

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: P130737

Luminaire Tested: **TBLED-LD1-8-W-UNV-L850-CD1-CMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130737  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25252)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: TBLED-LD1-8-W-UNV-L850-CD1-CMS  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
WIDE DISTRIBUTION WITH MINI SENSOR.  
Light Source: (160) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8204.9 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Spacing Criteria (0/90/45): 1.42 / 1.42 / 1.71  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
CIE Type: Direct

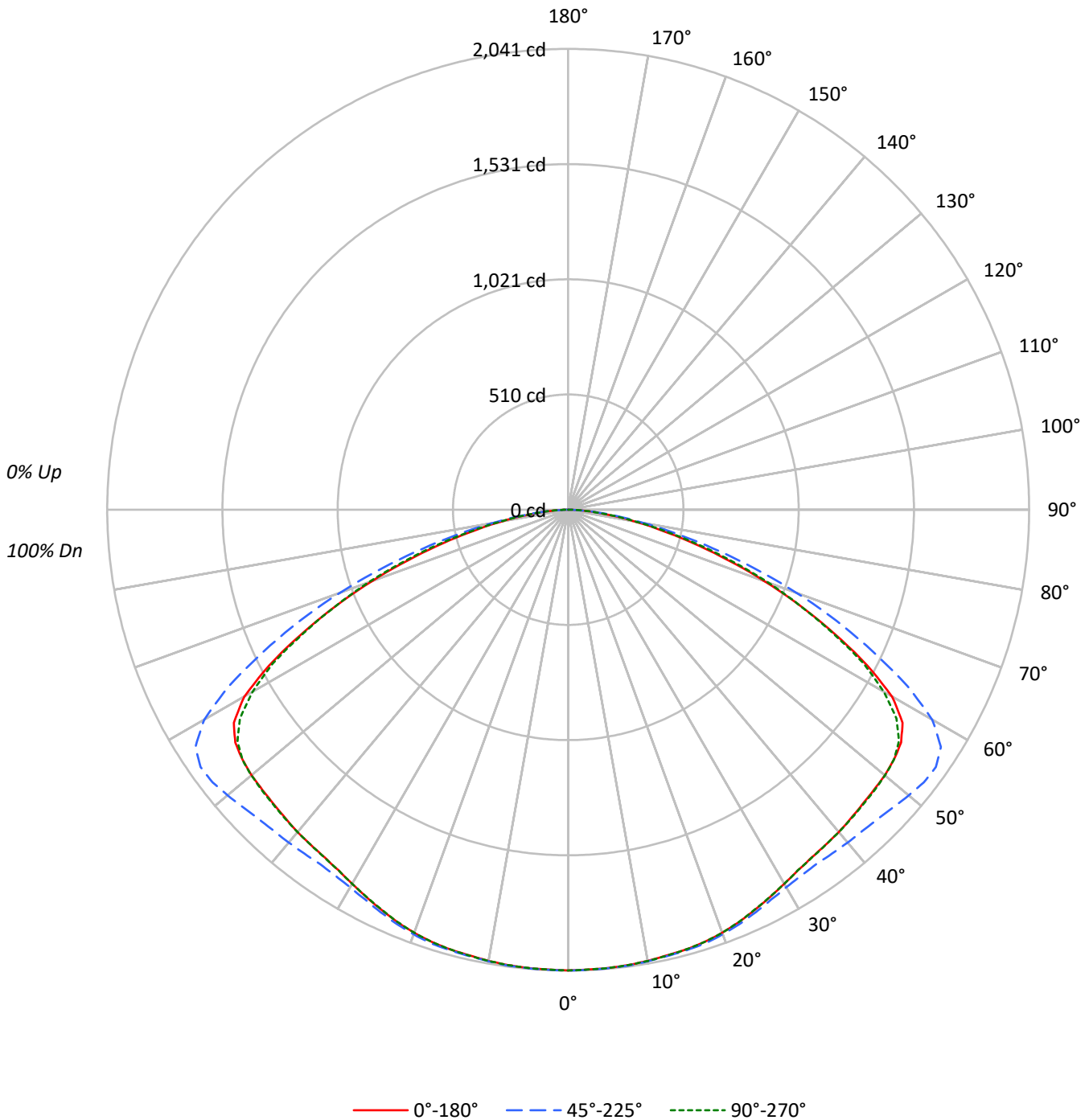
Input Watts (W): 77  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P130737

CATALOG NUMBER: TBLED-LD1-8-W-UNV-L850-CD1-CMS

### Luminous Intensity Polar Plot





TEST NUMBER: P130737

CATALOG NUMBER: TBLED-LD1-8-W-UNV-L850-CD1-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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	88	81	74	94	86	79	73	82	77	72	79	74	70	76	72	68	66
3	87	76	67	60	85	74	66	59	71	64	58	68	62	57	66	61	56	54
4	79	66	57	49	77	65	56	49	62	55	48	60	53	48	58	52	47	45
5	72	58	49	42	70	57	48	41	55	47	41	53	46	40	51	45	40	38
6	66	52	42	36	64	51	42	35	49	41	35	47	40	35	46	39	34	32
7	61	47	37	31	59	46	37	31	44	36	30	43	36	30	41	35	30	28
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24
9	53	39	30	24	51	38	30	24	37	29	24	36	29	24	35	28	23	22
10	49	35	27	22	48	35	27	21	34	26	21	33	26	21	32	26	21	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	22099	22099	22099
5°	22149	22161	22149
10°	22311	22335	22311
15°	22604	22651	22604
20°	22977	23063	22977
25°	23365	23492	23353
30°	23919	24145	23919
35°	24851	25330	24864
40°	26348	27206	26348
45°	28233	29669	28282
50°	30826	33159	30844
55°	33962	37522	33741
60°	35867	40322	34944
65°	33369	38201	33094
70°	29286	34045	29758
75°	23944	27823	24882
80°	18677	21202	19076
85°	13245	14698	13505



TEST NUMBER: P130737

CATALOG NUMBER: TBLED-LD1-8-W-UNV-L850-CD1-CMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.3	2.4
10°-20°	571.3	7.0
20°-30°	906.7	11.1
30°-40°	1195.1	14.6
40°-50°	1467.2	17.9
50°-60°	1674.8	20.4
60°-70°	1377.8	16.8
70°-80°	676.1	8.2
80°-90°	141.5	1.7
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°	1672.3	20.4
0°-40°	2867.4	34.9
0°-60°	6009.5	73.2
0°-90°	8204.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8204.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2041	2041	2041	2041	2041	
5°	2038	2039	2039	2039	2038	194
15°	2016	2018	2020	2019	2016	571
25°	1956	1962	1966	1962	1954	904
35°	1880	1900	1916	1899	1881	1183
45°	1844	1891	1937	1895	1847	1428
55°	1799	1900	1988	1894	1787	1595
65°	1302	1406	1491	1404	1292	1285
75°	572	628	665	635	595	619
85°	107	116	118	115	109	131
90°	0	0	0	0	0	



TEST NUMBER: P130737

CATALOG NUMBER: TBLED-LD1-8-W-UNV-L850-CD1-CMS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2040.8	2040.8	2040.8	2040.8	2040.8	2040.8	2040.8	2040.8	2040.8	2040.8	2040.8
2.5°	2038.7	2038.7	2038.7	2038.7	2039.7	2039.7	2039.7	2039.7	2039.7	2039.7	2038.7
5°	2037.6	2037.6	2037.6	2037.6	2038.7	2038.7	2038.7	2038.7	2038.7	2038.7	2038.7
7.5°	2034.4	2034.4	2035.5	2035.5	2035.5	2035.5	2035.5	2036.5	2036.5	2036.5	2036.5
10°	2029.1	2029.1	2029.1	2029.1	2030.1	2030.1	2031.2	2031.2	2031.2	2031.2	2031.2
12.5°	2021.6	2021.6	2022.7	2022.7	2022.7	2023.7	2024.8	2024.8	2024.8	2024.8	2024.8
15°	2016.3	2016.3	2016.3	2017.4	2017.4	2018.4	2019.5	2019.5	2020.5	2020.5	2020.5
17.5°	2007.8	2008.8	2008.8	2008.8	2009.9	2011.0	2013.1	2013.1	2014.2	2014.2	2014.2
20°	1993.9	1993.9	1995.0	1996.0	1997.1	1998.2	2000.3	2001.4	2001.4	2001.4	2002.4
22.5°	1976.9	1976.9	1977.9	1979.0	1981.1	1982.2	1984.3	1985.4	1985.4	1985.4	1985.4
25°	1955.5	1956.6	1957.7	1958.7	1960.9	1963.0	1965.1	1967.3	1967.3	1966.2	1967.3
27.5°	1934.2	1935.3	1936.4	1938.5	1940.6	1942.8	1944.9	1947.0	1947.0	1947.0	1948.1
30°	1912.9	1914.0	1916.1	1918.2	1921.4	1923.6	1926.8	1930.0	1931.0	1931.0	1930.0
32.5°	1893.7	1894.8	1898.0	1901.2	1905.5	1909.7	1914.0	1917.2	1920.4	1920.4	1918.2
35°	1879.9	1880.9	1885.2	1890.5	1896.9	1902.3	1907.6	1911.8	1916.1	1916.1	1915.0
37.5°	1871.4	1872.4	1877.7	1884.1	1893.7	1901.2	1908.7	1914.0	1918.2	1919.3	1918.2
40°	1863.9	1865.0	1871.4	1879.9	1890.5	1901.2	1910.8	1918.2	1922.5	1924.6	1924.6
42.5°	1853.2	1855.4	1861.8	1873.5	1886.3	1899.1	1910.8	1921.4	1926.8	1928.9	1927.8
45°	1843.6	1845.8	1854.3	1868.2	1883.1	1899.1	1914.0	1926.8	1934.2	1937.4	1935.3
47.5°	1836.2	1839.4	1850.0	1866.0	1884.1	1904.4	1922.5	1937.4	1947.0	1951.3	1948.1
50°	1829.8	1834.1	1845.8	1865.0	1888.4	1914.0	1935.3	1952.3	1964.1	1968.3	1965.1
52.5°	1818.1	1825.5	1839.4	1862.8	1891.6	1920.4	1945.9	1966.2	1980.1	1984.3	1980.1
55°	1798.9	1806.3	1822.3	1849.0	1884.1	1916.1	1947.0	1969.4	1982.2	1987.5	1981.1
57.5°	1755.2	1762.7	1778.6	1809.5	1844.7	1880.9	1912.9	1937.4	1953.4	1956.6	1943.8
60°	1656.1	1661.4	1685.9	1716.8	1750.9	1786.1	1819.1	1846.8	1860.7	1861.8	1843.6
62.5°	1492.0	1500.5	1525.0	1558.0	1590.0	1618.8	1649.7	1678.5	1689.1	1693.4	1679.5
65°	1302.3	1314.0	1332.1	1362.0	1393.9	1417.4	1451.5	1476.0	1486.6	1490.9	1485.6
67.5°	1113.6	1124.3	1133.9	1162.7	1191.4	1213.8	1246.9	1269.2	1277.8	1284.2	1281.0
70°	925.0	934.6	943.1	966.6	989.0	1017.7	1036.9	1058.2	1063.6	1075.3	1070.0
72.5°	741.7	749.2	757.7	780.1	793.9	824.8	833.4	851.5	861.1	864.3	858.9
75°	572.3	577.6	587.2	605.3	616.0	639.4	642.6	658.6	665.0	665.0	662.9
77.5°	424.1	428.4	439.1	449.7	460.4	476.4	473.2	483.8	488.1	490.2	488.1
80°	299.5	304.8	306.9	315.4	325.0	331.4	329.3	334.6	335.7	340.0	338.9
82.5°	191.8	197.2	194.0	199.3	205.7	209.9	211.0	211.0	211.0	214.2	213.1
85°	106.6	110.8	108.7	110.8	114.0	117.2	115.1	116.2	117.2	118.3	117.2
87.5°	35.2	39.4	36.2	37.3	39.4	41.6	42.6	39.4	41.6	41.6	41.6
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: P130737

CATALOG NUMBER: TBLED-LD1-8-W-UNV-L850-CD1-CMS

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2040.8	2040.8	2040.8	2040.8	2040.8	2040.8	2040.8	2040.8
2.5°	2038.7	2038.7	2038.7	2038.7	2038.7	2038.7	2038.7	2038.7
5°	2038.7	2038.7	2038.7	2038.7	2037.6	2037.6	2037.6	2037.6
7.5°	2035.5	2035.5	2035.5	2035.5	2034.4	2034.4	2034.4	2034.4
10°	2030.1	2030.1	2030.1	2029.1	2029.1	2029.1	2029.1	2029.1
12.5°	2024.8	2023.7	2023.7	2023.7	2023.7	2022.7	2022.7	2022.7
15°	2020.5	2019.5	2019.5	2018.4	2017.4	2017.4	2016.3	2016.3
17.5°	2013.1	2013.1	2012.0	2011.0	2009.9	2008.8	2008.8	2007.8
20°	2001.4	2000.3	1998.2	1997.1	1997.1	1996.0	1995.0	1993.9
22.5°	1984.3	1983.2	1982.2	1980.1	1979.0	1977.9	1976.9	1975.8
25°	1965.1	1964.1	1963.0	1960.9	1959.8	1957.7	1956.6	1954.5
27.5°	1945.9	1945.9	1942.8	1940.6	1938.5	1936.4	1935.3	1933.2
30°	1928.9	1927.8	1925.7	1921.4	1919.3	1916.1	1914.0	1912.9
32.5°	1916.1	1915.0	1910.8	1905.5	1901.2	1896.9	1895.9	1893.7
35°	1912.9	1908.7	1902.3	1895.9	1890.5	1885.2	1882.0	1880.9
37.5°	1916.1	1908.7	1901.2	1892.7	1885.2	1877.7	1873.5	1871.4
40°	1919.3	1911.8	1903.3	1891.6	1880.9	1872.4	1867.1	1863.9
42.5°	1921.4	1912.9	1902.3	1888.4	1875.6	1865.0	1858.6	1855.4
45°	1926.8	1917.2	1903.3	1886.3	1870.3	1858.6	1851.1	1846.8
47.5°	1938.5	1924.6	1907.6	1887.3	1868.2	1852.2	1843.6	1839.4
50°	1953.4	1936.4	1915.0	1890.5	1867.1	1846.8	1836.2	1830.9
52.5°	1967.3	1947.0	1921.4	1892.7	1862.8	1839.4	1823.4	1818.1
55°	1967.3	1942.8	1910.8	1877.7	1843.6	1815.9	1794.6	1787.2
57.5°	1925.7	1899.1	1859.6	1823.4	1786.1	1753.1	1730.7	1723.2
60°	1819.1	1795.7	1749.9	1714.7	1673.1	1636.9	1619.8	1613.5
62.5°	1656.1	1639.0	1597.5	1566.6	1521.8	1493.0	1472.8	1473.8
65°	1466.4	1451.5	1417.4	1389.7	1349.2	1326.8	1306.5	1291.6
67.5°	1267.1	1250.1	1222.3	1197.8	1164.8	1148.8	1126.4	1112.6
70°	1058.2	1045.4	1019.9	1002.8	975.1	961.3	939.9	939.9
72.5°	849.4	843.0	824.8	809.9	788.6	775.8	758.8	762.0
75°	655.4	658.6	640.5	629.8	612.8	602.1	589.3	594.7
77.5°	491.3	487.0	474.2	467.8	452.9	448.7	435.9	440.1
80°	340.0	338.9	328.2	324.0	315.4	313.3	302.7	305.9
82.5°	214.2	214.2	209.9	205.7	202.5	200.3	192.9	195.0
85°	118.3	117.2	116.2	113.0	110.8	111.9	106.6	108.7
87.5°	41.6	40.5	40.5	38.4	36.2	39.4	35.2	36.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)