

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: P35174

Luminaire Tested: **LD4B10D010 EU4B10209027 4LBMWH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P35174  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD4B10D010 EU4B10209027 4LBMWH1  
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT  
MEDIUM DISTRIBUTION WITH WHEAT 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: 677.0 lumens  
Efficiency: N/A  
Efficacy: 69.5 lumens/watt  
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.87  
Luminous Opening: Circular (Dia: 0.35' x H: 0')  
CIE Type: Direct

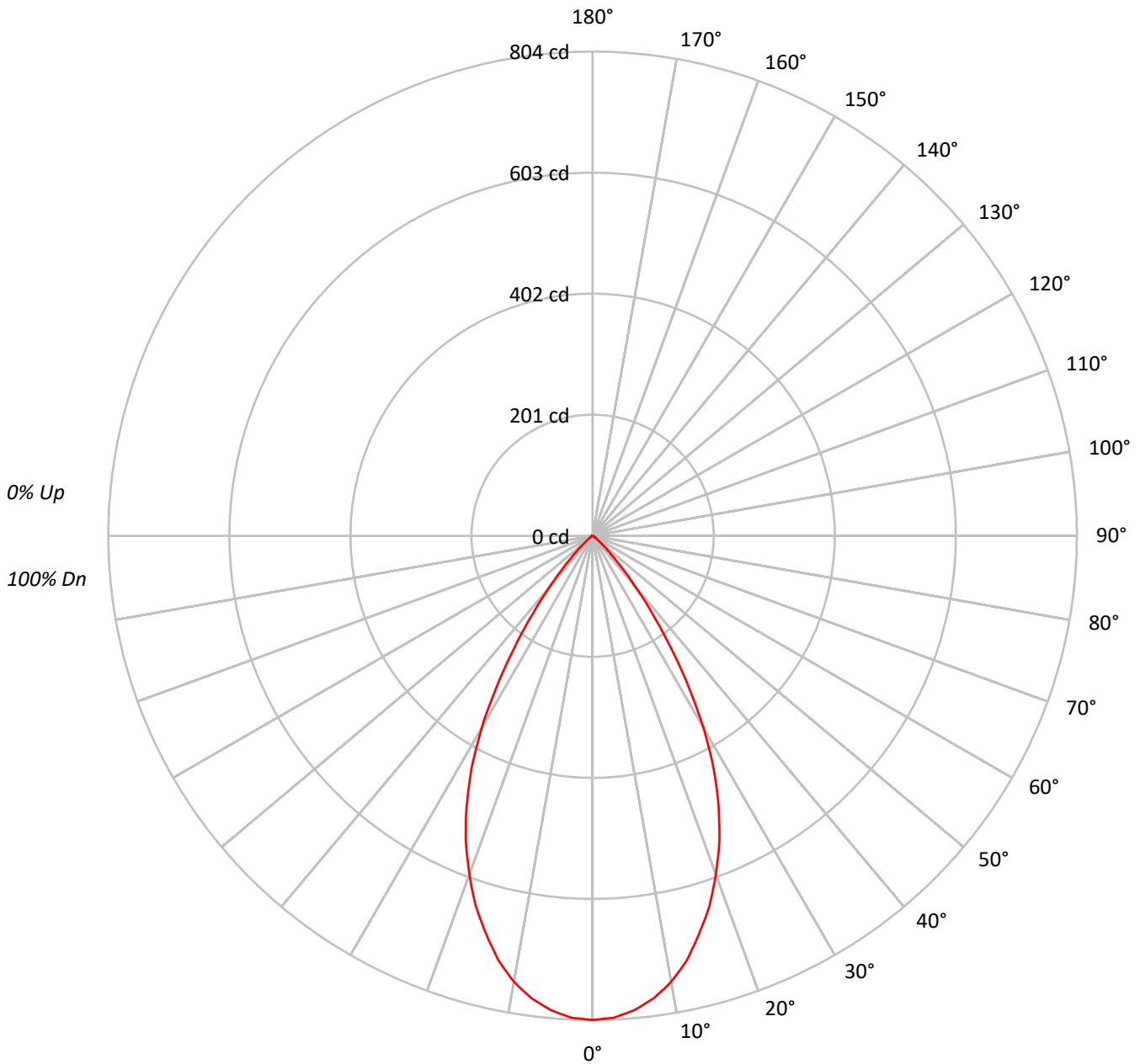
Input Watts (W): 9.74  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P35174

CATALOG NUMBER: LD4B10D010 EU4B10209027 4LBMWH1

### Luminous Intensity Polar Plot





TEST NUMBER: P35174

CATALOG NUMBER: LD4B10D010 EU4B10209027 4LBMWH1

**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	114	111	108	106	111	109	106	105	105	103	101	101	100	98	98	96	95	94			
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87			
3	103	96	91	88	101	95	90	87	92	89	85	90	87	84	88	85	83	81			
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76			
5	93	84	79	74	91	84	78	74	82	77	73	80	76	73	79	75	72	71			
6	88	79	73	69	87	79	73	69	77	72	68	76	71	68	74	71	68	66			
7	84	75	69	65	82	74	68	64	73	68	64	72	67	64	70	66	63	62			
8	80	70	64	60	79	70	64	60	69	64	60	68	63	60	67	63	59	58			
9	76	66	61	57	75	66	60	57	65	60	56	64	60	56	63	59	56	55			
10	73	63	57	53	72	62	57	53	62	57	53	61	56	53	60	56	53	52			

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

	0°
0°	87846
5°	86755
10°	83432
15°	77371
20°	69531
25°	59675
30°	46428
35°	30011
40°	15975
45°	6644
50°	2210
55°	952
60°	656
65°	517
70°	319
75°	422
80°	0
85°	0



TEST NUMBER: P35174

CATALOG NUMBER: LD4B10D010 EU4B10209027 4LBMWH1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.3	11.0
10°-20°	191.0	28.2
20°-30°	224.0	33.1
30°-40°	141.8	20.9
40°-50°	38.0	5.6
50°-60°	5.3	0.8
60°-70°	2.0	0.3
70°-80°	0.7	0.1
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°	489.3	72.3
0°-40°	631.1	93.2
0°-60°	674.3	99.6
0°-90°	677.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	677.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	804	
5°	791	74
15°	684	191
25°	495	224
35°	225	142
45°	43	38
55°	5	5
65°	2	2
75°	1	1
85°	0	0
90°	0	



TEST NUMBER: P35174

CATALOG NUMBER: LD4B10D010 EU4B10209027 4LBMWH1

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	804
2.5°	801
5°	791
7.5°	775
10°	752
12.5°	722
15°	684
17.5°	645
20°	598
22.5°	550
25°	495
27.5°	435
30°	368
32.5°	295
35°	225
37.5°	163
40°	112
42.5°	72
45°	43
47.5°	24
50°	13
52.5°	7
55°	5
57.5°	4
60°	3
62.5°	3
65°	2
67.5°	1
70°	1
72.5°	1
75°	1
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







(END OF REPORT)