

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: P130697

Luminaire Tested: **TBLED-LD1-6-M-UNV-L840-CD1-CG-CMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130697
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-L840-CD1-CG-CMS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND MINI SENSOR.
Light Source: (160) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5596.3 lumens
Efficiency: N/A
Efficacy: 109.7 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

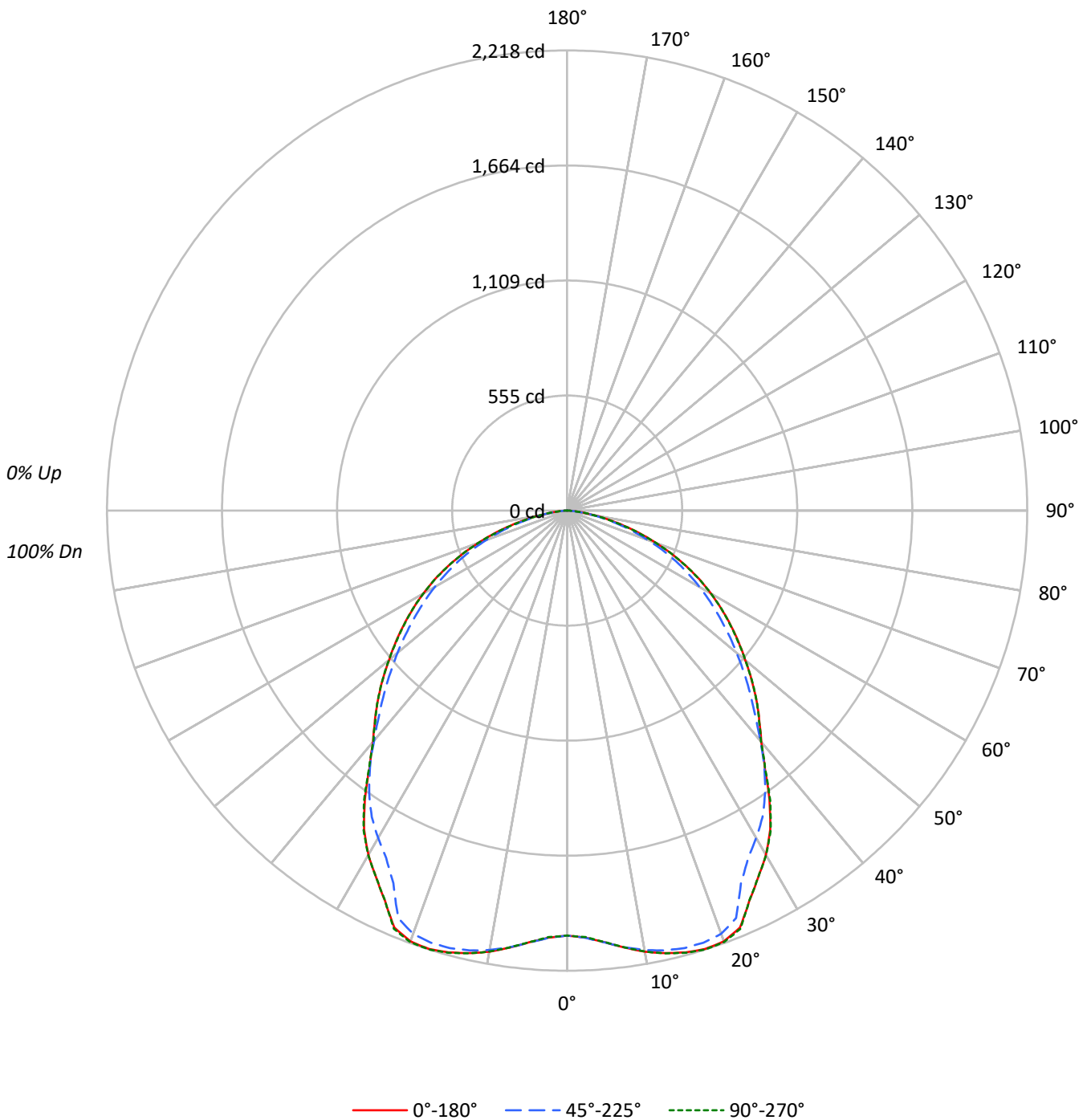
Input Watts (W): 51
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130697

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L840-CD1-CG-CMS

Luminous Intensity Polar Plot





TEST NUMBER: P130697

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L840-CD1-CG-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	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°	22178	22178	22178
5°	22706	22722	22691
10°	23740	23650	23732
15°	24715	24471	24737
20°	25459	25020	25498
25°	24813	23674	24796
30°	23967	22785	23975
35°	22478	21992	22550
40°	20573	20477	20545
45°	19757	19100	19757
50°	18868	17973	18890
55°	18150	16931	18100
60°	17358	15974	17358
65°	16214	14820	16214
70°	14390	13142	14390
75°	11928	10790	11757
80°	8612	7895	8444
85°	5156	4734	4982



TEST NUMBER: P130697

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L840-CD1-CG-CMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.6	3.6
10°-20°	620.9	11.1
20°-30°	937.7	16.8
30°-40°	1023.7	18.3
40°-50°	999.1	17.9
50°-60°	858.3	15.3
60°-70°	606.7	10.8
70°-80°	293.5	5.2
80°-90°	54.8	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°	1760.2	31.5
0°-40°	2783.9	49.7
0°-60°	4641.3	82.9
0°-90°	5596.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5596.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2048	2048	2048	2048	2048	
5°	2089	2090	2090	2089	2088	202
15°	2205	2200	2183	2201	2207	624
25°	2077	2082	1981	2083	2075	957
35°	1700	1612	1664	1608	1706	1058
45°	1290	1315	1247	1311	1290	994
55°	961	973	897	970	959	860
65°	633	613	578	612	633	624
75°	285	271	258	270	281	305
85°	42	40	38	38	40	57
90°	0	0	0	0	0	



TEST NUMBER: P130697

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L840-CD1-CG-CMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2048.1	2048.1	2048.1	2048.1	2048.1	2048.1	2048.1	2048.1	2048.1	2048.1	2048.1
2.5°	2060.3	2059.6	2059.0	2059.6	2061.0	2061.0	2061.0	2060.3	2060.3	2061.0	2060.3
5°	2088.9	2087.5	2088.2	2087.5	2090.3	2089.6	2089.6	2090.3	2090.3	2090.3	2089.6
7.5°	2124.3	2122.9	2122.9	2122.9	2123.6	2123.6	2123.6	2123.6	2122.9	2122.9	2122.9
10°	2159.0	2156.9	2157.6	2156.9	2157.6	2156.3	2154.9	2153.5	2152.2	2150.8	2151.5
12.5°	2184.8	2184.2	2185.5	2185.5	2184.2	2182.1	2178.7	2175.3	2172.6	2171.2	2172.6
15°	2204.6	2205.9	2206.6	2205.9	2203.2	2197.8	2193.7	2188.2	2184.8	2182.8	2184.8
17.5°	2215.5	2215.5	2214.1	2210.0	2205.3	2200.5	2194.4	2188.9	2185.5	2183.5	2186.2
20°	2209.3	2208.7	2203.9	2197.8	2190.3	2184.2	2178.7	2174.0	2171.9	2171.2	2172.6
22.5°	2176.0	2177.4	2174.6	2170.6	2165.1	2156.3	2146.1	2136.5	2129.1	2126.3	2129.1
25°	2076.7	2076.0	2080.7	2088.9	2094.3	2070.5	2038.6	2007.9	1986.8	1981.4	1986.8
27.5°	1993.6	1993.0	1982.1	1958.3	1930.4	1908.6	1902.5	1899.1	1891.6	1888.2	1892.9
30°	1916.8	1910.0	1871.2	1821.5	1786.1	1777.3	1790.9	1809.3	1819.5	1822.2	1817.4
32.5°	1822.2	1803.8	1751.4	1707.9	1692.2	1685.4	1690.2	1714.0	1738.5	1752.1	1737.1
35°	1700.4	1684.7	1643.2	1619.4	1616.0	1608.5	1602.4	1616.7	1646.6	1663.6	1643.2
37.5°	1565.7	1573.1	1555.5	1543.2	1543.2	1535.7	1523.5	1528.2	1545.2	1561.6	1543.9
40°	1455.4	1469.0	1473.1	1469.7	1468.4	1458.8	1447.3	1444.5	1445.2	1448.6	1443.2
42.5°	1371.1	1373.1	1391.5	1397.6	1392.2	1381.9	1375.1	1371.1	1351.3	1342.5	1354.0
45°	1290.1	1291.4	1306.4	1324.1	1320.7	1309.8	1304.4	1291.4	1256.7	1247.2	1259.5
47.5°	1205.7	1213.2	1224.1	1242.5	1245.9	1235.0	1227.5	1205.0	1163.5	1155.4	1164.2
50°	1120.0	1134.3	1147.2	1156.0	1160.8	1151.3	1143.1	1116.6	1076.4	1066.9	1075.8
52.5°	1041.7	1054.7	1071.7	1068.9	1066.9	1064.9	1059.4	1032.2	994.1	981.2	993.4
55°	961.4	974.4	991.4	979.8	971.0	974.4	968.2	945.8	913.1	896.8	913.1
57.5°	881.8	892.0	905.6	891.4	878.4	882.5	878.4	862.8	832.2	816.5	832.2
60°	801.5	807.7	817.2	802.2	788.6	791.3	790.0	773.6	749.8	737.6	749.8
62.5°	719.2	722.6	727.4	713.1	701.5	700.8	701.5	685.2	666.8	658.7	667.5
65°	632.8	634.2	636.9	622.6	614.4	611.0	612.4	597.4	583.8	578.4	584.5
67.5°	544.3	545.7	546.4	532.8	527.3	522.6	523.2	512.4	500.1	496.7	501.5
70°	454.5	456.6	456.6	444.3	440.9	434.8	434.8	428.0	417.8	415.1	418.5
72.5°	370.2	368.8	368.8	358.6	355.9	349.7	349.1	347.0	337.5	334.8	338.2
75°	285.1	283.7	284.4	276.3	273.5	268.8	268.1	268.1	260.6	257.9	261.3
77.5°	206.2	207.5	206.8	200.7	198.0	196.0	198.0	198.0	191.2	188.5	191.9
80°	138.1	139.5	139.5	134.7	132.7	131.3	134.0	132.7	129.3	126.6	129.3
82.5°	83.7	83.7	83.7	82.3	79.6	79.6	81.7	81.7	78.2	76.2	78.2
85°	41.5	41.5	40.8	40.8	39.5	39.5	40.8	40.8	38.8	38.1	38.8
87.5°	14.3	13.6	13.6	13.6	12.9	13.6	13.6	13.6	12.9	12.9	12.9
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: P130697

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L840-CD1-CG-CMS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2048.1	2048.1	2048.1	2048.1	2048.1	2048.1	2048.1	2048.1
2.5°	2061.0	2061.0	2060.3	2060.3	2060.3	2059.6	2059.0	2058.3
5°	2090.9	2090.3	2088.9	2089.6	2088.9	2088.9	2088.2	2087.5
7.5°	2124.3	2125.0	2123.6	2125.0	2125.0	2125.0	2124.3	2123.6
10°	2153.5	2155.6	2156.3	2158.3	2159.0	2159.7	2159.0	2158.3
12.5°	2176.0	2179.4	2182.1	2185.5	2187.6	2188.2	2186.9	2186.2
15°	2188.9	2193.7	2198.5	2203.9	2207.3	2208.7	2208.0	2206.6
17.5°	2189.6	2195.1	2201.2	2205.9	2210.7	2214.1	2216.8	2217.5
20°	2174.6	2179.4	2184.8	2191.0	2198.5	2204.6	2210.7	2212.7
22.5°	2134.5	2146.1	2157.6	2163.8	2169.9	2174.0	2177.4	2182.1
25°	2003.2	2037.9	2075.3	2090.9	2088.2	2075.3	2073.3	2075.3
27.5°	1900.4	1904.5	1909.3	1927.6	1953.5	1977.3	1990.9	1993.6
30°	1808.6	1788.8	1773.9	1782.7	1816.7	1863.7	1905.9	1917.4
32.5°	1713.3	1687.5	1681.3	1687.5	1702.4	1741.2	1799.0	1825.6
35°	1611.9	1601.0	1605.8	1611.2	1614.6	1635.7	1678.6	1705.8
37.5°	1522.8	1521.4	1531.0	1537.8	1537.8	1545.9	1567.7	1568.4
40°	1439.1	1445.9	1453.4	1462.9	1465.0	1468.4	1462.9	1453.4
42.5°	1365.6	1373.1	1377.9	1387.4	1392.8	1385.3	1367.7	1369.0
45°	1288.7	1303.0	1305.7	1315.9	1320.0	1300.3	1286.7	1290.1
47.5°	1202.3	1226.1	1231.6	1242.5	1239.1	1220.0	1210.5	1206.4
50°	1113.2	1144.5	1149.2	1156.7	1152.6	1143.1	1130.9	1121.3
52.5°	1032.9	1058.1	1061.5	1064.2	1067.6	1069.6	1054.0	1039.0
55°	947.2	966.9	971.6	968.9	978.5	989.3	973.7	958.7
57.5°	864.1	877.7	881.2	876.4	890.0	904.3	892.7	881.2
60°	775.7	789.3	790.0	787.9	801.5	813.8	809.0	801.5
62.5°	688.6	700.8	698.8	700.8	711.7	727.4	724.0	719.2
65°	600.1	611.7	610.3	614.4	622.6	636.9	636.9	632.8
67.5°	515.8	522.6	521.9	527.3	533.5	547.1	548.4	544.3
70°	431.4	434.8	434.1	440.2	445.0	459.3	459.3	454.5
72.5°	349.7	351.8	349.1	357.2	359.3	371.5	371.5	366.1
75°	271.5	270.8	268.1	272.9	279.0	287.8	285.8	281.0
77.5°	198.7	196.6	193.9	199.4	202.8	209.6	207.5	202.8
80°	134.7	132.7	129.3	134.0	136.8	140.8	138.8	135.4
82.5°	82.3	80.3	77.6	81.0	82.3	85.1	83.7	81.0
85°	40.8	39.5	38.1	38.8	40.8	41.5	40.8	40.1
87.5°	13.6	12.9	12.2	12.9	12.9	13.6	13.6	12.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)