

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: P130696

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130696
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25358)
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-CG-CMS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND MINI SENSOR.
Light Source: (160) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5469.1 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.33 / 1.33 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

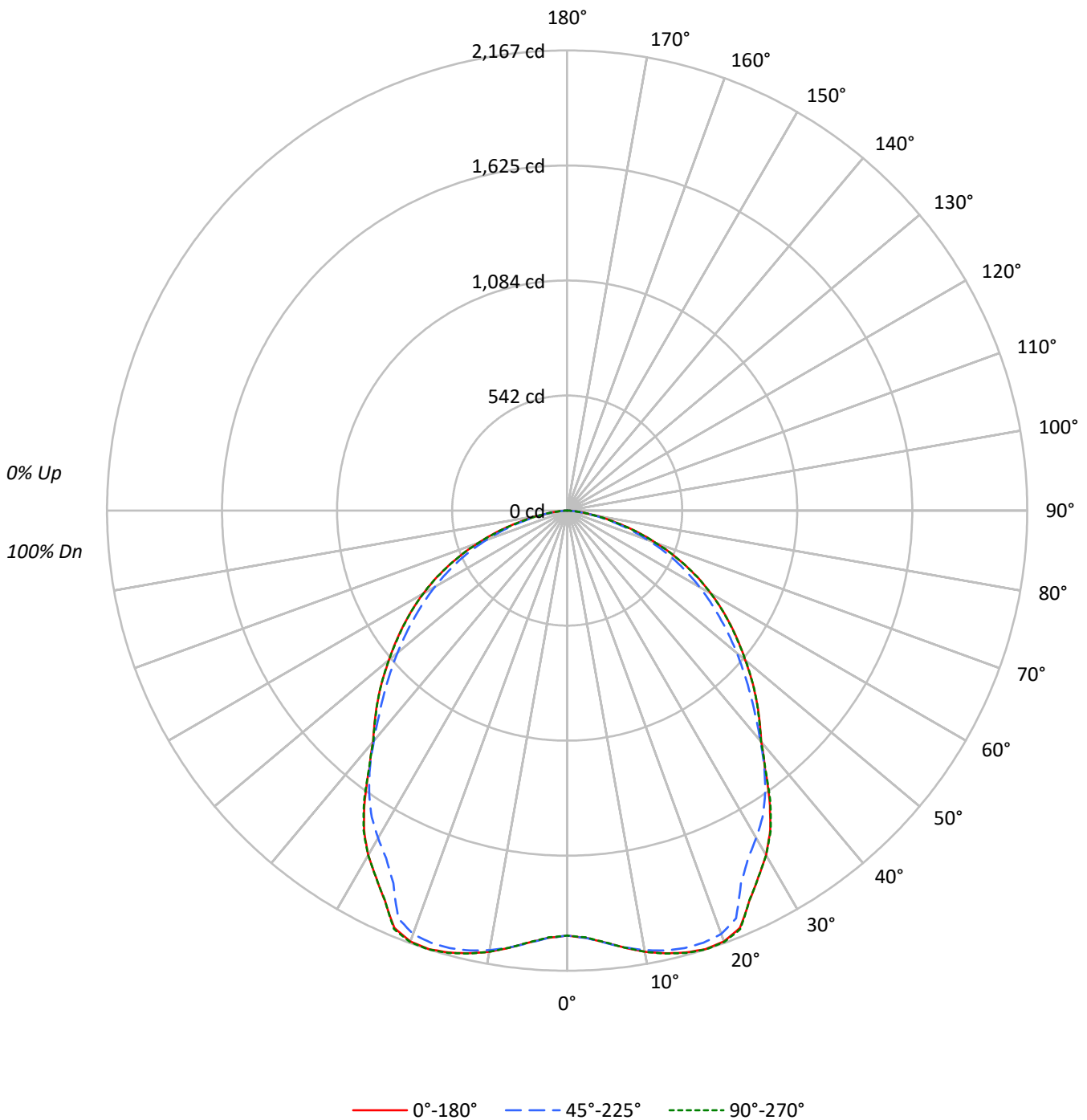
Input Watts (W): 51
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	68	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21674	21674	21674
5°	22190	22205	22176
10°	23200	23112	23193
15°	24153	23915	24176
20°	24881	24452	24920
25°	24249	23136	24232
30°	23422	22267	23431
35°	21967	21492	22038
40°	20107	20012	20079
45°	19308	18666	19308
50°	18438	17566	18462
55°	17739	16546	17688
60°	16964	15611	16964
65°	15845	14482	15845
70°	14064	12842	14064
75°	11656	10543	11489
80°	8419	7714	8250
85°	5044	4622	4870



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.0	3.6
10°-20°	606.8	11.1
20°-30°	916.4	16.8
30°-40°	1000.5	18.3
40°-50°	976.4	17.9
50°-60°	838.8	15.3
60°-70°	592.9	10.8
70°-80°	286.8	5.2
80°-90°	53.5	1.0
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°	1720.2	31.5
0°-40°	2720.6	49.7
0°-60°	4535.8	82.9
0°-90°	5469.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5469.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2002	2002	2002	2002	2002	
5°	2041	2042	2043	2042	2040	197
15°	2154	2150	2133	2151	2156	609
25°	2030	2035	1936	2036	2028	935
35°	1662	1576	1626	1572	1667	1034
45°	1261	1285	1219	1281	1261	972
55°	940	951	876	948	937	840
65°	618	599	565	598	618	610
75°	279	265	252	264	275	298
85°	41	39	37	38	39	55
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°	2001.5	2001.5	2001.5	2001.5	2001.5	2001.5	2001.5	2001.5	2001.5	2001.5	2001.5
2.5°	2013.5	2012.8	2012.2	2012.8	2014.2	2014.2	2014.2	2013.5	2013.5	2014.2	2013.5
5°	2041.4	2040.1	2040.8	2040.1	2042.8	2042.1	2042.1	2042.8	2042.8	2042.8	2042.1
7.5°	2076.0	2074.7	2074.7	2074.7	2075.3	2075.3	2075.3	2075.3	2074.7	2074.7	2074.7
10°	2109.9	2107.9	2108.6	2107.9	2108.6	2107.3	2105.9	2104.6	2103.3	2101.9	2102.6
12.5°	2135.2	2134.5	2135.9	2135.9	2134.5	2132.5	2129.2	2125.9	2123.2	2121.9	2123.2
15°	2154.5	2155.8	2156.5	2155.8	2153.1	2147.8	2143.8	2138.5	2135.2	2133.2	2135.2
17.5°	2165.1	2165.1	2163.8	2159.8	2155.1	2150.5	2144.5	2139.2	2135.9	2133.9	2136.5
20°	2159.1	2158.5	2153.8	2147.8	2140.5	2134.5	2129.2	2124.6	2122.6	2121.9	2123.2
22.5°	2126.5	2127.9	2125.2	2121.2	2115.9	2107.3	2097.3	2088.0	2080.7	2078.0	2080.7
25°	2029.5	2028.8	2033.5	2041.4	2046.8	2023.5	1992.2	1962.3	1941.7	1936.4	1941.7
27.5°	1948.3	1947.7	1937.0	1913.8	1886.5	1865.2	1859.2	1855.9	1848.6	1845.3	1849.9
30°	1873.2	1866.5	1828.6	1780.1	1745.5	1736.9	1750.2	1768.1	1778.1	1780.8	1776.1
32.5°	1780.8	1762.8	1711.6	1669.1	1653.8	1647.1	1651.8	1675.0	1699.0	1712.3	1697.6
35°	1661.7	1646.4	1605.9	1582.6	1579.3	1572.0	1566.0	1579.9	1609.2	1625.8	1605.9
37.5°	1530.1	1537.4	1520.1	1508.1	1508.1	1500.8	1488.8	1493.5	1510.1	1526.1	1508.8
40°	1422.4	1435.7	1439.6	1436.3	1435.0	1425.7	1414.4	1411.7	1412.4	1415.7	1410.4
42.5°	1339.9	1341.9	1359.8	1365.8	1360.5	1350.5	1343.9	1339.9	1320.6	1312.0	1323.3
45°	1260.8	1262.1	1276.7	1294.0	1290.7	1280.1	1274.7	1262.1	1228.2	1218.9	1230.8
47.5°	1178.3	1185.6	1196.3	1214.2	1217.5	1206.9	1199.6	1177.6	1137.1	1129.1	1137.7
50°	1094.5	1108.5	1121.1	1129.8	1134.4	1125.1	1117.1	1091.2	1052.0	1042.7	1051.3
52.5°	1018.1	1030.7	1047.3	1044.7	1042.7	1040.7	1035.3	1008.7	971.5	958.9	970.8
55°	939.6	952.2	968.8	957.5	948.9	952.2	946.2	924.3	892.4	876.4	892.4
57.5°	861.8	871.8	885.1	871.1	858.5	862.5	858.5	843.2	813.2	798.0	813.2
60°	783.3	789.3	798.6	784.0	770.7	773.3	772.0	756.1	732.8	720.8	732.8
62.5°	702.9	706.2	710.8	696.9	685.6	684.9	685.6	669.6	651.7	643.7	652.3
65°	618.4	619.7	622.4	608.4	600.5	597.1	598.5	583.8	570.5	565.2	571.2
67.5°	532.0	533.3	534.0	520.7	515.3	510.7	511.4	500.7	488.7	485.4	490.1
70°	444.2	446.2	446.2	434.2	430.9	424.9	424.9	418.3	408.3	405.6	409.0
72.5°	361.7	360.4	360.4	350.4	347.8	341.8	341.1	339.1	329.8	327.2	330.5
75°	278.6	277.3	278.0	270.0	267.3	262.7	262.0	262.0	254.7	252.0	255.3
77.5°	201.5	202.8	202.1	196.2	193.5	191.5	193.5	193.5	186.9	184.2	187.5
80°	135.0	136.3	136.3	131.7	129.7	128.3	131.0	129.7	126.3	123.7	126.3
82.5°	81.8	81.8	81.8	80.5	77.8	77.8	79.8	79.8	76.5	74.5	76.5
85°	40.6	40.6	39.9	39.9	38.6	38.6	39.9	39.9	37.9	37.2	37.9
87.5°	14.0	13.3	13.3	13.3	12.6	13.3	13.3	13.3	12.6	12.6	12.6
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°	2001.5	2001.5	2001.5	2001.5	2001.5	2001.5	2001.5	2001.5
2.5°	2014.2	2014.2	2013.5	2013.5	2013.5	2012.8	2012.2	2011.5
5°	2043.4	2042.8	2041.4	2042.1	2041.4	2041.4	2040.8	2040.1
7.5°	2076.0	2076.7	2075.3	2076.7	2076.7	2076.7	2076.0	2075.3
10°	2104.6	2106.6	2107.3	2109.3	2109.9	2110.6	2109.9	2109.3
12.5°	2126.5	2129.9	2132.5	2135.9	2137.9	2138.5	2137.2	2136.5
15°	2139.2	2143.8	2148.5	2153.8	2157.1	2158.5	2157.8	2156.5
17.5°	2139.8	2145.2	2151.1	2155.8	2160.5	2163.8	2166.4	2167.1
20°	2125.2	2129.9	2135.2	2141.2	2148.5	2154.5	2160.5	2162.5
22.5°	2086.0	2097.3	2108.6	2114.6	2120.6	2124.6	2127.9	2132.5
25°	1957.6	1991.6	2028.1	2043.4	2040.8	2028.1	2026.1	2028.1
27.5°	1857.2	1861.2	1865.9	1883.8	1909.1	1932.4	1945.7	1948.3
30°	1767.5	1748.2	1733.6	1742.2	1775.4	1821.3	1862.6	1873.9
32.5°	1674.4	1649.1	1643.1	1649.1	1663.7	1701.6	1758.2	1784.1
35°	1575.3	1564.7	1569.3	1574.6	1578.0	1598.6	1640.5	1667.1
37.5°	1488.2	1486.9	1496.2	1502.8	1502.8	1510.8	1532.1	1532.7
40°	1406.4	1413.0	1420.4	1429.7	1431.7	1435.0	1429.7	1420.4
42.5°	1334.6	1341.9	1346.5	1355.9	1361.2	1353.9	1336.6	1337.9
45°	1259.4	1273.4	1276.1	1286.0	1290.0	1270.7	1257.4	1260.8
47.5°	1175.0	1198.3	1203.6	1214.2	1210.9	1192.3	1183.0	1179.0
50°	1087.9	1118.5	1123.1	1130.4	1126.4	1117.1	1105.2	1095.9
52.5°	1009.4	1034.0	1037.3	1040.0	1043.3	1045.3	1030.0	1015.4
55°	925.6	944.9	949.6	946.9	956.2	966.9	951.6	936.9
57.5°	844.5	857.8	861.1	856.5	869.8	883.7	872.4	861.1
60°	758.1	771.4	772.0	770.0	783.3	795.3	790.6	783.3
62.5°	672.9	684.9	682.9	684.9	695.5	710.8	707.5	702.9
65°	586.5	597.8	596.5	600.5	608.4	622.4	622.4	618.4
67.5°	504.0	510.7	510.0	515.3	521.3	534.6	536.0	532.0
70°	421.6	424.9	424.2	430.2	434.9	448.8	448.8	444.2
72.5°	341.8	343.8	341.1	349.1	351.1	363.1	363.1	357.7
75°	265.3	264.7	262.0	266.6	272.6	281.3	279.3	274.6
77.5°	194.2	192.2	189.5	194.8	198.2	204.8	202.8	198.2
80°	131.7	129.7	126.3	131.0	133.7	137.6	135.7	132.3
82.5°	80.5	78.5	75.8	79.1	80.5	83.1	81.8	79.1
85°	39.9	38.6	37.2	37.9	39.9	40.6	39.9	39.2
87.5°	13.3	12.6	12.0	12.6	12.6	13.3	13.3	12.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)