

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: P209473

Luminaire Tested: **LDSQ6B50D010 EU6B30508050 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209473
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 EU6B30508050 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 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5976.9 lumens
Efficiency: N/A
Efficacy: 101.7 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

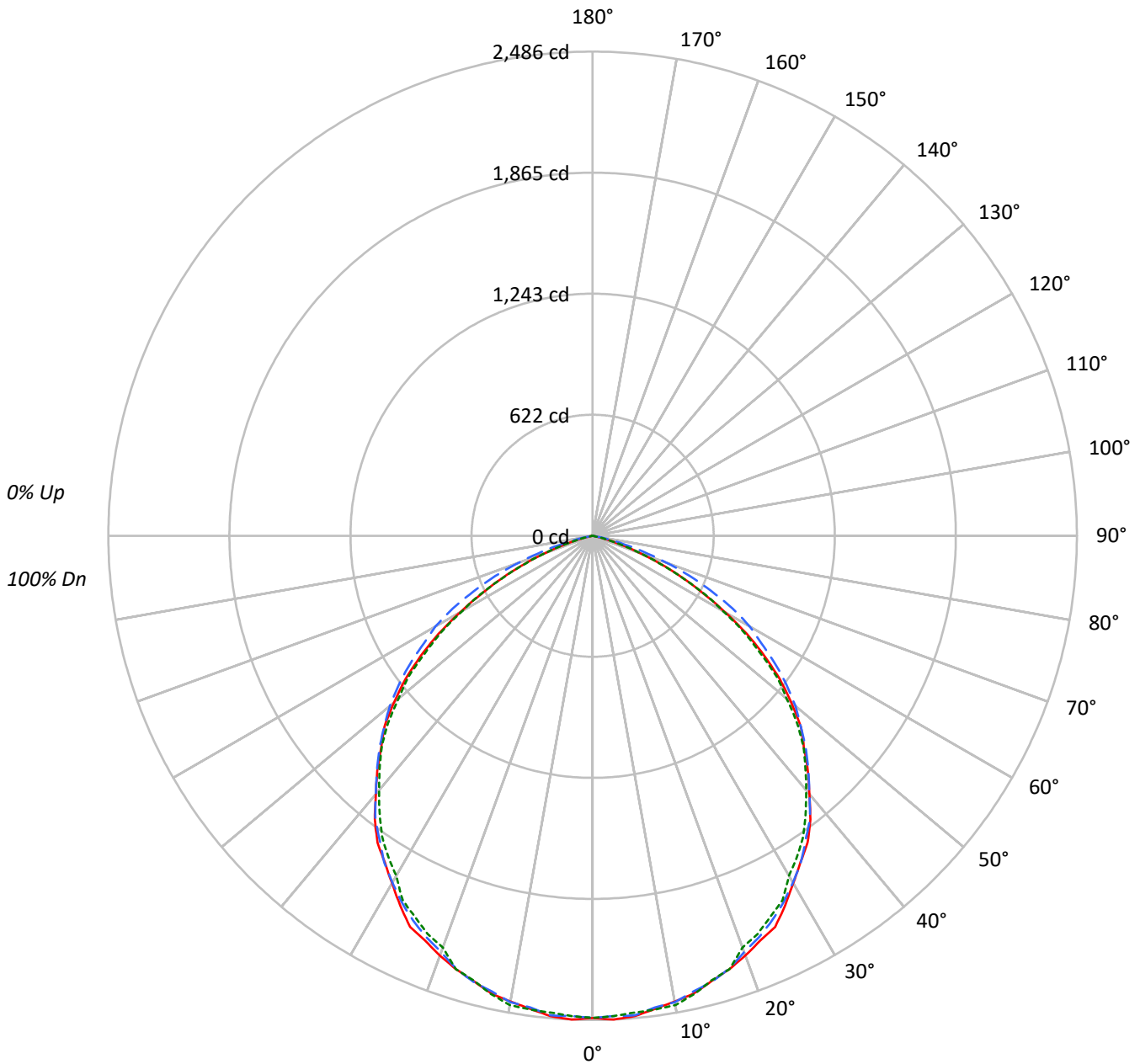
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	234.1	3.9
10°-20°	667.6	11.2
20°-30°	1004.6	16.8
30°-40°	1188.5	19.9
40°-50°	1186.0	19.8
50°-60°	983.5	16.5
60°-70°	574.6	9.6
70°-80°	136.8	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°	1906.4	31.9
0°-40°	3094.9	51.8
0°-60°	5264.5	88.1
0°-90°	5976.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5976.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2476	2476	2476	2476	2476	
5°	2476	2463	2472	2465	2457	235
15°	2366	2364	2370	2359	2362	669
25°	2216	2191	2180	2173	2158	1013
35°	1924	1906	1906	1895	1884	1196
45°	1534	1535	1548	1532	1530	1186
55°	1077	1116	1143	1112	1052	956
65°	508	571	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°	2475.6	2475.6	2475.6	2475.6	2475.6	2475.6	2475.6	2475.6	2475.6	2475.6	2475.6
2.5°	2486.5	2471.9	2482.9	2461.0	2475.6	2461.0	2464.6	2457.3	2471.9	2468.3	2464.6
5°	2475.6	2479.2	2471.9	2479.2	2468.3	2457.3	2468.3	2461.0	2439.1	2471.9	2464.6
7.5°	2450.0	2453.7	2446.4	2457.3	2450.0	2435.4	2464.6	2442.7	2439.1	2442.7	2457.3
10°	2428.1	2435.4	2431.8	2428.1	2431.8	2431.8	2424.5	2413.5	2424.5	2431.8	2428.1
12.5°	2406.2	2417.2	2409.9	2402.6	2395.3	2398.9	2406.2	2388.0	2388.0	2395.3	2417.2
15°	2366.0	2373.3	2377.0	2362.4	2362.4	2366.0	2380.7	2351.4	2366.0	2369.7	2373.3
17.5°	2333.2	2336.8	2336.8	2325.9	2333.2	2322.2	2333.2	2318.6	2333.2	2329.5	2336.8
20°	2293.0	2300.3	2293.0	2293.0	2285.7	2289.4	2289.4	2289.4	2278.4	2274.8	2282.1
22.5°	2249.2	2249.2	2241.9	2249.2	2241.9	2238.2	2256.5	2227.3	2256.5	2230.9	2252.9
25°	2216.3	2198.1	2187.1	2183.5	2198.1	2183.5	2190.8	2179.8	2187.1	2179.8	2183.5
27.5°	2139.7	2128.7	2125.1	2128.7	2128.7	2125.1	2139.7	2099.5	2125.1	2121.4	2121.4
30°	2059.3	2059.3	2066.6	2059.3	2066.6	2055.7	2070.3	2037.4	2059.3	2055.7	2059.3
32.5°	1986.3	1990.0	1990.0	1997.3	1986.3	1990.0	1990.0	1979.0	1986.3	1990.0	1982.7
35°	1924.2	1906.0	1906.0	1906.0	1906.0	1906.0	1913.3	1902.3	1913.3	1906.0	1906.0
37.5°	1836.6	1818.3	1818.3	1814.7	1833.0	1822.0	1840.3	1825.7	1825.7	1833.0	1833.0
40°	1730.7	1738.0	1727.1	1741.7	1738.0	1723.4	1756.3	1734.4	1749.0	1730.7	1745.3
42.5°	1635.8	1639.4	1635.8	1632.1	1646.7	1643.1	1657.7	1643.1	1639.4	1639.4	1665.0
45°	1533.5	1533.5	1533.5	1544.5	1533.5	1537.2	1551.8	1544.5	1551.8	1548.2	1573.7
47.5°	1449.6	1431.3	1427.7	1449.6	1445.9	1449.6	1449.6	1453.2	1456.9	1449.6	1460.5
50°	1329.1	1321.8	1321.8	1325.4	1329.1	1336.4	1347.3	1354.6	1347.3	1358.3	1361.9
52.5°	1212.2	1204.9	1208.6	1223.2	1230.5	1226.8	1245.1	1248.7	1245.1	1252.4	1252.4
55°	1077.1	1069.8	1080.8	1099.0	1110.0	1121.0	1139.2	1124.6	1139.2	1142.9	1146.5
57.5°	938.4	934.7	938.4	956.6	967.6	993.2	1022.4	1022.4	1037.0	1026.0	1037.0
60°	785.0	785.0	799.6	810.6	839.8	858.1	887.3	901.9	916.5	931.1	923.8
62.5°	639.0	642.6	653.6	679.1	697.4	723.0	755.8	770.4	796.0	810.6	803.3
65°	507.5	507.5	514.8	536.7	555.0	587.9	617.1	649.9	664.5	671.8	675.5
67.5°	379.7	376.1	390.7	405.3	423.6	456.4	489.3	507.5	533.1	540.4	536.7
70°	255.6	259.2	266.5	281.2	303.1	328.6	365.1	379.7	394.3	401.6	394.3
72.5°	160.7	160.7	164.3	178.9	193.5	211.8	237.3	251.9	270.2	273.8	266.5
75°	73.0	73.0	80.3	87.6	98.6	113.2	131.4	142.4	153.4	164.3	164.3
77.5°	14.6	18.3	21.9	21.9	29.2	40.2	51.1	62.1	73.0	73.0	73.0
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°	2475.6	2475.6	2475.6	2475.6	2475.6	2475.6	2475.6	2475.6
2.5°	2475.6	2497.5	2475.6	2464.6	2479.2	2475.6	2464.6	2468.3
5°	2464.6	2471.9	2479.2	2450.0	2468.3	2471.9	2464.6	2457.3
7.5°	2453.7	2457.3	2453.7	2446.4	2446.4	2446.4	2453.7	2453.7
10°	2450.0	2439.1	2420.8	2409.9	2420.8	2420.8	2417.2	2446.4
12.5°	2402.6	2417.2	2406.2	2384.3	2406.2	2402.6	2402.6	2409.9
15°	2366.0	2366.0	2373.3	2344.1	2358.7	2355.1	2355.1	2362.4
17.5°	2329.5	2329.5	2325.9	2318.6	2314.9	2325.9	2314.9	2333.2
20°	2278.4	2285.7	2307.6	2271.1	2282.1	2271.1	2271.1	2249.2
22.5°	2216.3	2252.9	2234.6	2230.9	2227.3	2230.9	2238.2	2212.7
25°	2176.2	2176.2	2183.5	2161.6	2161.6	2168.9	2165.2	2157.9
27.5°	2121.4	2117.8	2114.1	2106.8	2125.1	2110.5	2110.5	2110.5
30°	2044.7	2055.7	2052.0	2033.8	2055.7	2048.4	2037.4	2015.5
32.5°	1979.0	1993.6	1971.7	1968.1	1964.4	1968.1	1971.7	1953.4
35°	1898.7	1902.3	1902.3	1887.7	1891.4	1887.7	1880.4	1884.1
37.5°	1825.7	1822.0	1803.7	1796.4	1800.1	1800.1	1803.7	1796.4
40°	1723.4	1734.4	1734.4	1708.8	1716.1	1708.8	1708.8	1705.2
42.5°	1639.4	1643.1	1632.1	1621.2	1621.2	1617.5	1610.2	1617.5
45°	1551.8	1548.2	1537.2	1526.2	1526.2	1522.6	1515.3	1529.9
47.5°	1453.2	1445.9	1442.3	1427.7	1427.7	1405.8	1409.4	1424.0
50°	1354.6	1347.3	1332.7	1325.4	1314.5	1303.5	1299.9	1299.9
52.5°	1237.8	1237.8	1223.2	1208.6	1204.9	1197.6	1190.3	1194.0
55°	1135.6	1135.6	1124.6	1099.0	1084.4	1066.2	1055.2	1051.6
57.5°	1018.7	1011.4	989.5	960.3	945.7	931.1	920.1	920.1
60°	901.9	883.6	861.7	836.1	810.6	785.0	777.7	774.1
62.5°	774.1	755.8	715.7	686.4	668.2	653.6	639.0	649.9
65°	646.3	620.7	584.2	555.0	536.7	514.8	503.9	503.9
67.5°	511.2	485.6	449.1	419.9	401.6	387.0	372.4	372.4
70°	376.1	357.8	325.0	299.4	284.8	262.9	259.2	259.2
72.5°	255.6	233.7	208.1	189.9	175.3	160.7	153.4	149.7
75°	142.4	127.8	109.5	98.6	84.0	76.7	69.4	69.4
77.5°	58.4	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)