

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: P130678

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130678  
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-DOS  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR.  
Light Source: (160) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5444.2 lumens  
Efficiency: N/A  
Efficacy: 106.7 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

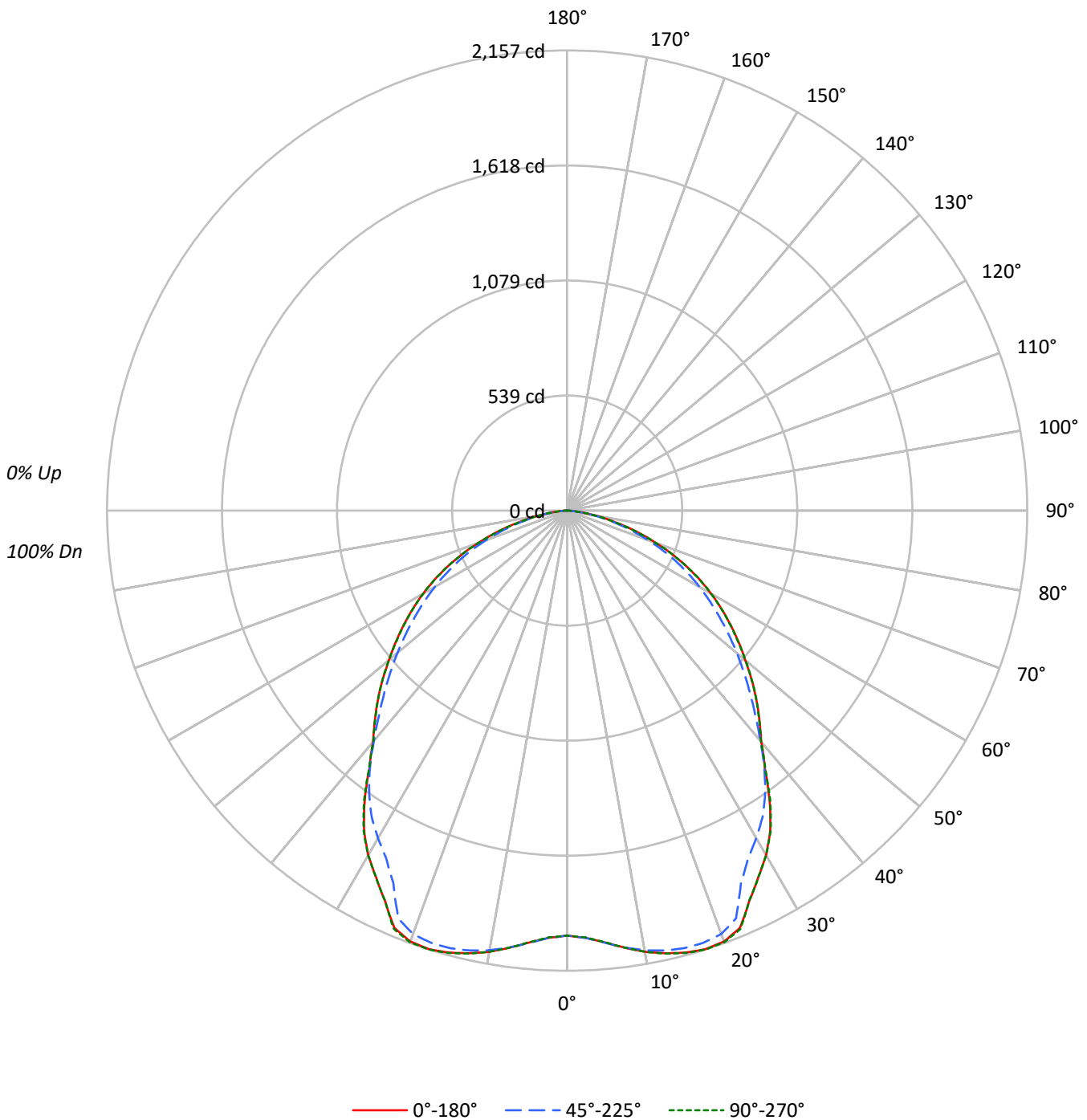
Input Watts (W): 51  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P130678

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L835-CD1-CG-DOS

### Luminous Intensity Polar Plot





TEST NUMBER: P130678

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L835-CD1-CG-DOS

**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°	21575	21575	21575
5°	22089	22104	22075
10°	23094	23007	23087
15°	24044	23806	24065
20°	24768	24340	24806
25°	24138	23030	24122
30°	23316	22166	23323
35°	21867	21394	21938
40°	20015	19922	19987
45°	19219	18581	19219
50°	18354	17485	18378
55°	17658	16470	17609
60°	16888	15539	16888
65°	15773	14415	15773
70°	14000	12785	14000
75°	11602	10497	11439
80°	8381	7676	8213
85°	5020	4609	4858



TEST NUMBER: P130678

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L835-CD1-CG-DOS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.1	3.6
10°-20°	604.0	11.1
20°-30°	912.2	16.8
30°-40°	995.9	18.3
40°-50°	972.0	17.9
50°-60°	835.0	15.3
60°-70°	590.2	10.8
70°-80°	285.5	5.2
80°-90°	53.3	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°	1712.3	31.5
0°-40°	2708.2	49.7
0°-60°	4515.2	82.9
0°-90°	5444.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5444.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1992	1992	1992	1992	1992	
5°	2032	2033	2034	2032	2031	196
15°	2145	2141	2124	2141	2147	607
25°	2020	2026	1928	2026	2019	931
35°	1654	1568	1618	1565	1660	1029
45°	1255	1280	1213	1275	1255	967
55°	935	946	872	944	933	836
65°	616	596	563	596	616	607
75°	277	264	251	263	273	297
85°	40	38	37	37	39	55
90°	0	0	0	0	0	



TEST NUMBER: P130678

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L835-CD1-CG-DOS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1992.4	1992.4	1992.4	1992.4	1992.4	1992.4	1992.4	1992.4	1992.4	1992.4	1992.4
2.5°	2004.3	2003.7	2003.0	2003.7	2005.0	2005.0	2005.0	2004.3	2004.3	2005.0	2004.3
5°	2032.1	2030.8	2031.5	2030.8	2033.5	2032.8	2032.8	2033.5	2033.5	2033.5	2032.8
7.5°	2066.6	2065.2	2065.2	2065.2	2065.9	2065.9	2065.9	2065.9	2065.2	2065.2	2065.2
10°	2100.3	2098.3	2099.0	2098.3	2099.0	2097.7	2096.3	2095.0	2093.7	2092.4	2093.0
12.5°	2125.5	2124.8	2126.1	2126.1	2124.8	2122.8	2119.5	2116.2	2113.5	2112.2	2113.5
15°	2144.7	2146.0	2146.6	2146.0	2143.3	2138.0	2134.1	2128.8	2125.5	2123.5	2125.5
17.5°	2155.3	2155.3	2153.9	2150.0	2145.3	2140.7	2134.7	2129.4	2126.1	2124.1	2126.8
20°	2149.3	2148.6	2144.0	2138.0	2130.8	2124.8	2119.5	2114.9	2112.9	2112.2	2113.5
22.5°	2116.9	2118.2	2115.5	2111.6	2106.3	2097.7	2087.7	2078.5	2071.2	2068.5	2071.2
25°	2020.2	2019.6	2024.2	2032.1	2037.4	2014.3	1983.1	1953.4	1932.8	1927.5	1932.8
27.5°	1939.5	1938.8	1928.2	1905.0	1877.9	1856.7	1850.8	1847.5	1840.2	1836.9	1841.5
30°	1864.7	1858.0	1820.3	1772.0	1737.6	1729.0	1742.2	1760.1	1770.0	1772.7	1768.0
32.5°	1772.7	1754.8	1703.8	1661.4	1646.2	1639.6	1644.2	1667.4	1691.2	1704.5	1689.9
35°	1654.2	1638.9	1598.6	1575.4	1572.1	1564.8	1558.9	1572.8	1601.9	1618.4	1598.6
37.5°	1523.1	1530.4	1513.2	1501.3	1501.3	1494.0	1482.1	1486.7	1503.2	1519.1	1501.9
40°	1415.9	1429.1	1433.1	1429.8	1428.4	1419.2	1407.9	1405.3	1405.9	1409.3	1404.0
42.5°	1333.8	1335.8	1353.7	1359.6	1354.3	1344.4	1337.8	1333.8	1314.6	1306.0	1317.2
45°	1255.0	1256.3	1270.9	1288.1	1284.8	1274.2	1268.9	1256.3	1222.6	1213.3	1225.2
47.5°	1172.9	1180.2	1190.8	1208.7	1212.0	1201.4	1194.1	1172.3	1131.9	1124.0	1132.6
50°	1089.5	1103.4	1116.0	1124.6	1129.3	1120.0	1112.0	1086.2	1047.2	1037.9	1046.5
52.5°	1013.4	1026.0	1042.5	1039.9	1037.9	1035.9	1030.6	1004.2	967.1	954.5	966.4
55°	935.3	947.9	964.4	953.2	944.6	947.9	941.9	920.1	888.3	872.4	888.3
57.5°	857.9	867.8	881.0	867.1	854.6	858.5	854.6	839.3	809.5	794.3	809.5
60°	779.8	785.7	795.0	780.4	767.2	769.8	768.5	752.6	729.4	717.5	729.4
62.5°	699.7	703.0	707.6	693.7	682.5	681.8	682.5	666.6	648.7	640.8	649.4
65°	615.6	616.9	619.6	605.7	597.7	594.4	595.7	581.2	567.9	562.6	568.6
67.5°	529.5	530.9	531.5	518.3	513.0	508.4	509.0	498.4	486.5	483.2	487.8
70°	442.2	444.2	444.2	432.2	428.9	423.0	423.0	416.4	406.4	403.8	407.1
72.5°	360.1	358.8	358.8	348.8	346.2	340.2	339.6	337.6	328.3	325.7	329.0
75°	277.3	276.0	276.7	268.7	266.1	261.5	260.8	260.8	253.5	250.9	254.2
77.5°	200.6	201.9	201.2	195.3	192.6	190.6	192.6	192.6	186.0	183.4	186.7
80°	134.4	135.7	135.7	131.1	129.1	127.8	130.4	129.1	125.8	123.1	125.8
82.5°	81.4	81.4	81.4	80.1	77.4	77.4	79.4	79.4	76.1	74.1	76.1
85°	40.4	40.4	39.7	39.7	38.4	38.4	39.7	39.7	37.7	37.1	37.7
87.5°	13.9	13.2	13.2	13.2	12.6	13.2	13.2	13.2	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



TEST NUMBER: P130678

CATALOG NUMBER: TBLED-LD1-6-M-UNV-L835-CD1-CG-DOS

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1992.4	1992.4	1992.4	1992.4	1992.4	1992.4	1992.4	1992.4
2.5°	2005.0	2005.0	2004.3	2004.3	2004.3	2003.7	2003.0	2002.3
5°	2034.1	2033.5	2032.1	2032.8	2032.1	2032.1	2031.5	2030.8
7.5°	2066.6	2067.2	2065.9	2067.2	2067.2	2067.2	2066.6	2065.9
10°	2095.0	2097.0	2097.7	2099.6	2100.3	2101.0	2100.3	2099.6
12.5°	2116.9	2120.2	2122.8	2126.1	2128.1	2128.8	2127.4	2126.8
15°	2129.4	2134.1	2138.7	2144.0	2147.3	2148.6	2148.0	2146.6
17.5°	2130.1	2135.4	2141.4	2146.0	2150.6	2153.9	2156.6	2157.2
20°	2115.5	2120.2	2125.5	2131.4	2138.7	2144.7	2150.6	2152.6
22.5°	2076.5	2087.7	2099.0	2104.9	2110.9	2114.9	2118.2	2122.8
25°	1948.7	1982.5	2018.9	2034.1	2031.5	2018.9	2016.9	2018.9
27.5°	1848.8	1852.7	1857.4	1875.3	1900.4	1923.6	1936.8	1939.5
30°	1759.4	1740.2	1725.7	1734.3	1767.4	1813.0	1854.1	1865.3
32.5°	1666.7	1641.6	1635.6	1641.6	1656.2	1693.9	1750.1	1776.0
35°	1568.1	1557.5	1562.2	1567.5	1570.8	1591.3	1633.0	1659.5
37.5°	1481.4	1480.1	1489.3	1496.0	1496.0	1503.9	1525.1	1525.8
40°	1400.0	1406.6	1413.9	1423.2	1425.1	1428.4	1423.2	1413.9
42.5°	1328.5	1335.8	1340.4	1349.7	1355.0	1347.7	1330.5	1331.8
45°	1253.7	1267.6	1270.2	1280.2	1284.1	1265.0	1251.7	1255.0
47.5°	1169.6	1192.8	1198.1	1208.7	1205.4	1186.8	1177.6	1173.6
50°	1082.9	1113.4	1118.0	1125.3	1121.3	1112.0	1100.1	1090.9
52.5°	1004.8	1029.3	1032.6	1035.3	1038.6	1040.6	1025.3	1010.8
55°	921.4	940.6	945.2	942.6	951.9	962.4	947.2	932.7
57.5°	840.7	853.9	857.2	852.6	865.8	879.7	868.5	857.2
60°	754.6	767.8	768.5	766.5	779.8	791.7	787.0	779.8
62.5°	669.9	681.8	679.8	681.8	692.4	707.6	704.3	699.7
65°	583.8	595.1	593.8	597.7	605.7	619.6	619.6	615.6
67.5°	501.7	508.4	507.7	513.0	519.0	532.2	533.5	529.5
70°	419.7	423.0	422.3	428.3	432.9	446.8	446.8	442.2
72.5°	340.2	342.2	339.6	347.5	349.5	361.4	361.4	356.1
75°	264.1	263.4	260.8	265.4	271.4	280.0	278.0	273.4
77.5°	193.3	191.3	188.7	193.9	197.3	203.9	201.9	197.3
80°	131.1	129.1	125.8	130.4	133.0	137.0	135.0	131.7
82.5°	80.1	78.1	75.5	78.8	80.1	82.7	81.4	78.8
85°	39.7	38.4	37.1	37.7	39.7	40.4	39.7	39.1
87.5°	13.2	12.6	11.9	12.6	12.6	13.2	13.2	12.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)