

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: P209457

Luminaire Tested: **LDSQ6B40D010 EU6B30508027 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209457
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 EU6B30508027 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: 4327.5 lumens
Efficiency: N/A
Efficacy: 100.6 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

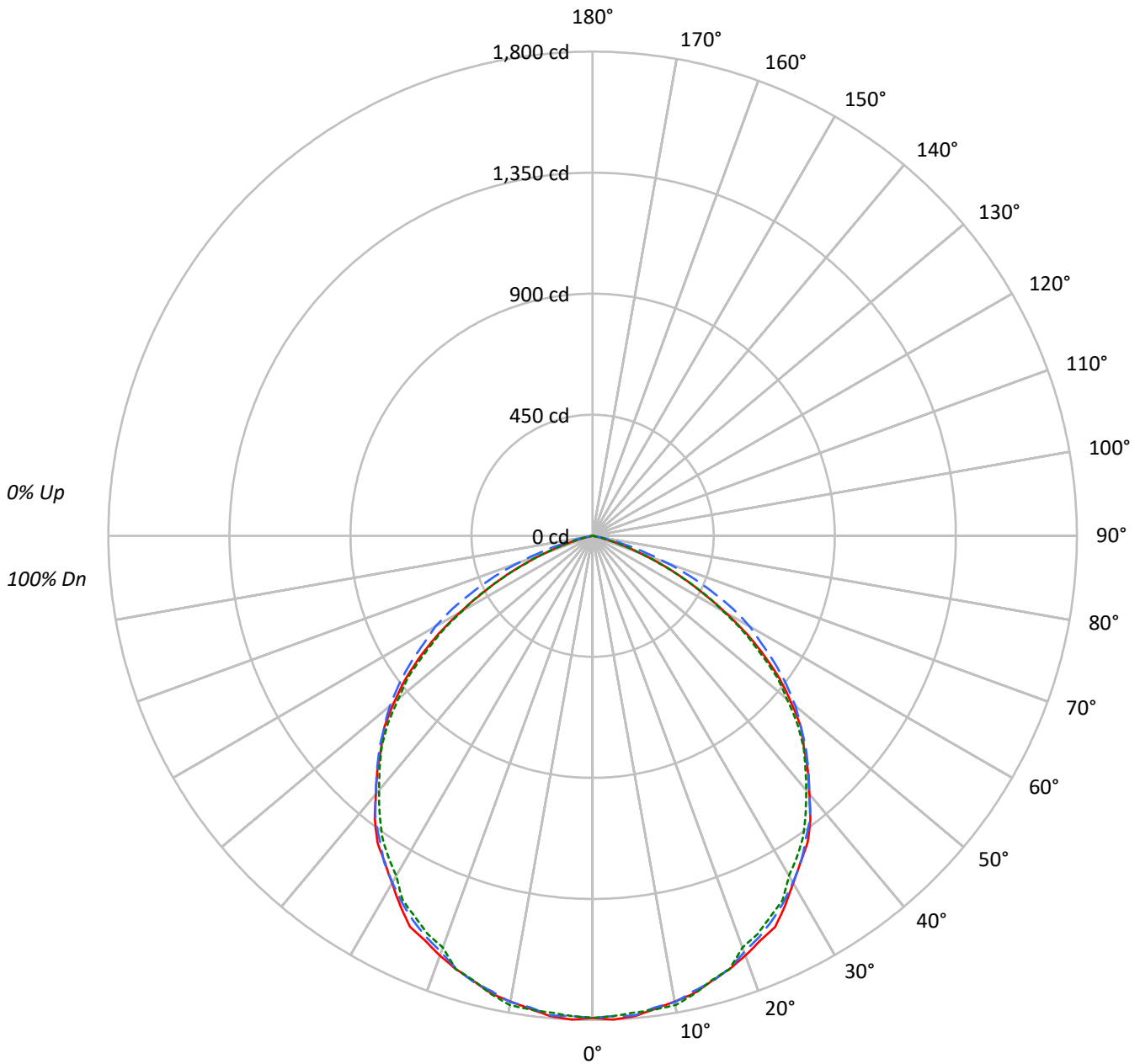
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	169.5	3.9
10°-20°	483.4	11.2
20°-30°	727.4	16.8
30°-40°	860.5	19.9
40°-50°	858.7	19.8
50°-60°	712.1	16.5
60°-70°	416.0	9.6
70°-80°	99.1	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°	1380.3	31.9
0°-40°	2240.8	51.8
0°-60°	3811.7	88.1
0°-90°	4327.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4327.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1792	1792	1792	1792	1792	
5°	1792	1783	1790	1784	1779	170
15°	1713	1712	1716	1708	1710	484
25°	1605	1586	1578	1573	1562	733
35°	1393	1380	1380	1372	1364	866
45°	1110	1112	1121	1109	1108	859
55°	780	808	828	805	761	692
65°	368	414	486	412	365	365
75°	53	77	119	75	50	72
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°	1792.4	1792.4	1792.4	1792.4	1792.4	1792.4	1792.4	1792.4	1792.4	1792.4	1792.4
2.5°	1800.4	1789.8	1797.7	1781.9	1792.4	1781.9	1784.5	1779.2	1789.8	1787.1	1784.5
5°	1792.4	1795.1	1789.8	1795.1	1787.1	1779.2	1787.1	1781.9	1766.0	1789.8	1784.5
7.5°	1773.9	1776.6	1771.3	1779.2	1773.9	1763.3	1784.5	1768.6	1766.0	1768.6	1779.2
10°	1758.1	1763.3	1760.7	1758.1	1760.7	1760.7	1755.4	1747.5	1755.4	1760.7	1758.1
12.5°	1742.2	1750.1	1744.8	1739.6	1734.3	1736.9	1742.2	1729.0	1729.0	1734.3	1750.1
15°	1713.1	1718.4	1721.0	1710.5	1710.5	1713.1	1723.7	1702.5	1713.1	1715.8	1718.4
17.5°	1689.3	1692.0	1692.0	1684.0	1689.3	1681.4	1689.3	1678.7	1689.3	1686.7	1692.0
20°	1660.2	1665.5	1660.2	1660.2	1655.0	1657.6	1657.6	1657.6	1649.7	1647.0	1652.3
22.5°	1628.5	1628.5	1623.2	1628.5	1623.2	1620.6	1633.8	1612.7	1633.8	1615.3	1631.2
25°	1604.7	1591.5	1583.6	1580.9	1591.5	1580.9	1586.2	1578.3	1583.6	1578.3	1580.9
27.5°	1549.2	1541.3	1538.6	1541.3	1541.3	1538.6	1549.2	1520.1	1538.6	1536.0	1536.0
30°	1491.0	1491.0	1496.3	1491.0	1496.3	1488.4	1499.0	1475.2	1491.0	1488.4	1491.0
32.5°	1438.2	1440.8	1440.8	1446.1	1438.2	1440.8	1440.8	1432.9	1438.2	1440.8	1435.5
35°	1393.2	1380.0	1380.0	1380.0	1380.0	1380.0	1385.3	1377.4	1385.3	1380.0	1380.0
37.5°	1329.8	1316.6	1316.6	1313.9	1327.1	1319.2	1332.4	1321.8	1321.8	1327.1	1327.1
40°	1253.1	1258.4	1250.5	1261.0	1258.4	1247.8	1271.6	1255.8	1266.3	1253.1	1263.7
42.5°	1184.4	1187.0	1184.4	1181.7	1192.3	1189.7	1200.2	1189.7	1187.0	1187.0	1205.5
45°	1110.4	1110.4	1110.4	1118.3	1110.4	1113.0	1123.6	1118.3	1123.6	1120.9	1139.4
47.5°	1049.5	1036.3	1033.7	1049.5	1046.9	1049.5	1049.5	1052.2	1054.8	1049.5	1057.5
50°	962.3	957.0	957.0	959.7	962.3	967.6	975.5	980.8	975.5	983.5	986.1
52.5°	877.7	872.4	875.1	885.6	890.9	888.3	901.5	904.1	901.5	906.8	906.8
55°	779.9	774.6	782.5	795.8	803.7	811.6	824.8	814.3	824.8	827.5	830.1
57.5°	679.4	676.8	679.4	692.6	700.6	719.1	740.2	740.2	750.8	742.9	750.8
60°	568.4	568.4	579.0	586.9	608.1	621.3	642.4	653.0	663.6	674.1	668.9
62.5°	462.6	465.3	473.2	491.7	504.9	523.5	547.2	557.8	576.3	586.9	581.6
65°	367.5	367.5	372.8	388.6	401.8	425.6	446.8	470.6	481.2	486.4	489.1
67.5°	274.9	272.3	282.9	293.5	306.7	330.5	354.3	367.5	386.0	391.3	388.6
70°	185.1	187.7	193.0	203.6	219.4	237.9	264.4	274.9	285.5	290.8	285.5
72.5°	116.3	116.3	119.0	129.5	140.1	153.3	171.8	182.4	195.6	198.3	193.0
75°	52.9	52.9	58.2	63.4	71.4	82.0	95.2	103.1	111.0	119.0	119.0
77.5°	10.6	13.2	15.9	15.9	21.1	29.1	37.0	44.9	52.9	52.9	52.9
80°	2.6	2.6	2.6	2.6	2.6	2.6	5.3	7.9	13.2	13.2	13.2
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°	1792.4	1792.4	1792.4	1792.4	1792.4	1792.4	1792.4	1792.4
2.5°	1792.4	1808.3	1792.4	1784.5	1795.1	1792.4	1784.5	1787.1
5°	1784.5	1789.8	1795.1	1773.9	1787.1	1789.8	1784.5	1779.2
7.5°	1776.6	1779.2	1776.6	1771.3	1771.3	1771.3	1776.6	1776.6
10°	1773.9	1766.0	1752.8	1744.8	1752.8	1752.8	1750.1	1771.3
12.5°	1739.6	1750.1	1742.2	1726.3	1742.2	1739.6	1739.6	1744.8
15°	1713.1	1713.1	1718.4	1697.3	1707.8	1705.2	1705.2	1710.5
17.5°	1686.7	1686.7	1684.0	1678.7	1676.1	1684.0	1676.1	1689.3
20°	1649.7	1655.0	1670.8	1644.4	1652.3	1644.4	1644.4	1628.5
22.5°	1604.7	1631.2	1617.9	1615.3	1612.7	1615.3	1620.6	1602.1
25°	1575.6	1575.6	1580.9	1565.1	1565.1	1570.4	1567.7	1562.4
27.5°	1536.0	1533.3	1530.7	1525.4	1538.6	1528.1	1528.1	1528.1
30°	1480.5	1488.4	1485.8	1472.5	1488.4	1483.1	1475.2	1459.3
32.5°	1432.9	1443.5	1427.6	1425.0	1422.3	1425.0	1427.6	1414.4
35°	1374.7	1377.4	1377.4	1366.8	1369.4	1366.8	1361.5	1364.1
37.5°	1321.8	1319.2	1306.0	1300.7	1303.3	1303.3	1306.0	1300.7
40°	1247.8	1255.8	1255.8	1237.3	1242.5	1237.3	1237.3	1234.6
42.5°	1187.0	1189.7	1181.7	1173.8	1173.8	1171.2	1165.9	1171.2
45°	1123.6	1120.9	1113.0	1105.1	1105.1	1102.4	1097.1	1107.7
47.5°	1052.2	1046.9	1044.3	1033.7	1033.7	1017.8	1020.5	1031.0
50°	980.8	975.5	965.0	959.7	951.7	943.8	941.2	941.2
52.5°	896.2	896.2	885.6	875.1	872.4	867.1	861.8	864.5
55°	822.2	822.2	814.3	795.8	785.2	772.0	764.0	761.4
57.5°	737.6	732.3	716.4	695.3	684.7	674.1	666.2	666.2
60°	653.0	639.8	623.9	605.4	586.9	568.4	563.1	560.5
62.5°	560.5	547.2	518.2	497.0	483.8	473.2	462.6	470.6
65°	467.9	449.4	423.0	401.8	388.6	372.8	364.8	364.8
67.5°	370.1	351.6	325.2	304.0	290.8	280.2	269.7	269.7
70°	272.3	259.1	235.3	216.8	206.2	190.3	187.7	187.7
72.5°	185.1	169.2	150.7	137.5	126.9	116.3	111.0	108.4
75°	103.1	92.5	79.3	71.4	60.8	55.5	50.2	50.2
77.5°	42.3	34.4	26.4	21.1	15.9	13.2	10.6	13.2
80°	7.9	5.3	2.6	2.6	2.6	2.6	2.6	2.6
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)