

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: P159799

Luminaire Tested: **VST-E08-LED-E-U-T4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159799
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-E08-LED-E-U-T4-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(8) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT
Light Source: (168) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21747.7 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Luminous Opening: Rectangular (W 1.33' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 194.5
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



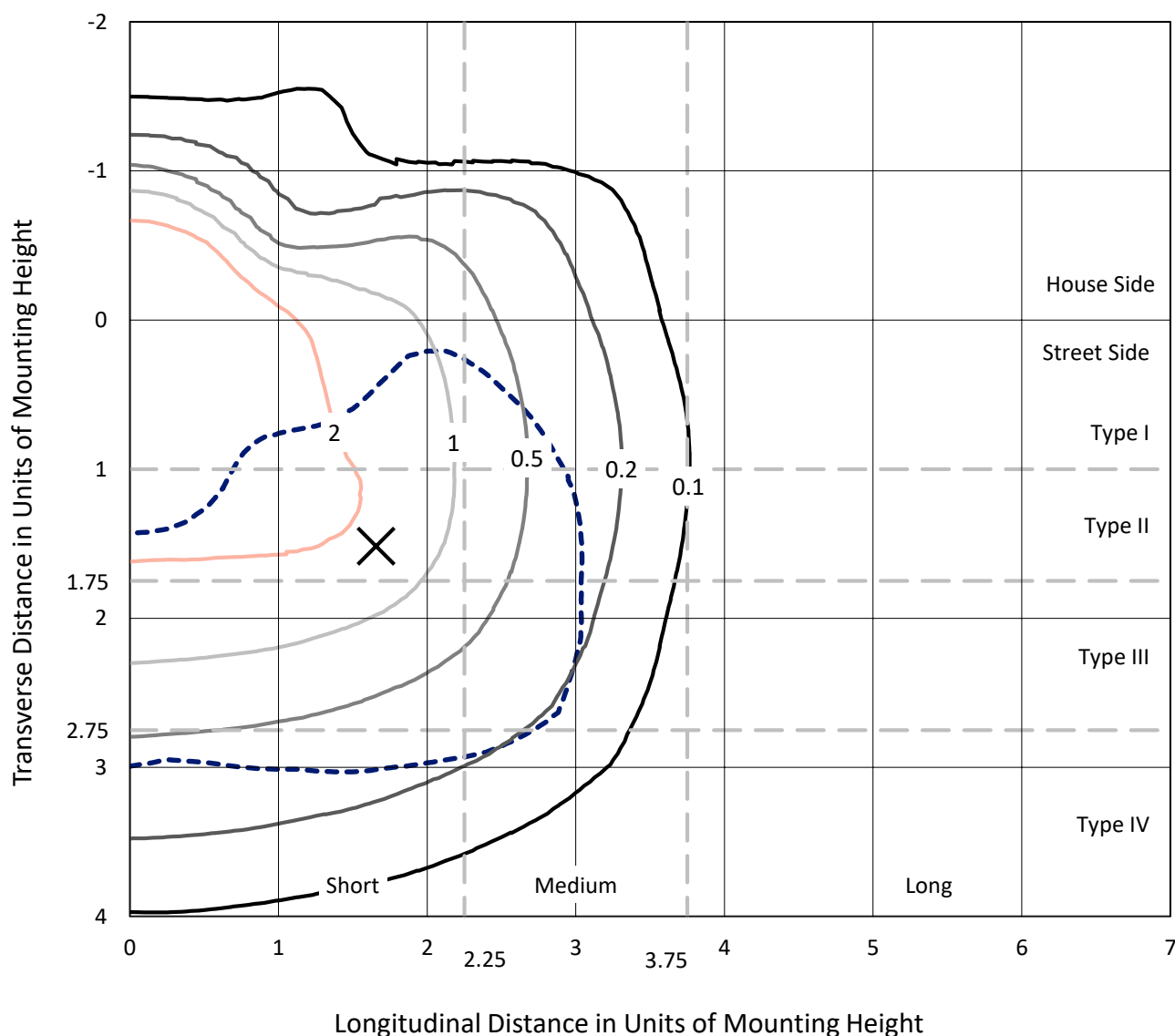
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

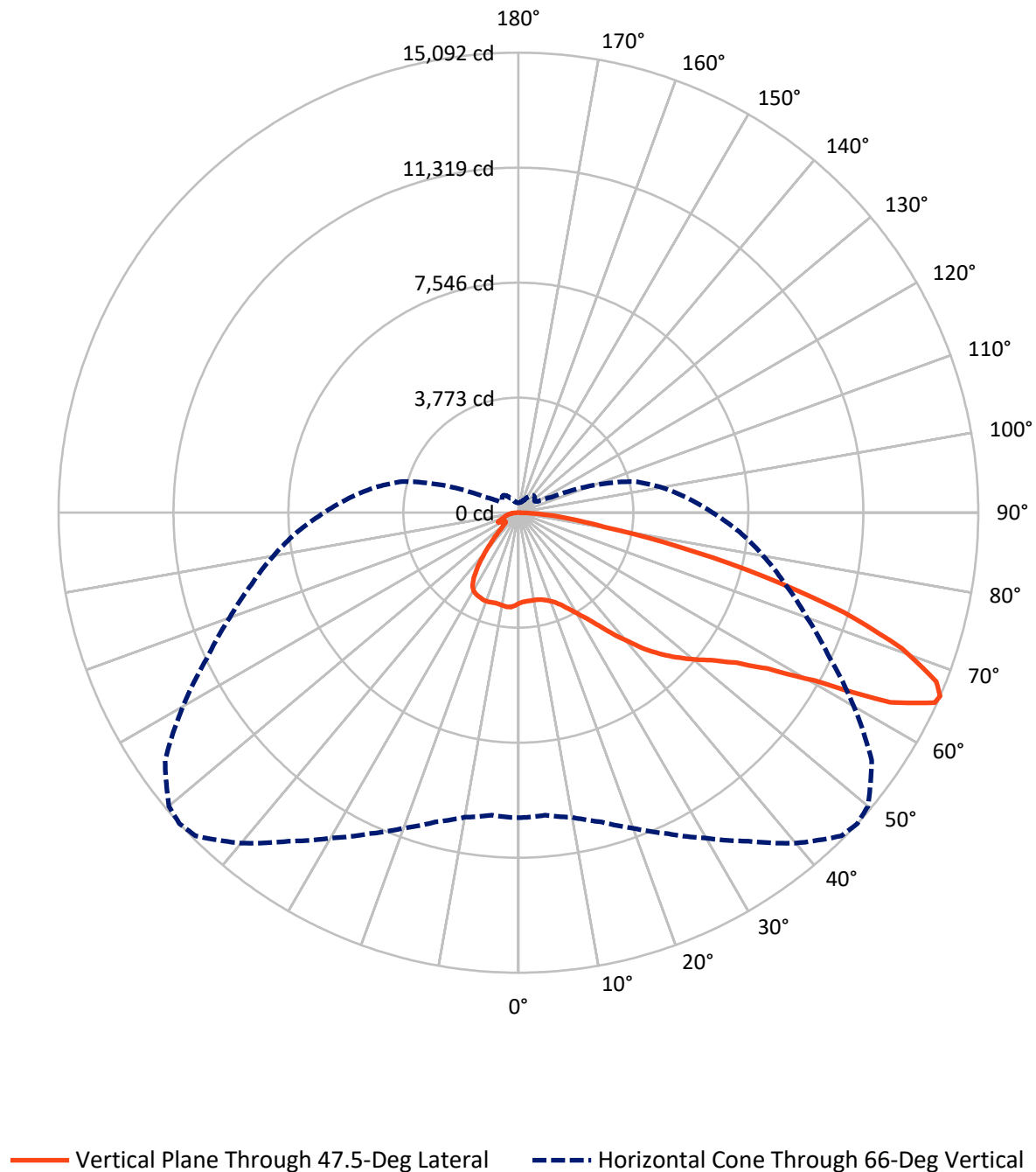


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4502.7	0.0	4502.7
	% Fixture	20.7	0.0	20.7
Street Side	Lumens	17244.9	0.0	17244.9
	% Fixture	79.3	0.0	79.3
Total	Lumens	21747.7	0.0	21747.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.8	1.3
10°-20°	860.0	4.0
20°-30°	1467.3	6.7
30°-40°	2214.7	10.2
40°-50°	2878.6	13.2
50°-60°	3949.1	18.2
60°-70°	6075.0	27.9
70°-80°	3511.7	16.1
80°-90°	504.5	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°	21747.7	100.0
0°-180°	21747.7	100.0

Coefficient of Utilization



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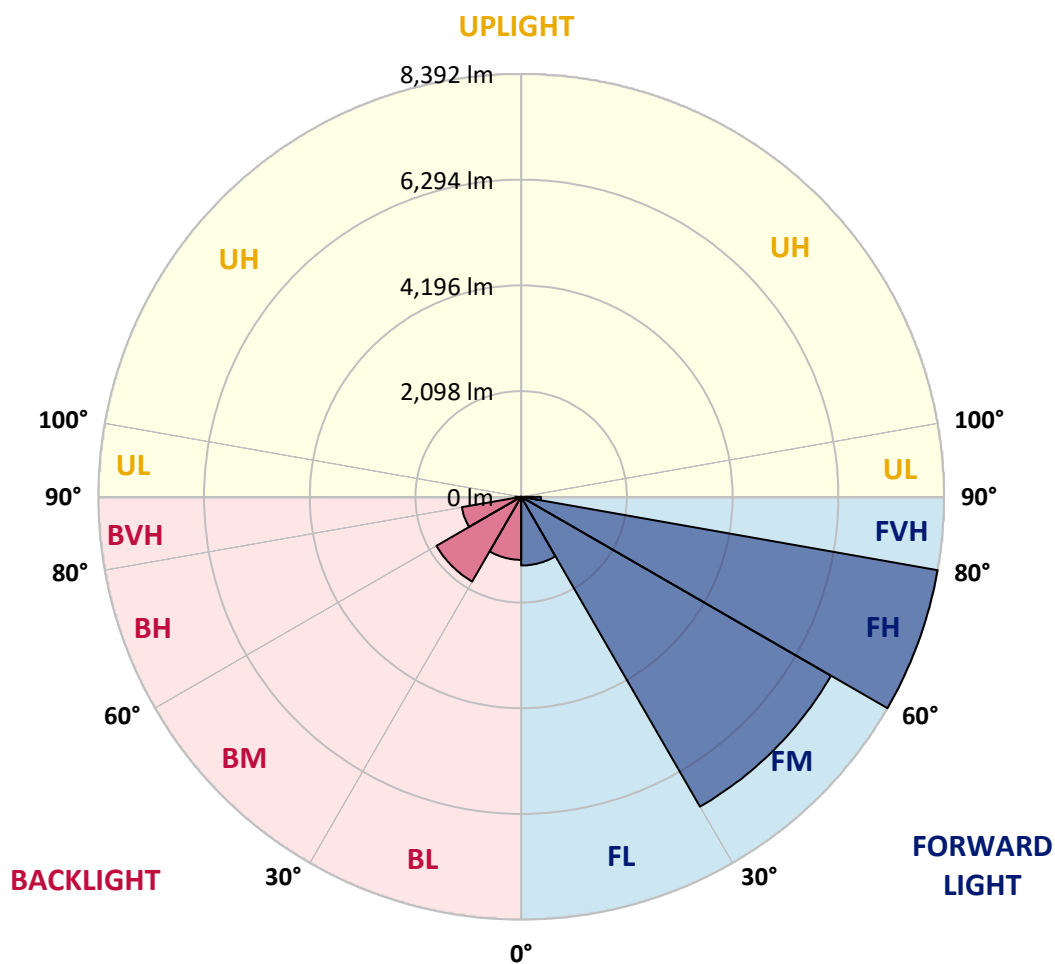
CATALOG NUMBER: VST-E08-LED-E-U-T4-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1363.2	6.3			
FM	(30°-60°)	7099.7	32.6			
FH	(60°-80°)	8391.7	38.6			G4/12000
FVH	(80°-90°)	390.4	1.8			G3/500
BL	(0°-30°)	1250.9	5.8	B3/2500		
BM	(30°-60°)	1942.7	8.9	B2/2500		
BH	(60°-80°)	1195.1	5.5	B3/2500		G3/2500
BVH	(80°-90°)	114.1	0.5			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3
2.5°	2899.3	2900.8	2902.3	2902.3	2906.6	2906.6	2914.0	2918.3	2919.8	2928.6	2934.4
5°	2845.3	2843.8	2845.3	2848.2	2855.5	2861.3	2876.0	2886.2	2895.0	2909.6	2916.9
7.5°	2821.9	2824.8	2827.7	2829.2	2835.0	2849.7	2862.8	2873.0	2890.6	2908.1	2915.4
10°	2852.6	2857.0	2852.6	2855.5	2855.5	2868.7	2874.5	2881.8	2895.0	2911.0	2915.4
12.5°	2924.2	2933.0	2924.2	2916.9	2911.0	2922.7	2919.8	2914.0	2921.3	2925.6	2925.6
15°	3042.6	3042.6	3036.7	3026.5	3011.9	3013.3	3000.2	2987.0	2981.2	2970.9	2963.6
17.5°	3158.0	3155.1	3141.9	3128.8	3118.5	3114.2	3095.2	3077.6	3057.2	3041.1	3023.6
20°	3270.5	3282.2	3266.1	3247.1	3231.1	3220.8	3206.2	3171.2	3146.3	3120.0	3102.5
22.5°	3464.9	3454.7	3437.1	3409.4	3393.3	3375.7	3345.1	3307.1	3269.1	3236.9	3215.0
25°	3665.1	3654.9	3630.0	3609.6	3586.2	3571.6	3538.0	3491.2	3454.7	3405.0	3375.7
27.5°	3879.9	3871.1	3841.9	3825.8	3809.8	3792.2	3763.0	3714.8	3681.2	3624.2	3593.5
30°	4122.5	4121.0	4081.6	4078.7	4055.3	4036.3	4015.8	3974.9	3941.3	3884.3	3847.8
32.5°	4381.2	4375.3	4347.5	4338.8	4354.9	4341.7	4312.5	4270.1	4226.3	4192.6	4151.7
35°	4749.4	4739.2	4723.1	4730.4	4740.7	4777.2	4731.9	4695.4	4642.7	4598.9	4541.9
37.5°	5018.3	5003.7	5022.7	5063.6	5122.1	5149.8	5189.3	5190.8	5165.9	5107.5	5057.8
40°	5265.3	5259.4	5303.3	5360.3	5468.4	5547.3	5621.9	5658.4	5667.2	5629.2	5554.6
42.5°	5474.3	5491.8	5550.2	5637.9	5789.9	5909.7	6048.6	6134.8	6188.9	6168.4	6134.8
45°	5722.7	5731.5	5803.1	5914.1	6058.8	6257.5	6440.2	6586.4	6681.3	6679.9	6641.9
47.5°	6034.0	6035.4	6096.8	6226.9	6381.8	6583.4	6814.3	7008.7	7134.4	7140.2	7111.0
50°	6403.7	6400.8	6468.0	6590.7	6755.9	6950.2	7195.7	7438.3	7613.7	7613.7	7571.3
52.5°	6880.1	6874.2	6910.8	7018.9	7178.2	7382.8	7626.8	7907.4	8097.4	8138.3	8046.3
55°	7515.8	7524.5	7533.3	7628.3	7764.2	7926.4	8207.0	8465.7	8719.9	8743.3	8689.2
57.5°	8250.8	8221.6	8284.5	8439.4	8594.3	8797.4	8996.1	9301.6	9602.6	9653.7	9646.4
60°	9399.5	9361.5	9425.8	9623.1	9794.0	10114.1	10454.6	10849.1	11205.7	11310.9	11183.8
62.5°	10456.0	10502.8	10590.5	10819.9	11068.3	11495.1	12006.5	12683.1	13359.8	13728.0	13701.7
65°	10361.0	10317.2	10485.3	10798.0	11248.1	11791.7	12427.4	13242.8	14217.6	14957.0	15022.8
66°	10008.9	9963.6	10144.8	10502.8	11017.2	11622.2	12328.0	13158.1	14154.7	14990.6	15091.5
67.5°	9427.2	9381.9	9586.5	9912.4	10442.9	11204.3	11967.1	12874.6	13910.7	14711.5	14793.4
70°	8304.9	8243.5	8402.8	8771.1	9200.7	9937.3	10663.5	11625.1	12689.0	13329.1	13359.8
72.5°	7035.0	6891.8	7061.3	7344.8	7651.7	8261.1	8893.8	9551.5	10399.0	10990.9	11160.4
75°	5104.5	5179.1	5228.7	5415.8	5618.9	6123.1	6494.3	7045.2	7701.4	8129.5	8265.5
77.5°	2707.9	2820.4	2890.6	3077.6	3413.7	3798.1	4200.0	4540.4	4971.5	5211.2	5377.8
80°	1519.8	1598.7	1712.7	1860.3	2024.0	2319.2	2557.4	2732.7	2794.1	2836.5	2874.5
82.5°	835.9	1036.1	1205.6	1307.9	1404.4	1522.7	1664.5	1810.6	1857.4	1787.2	1750.7
85°	130.1	191.4	583.1	711.7	774.5	865.1	967.4	1075.6	1077.0	926.5	1011.3
87.5°	36.5	40.9	83.3	125.7	122.8	99.4	122.8	223.6	131.5	65.8	76.0
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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CATALOG NUMBER: VST-E08-LED-E-U-T4-7030

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3
2.5°	2937.3	2940.3	2947.6	2954.9	2962.2	2969.5	2973.9	2981.2	2987.0	2995.8	3006.0
5°	2925.6	2933.0	2946.1	2962.2	2976.8	2989.9	3000.2	3014.8	3027.9	3039.6	3057.2
7.5°	2925.6	2940.3	2962.2	2979.7	2992.9	3008.9	3025.0	3039.6	3054.2	3065.9	3077.6
10°	2927.1	2941.7	2963.6	2984.1	2998.7	3016.2	3029.4	3042.6	3058.6	3065.9	3080.5
12.5°	2933.0	2938.8	2954.9	2975.3	2992.9	3010.4	3023.6	3036.7	3054.2	3057.2	3067.4
15°	2962.2	2953.4	2957.8	2972.4	2991.4	3006.0	3020.6	3030.9	3042.6	3039.6	3048.4
17.5°	3016.2	2994.3	2985.6	2987.0	2995.8	3006.0	3011.9	3013.3	3014.8	3001.6	3003.1
20°	3089.3	3058.6	3038.2	3027.9	3016.2	3006.0	2989.9	2970.9	2953.4	2927.1	2924.2
22.5°	3198.9	3153.6	3131.7	3103.9	3068.9	3025.0	2985.6	2938.8	2900.8	2861.3	2846.7
25°	3358.2	3311.4	3288.1	3244.2	3181.4	3118.5	3061.6	2998.7	2943.2	2896.4	2874.5
27.5°	3571.6	3524.8	3500.0	3454.7	3377.2	3314.4	3235.5	3168.2	3101.0	3032.3	3004.6
30°	3830.2	3789.3	3761.5	3725.0	3657.8	3589.1	3497.0	3393.3	3286.6	3177.0	3122.9
32.5°	4135.7	4090.3	4069.9	4027.5	3957.4	3885.8	3783.5	3650.5	3472.2	3299.8	3191.6
35°	4517.1	4465.9	4442.5	4387.0	4305.2	4200.0	4090.3	3912.1	3670.9	3431.3	3254.4
37.5°	5027.1	4913.1	4835.6	4708.5	4577.0	4429.4	4273.0	4090.3	3805.4	3508.7	3263.2
40°	5478.6	5363.2	5214.1	5031.5	4826.9	4623.7	4445.5	4237.9	3928.1	3564.3	3235.5
42.5°	6039.8	5835.2	5597.0	5350.0	5078.2	4828.3	4616.4	4372.4	4011.4	3578.9	3158.0
45°	6552.7	6308.7	5990.1	5661.3	5323.7	5009.5	4771.3	4499.5	4083.0	3578.9	3064.5
47.5°	7020.4	6728.1	6346.7	5937.5	5544.4	5201.0	4930.6	4629.6	4183.9	3624.2	3036.7
50°	7452.9	7116.8	6682.8	6207.9	5766.5	5399.7	5108.9	4796.2	4337.3	3741.1	3103.9
52.5°	7908.9	7552.3	7023.3	6519.1	6032.5	5639.4	5329.6	5002.2	4536.1	3925.2	3222.3
55°	8506.6	8088.6	7488.0	6932.7	6397.8	5963.8	5611.6	5249.2	4753.8	4132.7	3367.0
57.5°	9449.2	8842.7	8242.1	7520.2	7016.0	6444.6	6058.8	5642.3	5107.5	4403.1	3584.7
60°	11099.0	10353.7	9631.8	8801.8	8179.2	7581.5	6998.5	6454.8	5810.4	5013.9	4062.6
62.5°	13454.7	12697.8	11563.7	10548.1	9608.4	8816.4	8056.5	7365.3	6538.1	5667.2	4651.5
65°	14862.0	13995.4	12643.7	11278.8	10137.5	9155.4	8285.9	7439.8	6546.9	5697.8	4829.8
66°	14974.6	14154.7	12710.9	11268.6	10083.4	9064.8	8160.2	7284.9	6370.1	5557.6	4771.3
67.5°	14765.6	14059.7	12573.5	11069.8	9858.3	8757.9	7828.5	6910.8	5991.6	5239.0	4577.0
70°	13291.1	12781.1	11506.8	10098.0	8889.5	7919.1	6938.5	6055.9	5184.9	4552.1	4061.1
72.5°	10895.9	10250.0	9358.6	8411.6	7460.2	6599.5	5708.1	4956.9	4226.3	3765.9	3418.1
75°	8003.9	7422.3	6440.2	5849.8	5221.4	4680.7	4080.1	3368.4	2849.7	2618.8	2534.0
77.5°	5073.8	4442.5	3613.9	2962.2	2547.2	2189.1	1725.9	1372.2	1098.9	1144.2	1267.0
80°	2563.2	2208.1	1652.8	1305.0	1128.2	938.2	742.4	562.6	410.6	469.1	530.5
82.5°	1645.5	1373.7	1094.6	862.2	727.8	641.5	512.9	372.6	277.7	312.7	382.9
85°	990.8	837.4	667.8	546.5	474.9	396.0	290.8	206.1	204.6	219.2	270.4
87.5°	150.5	214.8	124.2	133.0	140.3	150.5	133.0	112.5	97.9	127.1	160.7
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3	2975.3
2.5°	3016.2	3019.2	3025.0	3032.3	3030.9	3041.1	3046.9	3041.1	3054.2	3054.2	3061.6
5°	3071.8	3076.2	3086.4	3093.7	3096.6	3105.4	3108.3	3106.9	3109.8	3111.2	3114.2
7.5°	3087.9	3099.5	3103.9	3108.3	3109.8	3112.7	3112.7	3109.8	3109.8	3108.3	3111.2
10°	3083.5	3087.9	3090.8	3089.3	3089.3	3086.4	3084.9	3083.5	3083.5	3080.5	3084.9
12.5°	3068.9	3068.9	3068.9	3065.9	3065.9	3064.5	3064.5	3064.5	3067.4	3068.9	3076.2
15°	3039.6	3039.6	3042.6	3041.1	3045.5	3052.8	3061.6	3067.4	3074.7	3076.2	3080.5
17.5°	2994.3	2995.8	3004.6	3023.6	3042.6	3064.5	3080.5	3084.9	3079.1	3064.5	3054.2
20°	2915.4	2934.4	2969.5	3014.8	3057.2	3084.9	3092.2	3074.7	3046.9	3008.9	2988.5
22.5°	2845.3	2883.3	2946.1	3020.6	3073.2	3092.2	3070.3	3029.4	2979.7	2935.9	2905.2
25°	2873.0	2916.9	2982.6	3046.9	3080.5	3070.3	3026.5	2968.0	2915.4	2864.3	2814.6
27.5°	2989.9	3033.8	3080.5	3099.5	3087.9	3049.9	2988.5	2925.6	2855.5	2782.4	2721.1
30°	3101.0	3125.9	3128.8	3109.8	3067.4	3006.0	2934.4	2861.3	2772.2	2684.5	2607.1
32.5°	3136.1	3106.9	3054.2	3000.2	2941.7	2878.9	2795.6	2699.1	2604.1	2504.8	2418.6
35°	3125.9	3007.5	2877.4	2762.0	2691.8	2620.2	2544.2	2415.6	2308.9	2224.2	2168.7
37.5°	3033.8	2817.5	2617.3	2449.2	2339.6	2254.9	2142.4	2035.7	1943.6	1905.6	1860.3
40°	2905.2	2574.9	2297.3	2062.0	1948.0	1839.9	1714.2	1632.3	1606.0	1571.0	1572.4
42.5°	2721.1	2291.4	1933.4	1663.0	1538.8	1420.4	1331.3	1283.1	1284.5	1255.3	1261.2
45°	2526.7	2006.4	1556.3	1287.5	1164.7	1063.9	1014.2	999.6	1001.0	1002.5	993.7
47.5°	2408.3	1784.3	1248.0	976.2	868.0	811.1	784.8	777.4	778.9	780.4	770.1
50°	2390.8	1668.9	1042.0	746.8	676.6	644.5	631.3	624.0	624.0	618.2	609.4
52.5°	2440.5	1639.6	941.1	647.4	580.2	550.9	540.7	534.9	526.1	514.4	498.3
55°	2519.4	1666.0	910.4	613.8	548.0	518.8	505.6	502.7	488.1	466.2	439.9
57.5°	2665.5	1760.9	930.9	622.5	553.9	527.6	518.8	515.9	495.4	461.8	428.2
60°	3084.9	2037.1	1033.2	672.2	596.2	574.3	574.3	569.9	542.2	493.9	445.7
62.5°	3663.6	2441.9	1172.0	740.9	654.7	651.8	676.6	678.1	628.4	550.9	474.9
65°	3942.8	2631.9	1220.2	755.5	670.8	704.4	754.1	754.1	683.9	577.2	479.3
66°	3944.2	2627.5	1205.6	738.0	653.2	697.1	748.2	748.2	675.1	569.9	472.0
67.5°	3843.4	2545.7	1157.4	705.8	613.8	654.7	700.0	698.5	632.8	540.7	451.6
70°	3447.3	2252.0	1020.0	653.2	567.0	568.5	584.5	574.3	530.5	467.6	410.6
72.5°	2972.4	1883.7	884.1	619.6	530.5	502.7	489.6	480.8	453.0	415.0	380.0
75°	2279.7	1462.8	770.1	588.9	498.3	450.1	432.6	425.3	406.3	384.3	356.6
77.5°	1397.1	1002.5	653.2	539.2	461.8	417.9	399.0	384.3	365.3	344.9	325.9
80°	602.1	605.0	523.2	457.4	401.9	350.7	325.9	308.3	298.1	290.8	280.6
82.5°	420.9	434.0	399.0	355.1	306.9	270.4	248.4	244.0	245.5	245.5	242.6
85°	315.7	309.8	279.1	254.3	232.4	209.0	191.4	190.0	195.8	195.8	191.4
87.5°	182.7	184.1	157.8	147.6	153.4	131.5	119.8	121.3	135.9	134.4	131.5
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°	2975.3	2975.3	2975.3	2975.3	2975.3
2.5°	3061.6	3065.9	3064.5	3068.9	3064.5
5°	3118.5	3117.1	3115.6	3121.5	3114.2
7.5°	3109.8	3111.2	3111.2	3111.2	3109.8
10°	3087.9	3093.7	3096.6	3102.5	3101.0
12.5°	3080.5	3089.3	3098.1	3106.9	3108.3
15°	3082.0	3087.9	3092.2	3096.6	3098.1
17.5°	3044.0	3042.6	3038.2	3035.2	3032.3
20°	2966.6	2959.3	2951.9	2940.3	2946.1
22.5°	2870.1	2849.7	2826.3	2807.3	2805.8
25°	2757.6	2719.6	2681.6	2656.8	2648.0
27.5°	2658.2	2612.9	2573.5	2551.5	2545.7
30°	2539.8	2498.9	2463.9	2444.9	2433.2
32.5°	2364.5	2332.3	2288.5	2273.9	2272.4
35°	2120.4	2095.6	2064.9	2059.1	2051.8
37.5°	1844.2	1835.5	1820.9	1803.3	1800.4
40°	1549.0	1554.9	1550.5	1540.3	1524.2
42.5°	1264.1	1274.3	1275.8	1283.1	1290.4
45°	1006.9	1015.6	1015.6	1023.0	1031.7
47.5°	773.1	767.2	771.6	778.9	783.3
50°	584.5	580.2	572.9	567.0	561.2
52.5°	470.6	461.8	441.3	435.5	429.6
55°	415.0	399.0	384.3	378.5	378.5
57.5°	399.0	378.5	362.4	355.1	352.2
60°	401.9	372.6	352.2	340.5	336.1
62.5°	415.0	374.1	346.3	333.2	328.8
65°	413.6	371.2	344.9	330.3	325.9
66°	406.3	366.8	342.0	328.8	325.9
67.5°	394.6	361.0	339.0	327.3	323.0
70°	371.2	349.3	333.2	323.0	318.6
72.5°	352.2	337.6	323.0	311.3	308.3
75°	334.7	320.0	306.9	301.0	296.7
77.5°	308.3	295.2	287.9	282.0	279.1
80°	273.3	264.5	255.7	249.9	245.5
82.5°	238.2	226.5	217.7	213.4	210.4
85°	194.4	187.1	173.9	165.1	163.7
87.5°	130.1	122.8	118.4	111.1	103.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)