

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: P211616

Luminaire Tested: **LE\_4B20D010 EC4B10209730 4LBCS1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211616  
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 EC4B10209730 4LBCS1MW  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH CAST 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: 1829.9 lumens  
Efficiency: N/A  
Efficacy: 88.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.23 / 1.33  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

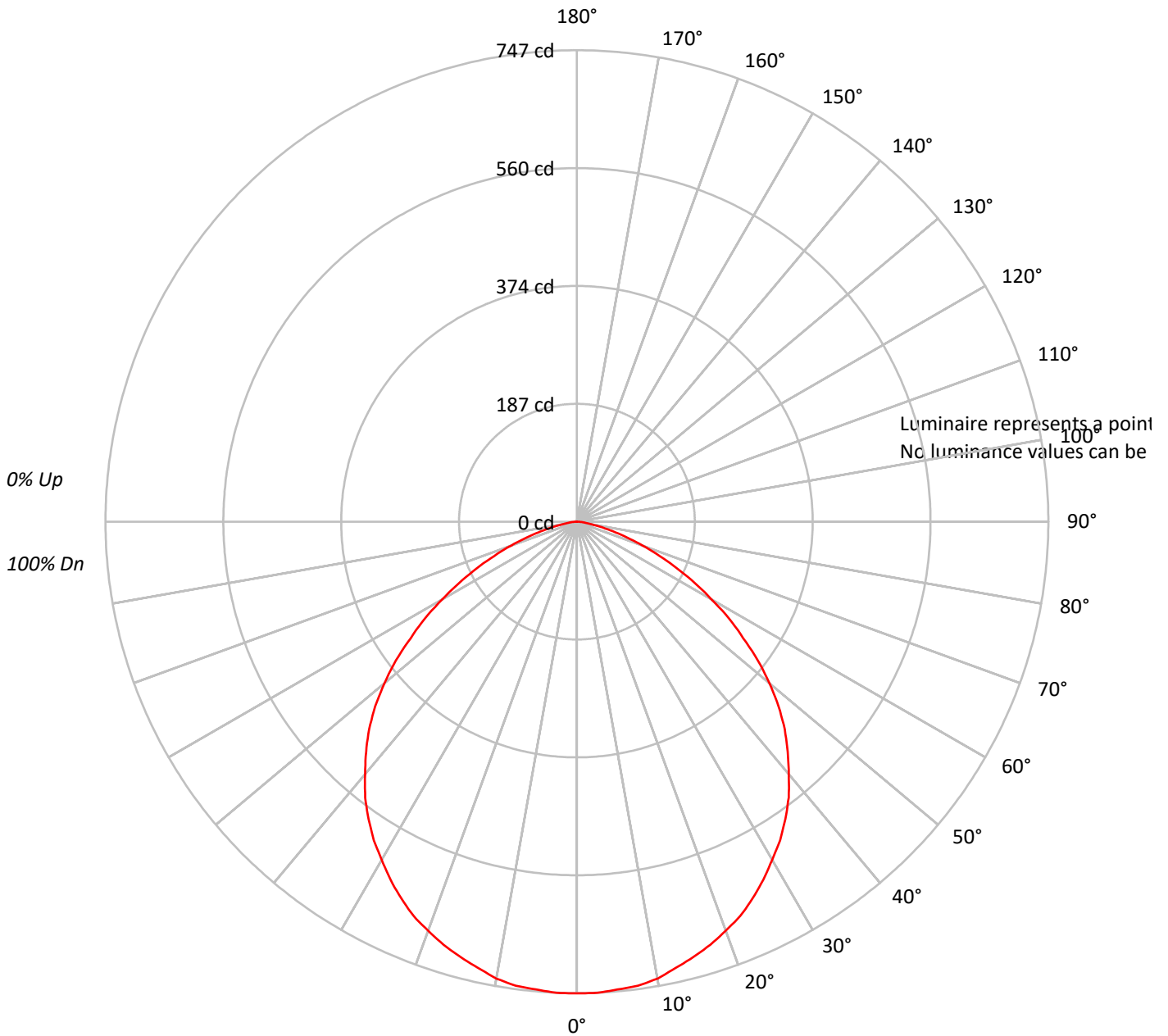
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				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
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74				74
3	93	83	75	70	90	81	74	69	79	73	68	76	71	67	73	69	65	63				63
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	66	61	57	55				55
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48				48
6	73	60	52	45	71	59	51	45	57	50	45	56	49	44	54	49	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33				33
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30				30
10	55	42	35	30	54	42	34	30	41	34	29	40	34	29	39	33	29	27				27

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.8	3.9
10°-20°	201.6	11.0
20°-30°	303.2	16.6
30°-40°	359.4	19.6
40°-50°	357.6	19.5
50°-60°	288.3	15.8
60°-70°	174.4	9.5
70°-80°	64.8	3.5
80°-90°	9.7	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°	575.6	31.5
0°-40°	935.0	51.1
0°-60°	1581.0	86.4
0°-90°	1829.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1829.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	747	
5°	744	71
15°	714	202
25°	659	303
35°	576	359
45°	466	358
55°	322	288
65°	175	174
75°	59	65
85°	8	10
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	747.4
2.5°	747.4
5°	744.0
7.5°	741.8
10°	735.1
12.5°	724.1
15°	714.1
17.5°	703.0
20°	689.6
22.5°	676.4
25°	658.6
27.5°	639.7
30°	618.7
32.5°	598.8
35°	575.5
37.5°	551.1
40°	522.2
42.5°	494.5
45°	465.7
47.5°	433.5
50°	398.1
52.5°	361.5
55°	321.6
57.5°	286.1
60°	246.2
62.5°	210.7
65°	175.2
67.5°	142.0
70°	110.9
72.5°	83.2
75°	58.8
77.5°	37.7
80°	22.2
82.5°	13.3
85°	7.8
87.5°	3.4
90°	0.0



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— 0°-180°







(END OF REPORT)