

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: P209474

Luminaire Tested: **LDSQ6B50D010 EU6B30509024 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209474
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: LDSQ6B50D010 EU6B30509024 6LBCSSQ1MMS
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
D010TE
Light Source: HIGH LUMEN LED 2400 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4171.9 lumens
Efficiency: N/A
Efficacy: 71.0 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

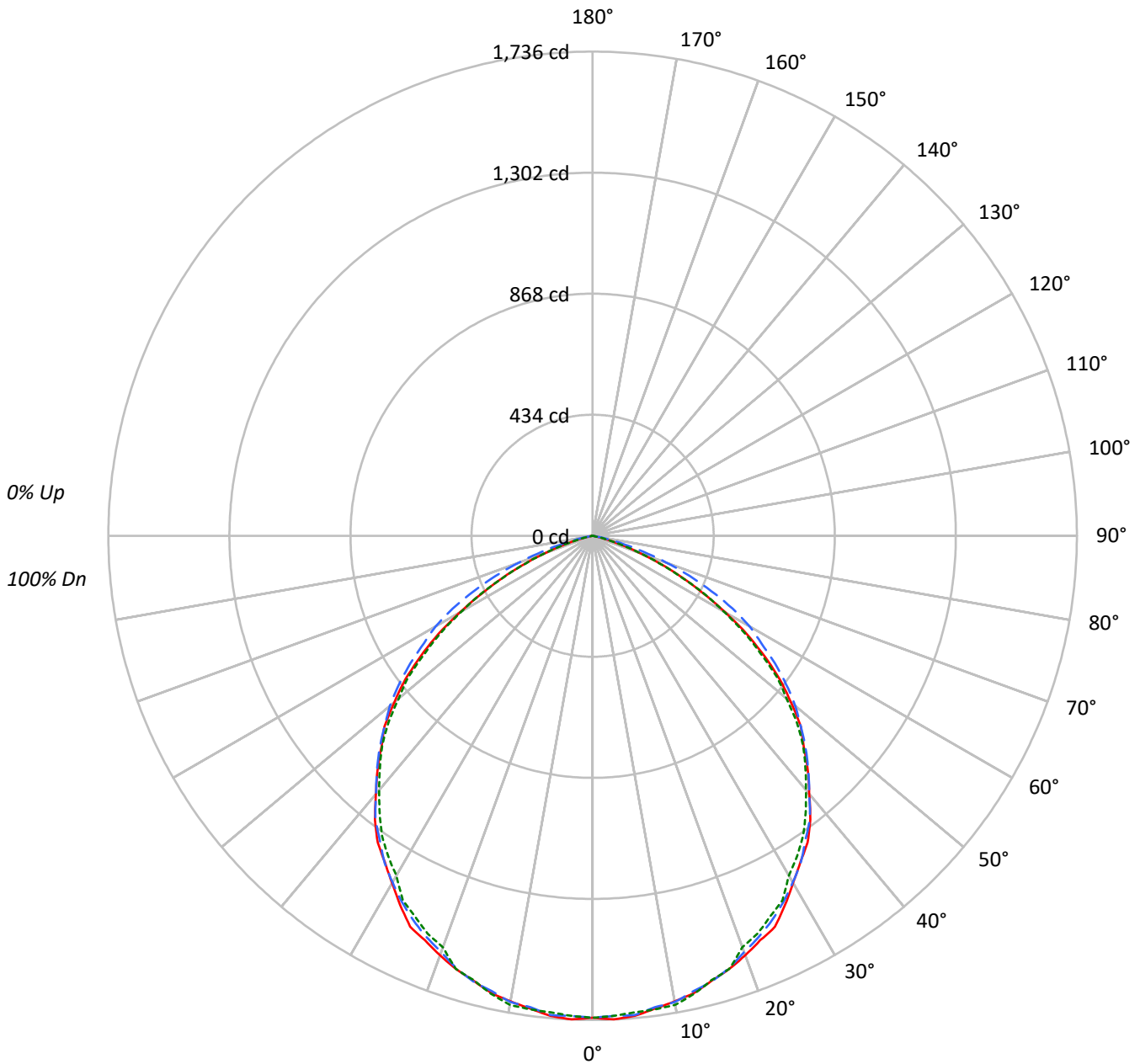
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	163.4	3.9
10°-20°	466.0	11.2
20°-30°	701.2	16.8
30°-40°	829.6	19.9
40°-50°	827.9	19.8
50°-60°	686.5	16.5
60°-70°	401.1	9.6
70°-80°	95.5	2.3
80°-90°	0.7	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°	1330.7	31.9
0°-40°	2160.2	51.8
0°-60°	3674.6	88.1
0°-90°	4171.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4171.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1728	1728	1728	1728	1728	
5°	1728	1719	1725	1720	1715	164
15°	1652	1650	1654	1646	1649	467
25°	1547	1529	1522	1516	1506	707
35°	1343	1330	1330	1323	1315	835
45°	1070	1072	1081	1069	1068	828
55°	752	779	798	776	734	668
65°	354	399	469	398	352	352
75°	51	74	115	73	48	69
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°	1728.0	1728.0	1728.0	1728.0	1728.0	1728.0	1728.0	1728.0	1728.0	1728.0	1728.0
2.5°	1735.6	1725.4	1733.1	1717.8	1728.0	1717.8	1720.3	1715.2	1725.4	1722.9	1720.3
5°	1728.0	1730.5	1725.4	1730.5	1722.9	1715.2	1722.9	1717.8	1702.5	1725.4	1720.3
7.5°	1710.1	1712.7	1707.6	1715.2	1710.1	1699.9	1720.3	1705.0	1702.5	1705.0	1715.2
10°	1694.8	1699.9	1697.4	1694.8	1697.4	1697.4	1692.3	1684.6	1692.3	1697.4	1694.8
12.5°	1679.5	1687.2	1682.1	1677.0	1671.9	1674.4	1679.5	1666.8	1666.8	1671.9	1687.2
15°	1651.5	1656.6	1659.1	1649.0	1649.0	1651.5	1661.7	1641.3	1651.5	1654.1	1656.6
17.5°	1628.6	1631.1	1631.1	1623.5	1628.6	1620.9	1628.6	1618.4	1628.6	1626.0	1631.1
20°	1600.5	1605.6	1600.5	1600.5	1595.4	1598.0	1598.0	1598.0	1590.3	1587.8	1592.9
22.5°	1569.9	1569.9	1564.9	1569.9	1564.9	1562.3	1575.0	1554.7	1575.0	1557.2	1572.5
25°	1547.0	1534.3	1526.6	1524.1	1534.3	1524.1	1529.2	1521.5	1526.6	1521.5	1524.1
27.5°	1493.5	1485.8	1483.3	1485.8	1485.8	1483.3	1493.5	1465.5	1483.3	1480.7	1480.7
30°	1437.4	1437.4	1442.5	1437.4	1442.5	1434.9	1445.1	1422.1	1437.4	1434.9	1437.4
32.5°	1386.4	1389.0	1389.0	1394.1	1386.4	1389.0	1389.0	1381.3	1386.4	1389.0	1383.9
35°	1343.1	1330.4	1330.4	1330.4	1330.4	1330.4	1335.5	1327.8	1335.5	1330.4	1330.4
37.5°	1282.0	1269.2	1269.2	1266.7	1279.4	1271.8	1284.5	1274.3	1274.3	1279.4	1279.4
40°	1208.0	1213.1	1205.5	1215.7	1213.1	1202.9	1225.9	1210.6	1220.8	1208.0	1218.2
42.5°	1141.8	1144.3	1141.8	1139.2	1149.4	1146.9	1157.1	1146.9	1144.3	1144.3	1162.2
45°	1070.4	1070.4	1070.4	1078.1	1070.4	1073.0	1083.2	1078.1	1083.2	1080.6	1098.5
47.5°	1011.8	999.1	996.5	1011.8	1009.3	1011.8	1011.8	1014.3	1016.9	1011.8	1019.4
50°	927.7	922.6	922.6	925.1	927.7	932.8	940.4	945.5	940.4	948.1	950.6
52.5°	846.1	841.0	843.6	853.8	858.9	856.3	869.1	871.6	869.1	874.2	874.2
55°	751.8	746.7	754.4	767.1	774.8	782.4	795.2	785.0	795.2	797.7	800.3
57.5°	655.0	652.4	655.0	667.7	675.4	693.2	713.6	713.6	723.8	716.2	723.8
60°	548.0	548.0	558.1	565.8	586.2	598.9	619.3	629.5	639.7	649.9	644.8
62.5°	446.0	448.6	456.2	474.0	486.8	504.6	527.6	537.8	555.6	565.8	560.7
65°	354.3	354.3	359.4	374.6	387.4	410.3	430.7	453.7	463.8	468.9	471.5
67.5°	265.1	262.5	272.7	282.9	295.6	318.6	341.5	354.3	372.1	377.2	374.6
70°	178.4	181.0	186.0	196.2	211.5	229.4	254.9	265.1	275.3	280.3	275.3
72.5°	112.1	112.1	114.7	124.9	135.1	147.8	165.7	175.9	188.6	191.1	186.0
75°	51.0	51.0	56.1	61.2	68.8	79.0	91.8	99.4	107.0	114.7	114.7
77.5°	10.2	12.7	15.3	15.3	20.4	28.0	35.7	43.3	51.0	51.0	51.0
80°	2.5	2.5	2.5	2.5	2.5	2.5	5.1	7.6	12.7	12.7	12.7
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°	1728.0	1728.0	1728.0	1728.0	1728.0	1728.0	1728.0	1728.0
2.5°	1728.0	1743.3	1728.0	1720.3	1730.5	1728.0	1720.3	1722.9
5°	1720.3	1725.4	1730.5	1710.1	1722.9	1725.4	1720.3	1715.2
7.5°	1712.7	1715.2	1712.7	1707.6	1707.6	1707.6	1712.7	1712.7
10°	1710.1	1702.5	1689.7	1682.1	1689.7	1689.7	1687.2	1707.6
12.5°	1677.0	1687.2	1679.5	1664.2	1679.5	1677.0	1677.0	1682.1
15°	1651.5	1651.5	1656.6	1636.2	1646.4	1643.9	1643.9	1649.0
17.5°	1626.0	1626.0	1623.5	1618.4	1615.8	1623.5	1615.8	1628.6
20°	1590.3	1595.4	1610.7	1585.2	1592.9	1585.2	1585.2	1569.9
22.5°	1547.0	1572.5	1559.8	1557.2	1554.7	1557.2	1562.3	1544.5
25°	1519.0	1519.0	1524.1	1508.8	1508.8	1513.9	1511.3	1506.2
27.5°	1480.7	1478.2	1475.6	1470.6	1483.3	1473.1	1473.1	1473.1
30°	1427.2	1434.9	1432.3	1419.6	1434.9	1429.8	1422.1	1406.8
32.5°	1381.3	1391.5	1376.3	1373.7	1371.2	1373.7	1376.3	1363.5
35°	1325.3	1327.8	1327.8	1317.6	1320.2	1317.6	1312.5	1315.1
37.5°	1274.3	1271.8	1259.0	1253.9	1256.5	1256.5	1259.0	1253.9
40°	1202.9	1210.6	1210.6	1192.8	1197.8	1192.8	1192.8	1190.2
42.5°	1144.3	1146.9	1139.2	1131.6	1131.6	1129.0	1123.9	1129.0
45°	1083.2	1080.6	1073.0	1065.3	1065.3	1062.8	1057.7	1067.9
47.5°	1014.3	1009.3	1006.7	996.5	996.5	981.2	983.8	994.0
50°	945.5	940.4	930.2	925.1	917.5	909.9	907.3	907.3
52.5°	864.0	864.0	853.8	843.6	841.0	835.9	830.8	833.4
55°	792.6	792.6	785.0	767.1	756.9	744.2	736.6	734.0
57.5°	711.1	706.0	690.7	670.3	660.1	649.9	642.3	642.3
60°	629.5	616.8	601.5	583.6	565.8	548.0	542.9	540.3
62.5°	540.3	527.6	499.5	479.1	466.4	456.2	446.0	453.7
65°	451.1	433.3	407.8	387.4	374.6	359.4	351.7	351.7
67.5°	356.8	339.0	313.5	293.1	280.3	270.2	260.0	260.0
70°	262.5	249.8	226.8	209.0	198.8	183.5	181.0	181.0
72.5°	178.4	163.1	145.3	132.5	122.3	112.1	107.0	104.5
75°	99.4	89.2	76.5	68.8	58.6	53.5	48.4	48.4
77.5°	40.8	33.1	25.5	20.4	15.3	12.7	10.2	12.7
80°	7.6	5.1	2.5	2.5	2.5	2.5	2.5	2.5
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)