

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: P209505

Luminaire Tested: **LDSQ6B70D010 EU6B60709050 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209505
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 EU6B60709050 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: 6751.9 lumens
Efficiency: N/A
Efficacy: 85.0 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

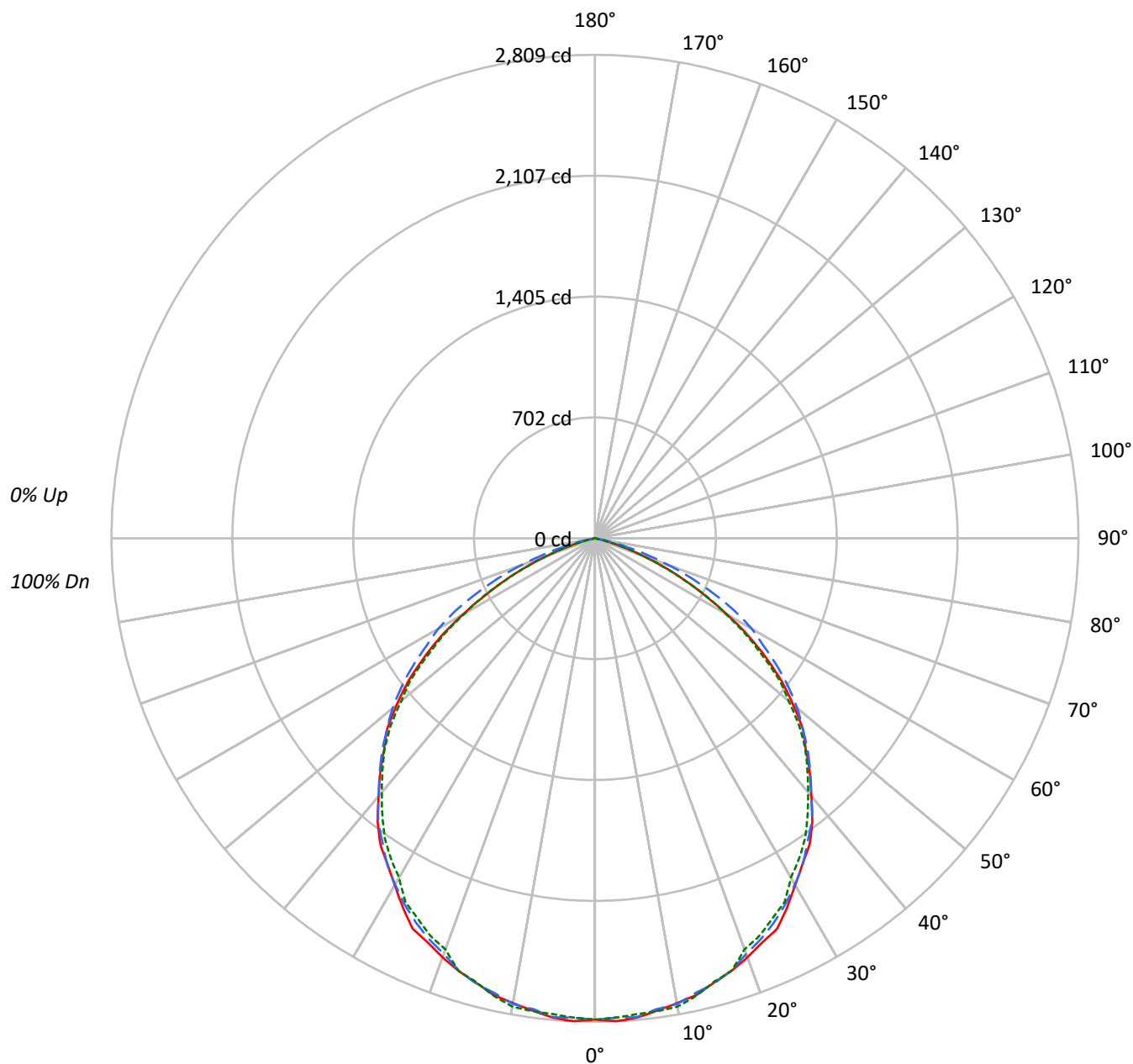
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	264.5	3.9
10°-20°	754.2	11.2
20°-30°	1134.9	16.8
30°-40°	1342.6	19.9
40°-50°	1339.8	19.8
50°-60°	1111.0	16.5
60°-70°	649.1	9.6
70°-80°	154.6	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°	2153.6	31.9
0°-40°	3496.2	51.8
0°-60°	5947.1	88.1
0°-90°	6751.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6751.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2797	2797	2797	2797	2797	
5°	2797	2782	2792	2784	2776	265
15°	2673	2671	2677	2665	2669	756
25°	2504	2475	2462	2454	2438	1144
35°	2174	2153	2153	2141	2128	1351
45°	1732	1734	1749	1730	1728	1340
55°	1217	1260	1291	1256	1188	1080
65°	573	646	759	644	569	570
75°	82	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°	2796.6	2796.6	2796.6	2796.6	2796.6	2796.6	2796.6	2796.6	2796.6	2796.6	2796.6
2.5°	2809.0	2792.5	2804.8	2780.1	2796.6	2780.1	2784.2	2776.0	2792.5	2788.3	2784.2
5°	2796.6	2800.7	2792.5	2800.7	2788.3	2776.0	2788.3	2780.1	2755.4	2792.5	2784.2
7.5°	2767.7	2771.8	2763.6	2776.0	2767.7	2751.2	2784.2	2759.5	2755.4	2759.5	2776.0
10°	2743.0	2751.2	2747.1	2743.0	2747.1	2747.1	2738.9	2726.5	2738.9	2747.1	2743.0
12.5°	2718.2	2730.6	2722.4	2714.1	2705.9	2710.0	2718.2	2697.6	2697.6	2705.9	2730.6
15°	2672.9	2681.1	2685.2	2668.7	2668.7	2672.9	2689.4	2656.4	2672.9	2677.0	2681.1
17.5°	2635.7	2639.9	2639.9	2627.5	2635.7	2623.4	2635.7	2619.2	2635.7	2631.6	2639.9
20°	2590.4	2598.6	2590.4	2590.4	2582.1	2586.2	2586.2	2586.2	2573.9	2569.7	2578.0
22.5°	2540.9	2540.9	2532.6	2540.9	2532.6	2528.5	2549.1	2516.1	2549.1	2520.2	2545.0
25°	2503.7	2483.1	2470.7	2466.6	2483.1	2466.6	2474.9	2462.5	2470.7	2462.5	2466.6
27.5°	2417.1	2404.7	2400.6	2404.7	2404.7	2400.6	2417.1	2371.7	2400.6	2396.5	2396.5
30°	2326.4	2326.4	2334.6	2326.4	2334.6	2322.2	2338.7	2301.6	2326.4	2322.2	2326.4
32.5°	2243.9	2248.0	2248.0	2256.3	2243.9	2248.0	2248.0	2235.6	2243.9	2248.0	2239.8
35°	2173.8	2153.1	2153.1	2153.1	2153.1	2153.1	2161.4	2149.0	2161.4	2153.1	2153.1
37.5°	2074.8	2054.1	2054.1	2050.0	2070.6	2058.3	2078.9	2062.4	2062.4	2070.6	2070.6
40°	1955.1	1963.4	1951.0	1967.5	1963.4	1946.9	1984.0	1959.3	1975.8	1955.1	1971.6
42.5°	1847.9	1852.0	1847.9	1843.8	1860.3	1856.1	1872.6	1856.1	1852.0	1852.0	1880.9
45°	1732.4	1732.4	1732.4	1744.8	1732.4	1736.5	1753.0	1744.8	1753.0	1748.9	1777.8
47.5°	1637.5	1616.9	1612.8	1637.5	1633.4	1637.5	1637.5	1641.7	1645.8	1637.5	1649.9
50°	1501.4	1493.2	1493.2	1497.3	1501.4	1509.7	1522.0	1530.3	1522.0	1534.4	1538.5
52.5°	1369.4	1361.2	1365.3	1381.8	1390.0	1385.9	1406.5	1410.7	1406.5	1414.8	1414.8
55°	1216.8	1208.6	1220.9	1241.6	1253.9	1266.3	1286.9	1270.4	1286.9	1291.1	1295.2
57.5°	1060.1	1055.9	1060.1	1080.7	1093.1	1121.9	1154.9	1154.9	1171.4	1159.1	1171.4
60°	886.8	886.8	903.3	915.7	948.7	969.3	1002.3	1018.8	1035.3	1051.8	1043.6
62.5°	721.8	726.0	738.3	767.2	787.8	816.7	853.8	870.3	899.2	915.7	907.5
65°	573.3	573.3	581.6	606.3	627.0	664.1	697.1	734.2	750.7	759.0	763.1
67.5°	429.0	424.9	441.4	457.9	478.5	515.6	552.7	573.3	602.2	610.5	606.3
70°	288.7	292.9	301.1	317.6	342.4	371.2	412.5	429.0	445.5	453.7	445.5
72.5°	181.5	181.5	185.6	202.1	218.6	239.2	268.1	284.6	305.2	309.4	301.1
75°	82.5	82.5	90.7	99.0	111.4	127.9	148.5	160.9	173.2	185.6	185.6
77.5°	16.5	20.6	24.7	24.7	33.0	45.4	57.7	70.1	82.5	82.5	82.5
80°	4.1	4.1	4.1	4.1	4.1	4.1	8.2	12.4	20.6	20.6	20.6
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°	2796.6	2796.6	2796.6	2796.6	2796.6	2796.6	2796.6	2796.6
2.5°	2796.6	2821.3	2796.6	2784.2	2800.7	2796.6	2784.2	2788.3
5°	2784.2	2792.5	2800.7	2767.7	2788.3	2792.5	2784.2	2776.0
7.5°	2771.8	2776.0	2771.8	2763.6	2763.6	2763.6	2771.8	2771.8
10°	2767.7	2755.4	2734.7	2722.4	2734.7	2734.7	2730.6	2763.6
12.5°	2714.1	2730.6	2718.2	2693.5	2718.2	2714.1	2714.1	2722.4
15°	2672.9	2672.9	2681.1	2648.1	2664.6	2660.5	2660.5	2668.7
17.5°	2631.6	2631.6	2627.5	2619.2	2615.1	2627.5	2615.1	2635.7
20°	2573.9	2582.1	2606.9	2565.6	2578.0	2565.6	2565.6	2540.9
22.5°	2503.7	2545.0	2524.4	2520.2	2516.1	2520.2	2528.5	2499.6
25°	2458.4	2458.4	2466.6	2441.9	2441.9	2450.1	2446.0	2437.7
27.5°	2396.5	2392.4	2388.2	2380.0	2400.6	2384.1	2384.1	2384.1
30°	2309.9	2322.2	2318.1	2297.5	2322.2	2314.0	2301.6	2276.9
32.5°	2235.6	2252.1	2227.4	2223.3	2219.1	2223.3	2227.4	2206.8
35°	2144.9	2149.0	2149.0	2132.5	2136.6	2132.5	2124.3	2128.4
37.5°	2062.4	2058.3	2037.6	2029.4	2033.5	2033.5	2037.6	2029.4
40°	1946.9	1959.3	1959.3	1930.4	1938.6	1930.4	1930.4	1926.3
42.5°	1852.0	1856.1	1843.8	1831.4	1831.4	1827.3	1819.0	1827.3
45°	1753.0	1748.9	1736.5	1724.2	1724.2	1720.0	1711.8	1728.3
47.5°	1641.7	1633.4	1629.3	1612.8	1612.8	1588.0	1592.2	1608.7
50°	1530.3	1522.0	1505.5	1497.3	1484.9	1472.5	1468.4	1468.4
52.5°	1398.3	1398.3	1381.8	1365.3	1361.2	1352.9	1344.7	1348.8
55°	1282.8	1282.8	1270.4	1241.6	1225.1	1204.4	1192.1	1187.9
57.5°	1150.8	1142.6	1117.8	1084.8	1068.3	1051.8	1039.4	1039.4
60°	1018.8	998.2	973.4	944.6	915.7	886.8	878.6	874.5
62.5°	874.5	853.8	808.5	775.5	754.8	738.3	721.8	734.2
65°	730.1	701.2	660.0	627.0	606.3	581.6	569.2	569.2
67.5°	577.5	548.6	507.3	474.3	453.7	437.2	420.7	420.7
70°	424.9	404.2	367.1	338.2	321.7	297.0	292.9	292.9
72.5°	288.7	264.0	235.1	214.5	198.0	181.5	173.2	169.1
75°	160.9	144.4	123.7	111.4	94.9	86.6	78.4	78.4
77.5°	66.0	53.6	41.2	33.0	24.7	20.6	16.5	20.6
80°	12.4	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)