

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: P130656

Luminaire Tested: **TBLED-LD1-8-M-UNV-L850-CD1-DIMRF-LW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130656
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-LD1-8-M-UNV-L850-CD1-DIMRF-LW
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH LUMAWATT WIRELESS SENSOR.
Light Source: (160) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8380.6 lumens
Efficiency: N/A
Efficacy: 108.8 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

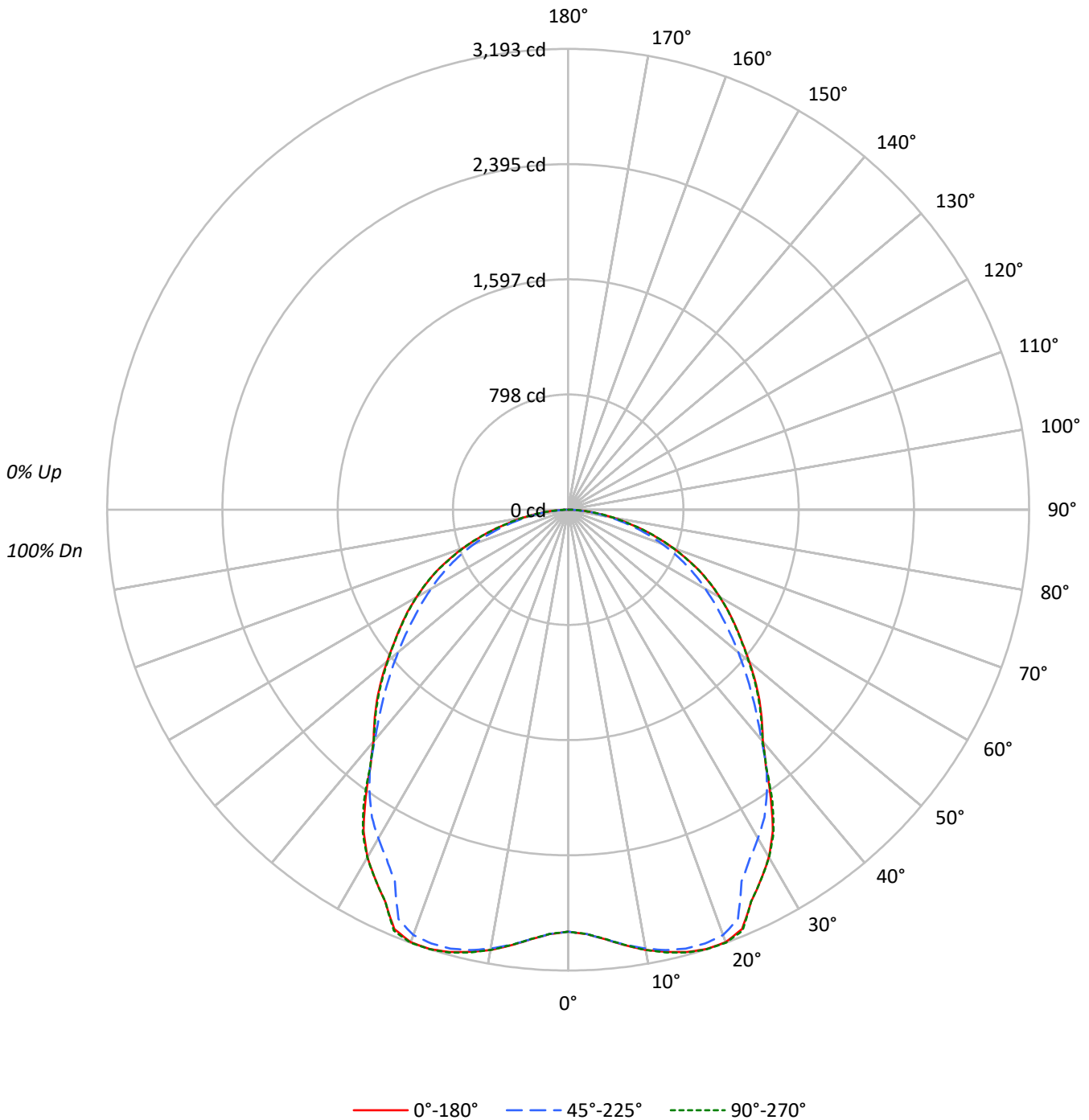
Input Watts (W): 77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	31657	31657	31657
5°	32484	32484	32472
10°	34060	33947	34060
15°	35569	35292	35615
20°	36741	36146	36788
25°	35829	33945	35792
30°	34763	32881	34802
35°	32366	31712	32598
40°	29643	29424	29599
45°	28689	27506	28594
50°	27584	25918	27480
55°	26769	24609	26710
60°	26290	23745	26290
65°	25743	23025	25664
70°	24436	21890	24404
75°	22246	20133	22334
80°	19469	17673	19537
85°	16897	14723	16897



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.6	3.4
10°-20°	894.7	10.7
20°-30°	1353.1	16.1
30°-40°	1477.0	17.6
40°-50°	1449.9	17.3
50°-60°	1269.3	15.1
60°-70°	953.8	11.4
70°-80°	545.3	6.5
80°-90°	148.7	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
0°-30°	2536.4	30.3
0°-40°	4013.5	47.9
0°-60°	6732.7	80.3
0°-90°	8380.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8380.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2923	2923	2923	2923	2923	
5°	2988	2989	2988	2988	2987	289
15°	3173	3170	3148	3172	3177	898
25°	2999	3003	2841	3002	2996	1385
35°	2448	2328	2399	2319	2466	1527
45°	1873	1912	1796	1900	1867	1444
55°	1418	1440	1304	1435	1415	1272
65°	1005	966	899	965	1002	988
75°	532	511	481	512	534	565
85°	136	128	118	128	136	152
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°	2923.4	2923.4	2923.4	2923.4	2923.4	2923.4	2923.4	2923.4	2923.4	2923.4	2923.4
2.5°	2943.0	2941.0	2942.0	2941.0	2943.0	2943.0	2942.0	2943.0	2942.0	2942.0	2942.0
5°	2988.4	2986.3	2987.3	2985.3	2988.4	2989.4	2988.4	2989.4	2989.4	2988.4	2988.4
7.5°	3045.0	3040.9	3041.9	3039.9	3043.0	3043.0	3041.9	3041.9	3040.9	3039.9	3040.9
10°	3097.6	3095.5	3095.5	3094.5	3096.6	3095.5	3093.5	3092.4	3088.3	3087.3	3089.3
12.5°	3137.8	3139.8	3142.9	3142.9	3141.9	3140.9	3135.7	3132.6	3126.4	3125.4	3127.5
15°	3172.8	3173.8	3176.9	3175.9	3172.8	3167.7	3162.5	3156.3	3151.2	3148.1	3151.2
17.5°	3191.4	3191.4	3190.3	3187.2	3181.0	3174.9	3167.7	3161.5	3156.3	3152.2	3156.3
20°	3188.3	3188.3	3183.1	3176.9	3166.6	3157.3	3150.1	3144.0	3138.8	3136.7	3139.8
22.5°	3145.0	3148.1	3144.0	3142.9	3134.7	3122.3	3107.9	3092.4	3075.9	3070.8	3078.0
25°	2998.7	2996.6	2998.7	3018.2	3023.4	2982.2	2929.6	2881.2	2852.3	2841.0	2856.5
27.5°	2890.5	2888.4	2862.6	2821.4	2764.7	2737.9	2742.1	2737.9	2730.7	2725.6	2732.8
30°	2780.2	2764.7	2694.7	2619.4	2564.8	2556.6	2580.3	2610.2	2628.7	2629.7	2626.7
32.5°	2638.0	2607.1	2516.4	2458.7	2436.0	2431.9	2439.1	2470.0	2512.3	2528.8	2507.1
35°	2448.4	2430.9	2375.2	2338.1	2330.9	2325.8	2313.4	2328.9	2381.4	2398.9	2379.3
37.5°	2251.6	2268.1	2244.4	2231.0	2229.9	2219.6	2202.1	2204.2	2232.0	2256.7	2228.9
40°	2097.0	2113.5	2128.9	2127.9	2123.8	2108.3	2094.9	2087.7	2085.7	2081.5	2087.7
42.5°	1986.7	1980.6	2010.4	2026.9	2016.6	2006.3	1995.0	1989.8	1951.7	1934.2	1956.9
45°	1873.4	1871.3	1891.9	1927.0	1918.7	1904.3	1901.2	1880.6	1815.7	1796.1	1820.8
47.5°	1756.9	1765.2	1783.7	1812.6	1817.7	1805.4	1796.1	1753.9	1687.9	1664.2	1686.9
50°	1637.4	1656.0	1681.7	1693.1	1698.2	1691.0	1684.8	1630.2	1563.2	1538.5	1564.2
52.5°	1523.0	1548.8	1582.8	1573.5	1569.4	1572.5	1562.2	1512.7	1447.8	1417.9	1448.8
55°	1417.9	1442.7	1472.5	1454.0	1434.4	1445.7	1436.5	1397.3	1340.6	1303.5	1338.6
57.5°	1319.0	1334.5	1358.2	1333.4	1310.8	1324.1	1314.9	1284.0	1231.4	1199.5	1233.5
60°	1213.9	1226.3	1239.7	1216.0	1192.2	1199.5	1195.3	1167.5	1124.2	1096.4	1122.2
62.5°	1108.8	1115.0	1124.2	1098.5	1078.9	1078.9	1076.8	1050.0	1016.0	1000.6	1015.0
65°	1004.7	1003.7	1006.8	981.0	966.6	964.5	960.4	935.7	908.9	898.6	909.9
67.5°	887.2	889.3	890.3	866.6	855.3	850.1	847.0	824.4	802.7	795.5	803.8
70°	771.8	772.8	772.8	751.2	743.0	734.7	731.6	714.1	696.6	691.4	698.7
72.5°	650.2	657.4	654.3	636.8	630.6	620.3	618.3	606.9	593.5	586.3	593.5
75°	531.7	542.0	538.9	523.5	516.3	506.0	507.0	500.8	486.4	481.2	488.4
77.5°	417.3	423.5	424.6	416.3	405.0	397.8	400.9	399.8	389.5	377.2	386.4
80°	312.2	319.4	320.5	313.3	304.0	297.8	301.9	301.9	293.7	283.4	291.6
82.5°	217.4	222.6	222.6	218.5	214.3	208.2	210.2	211.2	206.1	195.8	203.0
85°	136.0	137.1	135.0	131.9	128.8	126.7	126.7	128.8	124.7	118.5	123.7
87.5°	50.5	51.5	50.5	53.6	50.5	49.5	50.5	53.6	49.5	49.5	50.5
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°	2923.4	2923.4	2923.4	2923.4	2923.4	2923.4	2923.4	2923.4
2.5°	2942.0	2943.0	2943.0	2942.0	2942.0	2942.0	2941.0	2942.0
5°	2988.4	2989.4	2989.4	2987.3	2988.4	2987.3	2986.3	2987.3
7.5°	3041.9	3044.0	3043.0	3044.0	3045.0	3043.0	3043.0	3043.0
10°	3091.4	3094.5	3096.6	3098.6	3099.6	3097.6	3098.6	3097.6
12.5°	3131.6	3137.8	3141.9	3144.0	3146.0	3146.0	3144.0	3141.9
15°	3156.3	3163.5	3168.7	3174.9	3179.0	3180.0	3178.0	3176.9
17.5°	3162.5	3168.7	3175.9	3182.1	3188.3	3192.4	3194.4	3193.4
20°	3145.0	3150.1	3158.4	3167.7	3175.9	3184.1	3190.3	3192.4
22.5°	3094.5	3108.9	3124.4	3135.7	3142.9	3147.0	3150.1	3157.3
25°	2887.4	2925.5	2981.1	3023.4	3016.2	2996.6	2989.4	2995.6
27.5°	2740.0	2735.9	2729.7	2762.7	2814.2	2859.5	2881.2	2891.5
30°	2608.1	2577.2	2548.3	2559.7	2612.2	2690.5	2756.5	2783.3
32.5°	2470.0	2427.8	2423.7	2430.9	2455.6	2508.2	2597.8	2648.3
35°	2324.7	2302.1	2314.4	2323.7	2331.9	2358.7	2420.6	2465.9
37.5°	2194.9	2190.8	2207.3	2218.6	2222.7	2236.1	2259.8	2253.6
40°	2080.5	2083.6	2098.0	2110.4	2118.6	2119.7	2105.2	2093.9
42.5°	1977.5	1990.9	1990.9	2006.3	2020.7	2001.2	1971.3	1979.5
45°	1872.4	1894.0	1893.0	1906.4	1919.8	1885.8	1861.0	1867.2
47.5°	1748.7	1789.9	1796.1	1810.5	1810.5	1775.5	1755.9	1748.7
50°	1623.0	1676.6	1683.8	1692.0	1687.9	1674.5	1648.7	1631.2
52.5°	1506.5	1557.0	1564.2	1561.2	1569.4	1575.6	1540.5	1518.9
55°	1392.2	1431.3	1440.6	1430.3	1449.9	1467.4	1434.4	1414.8
57.5°	1278.8	1308.7	1316.9	1308.7	1330.3	1349.9	1328.3	1314.9
60°	1164.4	1191.2	1196.4	1189.2	1214.9	1232.4	1222.1	1213.9
62.5°	1052.1	1070.7	1075.8	1078.9	1094.4	1115.0	1112.9	1111.9
65°	938.8	958.3	960.4	969.7	980.0	1006.8	1001.6	1001.6
67.5°	828.5	841.9	845.0	859.4	863.5	889.3	886.2	882.1
70°	714.1	727.5	731.6	746.1	752.2	772.8	773.9	770.8
72.5°	609.0	614.2	618.3	631.7	636.8	656.4	656.4	652.3
75°	501.8	500.8	504.9	518.3	523.5	540.0	538.9	533.8
77.5°	400.9	395.7	398.8	408.1	414.2	426.6	422.5	418.4
80°	306.0	297.8	298.8	308.1	312.2	320.5	316.4	313.3
82.5°	216.4	209.2	207.1	214.3	220.5	221.6	220.5	218.5
85°	131.9	125.7	126.7	129.8	134.0	134.0	136.0	136.0
87.5°	51.5	48.4	48.4	51.5	51.5	52.6	51.5	49.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)