

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: P842703

Luminaire Tested: **ARCH4-80-750-U-T2R**

Issue Date: 5/27/2024

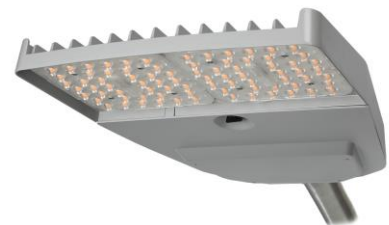
Test Information

Test Method: LM-79-08
Report Number: P842703
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15206 lumens
Efficiency: N/A
Efficacy: 182.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 83.4
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



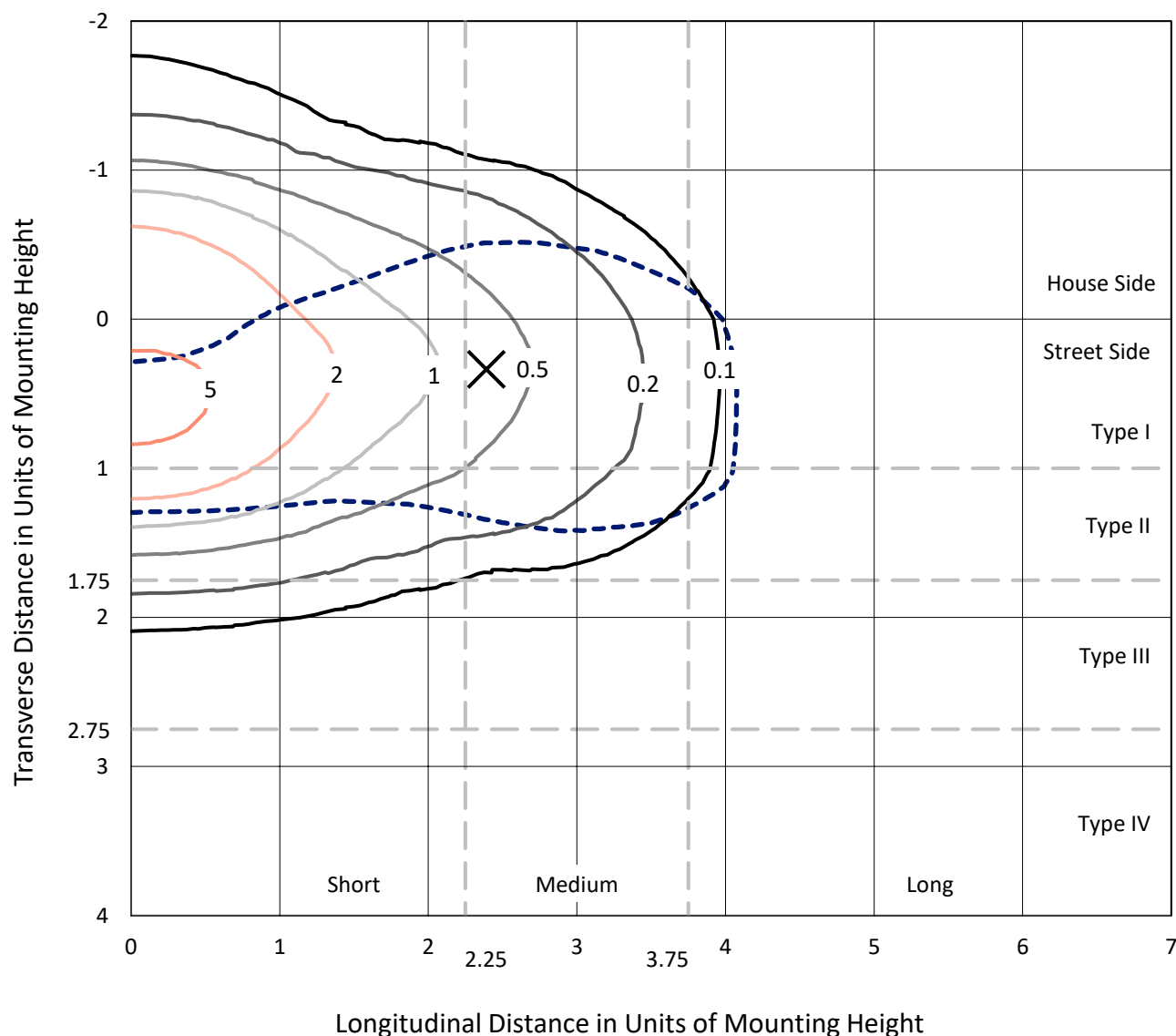
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

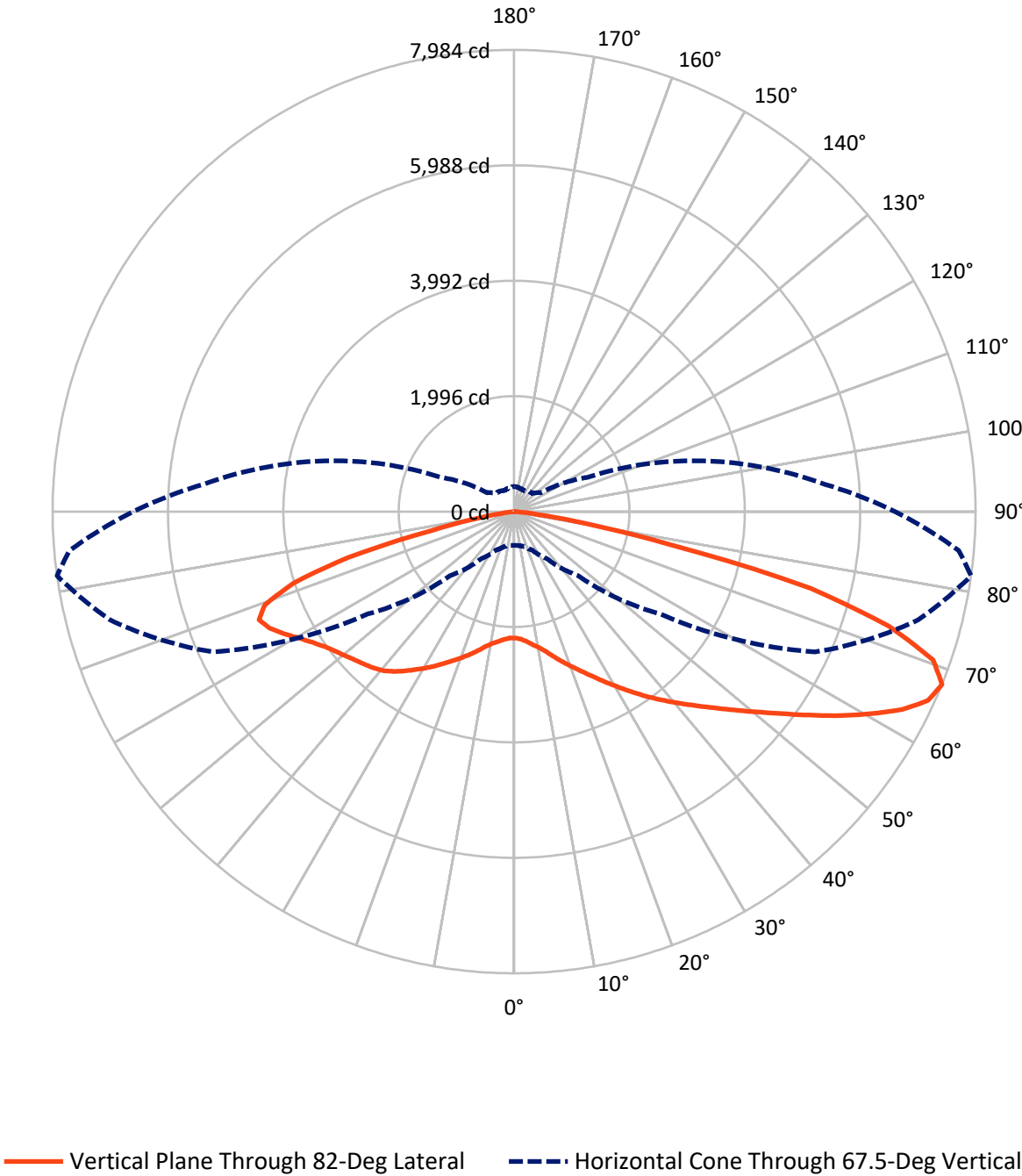
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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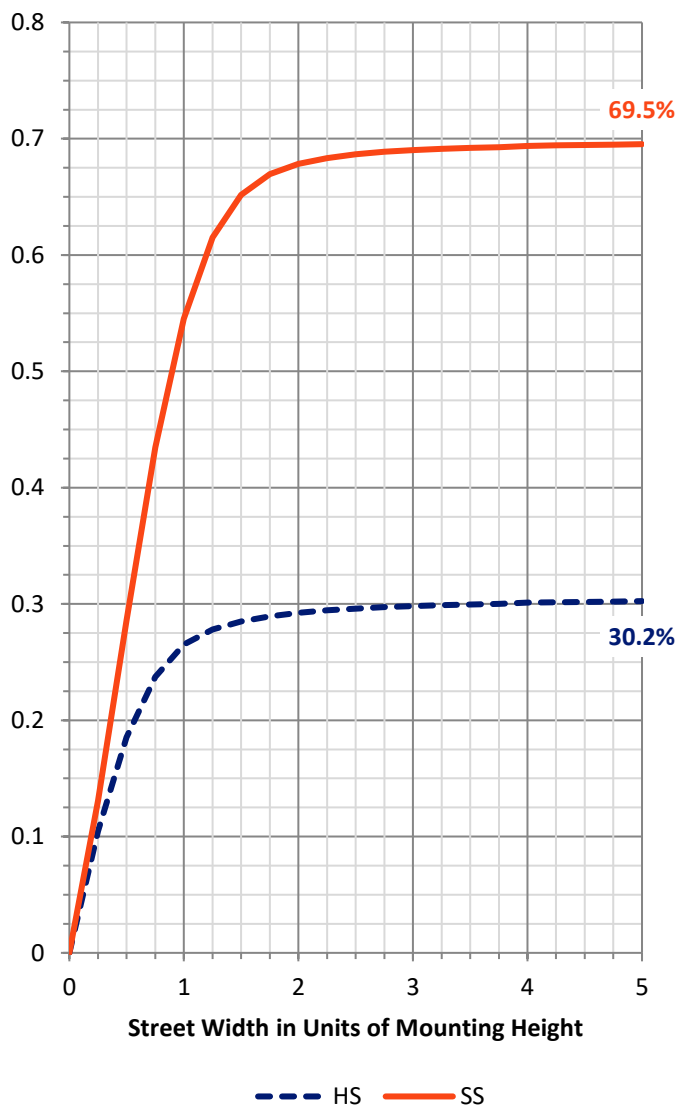
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4630.8	0.0	4630.8
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	10575.2	0.0	10575.2
	% Fixture	69.5	0.0	69.5
Total	Lumens	15206.0	0.0	15206.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.9	1.5
10°-20°	813.7	5.4
20°-30°	1635.3	10.8
30°-40°	2568.9	16.9
40°-50°	3129.4	20.6
50°-60°	2956.9	19.4
60°-70°	2441.7	16.1
70°-80°	1329.6	8.7
80°-90°	104.5	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°	15206.0	100.0
0°-180°	15206.0	100.0

Coefficient of Utilization



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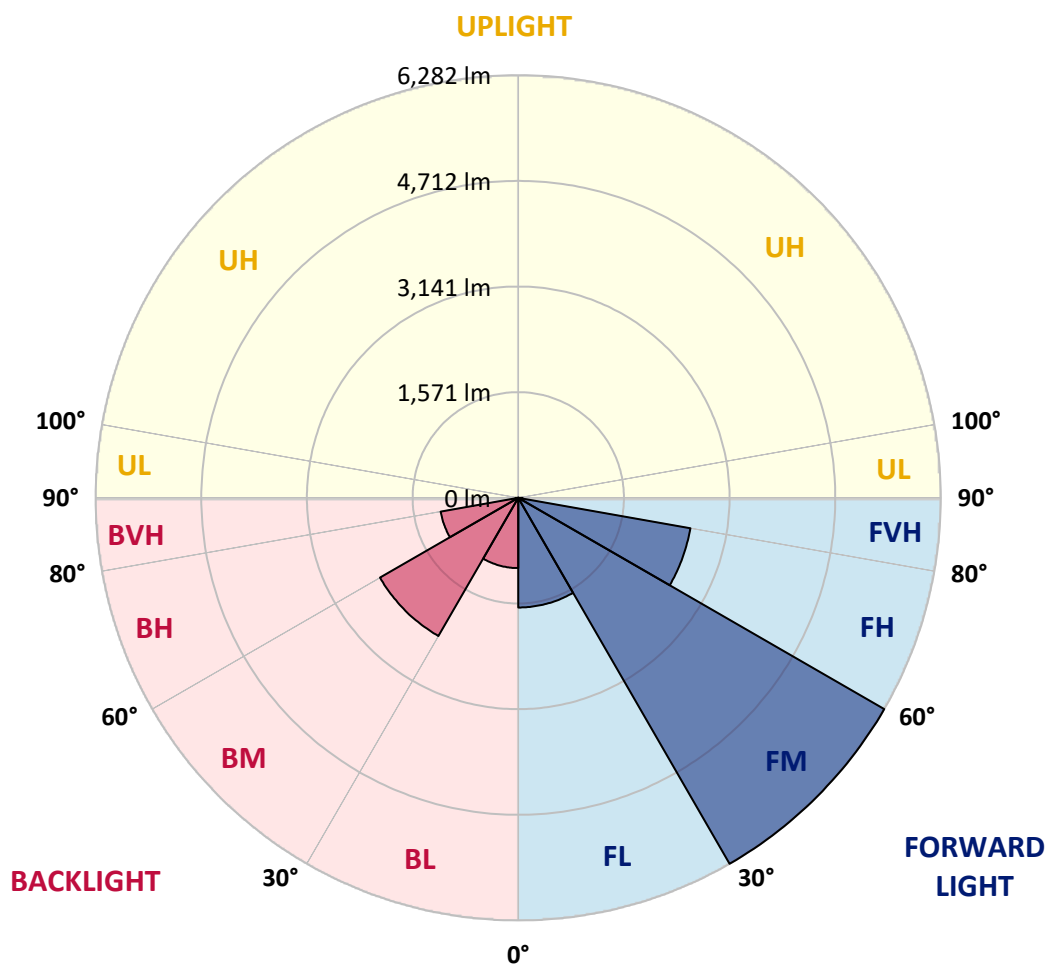
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1630.6	10.7			
FM	(30°-60°)	6282.2	41.3			
FH	(60°-80°)	2599.3	17.1			G2/5000
FVH	(80°-90°)	63.0	0.4			G1/100
BL	(0°-30°)	1044.3	6.9	B3/2500		
BM	(30°-60°)	2372.9	15.6	B2/2500		
BH	(60°-80°)	1172.1	7.7	B3/2500		G3/2500
BVH	(80°-90°)	41.5	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°	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9
2.5°	2285.2	2285.2	2302.9	2302.9	2287.4	2263.1	2256.5	2230.0	2205.7	2205.7	2207.9
5°	2503.8	2501.6	2514.8	2497.2	2459.6	2411.1	2377.9	2320.5	2272.0	2256.5	2254.3
7.5°	2771.0	2768.7	2775.4	2746.7	2676.0	2596.5	2530.3	2437.6	2358.1	2325.0	2316.1
10°	3069.0	3066.8	3060.2	3011.6	2916.7	2793.0	2693.7	2565.6	2446.4	2393.4	2382.4
12.5°	3411.3	3406.8	3391.4	3320.7	3190.5	3031.5	2888.0	2722.4	2563.4	2490.5	2466.3
15°	3793.2	3786.6	3757.9	3671.8	3497.4	3296.4	3111.0	2899.0	2704.7	2609.8	2576.7
17.5°	4195.1	4195.1	4150.9	4022.9	3828.6	3579.1	3349.4	3080.1	2852.7	2735.6	2695.9
20°	4603.5	4601.3	4546.1	4391.6	4162.0	3874.9	3583.5	3287.6	3005.0	2863.7	2815.1
22.5°	5034.1	5029.7	4961.2	4784.6	4510.8	4186.2	3846.2	3493.0	3172.8	3002.8	2941.0
25°	5528.7	5522.0	5438.1	5221.8	4897.2	4530.7	4142.1	3733.6	3364.9	3157.3	3084.5
27.5°	6054.2	6045.3	5946.0	5694.3	5338.8	4897.2	4468.9	4011.8	3576.9	3329.6	3247.9
30°	6522.2	6515.6	6407.4	6149.1	5740.6	5261.5	4780.2	4290.0	3799.9	3512.8	3411.3
32.5°	6875.5	6875.5	6778.4	6524.4	6100.5	5610.4	5093.7	4552.8	4031.7	3709.3	3590.1
35°	7089.7	7096.3	7012.4	6809.3	6409.6	5939.3	5418.3	4861.9	4279.0	3919.1	3791.0
37.5°	7120.6	7142.7	7094.1	6957.2	6623.8	6213.1	5736.2	5159.9	4535.1	4131.0	3987.5
40°	6977.1	6992.5	6994.7	6941.7	6712.1	6409.6	6016.6	5475.7	4806.7	4354.0	4188.5
42.5°	6690.0	6701.1	6721.0	6736.4	6648.1	6495.7	6230.8	5769.3	5095.9	4581.5	4387.2
45°	6319.1	6316.9	6350.0	6416.3	6411.8	6447.2	6350.0	6036.5	5396.2	4839.8	4608.0
47.5°	5764.9	5753.9	5870.9	6021.0	6096.1	6261.7	6352.2	6246.2	5723.0	5124.6	4859.7
50°	4897.2	4886.2	5142.3	5495.5	5716.3	5968.0	6230.8	6372.1	6065.2	5444.8	5133.4
52.5°	3841.8	3830.8	4155.3	4773.6	5254.9	5621.4	5985.7	6400.8	6389.8	5802.5	5442.6
55°	2857.1	2848.2	3164.0	3833.0	4612.4	5219.6	5685.4	6325.7	6694.5	6213.1	5817.9
57.5°	2013.6	2009.2	2283.0	2837.2	3786.6	4729.4	5396.2	6180.0	6974.9	6659.1	6241.8
60°	1413.1	1406.5	1605.2	2033.5	2863.7	3989.7	5109.2	5985.7	7184.6	7098.5	6692.2
62.5°	951.6	947.2	1088.5	1446.2	2033.5	3071.2	4674.2	5855.4	7303.8	7540.1	7147.1
65°	722.0	719.8	783.8	980.3	1439.6	2205.7	3983.1	5840.0	7319.3	7871.3	7533.5
67.5°	582.9	585.1	620.4	733.0	995.8	1567.6	3088.9	5742.8	7237.6	7983.9	7721.1
70°	476.9	476.9	492.4	567.4	735.2	1057.6	2157.2	5301.2	7010.2	7690.2	7498.1
72.5°	364.3	366.5	415.1	459.3	554.2	741.9	1382.2	4387.2	6473.7	6780.6	6634.8
75°	289.2	287.0	315.7	377.6	430.5	529.9	847.8	3146.3	5508.8	5299.0	5206.3
77.5°	207.5	205.3	227.4	280.4	326.8	375.3	505.6	1587.5	2996.2	2753.3	2684.8
80°	141.3	136.9	156.8	194.3	216.4	220.8	247.3	609.4	1307.1	1232.0	1216.6
82.5°	72.9	72.9	83.9	110.4	112.6	114.8	110.4	196.5	432.8	404.1	386.4
85°	28.7	28.7	30.9	37.5	37.5	39.7	39.7	50.8	46.4	44.2	42.0
87.5°	2.2	2.2	4.4	4.4	6.6	6.6	6.6	8.8	11.0	11.0	11.0
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°	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9	2185.9
2.5°	2203.5	2194.7	2166.0	2159.4	2154.9	2148.3	2150.5	2135.1	2128.4	2130.7	2121.8
5°	2243.3	2227.8	2192.5	2177.0	2172.6	2166.0	2172.6	2161.6	2150.5	2154.9	2150.5
7.5°	2298.5	2276.4	2232.2	2216.8	2214.6	2207.9	2216.8	2207.9	2199.1	2203.5	2194.7
10°	2355.9	2327.2	2278.6	2263.1	2263.1	2260.9	2269.8	2256.5	2247.7	2249.9	2245.5
12.5°	2439.8	2402.2	2349.2	2336.0	2329.4	2336.0	2338.2	2320.5	2305.1	2307.3	2300.7
15°	2541.3	2499.4	2442.0	2422.1	2417.7	2415.5	2406.6	2384.6	2364.7	2362.5	2355.9
17.5°	2651.7	2598.7	2530.3	2510.4	2490.5	2483.9	2461.8	2433.1	2402.2	2402.2	2393.4
20°	2757.7	2698.1	2616.4	2587.7	2559.0	2532.5	2495.0	2448.6	2408.9	2402.2	2393.4
22.5°	2872.5	2801.9	2706.9	2665.0	2614.2	2561.2	2497.2	2435.4	2384.6	2373.5	2366.9
25°	3000.6	2912.3	2799.7	2737.8	2656.1	2574.5	2479.5	2400.0	2340.4	2322.7	2318.3
27.5°	3141.9	3035.9	2899.0	2808.5	2689.3	2561.2	2439.8	2344.8	2272.0	2249.9	2243.3
30°	3285.4	3159.6	2989.5	2857.1	2689.3	2519.3	2366.9	2256.5	2172.6	2141.7	2137.3
32.5°	3428.9	3287.6	3071.2	2883.6	2662.8	2448.6	2272.0	2141.7	2046.8	2009.2	2018.1
35°	3601.1	3428.9	3146.3	2894.6	2618.6	2362.5	2163.8	2011.4	1914.3	1881.2	1887.8
37.5°	3780.0	3570.2	3205.9	2885.8	2556.8	2265.3	2042.3	1894.4	1773.0	1715.6	1722.2
40°	3934.5	3698.3	3247.9	2854.9	2477.3	2154.9	1923.1	1728.8	1561.0	1505.8	1499.2
42.5°	4080.3	3793.2	3270.0	2808.5	2386.8	2026.9	1753.1	1503.6	1335.8	1267.4	1269.6
45°	4232.6	3886.0	3261.1	2746.7	2274.2	1876.7	1534.5	1282.8	1134.9	1073.1	1075.3
47.5°	4407.0	3985.3	3252.3	2680.4	2137.3	1682.4	1324.8	1088.5	960.5	916.3	911.9
50°	4592.5	4095.7	3241.2	2598.7	1984.9	1466.1	1117.2	907.5	799.3	770.6	763.9
52.5°	4802.3	4214.9	3234.6	2501.6	1801.7	1236.4	931.7	748.5	675.6	655.8	653.5
55°	5054.0	4354.0	3243.5	2384.6	1580.9	1020.1	775.0	644.7	596.1	585.1	582.9
57.5°	5360.9	4532.9	3270.0	2247.7	1349.0	832.4	660.2	580.7	549.8	540.9	540.9
60°	5694.3	4736.0	3318.5	2093.1	1117.2	686.7	585.1	529.9	516.7	527.7	527.7
62.5°	6054.2	4974.5	3404.6	1905.4	900.8	580.7	525.5	488.0	479.1	501.2	503.4
65°	6387.6	5206.3	3459.8	1680.2	715.4	503.4	479.1	446.0	450.4	472.5	470.3
67.5°	6592.9	5398.4	3382.6	1397.6	567.4	446.0	430.5	401.8	412.9	430.5	432.8
70°	6467.0	5290.2	3000.6	1055.4	443.8	388.6	377.6	359.9	368.7	390.8	399.6
72.5°	5851.0	4738.2	2333.8	713.2	357.7	326.8	331.2	322.4	333.4	353.3	373.1
75°	4749.3	3581.3	1565.4	457.0	282.6	278.2	284.8	278.2	282.6	302.5	313.5
77.5°	2479.5	1746.5	779.4	284.8	209.8	216.4	227.4	229.6	242.9	247.3	251.7
80°	1157.0	786.0	324.6	159.0	139.1	152.3	174.4	176.6	181.1	187.7	189.9
82.5°	377.6	236.2	150.1	86.1	79.5	86.1	112.6	134.7	136.9	150.1	150.1
85°	39.7	24.3	33.1	35.3	30.9	37.5	50.8	48.6	22.1	13.2	13.2
87.5°	11.0	8.8	11.0	11.0	8.8	8.8	6.6	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)