

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: P209485

Luminaire Tested: **LDSQ6B60D010 EU6B60708040 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209485
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: LDSQ6B60D010 EU6B60708040 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: 6765.7 lumens
Efficiency: N/A
Efficacy: 108.3 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

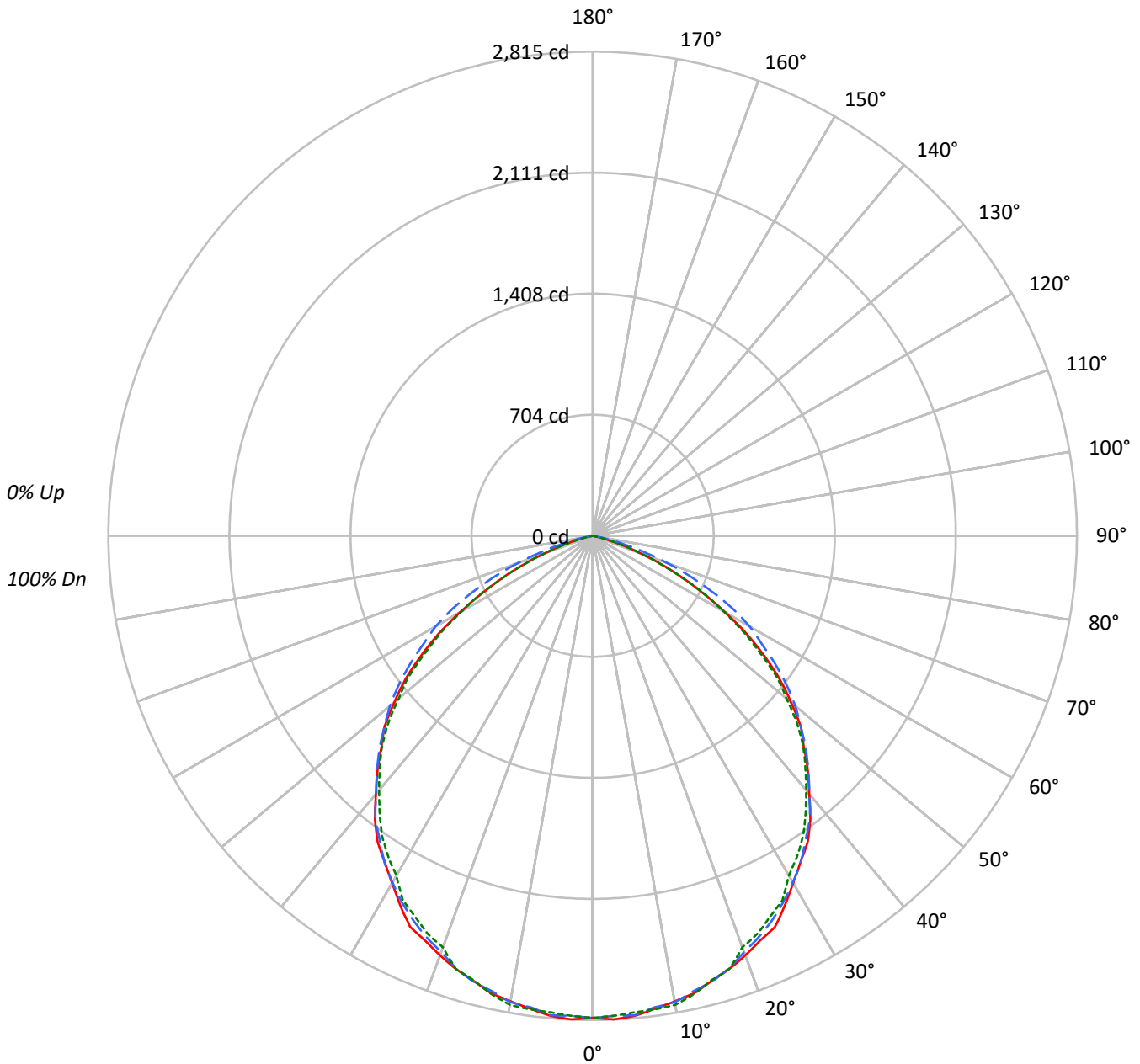
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	265.0	3.9
10°-20°	755.8	11.2
20°-30°	1137.2	16.8
30°-40°	1345.3	19.9
40°-50°	1342.6	19.8
50°-60°	1113.3	16.5
60°-70°	650.4	9.6
70°-80°	154.9	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°	2158.0	31.9
0°-40°	3503.3	51.8
0°-60°	5959.2	88.1
0°-90°	6765.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6765.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2802	2802	2802	2802	2802	
5°	2802	2788	2798	2790	2782	265
15°	2678	2676	2682	2670	2674	757
25°	2509	2480	2468	2459	2443	1147
35°	2178	2158	2158	2145	2133	1354
45°	1736	1738	1752	1734	1732	1343
55°	1219	1263	1294	1259	1190	1083
65°	574	647	760	645	570	571
75°	83	120	186	118	78	112
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°	2802.3	2802.3	2802.3	2802.3	2802.3	2802.3	2802.3	2802.3	2802.3	2802.3	2802.3
2.5°	2814.7	2798.2	2810.6	2785.8	2802.3	2785.8	2789.9	2781.6	2798.2	2794.0	2789.9
5°	2802.3	2806.4	2798.2	2806.4	2794.0	2781.6	2794.0	2785.8	2761.0	2798.2	2789.9
7.5°	2773.4	2777.5	2769.2	2781.6	2773.4	2756.8	2789.9	2765.1	2761.0	2765.1	2781.6
10°	2748.6	2756.8	2752.7	2748.6	2752.7	2752.7	2744.4	2732.0	2744.4	2752.7	2748.6
12.5°	2723.8	2736.2	2727.9	2719.6	2711.4	2715.5	2723.8	2703.1	2703.1	2711.4	2736.2
15°	2678.3	2686.6	2690.7	2674.2	2674.2	2678.3	2694.8	2661.8	2678.3	2682.4	2686.6
17.5°	2641.1	2645.2	2645.2	2632.8	2641.1	2628.7	2641.1	2624.6	2641.1	2637.0	2645.2
20°	2595.6	2603.9	2595.6	2595.6	2587.4	2591.5	2591.5	2591.5	2579.1	2575.0	2583.2
22.5°	2546.0	2546.0	2537.8	2546.0	2537.8	2533.6	2554.3	2521.2	2554.3	2525.4	2550.2
25°	2508.8	2488.2	2475.8	2471.6	2488.2	2471.6	2479.9	2467.5	2475.8	2467.5	2471.6
27.5°	2422.0	2409.6	2405.5	2409.6	2409.6	2405.5	2422.0	2376.6	2405.5	2401.4	2401.4
30°	2331.1	2331.1	2339.4	2331.1	2339.4	2327.0	2343.5	2306.3	2331.1	2327.0	2331.1
32.5°	2248.4	2252.6	2252.6	2260.8	2248.4	2252.6	2252.6	2240.2	2248.4	2252.6	2244.3
35°	2178.2	2157.5	2157.5	2157.5	2157.5	2157.5	2165.8	2153.4	2165.8	2157.5	2157.5
37.5°	2079.0	2058.3	2058.3	2054.2	2074.9	2062.5	2083.1	2066.6	2066.6	2074.9	2074.9
40°	1959.1	1967.4	1955.0	1971.5	1967.4	1950.9	1988.1	1963.3	1979.8	1959.1	1975.7
42.5°	1851.7	1855.8	1851.7	1847.5	1864.1	1859.9	1876.5	1859.9	1855.8	1855.8	1884.7
45°	1735.9	1735.9	1735.9	1748.3	1735.9	1740.1	1756.6	1748.3	1756.6	1752.5	1781.4
47.5°	1640.9	1620.2	1616.1	1640.9	1636.7	1640.9	1640.9	1645.0	1649.1	1640.9	1653.3
50°	1504.5	1496.2	1496.2	1500.3	1504.5	1512.7	1525.1	1533.4	1525.1	1537.5	1541.7
52.5°	1372.2	1363.9	1368.1	1384.6	1392.9	1388.7	1409.4	1413.5	1409.4	1417.7	1417.7
55°	1219.3	1211.0	1223.4	1244.1	1256.5	1268.9	1289.5	1273.0	1289.5	1293.7	1297.8
57.5°	1062.2	1058.1	1062.2	1082.9	1095.3	1124.2	1157.3	1157.3	1173.8	1161.4	1173.8
60°	888.6	888.6	905.2	917.6	950.6	971.3	1004.4	1020.9	1037.4	1054.0	1045.7
62.5°	723.3	727.4	739.8	768.8	789.4	818.4	855.6	872.1	901.0	917.6	909.3
65°	574.5	574.5	582.8	607.6	628.2	665.4	698.5	735.7	752.2	760.5	764.6
67.5°	429.8	425.7	442.2	458.8	479.4	516.6	553.8	574.5	603.4	611.7	607.6
70°	289.3	293.5	301.7	318.3	343.1	372.0	413.3	429.8	446.4	454.6	446.4
72.5°	181.9	181.9	186.0	202.5	219.1	239.7	268.7	285.2	305.9	310.0	301.7
75°	82.7	82.7	90.9	99.2	111.6	128.1	148.8	161.2	173.6	186.0	186.0
77.5°	16.5	20.7	24.8	24.8	33.1	45.5	57.9	70.3	82.7	82.7	82.7
80°	4.1	4.1	4.1	4.1	4.1	4.1	8.3	12.4	20.7	20.7	20.7
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°	2802.3	2802.3	2802.3	2802.3	2802.3	2802.3	2802.3	2802.3
2.5°	2802.3	2827.1	2802.3	2789.9	2806.4	2802.3	2789.9	2794.0
5°	2789.9	2798.2	2806.4	2773.4	2794.0	2798.2	2789.9	2781.6
7.5°	2777.5	2781.6	2777.5	2769.2	2769.2	2769.2	2777.5	2777.5
10°	2773.4	2761.0	2740.3	2727.9	2740.3	2740.3	2736.2	2769.2
12.5°	2719.6	2736.2	2723.8	2699.0	2723.8	2719.6	2719.6	2727.9
15°	2678.3	2678.3	2686.6	2653.5	2670.0	2665.9	2665.9	2674.2
17.5°	2637.0	2637.0	2632.8	2624.6	2620.4	2632.8	2620.4	2641.1
20°	2579.1	2587.4	2612.2	2570.8	2583.2	2570.8	2570.8	2546.0
22.5°	2508.8	2550.2	2529.5	2525.4	2521.2	2525.4	2533.6	2504.7
25°	2463.4	2463.4	2471.6	2446.8	2446.8	2455.1	2451.0	2442.7
27.5°	2401.4	2397.2	2393.1	2384.8	2405.5	2389.0	2389.0	2389.0
30°	2314.6	2327.0	2322.8	2302.2	2327.0	2318.7	2306.3	2281.5
32.5°	2240.2	2256.7	2231.9	2227.8	2223.6	2227.8	2231.9	2211.2
35°	2149.2	2153.4	2153.4	2136.8	2141.0	2136.8	2128.6	2132.7
37.5°	2066.6	2062.5	2041.8	2033.5	2037.7	2037.7	2041.8	2033.5
40°	1950.9	1963.3	1963.3	1934.3	1942.6	1934.3	1934.3	1930.2
42.5°	1855.8	1859.9	1847.5	1835.1	1835.1	1831.0	1822.7	1831.0
45°	1756.6	1752.5	1740.1	1727.7	1727.7	1723.5	1715.3	1731.8
47.5°	1645.0	1636.7	1632.6	1616.1	1616.1	1591.3	1595.4	1611.9
50°	1533.4	1525.1	1508.6	1500.3	1487.9	1475.5	1471.4	1471.4
52.5°	1401.1	1401.1	1384.6	1368.1	1363.9	1355.7	1347.4	1351.5
55°	1285.4	1285.4	1273.0	1244.1	1227.6	1206.9	1194.5	1190.4
57.5°	1153.2	1144.9	1120.1	1087.0	1070.5	1054.0	1041.6	1041.6
60°	1020.9	1000.2	975.4	946.5	917.6	888.6	880.4	876.2
62.5°	876.2	855.6	810.1	777.0	756.4	739.8	723.3	735.7
65°	731.6	702.6	661.3	628.2	607.6	582.8	570.4	570.4
67.5°	578.6	549.7	508.4	475.3	454.6	438.1	421.6	421.6
70°	425.7	405.1	367.9	338.9	322.4	297.6	293.5	293.5
72.5°	289.3	264.5	235.6	214.9	198.4	181.9	173.6	169.5
75°	161.2	144.7	124.0	111.6	95.1	86.8	78.5	78.5
77.5°	66.1	53.7	41.3	33.1	24.8	20.7	16.5	20.7
80°	12.4	8.3	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)