

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: P130651

Luminaire Tested: **TBLED-LD1-6-M-UNV-L835-CD1-DIMRF-LW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130651  
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-L835-CD1-DIMRF-LW  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
MEDIUM DISTRIBUTION WITH LUMAWATT WIRELESS SENSOR.  
Light Source: (160) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5229.0 lumens  
Efficiency: N/A  
Efficacy: 102.5 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

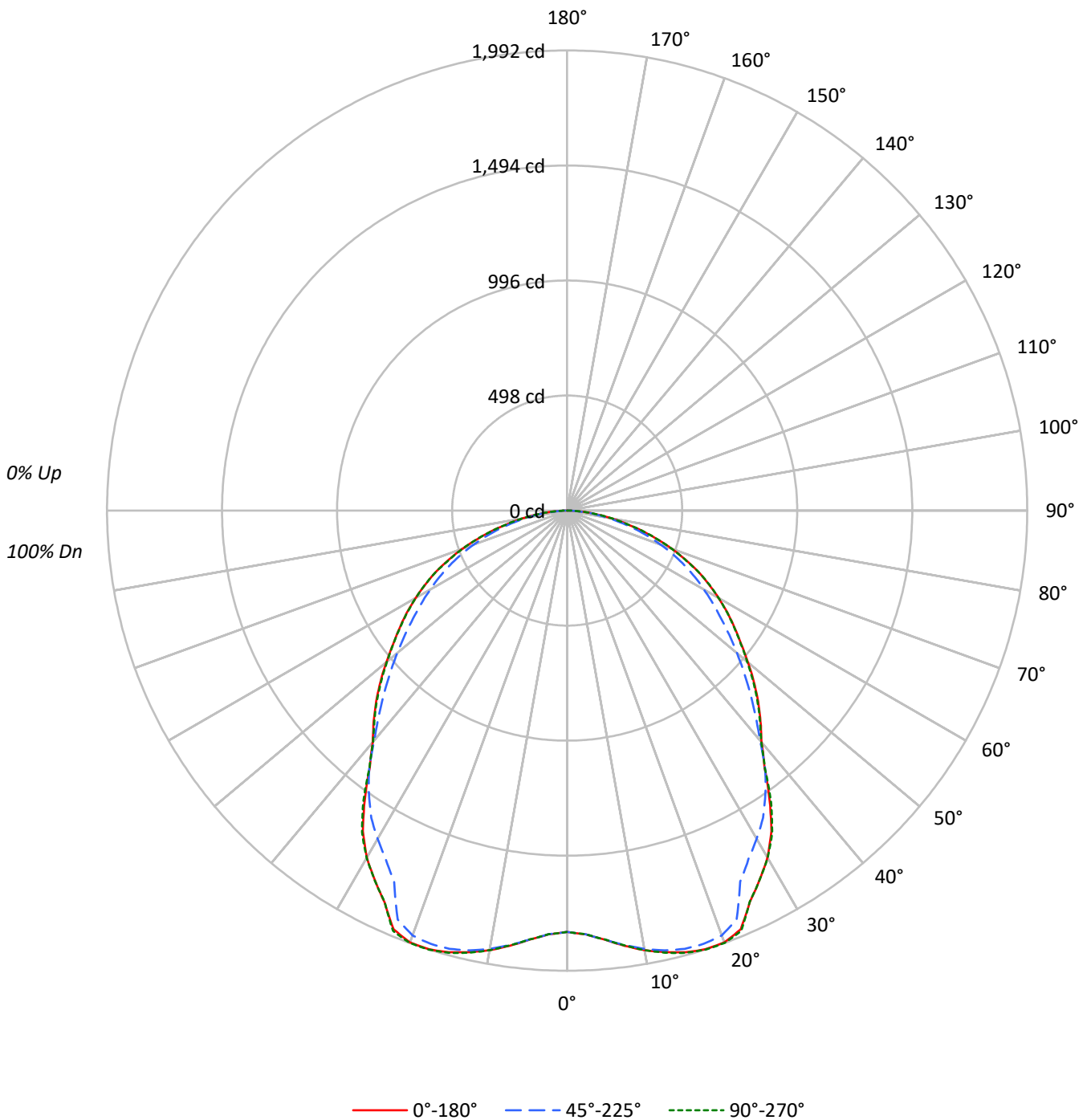
Input Watts (W): 51  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	19753	19753	19753
5°	20268	20268	20261
10°	21251	21181	21251
15°	22193	22020	22222
20°	22924	22553	22954
25°	22355	21179	22332
30°	21690	20516	21714
35°	20195	19787	20339
40°	18495	18360	18468
45°	17901	17162	17841
50°	17210	16171	17146
55°	16702	15354	16667
60°	16403	14816	16403
65°	16063	14367	16012
70°	15248	13659	15226
75°	13882	12564	13932
80°	12148	11025	12191
85°	10548	9182	10548



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.1	3.4
10°-20°	558.3	10.7
20°-30°	844.2	16.1
30°-40°	921.6	17.6
40°-50°	904.7	17.3
50°-60°	792.0	15.1
60°-70°	595.1	11.4
70°-80°	340.2	6.5
80°-90°	92.8	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°	1582.6	30.3
0°-40°	2504.2	47.9
0°-60°	4200.8	80.3
0°-90°	5229.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5229.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1824	1824	1824	1824	1824	
5°	1865	1865	1865	1865	1864	180
15°	1980	1978	1964	1979	1982	560
25°	1871	1874	1773	1873	1869	864
35°	1528	1453	1497	1447	1539	953
45°	1169	1193	1121	1185	1165	901
55°	885	899	813	896	883	793
65°	627	602	561	602	625	617
75°	332	319	300	319	333	352
85°	85	80	74	80	85	95
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°	1824.1	1824.1	1824.1	1824.1	1824.1	1824.1	1824.1	1824.1	1824.1	1824.1	1824.1
2.5°	1836.3	1835.0	1835.6	1835.0	1836.3	1836.3	1835.6	1836.3	1835.6	1835.6	1835.6
5°	1864.6	1863.3	1863.9	1862.6	1864.6	1865.2	1864.6	1865.2	1865.2	1864.6	1864.6
7.5°	1899.9	1897.3	1898.0	1896.7	1898.6	1898.6	1898.0	1898.0	1897.3	1896.7	1897.3
10°	1932.7	1931.4	1931.4	1930.8	1932.1	1931.4	1930.1	1929.5	1926.9	1926.3	1927.6
12.5°	1957.8	1959.1	1961.0	1961.0	1960.4	1959.7	1956.5	1954.6	1950.7	1950.1	1951.4
15°	1979.6	1980.3	1982.2	1981.6	1979.6	1976.4	1973.2	1969.4	1966.1	1964.2	1966.1
17.5°	1991.2	1991.2	1990.6	1988.6	1984.8	1980.9	1976.4	1972.6	1969.4	1966.8	1969.4
20°	1989.3	1989.3	1986.1	1982.2	1975.8	1970.0	1965.5	1961.6	1958.4	1957.1	1959.1
22.5°	1962.3	1964.2	1961.6	1961.0	1955.9	1948.1	1939.1	1929.5	1919.2	1916.0	1920.5
25°	1871.0	1869.7	1871.0	1883.2	1886.4	1860.7	1827.9	1797.7	1779.7	1772.6	1782.3
27.5°	1803.5	1802.2	1786.1	1760.4	1725.0	1708.3	1710.9	1708.3	1703.8	1700.6	1705.1
30°	1734.7	1725.0	1681.3	1634.4	1600.3	1595.2	1610.0	1628.6	1640.2	1640.8	1638.9
32.5°	1646.0	1626.7	1570.1	1534.1	1519.9	1517.4	1521.9	1541.2	1567.5	1577.8	1564.3
35°	1527.7	1516.7	1482.0	1458.9	1454.4	1451.1	1443.4	1453.1	1485.9	1496.8	1484.6
37.5°	1404.8	1415.1	1400.3	1392.0	1391.3	1384.9	1374.0	1375.3	1392.6	1408.1	1390.7
40°	1308.4	1318.7	1328.3	1327.7	1325.1	1315.5	1307.1	1302.6	1301.3	1298.8	1302.6
42.5°	1239.6	1235.8	1254.4	1264.7	1258.3	1251.8	1244.8	1241.5	1217.8	1206.8	1221.0
45°	1168.9	1167.6	1180.5	1202.3	1197.2	1188.2	1186.2	1173.4	1132.9	1120.7	1136.1
47.5°	1096.2	1101.4	1112.9	1131.0	1134.2	1126.5	1120.7	1094.3	1053.2	1038.4	1052.5
50°	1021.6	1033.2	1049.3	1056.4	1059.6	1055.1	1051.2	1017.1	975.4	959.9	976.0
52.5°	950.3	966.4	987.6	981.8	979.2	981.1	974.7	943.9	903.3	884.7	904.0
55°	884.7	900.1	918.8	907.2	895.0	902.1	896.3	871.8	836.5	813.3	835.2
57.5°	823.0	832.6	847.4	832.0	817.8	826.2	820.4	801.1	768.3	748.4	769.6
60°	757.4	765.1	773.5	758.7	743.9	748.4	745.8	728.5	701.5	684.1	700.2
62.5°	691.8	695.7	701.5	685.4	673.2	673.2	671.9	655.2	634.0	624.3	633.3
65°	626.9	626.2	628.2	612.1	603.1	601.8	599.2	583.8	567.1	560.7	567.7
67.5°	553.6	554.9	555.5	540.7	533.6	530.4	528.5	514.4	500.9	496.4	501.5
70°	481.6	482.2	482.2	468.7	463.6	458.4	456.5	445.6	434.6	431.4	435.9
72.5°	405.7	410.2	408.3	397.3	393.5	387.1	385.8	378.7	370.3	365.8	370.3
75°	331.8	338.2	336.3	326.6	322.1	315.7	316.3	312.5	303.5	300.3	304.8
77.5°	260.4	264.3	264.9	259.8	252.7	248.2	250.1	249.5	243.0	235.3	241.1
80°	194.8	199.3	200.0	195.5	189.7	185.8	188.4	188.4	183.2	176.8	182.0
82.5°	135.7	138.9	138.9	136.3	133.7	129.9	131.2	131.8	128.6	122.2	126.7
85°	84.9	85.5	84.2	82.3	80.4	79.1	79.1	80.4	77.8	73.9	77.2
87.5°	31.5	32.1	31.5	33.4	31.5	30.9	31.5	33.4	30.9	30.9	31.5
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°	1824.1	1824.1	1824.1	1824.1	1824.1	1824.1	1824.1	1824.1
2.5°	1835.6	1836.3	1836.3	1835.6	1835.6	1835.6	1835.0	1835.6
5°	1864.6	1865.2	1865.2	1863.9	1864.6	1863.9	1863.3	1863.9
7.5°	1898.0	1899.3	1898.6	1899.3	1899.9	1898.6	1898.6	1898.6
10°	1928.9	1930.8	1932.1	1933.4	1934.0	1932.7	1933.4	1932.7
12.5°	1953.9	1957.8	1960.4	1961.6	1962.9	1962.9	1961.6	1960.4
15°	1969.4	1973.9	1977.1	1980.9	1983.5	1984.1	1982.9	1982.2
17.5°	1973.2	1977.1	1981.6	1985.4	1989.3	1991.9	1993.1	1992.5
20°	1962.3	1965.5	1970.6	1976.4	1981.6	1986.7	1990.6	1991.9
22.5°	1930.8	1939.8	1949.4	1956.5	1961.0	1963.6	1965.5	1970.0
25°	1801.6	1825.3	1860.1	1886.4	1881.9	1869.7	1865.2	1869.1
27.5°	1709.6	1707.0	1703.2	1723.8	1755.9	1784.2	1797.7	1804.1
30°	1627.3	1608.0	1590.0	1597.1	1629.9	1678.7	1719.9	1736.6
32.5°	1541.2	1514.8	1512.2	1516.7	1532.2	1564.9	1620.9	1652.4
35°	1450.5	1436.4	1444.1	1449.9	1455.0	1471.7	1510.3	1538.6
37.5°	1369.5	1366.9	1377.2	1384.3	1386.8	1395.2	1410.0	1406.1
40°	1298.1	1300.0	1309.0	1316.8	1321.9	1322.6	1313.5	1306.5
42.5°	1233.8	1242.2	1242.2	1251.8	1260.8	1248.6	1230.0	1235.1
45°	1168.2	1181.7	1181.1	1189.5	1197.8	1176.6	1161.2	1165.0
47.5°	1091.1	1116.8	1120.7	1129.7	1129.7	1107.8	1095.6	1091.1
50°	1012.6	1046.1	1050.6	1055.7	1053.2	1044.8	1028.7	1017.8
52.5°	940.0	971.5	976.0	974.1	979.2	983.1	961.2	947.7
55°	868.6	893.1	898.8	892.4	904.6	915.6	895.0	882.8
57.5°	797.9	816.5	821.7	816.5	830.1	842.3	828.8	820.4
60°	726.5	743.3	746.5	742.0	758.0	769.0	762.5	757.4
62.5°	656.5	668.0	671.2	673.2	682.8	695.7	694.4	693.7
65°	585.7	597.9	599.2	605.0	611.4	628.2	624.9	624.9
67.5°	516.9	525.3	527.2	536.2	538.8	554.9	552.9	550.4
70°	445.6	453.9	456.5	465.5	469.4	482.2	482.9	480.9
72.5°	380.0	383.2	385.8	394.1	397.3	409.6	409.6	407.0
75°	313.1	312.5	315.0	323.4	326.6	336.9	336.3	333.0
77.5°	250.1	246.9	248.8	254.6	258.5	266.2	263.6	261.0
80°	191.0	185.8	186.5	192.2	194.8	200.0	197.4	195.5
82.5°	135.0	130.5	129.2	133.7	137.6	138.2	137.6	136.3
85°	82.3	78.4	79.1	81.0	83.6	83.6	84.9	84.9
87.5°	32.1	30.2	30.2	32.1	32.1	32.8	32.1	30.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)