

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: P158506

Luminaire Tested: **VST-F10-LED-E-U-SL3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158506
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-F10-LED-E-U-SL3-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (70) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25555.1 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 258.7
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



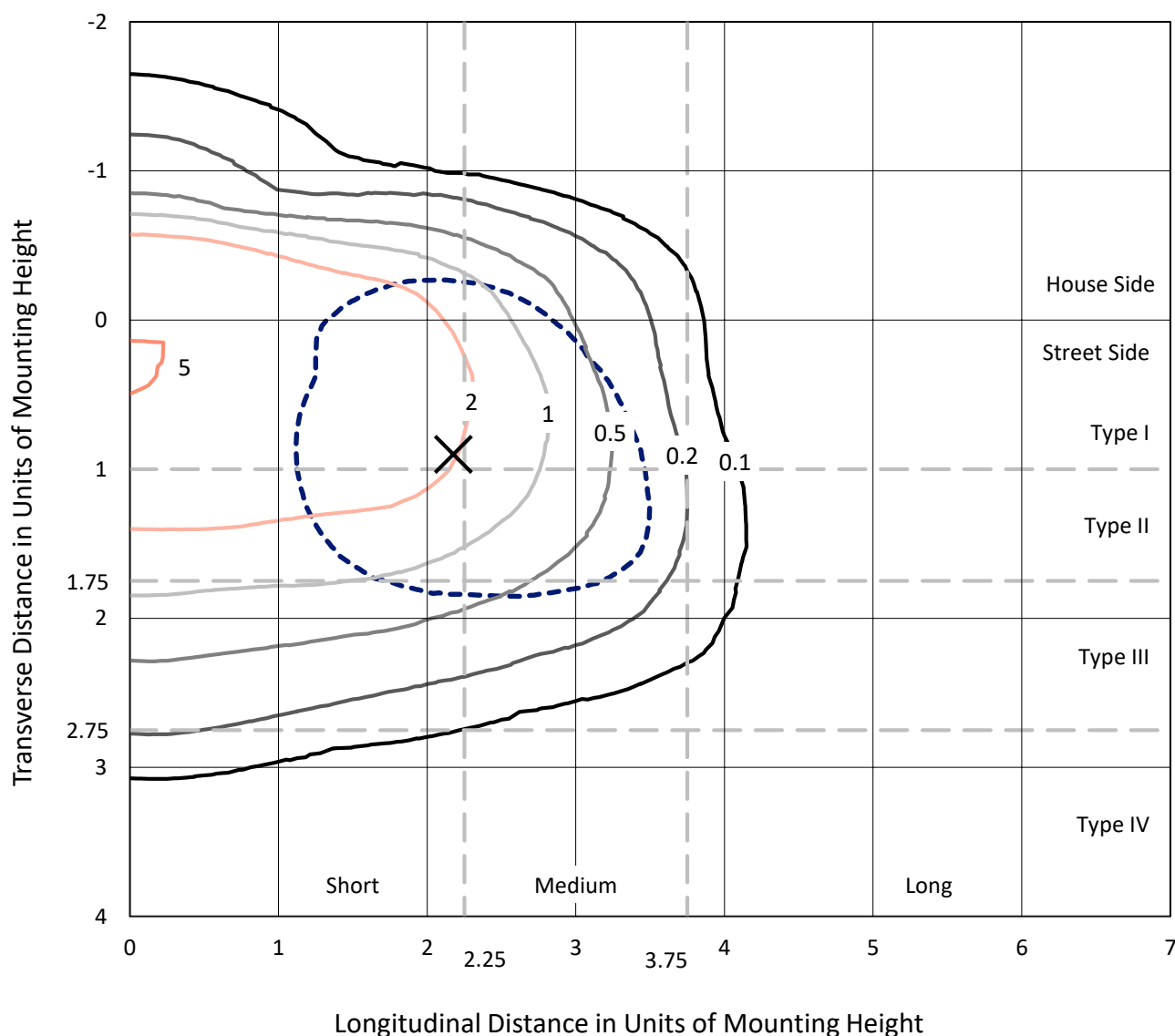
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

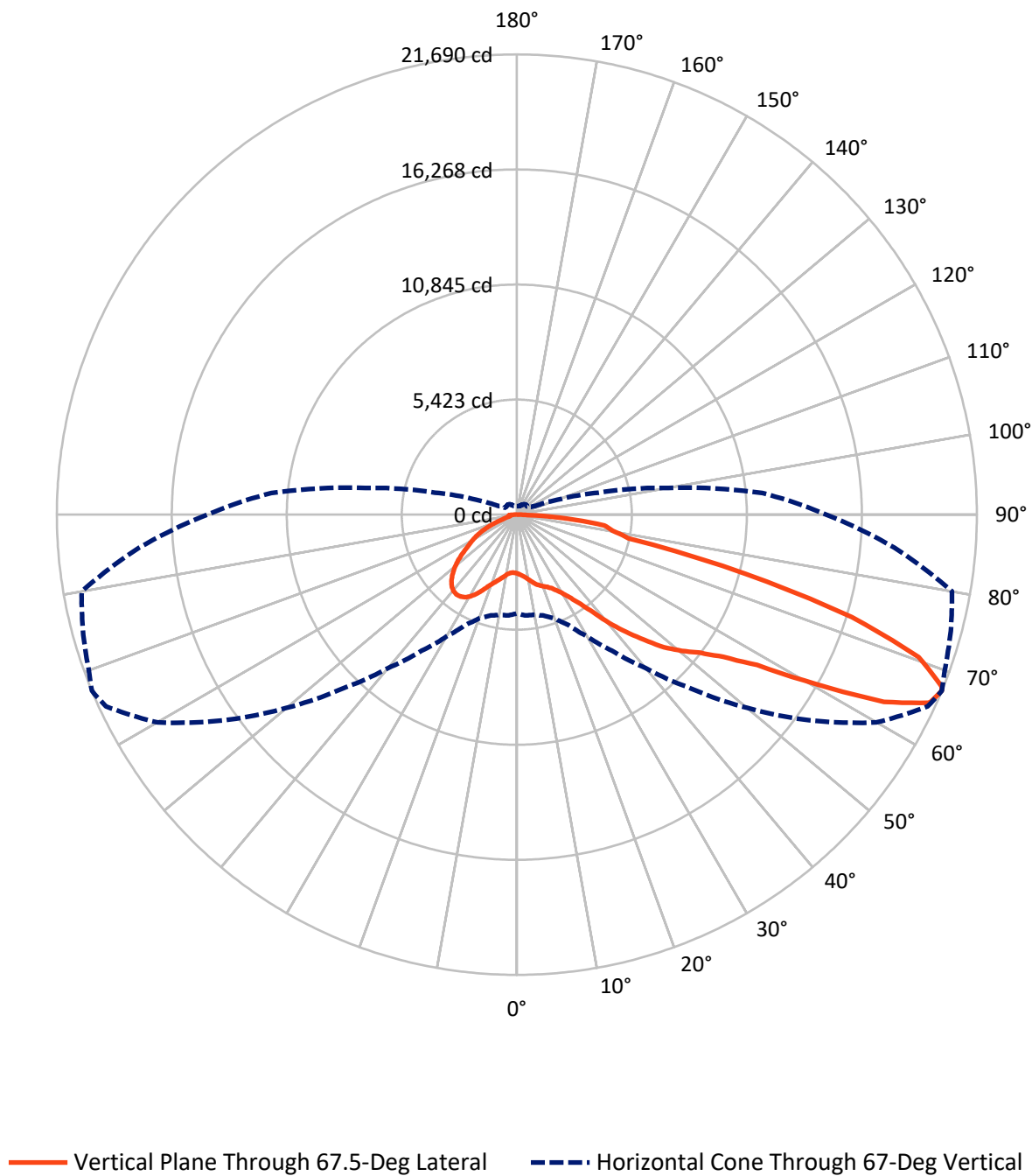


Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6130.7	0.0	6130.7
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	19424.4	0.0	19424.4
	% Fixture	76.0	0.0	76.0
Total	Lumens	25555.1	0.0	25555.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.3	1.1
10°-20°	937.9	3.7
20°-30°	1674.5	6.6
30°-40°	2454.1	9.6
40°-50°	3791.9	14.8
50°-60°	5521.7	21.6
60°-70°	7193.0	28.1
70°-80°	3219.8	12.6
80°-90°	486.8	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°	25555.1	100.0
0°-180°	25555.1	100.0

Coefficient of Utilization



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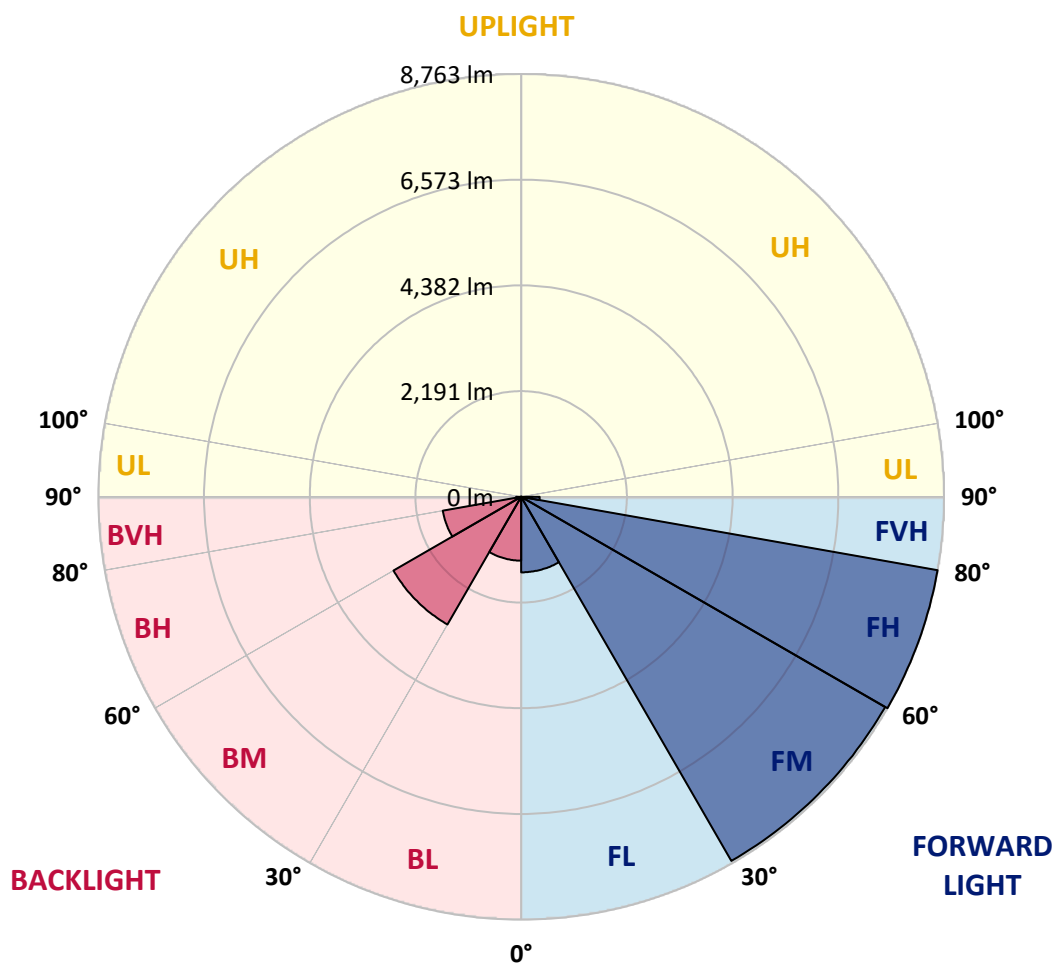
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1565.8	6.1			
FM	(30°-60°)	8713.0	34.1			
FH	(60°-80°)	8763.4	34.3			G4/12000
FVH	(80°-90°)	382.3	1.5			G3/500
BL	(0°-30°)	1322.0	5.2	B3/2500		
BM	(30°-60°)	3054.8	12.0	B3/5000		
BH	(60°-80°)	1649.4	6.5	B3/2500		G3/2500
BVH	(80°-90°)	104.5	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°	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9
2.5°	2878.4	2885.1	2886.8	2885.1	2886.8	2880.1	2878.4	2868.2	2873.3	2859.7	2856.3
5°	3034.2	3039.3	3042.7	3029.1	3032.5	3025.8	3017.3	3007.1	2993.6	2974.9	2963.1
7.5°	3186.7	3195.2	3193.5	3188.4	3176.5	3169.8	3152.8	3137.6	3113.8	3091.8	3076.6
10°	3391.7	3390.0	3390.0	3361.2	3344.3	3329.0	3298.5	3274.8	3251.1	3218.9	3201.9
12.5°	3628.9	3617.0	3611.9	3591.6	3556.0	3528.9	3484.9	3439.1	3396.8	3362.9	3335.8
15°	3857.6	3857.6	3844.0	3811.8	3778.0	3742.4	3679.7	3613.6	3544.2	3490.0	3462.8
17.5°	4066.0	4047.3	4035.5	3993.1	3957.5	3899.9	3830.5	3759.3	3672.9	3596.7	3544.2
20°	4218.4	4203.2	4177.8	4125.3	4064.3	3996.5	3915.2	3832.2	3739.0	3656.0	3596.7
22.5°	4306.5	4287.9	4248.9	4179.5	4096.5	4001.6	3906.7	3828.8	3744.1	3681.4	3632.3
25°	4352.3	4333.6	4281.1	4189.6	4077.8	3952.5	3844.0	3767.8	3718.7	3703.4	3696.6
27.5°	4350.6	4335.3	4279.4	4174.4	4030.4	3886.4	3769.5	3705.1	3700.0	3759.3	3803.4
30°	4306.5	4296.4	4245.5	4140.5	3989.7	3838.9	3730.5	3696.6	3749.2	3874.5	3982.9
32.5°	4262.5	4257.4	4221.8	4127.0	3998.2	3871.1	3796.6	3800.0	3908.4	4101.5	4276.0
35°	4267.6	4274.3	4269.3	4218.4	4137.1	4071.0	4035.5	4110.0	4279.4	4513.2	4747.0
37.5°	4311.6	4337.0	4369.2	4374.3	4376.0	4365.8	4440.4	4597.9	4845.3	5150.2	5516.2
40°	4408.2	4437.0	4530.2	4611.5	4716.5	4841.9	4992.7	5211.2	5517.9	5894.0	6342.9
42.5°	4708.0	4748.7	4863.9	5014.7	5207.8	5404.3	5629.7	5927.8	6303.9	6700.4	7171.3
45°	5099.4	5184.1	5311.2	5478.9	5768.6	6044.7	6336.1	6669.9	7069.7	7566.1	8040.4
47.5°	5587.3	5672.0	5856.7	6036.3	6378.5	6722.4	7040.9	7389.9	7823.6	8331.8	8857.0
50°	6014.2	6110.8	6275.1	6517.4	6913.8	7335.7	7688.1	8065.9	8430.1	8965.4	9495.7
52.5°	6349.7	6419.1	6576.7	6798.6	7240.8	7703.3	8148.9	8569.0	9001.0	9536.4	10027.7
55°	6392.0	6456.4	6610.6	6864.7	7313.7	7827.0	8340.3	8838.4	9450.0	10034.5	10685.0
57.5°	6209.1	6261.6	6417.4	6644.5	7081.6	7666.0	8314.9	8953.6	9736.3	10525.8	11320.3
60°	5949.9	6002.4	6124.4	6305.6	6700.4	7330.6	8087.9	8962.1	10002.3	11142.4	12311.4
62.5°	5665.2	5711.0	5809.2	5938.0	6285.3	6866.4	7733.8	8906.2	10219.1	11755.7	13558.3
65°	5185.8	5295.9	5338.3	5470.4	5817.7	6366.6	7249.3	8528.4	10131.0	12028.5	14341.0
67°	4655.5	4767.3	4789.4	4923.2	5201.0	5727.9	6625.8	7828.7	9433.0	11557.5	14168.2
67.5°	4486.1	4581.0	4614.9	4748.7	5011.3	5507.7	6359.8	7576.2	9219.6	11300.0	13959.8
70°	3298.5	3403.5	3440.8	3496.7	3684.8	4098.2	4662.3	5717.8	7350.9	9221.3	11776.0
72.5°	1765.3	1850.0	1885.6	1968.6	2065.2	2290.5	2722.5	3479.8	4511.5	6170.1	8377.6
75°	1194.4	1228.3	1253.7	1311.3	1411.2	1590.8	1780.6	2046.5	2670.0	3481.5	4767.3
77.5°	681.0	696.3	699.7	709.8	789.5	960.6	1272.3	1723.0	2209.2	2522.6	3049.5
80°	294.8	325.3	349.0	333.7	328.7	364.2	455.7	679.4	1331.6	2114.3	2509.0
82.5°	159.3	172.8	193.1	194.8	205.0	216.9	235.5	279.5	393.0	792.9	1729.7
85°	83.0	86.4	115.2	132.1	140.6	147.4	150.8	167.7	193.1	245.7	430.3
87.5°	11.9	16.9	20.3	27.1	30.5	32.2	37.3	47.4	55.9	67.8	115.2
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9
2.5°	2841.1	2837.7	2827.5	2820.8	2814.0	2807.2	2798.7	2792.0	2780.1	2771.6	2761.5
5°	2946.1	2925.8	2912.2	2893.6	2890.2	2868.2	2846.2	2836.0	2815.7	2798.7	2778.4
7.5°	3052.9	3029.1	3007.1	2991.9	2983.4	2952.9	2930.9	2905.5	2881.8	2859.7	2836.0
10°	3178.2	3154.5	3130.8	3120.6	3105.4	3076.6	3057.9	3025.8	3002.0	2974.9	2942.7
12.5°	3308.7	3291.7	3274.8	3261.2	3254.5	3240.9	3213.8	3186.7	3154.5	3127.4	3090.1
15°	3423.9	3412.0	3405.2	3401.9	3401.9	3393.4	3368.0	3342.6	3308.7	3278.2	3237.5
17.5°	3505.2	3500.1	3505.2	3510.3	3517.1	3510.3	3505.2	3476.4	3454.4	3417.1	3376.4
20°	3552.6	3562.8	3588.2	3605.2	3620.4	3632.3	3637.3	3613.6	3584.8	3557.7	3530.6
22.5°	3603.5	3632.3	3676.3	3701.7	3727.1	3769.5	3779.7	3762.7	3740.7	3723.7	3694.9
25°	3688.2	3730.5	3806.8	3847.4	3883.0	3945.7	3954.1	3957.5	3952.5	3938.9	3903.3
27.5°	3820.3	3903.3	4005.0	4057.5	4096.5	4177.8	4210.0	4210.0	4196.4	4211.7	4211.7
30°	4050.7	4160.8	4293.0	4323.5	4384.5	4455.6	4508.1	4514.9	4516.6	4548.8	4596.2
32.5°	4404.8	4509.8	4657.2	4691.1	4743.6	4811.4	4870.7	4863.9	4879.2	4948.6	5011.3
35°	4919.8	5026.5	5123.1	5168.9	5192.6	5253.6	5275.6	5312.9	5358.6	5445.0	5436.5
37.5°	5682.2	5777.1	5790.6	5819.4	5790.6	5802.5	5819.4	5863.5	5985.4	6063.4	5938.0
40°	6600.4	6758.0	6742.7	6708.8	6644.5	6558.1	6588.6	6656.3	6788.5	6720.7	6383.6
42.5°	7466.1	7628.8	7598.3	7559.3	7417.0	7384.8	7381.4	7437.3	7508.5	7315.3	6732.6
45°	8318.3	8484.3	8431.8	8409.8	8314.9	8245.4	8303.0	8306.4	8287.8	7874.4	7037.5
47.5°	9197.5	9350.0	9316.1	9334.8	9236.5	9190.8	9195.9	9172.1	8997.6	8348.8	7274.7
50°	9907.4	10112.4	10132.7	10090.4	10037.8	9968.4	10146.3	10081.9	9693.9	8809.6	7503.4
52.5°	10459.7	10735.8	10840.9	10813.8	10771.4	10779.9	11113.6	11186.5	10544.4	9390.7	7755.8
55°	11113.6	11549.0	11720.1	11821.8	11777.7	11947.2	12711.2	12748.5	11726.9	10149.7	8084.5
57.5°	12057.3	12680.7	13221.2	13365.2	13504.1	14054.7	15294.8	14917.0	13261.8	11298.3	8501.3
60°	13492.2	14857.7	15735.3	16196.1	16521.4	17290.5	18469.6	17512.4	15174.5	12665.5	9024.7
62.5°	15501.5	17497.2	18964.3	19426.8	19560.7	20002.8	20856.7	19025.3	16216.4	13278.8	9070.5
65°	16997.4	19391.3	21148.1	21385.3	21226.0	21234.5	21458.1	18945.7	15828.5	12743.4	8284.4
67°	16899.2	19579.3	21378.5	21690.2	21470.0	21180.3	20831.3	17866.5	14581.6	11621.9	7254.4
67.5°	16748.4	19398.0	21278.5	21607.2	21405.6	21075.2	20565.3	17448.1	14193.6	11272.9	7044.3
70°	14478.2	17109.2	19642.0	20104.5	20189.2	19887.6	18456.1	14712.0	11523.6	9170.4	5470.4
72.5°	11269.5	13612.5	16118.2	16519.7	16844.9	15975.8	13432.9	10161.5	8399.6	6608.9	3960.9
75°	7440.7	9824.4	11088.2	11147.5	10732.4	9123.0	6563.1	5089.2	4684.3	3884.7	2451.4
77.5°	3981.3	5777.1	5812.6	5382.3	5185.8	3866.1	1568.8	865.7	964.0	1094.4	975.8
80°	2969.8	3679.7	4264.2	4584.4	4679.2	3315.5	811.5	459.1	401.5	365.9	360.9
82.5°	2678.5	3554.3	3984.6	4159.1	4115.1	2727.6	455.7	308.3	255.8	277.8	316.8
85°	1050.4	1897.4	2495.5	2415.9	2029.6	1016.5	249.0	166.0	166.0	240.6	311.7
87.5°	215.2	389.7	528.6	504.9	454.0	196.5	122.0	100.0	101.6	194.8	294.8
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°	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9
2.5°	2751.3	2741.1	2734.4	2727.6	2720.8	2717.4	2712.3	2712.3	2702.2	2698.8	2695.4
5°	2763.2	2746.2	2734.4	2719.1	2707.3	2697.1	2683.5	2680.1	2668.3	2659.8	2656.4
7.5°	2814.0	2788.6	2763.2	2744.5	2727.6	2705.6	2690.3	2676.8	2664.9	2656.4	2646.3
10°	2910.6	2883.4	2847.9	2814.0	2792.0	2758.1	2734.4	2710.6	2697.1	2686.9	2673.4
12.5°	3052.9	3013.9	2971.5	2930.9	2893.6	2849.6	2825.8	2797.0	2780.1	2771.6	2761.5
15°	3198.6	3156.2	3103.7	3064.7	3022.4	2988.5	2966.5	2941.0	2927.5	2917.3	2910.6
17.5°	3347.6	3298.5	3261.2	3222.3	3201.9	3176.5	3147.7	3115.5	3076.6	3052.9	3020.7
20°	3500.1	3462.8	3440.8	3418.8	3395.1	3359.5	3301.9	3235.8	3163.0	3093.5	3027.4
22.5°	3678.0	3656.0	3652.6	3632.3	3583.1	3498.4	3391.7	3268.0	3144.3	3029.1	2939.4
25°	3928.7	3928.7	3911.8	3828.8	3713.6	3561.1	3381.5	3203.6	3039.3	2881.8	2763.2
27.5°	4243.8	4232.0	4149.0	3977.9	3771.2	3534.0	3293.4	3068.1	2858.0	2685.2	2532.8
30°	4591.1	4508.1	4330.3	4060.9	3750.9	3445.9	3151.1	2890.2	2642.9	2431.1	2251.5
32.5°	4952.0	4750.4	4430.2	4060.9	3679.7	3313.8	2973.2	2653.0	2370.1	2132.9	1919.5
35°	5279.0	4911.3	4453.9	3994.8	3540.8	3118.9	2724.2	2361.6	2022.8	1767.0	1533.2
37.5°	5575.5	5018.1	4428.5	3866.1	3339.2	2844.5	2382.0	1982.2	1599.3	1351.9	1152.0
40°	5768.6	5040.1	4323.5	3664.4	3051.2	2473.5	1961.8	1514.6	1211.3	986.0	852.2
42.5°	5888.9	4997.7	4154.1	3388.3	2663.2	2007.6	1472.2	1086.0	860.6	735.3	684.4
45°	5956.6	4887.6	3903.3	3010.5	2193.9	1526.4	1045.3	784.4	662.4	618.4	601.4
47.5°	5953.2	4709.7	3589.9	2573.4	1675.5	1063.9	740.3	611.6	577.7	564.2	560.8
50°	5917.7	4491.2	3222.3	2099.1	1209.6	742.0	586.2	548.9	540.4	532.0	528.6
52.5°	5868.5	4220.1	2815.7	1636.6	858.9	593.0	532.0	521.8	515.0	506.6	503.2
55°	5777.1	3886.4	2375.2	1231.6	672.6	535.4	513.3	509.9	501.5	489.6	482.8
57.5°	5665.2	3547.6	1953.4	962.3	594.6	521.8	509.9	504.9	493.0	479.4	465.9
60°	5624.6	3268.0	1623.0	811.5	576.0	526.9	518.4	511.6	494.7	474.4	459.1
62.5°	5370.5	2952.9	1385.8	752.2	586.2	548.9	545.5	535.4	509.9	486.2	462.5
65°	4713.1	2497.2	1174.0	711.5	606.5	586.2	589.6	574.3	548.9	516.7	474.4
67°	3986.3	2036.4	977.5	672.6	621.8	625.1	637.0	625.1	593.0	547.2	489.6
67.5°	3793.2	1919.5	928.4	660.7	625.1	635.3	648.9	640.4	608.2	555.7	496.4
70°	2819.1	1351.9	692.9	598.0	625.1	665.8	696.3	704.8	669.2	596.3	509.9
72.5°	1985.5	872.5	532.0	518.4	567.5	621.8	679.4	708.2	667.5	587.9	491.3
75°	1192.7	545.5	432.0	440.5	477.8	533.7	579.4	591.3	540.4	489.6	425.2
77.5°	552.3	362.5	338.8	350.7	386.3	411.7	411.7	388.0	349.0	318.5	304.9
80°	325.3	296.5	294.8	316.8	340.5	321.9	293.1	260.9	240.6	230.4	225.3
82.5°	304.9	316.8	337.1	342.2	323.6	277.8	242.3	210.1	199.9	194.8	189.7
85°	359.2	384.6	350.7	323.6	286.3	233.8	189.7	162.6	157.6	152.5	145.7
87.5°	332.1	316.8	276.1	237.2	196.5	142.3	103.3	93.2	100.0	98.3	94.9
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°	2769.9	2769.9	2769.9	2769.9	2769.9
2.5°	2697.1	2697.1	2690.3	2686.9	2695.4
5°	2649.7	2651.3	2646.3	2644.6	2646.3
7.5°	2639.5	2637.8	2634.4	2631.0	2634.4
10°	2670.0	2668.3	2663.2	2666.6	2661.5
12.5°	2761.5	2771.6	2769.9	2773.3	2780.1
15°	2910.6	2908.9	2903.8	2907.2	2912.2
17.5°	2995.3	2981.7	2969.8	2964.8	2964.8
20°	2974.9	2936.0	2915.6	2903.8	2900.4
22.5°	2854.6	2798.7	2756.4	2746.2	2737.7
25°	2658.1	2588.7	2534.5	2522.6	2500.6
27.5°	2429.4	2336.2	2271.9	2258.3	2246.4
30°	2129.5	2022.8	1948.3	1900.8	1916.1
32.5°	1763.6	1662.0	1575.6	1499.3	1487.5
35°	1362.1	1250.3	1174.0	1140.2	1118.1
37.5°	1016.5	923.3	872.5	840.3	842.0
40°	777.6	728.5	701.4	679.4	681.0
42.5°	648.9	626.8	620.1	609.9	604.8
45°	587.9	581.1	582.8	572.6	569.2
47.5°	554.0	548.9	550.6	543.8	542.1
50°	526.9	523.5	525.2	520.1	518.4
52.5°	499.8	501.5	499.8	496.4	496.4
55°	476.1	474.4	477.8	472.7	472.7
57.5°	457.4	455.7	455.7	454.0	454.0
60°	447.3	440.5	438.8	438.8	440.5
62.5°	442.2	430.3	428.6	428.6	430.3
65°	443.9	425.2	418.5	416.8	415.1
67°	445.6	418.5	404.9	398.1	396.4
67.5°	447.3	415.1	399.8	393.0	389.7
70°	437.1	391.3	369.3	357.5	354.1
72.5°	411.7	362.5	335.4	320.2	316.8
75°	365.9	328.7	304.9	288.0	281.2
77.5°	282.9	266.0	257.5	247.3	244.0
80°	220.2	211.8	208.4	201.6	199.9
82.5°	183.0	174.5	169.4	160.9	155.9
85°	142.3	132.1	128.8	122.0	118.6
87.5°	93.2	88.1	86.4	77.9	74.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)