

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: P209472

Luminaire Tested: **LDSQ6B50D010 EU6B30508040 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209472
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 EU6B30508040 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 4000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5980.3 lumens
Efficiency: N/A
Efficacy: 101.8 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

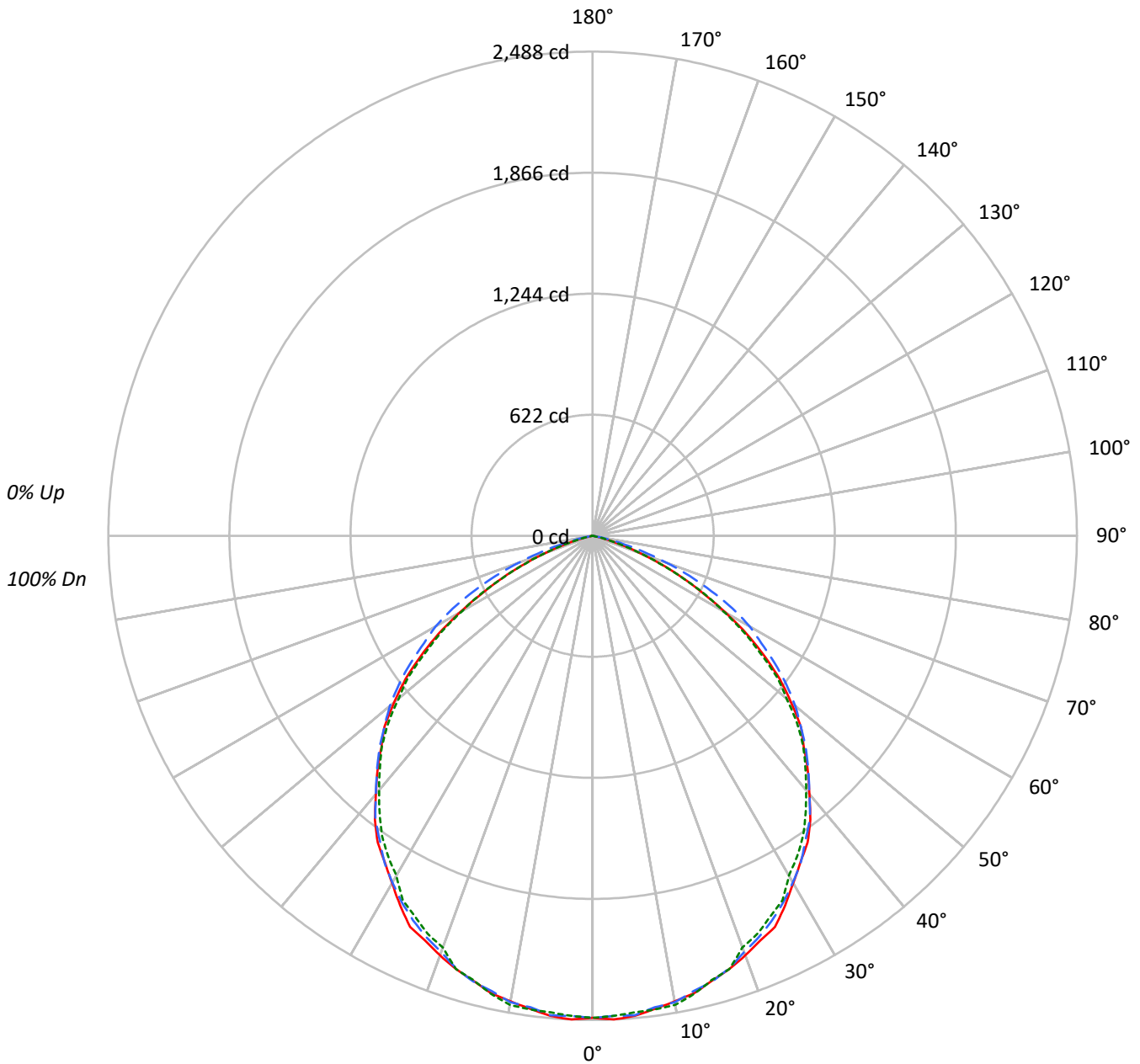
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	234.3	3.9
10°-20°	668.0	11.2
20°-30°	1005.2	16.8
30°-40°	1189.2	19.9
40°-50°	1186.7	19.8
50°-60°	984.1	16.5
60°-70°	574.9	9.6
70°-80°	136.9	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°	1907.5	31.9
0°-40°	3096.7	51.8
0°-60°	5267.4	88.1
0°-90°	5980.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5980.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2477	2477	2477	2477	2477	
5°	2477	2464	2473	2466	2459	235
15°	2367	2366	2371	2360	2364	669
25°	2218	2192	2181	2174	2159	1014
35°	1925	1907	1907	1896	1885	1197
45°	1534	1536	1549	1533	1531	1187
55°	1078	1116	1144	1112	1052	957
65°	508	572	672	570	504	505
75°	73	106	164	104	69	99
85°	0	0	0	0	0	1
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°	2477.0	2477.0	2477.0	2477.0	2477.0	2477.0	2477.0	2477.0	2477.0	2477.0	2477.0
2.5°	2487.9	2473.3	2484.3	2462.4	2477.0	2462.4	2466.0	2458.7	2473.3	2469.7	2466.0
5°	2477.0	2480.6	2473.3	2480.6	2469.7	2458.7	2469.7	2462.4	2440.4	2473.3	2466.0
7.5°	2451.4	2455.1	2447.8	2458.7	2451.4	2436.8	2466.0	2444.1	2440.4	2444.1	2458.7
10°	2429.5	2436.8	2433.1	2429.5	2433.1	2433.1	2425.8	2414.9	2425.8	2433.1	2429.5
12.5°	2407.6	2418.5	2411.2	2403.9	2396.6	2400.3	2407.6	2389.3	2389.3	2396.6	2418.5
15°	2367.4	2374.7	2378.3	2363.7	2363.7	2367.4	2382.0	2352.8	2367.4	2371.0	2374.7
17.5°	2334.5	2338.1	2338.1	2327.2	2334.5	2323.5	2334.5	2319.9	2334.5	2330.8	2338.1
20°	2294.3	2301.6	2294.3	2294.3	2287.0	2290.7	2290.7	2290.7	2279.7	2276.0	2283.3
22.5°	2250.5	2250.5	2243.2	2250.5	2243.2	2239.5	2257.8	2228.5	2257.8	2232.2	2254.1
25°	2217.6	2199.3	2188.4	2184.7	2199.3	2184.7	2192.0	2181.1	2188.4	2181.1	2184.7
27.5°	2140.9	2129.9	2126.3	2129.9	2129.9	2126.3	2140.9	2100.7	2126.3	2122.6	2122.6
30°	2060.5	2060.5	2067.8	2060.5	2067.8	2056.8	2071.5	2038.6	2060.5	2056.8	2060.5
32.5°	1987.4	1991.1	1991.1	1998.4	1987.4	1991.1	1991.1	1980.1	1987.4	1991.1	1983.8
35°	1925.3	1907.1	1907.1	1907.1	1907.1	1907.1	1914.4	1903.4	1914.4	1907.1	1907.1
37.5°	1837.6	1819.4	1819.4	1815.7	1834.0	1823.0	1841.3	1826.7	1826.7	1834.0	1834.0
40°	1731.7	1739.0	1728.0	1742.7	1739.0	1724.4	1757.3	1735.3	1750.0	1731.7	1746.3
42.5°	1636.7	1640.4	1636.7	1633.1	1647.7	1644.0	1658.6	1644.0	1640.4	1640.4	1665.9
45°	1534.4	1534.4	1534.4	1545.4	1534.4	1538.1	1552.7	1545.4	1552.7	1549.0	1574.6
47.5°	1450.4	1432.1	1428.5	1450.4	1446.7	1450.4	1450.4	1454.0	1457.7	1450.4	1461.3
50°	1329.8	1322.5	1322.5	1326.2	1329.8	1337.1	1348.1	1355.4	1348.1	1359.0	1362.7
52.5°	1212.9	1205.6	1209.3	1223.9	1231.2	1227.5	1245.8	1249.4	1245.8	1253.1	1253.1
55°	1077.7	1070.4	1081.4	1099.7	1110.6	1121.6	1139.8	1125.2	1139.8	1143.5	1147.2
57.5°	938.9	935.3	938.9	957.2	968.1	993.7	1022.9	1022.9	1037.6	1026.6	1037.6
60°	785.5	785.5	800.1	811.0	840.3	858.5	887.8	902.4	917.0	931.6	924.3
62.5°	639.3	643.0	654.0	679.5	697.8	723.4	756.2	770.9	796.4	811.0	803.7
65°	507.8	507.8	515.1	537.0	555.3	588.2	617.4	650.3	664.9	672.2	675.9
67.5°	379.9	376.3	390.9	405.5	423.8	456.7	489.6	507.8	533.4	540.7	537.0
70°	255.7	259.4	266.7	281.3	303.2	328.8	365.3	379.9	394.6	401.9	394.6
72.5°	160.7	160.7	164.4	179.0	193.6	211.9	237.5	252.1	270.3	274.0	266.7
75°	73.1	73.1	80.4	87.7	98.6	113.3	131.5	142.5	153.4	164.4	164.4
77.5°	14.6	18.3	21.9	21.9	29.2	40.2	51.1	62.1	73.1	73.1	73.1
80°	3.7	3.7	3.7	3.7	3.7	3.7	7.3	11.0	18.3	18.3	18.3
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°	2477.0	2477.0	2477.0	2477.0	2477.0	2477.0	2477.0	2477.0
2.5°	2477.0	2498.9	2477.0	2466.0	2480.6	2477.0	2466.0	2469.7
5°	2466.0	2473.3	2480.6	2451.4	2469.7	2473.3	2466.0	2458.7
7.5°	2455.1	2458.7	2455.1	2447.8	2447.8	2447.8	2455.1	2455.1
10°	2451.4	2440.4	2422.2	2411.2	2422.2	2422.2	2418.5	2447.8
12.5°	2403.9	2418.5	2407.6	2385.6	2407.6	2403.9	2403.9	2411.2
15°	2367.4	2367.4	2374.7	2345.5	2360.1	2356.4	2356.4	2363.7
17.5°	2330.8	2330.8	2327.2	2319.9	2316.2	2327.2	2316.2	2334.5
20°	2279.7	2287.0	2308.9	2272.4	2283.3	2272.4	2272.4	2250.5
22.5°	2217.6	2254.1	2235.9	2232.2	2228.5	2232.2	2239.5	2213.9
25°	2177.4	2177.4	2184.7	2162.8	2162.8	2170.1	2166.4	2159.1
27.5°	2122.6	2118.9	2115.3	2108.0	2126.3	2111.6	2111.6	2111.6
30°	2045.9	2056.8	2053.2	2034.9	2056.8	2049.5	2038.6	2016.7
32.5°	1980.1	1994.7	1972.8	1969.2	1965.5	1969.2	1972.8	1954.5
35°	1899.7	1903.4	1903.4	1888.8	1892.4	1888.8	1881.5	1885.1
37.5°	1826.7	1823.0	1804.8	1797.5	1801.1	1801.1	1804.8	1797.5
40°	1724.4	1735.3	1735.3	1709.8	1717.1	1709.8	1709.8	1706.1
42.5°	1640.4	1644.0	1633.1	1622.1	1622.1	1618.4	1611.1	1618.4
45°	1552.7	1549.0	1538.1	1527.1	1527.1	1523.5	1516.1	1530.8
47.5°	1454.0	1446.7	1443.1	1428.5	1428.5	1406.5	1410.2	1424.8
50°	1355.4	1348.1	1333.5	1326.2	1315.2	1304.2	1300.6	1300.6
52.5°	1238.5	1238.5	1223.9	1209.3	1205.6	1198.3	1191.0	1194.6
55°	1136.2	1136.2	1125.2	1099.7	1085.0	1066.8	1055.8	1052.2
57.5°	1019.3	1012.0	990.1	960.8	946.2	931.6	920.6	920.6
60°	902.4	884.1	862.2	836.6	811.0	785.5	778.2	774.5
62.5°	774.5	756.2	716.1	686.8	668.6	654.0	639.3	650.3
65°	646.6	621.1	584.5	555.3	537.0	515.1	504.2	504.2
67.5°	511.5	485.9	449.4	420.1	401.9	387.3	372.6	372.6
70°	376.3	358.0	325.1	299.6	285.0	263.0	259.4	259.4
72.5°	255.7	233.8	208.2	190.0	175.4	160.7	153.4	149.8
75°	142.5	127.9	109.6	98.6	84.0	76.7	69.4	69.4
77.5°	58.5	47.5	36.5	29.2	21.9	18.3	14.6	18.3
80°	11.0	7.3	3.7	3.7	3.7	3.7	3.7	3.7
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)