

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: P158523

Luminaire Tested: **VST-F12-LED-E-U-SL3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158523
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F12-LED-E-U-SL3-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25223.5 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 306.6
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



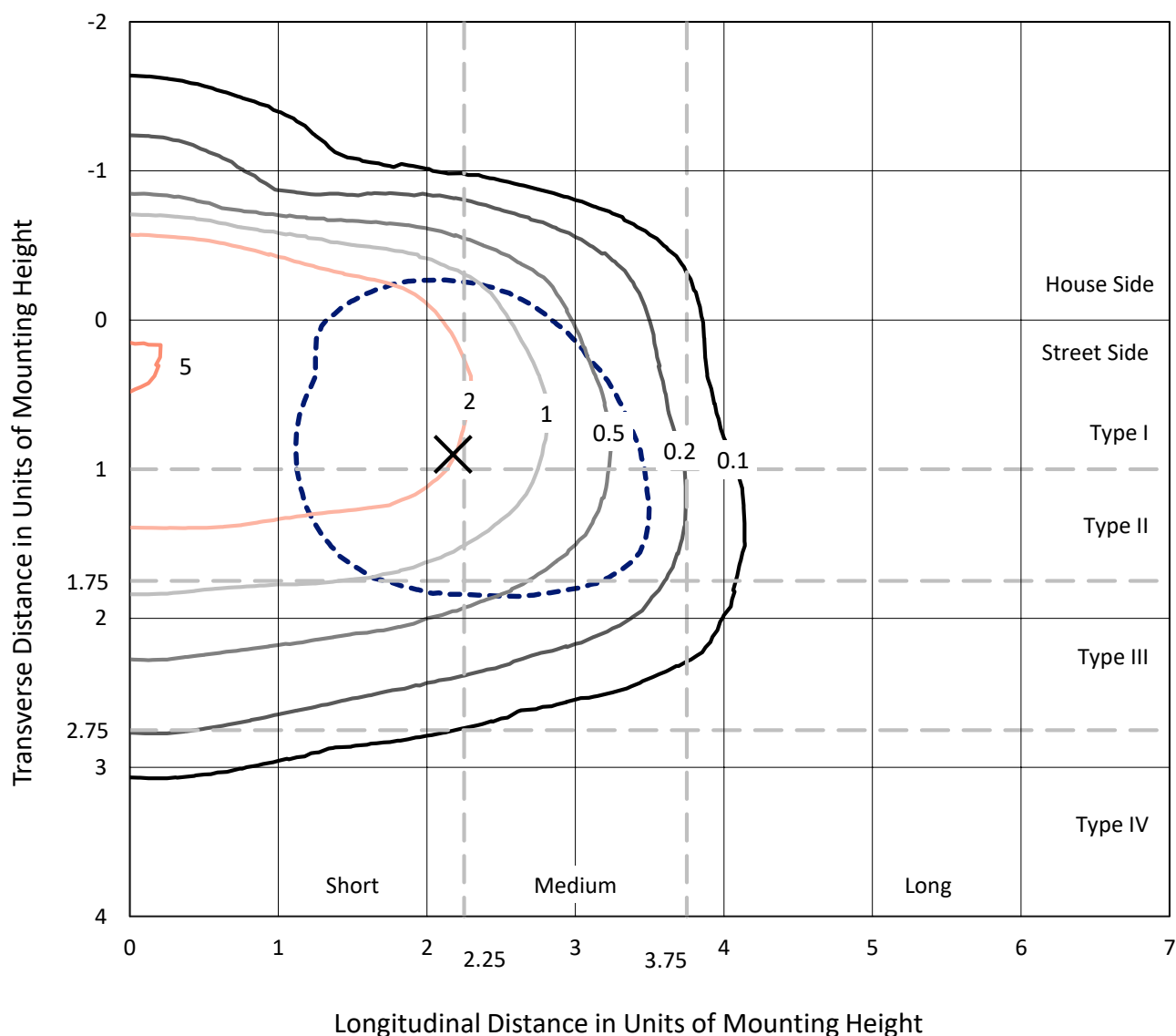
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

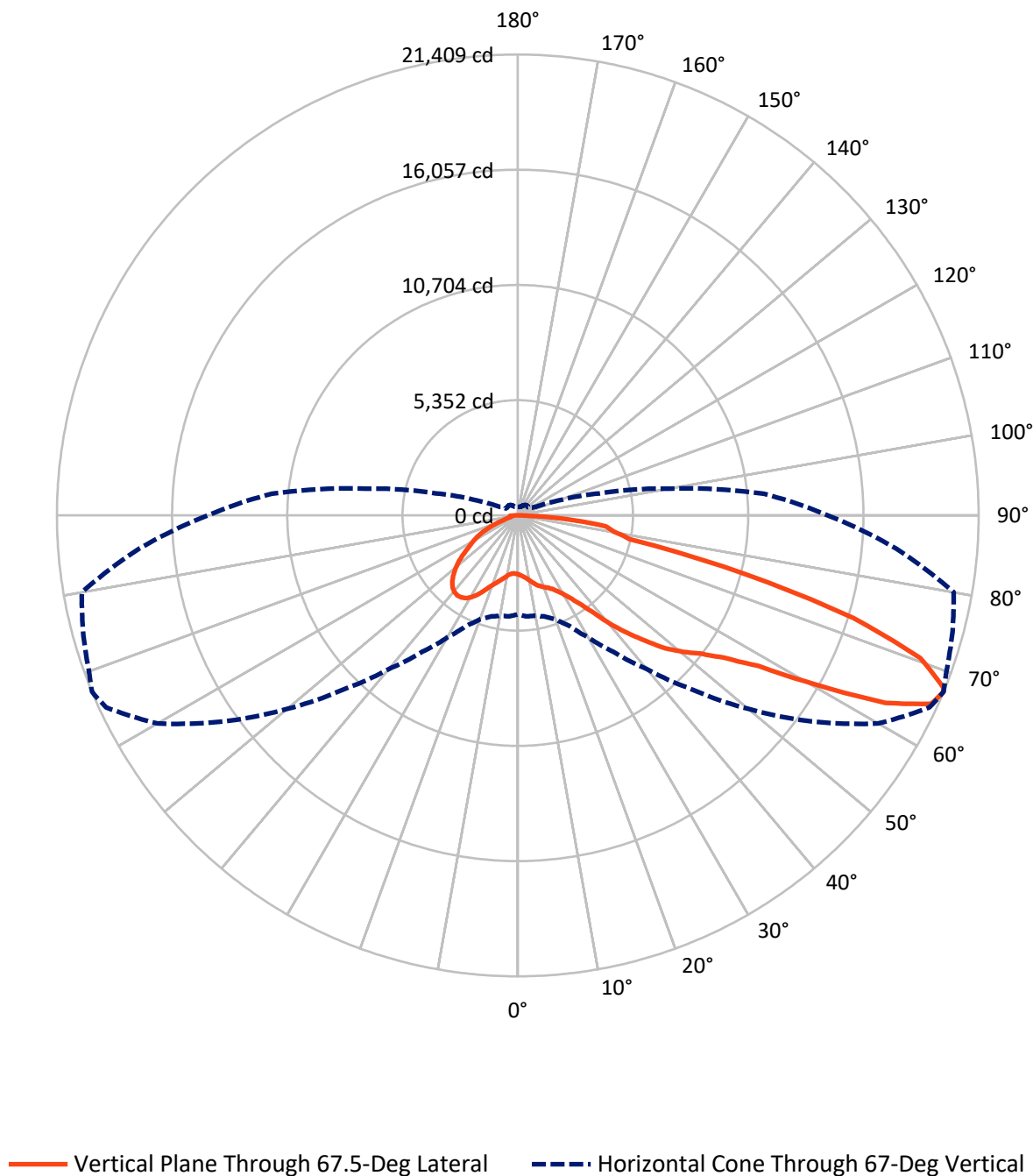


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6051.2	0.0	6051.2
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	19172.3	0.0	19172.3
	% Fixture	76.0	0.0	76.0
Total	Lumens	25223.5	0.0	25223.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.7	1.1
10°-20°	925.8	3.7
20°-30°	1652.8	6.6
30°-40°	2422.3	9.6
40°-50°	3742.7	14.8
50°-60°	5450.1	21.6
60°-70°	7099.6	28.1
70°-80°	3178.0	12.6
80°-90°	480.5	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°	25223.5	100.0
0°-180°	25223.5	100.0

Coefficient of Utilization



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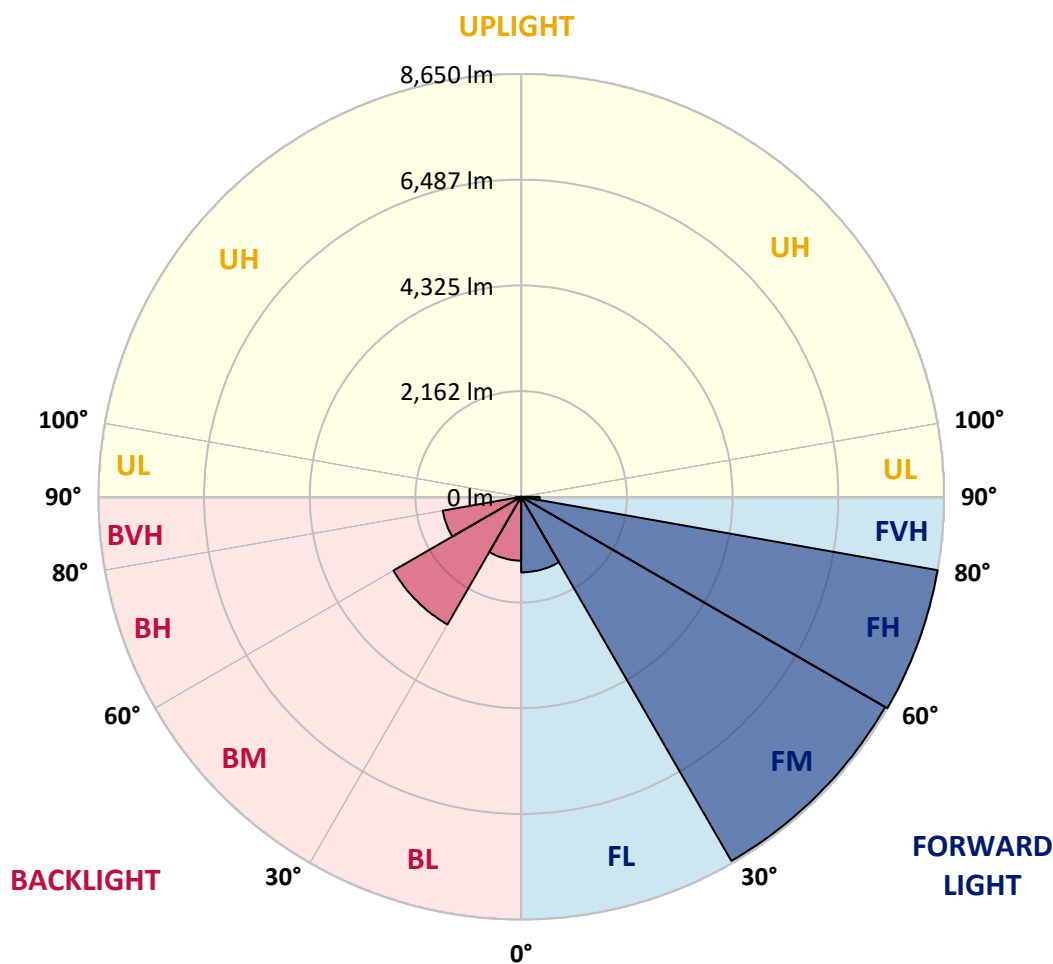
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1545.5	6.1			
FM	(30°-60°)	8599.9	34.1			
FH	(60°-80°)	8649.6	34.3			G4/12000
FVH	(80°-90°)	377.3	1.5			G3/500
BL	(0°-30°)	1304.8	5.2	B3/2500		
BM	(30°-60°)	3015.2	12.0	B3/5000		
BH	(60°-80°)	1628.0	6.5	B3/2500		G3/2500
BVH	(80°-90°)	103.2	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0
2.5°	2841.0	2847.7	2849.4	2847.7	2849.4	2842.7	2841.0	2831.0	2836.0	2822.6	2819.3
5°	2994.8	2999.9	3003.2	2989.8	2993.2	2986.5	2978.1	2968.1	2954.7	2936.3	2924.6
7.5°	3145.3	3153.7	3152.0	3147.0	3135.3	3128.6	3111.9	3096.9	3073.4	3051.7	3036.7
10°	3347.7	3346.0	3346.0	3317.6	3300.9	3285.8	3255.7	3232.3	3208.9	3177.1	3160.4
12.5°	3581.8	3570.1	3565.1	3545.0	3509.9	3483.1	3439.6	3394.5	3352.7	3319.2	3292.5
15°	3807.5	3807.5	3794.1	3762.4	3728.9	3693.8	3631.9	3566.7	3498.2	3444.7	3417.9
17.5°	4013.2	3994.8	3983.1	3941.3	3906.2	3849.3	3780.8	3710.5	3625.3	3550.0	3498.2
20°	4163.7	4148.6	4123.6	4071.7	4011.5	3944.6	3864.4	3782.4	3690.5	3608.5	3550.0
22.5°	4250.6	4232.3	4193.8	4125.2	4043.3	3949.7	3856.0	3779.1	3695.5	3633.6	3585.1
25°	4295.8	4277.4	4225.6	4135.3	4024.9	3901.2	3794.1	3718.9	3670.4	3655.4	3648.7
27.5°	4294.1	4279.1	4223.9	4120.2	3978.1	3835.9	3720.6	3657.0	3652.0	3710.5	3754.0
30°	4250.6	4240.6	4190.4	4086.8	3937.9	3789.1	3682.1	3648.7	3700.5	3824.2	3931.3
32.5°	4207.2	4202.2	4167.0	4073.4	3946.3	3820.9	3747.3	3750.7	3857.7	4048.3	4220.5
35°	4212.2	4218.9	4213.9	4163.7	4083.4	4018.2	3983.1	4056.7	4223.9	4454.6	4685.4
37.5°	4255.7	4280.7	4312.5	4317.5	4319.2	4309.2	4382.7	4538.3	4782.4	5083.4	5444.6
40°	4351.0	4379.4	4471.4	4551.6	4655.3	4779.0	4927.9	5143.6	5446.2	5817.5	6260.6
42.5°	4646.9	4687.1	4800.8	4949.6	5140.2	5334.2	5556.6	5850.9	6222.1	6613.4	7078.3
45°	5033.2	5116.8	5242.2	5407.8	5693.7	5966.3	6253.9	6583.3	6977.9	7467.9	7936.1
47.5°	5514.8	5598.4	5780.7	5957.9	6295.7	6635.2	6949.5	7294.0	7722.1	8223.7	8742.1
50°	5936.2	6031.5	6193.7	6432.8	6824.1	7240.5	7588.3	7961.2	8320.7	8849.1	9372.5
52.5°	6267.3	6335.8	6491.3	6710.4	7146.8	7603.3	8043.1	8457.8	8884.2	9412.6	9897.5
55°	6309.1	6372.6	6524.8	6775.6	7218.7	7725.4	8232.1	8723.7	9327.3	9904.2	10546.3
57.5°	6128.5	6180.3	6334.2	6558.2	6989.7	7566.5	8207.0	8837.4	9609.9	10389.2	11173.4
60°	5872.6	5924.5	6044.9	6223.8	6613.4	7235.5	7982.9	8845.8	9872.5	10997.8	12151.6
62.5°	5591.7	5636.9	5733.9	5860.9	6203.7	6777.3	7633.4	8790.6	10086.5	11603.2	13382.3
65°	5118.5	5227.2	5269.0	5399.4	5742.2	6284.0	7155.2	8417.7	9999.5	11872.4	14154.9
67°	4595.1	4705.5	4727.2	4859.3	5133.5	5653.6	6539.8	7727.1	9310.6	11407.5	13984.3
67.5°	4427.9	4521.5	4555.0	4687.1	4946.3	5436.2	6277.3	7477.9	9099.9	11153.3	13778.6
70°	3255.7	3359.4	3396.2	3451.3	3637.0	4045.0	4601.8	5643.6	7255.5	9101.6	11623.2
72.5°	1742.4	1826.0	1861.1	1943.1	2038.4	2260.8	2687.2	3434.6	4453.0	6090.0	8268.9
75°	1178.9	1212.3	1237.4	1294.3	1392.9	1570.2	1757.4	2020.0	2635.3	3436.3	4705.5
77.5°	672.2	687.3	690.6	700.6	779.2	948.1	1255.8	1700.6	2180.5	2489.9	3009.9
80°	291.0	321.1	344.5	329.4	324.4	359.5	449.8	670.5	1314.3	2086.9	2476.5
82.5°	157.2	170.6	190.6	192.3	202.3	214.0	232.4	275.9	387.9	782.6	1707.3
85°	81.9	85.3	113.7	130.4	138.8	145.5	148.8	165.5	190.6	242.5	424.7
87.5°	11.7	16.7	20.1	26.8	30.1	31.8	36.8	46.8	55.2	66.9	113.7
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°	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0
2.5°	2804.2	2800.9	2790.8	2784.2	2777.5	2770.8	2762.4	2755.7	2744.0	2735.7	2725.6
5°	2907.9	2887.8	2874.5	2856.1	2852.7	2831.0	2809.2	2799.2	2779.1	2762.4	2742.4
7.5°	3013.2	2989.8	2968.1	2953.0	2944.7	2914.6	2892.8	2867.8	2844.4	2822.6	2799.2
10°	3137.0	3113.6	3090.2	3080.1	3065.1	3036.7	3018.3	2986.5	2963.1	2936.3	2904.6
12.5°	3265.7	3249.0	3232.3	3218.9	3212.2	3198.9	3172.1	3145.3	3113.6	3086.8	3050.0
15°	3379.4	3367.7	3361.1	3357.7	3357.7	3349.3	3324.3	3299.2	3265.7	3235.6	3195.5
17.5°	3459.7	3454.7	3459.7	3464.7	3471.4	3464.7	3459.7	3431.3	3409.5	3372.8	3332.6
20°	3506.5	3516.6	3541.6	3558.4	3573.4	3585.1	3590.1	3566.7	3538.3	3511.5	3484.8
22.5°	3556.7	3585.1	3628.6	3653.7	3678.8	3720.6	3730.6	3713.9	3692.1	3675.4	3647.0
25°	3640.3	3682.1	3757.4	3797.5	3832.6	3894.5	3902.8	3906.2	3901.2	3887.8	3852.7
27.5°	3770.7	3852.7	3953.0	4004.8	4043.3	4123.6	4155.3	4155.3	4142.0	4157.0	4157.0
30°	3998.1	4106.8	4237.3	4267.4	4327.6	4397.8	4449.6	4456.3	4458.0	4489.8	4536.6
32.5°	4347.6	4451.3	4596.8	4630.2	4682.1	4748.9	4807.5	4800.8	4815.8	4884.4	4946.3
35°	4856.0	4961.3	5056.6	5101.8	5125.2	5185.4	5207.1	5243.9	5289.1	5374.3	5366.0
37.5°	5608.4	5702.1	5715.5	5743.9	5715.5	5727.2	5743.9	5787.4	5907.8	5984.7	5860.9
40°	6514.8	6670.3	6655.2	6621.8	6558.2	6473.0	6503.1	6569.9	6700.4	6633.5	6300.7
42.5°	7369.2	7529.8	7499.7	7461.2	7320.7	7289.0	7285.6	7340.8	7411.0	7220.4	6645.2
45°	8210.3	8374.2	8322.4	8300.6	8207.0	8138.4	8195.3	8198.6	8180.2	7772.2	6946.2
47.5°	9078.2	9228.7	9195.2	9213.6	9116.6	9071.5	9076.5	9053.1	8880.9	8240.4	7180.3
50°	9778.8	9981.2	10001.2	9959.4	9907.6	9839.0	10014.6	9951.1	9568.1	8695.3	7406.0
52.5°	10323.9	10596.5	10700.2	10673.4	10631.6	10640.0	10969.4	11041.3	10407.6	9268.8	7655.2
55°	10969.4	11399.2	11568.0	11668.4	11624.9	11792.1	12546.3	12583.0	11574.7	10017.9	7979.6
57.5°	11900.8	12516.2	13049.6	13191.7	13328.8	13872.3	15096.3	14723.4	13089.7	11151.7	8390.9
60°	13317.1	14664.9	15531.1	15985.9	16307.0	17066.1	18229.9	17285.2	14977.6	12501.1	8907.6
62.5°	15300.3	17270.1	18718.2	19174.7	19306.8	19743.3	20586.0	18778.4	16006.0	13106.4	8952.8
65°	16776.8	19139.6	20873.6	21107.7	20950.6	20958.9	21179.6	18699.8	15623.0	12578.0	8176.9
67°	16679.8	19325.2	21101.1	21408.7	21191.4	20905.4	20560.9	17634.7	14392.3	11471.1	7160.2
67.5°	16531.0	19146.3	21002.4	21326.8	21127.8	20801.7	20298.4	17221.6	14009.4	11126.6	6952.9
70°	14290.3	16887.2	19387.1	19843.6	19927.2	19629.5	18216.6	14521.1	11374.1	9051.4	5399.4
72.5°	11123.2	13435.8	15909.0	16305.3	16626.3	15768.5	13258.6	10029.6	8290.6	6523.1	3909.5
75°	7344.2	9696.9	10944.3	11002.8	10593.2	9004.6	6478.0	5023.2	4623.5	3834.3	2419.6
77.5°	3929.6	5702.1	5737.2	5312.5	5118.5	3815.9	1548.4	854.5	951.5	1080.2	963.2
80°	2931.3	3631.9	4208.8	4524.9	4618.5	3272.4	801.0	453.2	396.3	361.2	356.2
82.5°	2643.7	3508.2	3932.9	4105.2	4061.7	2692.2	449.8	304.3	252.5	274.2	312.7
85°	1036.7	1872.8	2463.1	2384.5	2003.3	1003.3	245.8	163.9	163.9	237.4	307.7
87.5°	212.4	384.6	521.7	498.3	448.1	194.0	120.4	98.7	100.3	192.3	291.0
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°	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0	2734.0
2.5°	2715.6	2705.6	2698.9	2692.2	2685.5	2682.2	2677.1	2677.1	2667.1	2663.8	2660.4
5°	2727.3	2710.6	2698.9	2683.8	2672.1	2662.1	2648.7	2645.4	2633.7	2625.3	2622.0
7.5°	2777.5	2752.4	2727.3	2708.9	2692.2	2670.4	2655.4	2642.0	2630.3	2622.0	2611.9
10°	2872.8	2846.0	2810.9	2777.5	2755.7	2722.3	2698.9	2675.5	2662.1	2652.1	2638.7
12.5°	3013.2	2974.8	2933.0	2892.8	2856.1	2812.6	2789.2	2760.7	2744.0	2735.7	2725.6
15°	3157.0	3115.2	3063.4	3024.9	2983.1	2949.7	2928.0	2902.9	2889.5	2879.5	2872.8
17.5°	3304.2	3255.7	3218.9	3180.5	3160.4	3135.3	3106.9	3075.1	3036.7	3013.2	2981.5
20°	3454.7	3417.9	3396.2	3374.4	3351.0	3315.9	3259.1	3193.8	3121.9	3053.4	2988.2
22.5°	3630.3	3608.5	3605.2	3585.1	3536.6	3453.0	3347.7	3225.6	3103.5	2989.8	2901.2
25°	3877.8	3877.8	3861.0	3779.1	3665.4	3514.9	3337.6	3162.1	2999.9	2844.4	2727.3
27.5°	4188.8	4177.1	4095.1	3926.2	3722.2	3488.1	3250.7	3028.3	2820.9	2650.4	2499.9
30°	4531.6	4449.6	4274.1	4008.2	3702.2	3401.2	3110.2	2852.7	2608.6	2399.6	2222.3
32.5°	4887.7	4688.8	4372.7	4008.2	3631.9	3270.8	2934.7	2618.6	2339.4	2105.3	1894.6
35°	5210.5	4847.6	4396.1	3943.0	3494.8	3078.5	2688.8	2331.0	1996.6	1744.1	1513.3
37.5°	5503.1	4953.0	4371.0	3815.9	3295.8	2807.6	2351.1	1956.4	1578.5	1334.4	1137.1
40°	5693.7	4974.7	4267.4	3616.9	3011.6	2441.4	1936.4	1494.9	1195.6	973.2	841.1
42.5°	5812.4	4932.9	4100.1	3344.3	2628.6	1981.5	1453.1	1071.9	849.5	725.7	675.6
45°	5879.3	4824.2	3852.7	2971.4	2165.5	1506.6	1031.7	774.2	653.8	610.3	593.6
47.5°	5876.0	4648.6	3543.3	2540.0	1653.8	1050.1	730.7	603.7	570.2	556.8	553.5
50°	5840.9	4432.9	3180.5	2071.8	1193.9	732.4	578.6	541.8	533.4	525.1	521.7
52.5°	5792.4	4165.4	2779.1	1615.3	847.8	585.3	525.1	515.0	508.3	500.0	496.6
55°	5702.1	3835.9	2344.4	1215.7	663.8	528.4	506.7	503.3	495.0	483.3	476.6
57.5°	5591.7	3501.5	1928.0	949.8	586.9	515.0	503.3	498.3	486.6	473.2	459.8
60°	5551.6	3225.6	1601.9	801.0	568.5	520.0	511.7	505.0	488.3	468.2	453.2
62.5°	5300.8	2914.6	1367.8	742.4	578.6	541.8	538.4	528.4	503.3	479.9	456.5
65°	4652.0	2464.8	1158.8	702.3	598.6	578.6	581.9	566.9	541.8	510.0	468.2
67°	3934.6	2009.9	964.8	663.8	613.7	617.0	628.7	617.0	585.3	540.1	483.3
67.5°	3744.0	1894.6	916.3	652.1	617.0	627.1	640.4	632.1	600.3	548.5	489.9
70°	2782.5	1334.4	683.9	590.3	617.0	657.2	687.3	695.6	660.5	588.6	503.3
72.5°	1959.8	861.2	525.1	511.7	560.2	613.7	670.5	699.0	658.8	580.2	484.9
75°	1177.2	538.4	426.4	434.8	471.6	526.7	571.9	583.6	533.4	483.3	419.7
77.5°	545.1	357.8	334.4	346.1	381.3	406.3	406.3	382.9	344.5	314.4	301.0
80°	321.1	292.6	291.0	312.7	336.1	317.7	289.3	257.5	237.4	227.4	222.4
82.5°	301.0	312.7	332.8	337.8	319.4	274.2	239.1	207.3	197.3	192.3	187.3
85°	354.5	379.6	346.1	319.4	282.6	230.8	187.3	160.5	155.5	150.5	143.8
87.5°	327.7	312.7	272.6	234.1	194.0	140.5	102.0	92.0	98.7	97.0	93.6
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°	2734.0	2734.0	2734.0	2734.0	2734.0
2.5°	2662.1	2662.1	2655.4	2652.1	2660.4
5°	2615.3	2616.9	2611.9	2610.3	2611.9
7.5°	2605.2	2603.6	2600.2	2596.9	2600.2
10°	2635.3	2633.7	2628.6	2632.0	2627.0
12.5°	2725.6	2735.7	2734.0	2737.3	2744.0
15°	2872.8	2871.1	2866.1	2869.4	2874.5
17.5°	2956.4	2943.0	2931.3	2926.3	2926.3
20°	2936.3	2897.9	2877.8	2866.1	2862.7
22.5°	2817.6	2762.4	2720.6	2710.6	2702.2
25°	2623.6	2555.1	2501.6	2489.9	2468.1
27.5°	2397.9	2305.9	2242.4	2229.0	2217.3
30°	2101.9	1996.6	1923.0	1876.2	1891.2
32.5°	1740.7	1640.4	1555.1	1479.9	1468.2
35°	1344.4	1234.1	1158.8	1125.4	1103.6
37.5°	1003.3	911.3	861.2	829.4	831.1
40°	767.5	719.0	692.3	670.5	672.2
42.5°	640.4	618.7	612.0	602.0	597.0
45°	580.2	573.6	575.2	565.2	561.8
47.5°	546.8	541.8	543.5	536.8	535.1
50°	520.0	516.7	518.4	513.4	511.7
52.5°	493.3	495.0	493.3	489.9	489.9
55°	469.9	468.2	471.6	466.5	466.5
57.5°	451.5	449.8	449.8	448.1	448.1
60°	441.5	434.8	433.1	433.1	434.8
62.5°	436.4	424.7	423.1	423.1	424.7
65°	438.1	419.7	413.0	411.4	409.7
67°	439.8	413.0	399.6	393.0	391.3
67.5°	441.5	409.7	394.6	387.9	384.6
70°	431.4	386.3	364.5	352.8	349.5
72.5°	406.3	357.8	331.1	316.0	312.7
75°	361.2	324.4	301.0	284.3	277.6
77.5°	279.3	262.5	254.2	244.1	240.8
80°	217.4	209.0	205.7	199.0	197.3
82.5°	180.6	172.2	167.2	158.9	153.8
85°	140.5	130.4	127.1	120.4	117.1
87.5°	92.0	87.0	85.3	76.9	73.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)