

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: P130702

Luminaire Tested: **TBLED-LD1-11-M-UNV-L835-CD1-CG-CMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130702
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25358)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: TBLED-LD1-11-M-UNV-L835-CD1-CG-CMS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND MINI SENSOR.
Light Source: (160) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10168.7 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 1.33 / 1.33 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

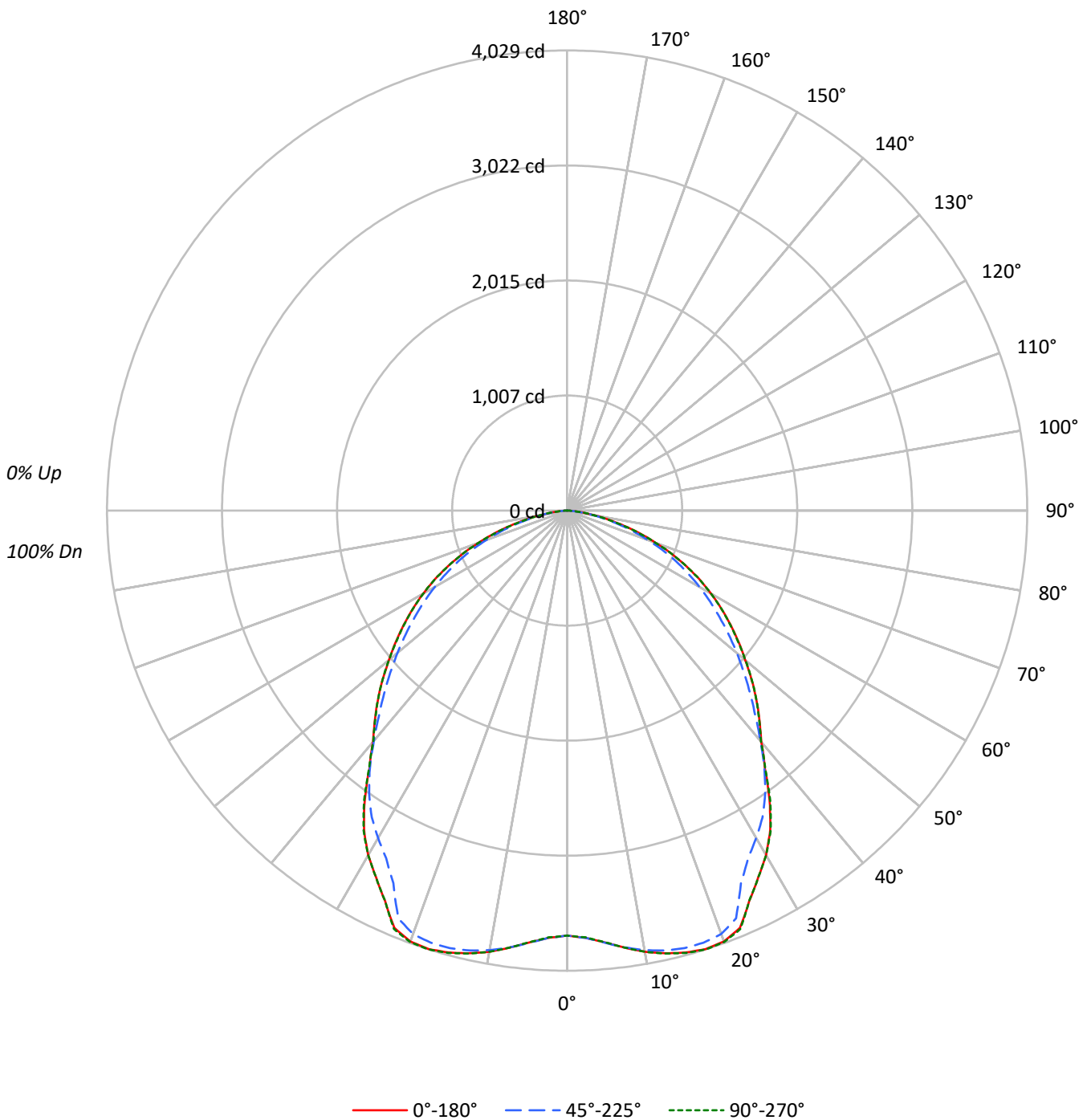
Input Watts (W): 108
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	68	64	62					62			
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53					53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41					41			
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36					36			
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33					33			
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29					29			
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27					27			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	40298	40298	40298
5°	41258	41285	41231
10°	43136	42972	43122
15°	44908	44464	44949
20°	46260	45463	46332
25°	45085	43017	45055
30°	43549	41400	43564
35°	40843	39961	40973
40°	37384	37208	37331
45°	35898	34705	35898
50°	34282	32658	34325
55°	32982	30764	32888
60°	31542	29025	31542
65°	29461	26927	29461
70°	26149	23879	26149
75°	21672	19606	21363
80°	15652	14343	15341
85°	9368	8598	9057



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	366.3	3.6
10°-20°	1128.2	11.1
20°-30°	1703.8	16.8
30°-40°	1860.1	18.3
40°-50°	1815.4	17.9
50°-60°	1559.6	15.3
60°-70°	1102.4	10.8
70°-80°	533.3	5.2
80°-90°	99.5	1.0
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°-30°	3198.3	31.5
0°-40°	5058.5	49.7
0°-60°	8433.4	82.9
0°-90°	10168.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10168.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3721	3721	3721	3721	3721	
5°	3796	3797	3798	3796	3793	366
15°	4006	3998	3966	4000	4010	1133
25°	3773	3784	3600	3785	3771	1739
35°	3090	2930	3023	2923	3100	1922
45°	2344	2390	2266	2382	2344	1807
55°	1747	1767	1630	1763	1742	1562
65°	1150	1113	1051	1113	1150	1134
75°	518	493	469	491	511	554
85°	75	72	69	70	73	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3721.4	3721.4	3721.4	3721.4	3721.4	3721.4	3721.4	3721.4	3721.4	3721.4	3721.4
2.5°	3743.7	3742.4	3741.2	3742.4	3744.9	3744.9	3744.9	3743.7	3743.7	3744.9	3743.7
5°	3795.6	3793.1	3794.4	3793.1	3798.1	3796.8	3796.8	3798.1	3798.1	3798.1	3796.8
7.5°	3859.9	3857.4	3857.4	3857.4	3858.7	3858.7	3858.7	3858.7	3857.4	3857.4	3857.4
10°	3923.0	3919.2	3920.5	3919.2	3920.5	3918.0	3915.5	3913.1	3910.6	3908.1	3909.4
12.5°	3969.9	3968.7	3971.2	3971.2	3968.7	3965.0	3958.8	3952.6	3947.7	3945.2	3947.7
15°	4005.8	4008.3	4009.5	4008.3	4003.3	3993.4	3986.0	3976.1	3969.9	3966.2	3969.9
17.5°	4025.6	4025.6	4023.1	4015.7	4007.0	3998.4	3987.2	3977.4	3971.2	3967.5	3972.4
20°	4014.4	4013.2	4004.6	3993.4	3979.8	3968.7	3958.8	3950.2	3946.4	3945.2	3947.7
22.5°	3953.9	3956.3	3951.4	3944.0	3934.1	3918.0	3899.5	3882.2	3868.6	3863.6	3868.6
25°	3773.4	3772.1	3780.8	3795.6	3805.5	3762.2	3704.1	3648.5	3610.2	3600.3	3610.2
27.5°	3622.5	3621.3	3601.5	3558.2	3507.5	3468.0	3456.8	3450.7	3437.1	3430.9	3439.5
30°	3482.8	3470.4	3400.0	3309.7	3245.4	3229.4	3254.1	3287.5	3306.0	3311.0	3302.3
32.5°	3311.0	3277.6	3182.4	3103.2	3074.8	3062.4	3071.1	3114.4	3158.9	3183.6	3156.4
35°	3089.6	3061.2	2985.8	2942.5	2936.3	2922.7	2911.6	2937.6	2992.0	3022.9	2985.8
37.5°	2844.9	2858.5	2826.3	2804.1	2804.1	2790.5	2768.2	2776.9	2807.8	2837.4	2805.3
40°	2644.6	2669.3	2676.7	2670.5	2668.1	2650.7	2629.7	2624.8	2626.0	2632.2	2622.3
42.5°	2491.3	2495.0	2528.3	2539.5	2529.6	2511.0	2498.7	2491.3	2455.4	2439.3	2460.3
45°	2344.1	2346.6	2373.8	2405.9	2399.8	2380.0	2370.1	2346.6	2283.5	2266.2	2288.5
47.5°	2190.8	2204.4	2224.2	2257.6	2263.8	2244.0	2230.4	2189.6	2114.2	2099.3	2115.4
50°	2035.0	2061.0	2084.5	2100.6	2109.2	2091.9	2077.1	2028.9	1955.9	1938.6	1954.7
52.5°	1892.9	1916.3	1947.3	1942.3	1938.6	1934.9	1925.0	1875.5	1806.3	1782.8	1805.1
55°	1747.0	1770.5	1801.4	1780.3	1764.3	1770.5	1759.3	1718.5	1659.2	1629.5	1659.2
57.5°	1602.3	1620.9	1645.6	1619.6	1596.1	1603.6	1596.1	1567.7	1512.1	1483.6	1512.1
60°	1456.4	1467.6	1484.9	1457.7	1432.9	1437.9	1435.4	1405.7	1362.5	1340.2	1362.5
62.5°	1306.8	1313.0	1321.7	1295.7	1274.7	1273.4	1274.7	1245.0	1211.6	1196.8	1212.9
65°	1149.8	1152.3	1157.2	1131.3	1116.4	1110.2	1112.7	1085.5	1060.8	1050.9	1062.0
67.5°	989.1	991.6	992.8	968.1	958.2	949.5	950.8	931.0	908.7	902.5	911.2
70°	825.9	829.6	829.6	807.3	801.2	790.0	790.0	777.7	759.1	754.2	760.4
72.5°	672.6	670.1	670.1	651.6	646.6	635.5	634.2	630.5	613.2	608.3	614.5
75°	518.0	515.6	516.8	502.0	497.0	488.4	487.1	487.1	473.5	468.6	474.8
77.5°	374.6	377.1	375.9	364.7	359.8	356.1	359.8	359.8	347.4	342.5	348.7
80°	251.0	253.5	253.5	244.8	241.1	238.6	243.6	241.1	234.9	230.0	234.9
82.5°	152.1	152.1	152.1	149.6	144.7	144.7	148.4	148.4	142.2	138.5	142.2
85°	75.4	75.4	74.2	74.2	71.7	71.7	74.2	74.2	70.5	69.2	70.5
87.5°	26.0	24.7	24.7	24.7	23.5	24.7	24.7	24.7	23.5	23.5	23.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P130702

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3721.4	3721.4	3721.4	3721.4	3721.4	3721.4	3721.4	3721.4
2.5°	3744.9	3744.9	3743.7	3743.7	3743.7	3742.4	3741.2	3740.0
5°	3799.3	3798.1	3795.6	3796.8	3795.6	3795.6	3794.4	3793.1
7.5°	3859.9	3861.1	3858.7	3861.1	3861.1	3861.1	3859.9	3858.7
10°	3913.1	3916.8	3918.0	3921.7	3923.0	3924.2	3923.0	3921.7
12.5°	3953.9	3960.0	3965.0	3971.2	3974.9	3976.1	3973.6	3972.4
15°	3977.4	3986.0	3994.7	4004.6	4010.7	4013.2	4012.0	4009.5
17.5°	3978.6	3988.5	3999.6	4008.3	4016.9	4023.1	4028.0	4029.3
20°	3951.4	3960.0	3969.9	3981.1	3994.7	4005.8	4016.9	4020.6
22.5°	3878.4	3899.5	3920.5	3931.6	3942.7	3950.2	3956.3	3965.0
25°	3639.8	3702.9	3770.9	3799.3	3794.4	3770.9	3767.2	3770.9
27.5°	3453.1	3460.6	3469.2	3502.6	3549.6	3592.8	3617.6	3622.5
30°	3286.2	3250.4	3223.2	3239.2	3301.1	3386.4	3463.0	3484.0
32.5°	3113.1	3066.2	3055.0	3066.2	3093.4	3163.8	3268.9	3317.1
35°	2928.9	2909.1	2917.8	2927.7	2933.9	2972.2	3050.1	3099.5
37.5°	2767.0	2764.5	2781.8	2794.2	2794.2	2809.0	2848.6	2849.8
40°	2614.9	2627.3	2640.9	2658.2	2661.9	2668.1	2658.2	2640.9
42.5°	2481.4	2495.0	2503.6	2520.9	2530.8	2517.2	2485.1	2487.5
45°	2341.7	2367.6	2372.6	2391.1	2398.5	2362.7	2337.9	2344.1
47.5°	2184.6	2227.9	2237.8	2257.6	2251.4	2216.8	2199.5	2192.1
50°	2022.7	2079.5	2088.2	2101.8	2094.4	2077.1	2054.8	2037.5
52.5°	1876.8	1922.5	1928.7	1933.7	1939.8	1943.5	1915.1	1887.9
55°	1721.0	1756.9	1765.5	1760.6	1777.9	1797.7	1769.2	1742.0
57.5°	1570.2	1594.9	1601.1	1592.4	1617.2	1643.1	1622.1	1601.1
60°	1409.4	1434.2	1435.4	1431.7	1456.4	1478.7	1470.0	1456.4
62.5°	1251.2	1273.4	1269.7	1273.4	1293.2	1321.7	1315.5	1306.8
65°	1090.5	1111.5	1109.0	1116.4	1131.3	1157.2	1157.2	1149.8
67.5°	937.2	949.5	948.3	958.2	969.3	994.0	996.5	989.1
70°	783.8	790.0	788.8	799.9	808.6	834.5	834.5	825.9
72.5°	635.5	639.2	634.2	649.1	652.8	675.0	675.0	665.2
75°	493.3	492.1	487.1	495.8	506.9	523.0	519.3	510.6
77.5°	361.0	357.3	352.4	362.3	368.4	380.8	377.1	368.4
80°	244.8	241.1	234.9	243.6	248.5	255.9	252.2	246.0
82.5°	149.6	145.9	140.9	147.1	149.6	154.5	152.1	147.1
85°	74.2	71.7	69.2	70.5	74.2	75.4	74.2	72.9
87.5°	24.7	23.5	22.3	23.5	23.5	24.7	24.7	23.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)