

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: P252056

Luminaire Tested: **LD4B10D010 EU4B10209027 4LBBA1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252056  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-4)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD4B10D010 EU4B10209027 4LBBA1MB  
Description: PORTFOLIO 4 INCH BAFFLE RECESSED DOWNLIGHT, WITH MATTE BLACK TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 441.0 lumens  
Efficiency: N/A  
Efficacy: 43.9 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 0.94  
Luminous Opening: Circular (Dia: 0.38' x H: 0')  
CIE Type: Direct

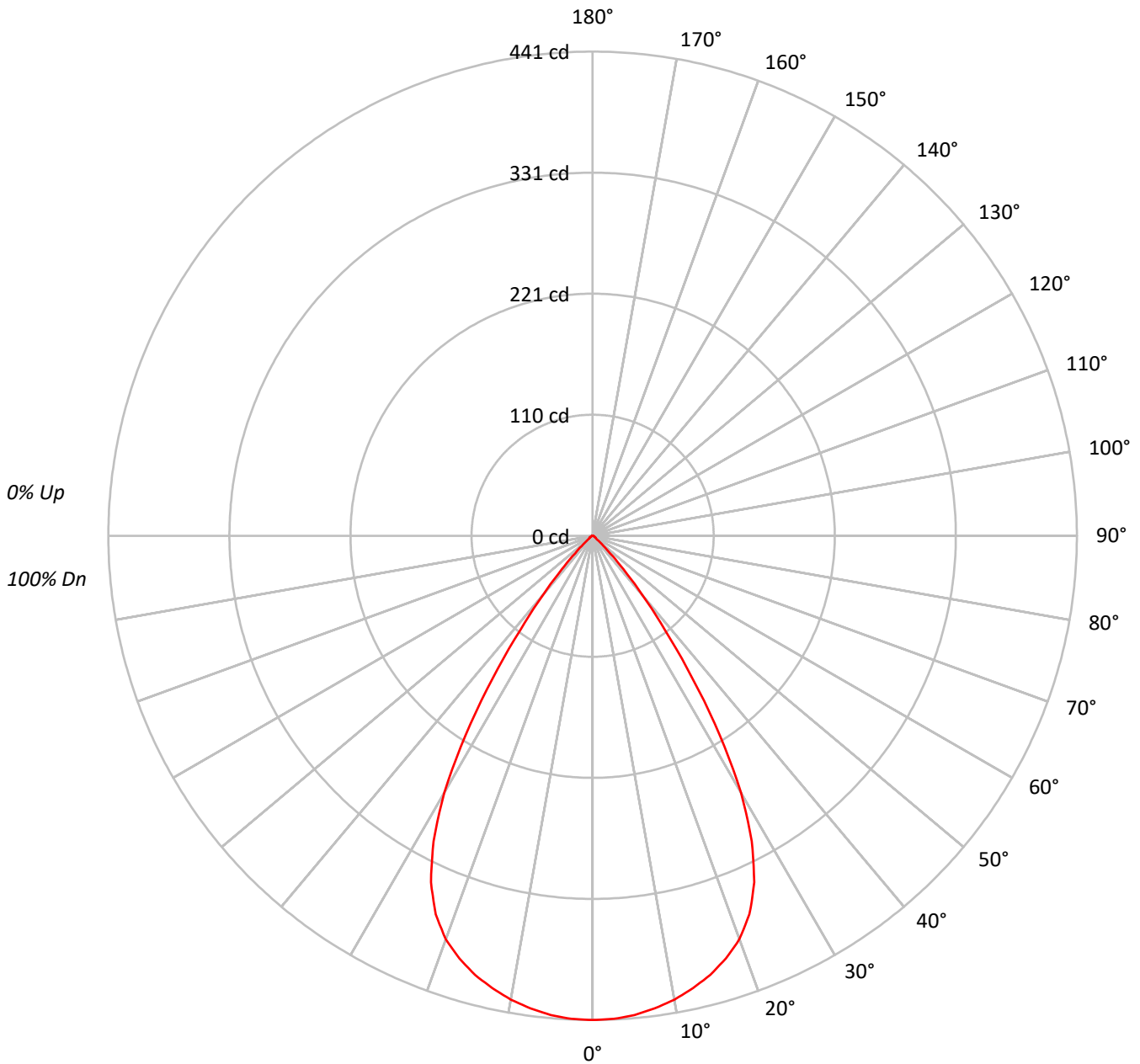
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				20				
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			
1	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93			
2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87			
3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81			
4	97	90	84	80	95	88	83	79	86	82	78	84	81	77	82	79	77	75			
5	92	84	78	74	91	83	77	73	81	76	73	79	75	72	78	74	71	70			
6	87	79	73	68	86	78	72	68	76	71	68	75	70	67	74	70	67	65			
7	83	74	68	63	82	73	67	63	72	67	63	71	66	63	69	65	62	61			
8	79	69	63	59	78	69	63	59	68	63	59	67	62	59	66	61	58	57			
9	75	65	59	55	74	65	59	55	64	59	55	63	58	55	62	58	55	53			
10	72	62	56	52	71	61	56	52	60	55	52	60	55	52	59	55	51	50			

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

	0°
0°	42979
5°	42869
10°	42454
15°	41771
20°	40552
25°	37454
30°	30384
35°	18834
40°	8867
45°	3101
50°	879
55°	595
60°	448
65°	392
70°	342
75°	226
80°	337
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.5	9.4
10°-20°	116.4	26.4
20°-30°	156.4	35.5
30°-40°	99.9	22.7
40°-50°	21.3	4.8
50°-60°	3.2	0.7
60°-70°	1.6	0.4
70°-80°	0.7	0.2
80°-90°	0.1	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°	314.3	71.3
0°-40°	414.2	93.9
0°-60°	438.7	99.5
0°-90°	441.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	441.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	441	
5°	438	42
15°	414	116
25°	348	156
35°	158	100
45°	22	21
55°	4	3
65°	2	2
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	441.0
2.5°	440.5
5°	438.2
7.5°	434.1
10°	429.0
12.5°	422.0
15°	414.0
17.5°	403.6
20°	391.0
22.5°	373.1
25°	348.3
27.5°	313.8
30°	270.0
32.5°	215.9
35°	158.3
37.5°	108.2
40°	69.7
42.5°	41.5
45°	22.5
47.5°	11.5
50°	5.8
52.5°	4.0
55°	3.5
57.5°	2.9
60°	2.3
62.5°	1.7
65°	1.7
67.5°	1.2
70°	1.2
72.5°	0.6
75°	0.6
77.5°	0.6
80°	0.6
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)