

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: P130682

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130682
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-LD1-8-M-UNV-L840-CD1-CG-DOS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR.
Light Source: (160) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7846.9 lumens
Efficiency: N/A
Efficacy: 101.9 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

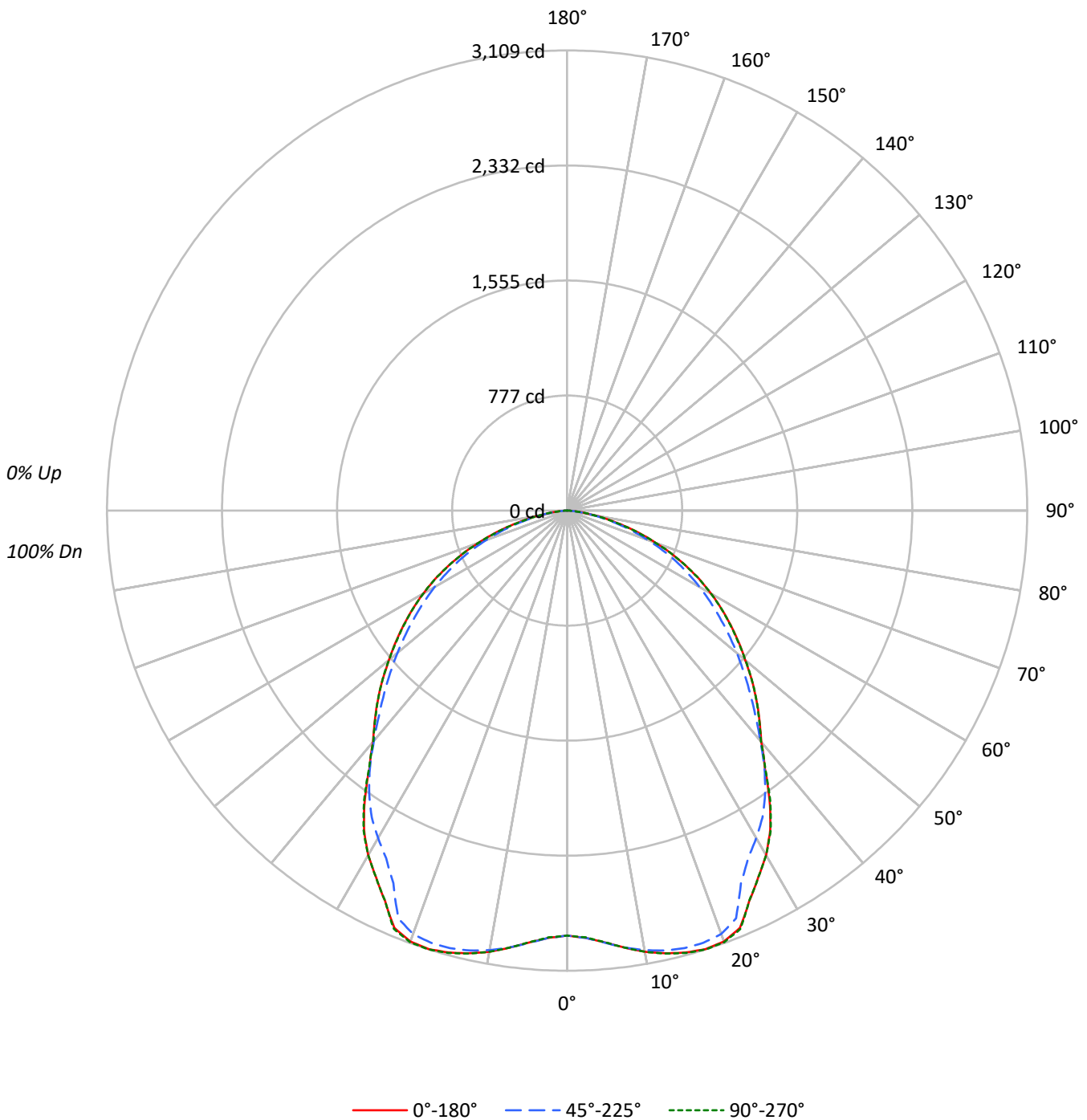
Input Watts (W): 77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130682

CATALOG NUMBER: TBLED-LD1-8-M-UNV-L840-CD1-CG-DOS

Luminous Intensity Polar Plot





TEST NUMBER: P130682

CATALOG NUMBER: TBLED-LD1-8-M-UNV-L840-CD1-CG-DOS

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31097	31097	31097
5°	31838	31859	31818
10°	33286	33161	33276
15°	34654	34311	34686
20°	35698	35083	35753
25°	34791	33194	34768
30°	33605	31947	33617
35°	31518	30837	31618
40°	28847	28713	28807
45°	27702	26781	27702
50°	26456	25202	26488
55°	25451	23741	25379
60°	24341	22398	24341
65°	22735	20780	22735
70°	20178	18427	20178
75°	16727	15129	16484
80°	12079	11069	11842
85°	7231	6635	6995



TEST NUMBER: P130682

CATALOG NUMBER: TBLED-LD1-8-M-UNV-L840-CD1-CG-DOS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.7	3.6
10°-20°	870.6	11.1
20°-30°	1314.8	16.8
30°-40°	1435.4	18.3
40°-50°	1400.9	17.9
50°-60°	1203.5	15.3
60°-70°	850.7	10.8
70°-80°	411.6	5.2
80°-90°	76.8	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°	2468.1	31.5
0°-40°	3903.5	49.7
0°-60°	6507.9	82.9
0°-90°	7846.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7846.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2872	2872	2872	2872	2872	
5°	2929	2930	2931	2929	2927	283
15°	3091	3085	3061	3086	3094	874
25°	2912	2920	2778	2921	2910	1342
35°	2384	2261	2333	2255	2392	1483
45°	1809	1844	1749	1838	1809	1394
55°	1348	1364	1258	1360	1344	1206
65°	887	859	811	859	887	875
75°	400	380	362	379	394	428
85°	58	55	53	54	56	79
90°	0	0	0	0	0	



TEST NUMBER: P130682

CATALOG NUMBER: TBLED-LD1-8-M-UNV-L840-CD1-CG-DOS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2871.7	2871.7	2871.7	2871.7	2871.7	2871.7	2871.7	2871.7	2871.7	2871.7	2871.7
2.5°	2888.9	2887.9	2887.0	2887.9	2889.9	2889.9	2889.9	2888.9	2888.9	2889.9	2888.9
5°	2929.0	2927.1	2928.0	2927.1	2930.9	2929.9	2929.9	2930.9	2930.9	2930.9	2929.9
7.5°	2978.6	2976.7	2976.7	2976.7	2977.6	2977.6	2977.6	2977.6	2976.7	2976.7	2976.7
10°	3027.2	3024.4	3025.3	3024.4	3025.3	3023.4	3021.5	3019.6	3017.7	3015.8	3016.7
12.5°	3063.5	3062.5	3064.5	3064.5	3062.5	3059.7	3054.9	3050.1	3046.3	3044.4	3046.3
15°	3091.2	3093.1	3094.0	3093.1	3089.3	3081.6	3075.9	3068.3	3063.5	3060.6	3063.5
17.5°	3106.4	3106.4	3104.5	3098.8	3092.1	3085.4	3076.9	3069.2	3064.5	3061.6	3065.4
20°	3097.8	3096.9	3090.2	3081.6	3071.1	3062.5	3054.9	3048.2	3045.4	3044.4	3046.3
22.5°	3051.1	3053.0	3049.2	3043.5	3035.8	3023.4	3009.1	2995.8	2985.3	2981.4	2985.3
25°	2911.8	2910.8	2917.5	2929.0	2936.6	2903.2	2858.4	2815.4	2785.9	2778.2	2785.9
27.5°	2795.4	2794.5	2779.2	2745.8	2706.7	2676.1	2667.6	2662.8	2652.3	2647.5	2654.2
30°	2687.6	2678.1	2623.7	2554.0	2504.4	2492.0	2511.1	2536.9	2551.2	2555.0	2548.3
32.5°	2555.0	2529.2	2455.8	2394.7	2372.8	2363.2	2369.9	2403.3	2437.6	2456.7	2435.7
35°	2384.2	2362.3	2304.1	2270.7	2265.9	2255.4	2246.8	2266.9	2308.8	2332.7	2304.1
37.5°	2195.3	2205.8	2181.0	2163.8	2163.8	2153.3	2136.1	2142.8	2166.7	2189.6	2164.8
40°	2040.7	2059.8	2065.5	2060.8	2058.9	2045.5	2029.3	2025.5	2026.4	2031.2	2023.6
42.5°	1922.4	1925.3	1951.1	1959.6	1952.0	1937.7	1928.2	1922.4	1894.8	1882.4	1898.6
45°	1808.9	1810.8	1831.8	1856.6	1851.8	1836.6	1828.9	1810.8	1762.2	1748.8	1766.0
47.5°	1690.6	1701.1	1716.4	1742.1	1746.9	1731.6	1721.1	1689.6	1631.4	1620.0	1632.4
50°	1570.4	1590.4	1608.6	1621.0	1627.6	1614.3	1602.8	1565.6	1509.3	1496.0	1508.4
52.5°	1460.7	1478.8	1502.6	1498.8	1496.0	1493.1	1485.5	1447.3	1393.9	1375.8	1392.9
55°	1348.1	1366.2	1390.1	1373.9	1361.4	1366.2	1357.6	1326.1	1280.4	1257.5	1280.4
57.5°	1236.5	1250.8	1269.9	1249.8	1231.7	1237.4	1231.7	1209.8	1166.8	1144.9	1166.8
60°	1123.9	1132.5	1145.8	1124.8	1105.8	1109.6	1107.7	1084.8	1051.4	1034.2	1051.4
62.5°	1008.4	1013.2	1019.9	999.9	983.6	982.7	983.6	960.7	935.0	923.5	935.9
65°	887.3	889.2	893.0	873.0	861.5	856.7	858.7	837.7	818.6	811.0	819.5
67.5°	763.3	765.2	766.1	747.0	739.4	732.7	733.7	718.4	701.2	696.5	703.1
70°	637.3	640.2	640.2	623.0	618.2	609.6	609.6	600.1	585.8	582.0	586.7
72.5°	519.0	517.1	517.1	502.8	499.0	490.4	489.4	486.6	473.2	469.4	474.2
75°	399.8	397.8	398.8	387.3	383.5	376.9	375.9	375.9	365.4	361.6	366.4
77.5°	289.1	291.0	290.0	281.4	277.6	274.8	277.6	277.6	268.1	264.3	269.0
80°	193.7	195.6	195.6	188.9	186.0	184.1	188.0	186.0	181.3	177.5	181.3
82.5°	117.3	117.3	117.3	115.4	111.6	111.6	114.5	114.5	109.7	106.9	109.7
85°	58.2	58.2	57.2	57.2	55.3	55.3	57.2	57.2	54.4	53.4	54.4
87.5°	20.0	19.1	19.1	19.1	18.1	19.1	19.1	19.1	18.1	18.1	18.1
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: P130682

CATALOG NUMBER: TBLED-LD1-8-M-UNV-L840-CD1-CG-DOS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2871.7	2871.7	2871.7	2871.7	2871.7	2871.7	2871.7	2871.7
2.5°	2889.9	2889.9	2888.9	2888.9	2888.9	2887.9	2887.0	2886.0
5°	2931.8	2930.9	2929.0	2929.9	2929.0	2929.0	2928.0	2927.1
7.5°	2978.6	2979.5	2977.6	2979.5	2979.5	2979.5	2978.6	2977.6
10°	3019.6	3022.5	3023.4	3026.3	3027.2	3028.2	3027.2	3026.3
12.5°	3051.1	3055.9	3059.7	3064.5	3067.3	3068.3	3066.4	3065.4
15°	3069.2	3075.9	3082.6	3090.2	3095.0	3096.9	3095.9	3094.0
17.5°	3070.2	3077.8	3086.4	3093.1	3099.8	3104.5	3108.3	3109.3
20°	3049.2	3055.9	3063.5	3072.1	3082.6	3091.2	3099.8	3102.6
22.5°	2992.9	3009.1	3025.3	3033.9	3042.5	3048.2	3053.0	3059.7
25°	2808.8	2857.4	2909.9	2931.8	2928.0	2909.9	2907.0	2909.9
27.5°	2664.7	2670.4	2677.1	2702.9	2739.1	2772.5	2791.6	2795.4
30°	2535.9	2508.2	2487.2	2499.6	2547.3	2613.2	2672.3	2688.5
32.5°	2402.3	2366.1	2357.5	2366.1	2387.1	2441.4	2522.5	2559.8
35°	2260.2	2244.9	2251.6	2259.2	2264.0	2293.6	2353.7	2391.8
37.5°	2135.2	2133.3	2146.6	2156.2	2156.2	2167.6	2198.2	2199.1
40°	2017.8	2027.4	2037.9	2051.2	2054.1	2058.9	2051.2	2037.9
42.5°	1914.8	1925.3	1932.0	1945.3	1953.0	1942.5	1917.7	1919.6
45°	1807.0	1827.0	1830.8	1845.2	1850.9	1823.2	1804.1	1808.9
47.5°	1685.8	1719.2	1726.9	1742.1	1737.3	1710.6	1697.3	1691.6
50°	1560.8	1604.7	1611.4	1621.9	1616.2	1602.8	1585.7	1572.3
52.5°	1448.3	1483.6	1488.3	1492.2	1496.9	1499.8	1477.8	1456.9
55°	1328.1	1355.7	1362.4	1358.6	1371.9	1387.2	1365.3	1344.3
57.5°	1211.7	1230.7	1235.5	1228.8	1247.9	1267.9	1251.7	1235.5
60°	1087.6	1106.7	1107.7	1104.8	1123.9	1141.1	1134.4	1123.9
62.5°	965.5	982.7	979.8	982.7	997.9	1019.9	1015.1	1008.4
65°	841.5	857.7	855.8	861.5	873.0	893.0	893.0	887.3
67.5°	723.2	732.7	731.8	739.4	748.0	767.1	769.0	763.3
70°	604.9	609.6	608.7	617.3	624.0	644.0	644.0	637.3
72.5°	490.4	493.3	489.4	500.9	503.7	520.9	520.9	513.3
75°	380.7	379.7	375.9	382.6	391.2	403.6	400.7	394.0
77.5°	278.6	275.7	271.9	279.5	284.3	293.9	291.0	284.3
80°	188.9	186.0	181.3	188.0	191.8	197.5	194.6	189.9
82.5°	115.4	112.6	108.8	113.5	115.4	119.3	117.3	113.5
85°	57.2	55.3	53.4	54.4	57.2	58.2	57.2	56.3
87.5°	19.1	18.1	17.2	18.1	18.1	19.1	19.1	18.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)