

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: P208179

Luminaire Tested: **LD4B20D010 EU4B10208030 4LBMLI1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P208179  
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 EU4B10208030 4LBMLI1  
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT  
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR 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: 1899.6 lumens  
Efficiency: N/A  
Efficacy: 91.3 lumens/watt  
Spacing Criteria (0/90/45): 0.7 / 0.7 / 0.76  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

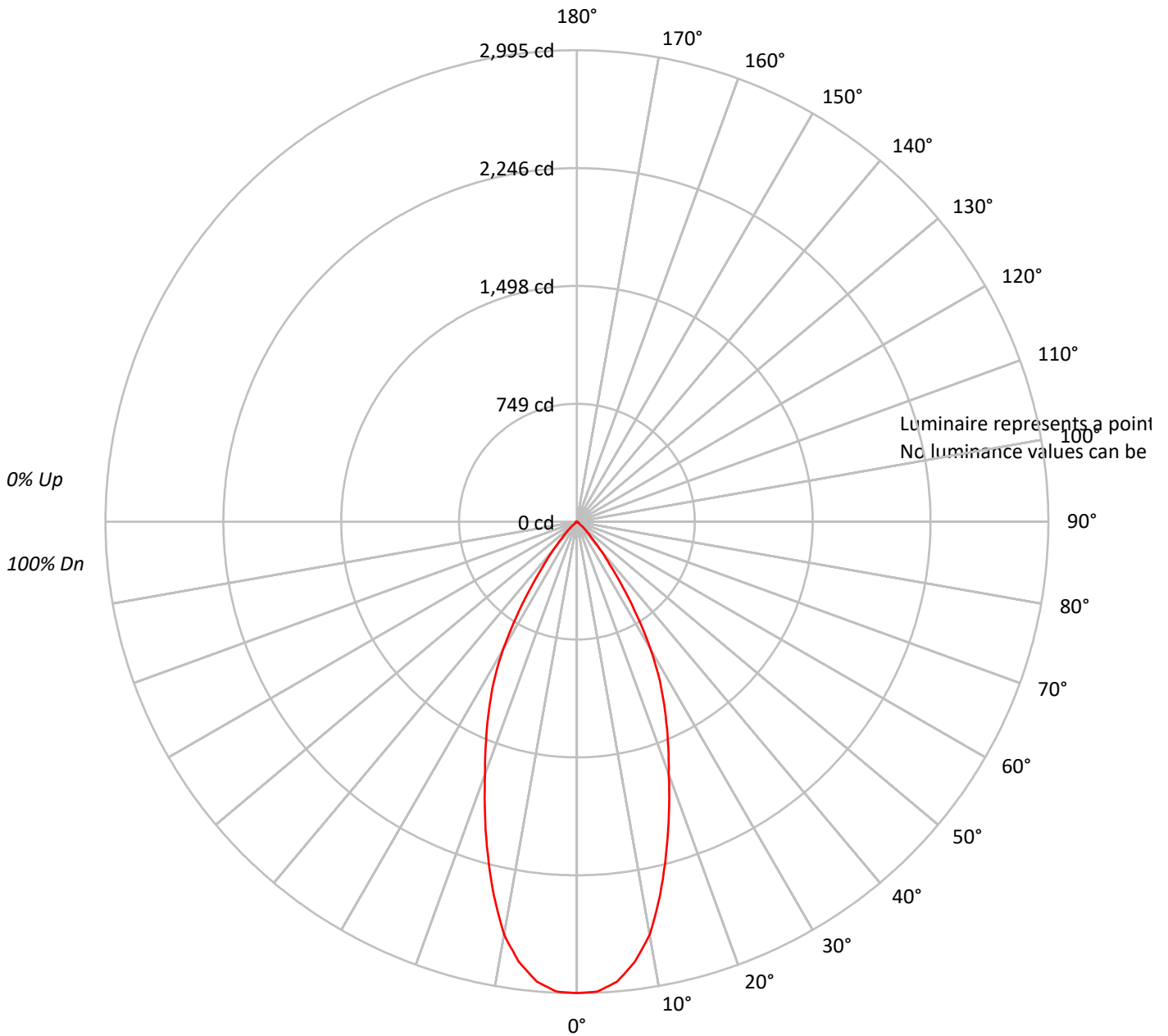
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94			
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	88			
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83			
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	79	78			
5	94	87	81	77	93	86	81	77	84	79	76	82	78	75	81	77	75	73			
6	90	82	76	72	89	81	76	72	80	75	71	78	74	71	77	73	71	69			
7	86	77	72	68	85	77	71	68	75	71	67	74	70	67	73	69	67	65			
8	82	73	68	64	81	73	67	64	72	67	64	71	66	63	70	66	63	62			
9	79	70	64	60	78	69	64	60	68	63	60	67	63	60	67	63	60	58			
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	64	60	57	56			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	271.1	14.3
10°-20°	606.2	31.9
20°-30°	602.7	31.7
30°-40°	328.2	17.3
40°-50°	75.9	4.0
50°-60°	10.7	0.6
60°-70°	4.0	0.2
70°-80°	0.9	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°	1480.0	77.9
0°-40°	1808.2	95.2
0°-60°	1894.8	99.7
0°-90°	1899.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1899.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2995	
5°	2933	271
15°	2188	606
25°	1322	603
35°	508	328
45°	87	76
55°	12	11
65°	5	4
75°	0	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2994.7
2.5°	2987.8
5°	2932.6
7.5°	2820.0
10°	2663.7
12.5°	2433.9
15°	2188.0
17.5°	1944.4
20°	1705.3
22.5°	1510.0
25°	1321.5
27.5°	1142.3
30°	940.0
32.5°	714.8
35°	507.9
37.5°	342.4
40°	222.9
42.5°	140.2
45°	87.3
47.5°	50.6
50°	25.3
52.5°	13.8
55°	11.5
57.5°	6.9
60°	6.9
62.5°	4.6
65°	4.6
67.5°	2.3
70°	2.3
72.5°	2.3
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)