

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: P130655

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130655  
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-DIMRF-LW  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
MEDIUM DISTRIBUTION WITH LUMAWATT WIRELESS SENSOR.  
Light Source: (160) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7536.7 lumens  
Efficiency: N/A  
Efficacy: 97.9 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

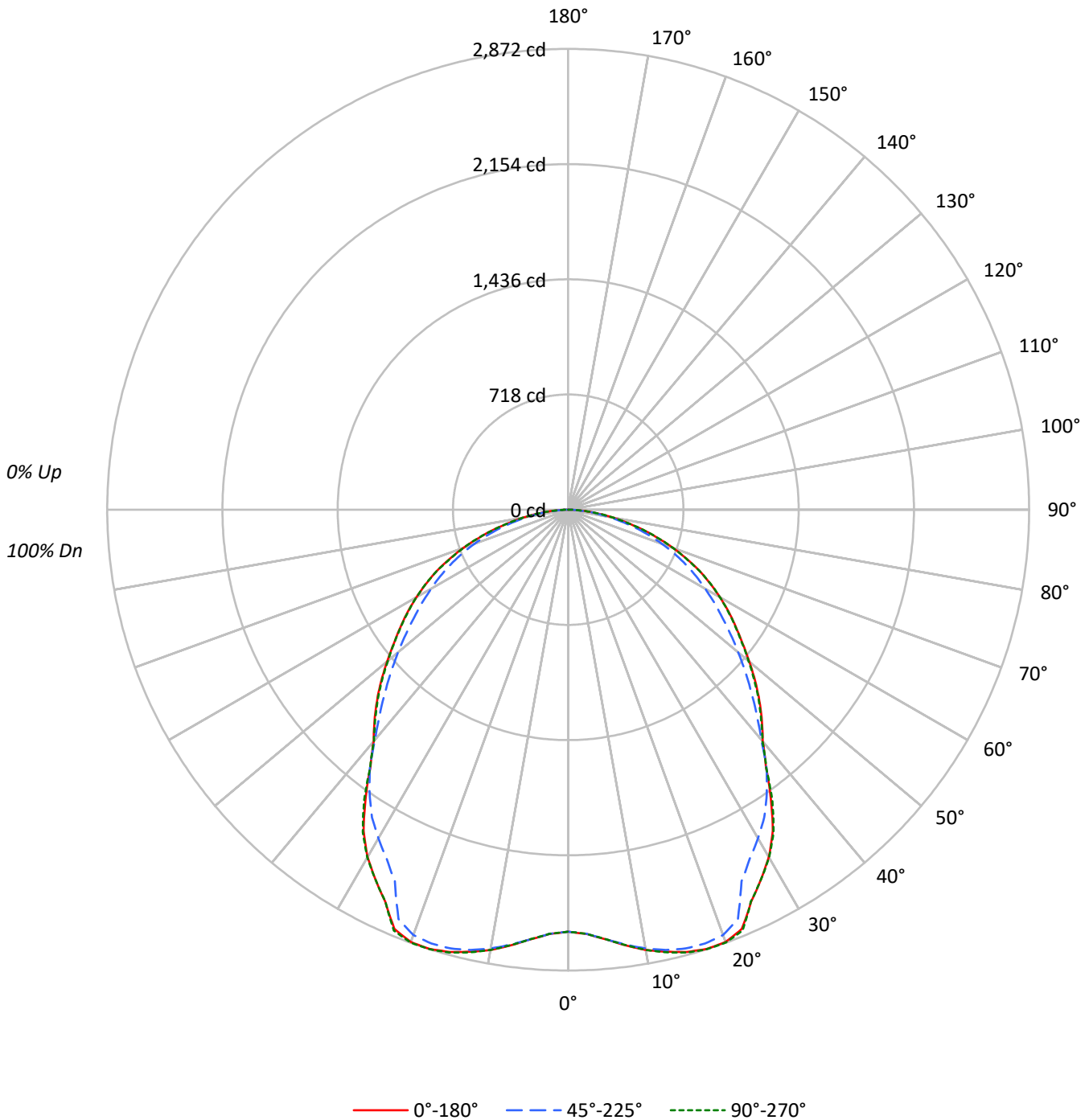
Input Watts (W): 77  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	28470	28470	28470
5°	29212	29212	29202
10°	30631	30529	30631
15°	31987	31739	32029
20°	33041	32507	33083
25°	32220	30526	32187
30°	31263	29572	31297
35°	29108	28519	29315
40°	26657	26461	26619
45°	25801	24735	25715
50°	24806	23309	24714
55°	24073	22132	24022
60°	23643	21354	23643
65°	23150	20706	23081
70°	21976	19687	21947
75°	20007	18108	20083
80°	17511	15889	17567
85°	15195	13245	15195



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	259.6	3.4
10°-20°	804.6	10.7
20°-30°	1216.8	16.1
30°-40°	1328.3	17.6
40°-50°	1303.9	17.3
50°-60°	1141.5	15.1
60°-70°	857.8	11.4
70°-80°	490.4	6.5
80°-90°	133.7	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°	2281.0	30.3
0°-40°	3609.3	47.9
0°-60°	6054.8	80.3
0°-90°	7536.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7536.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2629	2629	2629	2629	2629	
5°	2687	2688	2687	2687	2686	260
15°	2853	2851	2831	2852	2857	807
25°	2697	2700	2555	2700	2694	1245
35°	2202	2094	2157	2086	2218	1373
45°	1685	1719	1615	1708	1679	1299
55°	1275	1295	1172	1291	1272	1144
65°	904	868	808	868	901	889
75°	478	460	433	460	480	508
85°	122	115	107	115	122	137
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°	2629.1	2629.1	2629.1	2629.1	2629.1	2629.1	2629.1	2629.1	2629.1	2629.1	2629.1
2.5°	2646.7	2644.8	2645.7	2644.8	2646.7	2646.7	2645.7	2646.7	2645.7	2645.7	2645.7
5°	2687.4	2685.6	2686.5	2684.7	2687.4	2688.4	2687.4	2688.4	2688.4	2687.4	2687.4
7.5°	2738.4	2734.7	2735.6	2733.8	2736.6	2736.6	2735.6	2735.6	2734.7	2733.8	2734.7
10°	2785.7	2783.8	2783.8	2782.9	2784.8	2783.8	2782.0	2781.0	2777.3	2776.4	2778.3
12.5°	2821.8	2823.7	2826.5	2826.5	2825.5	2824.6	2820.0	2817.2	2811.6	2810.7	2812.6
15°	2853.3	2854.3	2857.0	2856.1	2853.3	2848.7	2844.1	2838.5	2833.9	2831.1	2833.9
17.5°	2870.0	2870.0	2869.1	2866.3	2860.7	2855.2	2848.7	2843.1	2838.5	2834.8	2838.5
20°	2867.2	2867.2	2862.6	2857.0	2847.8	2839.4	2832.9	2827.4	2822.7	2820.9	2823.7
22.5°	2828.3	2831.1	2827.4	2826.5	2819.0	2807.9	2794.9	2781.0	2766.2	2761.6	2768.1
25°	2696.7	2694.9	2696.7	2714.3	2719.0	2681.9	2634.6	2591.1	2565.1	2554.9	2568.8
27.5°	2599.4	2597.6	2574.4	2537.3	2486.4	2462.3	2466.0	2462.3	2455.8	2451.1	2457.6
30°	2500.3	2486.4	2423.3	2355.7	2306.6	2299.2	2320.5	2347.3	2364.0	2365.0	2362.2
32.5°	2372.4	2344.6	2263.0	2211.1	2190.7	2187.0	2193.5	2221.3	2259.3	2274.1	2254.7
35°	2201.9	2186.1	2136.1	2102.7	2096.2	2091.6	2080.5	2094.4	2141.6	2157.4	2139.8
37.5°	2024.9	2039.7	2018.4	2006.3	2005.4	1996.1	1980.4	1982.2	2007.2	2029.5	2004.5
40°	1885.8	1900.7	1914.6	1913.6	1909.9	1896.0	1884.0	1877.5	1875.7	1871.9	1877.5
42.5°	1786.7	1781.1	1808.0	1822.8	1813.6	1804.3	1794.1	1789.5	1755.2	1739.4	1759.8
45°	1684.8	1682.9	1701.4	1732.9	1725.5	1712.6	1709.8	1691.2	1632.9	1615.2	1637.5
47.5°	1580.0	1587.4	1604.1	1630.1	1634.7	1623.6	1615.2	1577.3	1517.9	1496.6	1517.0
50°	1472.5	1489.2	1512.4	1522.6	1527.2	1520.7	1515.2	1466.0	1405.8	1383.6	1406.7
52.5°	1369.7	1392.8	1423.4	1415.1	1411.4	1414.2	1404.9	1360.4	1302.0	1275.1	1302.9
55°	1275.1	1297.4	1324.3	1307.6	1290.0	1300.2	1291.8	1256.6	1205.6	1172.3	1203.8
57.5°	1186.2	1200.1	1221.4	1199.2	1178.8	1190.8	1182.5	1154.7	1107.4	1078.7	1109.3
60°	1091.7	1102.8	1114.8	1093.5	1072.2	1078.7	1075.0	1050.0	1011.0	986.0	1009.2
62.5°	997.1	1002.7	1011.0	987.9	970.3	970.3	968.4	944.3	913.7	899.8	912.8
65°	903.5	902.6	905.4	882.2	869.2	867.4	863.7	841.4	817.4	808.1	818.3
67.5°	797.9	799.7	800.7	779.4	769.2	764.5	761.8	741.4	721.9	715.4	722.8
70°	694.1	695.0	695.0	675.6	668.2	660.7	658.0	642.2	626.5	621.8	628.3
72.5°	584.8	591.2	588.5	572.7	567.1	557.9	556.0	545.8	533.8	527.3	533.8
75°	478.2	487.4	484.7	470.8	464.3	455.0	455.9	450.4	437.4	432.8	439.3
77.5°	375.3	380.9	381.8	374.4	364.2	357.7	360.5	359.6	350.3	339.2	347.5
80°	280.8	287.3	288.2	281.7	273.4	267.8	271.5	271.5	264.1	254.8	262.3
82.5°	195.5	200.2	200.2	196.5	192.8	187.2	189.0	190.0	185.3	176.1	182.6
85°	122.3	123.3	121.4	118.6	115.8	114.0	114.0	115.8	112.1	106.6	111.2
87.5°	45.4	46.3	45.4	48.2	45.4	44.5	45.4	48.2	44.5	44.5	45.4
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°	2629.1	2629.1	2629.1	2629.1	2629.1	2629.1	2629.1	2629.1
2.5°	2645.7	2646.7	2646.7	2645.7	2645.7	2645.7	2644.8	2645.7
5°	2687.4	2688.4	2688.4	2686.5	2687.4	2686.5	2685.6	2686.5
7.5°	2735.6	2737.5	2736.6	2737.5	2738.4	2736.6	2736.6	2736.6
10°	2780.1	2782.9	2784.8	2786.6	2787.5	2785.7	2786.6	2785.7
12.5°	2816.3	2821.8	2825.5	2827.4	2829.2	2829.2	2827.4	2825.5
15°	2838.5	2845.0	2849.6	2855.2	2858.9	2859.8	2858.0	2857.0
17.5°	2844.1	2849.6	2856.1	2861.7	2867.2	2870.9	2872.8	2871.9
20°	2828.3	2832.9	2840.4	2848.7	2856.1	2863.5	2869.1	2870.9
22.5°	2782.9	2795.9	2809.8	2820.0	2826.5	2830.2	2832.9	2839.4
25°	2596.6	2630.9	2681.0	2719.0	2712.5	2694.9	2688.4	2693.9
27.5°	2464.1	2460.4	2454.8	2484.5	2530.8	2571.6	2591.1	2600.3
30°	2345.5	2317.7	2291.7	2301.9	2349.2	2419.6	2478.9	2503.0
32.5°	2221.3	2183.3	2179.6	2186.1	2208.3	2255.6	2336.2	2381.6
35°	2090.6	2070.3	2081.4	2089.7	2097.1	2121.2	2176.8	2217.6
37.5°	1973.9	1970.2	1985.0	1995.2	1998.9	2011.0	2032.3	2026.7
40°	1871.0	1873.8	1886.8	1897.9	1905.3	1906.2	1893.3	1883.1
42.5°	1778.3	1790.4	1790.4	1804.3	1817.3	1799.7	1772.8	1780.2
45°	1683.8	1703.3	1702.4	1714.4	1726.5	1695.9	1673.6	1679.2
47.5°	1572.6	1609.7	1615.2	1628.2	1628.2	1596.7	1579.1	1572.6
50°	1459.6	1507.8	1514.2	1521.7	1517.9	1505.9	1482.7	1467.0
52.5°	1354.8	1400.3	1406.7	1404.0	1411.4	1416.9	1385.4	1366.0
55°	1252.0	1287.2	1295.5	1286.3	1303.9	1319.6	1290.0	1272.4
57.5°	1150.0	1176.9	1184.3	1176.9	1196.4	1214.0	1194.5	1182.5
60°	1047.2	1071.3	1075.9	1069.4	1092.6	1108.3	1099.1	1091.7
62.5°	946.2	962.8	967.5	970.3	984.2	1002.7	1000.8	999.9
65°	844.2	861.8	863.7	872.0	881.3	905.4	900.8	900.8
67.5°	745.1	757.1	759.9	772.9	776.6	799.7	797.0	793.3
70°	642.2	654.3	658.0	670.9	676.5	695.0	696.0	693.2
72.5°	547.7	552.3	556.0	568.1	572.7	590.3	590.3	586.6
75°	451.3	450.4	454.1	466.1	470.8	485.6	484.7	480.0
77.5°	360.5	355.9	358.6	367.0	372.5	383.7	379.9	376.2
80°	275.2	267.8	268.7	277.1	280.8	288.2	284.5	281.7
82.5°	194.6	188.1	186.3	192.8	198.3	199.2	198.3	196.5
85°	118.6	113.1	114.0	116.8	120.5	120.5	122.3	122.3
87.5°	46.3	43.6	43.6	46.3	46.3	47.3	46.3	44.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)