

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: P209481

Luminaire Tested: **LDSQ6B50D010 EU6B30509730 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209481
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 EU6B30509730 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 3000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4309.8 lumens
Efficiency: N/A
Efficacy: 73.3 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

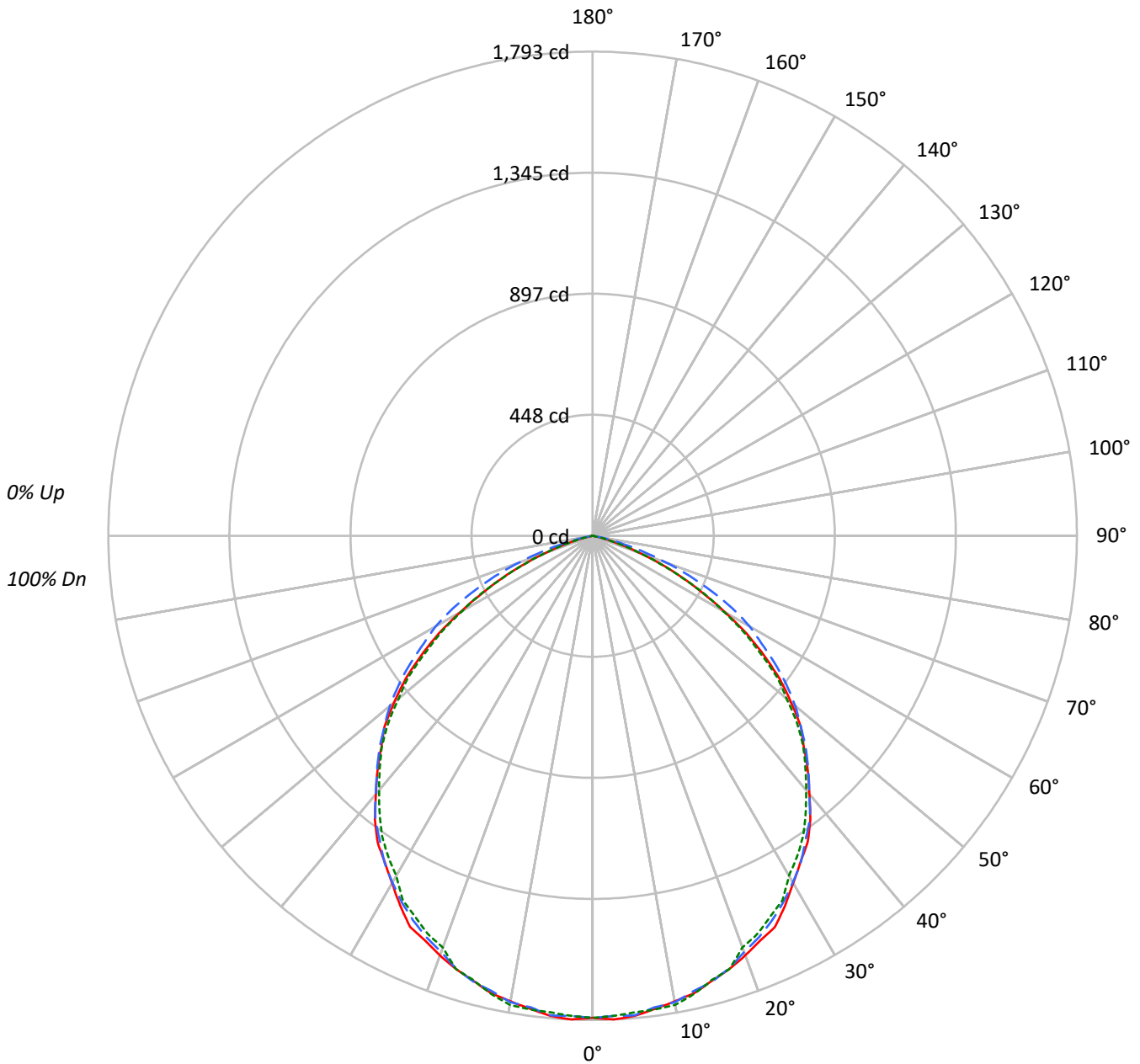
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	168.8	3.9
10°-20°	481.4	11.2
20°-30°	724.4	16.8
30°-40°	857.0	19.9
40°-50°	855.2	19.8
50°-60°	709.2	16.5
60°-70°	414.3	9.6
70°-80°	98.7	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°	1374.7	31.9
0°-40°	2231.7	51.8
0°-60°	3796.1	88.1
0°-90°	4309.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4309.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1785	1776	1782	1777	1772	169
15°	1706	1705	1709	1701	1704	482
25°	1598	1580	1572	1567	1556	731
35°	1388	1374	1374	1366	1359	863
45°	1106	1107	1116	1104	1103	855
55°	777	804	824	802	758	690
65°	366	412	484	411	363	364
75°	53	76	118	75	50	71
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°	1785.1	1785.1	1785.1	1785.1	1785.1	1785.1	1785.1	1785.1	1785.1	1785.1	1785.1
2.5°	1793.0	1782.5	1790.4	1774.6	1785.1	1774.6	1777.2	1771.9	1782.5	1779.8	1777.2
5°	1785.1	1787.7	1782.5	1787.7	1779.8	1771.9	1779.8	1774.6	1758.8	1782.5	1777.2
7.5°	1766.7	1769.3	1764.0	1771.9	1766.7	1756.1	1777.2	1761.4	1758.8	1761.4	1771.9
10°	1750.9	1756.1	1753.5	1750.9	1753.5	1753.5	1748.2	1740.3	1748.2	1753.5	1750.9
12.5°	1735.1	1743.0	1737.7	1732.4	1727.2	1729.8	1735.1	1721.9	1721.9	1727.2	1743.0
15°	1706.1	1711.4	1714.0	1703.5	1703.5	1706.1	1716.6	1695.6	1706.1	1708.7	1711.4
17.5°	1682.4	1685.0	1685.0	1677.1	1682.4	1674.5	1682.4	1671.9	1682.4	1679.8	1685.0
20°	1653.5	1658.7	1653.5	1653.5	1648.2	1650.8	1650.8	1650.8	1642.9	1640.3	1645.6
22.5°	1621.9	1621.9	1616.6	1621.9	1616.6	1614.0	1627.1	1606.1	1627.1	1608.7	1624.5
25°	1598.2	1585.0	1577.1	1574.5	1585.0	1574.5	1579.7	1571.8	1577.1	1571.8	1574.5
27.5°	1542.9	1535.0	1532.3	1535.0	1535.0	1532.3	1542.9	1513.9	1532.3	1529.7	1529.7
30°	1484.9	1484.9	1490.2	1484.9	1490.2	1482.3	1492.8	1469.1	1484.9	1482.3	1484.9
32.5°	1432.3	1434.9	1434.9	1440.2	1432.3	1434.9	1434.9	1427.0	1432.3	1434.9	1429.7
35°	1387.5	1374.4	1374.4	1374.4	1374.4	1374.4	1379.6	1371.7	1379.6	1374.4	1374.4
37.5°	1324.3	1311.2	1311.2	1308.5	1321.7	1313.8	1327.0	1316.4	1316.4	1321.7	1321.7
40°	1248.0	1253.3	1245.4	1255.9	1253.3	1242.7	1266.4	1250.6	1261.2	1248.0	1258.5
42.5°	1179.5	1182.2	1179.5	1176.9	1187.4	1184.8	1195.3	1184.8	1182.2	1182.2	1200.6
45°	1105.8	1105.8	1105.8	1113.7	1105.8	1108.4	1119.0	1113.7	1119.0	1116.3	1134.8
47.5°	1045.3	1032.1	1029.5	1045.3	1042.6	1045.3	1045.3	1047.9	1050.5	1045.3	1053.2
50°	958.4	953.1	953.1	955.7	958.4	963.6	971.5	976.8	971.5	979.4	982.1
52.5°	874.1	868.9	871.5	882.0	887.3	884.6	897.8	900.4	897.8	903.1	903.1
55°	776.7	771.4	779.3	792.5	800.4	808.3	821.5	810.9	821.5	824.1	826.7
57.5°	676.7	674.0	676.7	689.8	697.7	716.1	737.2	737.2	747.7	739.8	747.7
60°	566.1	566.1	576.6	584.5	605.6	618.7	639.8	650.3	660.9	671.4	666.1
62.5°	460.8	463.4	471.3	489.7	502.9	521.3	545.0	555.5	574.0	584.5	579.2
65°	366.0	366.0	371.2	387.0	400.2	423.9	445.0	468.7	479.2	484.5	487.1
67.5°	273.8	271.2	281.7	292.3	305.4	329.1	352.8	366.0	384.4	389.7	387.0
70°	184.3	186.9	192.2	202.7	218.5	237.0	263.3	273.8	284.4	289.6	284.4
72.5°	115.8	115.8	118.5	129.0	139.5	152.7	171.1	181.7	194.8	197.5	192.2
75°	52.7	52.7	57.9	63.2	71.1	81.6	94.8	102.7	110.6	118.5	118.5
77.5°	10.5	13.2	15.8	15.8	21.1	29.0	36.9	44.8	52.7	52.7	52.7
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°	1785.1	1785.1	1785.1	1785.1	1785.1	1785.1	1785.1	1785.1
2.5°	1785.1	1800.9	1785.1	1777.2	1787.7	1785.1	1777.2	1779.8
5°	1777.2	1782.5	1787.7	1766.7	1779.8	1782.5	1777.2	1771.9
7.5°	1769.3	1771.9	1769.3	1764.0	1764.0	1764.0	1769.3	1769.3
10°	1766.7	1758.8	1745.6	1737.7	1745.6	1745.6	1743.0	1764.0
12.5°	1732.4	1743.0	1735.1	1719.3	1735.1	1732.4	1732.4	1737.7
15°	1706.1	1706.1	1711.4	1690.3	1700.8	1698.2	1698.2	1703.5
17.5°	1679.8	1679.8	1677.1	1671.9	1669.2	1677.1	1669.2	1682.4
20°	1642.9	1648.2	1664.0	1637.7	1645.6	1637.7	1637.7	1621.9
22.5°	1598.2	1624.5	1611.3	1608.7	1606.1	1608.7	1614.0	1595.5
25°	1569.2	1569.2	1574.5	1558.7	1558.7	1563.9	1561.3	1556.0
27.5°	1529.7	1527.1	1524.4	1519.2	1532.3	1521.8	1521.8	1521.8
30°	1474.4	1482.3	1479.7	1466.5	1482.3	1477.0	1469.1	1453.4
32.5°	1427.0	1437.6	1421.8	1419.1	1416.5	1419.1	1421.8	1408.6
35°	1369.1	1371.7	1371.7	1361.2	1363.8	1361.2	1355.9	1358.6
37.5°	1316.4	1313.8	1300.6	1295.4	1298.0	1298.0	1300.6	1295.4
40°	1242.7	1250.6	1250.6	1232.2	1237.5	1232.2	1232.2	1229.6
42.5°	1182.2	1184.8	1176.9	1169.0	1169.0	1166.4	1161.1	1166.4
45°	1119.0	1116.3	1108.4	1100.5	1100.5	1097.9	1092.6	1103.2
47.5°	1047.9	1042.6	1040.0	1029.5	1029.5	1013.7	1016.3	1026.8
50°	976.8	971.5	961.0	955.7	947.8	939.9	937.3	937.3
52.5°	892.5	892.5	882.0	871.5	868.9	863.6	858.3	861.0
55°	818.8	818.8	810.9	792.5	782.0	768.8	760.9	758.3
57.5°	734.6	729.3	713.5	692.4	681.9	671.4	663.5	663.5
60°	650.3	637.2	621.4	602.9	584.5	566.1	560.8	558.2
62.5°	558.2	545.0	516.0	495.0	481.8	471.3	460.8	468.7
65°	466.0	447.6	421.3	400.2	387.0	371.2	363.3	363.3
67.5°	368.6	350.2	323.8	302.8	289.6	279.1	268.6	268.6
70°	271.2	258.0	234.3	215.9	205.4	189.6	186.9	186.9
72.5°	184.3	168.5	150.1	136.9	126.4	115.8	110.6	107.9
75°	102.7	92.2	79.0	71.1	60.6	55.3	50.0	50.0
77.5°	42.1	34.2	26.3	21.1	15.8	13.2	10.5	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



Report Generated By E9808895 / USPTCWHP6082093





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









(END OF REPORT)