

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: P159795

Luminaire Tested: **VST-F07-LED-E-U-T4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159795
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33707)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F07-LED-E-U-T4
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT
Light Source: (49) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17199.4 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 180.5
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



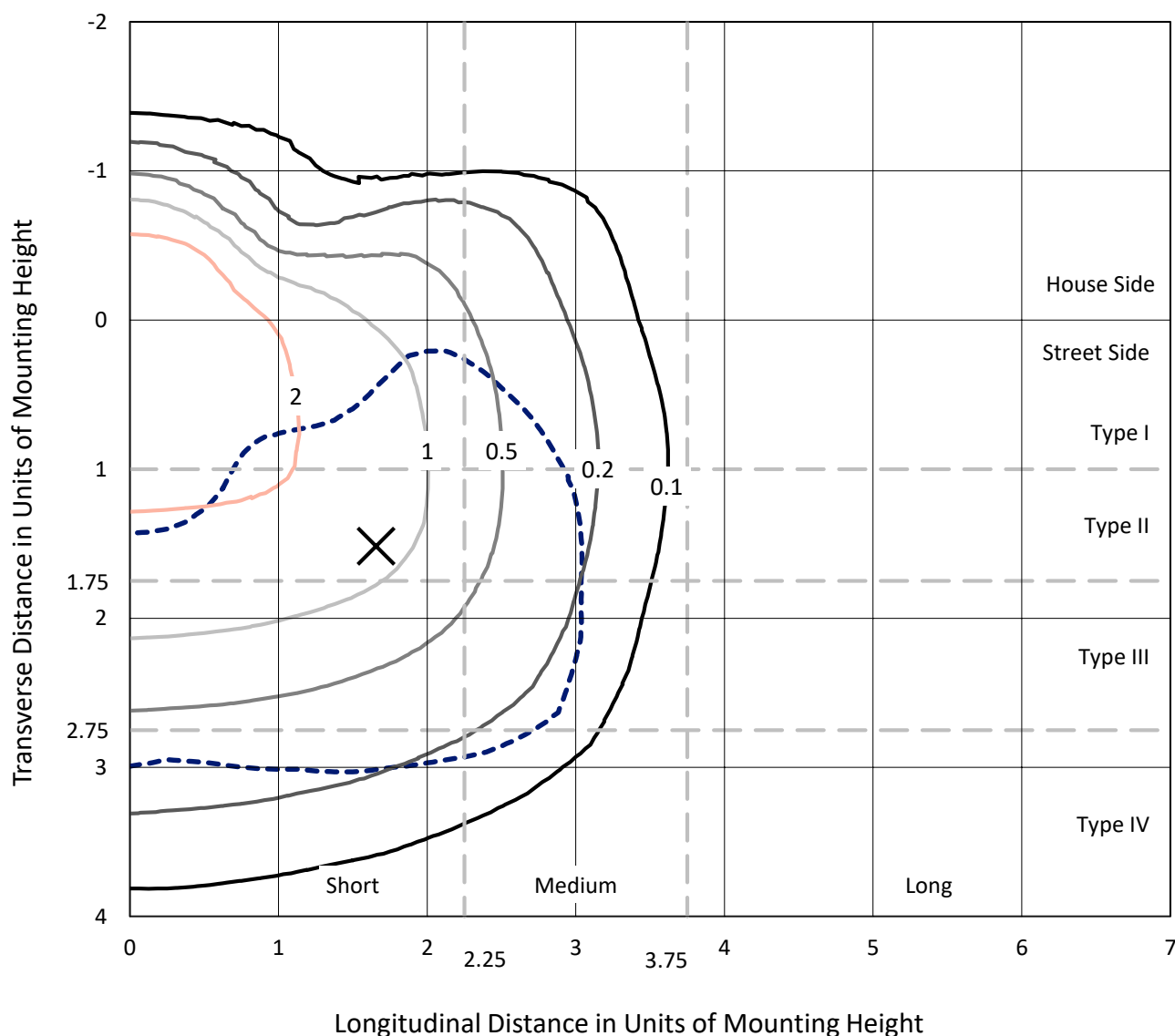
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

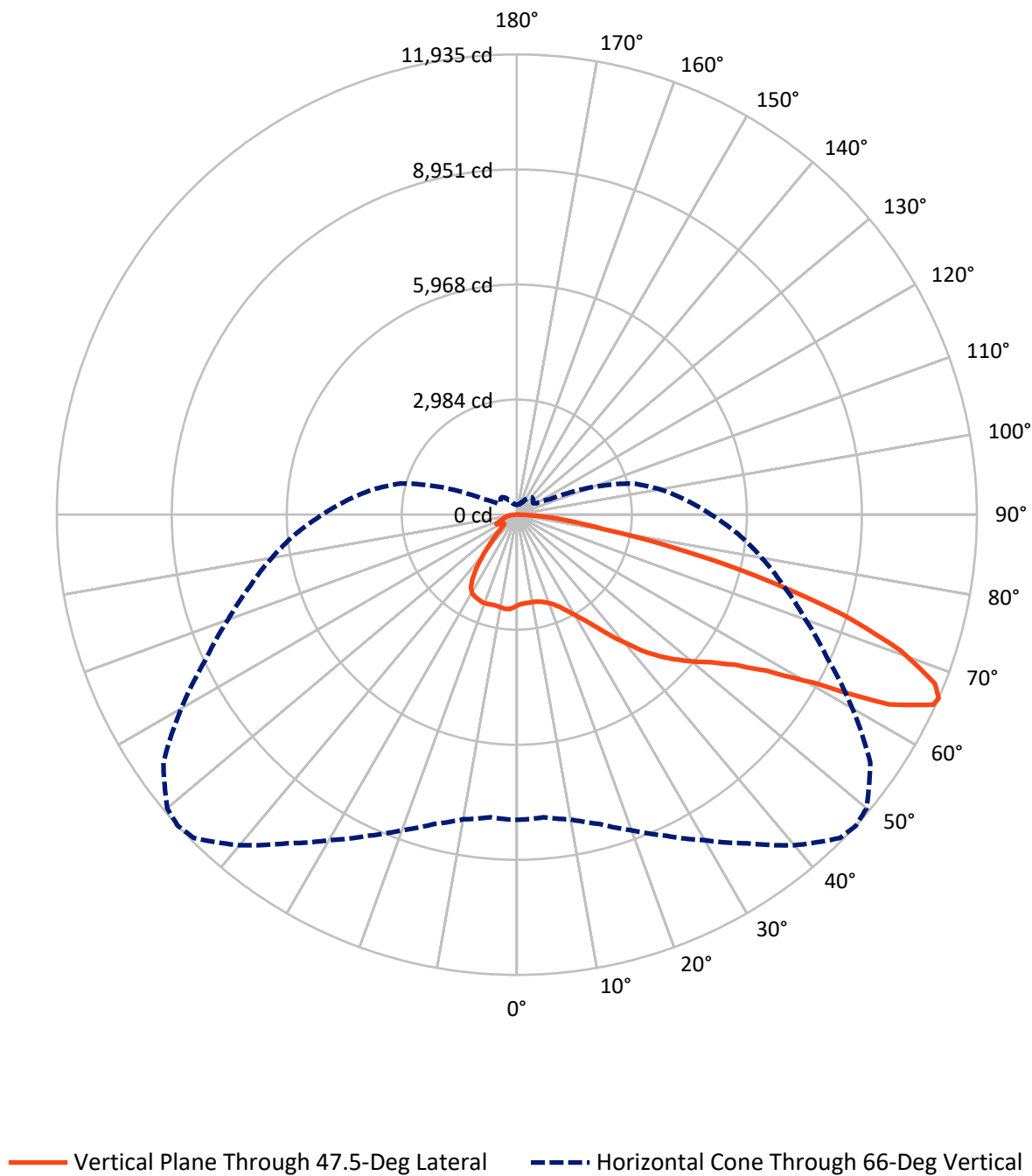


Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3561.0	0.0	3561.0
	% Fixture	20.7	0.0	20.7
Street Side	Lumens	13638.4	0.0	13638.4
	% Fixture	79.3	0.0	79.3
Total	Lumens	17199.4	0.0	17199.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.8	1.3
10°-20°	680.1	4.0
20°-30°	1160.4	6.7
30°-40°	1751.5	10.2
40°-50°	2276.6	13.2
50°-60°	3123.2	18.2
60°-70°	4804.5	27.9
70°-80°	2777.3	16.1
80°-90°	399.0	2.3
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°	17199.4	100.0
0°-180°	17199.4	100.0

Coefficient of Utilization



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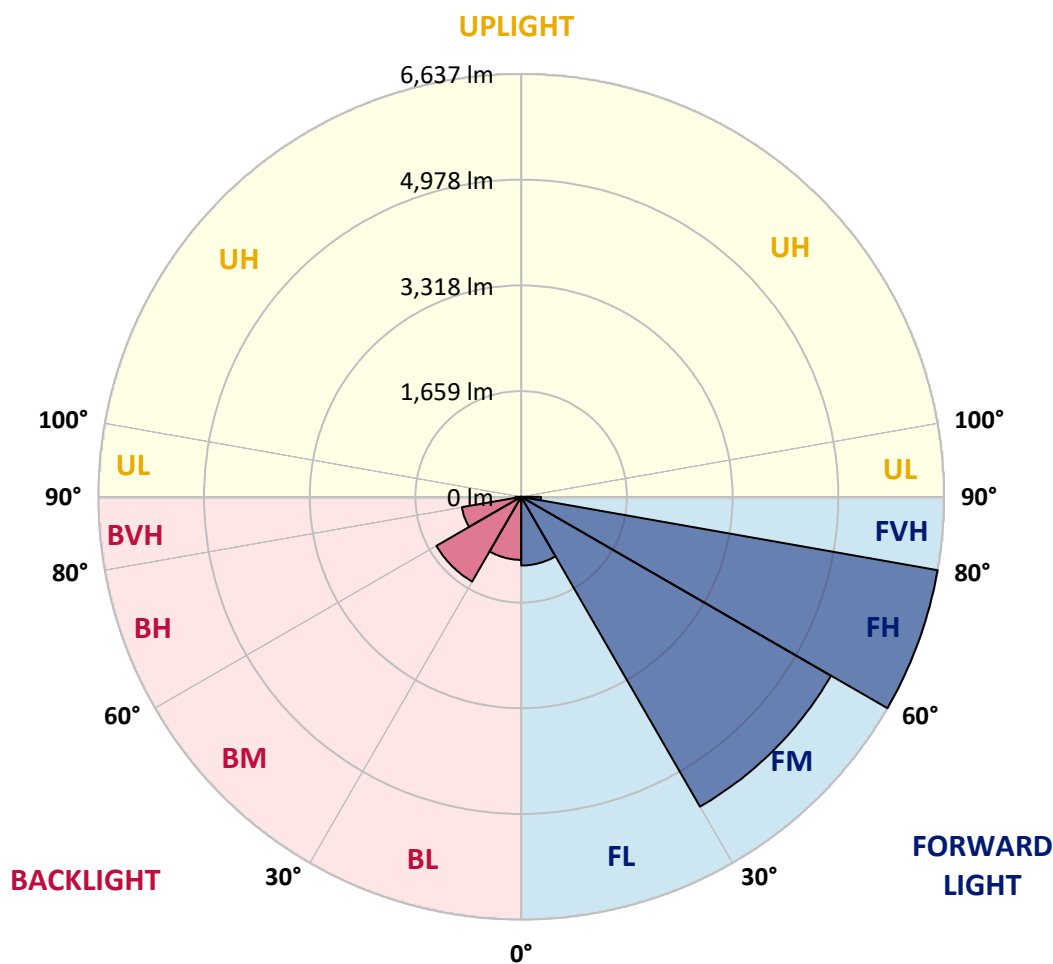
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1078.1	6.3			
FM	(30°-60°)	5614.9	32.6			
FH	(60°-80°)	6636.7	38.6			G3/7500
FVH	(80°-90°)	308.8	1.8			G3/500
BL	(0°-30°)	989.3	5.8	B2/1000		
BM	(30°-60°)	1536.4	8.9	B2/2500		
BH	(60°-80°)	945.1	5.5	B2/1000		G2/1000
BVH	(80°-90°)	90.2	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°	45°	47.5°
0°	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1
2.5°	2293.0	2294.1	2295.3	2295.3	2298.8	2298.8	2304.5	2308.0	2309.2	2316.1	2320.7
5°	2250.2	2249.1	2250.2	2252.5	2258.3	2262.9	2274.5	2282.6	2289.5	2301.1	2306.8
7.5°	2231.7	2234.0	2236.3	2237.5	2242.1	2253.7	2264.1	2272.2	2286.0	2299.9	2305.7
10°	2256.0	2259.5	2256.0	2258.3	2258.3	2268.7	2273.3	2279.1	2289.5	2302.2	2305.7
12.5°	2312.6	2319.6	2312.6	2306.8	2302.2	2311.5	2309.2	2304.5	2310.3	2313.8	2313.8
15°	2406.2	2406.2	2401.6	2393.5	2382.0	2383.1	2372.7	2362.3	2357.7	2349.6	2343.8
17.5°	2497.5	2495.2	2484.8	2474.4	2466.3	2462.9	2447.8	2434.0	2417.8	2405.1	2391.2
20°	2586.5	2595.8	2583.1	2568.0	2555.3	2547.2	2535.7	2507.9	2488.3	2467.5	2453.6
22.5°	2740.2	2732.2	2718.3	2696.3	2683.6	2669.7	2645.5	2615.4	2585.4	2560.0	2542.6
25°	2898.6	2890.5	2870.8	2854.7	2836.2	2824.6	2798.0	2761.1	2732.2	2692.9	2669.7
27.5°	3068.5	3061.5	3038.4	3025.7	3013.0	2999.1	2976.0	2937.9	2911.3	2866.2	2842.0
30°	3260.3	3259.2	3228.0	3225.7	3207.2	3192.1	3176.0	3143.6	3117.0	3071.9	3043.0
32.5°	3464.9	3460.3	3438.3	3431.4	3444.1	3433.7	3410.6	3377.1	3342.4	3315.8	3283.4
35°	3756.1	3748.0	3735.3	3741.1	3749.2	3778.1	3742.3	3713.4	3671.8	3637.1	3592.0
37.5°	3968.8	3957.2	3972.3	4004.6	4050.9	4072.8	4104.0	4105.2	4085.5	4039.3	4000.0
40°	4164.1	4159.5	4194.2	4239.2	4324.8	4387.2	4446.1	4475.0	4481.9	4451.9	4392.9
42.5°	4329.4	4343.3	4389.5	4458.8	4579.0	4673.8	4783.6	4851.8	4894.5	4878.4	4851.8
45°	4525.9	4532.8	4589.4	4677.3	4791.7	4948.9	5093.3	5208.9	5284.0	5282.9	5252.8
47.5°	4772.0	4773.2	4821.7	4924.6	5047.1	5206.6	5389.2	5542.9	5642.3	5646.9	5623.8
50°	5064.4	5062.1	5115.3	5212.4	5343.0	5496.7	5690.8	5882.7	6021.4	6021.4	5987.9
52.5°	5441.2	5436.6	5465.5	5551.0	5677.0	5838.8	6031.8	6253.7	6403.9	6436.3	6363.5
55°	5943.9	5950.9	5957.8	6032.9	6140.4	6268.7	6490.6	6695.2	6896.3	6914.8	6872.0
57.5°	6525.3	6502.2	6551.9	6674.4	6796.9	6957.5	7114.7	7356.3	7594.3	7634.8	7629.0
60°	7433.7	7403.6	7454.5	7610.5	7745.7	7998.8	8268.1	8580.2	8862.2	8945.4	8844.8
62.5°	8269.3	8306.3	8375.6	8557.1	8753.5	9091.0	9495.5	10030.6	10565.7	10857.0	10836.2
65°	8194.2	8159.5	8292.4	8539.7	8895.7	9325.6	9828.4	10473.3	11244.1	11828.9	11881.0
66°	7915.6	7879.8	8023.1	8306.3	8713.1	9191.6	9749.8	10406.2	11194.4	11855.5	11935.3
67.5°	7455.6	7419.8	7581.6	7839.3	8258.9	8861.0	9464.3	10182.0	11001.4	11634.8	11699.5
70°	6568.0	6519.5	6645.5	6936.7	7276.5	7859.0	8433.4	9193.9	10035.2	10541.5	10565.7
72.5°	5563.7	5450.4	5584.5	5808.7	6051.4	6533.4	7033.8	7553.9	8224.2	8692.3	8826.3
75°	4037.0	4095.9	4135.2	4283.2	4443.8	4842.5	5136.1	5571.8	6090.7	6429.4	6536.8
77.5°	2141.6	2230.6	2286.0	2434.0	2699.8	3003.8	3321.6	3590.9	3931.8	4121.4	4253.1
80°	1202.0	1264.4	1354.5	1471.3	1600.7	1834.2	2022.5	2161.2	2209.8	2243.3	2273.3
82.5°	661.1	819.4	953.5	1034.4	1110.7	1204.3	1316.4	1432.0	1468.9	1413.5	1384.6
85°	102.9	151.4	461.1	562.8	612.5	684.2	765.1	850.6	851.8	732.7	799.8
87.5°	28.9	32.4	65.9	99.4	97.1	78.6	97.1	176.8	104.0	52.0	60.1
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°	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1
2.5°	2323.0	2325.3	2331.1	2336.9	2342.7	2348.5	2351.9	2357.7	2362.3	2369.3	2377.3
5°	2313.8	2319.6	2330.0	2342.7	2354.2	2364.6	2372.7	2384.3	2394.7	2403.9	2417.8
7.5°	2313.8	2325.3	2342.7	2356.5	2366.9	2379.7	2392.4	2403.9	2415.5	2424.7	2434.0
10°	2314.9	2326.5	2343.8	2360.0	2371.6	2385.4	2395.8	2406.2	2419.0	2424.7	2436.3
12.5°	2319.6	2324.2	2336.9	2353.1	2366.9	2380.8	2391.2	2401.6	2415.5	2417.8	2425.9
15°	2342.7	2335.7	2339.2	2350.8	2365.8	2377.3	2388.9	2397.0	2406.2	2403.9	2410.9
17.5°	2385.4	2368.1	2361.2	2362.3	2369.3	2377.3	2382.0	2383.1	2384.3	2373.9	2375.0
20°	2443.2	2419.0	2402.8	2394.7	2385.4	2377.3	2364.6	2349.6	2335.7	2314.9	2312.6
22.5°	2529.9	2494.1	2476.7	2454.8	2427.0	2392.4	2361.2	2324.2	2294.1	2262.9	2251.4
25°	2655.9	2618.9	2600.4	2565.7	2516.0	2466.3	2421.3	2371.6	2327.7	2290.7	2273.3
27.5°	2824.6	2787.6	2768.0	2732.2	2670.9	2621.2	2558.8	2505.6	2452.5	2398.1	2376.2
30°	3029.2	2996.8	2974.9	2946.0	2892.8	2838.5	2765.7	2683.6	2599.2	2512.6	2469.8
32.5°	3270.7	3234.9	3218.7	3185.2	3129.7	3073.1	2992.2	2887.0	2746.0	2609.6	2524.1
35°	3572.4	3531.9	3513.4	3469.5	3404.8	3321.6	3234.9	3093.9	2903.2	2713.7	2573.8
37.5°	3975.7	3885.6	3824.3	3723.8	3619.8	3503.0	3379.4	3234.9	3009.5	2774.9	2580.8
40°	4332.9	4241.5	4123.7	3979.2	3817.4	3656.7	3515.7	3351.6	3106.6	2818.8	2558.8
42.5°	4776.7	4614.8	4426.5	4231.1	4016.2	3818.5	3651.0	3458.0	3172.5	2830.4	2497.5
45°	5182.3	4989.3	4737.4	4477.3	4210.3	3961.9	3773.5	3558.5	3229.1	2830.4	2423.6
47.5°	5552.2	5321.0	5019.4	4695.8	4384.9	4113.3	3899.4	3661.4	3308.9	2866.2	2401.6
50°	5894.2	5628.4	5285.2	4909.6	4560.5	4270.4	4040.4	3793.1	3430.2	2958.7	2454.8
52.5°	6254.8	5972.8	5554.5	5155.7	4770.9	4460.0	4215.0	3956.1	3587.4	3104.3	2548.4
55°	6727.5	6397.0	5922.0	5482.8	5059.8	4716.6	4438.0	4151.4	3759.6	3268.4	2662.8
57.5°	7473.0	6993.4	6518.3	5947.4	5548.7	5096.8	4791.7	4462.3	4039.3	3482.2	2835.0
60°	8777.8	8188.4	7617.4	6961.0	6468.6	5996.0	5534.8	5104.9	4595.2	3965.3	3212.9
62.5°	10640.9	10042.2	9145.3	8342.1	7599.0	6972.5	6371.6	5824.9	5170.8	4481.9	3678.7
65°	11753.8	11068.5	9999.4	8920.0	8017.3	7240.7	6553.0	5883.8	5177.7	4506.2	3819.7
66°	11842.8	11194.4	10052.6	8911.9	7974.6	7169.0	6453.6	5761.3	5037.8	4395.3	3773.5
67.5°	11677.5	11119.3	9943.9	8754.7	7796.6	6926.3	6191.3	5465.5	4738.5	4143.3	3619.8
70°	10511.4	10108.1	9100.3	7986.1	7030.3	6262.9	5487.4	4789.4	4100.5	3600.1	3211.8
72.5°	8617.2	8106.3	7401.3	6652.4	5900.0	5219.3	4514.3	3920.3	3342.4	2978.3	2703.3
75°	6330.0	5870.0	5093.3	4626.4	4129.4	3701.8	3226.8	2664.0	2253.7	2071.1	2004.0
77.5°	4012.7	3513.4	2858.1	2342.7	2014.4	1731.3	1364.9	1085.2	869.1	904.9	1002.0
80°	2027.2	1746.3	1307.1	1032.1	892.2	742.0	587.1	445.0	324.8	371.0	419.5
82.5°	1301.4	1086.4	865.6	681.9	575.6	507.4	405.7	294.7	219.6	247.3	302.8
85°	783.6	662.2	528.2	432.2	375.6	313.2	230.0	163.0	161.8	173.4	213.8
87.5°	119.0	169.9	98.2	105.2	111.0	119.0	105.2	89.0	77.4	100.5	127.1
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°	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1	2353.1
2.5°	2385.4	2387.7	2392.4	2398.1	2397.0	2405.1	2409.7	2405.1	2415.5	2415.5	2421.3
5°	2429.4	2432.8	2440.9	2446.7	2449.0	2455.9	2458.2	2457.1	2459.4	2460.6	2462.9
7.5°	2442.1	2451.3	2454.8	2458.2	2459.4	2461.7	2461.7	2459.4	2459.4	2458.2	2460.6
10°	2438.6	2442.1	2444.4	2443.2	2443.2	2440.9	2439.8	2438.6	2438.6	2436.3	2439.8
12.5°	2427.0	2427.0	2427.0	2424.7	2424.7	2423.6	2423.6	2423.6	2425.9	2427.0	2432.8
15°	2403.9	2403.9	2406.2	2405.1	2408.6	2414.3	2421.3	2425.9	2431.7	2432.8	2436.3
17.5°	2368.1	2369.3	2376.2	2391.2	2406.2	2423.6	2436.3	2439.8	2435.1	2423.6	2415.5
20°	2305.7	2320.7	2348.5	2384.3	2417.8	2439.8	2445.5	2431.7	2409.7	2379.7	2363.5
22.5°	2250.2	2280.3	2330.0	2388.9	2430.5	2445.5	2428.2	2395.8	2356.5	2321.9	2297.6
25°	2272.2	2306.8	2358.9	2409.7	2436.3	2428.2	2393.5	2347.3	2305.7	2265.2	2225.9
27.5°	2364.6	2399.3	2436.3	2451.3	2442.1	2412.0	2363.5	2313.8	2258.3	2200.5	2152.0
30°	2452.5	2472.1	2474.4	2459.4	2425.9	2377.3	2320.7	2262.9	2192.4	2123.1	2061.8
32.5°	2480.2	2457.1	2415.5	2372.7	2326.5	2276.8	2210.9	2134.6	2059.5	1980.9	1912.7
35°	2472.1	2378.5	2275.6	2184.3	2128.9	2072.2	2012.1	1910.4	1826.1	1759.0	1715.1
37.5°	2399.3	2228.3	2069.9	1937.0	1850.3	1783.3	1694.3	1609.9	1537.1	1507.1	1471.3
40°	2297.6	2036.4	1816.8	1630.7	1540.6	1455.1	1355.7	1291.0	1270.2	1242.4	1243.6
42.5°	2152.0	1812.2	1529.0	1315.2	1217.0	1123.4	1052.9	1014.7	1015.9	992.8	997.4
45°	1998.3	1586.8	1230.9	1018.2	921.1	841.4	802.1	790.5	791.7	792.8	785.9
47.5°	1904.7	1411.2	987.0	772.0	686.5	641.4	620.6	614.9	616.0	617.2	609.1
50°	1890.8	1319.8	824.0	590.6	535.1	509.7	499.3	493.5	493.5	488.9	481.9
52.5°	1930.1	1296.7	744.3	512.0	458.8	435.7	427.6	423.0	416.1	406.8	394.1
55°	1992.5	1317.5	720.0	485.4	433.4	410.3	399.9	397.6	386.0	368.7	347.9
57.5°	2108.1	1392.7	736.2	492.3	438.0	417.2	410.3	408.0	391.8	365.2	338.6
60°	2439.8	1611.1	817.1	531.6	471.5	454.2	454.2	450.7	428.8	390.6	352.5
62.5°	2897.4	1931.2	926.9	586.0	517.8	515.5	535.1	536.3	497.0	435.7	375.6
65°	3118.2	2081.5	965.0	597.5	530.5	557.1	596.4	596.4	540.9	456.5	379.1
66°	3119.3	2078.0	953.5	583.6	516.6	551.3	591.7	591.7	533.9	450.7	373.3
67.5°	3039.6	2013.3	915.3	558.2	485.4	517.8	553.6	552.4	500.4	427.6	357.1
70°	2726.4	1781.0	806.7	516.6	448.4	449.6	462.3	454.2	419.5	369.8	324.8
72.5°	2350.8	1489.7	699.2	490.0	419.5	397.6	387.2	380.2	358.3	328.2	300.5
75°	1802.9	1156.9	609.1	465.8	394.1	356.0	342.1	336.3	321.3	304.0	282.0
77.5°	1104.9	792.8	516.6	426.5	365.2	330.5	315.5	304.0	288.9	272.8	257.7
80°	476.2	478.5	413.8	361.7	317.8	277.4	257.7	243.9	235.8	230.0	221.9
82.5°	332.9	343.3	315.5	280.8	242.7	213.8	196.5	193.0	194.2	194.2	191.9
85°	249.6	245.0	220.7	201.1	183.8	165.3	151.4	150.2	154.9	154.9	151.4
87.5°	144.5	145.6	124.8	116.7	121.4	104.0	94.8	95.9	107.5	106.3	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):

	160°	165°	170°	175°	180°
0°	2353.1	2353.1	2353.1	2353.1	2353.1
2.5°	2421.3	2424.7	2423.6	2427.0	2423.6
5°	2466.3	2465.2	2464.0	2468.6	2462.9
7.5°	2459.4	2460.6	2460.6	2460.6	2459.4
10°	2442.1	2446.7	2449.0	2453.6	2452.5
12.5°	2436.3	2443.2	2450.2	2457.1	2458.2
15°	2437.4	2442.1	2445.5	2449.0	2450.2
17.5°	2407.4	2406.2	2402.8	2400.5	2398.1
20°	2346.1	2340.4	2334.6	2325.3	2330.0
22.5°	2269.9	2253.7	2235.2	2220.2	2219.0
25°	2180.9	2150.8	2120.8	2101.1	2094.2
27.5°	2102.3	2066.5	2035.2	2017.9	2013.3
30°	2008.7	1976.3	1948.6	1933.5	1924.3
32.5°	1870.0	1844.6	1809.9	1798.3	1797.2
35°	1677.0	1657.3	1633.1	1628.4	1622.7
37.5°	1458.5	1451.6	1440.0	1426.2	1423.9
40°	1225.1	1229.7	1226.2	1218.1	1205.4
42.5°	999.7	1007.8	1009.0	1014.7	1020.5
45°	796.3	803.2	803.2	809.0	815.9
47.5°	611.4	606.8	610.2	616.0	619.5
50°	462.3	458.8	453.0	448.4	443.8
52.5°	372.1	365.2	349.0	344.4	339.8
55°	328.2	315.5	304.0	299.3	299.3
57.5°	315.5	299.3	286.6	280.8	278.5
60°	317.8	294.7	278.5	269.3	265.8
62.5°	328.2	295.9	273.9	263.5	260.0
65°	327.1	293.6	272.8	261.2	257.7
66°	321.3	290.1	270.4	260.0	257.7
67.5°	312.0	285.5	268.1	258.9	255.4
70°	293.6	276.2	263.5	255.4	252.0
72.5°	278.5	267.0	255.4	246.2	243.9
75°	264.7	253.1	242.7	238.1	234.6
77.5°	243.9	233.5	227.7	223.1	220.7
80°	216.1	209.2	202.3	197.6	194.2
82.5°	188.4	179.1	172.2	168.7	166.4
85°	153.7	147.9	137.5	130.6	129.4
87.5°	102.9	97.1	93.6	87.8	82.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)