

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: P209493

Luminaire Tested: **LDSQ6B60D010 EU6B60709727 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209493
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: LDSQ6B60D010 EU6B60709727 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 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4665.4 lumens
Efficiency: N/A
Efficacy: 74.7 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

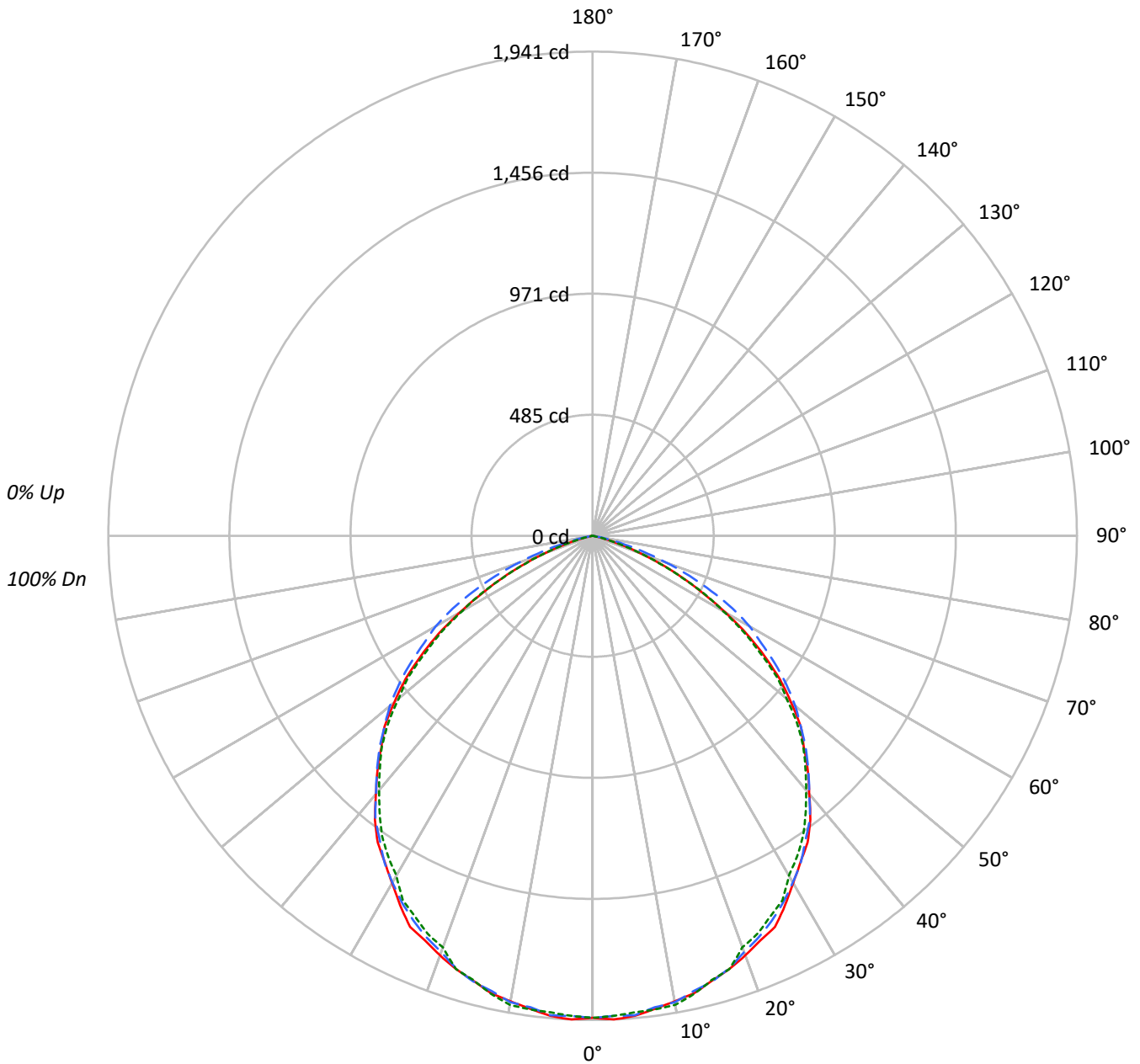
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	182.7	3.9
10°-20°	521.1	11.2
20°-30°	784.2	16.8
30°-40°	927.7	19.9
40°-50°	925.8	19.8
50°-60°	767.7	16.5
60°-70°	448.5	9.6
70°-80°	106.8	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°	1488.1	31.9
0°-40°	2415.7	51.8
0°-60°	4109.2	88.1
0°-90°	4665.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4665.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1932	1932	1932	1932	1932	
5°	1932	1922	1930	1924	1918	183
15°	1847	1845	1850	1841	1844	522
25°	1730	1710	1702	1696	1684	791
35°	1502	1488	1488	1479	1471	934
45°	1197	1198	1208	1196	1194	926
55°	841	871	892	868	821	747
65°	396	446	524	445	393	394
75°	57	83	128	81	54	77
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°	1932.3	1932.3	1932.3	1932.3	1932.3	1932.3	1932.3	1932.3	1932.3	1932.3	1932.3
2.5°	1940.9	1929.5	1938.0	1920.9	1932.3	1920.9	1923.8	1918.1	1929.5	1926.6	1923.8
5°	1932.3	1935.2	1929.5	1935.2	1926.6	1918.1	1926.6	1920.9	1903.8	1929.5	1923.8
7.5°	1912.4	1915.2	1909.5	1918.1	1912.4	1901.0	1923.8	1906.7	1903.8	1906.7	1918.1
10°	1895.3	1901.0	1898.1	1895.3	1898.1	1898.1	1892.4	1883.9	1892.4	1898.1	1895.3
12.5°	1878.2	1886.7	1881.0	1875.3	1869.6	1872.5	1878.2	1863.9	1863.9	1869.6	1886.7
15°	1846.8	1852.5	1855.4	1844.0	1844.0	1846.8	1858.2	1835.4	1846.8	1849.7	1852.5
17.5°	1821.2	1824.0	1824.0	1815.5	1821.2	1812.6	1821.2	1809.8	1821.2	1818.3	1824.0
20°	1789.8	1795.5	1789.8	1789.8	1784.1	1787.0	1787.0	1787.0	1778.4	1775.6	1781.3
22.5°	1755.6	1755.6	1749.9	1755.6	1749.9	1747.1	1761.3	1738.5	1761.3	1741.4	1758.5
25°	1730.0	1715.7	1707.2	1704.3	1715.7	1704.3	1710.0	1701.5	1707.2	1701.5	1704.3
27.5°	1670.1	1661.6	1658.7	1661.6	1661.6	1658.7	1670.1	1638.8	1658.7	1655.9	1655.9
30°	1607.4	1607.4	1613.1	1607.4	1613.1	1604.6	1616.0	1590.3	1607.4	1604.6	1607.4
32.5°	1550.4	1553.3	1553.3	1559.0	1550.4	1553.3	1553.3	1544.7	1550.4	1553.3	1547.6
35°	1502.0	1487.7	1487.7	1487.7	1487.7	1487.7	1493.4	1484.9	1493.4	1487.7	1487.7
37.5°	1433.6	1419.3	1419.3	1416.5	1430.7	1422.2	1436.4	1425.0	1425.0	1430.7	1430.7
40°	1350.9	1356.6	1348.1	1359.5	1356.6	1345.2	1370.9	1353.8	1365.2	1350.9	1362.3
42.5°	1276.8	1279.7	1276.8	1274.0	1285.4	1282.5	1293.9	1282.5	1279.7	1279.7	1299.6
45°	1197.0	1197.0	1197.0	1205.6	1197.0	1199.9	1211.3	1205.6	1211.3	1208.4	1228.4
47.5°	1131.5	1117.2	1114.4	1131.5	1128.6	1131.5	1131.5	1134.3	1137.2	1131.5	1140.0
50°	1037.4	1031.7	1031.7	1034.6	1037.4	1043.1	1051.7	1057.4	1051.7	1060.2	1063.1
52.5°	946.2	940.5	943.4	954.8	960.5	957.6	971.9	974.7	971.9	977.6	977.6
55°	840.8	835.1	843.6	857.9	866.4	875.0	889.2	877.8	889.2	892.1	894.9
57.5°	732.5	729.6	732.5	746.7	755.3	775.2	798.0	798.0	809.4	800.9	809.4
60°	612.8	612.8	624.2	632.7	655.5	669.8	692.6	704.0	715.4	726.8	721.1
62.5°	498.8	501.6	510.2	530.1	544.4	564.3	590.0	601.4	621.3	632.7	627.0
65°	396.2	396.2	401.9	419.0	433.2	458.9	481.7	507.3	518.7	524.4	527.3
67.5°	296.4	293.6	305.0	316.4	330.6	356.3	381.9	396.2	416.1	421.8	419.0
70°	199.5	202.4	208.1	219.5	236.6	256.5	285.0	296.4	307.8	313.5	307.8
72.5°	125.4	125.4	128.3	139.7	151.1	165.3	185.3	196.7	210.9	213.8	208.1
75°	57.0	57.0	62.7	68.4	77.0	88.4	102.6	111.2	119.7	128.3	128.3
77.5°	11.4	14.3	17.1	17.1	22.8	31.4	39.9	48.5	57.0	57.0	57.0
80°	2.9	2.9	2.9	2.9	2.9	2.9	5.7	8.6	14.3	14.3	14.3
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°	1932.3	1932.3	1932.3	1932.3	1932.3	1932.3	1932.3	1932.3
2.5°	1932.3	1949.5	1932.3	1923.8	1935.2	1932.3	1923.8	1926.6
5°	1923.8	1929.5	1935.2	1912.4	1926.6	1929.5	1923.8	1918.1
7.5°	1915.2	1918.1	1915.2	1909.5	1909.5	1909.5	1915.2	1915.2
10°	1912.4	1903.8	1889.6	1881.0	1889.6	1889.6	1886.7	1909.5
12.5°	1875.3	1886.7	1878.2	1861.1	1878.2	1875.3	1875.3	1881.0
15°	1846.8	1846.8	1852.5	1829.7	1841.1	1838.3	1838.3	1844.0
17.5°	1818.3	1818.3	1815.5	1809.8	1806.9	1815.5	1806.9	1821.2
20°	1778.4	1784.1	1801.2	1772.7	1781.3	1772.7	1772.7	1755.6
22.5°	1730.0	1758.5	1744.2	1741.4	1738.5	1741.4	1747.1	1727.1
25°	1698.6	1698.6	1704.3	1687.2	1687.2	1692.9	1690.1	1684.4
27.5°	1655.9	1653.0	1650.2	1644.5	1658.7	1647.3	1647.3	1647.3
30°	1596.0	1604.6	1601.7	1587.5	1604.6	1598.9	1590.3	1573.2
32.5°	1544.7	1556.1	1539.0	1536.2	1533.3	1536.2	1539.0	1524.8
35°	1482.0	1484.9	1484.9	1473.5	1476.3	1473.5	1467.8	1470.6
37.5°	1425.0	1422.2	1407.9	1402.2	1405.1	1405.1	1407.9	1402.2
40°	1345.2	1353.8	1353.8	1333.8	1339.5	1333.8	1333.8	1331.0
42.5°	1279.7	1282.5	1274.0	1265.4	1265.4	1262.6	1256.9	1262.6
45°	1211.3	1208.4	1199.9	1191.3	1191.3	1188.5	1182.8	1194.2
47.5°	1134.3	1128.6	1125.8	1114.4	1114.4	1097.3	1100.1	1111.5
50°	1057.4	1051.7	1040.3	1034.6	1026.0	1017.5	1014.6	1014.6
52.5°	966.2	966.2	954.8	943.4	940.5	934.8	929.1	932.0
55°	886.4	886.4	877.8	857.9	846.5	832.2	823.7	820.8
57.5°	795.2	789.5	772.4	749.6	738.2	726.8	718.2	718.2
60°	704.0	689.7	672.6	652.7	632.7	612.8	607.1	604.2
62.5°	604.2	590.0	558.6	535.8	521.6	510.2	498.8	507.3
65°	504.5	484.5	456.0	433.2	419.0	401.9	393.3	393.3
67.5°	399.0	379.1	350.6	327.8	313.5	302.1	290.7	290.7
70°	293.6	279.3	253.7	233.7	222.3	205.2	202.4	202.4
72.5°	199.5	182.4	162.5	148.2	136.8	125.4	119.7	116.9
75°	111.2	99.8	85.5	77.0	65.6	59.9	54.2	54.2
77.5°	45.6	37.1	28.5	22.8	17.1	14.3	11.4	14.3
80°	8.6	5.7	2.9	2.9	2.9	2.9	2.9	2.9
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)