

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: P209478

Luminaire Tested: **LDSQ6B50D010 EU6B30509040 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209478
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 EU6B30509040 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 4000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5009.6 lumens
Efficiency: N/A
Efficacy: 85.2 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

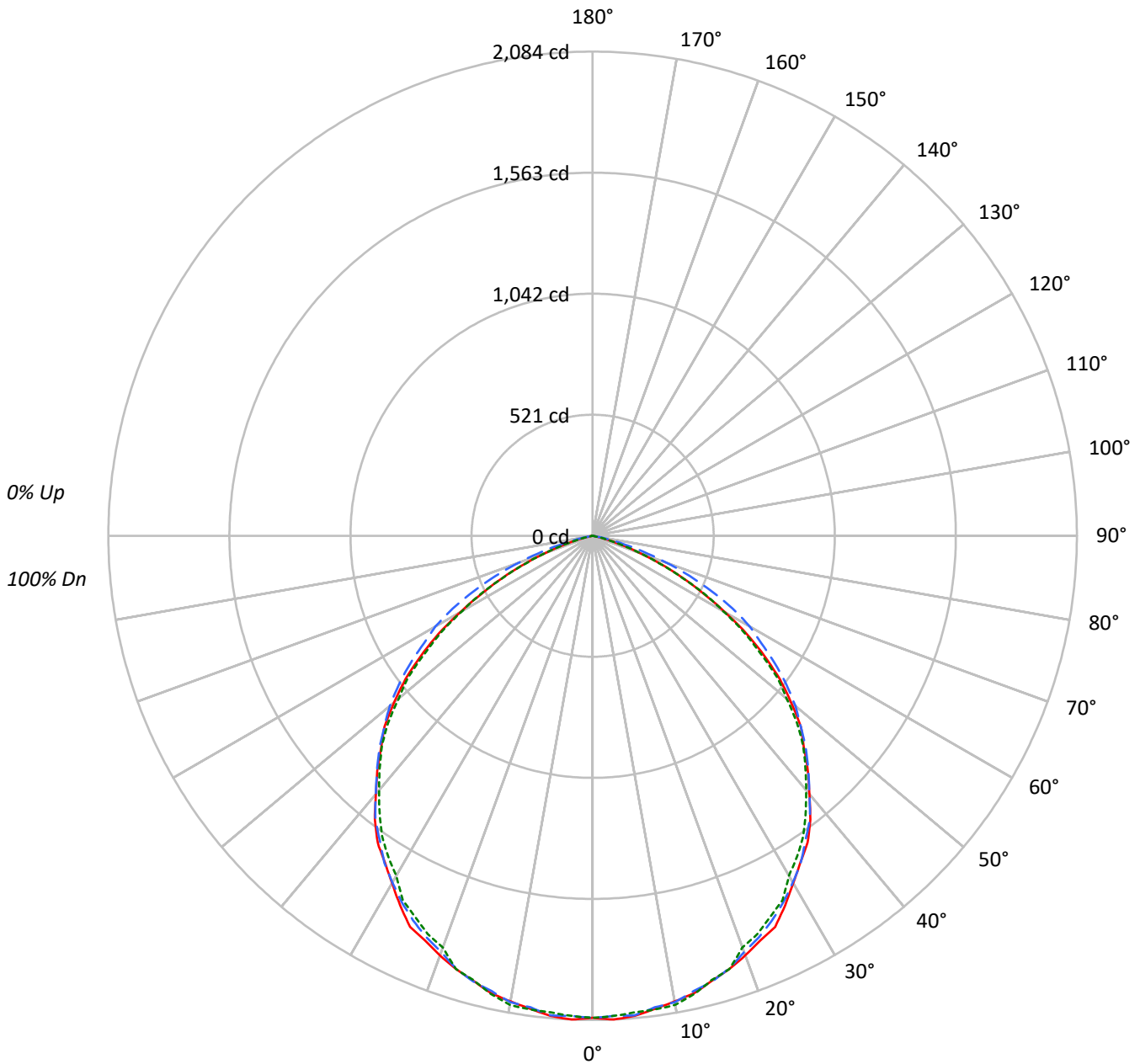
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	196.2	3.9
10°-20°	559.6	11.2
20°-30°	842.1	16.8
30°-40°	996.1	19.9
40°-50°	994.1	19.8
50°-60°	824.3	16.5
60°-70°	481.6	9.6
70°-80°	114.7	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°	1597.9	31.9
0°-40°	2594.0	51.8
0°-60°	4412.5	88.1
0°-90°	5009.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5009.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2075	2075	2075	2075	2075	
5°	2075	2064	2072	2066	2060	197
15°	1983	1982	1986	1977	1980	561
25°	1858	1836	1827	1821	1809	849
35°	1613	1598	1598	1588	1579	1003
45°	1285	1287	1298	1284	1282	994
55°	903	935	958	932	881	802
65°	425	479	563	477	422	423
75°	61	89	138	87	58	83
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°	2074.9	2074.9	2074.9	2074.9	2074.9	2074.9	2074.9	2074.9	2074.9	2074.9	2074.9
2.5°	2084.1	2071.9	2081.1	2062.7	2074.9	2062.7	2065.8	2059.6	2071.9	2068.8	2065.8
5°	2074.9	2078.0	2071.9	2078.0	2068.8	2059.6	2068.8	2062.7	2044.3	2071.9	2065.8
7.5°	2053.5	2056.6	2050.5	2059.6	2053.5	2041.3	2065.8	2047.4	2044.3	2047.4	2059.6
10°	2035.2	2041.3	2038.2	2035.2	2038.2	2038.2	2032.1	2022.9	2032.1	2038.2	2035.2
12.5°	2016.8	2026.0	2019.9	2013.7	2007.6	2010.7	2016.8	2001.5	2001.5	2007.6	2026.0
15°	1983.1	1989.3	1992.3	1980.1	1980.1	1983.1	1995.4	1970.9	1983.1	1986.2	1989.3
17.5°	1955.6	1958.7	1958.7	1949.5	1955.6	1946.4	1955.6	1943.4	1955.6	1952.5	1958.7
20°	1921.9	1928.0	1921.9	1921.9	1915.8	1918.9	1918.9	1918.9	1909.7	1906.6	1912.7
22.5°	1885.2	1885.2	1879.1	1885.2	1879.1	1876.0	1891.3	1866.8	1891.3	1869.9	1888.3
25°	1857.7	1842.4	1833.2	1830.1	1842.4	1830.1	1836.2	1827.1	1833.2	1827.1	1830.1
27.5°	1793.4	1784.2	1781.1	1784.2	1784.2	1781.1	1793.4	1759.7	1781.1	1778.1	1778.1
30°	1726.1	1726.1	1732.2	1726.1	1732.2	1723.0	1735.2	1707.7	1726.1	1723.0	1726.1
32.5°	1664.9	1667.9	1667.9	1674.0	1664.9	1667.9	1667.9	1658.7	1664.9	1667.9	1661.8
35°	1612.8	1597.5	1597.5	1597.5	1597.5	1597.5	1603.6	1594.5	1603.6	1597.5	1597.5
37.5°	1539.4	1524.1	1524.1	1521.0	1536.3	1527.1	1542.4	1530.2	1530.2	1536.3	1536.3
40°	1450.6	1456.7	1447.6	1459.8	1456.7	1444.5	1472.0	1453.7	1465.9	1450.6	1462.9
42.5°	1371.1	1374.1	1371.1	1368.0	1380.2	1377.2	1389.4	1377.2	1374.1	1374.1	1395.5
45°	1285.4	1285.4	1285.4	1294.5	1285.4	1288.4	1300.7	1294.5	1300.7	1297.6	1319.0
47.5°	1215.0	1199.7	1196.6	1215.0	1211.9	1215.0	1215.0	1218.0	1221.1	1215.0	1224.2
50°	1114.0	1107.9	1107.9	1110.9	1114.0	1120.1	1129.3	1135.4	1129.3	1138.5	1141.5
52.5°	1016.1	1009.9	1013.0	1025.2	1031.4	1028.3	1043.6	1046.7	1043.6	1049.7	1049.7
55°	902.8	896.7	905.9	921.2	930.4	939.5	954.8	942.6	954.8	957.9	961.0
57.5°	786.5	783.5	786.5	801.8	811.0	832.4	856.9	856.9	869.2	860.0	869.2
60°	658.0	658.0	670.2	679.4	703.9	719.2	743.7	755.9	768.2	780.4	774.3
62.5°	535.6	538.6	547.8	569.2	584.5	606.0	633.5	645.7	667.2	679.4	673.3
65°	425.4	425.4	431.5	449.9	465.2	492.7	517.2	544.8	557.0	563.1	566.2
67.5°	318.3	315.2	327.5	339.7	355.0	382.5	410.1	425.4	446.8	452.9	449.9
70°	214.2	217.3	223.4	235.7	254.0	275.4	306.0	318.3	330.5	336.6	330.5
72.5°	134.7	134.7	137.7	150.0	162.2	177.5	198.9	211.2	226.5	229.5	223.4
75°	61.2	61.2	67.3	73.4	82.6	94.9	110.2	119.4	128.5	137.7	137.7
77.5°	12.2	15.3	18.4	18.4	24.5	33.7	42.8	52.0	61.2	61.2	61.2
80°	3.1	3.1	3.1	3.1	3.1	3.1	6.1	9.2	15.3	15.3	15.3
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°	2074.9	2074.9	2074.9	2074.9	2074.9	2074.9	2074.9	2074.9
2.5°	2074.9	2093.3	2074.9	2065.8	2078.0	2074.9	2065.8	2068.8
5°	2065.8	2071.9	2078.0	2053.5	2068.8	2071.9	2065.8	2059.6
7.5°	2056.6	2059.6	2056.6	2050.5	2050.5	2050.5	2056.6	2056.6
10°	2053.5	2044.3	2029.0	2019.9	2029.0	2029.0	2026.0	2050.5
12.5°	2013.7	2026.0	2016.8	1998.4	2016.8	2013.7	2013.7	2019.9
15°	1983.1	1983.1	1989.3	1964.8	1977.0	1974.0	1974.0	1980.1
17.5°	1952.5	1952.5	1949.5	1943.4	1940.3	1949.5	1940.3	1955.6
20°	1909.7	1915.8	1934.2	1903.6	1912.7	1903.6	1903.6	1885.2
22.5°	1857.7	1888.3	1873.0	1869.9	1866.8	1869.9	1876.0	1854.6
25°	1824.0	1824.0	1830.1	1811.8	1811.8	1817.9	1814.8	1808.7
27.5°	1778.1	1775.0	1772.0	1765.8	1781.1	1768.9	1768.9	1768.9
30°	1713.8	1723.0	1719.9	1704.6	1723.0	1716.9	1707.7	1689.3
32.5°	1658.7	1671.0	1652.6	1649.6	1646.5	1649.6	1652.6	1637.3
35°	1591.4	1594.5	1594.5	1582.2	1585.3	1582.2	1576.1	1579.2
37.5°	1530.2	1527.1	1511.8	1505.7	1508.8	1508.8	1511.8	1505.7
40°	1444.5	1453.7	1453.7	1432.3	1438.4	1432.3	1432.3	1429.2
42.5°	1374.1	1377.2	1368.0	1358.8	1358.8	1355.8	1349.6	1355.8
45°	1300.7	1297.6	1288.4	1279.2	1279.2	1276.2	1270.1	1282.3
47.5°	1218.0	1211.9	1208.9	1196.6	1196.6	1178.3	1181.3	1193.6
50°	1135.4	1129.3	1117.0	1110.9	1101.7	1092.6	1089.5	1089.5
52.5°	1037.5	1037.5	1025.2	1013.0	1009.9	1003.8	997.7	1000.7
55°	951.8	951.8	942.6	921.2	908.9	893.6	884.5	881.4
57.5°	853.9	847.7	829.4	804.9	792.6	780.4	771.2	771.2
60°	755.9	740.6	722.3	700.8	679.4	658.0	651.9	648.8
62.5°	648.8	633.5	599.8	575.4	560.1	547.8	535.6	544.8
65°	541.7	520.3	489.7	465.2	449.9	431.5	422.3	422.3
67.5°	428.5	407.0	376.4	351.9	336.6	324.4	312.2	312.2
70°	315.2	299.9	272.4	251.0	238.7	220.3	217.3	217.3
72.5°	214.2	195.9	174.4	159.1	146.9	134.7	128.5	125.5
75°	119.4	107.1	91.8	82.6	70.4	64.3	58.1	58.1
77.5°	49.0	39.8	30.6	24.5	18.4	15.3	12.2	15.3
80°	9.2	6.1	3.1	3.1	3.1	3.1	3.1	3.1
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)