

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: P251828

Luminaire Tested: **LD4B10D010 EU4B10209730 4LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P251828  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-14)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD4B10D010 EU4B10209730 4LBDW1LI  
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 724.0 lumens  
Efficiency: N/A  
Efficacy: 72.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.32 / 1.18  
Luminous Opening: Circular (Dia: 7.42' x H: 0')  
CIE Type: Direct

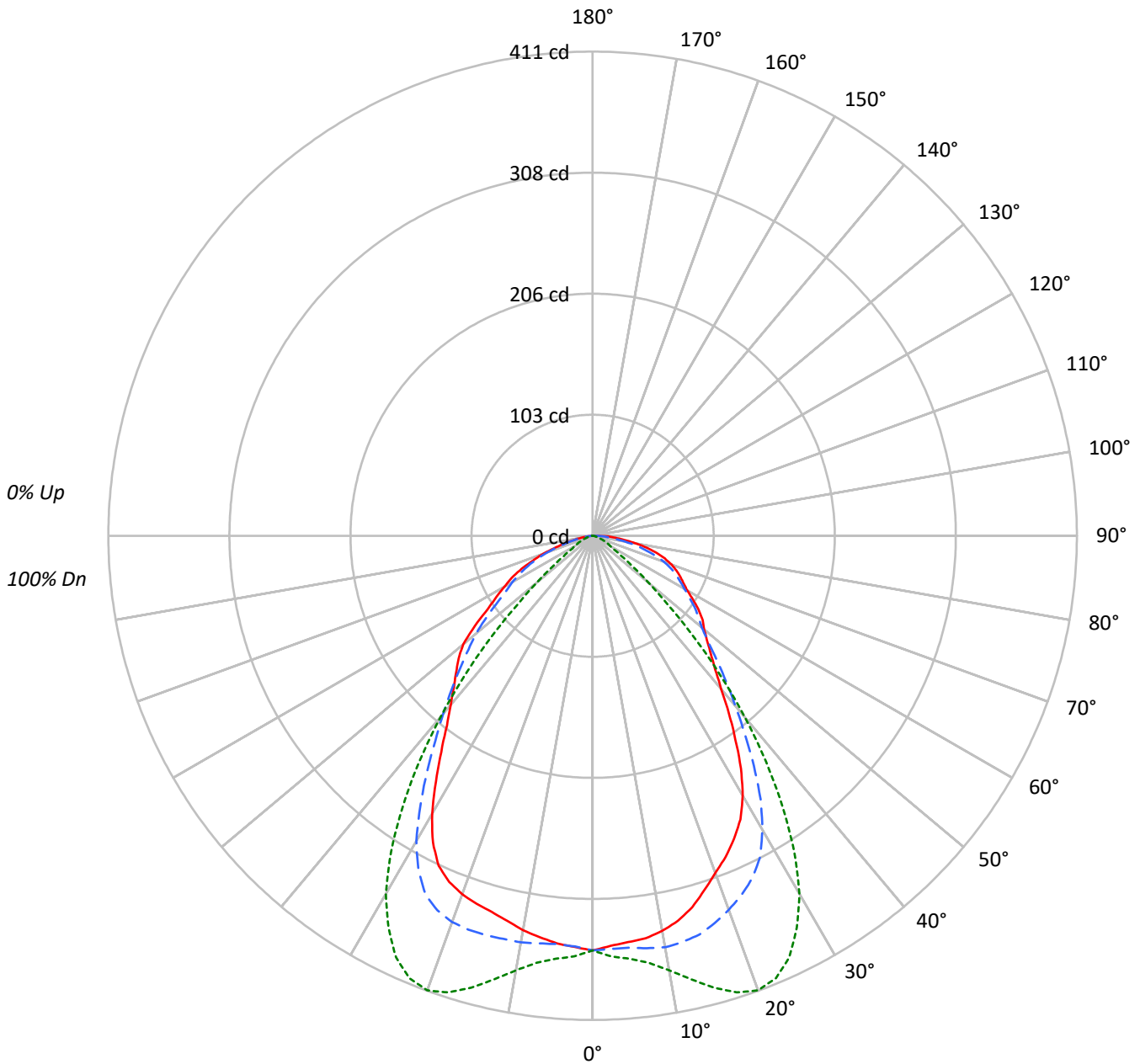
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				20	
RC	80				70				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				100
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87				87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				76
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66				66
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58				58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52				52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47				47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	88	88	88
5°	87	90	87
10°	86	95	86
15°	84	102	85
20°	81	109	86
25°	78	109	85
30°	73	101	78
35°	64	86	68
40°	55	65	61
45°	50	43	58
50°	48	24	56
55°	48	13	47
60°	46	9	43
65°	48	7	39
70°	52	5	32
75°	54	4	22
80°	53	2	14
85°	55	1	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.7	4.7
10°-20°	100.9	13.9
20°-30°	153.9	21.3
30°-40°	153.6	21.2
40°-50°	113.3	15.6
50°-60°	77.4	10.7
60°-70°	54.6	7.5
70°-80°	29.2	4.0
80°-90°	7.5	1.0
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°	288.5	39.8
0°-40°	442.1	61.1
0°-60°	632.7	87.4
0°-90°	724.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	724.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	352	352	352	352	352	
5°	346	351	360	348	347	33
15°	326	350	397	351	331	92
25°	284	321	395	336	309	130
35°	211	238	281	245	224	132
45°	142	149	122	159	164	111
55°	110	106	30	98	108	98
65°	82	78	12	60	66	81
75°	56	46	4	21	23	59
85°	19	13	0	3	0	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	352.0	352.0	352.0	352.0	352.0	352.0	352.0	352.0	352.0
2.5°	348.4	350.5	351.0	354.7	357.3	354.1	348.9	348.9	349.4
5°	346.3	348.9	351.0	357.3	360.4	355.2	347.9	346.8	347.3
7.5°	344.7	348.4	353.1	362.5	365.6	358.8	348.9	344.7	343.7
10°	340.5	345.8	354.7	368.3	374.5	366.2	350.5	342.6	340.0
12.5°	334.8	341.1	353.1	374.5	385.5	373.0	350.5	339.0	334.8
15°	326.4	333.2	350.5	379.8	397.0	380.3	351.0	335.3	330.6
17.5°	315.4	323.8	344.7	382.4	406.4	387.1	350.5	332.7	327.5
20°	304.4	314.4	337.9	382.4	410.6	389.7	348.9	330.1	323.8
22.5°	295.0	305.0	330.1	377.7	406.4	386.6	344.2	325.4	318.0
25°	284.0	294.5	320.7	367.7	394.9	377.1	335.8	315.9	309.1
27.5°	271.5	283.0	307.6	352.0	375.1	359.9	320.1	300.8	293.5
30°	254.7	265.2	288.2	329.5	351.0	336.3	299.2	279.3	272.5
32.5°	234.3	243.8	265.2	302.3	318.6	306.5	272.0	255.3	247.4
35°	211.3	219.7	238.5	267.8	281.4	274.1	245.3	229.6	223.9
37.5°	189.9	196.2	211.9	233.3	241.7	237.0	219.2	207.7	203.0
40°	169.5	175.8	188.3	198.8	200.9	202.4	197.2	189.9	187.3
42.5°	153.8	159.5	167.4	166.3	160.1	169.0	177.3	176.3	174.2
45°	141.8	145.9	148.6	132.9	121.9	136.5	159.0	164.8	163.7
47.5°	131.8	133.9	132.3	106.2	86.3	106.2	142.8	154.3	154.3
50°	123.4	125.0	120.8	88.4	62.2	85.3	128.7	141.2	143.3
52.5°	117.7	118.2	113.0	74.8	42.9	67.5	113.5	124.5	126.1
55°	109.8	110.4	105.7	64.9	29.8	53.4	98.3	108.3	108.3
57.5°	101.0	102.0	97.3	56.5	20.9	44.5	86.8	96.2	96.8
60°	92.6	93.1	90.0	50.2	17.3	38.2	78.5	86.3	86.3
62.5°	86.8	87.4	83.7	46.6	14.6	33.5	69.6	76.9	77.4
65°	82.1	82.1	77.9	42.9	12.0	28.2	60.2	66.4	66.4
67.5°	76.9	75.8	71.7	38.2	9.4	23.0	50.7	55.4	54.9
70°	71.1	69.6	64.3	33.0	6.8	18.3	39.8	43.4	43.9
72.5°	64.3	62.2	55.4	27.2	5.2	13.6	29.3	32.4	32.4
75°	56.5	53.9	46.0	21.4	3.7	9.4	20.9	23.0	23.0
77.5°	47.1	44.5	36.6	15.7	2.6	6.3	14.1	15.7	15.7
80°	37.1	34.5	27.2	11.0	1.6	3.7	8.9	10.5	9.9
82.5°	27.7	25.1	18.3	6.8	1.0	2.1	5.8	5.8	5.2
85°	19.4	17.8	12.6	4.2	0.5	1.0	2.6	1.0	0.0
87.5°	13.1	11.5	7.8	2.1	0.0	0.5	0.5	0.0	0.0
90°	0.0	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)