

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: P130706

Luminaire Tested: **TBLED-LD1-6-W-UNV-L840-CD1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130706
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-L840-CD1
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
WIDE DISTRIBUTION.
Light Source: (160) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

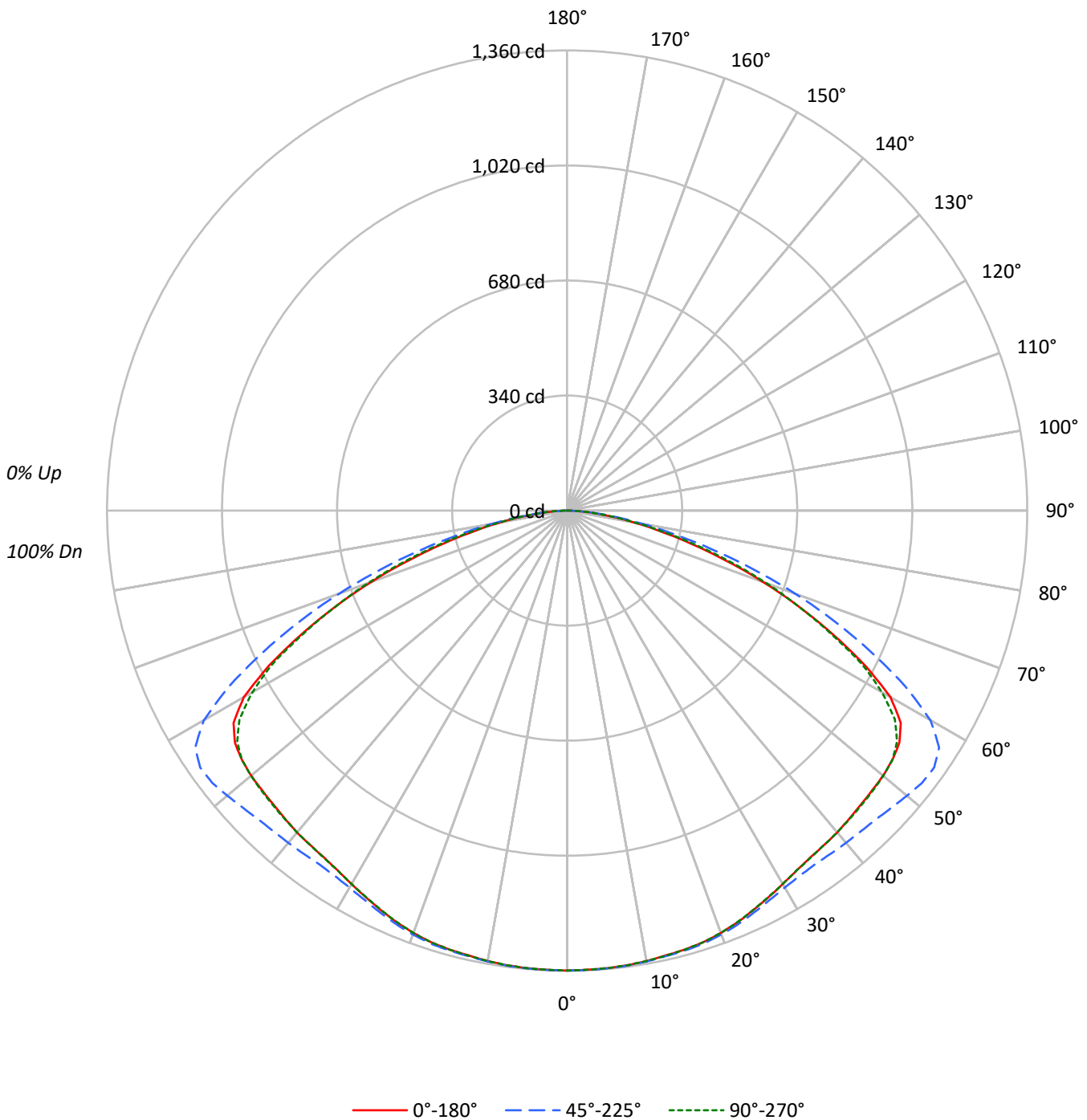
Lumens per Lamp: N/A
Luminaire Lumens: 5465.8 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.42 / 1.42 / 1.71
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

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°	14722	14722	14722
5°	14755	14763	14755
10°	14863	14878	14863
15°	15058	15090	15058
20°	15307	15363	15307
25°	15565	15650	15556
30°	15934	16085	15934
35°	16555	16873	16564
40°	17552	18124	17552
45°	18809	19764	18841
50°	20534	22089	20548
55°	22625	24996	22476
60°	23892	26859	23277
65°	22228	25449	22046
70°	19509	22679	19826
75°	15949	18535	16572
80°	12441	14125	12703
85°	8821	9791	8995



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.4	2.4
10°-20°	380.6	7.0
20°-30°	604.0	11.1
30°-40°	796.1	14.6
40°-50°	977.4	17.9
50°-60°	1115.7	20.4
60°-70°	917.9	16.8
70°-80°	450.4	8.2
80°-90°	94.3	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°	1114.0	20.4
0°-40°	1910.2	34.9
0°-60°	4003.3	73.2
0°-90°	5465.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5465.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1360	1360	1360	1360	1360	
5°	1357	1358	1358	1358	1357	129
15°	1343	1344	1346	1345	1343	380
25°	1303	1307	1310	1307	1302	602
35°	1252	1265	1276	1265	1253	788
45°	1228	1260	1291	1262	1230	952
55°	1198	1266	1324	1262	1190	1062
65°	868	936	993	935	860	856
75°	381	418	443	423	396	412
85°	71	77	79	76	72	88
90°	0	0	0	0	0	



TEST NUMBER: P130706

CATALOG NUMBER: TBLED-LD1-6-W-UNV-L840-CD1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1359.5	1359.5	1359.5	1359.5	1359.5	1359.5	1359.5	1359.5	1359.5	1359.5	1359.5
2.5°	1358.1	1358.1	1358.1	1358.1	1358.8	1358.8	1358.8	1358.8	1358.8	1358.8	1358.1
5°	1357.4	1357.4	1357.4	1357.4	1358.1	1358.1	1358.1	1358.1	1358.1	1358.1	1358.1
7.5°	1355.3	1355.3	1356.0	1356.0	1356.0	1356.0	1356.0	1356.7	1356.7	1356.7	1356.7
10°	1351.7	1351.7	1351.7	1351.7	1352.4	1352.4	1353.1	1353.1	1353.1	1353.1	1353.1
12.5°	1346.7	1346.7	1347.4	1347.4	1347.4	1348.2	1348.9	1348.9	1348.9	1348.9	1348.9
15°	1343.2	1343.2	1343.2	1343.9	1343.9	1344.6	1345.3	1345.3	1346.0	1346.0	1346.0
17.5°	1337.5	1338.2	1338.2	1338.2	1338.9	1339.6	1341.1	1341.1	1341.8	1341.8	1341.8
20°	1328.3	1328.3	1329.0	1329.7	1330.4	1331.1	1332.5	1333.2	1333.2	1333.2	1334.0
22.5°	1316.9	1316.9	1317.6	1318.3	1319.8	1320.5	1321.9	1322.6	1322.6	1322.6	1322.6
25°	1302.7	1303.4	1304.1	1304.8	1306.3	1307.7	1309.1	1310.5	1310.5	1309.8	1310.5
27.5°	1288.5	1289.2	1289.9	1291.4	1292.8	1294.2	1295.6	1297.0	1297.0	1297.0	1297.7
30°	1274.3	1275.0	1276.4	1277.9	1280.0	1281.4	1283.5	1285.7	1286.4	1286.4	1285.7
32.5°	1261.5	1262.3	1264.4	1266.5	1269.3	1272.2	1275.0	1277.2	1279.3	1279.3	1277.9
35°	1252.3	1253.0	1255.9	1259.4	1263.7	1267.2	1270.8	1273.6	1276.4	1276.4	1275.7
37.5°	1246.6	1247.3	1250.9	1255.2	1261.5	1266.5	1271.5	1275.0	1277.9	1278.6	1277.9
40°	1241.7	1242.4	1246.6	1252.3	1259.4	1266.5	1272.9	1277.9	1280.7	1282.1	1282.1
42.5°	1234.6	1236.0	1240.2	1248.1	1256.6	1265.1	1272.9	1280.0	1283.5	1285.0	1284.3
45°	1228.2	1229.6	1235.3	1244.5	1254.4	1265.1	1275.0	1283.5	1288.5	1290.6	1289.2
47.5°	1223.2	1225.3	1232.4	1243.1	1255.2	1268.6	1280.7	1290.6	1297.0	1299.9	1297.7
50°	1218.9	1221.8	1229.6	1242.4	1258.0	1275.0	1289.2	1300.6	1308.4	1311.2	1309.1
52.5°	1211.1	1216.1	1225.3	1241.0	1260.1	1279.3	1296.3	1309.8	1319.0	1321.9	1319.0
55°	1198.4	1203.3	1214.0	1231.7	1255.2	1276.4	1297.0	1311.9	1320.5	1324.0	1319.8
57.5°	1169.2	1174.2	1184.9	1205.5	1228.9	1253.0	1274.3	1290.6	1301.3	1303.4	1294.9
60°	1103.2	1106.8	1123.1	1143.7	1166.4	1189.8	1211.8	1230.3	1239.5	1240.2	1228.2
62.5°	993.9	999.6	1015.9	1037.9	1059.2	1078.4	1099.0	1118.1	1125.2	1128.1	1118.8
65°	867.5	875.3	887.4	907.3	928.6	944.2	966.9	983.2	990.3	993.2	989.6
67.5°	741.9	749.0	755.4	774.5	793.7	808.6	830.6	845.5	851.2	855.5	853.3
70°	616.2	622.6	628.3	643.9	658.8	678.0	690.8	705.0	708.5	716.3	712.8
72.5°	494.1	499.1	504.8	519.7	528.9	549.5	555.2	567.2	573.6	575.8	572.2
75°	381.2	384.8	391.2	403.2	410.3	426.0	428.1	438.7	443.0	443.0	441.6
77.5°	282.6	285.4	292.5	299.6	306.7	317.3	315.2	322.3	325.1	326.6	325.1
80°	199.5	203.0	204.5	210.1	216.5	220.8	219.4	222.9	223.6	226.5	225.8
82.5°	127.8	131.3	129.2	132.8	137.0	139.9	140.6	140.6	140.6	142.7	142.0
85°	71.0	73.8	72.4	73.8	76.0	78.1	76.7	77.4	78.1	78.8	78.1
87.5°	23.4	26.3	24.1	24.8	26.3	27.7	28.4	26.3	27.7	27.7	27.7
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: P130706

CATALOG NUMBER: TBLED-LD1-6-W-UNV-L840-CD1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1359.5	1359.5	1359.5	1359.5	1359.5	1359.5	1359.5	1359.5
2.5°	1358.1	1358.1	1358.1	1358.1	1358.1	1358.1	1358.1	1358.1
5°	1358.1	1358.1	1358.1	1358.1	1357.4	1357.4	1357.4	1357.4
7.5°	1356.0	1356.0	1356.0	1356.0	1355.3	1355.3	1355.3	1355.3
10°	1352.4	1352.4	1352.4	1351.7	1351.7	1351.7	1351.7	1351.7
12.5°	1348.9	1348.2	1348.2	1348.2	1348.2	1347.4	1347.4	1347.4
15°	1346.0	1345.3	1345.3	1344.6	1343.9	1343.9	1343.2	1343.2
17.5°	1341.1	1341.1	1340.3	1339.6	1338.9	1338.2	1338.2	1337.5
20°	1333.2	1332.5	1331.1	1330.4	1330.4	1329.7	1329.0	1328.3
22.5°	1321.9	1321.2	1320.5	1319.0	1318.3	1317.6	1316.9	1316.2
25°	1309.1	1308.4	1307.7	1306.3	1305.6	1304.1	1303.4	1302.0
27.5°	1296.3	1296.3	1294.2	1292.8	1291.4	1289.9	1289.2	1287.8
30°	1285.0	1284.3	1282.8	1280.0	1278.6	1276.4	1275.0	1274.3
32.5°	1276.4	1275.7	1272.9	1269.3	1266.5	1263.7	1263.0	1261.5
35°	1274.3	1271.5	1267.2	1263.0	1259.4	1255.9	1253.7	1253.0
37.5°	1276.4	1271.5	1266.5	1260.8	1255.9	1250.9	1248.1	1246.6
40°	1278.6	1273.6	1267.9	1260.1	1253.0	1247.3	1243.8	1241.7
42.5°	1280.0	1274.3	1267.2	1258.0	1249.5	1242.4	1238.1	1236.0
45°	1283.5	1277.2	1267.9	1256.6	1245.9	1238.1	1233.1	1230.3
47.5°	1291.4	1282.1	1270.8	1257.3	1244.5	1233.9	1228.2	1225.3
50°	1301.3	1289.9	1275.7	1259.4	1243.8	1230.3	1223.2	1219.7
52.5°	1310.5	1297.0	1280.0	1260.8	1241.0	1225.3	1214.7	1211.1
55°	1310.5	1294.2	1272.9	1250.9	1228.2	1209.7	1195.5	1190.5
57.5°	1282.8	1265.1	1238.8	1214.7	1189.8	1167.8	1152.9	1148.0
60°	1211.8	1196.2	1165.7	1142.3	1114.6	1090.4	1079.1	1074.8
62.5°	1103.2	1091.9	1064.2	1043.6	1013.8	994.6	981.1	981.8
65°	976.9	966.9	944.2	925.7	898.8	883.9	870.4	860.4
67.5°	844.1	832.7	814.3	798.0	776.0	765.3	750.4	741.2
70°	705.0	696.4	679.4	668.0	649.6	640.4	626.2	626.2
72.5°	565.8	561.6	549.5	539.5	525.3	516.8	505.5	507.6
75°	436.6	438.7	426.7	419.6	408.2	401.1	392.6	396.1
77.5°	327.3	324.4	315.9	311.7	301.7	298.9	290.4	293.2
80°	226.5	225.8	218.7	215.8	210.1	208.7	201.6	203.7
82.5°	142.7	142.7	139.9	137.0	134.9	133.5	128.5	129.9
85°	78.8	78.1	77.4	75.3	73.8	74.5	71.0	72.4
87.5°	27.7	27.0	27.0	25.6	24.1	26.3	23.4	24.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)