

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: P209506

Luminaire Tested: **LDSQ6B70D010 EU6B60709727 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209506
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: LDSQ6B70D010 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: 5533.8 lumens
Efficiency: N/A
Efficacy: 69.7 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

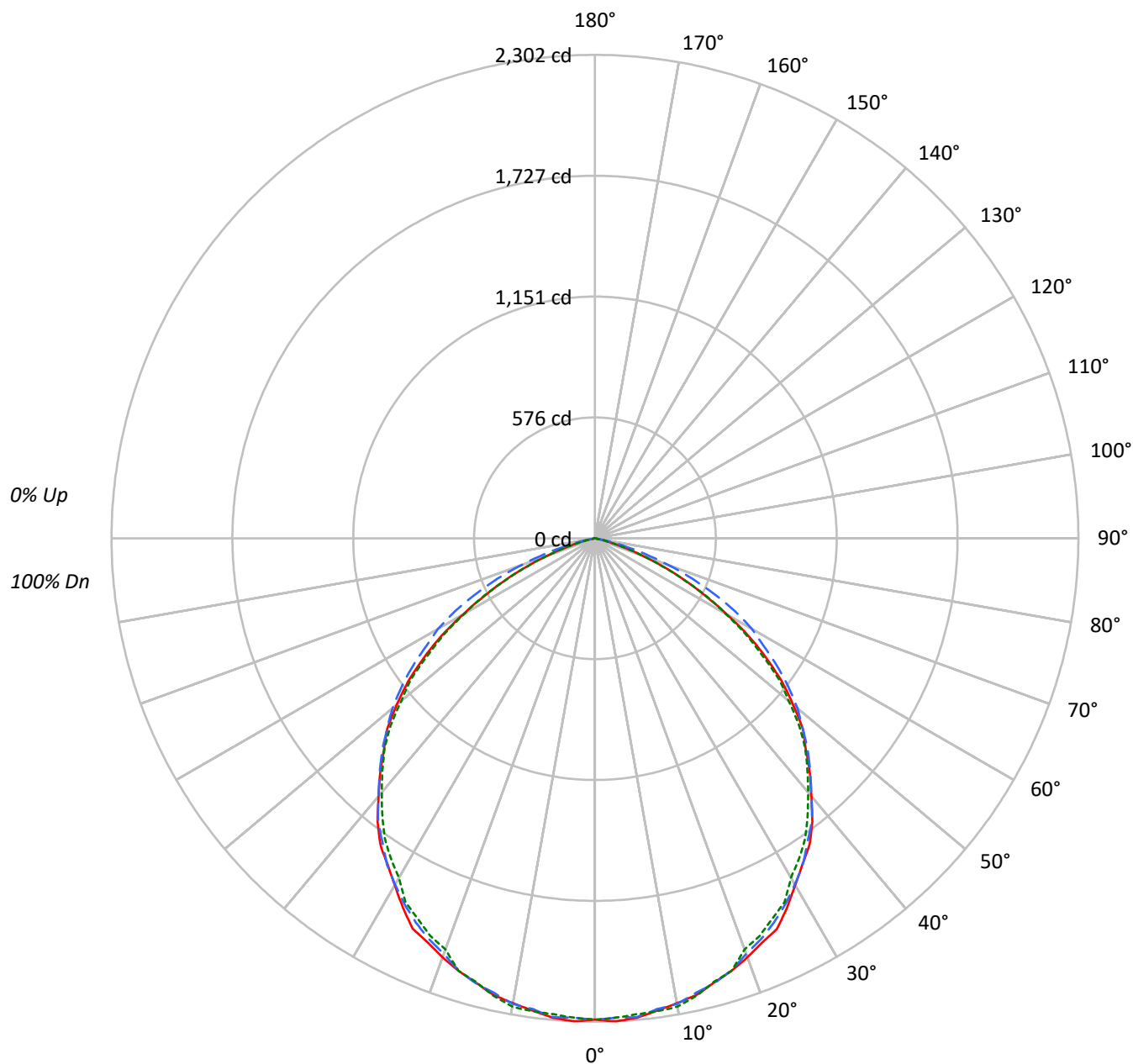
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20							
RC	80				70				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°	216.8	3.9
10°-20°	618.2	11.2
20°-30°	930.2	16.8
30°-40°	1100.4	19.9
40°-50°	1098.1	19.8
50°-60°	910.6	16.5
60°-70°	532.0	9.6
70°-80°	126.7	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°	1765.1	31.9
0°-40°	2865.5	51.8
0°-60°	4874.2	88.1
0°-90°	5533.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5533.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2292	2292	2292	2292	2292	
5°	2292	2280	2289	2282	2275	217
15°	2191	2189	2194	2184	2187	619
25°	2052	2028	2018	2011	1998	938
35°	1782	1765	1765	1755	1744	1108
45°	1420	1422	1433	1418	1416	1098
55°	997	1033	1058	1029	974	885
65°	470	529	622	527	466	467
75°	68	98	152	96	64	92
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°	2292.1	2292.1	2292.1	2292.1	2292.1	2292.1	2292.1	2292.1	2292.1	2292.1	2292.1
2.5°	2302.2	2288.7	2298.8	2278.5	2292.1	2278.5	2281.9	2275.2	2288.7	2285.3	2281.9
5°	2292.1	2295.4	2288.7	2295.4	2285.3	2275.2	2285.3	2278.5	2258.3	2288.7	2281.9
7.5°	2268.4	2271.8	2265.0	2275.2	2268.4	2254.9	2281.9	2261.6	2258.3	2261.6	2275.2
10°	2248.1	2254.9	2251.5	2248.1	2251.5	2251.5	2244.7	2234.6	2244.7	2251.5	2248.1
12.5°	2227.8	2238.0	2231.2	2224.4	2217.7	2221.1	2227.8	2210.9	2210.9	2217.7	2238.0
15°	2190.6	2197.4	2200.8	2187.3	2187.3	2190.6	2204.2	2177.1	2190.6	2194.0	2197.4
17.5°	2160.2	2163.6	2163.6	2153.5	2160.2	2150.1	2160.2	2146.7	2160.2	2156.8	2163.6
20°	2123.0	2129.8	2123.0	2123.0	2116.3	2119.6	2119.6	2119.6	2109.5	2106.1	2112.9
22.5°	2082.5	2082.5	2075.7	2082.5	2075.7	2072.3	2089.2	2062.2	2089.2	2065.6	2085.8
25°	2052.0	2035.1	2025.0	2021.6	2035.1	2021.6	2028.4	2018.2	2025.0	2018.2	2021.6
27.5°	1981.0	1970.9	1967.5	1970.9	1970.9	1967.5	1981.0	1943.9	1967.5	1964.1	1964.1
30°	1906.7	1906.7	1913.4	1906.7	1913.4	1903.3	1916.8	1886.4	1906.7	1903.3	1906.7
32.5°	1839.1	1842.4	1842.4	1849.2	1839.1	1842.4	1842.4	1832.3	1839.1	1842.4	1835.7
35°	1781.6	1764.7	1764.7	1764.7	1764.7	1764.7	1771.4	1761.3	1771.4	1764.7	1764.7
37.5°	1700.5	1683.5	1683.5	1680.2	1697.1	1686.9	1703.8	1690.3	1690.3	1697.1	1697.1
40°	1602.4	1609.2	1599.0	1612.6	1609.2	1595.7	1626.1	1605.8	1619.3	1602.4	1615.9
42.5°	1514.5	1517.9	1514.5	1511.1	1524.7	1521.3	1534.8	1521.3	1517.9	1517.9	1541.6
45°	1419.9	1419.9	1419.9	1430.0	1419.9	1423.2	1436.8	1430.0	1436.8	1433.4	1457.0
47.5°	1342.1	1325.2	1321.8	1342.1	1338.7	1342.1	1342.1	1345.5	1348.9	1342.1	1352.2
50°	1230.5	1223.8	1223.8	1227.2	1230.5	1237.3	1247.4	1254.2	1247.4	1257.6	1261.0
52.5°	1122.4	1115.6	1119.0	1132.5	1139.3	1135.9	1152.8	1156.2	1152.8	1159.6	1159.6
55°	997.3	990.5	1000.7	1017.6	1027.7	1037.9	1054.8	1041.2	1054.8	1058.1	1061.5
57.5°	868.8	865.4	868.8	885.7	895.9	919.5	946.6	946.6	960.1	950.0	960.1
60°	726.8	726.8	740.4	750.5	777.5	794.4	821.5	835.0	848.5	862.1	855.3
62.5°	591.6	595.0	605.1	628.8	645.7	669.4	699.8	713.3	737.0	750.5	743.7
65°	469.9	469.9	476.7	497.0	513.9	544.3	571.3	601.8	615.3	622.0	625.4
67.5°	351.6	348.2	361.7	375.2	392.2	422.6	453.0	469.9	493.6	500.3	497.0
70°	236.6	240.0	246.8	260.3	280.6	304.3	338.1	351.6	365.1	371.9	365.1
72.5°	148.7	148.7	152.1	165.7	179.2	196.1	219.7	233.3	250.2	253.5	246.8
75°	67.6	67.6	74.4	81.1	91.3	104.8	121.7	131.8	142.0	152.1	152.1
77.5°	13.5	16.9	20.3	20.3	27.0	37.2	47.3	57.5	67.6	67.6	67.6
80°	3.4	3.4	3.4	3.4	3.4	3.4	6.8	10.1	16.9	16.9	16.9
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°	2292.1	2292.1	2292.1	2292.1	2292.1	2292.1	2292.1	2292.1
2.5°	2292.1	2312.3	2292.1	2281.9	2295.4	2292.1	2281.9	2285.3
5°	2281.9	2288.7	2295.4	2268.4	2285.3	2288.7	2281.9	2275.2
7.5°	2271.8	2275.2	2271.8	2265.0	2265.0	2265.0	2271.8	2271.8
10°	2268.4	2258.3	2241.4	2231.2	2241.4	2241.4	2238.0	2265.0
12.5°	2224.4	2238.0	2227.8	2207.5	2227.8	2224.4	2224.4	2231.2
15°	2190.6	2190.6	2197.4	2170.4	2183.9	2180.5	2180.5	2187.3
17.5°	2156.8	2156.8	2153.5	2146.7	2143.3	2153.5	2143.3	2160.2
20°	2109.5	2116.3	2136.6	2102.7	2112.9	2102.7	2102.7	2082.5
22.5°	2052.0	2085.8	2068.9	2065.6	2062.2	2065.6	2072.3	2048.7
25°	2014.8	2014.8	2021.6	2001.3	2001.3	2008.1	2004.7	1997.9
27.5°	1964.1	1960.8	1957.4	1950.6	1967.5	1954.0	1954.0	1954.0
30°	1893.1	1903.3	1899.9	1883.0	1903.3	1896.5	1886.4	1866.1
32.5°	1832.3	1845.8	1825.5	1822.2	1818.8	1822.2	1825.5	1808.6
35°	1757.9	1761.3	1761.3	1747.8	1751.2	1747.8	1741.0	1744.4
37.5°	1690.3	1686.9	1670.0	1663.3	1666.6	1666.6	1670.0	1663.3
40°	1595.7	1605.8	1605.8	1582.1	1588.9	1582.1	1582.1	1578.7
42.5°	1517.9	1521.3	1511.1	1501.0	1501.0	1497.6	1490.9	1497.6
45°	1436.8	1433.4	1423.2	1413.1	1413.1	1409.7	1403.0	1416.5
47.5°	1345.5	1338.7	1335.3	1321.8	1321.8	1301.5	1304.9	1318.4
50°	1254.2	1247.4	1233.9	1227.2	1217.0	1206.9	1203.5	1203.5
52.5°	1146.0	1146.0	1132.5	1119.0	1115.6	1108.8	1102.1	1105.5
55°	1051.4	1051.4	1041.2	1017.6	1004.0	987.1	977.0	973.6
57.5°	943.2	936.4	916.1	889.1	875.6	862.1	851.9	851.9
60°	835.0	818.1	797.8	774.2	750.5	726.8	720.1	716.7
62.5°	716.7	699.8	662.6	635.6	618.7	605.1	591.6	601.8
65°	598.4	574.7	540.9	513.9	497.0	476.7	466.5	466.5
67.5°	473.3	449.6	415.8	388.8	371.9	358.3	344.8	344.8
70°	348.2	331.3	300.9	277.2	263.7	243.4	240.0	240.0
72.5°	236.6	216.4	192.7	175.8	162.3	148.7	142.0	138.6
75°	131.8	118.3	101.4	91.3	77.8	71.0	64.2	64.2
77.5°	54.1	43.9	33.8	27.0	20.3	16.9	13.5	16.9
80°	10.1	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)