

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: P130728

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130728  
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-DIMRF-LW  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
WIDE 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: 7933.3 lumens  
Efficiency: N/A  
Efficacy: 103.0 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

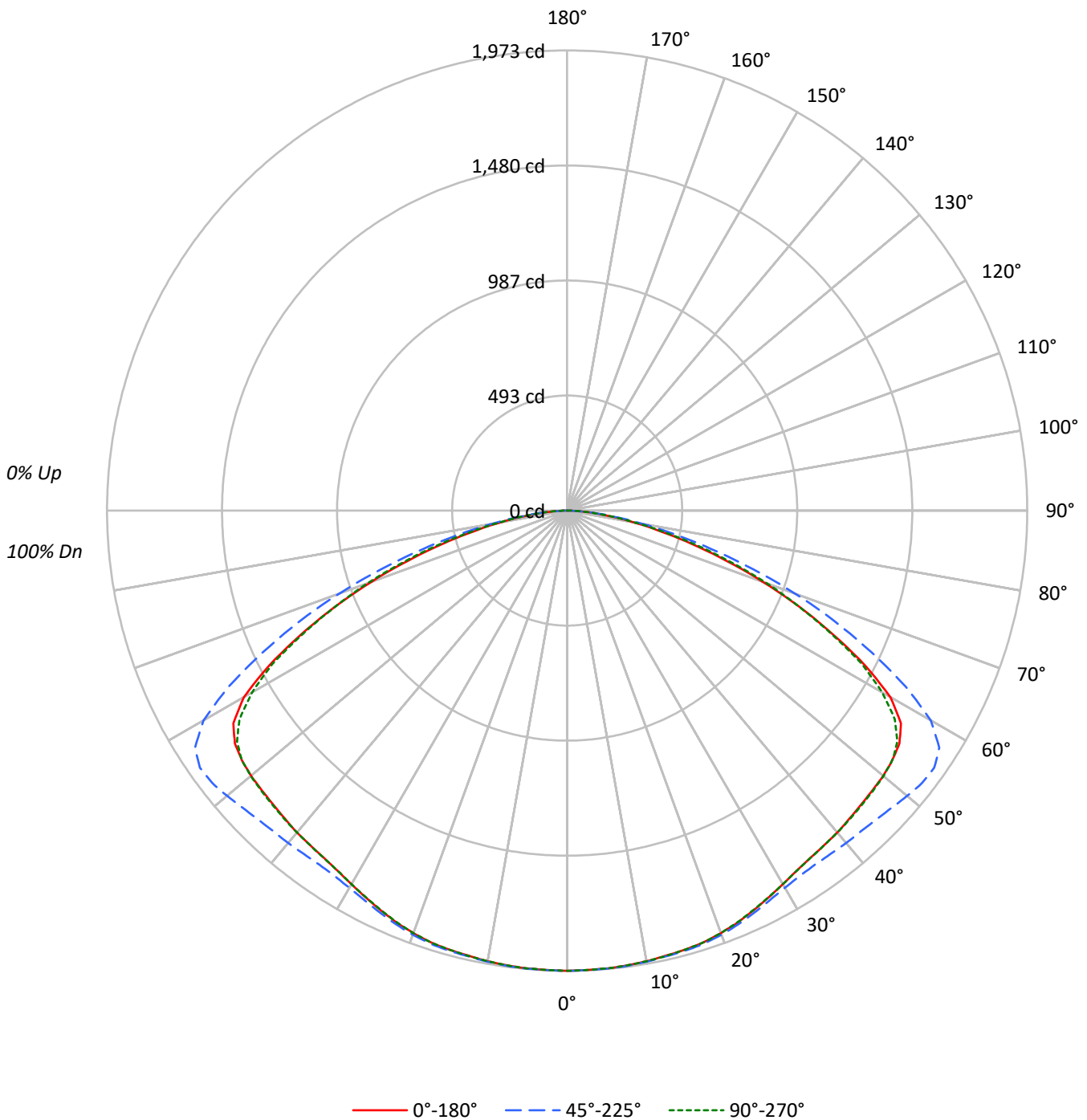
Input Watts (W): 77  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	21368	21368	21368
5°	21416	21427	21416
10°	21573	21596	21573
15°	21856	21902	21856
20°	22216	22299	22216
25°	22592	22715	22580
30°	23127	23346	23127
35°	24029	24492	24042
40°	25476	26305	25476
45°	27299	28688	27346
50°	29805	32062	29823
55°	32839	36280	32623
60°	34680	38988	33788
65°	32264	36938	32000
70°	28318	32918	28773
75°	23149	26902	24057
80°	18053	20498	18440
85°	12797	14214	13058



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.9	2.4
10°-20°	552.4	7.0
20°-30°	876.7	11.1
30°-40°	1155.6	14.6
40°-50°	1418.6	17.9
50°-60°	1619.4	20.4
60°-70°	1332.2	16.8
70°-80°	653.7	8.2
80°-90°	136.8	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°	1617.0	20.4
0°-40°	2772.6	34.9
0°-60°	5810.6	73.2
0°-90°	7933.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7933.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1973	1973	1973	1973	1973	
5°	1970	1971	1971	1971	1970	188
15°	1950	1951	1954	1952	1950	552
25°	1891	1897	1901	1897	1890	874
35°	1818	1837	1853	1836	1819	1143
45°	1783	1828	1873	1832	1786	1381
55°	1739	1837	1922	1832	1728	1542
65°	1259	1359	1442	1357	1249	1243
75°	553	607	643	614	575	599
85°	103	112	114	111	105	127
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°	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3
2.5°	1971.2	1971.2	1971.2	1971.2	1972.2	1972.2	1972.2	1972.2	1972.2	1972.2	1971.2
5°	1970.2	1970.2	1970.2	1970.2	1971.2	1971.2	1971.2	1971.2	1971.2	1971.2	1971.2
7.5°	1967.1	1967.1	1968.1	1968.1	1968.1	1968.1	1968.1	1969.1	1969.1	1969.1	1969.1
10°	1961.9	1961.9	1961.9	1961.9	1963.0	1963.0	1964.0	1964.0	1964.0	1964.0	1964.0
12.5°	1954.7	1954.7	1955.7	1955.7	1955.7	1956.8	1957.8	1957.8	1957.8	1957.8	1957.8
15°	1949.6	1949.6	1949.6	1950.6	1950.6	1951.6	1952.7	1952.7	1953.7	1953.7	1953.7
17.5°	1941.3	1942.3	1942.3	1942.3	1943.4	1944.4	1946.5	1946.5	1947.5	1947.5	1947.5
20°	1927.9	1927.9	1929.0	1930.0	1931.0	1932.0	1934.1	1935.1	1935.1	1935.1	1936.2
22.5°	1911.4	1911.4	1912.5	1913.5	1915.6	1916.6	1918.6	1919.7	1919.7	1919.7	1919.7
25°	1890.8	1891.9	1892.9	1893.9	1896.0	1898.0	1900.1	1902.2	1902.2	1901.1	1902.2
27.5°	1870.2	1871.2	1872.3	1874.3	1876.4	1878.5	1880.5	1882.6	1882.6	1882.6	1883.6
30°	1849.6	1850.6	1852.7	1854.8	1857.9	1859.9	1863.0	1866.1	1867.1	1867.1	1866.1
32.5°	1831.1	1832.1	1835.2	1838.3	1842.4	1846.5	1850.6	1853.7	1856.8	1856.8	1854.8
35°	1817.7	1818.7	1822.8	1828.0	1834.2	1839.3	1844.5	1848.6	1852.7	1852.7	1851.7
37.5°	1809.4	1810.5	1815.6	1821.8	1831.1	1838.3	1845.5	1850.6	1854.8	1855.8	1854.8
40°	1802.2	1803.2	1809.4	1817.7	1828.0	1838.3	1847.5	1854.8	1858.9	1860.9	1860.9
42.5°	1791.9	1794.0	1800.2	1811.5	1823.8	1836.2	1847.5	1857.9	1863.0	1865.1	1864.0
45°	1782.6	1784.7	1792.9	1806.3	1820.8	1836.2	1850.6	1863.0	1870.2	1873.3	1871.2
47.5°	1775.4	1778.5	1788.8	1804.3	1821.8	1841.4	1858.9	1873.3	1882.6	1886.7	1883.6
50°	1769.2	1773.4	1784.7	1803.2	1825.9	1850.6	1871.2	1887.7	1899.1	1903.2	1900.1
52.5°	1757.9	1765.1	1778.5	1801.2	1829.0	1856.8	1881.6	1901.1	1914.5	1918.6	1914.5
55°	1739.4	1746.6	1762.0	1787.8	1821.8	1852.7	1882.6	1904.2	1916.6	1921.7	1915.6
57.5°	1697.1	1704.3	1719.8	1749.7	1783.7	1818.7	1849.6	1873.3	1888.8	1891.9	1879.5
60°	1601.3	1606.4	1630.1	1660.0	1693.0	1727.0	1758.9	1785.7	1799.1	1800.2	1782.6
62.5°	1442.6	1450.8	1474.5	1506.5	1537.4	1565.2	1595.1	1622.9	1633.2	1637.3	1623.9
65°	1259.2	1270.5	1288.0	1316.9	1347.8	1370.5	1403.4	1427.1	1437.4	1441.6	1436.4
67.5°	1076.8	1087.1	1096.4	1124.2	1152.0	1173.7	1205.6	1227.2	1235.5	1241.7	1238.6
70°	894.4	903.7	911.9	934.6	956.2	984.1	1002.6	1023.2	1028.4	1039.7	1034.5
72.5°	717.2	724.4	732.6	754.3	767.7	797.5	805.8	823.3	832.6	835.7	830.5
75°	553.3	558.5	567.8	585.3	595.6	618.3	621.3	636.8	643.0	643.0	640.9
77.5°	410.1	414.2	424.5	434.8	445.1	460.6	457.5	467.8	471.9	474.0	471.9
80°	289.5	294.7	296.8	305.0	314.3	320.5	318.4	323.6	324.6	328.7	327.7
82.5°	185.5	190.6	187.5	192.7	198.9	203.0	204.0	204.0	204.0	207.1	206.1
85°	103.0	107.2	105.1	107.2	110.3	113.3	111.3	112.3	113.3	114.4	113.3
87.5°	34.0	38.1	35.0	36.1	38.1	40.2	41.2	38.1	40.2	40.2	40.2
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°	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3
2.5°	1971.2	1971.2	1971.2	1971.2	1971.2	1971.2	1971.2	1971.2
5°	1971.2	1971.2	1971.2	1971.2	1970.2	1970.2	1970.2	1970.2
7.5°	1968.1	1968.1	1968.1	1968.1	1967.1	1967.1	1967.1	1967.1
10°	1963.0	1963.0	1963.0	1961.9	1961.9	1961.9	1961.9	1961.9
12.5°	1957.8	1956.8	1956.8	1956.8	1956.8	1955.7	1955.7	1955.7
15°	1953.7	1952.7	1952.7	1951.6	1950.6	1950.6	1949.6	1949.6
17.5°	1946.5	1946.5	1945.4	1944.4	1943.4	1942.3	1942.3	1941.3
20°	1935.1	1934.1	1932.0	1931.0	1931.0	1930.0	1929.0	1927.9
22.5°	1918.6	1917.6	1916.6	1914.5	1913.5	1912.5	1911.4	1910.4
25°	1900.1	1899.1	1898.0	1896.0	1894.9	1892.9	1891.9	1889.8
27.5°	1881.6	1881.6	1878.5	1876.4	1874.3	1872.3	1871.2	1869.2
30°	1865.1	1864.0	1862.0	1857.9	1855.8	1852.7	1850.6	1849.6
32.5°	1852.7	1851.7	1847.5	1842.4	1838.3	1834.2	1833.1	1831.1
35°	1849.6	1845.5	1839.3	1833.1	1828.0	1822.8	1819.7	1818.7
37.5°	1852.7	1845.5	1838.3	1830.0	1822.8	1815.6	1811.5	1809.4
40°	1855.8	1848.6	1840.3	1829.0	1818.7	1810.5	1805.3	1802.2
42.5°	1857.9	1849.6	1839.3	1825.9	1813.5	1803.2	1797.1	1794.0
45°	1863.0	1853.7	1840.3	1823.8	1808.4	1797.1	1789.8	1785.7
47.5°	1874.3	1860.9	1844.5	1824.9	1806.3	1790.9	1782.6	1778.5
50°	1888.8	1872.3	1851.7	1828.0	1805.3	1785.7	1775.4	1770.3
52.5°	1902.2	1882.6	1857.9	1830.0	1801.2	1778.5	1763.1	1757.9
55°	1902.2	1878.5	1847.5	1815.6	1782.6	1755.8	1735.2	1728.0
57.5°	1862.0	1836.2	1798.1	1763.1	1727.0	1695.0	1673.4	1666.2
60°	1758.9	1736.3	1692.0	1658.0	1617.8	1582.7	1566.2	1560.1
62.5°	1601.3	1584.8	1544.6	1514.7	1471.4	1443.6	1424.0	1425.1
65°	1417.9	1403.4	1370.5	1343.7	1304.5	1282.9	1263.3	1248.9
67.5°	1225.2	1208.7	1181.9	1158.2	1126.3	1110.8	1089.2	1075.8
70°	1023.2	1010.8	986.1	969.6	942.8	929.4	908.8	908.8
72.5°	821.2	815.1	797.5	783.1	762.5	750.1	733.7	736.8
75°	633.7	636.8	619.3	609.0	592.5	582.2	569.8	575.0
77.5°	475.0	470.9	458.5	452.4	437.9	433.8	421.4	425.6
80°	328.7	327.7	317.4	313.2	305.0	302.9	292.6	295.7
82.5°	207.1	207.1	203.0	198.9	195.8	193.7	186.5	188.6
85°	114.4	113.3	112.3	109.2	107.2	108.2	103.0	105.1
87.5°	40.2	39.2	39.2	37.1	35.0	38.1	34.0	35.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)