

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: P836403

Luminaire Tested: **ARCH3-180-730-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836403
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-730-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23363 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 180.5
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

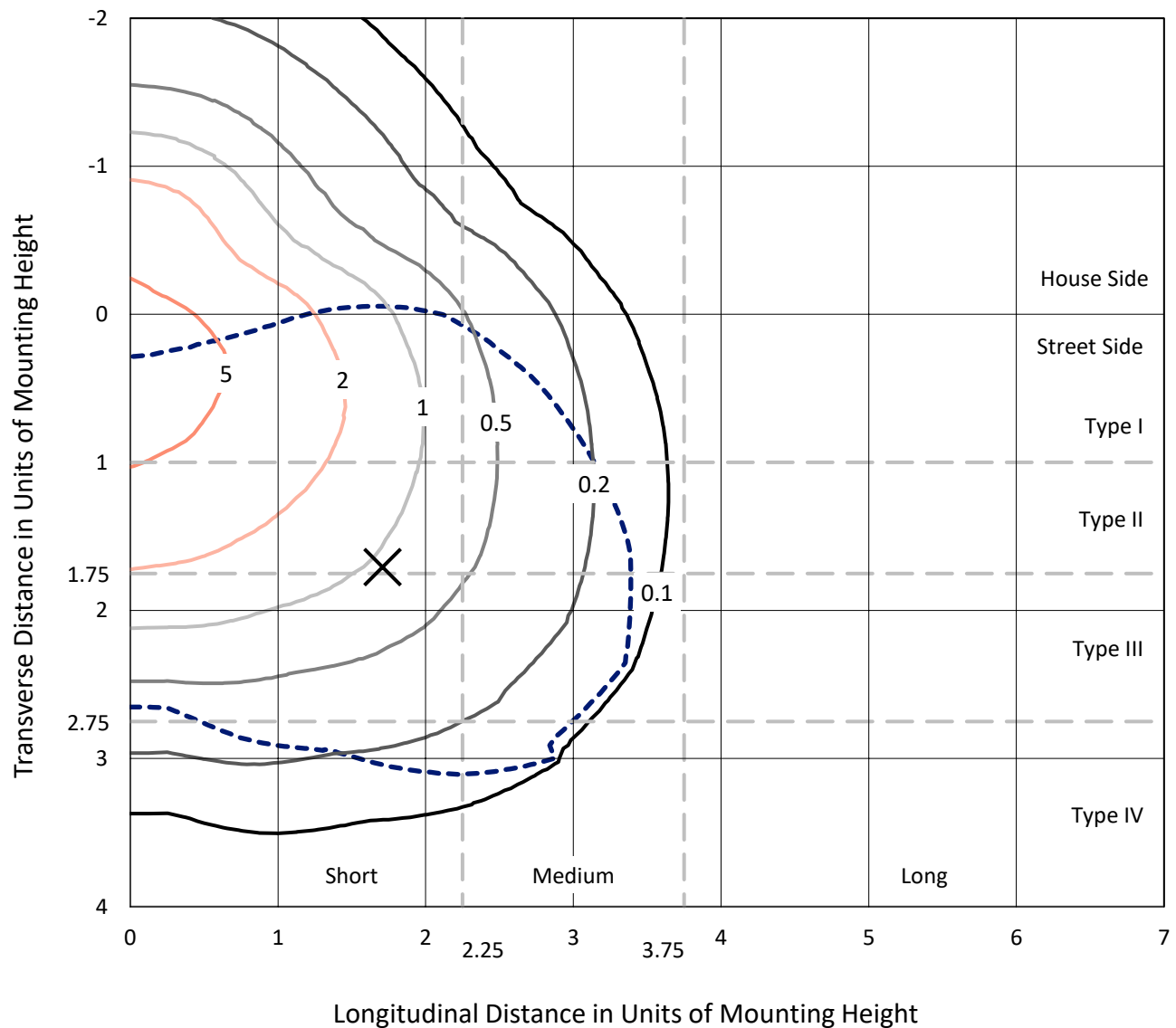


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Iso-Footcandle Lines of Horizontal Illumination

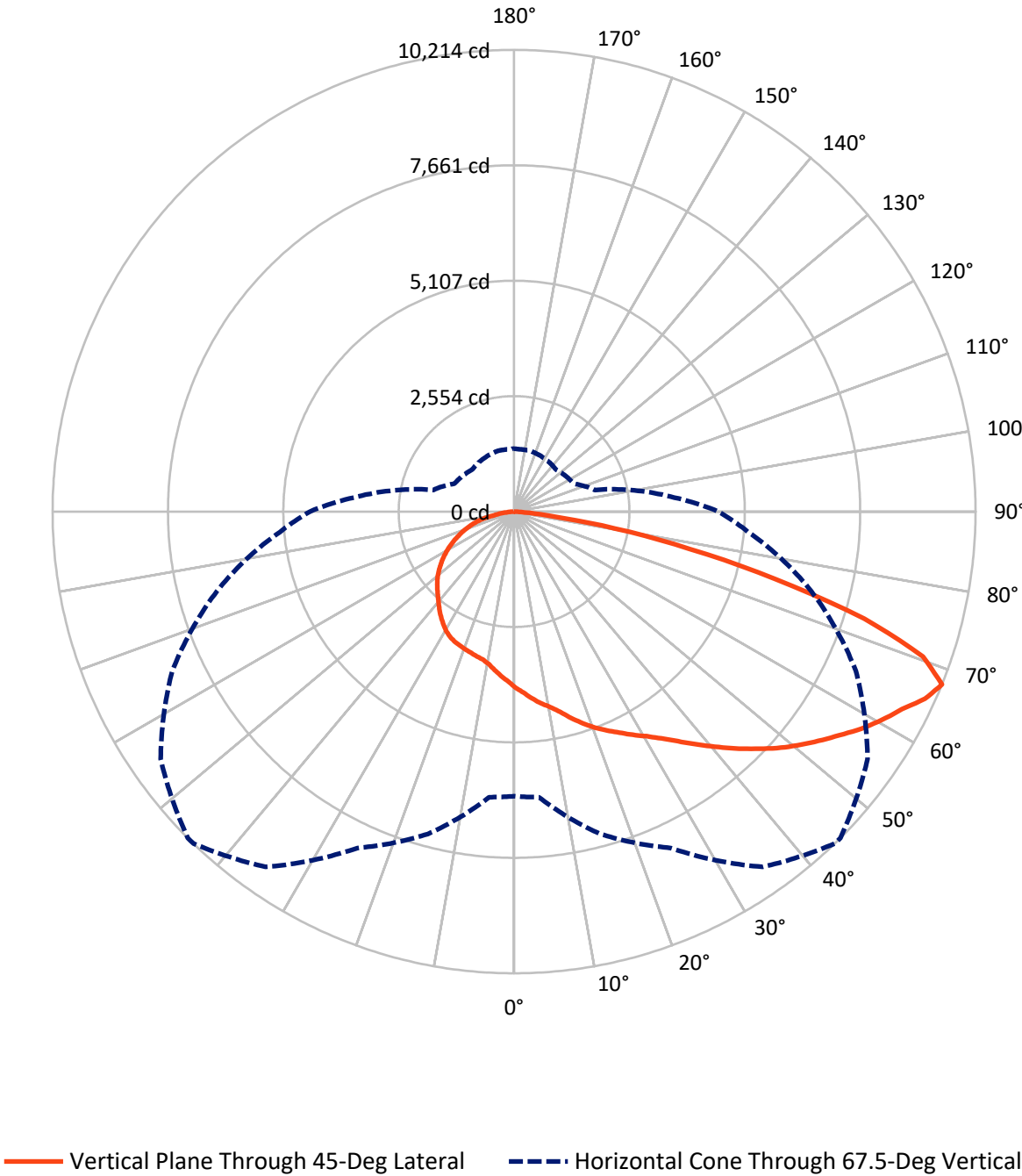
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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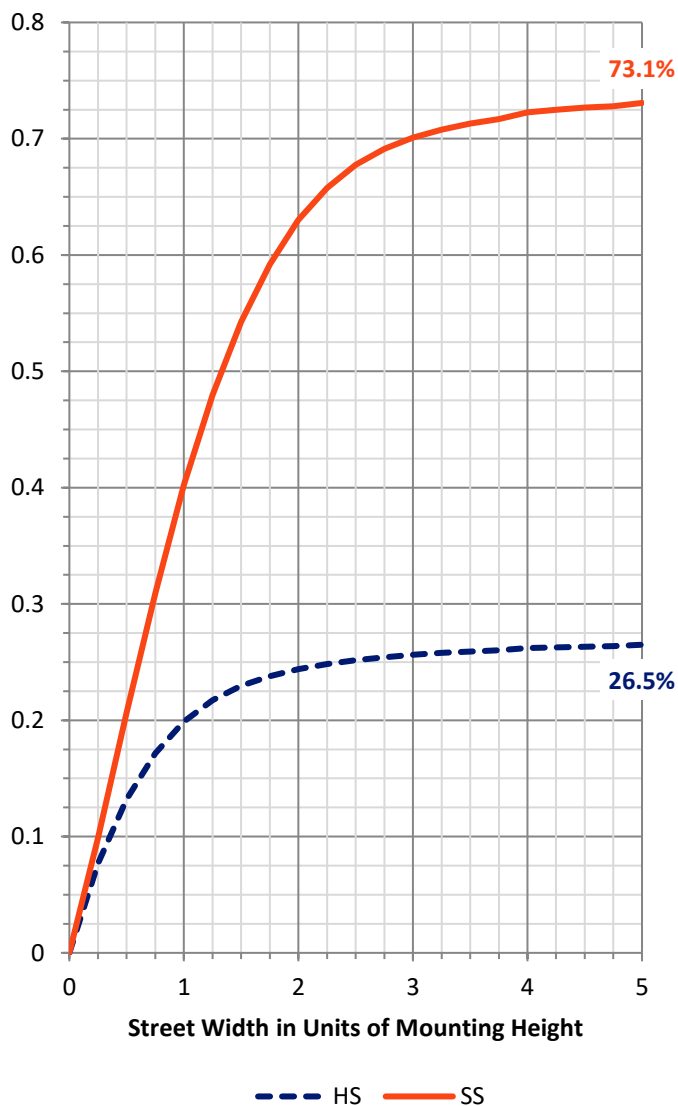
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6241.4	0.0	6241.4
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	17121.5	0.0	17121.5
	% Fixture	73.3	0.0	73.3
Total	Lumens	23363.0	0.0	23363.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	373.1	1.6
10°-20°	1152.5	4.9
20°-30°	1989.3	8.5
30°-40°	2933.5	12.6
40°-50°	3974.3	17.0
50°-60°	4857.5	20.8
60°-70°	5009.9	21.4
70°-80°	2744.1	11.7
80°-90°	328.9	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°	23363.0	100.0
0°-180°	23363.0	100.0

Coefficient of Utilization



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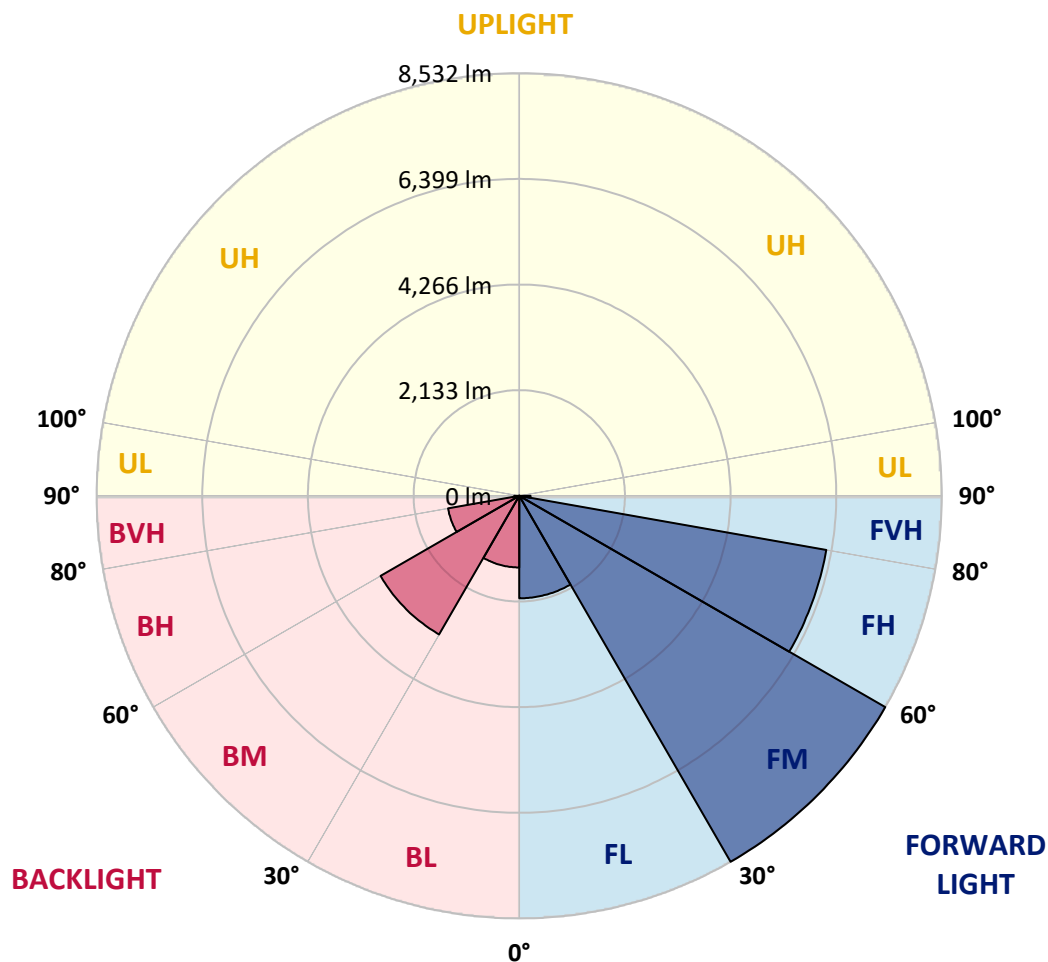
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2068.3	8.9			
FM	(30°-60°)	8532.4	36.5			
FH	(60°-80°)	6294.3	26.9			G3/7500
FVH	(80°-90°)	226.6	1.0			G3/500
BL	(0°-30°)	1446.6	6.2	B3/2500		
BM	(30°-60°)	3233.0	13.8	B3/5000		
BH	(60°-80°)	1459.6	6.2	B3/2500		G3/2500
BVH	(80°-90°)	102.3	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°	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5
2.5°	4067.2	4063.6	4070.7	4045.8	4013.8	4010.3	4010.3	3988.9	3964.1	3914.3	3875.2
5°	4259.1	4252.0	4255.6	4220.0	4177.4	4156.0	4152.5	4106.3	4049.4	3971.2	3900.1
7.5°	4436.9	4429.8	4426.2	4387.1	4323.1	4287.6	4284.0	4216.5	4148.9	4028.0	3924.9
10°	4604.0	4596.9	4589.8	4536.4	4458.2	4404.9	4397.8	4312.5	4227.1	4077.8	3946.3
12.5°	4817.3	4803.1	4796.0	4732.0	4618.2	4561.3	4550.7	4436.9	4330.2	4148.9	3988.9
15°	5041.3	5030.6	5020.0	4959.5	4831.5	4756.9	4739.1	4596.9	4451.1	4241.4	4052.9
17.5°	5208.4	5197.7	5197.7	5144.4	5027.1	4941.7	4927.5	4756.9	4575.5	4326.7	4102.7
20°	5311.5	5300.8	5311.5	5279.5	5190.6	5119.5	5105.3	4916.8	4700.0	4404.9	4145.4
22.5°	5386.1	5375.5	5393.2	5379.0	5315.0	5272.4	5261.7	5076.8	4828.0	4486.7	4188.0
25°	5517.7	5517.7	5517.7	5492.8	5432.4	5418.1	5418.1	5258.1	4991.5	4593.3	4252.0
27.5°	5780.8	5766.5	5748.8	5677.7	5574.6	5571.0	5592.3	5443.0	5179.9	4732.0	4330.2
30°	6168.3	6161.2	6093.6	5944.3	5770.1	5752.3	5766.5	5642.1	5382.6	4877.7	4419.1
32.5°	6669.6	6644.7	6506.0	6282.0	6033.2	5951.4	5979.9	5848.3	5595.9	5027.1	4504.4
35°	7025.1	7032.2	6932.7	6730.0	6434.9	6218.1	6239.4	6079.4	5827.0	5194.2	4611.1
37.5°	7433.9	7458.8	7309.5	7156.6	6882.9	6513.1	6534.5	6317.6	6058.1	5403.9	4724.9
40°	7999.2	7949.4	7697.0	7515.7	7213.5	6822.4	6840.2	6584.2	6324.7	5603.0	4856.4
42.5°	8472.1	8383.2	8077.4	7846.3	7483.7	7149.5	7167.3	6872.2	6594.9	5823.4	5002.2
45°	9151.1	8905.8	8464.9	8351.2	7761.0	7469.5	7487.3	7178.0	6879.3	6058.1	5158.6
47.5°	9545.7	9154.7	8873.8	8813.4	8066.8	7800.1	7821.5	7501.5	7185.1	6324.7	5322.1
50°	9520.8	9268.4	9186.7	9037.3	8337.0	8109.4	8130.8	7835.7	7494.4	6587.8	5478.6
52.5°	9357.3	9403.5	9360.9	9112.0	8607.2	8408.1	8432.9	8166.3	7810.8	6833.1	5624.3
55°	9609.7	9641.7	9559.9	9232.9	8905.8	8706.7	8735.1	8514.7	8123.6	7050.0	5748.8
57.5°	9911.9	9798.1	9716.4	9446.2	9215.1	9030.2	9062.2	8870.2	8393.8	7224.2	5844.8
60°	9897.7	9659.5	9741.3	9460.4	9424.8	9328.9	9357.3	9161.8	8600.0	7352.2	5883.9
62.5°	9168.9	9040.9	9453.3	9357.3	9595.5	9595.5	9631.1	9339.5	8724.5	7405.5	5862.5
65°	7903.2	7910.3	8635.6	9033.8	9798.1	9961.7	9990.1	9449.7	8653.4	7249.1	5663.4
67.5°	6296.3	6342.5	7384.2	8212.5	9595.5	10210.6	10214.1	9549.3	8347.6	6808.2	5201.3
70°	4607.5	4643.1	5873.2	6879.3	8639.1	9659.5	9602.6	9268.4	7682.8	6040.3	4479.6
72.5°	3114.4	3146.4	4412.0	5283.0	7089.1	8226.7	8102.3	8191.2	6548.7	4963.1	3601.4
75°	2094.0	2133.1	3139.2	3779.2	5215.5	6246.5	5969.2	6203.8	5066.2	3757.9	2627.3
77.5°	1319.0	1343.9	1994.5	2478.0	3562.3	4252.0	3974.7	3978.3	2918.8	2022.9	1411.4
80°	839.0	846.1	1208.8	1429.2	2062.0	2556.2	2261.1	1838.0	1315.4	1073.7	842.6
82.5°	487.1	476.4	721.7	807.0	981.2	970.6	803.5	760.8	575.9	536.8	430.2
85°	195.5	181.3	316.4	295.1	298.6	316.4	234.6	234.6	188.4	145.8	106.7
87.5°	39.1	39.1	42.7	39.1	39.1	42.7	32.0	32.0	28.4	28.4	28.4
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°	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5	3896.5
2.5°	3868.1	3861.0	3843.2	3797.0	3772.1	3757.9	3736.5	3729.4	3725.9	3729.4	3740.1
5°	3878.7	3853.8	3804.1	3729.4	3679.6	3647.6	3612.1	3597.9	3587.2	3587.2	3597.9
7.5°	3885.8	3846.7	3761.4	3651.2	3580.1	3530.3	3487.7	3469.9	3466.3	3477.0	3480.5
10°	3889.4	3832.5	3711.6	3573.0	3480.5	3416.6	3373.9	3363.2	3373.9	3395.2	3398.8
12.5°	3914.3	3836.1	3683.2	3519.7	3409.4	3345.4	3313.5	3313.5	3341.9	3381.0	3384.6
15°	3956.9	3861.0	3669.0	3477.0	3363.2	3306.3	3295.7	3313.5	3356.1	3416.6	3423.7
17.5°	3988.9	3875.2	3637.0	3420.1	3302.8	3267.2	3285.0	3327.7	3388.1	3469.9	3477.0
20°	4010.3	3875.2	3590.8	3352.6	3242.3	3235.2	3285.0	3352.6	3416.6	3512.5	3523.2
22.5°	4031.6	3868.1	3537.4	3270.8	3174.8	3196.1	3288.6	3373.9	3437.9	3541.0	3558.8
25°	4070.7	3878.7	3484.1	3189.0	3103.7	3164.1	3285.0	3388.1	3455.7	3562.3	3590.8
27.5°	4124.0	3903.6	3445.0	3114.4	3032.6	3114.4	3260.1	3384.6	3455.7	3558.8	3590.8
30°	4180.9	3932.1	3398.8	3032.6	2950.8	3043.3	3206.8	3345.4	3427.2	3523.2	3562.3
32.5°	4241.4	3964.1	3359.7	2943.7	2851.3	2947.3	3128.6	3285.0	3373.9	3462.8	3505.4
35°	4323.1	4020.9	3338.3	2872.6	2762.4	2847.7	3029.0	3206.8	3302.8	3384.6	3434.3
37.5°	4422.7	4092.0	3327.7	2801.5	2666.4	2737.5	2922.4	3110.8	3213.9	3281.5	3327.7
40°	4536.4	4180.9	3324.1	2734.0	2570.4	2623.7	2812.2	3000.6	3100.1	3153.5	3192.6
42.5°	4664.4	4280.5	3317.0	2666.4	2474.4	2517.1	2705.5	2890.4	2975.7	3021.9	3057.5
45°	4799.5	4380.0	3302.8	2584.6	2371.3	2421.1	2595.3	2758.8	2847.7	2886.8	2925.9
47.5°	4934.6	4479.6	3274.3	2492.2	2278.9	2325.1	2478.0	2620.2	2691.3	2726.8	2765.9
50°	5066.2	4568.4	3206.8	2385.5	2182.9	2225.6	2342.9	2438.9	2492.2	2520.6	2559.7
52.5°	5183.5	4628.9	3110.8	2261.1	2086.9	2108.2	2186.5	2268.2	2310.9	2314.4	2350.0
55°	5283.0	4660.9	2972.2	2133.1	1983.8	1987.4	2030.0	2094.0	2111.8	2097.6	2122.5
57.5°	5339.9	4643.1	2819.3	2001.6	1877.1	1862.9	1894.9	1926.9	1930.5	1894.9	1919.8
60°	5354.1	4561.3	2620.2	1870.0	1770.5	1731.4	1742.1	1734.9	1727.8	1713.6	1734.9
62.5°	5283.0	4387.1	2399.8	1742.1	1656.7	1596.3	1592.7	1589.2	1599.8	1603.4	1607.0
65°	5023.5	4060.0	2136.7	1610.5	1535.8	1454.1	1450.5	1493.2	1507.4	1486.1	1493.2
67.5°	4522.2	3558.8	1848.7	1457.6	1383.0	1311.9	1340.3	1365.2	1390.1	1383.0	1390.1
70°	3811.2	2922.4	1585.6	1287.0	1215.9	1176.8	1208.8	1230.1	1233.7	1226.5	1233.7
72.5°	2997.0	2282.4	1340.3	1112.8	1048.8	1031.0	1070.1	1087.9	1119.9	1134.1	1137.7
75°	2165.1	1685.2	1098.6	924.4	871.0	871.0	906.6	938.6	967.0	949.2	938.6
77.5°	1208.8	1006.1	789.3	636.4	647.0	696.8	711.0	746.6	775.0	771.5	764.4
80°	732.4	629.3	533.3	412.4	408.8	448.0	540.4	600.8	615.1	583.1	579.5
82.5°	380.4	330.6	284.4	231.1	256.0	298.6	312.9	376.9	416.0	401.7	419.5
85°	96.0	92.4	103.1	106.7	131.5	145.8	160.0	188.4	124.4	60.4	60.4
87.5°	28.4	28.4	35.6	35.6	46.2	56.9	53.3	53.3	28.4	3.6	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)