

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: P158514

Luminaire Tested: **VST-F11-LED-E-U-SL3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158514
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-F11-LED-E-U-SL3-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (77) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25021.7 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 282.7
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

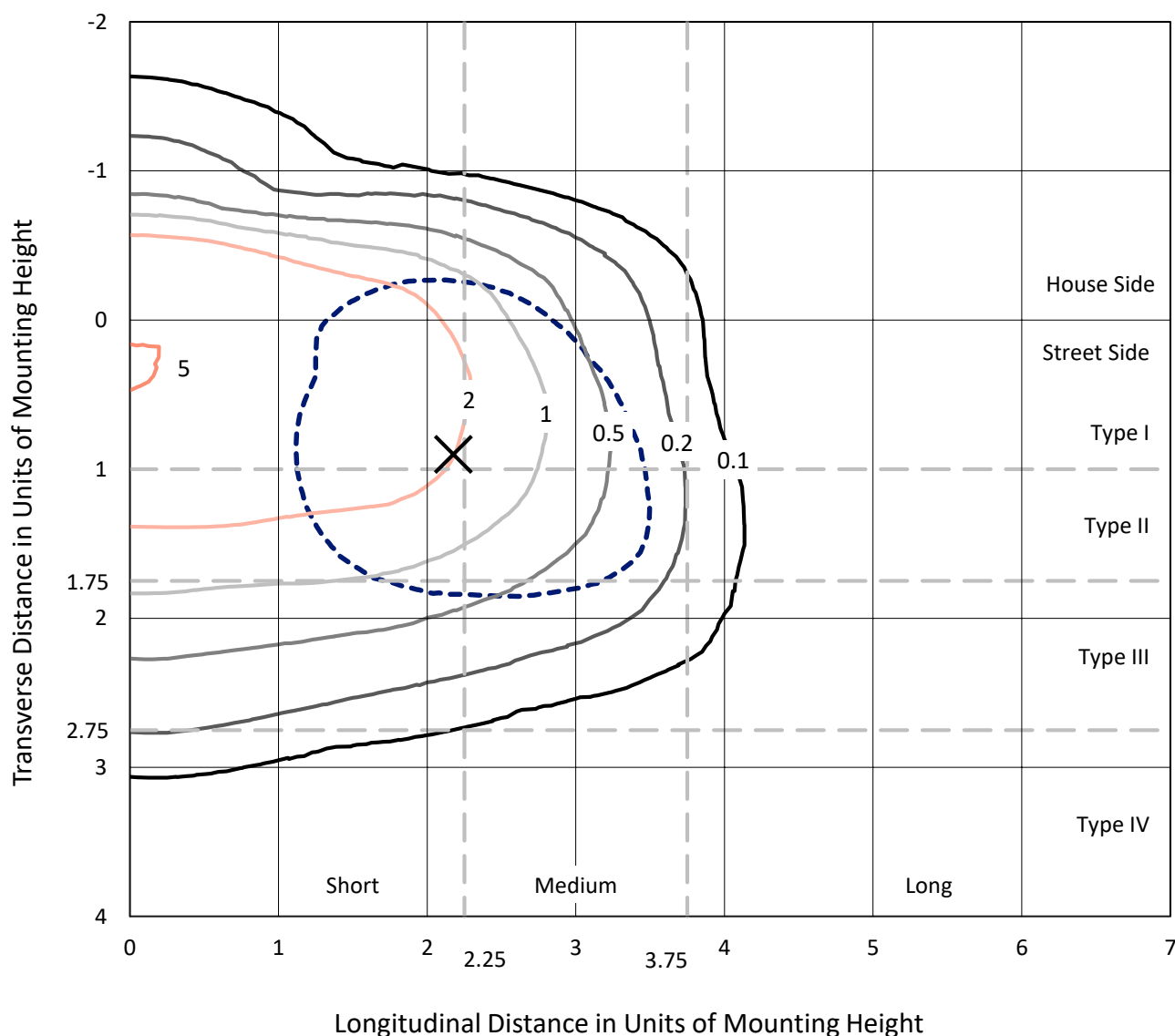


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

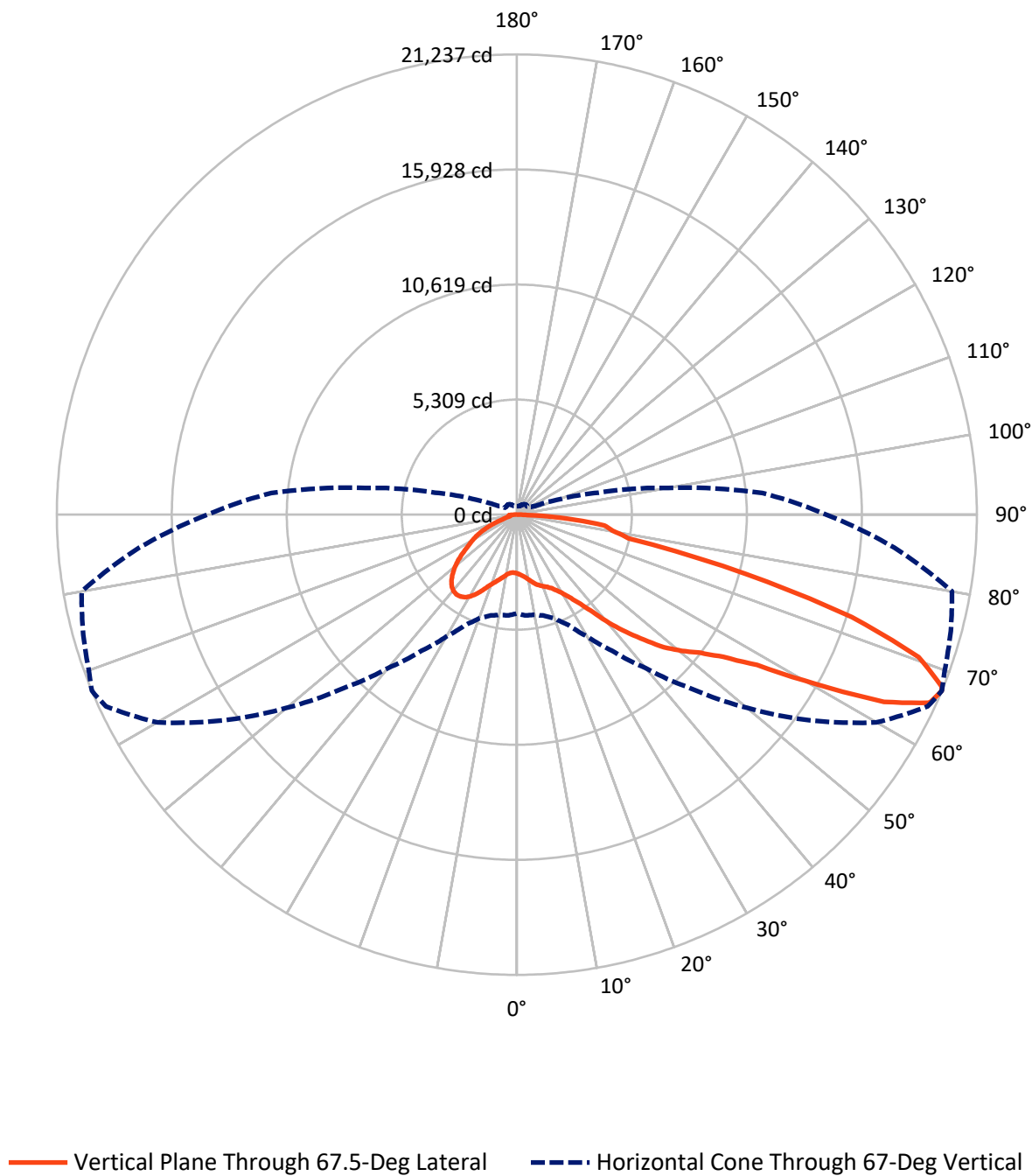


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6002.8	0.0	6002.8
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	19018.9	0.0	19018.9
	% Fixture	76.0	0.0	76.0
Total	Lumens	25021.7	0.0	25021.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.5	1.1
10°-20°	918.4	3.7
20°-30°	1639.6	6.6
30°-40°	2402.9	9.6
40°-50°	3712.8	14.8
50°-60°	5406.5	21.6
60°-70°	7042.8	28.1
70°-80°	3152.6	12.6
80°-90°	476.7	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°	25021.7	100.0
0°-180°	25021.7	100.0

Coefficient of Utilization



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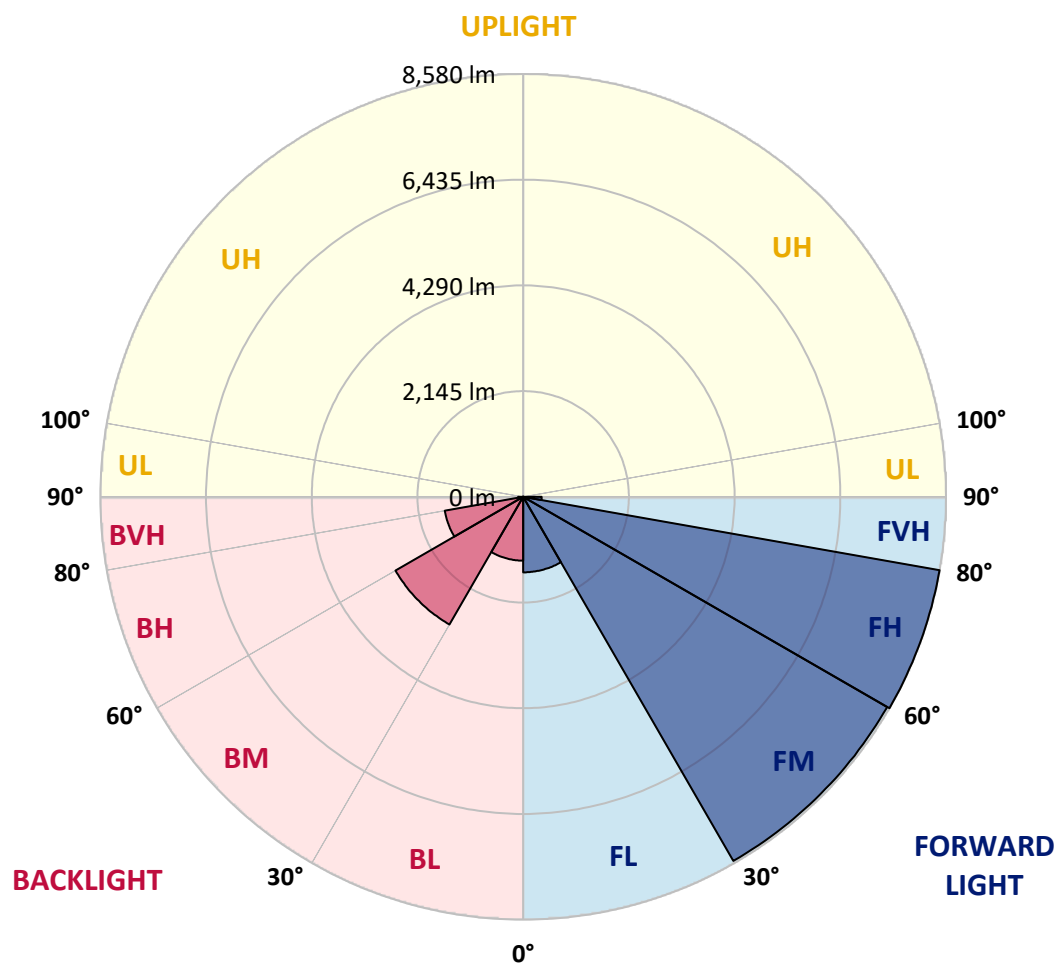
CATALOG NUMBER: VST-F11-LED-E-U-SL3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1533.1	6.1			
FM	(30°-60°)	8531.1	34.1			
FH	(60°-80°)	8580.4	34.3			G4/12000
FVH	(80°-90°)	374.3	1.5			G3/500
BL	(0°-30°)	1294.4	5.2	B3/2500		
BM	(30°-60°)	2991.1	12.0	B3/5000		
BH	(60°-80°)	1615.0	6.5	B3/2500		G3/2500
BVH	(80°-90°)	102.4	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°	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1
2.5°	2818.3	2824.9	2826.6	2824.9	2826.6	2819.9	2818.3	2808.3	2813.3	2800.0	2796.7
5°	2970.9	2975.9	2979.2	2965.9	2969.2	2962.6	2954.3	2944.3	2931.1	2912.8	2901.2
7.5°	3120.2	3128.5	3126.8	3121.8	3110.2	3103.6	3087.0	3072.1	3048.8	3027.3	3012.4
10°	3320.9	3319.2	3319.2	3291.0	3274.4	3259.5	3229.7	3206.4	3183.2	3151.7	3135.1
12.5°	3553.1	3541.5	3536.5	3516.6	3481.8	3455.3	3412.1	3367.3	3325.9	3292.7	3266.1
15°	3777.1	3777.1	3763.8	3732.3	3699.1	3664.3	3602.9	3538.2	3470.2	3417.1	3390.6
17.5°	3981.1	3962.8	3951.2	3909.8	3874.9	3818.5	3750.5	3680.8	3596.2	3521.6	3470.2
20°	4130.4	4115.4	4090.6	4039.1	3979.4	3913.1	3833.5	3752.2	3660.9	3579.7	3521.6
22.5°	4216.6	4198.4	4160.2	4092.2	4010.9	3918.1	3825.2	3748.9	3665.9	3604.5	3556.4
25°	4261.4	4243.2	4191.8	4102.2	3992.7	3869.9	3763.8	3689.1	3641.0	3626.1	3619.5
27.5°	4259.8	4244.8	4190.1	4087.2	3946.3	3805.3	3690.8	3627.8	3622.8	3680.8	3724.0
30°	4216.6	4206.7	4156.9	4054.1	3906.4	3758.8	3652.6	3619.5	3670.9	3793.6	3899.8
32.5°	4173.5	4168.5	4133.7	4040.8	3914.7	3790.3	3717.3	3720.7	3826.8	4015.9	4186.8
35°	4178.5	4185.1	4180.1	4130.4	4050.8	3986.1	3951.2	4024.2	4190.1	4419.0	4647.9
37.5°	4221.6	4246.5	4278.0	4283.0	4284.6	4274.7	4347.7	4501.9	4744.1	5042.7	5401.0
40°	4316.2	4344.4	4435.6	4515.2	4618.1	4740.8	4888.4	5102.4	5402.7	5770.9	6210.5
42.5°	4609.8	4649.6	4762.4	4910.0	5099.1	5291.5	5512.1	5804.1	6172.3	6560.5	7021.6
45°	4992.9	5075.9	5200.3	5364.5	5648.2	5918.5	6203.9	6530.6	6922.1	7408.1	7872.6
47.5°	5470.7	5553.6	5734.4	5910.3	6245.3	6582.1	6893.9	7235.6	7660.3	8157.9	8672.1
50°	5888.7	5983.2	6144.1	6381.3	6769.5	7182.5	7527.6	7897.5	8254.1	8778.3	9297.5
52.5°	6217.1	6285.1	6439.4	6656.7	7089.6	7542.5	7978.8	8390.1	8813.1	9337.3	9818.4
55°	6258.6	6321.6	6472.6	6721.4	7161.0	7663.6	8166.2	8653.9	9252.7	9825.0	10462.0
57.5°	6079.4	6130.9	6283.5	6505.8	6933.7	7506.0	8141.3	8766.7	9533.0	10306.0	11084.0
60°	5825.7	5877.1	5996.5	6174.0	6560.5	7177.6	7919.0	8775.0	9793.5	10909.8	12054.4
62.5°	5547.0	5591.8	5688.0	5814.0	6154.1	6723.1	7572.4	8720.2	10005.8	11510.3	13275.3
65°	5077.5	5185.4	5226.8	5356.2	5696.3	6233.7	7097.9	8350.3	9919.5	11777.4	14041.6
67°	4558.3	4667.8	4689.4	4820.4	5092.5	5608.4	6487.5	7665.2	9236.1	11316.2	13872.4
67.5°	4392.5	4485.4	4518.5	4649.6	4906.7	5392.7	6227.1	7418.1	9027.1	11064.1	13668.4
70°	3229.7	3332.5	3369.0	3423.7	3607.9	4012.6	4565.0	5598.4	7197.5	9028.8	11530.2
72.5°	1728.5	1811.4	1846.2	1927.5	2022.1	2242.7	2665.7	3407.1	4417.3	6041.3	8202.7
75°	1169.4	1202.6	1227.5	1283.9	1381.8	1557.6	1743.4	2003.8	2614.2	3408.8	4667.8
77.5°	666.8	681.8	685.1	695.0	773.0	940.5	1245.7	1687.0	2163.1	2469.9	2985.8
80°	288.6	318.5	341.7	326.8	321.8	356.6	446.2	665.2	1303.8	2070.2	2456.7
82.5°	155.9	169.2	189.1	190.8	200.7	212.3	230.6	273.7	384.8	776.3	1693.6
85°	81.3	84.6	112.8	129.4	137.7	144.3	147.6	164.2	189.1	240.5	421.3
87.5°	11.6	16.6	19.9	26.5	29.9	31.5	36.5	46.4	54.7	66.4	112.8
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1
2.5°	2781.8	2778.5	2768.5	2761.9	2755.2	2748.6	2740.3	2733.7	2722.1	2713.8	2703.8
5°	2884.6	2864.7	2851.5	2833.2	2829.9	2808.3	2786.8	2776.8	2756.9	2740.3	2720.4
7.5°	2989.1	2965.9	2944.3	2929.4	2921.1	2891.3	2869.7	2844.8	2821.6	2800.0	2776.8
10°	3111.9	3088.7	3065.4	3055.5	3040.6	3012.4	2994.1	2962.6	2939.4	2912.8	2881.3
12.5°	3239.6	3223.0	3206.4	3193.2	3186.5	3173.3	3146.7	3120.2	3088.7	3062.1	3025.6
15°	3352.4	3340.8	3334.2	3330.8	3330.8	3322.5	3297.7	3272.8	3239.6	3209.8	3169.9
17.5°	3432.0	3427.1	3432.0	3437.0	3443.6	3437.0	3432.0	3403.8	3382.3	3345.8	3306.0
20°	3478.5	3488.4	3513.3	3529.9	3544.8	3556.4	3561.4	3538.2	3510.0	3483.4	3456.9
22.5°	3528.2	3556.4	3599.6	3624.4	3649.3	3690.8	3700.8	3684.2	3662.6	3646.0	3617.8
25°	3611.2	3652.6	3727.3	3767.1	3801.9	3863.3	3871.6	3874.9	3869.9	3856.7	3821.8
27.5°	3740.6	3821.8	3921.4	3972.8	4010.9	4090.6	4122.1	4122.1	4108.8	4123.7	4123.7
30°	3966.2	4074.0	4203.4	4233.2	4292.9	4362.6	4414.0	4420.7	4422.3	4453.8	4500.3
32.5°	4312.8	4415.7	4560.0	4593.2	4644.6	4711.0	4769.0	4762.4	4777.3	4845.3	4906.7
35°	4817.1	4921.6	5016.2	5061.0	5084.2	5143.9	5165.5	5202.0	5246.7	5331.3	5323.0
37.5°	5563.6	5656.5	5669.7	5697.9	5669.7	5681.3	5697.9	5741.1	5860.5	5936.8	5814.0
40°	6462.6	6616.9	6602.0	6568.8	6505.8	6421.2	6451.0	6517.4	6646.8	6580.4	6250.3
42.5°	7310.3	7469.5	7439.7	7401.5	7262.2	7230.6	7227.3	7282.1	7351.7	7162.6	6592.0
45°	8144.6	8307.2	8255.8	8234.2	8141.3	8073.3	8129.7	8133.0	8114.8	7710.0	6890.6
47.5°	9005.5	9154.8	9121.7	9139.9	9043.7	8998.9	9003.9	8980.7	8809.8	8174.5	7122.8
50°	9700.6	9901.3	9921.2	9879.7	9828.3	9760.3	9934.5	9871.4	9491.6	8625.7	7346.8
52.5°	10241.3	10511.7	10614.6	10588.0	10546.6	10554.9	10881.6	10953.0	10324.3	9194.6	7593.9
55°	10881.6	11307.9	11475.5	11575.0	11531.9	11697.8	12445.9	12482.4	11482.1	9937.8	7915.7
57.5°	11805.6	12416.0	12945.2	13086.2	13222.2	13761.3	14975.5	14605.6	12985.0	11062.4	8323.8
60°	13210.6	14547.6	15406.8	15858.0	16176.5	16929.6	18084.1	17146.9	14857.7	12401.1	8836.4
62.5°	15177.9	17131.9	18568.4	19021.3	19152.3	19585.3	20421.3	18628.2	15877.9	13001.6	8881.1
65°	16642.6	18986.5	20706.6	20938.9	20782.9	20791.2	21010.2	18550.2	15498.0	12477.4	8111.5
67°	16546.4	19170.6	20932.2	21237.4	21021.8	20738.1	20396.4	17493.6	14277.2	11379.3	7102.9
67.5°	16398.8	18993.1	20834.3	21156.2	20958.8	20635.3	20136.0	17083.8	13897.3	11037.6	6897.2
70°	14176.0	16752.1	19232.0	19684.8	19767.7	19472.5	18070.8	14404.9	11283.1	8979.0	5356.2
72.5°	11034.2	13328.3	15781.7	16174.8	16493.3	15642.3	13152.5	9949.4	8224.3	6470.9	3878.2
75°	7285.4	9619.3	10856.8	10914.8	10508.4	8932.6	6426.1	4983.0	4586.5	3803.6	2400.3
77.5°	3898.1	5656.5	5691.3	5270.0	5077.5	3785.3	1536.0	847.6	943.8	1071.6	955.5
80°	2907.9	3602.9	4175.2	4488.7	4581.6	3246.2	794.6	449.5	393.1	358.3	353.3
82.5°	2622.5	3480.1	3901.5	4072.3	4029.2	2670.6	446.2	301.9	250.5	272.0	310.2
85°	1028.4	1857.8	2443.4	2365.4	1987.2	995.3	243.8	162.6	162.6	235.5	305.2
87.5°	210.7	381.5	517.5	494.3	444.6	192.4	119.4	97.9	99.5	190.8	288.6
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1	2712.1
2.5°	2693.9	2683.9	2677.3	2670.6	2664.0	2660.7	2655.7	2655.7	2645.8	2642.4	2639.1
5°	2705.5	2688.9	2677.3	2662.4	2650.7	2640.8	2627.5	2624.2	2612.6	2604.3	2601.0
7.5°	2755.2	2730.4	2705.5	2687.2	2670.6	2649.1	2634.2	2620.9	2609.3	2601.0	2591.0
10°	2849.8	2823.3	2788.4	2755.2	2733.7	2700.5	2677.3	2654.1	2640.8	2630.8	2617.6
12.5°	2989.1	2951.0	2909.5	2869.7	2833.2	2790.1	2766.9	2738.7	2722.1	2713.8	2703.8
15°	3131.8	3090.3	3038.9	3000.7	2959.3	2926.1	2904.5	2879.7	2866.4	2856.4	2849.8
17.5°	3277.8	3229.7	3193.2	3155.0	3135.1	3110.2	3082.0	3050.5	3012.4	2989.1	2957.6
20°	3427.1	3390.6	3369.0	3347.4	3324.2	3289.4	3233.0	3168.3	3097.0	3028.9	2964.2
22.5°	3601.2	3579.7	3576.3	3556.4	3508.3	3425.4	3320.9	3199.8	3078.7	2965.9	2878.0
25°	3846.7	3846.7	3830.1	3748.9	3636.1	3486.8	3310.9	3136.8	2975.9	2821.6	2705.5
27.5°	4155.3	4143.6	4062.4	3894.8	3692.5	3460.2	3224.7	3004.1	2798.4	2629.2	2479.9
30°	4495.3	4414.0	4239.9	3976.1	3672.6	3374.0	3085.3	2829.9	2587.7	2380.4	2204.5
32.5°	4848.6	4651.2	4337.7	3976.1	3602.9	3244.6	2911.2	2597.7	2320.6	2088.4	1879.4
35°	5168.8	4808.8	4360.9	3911.4	3466.9	3053.8	2667.3	2312.3	1980.6	1730.1	1501.2
37.5°	5459.1	4913.3	4336.1	3785.3	3269.5	2785.1	2332.3	1940.8	1565.9	1323.7	1128.0
40°	5648.2	4934.9	4233.2	3588.0	2987.5	2421.8	1920.9	1483.0	1186.0	965.4	834.4
42.5°	5765.9	4893.4	4067.3	3317.6	2607.6	1965.7	1441.5	1063.3	842.7	719.9	670.1
45°	5832.3	4785.6	3821.8	2947.7	2148.1	1494.6	1023.5	768.0	648.6	605.5	588.9
47.5°	5829.0	4611.4	3515.0	2519.7	1640.5	1041.7	724.9	598.8	565.6	552.4	549.1
50°	5794.1	4397.4	3155.0	2055.2	1184.4	726.5	573.9	537.4	529.2	520.9	517.5
52.5°	5746.0	4132.0	2756.9	1602.4	841.0	580.6	520.9	510.9	504.3	496.0	492.7
55°	5656.5	3805.3	2325.6	1205.9	658.5	524.2	502.6	499.3	491.0	479.4	472.8
57.5°	5547.0	3473.5	1912.6	942.2	582.2	510.9	499.3	494.3	482.7	469.4	456.2
60°	5507.2	3199.8	1589.1	794.6	564.0	515.9	507.6	501.0	484.4	464.5	449.5
62.5°	5258.4	2891.3	1356.9	736.5	573.9	537.4	534.1	524.2	499.3	476.1	452.8
65°	4614.7	2445.1	1149.5	696.7	593.8	573.9	577.3	562.3	537.4	505.9	464.5
67°	3903.1	1993.9	957.1	658.5	608.8	612.1	623.7	612.1	580.6	535.8	479.4
67.5°	3714.0	1879.4	909.0	646.9	612.1	622.0	635.3	627.0	595.5	544.1	486.0
70°	2760.2	1323.7	678.4	585.6	612.1	651.9	681.8	690.1	655.2	583.9	499.3
72.5°	1944.1	854.3	520.9	507.6	555.7	608.8	665.2	693.4	653.6	575.6	481.0
75°	1167.8	534.1	423.0	431.3	467.8	522.5	567.3	578.9	529.2	479.4	416.4
77.5°	540.8	355.0	331.8	343.4	378.2	403.1	403.1	379.9	341.7	311.9	298.6
80°	318.5	290.3	288.6	310.2	333.4	315.2	287.0	255.5	235.5	225.6	220.6
82.5°	298.6	310.2	330.1	335.1	316.8	272.0	237.2	205.7	195.7	190.8	185.8
85°	351.7	376.5	343.4	316.8	280.3	228.9	185.8	159.2	154.3	149.3	142.7
87.5°	325.1	310.2	270.4	232.2	192.4	139.3	101.2	91.2	97.9	96.2	92.9
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°	2712.1	2712.1	2712.1	2712.1	2712.1
2.5°	2640.8	2640.8	2634.2	2630.8	2639.1
5°	2594.3	2596.0	2591.0	2589.4	2591.0
7.5°	2584.4	2582.7	2579.4	2576.1	2579.4
10°	2614.2	2612.6	2607.6	2610.9	2606.0
12.5°	2703.8	2713.8	2712.1	2715.4	2722.1
15°	2849.8	2848.1	2843.2	2846.5	2851.5
17.5°	2932.7	2919.5	2907.9	2902.9	2902.9
20°	2912.8	2874.7	2854.8	2843.2	2839.8
22.5°	2795.1	2740.3	2698.8	2688.9	2680.6
25°	2602.6	2534.6	2481.5	2469.9	2448.4
27.5°	2378.7	2287.5	2224.4	2211.2	2199.5
30°	2085.1	1980.6	1907.6	1861.2	1876.1
32.5°	1726.8	1627.3	1542.7	1468.0	1456.4
35°	1333.7	1224.2	1149.5	1116.4	1094.8
37.5°	995.3	904.0	854.3	822.8	824.4
40°	761.4	713.3	686.7	665.2	666.8
42.5°	635.3	613.8	607.1	597.2	592.2
45°	575.6	569.0	570.6	560.7	557.4
47.5°	542.4	537.4	539.1	532.5	530.8
50°	515.9	512.6	514.2	509.2	507.6
52.5°	489.3	491.0	489.3	486.0	486.0
55°	466.1	464.5	467.8	462.8	462.8
57.5°	447.9	446.2	446.2	444.6	444.6
60°	437.9	431.3	429.6	429.6	431.3
62.5°	432.9	421.3	419.7	419.7	421.3
65°	434.6	416.4	409.7	408.1	406.4
67°	436.3	409.7	396.4	389.8	388.2
67.5°	437.9	406.4	391.5	384.8	381.5
70°	428.0	383.2	361.6	350.0	346.7
72.5°	403.1	355.0	328.4	313.5	310.2
75°	358.3	321.8	298.6	282.0	275.4
77.5°	277.0	260.4	252.1	242.2	238.9
80°	215.6	207.3	204.0	197.4	195.7
82.5°	179.1	170.9	165.9	157.6	152.6
85°	139.3	129.4	126.1	119.4	116.1
87.5°	91.2	86.3	84.6	76.3	73.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)