

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: P209458

Luminaire Tested: **LDSQ6B40D010 EU6B30508030 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209458
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 EU6B30508030 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: 4523.9 lumens
Efficiency: N/A
Efficacy: 105.2 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

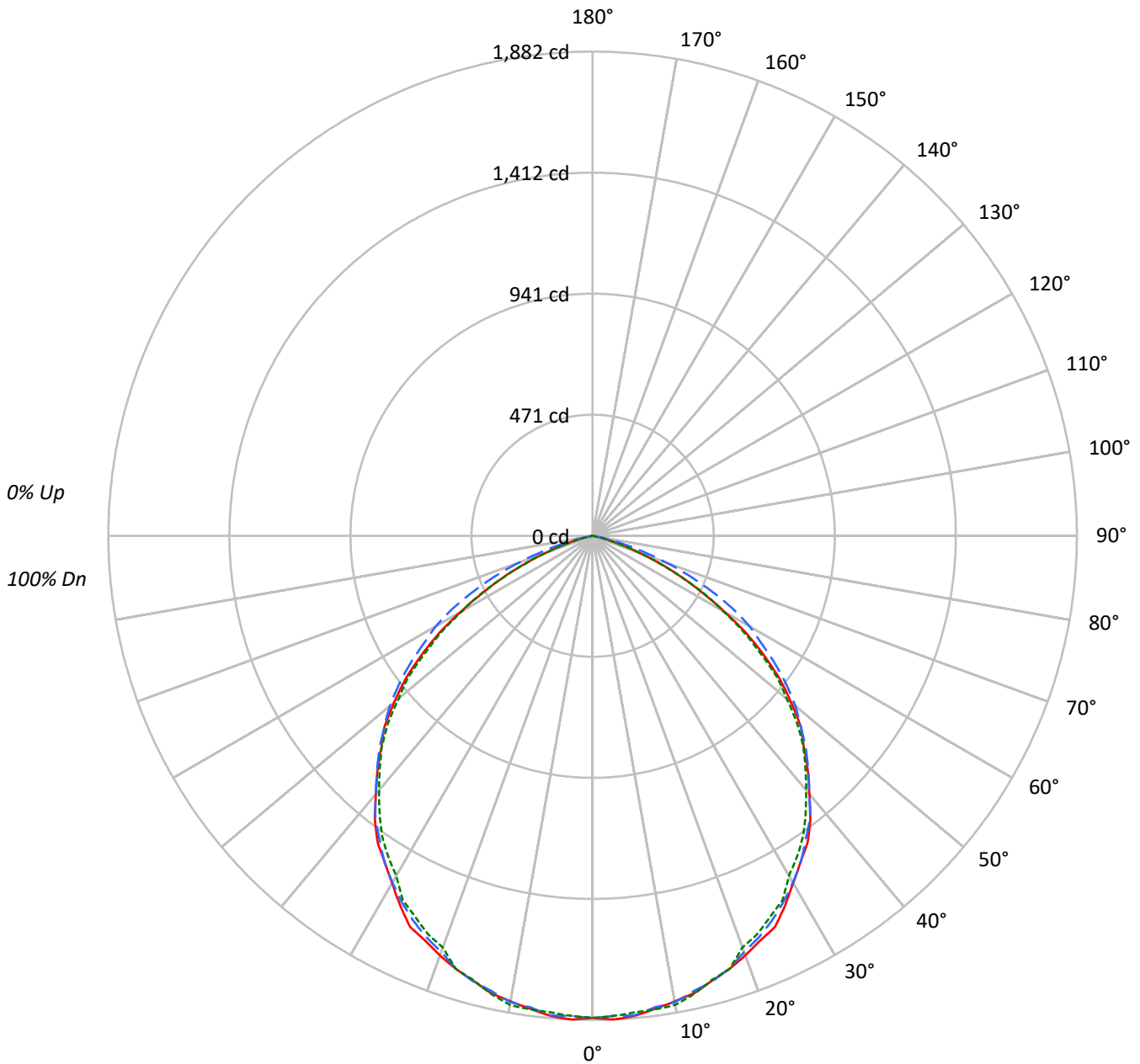
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	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°	177.2	3.9
10°-20°	505.3	11.2
20°-30°	760.4	16.8
30°-40°	899.6	19.9
40°-50°	897.7	19.8
50°-60°	744.4	16.5
60°-70°	434.9	9.6
70°-80°	103.6	2.3
80°-90°	0.8	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°	1443.0	31.9
0°-40°	2342.5	51.8
0°-60°	3984.7	88.1
0°-90°	4523.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4523.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1874	1874	1874	1874	1874	
5°	1874	1864	1871	1865	1860	178
15°	1791	1790	1794	1785	1788	506
25°	1678	1658	1650	1644	1633	767
35°	1456	1443	1443	1434	1426	905
45°	1161	1162	1172	1159	1158	898
55°	815	844	865	842	796	724
65°	384	433	508	431	381	382
75°	55	80	124	79	52	75
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1873.8	1873.8	1873.8	1873.8	1873.8	1873.8	1873.8	1873.8	1873.8	1873.8	1873.8
2.5°	1882.1	1871.0	1879.3	1862.7	1873.8	1862.7	1865.5	1860.0	1871.0	1868.3	1865.5
5°	1873.8	1876.5	1871.0	1876.5	1868.3	1860.0	1868.3	1862.7	1846.1	1871.0	1865.5
7.5°	1854.4	1857.2	1851.7	1860.0	1854.4	1843.4	1865.5	1848.9	1846.1	1848.9	1860.0
10°	1837.8	1843.4	1840.6	1837.8	1840.6	1840.6	1835.1	1826.8	1835.1	1840.6	1837.8
12.5°	1821.3	1829.6	1824.0	1818.5	1813.0	1815.7	1821.3	1807.4	1807.4	1813.0	1829.6
15°	1790.9	1796.4	1799.2	1788.1	1788.1	1790.9	1801.9	1779.8	1790.9	1793.6	1796.4
17.5°	1766.0	1768.8	1768.8	1760.5	1766.0	1757.7	1766.0	1754.9	1766.0	1763.2	1768.8
20°	1735.6	1741.1	1735.6	1735.6	1730.1	1732.8	1732.8	1732.8	1724.5	1721.8	1727.3
22.5°	1702.4	1702.4	1696.9	1702.4	1696.9	1694.1	1708.0	1685.8	1708.0	1688.6	1705.2
25°	1677.6	1663.7	1655.4	1652.7	1663.7	1652.7	1658.2	1649.9	1655.4	1649.9	1652.7
27.5°	1619.5	1611.2	1608.5	1611.2	1611.2	1608.5	1619.5	1589.1	1608.5	1605.7	1605.7
30°	1558.7	1558.7	1564.2	1558.7	1564.2	1556.0	1567.0	1542.1	1558.7	1556.0	1558.7
32.5°	1503.4	1506.2	1506.2	1511.7	1503.4	1506.2	1506.2	1497.9	1503.4	1506.2	1500.7
35°	1456.5	1442.6	1442.6	1442.6	1442.6	1442.6	1448.2	1439.9	1448.2	1442.6	1442.6
37.5°	1390.1	1376.3	1376.3	1373.6	1387.4	1379.1	1392.9	1381.8	1381.8	1387.4	1387.4
40°	1310.0	1315.5	1307.2	1318.3	1315.5	1304.5	1329.3	1312.7	1323.8	1310.0	1321.0
42.5°	1238.1	1240.9	1238.1	1235.4	1246.4	1243.7	1254.7	1243.7	1240.9	1240.9	1260.2
45°	1160.7	1160.7	1160.7	1169.0	1160.7	1163.5	1174.6	1169.0	1174.6	1171.8	1191.1
47.5°	1097.2	1083.4	1080.6	1097.2	1094.4	1097.2	1097.2	1099.9	1102.7	1097.2	1105.5
50°	1006.0	1000.5	1000.5	1003.2	1006.0	1011.5	1019.8	1025.3	1019.8	1028.1	1030.9
52.5°	917.5	912.0	914.8	925.8	931.4	928.6	942.4	945.2	942.4	947.9	947.9
55°	815.3	809.8	818.1	831.9	840.2	848.5	862.3	851.2	862.3	865.0	867.8
57.5°	710.3	707.5	710.3	724.1	732.4	751.7	773.8	773.8	784.9	776.6	784.9
60°	594.2	594.2	605.2	613.5	635.6	649.5	671.6	682.6	693.7	704.7	699.2
62.5°	483.6	486.4	494.7	514.0	527.9	547.2	572.1	583.1	602.5	613.5	608.0
65°	384.2	384.2	389.7	406.3	420.1	445.0	467.1	491.9	503.0	508.5	511.3
67.5°	287.4	284.7	295.7	306.8	320.6	345.5	370.3	384.2	403.5	409.0	406.3
70°	193.5	196.2	201.7	212.8	229.4	248.7	276.4	287.4	298.5	304.0	298.5
72.5°	121.6	121.6	124.4	135.4	146.5	160.3	179.6	190.7	204.5	207.3	201.7
75°	55.3	55.3	60.8	66.3	74.6	85.7	99.5	107.8	116.1	124.4	124.4
77.5°	11.1	13.8	16.6	16.6	22.1	30.4	38.7	47.0	55.3	55.3	55.3
80°	2.8	2.8	2.8	2.8	2.8	2.8	5.5	8.3	13.8	13.8	13.8
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1873.8	1873.8	1873.8	1873.8	1873.8	1873.8	1873.8	1873.8
2.5°	1873.8	1890.4	1873.8	1865.5	1876.5	1873.8	1865.5	1868.3
5°	1865.5	1871.0	1876.5	1854.4	1868.3	1871.0	1865.5	1860.0
7.5°	1857.2	1860.0	1857.2	1851.7	1851.7	1851.7	1857.2	1857.2
10°	1854.4	1846.1	1832.3	1824.0	1832.3	1832.3	1829.6	1851.7
12.5°	1818.5	1829.6	1821.3	1804.7	1821.3	1818.5	1818.5	1824.0
15°	1790.9	1790.9	1796.4	1774.3	1785.3	1782.6	1782.6	1788.1
17.5°	1763.2	1763.2	1760.5	1754.9	1752.2	1760.5	1752.2	1766.0
20°	1724.5	1730.1	1746.6	1719.0	1727.3	1719.0	1719.0	1702.4
22.5°	1677.6	1705.2	1691.4	1688.6	1685.8	1688.6	1694.1	1674.8
25°	1647.2	1647.2	1652.7	1636.1	1636.1	1641.6	1638.9	1633.3
27.5°	1605.7	1602.9	1600.2	1594.6	1608.5	1597.4	1597.4	1597.4
30°	1547.7	1556.0	1553.2	1539.4	1556.0	1550.4	1542.1	1525.6
32.5°	1497.9	1509.0	1492.4	1489.6	1486.9	1489.6	1492.4	1478.6
35°	1437.1	1439.9	1439.9	1428.8	1431.6	1428.8	1423.3	1426.1
37.5°	1381.8	1379.1	1365.3	1359.7	1362.5	1362.5	1365.3	1359.7
40°	1304.5	1312.7	1312.7	1293.4	1298.9	1293.4	1293.4	1290.6
42.5°	1240.9	1243.7	1235.4	1227.1	1227.1	1224.3	1218.8	1224.3
45°	1174.6	1171.8	1163.5	1155.2	1155.2	1152.5	1146.9	1158.0
47.5°	1099.9	1094.4	1091.7	1080.6	1080.6	1064.0	1066.8	1077.8
50°	1025.3	1019.8	1008.7	1003.2	994.9	986.6	983.9	983.9
52.5°	936.9	936.9	925.8	914.8	912.0	906.5	901.0	903.7
55°	859.5	859.5	851.2	831.9	820.8	807.0	798.7	795.9
57.5°	771.1	765.5	749.0	726.8	715.8	704.7	696.4	696.4
60°	682.6	668.8	652.2	632.9	613.5	594.2	588.7	585.9
62.5°	585.9	572.1	541.7	519.6	505.8	494.7	483.6	491.9
65°	489.2	469.8	442.2	420.1	406.3	389.7	381.4	381.4
67.5°	386.9	367.6	339.9	317.8	304.0	293.0	281.9	281.9
70°	284.7	270.8	246.0	226.6	215.6	199.0	196.2	196.2
72.5°	193.5	176.9	157.5	143.7	132.7	121.6	116.1	113.3
75°	107.8	96.7	82.9	74.6	63.6	58.0	52.5	52.5
77.5°	44.2	35.9	27.6	22.1	16.6	13.8	11.1	13.8
80°	8.3	5.5	2.8	2.8	2.8	2.8	2.8	2.8
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)