

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: P209479

Luminaire Tested: **LDSQ6B50D010 EU6B30509050 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209479
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 EU6B30509050 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 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5031.5 lumens
Efficiency: N/A
Efficacy: 85.6 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

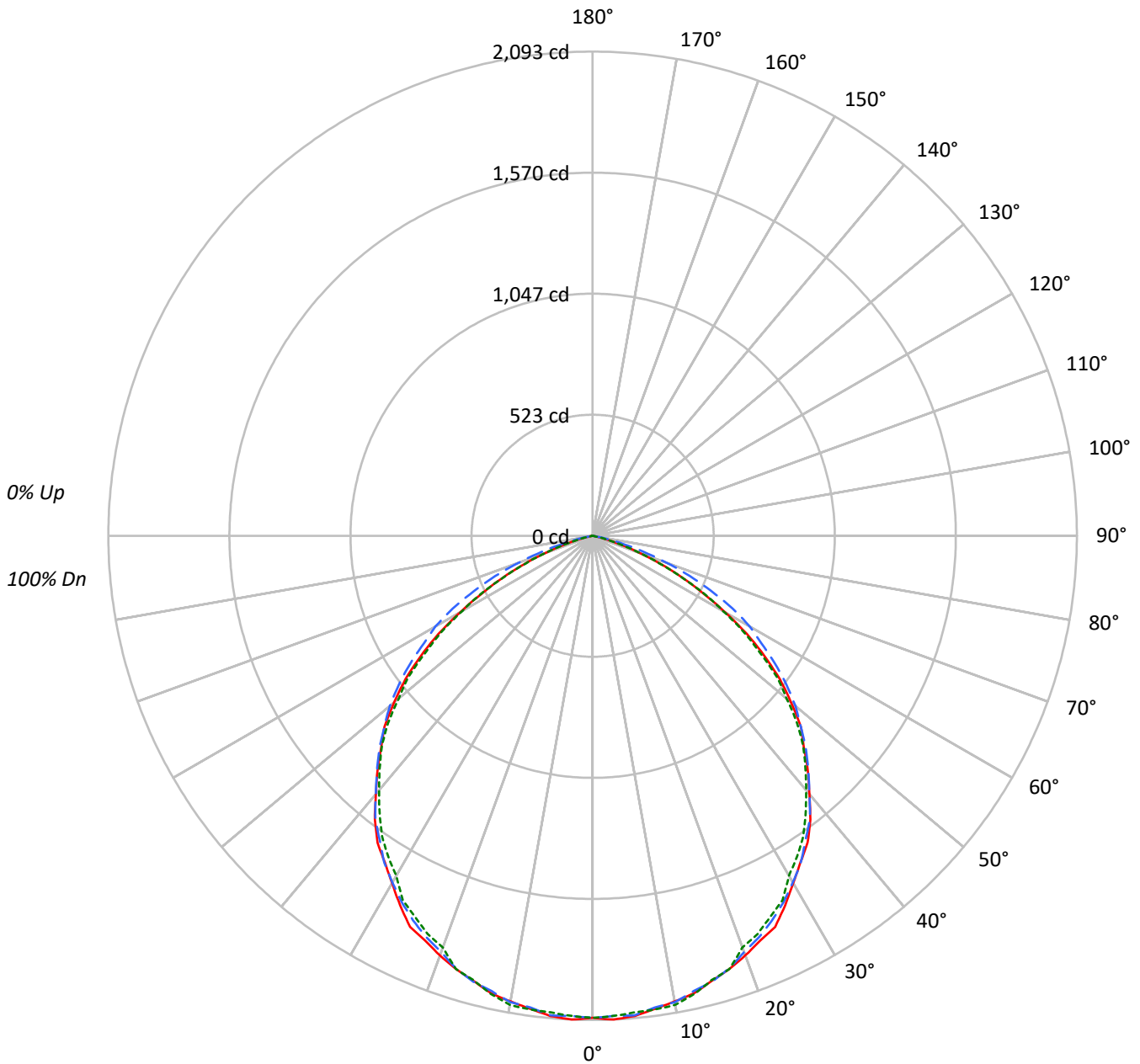
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P209479

CATALOG NUMBER: LDSQ6B50D010 EU6B30509050 6LBCSSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P209479

CATALOG NUMBER: LDSQ6B50D010 EU6B30509050 6LBCSSQ1MMS

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°			



TEST NUMBER: P209479

CATALOG NUMBER: LDSQ6B50D010 EU6B30509050 6LBCSSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.1	3.9
10°-20°	562.0	11.2
20°-30°	845.7	16.8
30°-40°	1000.5	19.9
40°-50°	998.4	19.8
50°-60°	827.9	16.5
60°-70°	483.7	9.6
70°-80°	115.2	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°	1604.9	31.9
0°-40°	2605.4	51.8
0°-60°	4431.7	88.1
0°-90°	5031.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5031.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2084	2084	2084	2084	2084	
5°	2084	2073	2081	2075	2069	197
15°	1992	1990	1995	1986	1989	563
25°	1866	1844	1835	1829	1817	853
35°	1620	1604	1604	1595	1586	1007
45°	1291	1293	1303	1289	1288	999
55°	907	939	962	936	885	805
65°	427	481	566	480	424	425
75°	62	89	138	88	58	83
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P209479

CATALOG NUMBER: LDSQ6B50D010 EU6B30509050 6LBCSSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2084.0	2084.0	2084.0	2084.0	2084.0	2084.0	2084.0	2084.0	2084.0	2084.0	2084.0
2.5°	2093.2	2080.9	2090.2	2071.7	2084.0	2071.7	2074.8	2068.6	2080.9	2077.9	2074.8
5°	2084.0	2087.1	2080.9	2087.1	2077.9	2068.6	2077.9	2071.7	2053.3	2080.9	2074.8
7.5°	2062.5	2065.6	2059.4	2068.6	2062.5	2050.2	2074.8	2056.3	2053.3	2056.3	2068.6
10°	2044.0	2050.2	2047.1	2044.0	2047.1	2047.1	2041.0	2031.8	2041.0	2047.1	2044.0
12.5°	2025.6	2034.8	2028.7	2022.5	2016.4	2019.5	2025.6	2010.2	2010.2	2016.4	2034.8
15°	1991.8	1997.9	2001.0	1988.7	1988.7	1991.8	2004.1	1979.5	1991.8	1994.9	1997.9
17.5°	1964.1	1967.2	1967.2	1958.0	1964.1	1954.9	1964.1	1951.8	1964.1	1961.1	1967.2
20°	1930.3	1936.5	1930.3	1930.3	1924.2	1927.2	1927.2	1927.2	1918.0	1914.9	1921.1
22.5°	1893.4	1893.4	1887.3	1893.4	1887.3	1884.2	1899.6	1875.0	1899.6	1878.1	1896.5
25°	1865.8	1850.4	1841.2	1838.1	1850.4	1838.1	1844.3	1835.0	1841.2	1835.0	1838.1
27.5°	1801.2	1792.0	1788.9	1792.0	1792.0	1788.9	1801.2	1767.4	1788.9	1785.9	1785.9
30°	1733.6	1733.6	1739.7	1733.6	1739.7	1730.5	1742.8	1715.2	1733.6	1730.5	1733.6
32.5°	1672.1	1675.2	1675.2	1681.3	1672.1	1675.2	1675.2	1666.0	1672.1	1675.2	1669.0
35°	1619.9	1604.5	1604.5	1604.5	1604.5	1604.5	1610.6	1601.4	1610.6	1604.5	1604.5
37.5°	1546.1	1530.7	1530.7	1527.7	1543.0	1533.8	1549.2	1536.9	1536.9	1543.0	1543.0
40°	1457.0	1463.1	1453.9	1466.2	1463.1	1450.8	1478.5	1460.0	1472.3	1457.0	1469.3
42.5°	1377.0	1380.1	1377.0	1374.0	1386.3	1383.2	1395.5	1383.2	1380.1	1380.1	1401.6
45°	1291.0	1291.0	1291.0	1300.2	1291.0	1294.1	1306.3	1300.2	1306.3	1303.3	1324.8
47.5°	1220.3	1204.9	1201.8	1220.3	1217.2	1220.3	1220.3	1223.4	1226.4	1220.3	1229.5
50°	1118.8	1112.7	1112.7	1115.8	1118.8	1125.0	1134.2	1140.4	1134.2	1143.4	1146.5
52.5°	1020.5	1014.3	1017.4	1029.7	1035.9	1032.8	1048.2	1051.2	1048.2	1054.3	1054.3
55°	906.8	900.6	909.8	925.2	934.4	943.6	959.0	946.7	959.0	962.1	965.2
57.5°	790.0	786.9	790.0	805.3	814.5	836.1	860.7	860.7	872.9	863.7	872.9
60°	660.9	660.9	673.2	682.4	707.0	722.3	746.9	759.2	771.5	783.8	777.7
62.5°	537.9	541.0	550.2	571.7	587.1	608.6	636.3	648.6	670.1	682.4	676.2
65°	427.3	427.3	433.4	451.8	467.2	494.9	519.5	547.1	559.4	565.6	568.6
67.5°	319.7	316.6	328.9	341.2	356.6	384.2	411.9	427.3	448.8	454.9	451.8
70°	215.2	218.2	224.4	236.7	255.1	276.6	307.4	319.7	332.0	338.1	332.0
72.5°	135.2	135.2	138.3	150.6	162.9	178.3	199.8	212.1	227.5	230.5	224.4
75°	61.5	61.5	67.6	73.8	83.0	95.3	110.7	119.9	129.1	138.3	138.3
77.5°	12.3	15.4	18.4	18.4	24.6	33.8	43.0	52.3	61.5	61.5	61.5
80°	3.1	3.1	3.1	3.1	3.1	3.1	6.1	9.2	15.4	15.4	15.4
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



TEST NUMBER: P209479

CATALOG NUMBER: LDSQ6B50D010 EU6B30509050 6LBCSSQ1MMS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2084.0	2084.0	2084.0	2084.0	2084.0	2084.0	2084.0	2084.0
2.5°	2084.0	2102.4	2084.0	2074.8	2087.1	2084.0	2074.8	2077.9
5°	2074.8	2080.9	2087.1	2062.5	2077.9	2080.9	2074.8	2068.6
7.5°	2065.6	2068.6	2065.6	2059.4	2059.4	2059.4	2065.6	2065.6
10°	2062.5	2053.3	2037.9	2028.7	2037.9	2037.9	2034.8	2059.4
12.5°	2022.5	2034.8	2025.6	2007.2	2025.6	2022.5	2022.5	2028.7
15°	1991.8	1991.8	1997.9	1973.4	1985.6	1982.6	1982.6	1988.7
17.5°	1961.1	1961.1	1958.0	1951.8	1948.8	1958.0	1948.8	1964.1
20°	1918.0	1924.2	1942.6	1911.9	1921.1	1911.9	1911.9	1893.4
22.5°	1865.8	1896.5	1881.1	1878.1	1875.0	1878.1	1884.2	1862.7
25°	1832.0	1832.0	1838.1	1819.7	1819.7	1825.8	1822.7	1816.6
27.5°	1785.9	1782.8	1779.7	1773.6	1788.9	1776.6	1776.6	1776.6
30°	1721.3	1730.5	1727.5	1712.1	1730.5	1724.4	1715.2	1696.7
32.5°	1666.0	1678.3	1659.8	1656.8	1653.7	1656.8	1659.8	1644.5
35°	1598.4	1601.4	1601.4	1589.1	1592.2	1589.1	1583.0	1586.1
37.5°	1536.9	1533.8	1518.4	1512.3	1515.4	1515.4	1518.4	1512.3
40°	1450.8	1460.0	1460.0	1438.5	1444.7	1438.5	1438.5	1435.4
42.5°	1380.1	1383.2	1374.0	1364.7	1364.7	1361.7	1355.5	1361.7
45°	1306.3	1303.3	1294.1	1284.8	1284.8	1281.8	1275.6	1287.9
47.5°	1223.4	1217.2	1214.1	1201.8	1201.8	1183.4	1186.5	1198.8
50°	1140.4	1134.2	1121.9	1115.8	1106.6	1097.3	1094.3	1094.3
52.5°	1042.0	1042.0	1029.7	1017.4	1014.3	1008.2	1002.0	1005.1
55°	955.9	955.9	946.7	925.2	912.9	897.5	888.3	885.2
57.5°	857.6	851.4	833.0	808.4	796.1	783.8	774.6	774.6
60°	759.2	743.8	725.4	703.9	682.4	660.9	654.7	651.6
62.5°	651.6	636.3	602.5	577.9	562.5	550.2	537.9	547.1
65°	544.1	522.5	491.8	467.2	451.8	433.4	424.2	424.2
67.5°	430.3	408.8	378.1	353.5	338.1	325.8	313.5	313.5
70°	316.6	301.2	273.6	252.0	239.8	221.3	218.2	218.2
72.5°	215.2	196.7	175.2	159.8	147.5	135.2	129.1	126.0
75°	119.9	107.6	92.2	83.0	70.7	64.5	58.4	58.4
77.5°	49.2	40.0	30.7	24.6	18.4	15.4	12.3	15.4
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



Report Generated By E9808895 / USPTCWHP6082093





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









(END OF REPORT)