

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: P209462

Luminaire Tested: **LDSQ6B40D010 EU6B30509027 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209462
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: LDSQ6B40D010 EU6B30509027 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-43.02 W DE010-42.54 W D5LT-42.539 W DMX-41.87 W DL2-41.57 W DL3-44.71 W DLE-39.33 W
Light Source: HIGH LUMEN LED 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3715.9 lumens
Efficiency: N/A
Efficacy: 86.4 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

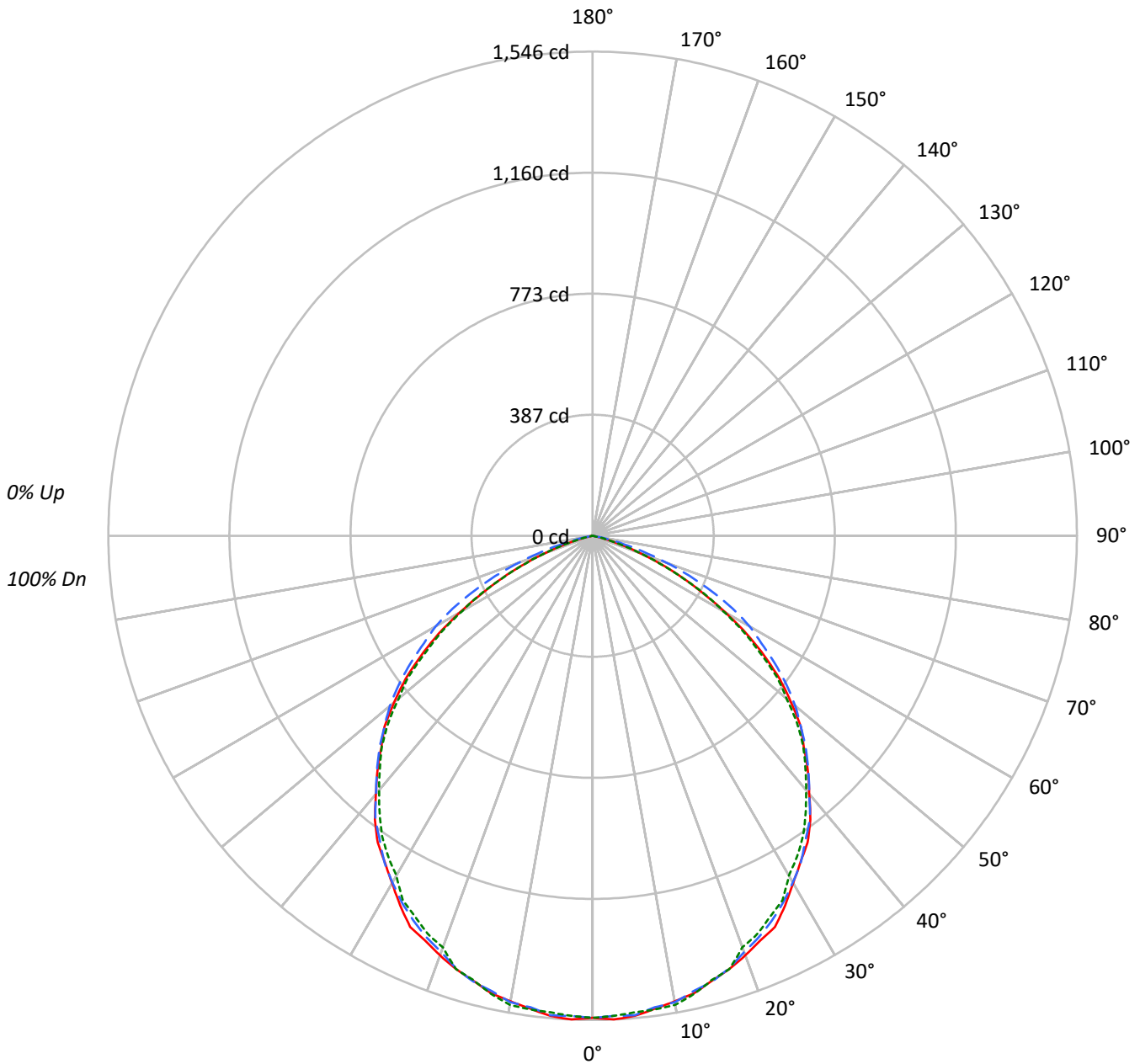
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	145.6	3.9
10°-20°	415.1	11.2
20°-30°	624.6	16.8
30°-40°	738.9	19.9
40°-50°	737.4	19.8
50°-60°	611.5	16.5
60°-70°	357.2	9.6
70°-80°	85.1	2.3
80°-90°	0.6	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°	1185.2	31.9
0°-40°	1924.1	51.8
0°-60°	3273.0	88.1
0°-90°	3715.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3715.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1539	1531	1537	1532	1528	146
15°	1471	1470	1473	1466	1469	416
25°	1378	1362	1355	1351	1342	630
35°	1196	1185	1185	1178	1171	744
45°	953	955	962	952	951	738
55°	670	694	710	691	654	595
65°	316	355	418	354	313	314
75°	45	66	102	65	43	61
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°	1539.1	1539.1	1539.1	1539.1	1539.1	1539.1	1539.1	1539.1	1539.1	1539.1	1539.1
2.5°	1545.9	1536.8	1543.6	1530.0	1539.1	1530.0	1532.3	1527.7	1536.8	1534.6	1532.3
5°	1539.1	1541.4	1536.8	1541.4	1534.6	1527.7	1534.6	1530.0	1516.4	1536.8	1532.3
7.5°	1523.2	1525.5	1520.9	1527.7	1523.2	1514.1	1532.3	1518.7	1516.4	1518.7	1527.7
10°	1509.6	1514.1	1511.9	1509.6	1511.9	1511.9	1507.3	1500.5	1507.3	1511.9	1509.6
12.5°	1496.0	1502.8	1498.2	1493.7	1489.2	1491.4	1496.0	1484.6	1484.6	1489.2	1502.8
15°	1471.0	1475.5	1477.8	1468.7	1468.7	1471.0	1480.1	1461.9	1471.0	1473.3	1475.5
17.5°	1450.6	1452.8	1452.8	1446.0	1450.6	1443.8	1450.6	1441.5	1450.6	1448.3	1452.8
20°	1425.6	1430.1	1425.6	1425.6	1421.1	1423.3	1423.3	1423.3	1416.5	1414.2	1418.8
22.5°	1398.4	1398.4	1393.8	1398.4	1393.8	1391.5	1402.9	1384.7	1402.9	1387.0	1400.6
25°	1377.9	1366.6	1359.8	1357.5	1366.6	1357.5	1362.0	1355.2	1359.8	1355.2	1357.5
27.5°	1330.3	1323.4	1321.2	1323.4	1323.4	1321.2	1330.3	1305.3	1321.2	1318.9	1318.9
30°	1280.3	1280.3	1284.9	1280.3	1284.9	1278.0	1287.1	1266.7	1280.3	1278.0	1280.3
32.5°	1234.9	1237.2	1237.2	1241.7	1234.9	1237.2	1237.2	1230.4	1234.9	1237.2	1232.6
35°	1196.3	1185.0	1185.0	1185.0	1185.0	1185.0	1189.5	1182.7	1189.5	1185.0	1185.0
37.5°	1141.8	1130.5	1130.5	1128.2	1139.6	1132.8	1144.1	1135.0	1135.0	1139.6	1139.6
40°	1076.0	1080.5	1073.7	1082.8	1080.5	1071.5	1091.9	1078.3	1087.4	1076.0	1085.1
42.5°	1017.0	1019.3	1017.0	1014.7	1023.8	1021.5	1030.6	1021.5	1019.3	1019.3	1035.1
45°	953.4	953.4	953.4	960.2	953.4	955.7	964.8	960.2	964.8	962.5	978.4
47.5°	901.2	889.9	887.6	901.2	898.9	901.2	901.2	903.5	905.8	901.2	908.0
50°	826.3	821.8	821.8	824.0	826.3	830.8	837.6	842.2	837.6	844.5	846.7
52.5°	753.7	749.1	751.4	760.5	765.0	762.7	774.1	776.4	774.1	778.6	778.6
55°	669.7	665.1	671.9	683.3	690.1	696.9	708.3	699.2	708.3	710.5	712.8
57.5°	583.4	581.1	583.4	594.8	601.6	617.5	635.6	635.6	644.7	637.9	644.7
60°	488.1	488.1	497.1	504.0	522.1	533.5	551.6	560.7	569.8	578.9	574.3
62.5°	397.3	399.5	406.3	422.2	433.6	449.5	469.9	479.0	494.9	504.0	499.4
65°	315.5	315.5	320.1	333.7	345.0	365.5	383.6	404.1	413.1	417.7	420.0
67.5°	236.1	233.8	242.9	252.0	263.3	283.8	304.2	315.5	331.4	336.0	333.7
70°	158.9	161.2	165.7	174.8	188.4	204.3	227.0	236.1	245.2	249.7	245.2
72.5°	99.9	99.9	102.2	111.2	120.3	131.7	147.6	156.6	168.0	170.3	165.7
75°	45.4	45.4	49.9	54.5	61.3	70.4	81.7	88.5	95.3	102.2	102.2
77.5°	9.1	11.4	13.6	13.6	18.2	25.0	31.8	38.6	45.4	45.4	45.4
80°	2.3	2.3	2.3	2.3	2.3	2.3	4.5	6.8	11.4	11.4	11.4
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°	1539.1	1539.1	1539.1	1539.1	1539.1	1539.1	1539.1	1539.1
2.5°	1539.1	1552.7	1539.1	1532.3	1541.4	1539.1	1532.3	1534.6
5°	1532.3	1536.8	1541.4	1523.2	1534.6	1536.8	1532.3	1527.7
7.5°	1525.5	1527.7	1525.5	1520.9	1520.9	1520.9	1525.5	1525.5
10°	1523.2	1516.4	1505.0	1498.2	1505.0	1505.0	1502.8	1520.9
12.5°	1493.7	1502.8	1496.0	1482.3	1496.0	1493.7	1493.7	1498.2
15°	1471.0	1471.0	1475.5	1457.4	1466.5	1464.2	1464.2	1468.7
17.5°	1448.3	1448.3	1446.0	1441.5	1439.2	1446.0	1439.2	1450.6
20°	1416.5	1421.1	1434.7	1412.0	1418.8	1412.0	1412.0	1398.4
22.5°	1377.9	1400.6	1389.3	1387.0	1384.7	1387.0	1391.5	1375.7
25°	1353.0	1353.0	1357.5	1343.9	1343.9	1348.4	1346.1	1341.6
27.5°	1318.9	1316.6	1314.4	1309.8	1321.2	1312.1	1312.1	1312.1
30°	1271.2	1278.0	1275.8	1264.4	1278.0	1273.5	1266.7	1253.1
32.5°	1230.4	1239.4	1225.8	1223.6	1221.3	1223.6	1225.8	1214.5
35°	1180.4	1182.7	1182.7	1173.6	1175.9	1173.6	1169.1	1171.3
37.5°	1135.0	1132.8	1121.4	1116.9	1119.1	1119.1	1121.4	1116.9
40°	1071.5	1078.3	1078.3	1062.4	1066.9	1062.4	1062.4	1060.1
42.5°	1019.3	1021.5	1014.7	1007.9	1007.9	1005.6	1001.1	1005.6
45°	964.8	962.5	955.7	948.9	948.9	946.6	942.1	951.2
47.5°	903.5	898.9	896.7	887.6	887.6	874.0	876.2	885.3
50°	842.2	837.6	828.6	824.0	817.2	810.4	808.1	808.1
52.5°	769.5	769.5	760.5	751.4	749.1	744.6	740.0	742.3
55°	706.0	706.0	699.2	683.3	674.2	662.9	656.0	653.8
57.5°	633.3	628.8	615.2	597.0	587.9	578.9	572.1	572.1
60°	560.7	549.4	535.7	519.8	504.0	488.1	483.5	481.3
62.5°	481.3	469.9	444.9	426.8	415.4	406.3	397.3	404.1
65°	401.8	385.9	363.2	345.0	333.7	320.1	313.3	313.3
67.5°	317.8	301.9	279.2	261.1	249.7	240.6	231.5	231.5
70°	233.8	222.5	202.0	186.1	177.1	163.4	161.2	161.2
72.5°	158.9	145.3	129.4	118.0	109.0	99.9	95.3	93.1
75°	88.5	79.5	68.1	61.3	52.2	47.7	43.1	43.1
77.5°	36.3	29.5	22.7	18.2	13.6	11.4	9.1	11.4
80°	6.8	4.5	2.3	2.3	2.3	2.3	2.3	2.3
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)