

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: P158685

Luminaire Tested: **VST-F06-LED-E-U-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158685
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33714)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F06-LED-E-U-SL4
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14368.8 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 156.5
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: 28.75 FT



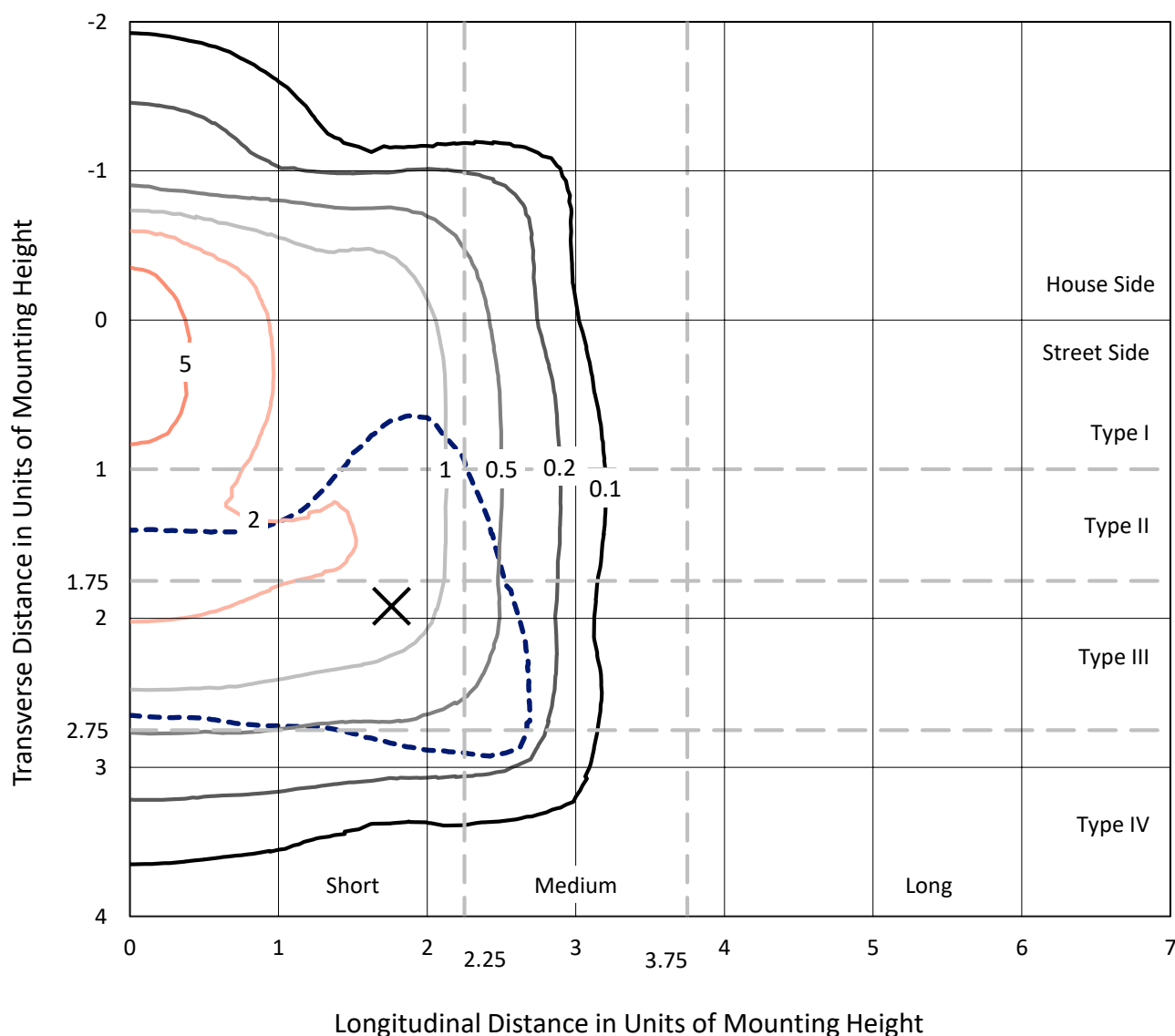
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

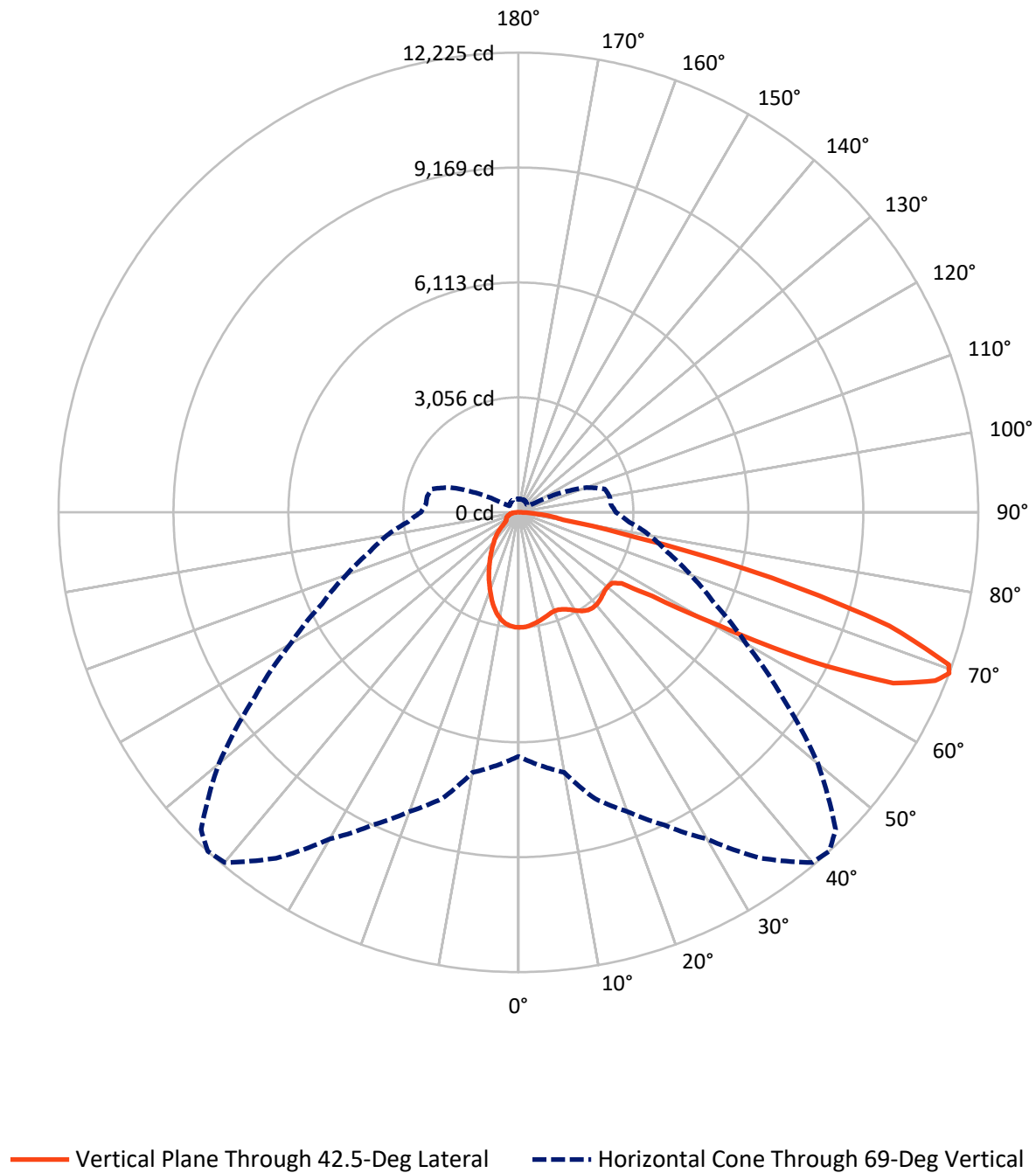


Based on 20 foot mounting height. Maximum calculated value = 7.7 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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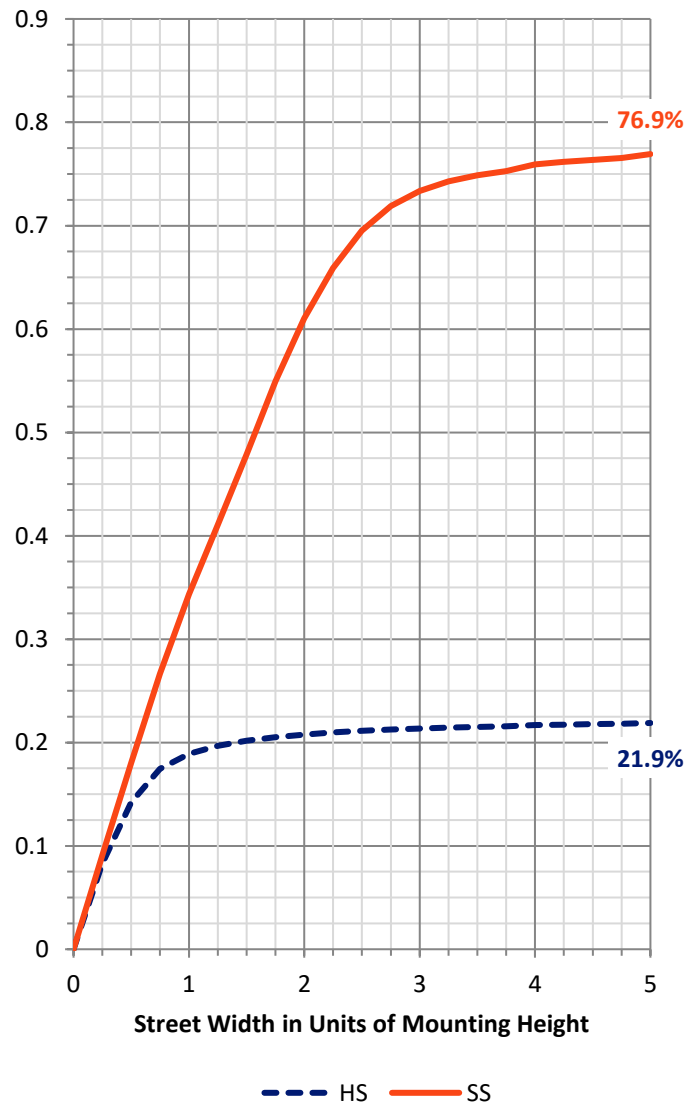
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3194.4	0.0	3194.4
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	11174.4	0.0	11174.4
	% Fixture	77.8	0.0	77.8
Total	Lumens	14368.8	0.0	14368.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	284.9	2.0
10°-20°	767.7	5.3
20°-30°	1119.5	7.8
30°-40°	1427.1	9.9
40°-50°	1660.5	11.6
50°-60°	2526.5	17.6
60°-70°	4462.9	31.1
70°-80°	1841.6	12.8
80°-90°	278.1	1.9
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°	14368.8	100.0
0°-180°	14368.8	100.0

Coefficient of Utilization



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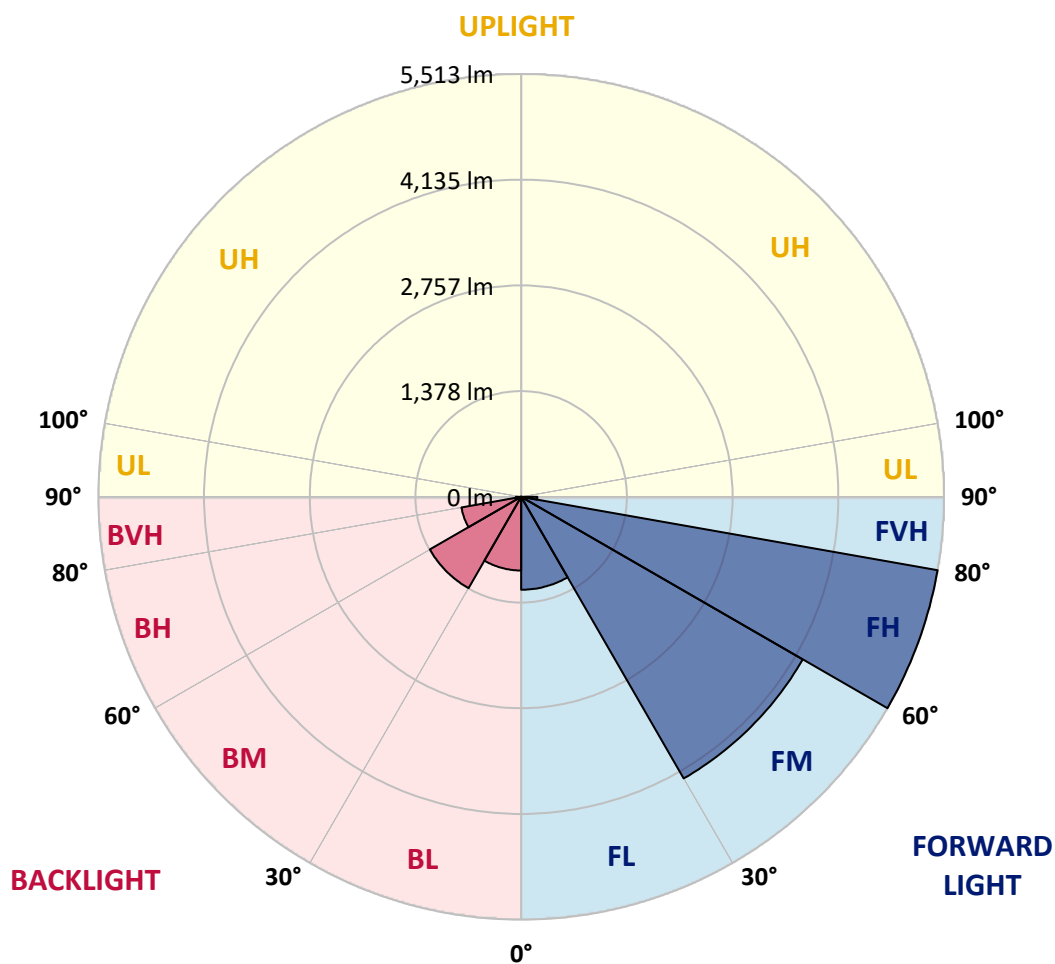
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1211.6	8.4			
FM	(30°-60°)	4239.2	29.5			
FH	(60°-80°)	5513.3	38.4			G3/7500
FVH	(80°-90°)	210.3	1.5			G2/225
BL	(0°-30°)	960.4	6.7	B2/1000		
BM	(30°-60°)	1374.9	9.6	B2/2500		
BH	(60°-80°)	791.2	5.5	B2/1000		G2/1000
BVH	(80°-90°)	67.8	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	42.5°	45°
0°	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1
2.5°	3050.1	3061.0	3057.1	3057.1	3060.1	3055.1	3055.1	3057.1	3052.1	3055.1	3054.1
5°	3039.3	3045.2	3043.2	3043.2	3043.2	3039.3	3037.3	3036.3	3029.3	3029.3	3026.4
7.5°	3015.5	3017.5	3020.4	3016.5	3015.5	3014.5	3007.6	3003.6	2995.7	2988.7	2990.7
10°	2983.8	2982.8	2987.7	2984.8	2980.8	2977.8	2971.9	2965.0	2956.0	2947.1	2946.1
12.5°	2948.1	2947.1	2951.1	2949.1	2946.1	2940.2	2935.2	2923.3	2909.5	2898.6	2897.6
15°	2925.3	2922.4	2926.3	2922.4	2917.4	2911.5	2902.5	2887.7	2862.9	2852.0	2843.1
17.5°	2947.1	2942.2	2944.2	2939.2	2932.3	2916.4	2895.6	2863.9	2828.2	2809.4	2795.6
20°	3023.4	3014.5	3016.5	3011.5	2995.7	2974.9	2935.2	2879.8	2819.3	2788.6	2766.8
22.5°	3132.4	3125.4	3128.4	3123.5	3107.6	3075.9	3016.5	2937.2	2851.0	2806.5	2771.8
25°	3297.8	3303.8	3305.7	3282.9	3274.0	3215.6	3133.4	3023.4	2908.5	2856.0	2808.4
27.5°	3484.0	3484.0	3493.0	3484.0	3466.2	3397.9	3282.0	3149.2	3001.6	2930.3	2872.8
30°	3665.3	3663.3	3680.2	3678.2	3649.5	3572.2	3440.5	3279.0	3110.6	3030.3	2957.0
32.5°	3857.5	3863.5	3874.4	3870.4	3832.7	3725.8	3567.3	3391.9	3214.6	3126.4	3044.2
35°	4065.5	4068.5	4072.5	4070.5	3994.2	3859.5	3660.4	3464.2	3280.0	3192.8	3107.6
37.5°	4273.6	4270.6	4265.7	4223.1	4135.9	3948.7	3716.8	3505.8	3312.7	3218.6	3130.4
40°	4459.8	4443.0	4427.1	4360.8	4227.0	3999.2	3738.6	3515.7	3309.7	3212.6	3126.4
42.5°	4561.9	4543.0	4510.3	4427.1	4264.7	4004.1	3723.8	3486.0	3279.0	3182.9	3097.7
45°	4580.7	4566.8	4535.1	4442.0	4255.7	3972.4	3678.2	3437.5	3233.4	3137.3	3057.1
47.5°	4536.1	4525.2	4494.5	4402.4	4217.1	3924.9	3625.7	3386.0	3188.8	3098.7	3021.4
50°	4467.7	4457.8	4434.1	4349.9	4173.5	3892.2	3599.0	3359.2	3174.0	3091.8	3020.4
52.5°	4578.7	4586.6	4517.3	4425.1	4220.1	3920.9	3628.7	3387.0	3200.7	3119.5	3045.2
55°	6303.4	6292.5	5875.4	5525.7	4900.6	4334.0	3911.0	3606.9	3407.8	3326.5	3257.2
57.5°	8190.5	8152.9	7981.5	7654.6	6983.0	6086.4	5271.1	4577.7	4304.3	4187.4	4195.3
60°	8806.7	8820.6	8783.9	8668.0	8427.3	7960.7	7340.6	6819.5	6306.4	6055.7	6084.4
62.5°	9148.5	9173.2	9204.9	9179.2	9100.9	8992.9	8914.7	8962.2	8890.9	8710.6	8567.0
65°	9196.0	9246.5	9351.5	9434.8	9475.4	9577.4	9817.1	10391.7	10916.7	10951.4	10698.8
67.5°	8254.9	8394.6	8622.4	9007.8	9337.7	9700.2	10278.8	11152.5	11927.2	11952.9	11717.2
69°	6490.6	6759.1	7025.5	7886.4	8465.9	9176.2	10032.1	11225.8	12154.0	12225.4	11928.2
70°	5200.8	5360.3	5590.1	6454.9	7320.8	8226.2	9466.5	10984.1	11998.5	12142.2	11814.3
72.5°	3122.5	3183.9	3263.1	3573.2	4019.0	4825.4	6469.8	8955.3	10121.3	10313.4	9896.4
75°	2018.9	2014.9	2021.9	2108.1	2133.8	2288.4	2806.5	4607.4	6602.5	6951.3	6452.0
77.5°	1520.6	1534.5	1512.7	1520.6	1513.7	1555.3	1571.1	1649.4	2606.3	3210.6	2870.8
80°	1342.3	1349.2	1350.2	1346.3	1297.7	1293.8	1319.5	1274.9	1184.8	1202.6	1152.1
82.5°	765.8	764.8	773.7	841.0	868.8	959.9	997.6	1018.4	940.1	881.7	797.5
85°	496.3	500.3	510.2	531.0	510.2	518.1	509.2	527.0	483.4	448.8	401.2
87.5°	203.1	203.1	216.0	234.8	218.9	215.0	184.3	182.3	154.5	139.7	109.0
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1
2.5°	3048.2	3054.1	3051.1	3055.1	3052.1	3052.1	3048.2	3047.2	3050.1	3046.2	3047.2
5°	3021.4	3022.4	3017.5	3019.4	3013.5	3011.5	3008.5	3000.6	3005.6	3000.6	3002.6
7.5°	2982.8	2979.8	2972.9	2963.0	2956.0	2953.1	2947.1	2936.2	2938.2	2929.3	2934.2
10°	2933.3	2923.3	2911.5	2896.6	2886.7	2877.8	2864.9	2852.0	2845.1	2837.2	2836.2
12.5°	2877.8	2865.9	2850.0	2827.3	2805.5	2790.6	2770.8	2748.0	2741.1	2728.2	2721.3
15°	2817.4	2798.5	2779.7	2754.0	2730.2	2707.4	2680.6	2651.9	2633.1	2613.3	2598.4
17.5°	2762.9	2741.1	2716.3	2691.5	2665.8	2638.0	2604.4	2568.7	2541.0	2504.3	2474.6
20°	2720.3	2692.5	2667.8	2642.0	2613.3	2579.6	2539.0	2493.4	2446.9	2406.2	2371.6
22.5°	2703.4	2659.8	2630.1	2604.4	2575.6	2536.0	2486.5	2433.0	2376.5	2320.1	2274.5
25°	2717.3	2652.9	2606.3	2575.6	2550.9	2510.3	2454.8	2389.4	2324.0	2256.7	2195.2
27.5°	2757.9	2675.7	2608.3	2559.8	2531.1	2490.4	2432.0	2362.7	2285.4	2210.1	2134.8
30°	2821.3	2714.3	2629.1	2560.8	2516.2	2469.6	2408.2	2328.0	2249.7	2163.5	2081.3
32.5°	2882.7	2754.9	2652.9	2564.7	2496.4	2436.0	2367.6	2288.4	2204.2	2114.0	2028.8
35°	2926.3	2781.7	2661.8	2555.8	2465.7	2390.4	2317.1	2237.8	2155.6	2063.5	1976.3
37.5°	2947.1	2796.5	2662.8	2532.1	2425.1	2341.8	2263.6	2185.3	2108.1	2020.9	1938.7
40°	2946.1	2795.6	2648.9	2501.3	2376.5	2288.4	2211.1	2134.8	2062.5	1986.2	1911.9
42.5°	2924.3	2779.7	2629.1	2471.6	2341.8	2243.8	2163.5	2090.2	2028.8	1961.4	1899.0
45°	2890.7	2753.0	2608.3	2457.8	2331.9	2233.9	2148.7	2077.4	2022.9	1961.4	1908.0
47.5°	2864.9	2738.1	2611.3	2482.5	2362.7	2260.6	2170.5	2092.2	2045.7	1996.1	1958.5
50°	2868.9	2745.0	2621.2	2497.4	2384.4	2281.4	2194.2	2122.9	2089.2	2076.4	2067.4
52.5°	2889.7	2755.9	2650.9	2576.6	2538.0	2460.7	2409.2	2364.6	2389.4	2340.9	2283.4
55°	3155.2	3111.6	3213.6	3309.7	3431.5	3477.1	3433.5	3425.6	3465.2	3300.8	2923.3
57.5°	4251.8	4364.7	4522.2	4605.4	4706.5	4679.7	4578.7	4494.5	4395.4	4203.2	3732.7
60°	6117.1	6031.9	5960.6	5759.5	5595.1	5402.9	5188.9	5005.7	4830.3	4553.9	4044.7
62.5°	8039.0	7447.6	6953.2	6475.7	6091.4	5772.4	5462.3	5186.9	4921.4	4536.1	3988.3
65°	9701.2	8456.0	7527.8	6827.4	6265.7	5781.3	5383.1	5002.7	4664.9	4213.1	3671.3
67.5°	10448.2	8887.9	7537.7	6534.2	5756.6	5098.8	4583.6	4009.1	3630.7	3341.4	3036.3
69°	10392.7	8558.1	6999.8	5764.5	4870.9	4104.2	3551.4	2952.1	2589.5	2466.7	2459.7
70°	10129.2	7999.3	6371.7	5139.4	4117.1	3355.3	2825.3	2287.4	1949.6	1865.4	2014.9
72.5°	8269.8	5652.5	3993.2	3049.2	2344.8	1853.5	1511.7	1199.7	957.9	830.1	857.9
75°	4670.8	2617.2	1692.0	1278.9	1080.8	893.5	766.7	653.8	591.4	480.5	380.4
77.5°	1697.9	1123.4	893.5	772.7	547.8	377.4	316.0	276.4	250.6	250.6	238.7
80°	1073.8	846.0	590.4	404.2	299.2	260.5	227.8	200.1	184.3	180.3	184.3
82.5°	670.7	518.1	330.9	253.6	213.0	191.2	166.4	145.6	132.7	129.8	135.7
85°	330.9	256.6	201.1	179.3	168.4	156.5	137.7	117.9	113.9	121.8	142.7
87.5°	99.1	88.2	72.3	75.3	79.3	77.3	61.4	53.5	50.5	66.4	104.0
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1	3060.1
2.5°	3049.2	3048.2	3050.1	3047.2	3049.2	3050.1	3048.2	3057.1	3051.1	3052.1	3056.1
5°	3004.6	3002.6	3010.5	3008.5	3012.5	3016.5	3014.5	3027.4	3022.4	3026.4	3034.3
7.5°	2930.3	2934.2	2935.2	2935.2	2943.2	2956.0	2959.0	2966.9	2966.9	2977.8	2985.8
10°	2831.2	2832.2	2838.2	2837.2	2847.1	2860.9	2862.9	2876.8	2881.7	2899.6	2910.5
12.5°	2716.3	2711.4	2710.4	2709.4	2722.3	2737.1	2739.1	2762.9	2772.8	2788.6	2806.5
15°	2587.5	2574.6	2570.7	2578.6	2575.6	2584.6	2593.5	2606.3	2620.2	2651.9	2667.8
17.5°	2461.7	2436.0	2429.0	2420.1	2411.2	2411.2	2415.2	2431.0	2459.7	2476.6	2512.2
20°	2332.9	2302.2	2277.5	2253.7	2232.9	2225.0	2225.9	2245.8	2266.6	2294.3	2328.0
22.5°	2225.0	2178.4	2135.8	2104.1	2061.5	2060.5	2054.6	2060.5	2083.3	2090.2	2109.1
25°	2131.8	2069.4	2012.0	1960.5	1918.9	1897.1	1891.1	1889.1	1878.2	1875.3	1861.4
27.5°	2059.5	1984.2	1909.9	1847.5	1796.0	1766.3	1728.6	1701.9	1663.3	1653.4	1628.6
30°	2000.1	1918.9	1837.6	1756.4	1697.9	1644.4	1581.0	1534.5	1475.0	1436.4	1402.7
32.5°	1942.6	1860.4	1778.2	1697.9	1607.8	1524.6	1441.4	1369.1	1302.7	1243.2	1193.7
35°	1895.1	1816.8	1733.6	1636.5	1521.6	1401.7	1301.7	1219.5	1128.3	1065.9	1003.5
37.5°	1864.4	1793.0	1709.8	1576.1	1428.5	1299.7	1185.8	1085.7	992.6	898.5	828.2
40°	1850.5	1788.1	1684.1	1520.6	1347.3	1204.6	1078.8	967.8	849.0	743.0	667.7
42.5°	1849.5	1786.1	1648.4	1459.2	1279.9	1124.4	984.7	851.9	720.2	611.2	536.9
45°	1867.3	1783.1	1610.8	1407.7	1220.5	1058.0	891.6	730.1	582.5	501.3	461.6
47.5°	1914.9	1788.1	1580.1	1360.1	1164.0	977.8	784.6	596.4	474.5	436.9	436.9
50°	2000.1	1816.8	1572.1	1326.5	1107.5	884.6	653.8	481.4	420.0	420.0	431.9
52.5°	2130.8	1877.2	1586.0	1302.7	1037.2	761.8	515.1	415.1	403.2	414.1	429.9
55°	2432.0	1984.2	1604.8	1262.1	930.2	604.3	425.0	392.3	397.2	410.1	425.0
57.5°	2984.8	2213.1	1624.6	1172.9	757.8	465.6	385.4	383.4	392.3	404.2	417.1
60°	3348.3	2504.3	1675.2	1038.2	573.6	384.4	365.5	377.4	388.3	398.2	408.1
62.5°	3348.3	2586.5	1712.8	887.6	430.9	349.7	352.7	371.5	384.4	389.3	395.3
65°	3134.4	2436.0	1585.0	723.2	350.7	329.9	340.8	359.6	371.5	375.4	380.4
67.5°	2739.1	2151.6	1335.4	544.8	313.0	313.0	326.9	340.8	350.7	358.6	366.5
69°	2381.5	1930.7	1175.9	461.6	298.2	300.2	314.0	325.9	337.8	347.7	357.6
70°	2123.9	1765.3	1064.9	419.0	289.3	290.3	304.1	317.0	327.9	338.8	350.7
72.5°	1137.2	1219.5	809.3	343.7	266.5	269.5	282.3	294.2	304.1	315.0	325.9
75°	387.3	524.0	515.1	281.3	240.7	248.6	256.6	267.5	280.3	287.3	293.2
77.5°	226.9	234.8	274.4	228.8	216.9	220.9	229.8	238.7	249.6	256.6	261.5
80°	190.2	189.2	190.2	186.2	189.2	198.1	204.1	216.0	225.9	227.8	226.9
82.5°	154.5	162.5	163.5	161.5	170.4	177.3	182.3	189.2	188.2	190.2	194.2
85°	137.7	136.7	143.6	144.6	144.6	139.7	140.7	140.7	140.7	143.6	144.6
87.5°	137.7	114.9	89.2	80.2	84.2	79.3	75.3	74.3	82.2	90.1	88.2
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):

	160°	165°	170°	175°	180°
0°	3060.1	3060.1	3060.1	3060.1	3060.1
2.5°	3058.1	3061.0	3059.1	3059.1	3061.0
5°	3037.3	3042.2	3040.2	3042.2	3042.2
7.5°	2989.7	2996.7	3001.6	3006.6	3003.6
10°	2921.4	2933.3	2941.2	2947.1	2944.2
12.5°	2819.3	2830.2	2847.1	2857.0	2849.1
15°	2679.7	2710.4	2720.3	2734.1	2726.2
17.5°	2534.0	2552.9	2564.7	2577.6	2585.5
20°	2339.9	2354.7	2370.6	2376.5	2367.6
22.5°	2106.1	2114.0	2111.0	2119.9	2102.1
25°	1849.5	1854.5	1851.5	1859.4	1844.6
27.5°	1606.8	1605.8	1606.8	1596.9	1587.0
30°	1373.0	1364.1	1360.1	1345.3	1342.3
32.5°	1164.0	1133.3	1117.4	1095.6	1090.7
35°	955.0	911.4	882.7	857.9	847.0
37.5°	767.7	715.2	681.6	659.8	656.8
40°	607.3	558.7	534.9	523.1	521.1
42.5°	495.3	474.5	468.6	468.6	468.6
45°	451.7	450.7	455.7	459.7	460.6
47.5°	442.8	448.8	455.7	461.6	463.6
50°	442.8	448.8	453.7	459.7	461.6
52.5°	440.8	445.8	447.8	451.7	453.7
55°	434.9	437.9	437.9	439.8	441.8
57.5°	425.0	427.0	424.0	426.0	430.9
60°	415.1	417.1	412.1	417.1	420.0
62.5°	404.2	405.2	403.2	407.1	407.1
65°	386.3	384.4	387.3	390.3	391.3
67.5°	368.5	363.6	366.5	367.5	369.5
69°	354.6	351.7	352.7	354.6	356.6
70°	344.7	342.8	344.7	347.7	350.7
72.5°	320.0	321.0	327.9	333.8	339.8
75°	297.2	304.1	313.0	325.9	332.9
77.5°	269.5	274.4	281.3	295.2	308.1
80°	232.8	235.8	236.8	241.7	240.7
82.5°	189.2	186.2	184.3	182.3	181.3
85°	135.7	134.7	126.8	120.9	120.9
87.5°	81.2	77.3	73.3	68.4	65.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)