

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: P211550

Luminaire Tested: **LE\_4B20D010 EC4B10209727 4LBW1B**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211550  
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: LE\_4B20D010 EC4B10209727 4LBW1B  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE DISTRIBUTION WITH SPECULAR BLACK 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: 820.2 lumens  
Efficiency: N/A  
Efficacy: 39.4 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.03  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

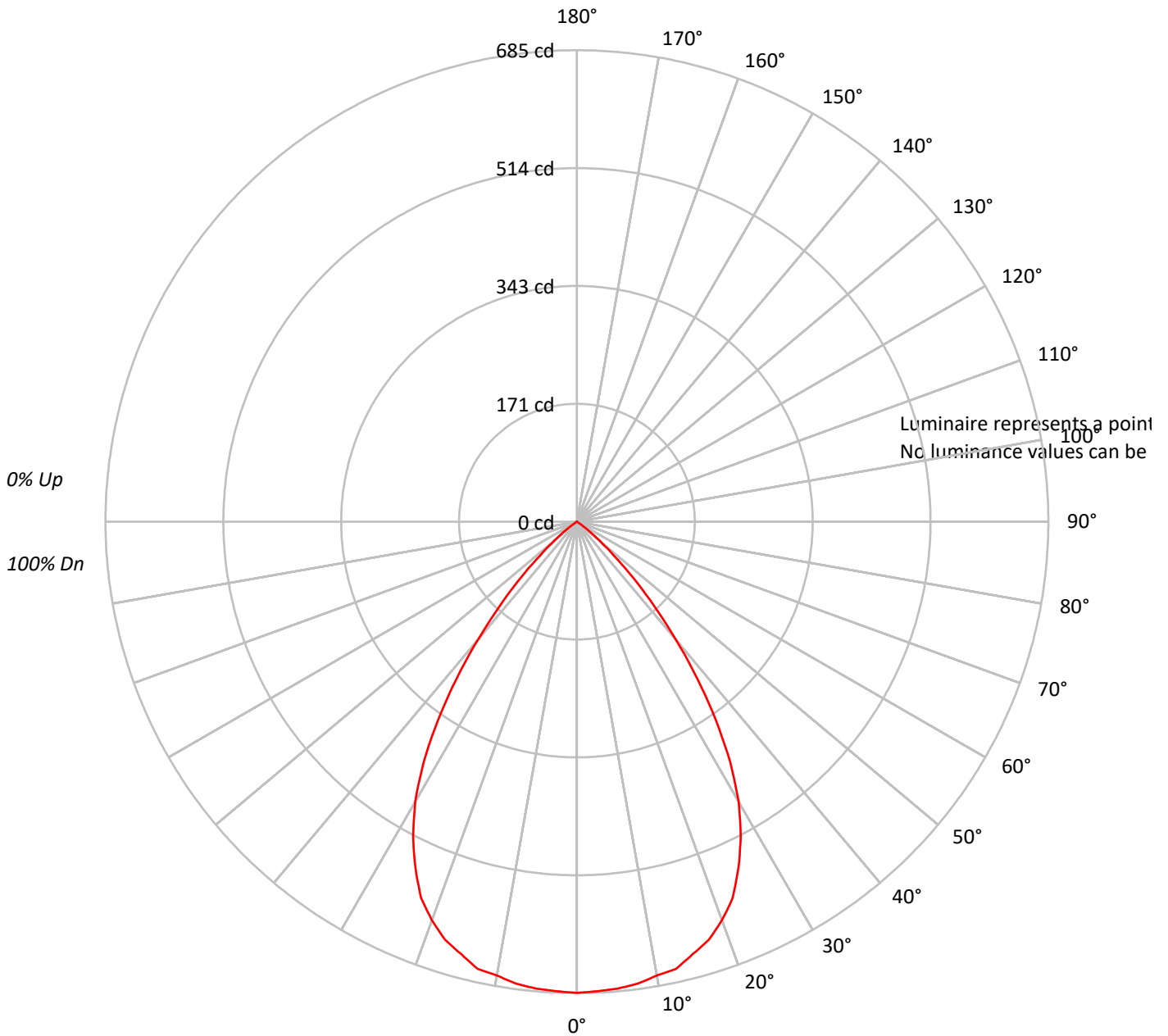
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86	86	86	86
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79	79	79	79
4	96	88	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72	72	72	72
5	90	81	75	70	89	80	74	70	79	73	69	77	72	69	75	71	68	67	67	67	67
6	85	76	69	65	84	75	69	64	73	68	64	72	67	64	70	66	63	62	62	62	62
7	80	71	64	60	79	70	64	59	69	63	59	67	62	59	66	62	58	57	57	57	57
8	76	66	60	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53	53	53	53
9	72	62	55	51	71	61	55	51	60	55	51	59	54	51	58	54	50	49	49	49	49
10	68	58	52	48	67	58	52	48	57	51	47	56	51	47	55	50	47	46	46	46	46

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.7	7.9
10°-20°	183.2	22.3
20°-30°	253.2	30.9
30°-40°	216.8	26.4
40°-50°	92.1	11.2
50°-60°	10.3	1.3
60°-70°	0.0	0.0
70°-80°	0.0	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°	501.0	61.1
0°-40°	717.8	87.5
0°-60°	820.2	100.0
0°-90°	820.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	820.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	685	
5°	681	65
15°	650	183
25°	555	253
35°	352	217
45°	116	92
55°	6	10
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	684.6
2.5°	682.8
5°	680.9
7.5°	677.1
10°	669.4
12.5°	665.6
15°	650.4
17.5°	637.1
20°	616.2
22.5°	591.5
25°	555.3
27.5°	515.4
30°	469.8
32.5°	414.6
35°	351.8
37.5°	287.2
40°	222.5
42.5°	165.4
45°	116.0
47.5°	72.3
50°	41.9
52.5°	20.9
55°	5.7
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
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)