

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: P209463

Luminaire Tested: **LDSQ6B40D010 EU6B30509030 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209463
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 EU6B30509030 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 3000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3863.5 lumens
Efficiency: N/A
Efficacy: 89.8 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

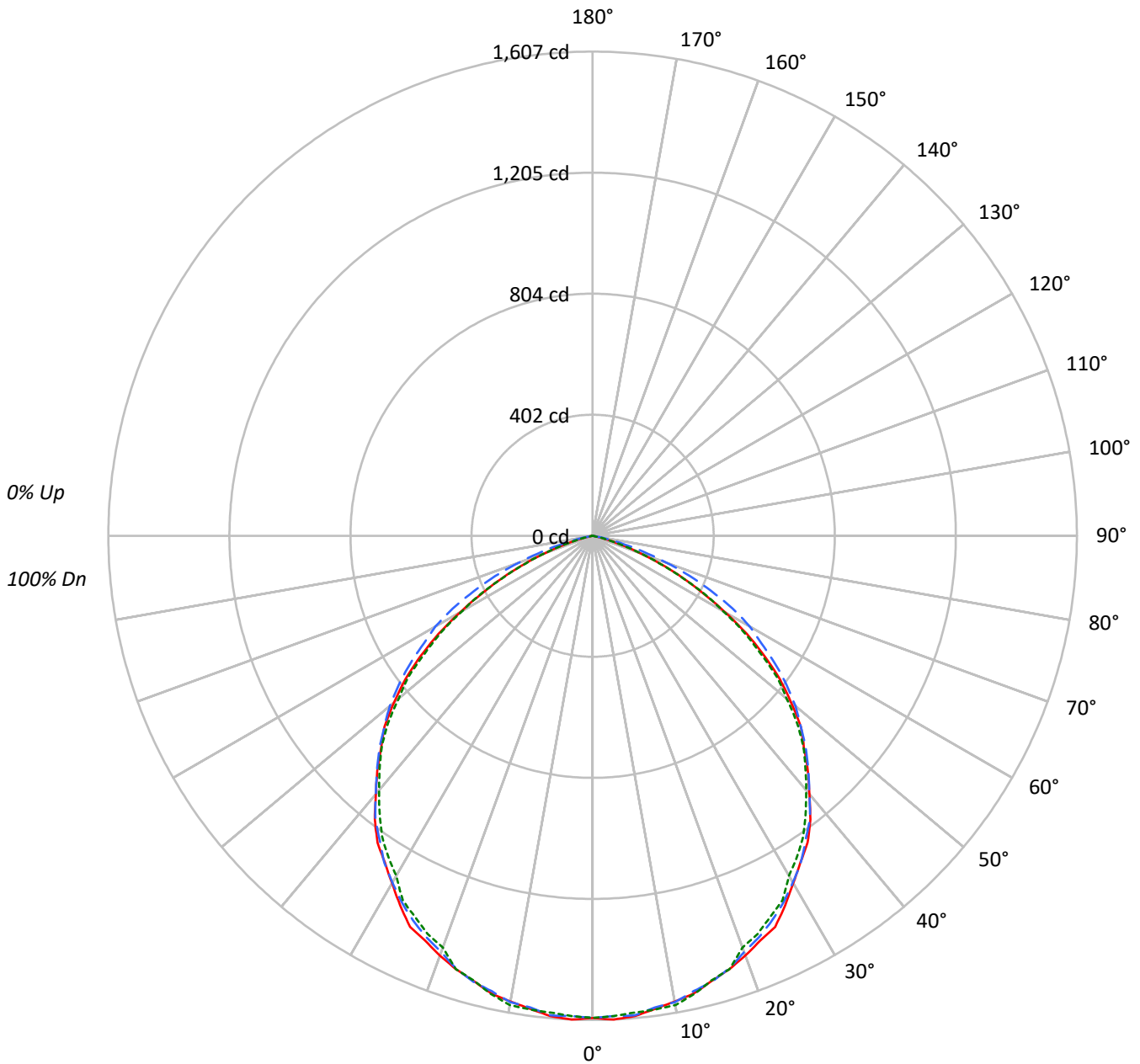
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P209463

CATALOG NUMBER: LDSQ6B40D010 EU6B30509030 6LBCSSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P209463

CATALOG NUMBER: LDSQ6B40D010 EU6B30509030 6LBCSSQ1MMS

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°			



TEST NUMBER: P209463

CATALOG NUMBER: LDSQ6B40D010 EU6B30509030 6LBCSSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.3	3.9
10°-20°	431.6	11.2
20°-30°	649.4	16.8
30°-40°	768.2	19.9
40°-50°	766.7	19.8
50°-60°	635.8	16.5
60°-70°	371.4	9.6
70°-80°	88.5	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°	1232.3	31.9
0°-40°	2000.6	51.8
0°-60°	3403.0	88.1
0°-90°	3863.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3863.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1600	1592	1598	1593	1588	152
15°	1529	1528	1532	1525	1527	432
25°	1433	1416	1409	1404	1395	655
35°	1244	1232	1232	1225	1218	773
45°	991	992	1001	990	989	767
55°	696	721	739	719	680	618
65°	328	369	434	368	326	326
75°	47	68	106	67	45	64
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P209463

CATALOG NUMBER: LDSQ6B40D010 EU6B30509030 6LBCSSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1600.2	1600.2	1600.2	1600.2	1600.2	1600.2	1600.2	1600.2	1600.2	1600.2	1600.2
2.5°	1607.3	1597.9	1605.0	1590.8	1600.2	1590.8	1593.2	1588.4	1597.9	1595.5	1593.2
5°	1600.2	1602.6	1597.9	1602.6	1595.5	1588.4	1595.5	1590.8	1576.6	1597.9	1593.2
7.5°	1583.7	1586.1	1581.4	1588.4	1583.7	1574.3	1593.2	1579.0	1576.6	1579.0	1588.4
10°	1569.6	1574.3	1571.9	1569.6	1571.9	1571.9	1567.2	1560.1	1567.2	1571.9	1569.6
12.5°	1555.4	1562.5	1557.8	1553.0	1548.3	1550.7	1555.4	1543.6	1543.6	1548.3	1562.5
15°	1529.4	1534.2	1536.5	1527.1	1527.1	1529.4	1538.9	1520.0	1529.4	1531.8	1534.2
17.5°	1508.2	1510.6	1510.6	1503.5	1508.2	1501.1	1508.2	1498.8	1508.2	1505.8	1510.6
20°	1482.2	1487.0	1482.2	1482.2	1477.5	1479.9	1479.9	1479.9	1472.8	1470.4	1475.2
22.5°	1453.9	1453.9	1449.2	1453.9	1449.2	1446.8	1458.6	1439.7	1458.6	1442.1	1456.3
25°	1432.7	1420.9	1413.8	1411.4	1420.9	1411.4	1416.1	1409.1	1413.8	1409.1	1411.4
27.5°	1383.1	1376.0	1373.7	1376.0	1376.0	1373.7	1383.1	1357.1	1373.7	1371.3	1371.3
30°	1331.2	1331.2	1335.9	1331.2	1335.9	1328.8	1338.3	1317.0	1331.2	1328.8	1331.2
32.5°	1284.0	1286.3	1286.3	1291.1	1284.0	1286.3	1286.3	1279.3	1284.0	1286.3	1281.6
35°	1243.8	1232.0	1232.0	1232.0	1232.0	1232.0	1236.8	1229.7	1236.8	1232.0	1232.0
37.5°	1187.2	1175.4	1175.4	1173.0	1184.8	1177.8	1189.6	1180.1	1180.1	1184.8	1184.8
40°	1118.8	1123.5	1116.4	1125.8	1123.5	1114.0	1135.3	1121.1	1130.6	1118.8	1128.2
42.5°	1057.4	1059.7	1057.4	1055.0	1064.5	1062.1	1071.6	1062.1	1059.7	1059.7	1076.3
45°	991.3	991.3	991.3	998.4	991.3	993.7	1003.1	998.4	1003.1	1000.7	1017.3
47.5°	937.0	925.2	922.9	937.0	934.7	937.0	937.0	939.4	941.7	937.0	944.1
50°	859.1	854.4	854.4	856.8	859.1	863.8	870.9	875.7	870.9	878.0	880.4
52.5°	783.6	778.9	781.2	790.7	795.4	793.0	804.8	807.2	804.8	809.6	809.6
55°	696.3	691.6	698.6	710.4	717.5	724.6	736.4	727.0	736.4	738.8	741.1
57.5°	606.6	604.2	606.6	618.4	625.5	642.0	660.9	660.9	670.3	663.2	670.3
60°	507.5	507.5	516.9	524.0	542.9	554.7	573.5	583.0	592.4	601.9	597.1
62.5°	413.0	415.4	422.5	439.0	450.8	467.3	488.6	498.0	514.5	524.0	519.3
65°	328.1	328.1	332.8	347.0	358.8	380.0	398.9	420.1	429.6	434.3	436.6
67.5°	245.5	243.1	252.5	262.0	273.8	295.0	316.3	328.1	344.6	349.3	347.0
70°	165.2	167.6	172.3	181.7	195.9	212.4	236.0	245.5	254.9	259.6	254.9
72.5°	103.9	103.9	106.2	115.7	125.1	136.9	153.4	162.9	174.7	177.0	172.3
75°	47.2	47.2	51.9	56.6	63.7	73.2	85.0	92.0	99.1	106.2	106.2
77.5°	9.4	11.8	14.2	14.2	18.9	26.0	33.0	40.1	47.2	47.2	47.2
80°	2.4	2.4	2.4	2.4	2.4	2.4	4.7	7.1	11.8	11.8	11.8
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



TEST NUMBER: P209463

CATALOG NUMBER: LDSQ6B40D010 EU6B30509030 6LBCSSQ1MMS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1600.2	1600.2	1600.2	1600.2	1600.2	1600.2	1600.2	1600.2
2.5°	1600.2	1614.4	1600.2	1593.2	1602.6	1600.2	1593.2	1595.5
5°	1593.2	1597.9	1602.6	1583.7	1595.5	1597.9	1593.2	1588.4
7.5°	1586.1	1588.4	1586.1	1581.4	1581.4	1581.4	1586.1	1586.1
10°	1583.7	1576.6	1564.8	1557.8	1564.8	1564.8	1562.5	1581.4
12.5°	1553.0	1562.5	1555.4	1541.2	1555.4	1553.0	1553.0	1557.8
15°	1529.4	1529.4	1534.2	1515.3	1524.7	1522.4	1522.4	1527.1
17.5°	1505.8	1505.8	1503.5	1498.8	1496.4	1503.5	1496.4	1508.2
20°	1472.8	1477.5	1491.7	1468.1	1475.2	1468.1	1468.1	1453.9
22.5°	1432.7	1456.3	1444.5	1442.1	1439.7	1442.1	1446.8	1430.3
25°	1406.7	1406.7	1411.4	1397.3	1397.3	1402.0	1399.6	1394.9
27.5°	1371.3	1368.9	1366.6	1361.9	1373.7	1364.2	1364.2	1364.2
30°	1321.7	1328.8	1326.5	1314.7	1328.8	1324.1	1317.0	1302.9
32.5°	1279.3	1288.7	1274.5	1272.2	1269.8	1272.2	1274.5	1262.7
35°	1227.3	1229.7	1229.7	1220.2	1222.6	1220.2	1215.5	1217.9
37.5°	1180.1	1177.8	1166.0	1161.2	1163.6	1163.6	1166.0	1161.2
40°	1114.0	1121.1	1121.1	1104.6	1109.3	1104.6	1104.6	1102.2
42.5°	1059.7	1062.1	1055.0	1047.9	1047.9	1045.6	1040.9	1045.6
45°	1003.1	1000.7	993.7	986.6	986.6	984.2	979.5	988.9
47.5°	939.4	934.7	932.3	922.9	922.9	908.7	911.1	920.5
50°	875.7	870.9	861.5	856.8	849.7	842.6	840.2	840.2
52.5°	800.1	800.1	790.7	781.2	778.9	774.2	769.4	771.8
55°	734.0	734.0	727.0	710.4	701.0	689.2	682.1	679.8
57.5°	658.5	653.8	639.6	620.7	611.3	601.9	594.8	594.8
60°	583.0	571.2	557.0	540.5	524.0	507.5	502.7	500.4
62.5°	500.4	488.6	462.6	443.7	431.9	422.5	413.0	420.1
65°	417.8	401.2	377.6	358.8	347.0	332.8	325.7	325.7
67.5°	330.4	313.9	290.3	271.4	259.6	250.2	240.7	240.7
70°	243.1	231.3	210.1	193.5	184.1	169.9	167.6	167.6
72.5°	165.2	151.1	134.5	122.7	113.3	103.9	99.1	96.8
75°	92.0	82.6	70.8	63.7	54.3	49.6	44.8	44.8
77.5°	37.8	30.7	23.6	18.9	14.2	11.8	9.4	11.8
80°	7.1	4.7	2.4	2.4	2.4	2.4	2.4	2.4
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



Report Generated By E9808895 / USPTCWHP6082093





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









(END OF REPORT)