

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: P35178

Luminaire Tested: **LD4B10D010 EU4B10209027 4LBNH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P35178  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD4B10D010 EU4B10209027 4LBNH1  
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT  
NARROW DISTRIBUTION WITH SEMI-SPECULAR CLEAR TRIM  
WATTAGE D010TR-10.05W DE010-10.58W D5LT-10.2W DMX-10.6W DL2-11.8W  
DL3-11.1W DLE-11.39W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 552.0 lumens  
Efficiency: N/A  
Efficacy: 56.7 lumens/watt  
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.85  
Luminous Opening: Circular (Dia: 0.35' x H: 0')  
CIE Type: Direct

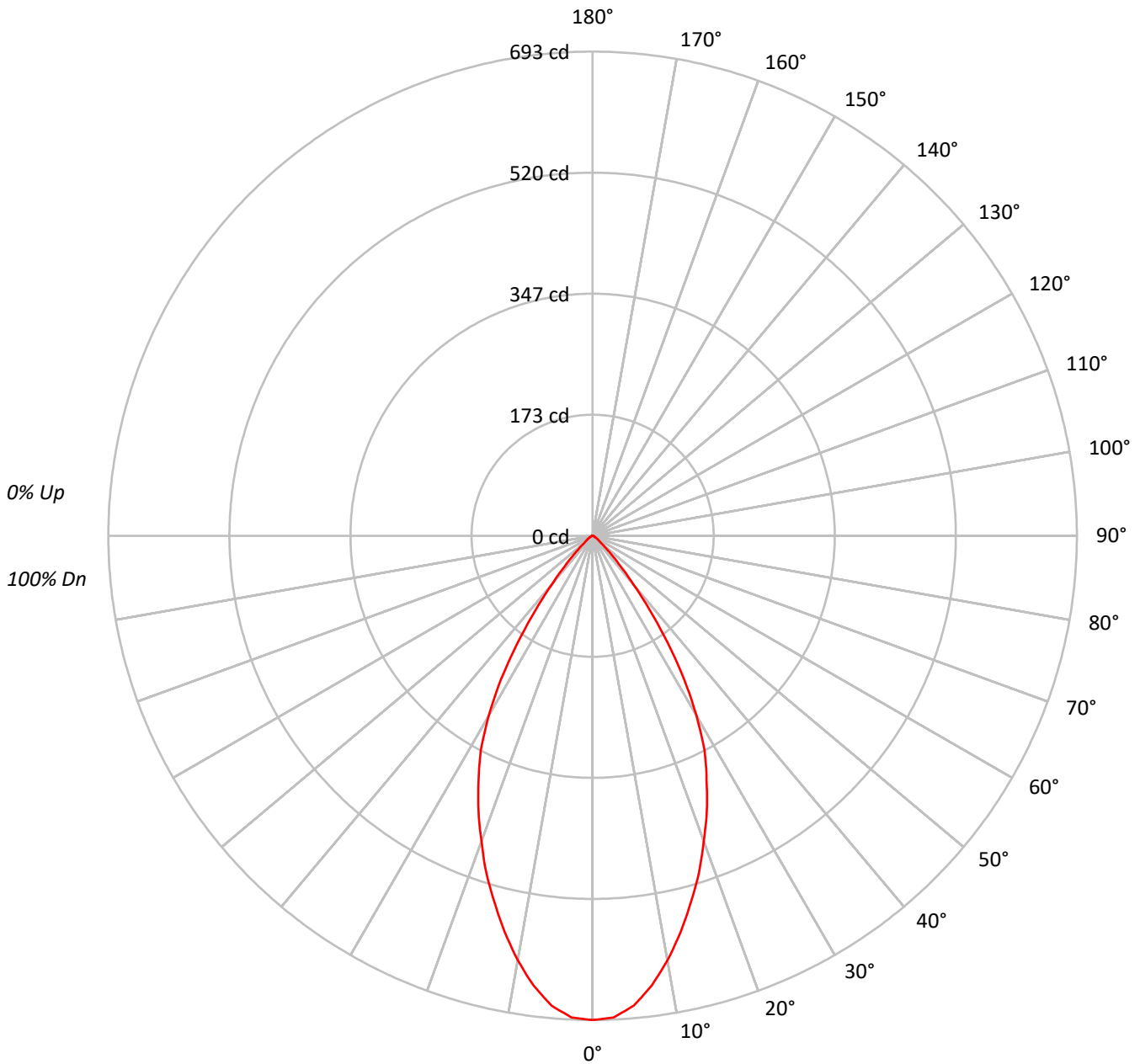
Input Watts (W): 9.73  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	89	83	79	86	82	78	84	81	78	83	79	77	75			
5	92	84	78	74	91	83	78	73	81	76	73	80	75	72	78	74	72	70			
6	88	79	73	69	86	78	72	68	77	72	68	75	71	67	74	70	67	65			
7	83	74	68	64	82	73	68	64	72	67	63	71	66	63	70	66	63	61			
8	79	70	64	60	78	69	64	60	68	63	59	67	63	59	66	62	59	58			
9	76	66	60	56	74	65	60	56	65	59	56	64	59	56	63	59	55	54			
10	72	62	57	53	71	62	56	53	61	56	53	60	56	52	60	55	52	51			

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

	0°
0°	75718
5°	74033
10°	68454
15°	61421
20°	54067
25°	46535
30°	37471
35°	24943
40°	12979
45°	5872
50°	2550
55°	1714
60°	1093
65°	776
70°	639
75°	422
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.5	11.3
10°-20°	151.7	27.5
20°-30°	176.1	31.9
30°-40°	116.6	21.1
40°-50°	32.7	5.9
50°-60°	8.2	1.5
60°-70°	3.1	0.6
70°-80°	1.1	0.2
80°-90°	0.0	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°	390.3	70.7
0°-40°	506.9	91.8
0°-60°	547.8	99.3
0°-90°	552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	552.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	693	
5°	675	63
15°	543	152
25°	386	176
35°	187	117
45°	38	33
55°	9	8
65°	3	3
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	693
2.5°	690
5°	675
7.5°	649
10°	617
12.5°	581
15°	543
17.5°	506
20°	465
22.5°	427
25°	386
27.5°	347
30°	297
32.5°	244
35°	187
37.5°	134
40°	91
42.5°	59
45°	38
47.5°	23
50°	15
52.5°	11
55°	9
57.5°	7
60°	5
62.5°	4
65°	3
67.5°	2
70°	2
72.5°	1
75°	1
77.5°	1
80°	0
82.5°	0
85°	0
87.5°	0
90°	0



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— 0°-180°







(END OF REPORT)