

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: P159571

Luminaire Tested: **VST-E07-LED-E-U-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159571
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E07-LED-E-U-T3-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (147) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21967.4 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 172.5
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

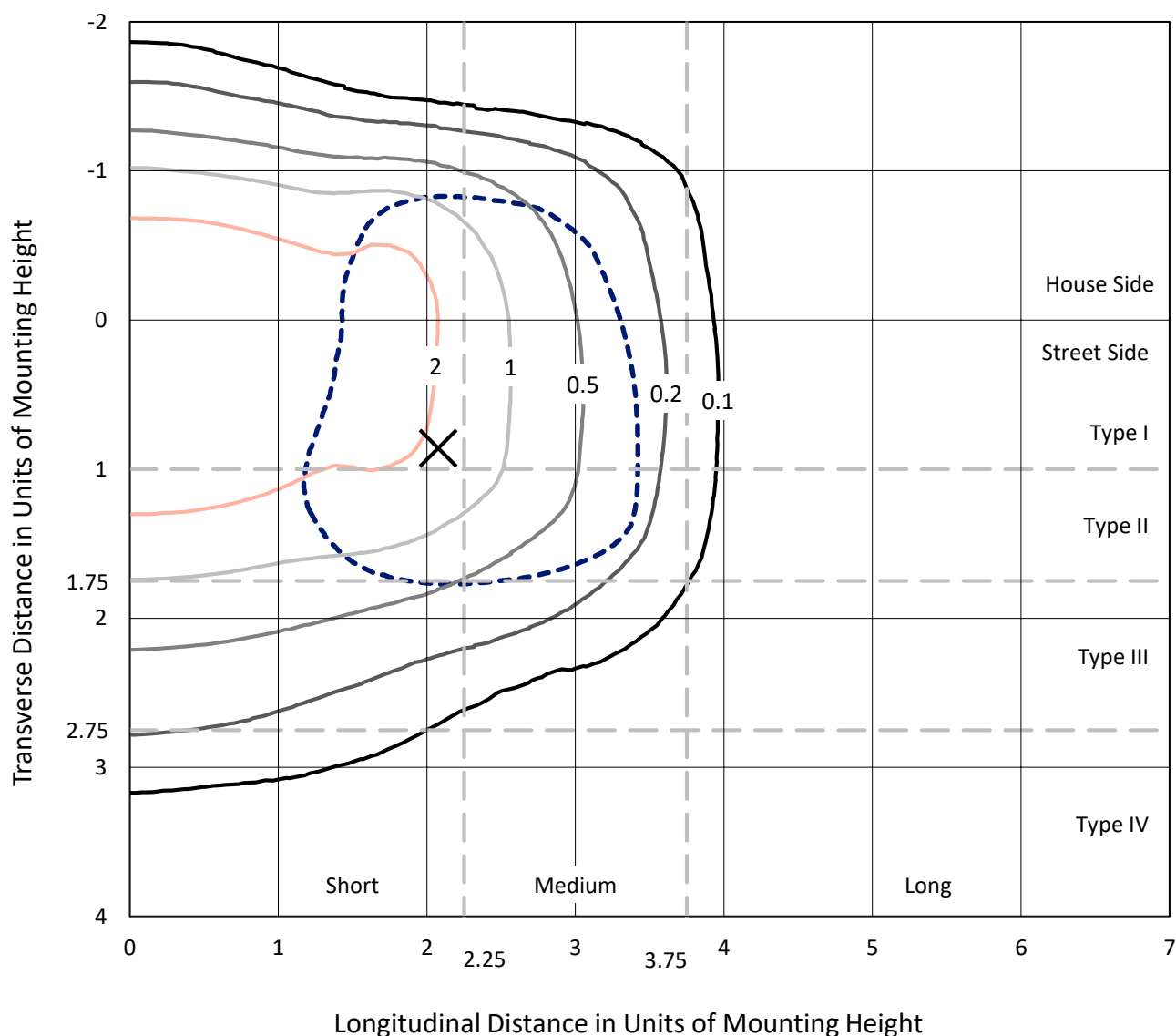


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

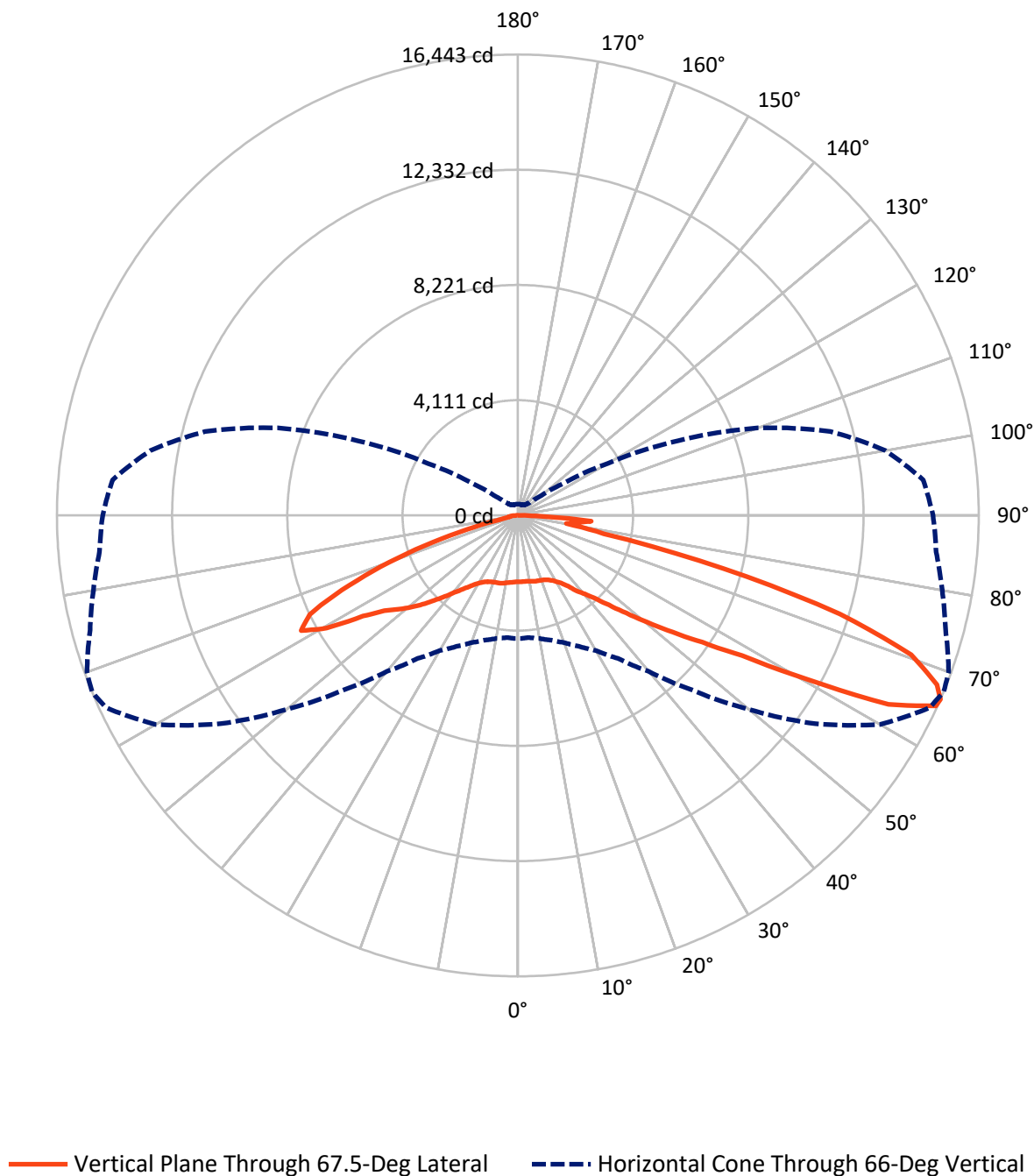


Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7601.7	0.0	7601.7
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	14365.7	0.0	14365.7
	% Fixture	65.4	0.0	65.4
Total	Lumens	21967.4	0.0	21967.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.5	1.0
10°-20°	673.5	3.1
20°-30°	1157.8	5.3
30°-40°	1871.2	8.5
40°-50°	3101.0	14.1
50°-60°	4866.8	22.2
60°-70°	6653.8	30.3
70°-80°	2926.0	13.3
80°-90°	489.8	2.2
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°	21967.4	100.0
0°-180°	21967.4	100.0

Coefficient of Utilization



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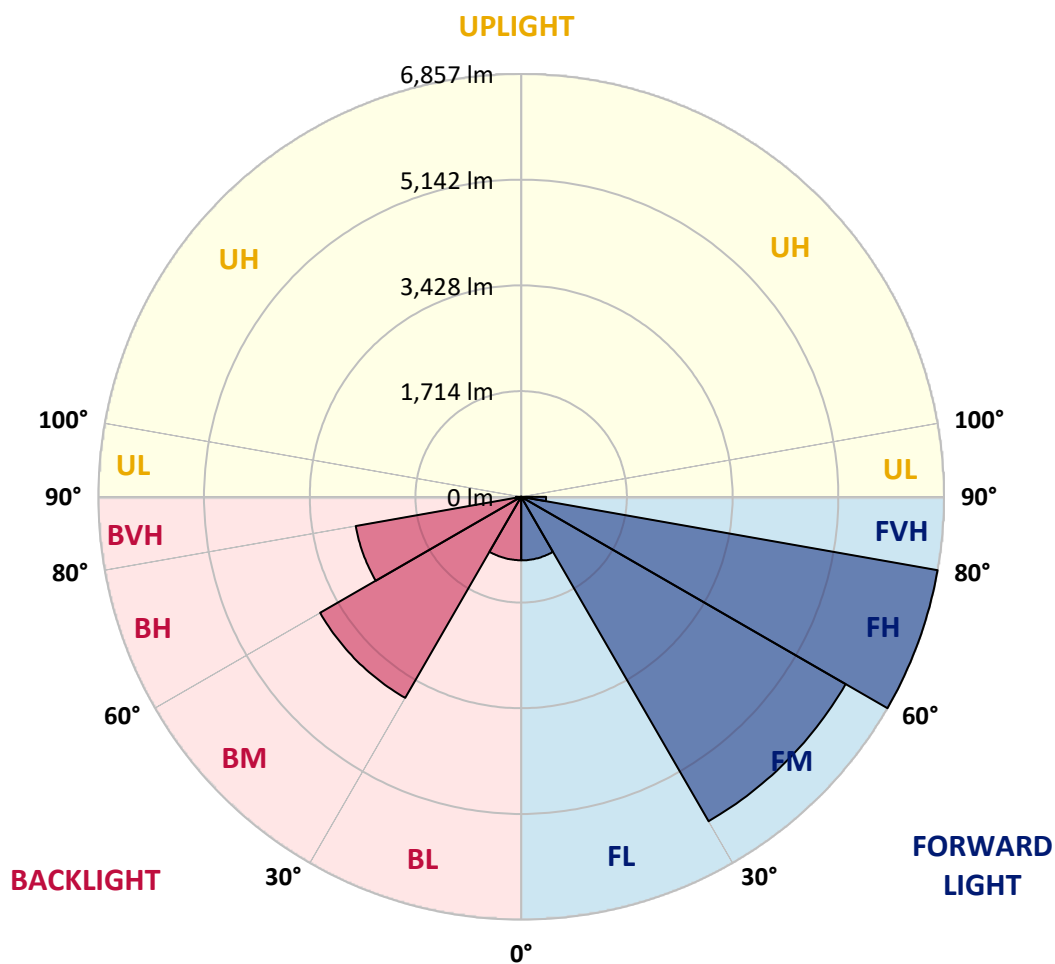
CATALOG NUMBER: VST-E07-LED-E-U-T3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1030.5	4.7			
FM	(30°-60°)	6074.7	27.7			
FH	(60°-80°)	6856.5	31.2			G3/7500
FVH	(80°-90°)	404.1	1.8			G3/500
BL	(0°-30°)	1028.3	4.7	B3/2500		
BM	(30°-60°)	3764.3	17.1	B3/5000		
BH	(60°-80°)	2723.4	12.4	B4/5000		G4/5000
BVH	(80°-90°)	85.7	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3
2.5°	2366.0	2366.0	2367.4	2366.0	2366.0	2364.6	2370.3	2370.3	2370.3	2368.9	2373.2
5°	2360.2	2360.2	2361.7	2361.7	2363.1	2361.7	2366.0	2367.4	2367.4	2367.4	2371.7
7.5°	2345.9	2350.2	2347.3	2348.8	2350.2	2354.5	2360.2	2363.1	2366.0	2370.3	2371.7
10°	2315.7	2322.9	2321.5	2325.8	2327.2	2340.1	2344.4	2350.2	2360.2	2366.0	2370.3
12.5°	2274.1	2278.4	2279.8	2285.5	2291.3	2307.1	2318.6	2328.6	2343.0	2357.4	2371.7
15°	2241.0	2243.9	2243.9	2249.6	2258.3	2272.6	2287.0	2304.2	2325.8	2350.2	2373.2
17.5°	2251.1	2258.3	2252.5	2251.1	2253.9	2262.6	2275.5	2289.9	2315.7	2343.0	2370.3
20°	2317.2	2318.6	2315.7	2308.5	2302.8	2304.2	2304.2	2307.1	2322.9	2344.4	2366.0
22.5°	2371.7	2377.5	2376.0	2377.5	2376.0	2381.8	2378.9	2373.2	2367.4	2368.9	2378.9
25°	2419.1	2424.9	2424.9	2429.2	2436.4	2447.9	2456.5	2455.1	2446.4	2434.9	2430.6
27.5°	2496.7	2496.7	2496.7	2501.0	2511.1	2525.5	2539.8	2548.4	2555.6	2544.1	2519.7
30°	2618.8	2620.3	2616.0	2617.4	2624.6	2643.2	2660.5	2673.4	2687.8	2686.3	2654.7
32.5°	2752.4	2758.2	2756.7	2762.5	2772.5	2789.8	2808.5	2828.6	2847.2	2858.7	2838.6
35°	2924.8	2930.6	2932.0	2940.6	2952.1	2978.0	3003.8	3029.7	3049.8	3058.4	3054.1
37.5°	3207.8	3209.2	3203.5	3190.6	3194.9	3215.0	3245.2	3286.8	3299.7	3308.4	3328.5
40°	3631.6	3627.3	3604.3	3592.8	3585.6	3594.2	3588.5	3621.5	3651.7	3653.1	3651.7
42.5°	4145.9	4132.9	4111.4	4108.5	4105.7	4102.8	4087.0	4088.4	4115.7	4122.9	4114.3
45°	4657.3	4641.5	4625.7	4640.0	4622.8	4667.3	4680.3	4714.7	4719.1	4733.4	4711.9
47.5°	5076.8	5078.2	5078.2	5098.3	5132.8	5217.5	5293.7	5359.8	5384.2	5418.7	5423.0
50°	5394.2	5402.9	5430.2	5494.8	5568.1	5710.3	5838.1	5957.4	6065.1	6105.3	6211.6
52.5°	5579.6	5602.5	5660.0	5767.7	5898.5	6082.3	6283.5	6486.0	6672.8	6830.8	6957.2
55°	5546.5	5563.7	5664.3	5832.4	6036.4	6283.5	6565.0	6858.1	7149.7	7416.9	7623.8
57.5°	5333.9	5345.4	5446.0	5635.6	5889.8	6221.7	6619.6	7054.9	7464.3	7895.3	8248.7
60°	5055.2	5072.4	5165.8	5315.2	5581.0	5934.4	6395.5	6985.9	7639.6	8317.6	8978.4
62.5°	4877.1	4872.8	4954.7	5088.3	5287.9	5608.3	6052.2	6751.8	7656.8	8803.2	10109.0
65°	4581.2	4568.2	4653.0	4805.3	5022.2	5332.5	5753.4	6425.7	7475.8	8987.0	10838.8
66°	4397.3	4371.4	4456.2	4609.9	4826.8	5157.2	5560.9	6224.6	7256.0	8807.5	10761.2
67.5°	4075.5	4062.6	4102.8	4223.4	4384.3	4694.6	5115.5	5783.5	6736.0	8267.3	10192.3
70°	3312.7	3283.9	3315.6	3370.1	3431.9	3508.0	3766.6	4296.7	5102.6	6586.6	8211.3
72.5°	2256.8	2242.5	2301.3	2384.7	2549.9	2627.4	2729.4	2815.6	3100.1	4151.6	5727.5
75°	1716.7	1725.3	1800.0	1937.9	2150.5	2380.4	2604.5	2686.3	2591.5	2509.6	3250.9
77.5°	962.5	1012.8	1103.3	1278.5	1504.1	1828.7	2219.5	2650.4	2865.9	2812.8	2630.3
80°	396.5	389.3	433.8	530.1	607.7	873.4	1336.0	1876.1	2482.4	2865.9	2805.6
82.5°	110.6	113.5	146.5	188.2	242.8	308.9	482.7	775.7	1264.2	1966.6	2574.3
85°	34.5	34.5	47.4	70.4	83.3	96.2	122.1	201.1	343.3	685.2	1389.1
87.5°	7.2	7.2	10.1	20.1	21.5	21.5	27.3	37.4	33.0	30.2	135.0
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3
2.5°	2368.9	2366.0	2367.4	2368.9	2367.4	2367.4	2366.0	2364.6	2366.0	2366.0	2370.3
5°	2367.4	2366.0	2367.4	2367.4	2367.4	2368.9	2368.9	2368.9	2373.2	2373.2	2380.4
7.5°	2370.3	2370.3	2373.2	2373.2	2373.2	2373.2	2374.6	2377.5	2384.7	2383.2	2396.2
10°	2376.0	2378.9	2386.1	2387.5	2387.5	2391.9	2394.7	2400.5	2407.7	2410.5	2422.0
12.5°	2383.2	2397.6	2410.5	2413.4	2417.7	2424.9	2429.2	2432.1	2445.0	2449.3	2463.7
15°	2391.9	2412.0	2427.8	2433.5	2439.3	2447.9	2453.6	2457.9	2469.4	2475.2	2492.4
17.5°	2393.3	2416.3	2434.9	2443.6	2450.8	2460.8	2469.4	2478.0	2491.0	2499.6	2516.8
20°	2391.9	2422.0	2450.8	2462.2	2469.4	2488.1	2501.0	2512.5	2528.3	2536.9	2554.2
22.5°	2407.7	2442.1	2480.9	2495.3	2506.8	2532.6	2549.9	2568.5	2588.7	2594.4	2607.3
25°	2445.0	2480.9	2529.8	2549.9	2570.0	2604.5	2628.9	2656.2	2676.3	2679.2	2683.5
27.5°	2508.2	2541.3	2600.2	2630.3	2663.4	2712.2	2748.1	2775.4	2804.1	2804.1	2801.3
30°	2636.1	2643.2	2705.0	2743.8	2792.6	2864.5	2917.6	2947.8	2969.3	2969.3	2944.9
32.5°	2801.3	2792.6	2848.7	2890.3	2957.9	3058.4	3130.2	3153.2	3176.2	3169.0	3127.4
35°	3039.7	3015.3	3046.9	3110.1	3186.3	3324.2	3398.9	3450.6	3465.0	3444.8	3378.8
37.5°	3340.0	3337.1	3352.9	3423.3	3508.0	3686.2	3762.3	3795.4	3783.9	3748.0	3631.6
40°	3657.5	3648.8	3638.8	3686.2	3781.0	3995.0	4130.1	4147.3	4131.5	4078.4	3931.8
42.5°	4081.2	4081.2	4033.8	4046.8	4125.8	4365.7	4525.1	4579.7	4581.2	4503.6	4308.2
45°	4664.5	4658.7	4575.4	4555.3	4615.6	4851.2	5056.6	5086.8	5086.8	4984.8	4770.8
47.5°	5365.5	5358.3	5276.4	5206.0	5217.5	5471.8	5642.8	5688.7	5648.5	5572.4	5318.1
50°	6155.6	6142.7	6059.4	5993.3	5964.5	6221.7	6366.8	6388.3	6329.4	6238.9	5963.1
52.5°	6957.2	6996.0	6947.1	6911.2	6921.3	7087.9	7237.3	7135.3	7105.2	7007.5	6730.2
55°	7791.8	7911.1	8018.8	7987.2	8024.6	8186.9	8215.6	8080.6	8026.0	7955.6	7646.7
57.5°	8632.2	8979.9	9333.2	9432.4	9524.3	9757.0	9724.0	9502.8	9544.4	9649.3	9301.6
60°	9805.9	10810.0	11706.4	11871.6	12157.5	12355.7	12400.3	12357.2	12551.1	12496.5	12189.1
62.5°	11608.7	13282.3	14529.2	14839.5	15126.8	15116.8	14966.0	14810.8	15001.9	15001.9	14198.8
65°	12895.9	14795.0	16129.6	16386.7	16375.2	16029.0	15672.7	15362.4	15335.1	15122.5	13948.9
66°	12956.2	14911.4	16218.6	16442.7	16356.5	15799.2	15372.5	14978.9	14810.8	14514.9	13312.5
67.5°	12413.2	14582.4	15928.4	16123.8	15896.8	15098.1	14510.6	13983.4	13739.1	13240.7	12108.7
70°	10182.2	12532.4	14490.5	14889.8	14632.7	13621.3	12816.9	12104.4	11637.5	10917.8	10101.8
72.5°	7432.7	9252.8	11373.1	12022.5	11982.2	11051.4	10403.5	9751.3	9137.9	8482.8	7886.6
75°	4831.1	6019.1	7201.4	7580.7	7398.2	6859.5	6395.5	6014.8	5433.0	4977.6	4867.0
77.5°	2758.2	3370.1	3187.7	3140.3	2911.9	2350.2	1563.0	1096.1	989.8	1235.4	1354.7
80°	2624.6	2378.9	1948.0	1756.9	1614.7	1100.4	577.5	406.5	356.3	364.9	392.2
82.5°	2959.3	3084.3	2522.6	2107.4	1834.5	1338.9	731.2	340.5	248.5	294.5	330.4
85°	2218.0	3123.1	3095.8	2623.1	2151.9	1542.9	864.8	260.0	149.4	206.9	270.1
87.5°	449.6	739.8	712.5	626.3	533.0	372.1	145.1	81.9	74.7	102.0	155.1
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°	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3	2370.3
2.5°	2373.2	2373.2	2376.0	2380.4	2381.8	2381.8	2384.7	2381.8	2387.5	2389.0	2390.4
5°	2386.1	2390.4	2393.3	2400.5	2404.8	2407.7	2412.0	2409.1	2414.8	2416.3	2419.1
7.5°	2400.5	2407.7	2413.4	2416.3	2422.0	2422.0	2423.5	2420.6	2419.1	2414.8	2413.4
10°	2426.3	2430.6	2437.8	2434.9	2432.1	2422.0	2413.4	2400.5	2393.3	2380.4	2373.2
12.5°	2468.0	2470.9	2470.9	2457.9	2439.3	2416.3	2394.7	2373.2	2355.9	2341.6	2333.0
15°	2496.7	2502.5	2495.3	2476.6	2449.3	2417.7	2389.0	2360.2	2337.3	2318.6	2307.1
17.5°	2518.3	2516.8	2503.9	2478.0	2452.2	2424.9	2399.0	2368.9	2340.1	2312.8	2295.6
20°	2551.3	2536.9	2514.0	2486.7	2459.4	2436.4	2416.3	2387.5	2357.4	2320.0	2294.2
22.5°	2595.8	2570.0	2536.9	2508.2	2482.4	2460.8	2437.8	2413.4	2381.8	2340.1	2304.2
25°	2659.0	2614.5	2577.2	2548.4	2525.5	2501.0	2475.2	2443.6	2412.0	2368.9	2325.8
27.5°	2755.3	2689.2	2641.8	2616.0	2594.4	2561.4	2528.3	2491.0	2450.8	2406.2	2357.4
30°	2871.7	2792.6	2738.1	2715.1	2689.2	2651.9	2616.0	2564.2	2508.2	2455.1	2394.7
32.5°	3008.1	2927.7	2873.1	2855.9	2814.2	2771.1	2720.8	2651.9	2578.6	2499.6	2427.8
35°	3215.0	3113.0	3062.7	3022.5	2965.0	2913.3	2828.6	2738.1	2633.2	2528.3	2439.3
37.5°	3427.6	3324.2	3272.5	3216.4	3141.7	3046.9	2933.4	2804.1	2664.8	2535.5	2426.3
40°	3712.0	3600.0	3533.9	3447.7	3327.0	3179.1	3011.0	2834.3	2664.8	2503.9	2371.7
42.5°	4043.9	3940.5	3838.5	3696.2	3502.3	3286.8	3051.2	2824.3	2618.8	2433.5	2294.2
45°	4503.6	4326.9	4164.6	3936.1	3653.1	3350.0	3055.5	2776.8	2539.8	2334.4	2179.2
47.5°	5020.7	4792.3	4505.0	4147.3	3760.9	3374.5	3013.9	2687.8	2414.8	2192.2	2022.7
50°	5616.9	5266.4	4825.4	4315.4	3815.5	3341.4	2914.8	2538.4	2242.5	1986.7	1805.7
52.5°	6299.3	5764.9	5115.5	4434.6	3806.9	3240.9	2751.0	2341.6	2011.2	1739.7	1561.5
55°	7056.3	6307.9	5392.8	4510.8	3729.3	3045.5	2493.8	2064.3	1723.9	1456.7	1300.1
57.5°	8390.9	7260.3	5921.4	4612.8	3566.9	2749.6	2167.8	1713.8	1406.4	1179.4	1030.0
60°	10870.4	8925.3	6922.7	4852.7	3322.7	2378.9	1756.9	1344.6	1087.5	922.3	811.6
62.5°	12404.6	10097.5	7411.1	4818.2	2926.2	1871.8	1304.4	997.0	794.4	685.2	616.3
65°	12041.1	9637.8	6815.0	4138.7	2276.9	1327.4	863.4	652.2	545.9	489.9	456.8
66°	11547.0	9123.5	6310.8	3706.3	1983.9	1109.0	712.5	547.3	469.8	428.1	410.9
67.5°	10511.2	8184.0	5443.1	2967.9	1486.8	826.0	525.8	429.5	382.1	360.6	349.1
70°	8797.4	6593.8	3849.9	1752.6	805.9	448.2	336.2	298.8	287.3	280.1	275.8
72.5°	6802.1	4773.6	2249.6	861.9	406.5	290.2	255.7	239.9	235.6	235.6	237.0
75°	4285.2	2743.8	1007.0	415.2	275.8	234.2	218.4	211.2	212.6	214.0	212.6
77.5°	1423.6	946.7	419.5	294.5	239.9	212.6	199.7	196.8	199.7	201.1	201.1
80°	409.4	357.7	303.1	260.0	219.8	198.2	186.8	185.3	192.5	193.9	191.1
82.5°	314.6	294.5	274.4	251.4	211.2	186.8	182.4	183.9	188.2	185.3	172.4
85°	288.7	285.9	205.4	204.0	183.9	178.1	173.8	175.3	170.9	155.1	140.8
87.5°	162.3	150.8	116.4	117.8	136.5	140.8	116.4	123.5	114.9	100.6	91.9
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°	2370.3	2370.3	2370.3	2370.3	2370.3
2.5°	2393.3	2391.9	2391.9	2396.2	2390.4
5°	2420.6	2419.1	2419.1	2423.5	2419.1
7.5°	2407.7	2403.3	2400.5	2399.0	2399.0
10°	2364.6	2360.2	2351.6	2348.8	2345.9
12.5°	2320.0	2315.7	2305.7	2305.7	2302.8
15°	2292.7	2287.0	2279.8	2275.5	2272.6
17.5°	2278.4	2269.7	2261.1	2256.8	2253.9
20°	2272.6	2261.1	2251.1	2243.9	2243.9
22.5°	2274.1	2259.7	2248.2	2239.6	2236.7
25°	2288.4	2266.9	2252.5	2243.9	2241.0
27.5°	2308.5	2282.7	2264.0	2252.5	2248.2
30°	2335.8	2299.9	2274.1	2259.7	2253.9
32.5°	2354.5	2304.2	2271.2	2251.1	2243.9
35°	2353.1	2288.4	2248.2	2222.3	2213.7
37.5°	2327.2	2251.1	2197.9	2166.3	2151.9
40°	2269.7	2182.1	2126.1	2095.9	2078.7
42.5°	2186.4	2091.6	2041.3	2008.3	1989.6
45°	2055.7	1962.3	1900.6	1874.7	1850.3
47.5°	1874.7	1779.9	1726.7	1689.4	1673.6
50°	1662.1	1567.3	1511.2	1481.1	1466.7
52.5°	1429.4	1338.9	1298.6	1269.9	1249.8
55°	1188.0	1104.7	1087.5	1055.9	1037.2
57.5°	961.1	912.2	896.4	864.8	849.0
60°	751.3	735.5	718.3	698.2	689.5
62.5°	581.8	567.4	563.1	550.2	548.8
65°	443.9	445.3	442.5	439.6	436.7
66°	403.7	402.2	403.7	400.8	399.4
67.5°	343.3	349.1	353.4	352.0	352.0
70°	278.7	283.0	288.7	287.3	287.3
72.5°	238.5	245.6	248.5	247.1	247.1
75°	215.5	222.7	222.7	219.8	218.4
77.5°	201.1	204.0	201.1	198.2	195.4
80°	186.8	183.9	179.6	175.3	172.4
82.5°	162.3	155.1	150.8	143.7	143.7
85°	130.7	125.0	114.9	107.7	100.6
87.5°	84.8	81.9	74.7	56.0	44.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)