

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: P209477

Luminaire Tested: **LDSQ6B50D010 EU6B30509035 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209477
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 EU6B30509035 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 3500 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5001.2 lumens
Efficiency: N/A
Efficacy: 85.1 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

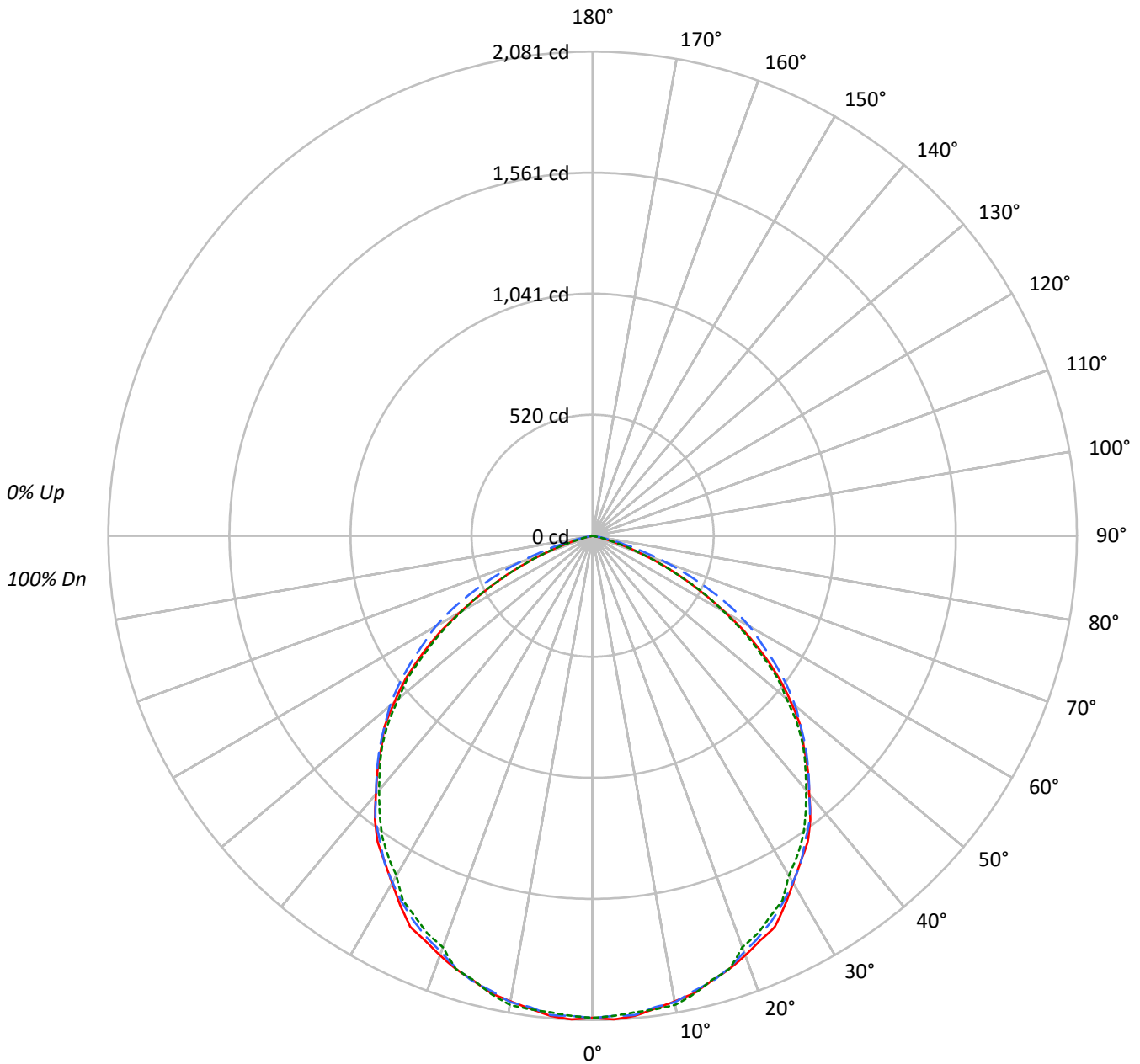
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	195.9	3.9
10°-20°	558.7	11.2
20°-30°	840.6	16.8
30°-40°	994.5	19.9
40°-50°	992.4	19.8
50°-60°	823.0	16.5
60°-70°	480.8	9.6
70°-80°	114.5	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°	1595.2	31.9
0°-40°	2589.7	51.8
0°-60°	4405.1	88.1
0°-90°	5001.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5001.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2072	2072	2072	2072	2072	
5°	2072	2061	2068	2062	2056	196
15°	1980	1978	1983	1974	1977	560
25°	1854	1833	1824	1818	1806	848
35°	1610	1595	1595	1586	1576	1001
45°	1283	1285	1295	1282	1280	993
55°	901	933	956	930	880	800
65°	425	478	562	477	422	422
75°	61	89	138	87	58	83
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°	2071.5	2071.5	2071.5	2071.5	2071.5	2071.5	2071.5	2071.5	2071.5	2071.5	2071.5
2.5°	2080.6	2068.4	2077.6	2059.2	2071.5	2059.2	2062.3	2056.2	2068.4	2065.4	2062.3
5°	2071.5	2074.5	2068.4	2074.5	2065.4	2056.2	2065.4	2059.2	2040.9	2068.4	2062.3
7.5°	2050.1	2053.1	2047.0	2056.2	2050.1	2037.9	2062.3	2044.0	2040.9	2044.0	2056.2
10°	2031.7	2037.9	2034.8	2031.7	2034.8	2034.8	2028.7	2019.5	2028.7	2034.8	2031.7
12.5°	2013.4	2022.6	2016.5	2010.4	2004.2	2007.3	2013.4	1998.1	1998.1	2004.2	2022.6
15°	1979.8	1985.9	1989.0	1976.8	1976.8	1979.8	1992.0	1967.6	1979.8	1982.9	1985.9
17.5°	1952.3	1955.4	1955.4	1946.2	1952.3	1943.1	1952.3	1940.1	1952.3	1949.3	1955.4
20°	1918.7	1924.8	1918.7	1918.7	1912.6	1915.6	1915.6	1915.6	1906.5	1903.4	1909.5
22.5°	1882.0	1882.0	1875.9	1882.0	1875.9	1872.9	1888.1	1863.7	1888.1	1866.8	1885.1
25°	1854.5	1839.3	1830.1	1827.0	1839.3	1827.0	1833.2	1824.0	1830.1	1824.0	1827.0
27.5°	1790.4	1781.2	1778.2	1781.2	1781.2	1778.2	1790.4	1756.8	1778.2	1775.1	1775.1
30°	1723.2	1723.2	1729.3	1723.2	1729.3	1720.1	1732.3	1704.8	1723.2	1720.1	1723.2
32.5°	1662.1	1665.1	1665.1	1671.2	1662.1	1665.1	1665.1	1655.9	1662.1	1665.1	1659.0
35°	1610.1	1594.8	1594.8	1594.8	1594.8	1594.8	1601.0	1591.8	1601.0	1594.8	1594.8
37.5°	1536.8	1521.5	1521.5	1518.5	1533.7	1524.6	1539.8	1527.6	1527.6	1533.7	1533.7
40°	1448.2	1454.3	1445.1	1457.4	1454.3	1442.1	1469.6	1451.2	1463.5	1448.2	1460.4
42.5°	1368.8	1371.8	1368.8	1365.7	1377.9	1374.9	1387.1	1374.9	1371.8	1371.8	1393.2
45°	1283.2	1283.2	1283.2	1292.4	1283.2	1286.3	1298.5	1292.4	1298.5	1295.4	1316.8
47.5°	1212.9	1197.7	1194.6	1212.9	1209.9	1212.9	1212.9	1216.0	1219.0	1212.9	1222.1
50°	1112.1	1106.0	1106.0	1109.1	1112.1	1118.2	1127.4	1133.5	1127.4	1136.6	1139.6
52.5°	1014.3	1008.2	1011.3	1023.5	1029.6	1026.6	1041.8	1044.9	1041.8	1048.0	1048.0
55°	901.3	895.2	904.4	919.6	928.8	938.0	953.2	941.0	953.2	956.3	959.4
57.5°	785.2	782.1	785.2	800.5	809.6	831.0	855.5	855.5	867.7	858.5	867.7
60°	656.9	656.9	669.1	678.3	702.7	718.0	742.4	754.6	766.9	779.1	773.0
62.5°	534.7	537.7	546.9	568.3	583.6	604.9	632.4	644.7	666.0	678.3	672.2
65°	424.7	424.7	430.8	449.1	464.4	491.9	516.3	543.8	556.1	562.2	565.2
67.5°	317.7	314.7	326.9	339.1	354.4	381.9	409.4	424.7	446.1	452.2	449.1
70°	213.9	216.9	223.0	235.3	253.6	275.0	305.5	317.7	330.0	336.1	330.0
72.5°	134.4	134.4	137.5	149.7	161.9	177.2	198.6	210.8	226.1	229.1	223.0
75°	61.1	61.1	67.2	73.3	82.5	94.7	110.0	119.2	128.3	137.5	137.5
77.5°	12.2	15.3	18.3	18.3	24.4	33.6	42.8	51.9	61.1	61.1	61.1
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°	2071.5	2071.5	2071.5	2071.5	2071.5	2071.5	2071.5	2071.5
2.5°	2071.5	2089.8	2071.5	2062.3	2074.5	2071.5	2062.3	2065.4
5°	2062.3	2068.4	2074.5	2050.1	2065.4	2068.4	2062.3	2056.2
7.5°	2053.1	2056.2	2053.1	2047.0	2047.0	2047.0	2053.1	2053.1
10°	2050.1	2040.9	2025.6	2016.5	2025.6	2025.6	2022.6	2047.0
12.5°	2010.4	2022.6	2013.4	1995.1	2013.4	2010.4	2010.4	2016.5
15°	1979.8	1979.8	1985.9	1961.5	1973.7	1970.6	1970.6	1976.8
17.5°	1949.3	1949.3	1946.2	1940.1	1937.0	1946.2	1937.0	1952.3
20°	1906.5	1912.6	1930.9	1900.4	1909.5	1900.4	1900.4	1882.0
22.5°	1854.5	1885.1	1869.8	1866.8	1863.7	1866.8	1872.9	1851.5
25°	1820.9	1820.9	1827.0	1808.7	1808.7	1814.8	1811.8	1805.7
27.5°	1775.1	1772.0	1769.0	1762.9	1778.2	1765.9	1765.9	1765.9
30°	1710.9	1720.1	1717.1	1701.8	1720.1	1714.0	1704.8	1686.5
32.5°	1655.9	1668.2	1649.8	1646.8	1643.7	1646.8	1649.8	1634.6
35°	1588.7	1591.8	1591.8	1579.6	1582.6	1579.6	1573.5	1576.5
37.5°	1527.6	1524.6	1509.3	1503.2	1506.2	1506.2	1509.3	1503.2
40°	1442.1	1451.2	1451.2	1429.9	1436.0	1429.9	1429.9	1426.8
42.5°	1371.8	1374.9	1365.7	1356.5	1356.5	1353.5	1347.4	1353.5
45°	1298.5	1295.4	1286.3	1277.1	1277.1	1274.0	1267.9	1280.2
47.5°	1216.0	1209.9	1206.8	1194.6	1194.6	1176.3	1179.3	1191.6
50°	1133.5	1127.4	1115.2	1109.1	1099.9	1090.7	1087.7	1087.7
52.5°	1035.7	1035.7	1023.5	1011.3	1008.2	1002.1	996.0	999.1
55°	950.2	950.2	941.0	919.6	907.4	892.1	883.0	879.9
57.5°	852.4	846.3	828.0	803.5	791.3	779.1	769.9	769.9
60°	754.6	739.4	721.0	699.7	678.3	656.9	650.8	647.7
62.5°	647.7	632.4	598.8	574.4	559.1	546.9	534.7	543.8
65°	540.8	519.4	488.8	464.4	449.1	430.8	421.6	421.6
67.5°	427.7	406.3	375.8	351.4	336.1	323.9	311.6	311.6
70°	314.7	299.4	271.9	250.5	238.3	220.0	216.9	216.9
72.5°	213.9	195.5	174.1	158.9	146.7	134.4	128.3	125.3
75°	119.2	106.9	91.7	82.5	70.3	64.2	58.0	58.0
77.5°	48.9	39.7	30.6	24.4	18.3	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)