

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: P130724

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130724
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-DIMRF-LW
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
WIDE DISTRIBUTION WITH LUMAWATT WIRELESS SENSOR.
Light Source: (160) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5065.1 lumens
Efficiency: N/A
Efficacy: 99.3 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

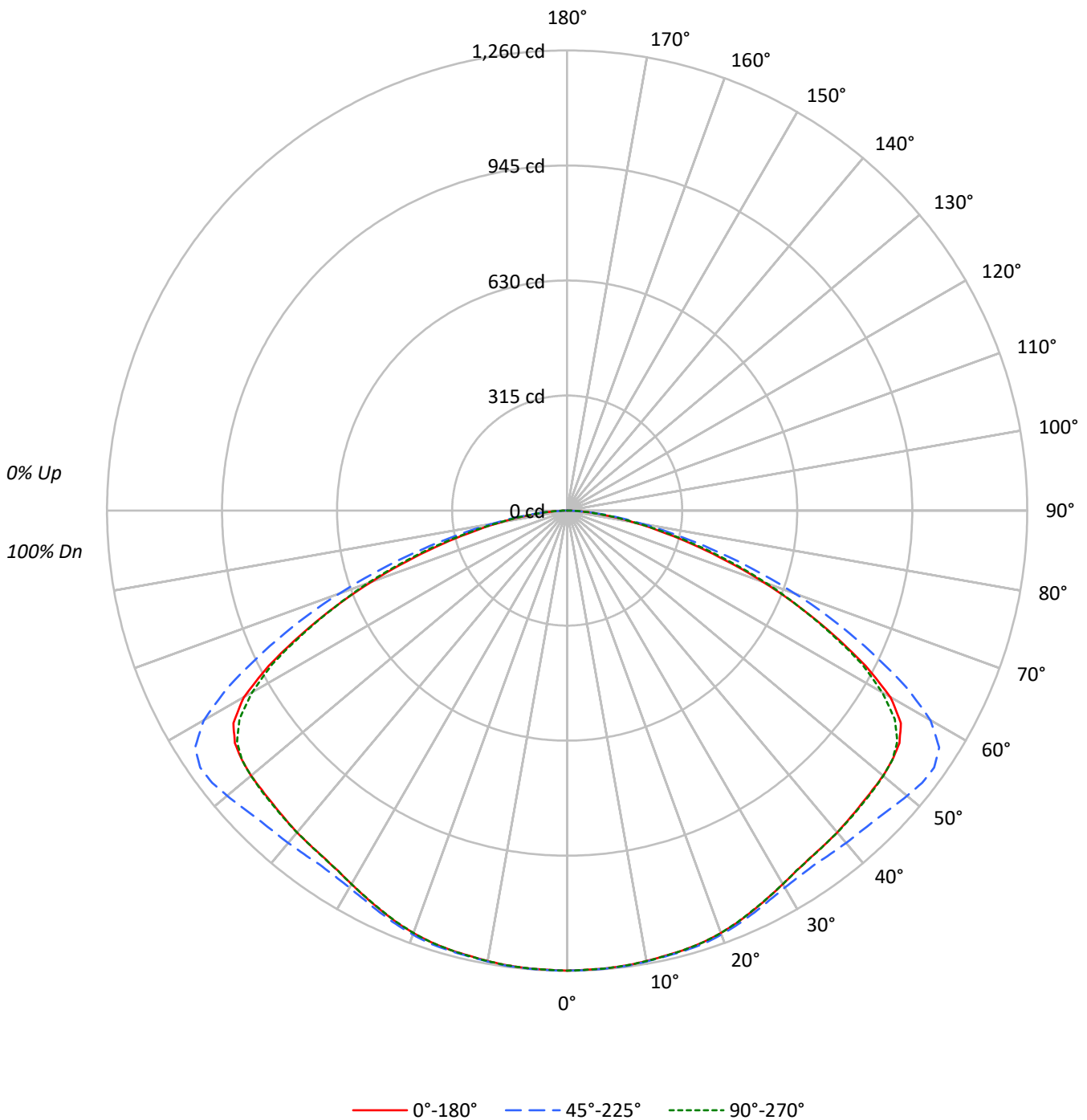
Input Watts (W): 51
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	13642	13642	13642
5°	13673	13680	13673
10°	13773	13788	13773
15°	13954	13983	13954
20°	14184	14237	14184
25°	14424	14503	14415
30°	14766	14906	14766
35°	15341	15637	15350
40°	16265	16795	16265
45°	17429	18316	17460
50°	19030	20470	19040
55°	20965	23163	20829
60°	22140	24891	21571
65°	20598	23583	20429
70°	18078	21017	18370
75°	14782	17175	15359
80°	11530	13089	11774
85°	8175	9070	8337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.9	2.4
10°-20°	352.7	7.0
20°-30°	559.8	11.1
30°-40°	737.8	14.6
40°-50°	905.7	17.9
50°-60°	1033.9	20.4
60°-70°	850.6	16.8
70°-80°	417.4	8.2
80°-90°	87.4	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°	1032.4	20.4
0°-40°	1770.1	34.9
0°-60°	3709.8	73.2
0°-90°	5065.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5065.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1260	1260	1260	1260	1260	
5°	1258	1258	1258	1258	1258	120
15°	1245	1246	1247	1246	1245	352
25°	1207	1211	1214	1211	1206	558
35°	1160	1173	1183	1172	1161	730
45°	1138	1167	1196	1170	1140	882
55°	1110	1173	1227	1169	1103	984
65°	804	868	920	866	797	793
75°	353	388	410	392	367	382
85°	66	71	73	71	67	81
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°	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8
2.5°	1258.5	1258.5	1258.5	1258.5	1259.2	1259.2	1259.2	1259.2	1259.2	1259.2	1258.5
5°	1257.9	1257.9	1257.9	1257.9	1258.5	1258.5	1258.5	1258.5	1258.5	1258.5	1258.5
7.5°	1255.9	1255.9	1256.5	1256.5	1256.5	1256.5	1256.5	1257.2	1257.2	1257.2	1257.2
10°	1252.6	1252.6	1252.6	1252.6	1253.3	1253.3	1253.9	1253.9	1253.9	1253.9	1253.9
12.5°	1248.0	1248.0	1248.6	1248.6	1248.6	1249.3	1250.0	1250.0	1250.0	1250.0	1250.0
15°	1244.7	1244.7	1244.7	1245.4	1245.4	1246.0	1246.7	1246.7	1247.3	1247.3	1247.3
17.5°	1239.4	1240.1	1240.1	1240.1	1240.8	1241.4	1242.7	1242.7	1243.4	1243.4	1243.4
20°	1230.9	1230.9	1231.5	1232.2	1232.9	1233.5	1234.8	1235.5	1235.5	1235.5	1236.2
22.5°	1220.4	1220.4	1221.0	1221.7	1223.0	1223.7	1225.0	1225.6	1225.6	1225.6	1225.6
25°	1207.2	1207.9	1208.5	1209.2	1210.5	1211.8	1213.1	1214.4	1214.4	1213.8	1214.4
27.5°	1194.0	1194.7	1195.4	1196.7	1198.0	1199.3	1200.6	1201.9	1201.9	1201.9	1202.6
30°	1180.9	1181.5	1182.9	1184.2	1186.2	1187.5	1189.4	1191.4	1192.1	1192.1	1191.4
32.5°	1169.0	1169.7	1171.7	1173.7	1176.3	1178.9	1181.5	1183.5	1185.5	1185.5	1184.2
35°	1160.5	1161.2	1163.8	1167.1	1171.0	1174.3	1177.6	1180.2	1182.9	1182.9	1182.2
37.5°	1155.2	1155.9	1159.2	1163.1	1169.0	1173.7	1178.3	1181.5	1184.2	1184.8	1184.2
40°	1150.6	1151.3	1155.2	1160.5	1167.1	1173.7	1179.6	1184.2	1186.8	1188.1	1188.1
42.5°	1144.0	1145.4	1149.3	1156.5	1164.4	1172.3	1179.6	1186.2	1189.4	1190.8	1190.1
45°	1138.1	1139.4	1144.7	1153.3	1162.5	1172.3	1181.5	1189.4	1194.0	1196.0	1194.7
47.5°	1133.5	1135.5	1142.1	1151.9	1163.1	1175.6	1186.8	1196.0	1201.9	1204.6	1202.6
50°	1129.6	1132.2	1139.4	1151.3	1165.8	1181.5	1194.7	1205.2	1212.5	1215.1	1213.1
52.5°	1122.3	1126.9	1135.5	1150.0	1167.7	1185.5	1201.3	1213.8	1222.3	1225.0	1222.3
55°	1110.5	1115.1	1125.0	1141.4	1163.1	1182.9	1201.9	1215.8	1223.7	1226.9	1223.0
57.5°	1083.5	1088.1	1098.0	1117.1	1138.8	1161.2	1180.9	1196.0	1205.9	1207.9	1200.0
60°	1022.3	1025.6	1040.8	1059.8	1080.9	1102.6	1123.0	1140.1	1148.7	1149.3	1138.1
62.5°	921.0	926.3	941.4	961.8	981.6	999.3	1018.4	1036.2	1042.7	1045.4	1036.8
65°	803.9	811.2	822.3	840.8	860.5	875.0	896.0	911.2	917.7	920.4	917.1
67.5°	687.5	694.1	700.0	717.7	735.5	749.3	769.7	783.5	788.8	792.7	790.8
70°	571.0	577.0	582.2	596.7	610.5	628.3	640.1	653.3	656.6	663.8	660.5
72.5°	457.9	462.5	467.8	481.6	490.1	509.2	514.5	525.6	531.6	533.5	530.2
75°	353.3	356.6	362.5	373.7	380.3	394.7	396.7	406.6	410.5	410.5	409.2
77.5°	261.8	264.5	271.0	277.6	284.2	294.1	292.1	298.7	301.3	302.6	301.3
80°	184.9	188.2	189.5	194.7	200.7	204.6	203.3	206.6	207.2	209.9	209.2
82.5°	118.4	121.7	119.7	123.0	127.0	129.6	130.3	130.3	130.3	132.2	131.6
85°	65.8	68.4	67.1	68.4	70.4	72.4	71.1	71.7	72.4	73.0	72.4
87.5°	21.7	24.3	22.4	23.0	24.3	25.7	26.3	24.3	25.7	25.7	25.7
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°	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8
2.5°	1258.5	1258.5	1258.5	1258.5	1258.5	1258.5	1258.5	1258.5
5°	1258.5	1258.5	1258.5	1258.5	1257.9	1257.9	1257.9	1257.9
7.5°	1256.5	1256.5	1256.5	1256.5	1255.9	1255.9	1255.9	1255.9
10°	1253.3	1253.3	1253.3	1252.6	1252.6	1252.6	1252.6	1252.6
12.5°	1250.0	1249.3	1249.3	1249.3	1249.3	1248.6	1248.6	1248.6
15°	1247.3	1246.7	1246.7	1246.0	1245.4	1245.4	1244.7	1244.7
17.5°	1242.7	1242.7	1242.1	1241.4	1240.8	1240.1	1240.1	1239.4
20°	1235.5	1234.8	1233.5	1232.9	1232.9	1232.2	1231.5	1230.9
22.5°	1225.0	1224.3	1223.7	1222.3	1221.7	1221.0	1220.4	1219.7
25°	1213.1	1212.5	1211.8	1210.5	1209.8	1208.5	1207.9	1206.5
27.5°	1201.3	1201.3	1199.3	1198.0	1196.7	1195.4	1194.7	1193.4
30°	1190.8	1190.1	1188.8	1186.2	1184.8	1182.9	1181.5	1180.9
32.5°	1182.9	1182.2	1179.6	1176.3	1173.7	1171.0	1170.4	1169.0
35°	1180.9	1178.3	1174.3	1170.4	1167.1	1163.8	1161.8	1161.2
37.5°	1182.9	1178.3	1173.7	1168.4	1163.8	1159.2	1156.5	1155.2
40°	1184.8	1180.2	1175.0	1167.7	1161.2	1155.9	1152.6	1150.6
42.5°	1186.2	1180.9	1174.3	1165.8	1157.9	1151.3	1147.3	1145.4
45°	1189.4	1183.5	1175.0	1164.4	1154.6	1147.3	1142.7	1140.1
47.5°	1196.7	1188.1	1177.6	1165.1	1153.3	1143.4	1138.1	1135.5
50°	1205.9	1195.4	1182.2	1167.1	1152.6	1140.1	1133.5	1130.2
52.5°	1214.4	1201.9	1186.2	1168.4	1150.0	1135.5	1125.6	1122.3
55°	1214.4	1199.3	1179.6	1159.2	1138.1	1121.0	1107.9	1103.3
57.5°	1188.8	1172.3	1148.0	1125.6	1102.6	1082.2	1068.4	1063.8
60°	1123.0	1108.5	1080.2	1058.5	1032.9	1010.5	1000.0	996.0
62.5°	1022.3	1011.8	986.2	967.1	939.4	921.7	909.2	909.8
65°	905.2	896.0	875.0	857.9	832.9	819.1	806.6	797.3
67.5°	782.2	771.7	754.6	739.5	719.1	709.2	695.4	686.8
70°	653.3	645.4	629.6	619.1	602.0	593.4	580.2	580.2
72.5°	524.3	520.4	509.2	500.0	486.8	478.9	468.4	470.4
75°	404.6	406.6	395.4	388.8	378.3	371.7	363.8	367.1
77.5°	303.3	300.6	292.8	288.8	279.6	277.0	269.1	271.7
80°	209.9	209.2	202.6	200.0	194.7	193.4	186.8	188.8
82.5°	132.2	132.2	129.6	127.0	125.0	123.7	119.1	120.4
85°	73.0	72.4	71.7	69.7	68.4	69.1	65.8	67.1
87.5°	25.7	25.0	25.0	23.7	22.4	24.3	21.7	22.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)