

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: P209389

Luminaire Tested: **LDSQ6B60D010 EU6B60709040 6LBSQ1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209389  
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 EU6B60709040 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 4000 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5162.1 lumens  
Efficiency: N/A  
Efficacy: 82.6 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

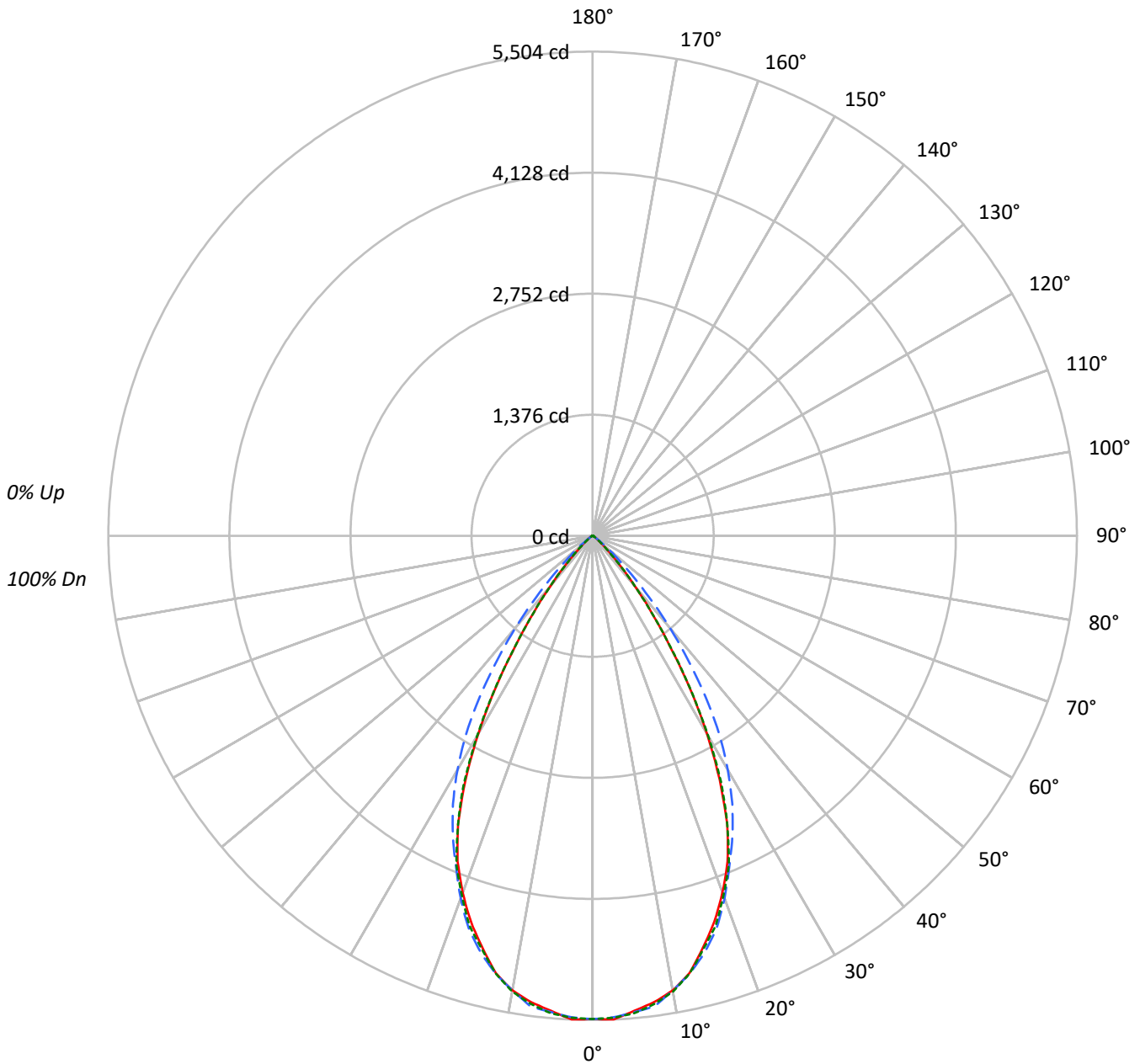
Input Watts (W): 62.48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	514.3	10.0
10°-20°	1368.0	26.5
20°-30°	1678.9	32.5
30°-40°	1159.0	22.5
40°-50°	362.4	7.0
50°-60°	56.6	1.1
60°-70°	16.4	0.3
70°-80°	5.4	0.1
80°-90°	1.2	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°	3561.2	69.0
0°-40°	4720.2	91.4
0°-60°	5139.2	99.6
0°-90°	5162.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5162.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5493	5493	5493	5493	5493	
5°	5420	5441	5434	5436	5448	512
15°	4846	4915	4908	4901	4863	1355
25°	3617	3711	3759	3735	3621	1621
35°	1526	1805	2240	1822	1533	975
45°	287	393	630	389	294	257
55°	48	52	59	52	45	47
65°	14	17	14	17	14	15
75°	4	4	4	4	4	5
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°	5493.2	5493.2	5493.2	5493.2	5493.2	5493.2	5493.2	5493.2	5493.2	5493.2	5493.2
2.5°	5503.5	5427.4	5475.8	5465.5	5493.2	5510.5	5493.2	5524.3	5503.5	5479.3	5486.2
5°	5420.5	5430.9	5427.4	5434.3	5441.2	5441.2	5475.8	5479.3	5486.2	5434.3	5448.2
7.5°	5347.8	5347.8	5365.1	5358.2	5382.4	5375.5	5378.9	5406.6	5410.1	5396.2	5385.9
10°	5247.4	5233.6	5216.2	5216.2	5247.4	5250.9	5278.6	5282.0	5302.8	5247.4	5254.3
12.5°	5091.6	5084.7	5057.0	5070.9	5095.1	5081.3	5126.3	5129.7	5122.8	5098.6	5112.4
15°	4845.9	4873.6	4866.7	4863.2	4918.6	4911.7	4908.2	4918.6	4922.0	4908.2	4897.8
17.5°	4600.1	4624.4	4627.8	4634.7	4645.1	4655.5	4669.4	4707.4	4693.6	4683.2	4717.8
20°	4316.3	4305.9	4333.6	4361.3	4371.7	4371.7	4392.4	4420.1	4399.4	4385.5	4389.0
22.5°	4008.2	4025.5	4011.7	4039.4	4053.2	4070.5	4091.3	4115.5	4098.2	4060.2	4105.2
25°	3617.1	3627.5	3672.5	3669.0	3689.8	3731.3	3762.5	3762.5	3762.5	3759.0	3759.0
27.5°	3125.6	3118.7	3174.1	3212.1	3264.0	3329.8	3371.4	3437.1	3447.5	3437.1	3412.9
30°	2599.5	2592.5	2661.8	2710.2	2803.7	2834.8	2949.1	3011.4	3077.1	3073.7	3056.4
32.5°	2052.6	2066.4	2121.8	2191.0	2267.2	2364.1	2471.4	2609.9	2668.7	2682.5	2651.4
35°	1526.5	1547.2	1599.1	1658.0	1751.4	1858.7	2007.6	2139.1	2239.5	2239.5	2215.3
37.5°	1100.7	1107.6	1156.1	1194.2	1291.1	1388.0	1516.1	1696.1	1758.4	1782.6	1758.4
40°	751.1	751.1	778.8	820.3	900.0	983.0	1100.7	1235.7	1325.7	1363.8	1322.2
42.5°	477.7	484.6	505.4	533.0	591.9	664.6	754.6	855.0	920.7	948.4	910.3
45°	287.3	294.2	311.5	332.3	370.4	415.4	477.7	550.4	605.7	630.0	612.7
47.5°	173.1	180.0	186.9	200.8	228.4	259.6	290.8	332.3	366.9	370.4	363.4
50°	100.4	100.4	107.3	117.7	131.5	148.8	166.1	190.4	200.8	214.6	200.8
52.5°	65.8	65.8	65.8	69.2	76.1	83.1	90.0	103.8	110.8	110.8	107.3
55°	48.5	48.5	48.5	48.5	51.9	51.9	51.9	55.4	58.8	58.8	58.8
57.5°	34.6	34.6	34.6	38.1	38.1	38.1	34.6	34.6	34.6	34.6	34.6
60°	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	24.2	24.2	24.2
62.5°	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
65°	13.8	13.8	13.8	17.3	17.3	17.3	17.3	13.8	13.8	13.8	13.8
67.5°	10.4	10.4	10.4	13.8	13.8	13.8	13.8	13.8	10.4	10.4	10.4
70°	6.9	6.9	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
72.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
75°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
77.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
82.5°	0.0	0.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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°	5493.2	5493.2	5493.2	5493.2	5493.2	5493.2	5493.2	5493.2
2.5°	5507.0	5489.7	5489.7	5489.7	5482.8	5489.7	5500.1	5482.8
5°	5448.2	5455.1	5423.9	5448.2	5458.5	5441.2	5482.8	5448.2
7.5°	5396.2	5385.9	5337.4	5372.0	5392.8	5399.7	5396.2	5368.5
10°	5292.4	5268.2	5247.4	5247.4	5240.5	5237.0	5275.1	5261.2
12.5°	5105.5	5122.8	5091.6	5108.9	5095.1	5098.6	5102.0	5095.1
15°	4946.3	4929.0	4887.4	4915.1	4897.8	4880.5	4915.1	4863.2
17.5°	4697.0	4693.6	4669.4	4652.0	4659.0	4655.5	4672.8	4648.6
20°	4402.8	4409.8	4395.9	4389.0	4378.6	4354.4	4375.1	4347.5
22.5°	4084.4	4091.3	4105.2	4077.5	4080.9	4046.3	4077.5	4046.3
25°	3762.5	3759.0	3741.7	3727.9	3689.8	3651.7	3644.8	3620.6
27.5°	3409.4	3385.2	3343.7	3298.7	3239.8	3187.9	3184.4	3167.1
30°	3021.8	2969.8	2893.7	2821.0	2731.0	2651.4	2651.4	2623.7
32.5°	2613.3	2495.6	2391.8	2301.8	2184.1	2139.1	2094.1	2069.9
35°	2125.3	2021.4	1896.8	1748.0	1692.6	1581.8	1588.8	1533.4
37.5°	1664.9	1536.8	1419.2	1298.0	1201.1	1149.2	1121.5	1093.8
40°	1235.7	1111.1	983.0	903.4	816.9	771.9	754.6	747.7
42.5°	844.6	740.7	657.7	591.9	546.9	498.4	484.6	477.7
45°	550.4	491.5	415.4	363.4	332.3	304.6	304.6	294.2
47.5°	328.8	290.8	252.7	218.1	197.3	180.0	173.1	169.6
50°	183.5	162.7	141.9	128.1	114.2	103.8	100.4	100.4
52.5°	100.4	90.0	83.1	72.7	65.8	65.8	65.8	62.3
55°	51.9	51.9	51.9	51.9	48.5	48.5	48.5	45.0
57.5°	34.6	34.6	38.1	38.1	38.1	34.6	34.6	34.6
60°	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
62.5°	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
65°	13.8	17.3	17.3	17.3	17.3	13.8	13.8	13.8
67.5°	10.4	13.8	13.8	13.8	10.4	10.4	10.4	10.4
70°	10.4	10.4	10.4	10.4	10.4	6.9	6.9	6.9
72.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
75°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
77.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
82.5°	3.5	3.5	3.5	3.5	3.5	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)