

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: P130707

Luminaire Tested: **TBLED-LD1-6-W-UNV-L850-CD1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25252)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: TBLED-LD1-6-W-UNV-L850-CD1
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
WIDE DISTRIBUTION.
Light Source: (160) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

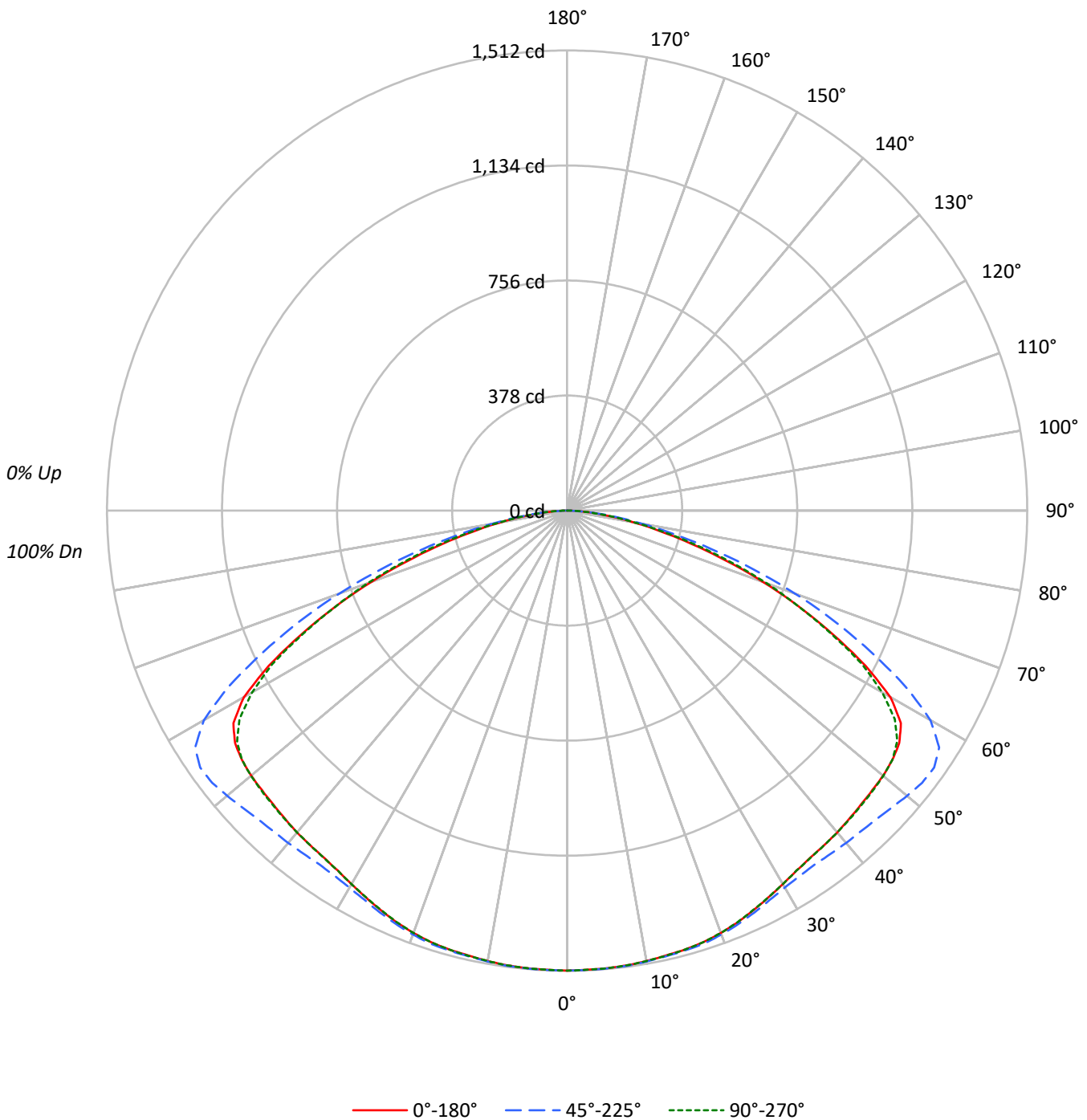
Lumens per Lamp: N/A
Luminaire Lumens: 6077.8 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.42 / 1.42 / 1.71
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	88	81	74	94	86	79	73	82	77	72	79	74	70	76	72	68	66
3	87	76	67	60	85	74	66	59	71	64	58	68	62	57	66	61	56	54
4	79	66	57	49	77	65	56	49	62	55	48	60	53	48	58	52	47	45
5	72	58	49	42	70	57	48	41	55	47	41	53	46	40	51	45	40	38
6	66	52	42	36	64	51	42	35	49	41	35	47	40	35	46	39	34	32
7	61	47	37	31	59	46	37	31	44	36	30	43	36	30	41	35	30	28
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24
9	53	39	30	24	51	38	30	24	37	29	24	36	29	24	35	28	23	22
10	49	35	27	22	48	35	27	21	34	26	21	33	26	21	32	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16370	16370	16370
5°	16407	16416	16407
10°	16527	16544	16527
15°	16744	16779	16744
20°	17020	17084	17020
25°	17308	17402	17298
30°	17718	17886	17718
35°	18408	18764	18419
40°	19517	20153	19517
45°	20914	21979	20951
50°	22834	24564	22847
55°	25157	27796	24992
60°	26569	29868	25885
65°	24718	28298	24516
70°	21694	25218	22046
75°	17735	20610	18430
80°	13831	15702	14131
85°	9803	10884	10002



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.9	2.4
10°-20°	423.2	7.0
20°-30°	671.7	11.1
30°-40°	885.3	14.6
40°-50°	1086.8	17.9
50°-60°	1240.6	20.4
60°-70°	1020.6	16.8
70°-80°	500.8	8.2
80°-90°	104.8	1.7
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°	1238.8	20.4
0°-40°	2124.1	34.9
0°-60°	4451.5	73.2
0°-90°	6077.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6077.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1512	1512	1512	1512	1512	
5°	1509	1510	1510	1510	1509	144
15°	1494	1495	1497	1496	1494	423
25°	1449	1453	1456	1453	1448	669
35°	1392	1407	1419	1407	1393	876
45°	1366	1401	1435	1404	1368	1058
55°	1332	1408	1472	1403	1324	1181
65°	965	1041	1104	1040	957	952
75°	424	465	493	470	440	459
85°	79	86	88	85	80	97
90°	0	0	0	0	0	



TEST NUMBER: P130707

CATALOG NUMBER: TBLED-LD1-6-W-UNV-L850-CD1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1511.7	1511.7	1511.7	1511.7	1511.7	1511.7	1511.7	1511.7	1511.7	1511.7	1511.7
2.5°	1510.2	1510.2	1510.2	1510.2	1510.9	1510.9	1510.9	1510.9	1510.9	1510.9	1510.2
5°	1509.4	1509.4	1509.4	1509.4	1510.2	1510.2	1510.2	1510.2	1510.2	1510.2	1510.2
7.5°	1507.0	1507.0	1507.8	1507.8	1507.8	1507.8	1507.8	1508.6	1508.6	1508.6	1508.6
10°	1503.0	1503.0	1503.0	1503.0	1503.8	1503.8	1504.6	1504.6	1504.6	1504.6	1504.6
12.5°	1497.5	1497.5	1498.3	1498.3	1498.3	1499.1	1499.9	1499.9	1499.9	1499.9	1499.9
15°	1493.6	1493.6	1493.6	1494.4	1494.4	1495.2	1495.9	1495.9	1496.7	1496.7	1496.7
17.5°	1487.3	1488.0	1488.0	1488.0	1488.8	1489.6	1491.2	1491.2	1492.0	1492.0	1492.0
20°	1477.0	1477.0	1477.8	1478.6	1479.4	1480.2	1481.7	1482.5	1482.5	1482.5	1483.3
22.5°	1464.4	1464.4	1465.2	1465.9	1467.5	1468.3	1469.9	1470.7	1470.7	1470.7	1470.7
25°	1448.6	1449.4	1450.2	1450.9	1452.5	1454.1	1455.7	1457.3	1457.3	1456.5	1457.3
27.5°	1432.8	1433.6	1434.4	1435.9	1437.5	1439.1	1440.7	1442.3	1442.3	1442.3	1443.1
30°	1417.0	1417.8	1419.4	1420.9	1423.3	1424.9	1427.3	1429.6	1430.4	1430.4	1429.6
32.5°	1402.8	1403.6	1405.9	1408.3	1411.5	1414.6	1417.8	1420.2	1422.5	1422.5	1420.9
35°	1392.5	1393.3	1396.5	1400.4	1405.2	1409.1	1413.1	1416.2	1419.4	1419.4	1418.6
37.5°	1386.2	1387.0	1391.0	1395.7	1402.8	1408.3	1413.8	1417.8	1420.9	1421.7	1420.9
40°	1380.7	1381.5	1386.2	1392.5	1400.4	1408.3	1415.4	1420.9	1424.1	1425.7	1425.7
42.5°	1372.8	1374.4	1379.1	1387.8	1397.3	1406.7	1415.4	1423.3	1427.3	1428.8	1428.1
45°	1365.7	1367.3	1373.6	1383.8	1394.9	1406.7	1417.8	1427.3	1432.8	1435.2	1433.6
47.5°	1360.2	1362.5	1370.4	1382.3	1395.7	1410.7	1424.1	1435.2	1442.3	1445.4	1443.1
50°	1355.4	1358.6	1367.3	1381.5	1398.8	1417.8	1433.6	1446.2	1454.9	1458.1	1455.7
52.5°	1346.7	1352.3	1362.5	1379.9	1401.2	1422.5	1441.5	1456.5	1466.7	1469.9	1466.7
55°	1332.5	1338.1	1349.9	1369.6	1395.7	1419.4	1442.3	1458.8	1468.3	1472.3	1467.5
57.5°	1300.2	1305.7	1317.5	1340.4	1366.5	1393.3	1417.0	1435.2	1447.0	1449.4	1439.9
60°	1226.8	1230.7	1248.9	1271.7	1297.0	1323.1	1347.5	1368.1	1378.3	1379.1	1365.7
62.5°	1105.2	1111.5	1129.7	1154.1	1177.8	1199.1	1222.0	1243.3	1251.2	1254.4	1244.1
65°	964.7	973.3	986.8	1008.9	1032.6	1049.9	1075.2	1093.3	1101.2	1104.4	1100.4
67.5°	824.9	832.8	839.9	861.3	882.6	899.1	923.6	940.2	946.5	951.2	948.9
70°	685.2	692.3	698.6	716.0	732.6	753.9	768.1	783.9	787.8	796.5	792.6
72.5°	549.4	555.0	561.3	577.9	588.1	611.0	617.3	630.7	637.8	640.2	636.3
75°	423.9	427.9	435.0	448.4	456.3	473.6	476.0	487.9	492.6	492.6	491.0
77.5°	314.2	317.3	325.2	333.1	341.0	352.9	350.5	358.4	361.6	363.1	361.6
80°	221.8	225.8	227.4	233.7	240.8	245.5	243.9	247.9	248.7	251.8	251.0
82.5°	142.1	146.0	143.7	147.6	152.4	155.5	156.3	156.3	156.3	158.7	157.9
85°	78.9	82.1	80.5	82.1	84.5	86.8	85.3	86.0	86.8	87.6	86.8
87.5°	26.1	29.2	26.8	27.6	29.2	30.8	31.6	29.2	30.8	30.8	30.8
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: P130707

CATALOG NUMBER: TBLED-LD1-6-W-UNV-L850-CD1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1511.7	1511.7	1511.7	1511.7	1511.7	1511.7	1511.7	1511.7
2.5°	1510.2	1510.2	1510.2	1510.2	1510.2	1510.2	1510.2	1510.2
5°	1510.2	1510.2	1510.2	1510.2	1509.4	1509.4	1509.4	1509.4
7.5°	1507.8	1507.8	1507.8	1507.8	1507.0	1507.0	1507.0	1507.0
10°	1503.8	1503.8	1503.8	1503.0	1503.0	1503.0	1503.0	1503.0
12.5°	1499.9	1499.1	1499.1	1499.1	1499.1	1498.3	1498.3	1498.3
15°	1496.7	1495.9	1495.9	1495.2	1494.4	1494.4	1493.6	1493.6
17.5°	1491.2	1491.2	1490.4	1489.6	1488.8	1488.0	1488.0	1487.3
20°	1482.5	1481.7	1480.2	1479.4	1479.4	1478.6	1477.8	1477.0
22.5°	1469.9	1469.1	1468.3	1466.7	1465.9	1465.2	1464.4	1463.6
25°	1455.7	1454.9	1454.1	1452.5	1451.7	1450.2	1449.4	1447.8
27.5°	1441.5	1441.5	1439.1	1437.5	1435.9	1434.4	1433.6	1432.0
30°	1428.8	1428.1	1426.5	1423.3	1421.7	1419.4	1417.8	1417.0
32.5°	1419.4	1418.6	1415.4	1411.5	1408.3	1405.2	1404.4	1402.8
35°	1417.0	1413.8	1409.1	1404.4	1400.4	1396.5	1394.1	1393.3
37.5°	1419.4	1413.8	1408.3	1402.0	1396.5	1391.0	1387.8	1386.2
40°	1421.7	1416.2	1409.9	1401.2	1393.3	1387.0	1383.1	1380.7
42.5°	1423.3	1417.0	1409.1	1398.8	1389.4	1381.5	1376.7	1374.4
45°	1427.3	1420.2	1409.9	1397.3	1385.4	1376.7	1371.2	1368.1
47.5°	1435.9	1425.7	1413.1	1398.1	1383.8	1372.0	1365.7	1362.5
50°	1447.0	1434.4	1418.6	1400.4	1383.1	1368.1	1360.2	1356.2
52.5°	1457.3	1442.3	1423.3	1402.0	1379.9	1362.5	1350.7	1346.7
55°	1457.3	1439.1	1415.4	1391.0	1365.7	1345.2	1329.4	1323.8
57.5°	1426.5	1406.7	1377.5	1350.7	1323.1	1298.6	1282.0	1276.5
60°	1347.5	1330.2	1296.2	1270.2	1239.4	1212.5	1199.9	1195.2
62.5°	1226.8	1214.1	1183.3	1160.4	1127.3	1106.0	1091.0	1091.8
65°	1086.2	1075.2	1049.9	1029.4	999.4	982.8	967.8	956.8
67.5°	938.6	926.0	905.5	887.3	862.8	851.0	834.4	824.1
70°	783.9	774.4	755.5	742.8	722.3	712.1	696.3	696.3
72.5°	629.2	624.4	611.0	600.0	584.2	574.7	562.1	564.4
75°	485.5	487.9	474.4	466.5	453.9	446.0	436.5	440.5
77.5°	363.9	360.8	351.3	346.6	335.5	332.3	322.9	326.0
80°	251.8	251.0	243.1	240.0	233.7	232.1	224.2	226.6
82.5°	158.7	158.7	155.5	152.4	150.0	148.4	142.9	144.5
85°	87.6	86.8	86.0	83.7	82.1	82.9	78.9	80.5
87.5°	30.8	30.0	30.0	28.4	26.8	29.2	26.1	26.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)