

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: P211558

Luminaire Tested: **LE\_4B20D010 EC4B10208030 4LBCS1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211558  
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 EC4B10208030 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: 2451.3 lumens  
Efficiency: N/A  
Efficacy: 117.9 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

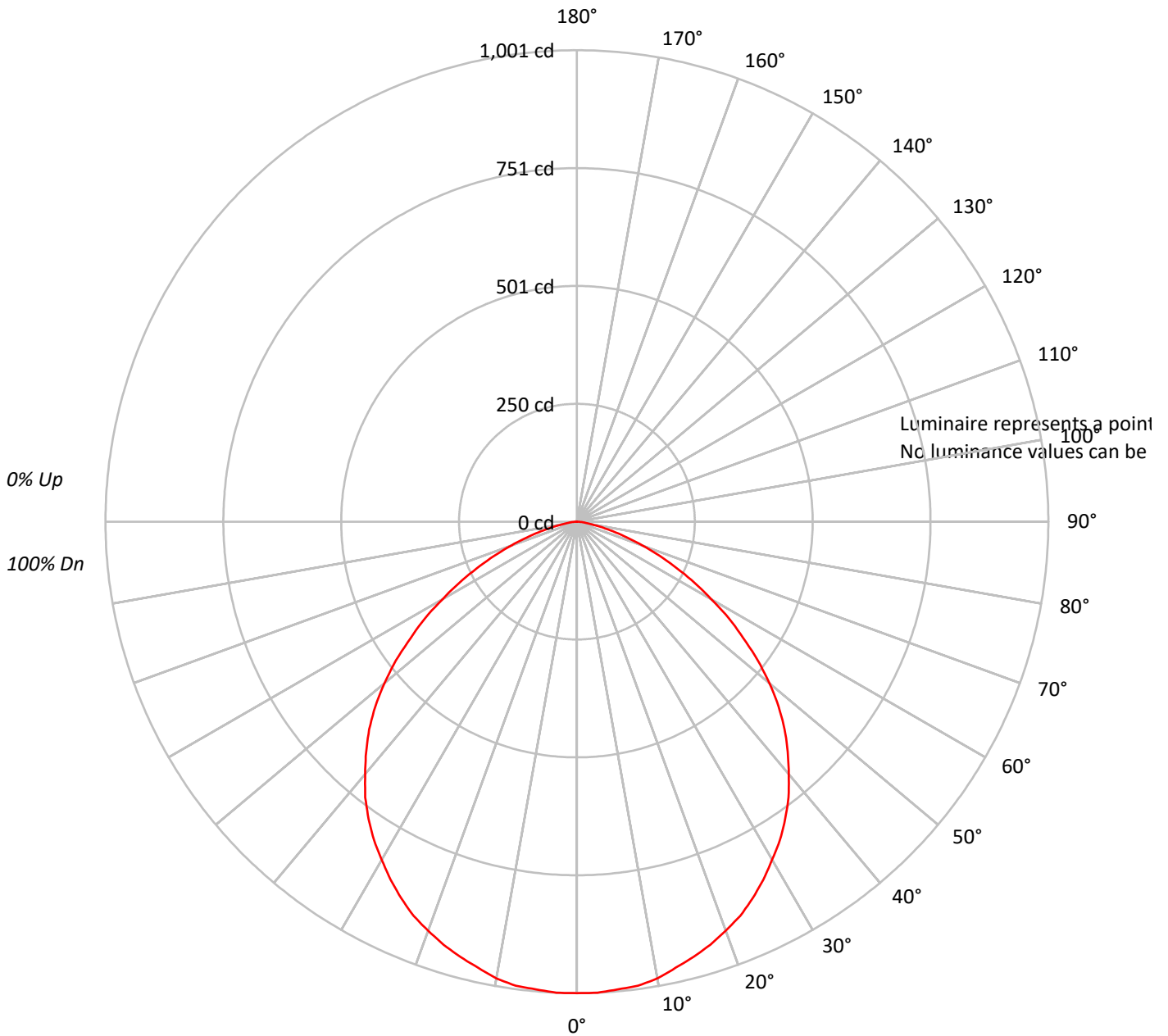
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																			
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74																			
3	93	83	75	70	90	81	74	69	79	73	68	76	71	67	73	69	65	63																			
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	66	61	57	55																			
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48																			
6	73	60	52	45	71	59	51	45	57	50	45	56	49	44	54	49	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33																			
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30																			
10	55	42	35	30	54	42	34	30	41	34	29	40	34	29	39	33	29	27																			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.9	3.9
10°-20°	270.1	11.0
20°-30°	406.2	16.6
30°-40°	481.4	19.6
40°-50°	479.1	19.5
50°-60°	386.3	15.8
60°-70°	233.7	9.5
70°-80°	86.8	3.5
80°-90°	12.9	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°	771.1	31.5
0°-40°	1252.6	51.1
0°-60°	2117.9	86.4
0°-90°	2451.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2451.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1001	
5°	997	95
15°	957	270
25°	882	406
35°	771	481
45°	624	479
55°	431	386
65°	235	234
75°	79	87
85°	10	13
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1001.2
2.5°	1001.2
5°	996.7
7.5°	993.8
10°	984.8
12.5°	970.0
15°	956.7
17.5°	941.8
20°	923.9
22.5°	906.1
25°	882.3
27.5°	857.1
30°	828.8
32.5°	802.1
35°	770.9
37.5°	738.2
40°	699.6
42.5°	662.5
45°	623.8
47.5°	580.8
50°	533.3
52.5°	484.3
55°	430.8
57.5°	383.3
60°	329.8
62.5°	282.2
65°	234.7
67.5°	190.1
70°	148.6
72.5°	111.4
75°	78.8
77.5°	50.5
80°	29.7
82.5°	17.9
85°	10.4
87.5°	4.4
90°	0.0



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— 0°-180°







(END OF REPORT)