

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: P207987

Luminaire Tested: **LD4B20D010 EU4B10209730 4LBNMW1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P207987  
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 EU4B10209730 4LBNMW1  
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT  
NARROW DISTRIBUTION WITH MATTE WHITE 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: 1078.5 lumens  
Efficiency: N/A  
Efficacy: 51.9 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.95  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

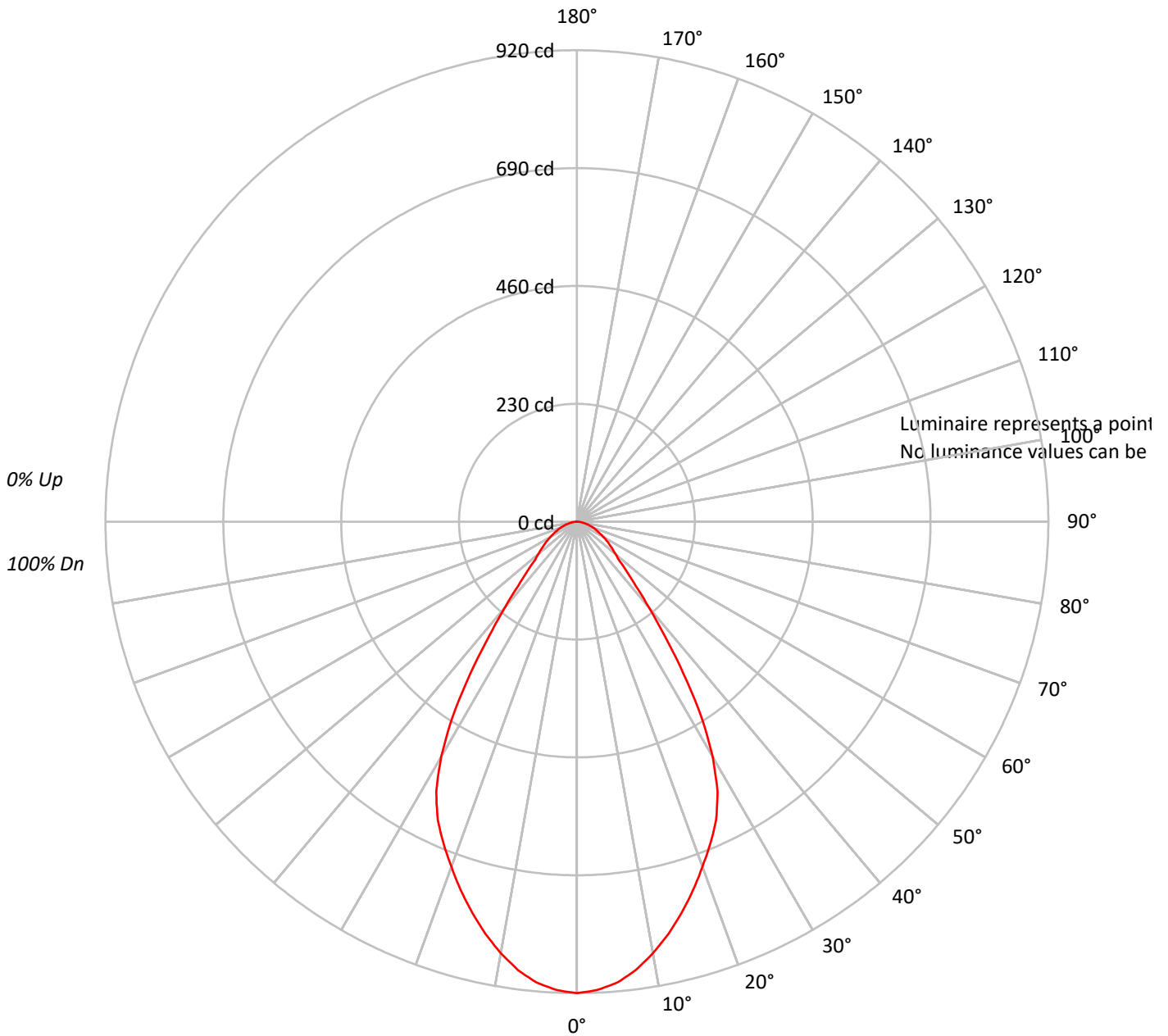
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90																												
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81																												
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73																												
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67																												
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61																												
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56																												
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	62	57	53	52																												
8	73	62	55	50	71	61	55	50	60	54	50	59	53	49	58	53	49	48																												
9	69	58	51	46	68	57	51	46	56	50	46	55	50	46	54	49	46	44																												
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41																												

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.6	7.8
10°-20°	221.5	20.5
20°-30°	291.5	27.0
30°-40°	226.9	21.0
40°-50°	110.2	10.2
50°-60°	69.6	6.5
60°-70°	44.9	4.2
70°-80°	23.5	2.2
80°-90°	5.8	0.5
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°	597.6	55.4
0°-40°	824.5	76.4
0°-60°	1004.3	93.1
0°-90°	1078.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1078.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	920	
5°	903	85
15°	790	221
25°	642	291
35°	363	227
45°	137	110
55°	77	70
65°	44	45
75°	22	23
85°	5	6
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	920.0
2.5°	914.9
5°	902.9
7.5°	882.4
10°	854.9
12.5°	824.1
15°	789.8
17.5°	753.9
20°	716.2
22.5°	680.2
25°	642.5
27.5°	594.5
30°	529.4
32.5°	452.3
35°	363.2
37.5°	281.0
40°	217.6
42.5°	169.6
45°	137.1
47.5°	111.4
50°	97.7
52.5°	87.4
55°	77.1
57.5°	68.5
60°	60.0
62.5°	51.4
65°	44.5
67.5°	39.4
70°	32.6
72.5°	27.4
75°	22.3
77.5°	17.1
80°	12.0
82.5°	8.6
85°	5.1
87.5°	1.7
90°	0.0



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— 0°-180°







(END OF REPORT)