

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: P209381

Luminaire Tested: **LDSQ6B60D010 EU6B60708030 6LBSQ1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209381  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35360)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDSQ6B60D010 EU6B60708030 6LBSQ1LI  
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE LOW  
IRIDESCENT TRIM.  
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR TRIM  
D010TE  
Light Source: HIGH LUMEN LED 3000 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5949.1 lumens  
Efficiency: N/A  
Efficacy: 95.2 lumens/watt  
Spacing Criteria (0/90/45): 0.92 / 0.92 / 0.95  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

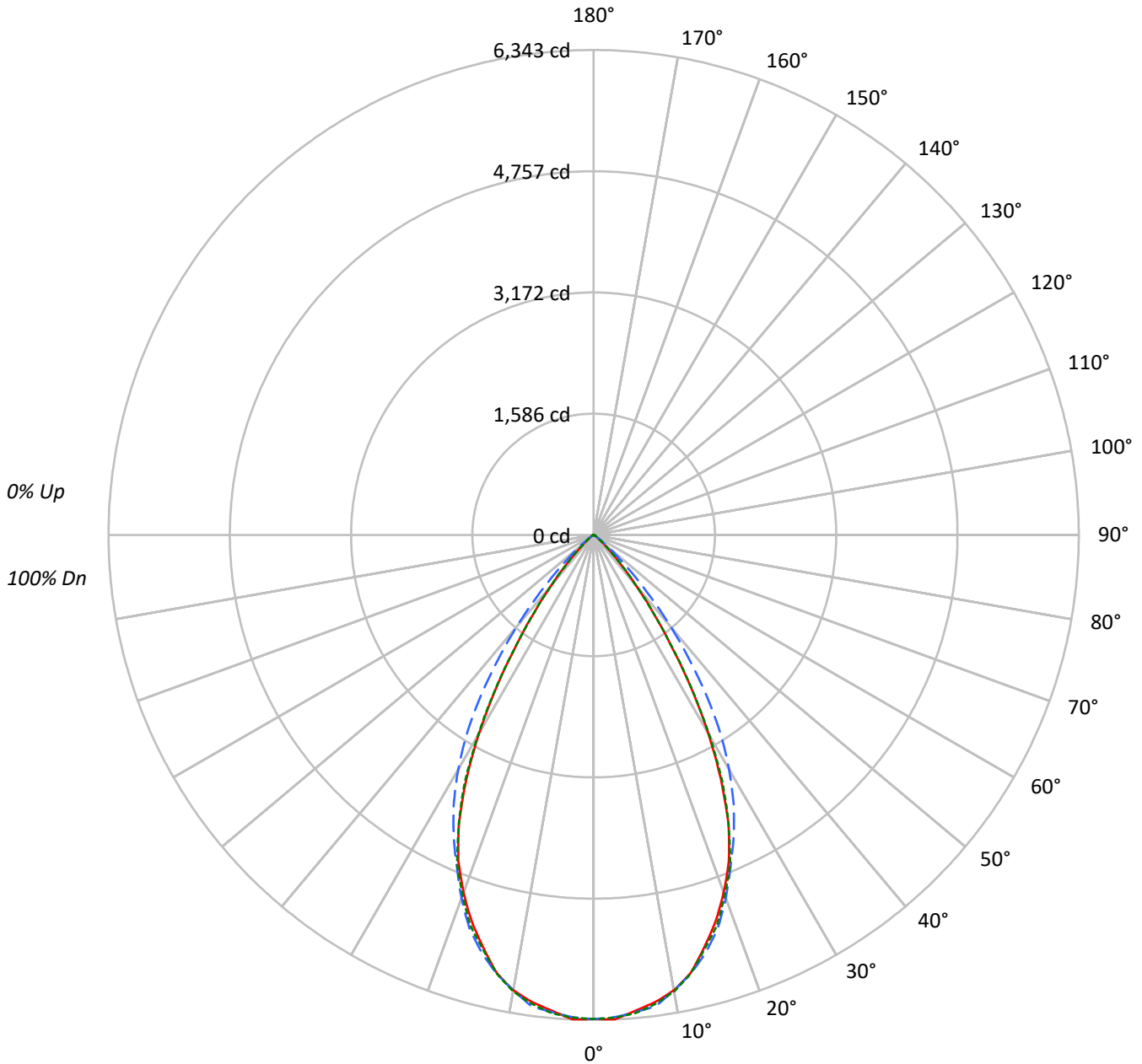
Input Watts (W): 62.48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	83	78	73	90	82	77	73	81	76	72	79	75	72	77	74	71	69																			
6	87	78	72	68	86	77	72	67	76	71	67	74	70	67	73	69	66	65																			
7	83	73	67	63	81	73	67	63	71	66	62	70	66	62	69	65	62	60																			
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	64	58	55	63	58	54	62	57	54	53																			
10	71	61	55	52	70	61	55	51	60	55	51	59	55	51	59	54	51	50																			

**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°	592.7	10.0
10°-20°	1576.5	26.5
20°-30°	1934.9	32.5
30°-40°	1335.7	22.5
40°-50°	417.6	7.0
50°-60°	65.2	1.1
60°-70°	18.9	0.3
70°-80°	6.2	0.1
80°-90°	1.4	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°	4104.1	69.0
0°-40°	5439.8	91.4
0°-60°	5922.6	99.6
0°-90°	5949.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5949.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6331	6331	6331	6331	6331	
5°	6247	6271	6263	6265	6279	591
15°	5585	5664	5656	5648	5605	1562
25°	4168	4276	4332	4304	4172	1868
35°	1759	2080	2581	2100	1767	1124
45°	331	453	726	449	339	297
55°	56	60	68	60	52	54
65°	16	20	16	20	16	18
75°	4	4	4	4	4	6
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°	6330.6	6330.6	6330.6	6330.6	6330.6	6330.6	6330.6	6330.6	6330.6	6330.6	6330.6
2.5°	6342.6	6254.8	6310.7	6298.7	6330.6	6350.5	6330.6	6366.5	6342.6	6314.6	6322.6
5°	6246.8	6258.8	6254.8	6262.8	6270.8	6270.8	6310.7	6314.6	6322.6	6262.8	6278.7
7.5°	6163.1	6163.1	6183.0	6175.0	6202.9	6195.0	6199.0	6230.9	6234.9	6218.9	6206.9
10°	6047.4	6031.4	6011.5	6011.5	6047.4	6051.4	6083.3	6087.3	6111.2	6047.4	6055.4
12.5°	5867.9	5859.9	5828.0	5843.9	5871.9	5855.9	5907.8	5911.7	5903.8	5875.8	5891.8
15°	5584.6	5616.6	5608.6	5604.6	5668.4	5660.4	5656.4	5668.4	5672.4	5656.4	5644.5
17.5°	5301.4	5329.3	5333.3	5341.3	5353.3	5365.2	5381.2	5425.1	5409.1	5397.2	5437.1
20°	4974.3	4962.4	4994.3	5026.2	5038.1	5038.1	5062.1	5094.0	5070.1	5054.1	5058.1
22.5°	4619.3	4639.2	4623.3	4655.2	4671.2	4691.1	4715.0	4743.0	4723.0	4679.1	4731.0
25°	4168.5	4180.5	4232.4	4228.4	4252.3	4300.2	4336.1	4336.1	4336.1	4332.1	4332.1
27.5°	3602.1	3594.1	3657.9	3701.8	3761.7	3837.4	3885.3	3961.1	3973.1	3961.1	3933.2
30°	2995.8	2987.8	3067.6	3123.4	3231.1	3267.0	3398.7	3470.5	3546.3	3542.3	3522.3
32.5°	2365.5	2381.5	2445.3	2525.1	2612.8	2724.5	2848.2	3007.7	3075.5	3091.5	3055.6
35°	1759.2	1783.1	1842.9	1910.7	2018.5	2142.1	2313.6	2465.2	2580.9	2580.9	2553.0
37.5°	1268.5	1276.5	1332.3	1376.2	1487.9	1599.6	1747.2	1954.6	2026.4	2054.4	2026.4
40°	865.6	865.6	897.5	945.4	1037.1	1132.9	1268.5	1424.1	1527.8	1571.7	1523.8
42.5°	550.5	558.5	582.4	614.3	682.1	765.9	869.6	985.3	1061.1	1093.0	1049.1
45°	331.1	339.1	359.0	382.9	426.8	478.7	550.5	634.3	698.1	726.0	706.1
47.5°	199.5	207.4	215.4	231.4	263.3	299.2	335.1	382.9	422.8	426.8	418.8
50°	115.7	115.7	123.7	135.6	151.6	171.5	191.5	219.4	231.4	247.3	231.4
52.5°	75.8	75.8	75.8	79.8	87.8	95.7	103.7	119.7	127.6	127.6	123.7
55°	55.8	55.8	55.8	55.8	59.8	59.8	59.8	63.8	67.8	67.8	67.8
57.5°	39.9	39.9	39.9	43.9	43.9	43.9	39.9	39.9	39.9	39.9	39.9
60°	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	27.9	27.9	27.9
62.5°	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9
65°	16.0	16.0	16.0	19.9	19.9	19.9	19.9	16.0	16.0	16.0	16.0
67.5°	12.0	12.0	12.0	16.0	16.0	16.0	16.0	16.0	12.0	12.0	12.0
70°	8.0	8.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
72.5°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
75°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
77.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
80°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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°	6330.6	6330.6	6330.6	6330.6	6330.6	6330.6	6330.6	6330.6
2.5°	6346.6	6326.6	6326.6	6326.6	6318.6	6326.6	6338.6	6318.6
5°	6278.7	6286.7	6250.8	6278.7	6290.7	6270.8	6318.6	6278.7
7.5°	6218.9	6206.9	6151.1	6191.0	6214.9	6222.9	6218.9	6187.0
10°	6099.2	6071.3	6047.4	6047.4	6039.4	6035.4	6079.3	6063.3
12.5°	5883.8	5903.8	5867.9	5887.8	5871.9	5875.8	5879.8	5871.9
15°	5700.3	5680.4	5632.5	5664.4	5644.5	5624.5	5664.4	5604.6
17.5°	5413.1	5409.1	5381.2	5361.3	5369.2	5365.2	5385.2	5357.3
20°	5074.0	5082.0	5066.1	5058.1	5046.1	5018.2	5042.1	5010.2
22.5°	4707.1	4715.0	4731.0	4699.1	4703.1	4663.2	4699.1	4663.2
25°	4336.1	4332.1	4312.1	4296.2	4252.3	4208.4	4200.5	4172.5
27.5°	3929.2	3901.3	3853.4	3801.5	3733.7	3673.9	3669.9	3650.0
30°	3482.4	3422.6	3334.8	3251.1	3147.3	3055.6	3055.6	3023.7
32.5°	3011.7	2876.1	2756.4	2652.7	2517.1	2465.2	2413.4	2385.4
35°	2449.3	2329.6	2186.0	2014.5	1950.6	1823.0	1831.0	1767.1
37.5°	1918.7	1771.1	1635.5	1495.9	1384.2	1324.4	1292.4	1260.5
40°	1424.1	1280.5	1132.9	1041.1	941.4	889.6	869.6	861.6
42.5°	973.3	853.7	757.9	682.1	630.3	574.4	558.5	550.5
45°	634.3	566.4	478.7	418.8	382.9	351.0	351.0	339.1
47.5°	379.0	335.1	291.2	251.3	227.4	207.4	199.5	195.5
50°	211.4	187.5	163.6	147.6	131.6	119.7	115.7	115.7
52.5°	115.7	103.7	95.7	83.8	75.8	75.8	75.8	71.8
55°	59.8	59.8	59.8	59.8	55.8	55.8	55.8	51.9
57.5°	39.9	39.9	43.9	43.9	43.9	39.9	39.9	39.9
60°	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9
62.5°	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9
65°	16.0	19.9	19.9	19.9	19.9	16.0	16.0	16.0
67.5°	12.0	16.0	16.0	16.0	12.0	12.0	12.0	12.0
70°	12.0	12.0	12.0	12.0	12.0	8.0	8.0	8.0
72.5°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
75°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
77.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
80°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	4.0	4.0	4.0	4.0	4.0	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)