

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P209448

Luminaire Tested: **LDSQ6B30D010 EU6B30508050 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209448
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35359)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B30D010 EU6B30508050 6LBCSSQ1MMS
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
WATTAGE D010TR-27.4 W DE010-27.95 W D5LT-27.65 W DMX-27.73 W DL2-29.56 W
DL3-29.67 W DLE-29.73 W
Light Source: HIGH LUMEN LED 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3314.9 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

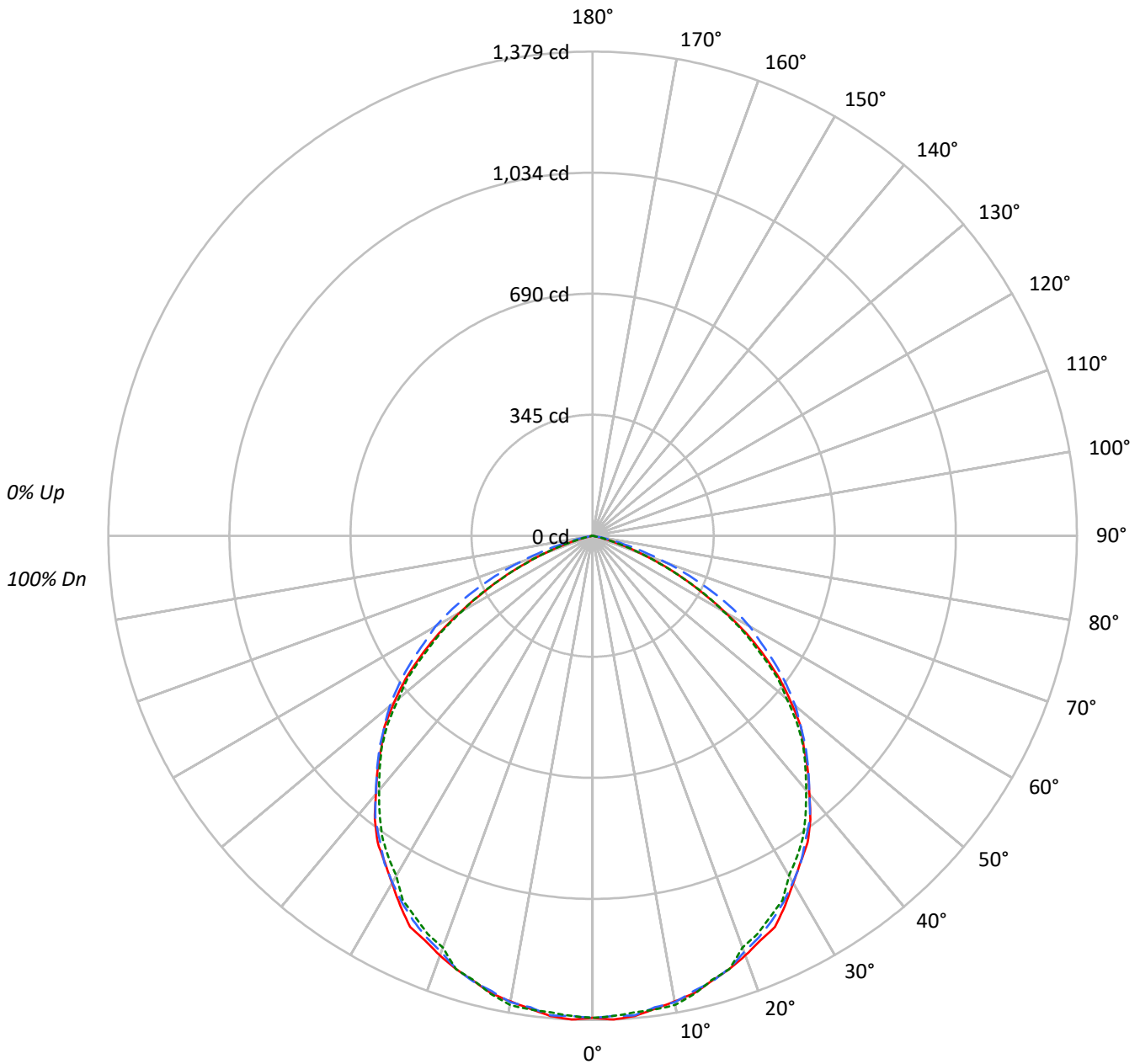
Input Watts (W): 28
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75																			
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64																			
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56																			
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49																			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43																			
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38																			
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34																			
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.9	3.9
10°-20°	370.3	11.2
20°-30°	557.2	16.8
30°-40°	659.2	19.9
40°-50°	657.8	19.8
50°-60°	545.5	16.5
60°-70°	318.7	9.6
70°-80°	75.9	2.3
80°-90°	0.5	0.0
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°	1057.3	31.9
0°-40°	1716.5	51.8
0°-60°	2919.8	88.1
0°-90°	3314.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3314.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1373	1373	1373	1373	1373	
5°	1373	1366	1371	1367	1363	130
15°	1312	1311	1314	1308	1310	371
25°	1229	1215	1209	1205	1197	562
35°	1067	1057	1057	1051	1045	664
45°	850	852	859	850	848	658
55°	597	619	634	617	583	530
65°	282	317	373	316	280	280
75°	40	59	91	58	38	55
85°	0	0	0	0	0	0
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°	1373.0	1373.0	1373.0	1373.0	1373.0	1373.0	1373.0	1373.0	1373.0	1373.0	1373.0
2.5°	1379.1	1371.0	1377.1	1364.9	1373.0	1364.9	1366.9	1362.9	1371.0	1369.0	1366.9
5°	1373.0	1375.0	1371.0	1375.0	1369.0	1362.9	1369.0	1364.9	1352.8	1371.0	1366.9
7.5°	1358.8	1360.9	1356.8	1362.9	1358.8	1350.7	1366.9	1354.8	1352.8	1354.8	1362.9
10°	1346.7	1350.7	1348.7	1346.7	1348.7	1348.7	1344.7	1338.6	1344.7	1348.7	1346.7
12.5°	1334.5	1340.6	1336.6	1332.5	1328.5	1330.5	1334.5	1324.4	1324.4	1328.5	1340.6
15°	1312.3	1316.3	1318.3	1310.2	1310.2	1312.3	1320.4	1304.2	1312.3	1314.3	1316.3
17.5°	1294.0	1296.1	1296.1	1290.0	1294.0	1288.0	1294.0	1285.9	1294.0	1292.0	1296.1
20°	1271.8	1275.8	1271.8	1271.8	1267.7	1269.7	1269.7	1269.7	1263.7	1261.6	1265.7
22.5°	1247.5	1247.5	1243.4	1247.5	1243.4	1241.4	1251.5	1235.3	1251.5	1237.3	1249.5
25°	1229.2	1219.1	1213.0	1211.0	1219.1	1211.0	1215.1	1209.0	1213.0	1209.0	1211.0
27.5°	1186.7	1180.6	1178.6	1180.6	1180.6	1178.6	1186.7	1164.4	1178.6	1176.6	1176.6
30°	1142.2	1142.2	1146.2	1142.2	1146.2	1140.1	1148.2	1130.0	1142.2	1140.1	1142.2
32.5°	1101.7	1103.7	1103.7	1107.7	1101.7	1103.7	1103.7	1097.6	1101.7	1103.7	1099.6
35°	1067.2	1057.1	1057.1	1057.1	1057.1	1057.1	1061.2	1055.1	1061.2	1057.1	1057.1
37.5°	1018.6	1008.5	1008.5	1006.5	1016.6	1010.5	1020.7	1012.6	1012.6	1016.6	1016.6
40°	959.9	964.0	957.9	966.0	964.0	955.9	974.1	961.9	970.0	959.9	968.0
42.5°	907.2	909.3	907.2	905.2	913.3	911.3	919.4	911.3	909.3	909.3	923.4
45°	850.5	850.5	850.5	856.6	850.5	852.6	860.7	856.6	860.7	858.6	872.8
47.5°	804.0	793.8	791.8	804.0	801.9	804.0	804.0	806.0	808.0	804.0	810.0
50°	737.1	733.1	733.1	735.1	737.1	741.2	747.3	751.3	747.3	753.3	755.4
52.5°	672.3	668.3	670.3	678.4	682.5	680.4	690.6	692.6	690.6	694.6	694.6
55°	597.4	593.4	599.4	609.6	615.6	621.7	631.8	623.7	631.8	633.9	635.9
57.5°	520.5	518.4	520.5	530.6	536.7	550.8	567.0	567.0	575.1	569.1	575.1
60°	435.4	435.4	443.5	449.6	465.8	475.9	492.1	500.2	508.3	516.4	512.4
62.5°	354.4	356.4	362.5	376.7	386.8	401.0	419.2	427.3	441.5	449.6	445.5
65°	281.5	281.5	285.5	297.7	307.8	326.0	342.2	360.5	368.6	372.6	374.6
67.5°	210.6	208.6	216.7	224.8	234.9	253.1	271.4	281.5	295.7	299.7	297.7
70°	141.8	143.8	147.8	155.9	168.1	182.3	202.5	210.6	218.7	222.8	218.7
72.5°	89.1	89.1	91.1	99.2	107.3	117.5	131.6	139.7	149.9	151.9	147.8
75°	40.5	40.5	44.6	48.6	54.7	62.8	72.9	79.0	85.1	91.1	91.1
77.5°	8.1	10.1	12.2	12.2	16.2	22.3	28.4	34.4	40.5	40.5	40.5
80°	2.0	2.0	2.0	2.0	2.0	2.0	4.1	6.1	10.1	10.1	10.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1373.0	1373.0	1373.0	1373.0	1373.0	1373.0	1373.0	1373.0
2.5°	1373.0	1385.2	1373.0	1366.9	1375.0	1373.0	1366.9	1369.0
5°	1366.9	1371.0	1375.0	1358.8	1369.0	1371.0	1366.9	1362.9
7.5°	1360.9	1362.9	1360.9	1356.8	1356.8	1356.8	1360.9	1360.9
10°	1358.8	1352.8	1342.6	1336.6	1342.6	1342.6	1340.6	1356.8
12.5°	1332.5	1340.6	1334.5	1322.4	1334.5	1332.5	1332.5	1336.6
15°	1312.3	1312.3	1316.3	1300.1	1308.2	1306.2	1306.2	1310.2
17.5°	1292.0	1292.0	1290.0	1285.9	1283.9	1290.0	1283.9	1294.0
20°	1263.7	1267.7	1279.9	1259.6	1265.7	1259.6	1259.6	1247.5
22.5°	1229.2	1249.5	1239.4	1237.3	1235.3	1237.3	1241.4	1227.2
25°	1207.0	1207.0	1211.0	1198.9	1198.9	1202.9	1200.9	1196.8
27.5°	1176.6	1174.6	1172.5	1168.5	1178.6	1170.5	1170.5	1170.5
30°	1134.1	1140.1	1138.1	1128.0	1140.1	1136.1	1130.0	1117.9
32.5°	1097.6	1105.7	1093.6	1091.5	1089.5	1091.5	1093.6	1083.4
35°	1053.1	1055.1	1055.1	1047.0	1049.0	1047.0	1042.9	1045.0
37.5°	1012.6	1010.5	1000.4	996.4	998.4	998.4	1000.4	996.4
40°	955.9	961.9	961.9	947.8	951.8	947.8	947.8	945.7
42.5°	909.3	911.3	905.2	899.1	899.1	897.1	893.1	897.1
45°	860.7	858.6	852.6	846.5	846.5	844.5	840.4	848.5
47.5°	806.0	801.9	799.9	791.8	791.8	779.7	781.7	789.8
50°	751.3	747.3	739.2	735.1	729.0	723.0	720.9	720.9
52.5°	686.5	686.5	678.4	670.3	668.3	664.2	660.2	662.2
55°	629.8	629.8	623.7	609.6	601.5	591.3	585.3	583.2
57.5°	565.0	561.0	548.8	532.6	524.5	516.4	510.3	510.3
60°	500.2	490.1	477.9	463.7	449.6	435.4	431.3	429.3
62.5°	429.3	419.2	396.9	380.7	370.6	362.5	354.4	360.5
65°	358.4	344.3	324.0	307.8	297.7	285.5	279.5	279.5
67.5°	283.5	269.3	249.1	232.9	222.8	214.7	206.6	206.6
70°	208.6	198.5	180.2	166.1	158.0	145.8	143.8	143.8
72.5°	141.8	129.6	115.4	105.3	97.2	89.1	85.1	83.0
75°	79.0	70.9	60.8	54.7	46.6	42.5	38.5	38.5
77.5°	32.4	26.3	20.3	16.2	12.2	10.1	8.1	10.1
80°	6.1	4.1	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°









(END OF REPORT)