

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: P130633

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130633  
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  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
MEDIUM DISTRIBUTION.  
Light Source: (160) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

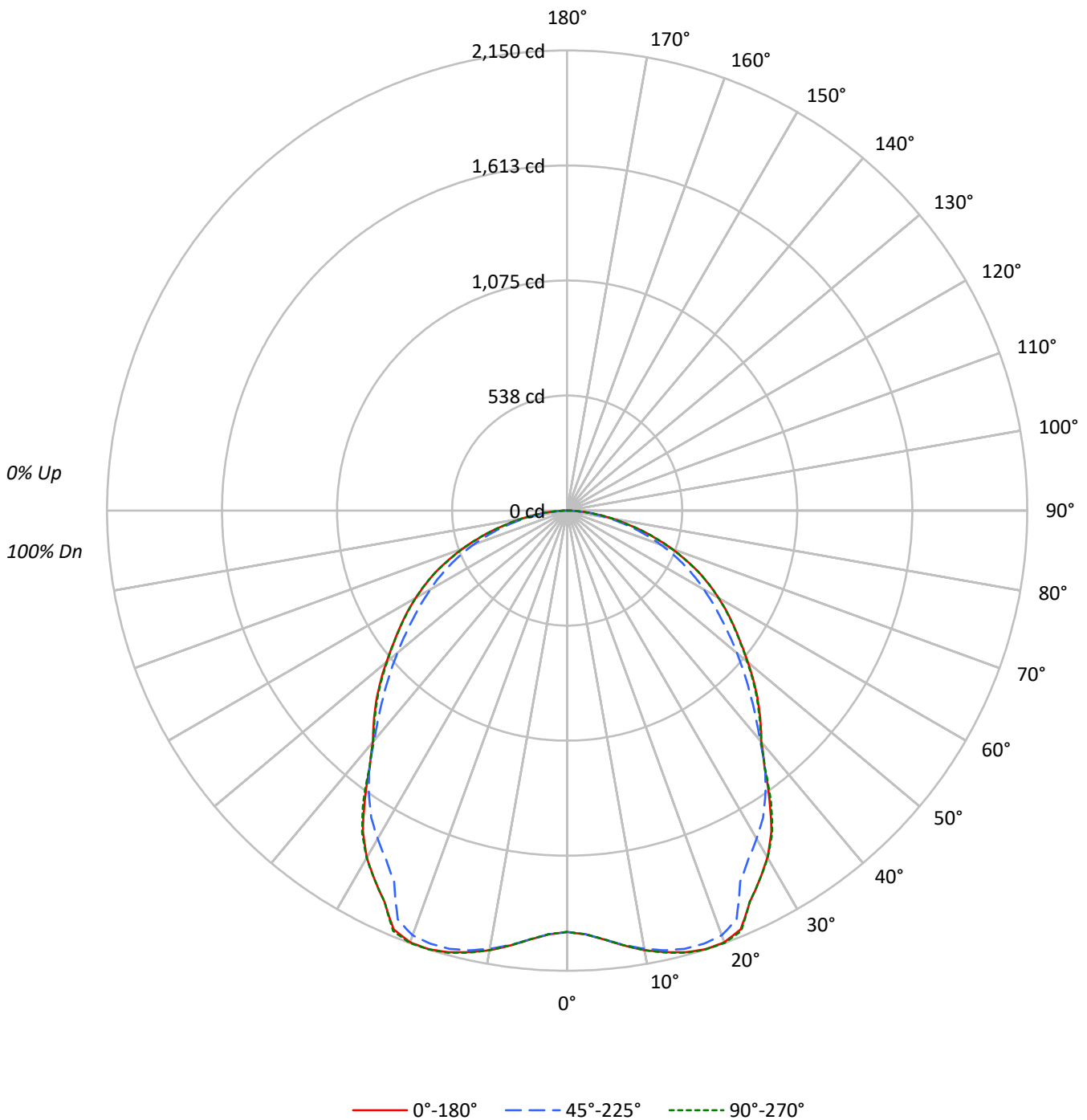
Lumens per Lamp: N/A  
Luminaire Lumens: 5642.7 lumens  
Efficiency: N/A  
Efficacy: 110.6 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.33  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
CIE Type: Direct

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°	21315	21315	21315
5°	21872	21872	21864
10°	22933	22857	22933
15°	23949	23762	23981
20°	24738	24338	24770
25°	24123	22856	24098
30°	23406	22139	23432
35°	21792	21352	21948
40°	19958	19811	19929
45°	19317	18519	19253
50°	18573	17451	18502
55°	18024	16570	17984
60°	17701	15987	17701
65°	17334	15502	17280
70°	16454	14741	16432
75°	14978	13556	15037
80°	13108	11898	13152
85°	11381	9915	11381



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.4	3.4
10°-20°	602.4	10.7
20°-30°	911.0	16.1
30°-40°	994.5	17.6
40°-50°	976.3	17.3
50°-60°	854.7	15.1
60°-70°	642.2	11.4
70°-80°	367.2	6.5
80°-90°	100.1	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°	1707.8	30.3
0°-40°	2702.3	47.9
0°-60°	4533.2	80.3
0°-90°	5642.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5642.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1968	1968	1968	1968	1968	
5°	2012	2012	2012	2012	2011	194
15°	2136	2135	2120	2136	2139	604
25°	2019	2022	1913	2021	2017	932
35°	1648	1568	1615	1561	1660	1028
45°	1261	1287	1209	1279	1257	972
55°	955	970	878	966	953	856
65°	676	650	605	650	674	665
75°	358	344	324	344	359	380
85°	92	86	80	86	92	103
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°	1968.4	1968.4	1968.4	1968.4	1968.4	1968.4	1968.4	1968.4	1968.4	1968.4	1968.4
2.5°	1981.6	1980.2	1980.9	1980.2	1981.6	1981.6	1980.9	1981.6	1980.9	1980.9	1980.9
5°	2012.1	2010.7	2011.4	2010.0	2012.1	2012.8	2012.1	2012.8	2012.8	2012.1	2012.1
7.5°	2050.2	2047.5	2048.2	2046.8	2048.9	2048.9	2048.2	2048.2	2047.5	2046.8	2047.5
10°	2085.6	2084.2	2084.2	2083.5	2084.9	2084.2	2082.9	2082.2	2079.4	2078.7	2080.1
12.5°	2112.7	2114.1	2116.2	2116.2	2115.5	2114.8	2111.3	2109.2	2105.1	2104.4	2105.7
15°	2136.3	2137.0	2139.1	2138.4	2136.3	2132.8	2129.3	2125.2	2121.7	2119.6	2121.7
17.5°	2148.8	2148.8	2148.1	2146.0	2141.8	2137.7	2132.8	2128.6	2125.2	2122.4	2125.2
20°	2146.7	2146.7	2143.2	2139.1	2132.1	2125.9	2121.0	2116.8	2113.4	2112.0	2114.1
22.5°	2117.5	2119.6	2116.8	2116.2	2110.6	2102.3	2092.6	2082.2	2071.1	2067.6	2072.4
25°	2019.0	2017.6	2019.0	2032.2	2035.7	2007.9	1972.5	1939.9	1920.5	1912.9	1923.3
27.5°	1946.2	1944.8	1927.4	1899.7	1861.5	1843.5	1846.3	1843.5	1838.6	1835.2	1840.0
30°	1871.9	1861.5	1814.3	1763.7	1726.9	1721.4	1737.3	1757.4	1769.9	1770.6	1768.5
32.5°	1776.2	1755.4	1694.3	1655.5	1640.2	1637.4	1642.3	1663.1	1691.5	1702.6	1688.1
35°	1648.5	1636.7	1599.3	1574.3	1569.4	1566.0	1557.6	1568.0	1603.4	1615.2	1602.0
37.5°	1516.0	1527.1	1511.1	1502.1	1501.4	1494.5	1482.7	1484.1	1502.8	1519.5	1500.7
40°	1411.9	1423.0	1433.4	1432.7	1430.0	1419.6	1410.5	1405.7	1404.3	1401.5	1405.7
42.5°	1337.7	1333.5	1353.6	1364.7	1357.8	1350.9	1343.2	1339.8	1314.1	1302.3	1317.6
45°	1261.4	1260.0	1273.9	1297.4	1291.9	1282.2	1280.1	1266.2	1222.5	1209.3	1226.0
47.5°	1183.0	1188.5	1201.0	1220.4	1223.9	1215.6	1209.3	1180.9	1136.5	1120.5	1135.8
50°	1102.5	1115.0	1132.3	1139.9	1143.4	1138.6	1134.4	1097.6	1052.5	1035.9	1053.2
52.5°	1025.5	1042.8	1065.7	1059.5	1056.7	1058.8	1051.8	1018.5	974.8	954.7	975.5
55°	954.7	971.3	991.5	979.0	965.8	973.4	967.2	940.8	902.7	877.7	901.3
57.5°	888.1	898.5	914.5	897.8	882.5	891.6	885.3	864.5	829.1	807.6	830.5
60°	817.3	825.6	834.7	818.7	802.8	807.6	804.8	786.1	757.0	738.2	755.6
62.5°	746.6	750.7	757.0	739.6	726.4	726.4	725.0	707.0	684.1	673.7	683.4
65°	676.5	675.8	677.9	660.5	650.8	649.4	646.6	630.0	612.0	605.0	612.6
67.5°	597.4	598.8	599.5	583.5	575.9	572.4	570.3	555.1	540.5	535.6	541.2
70°	519.7	520.4	520.4	505.8	500.2	494.7	492.6	480.8	469.0	465.6	470.4
72.5°	437.8	442.7	440.6	428.8	424.6	417.7	416.3	408.7	399.6	394.8	399.6
75°	358.0	364.9	362.9	352.5	347.6	340.7	341.4	337.2	327.5	324.0	328.9
77.5°	281.0	285.2	285.9	280.3	272.7	267.8	269.9	269.2	262.3	253.9	260.2
80°	210.2	215.1	215.8	210.9	204.7	200.5	203.3	203.3	197.7	190.8	196.4
82.5°	146.4	149.9	149.9	147.1	144.3	140.2	141.5	142.2	138.8	131.8	136.7
85°	91.6	92.3	90.9	88.8	86.7	85.3	85.3	86.7	84.0	79.8	83.3
87.5°	34.0	34.7	34.0	36.1	34.0	33.3	34.0	36.1	33.3	33.3	34.0
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°	1968.4	1968.4	1968.4	1968.4	1968.4	1968.4	1968.4	1968.4
2.5°	1980.9	1981.6	1981.6	1980.9	1980.9	1980.9	1980.2	1980.9
5°	2012.1	2012.8	2012.8	2011.4	2012.1	2011.4	2010.7	2011.4
7.5°	2048.2	2049.5	2048.9	2049.5	2050.2	2048.9	2048.9	2048.9
10°	2081.5	2083.5	2084.9	2086.3	2087.0	2085.6	2086.3	2085.6
12.5°	2108.5	2112.7	2115.5	2116.8	2118.2	2118.2	2116.8	2115.5
15°	2125.2	2130.0	2133.5	2137.7	2140.4	2141.1	2139.7	2139.1
17.5°	2129.3	2133.5	2138.4	2142.5	2146.7	2149.5	2150.8	2150.2
20°	2117.5	2121.0	2126.6	2132.8	2138.4	2143.9	2148.1	2149.5
22.5°	2083.5	2093.3	2103.7	2111.3	2116.2	2118.9	2121.0	2125.9
25°	1944.1	1969.8	2007.2	2035.7	2030.8	2017.6	2012.8	2016.9
27.5°	1844.9	1842.1	1837.9	1860.1	1894.8	1925.4	1939.9	1946.9
30°	1756.1	1735.2	1715.8	1723.5	1758.8	1811.6	1856.0	1874.0
32.5°	1663.1	1634.6	1631.9	1636.7	1653.4	1688.8	1749.1	1783.1
35°	1565.3	1550.0	1558.3	1564.6	1570.1	1588.2	1629.8	1660.3
37.5°	1477.8	1475.1	1486.2	1493.8	1496.6	1505.6	1521.5	1517.4
40°	1400.8	1402.9	1412.6	1420.9	1426.5	1427.2	1417.5	1409.8
42.5°	1331.4	1340.5	1340.5	1350.9	1360.6	1347.4	1327.3	1332.8
45°	1260.7	1275.2	1274.5	1283.6	1292.6	1269.7	1253.0	1257.2
47.5°	1177.4	1205.2	1209.3	1219.0	1219.0	1195.5	1182.3	1177.4
50°	1092.8	1128.8	1133.7	1139.3	1136.5	1127.5	1110.1	1098.3
52.5°	1014.4	1048.4	1053.2	1051.1	1056.7	1060.9	1037.3	1022.7
55°	937.4	963.7	970.0	963.0	976.2	988.0	965.8	952.6
57.5°	861.0	881.2	886.7	881.2	895.7	908.9	894.3	885.3
60°	784.0	802.1	805.5	800.7	818.0	829.8	822.9	817.3
62.5°	708.4	720.9	724.3	726.4	736.8	750.7	749.3	748.6
65°	632.1	645.3	646.6	652.9	659.8	677.9	674.4	674.4
67.5°	557.8	566.9	568.9	578.6	581.4	598.8	596.7	593.9
70°	480.8	489.8	492.6	502.3	506.5	520.4	521.1	519.0
72.5°	410.0	413.5	416.3	425.3	428.8	442.0	442.0	439.2
75°	337.9	337.2	340.0	349.0	352.5	363.6	362.9	359.4
77.5°	269.9	266.4	268.5	274.8	278.9	287.2	284.5	281.7
80°	206.1	200.5	201.2	207.5	210.2	215.8	213.0	210.9
82.5°	145.7	140.8	139.5	144.3	148.5	149.2	148.5	147.1
85°	88.8	84.6	85.3	87.4	90.2	90.2	91.6	91.6
87.5°	34.7	32.6	32.6	34.7	34.7	35.4	34.7	33.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)