

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: P148820

Luminaire Tested: **VWM-E05-LED-E1-RW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P148820
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-E05-LED-E1-RW
Description: VISION WALL MEDIUM LED LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (105) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15619.7 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 127.3
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

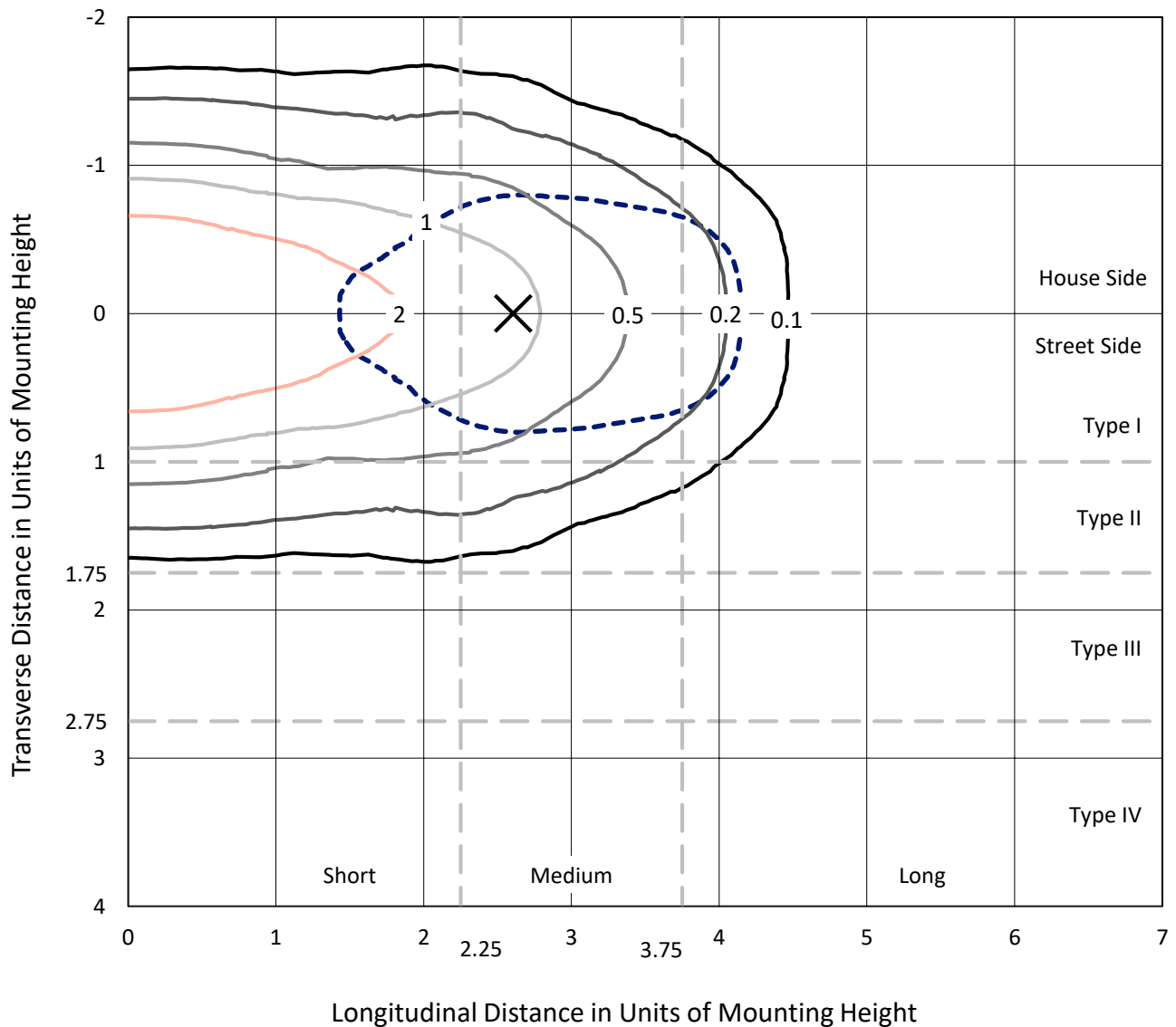


REPORT NUMBER: P148820

CATALOG NUMBER: VWM-E05-LED-E1-RW

Iso-Footcandle Lines of Horizontal Illumination

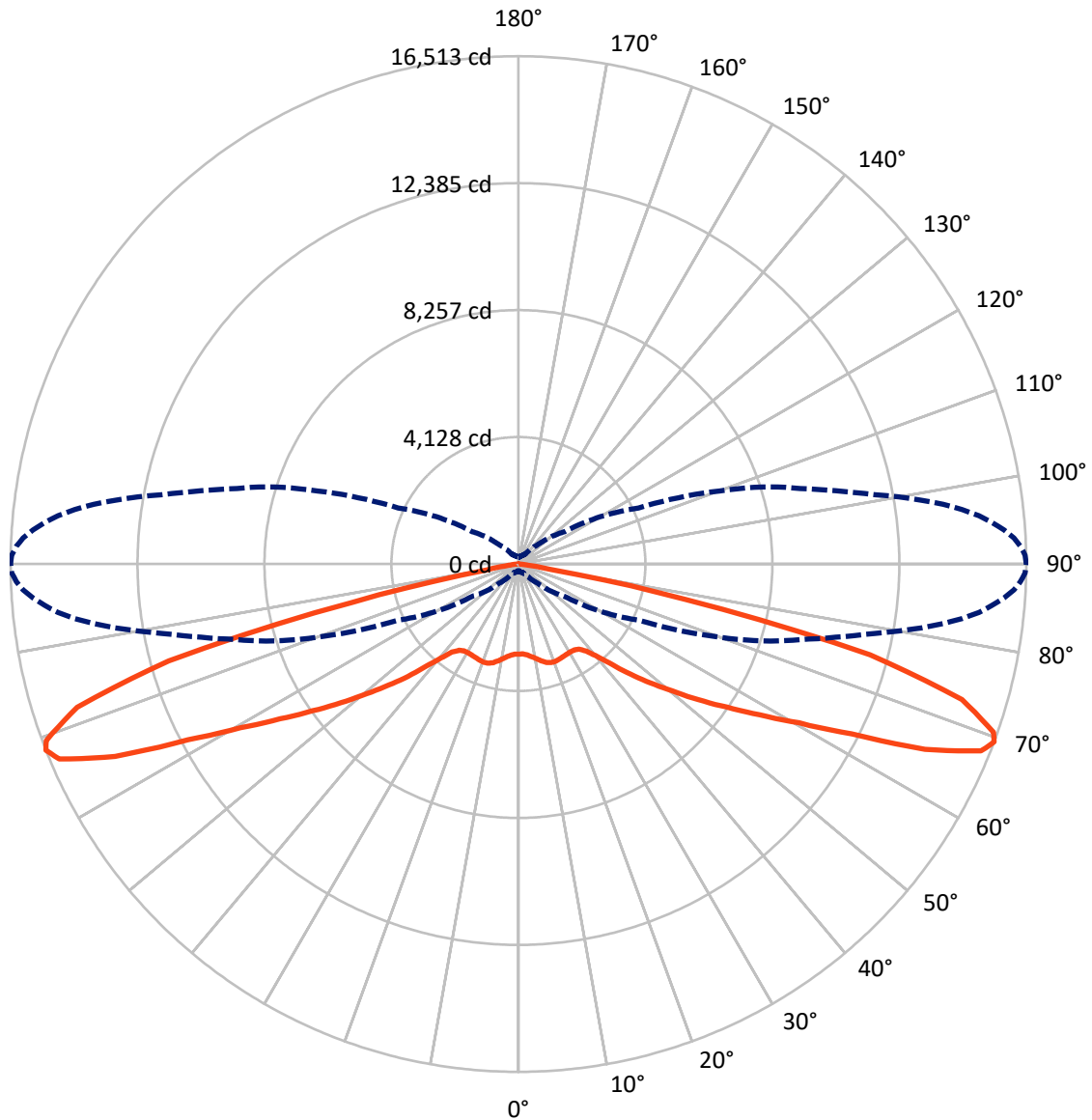
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type I - Short - Full Cutoff

REPORT NUMBER: P148820
CATALOG NUMBER: VWM-E05-LED-E1-RW

Luminous Intensity Polar Plot



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

REPORT NUMBER: P148820

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7809.8	0.0	7809.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7809.8	0.0	7809.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	15619.7	0.0	15619.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.1	1.8
10°-20°	905.6	5.8
20°-30°	1467.2	9.4
30°-40°	1828.5	11.7
40°-50°	2284.9	14.6
50°-60°	2821.4	18.1
60°-70°	3505.7	22.4
70°-80°	2327.3	14.9
80°-90°	192.1	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°	15619.7	100.0
0°-180°	15619.7	100.0



REPORT NUMBER: P148820

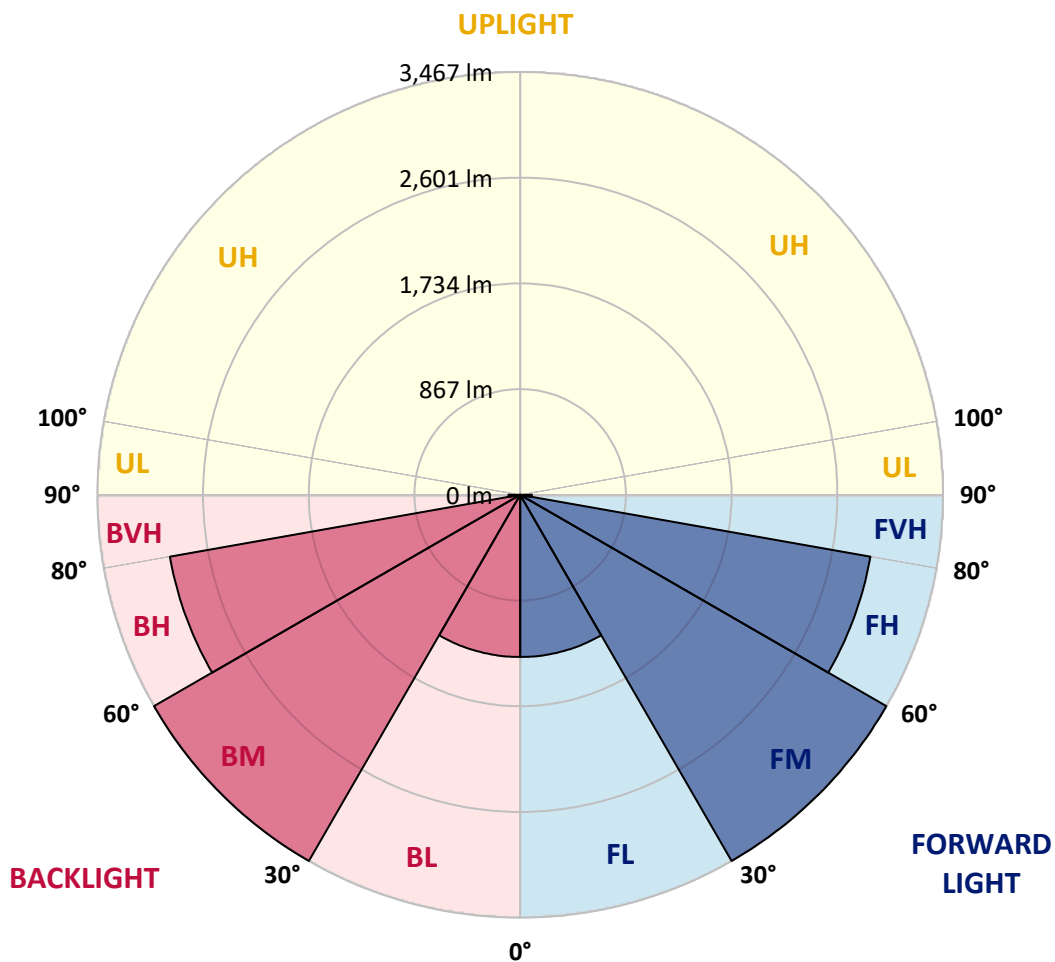
CATALOG NUMBER: VWM-E05-LED-E1-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1329.9	8.5			
FM	(30°-60°)	3467.4	22.2			
FH	(60°-80°)	2916.5	18.7			G2/5000
FVH	(80°-90°)	96.1	0.6			G1/100
BL	(0°-30°)	1329.9	8.5	B3/2500		
BM	(30°-60°)	3467.4	22.2	B3/5000		
BH	(60°-80°)	2916.5	18.7	B4/5000		G4/5000
BVH	(80°-90°)	96.1	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type I Short





REPORT NUMBER: P148820

CATALOG NUMBER: VWM-E05-LED-E1-RW

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7
2.5°	2940.0	2942.5	2940.8	2944.1	2943.4	2943.4	2941.7	2938.4	2937.9	2937.5	2937.1
5°	2968.4	2965.0	2970.0	2975.0	2973.4	2974.2	2973.4	2973.4	2973.0	2972.7	2972.3
7.5°	2998.3	2997.5	3000.9	3014.2	3015.9	3020.8	3026.6	3030.8	3031.0	3031.2	3031.3
10°	3024.1	3025.0	3033.4	3052.5	3062.5	3078.4	3094.1	3106.6	3107.6	3108.5	3109.4
12.5°	3045.0	3045.8	3058.3	3088.4	3112.5	3142.5	3176.7	3195.8	3197.5	3199.1	3200.8
15°	3046.6	3049.1	3070.8	3120.0	3168.3	3217.5	3258.4	3284.2	3285.5	3286.8	3288.2
17.5°	3025.0	3026.6	3063.4	3135.8	3216.6	3293.4	3335.8	3347.5	3348.0	3348.5	3349.0
20°	2968.4	2972.5	3024.2	3131.6	3255.0	3355.0	3399.2	3383.3	3381.7	3380.2	3378.6
22.5°	2876.7	2875.9	2943.4	3088.4	3262.5	3403.3	3442.5	3400.8	3395.9	3391.0	3386.1
25°	2728.3	2738.4	2817.5	2990.9	3220.0	3414.2	3473.4	3410.0	3402.9	3395.8	3388.7
27.5°	2567.5	2573.4	2657.5	2843.4	3120.8	3376.7	3488.4	3428.3	3420.4	3412.5	3404.6
30°	2380.0	2387.5	2477.5	2671.6	2961.6	3280.0	3484.2	3470.0	3460.8	3451.5	3442.3
32.5°	2196.6	2205.0	2285.8	2498.3	2794.1	3147.5	3459.2	3529.2	3519.6	3510.2	3500.6
35°	2006.6	2019.2	2117.5	2332.5	2632.5	3000.0	3420.8	3605.0	3599.7	3594.5	3589.2
37.5°	1849.2	1851.7	1946.6	2172.5	2482.5	2859.2	3370.0	3700.8	3704.6	3708.5	3712.3
40°	1673.4	1689.2	1784.2	2022.5	2346.6	2740.0	3321.6	3830.8	3850.8	3870.7	3890.6
42.5°	1515.8	1517.5	1614.2	1860.0	2199.2	2644.2	3295.0	3987.5	4030.1	4072.7	4115.3
45°	1350.0	1356.6	1444.2	1681.6	2029.2	2530.8	3294.2	4168.4	4236.4	4304.4	4372.4
47.5°	1193.4	1195.8	1288.4	1509.2	1834.2	2372.5	3288.4	4362.5	4455.1	4547.7	4640.2
50°	1043.4	1040.8	1131.6	1344.2	1641.6	2165.0	3237.5	4582.5	4699.4	4816.3	4933.2
52.5°	871.7	883.4	977.5	1180.8	1466.6	1954.2	3089.2	4823.3	4963.1	5103.0	5242.8
55°	703.3	708.4	809.2	999.2	1289.2	1757.5	2830.8	5045.0	5209.8	5374.7	5539.5
57.5°	518.3	533.3	621.6	809.2	1109.2	1591.6	2502.5	5160.0	5360.6	5561.2	5761.7
60°	365.8	377.5	455.8	613.4	911.6	1417.5	2220.0	5095.8	5356.5	5617.2	5877.8
62.5°	285.0	294.2	356.7	459.2	710.8	1243.3	2017.5	4888.3	5243.0	5597.6	5952.3
65°	250.0	258.4	315.0	367.5	530.8	1065.8	1906.7	4669.2	5138.0	5606.9	6075.7
67.5°	225.8	235.8	285.0	321.6	432.5	930.0	1877.5	4530.8	5061.8	5592.8	6123.8
69°	215.0	225.0	269.2	300.0	401.6	881.7	1827.5	4313.4	4841.3	5369.2	5897.1
70°	208.4	216.6	257.5	289.2	391.7	848.4	1744.2	4041.6	4560.1	5078.5	5596.9
72.5°	193.4	197.5	233.3	264.2	363.4	685.8	1341.6	3001.7	3451.1	3900.5	4349.9
75°	170.9	175.9	209.2	239.2	283.4	425.8	849.2	1856.6	2192.2	2527.7	2863.2
77.5°	147.5	151.6	180.8	228.4	220.0	265.8	507.5	1033.3	1227.9	1422.5	1617.1
80°	118.3	123.4	149.2	226.6	181.6	206.7	365.0	722.5	775.0	827.5	880.0
82.5°	86.6	90.8	116.6	183.4	139.2	155.8	278.4	612.5	630.8	649.0	667.3
85°	44.2	45.0	74.2	111.6	88.3	80.8	156.6	419.2	430.9	442.5	454.2
87.5°	7.5	7.5	16.7	19.2	21.6	13.3	20.0	71.7	73.9	76.2	78.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P148820

CATALOG NUMBER: VWM-E05-LED-E1-RW

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7
2.5°	2936.7	2936.2	2934.8	2935.1	2936.2	2935.6	2936.7	2936.9	2937.8	2934.7	2934.0
5°	2972.0	2971.7	2971.5	2971.4	2972.0	2971.8	2972.5	2973.9	2973.5	2971.5	2971.1
7.5°	3031.5	3031.7	3032.5	3031.6	3033.3	3032.5	3030.9	3033.5	3035.4	3035.5	3037.4
10°	3110.3	3111.2	3114.2	3113.8	3116.6	3116.2	3116.6	3119.5	3121.5	3121.8	3123.8
12.5°	3202.5	3204.2	3205.6	3207.2	3210.3	3208.5	3212.5	3214.2	3216.6	3221.7	3219.2
15°	3289.5	3290.8	3295.4	3295.6	3298.5	3299.6	3303.4	3304.8	3305.5	3309.5	3310.2
17.5°	3349.5	3350.0	3351.7	3350.8	3353.4	3352.5	3355.0	3356.4	3358.5	3360.7	3364.5
20°	3377.0	3375.4	3374.5	3373.6	3371.8	3369.3	3370.0	3371.2	3371.5	3373.5	3376.4
22.5°	3381.2	3376.2	3371.2	3367.8	3362.7	3358.4	3354.2	3354.5	3354.9	3354.3	3356.3
25°	3381.7	3374.6	3366.7	3357.1	3350.0	3340.4	3332.5	3331.8	3329.5	3329.6	3330.7
27.5°	3396.7	3388.8	3377.6	3366.6	3351.3	3338.6	3325.8	3321.3	3316.8	3314.0	3312.8
30°	3433.0	3423.8	3410.5	3396.4	3379.8	3359.9	3341.6	3336.0	3329.5	3323.8	3319.0
32.5°	3491.2	3481.6	3467.0	3452.3	3430.2	3410.5	3392.5	3383.3	3374.1	3364.2	3355.0
35°	3584.0	3578.7	3565.8	3552.9	3536.7	3521.2	3505.0	3494.7	3479.3	3471.5	3460.3
37.5°	3716.2	3720.0	3720.0	3721.7	3716.7	3709.2	3697.5	3686.7	3681.7	3660.8	3647.5
40°	3910.5	3930.4	3948.6	3962.8	3975.2	3987.6	3998.3	3992.0	3994.0	3988.5	3980.5
42.5°	4157.8	4200.4	4239.3	4278.3	4306.3	4350.2	4380.8	4390.5	4415.1	4424.8	4442.8
45°	4440.4	4508.4	4573.6	4634.0	4690.2	4753.0	4814.2	4859.6	4909.4	4965.6	5022.0
47.5°	4732.8	4825.4	4921.7	5000.4	5081.6	5174.6	5255.8	5324.3	5413.7	5496.3	5587.4
50°	5050.2	5167.1	5276.6	5373.8	5478.3	5585.4	5696.6	5797.3	5918.0	6050.3	6193.5
52.5°	5382.7	5522.5	5649.3	5771.2	5893.8	6016.5	6135.0	6277.1	6426.0	6600.7	6779.5
55°	5704.3	5869.2	6013.0	6148.5	6289.0	6426.2	6548.4	6738.5	6921.2	7129.7	7363.1
57.5°	5962.3	6162.9	6328.8	6489.7	6648.2	6794.1	6944.2	7158.7	7391.5	7635.2	7931.3
60°	6138.5	6399.2	6611.0	6804.5	6998.8	7182.3	7355.0	7635.3	7912.3	8215.2	8583.8
62.5°	6307.0	6661.6	6938.0	7201.8	7464.0	7699.5	7914.2	8266.8	8628.7	9003.0	9441.5
65°	6544.5	7013.4	7420.3	7788.2	8151.0	8497.2	8818.3	9265.2	9722.0	10214.7	10738.2
67.5°	6654.8	7185.8	7715.8	8211.7	8672.5	9110.8	9523.4	10063.5	10601.2	11172.2	11804.8
69°	6425.0	6952.9	7519.5	8061.1	8570.2	9035.1	9481.6	10033.2	10592.2	11175.3	11813.5
70°	6115.3	6633.8	7205.6	7771.8	8258.6	8743.0	9205.8	9753.0	10319.3	10904.0	11572.0
72.5°	4799.4	5248.8	5806.5	6355.9	6844.5	7330.6	7780.0	8340.0	8910.0	9524.2	10156.6
75°	3198.7	3534.2	3949.7	4459.3	4907.3	5337.0	5772.5	6246.2	6802.3	7308.5	7887.2
77.5°	1811.7	2006.2	2247.6	2579.0	2900.5	3157.8	3468.3	3691.2	4014.0	4292.7	4587.2
80°	932.5	985.0	1057.0	1136.5	1181.8	1174.7	1220.8	1175.2	1185.4	1148.0	1108.2
82.5°	685.5	703.8	736.3	752.3	750.7	698.2	642.5	565.2	497.0	425.5	359.8
85°	465.8	477.5	485.7	498.0	494.5	471.8	421.7	354.5	289.0	231.8	185.5
87.5°	80.7	82.9	82.3	89.3	89.5	83.1	68.4	58.3	49.2	36.6	25.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P148820

CATALOG NUMBER: VWM-E05-LED-E1-RW

CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	90°
0°	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7	2926.7
2.5°	2933.3	2933.4	2935.0	2933.4	2933.4	2933.3	2932.5	2934.1	2933.3	2930.8	2928.3
5°	2971.6	2969.1	2968.4	2970.0	2971.7	2968.4	2970.8	2973.4	2969.1	2970.0	2968.3
7.5°	3035.9	3035.0	3034.2	3035.8	3035.8	3035.0	3035.9	3033.3	3031.6	3034.2	3036.7
10°	3121.6	3120.9	3122.5	3122.5	3125.8	3124.1	3123.4	3125.9	3124.2	3122.5	3123.3
12.5°	3222.5	3220.0	3224.1	3224.2	3226.6	3226.6	3225.8	3226.7	3225.8	3223.3	3221.7
15°	3312.5	3309.2	3310.0	3316.7	3315.8	3317.5	3317.5	3315.8	3315.0	3314.2	3315.0
17.5°	3366.6	3365.0	3365.0	3368.4	3370.8	3370.0	3370.0	3370.0	3369.2	3370.0	3371.7
20°	3376.6	3376.6	3377.5	3380.8	3385.0	3382.5	3382.5	3384.2	3382.5	3384.2	3385.0
22.5°	3357.5	3359.2	3360.8	3365.0	3365.8	3365.8	3365.8	3366.7	3368.4	3368.3	3370.0
25°	3330.8	3332.5	3335.0	3338.4	3341.6	3341.7	3341.7	3343.4	3343.3	3344.2	3345.0
27.5°	3310.8	3312.5	3315.0	3318.4	3322.5	3322.5	3322.5	3324.2	3324.2	3325.0	3326.7
30°	3313.4	3310.0	3312.5	3314.2	3316.7	3316.6	3315.8	3316.6	3317.5	3317.5	3318.3
32.5°	3349.2	3341.7	3339.2	3338.4	3339.2	3336.6	3335.8	3334.2	3332.5	3332.5	3331.7
35°	3444.2	3432.5	3431.6	3425.0	3418.4	3411.6	3412.5	3407.5	3409.2	3405.0	3401.7
37.5°	3639.2	3625.8	3634.2	3620.0	3610.8	3604.2	3596.7	3586.6	3580.8	3588.4	3588.3
40°	3988.4	3979.2	3976.7	3979.2	3970.8	3975.0	3956.6	3951.6	3940.8	3948.4	3958.3
42.5°	4470.8	4465.0	4496.7	4502.5	4505.8	4510.8	4514.2	4486.6	4485.8	4480.0	4463.3
45°	5066.6	5101.6	5100.0	5138.4	5140.0	5128.4	5133.4	5120.8	5115.8	5097.5	5120.0
47.5°	5679.2	5745.8	5770.8	5779.2	5810.8	5818.4	5788.4	5778.4	5795.8	5765.8	5770.0
50°	6336.6	6408.3	6466.6	6505.8	6528.4	6530.0	6507.5	6502.5	6518.4	6461.6	6488.3
52.5°	6983.4	7091.6	7201.7	7260.0	7301.7	7305.0	7322.5	7301.7	7310.0	7296.6	7323.3
55°	7620.8	7808.3	7937.5	8051.6	8124.2	8186.6	8192.5	8215.0	8216.6	8244.2	8216.7
57.5°	8244.2	8448.4	8673.4	8875.8	8988.4	9059.2	9125.8	9216.6	9236.6	9225.8	9243.3
60°	8980.0	9295.8	9601.7	9835.0	10029.2	10215.0	10315.0	10457.5	10480.0	10541.7	10488.3
62.5°	9910.0	10368.4	10783.3	11097.5	11392.5	11681.6	11900.0	12010.0	12076.6	12205.8	12163.3
65°	11336.7	11886.6	12435.8	12885.8	13299.2	13643.4	13975.0	14133.4	14308.4	14491.7	14525.0
67.5°	12511.7	13192.5	13811.7	14360.0	14860.8	15243.3	15588.3	15862.5	16075.8	16210.8	16221.7
69°	12565.0	13272.5	13945.0	14533.3	15055.8	15462.5	15825.8	16130.8	16338.4	16476.6	16513.3
70°	12310.0	13034.2	13750.8	14345.0	14880.0	15295.8	15680.8	15971.6	16203.4	16344.2	16393.3
72.5°	10875.8	11649.2	12415.0	12935.8	13482.5	13977.5	14285.8	14582.5	14909.2	14951.6	15086.7
75°	8573.4	9223.3	9817.5	10215.8	10672.5	11116.6	11419.2	11497.5	11668.4	11883.4	11806.7
77.5°	4968.4	5168.4	5551.6	5650.0	5566.6	5760.0	5824.2	5687.5	5680.8	5806.7	5556.7
80°	1100.8	1038.4	1116.7	1058.4	1060.0	1061.6	1044.2	1037.5	1050.0	1037.5	1020.0
82.5°	305.0	295.0	296.6	293.4	299.2	295.0	292.5	299.2	298.4	297.5	303.3
85°	146.6	145.0	142.5	141.6	138.4	134.2	127.5	127.5	130.8	125.8	128.3
87.5°	19.2	18.3	18.4	21.7	19.2	15.8	15.8	15.8	15.0	15.0	15.0
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)