

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: P130670

Luminaire Tested: **TBLED-LD1-6-M-UNV-L840-CD1-CG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130670  
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-LD1-6-M-UNV-L840-CD1-CG  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS.  
Light Source: (160) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5839.3 lumens  
Efficiency: N/A  
Efficacy: 114.5 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

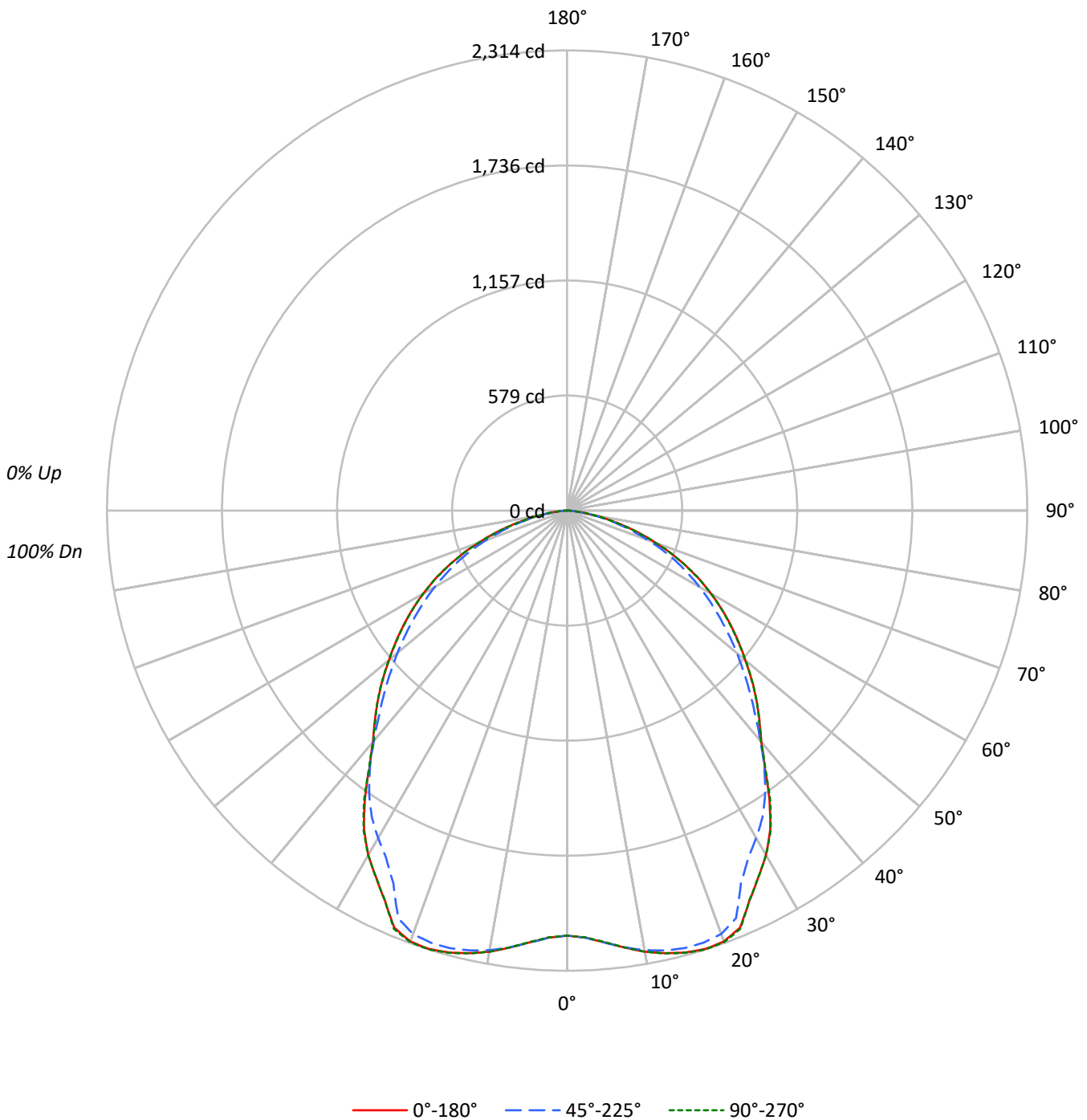
Input Watts (W): 51  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	23141	23141	23141
5°	23692	23708	23677
10°	24770	24677	24762
15°	25788	25533	25811
20°	26564	26107	26606
25°	25889	24702	25872
30°	25008	23774	25017
35°	23454	22948	23529
40°	21467	21366	21437
45°	20614	19930	20614
50°	19687	18753	19710
55°	18940	17665	18885
60°	18112	16667	18112
65°	16919	15463	16919
70°	15017	13712	15017
75°	12447	11259	12267
80°	8986	8238	8811
85°	5380	4945	5206



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.3	3.6
10°-20°	647.9	11.1
20°-30°	978.4	16.8
30°-40°	1068.2	18.3
40°-50°	1042.5	17.9
50°-60°	895.6	15.3
60°-70°	633.1	10.8
70°-80°	306.3	5.2
80°-90°	57.1	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°	1836.6	31.5
0°-40°	2904.8	49.7
0°-60°	4842.8	82.9
0°-90°	5839.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5839.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2137	2137	2137	2137	2137	
5°	2180	2181	2181	2180	2178	210
15°	2300	2296	2278	2297	2302	651
25°	2167	2173	2067	2174	2165	999
35°	1774	1682	1736	1678	1780	1104
45°	1346	1372	1301	1368	1346	1038
55°	1003	1015	936	1012	1000	897
65°	660	639	604	639	660	651
75°	298	283	269	282	293	318
85°	43	41	40	40	42	59
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°	2137.0	2137.0	2137.0	2137.0	2137.0	2137.0	2137.0	2137.0	2137.0	2137.0	2137.0
2.5°	2149.8	2149.1	2148.3	2149.1	2150.5	2150.5	2150.5	2149.8	2149.8	2150.5	2149.8
5°	2179.6	2178.2	2178.9	2178.2	2181.0	2180.3	2180.3	2181.0	2181.0	2181.0	2180.3
7.5°	2216.5	2215.1	2215.1	2215.1	2215.8	2215.8	2215.8	2215.8	2215.1	2215.1	2215.1
10°	2252.7	2250.6	2251.3	2250.6	2251.3	2249.9	2248.4	2247.0	2245.6	2244.2	2244.9
12.5°	2279.7	2279.0	2280.4	2280.4	2279.0	2276.8	2273.3	2269.7	2266.9	2265.5	2266.9
15°	2300.3	2301.7	2302.4	2301.7	2298.9	2293.2	2288.9	2283.2	2279.7	2277.6	2279.7
17.5°	2311.6	2311.6	2310.2	2306.0	2301.0	2296.0	2289.6	2283.9	2280.4	2278.3	2281.1
20°	2305.2	2304.5	2299.6	2293.2	2285.4	2279.0	2273.3	2268.3	2266.2	2265.5	2266.9
22.5°	2270.5	2271.9	2269.0	2264.8	2259.1	2249.9	2239.2	2229.3	2221.5	2218.6	2221.5
25°	2166.8	2166.1	2171.1	2179.6	2185.3	2160.4	2127.0	2095.1	2073.1	2067.4	2073.1
27.5°	2080.2	2079.5	2068.1	2043.3	2014.2	1991.4	1985.1	1981.5	1973.7	1970.1	1975.1
30°	2000.0	1992.9	1952.4	1900.6	1863.6	1854.4	1868.6	1887.8	1898.4	1901.3	1896.3
32.5°	1901.3	1882.1	1827.4	1782.0	1765.7	1758.6	1763.5	1788.4	1814.0	1828.2	1812.5
35°	1774.2	1757.9	1714.6	1689.7	1686.2	1678.3	1672.0	1686.9	1718.1	1735.9	1714.6
37.5°	1633.6	1641.4	1623.0	1610.2	1610.2	1602.4	1589.6	1594.6	1612.3	1629.4	1610.9
40°	1518.6	1532.8	1537.1	1533.5	1532.1	1522.2	1510.1	1507.2	1508.0	1511.5	1505.8
42.5°	1430.6	1432.7	1451.9	1458.3	1452.6	1441.9	1434.8	1430.6	1410.0	1400.8	1412.8
45°	1346.1	1347.5	1363.1	1381.6	1378.0	1366.7	1361.0	1347.5	1311.3	1301.4	1314.1
47.5°	1258.1	1265.9	1277.2	1296.4	1299.9	1288.6	1280.8	1257.3	1214.0	1205.5	1214.7
50°	1168.6	1183.5	1197.0	1206.2	1211.2	1201.3	1192.7	1165.0	1123.2	1113.2	1122.4
52.5°	1087.0	1100.4	1118.2	1115.3	1113.2	1111.1	1105.4	1077.0	1037.3	1023.8	1036.5
55°	1003.2	1016.7	1034.4	1022.3	1013.1	1016.7	1010.3	986.8	952.8	935.7	952.8
57.5°	920.1	930.8	945.0	930.0	916.6	920.8	916.6	900.2	868.3	852.0	868.3
60°	836.3	842.7	852.7	837.0	822.8	825.7	824.3	807.2	782.4	769.6	782.4
62.5°	750.4	754.0	758.9	744.0	732.0	731.3	732.0	714.9	695.8	687.2	696.5
65°	660.3	661.7	664.5	649.6	641.1	637.5	639.0	623.3	609.1	603.5	609.9
67.5°	568.0	569.4	570.1	555.9	550.2	545.3	546.0	534.6	521.8	518.3	523.2
70°	474.3	476.4	476.4	463.6	460.1	453.7	453.7	446.6	435.9	433.1	436.6
72.5°	386.2	384.8	384.8	374.1	371.3	364.9	364.2	362.1	352.1	349.3	352.9
75°	297.5	296.1	296.8	288.2	285.4	280.4	279.7	279.7	271.9	269.1	272.6
77.5°	215.1	216.5	215.8	209.4	206.6	204.5	206.6	206.6	199.5	196.7	200.2
80°	144.1	145.5	145.5	140.6	138.4	137.0	139.9	138.4	134.9	132.1	134.9
82.5°	87.3	87.3	87.3	85.9	83.1	83.1	85.2	85.2	81.6	79.5	81.6
85°	43.3	43.3	42.6	42.6	41.2	41.2	42.6	42.6	40.5	39.8	40.5
87.5°	14.9	14.2	14.2	14.2	13.5	14.2	14.2	14.2	13.5	13.5	13.5
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°	2137.0	2137.0	2137.0	2137.0	2137.0	2137.0	2137.0	2137.0
2.5°	2150.5	2150.5	2149.8	2149.8	2149.8	2149.1	2148.3	2147.6
5°	2181.7	2181.0	2179.6	2180.3	2179.6	2179.6	2178.9	2178.2
7.5°	2216.5	2217.2	2215.8	2217.2	2217.2	2217.2	2216.5	2215.8
10°	2247.0	2249.2	2249.9	2252.0	2252.7	2253.4	2252.7	2252.0
12.5°	2270.5	2274.0	2276.8	2280.4	2282.5	2283.2	2281.8	2281.1
15°	2283.9	2288.9	2293.9	2299.6	2303.1	2304.5	2303.8	2302.4
17.5°	2284.7	2290.3	2296.7	2301.7	2306.7	2310.2	2313.1	2313.8
20°	2269.0	2274.0	2279.7	2286.1	2293.9	2300.3	2306.7	2308.8
22.5°	2227.1	2239.2	2251.3	2257.7	2264.1	2268.3	2271.9	2276.8
25°	2090.1	2126.3	2165.4	2181.7	2178.9	2165.4	2163.3	2165.4
27.5°	1982.9	1987.2	1992.2	2011.3	2038.3	2063.1	2077.3	2080.2
30°	1887.1	1866.5	1850.9	1860.1	1895.6	1944.6	1988.6	2000.7
32.5°	1787.7	1760.7	1754.3	1760.7	1776.3	1816.8	1877.1	1904.8
35°	1681.9	1670.5	1675.5	1681.2	1684.7	1706.7	1751.5	1779.9
37.5°	1588.9	1587.5	1597.4	1604.5	1604.5	1613.0	1635.8	1636.5
40°	1501.6	1508.7	1516.5	1526.4	1528.5	1532.1	1526.4	1516.5
42.5°	1424.9	1432.7	1437.7	1447.6	1453.3	1445.5	1427.0	1428.4
45°	1344.7	1359.6	1362.4	1373.1	1377.3	1356.7	1342.5	1346.1
47.5°	1254.5	1279.4	1285.0	1296.4	1292.8	1273.0	1263.0	1258.8
50°	1161.5	1194.2	1199.1	1206.9	1202.7	1192.7	1180.0	1170.0
52.5°	1077.7	1104.0	1107.5	1110.4	1113.9	1116.1	1099.7	1084.1
55°	988.3	1008.9	1013.8	1011.0	1020.9	1032.3	1016.0	1000.3
57.5°	901.7	915.9	919.4	914.4	928.6	943.5	931.5	919.4
60°	809.4	823.6	824.3	822.1	836.3	849.1	844.1	836.3
62.5°	718.5	731.3	729.1	731.3	742.6	758.9	755.4	750.4
65°	626.2	638.3	636.8	641.1	649.6	664.5	664.5	660.3
67.5°	538.2	545.3	544.5	550.2	556.6	570.8	572.2	568.0
70°	450.1	453.7	453.0	459.3	464.3	479.2	479.2	474.3
72.5°	364.9	367.1	364.2	372.7	374.9	387.6	387.6	382.0
75°	283.3	282.6	279.7	284.7	291.1	300.3	298.2	293.2
77.5°	207.3	205.2	202.3	208.0	211.6	218.7	216.5	211.6
80°	140.6	138.4	134.9	139.9	142.7	147.0	144.8	141.3
82.5°	85.9	83.8	80.9	84.5	85.9	88.7	87.3	84.5
85°	42.6	41.2	39.8	40.5	42.6	43.3	42.6	41.9
87.5°	14.2	13.5	12.8	13.5	13.5	14.2	14.2	13.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)