

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: P130639

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130639
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25346)
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
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION.
Light Source: (160) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10491.4 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

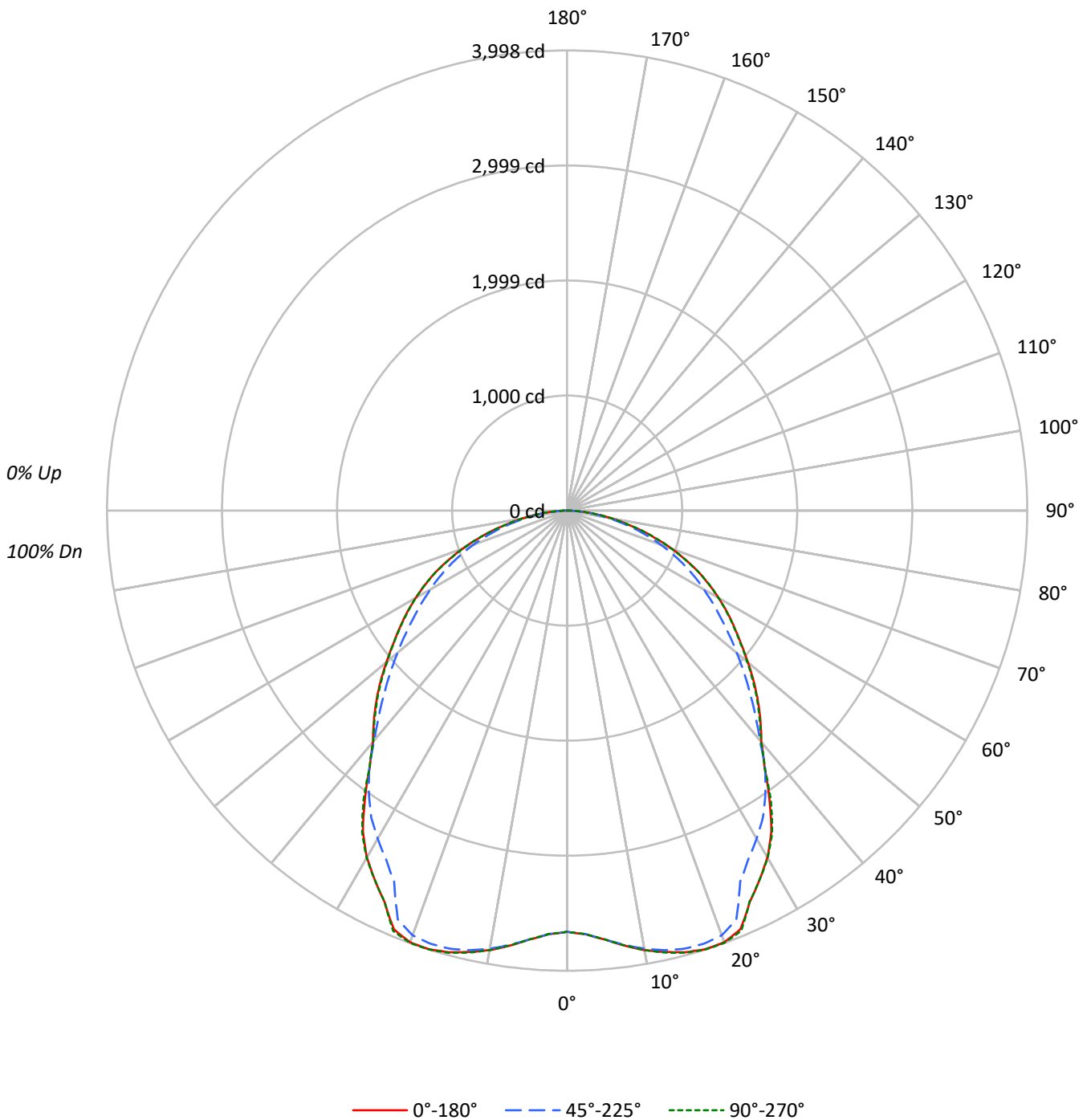
Input Watts (W): 108
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39631	39631	39631
5°	40665	40665	40651
10°	42639	42497	42639
15°	44528	44181	44586
20°	45994	45251	46054
25°	44852	42495	44807
30°	43520	41164	43567
35°	40519	39699	40808
40°	37109	36835	37054
45°	35915	34434	35797
50°	34532	32446	34402
55°	33513	30809	33439
60°	32911	29727	32911
65°	32228	28823	32128
70°	30591	27406	30550
75°	27848	25204	27957
80°	24376	22125	24458
85°	21159	18438	21159



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	361.3	3.4
10°-20°	1120.1	10.7
20°-30°	1693.9	16.1
30°-40°	1849.0	17.6
40°-50°	1815.1	17.3
50°-60°	1589.0	15.1
60°-70°	1194.1	11.4
70°-80°	682.6	6.5
80°-90°	186.2	1.8
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
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0°-30°	3175.3	30.3
0°-40°	5024.3	47.9
0°-60°	8428.5	80.3
0°-90°	10491.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10491.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3660	3660	3660	3660	3660	
5°	3741	3742	3741	3741	3740	362
15°	3972	3969	3941	3971	3977	1124
25°	3754	3759	3557	3758	3750	1733
35°	3065	2915	3003	2903	3087	1911
45°	2345	2393	2248	2378	2338	1808
55°	1775	1803	1632	1797	1771	1592
65°	1258	1209	1125	1208	1254	1237
75°	666	640	602	640	668	707
85°	170	160	148	161	170	191
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°	3659.8	3659.8	3659.8	3659.8	3659.8	3659.8	3659.8	3659.8	3659.8	3659.8	3659.8
2.5°	3684.3	3681.7	3683.0	3681.7	3684.3	3684.3	3683.0	3684.3	3683.0	3683.0	3683.0
5°	3741.0	3738.5	3739.7	3737.2	3741.0	3742.3	3741.0	3742.3	3742.3	3741.0	3741.0
7.5°	3812.0	3806.8	3808.1	3805.5	3809.4	3809.4	3808.1	3808.1	3806.8	3805.5	3806.8
10°	3877.8	3875.2	3875.2	3873.9	3876.5	3875.2	3872.6	3871.3	3866.2	3864.9	3867.5
12.5°	3928.1	3930.7	3934.5	3934.5	3933.2	3932.0	3925.5	3921.6	3913.9	3912.6	3915.2
15°	3971.9	3973.2	3977.1	3975.8	3971.9	3965.5	3959.0	3951.3	3944.9	3941.0	3944.9
17.5°	3995.2	3995.2	3993.9	3990.0	3982.3	3974.5	3965.5	3957.8	3951.3	3946.1	3951.3
20°	3991.3	3991.3	3984.8	3977.1	3964.2	3952.6	3943.6	3935.8	3929.4	3926.8	3930.7
22.5°	3937.1	3941.0	3935.8	3934.5	3924.2	3908.7	3890.7	3871.3	3850.7	3844.2	3853.3
25°	3753.9	3751.4	3753.9	3778.4	3784.9	3733.3	3667.5	3606.9	3570.8	3556.6	3575.9
27.5°	3618.5	3615.9	3583.7	3532.1	3461.1	3427.6	3432.7	3427.6	3418.5	3412.1	3421.1
30°	3480.5	3461.1	3373.4	3279.2	3210.8	3200.5	3230.2	3267.6	3290.8	3292.1	3288.2
32.5°	3302.4	3263.7	3150.2	3078.0	3049.6	3044.4	3053.5	3092.2	3145.1	3165.7	3138.6
35°	3065.1	3043.1	2973.5	2927.0	2918.0	2911.6	2896.1	2915.4	2981.2	3003.1	2978.6
37.5°	2818.7	2839.3	2809.6	2792.9	2791.6	2778.7	2756.8	2759.3	2794.2	2825.1	2790.3
40°	2625.2	2645.8	2665.2	2663.9	2658.7	2639.4	2622.6	2613.6	2611.0	2605.8	2613.6
42.5°	2487.1	2479.4	2516.8	2537.5	2524.6	2511.7	2497.5	2491.0	2443.3	2421.4	2449.7
45°	2345.2	2342.7	2368.5	2412.3	2402.0	2383.9	2380.1	2354.3	2273.0	2248.5	2279.5
47.5°	2199.5	2209.8	2233.0	2269.1	2275.6	2260.1	2248.5	2195.6	2113.0	2083.4	2111.8
50°	2049.8	2073.1	2105.3	2119.5	2125.9	2116.9	2109.2	2040.8	1956.9	1926.0	1958.2
52.5°	1906.6	1938.9	1981.5	1969.8	1964.7	1968.6	1955.7	1893.7	1812.5	1775.1	1813.8
55°	1775.1	1806.0	1843.4	1820.2	1795.7	1809.9	1798.3	1749.3	1678.3	1631.9	1675.7
57.5°	1651.2	1670.6	1700.2	1669.3	1640.9	1657.7	1646.1	1607.4	1541.6	1501.6	1544.1
60°	1519.6	1535.1	1551.9	1522.2	1492.5	1501.6	1496.4	1461.6	1407.4	1372.6	1404.8
62.5°	1388.1	1395.8	1407.4	1375.2	1350.6	1350.6	1348.1	1314.5	1272.0	1252.6	1270.7
65°	1257.8	1256.5	1260.3	1228.1	1210.0	1207.5	1202.3	1171.3	1137.8	1124.9	1139.1
67.5°	1110.7	1113.3	1114.6	1084.9	1070.7	1064.3	1060.4	1032.0	1004.9	995.9	1006.2
70°	966.2	967.5	967.5	940.4	930.1	919.8	915.9	894.0	872.0	865.6	874.6
72.5°	814.0	823.0	819.2	797.2	789.5	776.6	774.0	759.8	743.0	734.0	743.0
75°	665.6	678.5	674.7	655.3	646.3	633.4	634.7	626.9	608.9	602.4	611.5
77.5°	522.5	530.2	531.5	521.2	507.0	497.9	501.8	500.5	487.6	472.1	483.8
80°	390.9	399.9	401.2	392.2	380.6	372.8	378.0	378.0	367.7	354.8	365.1
82.5°	272.2	278.6	278.6	273.5	268.3	260.6	263.2	264.5	258.0	245.1	254.1
85°	170.3	171.6	169.0	165.1	161.3	158.7	158.7	161.3	156.1	148.4	154.8
87.5°	63.2	64.5	63.2	67.1	63.2	61.9	63.2	67.1	61.9	61.9	63.2
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°
0°	3659.8	3659.8	3659.8	3659.8	3659.8	3659.8	3659.8	3659.8
2.5°	3683.0	3684.3	3684.3	3683.0	3683.0	3683.0	3681.7	3683.0
5°	3741.0	3742.3	3742.3	3739.7	3741.0	3739.7	3738.5	3739.7
7.5°	3808.1	3810.7	3809.4	3810.7	3812.0	3809.4	3809.4	3809.4
10°	3870.0	3873.9	3876.5	3879.1	3880.4	3877.8	3879.1	3877.8
12.5°	3920.3	3928.1	3933.2	3935.8	3938.4	3938.4	3935.8	3933.2
15°	3951.3	3960.3	3966.8	3974.5	3979.7	3981.0	3978.4	3977.1
17.5°	3959.0	3966.8	3975.8	3983.6	3991.3	3996.5	3999.0	3997.7
20°	3937.1	3943.6	3953.9	3965.5	3975.8	3986.1	3993.9	3996.5
22.5°	3873.9	3892.0	3911.3	3925.5	3934.5	3939.7	3943.6	3952.6
25°	3614.6	3662.3	3732.0	3784.9	3775.9	3751.4	3742.3	3750.1
27.5°	3430.1	3425.0	3417.2	3458.5	3523.0	3579.8	3606.9	3619.8
30°	3265.0	3226.3	3190.2	3204.4	3270.2	3368.2	3450.8	3484.3
32.5°	3092.2	3039.3	3034.1	3043.1	3074.1	3139.9	3252.1	3315.3
35°	2910.3	2881.9	2897.4	2909.0	2919.3	2952.8	3030.2	3087.0
37.5°	2747.7	2742.6	2763.2	2777.4	2782.6	2799.3	2829.0	2821.3
40°	2604.5	2608.4	2626.5	2641.9	2652.3	2653.6	2635.5	2621.3
42.5°	2475.5	2492.3	2492.3	2511.7	2529.7	2505.2	2467.8	2478.1
45°	2344.0	2371.0	2369.8	2386.5	2403.3	2360.7	2329.8	2337.5
47.5°	2189.2	2240.8	2248.5	2266.6	2266.6	2222.7	2198.2	2189.2
50°	2031.8	2098.9	2107.9	2118.2	2113.0	2096.3	2064.0	2042.1
52.5°	1886.0	1949.2	1958.2	1954.4	1964.7	1972.4	1928.6	1901.5
55°	1742.8	1791.8	1803.4	1790.5	1815.0	1837.0	1795.7	1771.2
57.5°	1600.9	1638.3	1648.6	1638.3	1665.4	1689.9	1662.8	1646.1
60°	1457.7	1491.3	1497.7	1488.7	1520.9	1542.9	1530.0	1519.6
62.5°	1317.1	1340.3	1346.8	1350.6	1370.0	1395.8	1393.2	1391.9
65°	1175.2	1199.7	1202.3	1213.9	1226.8	1260.3	1253.9	1253.9
67.5°	1037.2	1053.9	1057.8	1075.9	1081.0	1113.3	1109.4	1104.3
70°	894.0	910.7	915.9	934.0	941.7	967.5	968.8	964.9
72.5°	762.4	768.8	774.0	790.8	797.2	821.7	821.7	816.6
75°	628.2	626.9	632.1	648.9	655.3	676.0	674.7	668.2
77.5°	501.8	495.4	499.2	510.8	518.6	534.1	528.9	523.7
80°	383.1	372.8	374.1	385.7	390.9	401.2	396.0	392.2
82.5°	270.9	261.9	259.3	268.3	276.1	277.4	276.1	273.5
85°	165.1	157.4	158.7	162.5	167.7	167.7	170.3	170.3
87.5°	64.5	60.6	60.6	64.5	64.5	65.8	64.5	61.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)