

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: P209504

Luminaire Tested: **LDSQ6B70D010 EU6B60709040 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209504
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 EU6B60709040 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: 6722.6 lumens
Efficiency: N/A
Efficacy: 84.6 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

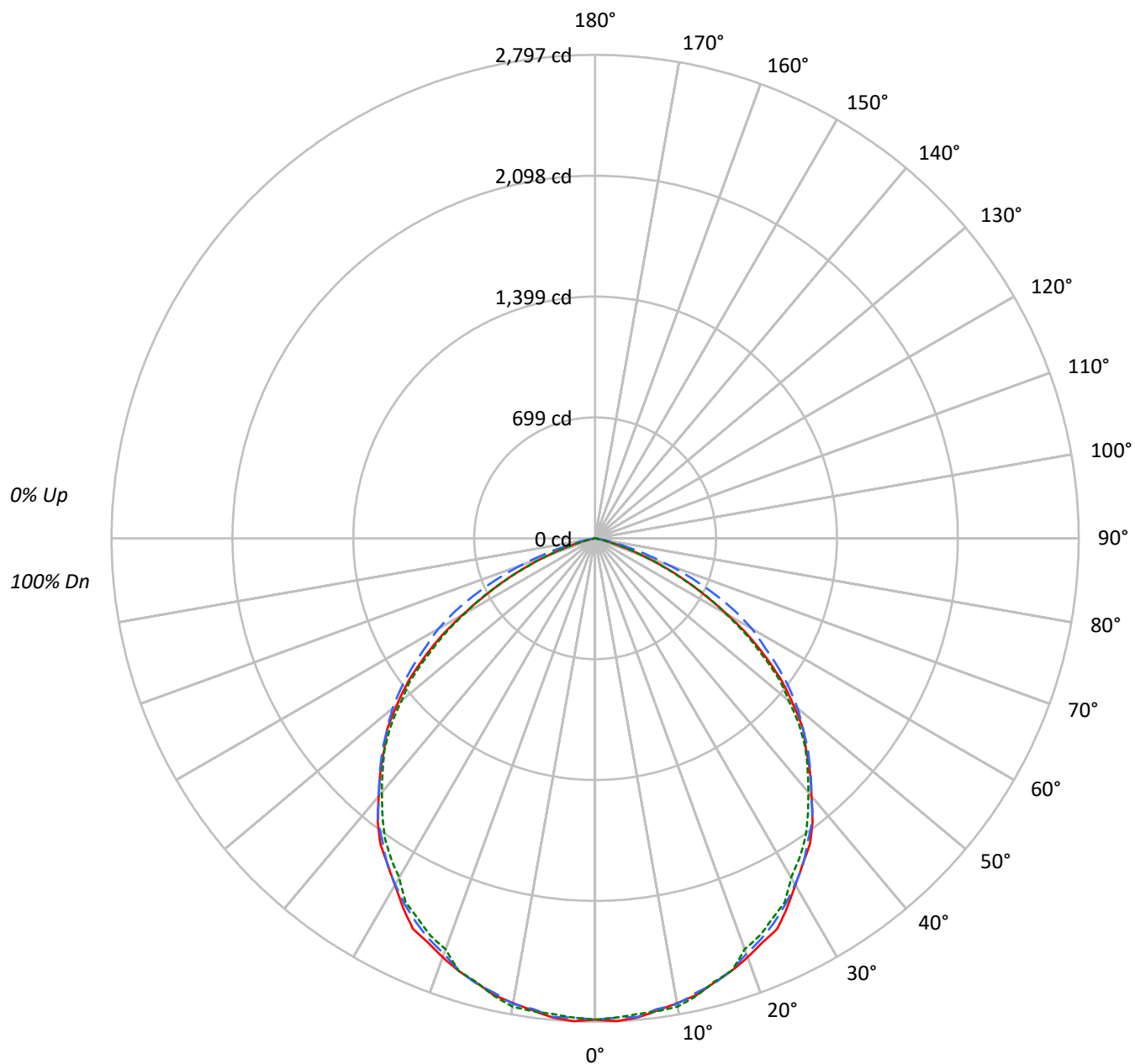
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	107	103	100		108	104	101	98		100	97	95		96	94	92		93	91	89
2	102	94	88	83		99	93	87	82		89	84	80		86	82	79		83	80	77
3	93	84	76	70		91	82	75	70		79	73	69		77	72	67		74	70	66
4	86	75	67	60		84	73	66	60		71	64	59		69	63	58		67	62	58
5	79	67	59	52		77	66	58	52		64	57	52		62	56	51		60	55	51
6	73	61	52	46		71	60	52	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41		66	54	46	41		53	46	40		51	45	40		50	44	40
8	63	50	42	37		62	50	42	36		48	41	36		47	41	36		46	40	36
9	59	46	38	33		58	46	38	33		45	38	33		43	37	33		42	37	32
10	55	43	35	30		54	42	35	30		41	34	30		40	34	30		39	34	30

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°	263.3	3.9
10°-20°	750.9	11.2
20°-30°	1130.0	16.8
30°-40°	1336.8	19.9
40°-50°	1334.0	19.8
50°-60°	1106.2	16.5
60°-70°	646.3	9.6
70°-80°	153.9	2.3
80°-90°	1.1	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°	2144.3	31.9
0°-40°	3481.0	51.8
0°-60°	5921.3	88.1
0°-90°	6722.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6722.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2784	2784	2784	2784	2784	
5°	2784	2770	2780	2772	2764	264
15°	2661	2659	2665	2653	2657	752
25°	2493	2464	2452	2444	2427	1139
35°	2164	2144	2144	2131	2119	1346
45°	1725	1727	1741	1723	1721	1334
55°	1212	1255	1285	1251	1183	1076
65°	571	643	756	641	567	568
75°	82	119	185	117	78	111
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°	2784.4	2784.4	2784.4	2784.4	2784.4	2784.4	2784.4	2784.4	2784.4	2784.4	2784.4
2.5°	2796.8	2780.3	2792.7	2768.0	2784.4	2768.0	2772.1	2763.9	2780.3	2776.2	2772.1
5°	2784.4	2788.5	2780.3	2788.5	2776.2	2763.9	2776.2	2768.0	2743.4	2780.3	2772.1
7.5°	2755.7	2759.8	2751.6	2763.9	2755.7	2739.3	2772.1	2747.5	2743.4	2747.5	2763.9
10°	2731.1	2739.3	2735.2	2731.1	2735.2	2735.2	2726.9	2714.6	2726.9	2735.2	2731.1
12.5°	2706.4	2718.7	2710.5	2702.3	2694.1	2698.2	2706.4	2685.9	2685.9	2694.1	2718.7
15°	2661.2	2669.5	2673.6	2657.1	2657.1	2661.2	2677.7	2644.8	2661.2	2665.3	2669.5
17.5°	2624.3	2628.4	2628.4	2616.1	2624.3	2612.0	2624.3	2607.8	2624.3	2620.2	2628.4
20°	2579.1	2587.3	2579.1	2579.1	2570.9	2575.0	2575.0	2575.0	2562.7	2558.6	2566.8
22.5°	2529.8	2529.8	2521.6	2529.8	2521.6	2517.5	2538.0	2505.2	2538.0	2509.3	2533.9
25°	2492.9	2472.3	2460.0	2455.9	2472.3	2455.9	2464.1	2451.8	2460.0	2451.8	2455.9
27.5°	2406.6	2394.3	2390.2	2394.3	2394.3	2390.2	2406.6	2361.4	2390.2	2386.1	2386.1
30°	2316.3	2316.3	2324.5	2316.3	2324.5	2312.2	2328.6	2291.6	2316.3	2312.2	2316.3
32.5°	2234.1	2238.2	2238.2	2246.4	2234.1	2238.2	2238.2	2225.9	2234.1	2238.2	2230.0
35°	2164.3	2143.8	2143.8	2143.8	2143.8	2143.8	2152.0	2139.7	2152.0	2143.8	2143.8
37.5°	2065.7	2045.2	2045.2	2041.1	2061.6	2049.3	2069.9	2053.4	2053.4	2061.6	2061.6
40°	1946.6	1954.9	1942.5	1959.0	1954.9	1938.4	1975.4	1950.8	1967.2	1946.6	1963.1
42.5°	1839.9	1844.0	1839.9	1835.8	1852.2	1848.1	1864.5	1848.1	1844.0	1844.0	1872.7
45°	1724.9	1724.9	1724.9	1737.2	1724.9	1729.0	1745.4	1737.2	1745.4	1741.3	1770.1
47.5°	1630.4	1609.9	1605.8	1630.4	1626.3	1630.4	1630.4	1634.5	1638.6	1630.4	1642.7
50°	1494.9	1486.7	1486.7	1490.8	1494.9	1503.1	1515.4	1523.6	1515.4	1527.7	1531.9
52.5°	1363.5	1355.3	1359.4	1375.8	1384.0	1379.9	1400.4	1404.5	1400.4	1408.6	1408.6
55°	1211.5	1203.3	1215.6	1236.2	1248.5	1260.8	1281.3	1264.9	1281.3	1285.4	1289.6
57.5°	1055.5	1051.4	1055.5	1076.0	1088.3	1117.1	1149.9	1149.9	1166.3	1154.0	1166.3
60°	883.0	883.0	899.4	911.7	944.6	965.1	998.0	1014.4	1030.8	1047.2	1039.0
62.5°	718.7	722.8	735.1	763.9	784.4	813.2	850.1	866.5	895.3	911.7	903.5
65°	570.9	570.9	579.1	603.7	624.2	661.2	694.1	731.0	747.4	755.7	759.8
67.5°	427.1	423.0	439.4	455.9	476.4	513.4	550.3	570.9	599.6	607.8	603.7
70°	287.5	291.6	299.8	316.2	340.9	369.6	410.7	427.1	443.5	451.8	443.5
72.5°	180.7	180.7	184.8	201.2	217.7	238.2	266.9	283.4	303.9	308.0	299.8
75°	82.1	82.1	90.4	98.6	110.9	127.3	147.8	160.2	172.5	184.8	184.8
77.5°	16.4	20.5	24.6	24.6	32.9	45.2	57.5	69.8	82.1	82.1	82.1
80°	4.1	4.1	4.1	4.1	4.1	4.1	8.2	12.3	20.5	20.5	20.5
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°	2784.4	2784.4	2784.4	2784.4	2784.4	2784.4	2784.4	2784.4
2.5°	2784.4	2809.1	2784.4	2772.1	2788.5	2784.4	2772.1	2776.2
5°	2772.1	2780.3	2788.5	2755.7	2776.2	2780.3	2772.1	2763.9
7.5°	2759.8	2763.9	2759.8	2751.6	2751.6	2751.6	2759.8	2759.8
10°	2755.7	2743.4	2722.8	2710.5	2722.8	2722.8	2718.7	2751.6
12.5°	2702.3	2718.7	2706.4	2681.8	2706.4	2702.3	2702.3	2710.5
15°	2661.2	2661.2	2669.5	2636.6	2653.0	2648.9	2648.9	2657.1
17.5°	2620.2	2620.2	2616.1	2607.8	2603.7	2616.1	2603.7	2624.3
20°	2562.7	2570.9	2595.5	2554.5	2566.8	2554.5	2554.5	2529.8
22.5°	2492.9	2533.9	2513.4	2509.3	2505.2	2509.3	2517.5	2488.7
25°	2447.7	2447.7	2455.9	2431.3	2431.3	2439.5	2435.4	2427.1
27.5°	2386.1	2382.0	2377.9	2369.7	2390.2	2373.8	2373.8	2373.8
30°	2299.8	2312.2	2308.0	2287.5	2312.2	2303.9	2291.6	2267.0
32.5°	2225.9	2242.3	2217.7	2213.6	2209.5	2213.6	2217.7	2197.2
35°	2135.6	2139.7	2139.7	2123.2	2127.3	2123.2	2115.0	2119.1
37.5°	2053.4	2049.3	2028.8	2020.6	2024.7	2024.7	2028.8	2020.6
40°	1938.4	1950.8	1950.8	1922.0	1930.2	1922.0	1922.0	1917.9
42.5°	1844.0	1848.1	1835.8	1823.4	1823.4	1819.3	1811.1	1819.3
45°	1745.4	1741.3	1729.0	1716.7	1716.7	1712.6	1704.3	1720.8
47.5°	1634.5	1626.3	1622.2	1605.8	1605.8	1581.1	1585.2	1601.7
50°	1523.6	1515.4	1499.0	1490.8	1478.5	1466.1	1462.0	1462.0
52.5°	1392.2	1392.2	1375.8	1359.4	1355.3	1347.0	1338.8	1342.9
55°	1277.2	1277.2	1264.9	1236.2	1219.7	1199.2	1186.9	1182.8
57.5°	1145.8	1137.6	1113.0	1080.1	1063.7	1047.2	1034.9	1034.9
60°	1014.4	993.9	969.2	940.5	911.7	883.0	874.8	870.7
62.5°	870.7	850.1	804.9	772.1	751.6	735.1	718.7	731.0
65°	726.9	698.2	657.1	624.2	603.7	579.1	566.7	566.7
67.5°	575.0	546.2	505.1	472.3	451.8	435.3	418.9	418.9
70°	423.0	402.5	365.5	336.8	320.3	295.7	291.6	291.6
72.5°	287.5	262.8	234.1	213.6	197.1	180.7	172.5	168.4
75°	160.2	143.7	123.2	110.9	94.5	86.2	78.0	78.0
77.5°	65.7	53.4	41.1	32.9	24.6	20.5	16.4	20.5
80°	12.3	8.2	4.1	4.1	4.1	4.1	4.1	4.1
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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°









(END OF REPORT)