

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: P130680

Luminaire Tested: **TBLED-LD1-6-M-UNV-L850-CD1-CG-DOS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130680  
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-L850-CD1-CG-DOS  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR.  
Light Source: (160) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6194.6 lumens  
Efficiency: N/A  
Efficacy: 121.5 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

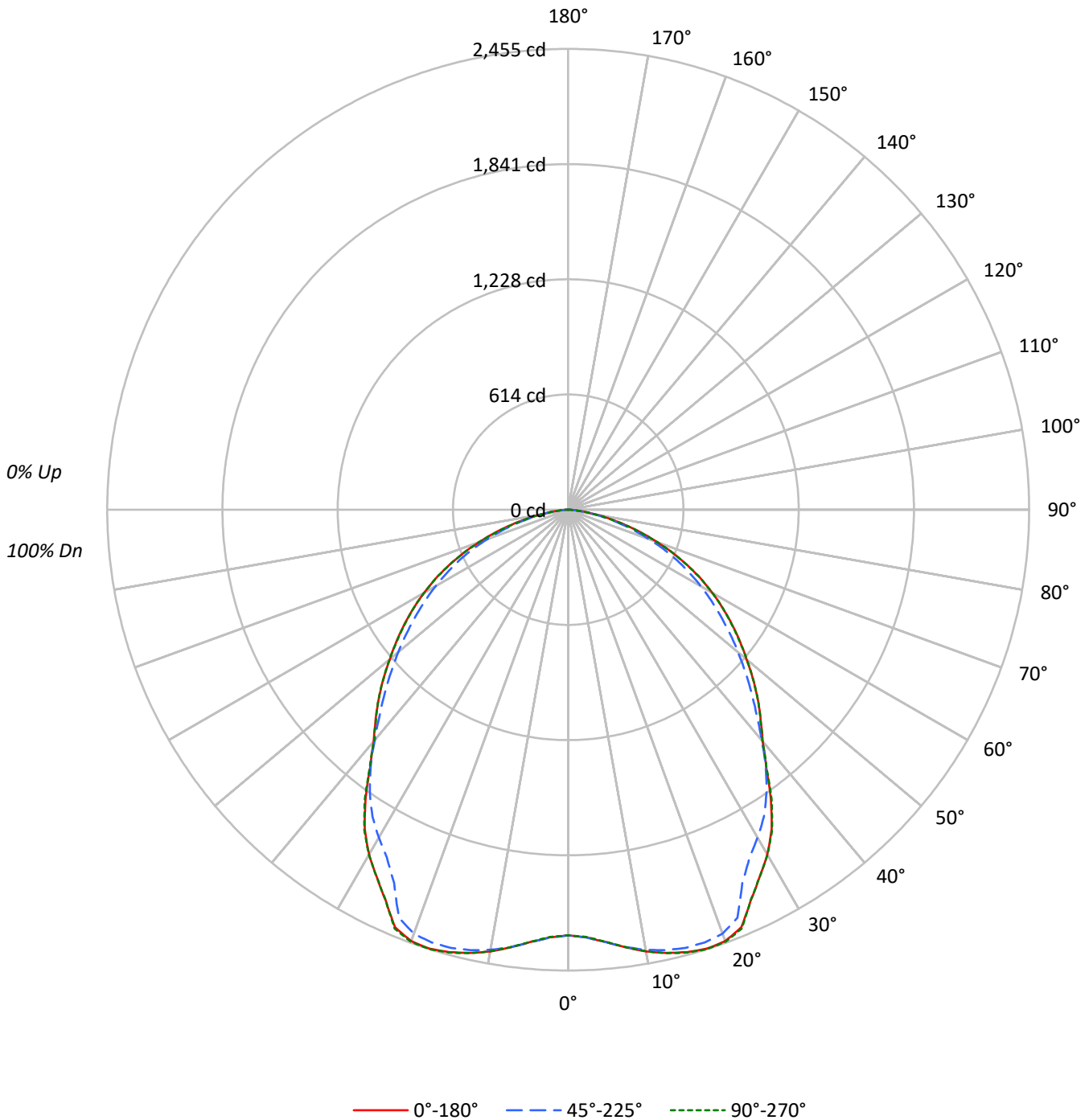
Input Watts (W): 51  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	24549	24549	24549
5°	25134	25150	25117
10°	26278	26179	26269
15°	27357	27087	27382
20°	28181	27695	28225
25°	27465	26205	27447
30°	26529	25220	26538
35°	24882	24343	24961
40°	22773	22667	22742
45°	21868	21141	21868
50°	20885	19896	20910
55°	20091	18741	20035
60°	19214	17681	19214
65°	17946	16404	17946
70°	15929	14545	15929
75°	13204	11941	13016
80°	9535	8737	9348
85°	5703	5243	5516



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.1	3.6
10°-20°	687.3	11.1
20°-30°	1037.9	16.8
30°-40°	1133.2	18.3
40°-50°	1105.9	17.9
50°-60°	950.1	15.3
60°-70°	671.6	10.8
70°-80°	324.9	5.2
80°-90°	60.6	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°	1948.4	31.5
0°-40°	3081.5	49.7
0°-60°	5137.5	82.9
0°-90°	6194.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6194.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2267	2267	2267	2267	2267	
5°	2312	2313	2314	2313	2311	223
15°	2440	2436	2416	2436	2442	690
25°	2299	2305	2193	2306	2297	1060
35°	1882	1785	1842	1780	1888	1171
45°	1428	1456	1380	1451	1428	1101
55°	1064	1077	993	1074	1061	952
65°	700	678	640	678	700	691
75°	316	300	285	299	311	338
85°	46	44	42	43	44	63
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°	2267.0	2267.0	2267.0	2267.0	2267.0	2267.0	2267.0	2267.0	2267.0	2267.0	2267.0
2.5°	2280.6	2279.8	2279.1	2279.8	2281.3	2281.3	2281.3	2280.6	2280.6	2281.3	2280.6
5°	2312.2	2310.7	2311.5	2310.7	2313.7	2313.0	2313.0	2313.7	2313.7	2313.7	2313.0
7.5°	2351.4	2349.9	2349.9	2349.9	2350.6	2350.6	2350.6	2350.6	2349.9	2349.9	2349.9
10°	2389.8	2387.5	2388.3	2387.5	2388.3	2386.8	2385.3	2383.8	2382.3	2380.8	2381.5
12.5°	2418.4	2417.7	2419.2	2419.2	2417.7	2415.4	2411.6	2407.9	2404.9	2403.3	2404.9
15°	2440.3	2441.8	2442.5	2441.8	2438.7	2432.7	2428.2	2422.2	2418.4	2416.2	2418.4
17.5°	2452.3	2452.3	2450.8	2446.3	2441.0	2435.7	2429.0	2422.9	2419.2	2416.9	2419.9
20°	2445.5	2444.8	2439.5	2432.7	2424.4	2417.7	2411.6	2406.4	2404.1	2403.3	2404.9
22.5°	2408.6	2410.1	2407.1	2402.6	2396.6	2386.8	2375.5	2364.9	2356.7	2353.6	2356.7
25°	2298.7	2297.9	2303.2	2312.2	2318.2	2291.9	2256.5	2222.6	2199.2	2193.2	2199.2
27.5°	2206.8	2206.0	2194.0	2167.6	2136.7	2112.6	2105.8	2102.1	2093.8	2090.0	2095.3
30°	2121.7	2114.1	2071.2	2016.2	1977.1	1967.3	1982.3	2002.7	2014.0	2017.0	2011.7
32.5°	2017.0	1996.6	1938.6	1890.4	1873.1	1865.6	1870.9	1897.2	1924.3	1939.4	1922.8
35°	1882.2	1864.8	1818.9	1792.5	1788.8	1780.5	1773.7	1789.5	1822.7	1841.5	1818.9
37.5°	1733.0	1741.3	1721.7	1708.2	1708.2	1699.9	1686.3	1691.6	1710.4	1728.5	1708.9
40°	1611.0	1626.1	1630.6	1626.8	1625.3	1614.8	1602.0	1599.0	1599.7	1603.5	1597.5
42.5°	1517.6	1519.9	1540.2	1547.0	1541.0	1529.7	1522.1	1517.6	1495.8	1486.0	1498.8
45°	1428.0	1429.5	1446.1	1465.7	1461.9	1449.8	1443.8	1429.5	1391.1	1380.5	1394.1
47.5°	1334.6	1342.9	1354.9	1375.3	1379.0	1367.0	1358.7	1333.9	1287.9	1278.9	1288.7
50°	1239.7	1255.5	1269.8	1279.6	1284.9	1274.4	1265.3	1235.9	1191.5	1181.0	1190.8
52.5°	1153.1	1167.4	1186.2	1183.2	1181.0	1178.7	1172.7	1142.5	1100.4	1086.1	1099.6
55°	1064.2	1078.5	1097.4	1084.6	1074.8	1078.5	1071.8	1046.9	1010.7	992.7	1010.7
57.5°	976.1	987.4	1002.5	986.6	972.3	976.9	972.3	955.0	921.1	903.8	921.1
60°	887.2	894.0	904.6	888.0	872.9	875.9	874.4	856.3	830.0	816.4	830.0
62.5°	796.1	799.9	805.1	789.3	776.5	775.8	776.5	758.4	738.1	729.1	738.9
65°	700.4	701.9	705.0	689.1	680.1	676.3	677.8	661.3	646.2	640.2	647.0
67.5°	602.5	604.0	604.8	589.7	583.7	578.4	579.2	567.1	553.6	549.8	555.1
70°	503.1	505.4	505.4	491.8	488.1	481.3	481.3	473.7	462.4	459.4	463.2
72.5°	409.7	408.2	408.2	396.9	393.9	387.1	386.4	384.1	373.6	370.6	374.3
75°	315.6	314.1	314.8	305.8	302.8	297.5	296.7	296.7	288.5	285.4	289.2
77.5°	228.2	229.7	229.0	222.2	219.2	216.9	219.2	219.2	211.6	208.6	212.4
80°	152.9	154.4	154.4	149.1	146.9	145.4	148.4	146.9	143.1	140.1	143.1
82.5°	92.6	92.6	92.6	91.1	88.1	88.1	90.4	90.4	86.6	84.4	86.6
85°	45.9	45.9	45.2	45.2	43.7	43.7	45.2	45.2	42.9	42.2	42.9
87.5°	15.8	15.1	15.1	15.1	14.3	15.1	15.1	15.1	14.3	14.3	14.3
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°	2267.0	2267.0	2267.0	2267.0	2267.0	2267.0	2267.0	2267.0
2.5°	2281.3	2281.3	2280.6	2280.6	2280.6	2279.8	2279.1	2278.3
5°	2314.5	2313.7	2312.2	2313.0	2312.2	2312.2	2311.5	2310.7
7.5°	2351.4	2352.1	2350.6	2352.1	2352.1	2352.1	2351.4	2350.6
10°	2383.8	2386.0	2386.8	2389.0	2389.8	2390.5	2389.8	2389.0
12.5°	2408.6	2412.4	2415.4	2419.2	2421.4	2422.2	2420.7	2419.9
15°	2422.9	2428.2	2433.5	2439.5	2443.3	2444.8	2444.0	2442.5
17.5°	2423.7	2429.7	2436.5	2441.8	2447.0	2450.8	2453.8	2454.6
20°	2407.1	2412.4	2418.4	2425.2	2433.5	2440.3	2447.0	2449.3
22.5°	2362.7	2375.5	2388.3	2395.1	2401.8	2406.4	2410.1	2415.4
25°	2217.3	2255.7	2297.2	2314.5	2311.5	2297.2	2294.9	2297.2
27.5°	2103.6	2108.1	2113.4	2133.7	2162.3	2188.7	2203.8	2206.8
30°	2001.9	1980.1	1963.5	1973.3	2010.9	2062.9	2109.6	2122.4
32.5°	1896.5	1867.8	1861.1	1867.8	1884.4	1927.3	1991.4	2020.7
35°	1784.2	1772.2	1777.5	1783.5	1787.3	1810.6	1858.1	1888.2
37.5°	1685.6	1684.1	1694.6	1702.2	1702.2	1711.2	1735.3	1736.0
40°	1592.9	1600.5	1608.8	1619.3	1621.6	1625.3	1619.3	1608.8
42.5°	1511.6	1519.9	1525.2	1535.7	1541.7	1533.4	1513.9	1515.4
45°	1426.5	1442.3	1445.3	1456.6	1461.1	1439.3	1424.2	1428.0
47.5°	1330.8	1357.2	1363.2	1375.3	1371.5	1350.4	1339.9	1335.4
50°	1232.2	1266.8	1272.1	1280.4	1275.9	1265.3	1251.8	1241.2
52.5°	1143.3	1171.2	1174.9	1177.9	1181.7	1184.0	1166.7	1150.1
55°	1048.4	1070.2	1075.5	1072.5	1083.0	1095.1	1077.8	1061.2
57.5°	956.5	971.6	975.3	970.1	985.1	1001.0	988.2	975.3
60°	858.6	873.7	874.4	872.2	887.2	900.8	895.5	887.2
62.5°	762.2	775.8	773.5	775.8	787.8	805.1	801.4	796.1
65°	664.3	677.1	675.6	680.1	689.1	705.0	705.0	700.4
67.5°	570.9	578.4	577.7	583.7	590.5	605.5	607.1	602.5
70°	477.5	481.3	480.5	487.3	492.6	508.4	508.4	503.1
72.5°	387.1	389.4	386.4	395.4	397.7	411.2	411.2	405.2
75°	300.5	299.8	296.7	302.0	308.8	318.6	316.3	311.1
77.5°	219.9	217.7	214.7	220.7	224.4	232.0	229.7	224.4
80°	149.1	146.9	143.1	148.4	151.4	155.9	153.6	149.9
82.5°	91.1	88.9	85.9	89.6	91.1	94.1	92.6	89.6
85°	45.2	43.7	42.2	42.9	45.2	45.9	45.2	44.4
87.5°	15.1	14.3	13.6	14.3	14.3	15.1	15.1	14.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)