

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: P208516

Luminaire Tested: **LD4B40D010 EU4B30509027 4LBNWH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P208516  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD4B40D010 EU4B30509027 4LBNWH1  
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT  
NARROW DISTRIBUTION WITH WHEAT TRIM  
WATTAGE D010TR-43.02W DE010-42.54W D5LT-42.539W DMX-41.87W DL2-41.57W  
DL3-44.71W DLE-39.33W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2204.9 lumens  
Efficiency: N/A  
Efficacy: 52.7 lumens/watt  
Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.62  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

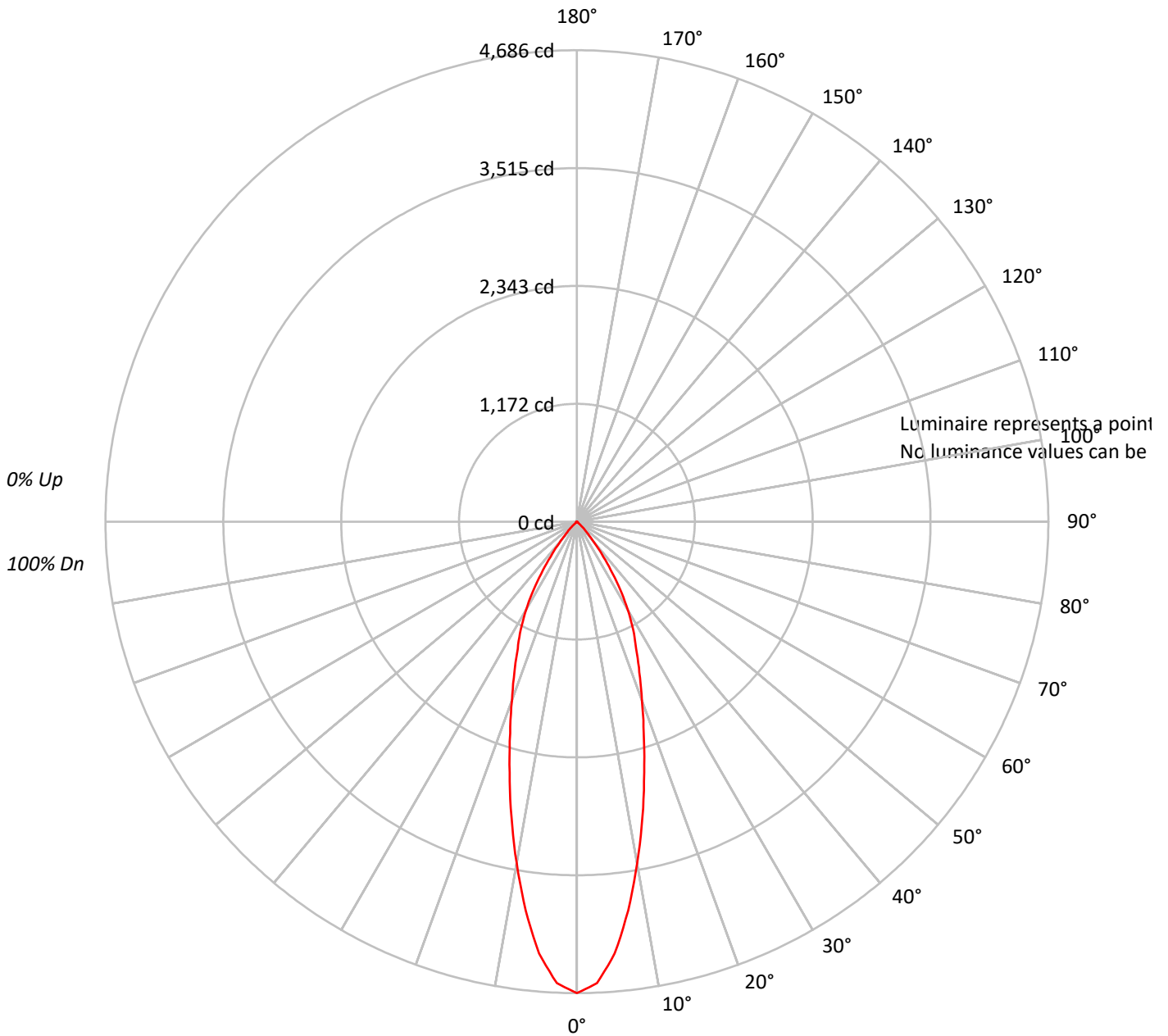
Input Watts (W): 41.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P208516

CATALOG NUMBER: LD4B40D010 EU4B30509027 4LBNWH1

### Luminous Intensity Polar Plot





TEST NUMBER: P208516

CATALOG NUMBER: LD4B40D010 EU4B30509027 4LBNWH1

**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	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95			
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89			
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	85	84			
4	100	93	88	84	98	92	87	83	90	86	82	88	84	82	86	83	81	79			
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75			
6	91	83	78	74	90	82	77	74	81	76	73	79	76	73	78	75	72	71			
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67			
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64			
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	65	62	61			
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58			

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





TEST NUMBER: P208516

CATALOG NUMBER: LD4B40D010 EU4B30509027 4LBNWH1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	383.2	17.4
10°-20°	718.8	32.6
20°-30°	644.9	29.3
30°-40°	370.1	16.8
40°-50°	73.8	3.3
50°-60°	9.3	0.4
60°-70°	4.2	0.2
70°-80°	0.5	0.0
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°	1746.9	79.2
0°-40°	2117.0	96.0
0°-60°	2200.1	99.8
0°-90°	2204.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2204.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4686	
5°	4309	383
15°	2581	719
25°	1393	645
35°	586	370
45°	80	74
55°	11	9
65°	4	4
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P208516

CATALOG NUMBER: LD4B40D010 EU4B30509027 4LBNWH1

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	4685.9
2.5°	4590.7
5°	4309.0
7.5°	3897.9
10°	3448.8
12.5°	3007.2
15°	2580.9
17.5°	2207.8
20°	1888.1
22.5°	1621.6
25°	1393.2
27.5°	1210.5
30°	1008.7
32.5°	803.2
35°	586.2
37.5°	399.7
40°	247.4
42.5°	148.5
45°	79.9
47.5°	34.3
50°	15.2
52.5°	11.4
55°	11.4
57.5°	7.6
60°	7.6
62.5°	3.8
65°	3.8
67.5°	3.8
70°	3.8
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







(END OF REPORT)