

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: P209503

Luminaire Tested: **LDSQ6B70D010 EU6B60709035 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209503
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 EU6B60709035 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 3500 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6711.4 lumens
Efficiency: N/A
Efficacy: 84.5 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

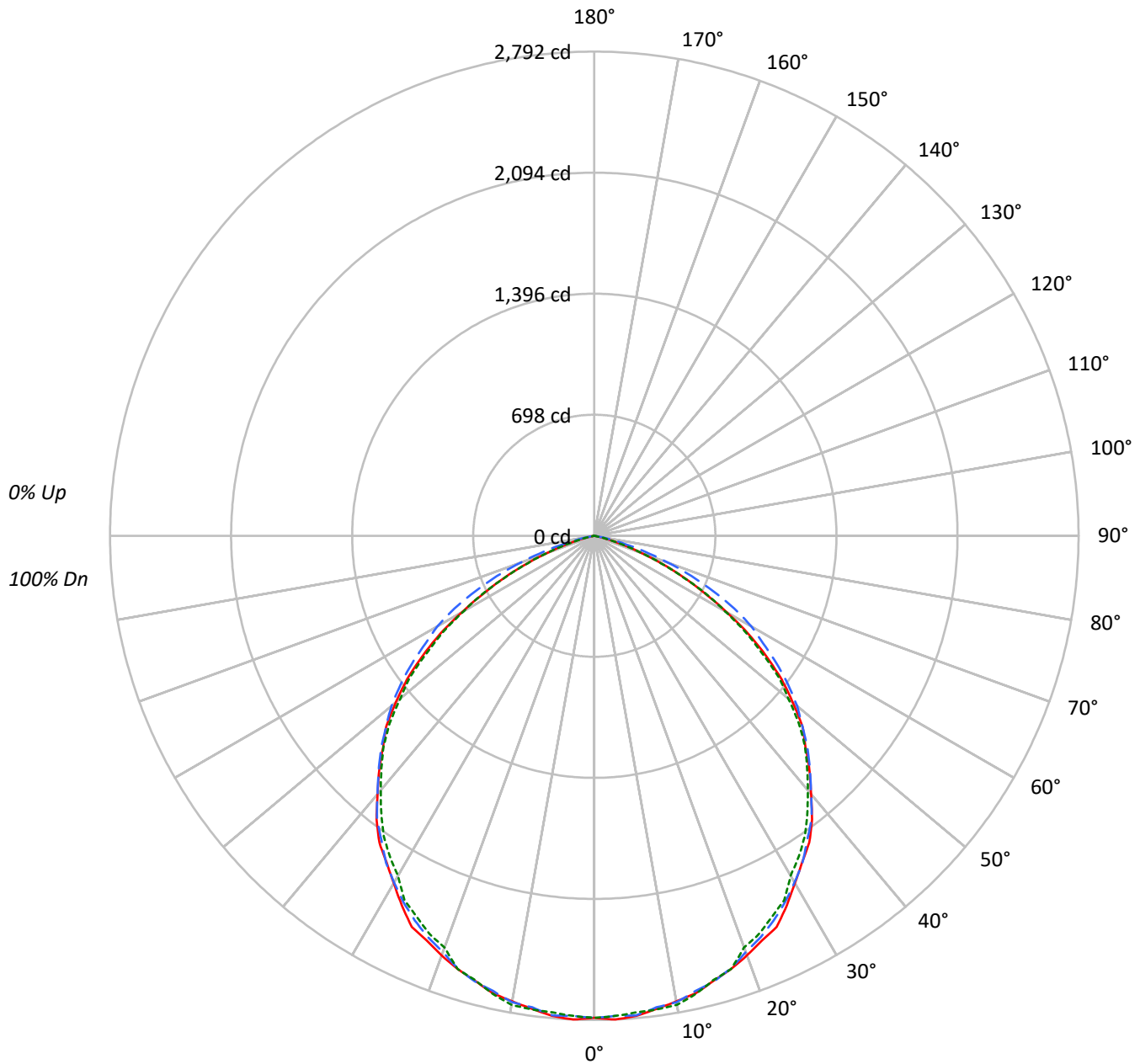
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	262.9	3.9
10°-20°	749.7	11.2
20°-30°	1128.1	16.8
30°-40°	1334.5	19.9
40°-50°	1331.8	19.8
50°-60°	1104.4	16.5
60°-70°	645.2	9.6
70°-80°	153.7	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°	2140.7	31.9
0°-40°	3475.2	51.8
0°-60°	5911.4	88.1
0°-90°	6711.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6711.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2780	2780	2780	2780	2780	
5°	2780	2765	2776	2768	2759	263
15°	2657	2655	2661	2649	2653	751
25°	2489	2460	2448	2440	2423	1138
35°	2161	2140	2140	2128	2116	1343
45°	1722	1724	1738	1720	1718	1332
55°	1210	1253	1283	1248	1181	1074
65°	570	642	754	640	566	567
75°	82	119	184	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°	2779.8	2779.8	2779.8	2779.8	2779.8	2779.8	2779.8	2779.8	2779.8	2779.8	2779.8
2.5°	2792.1	2775.7	2788.0	2763.4	2779.8	2763.4	2767.5	2759.3	2775.7	2771.6	2767.5
5°	2779.8	2783.9	2775.7	2783.9	2771.6	2759.3	2771.6	2763.4	2738.8	2775.7	2767.5
7.5°	2751.1	2755.2	2747.0	2759.3	2751.1	2734.7	2767.5	2742.9	2738.8	2742.9	2759.3
10°	2726.5	2734.7	2730.6	2726.5	2730.6	2730.6	2722.4	2710.1	2722.4	2730.6	2726.5
12.5°	2701.9	2714.2	2706.0	2697.8	2689.6	2693.7	2701.9	2681.4	2681.4	2689.6	2714.2
15°	2656.8	2665.0	2669.1	2652.7	2652.7	2656.8	2673.2	2640.4	2656.8	2660.9	2665.0
17.5°	2619.9	2624.0	2624.0	2611.7	2619.9	2607.6	2619.9	2603.5	2619.9	2615.8	2624.0
20°	2574.8	2583.0	2574.8	2574.8	2566.6	2570.7	2570.7	2570.7	2558.4	2554.3	2562.5
22.5°	2525.6	2525.6	2517.4	2525.6	2517.4	2513.3	2533.8	2501.0	2533.8	2505.1	2529.7
25°	2488.7	2468.2	2455.9	2451.8	2468.2	2451.8	2460.0	2447.7	2455.9	2447.7	2451.8
27.5°	2402.6	2390.3	2386.2	2390.3	2390.3	2386.2	2402.6	2357.5	2386.2	2382.1	2382.1
30°	2312.4	2312.4	2320.6	2312.4	2320.6	2308.3	2324.7	2287.8	2312.4	2308.3	2312.4
32.5°	2230.4	2234.5	2234.5	2242.7	2230.4	2234.5	2234.5	2222.2	2230.4	2234.5	2226.3
35°	2160.7	2140.2	2140.2	2140.2	2140.2	2140.2	2148.4	2136.1	2148.4	2140.2	2140.2
37.5°	2062.3	2041.8	2041.8	2037.7	2058.2	2045.9	2066.4	2050.0	2050.0	2058.2	2058.2
40°	1943.4	1951.6	1939.3	1955.7	1951.6	1935.2	1972.1	1947.5	1963.9	1943.4	1959.8
42.5°	1836.8	1840.9	1836.8	1832.7	1849.1	1845.0	1861.4	1845.0	1840.9	1840.9	1869.6
45°	1722.0	1722.0	1722.0	1734.3	1722.0	1726.1	1742.5	1734.3	1742.5	1738.4	1767.1
47.5°	1627.7	1607.2	1603.1	1627.7	1623.6	1627.7	1627.7	1631.8	1635.9	1627.7	1640.0
50°	1492.4	1484.2	1484.2	1488.3	1492.4	1500.6	1512.9	1521.1	1512.9	1525.2	1529.3
52.5°	1361.2	1353.0	1357.1	1373.5	1381.7	1377.6	1398.1	1402.2	1398.1	1406.3	1406.3
55°	1209.5	1201.3	1213.6	1234.1	1246.4	1258.7	1279.2	1262.8	1279.2	1283.3	1287.4
57.5°	1053.7	1049.6	1053.7	1074.2	1086.5	1115.2	1148.0	1148.0	1164.4	1152.1	1164.4
60°	881.5	881.5	897.9	910.2	943.0	963.5	996.3	1012.7	1029.1	1045.5	1037.3
62.5°	717.5	721.6	733.9	762.6	783.1	811.8	848.7	865.1	893.8	910.2	902.0
65°	569.9	569.9	578.1	602.7	623.2	660.1	692.9	729.8	746.2	754.4	758.5
67.5°	426.4	422.3	438.7	455.1	475.6	512.5	549.4	569.9	598.6	606.8	602.7
70°	287.0	291.1	299.3	315.7	340.3	369.0	410.0	426.4	442.8	451.0	442.8
72.5°	180.4	180.4	184.5	200.9	217.3	237.8	266.5	282.9	303.4	307.5	299.3
75°	82.0	82.0	90.2	98.4	110.7	127.1	147.6	159.9	172.2	184.5	184.5
77.5°	16.4	20.5	24.6	24.6	32.8	45.1	57.4	69.7	82.0	82.0	82.0
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°	2779.8	2779.8	2779.8	2779.8	2779.8	2779.8	2779.8	2779.8
2.5°	2779.8	2804.4	2779.8	2767.5	2783.9	2779.8	2767.5	2771.6
5°	2767.5	2775.7	2783.9	2751.1	2771.6	2775.7	2767.5	2759.3
7.5°	2755.2	2759.3	2755.2	2747.0	2747.0	2747.0	2755.2	2755.2
10°	2751.1	2738.8	2718.3	2706.0	2718.3	2718.3	2714.2	2747.0
12.5°	2697.8	2714.2	2701.9	2677.3	2701.9	2697.8	2697.8	2706.0
15°	2656.8	2656.8	2665.0	2632.2	2648.6	2644.5	2644.5	2652.7
17.5°	2615.8	2615.8	2611.7	2603.5	2599.4	2611.7	2599.4	2619.9
20°	2558.4	2566.6	2591.2	2550.2	2562.5	2550.2	2550.2	2525.6
22.5°	2488.7	2529.7	2509.2	2505.1	2501.0	2505.1	2513.3	2484.6
25°	2443.6	2443.6	2451.8	2427.2	2427.2	2435.4	2431.3	2423.1
27.5°	2382.1	2378.0	2373.9	2365.7	2386.2	2369.8	2369.8	2369.8
30°	2296.0	2308.3	2304.2	2283.7	2308.3	2300.1	2287.8	2263.2
32.5°	2222.2	2238.6	2214.0	2209.9	2205.8	2209.9	2214.0	2193.5
35°	2132.0	2136.1	2136.1	2119.7	2123.8	2119.7	2111.5	2115.6
37.5°	2050.0	2045.9	2025.4	2017.2	2021.3	2021.3	2025.4	2017.2
40°	1935.2	1947.5	1947.5	1918.8	1927.0	1918.8	1918.8	1914.7
42.5°	1840.9	1845.0	1832.7	1820.4	1820.4	1816.3	1808.1	1816.3
45°	1742.5	1738.4	1726.1	1713.8	1713.8	1709.7	1701.5	1717.9
47.5°	1631.8	1623.6	1619.5	1603.1	1603.1	1578.5	1582.6	1599.0
50°	1521.1	1512.9	1496.5	1488.3	1476.0	1463.7	1459.6	1459.6
52.5°	1389.9	1389.9	1373.5	1357.1	1353.0	1344.8	1336.6	1340.7
55°	1275.1	1275.1	1262.8	1234.1	1217.7	1197.2	1184.9	1180.8
57.5°	1143.9	1135.7	1111.1	1078.3	1061.9	1045.5	1033.2	1033.2
60°	1012.7	992.2	967.6	938.9	910.2	881.5	873.3	869.2
62.5°	869.2	848.7	803.6	770.8	750.3	733.9	717.5	729.8
65°	725.7	697.0	656.0	623.2	602.7	578.1	565.8	565.8
67.5°	574.0	545.3	504.3	471.5	451.0	434.6	418.2	418.2
70°	422.3	401.8	364.9	336.2	319.8	295.2	291.1	291.1
72.5°	287.0	262.4	233.7	213.2	196.8	180.4	172.2	168.1
75°	159.9	143.5	123.0	110.7	94.3	86.1	77.9	77.9
77.5°	65.6	53.3	41.0	32.8	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



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— 0°-180° - - 45°-225° - - - 90°-270°









(END OF REPORT)