

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: P130637

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130637
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
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION.
Light Source: (160) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

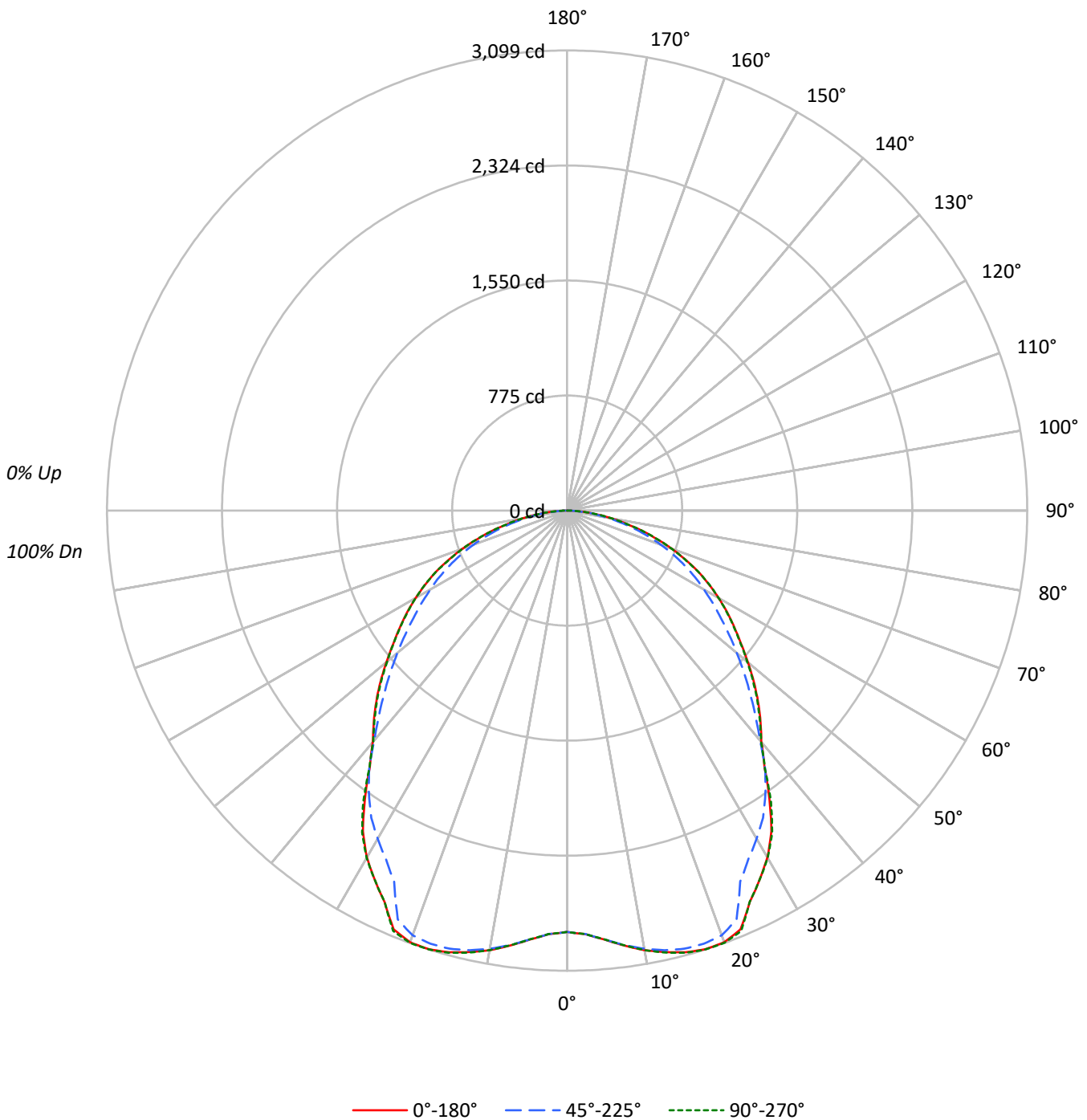
Lumens per Lamp: N/A
Luminaire Lumens: 8132.9 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

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°	30722	30722	30722
5°	31524	31524	31513
10°	33054	32944	33054
15°	34519	34250	34564
20°	35655	35079	35701
25°	34770	32942	34734
30°	33737	31911	33774
35°	31411	30776	31635
40°	28768	28556	28725
45°	27841	26692	27749
50°	26769	25152	26668
55°	25978	23882	25921
60°	25512	23043	25512
65°	24982	22343	24905
70°	23714	21244	23682
75°	21589	19539	21672
80°	18895	17149	18957
85°	16400	14288	16400



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.1	3.4
10°-20°	868.3	10.7
20°-30°	1313.1	16.1
30°-40°	1433.4	17.6
40°-50°	1407.1	17.3
50°-60°	1231.8	15.1
60°-70°	925.6	11.4
70°-80°	529.2	6.5
80°-90°	144.3	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°	2461.5	30.3
0°-40°	3895.0	47.9
0°-60°	6533.8	80.3
0°-90°	8132.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8132.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2837	2837	2837	2837	2837	
5°	2900	2901	2900	2900	2899	280
15°	3079	3077	3055	3078	3083	871
25°	2910	2914	2757	2914	2907	1344
35°	2376	2260	2328	2251	2393	1482
45°	1818	1855	1743	1844	1812	1401
55°	1376	1398	1265	1393	1373	1234
65°	975	937	872	936	972	959
75°	516	496	467	496	518	548
85°	132	124	115	124	132	148
90°	0	0	0	0	0	



TEST NUMBER: P130637

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2837.1	2837.1	2837.1	2837.1	2837.1	2837.1	2837.1	2837.1	2837.1	2837.1	2837.1
2.5°	2856.1	2854.1	2855.1	2854.1	2856.1	2856.1	2855.1	2856.1	2855.1	2855.1	2855.1
5°	2900.1	2898.1	2899.1	2897.1	2900.1	2901.1	2900.1	2901.1	2901.1	2900.1	2900.1
7.5°	2955.1	2951.1	2952.1	2950.1	2953.1	2953.1	2952.1	2952.1	2951.1	2950.1	2951.1
10°	3006.1	3004.1	3004.1	3003.1	3005.1	3004.1	3002.1	3001.1	2997.1	2996.1	2998.1
12.5°	3045.1	3047.1	3050.1	3050.1	3049.1	3048.1	3043.1	3040.1	3034.1	3033.1	3035.1
15°	3079.1	3080.1	3083.1	3082.1	3079.1	3074.1	3069.1	3063.1	3058.1	3055.1	3058.1
17.5°	3097.1	3097.1	3096.1	3093.1	3087.1	3081.1	3074.1	3068.1	3063.1	3059.1	3063.1
20°	3094.1	3094.1	3089.1	3083.1	3073.1	3064.1	3057.1	3051.1	3046.1	3044.1	3047.1
22.5°	3052.1	3055.1	3051.1	3050.1	3042.1	3030.1	3016.1	3001.1	2985.1	2980.1	2987.1
25°	2910.1	2908.1	2910.1	2929.1	2934.1	2894.1	2843.1	2796.1	2768.1	2757.1	2772.1
27.5°	2805.1	2803.1	2778.1	2738.1	2683.1	2657.1	2661.1	2657.1	2650.1	2645.1	2652.1
30°	2698.1	2683.1	2615.1	2542.1	2489.1	2481.1	2504.1	2533.1	2551.1	2552.1	2549.1
32.5°	2560.1	2530.1	2442.1	2386.1	2364.1	2360.1	2367.1	2397.1	2438.1	2454.1	2433.1
35°	2376.1	2359.1	2305.1	2269.1	2262.1	2257.1	2245.1	2260.1	2311.1	2328.1	2309.1
37.5°	2185.1	2201.1	2178.1	2165.1	2164.1	2154.1	2137.1	2139.1	2166.1	2190.1	2163.1
40°	2035.1	2051.1	2066.1	2065.1	2061.1	2046.1	2033.1	2026.1	2024.1	2020.1	2026.1
42.5°	1928.0	1922.0	1951.0	1967.0	1957.0	1947.0	1936.0	1931.0	1894.0	1877.0	1899.0
45°	1818.0	1816.0	1836.0	1870.0	1862.0	1848.0	1845.0	1825.0	1762.0	1743.0	1767.0
47.5°	1705.0	1713.0	1731.0	1759.0	1764.0	1752.0	1743.0	1702.0	1638.0	1615.0	1637.0
50°	1589.0	1607.0	1632.0	1643.0	1648.0	1641.0	1635.0	1582.0	1517.0	1493.0	1518.0
52.5°	1478.0	1503.0	1536.0	1527.0	1523.0	1526.0	1516.0	1468.0	1405.0	1376.0	1406.0
55°	1376.0	1400.0	1429.0	1411.0	1392.0	1403.0	1394.0	1356.0	1301.0	1265.0	1299.0
57.5°	1280.0	1295.0	1318.0	1294.0	1272.0	1285.0	1276.0	1246.0	1195.0	1164.0	1197.0
60°	1178.0	1190.0	1203.0	1180.0	1157.0	1164.0	1160.0	1133.0	1091.0	1064.0	1089.0
62.5°	1076.0	1082.0	1091.0	1066.0	1047.0	1047.0	1045.0	1019.0	986.0	971.0	985.0
65°	975.0	974.0	977.0	952.0	938.0	936.0	932.0	908.0	882.0	872.0	883.0
67.5°	861.0	863.0	864.0	841.0	830.0	825.0	822.0	800.0	779.0	772.0	780.0
70°	749.0	750.0	750.0	729.0	721.0	713.0	710.0	693.0	676.0	671.0	678.0
72.5°	631.0	638.0	635.0	618.0	612.0	602.0	600.0	589.0	576.0	569.0	576.0
75°	516.0	526.0	523.0	508.0	501.0	491.0	492.0	486.0	472.0	467.0	474.0
77.5°	405.0	411.0	412.0	404.0	393.0	386.0	389.0	388.0	378.0	366.0	375.0
80°	303.0	310.0	311.0	304.0	295.0	289.0	293.0	293.0	285.0	275.0	283.0
82.5°	211.0	216.0	216.0	212.0	208.0	202.0	204.0	205.0	200.0	190.0	197.0
85°	132.0	133.0	131.0	128.0	125.0	123.0	123.0	125.0	121.0	115.0	120.0
87.5°	49.0	50.0	49.0	52.0	49.0	48.0	49.0	52.0	48.0	48.0	49.0
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: P130637

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2837.1	2837.1	2837.1	2837.1	2837.1	2837.1	2837.1	2837.1
2.5°	2855.1	2856.1	2856.1	2855.1	2855.1	2855.1	2854.1	2855.1
5°	2900.1	2901.1	2901.1	2899.1	2900.1	2899.1	2898.1	2899.1
7.5°	2952.1	2954.1	2953.1	2954.1	2955.1	2953.1	2953.1	2953.1
10°	3000.1	3003.1	3005.1	3007.1	3008.1	3006.1	3007.1	3006.1
12.5°	3039.1	3045.1	3049.1	3051.1	3053.1	3053.1	3051.1	3049.1
15°	3063.1	3070.1	3075.1	3081.1	3085.1	3086.1	3084.1	3083.1
17.5°	3069.1	3075.1	3082.1	3088.1	3094.1	3098.1	3100.1	3099.1
20°	3052.1	3057.1	3065.1	3074.1	3082.1	3090.1	3096.1	3098.1
22.5°	3003.1	3017.1	3032.1	3043.1	3050.1	3054.1	3057.1	3064.1
25°	2802.1	2839.1	2893.1	2934.1	2927.1	2908.1	2901.1	2907.1
27.5°	2659.1	2655.1	2649.1	2681.1	2731.1	2775.1	2796.1	2806.1
30°	2531.1	2501.1	2473.1	2484.1	2535.1	2611.1	2675.1	2701.1
32.5°	2397.1	2356.1	2352.1	2359.1	2383.1	2434.1	2521.1	2570.1
35°	2256.1	2234.1	2246.1	2255.1	2263.1	2289.1	2349.1	2393.1
37.5°	2130.1	2126.1	2142.1	2153.1	2157.1	2170.1	2193.1	2187.1
40°	2019.1	2022.1	2036.1	2048.1	2056.1	2057.1	2043.1	2032.1
42.5°	1919.0	1932.0	1932.0	1947.0	1961.0	1942.0	1913.0	1921.0
45°	1817.0	1838.0	1837.0	1850.0	1863.0	1830.0	1806.0	1812.0
47.5°	1697.0	1737.0	1743.0	1757.0	1757.0	1723.0	1704.0	1697.0
50°	1575.0	1627.0	1634.0	1642.0	1638.0	1625.0	1600.0	1583.0
52.5°	1462.0	1511.0	1518.0	1515.0	1523.0	1529.0	1495.0	1474.0
55°	1351.0	1389.0	1398.0	1388.0	1407.0	1424.0	1392.0	1373.0
57.5°	1241.0	1270.0	1278.0	1270.0	1291.0	1310.0	1289.0	1276.0
60°	1130.0	1156.0	1161.0	1154.0	1179.0	1196.0	1186.0	1178.0
62.5°	1021.0	1039.0	1044.0	1047.0	1062.0	1082.0	1080.0	1079.0
65°	911.0	930.0	932.0	941.0	951.0	977.0	972.0	972.0
67.5°	804.0	817.0	820.0	834.0	838.0	863.0	860.0	856.0
70°	693.0	706.0	710.0	724.0	730.0	750.0	751.0	748.0
72.5°	591.0	596.0	600.0	613.0	618.0	637.0	637.0	633.0
75°	487.0	486.0	490.0	503.0	508.0	524.0	523.0	518.0
77.5°	389.0	384.0	387.0	396.0	402.0	414.0	410.0	406.0
80°	297.0	289.0	290.0	299.0	303.0	311.0	307.0	304.0
82.5°	210.0	203.0	201.0	208.0	214.0	215.0	214.0	212.0
85°	128.0	122.0	123.0	126.0	130.0	130.0	132.0	132.0
87.5°	50.0	47.0	47.0	50.0	50.0	51.0	50.0	48.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)