

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: P211539

Luminaire Tested: **LE\_4B20D010 EC4B10209727 4LBN1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211539  
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 4LBN1LI  
Description: PORTFOLIO 4 INCH CYLINDER  
NARROW 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: 1235.1 lumens  
Efficiency: N/A  
Efficacy: 59.4 lumens/watt  
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.54  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

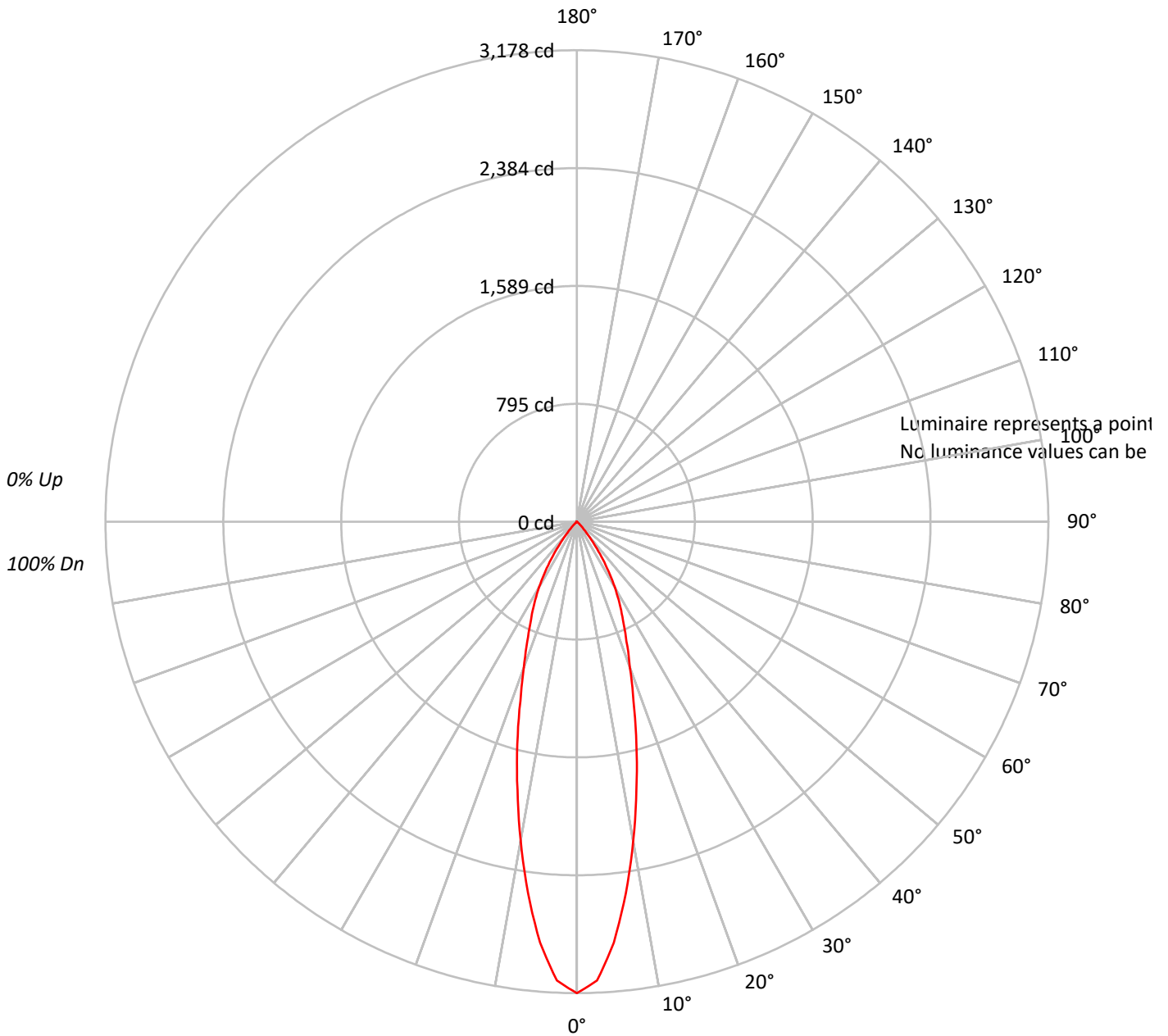
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	95
2	109	105	102	99	107	103	100	98	100	98	95	97	95	93	95	93	92	90	90	90	90
3	105	99	95	92	103	98	94	91	95	92	89	93	90	88	91	89	87	85	85	85	85
4	101	94	89	86	99	93	88	85	91	87	84	89	86	83	87	84	82	81	81	81	81
5	96	89	84	80	95	88	84	80	87	82	79	85	81	79	83	80	78	77	77	77	77
6	92	85	80	76	91	84	79	76	83	78	75	81	78	75	80	77	74	73	73	73	73
7	89	81	76	72	88	80	75	72	79	75	71	78	74	71	77	73	71	69	69	69	69
8	85	77	72	68	84	77	72	68	76	71	68	75	71	68	74	70	67	66	66	66	66
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	64	63	63	63	63
10	79	71	66	62	78	70	65	62	69	65	62	69	65	62	68	64	62	61	61	61	61

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	250.5	20.3
10°-20°	428.8	34.7
20°-30°	340.8	27.6
30°-40°	180.4	14.6
40°-50°	31.1	2.5
50°-60°	2.3	0.2
60°-70°	1.2	0.1
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°	1020.1	82.6
0°-40°	1200.5	97.2
0°-60°	1234.0	99.9
0°-90°	1235.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1235.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3178	
5°	2849	250
15°	1550	429
25°	734	341
35°	285	180
45°	32	31
55°	2	2
65°	2	1
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3178.5
2.5°	3096.6
5°	2849.4
7.5°	2526.0
10°	2183.7
12.5°	1852.6
15°	1550.2
17.5°	1268.7
20°	1044.2
22.5°	873.1
25°	734.3
27.5°	622.0
30°	509.8
32.5°	395.7
35°	285.4
37.5°	188.3
40°	112.2
42.5°	64.7
45°	32.4
47.5°	11.4
50°	3.8
52.5°	3.8
55°	1.9
57.5°	1.9
60°	1.9
62.5°	1.9
65°	1.9
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)