

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: METALUX

Report Number: P236301

Luminaire Tested: **4SWLED-78HL-LC-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236301
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26870)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-78HL-LC-UNV-L835-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, CLEAR LENS
Light Source: (224) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

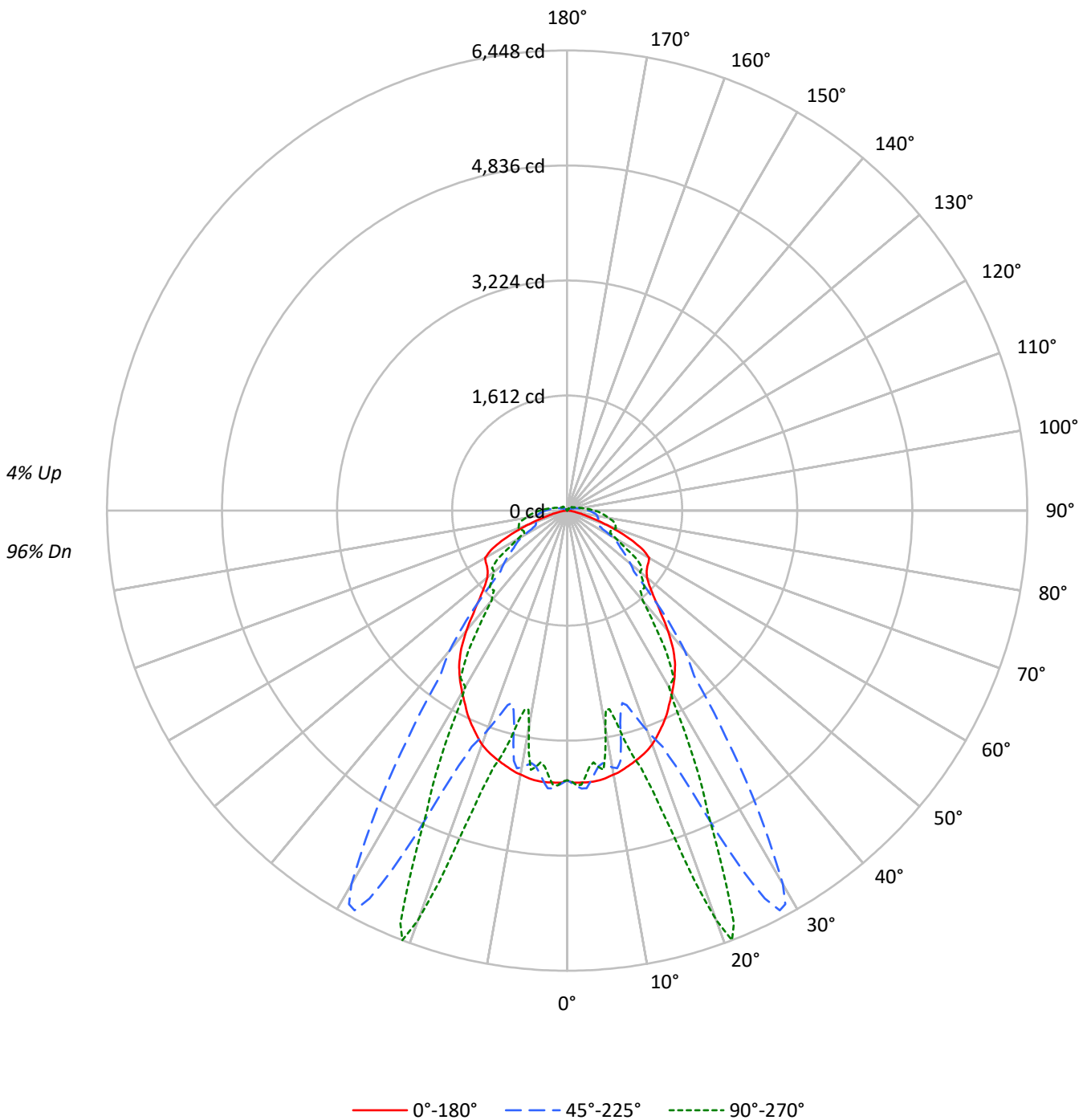
Lumens per Lamp: N/A
Luminaire Lumens: 10299.0 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.15 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 79.4
Input Voltage (V): 120
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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96				96
1	108	103	99	96	105	101	97	94	96	93	90	91	89	86	87	85	83	81				81
2	99	91	85	80	96	89	83	78	85	80	76	81	77	74	78	74	71	69				69
3	91	81	74	68	88	79	72	67	76	70	65	73	68	63	70	65	62	59				59
4	84	73	65	58	81	71	64	58	68	62	56	65	60	55	63	58	54	52				52
5	78	66	57	51	75	64	56	50	62	55	49	59	53	49	57	52	48	46				46
6	72	59	51	45	70	58	50	45	56	49	44	54	48	43	52	47	42	40				40
7	67	54	46	40	65	53	45	40	51	44	39	49	43	39	48	42	38	36				36
8	62	50	41	36	61	49	41	36	47	40	35	46	39	35	44	38	34	32				32
9	58	46	38	32	57	45	37	32	43	37	32	42	36	31	41	35	31	29				29
10	55	42	35	29	53	41	34	29	40	34	29	39	33	29	38	32	28	27				27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27116	27116	27116
5°	27399	26719	25085
10°	27192	25289	20969
15°	26803	19902	23917
20°	26280	22628	40852
25°	25196	34713	31216
30°	23897	42654	19303
35°	22532	28103	16699
40°	19929	19165	11646
45°	16870	12644	11216
50°	15602	9535	10178
55°	16276	7993	9610
60°	17907	6784	6856
65°	16035	5031	6229
70°	11343	5290	7357
75°	6523	5898	7871
80°	4116	6525	7553
85°	2232	6978	7427



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.7	3.4
10°-20°	994.9	9.7
20°-30°	1960.4	19.0
30°-40°	2022.7	19.6
40°-50°	1699.7	16.5
50°-60°	1253.6	12.2
60°-70°	710.8	6.9
70°-80°	510.3	5.0
80°-90°	346.0	3.4
90°-100°	206.7	2.0
100°-110°	107.9	1.0
110°-120°	60.4	0.6
120°-130°	35.4	0.3
130°-140°	24.5	0.2
140°-150°	8.9	0.1
150°-160°	2.5	0.0
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	3309.0	32.1
0°-40°	5331.7	51.8
0°-60°	8285.0	80.4
0°-90°	9852.1	95.7
90°-120°	375.0	3.6
90°-150°	443.8	4.3
90°-180°	447.0	4.3
0°-180°	10299.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3779	3779	3779	3779	3779	
5°	3816	3872	3807	3628	3601	362
15°	3643	3486	2895	3259	3555	1027
25°	3236	2888	4999	5613	4658	1485
35°	2638	3249	3884	2632	2425	1631
45°	1723	4339	1621	1463	1535	1357
55°	1369	2434	913	1152	1195	1236
65°	1018	977	487	597	673	986
75°	267	394	452	648	696	319
85°	38	165	376	460	491	49
90°	3	120	299	370	381	3
95°	1	96	234	271	284	1
105°	1	50	123	146	156	1
115°	3	23	68	96	108	2
125°	3	10	40	63	77	2
135°	3	5	29	60	74	2
145°	3	3	12	22	28	2
155°	4	4	5	6	9	2
165°	4	4	4	1	3	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7
1°	3810.7	3808.1	3792.8	3785.1	3783.8	3781.2	3782.5	3785.1	3791.5	3791.5	3820.9
2°	3814.5	3813.2	3803.0	3797.9	3797.9	3797.9	3800.4	3808.1	3813.2	3814.5	3859.3
3°	3815.8	3817.1	3810.7	3806.8	3815.8	3815.8	3819.6	3829.8	3847.8	3854.2	3900.2
4°	3818.3	3823.5	3819.6	3818.3	3836.2	3849.0	3856.7	3870.8	3882.3	3883.6	3901.5
5°	3815.8	3822.2	3822.2	3837.5	3861.8	3872.1	3878.5	3887.4	3869.5	3820.9	3806.8
6°	3813.2	3823.5	3829.8	3858.0	3879.7	3888.7	3890.0	3850.3	3803.0	3746.7	3700.7
7°	3806.8	3817.1	3837.5	3874.6	3888.7	3887.4	3865.7	3783.8	3700.7	3629.0	3608.6
8°	3791.5	3806.8	3847.8	3878.5	3868.2	3828.6	3787.6	3698.1	3620.1	3568.9	3572.7
9°	3773.6	3790.2	3847.8	3869.5	3819.6	3763.3	3712.2	3600.9	3551.0	3543.3	3612.4
10°	3755.7	3782.5	3849.0	3850.3	3741.6	3684.0	3613.7	3538.2	3536.9	3579.1	3654.6
11°	3740.3	3772.3	3841.4	3811.9	3675.1	3611.1	3539.5	3517.7	3567.6	3614.9	3678.9
12°	3718.6	3762.1	3824.7	3760.8	3589.4	3528.0	3490.9	3531.8	3591.9	3635.4	3586.8
13°	3693.0	3741.6	3792.8	3684.0	3519.0	3476.8	3490.9	3558.7	3597.0	3571.5	3355.3
14°	3666.1	3728.8	3754.4	3616.2	3455.1	3465.3	3510.1	3563.8	3570.2	3348.9	3077.7
15°	3643.1	3712.2	3713.4	3540.8	3433.3	3485.8	3520.3	3545.9	3444.8	3134.0	2894.8
16°	3616.2	3694.3	3668.7	3487.0	3453.8	3502.4	3521.6	3499.8	3206.9	2903.7	2805.2
17°	3589.4	3668.7	3612.4	3439.7	3478.1	3504.9	3503.7	3366.8	3030.4	2801.4	2848.7
18°	3558.7	3636.7	3561.2	3406.4	3488.3	3489.6	3460.2	3210.7	2853.8	2780.9	2981.8
19°	3524.1	3599.6	3506.2	3386.0	3475.5	3447.4	3370.6	3036.8	2786.0	2859.0	3132.7
20°	3487.0	3557.4	3456.3	3388.5	3443.5	3380.9	3264.5	2901.2	2782.2	2984.3	3287.5
21°	3441.0	3507.5	3409.0	3401.3	3384.7	3274.7	3128.9	2821.9	2843.6	3100.7	3428.2
22°	3391.1	3455.1	3371.9	3401.3	3295.2	3172.4	3007.3	2789.9	2948.5	3222.2	3567.6
23°	3337.4	3406.4	3337.4	3384.7	3185.1	3058.5	2908.8	2818.0	3024.0	3341.2	3881.0
24°	3288.8	3351.4	3314.3	3345.0	3086.6	2962.6	2847.4	2879.4	3094.3	3475.5	4318.5
25°	3236.3	3299.0	3293.9	3281.1	2997.1	2888.4	2834.7	2929.3	3187.7	3804.3	4999.0
26°	3178.7	3242.7	3274.7	3187.7	2929.3	2850.0	2852.6	2966.4	3313.1	4217.4	5611.7
27°	3117.3	3190.3	3237.6	3085.4	2882.0	2846.2	2889.7	2993.3	3603.4	4864.7	6100.4
28°	3055.9	3130.1	3185.1	2983.0	2853.8	2871.7	2905.0	3050.8	3974.4	5421.1	6344.7
29°	2997.1	3073.9	3126.3	2903.7	2850.0	2903.7	2902.4	3221.0	4551.3	5900.8	6306.3
30°	2944.7	3017.6	3058.5	2851.3	2870.5	2907.6	2901.2	3502.4	5043.8	6146.4	6041.5
32.5°	2796.3	2853.8	2855.1	2804.0	2903.7	2897.3	3126.3	4629.3	5867.6	5903.4	4982.4
35°	2637.7	2655.6	2681.1	2837.2	2925.5	3249.1	4012.8	5363.6	5816.4	4908.2	3883.6
37.5°	2440.7	2438.1	2610.8	2861.5	3359.1	4107.4	4717.6	5480.0	4981.1	3800.4	2924.2
40°	2192.5	2220.6	2598.0	2957.5	4061.4	4475.8	4780.3	5135.9	3861.8	2929.3	2562.2
42.5°	1939.2	2067.1	2598.0	3350.2	4198.3	4427.2	4736.8	4289.1	3058.5	2498.2	2095.3
45°	1723.0	1986.6	2617.2	3675.1	4063.9	4339.0	4387.6	3424.3	2535.3	1934.1	1620.7
47.5°	1563.2	1911.1	2783.5	3548.4	3923.2	3989.7	3806.8	2857.7	1891.9	1421.2	1270.2
50°	1458.3	1821.5	2855.1	3299.0	3631.6	3548.4	3278.5	2108.1	1306.0	1150.0	1160.2
52.5°	1403.3	1802.4	2659.4	3066.2	3263.2	3084.1	2585.2	1426.3	1052.8	1029.7	1036.1
55°	1368.7	1744.8	2372.9	2747.7	2801.4	2434.3	1908.5	1073.2	900.5	887.7	913.3
57.5°	1352.1	1581.1	2090.2	2329.4	2200.2	1874.0	1449.3	818.7	733.0	758.6	835.3
60°	1326.5	1409.7	1678.3	1831.8	1752.5	1483.8	1098.8	651.1	637.0	684.4	718.9
62.5°	1206.3	1210.1	1174.3	1446.7	1434.0	1203.7	868.6	557.7	533.4	547.5	555.2
65°	1018.2	938.9	812.3	1189.6	1183.2	977.3	692.0	442.6	431.1	463.1	487.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
67.5°	808.4	676.7	608.9	951.7	940.2	773.9	553.9	381.2	402.9	436.2	472.0
70°	594.8	497.6	479.7	749.6	740.6	620.4	464.3	353.1	388.9	423.4	460.5
72.5°	405.5	368.4	377.4	565.4	579.5	496.3	394.0	335.1	367.1	406.8	463.1
75°	267.3	269.9	290.4	415.7	443.9	394.0	332.6	312.1	346.7	394.0	451.5
77.5°	182.9	191.9	216.2	298.0	331.3	307.0	282.7	287.8	324.9	379.9	440.0
80°	120.2	129.2	154.8	211.1	245.6	244.3	243.0	267.3	309.6	368.4	427.2
82.5°	72.9	81.9	106.2	149.7	185.5	197.0	212.3	248.2	299.3	364.6	411.9
85°	38.4	47.3	70.4	107.5	144.5	165.0	186.8	232.8	294.2	350.5	376.1
87.5°	15.4	24.3	46.1	78.0	117.7	140.7	166.3	221.3	285.3	322.4	336.4
90°	2.6	11.5	29.4	58.8	97.2	120.2	148.4	212.3	264.8	281.4	299.3
92.5°	1.3	6.4	20.5	44.8	81.9	106.2	135.6	197.0	231.5	248.2	264.8
95°	1.3	3.8	15.4	35.8	70.4	95.9	124.1	172.7	198.3	214.9	234.1
97.5°	1.3	3.8	11.5	29.4	64.0	87.0	111.3	145.8	167.6	186.8	203.4
100°	1.3	2.6	10.2	25.6	56.3	74.2	92.1	119.0	138.2	158.6	174.0
102.5°	1.3	2.6	9.0	23.0	48.6	62.7	75.5	95.9	116.4	133.0	148.4
105°	1.3	2.6	7.7	20.5	39.7	49.9	60.1	79.3	97.2	112.6	122.8
107.5°	1.3	2.6	6.4	16.6	32.0	40.9	49.9	66.5	81.9	93.4	103.6
110°	1.3	1.3	5.1	14.1	26.9	34.5	40.9	55.0	67.8	79.3	88.3
112.5°	2.6	2.6	5.1	11.5	21.7	28.1	34.5	46.1	57.6	67.8	76.8
115°	2.6	2.6	3.8	9.0	17.9	23.0	28.1	38.4	48.6	58.8	67.8
117.5°	2.6	2.6	3.8	7.7	14.1	19.2	23.0	32.0	40.9	51.2	60.1
120°	2.6	2.6	2.6	6.4	12.8	15.4	19.2	26.9	35.8	44.8	52.4
122.5°	2.6	2.6	2.6	5.1	10.2	12.8	15.4	23.0	30.7	38.4	46.1
125°	2.6	2.6	2.6	3.8	7.7	10.2	12.8	19.2	25.6	33.3	39.7
127.5°	2.6	2.6	2.6	3.8	6.4	9.0	10.2	15.4	21.7	26.9	34.5
130°	2.6	2.6	2.6	2.6	5.1	6.4	9.0	12.8	17.9	24.3	30.7
132.5°	2.6	2.6	2.6	2.6	5.1	6.4	7.7	11.5	17.9	23.0	29.4
135°	2.6	2.6	2.6	2.6	3.8	5.1	7.7	11.5	16.6	23.0	29.4
137.5°	2.6	2.6	2.6	2.6	3.8	5.1	6.4	10.2	15.4	21.7	26.9
140°	2.6	2.6	2.6	2.6	2.6	3.8	5.1	9.0	12.8	16.6	21.7
142.5°	2.6	2.6	2.6	2.6	2.6	2.6	3.8	6.4	9.0	12.8	16.6
145°	2.6	2.6	2.6	2.6	2.6	2.6	3.8	5.1	6.4	9.0	11.5
147.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.8	5.1	6.4	9.0
150°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.8	3.8	5.1	6.4
152.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	5.1	5.1
155°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	5.1
157.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
160°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
162.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
165°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	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):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
180°	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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7	3778.7
1°	3831.1	3826.0	3822.2	3817.1	3811.9	3810.7	3808.1	3806.8	3796.6	3797.9
2°	3868.2	3872.1	3869.5	3864.4	3868.2	3863.1	3860.5	3855.4	3851.6	3852.9
3°	3913.0	3911.7	3900.2	3886.1	3877.2	3877.2	3858.0	3850.3	3827.3	3847.8
4°	3873.3	3846.5	3803.0	3782.5	3763.3	3760.8	3737.7	3716.0	3704.5	3725.0
5°	3765.9	3726.2	3671.2	3649.5	3627.7	3630.3	3611.1	3597.0	3588.1	3600.9
6°	3658.4	3622.6	3584.2	3561.2	3552.3	3545.9	3543.3	3547.2	3549.7	3548.4
7°	3583.0	3575.3	3571.5	3581.7	3590.6	3590.6	3606.0	3618.8	3622.6	3620.1
8°	3597.0	3622.6	3639.3	3645.6	3646.9	3649.5	3673.8	3673.8	3666.1	3668.7
9°	3654.6	3672.5	3690.4	3667.4	3622.6	3613.7	3529.2	3479.4	3409.0	3429.5
10°	3699.4	3666.1	3528.0	3414.1	3337.4	3311.8	3183.9	3127.6	3054.7	3075.1
11°	3622.6	3443.5	3235.0	3093.0	3020.1	2977.9	2894.8	2860.2	2846.2	2842.3
12°	3337.4	3128.9	2942.1	2860.2	2827.0	2814.2	2805.2	2815.5	2838.5	2844.9
13°	3077.7	2905.0	2819.3	2825.7	2842.3	2862.8	2934.4	2976.6	3017.6	3018.9
14°	2867.9	2815.5	2884.5	2971.5	3021.4	3053.4	3153.2	3222.2	3297.7	3311.8
15°	2812.9	2899.9	3063.6	3196.7	3259.3	3327.1	3458.9	3515.2	3557.4	3554.8
16°	2907.6	3057.2	3284.9	3441.0	3504.9	3549.7	3634.1	3685.3	3735.2	3742.9
17°	3066.2	3295.2	3504.9	3625.2	3671.2	3722.4	3878.5	3985.9	4076.7	4106.1
18°	3232.5	3473.0	3639.3	3833.7	3955.2	4055.0	4272.4	4470.7	4661.3	4697.1
19°	3418.0	3627.7	3905.3	4239.2	4388.8	4612.7	5000.3	5242.1	5435.2	5497.9
20°	3539.5	3870.8	4301.9	4929.9	5141.0	5389.2	5760.1	5944.3	6077.4	6106.8
21°	3753.1	4296.7	5037.4	5657.8	5871.4	6009.6	6255.2	6371.6	6404.8	6448.3
22°	4107.4	4972.2	5733.3	6184.8	6328.1	6407.4	6434.2	6347.3	6269.2	6238.5
23°	4757.2	5637.3	6193.8	6444.5	6430.4	6333.2	6114.5	5908.5	5774.2	5717.9
24°	5463.4	6149.0	6424.0	6211.7	6090.1	5882.9	5604.1	5396.8	5253.6	5184.5
25°	5962.2	6402.3	6169.5	5767.8	5613.0	5398.1	5060.4	4862.1	4721.4	4657.5
26°	6335.8	6279.5	5739.7	5279.2	5097.5	4890.3	4593.5	4482.2	4378.6	4317.2
27°	6370.3	5913.6	5283.0	4775.2	4612.7	4465.6	4243.0	4083.1	3974.4	3916.8
28°	6092.7	5486.4	4796.9	4390.1	4258.4	4079.3	3827.3	3670.0	3593.2	3506.2
29°	5738.4	4996.5	4392.7	3969.3	3826.0	3645.6	3394.9	3187.7	3137.8	3084.1
30°	5262.5	4550.0	3991.0	3519.0	3382.1	3187.7	2995.8	2928.0	2894.8	2852.6
32.5°	4143.2	3428.2	2962.6	2783.5	2742.5	2724.6	2795.0	2806.5	2804.0	2780.9
35°	3100.7	2710.6	2693.9	2667.1	2632.5	2599.3	2534.0	2496.9	2465.0	2425.3
37.5°	2647.9	2539.2	2386.9	2255.2	2196.3	2151.6	2083.8	2046.7	2016.0	1993.0
40°	2320.4	2096.6	1944.3	1852.2	1820.3	1767.8	1725.6	1702.6	1679.6	1648.9
42.5°	1872.7	1673.2	1552.9	1487.7	1468.5	1448.0	1464.7	1491.5	1504.3	1518.4
45°	1441.6	1350.8	1379.0	1439.1	1463.4	1489.0	1526.1	1533.7	1536.3	1535.0
47.5°	1256.1	1321.4	1354.6	1373.8	1370.0	1380.2	1410.9	1431.4	1444.2	1432.7
50°	1193.5	1202.4	1248.5	1295.8	1303.5	1290.7	1297.1	1313.7	1331.6	1334.2
52.5°	1079.6	1118.0	1153.8	1185.8	1213.9	1242.1	1288.1	1311.2	1325.2	1325.2
55°	969.6	1040.0	1089.9	1134.6	1152.5	1160.2	1183.2	1192.2	1201.1	1194.7
57.5°	900.5	933.8	967.1	960.7	946.6	926.1	938.9	954.3	960.7	956.8
60°	727.9	729.1	733.0	743.2	759.8	775.2	790.5	794.4	800.8	799.5
62.5°	575.6	588.4	608.9	642.1	651.1	651.1	666.4	678.0	681.8	676.7
65°	516.8	542.4	578.2	597.4	597.4	601.2	629.4	662.6	675.4	672.8



TEST NUMBER: P236301

CATALOG NUMBER: 4SWLED-78HL-LC-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
67.5°	505.3	550.0	568.0	594.8	615.3	635.7	663.9	683.1	694.6	698.4
70°	512.9	546.2	582.0	619.1	635.7	653.7	686.9	713.8	724.0	725.3
72.5°	511.7	555.2	591.0	635.7	654.9	671.6	695.9	706.1	709.9	709.9
75°	507.8	551.3	601.2	633.2	648.5	665.2	679.2	686.9	693.3	695.9
77.5°	491.2	538.5	562.8	592.3	602.5	610.2	628.1	640.9	649.8	651.1
80°	470.7	492.5	510.4	534.7	542.4	553.9	571.8	579.5	585.9	585.9
82.5°	431.1	446.4	465.6	491.2	505.3	516.8	530.9	536.0	539.8	541.1
85°	388.9	404.2	428.5	450.3	460.5	470.7	483.5	491.2	493.8	491.2
87.5°	350.5	372.2	395.3	411.9	415.7	420.8	431.1	437.5	440.0	442.6
90°	316.0	337.7	355.6	369.7	369.7	374.8	379.9	381.2	378.6	381.2
92.5°	285.3	299.3	309.6	316.0	316.0	319.8	326.2	328.7	327.5	328.7
95°	248.2	258.4	263.5	267.3	271.2	276.3	281.4	282.7	282.7	284.0
97.5°	214.9	222.6	227.7	231.5	232.8	236.6	236.6	237.9	237.9	239.2
100°	185.5	193.2	194.4	193.2	194.4	195.7	197.0	199.6	200.8	202.1
102.5°	157.3	163.7	166.3	167.6	168.9	171.4	174.0	175.2	177.8	177.8
105°	130.5	138.2	143.3	145.8	145.8	148.4	150.9	153.5	154.8	156.1
107.5°	111.3	119.0	125.4	127.9	130.5	131.8	134.3	136.9	138.2	139.4
110°	95.9	103.6	111.3	116.4	117.7	120.2	122.8	125.4	126.6	127.9
112.5°	85.7	92.1	98.5	103.6	106.2	108.7	111.3	113.8	116.4	116.4
115°	75.5	83.1	88.3	93.4	95.9	97.2	101.1	104.9	106.2	107.5
117.5°	67.8	74.2	79.3	84.4	87.0	89.5	92.1	94.7	97.2	97.2
120°	60.1	66.5	71.6	75.5	78.0	79.3	83.1	85.7	87.0	88.3
122.5°	52.4	58.8	62.7	67.8	69.1	71.6	75.5	78.0	79.3	80.6
125°	46.1	51.2	56.3	61.4	62.7	65.2	70.4	72.9	75.5	76.8
127.5°	40.9	46.1	52.4	57.6	60.1	64.0	69.1	72.9	75.5	76.8
130°	37.1	44.8	51.2	57.6	61.4	64.0	70.4	75.5	78.0	78.0
132.5°	37.1	44.8	52.4	58.8	62.7	65.2	71.6	76.8	79.3	80.6
135°	35.8	42.2	49.9	56.3	60.1	62.7	67.8	71.6	74.2	74.2
137.5°	32.0	37.1	42.2	47.3	51.2	53.7	57.6	60.1	62.7	62.7
140°	25.6	29.4	33.3	37.1	39.7	42.2	46.1	47.3	49.9	49.9
142.5°	19.2	21.7	25.6	28.1	29.4	32.0	34.5	37.1	38.4	38.4
145°	14.1	16.6	17.9	20.5	21.7	23.0	25.6	26.9	28.1	28.1
147.5°	10.2	11.5	12.8	15.4	15.4	16.6	19.2	20.5	20.5	20.5
150°	7.7	9.0	10.2	10.2	11.5	11.5	14.1	15.4	15.4	15.4
152.5°	6.4	6.4	7.7	7.7	9.0	9.0	10.2	11.5	11.5	11.5
155°	5.1	5.1	5.1	5.1	6.4	6.4	7.7	7.7	9.0	9.0
157.5°	3.8	3.8	3.8	3.8	3.8	3.8	5.1	5.1	6.4	6.4
160°	3.8	3.8	2.6	2.6	2.6	2.6	3.8	3.8	3.8	3.8
162.5°	3.8	2.6	2.6	2.6	1.3	2.6	2.6	2.6	2.6	2.6
165°	2.6	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	2.6
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P236301

CATALOG NUMBER: 4SWLED-78HL-LC-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)