

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: P130646

Luminaire Tested: **TBLED-LD1-8-M-UNV-L840-CD1-DOS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130646  
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-L840-CD1-DOS  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
MEDIUM DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR.  
Light Source: (160) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7759.1 lumens  
Efficiency: N/A  
Efficacy: 100.8 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

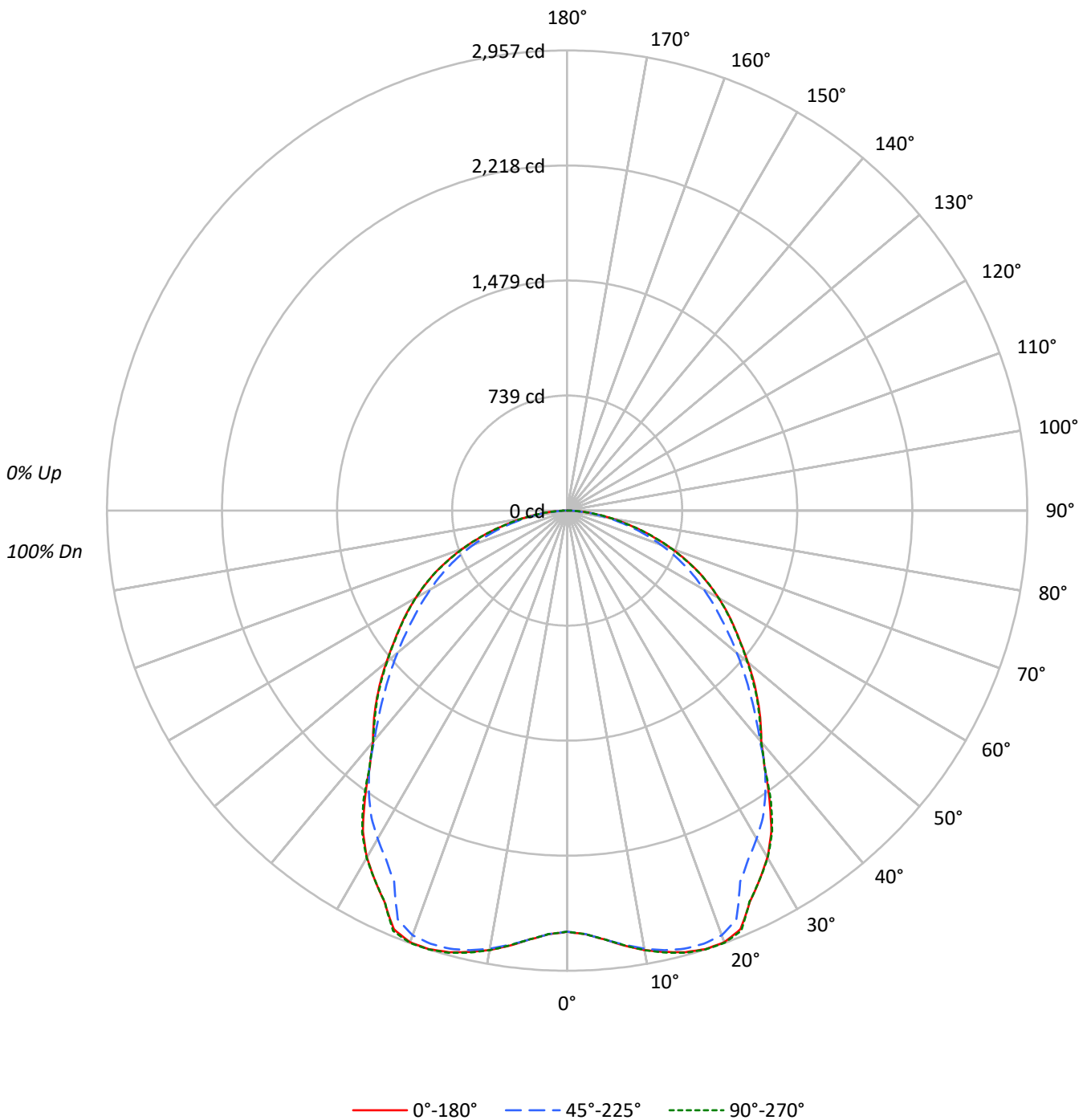
Input Watts (W): 77  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	29310	29310	29310
5°	30075	30075	30064
10°	31535	31430	31535
15°	32931	32675	32975
20°	34015	33466	34060
25°	33172	31427	33137
30°	32185	30444	32221
35°	29966	29360	30181
40°	27445	27243	27404
45°	26562	25466	26473
50°	25539	23996	25443
55°	24785	22785	24730
60°	24341	21984	24341
65°	23834	21316	23760
70°	22625	20269	22593
75°	20597	18639	20677
80°	18028	16363	18084
85°	15642	13630	15642



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.2	3.4
10°-20°	828.4	10.7
20°-30°	1252.7	16.1
30°-40°	1367.5	17.6
40°-50°	1342.4	17.3
50°-60°	1175.2	15.1
60°-70°	883.1	11.4
70°-80°	504.9	6.5
80°-90°	137.7	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°	2348.4	30.3
0°-40°	3715.9	47.9
0°-60°	6233.5	80.3
0°-90°	7759.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7759.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2707	2707	2707	2707	2707	
5°	2767	2767	2767	2767	2766	267
15°	2938	2935	2915	2937	2941	831
25°	2776	2780	2630	2780	2773	1282
35°	2267	2156	2221	2147	2283	1413
45°	1734	1770	1663	1759	1729	1337
55°	1313	1333	1207	1329	1310	1177
65°	930	894	832	894	927	915
75°	492	473	446	474	494	523
85°	126	118	110	119	126	141
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°	2706.7	2706.7	2706.7	2706.7	2706.7	2706.7	2706.7	2706.7	2706.7	2706.7	2706.7
2.5°	2724.8	2722.9	2723.8	2722.9	2724.8	2724.8	2723.8	2724.8	2723.8	2723.8	2723.8
5°	2766.8	2764.9	2765.8	2763.9	2766.8	2767.7	2766.8	2767.7	2767.7	2766.8	2766.8
7.5°	2819.2	2815.4	2816.4	2814.5	2817.3	2817.3	2816.4	2816.4	2815.4	2814.5	2815.4
10°	2867.9	2866.0	2866.0	2865.0	2866.9	2866.0	2864.1	2863.1	2859.3	2858.4	2860.3
12.5°	2905.1	2907.0	2909.9	2909.9	2908.9	2908.0	2903.2	2900.3	2894.6	2893.7	2895.6
15°	2937.5	2938.5	2941.4	2940.4	2937.5	2932.8	2928.0	2922.3	2917.5	2914.6	2917.5
17.5°	2954.7	2954.7	2953.8	2950.9	2945.2	2939.4	2932.8	2927.0	2922.3	2918.5	2922.3
20°	2951.8	2951.8	2947.1	2941.4	2931.8	2923.2	2916.5	2910.8	2906.1	2904.1	2907.0
22.5°	2911.8	2914.6	2910.8	2909.9	2902.2	2890.8	2877.4	2863.1	2847.9	2843.1	2849.8
25°	2776.3	2774.4	2776.3	2794.4	2799.2	2761.0	2712.4	2667.5	2640.8	2630.3	2644.6
27.5°	2676.1	2674.2	2650.4	2612.2	2559.7	2534.9	2538.7	2534.9	2528.2	2523.5	2530.2
30°	2574.0	2559.7	2494.9	2425.2	2374.6	2367.0	2389.0	2416.6	2433.8	2434.8	2431.9
32.5°	2442.4	2413.8	2329.8	2276.4	2255.4	2251.6	2258.3	2286.9	2326.0	2341.3	2321.2
35°	2266.8	2250.6	2199.1	2164.8	2158.1	2153.3	2141.9	2156.2	2204.8	2221.0	2202.9
37.5°	2084.6	2099.9	2077.9	2065.5	2064.6	2055.0	2038.8	2040.7	2066.5	2089.4	2063.6
40°	1941.5	1956.8	1971.1	1970.1	1966.3	1952.0	1939.6	1932.9	1931.0	1927.2	1932.9
42.5°	1839.4	1833.7	1861.4	1876.6	1867.1	1857.5	1847.1	1842.3	1807.0	1790.8	1811.8
45°	1734.5	1732.6	1751.6	1784.1	1776.5	1763.1	1760.2	1741.2	1681.0	1662.9	1685.8
47.5°	1626.7	1634.3	1651.5	1678.2	1683.0	1671.5	1662.9	1623.8	1562.7	1540.8	1561.8
50°	1516.0	1533.2	1557.0	1567.5	1572.3	1565.6	1559.9	1509.3	1447.3	1424.4	1448.3
52.5°	1410.1	1433.9	1465.4	1456.8	1453.0	1455.9	1446.3	1400.6	1340.4	1312.8	1341.4
55°	1312.8	1335.7	1363.3	1346.2	1328.0	1338.5	1330.0	1293.7	1241.2	1206.9	1239.3
57.5°	1221.2	1235.5	1257.4	1234.5	1213.6	1226.0	1217.4	1188.8	1140.1	1110.5	1142.0
60°	1123.9	1135.3	1147.7	1125.8	1103.8	1110.5	1106.7	1080.9	1040.9	1015.1	1039.0
62.5°	1026.6	1032.3	1040.9	1017.0	998.9	998.9	997.0	972.2	940.7	926.4	939.7
65°	930.2	929.3	932.1	908.3	894.9	893.0	889.2	866.3	841.5	831.9	842.4
67.5°	821.4	823.4	824.3	802.4	791.9	787.1	784.2	763.2	743.2	736.5	744.2
70°	714.6	715.5	715.5	695.5	687.9	680.2	677.4	661.2	644.9	640.2	646.9
72.5°	602.0	608.7	605.8	589.6	583.9	574.3	572.4	561.9	549.5	542.9	549.5
75°	492.3	501.8	499.0	484.7	478.0	468.4	469.4	463.7	450.3	445.5	452.2
77.5°	386.4	392.1	393.1	385.4	374.9	368.3	371.1	370.2	360.6	349.2	357.8
80°	289.1	295.8	296.7	290.0	281.4	275.7	279.5	279.5	271.9	262.4	270.0
82.5°	201.3	206.1	206.1	202.3	198.4	192.7	194.6	195.6	190.8	181.3	187.9
85°	125.9	126.9	125.0	122.1	119.3	117.3	117.3	119.3	115.4	109.7	114.5
87.5°	46.7	47.7	46.7	49.6	46.7	45.8	46.7	49.6	45.8	45.8	46.7
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°	2706.7	2706.7	2706.7	2706.7	2706.7	2706.7	2706.7	2706.7
2.5°	2723.8	2724.8	2724.8	2723.8	2723.8	2723.8	2722.9	2723.8
5°	2766.8	2767.7	2767.7	2765.8	2766.8	2765.8	2764.9	2765.8
7.5°	2816.4	2818.3	2817.3	2818.3	2819.2	2817.3	2817.3	2817.3
10°	2862.2	2865.0	2866.9	2868.8	2869.8	2867.9	2868.8	2867.9
12.5°	2899.4	2905.1	2908.9	2910.8	2912.7	2912.7	2910.8	2908.9
15°	2922.3	2929.0	2933.7	2939.4	2943.3	2944.2	2942.3	2941.4
17.5°	2928.0	2933.7	2940.4	2946.1	2951.8	2955.7	2957.6	2956.6
20°	2911.8	2916.5	2924.2	2932.8	2940.4	2948.0	2953.8	2955.7
22.5°	2865.0	2878.4	2892.7	2903.2	2909.9	2913.7	2916.5	2923.2
25°	2673.3	2708.6	2760.1	2799.2	2792.5	2774.4	2767.7	2773.4
27.5°	2536.8	2533.0	2527.3	2557.8	2605.5	2647.5	2667.5	2677.1
30°	2414.7	2386.1	2359.4	2369.9	2418.5	2491.0	2552.1	2576.9
32.5°	2286.9	2247.8	2243.9	2250.6	2273.5	2322.2	2405.2	2451.9
35°	2152.4	2131.4	2142.8	2151.4	2159.0	2183.8	2241.1	2283.1
37.5°	2032.1	2028.3	2043.6	2054.1	2057.9	2070.3	2092.2	2086.5
40°	1926.2	1929.1	1942.5	1953.9	1961.5	1962.5	1949.1	1938.6
42.5°	1830.8	1843.2	1843.2	1857.5	1870.9	1852.8	1825.1	1832.7
45°	1733.5	1753.6	1752.6	1765.0	1777.4	1745.9	1723.0	1728.7
47.5°	1619.0	1657.2	1662.9	1676.3	1676.3	1643.8	1625.7	1619.0
50°	1502.6	1552.2	1558.9	1566.6	1562.7	1550.3	1526.5	1510.3
52.5°	1394.8	1441.6	1448.3	1445.4	1453.0	1458.8	1426.3	1406.3
55°	1288.9	1325.2	1333.8	1324.2	1342.4	1358.6	1328.0	1309.9
57.5°	1184.0	1211.7	1219.3	1211.7	1231.7	1249.8	1229.8	1217.4
60°	1078.1	1102.9	1107.7	1101.0	1124.8	1141.1	1131.5	1123.9
62.5°	974.1	991.3	996.0	998.9	1013.2	1032.3	1030.4	1029.4
65°	869.1	887.3	889.2	897.8	907.3	932.1	927.3	927.3
67.5°	767.1	779.5	782.3	795.7	799.5	823.4	820.5	816.7
70°	661.2	673.6	677.4	690.7	696.5	715.5	716.5	713.6
72.5°	563.8	568.6	572.4	584.8	589.6	607.7	607.7	603.9
75°	464.6	463.7	467.5	479.9	484.7	499.9	499.0	494.2
77.5°	371.1	366.4	369.2	377.8	383.5	395.0	391.2	387.3
80°	283.4	275.7	276.7	285.3	289.1	296.7	292.9	290.0
82.5°	200.4	193.7	191.8	198.4	204.2	205.1	204.2	202.3
85°	122.1	116.4	117.3	120.2	124.0	124.0	125.9	125.9
87.5°	47.7	44.8	44.8	47.7	47.7	48.7	47.7	45.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)