

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: P209385

Luminaire Tested: **LDSQ6B60D010 EU6B60709024 6LBSQ1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209385  
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 EU6B60709024 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 2400 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4298.9 lumens  
Efficiency: N/A  
Efficacy: 68.8 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

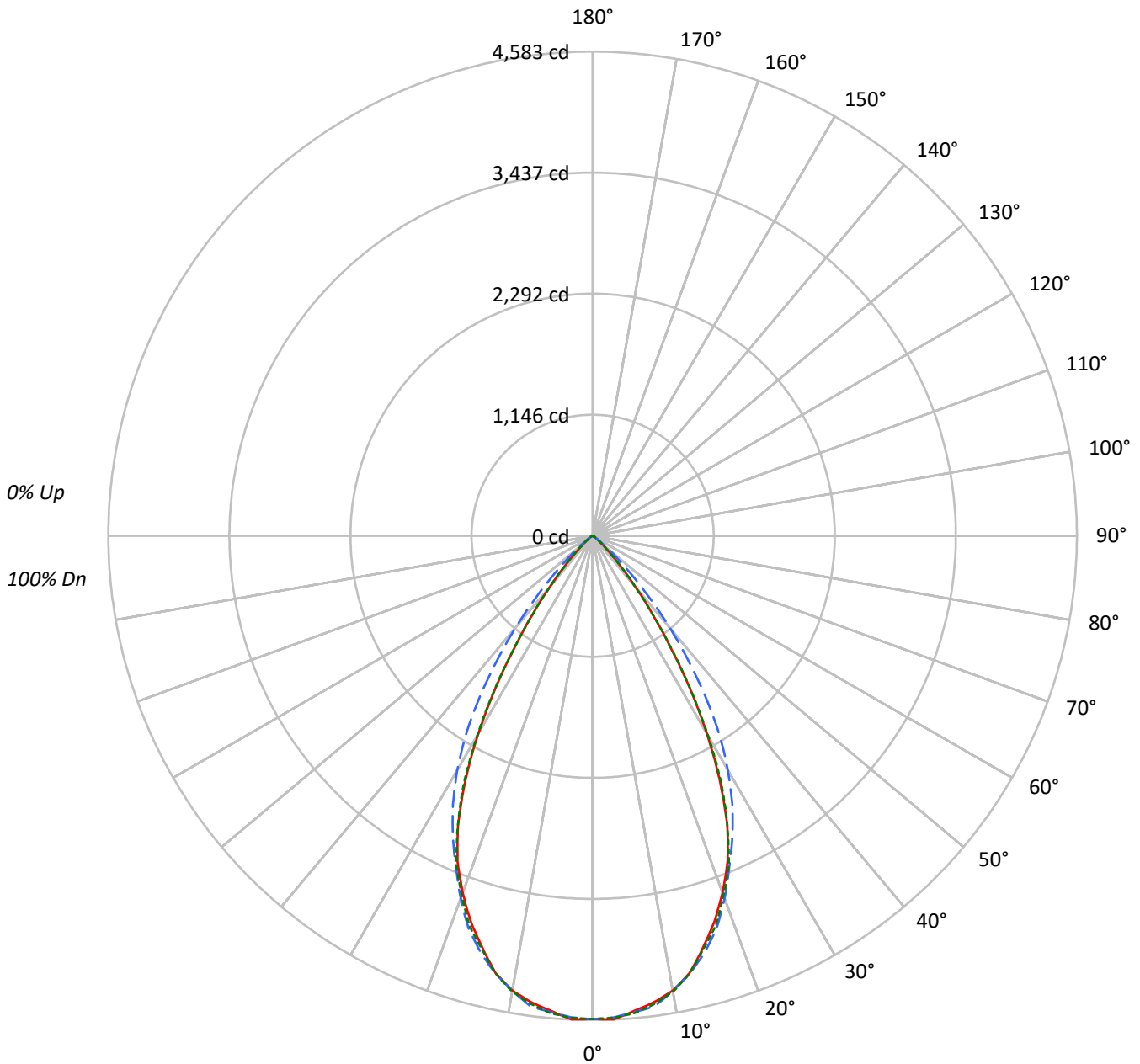
Input Watts (W): 62.48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	428.3	10.0
10°-20°	1139.2	26.5
20°-30°	1398.2	32.5
30°-40°	965.2	22.5
40°-50°	301.8	7.0
50°-60°	47.1	1.1
60°-70°	13.6	0.3
70°-80°	4.5	0.1
80°-90°	1.0	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°	2965.7	69.0
0°-40°	3930.8	91.4
0°-60°	4279.7	99.6
0°-90°	4298.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4298.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4575	4575	4575	4575	4575	
5°	4514	4531	4526	4527	4537	427
15°	4036	4093	4087	4082	4050	1129
25°	3012	3090	3130	3110	3015	1350
35°	1271	1503	1865	1518	1277	812
45°	239	327	525	324	245	214
55°	40	43	49	43	38	39
65°	12	14	12	14	12	13
75°	3	3	3	3	3	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4574.6	4574.6	4574.6	4574.6	4574.6	4574.6	4574.6	4574.6	4574.6	4574.6	4574.6
2.5°	4583.2	4519.8	4560.1	4551.5	4574.6	4589.0	4574.6	4600.5	4583.2	4563.0	4568.8
5°	4514.0	4522.7	4519.8	4525.6	4531.3	4531.3	4560.1	4563.0	4568.8	4525.6	4537.1
7.5°	4453.5	4453.5	4467.9	4462.1	4482.3	4476.6	4479.4	4502.5	4505.4	4493.8	4485.2
10°	4369.9	4358.4	4344.0	4344.0	4369.9	4372.8	4395.8	4398.7	4416.0	4369.9	4375.7
12.5°	4240.2	4234.4	4211.4	4222.9	4243.1	4231.5	4269.0	4271.9	4266.1	4245.9	4257.5
15°	4035.5	4058.6	4052.8	4049.9	4096.1	4090.3	4087.4	4096.1	4098.9	4087.4	4078.8
17.5°	3830.9	3851.0	3853.9	3859.7	3868.3	3877.0	3888.5	3920.2	3908.7	3900.0	3928.9
20°	3594.5	3585.9	3608.9	3632.0	3640.6	3640.6	3657.9	3681.0	3663.7	3652.2	3655.0
22.5°	3338.0	3352.4	3340.8	3363.9	3375.4	3389.8	3407.1	3427.3	3412.9	3381.2	3418.7
25°	3012.2	3020.9	3058.4	3055.5	3072.8	3107.4	3133.3	3133.3	3133.3	3130.4	3130.4
27.5°	2602.9	2597.1	2643.3	2675.0	2718.2	2773.0	2807.6	2862.3	2871.0	2862.3	2842.2
30°	2164.8	2159.0	2216.7	2257.0	2334.8	2360.8	2455.9	2507.8	2562.6	2559.7	2545.3
32.5°	1709.3	1720.9	1767.0	1824.6	1888.0	1968.8	2058.1	2173.4	2222.4	2234.0	2208.0
35°	1271.2	1288.5	1331.7	1380.7	1458.6	1547.9	1671.9	1781.4	1865.0	1865.0	1844.8
37.5°	916.6	922.4	962.8	994.5	1075.2	1155.9	1262.5	1412.4	1464.3	1484.5	1464.3
40°	625.5	625.5	648.6	683.2	749.5	818.6	916.6	1029.1	1104.0	1135.7	1101.1
42.5°	397.8	403.6	420.8	443.9	492.9	553.4	628.4	712.0	766.7	789.8	758.1
45°	239.2	245.0	259.4	276.7	308.4	345.9	397.8	458.3	504.4	524.6	510.2
47.5°	144.1	149.9	155.7	167.2	190.2	216.2	242.1	276.7	305.5	308.4	302.7
50°	83.6	83.6	89.4	98.0	109.5	123.9	138.4	158.5	167.2	178.7	167.2
52.5°	54.8	54.8	54.8	57.7	63.4	69.2	74.9	86.5	92.2	92.2	89.4
55°	40.4	40.4	40.4	40.4	43.2	43.2	43.2	46.1	49.0	49.0	49.0
57.5°	28.8	28.8	28.8	31.7	31.7	31.7	28.8	28.8	28.8	28.8	28.8
60°	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	20.2	20.2	20.2
62.5°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
65°	11.5	11.5	11.5	14.4	14.4	14.4	14.4	11.5	11.5	11.5	11.5
67.5°	8.6	8.6	8.6	11.5	11.5	11.5	11.5	11.5	8.6	8.6	8.6
70°	5.8	5.8	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
72.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
80°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
82.5°	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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°	4574.6	4574.6	4574.6	4574.6	4574.6	4574.6	4574.6	4574.6
2.5°	4586.1	4571.7	4571.7	4571.7	4565.9	4571.7	4580.3	4565.9
5°	4537.1	4542.8	4516.9	4537.1	4545.7	4531.3	4565.9	4537.1
7.5°	4493.8	4485.2	4444.8	4473.7	4491.0	4496.7	4493.8	4470.8
10°	4407.4	4387.2	4369.9	4369.9	4364.1	4361.2	4393.0	4381.4
12.5°	4251.7	4266.1	4240.2	4254.6	4243.1	4245.9	4248.8	4243.1
15°	4119.1	4104.7	4070.1	4093.2	4078.8	4064.4	4093.2	4049.9
17.5°	3911.6	3908.7	3888.5	3874.1	3879.9	3877.0	3891.4	3871.2
20°	3666.6	3672.3	3660.8	3655.0	3646.4	3626.2	3643.5	3620.4
22.5°	3401.4	3407.1	3418.7	3395.6	3398.5	3369.7	3395.6	3369.7
25°	3133.3	3130.4	3116.0	3104.5	3072.8	3041.1	3035.3	3015.1
27.5°	2839.3	2819.1	2784.5	2747.0	2698.0	2654.8	2651.9	2637.5
30°	2516.4	2473.2	2409.8	2349.3	2274.3	2208.0	2208.0	2184.9
32.5°	2176.3	2078.3	1991.8	1916.9	1818.9	1781.4	1743.9	1723.7
35°	1769.9	1683.4	1579.6	1455.7	1409.6	1317.3	1323.1	1277.0
37.5°	1386.5	1279.8	1181.8	1080.9	1000.2	957.0	933.9	910.9
40°	1029.1	925.3	818.6	752.3	680.3	642.8	628.4	622.6
42.5°	703.3	616.9	547.7	492.9	455.4	415.1	403.6	397.8
45°	458.3	409.3	345.9	302.7	276.7	253.7	253.7	245.0
47.5°	273.8	242.1	210.4	181.6	164.3	149.9	144.1	141.2
50°	152.8	135.5	118.2	106.7	95.1	86.5	83.6	83.6
52.5°	83.6	74.9	69.2	60.5	54.8	54.8	54.8	51.9
55°	43.2	43.2	43.2	43.2	40.4	40.4	40.4	37.5
57.5°	28.8	28.8	31.7	31.7	31.7	28.8	28.8	28.8
60°	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1
62.5°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
65°	11.5	14.4	14.4	14.4	14.4	11.5	11.5	11.5
67.5°	8.6	11.5	11.5	11.5	8.6	8.6	8.6	8.6
70°	8.6	8.6	8.6	8.6	8.6	5.8	5.8	5.8
72.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
80°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
82.5°	2.9	2.9	2.9	2.9	2.9	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)