

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: P130715

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130715
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-DOS
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
WIDE DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR.
Light Source: (160) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5214.6 lumens
Efficiency: N/A
Efficacy: 102.2 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

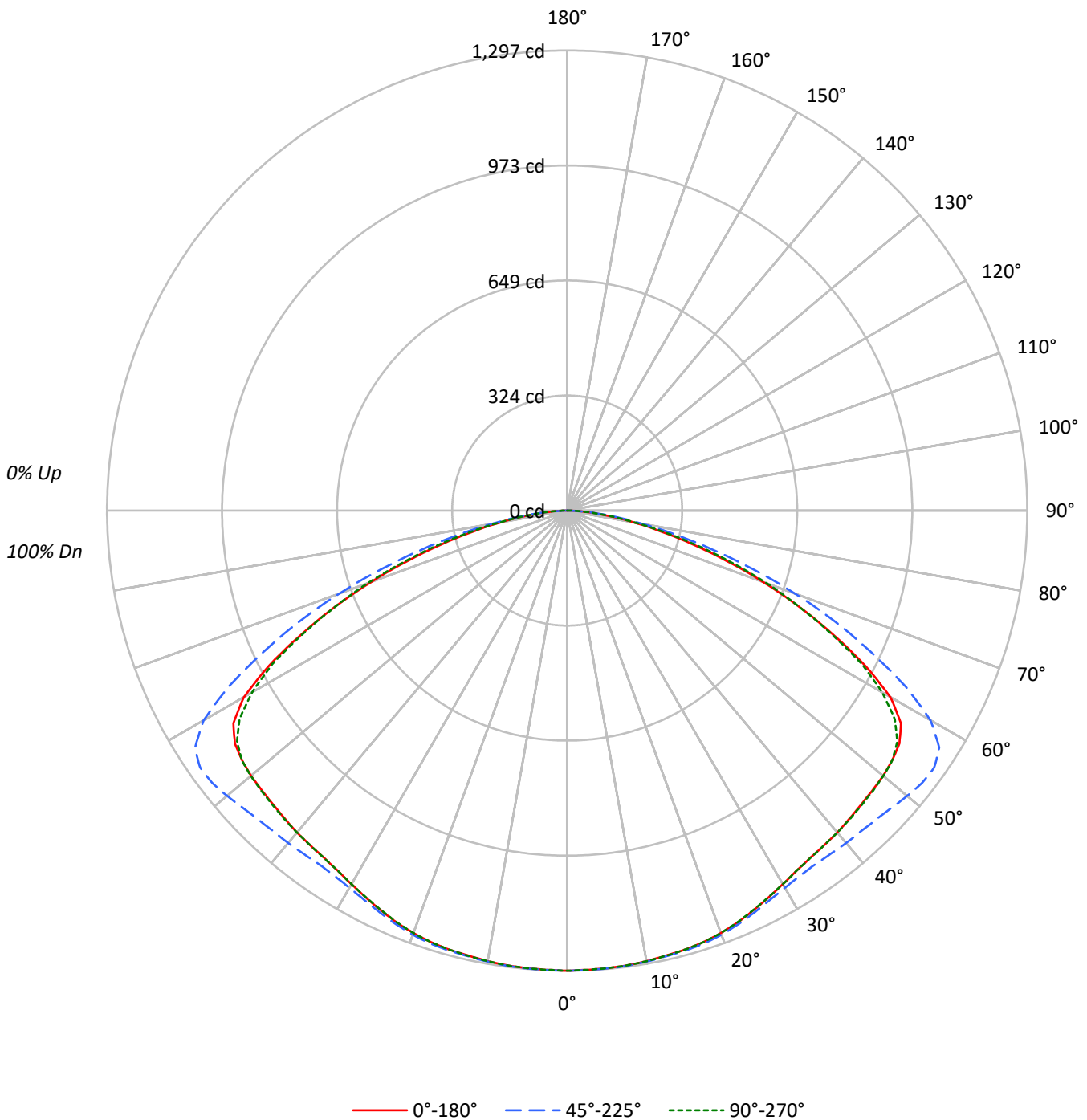
Input Watts (W): 51
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P130715

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

Luminous Intensity Polar Plot





TEST NUMBER: P130715

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

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°	14045	14045	14045
5°	14077	14084	14077
10°	14180	14194	14180
15°	14365	14396	14365
20°	14603	14658	14603
25°	14849	14930	14842
30°	15201	15346	15201
35°	15793	16099	15802
40°	16745	17291	16745
45°	17943	18856	17974
50°	19591	21075	19603
55°	21585	23848	21443
60°	22794	25625	22207
65°	21208	24278	21034
70°	18613	21637	18914
75°	15217	17681	15811
80°	11867	13476	12123
85°	8411	9343	8585



TEST NUMBER: P130715

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.5	2.4
10°-20°	363.1	7.0
20°-30°	576.3	11.1
30°-40°	759.6	14.6
40°-50°	932.5	17.9
50°-60°	1064.4	20.4
60°-70°	875.7	16.8
70°-80°	429.7	8.2
80°-90°	89.9	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°	1062.8	20.4
0°-40°	1822.4	34.9
0°-60°	3819.3	73.2
0°-90°	5214.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5214.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1295	1296	1296	1296	1295	123
15°	1281	1282	1284	1283	1281	363
25°	1243	1247	1250	1247	1242	574
35°	1195	1207	1218	1207	1195	752
45°	1172	1202	1231	1204	1174	908
55°	1143	1208	1263	1204	1136	1013
65°	828	893	948	892	821	817
75°	364	399	423	404	378	394
85°	68	74	75	73	69	84
90°	0	0	0	0	0	



TEST NUMBER: P130715

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1297.0	1297.0	1297.0	1297.0	1297.0	1297.0	1297.0	1297.0	1297.0	1297.0	1297.0
2.5°	1295.7	1295.7	1295.7	1295.7	1296.3	1296.3	1296.3	1296.3	1296.3	1296.3	1295.7
5°	1295.0	1295.0	1295.0	1295.0	1295.7	1295.7	1295.7	1295.7	1295.7	1295.7	1295.7
7.5°	1293.0	1293.0	1293.6	1293.6	1293.6	1293.6	1293.6	1294.3	1294.3	1294.3	1294.3
10°	1289.6	1289.6	1289.6	1289.6	1290.2	1290.2	1290.9	1290.9	1290.9	1290.9	1290.9
12.5°	1284.8	1284.8	1285.5	1285.5	1285.5	1286.2	1286.9	1286.9	1286.9	1286.9	1286.9
15°	1281.4	1281.4	1281.4	1282.1	1282.1	1282.8	1283.5	1283.5	1284.1	1284.1	1284.1
17.5°	1276.0	1276.7	1276.7	1276.7	1277.4	1278.1	1279.4	1279.4	1280.1	1280.1	1280.1
20°	1267.2	1267.2	1267.9	1268.6	1269.2	1269.9	1271.3	1272.0	1272.0	1272.0	1272.6
22.5°	1256.4	1256.4	1257.1	1257.7	1259.1	1259.8	1261.1	1261.8	1261.8	1261.8	1261.8
25°	1242.8	1243.5	1244.2	1244.9	1246.2	1247.6	1248.9	1250.3	1250.3	1249.6	1250.3
27.5°	1229.3	1230.0	1230.6	1232.0	1233.4	1234.7	1236.1	1237.4	1237.4	1237.4	1238.1
30°	1215.7	1216.4	1217.8	1219.1	1221.2	1222.5	1224.5	1226.6	1227.3	1227.3	1226.6
32.5°	1203.5	1204.2	1206.3	1208.3	1211.0	1213.7	1216.4	1218.5	1220.5	1220.5	1219.1
35°	1194.7	1195.4	1198.1	1201.5	1205.6	1209.0	1212.4	1215.1	1217.8	1217.8	1217.1
37.5°	1189.3	1190.0	1193.4	1197.5	1203.5	1208.3	1213.0	1216.4	1219.1	1219.8	1219.1
40°	1184.6	1185.3	1189.3	1194.7	1201.5	1208.3	1214.4	1219.1	1221.8	1223.2	1223.2
42.5°	1177.8	1179.2	1183.2	1190.7	1198.8	1206.9	1214.4	1221.2	1224.5	1225.9	1225.2
45°	1171.7	1173.1	1178.5	1187.3	1196.8	1206.9	1216.4	1224.5	1229.3	1231.3	1230.0
47.5°	1167.0	1169.0	1175.8	1185.9	1197.5	1210.3	1221.8	1231.3	1237.4	1240.1	1238.1
50°	1162.9	1165.6	1173.1	1185.3	1200.2	1216.4	1230.0	1240.8	1248.3	1251.0	1248.9
52.5°	1155.5	1160.2	1169.0	1183.9	1202.2	1220.5	1236.7	1249.6	1258.4	1261.1	1258.4
55°	1143.3	1148.0	1158.2	1175.1	1197.5	1217.8	1237.4	1251.6	1259.8	1263.2	1259.1
57.5°	1115.5	1120.2	1130.4	1150.0	1172.4	1195.4	1215.7	1231.3	1241.5	1243.5	1235.4
60°	1052.5	1055.9	1071.5	1091.1	1112.8	1135.1	1156.1	1173.7	1182.6	1183.2	1171.7
62.5°	948.2	953.6	969.2	990.2	1010.5	1028.8	1048.4	1066.7	1073.5	1076.2	1067.4
65°	827.7	835.1	846.6	865.6	885.9	900.8	922.5	938.1	944.8	947.5	944.1
67.5°	707.8	714.5	720.6	738.9	757.2	771.4	792.4	806.7	812.1	816.1	814.1
70°	587.9	594.0	599.4	614.3	628.5	646.8	659.0	672.6	675.9	683.4	680.0
72.5°	471.4	476.1	481.6	495.8	504.6	524.2	529.6	541.2	547.3	549.3	545.9
75°	363.7	367.1	373.2	384.7	391.5	406.4	408.4	418.6	422.6	422.6	421.3
77.5°	269.6	272.3	279.0	285.8	292.6	302.7	300.7	307.5	310.2	311.6	310.2
80°	190.3	193.7	195.1	200.5	206.6	210.6	209.3	212.7	213.3	216.1	215.4
82.5°	121.9	125.3	123.3	126.7	130.7	133.4	134.1	134.1	134.1	136.1	135.5
85°	67.7	70.4	69.1	70.4	72.5	74.5	73.1	73.8	74.5	75.2	74.5
87.5°	22.4	25.1	23.0	23.7	25.1	26.4	27.1	25.1	26.4	26.4	26.4
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: P130715

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1297.0	1297.0	1297.0	1297.0	1297.0	1297.0	1297.0	1297.0
2.5°	1295.7	1295.7	1295.7	1295.7	1295.7	1295.7	1295.7	1295.7
5°	1295.7	1295.7	1295.7	1295.7	1295.0	1295.0	1295.0	1295.0
7.5°	1293.6	1293.6	1293.6	1293.6	1293.0	1293.0	1293.0	1293.0
10°	1290.2	1290.2	1290.2	1289.6	1289.6	1289.6	1289.6	1289.6
12.5°	1286.9	1286.2	1286.2	1286.2	1286.2	1285.5	1285.5	1285.5
15°	1284.1	1283.5	1283.5	1282.8	1282.1	1282.1	1281.4	1281.4
17.5°	1279.4	1279.4	1278.7	1278.1	1277.4	1276.7	1276.7	1276.0
20°	1272.0	1271.3	1269.9	1269.2	1269.2	1268.6	1267.9	1267.2
22.5°	1261.1	1260.4	1259.8	1258.4	1257.7	1257.1	1256.4	1255.7
25°	1248.9	1248.3	1247.6	1246.2	1245.5	1244.2	1243.5	1242.2
27.5°	1236.7	1236.7	1234.7	1233.4	1232.0	1230.6	1230.0	1228.6
30°	1225.9	1225.2	1223.9	1221.2	1219.8	1217.8	1216.4	1215.7
32.5°	1217.8	1217.1	1214.4	1211.0	1208.3	1205.6	1204.9	1203.5
35°	1215.7	1213.0	1209.0	1204.9	1201.5	1198.1	1196.1	1195.4
37.5°	1217.8	1213.0	1208.3	1202.9	1198.1	1193.4	1190.7	1189.3
40°	1219.8	1215.1	1209.6	1202.2	1195.4	1190.0	1186.6	1184.6
42.5°	1221.2	1215.7	1209.0	1200.2	1192.0	1185.3	1181.2	1179.2
45°	1224.5	1218.5	1209.6	1198.8	1188.6	1181.2	1176.5	1173.7
47.5°	1232.0	1223.2	1212.4	1199.5	1187.3	1177.1	1171.7	1169.0
50°	1241.5	1230.6	1217.1	1201.5	1186.6	1173.7	1167.0	1163.6
52.5°	1250.3	1237.4	1221.2	1202.9	1183.9	1169.0	1158.8	1155.5
55°	1250.3	1234.7	1214.4	1193.4	1171.7	1154.1	1140.6	1135.8
57.5°	1223.9	1206.9	1181.9	1158.8	1135.1	1114.1	1099.9	1095.2
60°	1156.1	1141.2	1112.1	1089.8	1063.4	1040.3	1029.5	1025.4
62.5°	1052.5	1041.7	1015.3	995.6	967.2	948.9	936.0	936.7
65°	932.0	922.5	900.8	883.2	857.5	843.2	830.4	820.9
67.5°	805.3	794.5	776.9	761.3	740.3	730.1	715.9	707.1
70°	672.6	664.4	648.2	637.3	619.7	610.9	597.4	597.4
72.5°	539.8	535.7	524.2	514.7	501.2	493.1	482.2	484.3
75°	416.5	418.6	407.1	400.3	389.4	382.7	374.5	377.9
77.5°	312.2	309.5	301.4	297.3	287.8	285.1	277.0	279.7
80°	216.1	215.4	208.6	205.9	200.5	199.1	192.4	194.4
82.5°	136.1	136.1	133.4	130.7	128.7	127.3	122.6	123.9
85°	75.2	74.5	73.8	71.8	70.4	71.1	67.7	69.1
87.5°	26.4	25.7	25.7	24.4	23.0	25.1	22.4	23.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)