

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: P130691

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130691
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-DIMRF-LW
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND LUMAWATT WIRELESS SENSOR.
Light Source: (160) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7621.9 lumens
Efficiency: N/A
Efficacy: 99.0 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

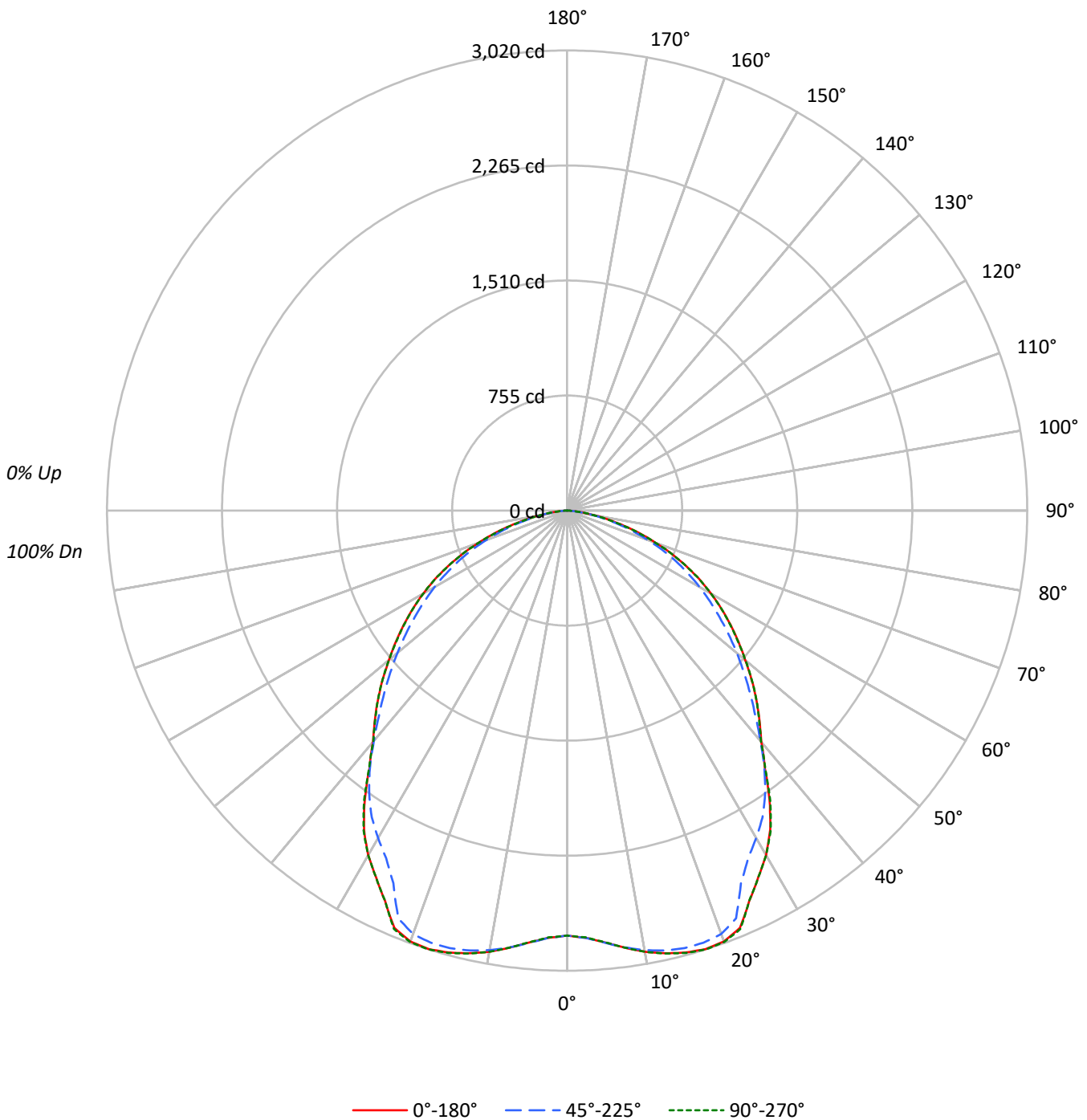
Input Watts (W): 77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130691

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

Luminous Intensity Polar Plot





TEST NUMBER: P130691

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

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°	30206	30206	30206
5°	30925	30946	30906
10°	32333	32210	32322
15°	33660	33328	33691
20°	34675	34077	34729
25°	33793	32243	33771
30°	32641	31031	32654
35°	30615	29952	30713
40°	28020	27890	27982
45°	26907	26014	26907
50°	25698	24480	25728
55°	24720	23059	24651
60°	23643	21757	23643
65°	22082	20183	22082
70°	19598	17898	19598
75°	16246	14694	16012
80°	11730	10751	11499
85°	7020	6448	6796



TEST NUMBER: P130691

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.6	3.6
10°-20°	845.6	11.1
20°-30°	1277.1	16.8
30°-40°	1394.3	18.3
40°-50°	1360.8	17.9
50°-60°	1169.0	15.3
60°-70°	826.3	10.8
70°-80°	399.8	5.2
80°-90°	74.6	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°	2397.3	31.5
0°-40°	3791.6	49.7
0°-60°	6321.3	82.9
0°-90°	7621.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7621.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2789	2789	2789	2789	2789	
5°	2845	2846	2847	2845	2843	275
15°	3002	2997	2973	2998	3005	849
25°	2828	2836	2699	2837	2826	1304
35°	2316	2196	2266	2191	2323	1441
45°	1757	1791	1699	1785	1757	1354
55°	1309	1325	1221	1321	1306	1171
65°	862	834	788	834	862	850
75°	388	369	351	368	383	415
85°	56	54	52	52	55	77
90°	0	0	0	0	0	



TEST NUMBER: P130691

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2789.4	2789.4	2789.4	2789.4	2789.4	2789.4	2789.4	2789.4	2789.4	2789.4	2789.4
2.5°	2806.1	2805.2	2804.2	2805.2	2807.0	2807.0	2807.0	2806.1	2806.1	2807.0	2806.1
5°	2845.0	2843.2	2844.1	2843.2	2846.9	2845.9	2845.9	2846.9	2846.9	2846.9	2845.9
7.5°	2893.2	2891.3	2891.3	2891.3	2892.3	2892.3	2892.3	2892.3	2891.3	2891.3	2891.3
10°	2940.5	2937.7	2938.6	2937.7	2938.6	2936.8	2934.9	2933.0	2931.2	2929.3	2930.3
12.5°	2975.7	2974.7	2976.6	2976.6	2974.7	2972.0	2967.3	2962.7	2959.0	2957.1	2959.0
15°	3002.5	3004.4	3005.3	3004.4	3000.7	2993.3	2987.7	2980.3	2975.7	2972.9	2975.7
17.5°	3017.4	3017.4	3015.5	3010.0	3003.5	2997.0	2988.6	2981.2	2976.6	2973.8	2977.5
20°	3009.0	3008.1	3001.6	2993.3	2983.1	2974.7	2967.3	2960.8	2958.1	2957.1	2959.0
22.5°	2963.6	2965.5	2961.8	2956.2	2948.8	2936.8	2922.9	2909.9	2899.7	2896.0	2899.7
25°	2828.3	2827.4	2833.9	2845.0	2852.4	2820.0	2776.4	2734.7	2706.0	2698.6	2706.0
27.5°	2715.3	2714.3	2699.5	2667.1	2629.1	2599.4	2591.1	2586.5	2576.3	2571.6	2578.1
30°	2610.5	2601.3	2548.5	2480.8	2432.6	2420.6	2439.1	2464.1	2478.0	2481.7	2475.2
32.5°	2481.7	2456.7	2385.4	2326.0	2304.7	2295.5	2302.0	2334.4	2367.7	2386.3	2365.9
35°	2315.9	2294.5	2238.0	2205.6	2200.9	2190.7	2182.4	2201.9	2242.6	2265.8	2238.0
37.5°	2132.4	2142.6	2118.5	2101.8	2101.8	2091.6	2074.9	2081.4	2104.6	2126.8	2102.7
40°	1982.2	2000.8	2006.3	2001.7	1999.8	1986.9	1971.1	1967.4	1968.3	1973.0	1965.6
42.5°	1867.3	1870.1	1895.1	1903.5	1896.1	1882.2	1872.9	1867.3	1840.5	1828.4	1844.2
45°	1757.0	1758.9	1779.3	1803.4	1798.7	1783.9	1776.5	1758.9	1711.6	1698.7	1715.3
47.5°	1642.1	1652.3	1667.2	1692.2	1696.8	1682.0	1671.8	1641.2	1584.7	1573.6	1585.6
50°	1525.4	1544.8	1562.4	1574.5	1581.0	1568.0	1556.9	1520.7	1466.1	1453.1	1465.1
52.5°	1418.8	1436.4	1459.6	1455.9	1453.1	1450.3	1442.9	1405.8	1353.9	1336.3	1353.0
55°	1309.4	1327.1	1350.2	1334.5	1322.4	1327.1	1318.7	1288.1	1243.6	1221.4	1243.6
57.5°	1201.0	1214.9	1233.5	1214.0	1196.4	1201.9	1196.4	1175.1	1133.4	1112.1	1133.4
60°	1091.7	1100.0	1113.0	1092.6	1074.1	1077.8	1075.9	1053.7	1021.2	1004.6	1021.2
62.5°	979.5	984.2	990.7	971.2	955.4	954.5	955.4	933.2	908.2	897.1	909.1
65°	861.8	863.7	867.4	847.9	836.8	832.2	834.0	813.7	795.1	787.7	796.0
67.5°	741.4	743.2	744.1	725.6	718.2	711.7	712.6	697.8	681.1	676.5	683.0
70°	619.0	621.8	621.8	605.1	600.5	592.2	592.2	582.9	569.0	565.3	569.9
72.5°	504.1	502.3	502.3	488.4	484.7	476.3	475.4	472.6	459.6	455.9	460.6
75°	388.3	386.4	387.4	376.2	372.5	366.1	365.1	365.1	354.9	351.2	355.9
77.5°	280.8	282.6	281.7	273.4	269.7	266.9	269.7	269.7	260.4	256.7	261.3
80°	188.1	190.0	190.0	183.5	180.7	178.9	182.6	180.7	176.1	172.4	176.1
82.5°	114.0	114.0	114.0	112.1	108.4	108.4	111.2	111.2	106.6	103.8	106.6
85°	56.5	56.5	55.6	55.6	53.7	53.7	55.6	55.6	52.8	51.9	52.8
87.5°	19.5	18.5	18.5	18.5	17.6	18.5	18.5	18.5	17.6	17.6	17.6
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: P130691

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2789.4	2789.4	2789.4	2789.4	2789.4	2789.4	2789.4	2789.4
2.5°	2807.0	2807.0	2806.1	2806.1	2806.1	2805.2	2804.2	2803.3
5°	2847.8	2846.9	2845.0	2845.9	2845.0	2845.0	2844.1	2843.2
7.5°	2893.2	2894.1	2892.3	2894.1	2894.1	2894.1	2893.2	2892.3
10°	2933.0	2935.8	2936.8	2939.5	2940.5	2941.4	2940.5	2939.5
12.5°	2963.6	2968.3	2972.0	2976.6	2979.4	2980.3	2978.5	2977.5
15°	2981.2	2987.7	2994.2	3001.6	3006.3	3008.1	3007.2	3005.3
17.5°	2982.2	2989.6	2997.9	3004.4	3010.9	3015.5	3019.2	3020.2
20°	2961.8	2968.3	2975.7	2984.0	2994.2	3002.5	3010.9	3013.7
22.5°	2907.1	2922.9	2938.6	2946.9	2955.3	2960.8	2965.5	2972.0
25°	2728.2	2775.5	2826.5	2847.8	2844.1	2826.5	2823.7	2826.5
27.5°	2588.3	2593.9	2600.4	2625.4	2660.6	2693.0	2711.6	2715.3
30°	2463.2	2436.3	2415.9	2428.0	2474.3	2538.3	2595.7	2611.5
32.5°	2333.5	2298.2	2289.9	2298.2	2318.6	2371.5	2450.2	2486.4
35°	2195.4	2180.6	2187.0	2194.5	2199.1	2227.8	2286.2	2323.3
37.5°	2074.0	2072.1	2085.1	2094.4	2094.4	2105.5	2135.1	2136.1
40°	1960.0	1969.3	1979.5	1992.4	1995.2	1999.8	1992.4	1979.5
42.5°	1859.9	1870.1	1876.6	1889.6	1897.0	1886.8	1862.7	1864.5
45°	1755.2	1774.7	1778.4	1792.3	1797.8	1770.9	1752.4	1757.0
47.5°	1637.5	1669.9	1677.3	1692.2	1687.5	1661.6	1648.6	1643.1
50°	1516.1	1558.7	1565.2	1575.4	1569.9	1556.9	1540.2	1527.2
52.5°	1406.7	1441.0	1445.7	1449.4	1454.0	1456.8	1435.5	1415.1
55°	1290.0	1316.9	1323.3	1319.6	1332.6	1347.4	1326.1	1305.7
57.5°	1176.9	1195.5	1200.1	1193.6	1212.1	1231.6	1215.8	1200.1
60°	1056.5	1075.0	1075.9	1073.1	1091.7	1108.3	1101.9	1091.7
62.5°	937.8	954.5	951.7	954.5	969.3	990.7	986.0	979.5
65°	817.4	833.1	831.3	836.8	847.9	867.4	867.4	861.8
67.5°	702.4	711.7	710.8	718.2	726.5	745.1	746.9	741.4
70°	587.5	592.2	591.2	599.6	606.1	625.5	625.5	619.0
72.5°	476.3	479.1	475.4	486.5	489.3	506.0	506.0	498.6
75°	369.8	368.8	365.1	371.6	380.0	392.0	389.2	382.7
77.5°	270.6	267.8	264.1	271.5	276.2	285.4	282.6	276.2
80°	183.5	180.7	176.1	182.6	186.3	191.8	189.0	184.4
82.5°	112.1	109.4	105.6	110.3	112.1	115.8	114.0	110.3
85°	55.6	53.7	51.9	52.8	55.6	56.5	55.6	54.7
87.5°	18.5	17.6	16.7	17.6	17.6	18.5	18.5	17.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)