

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: P130679

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130679
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-DOS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY SENSOR.
Light Source: (160) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5570.8 lumens
Efficiency: N/A
Efficacy: 109.2 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

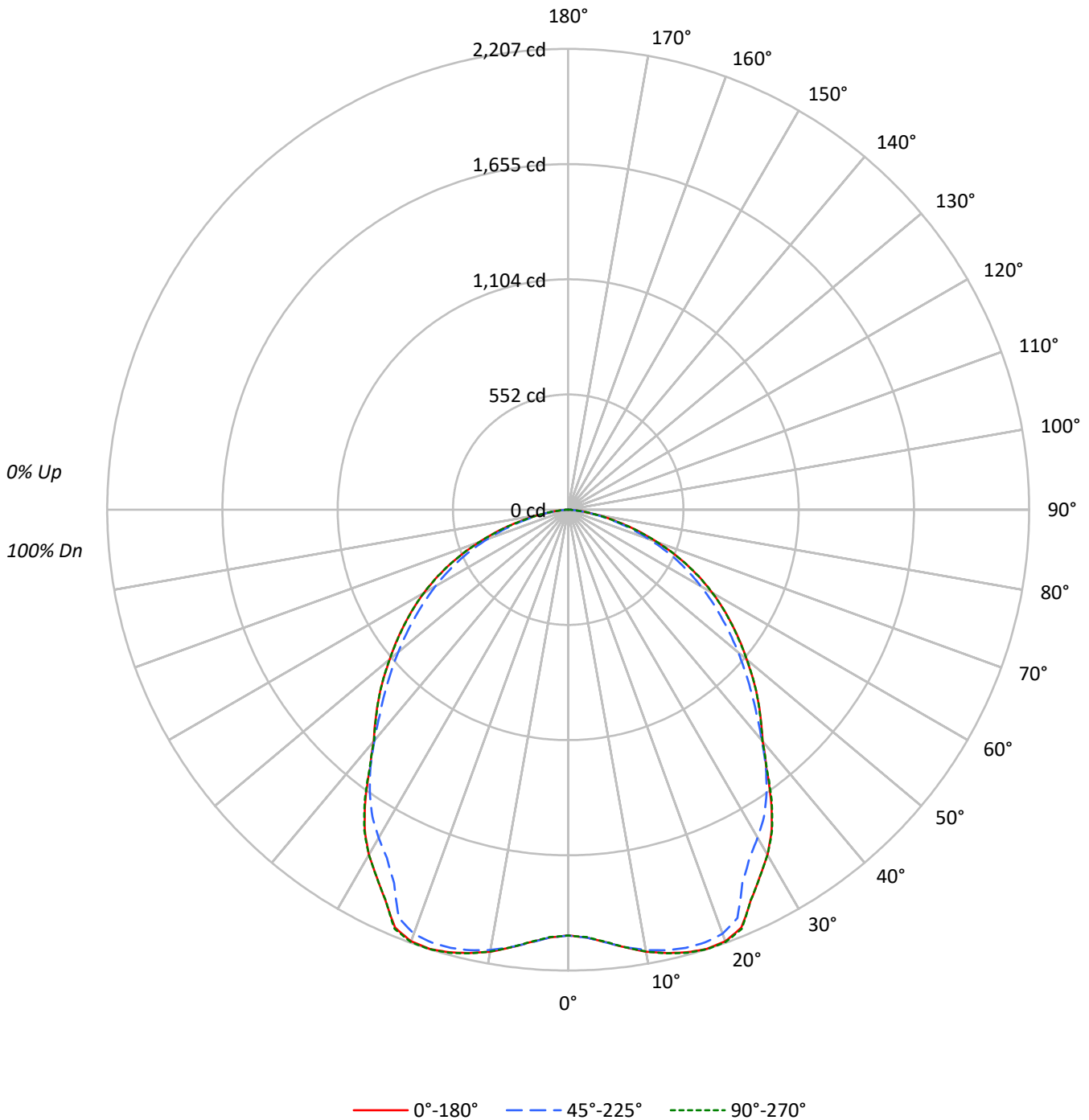
Input Watts (W): 51
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	22078	22078	22078
5°	22603	22617	22588
10°	23632	23542	23624
15°	24602	24360	24625
20°	25344	24906	25383
25°	24699	23566	24682
30°	23857	22681	23866
35°	22375	21893	22448
40°	20480	20384	20452
45°	19666	19012	19666
50°	18782	17891	18804
55°	18069	16853	18018
60°	17280	15901	17280
65°	16140	14751	16140
70°	14327	13082	14327
75°	11874	10740	11702
80°	8574	7857	8406
85°	5131	4709	4970



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.7	3.6
10°-20°	618.1	11.1
20°-30°	933.4	16.8
30°-40°	1019.1	18.3
40°-50°	994.6	17.9
50°-60°	854.4	15.3
60°-70°	604.0	10.8
70°-80°	292.2	5.2
80°-90°	54.5	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°	1752.2	31.5
0°-40°	2771.2	49.7
0°-60°	4620.2	82.9
0°-90°	5570.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5570.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2039	2039	2039	2039	2039	
5°	2079	2080	2081	2080	2078	201
15°	2194	2190	2173	2191	2197	621
25°	2067	2073	1972	2074	2066	953
35°	1693	1605	1656	1601	1698	1053
45°	1284	1309	1242	1305	1284	990
55°	957	968	893	966	954	856
65°	630	610	576	610	630	621
75°	284	270	257	269	280	304
85°	41	39	38	38	40	56
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°	2038.8	2038.8	2038.8	2038.8	2038.8	2038.8	2038.8	2038.8	2038.8	2038.8	2038.8
2.5°	2050.9	2050.3	2049.6	2050.3	2051.6	2051.6	2051.6	2050.9	2050.9	2051.6	2050.9
5°	2079.4	2078.0	2078.7	2078.0	2080.7	2080.1	2080.1	2080.7	2080.7	2080.7	2080.1
7.5°	2114.6	2113.3	2113.3	2113.3	2113.9	2113.9	2113.9	2113.9	2113.3	2113.3	2113.3
10°	2149.2	2147.1	2147.8	2147.1	2147.8	2146.4	2145.1	2143.7	2142.4	2141.0	2141.7
12.5°	2174.9	2174.2	2175.6	2175.6	2174.2	2172.2	2168.8	2165.4	2162.7	2161.3	2162.7
15°	2194.5	2195.9	2196.6	2195.9	2193.2	2187.8	2183.7	2178.3	2174.9	2172.9	2174.9
17.5°	2205.4	2205.4	2204.0	2200.0	2195.2	2190.5	2184.4	2179.0	2175.6	2173.5	2176.2
20°	2199.3	2198.6	2193.9	2187.8	2180.3	2174.2	2168.8	2164.1	2162.0	2161.3	2162.7
22.5°	2166.1	2167.4	2164.7	2160.7	2155.3	2146.4	2136.3	2126.8	2119.4	2116.6	2119.4
25°	2067.2	2066.5	2071.3	2079.4	2084.8	2061.1	2029.3	1998.8	1977.8	1972.4	1977.8
27.5°	1984.6	1983.9	1973.1	1949.3	1921.6	1899.9	1893.8	1890.4	1883.0	1879.6	1884.3
30°	1908.0	1901.3	1862.6	1813.2	1778.0	1769.2	1782.7	1801.0	1811.2	1813.9	1809.1
32.5°	1813.9	1795.6	1743.4	1700.1	1684.5	1677.7	1682.5	1706.2	1730.6	1744.1	1729.2
35°	1692.6	1677.1	1635.7	1612.0	1608.6	1601.2	1595.1	1609.3	1639.1	1656.1	1635.7
37.5°	1558.5	1566.0	1548.4	1536.2	1536.2	1528.7	1516.5	1521.3	1538.2	1554.5	1536.9
40°	1448.8	1462.3	1466.4	1463.0	1461.7	1452.2	1440.7	1438.0	1438.6	1442.0	1436.6
42.5°	1364.8	1366.8	1385.1	1391.2	1385.8	1375.6	1368.9	1364.8	1345.2	1336.4	1347.9
45°	1284.2	1285.6	1300.5	1318.1	1314.7	1303.9	1298.4	1285.6	1251.0	1241.5	1253.7
47.5°	1200.2	1207.7	1218.5	1236.8	1240.2	1229.3	1221.9	1199.5	1158.2	1150.1	1158.9
50°	1114.9	1129.1	1142.0	1150.8	1155.5	1146.0	1137.9	1111.5	1071.5	1062.0	1070.9
52.5°	1037.0	1049.9	1066.8	1064.1	1062.0	1060.0	1054.6	1027.5	989.6	976.7	988.9
55°	957.1	969.9	986.9	975.3	966.5	969.9	963.8	941.5	909.0	892.7	909.0
57.5°	877.8	888.0	901.5	887.3	874.4	878.5	874.4	858.8	828.4	812.8	828.4
60°	797.9	804.0	813.5	798.6	785.0	787.7	786.4	770.1	746.4	734.2	746.4
62.5°	715.9	719.3	724.1	709.8	698.3	697.6	698.3	682.1	663.8	655.7	664.5
65°	629.9	631.3	634.0	619.8	611.6	608.2	609.6	594.7	581.1	575.7	581.8
67.5°	541.9	543.2	543.9	530.3	524.9	520.2	520.9	510.0	497.8	494.4	499.2
70°	452.5	454.5	454.5	442.3	438.9	432.8	432.8	426.0	415.9	413.2	416.6
72.5°	368.5	367.1	367.1	357.0	354.2	348.1	347.5	345.4	336.0	333.2	336.6
75°	283.8	282.4	283.1	275.0	272.3	267.5	266.9	266.9	259.4	256.7	260.1
77.5°	205.2	206.6	205.9	199.8	197.1	195.1	197.1	197.1	190.3	187.6	191.0
80°	137.5	138.9	138.9	134.1	132.1	130.7	133.4	132.1	128.7	126.0	128.7
82.5°	83.3	83.3	83.3	82.0	79.2	79.2	81.3	81.3	77.9	75.9	77.9
85°	41.3	41.3	40.6	40.6	39.3	39.3	40.6	40.6	38.6	37.9	38.6
87.5°	14.2	13.5	13.5	13.5	12.9	13.5	13.5	13.5	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2038.8	2038.8	2038.8	2038.8	2038.8	2038.8	2038.8	2038.8
2.5°	2051.6	2051.6	2050.9	2050.9	2050.9	2050.3	2049.6	2048.9
5°	2081.4	2080.7	2079.4	2080.1	2079.4	2079.4	2078.7	2078.0
7.5°	2114.6	2115.3	2113.9	2115.3	2115.3	2115.3	2114.6	2113.9
10°	2143.7	2145.8	2146.4	2148.5	2149.2	2149.8	2149.2	2148.5
12.5°	2166.1	2169.5	2172.2	2175.6	2177.6	2178.3	2176.9	2176.2
15°	2179.0	2183.7	2188.4	2193.9	2197.2	2198.6	2197.9	2196.6
17.5°	2179.6	2185.1	2191.1	2195.9	2200.6	2204.0	2206.7	2207.4
20°	2164.7	2169.5	2174.9	2181.0	2188.4	2194.5	2200.6	2202.7
22.5°	2124.8	2136.3	2147.8	2153.9	2160.0	2164.1	2167.4	2172.2
25°	1994.0	2028.6	2065.8	2081.4	2078.7	2065.8	2063.8	2065.8
27.5°	1891.8	1895.8	1900.6	1918.9	1944.6	1968.3	1981.9	1984.6
30°	1800.3	1780.7	1765.8	1774.6	1808.5	1855.2	1897.2	1908.7
32.5°	1705.5	1679.8	1673.7	1679.8	1694.7	1733.3	1790.8	1817.3
35°	1604.6	1593.7	1598.5	1603.9	1607.3	1628.3	1671.0	1698.1
37.5°	1515.9	1514.5	1524.0	1530.8	1530.8	1538.9	1560.6	1561.2
40°	1432.5	1439.3	1446.8	1456.3	1458.3	1461.7	1456.3	1446.8
42.5°	1359.4	1366.8	1371.6	1381.1	1386.5	1379.0	1361.4	1362.8
45°	1282.9	1297.1	1299.8	1309.9	1314.0	1294.4	1280.8	1284.2
47.5°	1196.8	1220.5	1226.0	1236.8	1233.4	1214.4	1205.0	1200.9
50°	1108.1	1139.3	1144.0	1151.5	1147.4	1137.9	1125.7	1116.2
52.5°	1028.2	1053.2	1056.6	1059.3	1062.7	1064.8	1049.2	1034.3
55°	942.8	962.5	967.2	964.5	974.0	984.8	969.3	954.4
57.5°	860.2	873.8	877.1	872.4	885.9	900.2	888.7	877.1
60°	772.2	785.7	786.4	784.3	797.9	810.1	805.3	797.9
62.5°	685.5	697.6	695.6	697.6	708.5	724.1	720.7	715.9
65°	597.4	608.9	607.6	611.6	619.8	634.0	634.0	629.9
67.5°	513.4	520.2	519.5	524.9	531.0	544.6	545.9	541.9
70°	429.4	432.8	432.1	438.2	443.0	457.2	457.2	452.5
72.5°	348.1	350.2	347.5	355.6	357.6	369.8	369.8	364.4
75°	270.3	269.6	266.9	271.6	277.7	286.5	284.5	279.7
77.5°	197.8	195.7	193.0	198.5	201.8	208.6	206.6	201.8
80°	134.1	132.1	128.7	133.4	136.1	140.2	138.2	134.8
82.5°	82.0	79.9	77.2	80.6	82.0	84.7	83.3	80.6
85°	40.6	39.3	37.9	38.6	40.6	41.3	40.6	40.0
87.5°	13.5	12.9	12.2	12.9	12.9	13.5	13.5	12.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)