

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: P842739

Luminaire Tested: **ARCH4-90-727-U-T2R**

Issue Date: 5/27/2024

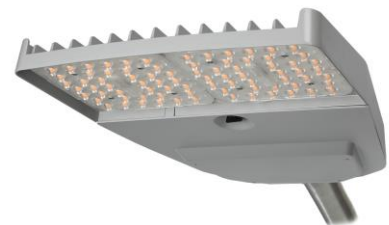
Test Information

Test Method: LM-79-08
Report Number: P842739
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: ARCH4-90-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 765mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15504 lumens
Efficiency: N/A
Efficacy: 166.5 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): 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



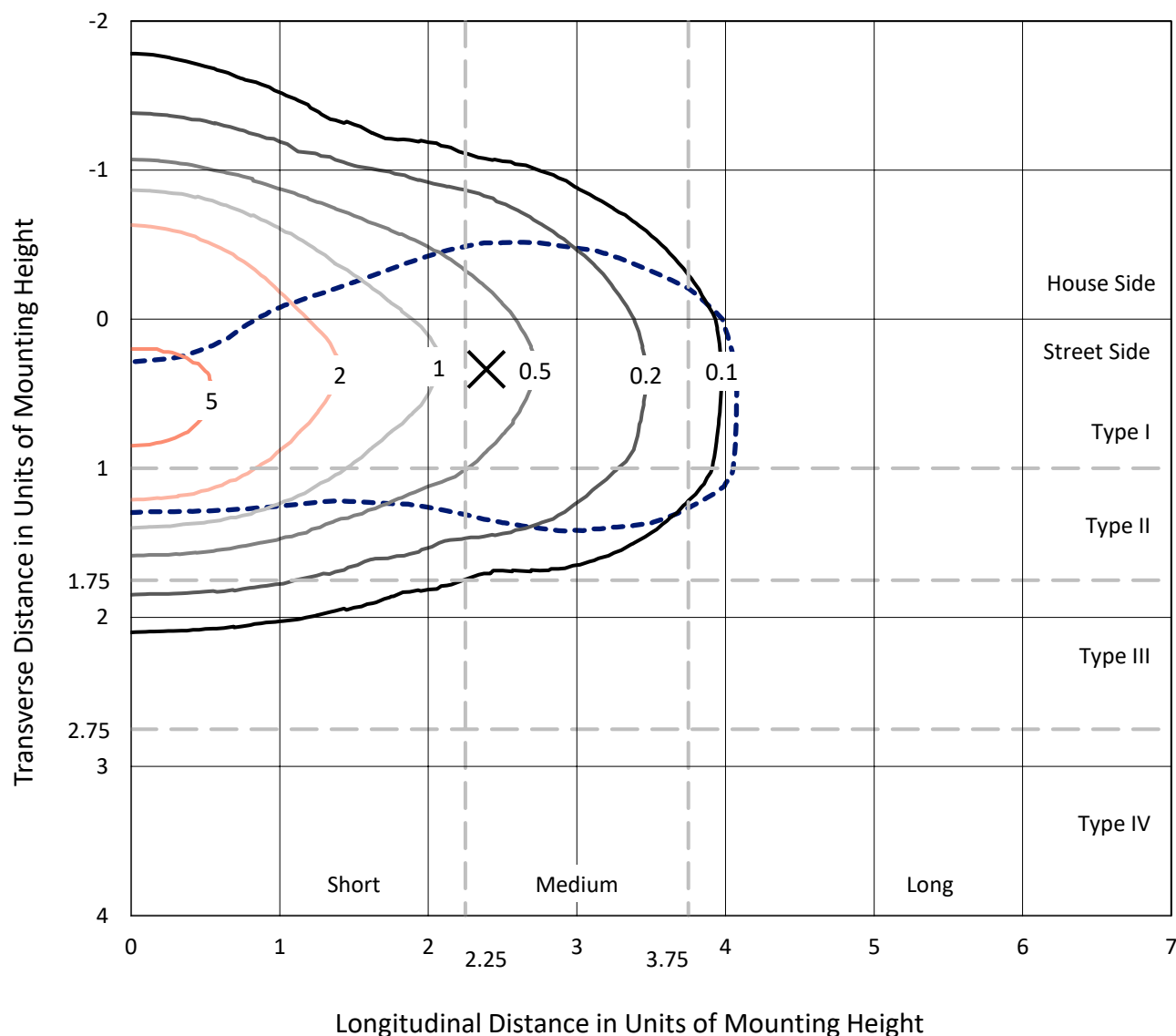
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

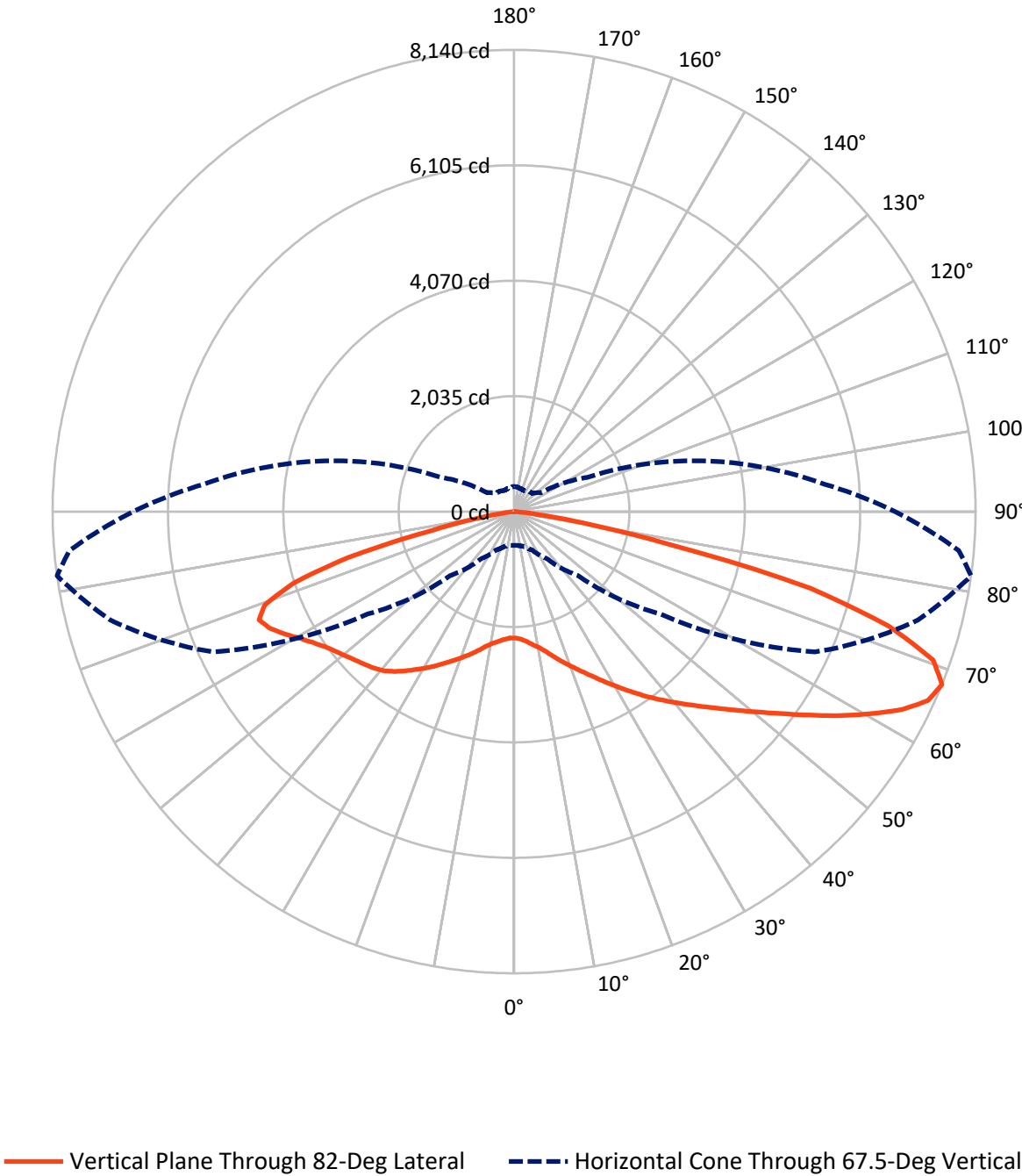
--- 1/2 Max cd



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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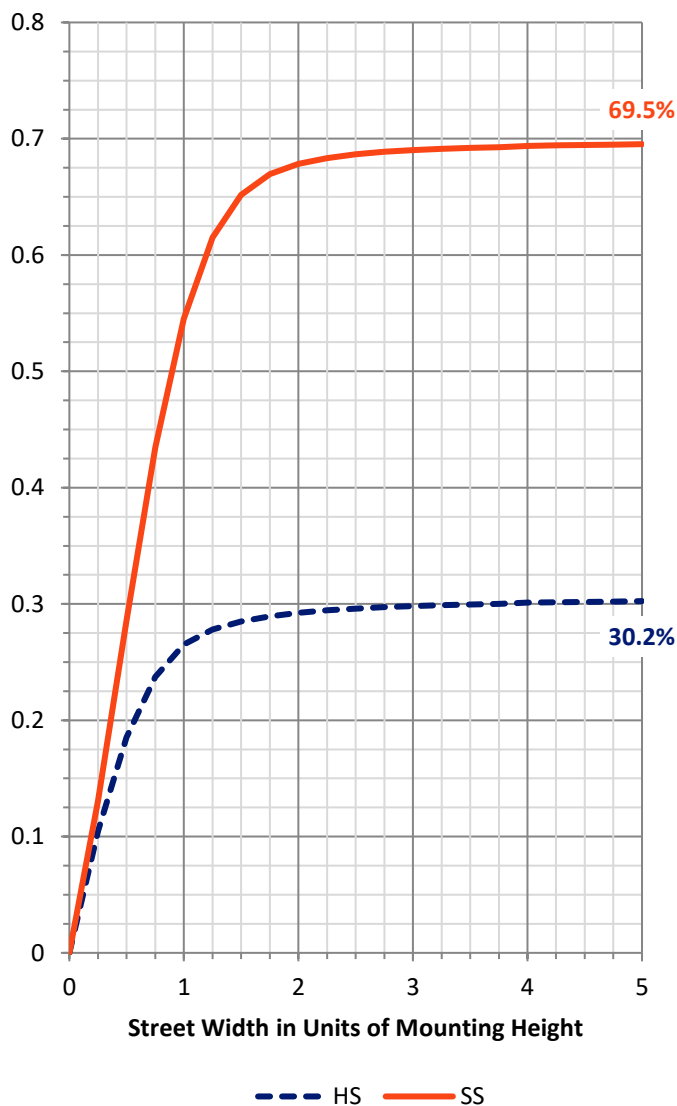
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4721.6	0.0	4721.6
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	10782.4	0.0	10782.4
	% Fixture	69.5	0.0	69.5
Total	Lumens	15504.0	0.0	15504.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.3	1.5
10°-20°	829.6	5.4
20°-30°	1667.4	10.8
30°-40°	2619.2	16.9
40°-50°	3190.7	20.6
50°-60°	3014.9	19.4
60°-70°	2489.6	16.1
70°-80°	1355.7	8.7
80°-90°	106.6	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°	15504.0	100.0
0°-180°	15504.0	100.0

Coefficient of Utilization



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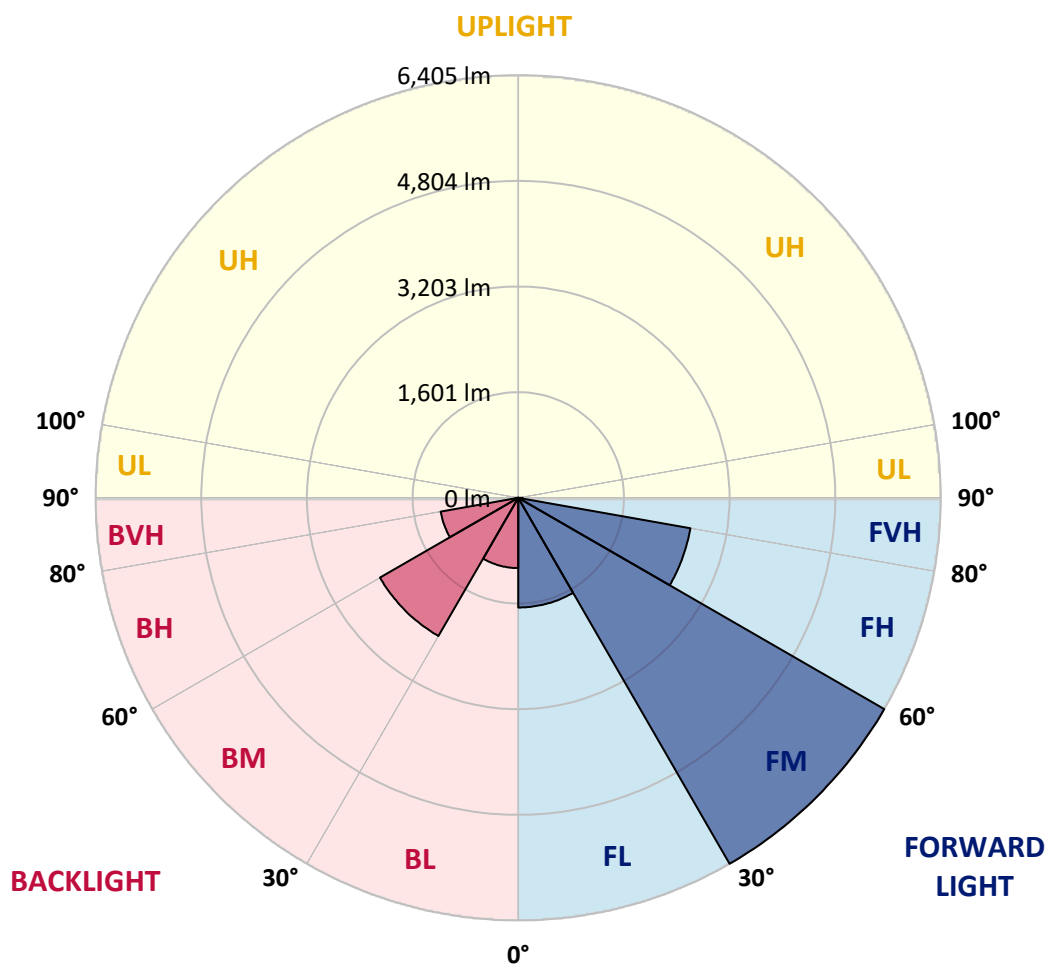
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1662.6	10.7			
FM	(30°-60°)	6405.4	41.3			
FH	(60°-80°)	2650.2	17.1			G2/5000
FVH	(80°-90°)	64.3	0.4			G1/100
BL	(0°-30°)	1064.8	6.9	B3/2500		
BM	(30°-60°)	2419.4	15.6	B2/2500		
BH	(60°-80°)	1195.1	7.7	B3/2500		G3/2500
BVH	(80°-90°)	42.3	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°	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7
2.5°	2330.0	2330.0	2348.0	2348.0	2332.2	2307.5	2300.7	2273.7	2249.0	2249.0	2251.2
5°	2552.9	2550.6	2564.1	2546.1	2507.8	2458.3	2424.5	2366.0	2316.5	2300.7	2298.5
7.5°	2825.3	2823.0	2829.8	2800.5	2728.5	2647.4	2579.9	2485.3	2404.3	2370.5	2361.5
10°	3129.2	3126.9	3120.2	3070.6	2973.8	2847.8	2746.5	2615.9	2494.3	2440.3	2429.0
12.5°	3478.1	3473.6	3457.8	3385.8	3253.0	3090.9	2944.6	2775.7	2613.6	2539.4	2514.6
15°	3867.6	3860.8	3831.5	3743.8	3565.9	3361.0	3171.9	2955.8	2757.7	2660.9	2627.2
17.5°	4277.3	4277.3	4232.3	4101.7	3903.6	3649.2	3415.1	3140.4	2908.6	2789.2	2748.7
20°	4693.8	4691.5	4635.2	4477.6	4243.5	3950.9	3653.7	3352.0	3063.9	2919.8	2870.3
22.5°	5132.7	5128.2	5058.5	4878.4	4599.2	4268.3	3921.6	3561.4	3235.0	3061.6	2998.6
25°	5637.0	5630.3	5544.7	5324.1	4993.2	4619.5	4223.3	3806.8	3430.8	3219.2	3144.9
27.5°	6172.8	6163.8	6062.5	5805.9	5443.4	4993.2	4556.4	4090.4	3647.0	3394.8	3311.5
30°	6650.1	6643.3	6533.0	6269.6	5853.1	5364.6	4873.9	4374.1	3874.3	3581.7	3478.1
32.5°	7010.2	7010.2	6911.2	6652.3	6220.1	5720.3	5193.5	4642.0	4110.7	3782.0	3660.5
35°	7228.6	7235.4	7149.8	6942.7	6535.2	6055.7	5524.5	4957.2	4362.8	3995.9	3865.3
37.5°	7260.1	7282.6	7233.1	7093.5	6753.6	6334.9	5848.6	5261.1	4624.0	4212.0	4065.7
40°	7113.8	7129.6	7131.8	7077.8	6843.7	6535.2	6134.5	5583.0	4900.9	4439.4	4270.5
42.5°	6821.1	6832.4	6852.7	6868.4	6778.4	6623.0	6352.9	5882.4	5195.8	4671.2	4473.1
45°	6442.9	6440.7	6474.5	6542.0	6537.5	6573.5	6474.5	6154.8	5501.9	4934.6	4698.3
47.5°	5877.9	5866.6	5986.0	6139.0	6215.6	6384.4	6476.7	6368.7	5835.1	5225.0	4954.9
50°	4993.2	4981.9	5243.1	5603.2	5828.4	6085.0	6352.9	6497.0	6184.1	5551.5	5234.0
52.5°	3917.1	3905.8	4236.8	4867.1	5357.9	5731.6	6103.0	6526.2	6515.0	5916.2	5549.2
55°	2913.1	2904.1	3226.0	3908.1	4702.8	5321.8	5796.9	6449.7	6825.7	6334.9	5931.9
57.5°	2053.1	2048.6	2327.7	2892.8	3860.8	4822.1	5501.9	6301.1	7111.6	6789.6	6364.2
60°	1440.8	1434.0	1636.6	2073.4	2919.8	4067.9	5209.3	6103.0	7325.4	7237.6	6823.4
62.5°	970.3	965.8	1109.8	1474.5	2073.4	3131.4	4765.8	5970.2	7447.0	7687.9	7287.1
65°	736.1	733.9	799.2	999.5	1467.8	2249.0	4061.2	5954.4	7462.7	8025.5	7681.1
67.5°	594.3	596.6	632.6	747.4	1015.3	1598.4	3149.4	5855.4	7379.4	8140.4	7872.5
70°	486.3	486.3	502.0	578.6	749.7	1078.3	2199.4	5405.1	7147.6	7840.9	7645.1
72.5°	371.4	373.7	423.2	468.3	565.1	756.4	1409.3	4473.1	6600.5	6913.4	6764.9
75°	294.9	292.7	321.9	385.0	439.0	540.3	864.5	3208.0	5616.8	5402.9	5308.3
77.5°	211.6	209.4	231.9	285.9	333.2	382.7	515.5	1618.6	3054.9	2807.3	2737.5
80°	144.1	139.6	159.8	198.1	220.6	225.1	252.1	621.3	1332.7	1256.2	1240.4
82.5°	74.3	74.3	85.5	112.6	114.8	117.1	112.6	200.4	441.2	412.0	394.0
85°	29.3	29.3	31.5	38.3	38.3	40.5	40.5	51.8	47.3	45.0	42.8
87.5°	2.3	2.3	4.5	4.5	6.8	6.8	6.8	9.0	11.3	11.3	11.3
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°	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7	2228.7
2.5°	2246.7	2237.7	2208.4	2201.7	2197.2	2190.4	2192.7	2176.9	2170.2	2172.4	2163.4
5°	2287.2	2271.5	2235.4	2219.7	2215.2	2208.4	2215.2	2203.9	2192.7	2197.2	2192.7
7.5°	2343.5	2321.0	2276.0	2260.2	2258.0	2251.2	2260.2	2251.2	2242.2	2246.7	2237.7
10°	2402.0	2372.8	2323.2	2307.5	2307.5	2305.2	2314.2	2300.7	2291.7	2294.0	2289.5
12.5°	2487.6	2449.3	2395.3	2381.8	2375.0	2381.8	2384.0	2366.0	2350.3	2352.5	2345.8
15°	2591.1	2548.4	2489.8	2469.6	2465.1	2462.8	2453.8	2431.3	2411.0	2408.8	2402.0
17.5°	2703.7	2649.7	2579.9	2559.6	2539.4	2532.6	2510.1	2480.8	2449.3	2449.3	2440.3
20°	2811.8	2751.0	2667.7	2638.4	2609.1	2582.1	2543.9	2496.6	2456.1	2449.3	2440.3
22.5°	2928.8	2856.8	2760.0	2717.2	2665.4	2611.4	2546.1	2483.1	2431.3	2420.0	2413.3
25°	3059.4	2969.3	2854.5	2791.5	2708.2	2624.9	2528.1	2447.1	2386.3	2368.3	2363.8
27.5°	3203.5	3095.4	2955.8	2863.5	2742.0	2611.4	2487.6	2390.8	2316.5	2294.0	2287.2
30°	3349.8	3221.5	3048.1	2913.1	2742.0	2568.6	2413.3	2300.7	2215.2	2183.7	2179.2
32.5°	3496.1	3352.0	3131.4	2940.1	2715.0	2496.6	2316.5	2183.7	2086.9	2048.6	2057.6
35°	3671.7	3496.1	3208.0	2951.3	2669.9	2408.8	2206.2	2050.8	1951.8	1918.0	1924.8
37.5°	3854.1	3640.2	3268.7	2942.3	2606.9	2309.7	2082.4	1931.5	1807.7	1749.2	1755.9
40°	4011.6	3770.8	3311.5	2910.8	2525.9	2197.2	1960.8	1762.7	1591.6	1535.3	1528.6
42.5°	4160.2	3867.6	3334.0	2863.5	2433.6	2066.6	1787.5	1533.1	1362.0	1292.2	1294.4
45°	4315.6	3962.1	3325.0	2800.5	2318.7	1913.5	1564.6	1307.9	1157.1	1094.1	1096.3
47.5°	4493.4	4063.4	3316.0	2733.0	2179.2	1715.4	1350.7	1109.8	979.3	934.2	929.7
50°	4682.5	4176.0	3304.8	2649.7	2023.8	1494.8	1139.1	925.2	814.9	785.7	778.9
52.5°	4896.4	4297.5	3298.0	2550.6	1837.0	1260.7	950.0	763.2	688.9	668.6	666.4
55°	5153.0	4439.4	3307.0	2431.3	1611.9	1040.1	790.2	657.4	607.8	596.6	594.3
57.5°	5465.9	4621.7	3334.0	2291.7	1375.5	848.7	673.1	592.1	560.5	551.5	551.5
60°	5805.9	4828.8	3383.6	2134.1	1139.1	700.1	596.6	540.3	526.8	538.0	538.0
62.5°	6172.8	5072.0	3471.4	1942.8	918.5	592.1	535.8	497.5	488.5	511.0	513.3
65°	6512.7	5308.3	3527.6	1713.2	729.4	513.3	488.5	454.7	459.2	481.8	479.5
67.5°	6722.1	5504.2	3448.8	1425.0	578.6	454.7	439.0	409.7	421.0	439.0	441.2
70°	6593.8	5393.9	3059.4	1076.1	452.5	396.2	385.0	366.9	376.0	398.5	407.5
72.5°	5965.7	4831.1	2379.5	727.1	364.7	333.2	337.7	328.7	339.9	360.2	380.5
75°	4842.3	3651.5	1596.1	466.0	288.2	283.7	290.4	283.7	288.2	308.4	319.7
77.5°	2528.1	1780.7	794.7	290.4	213.9	220.6	231.9	234.1	247.6	252.1	256.6
80°	1179.6	801.4	330.9	162.1	141.8	155.3	177.8	180.1	184.6	191.4	193.6
82.5°	385.0	240.9	153.1	87.8	81.0	87.8	114.8	137.3	139.6	153.1	153.1
85°	40.5	24.8	33.8	36.0	31.5	38.3	51.8	49.5	22.5	13.5	13.5
87.5°	11.3	9.0	11.3	11.3	9.0	9.0	6.8	2.3	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)