

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: P209371

Luminaire Tested: **LDSQ6B50D010 EU6B30508050 6LBSQ1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209371  
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: LDSQ6B50D010 EU6B30508050 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 5000 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5443.9 lumens  
Efficiency: N/A  
Efficacy: 92.6 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

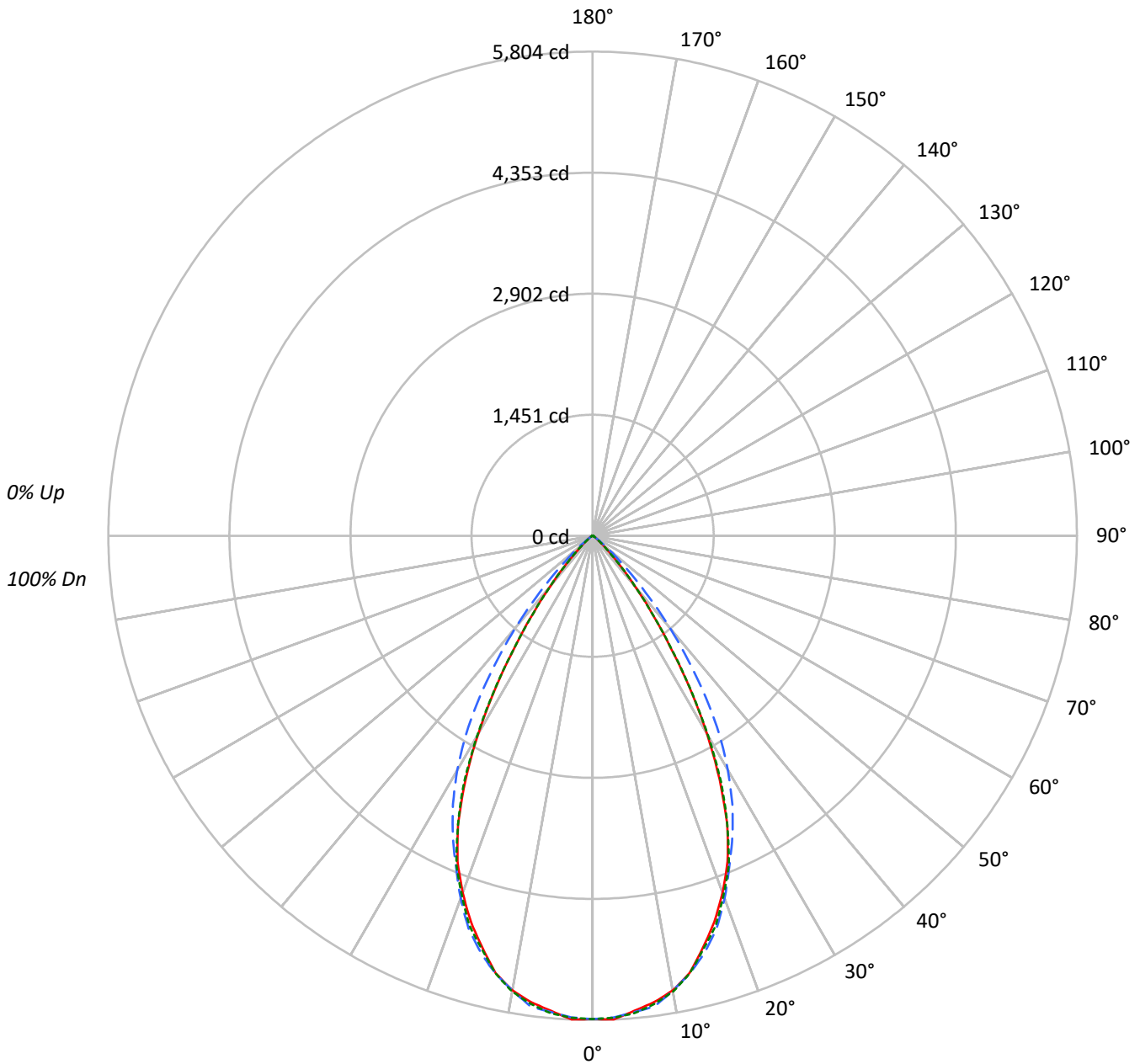
Input Watts (W): 58.77  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	542.3	10.0
10°-20°	1442.7	26.5
20°-30°	1770.6	32.5
30°-40°	1222.3	22.5
40°-50°	382.1	7.0
50°-60°	59.7	1.1
60°-70°	17.3	0.3
70°-80°	5.7	0.1
80°-90°	1.3	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°	3755.5	69.0
0°-40°	4977.8	91.4
0°-60°	5419.7	99.6
0°-90°	5443.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5443.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5793	5793	5793	5793	5793	
5°	5716	5738	5731	5733	5746	540
15°	5110	5183	5176	5169	5129	1429
25°	3814	3913	3964	3939	3818	1709
35°	1610	1904	2362	1922	1617	1028
45°	303	414	664	411	310	271
55°	51	55	62	55	48	50
65°	15	18	15	18	15	16
75°	4	4	4	4	4	5
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°	5793.0	5793.0	5793.0	5793.0	5793.0	5793.0	5793.0	5793.0	5793.0	5793.0	5793.0
2.5°	5803.9	5723.6	5774.7	5763.8	5793.0	5811.2	5793.0	5825.8	5803.9	5778.4	5785.7
5°	5716.3	5727.3	5723.6	5730.9	5738.2	5738.2	5774.7	5778.4	5785.7	5730.9	5745.5
7.5°	5639.7	5639.7	5657.9	5650.6	5676.2	5668.9	5672.5	5701.7	5705.4	5690.8	5679.8
10°	5533.8	5519.2	5501.0	5501.0	5533.8	5537.5	5566.7	5570.3	5592.2	5533.8	5541.1
12.5°	5369.5	5362.2	5333.0	5347.6	5373.2	5358.6	5406.0	5409.7	5402.4	5376.8	5391.4
15°	5110.4	5139.6	5132.3	5128.6	5187.0	5179.7	5176.1	5187.0	5190.7	5176.1	5165.1
17.5°	4851.2	4876.8	4880.4	4887.7	4898.7	4909.6	4924.2	4964.4	4949.8	4938.8	4975.3
20°	4551.9	4540.9	4570.1	4599.3	4610.3	4610.3	4632.2	4661.4	4639.5	4624.9	4628.5
22.5°	4227.0	4245.3	4230.7	4259.9	4274.5	4292.7	4314.6	4340.2	4321.9	4281.8	4329.2
25°	3814.5	3825.5	3872.9	3869.3	3891.2	3935.0	3967.8	3967.8	3967.8	3964.2	3964.2
27.5°	3296.2	3288.9	3347.3	3387.4	3442.2	3511.6	3555.4	3624.7	3635.7	3624.7	3599.2
30°	2741.4	2734.0	2807.1	2858.2	2956.7	2989.6	3110.0	3175.7	3245.1	3241.4	3223.2
32.5°	2164.6	2179.2	2237.6	2310.6	2390.9	2493.1	2606.3	2752.3	2814.4	2829.0	2796.1
35°	1609.8	1631.7	1686.4	1748.5	1847.0	1960.2	2117.2	2255.9	2361.7	2361.7	2336.2
37.5°	1160.8	1168.1	1219.2	1259.3	1361.5	1463.8	1598.8	1788.6	1854.3	1879.9	1854.3
40°	792.1	792.1	821.3	865.1	949.1	1036.7	1160.8	1303.1	1398.1	1438.2	1394.4
42.5°	503.7	511.0	532.9	562.1	624.2	700.9	795.8	901.6	971.0	1000.2	960.0
45°	303.0	310.3	328.5	350.4	390.6	438.0	503.7	580.4	638.8	664.3	646.1
47.5°	182.5	189.8	197.1	211.7	240.9	273.8	306.6	350.4	386.9	390.6	383.3
50°	105.9	105.9	113.2	124.1	138.7	157.0	175.2	200.8	211.7	226.3	211.7
52.5°	69.4	69.4	69.4	73.0	80.3	87.6	94.9	109.5	116.8	116.8	113.2
55°	51.1	51.1	51.1	51.1	54.8	54.8	54.8	58.4	62.1	62.1	62.1
57.5°	36.5	36.5	36.5	40.2	40.2	40.2	36.5	36.5	36.5	36.5	36.5
60°	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	25.6	25.6	25.6
62.5°	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9
65°	14.6	14.6	14.6	18.3	18.3	18.3	18.3	14.6	14.6	14.6	14.6
67.5°	11.0	11.0	11.0	14.6	14.6	14.6	14.6	14.6	11.0	11.0	11.0
70°	7.3	7.3	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
72.5°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
75°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
77.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
80°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
82.5°	0.0	0.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
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°	5793.0	5793.0	5793.0	5793.0	5793.0	5793.0	5793.0	5793.0
2.5°	5807.6	5789.3	5789.3	5789.3	5782.0	5789.3	5800.3	5782.0
5°	5745.5	5752.8	5720.0	5745.5	5756.5	5738.2	5782.0	5745.5
7.5°	5690.8	5679.8	5628.7	5665.2	5687.1	5694.4	5690.8	5661.6
10°	5581.3	5555.7	5533.8	5533.8	5526.5	5522.9	5563.0	5548.4
12.5°	5384.1	5402.4	5369.5	5387.8	5373.2	5376.8	5380.5	5373.2
15°	5216.2	5198.0	5154.2	5183.4	5165.1	5146.9	5183.4	5128.6
17.5°	4953.4	4949.8	4924.2	4906.0	4913.3	4909.6	4927.9	4902.3
20°	4643.1	4650.4	4635.8	4628.5	4617.6	4592.0	4613.9	4584.7
22.5°	4307.3	4314.6	4329.2	4300.0	4303.7	4267.2	4300.0	4267.2
25°	3967.8	3964.2	3945.9	3931.3	3891.2	3851.0	3843.7	3818.2
27.5°	3595.5	3570.0	3526.2	3478.7	3416.6	3361.9	3358.2	3340.0
30°	3186.7	3131.9	3051.6	2975.0	2880.1	2796.1	2796.1	2766.9
32.5°	2756.0	2631.8	2522.3	2427.4	2303.3	2255.9	2208.4	2182.9
35°	2241.3	2131.8	2000.3	1843.4	1785.0	1668.2	1675.5	1617.1
37.5°	1755.8	1620.7	1496.6	1368.9	1266.6	1211.9	1182.7	1153.5
40°	1303.1	1171.7	1036.7	952.7	861.5	814.0	795.8	788.5
42.5°	890.7	781.2	693.6	624.2	576.7	525.6	511.0	503.7
45°	580.4	518.3	438.0	383.3	350.4	321.2	321.2	310.3
47.5°	346.8	306.6	266.5	230.0	208.1	189.8	182.5	178.9
50°	193.5	171.6	149.7	135.1	120.5	109.5	105.9	105.9
52.5°	105.9	94.9	87.6	76.7	69.4	69.4	69.4	65.7
55°	54.8	54.8	54.8	54.8	51.1	51.1	51.1	47.5
57.5°	36.5	36.5	40.2	40.2	40.2	36.5	36.5	36.5
60°	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
62.5°	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9
65°	14.6	18.3	18.3	18.3	18.3	14.6	14.6	14.6
67.5°	11.0	14.6	14.6	14.6	11.0	11.0	11.0	11.0
70°	11.0	11.0	11.0	11.0	11.0	7.3	7.3	7.3
72.5°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
75°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
77.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
80°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
82.5°	3.7	3.7	3.7	3.7	3.7	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)