

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: P836928

Luminaire Tested: **ARCH3-90-750-U-T2R**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836928
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15427 lumens
Efficiency: N/A
Efficacy: 165.7 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 93.1
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



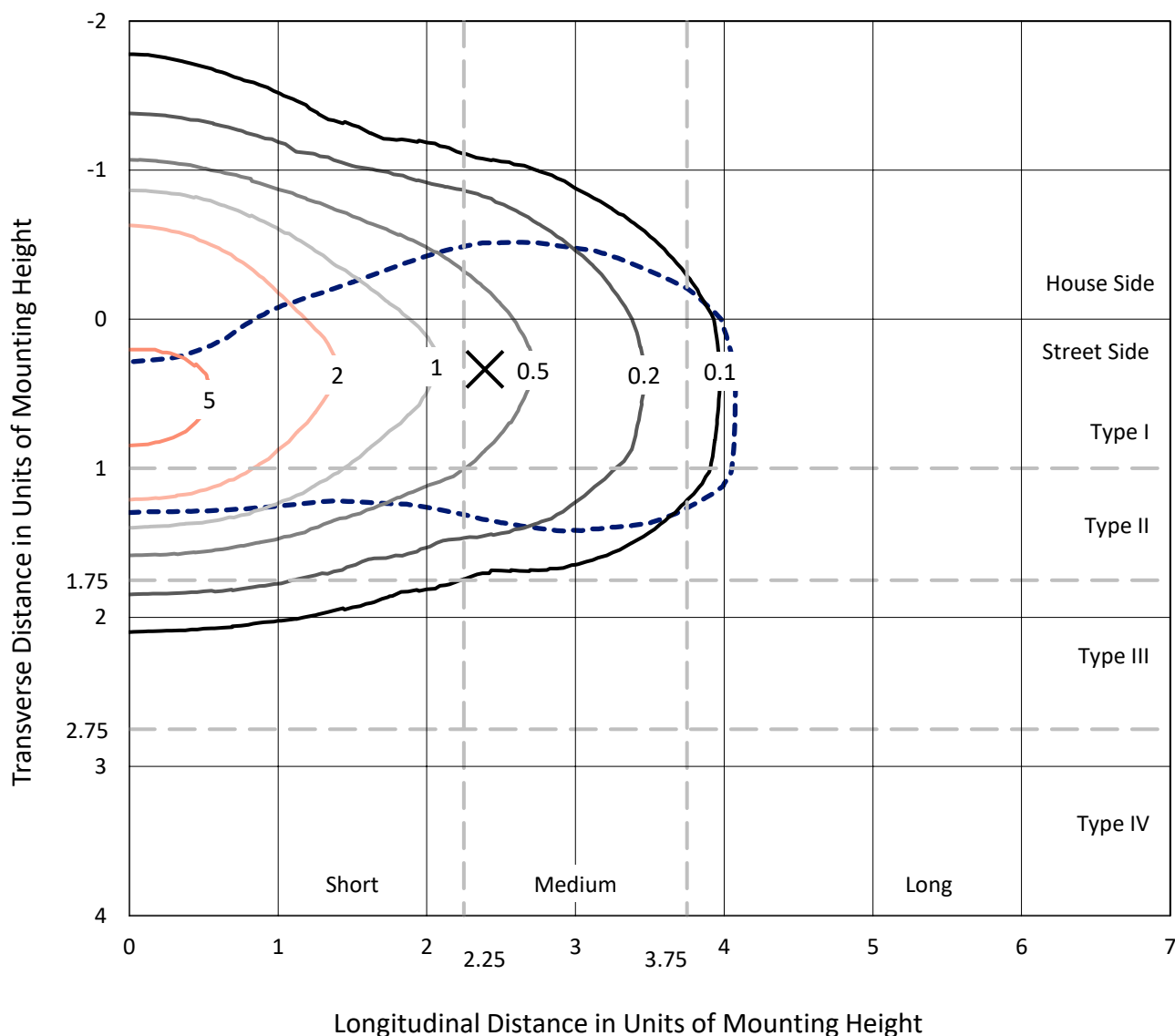
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

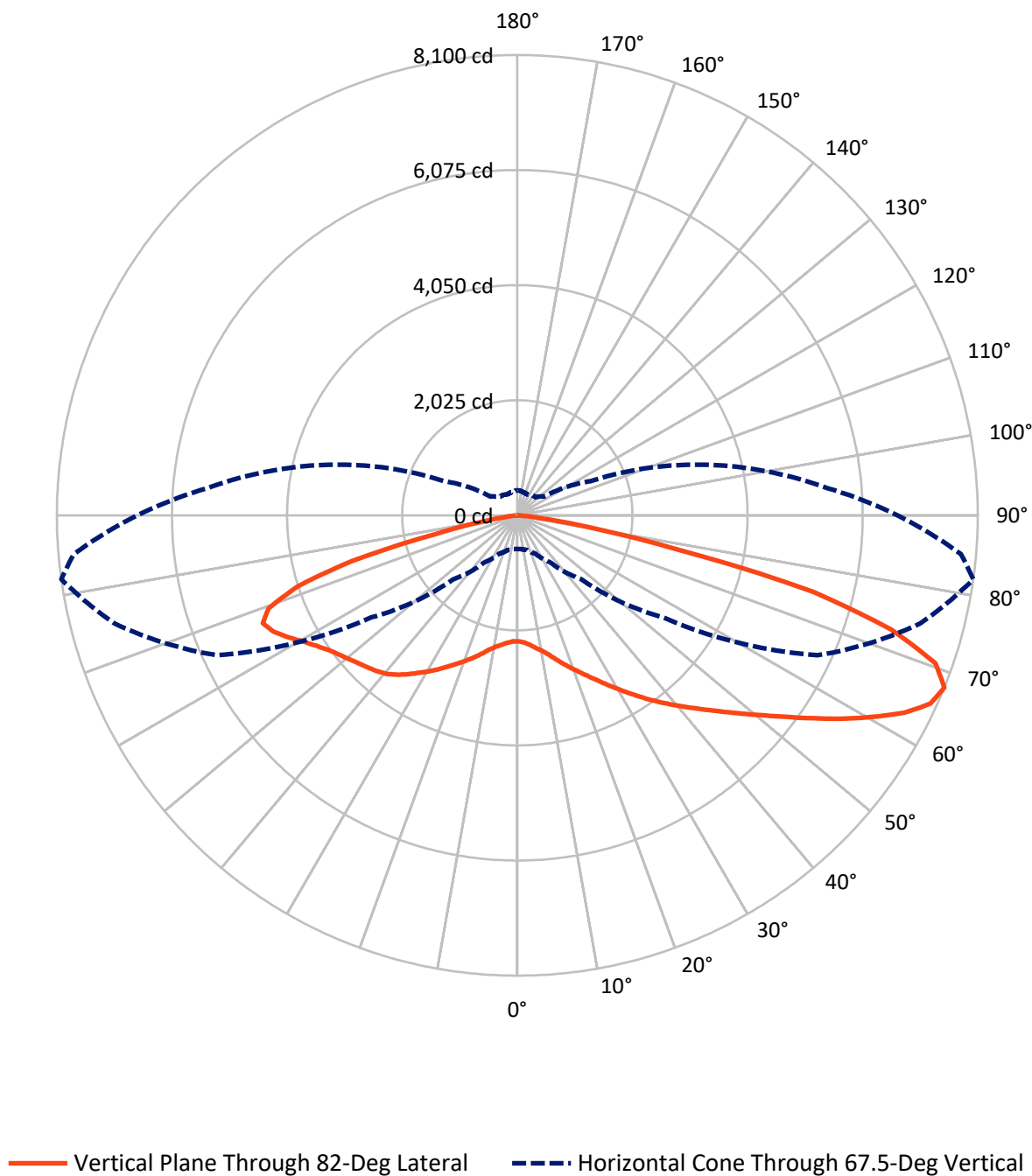
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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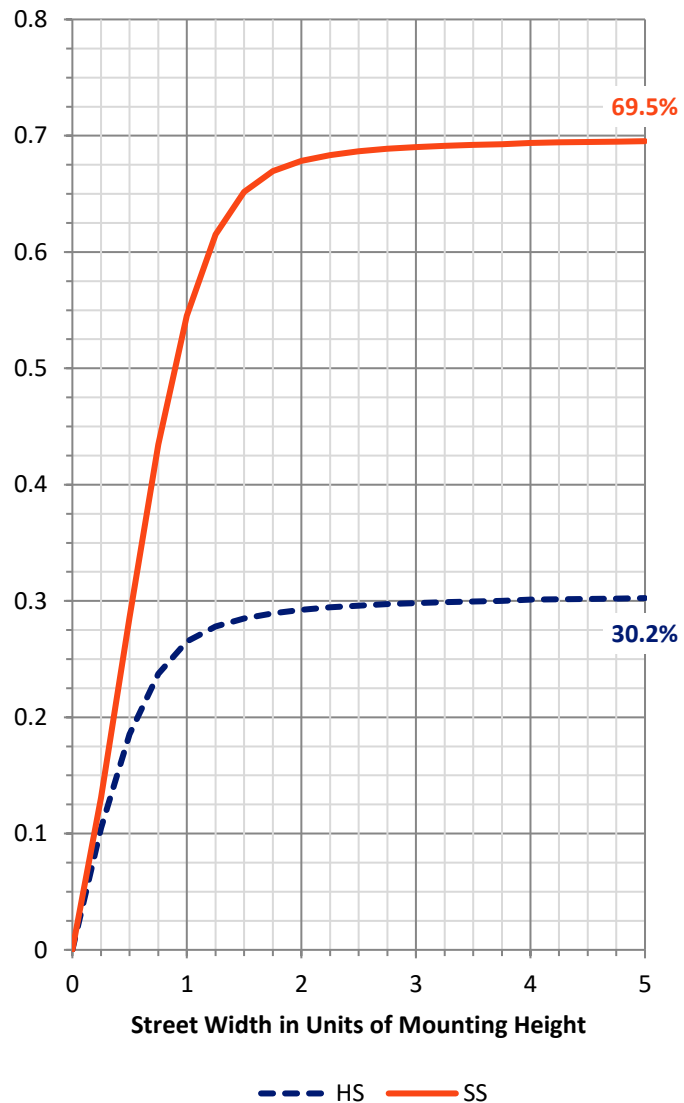
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4698.1	0.0	4698.1
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	10728.8	0.0	10728.8
	% Fixture	69.5	0.0	69.5
Total	Lumens	15427.0	0.0	15427.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.2	1.5
10°-20°	825.5	5.4
20°-30°	1659.1	10.8
30°-40°	2606.2	16.9
40°-50°	3174.9	20.6
50°-60°	2999.9	19.4
60°-70°	2477.2	16.1
70°-80°	1348.9	8.7
80°-90°	106.1	0.7
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°	15427.0	100.0
0°-180°	15427.0	100.0

Coefficient of Utilization



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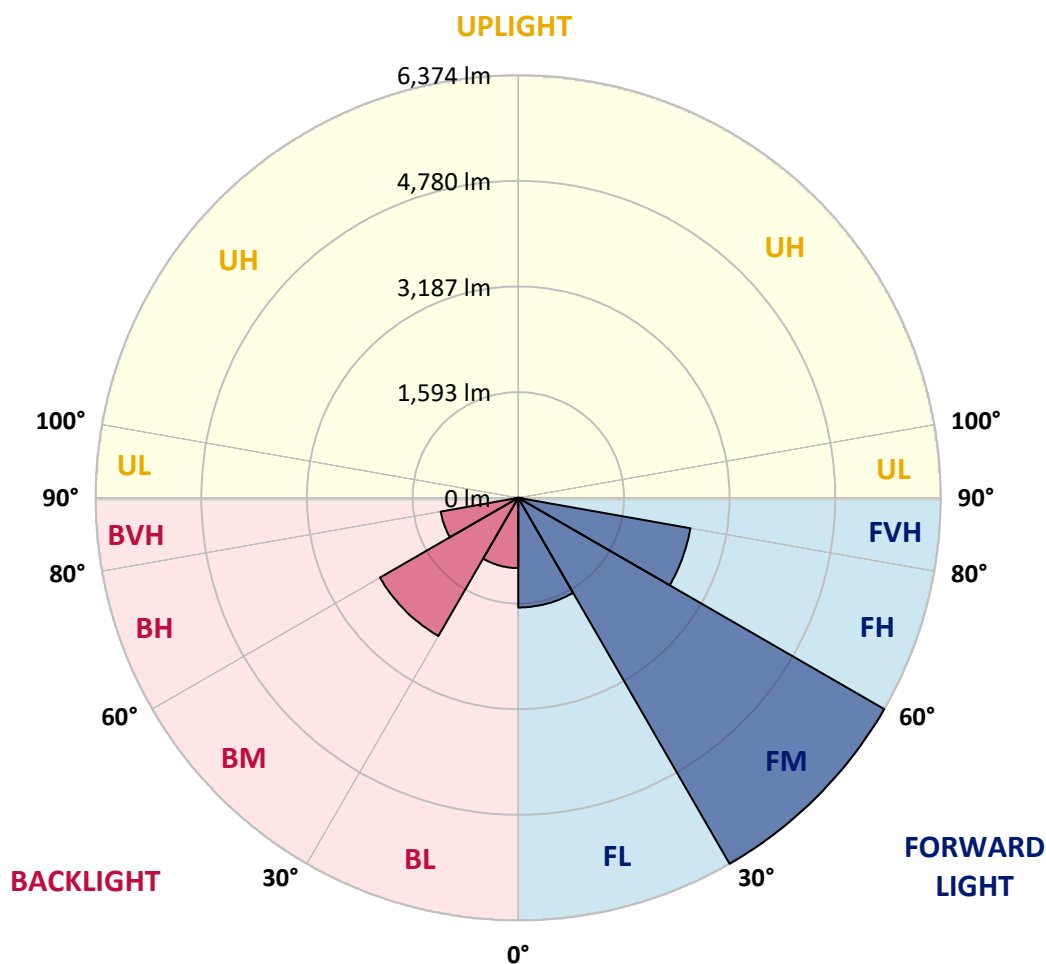
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1654.3	10.7			
FM	(30°-60°)	6373.5	41.3			
FH	(60°-80°)	2637.0	17.1			G2/5000
FVH	(80°-90°)	63.9	0.4			G1/100
BL	(0°-30°)	1059.5	6.9	B3/2500		
BM	(30°-60°)	2407.4	15.6	B2/2500		
BH	(60°-80°)	1189.1	7.7	B3/2500		G3/2500
BVH	(80°-90°)	42.1	0.3			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6
2.5°	2318.4	2318.4	2336.3	2336.3	2320.7	2296.0	2289.3	2262.4	2237.8	2237.8	2240.0
5°	2540.2	2537.9	2551.4	2533.5	2495.4	2446.1	2412.5	2354.3	2305.0	2289.3	2287.1
7.5°	2811.2	2809.0	2815.7	2786.6	2714.9	2634.3	2567.1	2473.0	2392.3	2358.7	2349.8
10°	3113.6	3111.4	3104.7	3055.4	2959.1	2833.6	2732.8	2602.9	2481.9	2428.2	2417.0
12.5°	3460.8	3456.4	3440.7	3369.0	3236.8	3075.6	2930.0	2761.9	2600.7	2526.7	2502.1
15°	3848.4	3841.6	3812.5	3725.2	3548.2	3344.4	3156.2	2941.2	2744.0	2647.7	2614.1
17.5°	4256.0	4256.0	4211.2	4081.3	3884.2	3631.1	3398.1	3124.8	2894.1	2775.4	2735.1
20°	4670.4	4668.2	4612.2	4455.4	4222.4	3931.2	3635.6	3335.4	3048.7	2905.3	2856.0
22.5°	5107.3	5102.8	5033.3	4854.1	4576.4	4247.1	3902.1	3543.7	3218.9	3046.4	2983.7
25°	5609.0	5602.3	5517.2	5297.7	4968.4	4596.5	4202.3	3787.9	3413.8	3203.2	3129.3
27.5°	6142.1	6133.2	6032.4	5777.0	5416.4	4968.4	4533.8	4070.1	3628.8	3378.0	3295.1
30°	6617.0	6610.3	6500.5	6238.5	5824.1	5338.0	4849.7	4352.4	3855.1	3563.9	3460.8
32.5°	6975.4	6975.4	6876.9	6619.3	6189.2	5691.9	5167.7	4618.9	4090.3	3763.2	3642.3
35°	7192.7	7199.4	7114.3	6908.2	6502.8	6025.7	5497.0	4932.5	4341.2	3976.0	3846.1
37.5°	7224.1	7246.5	7197.2	7058.3	6720.1	6303.4	5819.6	5234.9	4601.0	4191.1	4045.5
40°	7078.5	7094.2	7096.4	7042.6	6809.7	6502.8	6104.1	5555.3	4876.5	4417.3	4249.3
42.5°	6787.3	6798.5	6818.6	6834.3	6744.7	6590.1	6321.3	5853.2	5170.0	4648.0	4450.9
45°	6410.9	6408.7	6442.3	6509.5	6505.0	6540.9	6442.3	6124.2	5474.6	4910.1	4674.9
47.5°	5848.7	5837.5	5956.2	6108.5	6184.7	6352.7	6444.5	6337.0	5806.1	5199.1	4930.3
50°	4968.4	4957.2	5217.0	5575.4	5799.4	6054.8	6321.3	6464.7	6153.3	5523.9	5208.1
52.5°	3897.6	3886.4	4215.7	4842.9	5331.3	5703.1	6072.7	6493.8	6482.6	5886.8	5521.7
55°	2898.6	2889.6	3210.0	3888.7	4679.4	5295.4	5768.1	6417.7	6791.8	6303.4	5902.5
57.5°	2042.9	2038.4	2316.2	2878.4	3841.6	4798.1	5474.6	6269.8	7076.2	6755.9	6332.5
60°	1433.6	1426.9	1628.5	2063.1	2905.3	4047.7	5183.4	6072.7	7289.0	7201.7	6789.5
62.5°	965.5	961.0	1104.3	1467.2	2063.1	3115.9	4742.1	5940.5	7410.0	7649.7	7251.0
65°	732.5	730.2	795.2	994.6	1460.5	2237.8	4041.0	5924.9	7425.7	7985.7	7643.0
67.5°	591.4	593.6	629.4	743.7	1010.3	1590.4	3133.8	5826.3	7342.8	8099.9	7833.4
70°	483.8	483.8	499.5	575.7	745.9	1073.0	2188.5	5378.3	7112.1	7802.0	7607.1
72.5°	369.6	371.8	421.1	465.9	562.2	752.6	1402.3	4450.9	6567.7	6879.1	6731.3
75°	293.4	291.2	320.3	383.0	436.8	537.6	860.2	3192.0	5588.9	5376.1	5282.0
77.5°	210.6	208.3	230.7	284.5	331.5	380.8	513.0	1610.6	3039.7	2793.3	2723.9
80°	143.4	138.9	159.0	197.1	219.5	224.0	250.9	618.2	1326.1	1249.9	1234.3
82.5°	73.9	73.9	85.1	112.0	114.2	116.5	112.0	199.4	439.0	409.9	392.0
85°	29.1	29.1	31.4	38.1	38.1	40.3	40.3	51.5	47.0	44.8	42.6
87.5°	2.2	2.2	4.5	4.5	6.7	6.7	6.7	9.0	11.2	11.2	11.2
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°	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6	2217.6
2.5°	2235.5	2226.6	2197.5	2190.7	2186.3	2179.5	2181.8	2166.1	2159.4	2161.6	2152.7
5°	2275.9	2260.2	2224.3	2208.7	2204.2	2197.5	2204.2	2193.0	2181.8	2186.3	2181.8
7.5°	2331.9	2309.5	2264.7	2249.0	2246.7	2240.0	2249.0	2240.0	2231.1	2235.5	2226.6
10°	2390.1	2361.0	2311.7	2296.0	2296.0	2293.8	2302.7	2289.3	2280.3	2282.6	2278.1
12.5°	2475.2	2437.1	2383.4	2369.9	2363.2	2369.9	2372.2	2354.3	2338.6	2340.8	2334.1
15°	2578.3	2535.7	2477.5	2457.3	2452.8	2450.6	2441.6	2419.2	2399.1	2396.8	2390.1
17.5°	2690.3	2636.5	2567.1	2546.9	2526.7	2520.0	2497.6	2468.5	2437.1	2437.1	2428.2
20°	2797.8	2737.3	2654.4	2625.3	2596.2	2569.3	2531.2	2484.2	2443.9	2437.1	2428.2
22.5°	2914.3	2842.6	2746.3	2703.7	2652.2	2598.4	2533.5	2470.7	2419.2	2408.0	2401.3
25°	3044.2	2954.6	2840.3	2777.6	2694.7	2611.9	2515.5	2434.9	2374.4	2356.5	2352.0
27.5°	3187.6	3080.0	2941.2	2849.3	2728.3	2598.4	2475.2	2378.9	2305.0	2282.6	2275.9
30°	3333.2	3205.5	3033.0	2898.6	2728.3	2555.9	2401.3	2289.3	2204.2	2172.8	2168.3
32.5°	3478.8	3335.4	3115.9	2925.5	2701.5	2484.2	2305.0	2172.8	2076.5	2038.4	2047.4
35°	3653.5	3478.8	3192.0	2936.7	2656.7	2396.8	2195.2	2040.7	1942.1	1908.5	1915.2
37.5°	3834.9	3622.1	3252.5	2927.7	2593.9	2298.3	2072.0	1921.9	1798.7	1740.5	1747.2
40°	3991.7	3752.0	3295.1	2896.4	2513.3	2186.3	1951.1	1753.9	1583.7	1527.7	1521.0
42.5°	4139.6	3848.4	3317.5	2849.3	2421.5	2056.3	1778.6	1525.5	1355.2	1285.8	1288.0
45°	4294.1	3942.4	3308.5	2786.6	2307.2	1904.0	1556.8	1301.5	1151.4	1088.7	1090.9
47.5°	4471.1	4043.2	3299.6	2719.4	2168.3	1706.9	1344.0	1104.3	974.4	929.6	925.1
50°	4659.2	4155.2	3288.4	2636.5	2013.8	1487.4	1133.5	920.6	810.9	781.8	775.0
52.5°	4872.1	4276.2	3281.6	2537.9	1827.9	1254.4	945.3	759.4	685.4	665.3	663.0
55°	5127.4	4417.3	3290.6	2419.2	1603.9	1034.9	786.2	654.1	604.8	593.6	591.4
57.5°	5438.8	4598.8	3317.5	2280.3	1368.7	844.5	669.8	589.1	557.8	548.8	548.8
60°	5777.0	4804.9	3366.8	2123.5	1133.5	696.6	593.6	537.6	524.2	535.4	535.4
62.5°	6142.1	5046.8	3454.1	1933.1	913.9	589.1	533.1	495.0	486.1	508.5	510.7
65°	6480.4	5282.0	3510.1	1704.7	725.8	510.7	486.1	452.5	457.0	479.4	477.1
67.5°	6688.7	5476.9	3431.7	1417.9	575.7	452.5	436.8	407.7	418.9	436.8	439.0
70°	6561.0	5367.1	3044.2	1070.7	450.2	394.2	383.0	365.1	374.1	396.5	405.4
72.5°	5936.1	4807.1	2367.7	723.5	362.9	331.5	336.0	327.0	338.2	358.4	378.6
75°	4818.3	3633.3	1588.2	463.7	286.7	282.2	289.0	282.2	286.7	306.9	318.1
77.5°	2515.5	1771.9	790.7	289.0	212.8	219.5	230.7	233.0	246.4	250.9	255.4
80°	1173.8	797.4	329.3	161.3	141.1	154.6	177.0	179.2	183.7	190.4	192.6
82.5°	383.0	239.7	152.3	87.4	80.6	87.4	114.2	136.6	138.9	152.3	152.3
85°	40.3	24.6	33.6	35.8	31.4	38.1	51.5	49.3	22.4	13.4	13.4
87.5°	11.2	9.0	11.2	11.2	9.0	9.0	6.7	2.2	0.0	0.0	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)