

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: P840882

Luminaire Tested: **ARCH4-100-730-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840882
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: ARCH4-100-730-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17160 lumens
Efficiency: N/A
Efficacy: 166.4 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): 103.1
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

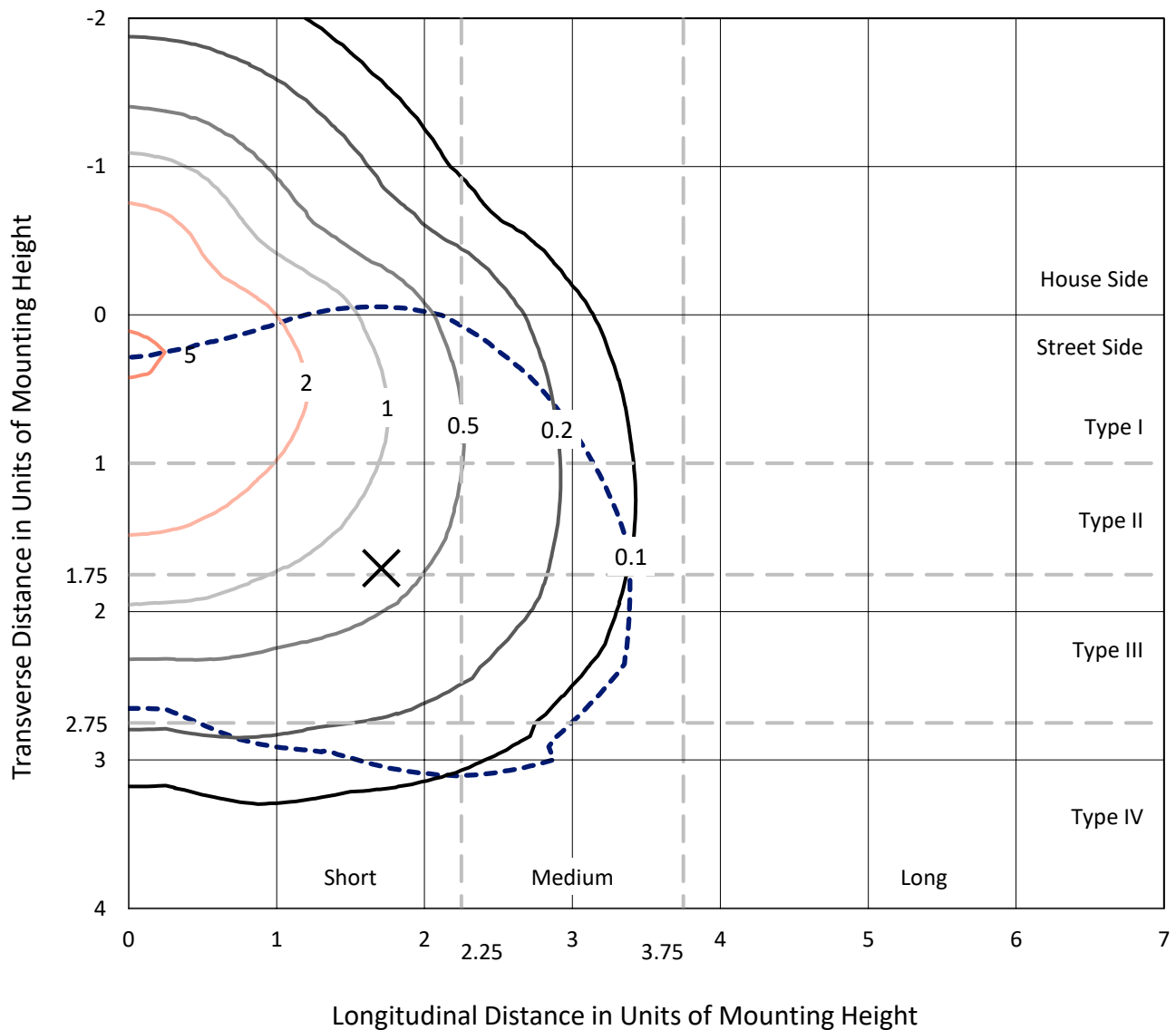


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

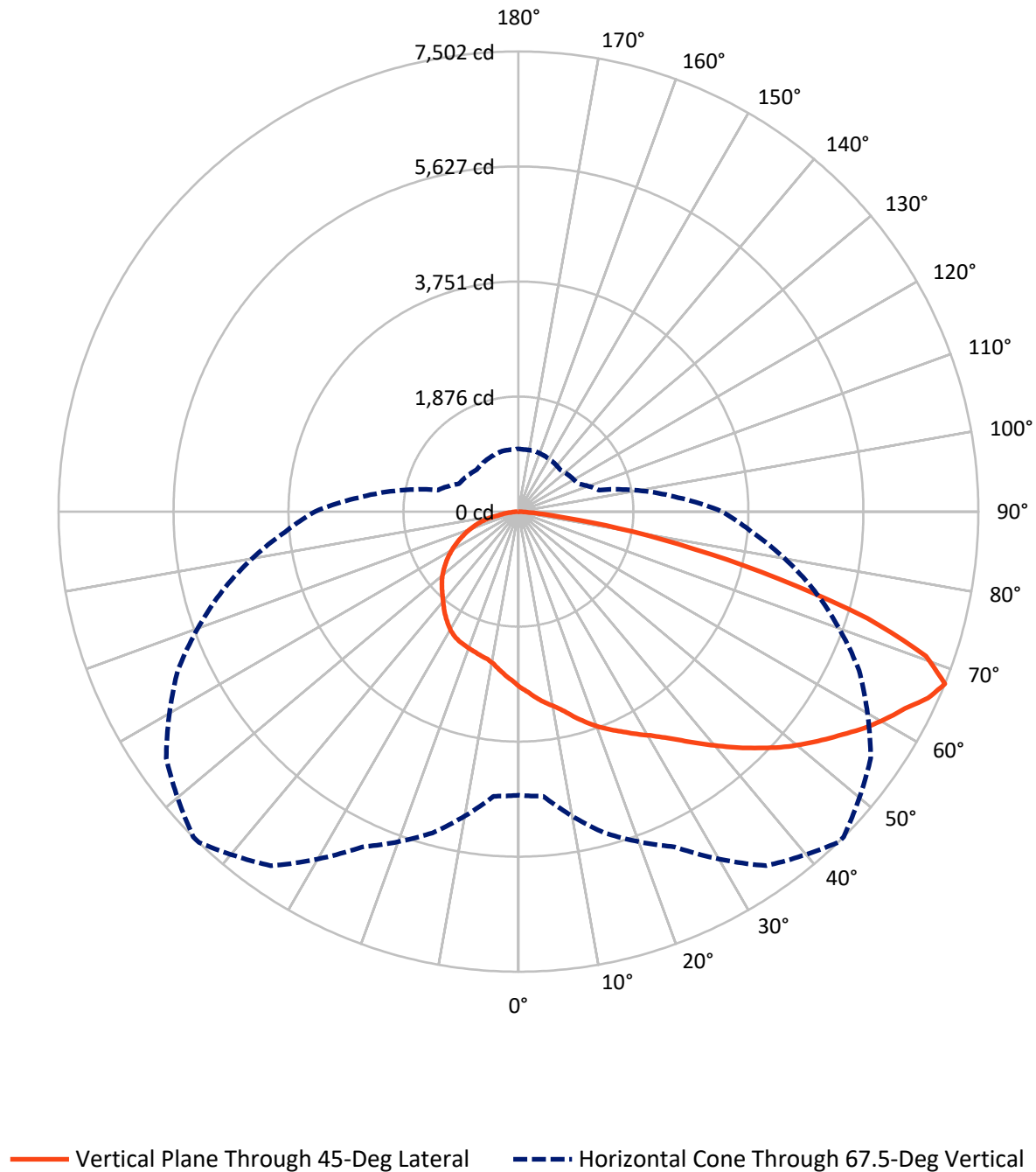


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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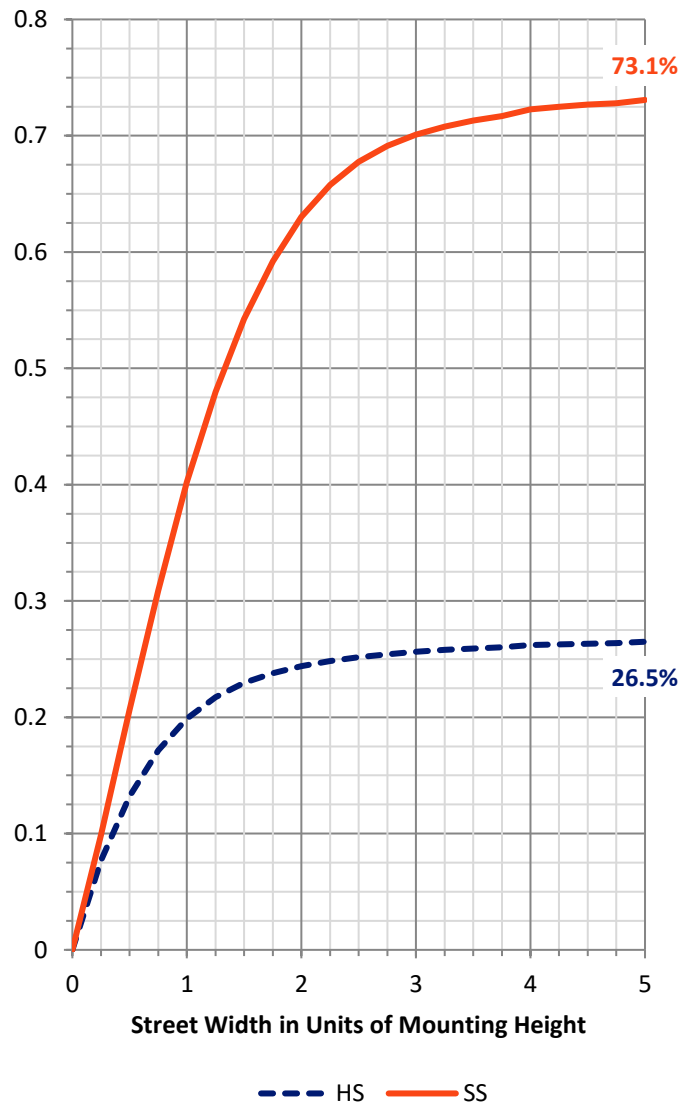
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4584.3	0.0	4584.3
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	12575.7	0.0	12575.7
	% Fixture	73.3	0.0	73.3
Total	Lumens	17160.0	0.0	17160.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.0	1.6
10°-20°	846.5	4.9
20°-30°	1461.1	8.5
30°-40°	2154.6	12.6
40°-50°	2919.1	17.0
50°-60°	3567.8	20.8
60°-70°	3679.7	21.4
70°-80°	2015.5	11.7
80°-90°	241.6	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°	17160.0	100.0
0°-180°	17160.0	100.0

Coefficient of Utilization



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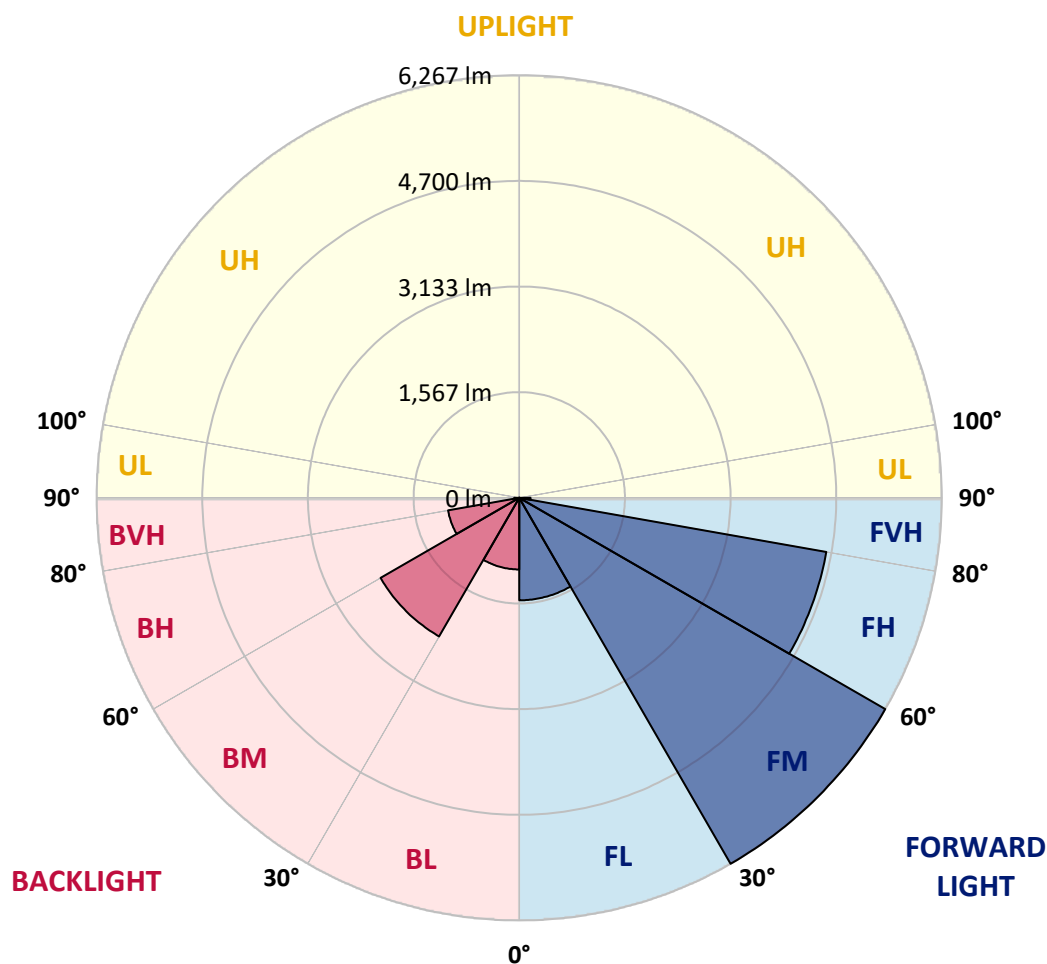
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1519.1	8.9			
FM	(30°-60°)	6267.0	36.5			
FH	(60°-80°)	4623.2	26.9			G2/5000
FVH	(80°-90°)	166.4	1.0			G2/225
BL	(0°-30°)	1062.5	6.2	B3/2500		
BM	(30°-60°)	2374.6	13.8	B2/2500		
BH	(60°-80°)	1072.1	6.2	B3/2500		G3/2500
BVH	(80°-90°)	75.2	0.4			G1/100
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°	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0
2.5°	2987.3	2984.7	2989.9	2971.6	2948.1	2945.5	2945.5	2929.9	2911.6	2875.0	2846.3
5°	3128.3	3123.1	3125.7	3099.6	3068.3	3052.6	3050.0	3016.0	2974.2	2916.8	2864.6
7.5°	3258.9	3253.7	3251.0	3222.3	3175.3	3149.2	3146.6	3097.0	3047.4	2958.6	2882.9
10°	3381.6	3376.4	3371.2	3332.0	3274.5	3235.4	3230.2	3167.5	3104.8	2995.1	2898.5
12.5°	3538.3	3527.8	3522.6	3475.6	3392.1	3350.3	3342.4	3258.9	3180.5	3047.4	2929.9
15°	3702.8	3695.0	3687.1	3642.7	3548.7	3493.9	3480.8	3376.4	3269.3	3115.3	2976.9
17.5°	3825.5	3817.7	3817.7	3778.5	3692.3	3629.7	3619.2	3493.9	3360.7	3177.9	3013.4
20°	3901.3	3893.4	3901.3	3877.8	3812.5	3760.2	3749.8	3611.4	3452.1	3235.4	3044.8
22.5°	3956.1	3948.3	3961.3	3950.9	3903.9	3872.5	3864.7	3728.9	3546.1	3295.4	3076.1
25°	4052.7	4052.7	4052.7	4034.4	3990.0	3979.6	3979.6	3862.1	3666.2	3373.8	3123.1
27.5°	4245.9	4235.5	4222.4	4170.2	4094.5	4091.9	4107.5	3997.9	3804.6	3475.6	3180.5
30°	4530.6	4525.3	4475.7	4366.1	4238.1	4225.1	4235.5	4144.1	3953.5	3582.7	3245.8
32.5°	4898.8	4880.5	4778.6	4614.1	4431.3	4371.3	4392.2	4295.6	4110.2	3692.3	3308.5
35°	5159.9	5165.1	5092.0	4943.2	4726.4	4567.1	4582.8	4465.3	4279.9	3815.1	3386.8
37.5°	5460.2	5478.5	5368.8	5256.5	5055.4	4783.9	4799.5	4640.2	4449.6	3969.1	3470.4
40°	5875.4	5838.8	5653.4	5520.2	5298.3	5011.0	5024.1	4836.1	4645.5	4115.4	3567.0
42.5°	6222.7	6157.4	5932.8	5763.1	5496.7	5251.3	5264.3	5047.6	4843.9	4277.3	3674.1
45°	6721.4	6541.3	6217.5	6133.9	5700.4	5486.3	5499.4	5272.2	5052.8	4449.6	3789.0
47.5°	7011.3	6724.0	6517.8	6473.4	5925.0	5729.1	5744.8	5509.8	5277.4	4645.5	3909.1
50°	6993.0	6807.6	6747.5	6637.9	6123.5	5956.3	5972.0	5755.3	5504.6	4838.7	4024.0
52.5°	6872.9	6906.8	6875.5	6692.7	6321.9	6175.7	6194.0	5998.1	5737.0	5018.9	4131.0
55°	7058.3	7081.8	7021.7	6781.5	6541.3	6395.0	6415.9	6254.0	5966.8	5178.2	4222.4
57.5°	7280.2	7196.7	7136.6	6938.2	6768.4	6632.7	6656.2	6515.1	6165.2	5306.1	4292.9
60°	7269.8	7094.8	7154.9	6948.6	6922.5	6852.0	6872.9	6729.3	6316.7	5400.1	4321.7
62.5°	6734.5	6640.5	6943.4	6872.9	7047.8	7047.8	7074.0	6859.8	6408.1	5439.3	4306.0
65°	5804.9	5810.1	6342.8	6635.3	7196.7	7316.8	7337.7	6940.8	6355.9	5324.4	4159.8
67.5°	4624.6	4658.5	5423.6	6032.1	7047.8	7499.6	7502.2	7013.9	6131.3	5000.6	3820.3
70°	3384.2	3410.3	4313.8	5052.8	6345.4	7094.8	7053.1	6807.6	5643.0	4436.6	3290.2
72.5°	2287.5	2311.0	3240.6	3880.4	5206.9	6042.5	5951.1	6016.4	4810.0	3645.3	2645.2
75°	1538.0	1566.8	2305.8	2775.8	3830.7	4588.0	4384.3	4556.7	3721.1	2760.1	1929.7
77.5°	968.8	987.1	1464.9	1820.1	2616.5	3123.1	2919.4	2922.0	2143.9	1485.8	1036.7
80°	616.3	621.5	887.8	1049.7	1514.5	1877.5	1660.8	1350.0	966.2	788.6	618.9
82.5°	357.7	349.9	530.1	592.8	720.7	712.9	590.1	558.8	423.0	394.3	316.0
85°	143.6	133.2	232.4	216.7	219.3	232.4	172.3	172.3	138.4	107.1	78.3
87.5°	28.7	28.7	31.3	28.7	28.7	31.3	23.5	23.5	20.9	20.9	20.9
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°	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0	2862.0
2.5°	2841.1	2835.8	2822.8	2788.8	2770.6	2760.1	2744.5	2739.2	2736.6	2739.2	2747.1
5°	2848.9	2830.6	2794.1	2739.2	2702.7	2679.2	2653.1	2642.6	2634.8	2634.8	2642.6
7.5°	2854.1	2825.4	2762.7	2681.8	2629.6	2593.0	2561.7	2548.6	2546.0	2553.8	2556.4
10°	2856.7	2815.0	2726.2	2624.3	2556.4	2509.4	2478.1	2470.3	2478.1	2493.8	2496.4
12.5°	2875.0	2817.6	2705.3	2585.2	2504.2	2457.2	2433.7	2433.7	2454.6	2483.3	2485.9
15°	2906.4	2835.8	2694.8	2553.8	2470.3	2428.5	2420.7	2433.7	2465.0	2509.4	2514.7
17.5°	2929.9	2846.3	2671.3	2512.1	2425.9	2399.8	2412.8	2444.2	2488.5	2548.6	2553.8
20°	2945.5	2846.3	2637.4	2462.4	2381.5	2376.3	2412.8	2462.4	2509.4	2579.9	2587.8
22.5°	2961.2	2841.1	2598.2	2402.4	2331.9	2347.5	2415.4	2478.1	2525.1	2600.8	2613.9
25°	2989.9	2848.9	2559.1	2342.3	2279.6	2324.0	2412.8	2488.5	2538.2	2616.5	2637.4
27.5°	3029.1	2867.2	2530.3	2287.5	2227.4	2287.5	2394.5	2485.9	2538.2	2613.9	2637.4
30°	3070.9	2888.1	2496.4	2227.4	2167.4	2235.3	2355.4	2457.2	2517.3	2587.8	2616.5
32.5°	3115.3	2911.6	2467.7	2162.1	2094.2	2164.8	2297.9	2412.8	2478.1	2543.4	2574.7
35°	3175.3	2953.4	2452.0	2109.9	2029.0	2091.6	2224.8	2355.4	2425.9	2485.9	2522.5
37.5°	3248.4	3005.6	2444.2	2057.7	1958.5	2010.7	2146.5	2284.9	2360.6	2410.2	2444.2
40°	3332.0	3070.9	2441.5	2008.1	1888.0	1927.1	2065.5	2203.9	2277.0	2316.2	2344.9
42.5°	3426.0	3144.0	2436.3	1958.5	1817.5	1848.8	1987.2	2123.0	2185.6	2219.6	2245.7
45°	3525.2	3217.1	2425.9	1898.4	1741.7	1778.3	1906.2	2026.4	2091.6	2120.4	2149.1
47.5°	3624.5	3290.2	2405.0	1830.5	1673.8	1707.8	1820.1	1924.5	1976.7	2002.9	2031.6
50°	3721.1	3355.5	2355.4	1752.2	1603.3	1634.7	1720.8	1791.3	1830.5	1851.4	1880.1
52.5°	3807.2	3399.9	2284.9	1660.8	1532.8	1548.5	1605.9	1666.0	1697.3	1699.9	1726.1
55°	3880.4	3423.4	2183.0	1566.8	1457.1	1459.7	1491.0	1538.0	1551.1	1540.7	1558.9
57.5°	3922.1	3410.3	2070.7	1470.2	1378.8	1368.3	1391.8	1415.3	1417.9	1391.8	1410.1
60°	3932.6	3350.3	1924.5	1373.5	1300.4	1271.7	1279.5	1274.3	1269.1	1258.6	1274.3
62.5°	3880.4	3222.3	1762.6	1279.5	1216.9	1172.5	1169.9	1167.2	1175.1	1177.7	1180.3
65°	3689.7	2982.1	1569.4	1182.9	1128.1	1068.0	1065.4	1096.7	1107.2	1091.5	1096.7
67.5°	3321.5	2613.9	1357.9	1070.6	1015.8	963.6	984.5	1002.7	1021.0	1015.8	1021.0
70°	2799.3	2146.5	1164.6	945.3	893.1	864.3	887.8	903.5	906.1	900.9	906.1
72.5°	2201.3	1676.4	984.5	817.3	770.3	757.3	786.0	799.1	822.6	833.0	835.6
75°	1590.3	1237.7	806.9	678.9	639.8	639.8	665.9	689.4	710.3	697.2	689.4
77.5°	887.8	739.0	579.7	467.4	475.3	511.8	522.3	548.4	569.3	566.6	561.4
80°	537.9	462.2	391.7	302.9	300.3	329.0	396.9	441.3	451.8	428.2	425.6
82.5°	279.4	242.8	208.9	169.7	188.0	219.3	229.8	276.8	305.5	295.1	308.1
85°	70.5	67.9	75.7	78.3	96.6	107.1	117.5	138.4	91.4	44.4	44.4
87.5°	20.9	20.9	26.1	26.1	33.9	41.8	39.2	39.2	20.9	2.6	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)