

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: P189861

Luminaire Tested: **VERD-M-A0485-E-U-T4-7030-AP**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189861
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26232)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-A0485-E-U-T4-7030-AP
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 3000K LEDS AT 85% STANDARD LUMENS AND TYPE IV OPTICS, GREY
PAINTED FINISH
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25147 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

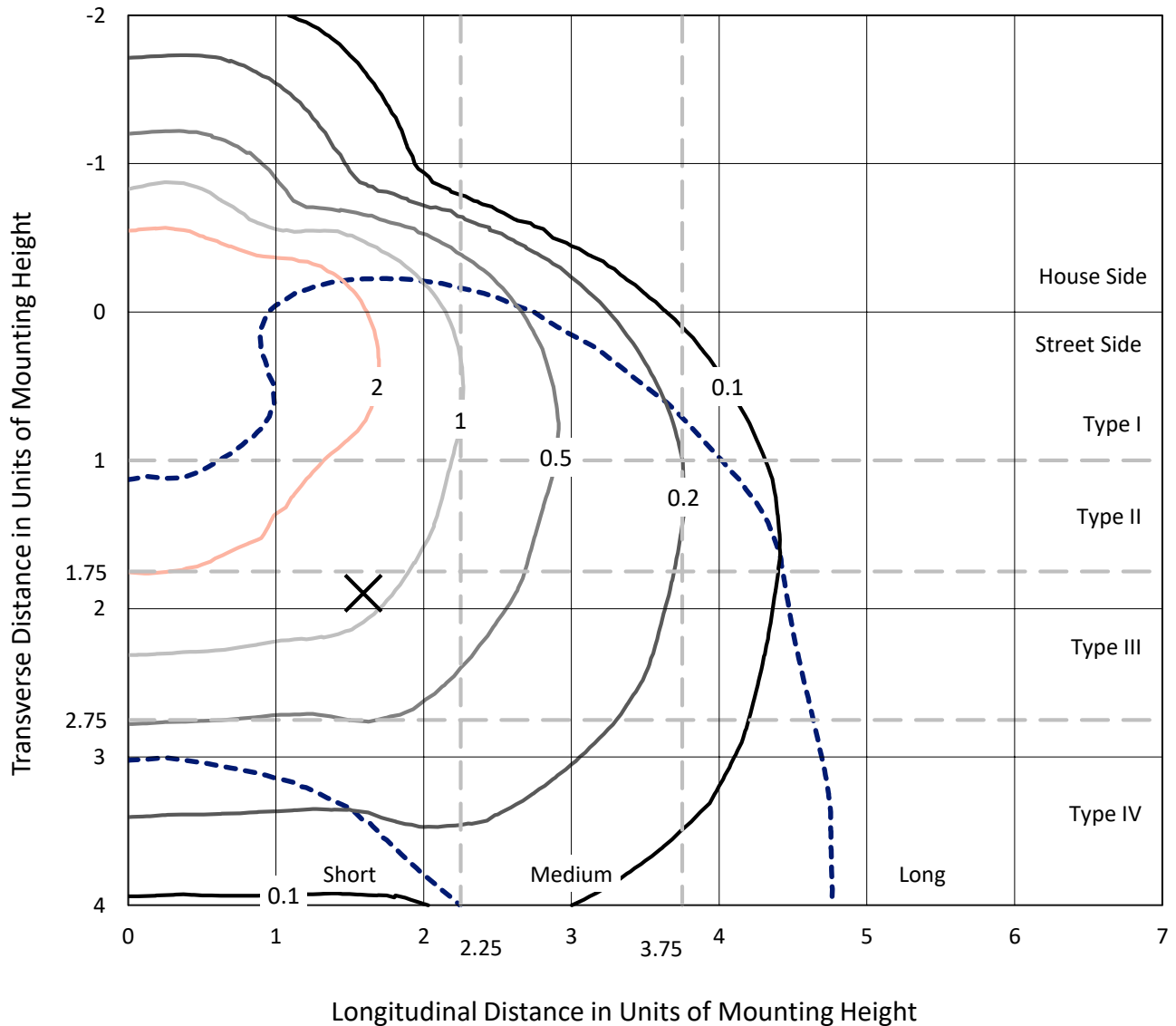
Input Watts (W): 210
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

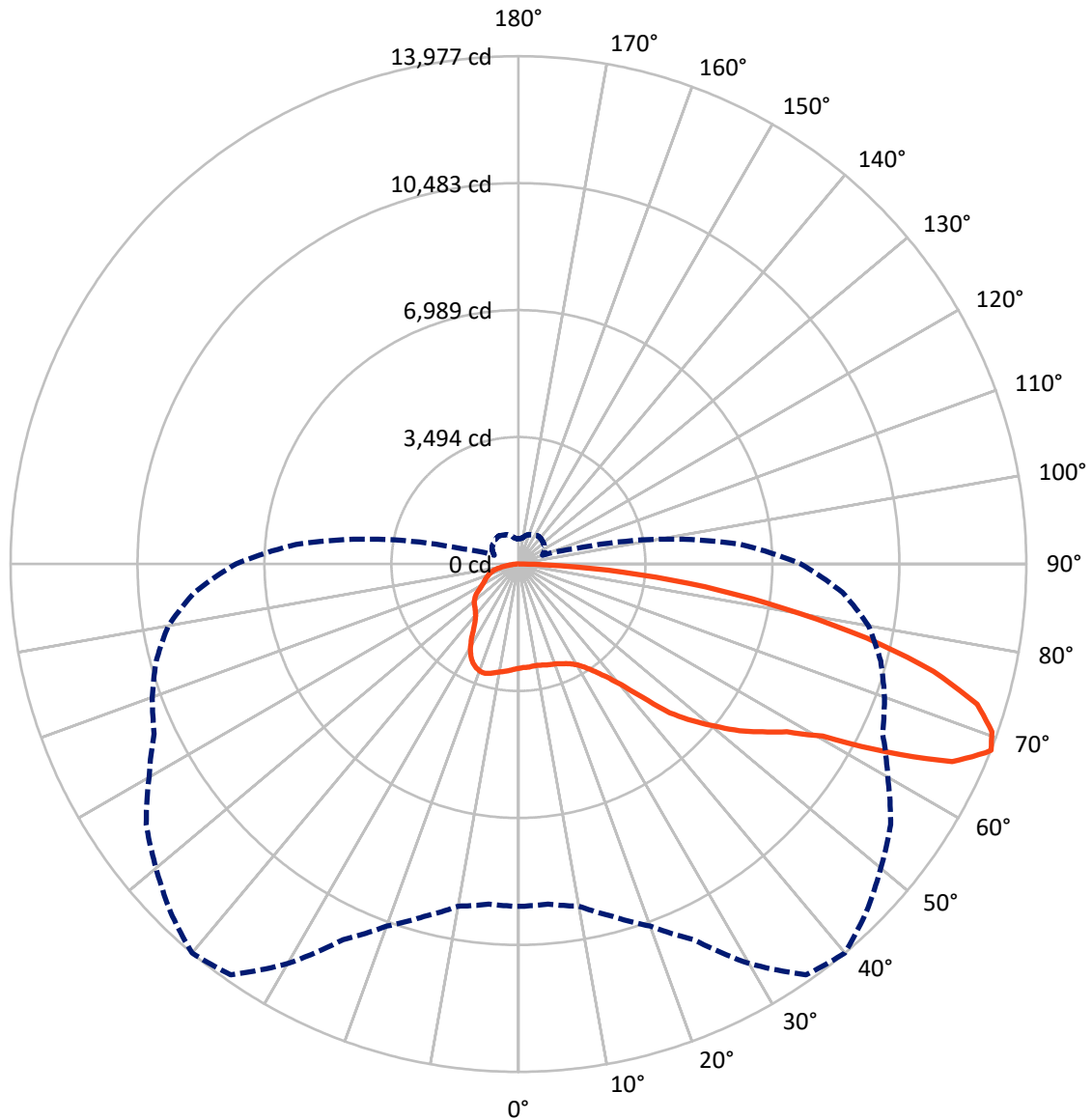
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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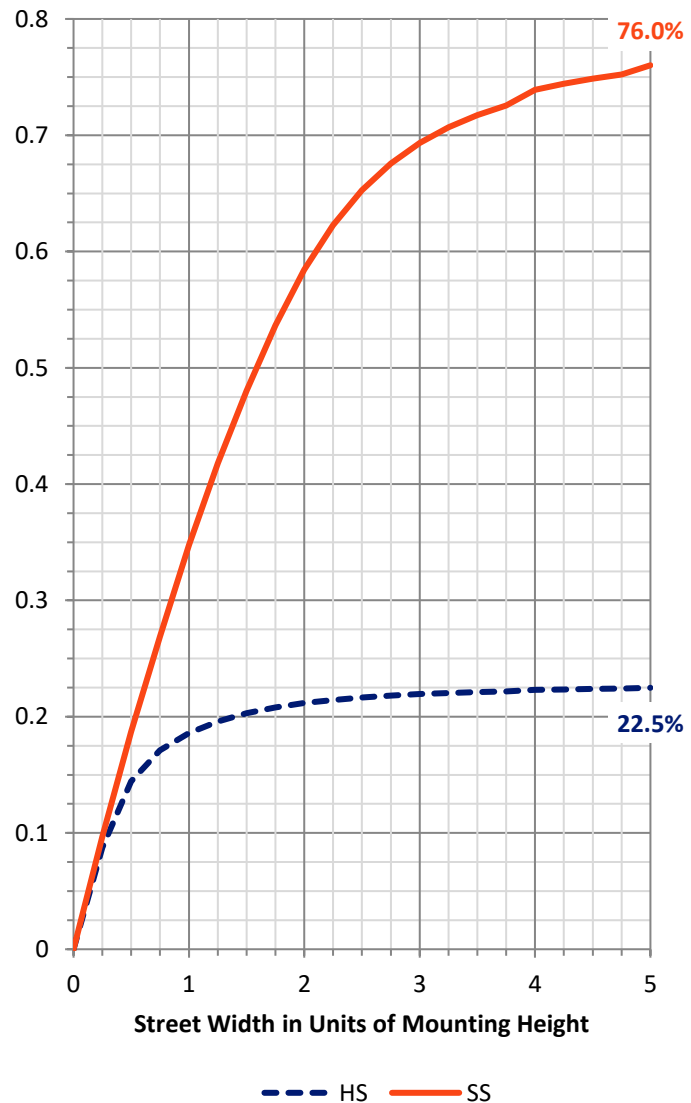
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5722.9	0.0	5722.9
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	19424.1	0.0	19424.1
	% Fixture	77.2	0.0	77.2
Total	Lumens	25147.0	0.0	25147.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.3	1.1
10°-20°	851.3	3.4
20°-30°	1433.0	5.7
30°-40°	2148.3	8.5
40°-50°	3519.2	14.0
50°-60°	5018.5	20.0
60°-70°	6323.6	25.1
70°-80°	4646.2	18.5
80°-90°	929.5	3.7
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°	25147.0	100.0
0°-180°	25147.0	100.0



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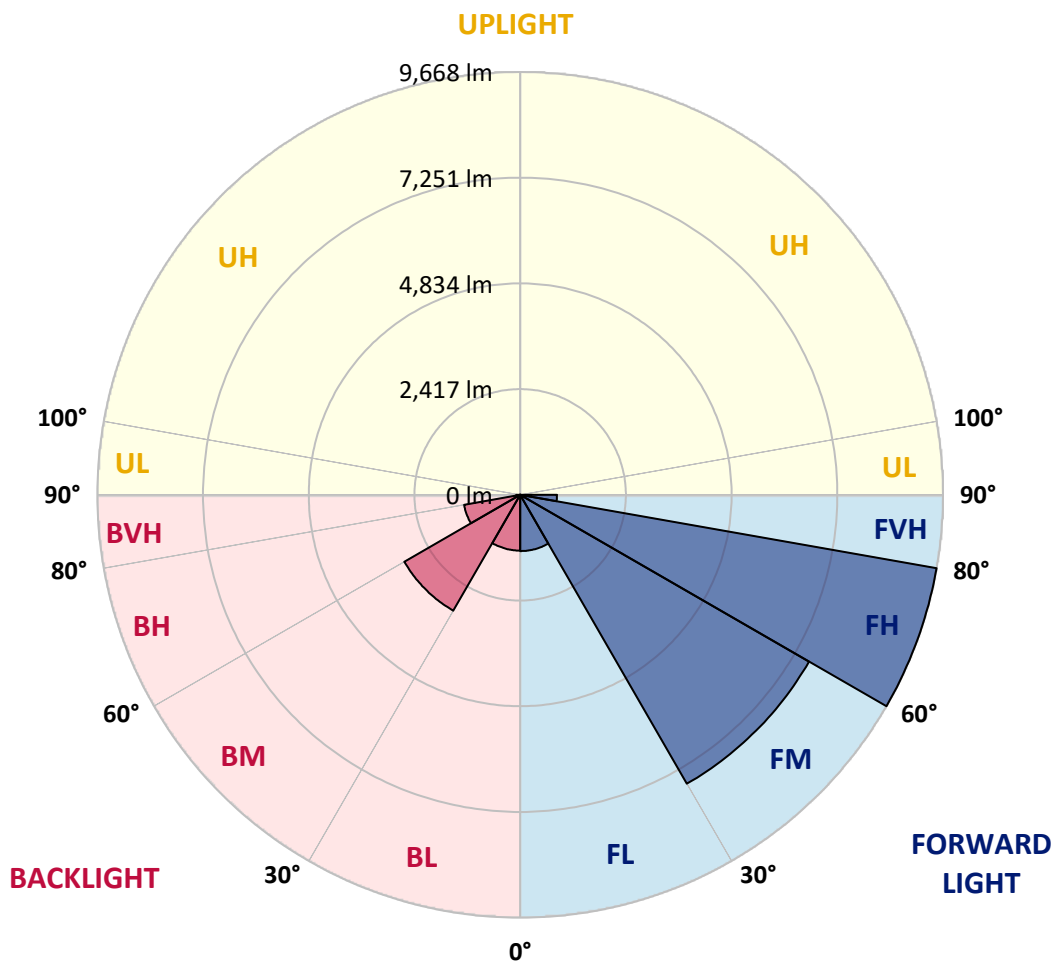
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1286.5	5.1			
FM	(30°-60°)	7626.6	30.3			
FH	(60°-80°)	9668.1	38.4			G4/12000
FVH	(80°-90°)	842.9	3.4			G5
BL	(0°-30°)	1275.2	5.1	B3/2500		
BM	(30°-60°)	3059.5	12.2	B3/5000		
BH	(60°-80°)	1301.6	5.2	B3/2500		G3/2500
BVH	(80°-90°)	86.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3
2.5°	2882.6	2880.9	2867.6	2864.3	2852.7	2854.4	2851.1	2846.1	2847.8	2837.8	2837.8
5°	2879.2	2879.2	2866.0	2862.7	2856.0	2862.7	2861.0	2851.1	2854.4	2852.7	2851.1
7.5°	2852.7	2849.4	2834.5	2832.9	2827.9	2837.8	2841.1	2832.9	2836.2	2847.8	2851.1
10°	2829.5	2831.2	2817.9	2817.9	2814.6	2831.2	2839.5	2834.5	2837.8	2854.4	2856.0
12.5°	2793.1	2798.1	2789.8	2793.1	2794.8	2817.9	2839.5	2846.1	2854.4	2869.3	2877.6
15°	2776.5	2778.2	2773.2	2779.8	2788.1	2814.6	2841.1	2861.0	2882.6	2904.1	2917.3
17.5°	2803.0	2801.4	2793.1	2794.8	2799.7	2822.9	2856.0	2885.9	2905.7	2927.3	2952.1
20°	2811.3	2816.3	2811.3	2816.3	2824.6	2849.4	2892.5	2919.0	2933.9	2953.8	2986.9
22.5°	2862.7	2856.0	2854.4	2859.4	2857.7	2880.9	2919.0	2958.8	2983.6	2995.2	3030.0
25°	2914.0	2909.1	2909.1	2919.0	2919.0	2937.2	2973.7	3006.8	3035.0	3071.4	3117.8
27.5°	2968.7	2965.4	2965.4	2985.3	2995.2	3011.8	3048.2	3084.7	3114.5	3150.9	3217.2
30°	3079.7	3073.1	3059.8	3083.0	3088.0	3102.9	3149.3	3187.4	3225.5	3273.5	3336.5
32.5°	3271.9	3260.3	3238.7	3240.4	3232.1	3243.7	3313.3	3338.1	3391.1	3440.8	3495.5
35°	3696.0	3654.5	3606.5	3576.7	3536.9	3500.5	3545.2	3580.0	3634.7	3684.4	3755.6
37.5°	4320.5	4242.7	4171.4	4138.3	4065.4	3969.3	3937.8	3888.1	3936.2	4019.0	4105.2
40°	5016.3	5016.3	4936.8	4845.7	4728.1	4567.4	4481.2	4396.7	4366.9	4395.1	4522.6
42.5°	5679.0	5700.5	5624.3	5529.9	5430.5	5263.1	5148.8	5077.6	5018.0	4988.1	5031.2
45°	6295.2	6374.8	6326.7	6222.3	6157.7	6088.2	6051.7	5922.5	5843.0	5723.7	5682.3
47.5°	6754.1	6832.0	6780.6	6628.2	6590.1	6578.5	6576.9	6492.4	6442.7	6331.7	6263.8
50°	7231.2	7345.5	7254.4	6986.1	7009.2	7017.5	7034.1	7010.9	7015.9	6991.0	6952.9
52.5°	7980.0	7991.6	7670.2	7453.2	7410.2	7420.1	7493.0	7529.4	7623.9	7542.7	7559.3
55°	9068.5	8715.6	8308.1	8140.7	7961.8	7885.6	7897.2	8004.9	8154.0	8081.1	8091.0
57.5°	9429.6	9489.2	9509.1	9164.5	9061.8	8843.1	8796.8	8573.1	8713.9	8612.9	8646.0
60°	10188.3	10355.7	10317.6	10402.0	10188.3	10180.1	10252.9	9762.6	9621.8	9343.5	9275.5
62.5°	11036.5	11034.9	11265.2	11329.8	11417.6	11283.4	11574.9	11520.3	11407.6	10595.9	10105.5
65°	10695.3	10688.6	10839.4	11348.0	11523.6	11909.6	12338.7	12931.7	13114.0	12728.0	11936.1
67.5°	9534.0	9577.0	9762.6	10367.3	10867.6	11556.7	12607.0	13712.0	13864.4	13476.8	12943.3
68°	9423.0	9396.5	9562.1	10044.2	10604.2	11404.3	12696.5	13803.1	13977.1	13543.0	13019.5
70°	8165.6	8139.1	8447.2	8993.9	9600.2	10761.5	12810.8	13779.9	13824.7	13428.7	12954.9
72.5°	6361.5	6330.0	6619.9	7062.3	7739.8	8998.9	11831.7	13175.3	13201.8	12827.4	12444.7
75°	4622.0	4583.9	4855.6	5246.6	5808.2	6916.5	9790.7	11488.8	11806.9	11850.0	11734.0
77.5°	3189.0	3268.6	3536.9	3820.2	4320.5	5160.4	7400.2	9182.8	9800.7	10190.0	10453.4
80°	2143.7	2274.6	2481.6	2750.0	3149.3	3808.6	5505.0	6861.8	7400.2	7789.5	7980.0
82.5°	1406.5	1426.4	1595.3	1827.3	2171.9	2702.0	3888.1	4868.9	5178.7	5228.4	5037.8
85°	738.9	796.8	901.2	1047.0	1262.4	1582.1	2153.6	2786.5	2900.8	2879.2	2600.9
87.5°	270.0	293.2	344.6	414.2	516.9	669.3	866.4	969.1	733.9	540.1	386.0
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°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3
2.5°	2842.8	2829.5	2827.9	2852.7	2846.1	2846.1	2842.8	2854.4	2842.8	2842.8	2859.4
5°	2849.4	2841.1	2841.1	2867.6	2874.3	2867.6	2874.3	2874.3	2871.0	2877.6	2889.2
7.5°	2847.8	2851.1	2852.7	2869.3	2889.2	2880.9	2900.8	2889.2	2904.1	2917.3	2920.7
10°	2847.8	2867.6	2875.9	2880.9	2899.1	2900.8	2915.7	2904.1	2927.3	2945.5	2948.8
12.5°	2877.6	2902.4	2932.3	2938.9	2953.8	2975.3	2977.0	2975.3	3005.1	3018.4	3033.3
15°	2927.3	2957.1	2993.5	3010.1	3030.0	3071.4	3066.4	3084.7	3117.8	3132.7	3159.2
17.5°	2980.3	3013.4	3056.5	3088.0	3117.8	3167.5	3164.2	3199.0	3232.1	3255.3	3285.1
20°	3028.3	3073.1	3122.8	3167.5	3217.2	3265.2	3275.2	3316.6	3363.0	3399.4	3424.3
22.5°	3084.7	3134.4	3189.0	3253.6	3316.6	3363.0	3406.1	3467.3	3518.7	3555.2	3570.1
25°	3174.1	3225.5	3286.8	3377.9	3447.5	3505.5	3585.0	3661.2	3709.2	3722.5	3717.5
27.5°	3286.8	3344.8	3419.3	3538.6	3614.8	3700.9	3815.2	3881.5	3908.0	3883.2	3818.6
30°	3417.6	3497.2	3589.9	3715.8	3815.2	3954.4	4093.6	4149.9	4120.1	4024.0	3883.2
32.5°	3598.2	3709.2	3818.6	3954.4	4118.4	4313.9	4458.0	4477.9	4363.6	4168.1	3944.5
35°	3883.2	4017.4	4156.5	4338.7	4638.6	4902.0	5019.6	4950.0	4706.5	4393.4	4057.1
37.5°	4265.8	4429.9	4636.9	4905.3	5350.9	5652.5	5702.2	5543.1	5182.0	4718.1	4219.5
40°	4714.8	4936.8	5211.8	5670.7	6147.8	6421.1	6404.6	6171.0	5707.1	5094.2	4436.5
42.5°	5278.1	5523.2	5869.5	6402.9	6941.3	7133.5	7054.0	6767.4	6219.0	5495.1	4673.4
45°	5828.1	6078.2	6469.2	7067.2	7584.1	7733.2	7607.3	7282.6	6677.9	5876.1	4941.8
47.5°	6378.1	6550.4	7047.3	7700.1	8185.5	8266.6	8082.8	7671.9	7058.9	6204.1	5135.6
50°	7025.8	7158.3	7676.9	8362.7	8723.9	8740.4	8545.0	8011.5	7327.3	6402.9	5281.4
52.5°	7633.8	7855.8	8392.5	8975.7	9197.7	9121.5	8901.1	8314.7	7522.8	6608.3	5322.8
55°	8221.9	8548.3	9133.1	9514.1	9603.5	9479.3	9139.7	8531.7	7685.2	6610.0	5288.0
57.5°	8788.5	9240.7	9787.4	10035.9	9996.2	9744.4	9235.8	8581.4	7701.7	6517.2	5148.8
60°	9408.1	9876.9	10355.7	10410.3	10238.0	9891.8	9318.6	8598.0	7605.6	6325.1	4911.9
62.5°	10087.3	10450.1	10725.1	10614.1	10373.9	10011.1	9353.4	8437.3	7444.9	5997.0	4361.9
65°	11015.0	11024.9	11000.1	10769.8	10403.7	9905.1	9207.6	8337.9	7042.4	5374.1	3394.5
67.5°	12386.7	11632.9	11084.6	10740.0	10335.8	9794.1	9035.3	7857.4	6354.9	4231.1	1946.6
68°	12506.0	11739.0	11059.7	10721.8	10322.5	9782.5	8949.2	7771.3	6144.5	3924.6	1640.1
70°	12534.1	11739.0	10909.0	10615.8	10269.5	9560.5	8493.6	6946.3	5019.6	2518.1	682.5
72.5°	12159.7	11306.6	10728.4	10523.0	9923.3	8806.7	7234.6	5294.6	3046.6	790.2	520.2
75°	11657.8	10791.4	10087.3	9482.6	8604.6	7032.4	5193.6	3046.6	889.6	386.0	452.3
77.5°	10168.5	9225.8	8417.4	7637.1	6300.2	4550.8	2572.8	777.0	280.0	309.8	381.0
80°	7241.2	6195.8	5021.3	3932.9	2266.3	864.8	311.4	198.8	202.1	235.2	306.5
82.5°	3980.9	2642.3	1577.1	611.3	212.1	182.2	164.0	135.8	142.5	190.5	223.6
85°	1734.5	836.6	253.5	154.1	134.2	122.6	104.4	94.4	120.9	125.9	120.9
87.5°	164.0	82.8	66.3	63.0	51.4	44.7	33.1	31.5	29.8	29.8	34.8
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3	2869.3
2.5°	2856.0	2859.4	2872.6	2869.3	2879.2	2894.2	2895.8	2904.1	2914.0	2924.0	2937.2
5°	2902.4	2902.4	2909.1	2904.1	2912.4	2920.7	2933.9	2937.2	2950.5	2970.4	2988.6
7.5°	2937.2	2935.6	2937.2	2950.5	2960.4	2960.4	2973.7	2975.3	2988.6	3005.1	3020.1
10°	2972.0	2993.5	2986.9	2996.9	3000.2	3001.8	3008.5	3011.8	3030.0	3036.6	3048.2
12.5°	3048.2	3068.1	3056.5	3071.4	3073.1	3064.8	3054.8	3053.2	3053.2	3046.6	3041.6
15°	3159.2	3169.2	3162.5	3150.9	3142.6	3141.0	3109.5	3084.7	3063.1	3033.3	3010.1
17.5°	3283.5	3278.5	3260.3	3245.4	3212.2	3189.0	3147.6	3092.9	3043.2	2978.6	2933.9
20°	3416.0	3381.2	3371.3	3319.9	3260.3	3202.3	3136.0	3059.8	2970.4	2875.9	2799.7
22.5°	3533.6	3482.3	3435.9	3368.0	3275.2	3187.4	3084.7	2986.9	2874.3	2745.1	2635.7
25°	3644.6	3546.9	3467.3	3368.0	3247.0	3132.7	3003.5	2879.2	2731.8	2571.1	2428.6
27.5°	3705.9	3573.4	3444.2	3310.0	3172.5	3016.7	2874.3	2718.5	2544.6	2362.4	2191.7
30°	3712.5	3551.8	3382.9	3197.3	3031.7	2851.1	2683.8	2489.9	2299.4	2110.6	1981.3
32.5°	3715.8	3490.5	3265.2	3043.2	2839.5	2630.7	2438.6	2224.9	2064.2	1948.2	1848.8
35°	3719.2	3416.0	3127.7	2836.2	2604.2	2378.9	2176.8	2009.5	1895.2	1819.0	1739.5
37.5°	3755.6	3346.4	2978.6	2632.4	2375.6	2150.3	1981.3	1853.8	1775.9	1719.6	1660.0
40°	3797.0	3263.6	2821.3	2440.2	2175.2	1976.4	1850.5	1770.9	1713.0	1669.9	1621.9
42.5°	3826.8	3119.5	2605.9	2248.1	1992.9	1837.2	1766.0	1722.9	1689.8	1658.3	1605.3
45°	3879.9	2960.4	2364.0	2004.5	1824.0	1729.5	1699.7	1684.8	1660.0	1628.5	1570.5
47.5°	3942.8	2791.4	2118.8	1800.8	1671.6	1656.6	1655.0	1641.7	1606.9	1573.8	1514.2
50°	3975.9	2624.1	1860.4	1630.1	1577.1	1588.7	1598.7	1585.4	1534.0	1486.0	1433.0
52.5°	4078.6	2549.6	1626.8	1494.3	1497.6	1509.2	1515.8	1497.6	1447.9	1398.2	1343.5
55°	4242.7	2441.9	1452.9	1360.1	1389.9	1406.5	1423.1	1394.9	1361.8	1325.3	1283.9
57.5°	4012.4	2046.0	1272.3	1234.2	1252.4	1267.3	1278.9	1278.9	1278.9	1282.2	1252.4
60°	3248.7	1456.2	1100.0	1075.2	1098.4	1128.2	1166.3	1187.8	1196.1	1199.4	1186.2
62.5°	2287.8	1033.7	947.6	962.5	992.3	1042.0	1078.5	1101.7	1098.4	1078.5	1048.7
65°	1280.6	859.8	874.7	919.4	944.3	984.0	1017.2	1030.4	1005.6	975.8	949.3
67.5°	722.3	788.6	848.2	886.3	907.8	931.0	950.9	965.8	936.0	901.2	881.3
68°	704.1	778.6	841.6	874.7	896.2	919.4	934.3	944.3	912.8	881.3	864.8
70°	656.0	760.4	813.4	839.9	841.6	879.7	883.0	889.6	863.1	826.7	805.1
72.5°	601.4	720.6	747.1	768.7	786.9	800.2	831.6	818.4	785.2	753.8	704.1
75°	555.0	617.9	642.8	692.5	705.7	727.3	743.8	712.4	662.7	632.8	603.0
77.5°	482.1	513.6	540.1	550.0	589.8	606.3	624.6	624.6	594.7	598.0	553.3
80°	371.1	374.4	364.5	394.3	447.3	468.8	475.5	462.2	483.7	480.4	462.2
82.5°	213.7	198.8	215.4	223.6	250.2	270.0	303.2	331.3	334.6	324.7	344.6
85°	89.5	79.5	91.1	104.4	132.5	164.0	202.1	217.0	213.7	207.1	190.5
87.5°	36.4	36.4	43.1	51.4	67.9	86.1	97.7	114.3	124.2	127.6	119.3
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):

	165°	170°	175°	180°
0°	2869.3	2869.3	2869.3	2869.3
2.5°	2942.2	2940.5	2938.9	2935.6
5°	2993.5	2995.2	2995.2	2993.5
7.5°	3031.7	3039.9	3041.6	3041.6
10°	3061.5	3068.1	3069.8	3068.1
12.5°	3051.5	3053.2	3059.8	3061.5
15°	3005.1	2993.5	2990.2	2988.6
17.5°	2895.8	2866.0	2841.1	2829.5
20°	2723.5	2665.5	2617.5	2605.9
22.5°	2531.3	2441.9	2378.9	2357.4
25°	2299.4	2188.4	2120.5	2099.0
27.5°	2072.5	1963.1	1915.1	1888.6
30°	1885.3	1804.1	1751.1	1724.6
32.5°	1761.0	1681.5	1626.8	1602.0
35°	1658.3	1575.5	1502.6	1469.4
37.5°	1590.4	1492.6	1408.1	1375.0
40°	1550.6	1462.8	1371.7	1335.3
42.5°	1530.7	1456.2	1375.0	1335.3
45°	1499.3	1419.7	1350.2	1307.1
47.5°	1451.2	1376.7	1307.1	1267.3
50°	1363.4	1287.2	1230.9	1199.4
52.5°	1270.6	1186.2	1126.5	1091.7
55°	1207.7	1123.2	1076.8	1053.6
57.5°	1196.1	1116.6	1070.2	1043.7
60°	1128.2	1052.0	992.3	964.2
62.5°	982.4	907.8	861.5	843.2
65°	891.3	820.0	775.3	762.1
67.5°	831.6	757.1	710.7	700.8
68°	816.7	742.2	702.4	689.2
70°	748.8	677.6	642.8	629.5
72.5°	604.7	535.1	488.7	472.1
75°	526.8	450.6	412.5	404.2
77.5°	462.2	372.7	334.6	326.4
80°	374.4	294.9	202.1	188.9
82.5°	280.0	180.6	150.8	137.5
85°	162.4	124.2	97.7	91.1
87.5°	102.7	86.1	74.5	69.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)