

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: P130698

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130698
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-CMS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND MINI SENSOR.
Light Source: (160) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6222.9 lumens
Efficiency: N/A
Efficacy: 122.0 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

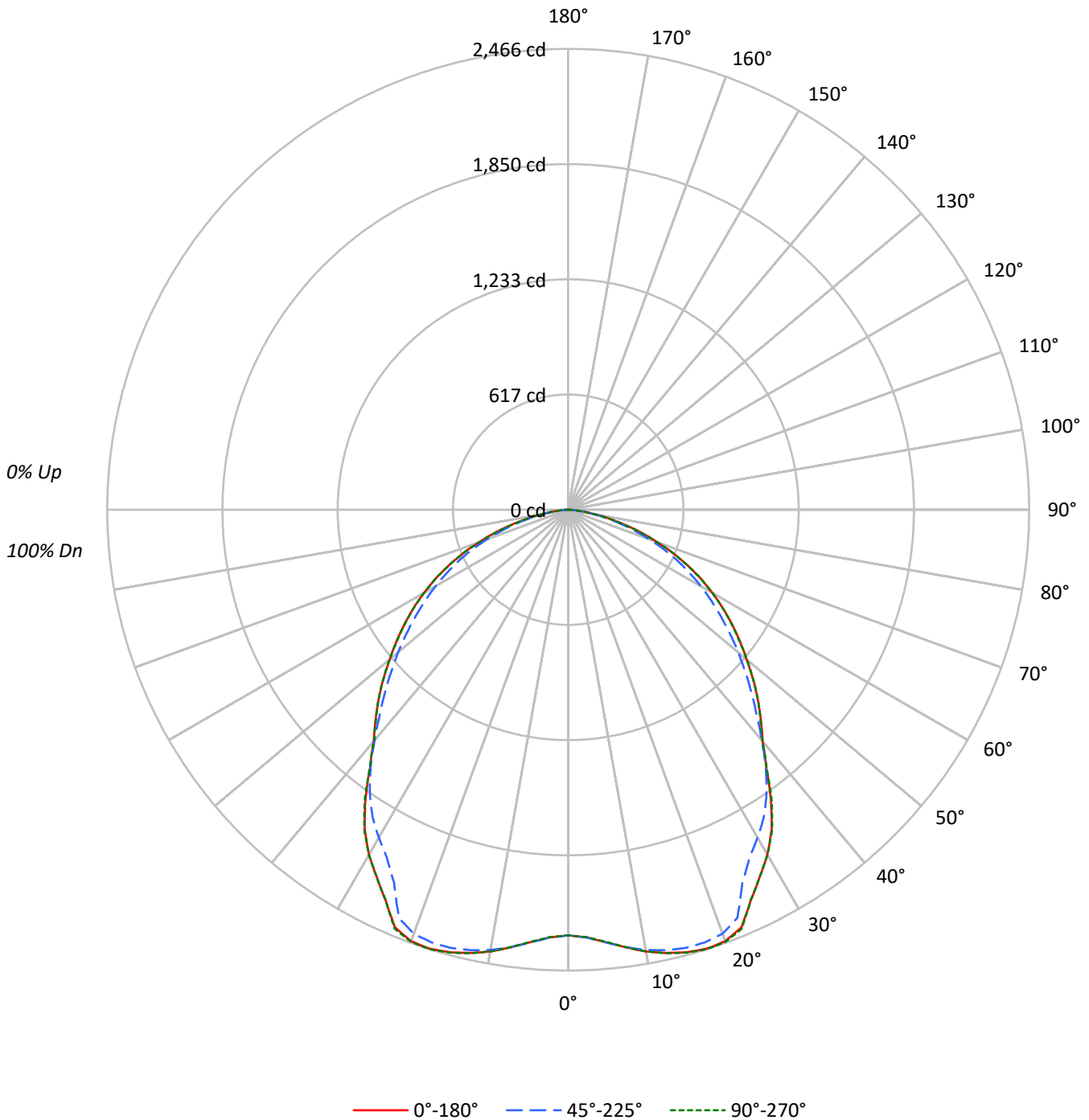
Input Watts (W): 51
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130698

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L850-CD1-CG-CMS

Luminous Intensity Polar Plot





TEST NUMBER: P130698

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L850-CD1-CG-CMS

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°	24661	24661	24661
5°	25249	25265	25233
10°	26397	26297	26390
15°	27482	27211	27508
20°	28310	27822	28354
25°	27591	26325	27573
30°	26651	25335	26660
35°	24995	24455	25075
40°	22877	22770	22845
45°	21968	21239	21968
50°	20981	19987	21006
55°	20184	18826	20127
60°	19303	17763	19303
65°	18028	16478	18028
70°	16001	14612	16001
75°	13263	11999	13075
80°	9578	8774	9391
85°	5740	5268	5541



TEST NUMBER: P130698

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L850-CD1-CG-CMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.2	3.6
10°-20°	690.4	11.1
20°-30°	1042.7	16.8
30°-40°	1138.3	18.3
40°-50°	1111.0	17.9
50°-60°	954.4	15.3
60°-70°	674.6	10.8
70°-80°	326.4	5.2
80°-90°	60.9	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°	1957.3	31.5
0°-40°	3095.6	49.7
0°-60°	5161.0	82.9
0°-90°	6222.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6222.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2277	2277	2277	2277	2277	
5°	2323	2324	2324	2323	2321	224
15°	2451	2447	2427	2448	2454	693
25°	2309	2316	2203	2316	2308	1064
35°	1891	1793	1850	1789	1897	1176
45°	1434	1463	1387	1458	1434	1106
55°	1069	1082	997	1079	1066	956
65°	704	681	643	681	704	694
75°	317	302	287	301	312	339
85°	46	44	42	43	45	63
90°	0	0	0	0	0	



TEST NUMBER: P130698

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L850-CD1-CG-CMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2277.4	2277.4	2277.4	2277.4	2277.4	2277.4	2277.4	2277.4	2277.4	2277.4	2277.4
2.5°	2291.0	2290.3	2289.5	2290.3	2291.8	2291.8	2291.8	2291.0	2291.0	2291.8	2291.0
5°	2322.8	2321.3	2322.0	2321.3	2324.3	2323.6	2323.6	2324.3	2324.3	2324.3	2323.6
7.5°	2362.1	2360.6	2360.6	2360.6	2361.4	2361.4	2361.4	2361.4	2360.6	2360.6	2360.6
10°	2400.7	2398.5	2399.2	2398.5	2399.2	2397.7	2396.2	2394.7	2393.2	2391.6	2392.4
12.5°	2429.5	2428.7	2430.2	2430.2	2428.7	2426.5	2422.7	2418.9	2415.9	2414.3	2415.9
15°	2451.4	2452.9	2453.7	2452.9	2449.9	2443.9	2439.3	2433.3	2429.5	2427.2	2429.5
17.5°	2463.5	2463.5	2462.0	2457.5	2452.2	2446.9	2440.1	2434.0	2430.2	2428.0	2431.0
20°	2456.7	2456.0	2450.7	2443.9	2435.5	2428.7	2422.7	2417.4	2415.1	2414.3	2415.9
22.5°	2419.6	2421.2	2418.1	2413.6	2407.5	2397.7	2386.3	2375.8	2367.4	2364.4	2367.4
25°	2309.2	2308.4	2313.7	2322.8	2328.8	2302.4	2266.8	2232.8	2209.3	2203.3	2209.3
27.5°	2216.9	2216.1	2204.0	2177.5	2146.5	2122.3	2115.5	2111.7	2103.4	2099.6	2104.9
30°	2131.4	2123.8	2080.7	2025.4	1986.1	1976.3	1991.4	2011.8	2023.2	2026.2	2020.9
32.5°	2026.2	2005.8	1947.5	1899.1	1881.7	1874.1	1879.4	1905.9	1933.1	1948.3	1931.6
35°	1890.8	1873.4	1827.2	1800.7	1797.0	1788.6	1781.8	1797.7	1831.0	1849.9	1827.2
37.5°	1741.0	1749.3	1729.6	1716.0	1716.0	1707.7	1694.1	1699.3	1718.3	1736.4	1716.7
40°	1618.4	1633.5	1638.1	1634.3	1632.8	1622.2	1609.3	1606.3	1607.0	1610.8	1604.8
42.5°	1524.6	1526.8	1547.3	1554.1	1548.0	1536.7	1529.1	1524.6	1502.6	1492.8	1505.7
45°	1434.5	1436.0	1452.7	1472.4	1468.6	1456.5	1450.4	1436.0	1397.5	1386.9	1400.5
47.5°	1340.7	1349.0	1361.1	1381.6	1385.4	1373.2	1364.9	1340.0	1293.8	1284.7	1294.6
50°	1245.4	1261.3	1275.6	1285.5	1290.8	1280.2	1271.1	1241.6	1197.0	1186.4	1196.2
52.5°	1158.4	1172.7	1191.7	1188.6	1186.4	1184.1	1178.0	1147.8	1105.4	1091.0	1104.7
55°	1069.1	1083.5	1102.4	1089.5	1079.7	1083.5	1076.7	1051.7	1015.4	997.2	1015.4
57.5°	980.6	991.9	1007.0	991.2	976.8	981.3	976.8	959.4	925.3	907.9	925.3
60°	891.3	898.1	908.7	892.0	876.9	879.9	878.4	860.3	833.8	820.2	833.8
62.5°	799.7	803.5	808.8	792.9	780.1	779.3	780.1	761.9	741.5	732.4	742.2
65°	703.6	705.2	708.2	692.3	683.2	679.4	680.9	664.3	649.2	643.1	649.9
67.5°	605.3	606.8	607.6	592.4	586.4	581.1	581.8	569.7	556.1	552.3	557.6
70°	505.4	507.7	507.7	494.1	490.3	483.5	483.5	475.9	464.6	461.5	465.3
72.5°	411.6	410.1	410.1	398.7	395.7	388.9	388.1	385.9	375.3	372.3	376.0
75°	317.0	315.5	316.3	307.2	304.2	298.9	298.1	298.1	289.8	286.8	290.5
77.5°	229.3	230.8	230.0	223.2	220.2	217.9	220.2	220.2	212.6	209.6	213.4
80°	153.6	155.1	155.1	149.8	147.5	146.0	149.1	147.5	143.8	140.7	143.8
82.5°	93.1	93.1	93.1	91.5	88.5	88.5	90.8	90.8	87.0	84.7	87.0
85°	46.2	46.2	45.4	45.4	43.9	43.9	45.4	45.4	43.1	42.4	43.1
87.5°	15.9	15.1	15.1	15.1	14.4	15.1	15.1	15.1	14.4	14.4	14.4
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: P130698

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L850-CD1-CG-CMS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2277.4	2277.4	2277.4	2277.4	2277.4	2277.4	2277.4	2277.4
2.5°	2291.8	2291.8	2291.0	2291.0	2291.0	2290.3	2289.5	2288.7
5°	2325.1	2324.3	2322.8	2323.6	2322.8	2322.8	2322.0	2321.3
7.5°	2362.1	2362.9	2361.4	2362.9	2362.9	2362.9	2362.1	2361.4
10°	2394.7	2396.9	2397.7	2400.0	2400.7	2401.5	2400.7	2400.0
12.5°	2419.6	2423.4	2426.5	2430.2	2432.5	2433.3	2431.7	2431.0
15°	2434.0	2439.3	2444.6	2450.7	2454.4	2456.0	2455.2	2453.7
17.5°	2434.8	2440.8	2447.6	2452.9	2458.2	2462.0	2465.0	2465.8
20°	2418.1	2423.4	2429.5	2436.3	2444.6	2451.4	2458.2	2460.5
22.5°	2373.5	2386.3	2399.2	2406.0	2412.8	2417.4	2421.2	2426.5
25°	2227.5	2266.0	2307.7	2325.1	2322.0	2307.7	2305.4	2307.7
27.5°	2113.2	2117.8	2123.0	2143.5	2172.2	2198.7	2213.8	2216.9
30°	2011.1	1989.1	1972.5	1982.3	2020.2	2072.4	2119.3	2132.1
32.5°	1905.1	1876.4	1869.6	1876.4	1893.0	1936.2	2000.5	2030.0
35°	1792.4	1780.3	1785.6	1791.7	1795.4	1818.9	1866.6	1896.8
37.5°	1693.3	1691.8	1702.4	1709.9	1709.9	1719.0	1743.2	1744.0
40°	1600.2	1607.8	1616.1	1626.7	1629.0	1632.8	1626.7	1616.1
42.5°	1518.5	1526.8	1532.1	1542.7	1548.8	1540.5	1520.8	1522.3
45°	1433.0	1448.9	1451.9	1463.3	1467.8	1445.9	1430.8	1434.5
47.5°	1336.9	1363.4	1369.5	1381.6	1377.8	1356.6	1346.0	1341.5
50°	1237.8	1272.6	1277.9	1286.2	1281.7	1271.1	1257.5	1246.9
52.5°	1148.5	1176.5	1180.3	1183.3	1187.1	1189.4	1172.0	1155.3
55°	1053.2	1075.1	1080.4	1077.4	1088.0	1100.1	1082.7	1066.1
57.5°	960.9	976.0	979.8	974.5	989.6	1005.5	992.7	979.8
60°	862.5	877.7	878.4	876.2	891.3	904.9	899.6	891.3
62.5°	765.7	779.3	777.0	779.3	791.4	808.8	805.0	799.7
65°	667.3	680.2	678.7	683.2	692.3	708.2	708.2	703.6
67.5°	573.5	581.1	580.3	586.4	593.2	608.3	609.8	605.3
70°	479.7	483.5	482.7	489.5	494.8	510.7	510.7	505.4
72.5°	388.9	391.2	388.1	397.2	399.5	413.1	413.1	407.1
75°	301.9	301.1	298.1	303.4	310.2	320.0	317.8	312.5
77.5°	220.9	218.7	215.6	221.7	225.5	233.0	230.8	225.5
80°	149.8	147.5	143.8	149.1	152.1	156.6	154.3	150.6
82.5°	91.5	89.3	86.3	90.0	91.5	94.6	93.1	90.0
85°	45.4	43.9	42.4	43.1	45.4	46.2	45.4	44.6
87.5°	15.1	14.4	13.6	14.4	14.4	15.1	15.1	14.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)