

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: P209382

Luminaire Tested: **LDSQ6B60D010 EU6B60708035 6LBSQ1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209382  
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 EU6B60708035 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 3500 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6101.5 lumens  
Efficiency: N/A  
Efficacy: 97.7 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

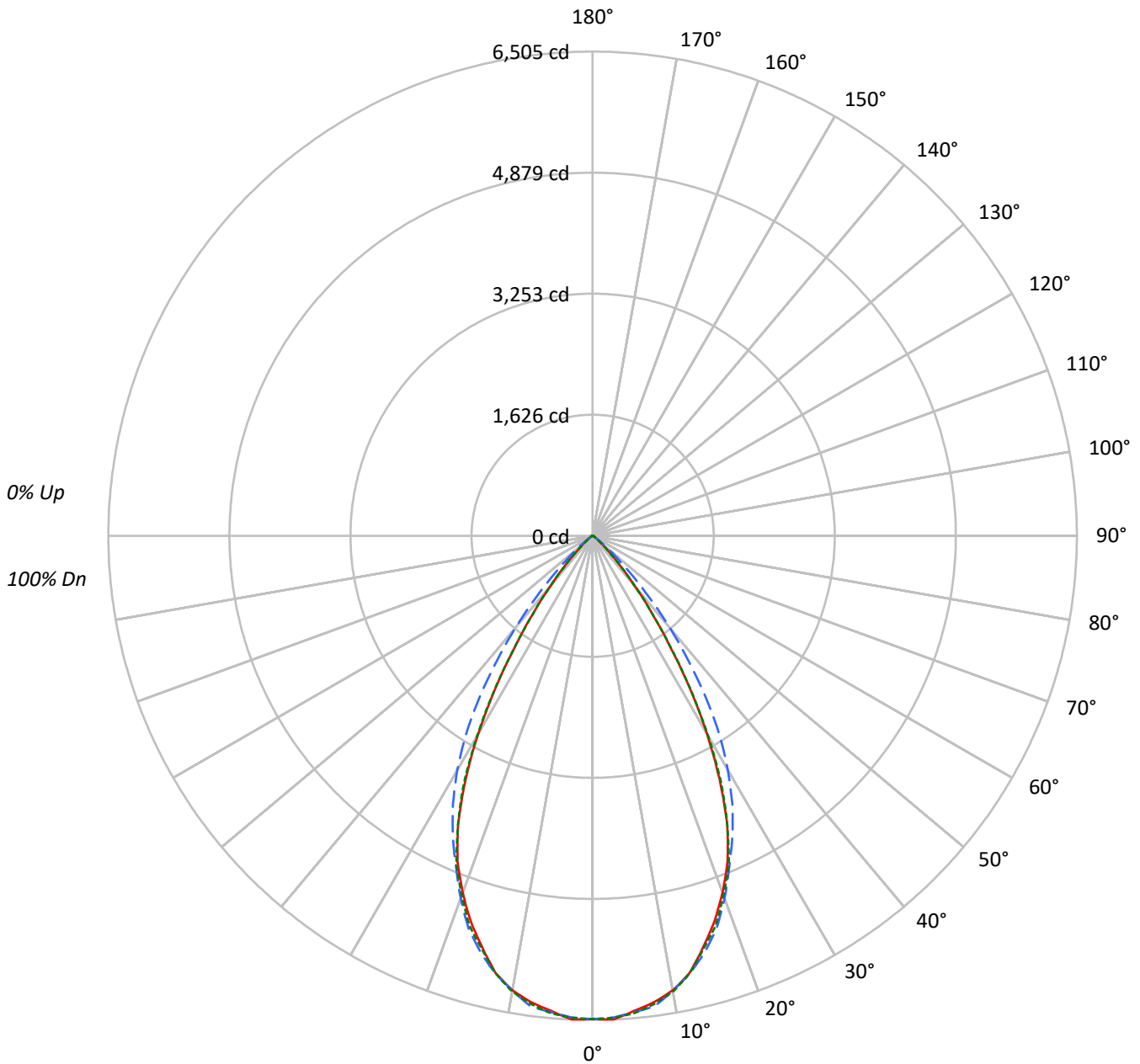
Input Watts (W): 62.48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	607.8	10.0
10°-20°	1617.0	26.5
20°-30°	1984.5	32.5
30°-40°	1369.9	22.5
40°-50°	428.3	7.0
50°-60°	66.9	1.1
60°-70°	19.4	0.3
70°-80°	6.4	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°	4209.3	69.0
0°-40°	5579.2	91.4
0°-60°	6074.4	99.6
0°-90°	6101.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6101.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6493	6493	6493	6493	6493	
5°	6407	6432	6423	6425	6440	606
15°	5728	5810	5801	5793	5748	1602
25°	4275	4386	4443	4414	4280	1916
35°	1804	2134	2647	2154	1812	1153
45°	340	464	745	460	348	304
55°	57	61	70	61	53	56
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°	6492.8	6492.8	6492.8	6492.8	6492.8	6492.8	6492.8	6492.8	6492.8	6492.8	6492.8
2.5°	6505.1	6415.1	6472.4	6460.1	6492.8	6513.3	6492.8	6529.7	6505.1	6476.5	6484.7
5°	6406.9	6419.2	6415.1	6423.3	6431.5	6431.5	6472.4	6476.5	6484.7	6423.3	6439.7
7.5°	6321.0	6321.0	6341.5	6333.3	6361.9	6353.7	6357.8	6390.6	6394.6	6378.3	6366.0
10°	6202.4	6186.0	6165.5	6165.5	6202.4	6206.4	6239.2	6243.3	6267.8	6202.4	6210.5
12.5°	6018.3	6010.1	5977.3	5993.7	6022.3	6006.0	6059.2	6063.3	6055.1	6026.4	6042.8
15°	5727.8	5760.5	5752.3	5748.2	5813.7	5805.5	5801.4	5813.7	5817.8	5801.4	5789.1
17.5°	5437.3	5465.9	5470.0	5478.2	5490.5	5502.8	5519.1	5564.1	5547.8	5535.5	5576.4
20°	5101.8	5089.5	5122.3	5155.0	5167.3	5167.3	5191.8	5224.5	5200.0	5183.6	5187.7
22.5°	4737.7	4758.1	4741.8	4774.5	4790.9	4811.3	4835.9	4864.5	4844.1	4799.1	4852.2
25°	4275.4	4287.6	4340.8	4336.7	4361.3	4410.4	4447.2	4447.2	4447.2	4443.1	4443.1
27.5°	3694.4	3686.2	3751.7	3796.7	3858.1	3935.8	3984.9	4062.6	4074.9	4062.6	4034.0
30°	3072.5	3064.4	3146.2	3203.5	3313.9	3350.7	3485.8	3559.4	3637.1	3633.0	3612.6
32.5°	2426.1	2442.5	2507.9	2589.8	2679.8	2794.3	2921.2	3084.8	3154.4	3170.7	3133.9
35°	1804.2	1828.8	1890.2	1959.7	2070.2	2197.0	2372.9	2528.4	2647.0	2647.0	2618.4
37.5°	1301.0	1309.2	1366.5	1411.5	1526.0	1640.6	1792.0	2004.7	2078.4	2107.0	2078.4
40°	887.8	887.8	920.5	969.6	1063.7	1161.9	1301.0	1460.6	1567.0	1612.0	1562.9
42.5°	564.6	572.8	597.3	630.1	699.6	785.5	891.9	1010.5	1088.3	1121.0	1076.0
45°	339.6	347.8	368.2	392.8	437.8	491.0	564.6	650.5	716.0	744.6	724.2
47.5°	204.6	212.7	220.9	237.3	270.0	306.8	343.7	392.8	433.7	437.8	429.6
50°	118.6	118.6	126.8	139.1	155.5	175.9	196.4	225.0	237.3	253.7	237.3
52.5°	77.7	77.7	77.7	81.8	90.0	98.2	106.4	122.7	130.9	130.9	126.8
55°	57.3	57.3	57.3	57.3	61.4	61.4	61.4	65.5	69.6	69.6	69.6
57.5°	40.9	40.9	40.9	45.0	45.0	45.0	40.9	40.9	40.9	40.9	40.9
60°	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	28.6	28.6	28.6
62.5°	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
65°	16.4	16.4	16.4	20.5	20.5	20.5	20.5	16.4	16.4	16.4	16.4
67.5°	12.3	12.3	12.3	16.4	16.4	16.4	16.4	16.4	12.3	12.3	12.3
70°	8.2	8.2	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
72.5°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
75°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
77.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
80°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
82.5°	0.0	0.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
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°	6492.8	6492.8	6492.8	6492.8	6492.8	6492.8	6492.8	6492.8
2.5°	6509.2	6488.7	6488.7	6488.7	6480.6	6488.7	6501.0	6480.6
5°	6439.7	6447.8	6411.0	6439.7	6451.9	6431.5	6480.6	6439.7
7.5°	6378.3	6366.0	6308.7	6349.6	6374.2	6382.4	6378.3	6345.6
10°	6255.5	6226.9	6202.4	6202.4	6194.2	6190.1	6235.1	6218.7
12.5°	6034.6	6055.1	6018.3	6038.7	6022.3	6026.4	6030.5	6022.3
15°	5846.4	5826.0	5776.9	5809.6	5789.1	5768.7	5809.6	5748.2
17.5°	5551.8	5547.8	5519.1	5498.7	5506.8	5502.8	5523.2	5494.6
20°	5204.1	5212.3	5195.9	5187.7	5175.5	5146.8	5171.4	5138.6
22.5°	4827.7	4835.9	4852.2	4819.5	4823.6	4782.7	4819.5	4782.7
25°	4447.2	4443.1	4422.7	4406.3	4361.3	4316.3	4308.1	4279.5
27.5°	4029.9	4001.3	3952.2	3899.0	3829.4	3768.1	3764.0	3743.5
30°	3571.7	3510.3	3420.3	3334.4	3228.0	3133.9	3133.9	3101.2
32.5°	3088.9	2949.8	2827.1	2720.7	2581.6	2528.4	2475.2	2446.6
35°	2512.0	2389.3	2242.0	2066.1	2000.6	1869.7	1877.9	1812.4
37.5°	1967.9	1816.5	1677.4	1534.2	1419.7	1358.3	1325.6	1292.8
40°	1460.6	1313.3	1161.9	1067.8	965.5	912.4	891.9	883.7
42.5°	998.3	875.5	777.3	699.6	646.4	589.1	572.8	564.6
45°	650.5	581.0	491.0	429.6	392.8	360.0	360.0	347.8
47.5°	388.7	343.7	298.7	257.7	233.2	212.7	204.6	200.5
50°	216.8	192.3	167.7	151.4	135.0	122.7	118.6	118.6
52.5°	118.6	106.4	98.2	85.9	77.7	77.7	77.7	73.6
55°	61.4	61.4	61.4	61.4	57.3	57.3	57.3	53.2
57.5°	40.9	40.9	45.0	45.0	45.0	40.9	40.9	40.9
60°	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
62.5°	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
65°	16.4	20.5	20.5	20.5	20.5	16.4	16.4	16.4
67.5°	12.3	16.4	16.4	16.4	12.3	12.3	12.3	12.3
70°	12.3	12.3	12.3	12.3	12.3	8.2	8.2	8.2
72.5°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
75°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
77.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
80°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
82.5°	4.1	4.1	4.1	4.1	4.1	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)