

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: P130653

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130653
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-DIMRF-LW
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH LUMAWATT WIRELESS SENSOR.
Light Source: (160) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5949.7 lumens
Efficiency: N/A
Efficacy: 116.7 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

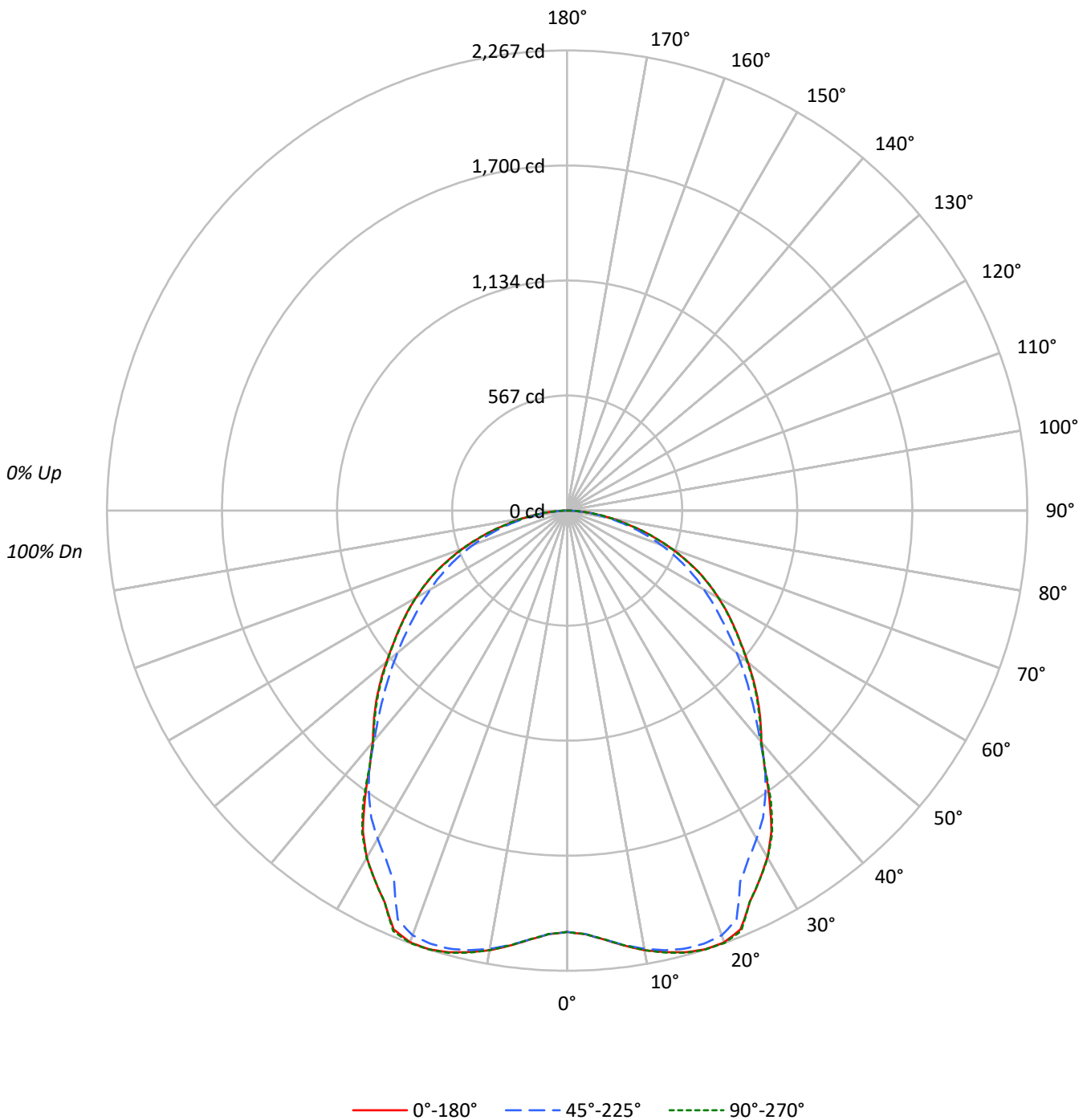
Input Watts (W): 51
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	22475	22475	22475
5°	23061	23061	23053
10°	24181	24100	24181
15°	25252	25055	25285
20°	26084	25662	26117
25°	25436	24098	25410
30°	24680	23345	24708
35°	22978	22514	23142
40°	21044	20890	21013
45°	20368	19527	20300
50°	19584	18400	19510
55°	19004	17471	18962
60°	18664	16858	18664
65°	18277	16345	18220
70°	17347	15542	17325
75°	15794	14292	15857
80°	13825	12547	13869
85°	12002	10449	12002



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.9	3.4
10°-20°	635.2	10.7
20°-30°	960.6	16.1
30°-40°	1048.6	17.6
40°-50°	1029.4	17.3
50°-60°	901.1	15.1
60°-70°	677.2	11.4
70°-80°	387.1	6.5
80°-90°	105.6	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°	1800.7	30.3
0°-40°	2849.3	47.9
0°-60°	4779.8	80.3
0°-90°	5949.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5949.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2076	2076	2076	2076	2076	
5°	2122	2122	2122	2122	2121	205
15°	2252	2251	2235	2252	2255	637
25°	2129	2132	2017	2131	2127	983
35°	1738	1653	1703	1646	1751	1084
45°	1330	1357	1275	1349	1326	1025
55°	1007	1022	925	1019	1004	903
65°	713	685	638	685	711	702
75°	378	363	342	363	379	401
85°	97	91	84	91	97	108
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°	2075.5	2075.5	2075.5	2075.5	2075.5	2075.5	2075.5	2075.5	2075.5	2075.5	2075.5
2.5°	2089.4	2087.9	2088.6	2087.9	2089.4	2089.4	2088.6	2089.4	2088.6	2088.6	2088.6
5°	2121.5	2120.1	2120.8	2119.4	2121.5	2122.3	2121.5	2122.3	2122.3	2121.5	2121.5
7.5°	2161.8	2158.9	2159.6	2158.1	2160.3	2160.3	2159.6	2159.6	2158.9	2158.1	2158.9
10°	2199.1	2197.6	2197.6	2196.9	2198.4	2197.6	2196.2	2195.4	2192.5	2191.8	2193.2
12.5°	2227.6	2229.1	2231.3	2231.3	2230.5	2229.8	2226.2	2224.0	2219.6	2218.8	2220.3
15°	2252.5	2253.2	2255.4	2254.7	2252.5	2248.8	2245.2	2240.8	2237.1	2234.9	2237.1
17.5°	2265.7	2265.7	2264.9	2262.7	2258.3	2254.0	2248.8	2244.4	2240.8	2237.9	2240.8
20°	2263.5	2263.5	2259.8	2255.4	2248.1	2241.5	2236.4	2232.0	2228.4	2226.9	2229.1
22.5°	2232.7	2234.9	2232.0	2231.3	2225.4	2216.6	2206.4	2195.4	2183.7	2180.1	2185.2
25°	2128.9	2127.4	2128.9	2142.8	2146.4	2117.2	2079.8	2045.5	2025.0	2016.9	2027.9
27.5°	2052.0	2050.6	2032.3	2003.0	1962.8	1943.8	1946.7	1943.8	1938.7	1935.0	1940.1
30°	1973.8	1962.8	1913.0	1859.6	1820.9	1815.0	1831.8	1853.1	1866.2	1867.0	1864.8
32.5°	1872.8	1850.9	1786.5	1745.5	1729.4	1726.5	1731.6	1753.6	1783.6	1795.3	1779.9
35°	1738.2	1725.8	1686.3	1659.9	1654.8	1651.1	1642.4	1653.3	1690.7	1703.1	1689.2
37.5°	1598.5	1610.2	1593.4	1583.8	1583.1	1575.8	1563.4	1564.8	1584.6	1602.1	1582.4
40°	1488.7	1500.4	1511.4	1510.7	1507.8	1496.8	1487.3	1482.2	1480.7	1477.8	1482.2
42.5°	1410.5	1406.1	1427.3	1439.0	1431.7	1424.4	1416.3	1412.7	1385.6	1373.2	1389.2
45°	1330.0	1328.5	1343.2	1368.0	1362.2	1351.9	1349.7	1335.1	1289.0	1275.1	1292.7
47.5°	1247.3	1253.2	1266.3	1286.8	1290.5	1281.7	1275.1	1245.1	1198.3	1181.5	1197.6
50°	1162.5	1175.6	1193.9	1202.0	1205.6	1200.5	1196.1	1157.3	1109.8	1092.2	1110.5
52.5°	1081.3	1099.5	1123.7	1117.1	1114.2	1116.4	1109.1	1073.9	1027.9	1006.6	1028.6
55°	1006.6	1024.2	1045.4	1032.2	1018.3	1026.4	1019.8	992.0	951.8	925.4	950.3
57.5°	936.4	947.4	964.2	946.6	930.6	940.1	933.5	911.5	874.2	851.5	875.7
60°	861.8	870.6	880.1	863.2	846.4	851.5	848.6	828.9	798.1	778.4	796.7
62.5°	787.2	791.6	798.1	779.9	766.0	766.0	764.5	745.5	721.3	710.4	720.6
65°	713.3	712.5	714.7	696.5	686.2	684.7	681.8	664.3	645.2	637.9	646.0
67.5°	629.9	631.3	632.1	615.2	607.2	603.5	601.3	585.3	569.9	564.8	570.6
70°	547.9	548.7	548.7	533.3	527.5	521.6	519.4	507.0	494.5	490.9	496.0
72.5°	461.6	466.7	464.5	452.1	447.7	440.4	438.9	430.9	421.4	416.3	421.4
75°	377.5	384.8	382.6	371.6	366.5	359.2	359.9	355.5	345.3	341.6	346.8
77.5°	296.3	300.7	301.4	295.6	287.5	282.4	284.6	283.8	276.5	267.8	274.3
80°	221.7	226.8	227.5	222.4	215.8	211.4	214.3	214.3	208.5	201.2	207.0
82.5°	154.4	158.0	158.0	155.1	152.2	147.8	149.2	150.0	146.3	139.0	144.1
85°	96.6	97.3	95.8	93.6	91.4	90.0	90.0	91.4	88.5	84.1	87.8
87.5°	35.8	36.6	35.8	38.0	35.8	35.1	35.8	38.0	35.1	35.1	35.8
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°	2075.5	2075.5	2075.5	2075.5	2075.5	2075.5	2075.5	2075.5
2.5°	2088.6	2089.4	2089.4	2088.6	2088.6	2088.6	2087.9	2088.6
5°	2121.5	2122.3	2122.3	2120.8	2121.5	2120.8	2120.1	2120.8
7.5°	2159.6	2161.1	2160.3	2161.1	2161.8	2160.3	2160.3	2160.3
10°	2194.7	2196.9	2198.4	2199.8	2200.6	2199.1	2199.8	2199.1
12.5°	2223.2	2227.6	2230.5	2232.0	2233.5	2233.5	2232.0	2230.5
15°	2240.8	2245.9	2249.6	2254.0	2256.9	2257.6	2256.2	2255.4
17.5°	2245.2	2249.6	2254.7	2259.1	2263.5	2266.4	2267.9	2267.1
20°	2232.7	2236.4	2242.3	2248.8	2254.7	2260.5	2264.9	2266.4
22.5°	2196.9	2207.1	2218.1	2226.2	2231.3	2234.2	2236.4	2241.5
25°	2049.9	2076.9	2116.4	2146.4	2141.3	2127.4	2122.3	2126.7
27.5°	1945.2	1942.3	1937.9	1961.3	1997.9	2030.1	2045.5	2052.8
30°	1851.6	1829.7	1809.2	1817.2	1854.5	1910.1	1956.9	1976.0
32.5°	1753.6	1723.6	1720.6	1725.8	1743.3	1780.6	1844.3	1880.1
35°	1650.4	1634.3	1643.1	1649.7	1655.5	1674.6	1718.5	1750.6
37.5°	1558.2	1555.3	1567.0	1575.1	1578.0	1587.5	1604.3	1599.9
40°	1477.0	1479.2	1489.5	1498.3	1504.1	1504.8	1494.6	1486.5
42.5°	1403.9	1413.4	1413.4	1424.4	1434.6	1420.7	1399.5	1405.3
45°	1329.3	1344.6	1343.9	1353.4	1362.9	1338.8	1321.2	1325.6
47.5°	1241.5	1270.7	1275.1	1285.4	1285.4	1260.5	1246.6	1241.5
50°	1152.2	1190.3	1195.4	1201.2	1198.3	1188.8	1170.5	1158.1
52.5°	1069.6	1105.4	1110.5	1108.3	1114.2	1118.6	1093.7	1078.3
55°	988.3	1016.1	1022.7	1015.4	1029.3	1041.8	1018.3	1004.4
57.5°	907.9	929.1	934.9	929.1	944.5	958.4	943.0	933.5
60°	826.7	845.7	849.3	844.2	862.5	875.0	867.6	861.8
62.5°	746.9	760.1	763.8	766.0	776.9	791.6	790.1	789.4
65°	666.5	680.4	681.8	688.4	695.7	714.7	711.1	711.1
67.5°	588.2	597.7	599.9	610.1	613.1	631.3	629.1	626.2
70°	507.0	516.5	519.4	529.7	534.0	548.7	549.4	547.2
72.5°	432.4	436.0	438.9	448.5	452.1	466.0	466.0	463.1
75°	356.3	355.5	358.5	368.0	371.6	383.3	382.6	379.0
77.5°	284.6	280.9	283.1	289.7	294.1	302.9	299.9	297.0
80°	217.3	211.4	212.2	218.7	221.7	227.5	224.6	222.4
82.5°	153.6	148.5	147.0	152.2	156.6	157.3	156.6	155.1
85°	93.6	89.3	90.0	92.2	95.1	95.1	96.6	96.6
87.5°	36.6	34.4	34.4	36.6	36.6	37.3	36.6	35.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)