

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: P208488

Luminaire Tested: **LD4B20D010 EU4B10208050 4LBNWH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P208488  
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: LD4B20D010 EU4B10208050 4LBNWH1  
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT  
NARROW DISTRIBUTION WITH WHEAT TRIM  
WATTAGE D010TR-21.86W DE010-20.46W D5LT-21.24W DMX-20.89W DL2-22.5W  
DL3-21.8 6W DLE-22.46W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1377.0 lumens  
Efficiency: N/A  
Efficacy: 66.2 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

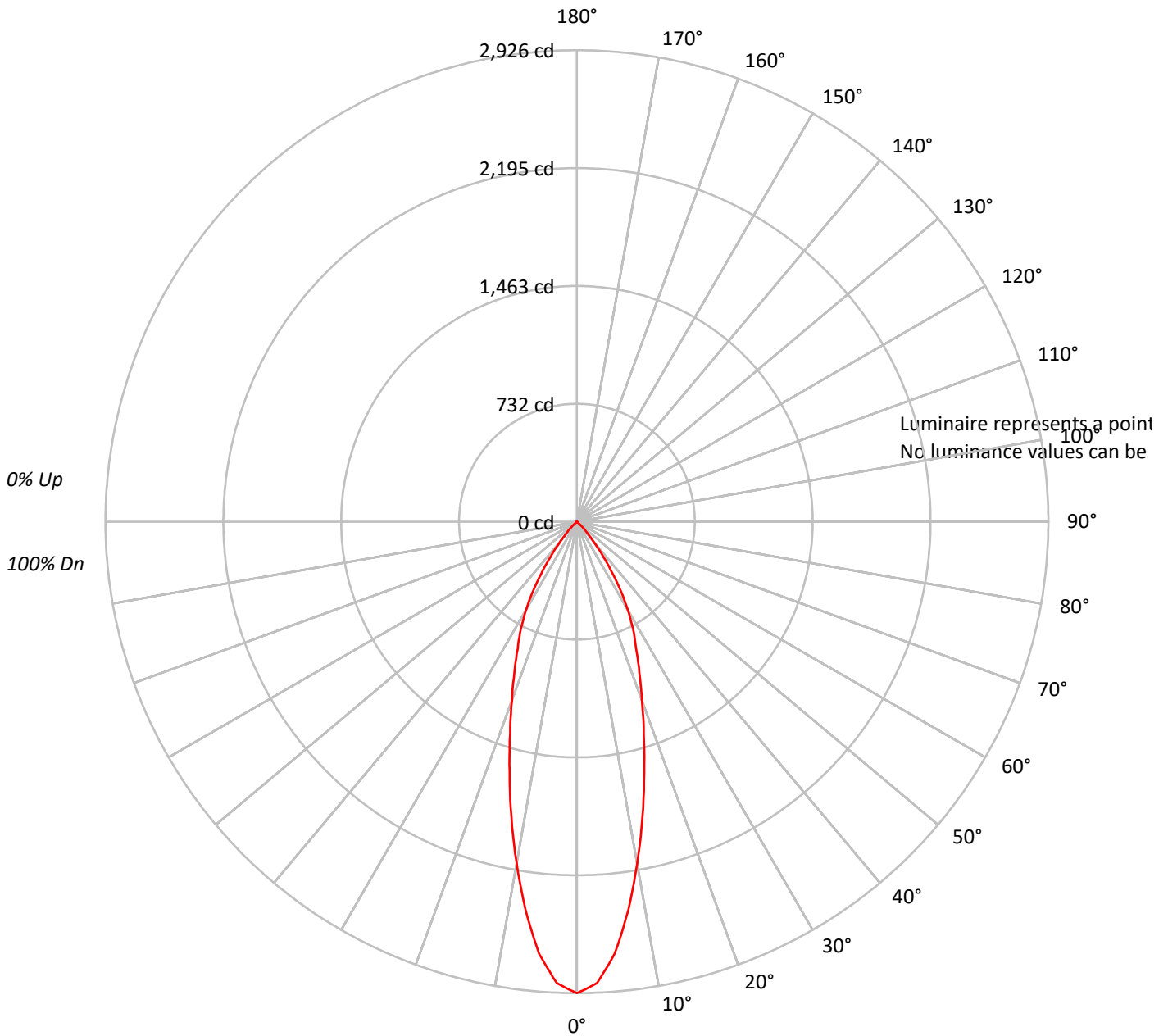
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100
1	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95	95	95	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89	89	89	89
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	85	84	84	84	84
4	100	93	88	84	98	92	87	83	90	86	82	88	84	82	86	83	81	79	79	79	79
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75	75	75	75
6	91	83	78	74	90	82	77	74	81	76	73	79	76	73	78	75	72	71	71	71	71
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67	67	67	67
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65	64	64	64	64
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	65	62	61	61	61	61
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58	58	58	58

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.3	17.4
10°-20°	448.9	32.6
20°-30°	402.8	29.3
30°-40°	231.1	16.8
40°-50°	46.1	3.3
50°-60°	5.8	0.4
60°-70°	2.7	0.2
70°-80°	0.3	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°	1091.0	79.2
0°-40°	1322.1	96.0
0°-60°	1374.0	99.8
0°-90°	1377.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1377.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2926	
5°	2691	239
15°	1612	449
25°	870	403
35°	366	231
45°	50	46
55°	7	6
65°	2	3
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2926.5
2.5°	2867.0
5°	2691.1
7.5°	2434.4
10°	2153.8
12.5°	1878.1
15°	1611.8
17.5°	1378.8
20°	1179.1
22.5°	1012.7
25°	870.1
27.5°	756.0
30°	630.0
32.5°	501.6
35°	366.1
37.5°	249.6
40°	154.5
42.5°	92.7
45°	49.9
47.5°	21.4
50°	9.5
52.5°	7.1
55°	7.1
57.5°	4.8
60°	4.8
62.5°	2.4
65°	2.4
67.5°	2.4
70°	2.4
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



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— 0°-180°







(END OF REPORT)