

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: P130635

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130635
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-LD1-6-M-UNV-L850-CD1
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION.
Light Source: (160) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

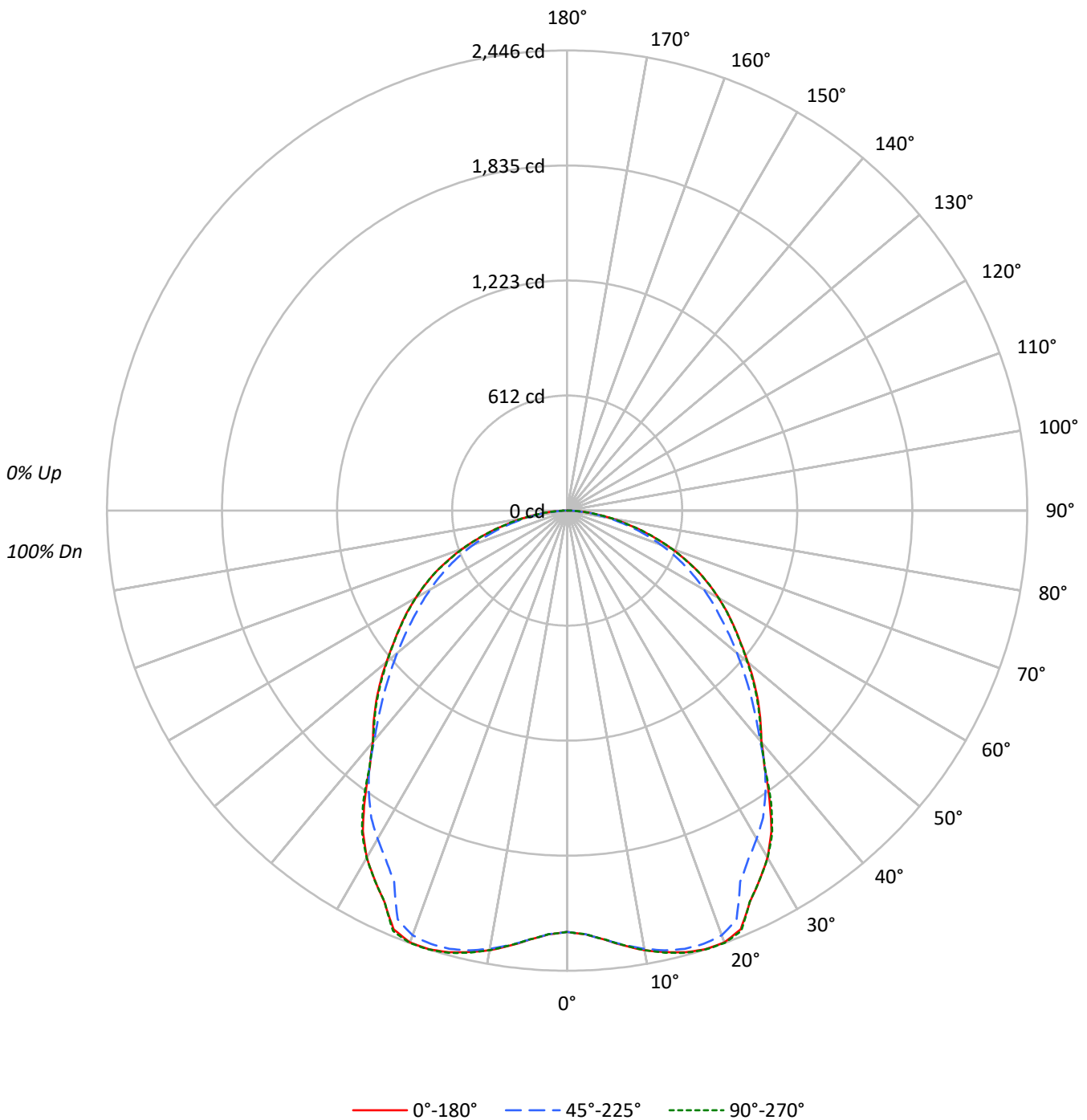
Lumens per Lamp: N/A
Luminaire Lumens: 6420.4 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

Input Watts (W): 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				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°	24253	24253	24253
5°	24886	24886	24877
10°	26094	26007	26094
15°	27250	27038	27286
20°	28148	27692	28183
25°	27448	26005	27420
30°	26632	25192	26662
35°	24796	24295	24973
40°	22709	22542	22677
45°	21979	21072	21907
50°	21132	19855	21053
55°	20508	18855	20463
60°	20141	18192	20141
65°	19722	17639	19660
70°	18721	16771	18696
75°	17045	15426	17108
80°	14916	13538	14966
85°	12946	11281	12946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.1	3.4
10°-20°	685.5	10.7
20°-30°	1036.6	16.1
30°-40°	1131.6	17.6
40°-50°	1110.8	17.3
50°-60°	972.4	15.1
60°-70°	730.7	11.4
70°-80°	417.8	6.5
80°-90°	113.9	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°	1943.2	30.3
0°-40°	3074.7	47.9
0°-60°	5158.0	80.3
0°-90°	6420.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6420.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2240	2240	2240	2240	2240	
5°	2289	2290	2289	2289	2289	221
15°	2431	2429	2412	2430	2434	688
25°	2297	2300	2176	2300	2295	1061
35°	1876	1784	1838	1777	1889	1170
45°	1435	1464	1376	1455	1430	1106
55°	1086	1103	999	1100	1084	974
65°	770	740	688	739	767	757
75°	407	392	369	392	409	432
85°	104	98	91	98	104	117
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°	2239.7	2239.7	2239.7	2239.7	2239.7	2239.7	2239.7	2239.7	2239.7	2239.7	2239.7
2.5°	2254.7	2253.1	2253.9	2253.1	2254.7	2254.7	2253.9	2254.7	2253.9	2253.9	2253.9
5°	2289.4	2287.8	2288.6	2287.0	2289.4	2290.2	2289.4	2290.2	2290.2	2289.4	2289.4
7.5°	2332.8	2329.7	2330.5	2328.9	2331.2	2331.2	2330.5	2330.5	2329.7	2328.9	2329.7
10°	2373.1	2371.5	2371.5	2370.7	2372.3	2371.5	2369.9	2369.1	2366.0	2365.2	2366.8
12.5°	2403.9	2405.4	2407.8	2407.8	2407.0	2406.2	2402.3	2399.9	2395.2	2394.4	2396.0
15°	2430.7	2431.5	2433.9	2433.1	2430.7	2426.8	2422.8	2418.1	2414.1	2411.8	2414.1
17.5°	2444.9	2444.9	2444.1	2441.8	2437.0	2432.3	2426.8	2422.0	2418.1	2414.9	2418.1
20°	2442.6	2442.6	2438.6	2433.9	2426.0	2418.9	2413.3	2408.6	2404.7	2403.1	2405.4
22.5°	2409.4	2411.8	2408.6	2407.8	2401.5	2392.0	2381.0	2369.1	2356.5	2352.6	2358.1
25°	2297.3	2295.7	2297.3	2312.3	2316.2	2284.7	2244.4	2207.3	2185.2	2176.5	2188.4
27.5°	2214.4	2212.8	2193.1	2161.5	2118.1	2097.6	2100.7	2097.6	2092.0	2088.1	2093.6
30°	2129.9	2118.1	2064.4	2006.8	1964.9	1958.6	1976.8	1999.7	2013.9	2014.7	2012.3
32.5°	2021.0	1997.3	1927.8	1883.6	1866.3	1863.1	1868.6	1892.3	1924.7	1937.3	1920.7
35°	1875.7	1862.3	1819.7	1791.3	1785.7	1781.8	1772.3	1784.2	1824.4	1837.8	1822.8
37.5°	1724.9	1737.6	1719.4	1709.2	1708.4	1700.5	1687.1	1688.6	1709.9	1728.9	1707.6
40°	1606.5	1619.2	1631.0	1630.2	1627.1	1615.2	1604.9	1599.4	1597.8	1594.7	1599.4
42.5°	1522.1	1517.3	1540.2	1552.8	1545.0	1537.1	1528.4	1524.4	1495.2	1481.8	1499.2
45°	1435.2	1433.6	1449.4	1476.3	1470.0	1458.9	1456.5	1440.7	1391.0	1376.0	1395.0
47.5°	1346.0	1352.3	1366.5	1388.6	1392.6	1383.1	1376.0	1343.6	1293.1	1275.0	1292.3
50°	1254.4	1268.6	1288.4	1297.1	1301.0	1295.5	1290.7	1248.9	1197.6	1178.6	1198.4
52.5°	1166.8	1186.5	1212.6	1205.5	1202.3	1204.7	1196.8	1158.9	1109.2	1086.3	1110.0
55°	1086.3	1105.2	1128.1	1113.9	1098.9	1107.6	1100.5	1070.5	1027.1	998.7	1025.5
57.5°	1010.5	1022.3	1040.5	1021.5	1004.2	1014.4	1007.3	983.7	943.4	918.9	945.0
60°	930.0	939.4	949.7	931.5	913.4	918.9	915.8	894.4	861.3	840.0	859.7
62.5°	849.4	854.2	861.3	841.6	826.6	826.6	825.0	804.4	778.4	766.6	777.6
65°	769.7	768.9	771.3	751.6	740.5	738.9	735.8	716.8	696.3	688.4	697.1
67.5°	679.7	681.3	682.1	663.9	655.2	651.3	648.9	631.6	615.0	609.5	615.8
70°	591.3	592.1	592.1	575.5	569.2	562.9	560.5	547.1	533.7	529.7	535.2
72.5°	498.1	503.7	501.3	487.9	483.1	475.2	473.7	465.0	454.7	449.2	454.7
75°	407.4	415.2	412.9	401.0	395.5	387.6	388.4	383.7	372.6	368.7	374.2
77.5°	319.7	324.5	325.3	318.9	310.3	304.7	307.1	306.3	298.4	288.9	296.0
80°	239.2	244.7	245.5	240.0	232.9	228.2	231.3	231.3	225.0	217.1	223.4
82.5°	166.6	170.5	170.5	167.4	164.2	159.5	161.0	161.8	157.9	150.0	155.5
85°	104.2	105.0	103.4	101.0	98.7	97.1	97.1	98.7	95.5	90.8	94.7
87.5°	38.7	39.5	38.7	41.1	38.7	37.9	38.7	41.1	37.9	37.9	38.7
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°	2239.7	2239.7	2239.7	2239.7	2239.7	2239.7	2239.7	2239.7
2.5°	2253.9	2254.7	2254.7	2253.9	2253.9	2253.9	2253.1	2253.9
5°	2289.4	2290.2	2290.2	2288.6	2289.4	2288.6	2287.8	2288.6
7.5°	2330.5	2332.0	2331.2	2332.0	2332.8	2331.2	2331.2	2331.2
10°	2368.3	2370.7	2372.3	2373.9	2374.7	2373.1	2373.9	2373.1
12.5°	2399.1	2403.9	2407.0	2408.6	2410.2	2410.2	2408.6	2407.0
15°	2418.1	2423.6	2427.6	2432.3	2435.4	2436.2	2434.7	2433.9
17.5°	2422.8	2427.6	2433.1	2437.8	2442.6	2445.7	2447.3	2446.5
20°	2409.4	2413.3	2419.7	2426.8	2433.1	2439.4	2444.1	2445.7
22.5°	2370.7	2381.8	2393.6	2402.3	2407.8	2411.0	2413.3	2418.9
25°	2212.0	2241.2	2283.9	2316.2	2310.7	2295.7	2290.2	2294.9
27.5°	2099.1	2096.0	2091.2	2116.5	2156.0	2190.7	2207.3	2215.2
30°	1998.1	1974.4	1952.3	1961.0	2001.3	2061.2	2111.8	2132.3
32.5°	1892.3	1859.9	1856.8	1862.3	1881.3	1921.5	1990.2	2028.9
35°	1781.0	1763.6	1773.1	1780.2	1786.5	1807.0	1854.4	1889.1
37.5°	1681.5	1678.4	1691.0	1699.7	1702.8	1713.1	1731.3	1726.5
40°	1593.9	1596.3	1607.3	1616.8	1623.1	1623.9	1612.8	1604.2
42.5°	1515.0	1525.2	1525.2	1537.1	1548.1	1533.1	1510.2	1516.5
45°	1434.4	1451.0	1450.2	1460.5	1470.7	1444.7	1425.7	1430.5
47.5°	1339.7	1371.3	1376.0	1387.1	1387.1	1360.2	1345.2	1339.7
50°	1243.4	1284.4	1290.0	1296.3	1293.1	1282.9	1263.1	1249.7
52.5°	1154.2	1192.9	1198.4	1196.0	1202.3	1207.1	1180.2	1163.6
55°	1066.5	1096.5	1103.6	1095.8	1110.8	1124.2	1098.9	1083.9
57.5°	979.7	1002.6	1008.9	1002.6	1019.2	1034.2	1017.6	1007.3
60°	892.1	912.6	916.5	911.0	930.8	944.2	936.3	930.0
62.5°	806.0	820.2	824.2	826.6	838.4	854.2	852.6	851.8
65°	719.2	734.2	735.8	742.9	750.8	771.3	767.3	767.3
67.5°	634.7	645.0	647.3	658.4	661.6	681.3	678.9	675.8
70°	547.1	557.4	560.5	571.6	576.3	592.1	592.9	590.5
72.5°	466.6	470.5	473.7	483.9	487.9	502.9	502.9	499.7
75°	384.5	383.7	386.8	397.1	401.0	413.7	412.9	408.9
77.5°	307.1	303.1	305.5	312.6	317.4	326.8	323.7	320.5
80°	234.5	228.2	228.9	236.0	239.2	245.5	242.4	240.0
82.5°	165.8	160.3	158.7	164.2	168.9	169.7	168.9	167.4
85°	101.0	96.3	97.1	99.5	102.6	102.6	104.2	104.2
87.5°	39.5	37.1	37.1	39.5	39.5	40.3	39.5	37.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)