

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: P130716

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130716  
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-DOS  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
WIDE DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR.  
Light Source: (160) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5798.4 lumens  
Efficiency: N/A  
Efficacy: 113.7 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

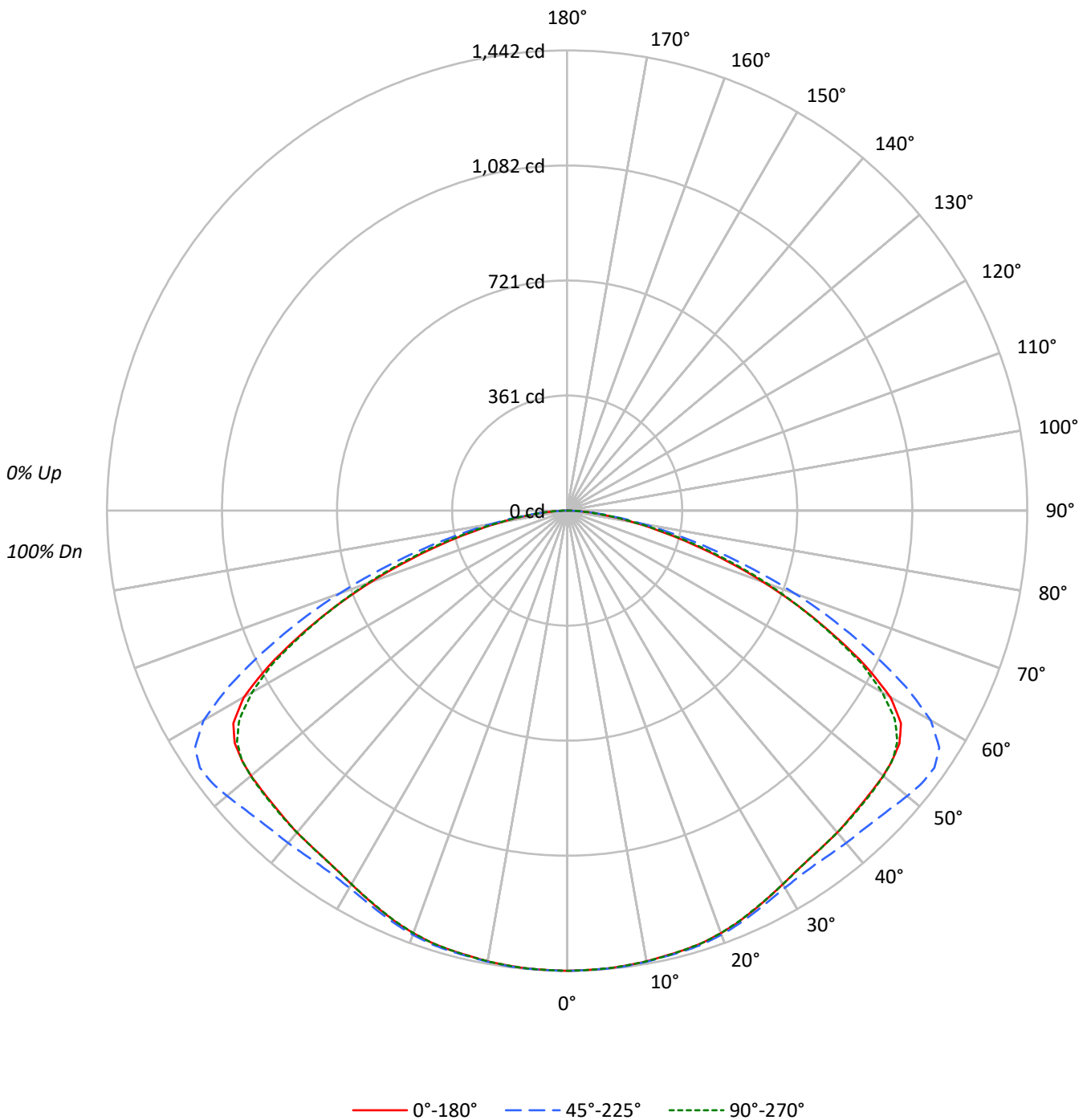
Input Watts (W): 51  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	15617	15617	15617
5°	15653	15660	15653
10°	15768	15784	15768
15°	15974	16008	15974
20°	16238	16299	16238
25°	16512	16602	16503
30°	16904	17064	16904
35°	17562	17900	17573
40°	18620	19226	18620
45°	19953	20968	19988
50°	21784	23433	21798
55°	24001	26518	23844
60°	25348	28495	24694
65°	23581	26996	23389
70°	20697	24059	21032
75°	16920	19664	17581
80°	13195	14979	13476
85°	9356	10387	9542



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.3	2.4
10°-20°	403.7	7.0
20°-30°	640.8	11.1
30°-40°	844.6	14.6
40°-50°	1036.9	17.9
50°-60°	1183.6	20.4
60°-70°	973.7	16.8
70°-80°	477.8	8.2
80°-90°	100.0	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°	1181.8	20.4
0°-40°	2026.4	34.9
0°-60°	4246.9	73.2
0°-90°	5798.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5798.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1442	1442	1442	1442	1442	
5°	1440	1441	1441	1441	1440	137
15°	1425	1426	1428	1427	1425	403
25°	1382	1387	1390	1387	1381	639
35°	1328	1342	1354	1342	1329	836
45°	1303	1336	1369	1339	1305	1009
55°	1271	1343	1405	1339	1263	1127
65°	920	993	1054	992	913	908
75°	404	444	470	449	420	438
85°	75	82	84	81	77	93
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°	1442.2	1442.2	1442.2	1442.2	1442.2	1442.2	1442.2	1442.2	1442.2	1442.2	1442.2
2.5°	1440.7	1440.7	1440.7	1440.7	1441.5	1441.5	1441.5	1441.5	1441.5	1441.5	1440.7
5°	1440.0	1440.0	1440.0	1440.0	1440.7	1440.7	1440.7	1440.7	1440.7	1440.7	1440.7
7.5°	1437.7	1437.7	1438.5	1438.5	1438.5	1438.5	1438.5	1439.2	1439.2	1439.2	1439.2
10°	1434.0	1434.0	1434.0	1434.0	1434.7	1434.7	1435.5	1435.5	1435.5	1435.5	1435.5
12.5°	1428.7	1428.7	1429.4	1429.4	1429.4	1430.2	1430.9	1430.9	1430.9	1430.9	1430.9
15°	1424.9	1424.9	1424.9	1425.7	1425.7	1426.4	1427.2	1427.2	1427.9	1427.9	1427.9
17.5°	1418.9	1419.6	1419.6	1419.6	1420.4	1421.2	1422.7	1422.7	1423.4	1423.4	1423.4
20°	1409.1	1409.1	1409.9	1410.6	1411.4	1412.1	1413.6	1414.4	1414.4	1414.4	1415.1
22.5°	1397.1	1397.1	1397.8	1398.6	1400.1	1400.8	1402.3	1403.1	1403.1	1403.1	1403.1
25°	1382.0	1382.7	1383.5	1384.2	1385.8	1387.3	1388.8	1390.3	1390.3	1389.5	1390.3
27.5°	1366.9	1367.7	1368.4	1369.9	1371.4	1373.0	1374.5	1376.0	1376.0	1376.0	1376.7
30°	1351.9	1352.6	1354.1	1355.6	1357.9	1359.4	1361.7	1363.9	1364.7	1364.7	1363.9
32.5°	1338.3	1339.1	1341.3	1343.6	1346.6	1349.6	1352.6	1354.9	1357.1	1357.1	1355.6
35°	1328.5	1329.3	1332.3	1336.0	1340.6	1344.3	1348.1	1351.1	1354.1	1354.1	1353.4
37.5°	1322.5	1323.2	1327.0	1331.5	1338.3	1343.6	1348.9	1352.6	1355.6	1356.4	1355.6
40°	1317.2	1318.0	1322.5	1328.5	1336.0	1343.6	1350.4	1355.6	1358.6	1360.1	1360.1
42.5°	1309.7	1311.2	1315.7	1324.0	1333.0	1342.1	1350.4	1357.9	1361.7	1363.2	1362.4
45°	1302.9	1304.4	1310.4	1320.2	1330.8	1342.1	1352.6	1361.7	1366.9	1369.2	1367.7
47.5°	1297.6	1299.9	1307.4	1318.7	1331.5	1345.8	1358.6	1369.2	1376.0	1379.0	1376.7
50°	1293.1	1296.1	1304.4	1318.0	1334.5	1352.6	1367.7	1379.7	1388.0	1391.0	1388.8
52.5°	1284.8	1290.1	1299.9	1316.5	1336.8	1357.1	1375.2	1389.5	1399.3	1402.3	1399.3
55°	1271.3	1276.6	1287.8	1306.7	1331.5	1354.1	1376.0	1391.8	1400.8	1404.6	1400.1
57.5°	1240.4	1245.7	1257.0	1278.8	1303.7	1329.3	1351.9	1369.2	1380.5	1382.7	1373.7
60°	1170.4	1174.1	1191.4	1213.3	1237.4	1262.2	1285.6	1305.2	1315.0	1315.7	1302.9
62.5°	1054.4	1060.4	1077.7	1101.1	1123.7	1144.0	1165.8	1186.2	1193.7	1196.7	1186.9
65°	920.3	928.6	941.4	962.5	985.1	1001.7	1025.8	1043.1	1050.6	1053.6	1049.9
67.5°	787.0	794.5	801.3	821.7	842.0	857.8	881.2	897.0	903.0	907.5	905.3
70°	653.7	660.5	666.5	683.1	698.9	719.2	732.8	747.9	751.6	759.9	756.1
72.5°	524.2	529.4	535.5	551.3	561.1	582.9	588.9	601.7	608.5	610.8	607.0
75°	404.4	408.2	415.0	427.8	435.3	451.9	454.1	465.4	470.0	470.0	468.4
77.5°	299.7	302.8	310.3	317.8	325.4	336.6	334.4	341.9	344.9	346.4	344.9
80°	211.6	215.4	216.9	222.9	229.7	234.2	232.7	236.5	237.2	240.2	239.5
82.5°	135.6	139.3	137.1	140.8	145.4	148.4	149.1	149.1	149.1	151.4	150.6
85°	75.3	78.3	76.8	78.3	80.6	82.8	81.3	82.1	82.8	83.6	82.8
87.5°	24.9	27.9	25.6	26.4	27.9	29.4	30.1	27.9	29.4	29.4	29.4
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°	1442.2	1442.2	1442.2	1442.2	1442.2	1442.2	1442.2	1442.2
2.5°	1440.7	1440.7	1440.7	1440.7	1440.7	1440.7	1440.7	1440.7
5°	1440.7	1440.7	1440.7	1440.7	1440.0	1440.0	1440.0	1440.0
7.5°	1438.5	1438.5	1438.5	1438.5	1437.7	1437.7	1437.7	1437.7
10°	1434.7	1434.7	1434.7	1434.0	1434.0	1434.0	1434.0	1434.0
12.5°	1430.9	1430.2	1430.2	1430.2	1430.2	1429.4	1429.4	1429.4
15°	1427.9	1427.2	1427.2	1426.4	1425.7	1425.7	1424.9	1424.9
17.5°	1422.7	1422.7	1421.9	1421.2	1420.4	1419.6	1419.6	1418.9
20°	1414.4	1413.6	1412.1	1411.4	1411.4	1410.6	1409.9	1409.1
22.5°	1402.3	1401.6	1400.8	1399.3	1398.6	1397.8	1397.1	1396.3
25°	1388.8	1388.0	1387.3	1385.8	1385.0	1383.5	1382.7	1381.2
27.5°	1375.2	1375.2	1373.0	1371.4	1369.9	1368.4	1367.7	1366.2
30°	1363.2	1362.4	1360.9	1357.9	1356.4	1354.1	1352.6	1351.9
32.5°	1354.1	1353.4	1350.4	1346.6	1343.6	1340.6	1339.8	1338.3
35°	1351.9	1348.9	1344.3	1339.8	1336.0	1332.3	1330.0	1329.3
37.5°	1354.1	1348.9	1343.6	1337.6	1332.3	1327.0	1324.0	1322.5
40°	1356.4	1351.1	1345.1	1336.8	1329.3	1323.2	1319.5	1317.2
42.5°	1357.9	1351.9	1344.3	1334.5	1325.5	1318.0	1313.5	1311.2
45°	1361.7	1354.9	1345.1	1333.0	1321.7	1313.5	1308.2	1305.2
47.5°	1369.9	1360.1	1348.1	1333.8	1320.2	1308.9	1302.9	1299.9
50°	1380.5	1368.4	1353.4	1336.0	1319.5	1305.2	1297.6	1293.9
52.5°	1390.3	1376.0	1357.9	1337.6	1316.5	1299.9	1288.6	1284.8
55°	1390.3	1373.0	1350.4	1327.0	1302.9	1283.3	1268.3	1263.0
57.5°	1360.9	1342.1	1314.2	1288.6	1262.2	1238.9	1223.1	1217.8
60°	1285.6	1269.0	1236.6	1211.8	1182.4	1156.8	1144.8	1140.2
62.5°	1170.4	1158.3	1128.9	1107.1	1075.5	1055.1	1040.8	1041.6
65°	1036.3	1025.8	1001.7	982.1	953.5	937.6	923.3	912.8
67.5°	895.5	883.4	863.8	846.5	823.2	811.9	796.1	786.3
70°	747.9	738.8	720.7	708.7	689.1	679.3	664.3	664.3
72.5°	600.2	595.7	582.9	572.4	557.3	548.3	536.2	538.5
75°	463.2	465.4	452.6	445.1	433.0	425.5	416.5	420.2
77.5°	347.2	344.2	335.1	330.6	320.1	317.1	308.0	311.0
80°	240.2	239.5	232.0	229.0	222.9	221.4	213.9	216.1
82.5°	151.4	151.4	148.4	145.4	143.1	141.6	136.3	137.8
85°	83.6	82.8	82.1	79.8	78.3	79.1	75.3	76.8
87.5°	29.4	28.6	28.6	27.1	25.6	27.9	24.9	25.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)