

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: P209507

Luminaire Tested: **LDSQ6B70D010 EU6B60709730 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209507
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 EU6B60709730 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: 5783.5 lumens
Efficiency: N/A
Efficacy: 72.8 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

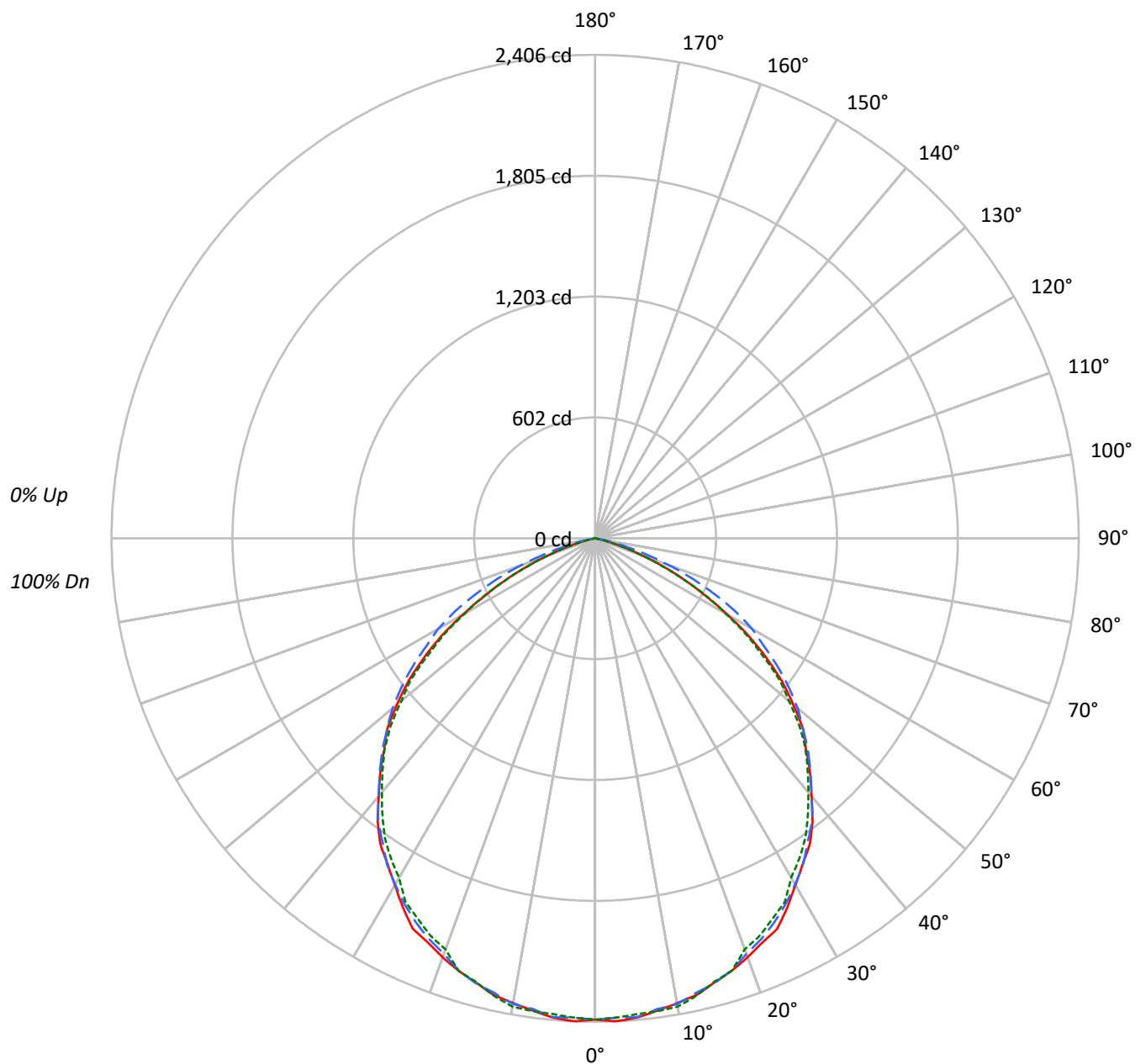
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	226.6	3.9
10°-20°	646.0	11.2
20°-30°	972.1	16.8
30°-40°	1150.0	19.9
40°-50°	1147.7	19.8
50°-60°	951.7	16.5
60°-70°	556.0	9.6
70°-80°	132.4	2.3
80°-90°	1.0	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°	1844.7	31.9
0°-40°	2994.8	51.8
0°-60°	5094.1	88.1
0°-90°	5783.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5783.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2396	2396	2396	2396	2396	
5°	2396	2383	2392	2385	2378	227
15°	2290	2288	2293	2282	2286	647
25°	2145	2120	2109	2102	2088	980
35°	1862	1844	1844	1834	1823	1158
45°	1484	1486	1498	1482	1480	1148
55°	1042	1079	1106	1076	1018	925
65°	491	553	650	551	488	488
75°	71	102	159	101	67	96
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°	2395.5	2395.5	2395.5	2395.5	2395.5	2395.5	2395.5	2395.5	2395.5	2395.5	2395.5
2.5°	2406.1	2391.9	2402.5	2381.3	2395.5	2381.3	2384.9	2377.8	2391.9	2388.4	2384.9
5°	2395.5	2399.0	2391.9	2399.0	2388.4	2377.8	2388.4	2381.3	2360.1	2391.9	2384.9
7.5°	2370.7	2374.3	2367.2	2377.8	2370.7	2356.6	2384.9	2363.7	2360.1	2363.7	2377.8
10°	2349.5	2356.6	2353.1	2349.5	2353.1	2353.1	2346.0	2335.4	2346.0	2353.1	2349.5
12.5°	2328.4	2339.0	2331.9	2324.8	2317.8	2321.3	2328.4	2310.7	2310.7	2317.8	2339.0
15°	2289.5	2296.6	2300.1	2286.0	2286.0	2289.5	2303.6	2275.4	2289.5	2293.0	2296.6
17.5°	2257.7	2261.2	2261.2	2250.6	2257.7	2247.1	2257.7	2243.6	2257.7	2254.2	2261.2
20°	2218.8	2225.9	2218.8	2218.8	2211.8	2215.3	2215.3	2215.3	2204.7	2201.2	2208.2
22.5°	2176.4	2176.4	2169.4	2176.4	2169.4	2165.8	2183.5	2155.2	2183.5	2158.8	2180.0
25°	2144.6	2127.0	2116.4	2112.8	2127.0	2112.8	2119.9	2109.3	2116.4	2109.3	2112.8
27.5°	2070.4	2059.8	2056.3	2059.8	2059.8	2056.3	2070.4	2031.6	2056.3	2052.8	2052.8
30°	1992.7	1992.7	1999.8	1992.7	1999.8	1989.2	2003.3	1971.5	1992.7	1989.2	1992.7
32.5°	1922.0	1925.6	1925.6	1932.6	1922.0	1925.6	1925.6	1915.0	1922.0	1925.6	1918.5
35°	1862.0	1844.3	1844.3	1844.3	1844.3	1844.3	1851.4	1840.8	1851.4	1844.3	1844.3
37.5°	1777.2	1759.5	1759.5	1756.0	1773.6	1763.0	1780.7	1766.6	1766.6	1773.6	1773.6
40°	1674.7	1681.8	1671.2	1685.3	1681.8	1667.7	1699.4	1678.2	1692.4	1674.7	1688.8
42.5°	1582.9	1586.4	1582.9	1579.3	1593.5	1589.9	1604.1	1589.9	1586.4	1586.4	1611.1
45°	1483.9	1483.9	1483.9	1494.5	1483.9	1487.5	1501.6	1494.5	1501.6	1498.1	1522.8
47.5°	1402.7	1385.0	1381.5	1402.7	1399.1	1402.7	1402.7	1406.2	1409.7	1402.7	1413.3
50°	1286.1	1279.0	1279.0	1282.5	1286.1	1293.1	1303.7	1310.8	1303.7	1314.3	1317.9
52.5°	1173.0	1165.9	1169.5	1183.6	1190.7	1187.1	1204.8	1208.3	1204.8	1211.9	1211.9
55°	1042.3	1035.2	1045.8	1063.5	1074.1	1084.7	1102.3	1088.2	1102.3	1105.9	1109.4
57.5°	908.0	904.5	908.0	925.7	936.3	961.0	989.3	989.3	1003.4	992.8	1003.4
60°	759.6	759.6	773.8	784.4	812.6	830.3	858.6	872.7	886.8	901.0	893.9
62.5°	618.3	621.8	632.4	657.2	674.8	699.6	731.4	745.5	770.2	784.4	777.3
65°	491.1	491.1	498.2	519.4	537.0	568.8	597.1	628.9	643.0	650.1	653.6
67.5°	367.4	363.9	378.0	392.2	409.8	441.6	473.4	491.1	515.8	522.9	519.4
70°	247.3	250.9	257.9	272.1	293.3	318.0	353.3	367.4	381.6	388.6	381.6
72.5°	155.5	155.5	159.0	173.1	187.3	204.9	229.7	243.8	261.5	265.0	257.9
75°	70.7	70.7	77.7	84.8	95.4	109.5	127.2	137.8	148.4	159.0	159.0
77.5°	14.1	17.7	21.2	21.2	28.3	38.9	49.5	60.1	70.7	70.7	70.7
80°	3.5	3.5	3.5	3.5	3.5	3.5	7.1	10.6	17.7	17.7	17.7
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°	2395.5	2395.5	2395.5	2395.5	2395.5	2395.5	2395.5	2395.5
2.5°	2395.5	2416.7	2395.5	2384.9	2399.0	2395.5	2384.9	2388.4
5°	2384.9	2391.9	2399.0	2370.7	2388.4	2391.9	2384.9	2377.8
7.5°	2374.3	2377.8	2374.3	2367.2	2367.2	2367.2	2374.3	2374.3
10°	2370.7	2360.1	2342.5	2331.9	2342.5	2342.5	2339.0	2367.2
12.5°	2324.8	2339.0	2328.4	2307.2	2328.4	2324.8	2324.8	2331.9
15°	2289.5	2289.5	2296.6	2268.3	2282.4	2278.9	2278.9	2286.0
17.5°	2254.2	2254.2	2250.6	2243.6	2240.0	2250.6	2240.0	2257.7
20°	2204.7	2211.8	2233.0	2197.6	2208.2	2197.6	2197.6	2176.4
22.5°	2144.6	2180.0	2162.3	2158.8	2155.2	2158.8	2165.8	2141.1
25°	2105.8	2105.8	2112.8	2091.6	2091.6	2098.7	2095.2	2088.1
27.5°	2052.8	2049.2	2045.7	2038.6	2056.3	2042.2	2042.2	2042.2
30°	1978.6	1989.2	1985.6	1968.0	1989.2	1982.1	1971.5	1950.3
32.5°	1915.0	1929.1	1907.9	1904.4	1900.8	1904.4	1907.9	1890.2
35°	1837.2	1840.8	1840.8	1826.6	1830.2	1826.6	1819.6	1823.1
37.5°	1766.6	1763.0	1745.4	1738.3	1741.8	1741.8	1745.4	1738.3
40°	1667.7	1678.2	1678.2	1653.5	1660.6	1653.5	1653.5	1650.0
42.5°	1586.4	1589.9	1579.3	1568.7	1568.7	1565.2	1558.1	1565.2
45°	1501.6	1498.1	1487.5	1476.9	1476.9	1473.3	1466.3	1480.4
47.5°	1406.2	1399.1	1395.6	1381.5	1381.5	1360.3	1363.8	1377.9
50°	1310.8	1303.7	1289.6	1282.5	1271.9	1261.3	1257.8	1257.8
52.5°	1197.7	1197.7	1183.6	1169.5	1165.9	1158.9	1151.8	1155.3
55°	1098.8	1098.8	1088.2	1063.5	1049.3	1031.7	1021.1	1017.5
57.5°	985.8	978.7	957.5	929.2	915.1	901.0	890.4	890.4
60°	872.7	855.0	833.8	809.1	784.4	759.6	752.6	749.0
62.5°	749.0	731.4	692.5	664.2	646.6	632.4	618.3	628.9
65°	625.4	600.6	565.3	537.0	519.4	498.2	487.6	487.6
67.5°	494.6	469.9	434.6	406.3	388.6	374.5	360.4	360.4
70°	363.9	346.2	314.5	289.7	275.6	254.4	250.9	250.9
72.5°	247.3	226.1	201.4	183.7	169.6	155.5	148.4	144.9
75°	137.8	123.7	106.0	95.4	81.3	74.2	67.1	67.1
77.5°	56.5	45.9	35.3	28.3	21.2	17.7	14.1	17.7
80°	10.6	7.1	3.5	3.5	3.5	3.5	3.5	3.5
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)