

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: P130733

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130733  
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-CMS  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
WIDE DISTRIBUTION WITH MINI SENSOR.  
Light Source: (160) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5238.4 lumens  
Efficiency: N/A  
Efficacy: 102.7 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

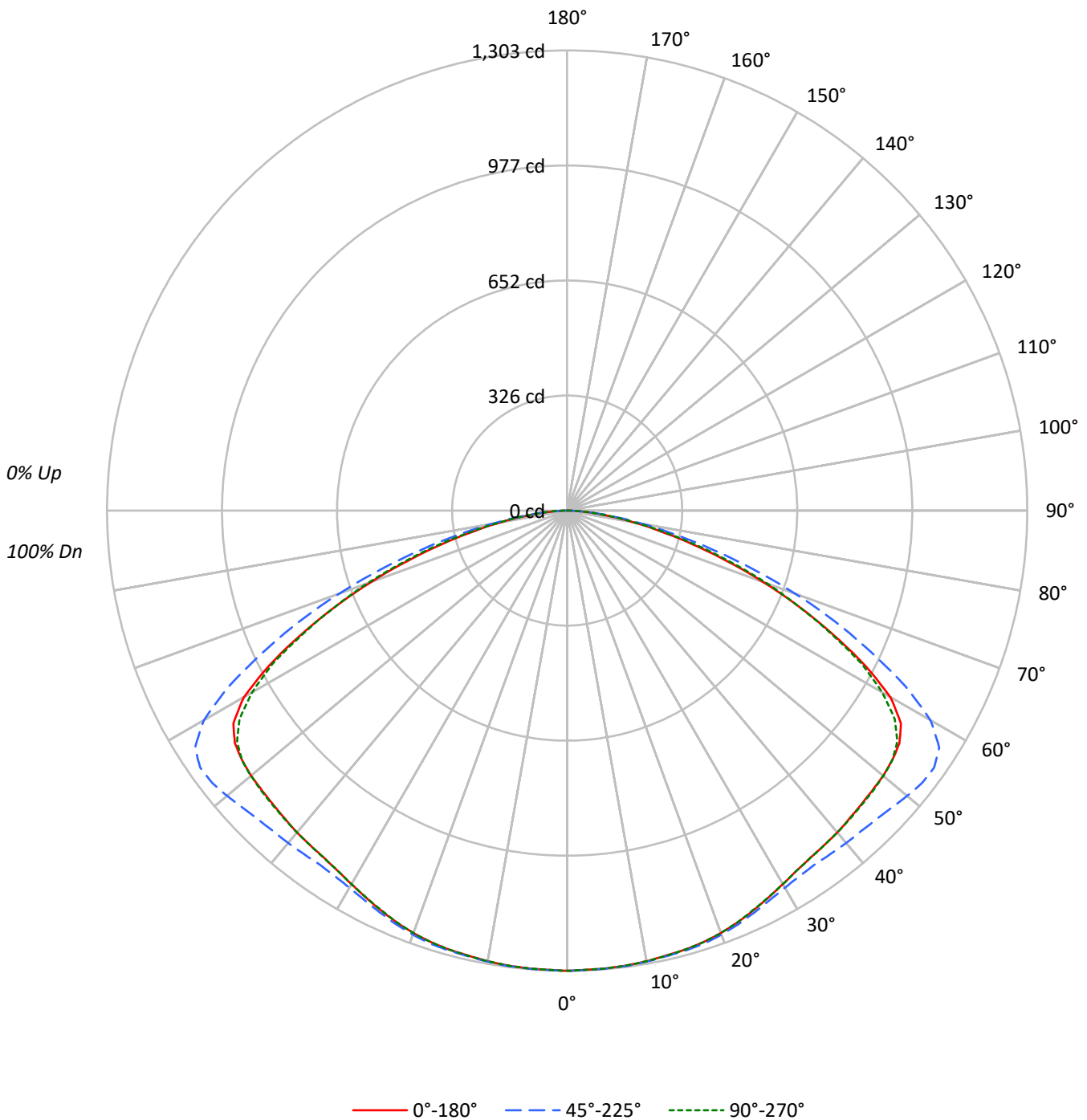
Input Watts (W): 51  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	14110	14110	14110
5°	14141	14148	14141
10°	14245	14259	14245
15°	14431	14462	14431
20°	14670	14725	14670
25°	14917	14998	14909
30°	15271	15416	15271
35°	15866	16171	15875
40°	16822	17370	16822
45°	18026	18943	18057
50°	19680	21171	19692
55°	21683	23956	21541
60°	22898	25742	22309
65°	21303	24390	21129
70°	18699	21735	19000
75°	15288	17765	15886
80°	11923	13532	12179
85°	8449	9381	8623



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.1	2.4
10°-20°	364.7	7.0
20°-30°	578.9	11.1
30°-40°	763.0	14.6
40°-50°	936.7	17.9
50°-60°	1069.3	20.4
60°-70°	879.7	16.8
70°-80°	431.6	8.2
80°-90°	90.4	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°	1067.7	20.4
0°-40°	1830.7	34.9
0°-60°	3836.7	73.2
0°-90°	5238.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5238.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1301	1302	1302	1302	1301	124
15°	1287	1288	1290	1289	1287	364
25°	1248	1253	1255	1253	1248	577
35°	1200	1213	1223	1212	1201	755
45°	1177	1207	1237	1210	1179	912
55°	1148	1213	1269	1209	1141	1018
65°	831	897	952	896	825	821
75°	365	401	425	406	380	395
85°	68	74	76	73	69	84
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°	1303.0	1303.0	1303.0	1303.0	1303.0	1303.0	1303.0	1303.0	1303.0	1303.0	1303.0
2.5°	1301.6	1301.6	1301.6	1301.6	1302.3	1302.3	1302.3	1302.3	1302.3	1302.3	1301.6
5°	1300.9	1300.9	1300.9	1300.9	1301.6	1301.6	1301.6	1301.6	1301.6	1301.6	1301.6
7.5°	1298.9	1298.9	1299.5	1299.5	1299.5	1299.5	1299.5	1300.2	1300.2	1300.2	1300.2
10°	1295.5	1295.5	1295.5	1295.5	1296.1	1296.1	1296.8	1296.8	1296.8	1296.8	1296.8
12.5°	1290.7	1290.7	1291.4	1291.4	1291.4	1292.1	1292.7	1292.7	1292.7	1292.7	1292.7
15°	1287.3	1287.3	1287.3	1288.0	1288.0	1288.7	1289.3	1289.3	1290.0	1290.0	1290.0
17.5°	1281.9	1282.5	1282.5	1282.5	1283.2	1283.9	1285.3	1285.3	1285.9	1285.9	1285.9
20°	1273.0	1273.0	1273.7	1274.4	1275.1	1275.7	1277.1	1277.8	1277.8	1277.8	1278.5
22.5°	1262.1	1262.1	1262.8	1263.5	1264.8	1265.5	1266.9	1267.6	1267.6	1267.6	1267.6
25°	1248.5	1249.2	1249.9	1250.6	1251.9	1253.3	1254.6	1256.0	1256.0	1255.3	1256.0
27.5°	1234.9	1235.6	1236.3	1237.6	1239.0	1240.4	1241.7	1243.1	1243.1	1243.1	1243.8
30°	1221.3	1222.0	1223.3	1224.7	1226.7	1228.1	1230.1	1232.2	1232.9	1232.9	1232.2
32.5°	1209.1	1209.7	1211.8	1213.8	1216.5	1219.3	1222.0	1224.0	1226.1	1226.1	1224.7
35°	1200.2	1200.9	1203.6	1207.0	1211.1	1214.5	1217.9	1220.6	1223.3	1223.3	1222.7
37.5°	1194.8	1195.4	1198.9	1202.9	1209.1	1213.8	1218.6	1222.0	1224.7	1225.4	1224.7
40°	1190.0	1190.7	1194.8	1200.2	1207.0	1213.8	1219.9	1224.7	1227.4	1228.8	1228.8
42.5°	1183.2	1184.6	1188.6	1196.1	1204.3	1212.5	1219.9	1226.7	1230.1	1231.5	1230.8
45°	1177.1	1178.4	1183.9	1192.7	1202.3	1212.5	1222.0	1230.1	1234.9	1237.0	1235.6
47.5°	1172.3	1174.4	1181.2	1191.4	1202.9	1215.9	1227.4	1237.0	1243.1	1245.8	1243.8
50°	1168.2	1171.0	1178.4	1190.7	1205.7	1222.0	1235.6	1246.5	1254.0	1256.7	1254.6
52.5°	1160.7	1165.5	1174.4	1189.3	1207.7	1226.1	1242.4	1255.3	1264.2	1266.9	1264.2
55°	1148.5	1153.3	1163.5	1180.5	1202.9	1223.3	1243.1	1257.4	1265.5	1268.9	1264.8
57.5°	1120.6	1125.4	1135.6	1155.3	1177.8	1200.9	1221.3	1237.0	1247.2	1249.2	1241.0
60°	1057.3	1060.7	1076.4	1096.1	1117.9	1140.3	1161.4	1179.1	1188.0	1188.6	1177.1
62.5°	952.5	958.0	973.6	994.7	1015.1	1033.5	1053.2	1071.6	1078.4	1081.1	1072.3
65°	831.4	838.9	850.5	869.5	890.0	904.9	926.7	942.3	949.1	951.9	948.5
67.5°	711.0	717.8	723.9	742.3	760.7	775.0	796.1	810.3	815.8	819.9	817.8
70°	590.6	596.7	602.1	617.1	631.4	649.8	662.0	675.6	679.0	686.5	683.1
72.5°	473.6	478.3	483.8	498.0	506.9	526.6	532.1	543.6	549.8	551.8	548.4
75°	365.4	368.8	374.9	386.5	393.3	408.2	410.3	420.5	424.6	424.6	423.2
77.5°	270.8	273.5	280.3	287.1	293.9	304.1	302.1	308.9	311.6	313.0	311.6
80°	191.2	194.6	196.0	201.4	207.5	211.6	210.2	213.6	214.3	217.0	216.4
82.5°	122.5	125.9	123.8	127.2	131.3	134.0	134.7	134.7	134.7	136.8	136.1
85°	68.0	70.8	69.4	70.8	72.8	74.8	73.5	74.2	74.8	75.5	74.8
87.5°	22.5	25.2	23.1	23.8	25.2	26.5	27.2	25.2	26.5	26.5	26.5
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°	1303.0	1303.0	1303.0	1303.0	1303.0	1303.0	1303.0	1303.0
2.5°	1301.6	1301.6	1301.6	1301.6	1301.6	1301.6	1301.6	1301.6
5°	1301.6	1301.6	1301.6	1301.6	1300.9	1300.9	1300.9	1300.9
7.5°	1299.5	1299.5	1299.5	1299.5	1298.9	1298.9	1298.9	1298.9
10°	1296.1	1296.1	1296.1	1295.5	1295.5	1295.5	1295.5	1295.5
12.5°	1292.7	1292.1	1292.1	1292.1	1292.1	1291.4	1291.4	1291.4
15°	1290.0	1289.3	1289.3	1288.7	1288.0	1288.0	1287.3	1287.3
17.5°	1285.3	1285.3	1284.6	1283.9	1283.2	1282.5	1282.5	1281.9
20°	1277.8	1277.1	1275.7	1275.1	1275.1	1274.4	1273.7	1273.0
22.5°	1266.9	1266.2	1265.5	1264.2	1263.5	1262.8	1262.1	1261.4
25°	1254.6	1254.0	1253.3	1251.9	1251.2	1249.9	1249.2	1247.8
27.5°	1242.4	1242.4	1240.4	1239.0	1237.6	1236.3	1235.6	1234.2
30°	1231.5	1230.8	1229.5	1226.7	1225.4	1223.3	1222.0	1221.3
32.5°	1223.3	1222.7	1219.9	1216.5	1213.8	1211.1	1210.4	1209.1
35°	1221.3	1218.6	1214.5	1210.4	1207.0	1203.6	1201.6	1200.9
37.5°	1223.3	1218.6	1213.8	1208.4	1203.6	1198.9	1196.1	1194.8
40°	1225.4	1220.6	1215.2	1207.7	1200.9	1195.4	1192.0	1190.0
42.5°	1226.7	1221.3	1214.5	1205.7	1197.5	1190.7	1186.6	1184.6
45°	1230.1	1224.0	1215.2	1204.3	1194.1	1186.6	1181.8	1179.1
47.5°	1237.6	1228.8	1217.9	1205.0	1192.7	1182.5	1177.1	1174.4
50°	1247.2	1236.3	1222.7	1207.0	1192.0	1179.1	1172.3	1168.9
52.5°	1256.0	1243.1	1226.7	1208.4	1189.3	1174.4	1164.2	1160.7
55°	1256.0	1240.4	1219.9	1198.9	1177.1	1159.4	1145.8	1141.0
57.5°	1229.5	1212.5	1187.3	1164.2	1140.3	1119.2	1105.0	1100.2
60°	1161.4	1146.5	1117.2	1094.8	1068.2	1045.1	1034.2	1030.1
62.5°	1057.3	1046.4	1019.9	1000.2	971.6	953.2	940.3	941.0
65°	936.2	926.7	904.9	887.2	861.4	847.1	834.2	824.6
67.5°	809.0	798.1	780.4	764.8	743.7	733.5	719.2	710.3
70°	675.6	667.5	651.1	640.2	622.6	613.7	600.1	600.1
72.5°	542.3	538.2	526.6	517.1	503.5	495.3	484.4	486.5
75°	418.4	420.5	408.9	402.1	391.2	384.4	376.3	379.7
77.5°	313.7	310.9	302.8	298.7	289.2	286.4	278.3	281.0
80°	217.0	216.4	209.6	206.8	201.4	200.0	193.2	195.3
82.5°	136.8	136.8	134.0	131.3	129.3	127.9	123.2	124.5
85°	75.5	74.8	74.2	72.1	70.8	71.4	68.0	69.4
87.5°	26.5	25.9	25.9	24.5	23.1	25.2	22.5	23.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)