

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: INVUE

Report Number: P148825

Luminaire Tested: **VWM-F05-LED-E1-RW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P148825
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33677)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: VWM-F05-LED-E1-RW
Description: VISION WALL MEDIUM LED LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12894.4 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

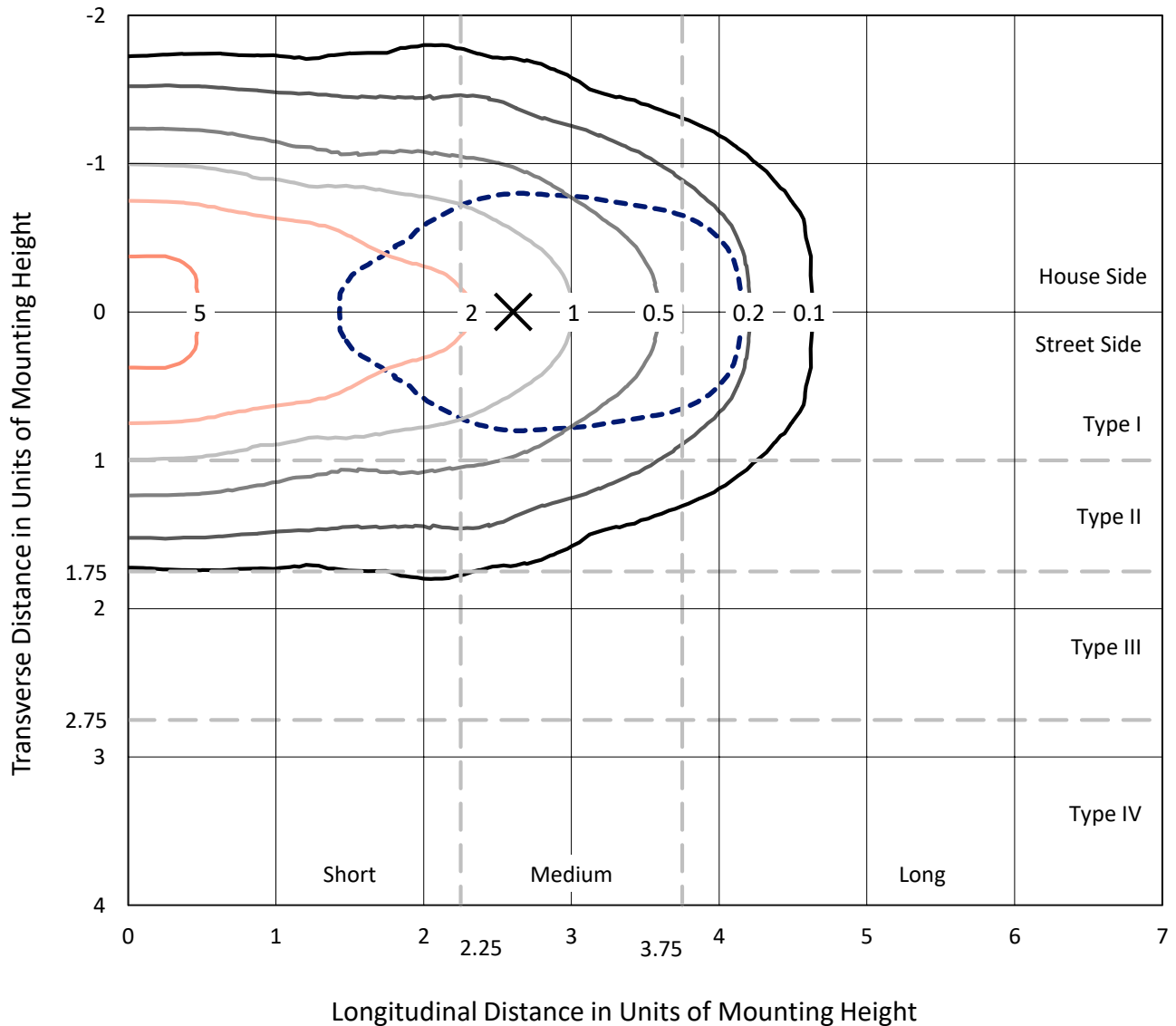
Input Watts (W): 133.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

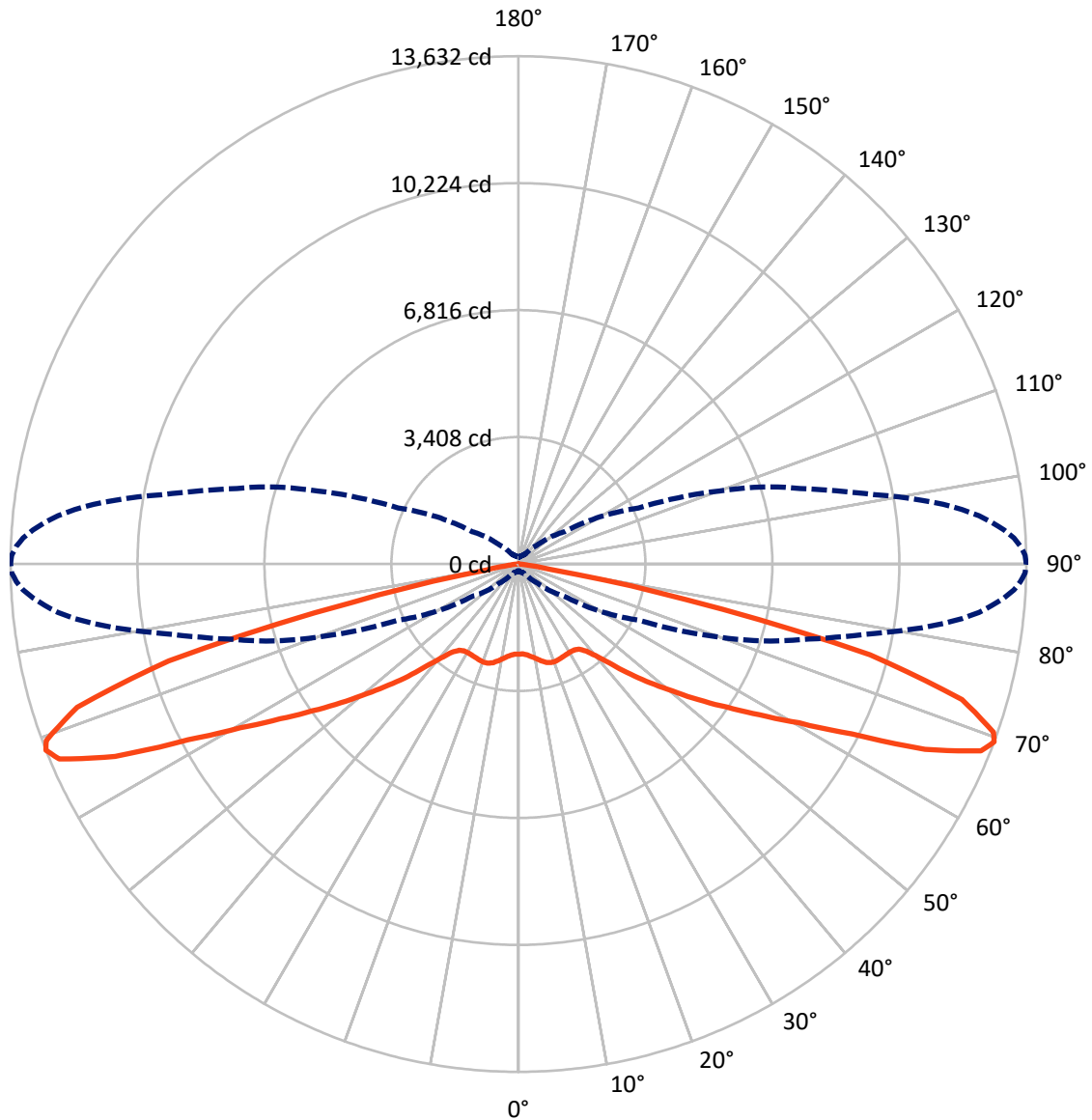


Based on 20 foot mounting height. Maximum calculated value = 6.2 fc
 Type I - Short - Full Cutoff

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CATALOG NUMBER: VWM-F05-LED-E1-RW

Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6447.2	0.0	6447.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6447.2	0.0	6447.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	12894.4	0.0	12894.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.0	1.8
10°-20°	747.6	5.8
20°-30°	1211.2	9.4
30°-40°	1509.4	11.7
40°-50°	1886.2	14.6
50°-60°	2329.1	18.1
60°-70°	2894.0	22.4
70°-80°	1921.2	14.9
80°-90°	158.6	1.2
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°	12894.4	100.0
0°-180°	12894.4	100.0



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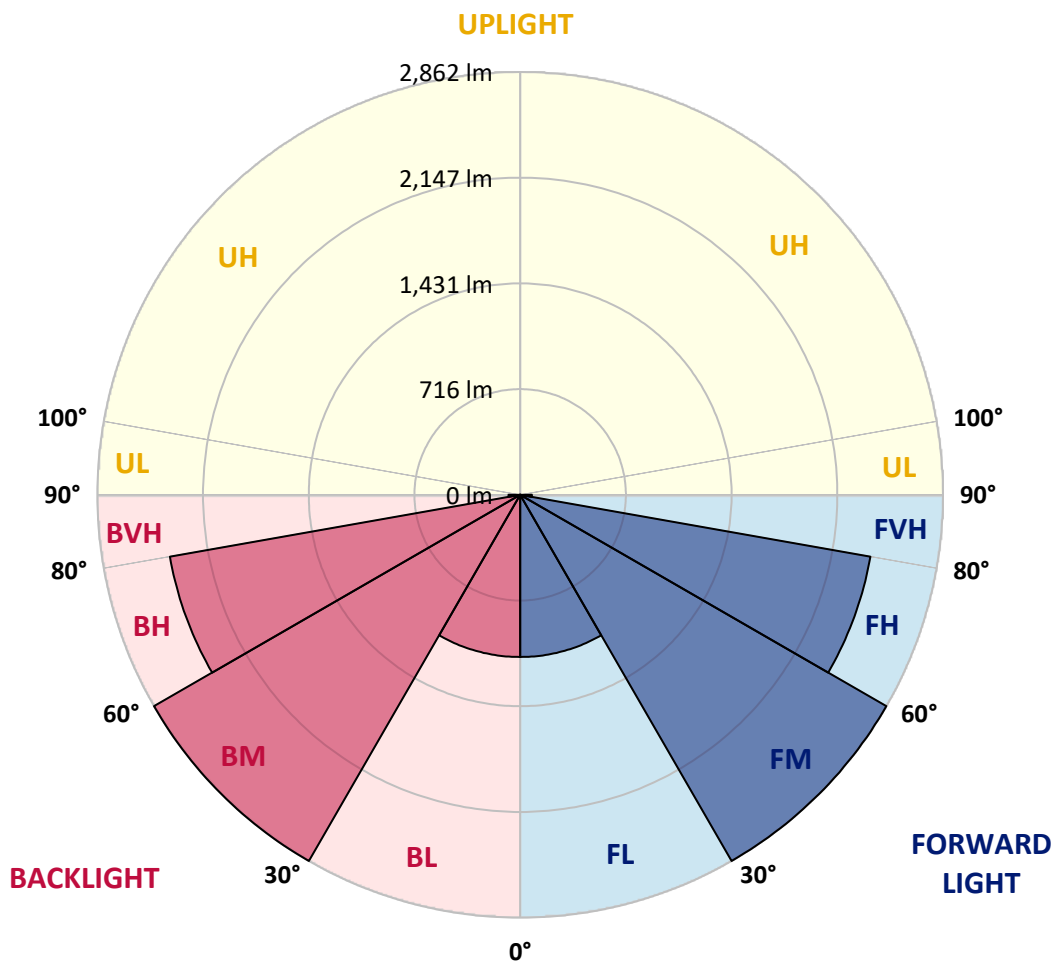
CATALOG NUMBER: VWM-F05-LED-E1-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1097.9	8.5			
FM (30°-60°)	2862.4	22.2			
FH (60°-80°)	2407.6	18.7			G2/5000
FVH (80°-90°)	79.3	0.6			G1/100
BL (0°-30°)	1097.9	8.5	B3/2500		
BM (30°-60°)	2862.4	22.2	B3/5000		
BH (60°-80°)	2407.6	18.7	B3/2500		G3/2500
BVH (80°-90°)	79.3	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0
2.5°	2427.0	2429.1	2427.8	2430.5	2429.8	2429.8	2428.4	2425.7	2425.4	2425.0	2424.7
5°	2450.4	2447.6	2451.8	2455.9	2454.6	2455.2	2454.6	2454.6	2454.3	2454.0	2453.7
7.5°	2475.2	2474.5	2477.2	2488.3	2489.6	2493.8	2498.6	2502.0	2502.1	2502.3	2502.4
10°	2496.5	2497.2	2504.1	2519.9	2528.2	2541.2	2554.4	2564.6	2565.4	2566.2	2566.9
12.5°	2513.7	2514.4	2524.7	2549.5	2569.4	2594.2	2622.4	2638.2	2639.6	2641.0	2642.4
15°	2515.1	2517.2	2535.0	2575.6	2615.6	2656.2	2689.8	2711.1	2712.2	2713.4	2714.4
17.5°	2497.2	2498.6	2528.9	2588.7	2655.4	2718.7	2753.8	2763.4	2763.9	2764.3	2764.7
20°	2450.4	2453.9	2496.5	2585.3	2687.1	2769.6	2806.1	2793.0	2791.7	2790.4	2789.1
22.5°	2374.8	2374.0	2429.8	2549.5	2693.2	2809.6	2841.9	2807.4	2803.4	2799.3	2795.3
25°	2252.3	2260.6	2326.0	2469.0	2658.2	2818.5	2867.3	2815.0	2809.2	2803.3	2797.5
27.5°	2119.5	2124.4	2193.8	2347.2	2576.3	2787.5	2879.7	2830.1	2823.6	2817.1	2810.6
30°	1964.8	1971.0	2045.2	2205.6	2445.0	2707.8	2876.2	2864.6	2857.0	2849.3	2841.7
32.5°	1813.4	1820.3	1887.0	2062.4	2306.6	2598.4	2855.6	2913.4	2905.6	2897.8	2889.9
35°	1656.6	1666.9	1748.0	1925.6	2173.2	2476.6	2824.0	2976.0	2971.7	2967.3	2963.0
37.5°	1526.5	1528.6	1607.1	1793.4	2049.4	2360.3	2782.0	3055.1	3058.3	3061.4	3064.6
40°	1381.4	1394.4	1472.9	1669.6	1937.2	2262.0	2742.1	3162.4	3178.9	3195.3	3211.8
42.5°	1251.4	1252.8	1332.6	1535.5	1815.4	2182.8	2720.1	3291.8	3326.9	3362.1	3397.2
45°	1114.4	1120.0	1192.2	1388.3	1675.1	2089.3	2719.4	3441.1	3497.2	3553.4	3609.5
47.5°	985.1	987.2	1063.6	1245.8	1514.2	1958.6	2714.6	3601.4	3677.8	3754.2	3830.6
50°	861.3	859.2	934.2	1109.6	1355.2	1787.3	2672.6	3783.0	3879.5	3976.0	4072.5
52.5°	719.6	729.2	807.0	974.8	1210.8	1613.2	2550.2	3981.8	4097.2	4212.6	4328.1
55°	580.6	584.8	668.0	824.8	1064.2	1450.8	2336.9	4164.8	4300.8	4436.9	4573.0
57.5°	427.9	440.3	513.2	668.0	915.6	1314.0	2065.8	4259.7	4425.3	4590.9	4756.5
60°	302.0	311.6	376.3	506.3	752.6	1170.2	1832.6	4206.8	4421.9	4637.1	4852.3
62.5°	235.3	242.8	294.5	379.0	586.8	1026.4	1665.5	4035.4	4328.2	4621.0	4913.8
65°	206.4	213.2	260.0	303.4	438.2	879.8	1574.0	3854.5	4241.5	4628.6	5015.6
67.5°	186.4	194.7	235.3	265.5	357.0	767.8	1549.9	3740.4	4178.7	4617.0	5055.4
69°	177.5	185.8	222.2	247.6	331.6	727.8	1508.6	3560.8	3996.6	4432.4	4868.2
70°	172.0	178.8	212.6	238.7	323.3	700.3	1439.8	3336.5	3764.5	4192.4	4620.4
72.5°	159.6	163.0	192.6	218.1	300.0	566.2	1107.6	2478.0	2849.0	3220.0	3591.0
75°	141.0	145.1	172.7	197.4	233.9	351.5	701.0	1532.8	1809.7	2086.7	2363.6
77.5°	121.8	125.2	149.3	188.5	181.6	219.4	419.0	853.0	1013.7	1174.3	1335.0
80°	97.7	101.8	123.2	187.2	150.0	170.6	301.4	596.4	639.8	683.1	726.5
82.5°	71.5	75.0	96.3	151.4	114.9	128.6	229.8	505.6	520.7	535.8	550.8
85°	36.5	37.2	61.2	92.2	73.0	66.8	129.3	346.0	355.7	365.3	375.0
87.5°	6.2	6.2	13.8	15.8	17.9	11.0	16.5	59.2	61.0	62.9	64.7
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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CATALOG NUMBER: VWM-F05-LED-E1-RW

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0
2.5°	2424.3	2424.0	2422.8	2423.0	2423.9	2423.4	2424.3	2424.4	2425.3	2422.6	2422.1
5°	2453.5	2453.2	2453.0	2452.9	2453.5	2453.3	2453.9	2455.0	2454.7	2453.0	2452.7
7.5°	2502.6	2502.7	2503.4	2502.7	2504.1	2503.4	2502.0	2504.2	2505.8	2505.9	2507.4
10°	2567.7	2568.4	2570.8	2570.5	2572.9	2572.6	2572.9	2575.2	2576.9	2577.1	2578.8
12.5°	2643.8	2645.1	2646.4	2647.6	2650.2	2648.7	2652.0	2653.4	2655.5	2659.6	2657.5
15°	2715.5	2716.6	2720.4	2720.6	2723.0	2724.0	2727.0	2728.2	2728.8	2732.1	2732.6
17.5°	2765.1	2765.5	2766.9	2766.2	2768.2	2767.6	2769.6	2770.7	2772.5	2774.3	2777.5
20°	2787.8	2786.5	2785.8	2785.0	2783.5	2781.4	2782.0	2783.0	2783.2	2784.9	2787.2
22.5°	2791.2	2787.1	2783.0	2780.1	2776.0	2772.4	2769.0	2769.2	2769.5	2769.1	2770.7
25°	2791.6	2785.8	2779.3	2771.3	2765.5	2757.6	2751.0	2750.5	2748.6	2748.7	2749.5
27.5°	2804.0	2797.5	2788.3	2779.2	2766.6	2756.1	2745.6	2741.8	2738.1	2735.8	2734.8
30°	2834.0	2826.4	2815.4	2803.9	2790.1	2773.7	2758.6	2754.0	2748.6	2743.9	2739.9
32.5°	2882.0	2874.2	2862.1	2850.0	2831.7	2815.5	2800.6	2793.0	2785.4	2777.2	2769.6
35°	2958.7	2954.3	2943.6	2933.0	2919.6	2906.9	2893.4	2884.9	2872.3	2865.8	2856.6
37.5°	3067.8	3071.0	3070.9	3072.3	3068.2	3062.0	3052.4	3043.4	3039.3	3022.1	3011.1
40°	3228.2	3244.6	3259.7	3271.4	3281.6	3291.9	3300.7	3295.5	3297.1	3292.6	3286.0
42.5°	3432.4	3467.6	3499.7	3531.8	3555.0	3591.3	3616.5	3624.5	3644.8	3652.8	3667.7
45°	3665.6	3721.8	3775.6	3825.5	3871.8	3923.7	3974.2	4011.8	4052.8	4099.2	4145.8
47.5°	3907.0	3983.5	4062.9	4127.9	4195.0	4271.7	4338.8	4395.4	4469.1	4537.4	4612.5
50°	4169.0	4265.6	4356.0	4436.2	4522.5	4610.9	4702.8	4785.9	4885.4	4994.7	5112.9
52.5°	4443.5	4559.0	4663.6	4764.2	4865.5	4966.8	5064.6	5181.9	5304.8	5449.0	5596.6
55°	4709.0	4845.1	4963.9	5075.8	5191.7	5304.9	5405.8	5562.8	5713.6	5885.7	6078.5
57.5°	4922.1	5087.6	5224.6	5357.5	5488.2	5608.7	5732.6	5909.7	6101.9	6303.0	6547.5
60°	5067.5	5282.7	5457.6	5617.3	5777.7	5929.2	6071.8	6303.2	6531.8	6781.8	7086.2
62.5°	5206.6	5499.4	5727.5	5945.3	6161.7	6356.1	6533.4	6824.5	7123.2	7432.2	7794.2
65°	5402.6	5789.7	6125.7	6429.4	6728.9	7014.6	7279.8	7648.7	8025.8	8432.5	8864.6
67.5°	5493.7	5932.1	6369.7	6778.9	7159.4	7521.2	7861.8	8307.7	8751.5	9222.9	9745.2
69°	5304.0	5739.8	6207.5	6654.6	7074.9	7458.7	7827.4	8282.6	8744.1	9225.5	9752.3
70°	5048.3	5476.3	5948.5	6415.8	6817.7	7217.6	7599.6	8051.4	8518.9	9001.6	9553.0
72.5°	3962.0	4333.0	4793.4	5246.9	5650.3	6051.6	6422.6	6884.9	7355.4	7862.5	8384.6
75°	2640.6	2917.6	3260.5	3681.3	4051.1	4405.8	4765.4	5156.3	5615.5	6033.3	6511.0
77.5°	1495.6	1656.2	1855.5	2129.1	2394.4	2606.8	2863.2	3047.2	3313.7	3543.7	3786.8
80°	769.8	813.1	872.6	938.2	975.6	969.7	1007.8	970.1	978.5	947.7	914.8
82.5°	565.9	581.0	607.9	621.0	619.7	576.4	530.4	466.6	410.3	351.3	297.1
85°	384.6	394.2	401.0	411.1	408.2	389.5	348.1	292.7	238.6	191.4	153.1
87.5°	66.6	68.4	68.0	73.7	73.9	68.6	56.4	48.2	40.6	30.3	21.4
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):

	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	90°
0°	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0	2416.0
2.5°	2421.6	2421.6	2422.9	2421.5	2421.5	2421.6	2420.9	2422.2	2421.5	2419.5	2417.4
5°	2453.2	2451.1	2450.4	2451.8	2453.2	2450.4	2452.5	2454.6	2451.1	2451.8	2450.4
7.5°	2506.2	2505.5	2504.8	2506.1	2506.2	2505.4	2506.1	2504.0	2502.7	2504.8	2506.8
10°	2577.0	2576.3	2577.7	2577.7	2580.4	2579.0	2578.4	2580.4	2579.1	2577.7	2578.4
12.5°	2660.2	2658.2	2661.6	2661.6	2663.7	2663.7	2663.0	2663.6	2663.0	2661.0	2659.6
15°	2734.6	2731.8	2732.5	2738.0	2737.3	2738.6	2738.7	2737.3	2736.6	2736.0	2736.6
17.5°	2779.2	2777.9	2777.8	2780.6	2782.7	2782.0	2782.0	2782.0	2781.4	2782.0	2783.4
20°	2787.6	2787.5	2788.2	2791.0	2794.4	2792.4	2792.3	2793.8	2792.4	2793.8	2794.4
22.5°	2771.7	2773.1	2774.5	2777.9	2778.6	2778.6	2778.6	2779.3	2780.6	2780.6	2782.0
25°	2749.7	2751.0	2753.2	2755.9	2758.6	2758.6	2758.6	2760.0	2760.0	2760.7	2761.4
27.5°	2733.1	2734.6	2736.6	2739.4	2742.8	2742.8	2742.8	2744.2	2744.2	2744.9	2746.2
30°	2735.2	2732.5	2734.6	2735.9	2738.0	2738.0	2737.3	2738.0	2738.6	2738.7	2739.4
32.5°	2764.8	2758.6	2756.6	2755.8	2756.6	2754.5	2753.8	2752.4	2751.0	2751.0	2750.4
35°	2843.2	2833.6	2832.9	2827.4	2821.9	2816.4	2817.1	2813.0	2814.4	2811.0	2808.2
37.5°	3004.2	2993.2	3000.1	2988.4	2980.8	2975.4	2969.1	2960.9	2956.0	2962.2	2962.3
40°	3292.4	3284.9	3282.8	3284.9	3278.0	3281.4	3266.4	3262.2	3253.2	3259.4	3267.7
42.5°	3690.8	3686.0	3712.2	3716.9	3719.7	3723.8	3726.6	3703.9	3703.2	3698.4	3684.6
45°	4182.6	4211.6	4210.2	4241.8	4243.2	4233.6	4237.7	4227.4	4223.2	4208.1	4226.7
47.5°	4688.3	4743.4	4764.0	4770.8	4797.0	4803.2	4778.4	4770.2	4784.6	4759.8	4763.3
50°	5231.0	5290.2	5338.4	5370.8	5389.3	5390.7	5372.1	5368.0	5381.0	5334.3	5356.3
52.5°	5764.9	5854.4	5945.2	5993.4	6027.8	6030.4	6045.0	6027.7	6034.5	6023.5	6045.6
55°	6291.2	6446.0	6552.6	6646.8	6706.7	6758.3	6763.2	6781.7	6783.0	6805.8	6783.1
57.5°	6805.8	6974.3	7160.0	7327.2	7420.1	7478.6	7533.6	7608.6	7625.1	7616.2	7630.6
60°	7413.2	7673.9	7926.4	8119.0	8279.4	8432.8	8515.3	8633.0	8651.5	8702.4	8658.4
62.5°	8181.0	8559.3	8901.9	9161.2	9404.8	9643.5	9823.8	9914.6	9969.6	10076.2	10041.1
65°	9358.7	9812.8	10266.1	10637.6	10978.8	11262.9	11536.7	11667.4	11811.9	11963.2	11990.7
67.5°	10328.7	10890.8	11401.8	11854.5	12268.0	12583.8	12868.6	13094.9	13271.0	13382.4	13391.4
69°	10372.7	10956.8	11512.0	11997.6	12429.0	12764.7	13064.6	13316.4	13487.7	13601.9	13632.2
70°	10162.2	10760.1	11351.7	11842.2	12283.8	12627.1	12945.0	13185.0	13376.2	13492.5	13533.1
72.5°	8978.3	9616.7	10248.9	10678.8	11130.2	11538.8	11793.3	12038.2	12307.9	12343.0	12454.4
75°	7077.5	7614.0	8104.6	8433.4	8810.4	9177.1	9426.8	9491.4	9632.5	9810.0	9746.7
77.5°	4101.4	4266.6	4583.0	4664.2	4595.5	4755.0	4808.0	4695.2	4689.6	4793.6	4587.2
80°	908.8	857.2	921.8	873.7	875.0	876.4	862.0	856.5	866.8	856.4	842.0
82.5°	251.8	243.6	244.9	242.2	247.0	243.6	241.4	247.0	246.3	245.6	250.4
85°	121.0	119.7	117.6	117.0	114.2	110.8	105.2	105.2	108.0	103.8	105.9
87.5°	15.8	15.2	15.2	17.9	15.8	13.1	13.1	13.1	12.4	12.4	12.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)