10722.1	10024.2	8762.8	7146.8	5460.0
70°	4836.7	4874.0	6165.3	7221.5	9068.8	10139.9	10080.2	9729.4	8064.9	6340.7	4702.4
72.5°	3269.3	3302.8	4631.4	5545.8	7441.7	8635.9	8505.3	8598.6	6874.4	5209.9	3780.5
75°	2198.2	2239.2	3295.4	3967.1	5474.9	6557.2	6266.1	6512.4	5318.1	3944.8	2758.0
77.5°	1384.6	1410.7	2093.7	2601.2	3739.5	4463.5	4172.4	4176.1	3064.0	2123.5	1481.6
80°	880.8	888.2	1268.9	1500.3	2164.6	2683.3	2373.6	1929.5	1380.9	1127.1	884.5
82.5°	511.3	500.1	757.6	847.2	1030.0	1018.8	843.4	798.7	604.6	563.5	451.6
85°	205.3	190.3	332.2	309.8	313.5	332.2	246.3	246.3	197.8	153.0	112.0
87.5°	41.1	41.1	44.8	41.1	41.1	44.8	33.6	33.6	29.9	29.9	29.9
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°	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3	4090.3
2.5°	4060.4	4053.0	4034.3	3985.8	3959.7	3944.8	3922.4	3914.9	3911.2	3914.9	3926.1
5°	4071.6	4045.5	3993.3	3914.9	3862.7	3829.1	3791.7	3776.8	3765.6	3765.6	3776.8
7.5°	4079.1	4038.1	3948.5	3832.8	3758.2	3705.9	3661.1	3642.5	3638.7	3649.9	3653.7
10°	4082.8	4023.1	3896.2	3750.7	3653.7	3586.5	3541.7	3530.5	3541.7	3564.1	3567.8
12.5°	4109.0	4026.9	3866.4	3694.7	3579.0	3511.8	3478.3	3478.3	3508.1	3549.2	3552.9
15°	4153.7	4053.0	3851.5	3649.9	3530.5	3470.8	3459.6	3478.3	3523.0	3586.5	3593.9
17.5°	4187.3	4067.9	3817.9	3590.2	3467.1	3429.7	3448.4	3493.2	3556.6	3642.5	3649.9
20°	4209.7	4067.9	3769.4	3519.3	3403.6	3396.1	3448.4	3519.3	3586.5	3687.2	3698.4
22.5°	4232.1	4060.4	3713.4	3433.5	3332.7	3355.1	3452.1	3541.7	3608.9	3717.1	3735.8
25°	4273.2	4071.6	3657.4	3347.6	3258.1	3321.5	3448.4	3556.6	3627.5	3739.5	3769.4
27.5°	4329.2	4097.8	3616.3	3269.3	3183.4	3269.3	3422.3	3552.9	3627.5	3735.8	3769.4
30°	4388.9	4127.6	3567.8	3183.4	3097.6	3194.6	3366.3	3511.8	3597.7	3698.4	3739.5
32.5°	4452.3	4161.2	3526.8	3090.1	2993.1	3093.9	3284.2	3448.4	3541.7	3635.0	3679.8
35°	4538.1	4220.9	3504.4	3015.5	2899.8	2989.4	3179.7	3366.3	3467.1	3552.9	3605.1
37.5°	4642.6	4295.6	3493.2	2940.8	2799.0	2873.7	3067.7	3265.5	3373.8	3444.7	3493.2
40°	4762.1	4388.9	3489.4	2869.9	2698.3	2754.2	2952.0	3149.8	3254.3	3310.3	3351.4
42.5°	4896.4	4493.4	3482.0	2799.0	2597.5	2642.3	2840.1	3034.1	3123.7	3172.2	3209.5
45°	5038.2	4597.9	3467.1	2713.2	2489.3	2541.5	2724.4	2896.1	2989.4	3030.4	3071.5
47.5°	5180.1	4702.4	3437.2	2616.2	2392.2	2440.7	2601.2	2750.5	2825.1	2862.5	2903.5
50°	5318.1	4795.7	3366.3	2504.2	2291.5	2336.3	2459.4	2560.2	2616.2	2646.0	2687.1
52.5°	5441.3	4859.1	3265.5	2373.6	2190.7	2213.1	2295.2	2381.0	2425.8	2429.6	2466.9
55°	5545.8	4892.7	3120.0	2239.2	2082.5	2086.2	2131.0	2198.2	2216.8	2201.9	2228.0
57.5°	5605.5	4874.0	2959.5	2101.1	1970.5	1955.6	1989.2	2022.8	2026.5	1989.2	2015.3
60°	5620.4	4788.2	2750.5	1963.0	1858.6	1817.5	1828.7	1821.2	1813.8	1798.8	1821.2
62.5°	5545.8	4605.3	2519.1	1828.7	1739.1	1675.7	1671.9	1668.2	1679.4	1683.1	1686.9
65°	5273.4	4262.0	2243.0	1690.6	1612.2	1526.4	1522.7	1567.5	1582.4	1560.0	1567.5
67.5°	4747.1	3735.8	1940.7	1530.1	1451.8	1377.1	1407.0	1433.1	1459.2	1451.8	1459.2
70°	4000.7	3067.7	1664.5	1351.0	1276.4	1235.3	1268.9	1291.3	1295.0	1287.6	1295.0
72.5°	3146.1	2396.0	1407.0	1168.1	1100.9	1082.3	1123.3	1142.0	1175.6	1190.5	1194.2
75°	2272.8	1769.0	1153.2	970.3	914.3	914.3	951.7	985.3	1015.1	996.5	985.3
77.5°	1268.9	1056.2	828.5	668.0	679.2	731.5	746.4	783.7	813.6	809.9	802.4
80°	768.8	660.6	559.8	432.9	429.2	470.2	567.3	630.7	645.6	612.1	608.3
82.5°	399.3	347.1	298.6	242.6	268.7	313.5	328.4	395.6	436.6	421.7	440.4
85°	100.8	97.0	108.2	112.0	138.1	153.0	167.9	197.8	130.6	63.4	63.4
87.5°	29.9	29.9	37.3	37.3	48.5	59.7	56.0	56.0	29.9	3.7	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)