

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: P209502

Luminaire Tested: **LDSQ6B70D010 EU6B60709030 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209502
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 EU6B60709030 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 3000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6616.5 lumens
Efficiency: N/A
Efficacy: 83.3 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

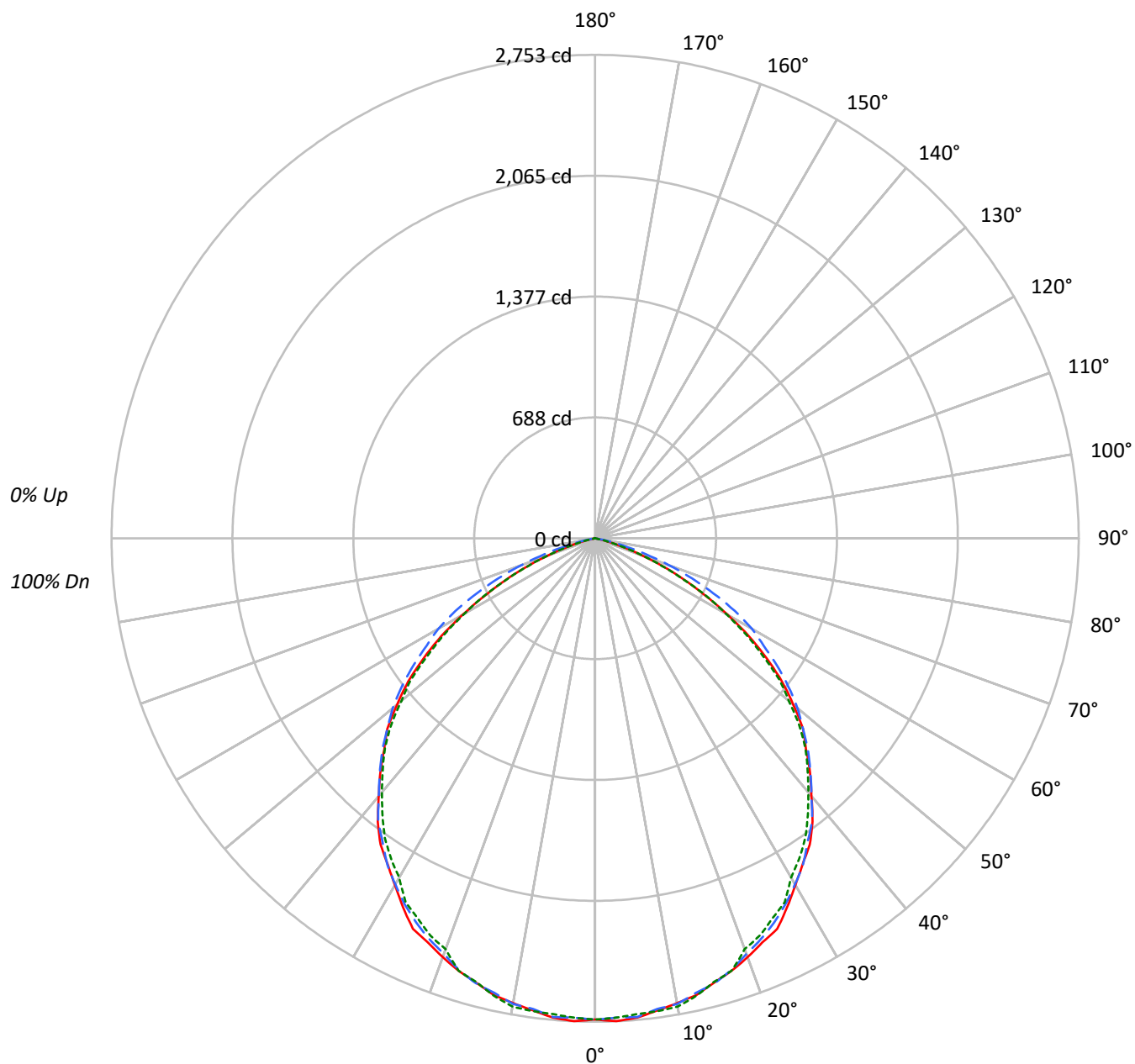
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	259.2	3.9
10°-20°	739.1	11.2
20°-30°	1112.2	16.8
30°-40°	1315.7	19.9
40°-50°	1313.0	19.8
50°-60°	1088.8	16.5
60°-70°	636.1	9.6
70°-80°	151.5	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°	2110.4	31.9
0°-40°	3426.1	51.8
0°-60°	5827.8	88.1
0°-90°	6616.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6616.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2740	2740	2740	2740	2740	
5°	2740	2726	2736	2728	2720	260
15°	2619	2617	2623	2611	2615	740
25°	2454	2425	2413	2405	2389	1121
35°	2130	2110	2110	2098	2086	1324
45°	1698	1700	1714	1696	1694	1313
55°	1192	1235	1265	1231	1164	1059
65°	562	633	744	631	558	559
75°	81	117	182	115	77	109
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°	2740.5	2740.5	2740.5	2740.5	2740.5	2740.5	2740.5	2740.5	2740.5	2740.5	2740.5
2.5°	2752.6	2736.5	2748.6	2724.3	2740.5	2724.3	2728.4	2720.3	2736.5	2732.4	2728.4
5°	2740.5	2744.5	2736.5	2744.5	2732.4	2720.3	2732.4	2724.3	2700.1	2736.5	2728.4
7.5°	2712.2	2716.2	2708.2	2720.3	2712.2	2696.0	2728.4	2704.1	2700.1	2704.1	2720.3
10°	2688.0	2696.0	2692.0	2688.0	2692.0	2692.0	2683.9	2671.8	2683.9	2692.0	2688.0
12.5°	2663.7	2675.8	2667.7	2659.7	2651.6	2655.6	2663.7	2643.5	2643.5	2651.6	2675.8
15°	2619.2	2627.3	2631.4	2615.2	2615.2	2619.2	2635.4	2603.1	2619.2	2623.3	2627.3
17.5°	2582.9	2586.9	2586.9	2574.8	2582.9	2570.7	2582.9	2566.7	2582.9	2578.8	2586.9
20°	2538.4	2546.5	2538.4	2538.4	2530.3	2534.4	2534.4	2534.4	2522.2	2518.2	2526.3
22.5°	2489.9	2489.9	2481.8	2489.9	2481.8	2477.8	2498.0	2465.6	2498.0	2469.7	2493.9
25°	2453.5	2433.3	2421.2	2417.1	2433.3	2417.1	2425.2	2413.1	2421.2	2413.1	2417.1
27.5°	2368.6	2356.5	2352.5	2356.5	2356.5	2352.5	2368.6	2324.2	2352.5	2348.4	2348.4
30°	2279.7	2279.7	2287.8	2279.7	2287.8	2275.7	2291.8	2255.5	2279.7	2275.7	2279.7
32.5°	2198.9	2202.9	2202.9	2211.0	2198.9	2202.9	2202.9	2190.8	2198.9	2202.9	2194.8
35°	2130.2	2109.9	2109.9	2109.9	2109.9	2109.9	2118.0	2105.9	2118.0	2109.9	2109.9
37.5°	2033.1	2012.9	2012.9	2008.9	2029.1	2017.0	2037.2	2021.0	2021.0	2029.1	2029.1
40°	1915.9	1924.0	1911.9	1928.0	1924.0	1907.8	1944.2	1920.0	1936.1	1915.9	1932.1
42.5°	1810.8	1814.9	1810.8	1806.8	1823.0	1818.9	1835.1	1818.9	1814.9	1814.9	1843.2
45°	1697.7	1697.7	1697.7	1709.8	1697.7	1701.7	1717.9	1709.8	1717.9	1713.8	1742.1
47.5°	1604.7	1584.5	1580.4	1604.7	1600.6	1604.7	1604.7	1608.7	1612.8	1604.7	1616.8
50°	1471.3	1463.2	1463.2	1467.3	1471.3	1479.4	1491.5	1499.6	1491.5	1503.6	1507.7
52.5°	1342.0	1333.9	1337.9	1354.1	1362.2	1358.1	1378.3	1382.4	1378.3	1386.4	1386.4
55°	1192.4	1184.3	1196.4	1216.7	1228.8	1240.9	1261.1	1244.9	1261.1	1265.2	1269.2
57.5°	1038.8	1034.8	1038.8	1059.0	1071.1	1099.4	1131.8	1131.8	1147.9	1135.8	1147.9
60°	869.0	869.0	885.2	897.3	929.7	949.9	982.2	998.4	1014.5	1030.7	1022.6
62.5°	707.4	711.4	723.5	751.8	772.0	800.3	836.7	852.9	881.2	897.3	889.2
65°	561.8	561.8	569.9	594.2	614.4	650.8	683.1	719.5	735.6	743.7	747.8
67.5°	420.4	416.3	432.5	448.7	468.9	505.3	541.6	561.8	590.1	598.2	594.2
70°	282.9	287.0	295.1	311.2	335.5	363.8	404.2	420.4	436.5	444.6	436.5
72.5°	177.8	177.8	181.9	198.1	214.2	234.4	262.7	278.9	299.1	303.2	295.1
75°	80.8	80.8	88.9	97.0	109.1	125.3	145.5	157.6	169.8	181.9	181.9
77.5°	16.2	20.2	24.3	24.3	32.3	44.5	56.6	68.7	80.8	80.8	80.8
80°	4.0	4.0	4.0	4.0	4.0	4.0	8.1	12.1	20.2	20.2	20.2
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°	2740.5	2740.5	2740.5	2740.5	2740.5	2740.5	2740.5	2740.5
2.5°	2740.5	2764.7	2740.5	2728.4	2744.5	2740.5	2728.4	2732.4
5°	2728.4	2736.5	2744.5	2712.2	2732.4	2736.5	2728.4	2720.3
7.5°	2716.2	2720.3	2716.2	2708.2	2708.2	2708.2	2716.2	2716.2
10°	2712.2	2700.1	2679.9	2667.7	2679.9	2679.9	2675.8	2708.2
12.5°	2659.7	2675.8	2663.7	2639.4	2663.7	2659.7	2659.7	2667.7
15°	2619.2	2619.2	2627.3	2595.0	2611.2	2607.1	2607.1	2615.2
17.5°	2578.8	2578.8	2574.8	2566.7	2562.6	2574.8	2562.6	2582.9
20°	2522.2	2530.3	2554.6	2514.1	2526.3	2514.1	2514.1	2489.9
22.5°	2453.5	2493.9	2473.7	2469.7	2465.6	2469.7	2477.8	2449.5
25°	2409.1	2409.1	2417.1	2392.9	2392.9	2401.0	2396.9	2388.8
27.5°	2348.4	2344.4	2340.3	2332.3	2352.5	2336.3	2336.3	2336.3
30°	2263.5	2275.7	2271.6	2251.4	2275.7	2267.6	2255.5	2231.2
32.5°	2190.8	2206.9	2182.7	2178.7	2174.6	2178.7	2182.7	2162.5
35°	2101.9	2105.9	2105.9	2089.7	2093.8	2089.7	2081.6	2085.7
37.5°	2021.0	2017.0	1996.8	1988.7	1992.7	1992.7	1996.8	1988.7
40°	1907.8	1920.0	1920.0	1891.7	1899.8	1891.7	1891.7	1887.6
42.5°	1814.9	1818.9	1806.8	1794.7	1794.7	1790.6	1782.5	1790.6
45°	1717.9	1713.8	1701.7	1689.6	1689.6	1685.5	1677.4	1693.6
47.5°	1608.7	1600.6	1596.6	1580.4	1580.4	1556.2	1560.2	1576.4
50°	1499.6	1491.5	1475.3	1467.3	1455.1	1443.0	1439.0	1439.0
52.5°	1370.2	1370.2	1354.1	1337.9	1333.9	1325.8	1317.7	1321.7
55°	1257.1	1257.1	1244.9	1216.7	1200.5	1180.3	1168.1	1164.1
57.5°	1127.7	1119.6	1095.4	1063.1	1046.9	1030.7	1018.6	1018.6
60°	998.4	978.2	953.9	925.6	897.3	869.0	861.0	856.9
62.5°	856.9	836.7	792.2	759.9	739.7	723.5	707.4	719.5
65°	715.4	687.1	646.7	614.4	594.2	569.9	557.8	557.8
67.5°	565.9	537.6	497.2	464.8	444.6	428.5	412.3	412.3
70°	416.3	396.1	359.7	331.4	315.3	291.0	287.0	287.0
72.5°	282.9	258.7	230.4	210.2	194.0	177.8	169.8	165.7
75°	157.6	141.5	121.3	109.1	93.0	84.9	76.8	76.8
77.5°	64.7	52.5	40.4	32.3	24.3	20.2	16.2	20.2
80°	12.1	8.1	4.0	4.0	4.0	4.0	4.0	4.0
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)