

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: P209489

Luminaire Tested: **LDSQ6B60D010 EU6B60709030 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209489
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 EU6B60709030 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: 5578.1 lumens
Efficiency: N/A
Efficacy: 89.3 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

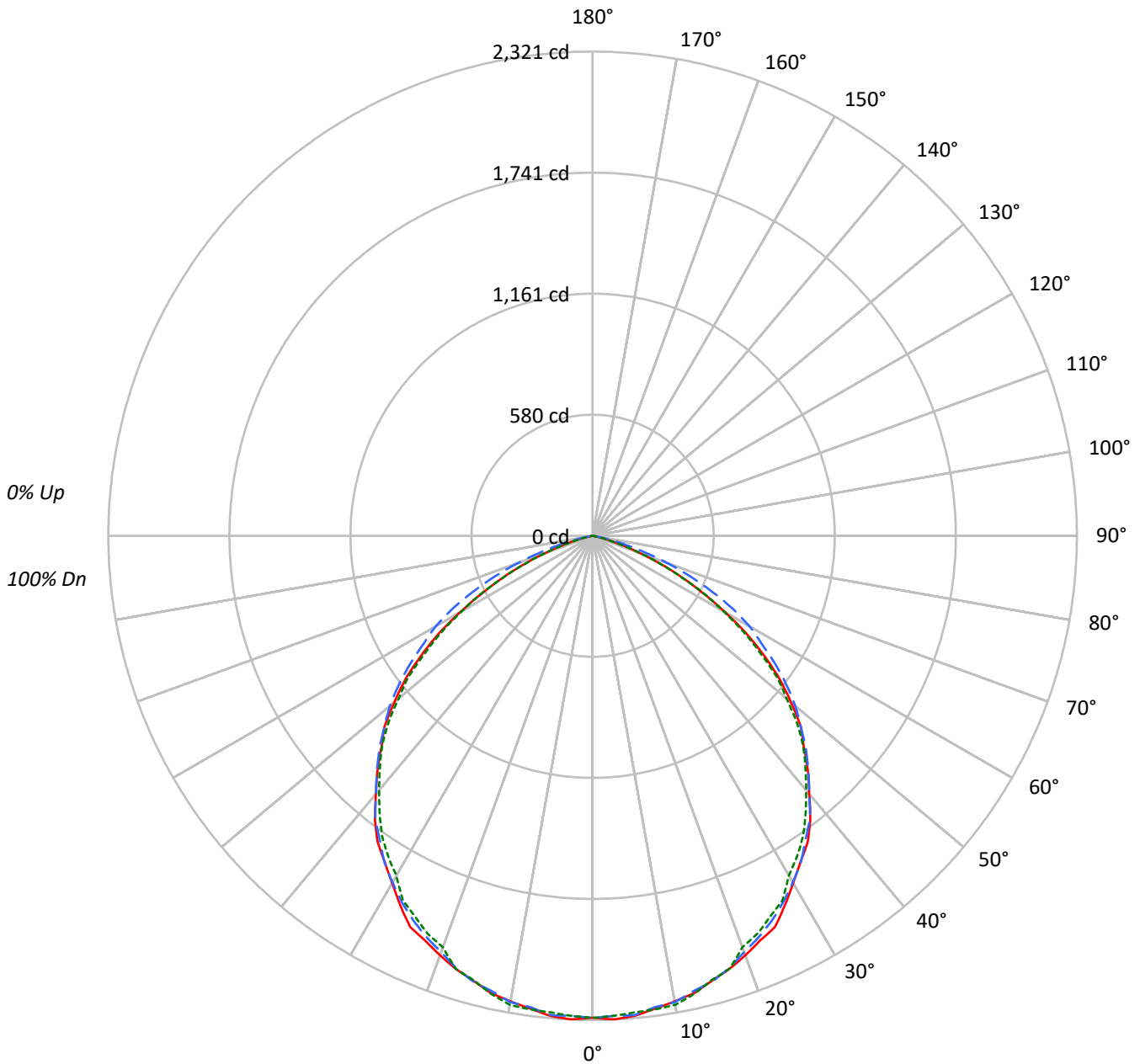
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	218.5	3.9
10°-20°	623.1	11.2
20°-30°	937.6	16.8
30°-40°	1109.2	19.9
40°-50°	1106.9	19.8
50°-60°	917.9	16.5
60°-70°	536.3	9.6
70°-80°	127.7	2.3
80°-90°	0.9	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°	1779.2	31.9
0°-40°	2888.4	51.8
0°-60°	4913.2	88.1
0°-90°	5578.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5578.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2310	2310	2310	2310	2310	
5°	2310	2298	2307	2300	2293	219
15°	2208	2206	2212	2201	2205	624
25°	2068	2045	2034	2028	2014	945
35°	1796	1779	1779	1769	1758	1117
45°	1431	1433	1445	1430	1428	1107
55°	1005	1041	1067	1038	981	893
65°	474	533	627	532	470	471
75°	68	99	153	97	65	92
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°	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4
2.5°	2320.6	2307.0	2317.2	2296.8	2310.4	2296.8	2300.2	2293.4	2307.0	2303.6	2300.2
5°	2310.4	2313.8	2307.0	2313.8	2303.6	2293.4	2303.6	2296.8	2276.3	2307.0	2300.2
7.5°	2286.6	2290.0	2283.1	2293.4	2286.6	2272.9	2300.2	2279.7	2276.3	2279.7	2293.4
10°	2266.1	2272.9	2269.5	2266.1	2269.5	2269.5	2262.7	2252.5	2262.7	2269.5	2266.1
12.5°	2245.7	2255.9	2249.1	2242.3	2235.4	2238.8	2245.7	2228.6	2228.6	2235.4	2255.9
15°	2208.2	2215.0	2218.4	2204.8	2204.8	2208.2	2221.8	2194.5	2208.2	2211.6	2215.0
17.5°	2177.5	2180.9	2180.9	2170.7	2177.5	2167.3	2177.5	2163.9	2177.5	2174.1	2180.9
20°	2140.0	2146.8	2140.0	2140.0	2133.2	2136.6	2136.6	2136.6	2126.4	2123.0	2129.8
22.5°	2099.1	2099.1	2092.3	2099.1	2092.3	2088.9	2105.9	2078.7	2105.9	2082.1	2102.5
25°	2068.5	2051.4	2041.2	2037.8	2051.4	2037.8	2044.6	2034.4	2041.2	2034.4	2037.8
27.5°	1996.9	1986.7	1983.3	1986.7	1986.7	1983.3	1996.9	1959.4	1983.3	1979.9	1979.9
30°	1921.9	1921.9	1928.8	1921.9	1928.8	1918.5	1932.2	1901.5	1921.9	1918.5	1921.9
32.5°	1853.8	1857.2	1857.2	1864.0	1853.8	1857.2	1857.2	1847.0	1853.8	1857.2	1850.4
35°	1795.9	1778.8	1778.8	1778.8	1778.8	1778.8	1785.6	1775.4	1785.6	1778.8	1778.8
37.5°	1714.1	1697.0	1697.0	1693.6	1710.7	1700.4	1717.5	1703.8	1703.8	1710.7	1710.7
40°	1615.2	1622.1	1611.8	1625.5	1622.1	1608.4	1639.1	1618.7	1632.3	1615.2	1628.9
42.5°	1526.6	1530.1	1526.6	1523.2	1536.9	1533.5	1547.1	1533.5	1530.1	1530.1	1553.9
45°	1431.2	1431.2	1431.2	1441.5	1431.2	1434.6	1448.3	1441.5	1448.3	1444.9	1468.7
47.5°	1352.9	1335.8	1332.4	1352.9	1349.4	1352.9	1352.9	1356.3	1359.7	1352.9	1363.1
50°	1240.4	1233.6	1233.6	1237.0	1240.4	1247.2	1257.4	1264.3	1257.4	1267.7	1271.1
52.5°	1131.4	1124.5	1127.9	1141.6	1148.4	1145.0	1162.0	1165.4	1162.0	1168.8	1168.8
55°	1005.3	998.5	1008.7	1025.7	1035.9	1046.2	1063.2	1049.6	1063.2	1066.6	1070.0
57.5°	875.8	872.4	875.8	892.8	903.0	926.9	954.2	954.2	967.8	957.6	967.8
60°	732.7	732.7	746.3	756.5	783.8	800.8	828.1	841.7	855.3	869.0	862.1
62.5°	596.3	599.8	610.0	633.8	650.9	674.7	705.4	719.0	742.9	756.5	749.7
65°	473.7	473.7	480.5	500.9	518.0	548.6	575.9	606.6	620.2	627.0	630.4
67.5°	354.4	351.0	364.6	378.3	395.3	426.0	456.6	473.7	497.5	504.3	500.9
70°	238.5	241.9	248.8	262.4	282.8	306.7	340.8	354.4	368.0	374.8	368.0
72.5°	149.9	149.9	153.3	167.0	180.6	197.6	221.5	235.1	252.2	255.6	248.8
75°	68.2	68.2	75.0	81.8	92.0	105.6	122.7	132.9	143.1	153.3	153.3
77.5°	13.6	17.0	20.4	20.4	27.3	37.5	47.7	57.9	68.2	68.2	68.2
80°	3.4	3.4	3.4	3.4	3.4	3.4	6.8	10.2	17.0	17.0	17.0
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°	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4	2310.4
2.5°	2310.4	2330.9	2310.4	2300.2	2313.8	2310.4	2300.2	2303.6
5°	2300.2	2307.0	2313.8	2286.6	2303.6	2307.0	2300.2	2293.4
7.5°	2290.0	2293.4	2290.0	2283.1	2283.1	2283.1	2290.0	2290.0
10°	2286.6	2276.3	2259.3	2249.1	2259.3	2259.3	2255.9	2283.1
12.5°	2242.3	2255.9	2245.7	2225.2	2245.7	2242.3	2242.3	2249.1
15°	2208.2	2208.2	2215.0	2187.7	2201.4	2198.0	2198.0	2204.8
17.5°	2174.1	2174.1	2170.7	2163.9	2160.5	2170.7	2160.5	2177.5
20°	2126.4	2133.2	2153.7	2119.6	2129.8	2119.6	2119.6	2099.1
22.5°	2068.5	2102.5	2085.5	2082.1	2078.7	2082.1	2088.9	2065.1
25°	2031.0	2031.0	2037.8	2017.3	2017.3	2024.2	2020.8	2013.9
27.5°	1979.9	1976.5	1973.0	1966.2	1983.3	1969.6	1969.6	1969.6
30°	1908.3	1918.5	1915.1	1898.1	1918.5	1911.7	1901.5	1881.0
32.5°	1847.0	1860.6	1840.2	1836.7	1833.3	1836.7	1840.2	1823.1
35°	1772.0	1775.4	1775.4	1761.8	1765.2	1761.8	1755.0	1758.4
37.5°	1703.8	1700.4	1683.4	1676.6	1680.0	1680.0	1683.4	1676.6
40°	1608.4	1618.7	1618.7	1594.8	1601.6	1594.8	1594.8	1591.4
42.5°	1530.1	1533.5	1523.2	1513.0	1513.0	1509.6	1502.8	1509.6
45°	1448.3	1444.9	1434.6	1424.4	1424.4	1421.0	1414.2	1427.8
47.5°	1356.3	1349.4	1346.0	1332.4	1332.4	1312.0	1315.4	1329.0
50°	1264.3	1257.4	1243.8	1237.0	1226.8	1216.5	1213.1	1213.1
52.5°	1155.2	1155.2	1141.6	1127.9	1124.5	1117.7	1110.9	1114.3
55°	1059.8	1059.8	1049.6	1025.7	1012.1	995.0	984.8	981.4
57.5°	950.7	943.9	923.5	896.2	882.6	869.0	858.7	858.7
60°	841.7	824.7	804.2	780.4	756.5	732.7	725.8	722.4
62.5°	722.4	705.4	667.9	640.6	623.6	610.0	596.3	606.6
65°	603.2	579.3	545.2	518.0	500.9	480.5	470.3	470.3
67.5°	477.1	453.2	419.1	391.9	374.8	361.2	347.6	347.6
70°	351.0	334.0	303.3	279.4	265.8	245.4	241.9	241.9
72.5°	238.5	218.1	194.2	177.2	163.6	149.9	143.1	139.7
75°	132.9	119.3	102.2	92.0	78.4	71.6	64.7	64.7
77.5°	54.5	44.3	34.1	27.3	20.4	17.0	13.6	17.0
80°	10.2	6.8	3.4	3.4	3.4	3.4	3.4	3.4
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)