

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: P211613

Luminaire Tested: **LE\_4B20D010 EC4B10209030 4LBW1WH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211613  
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 EC4B10209030 4LBW1WH  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE DISTRIBUTION WITH WHEAT 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: 1741.1 lumens  
Efficiency: N/A  
Efficacy: 83.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.16  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

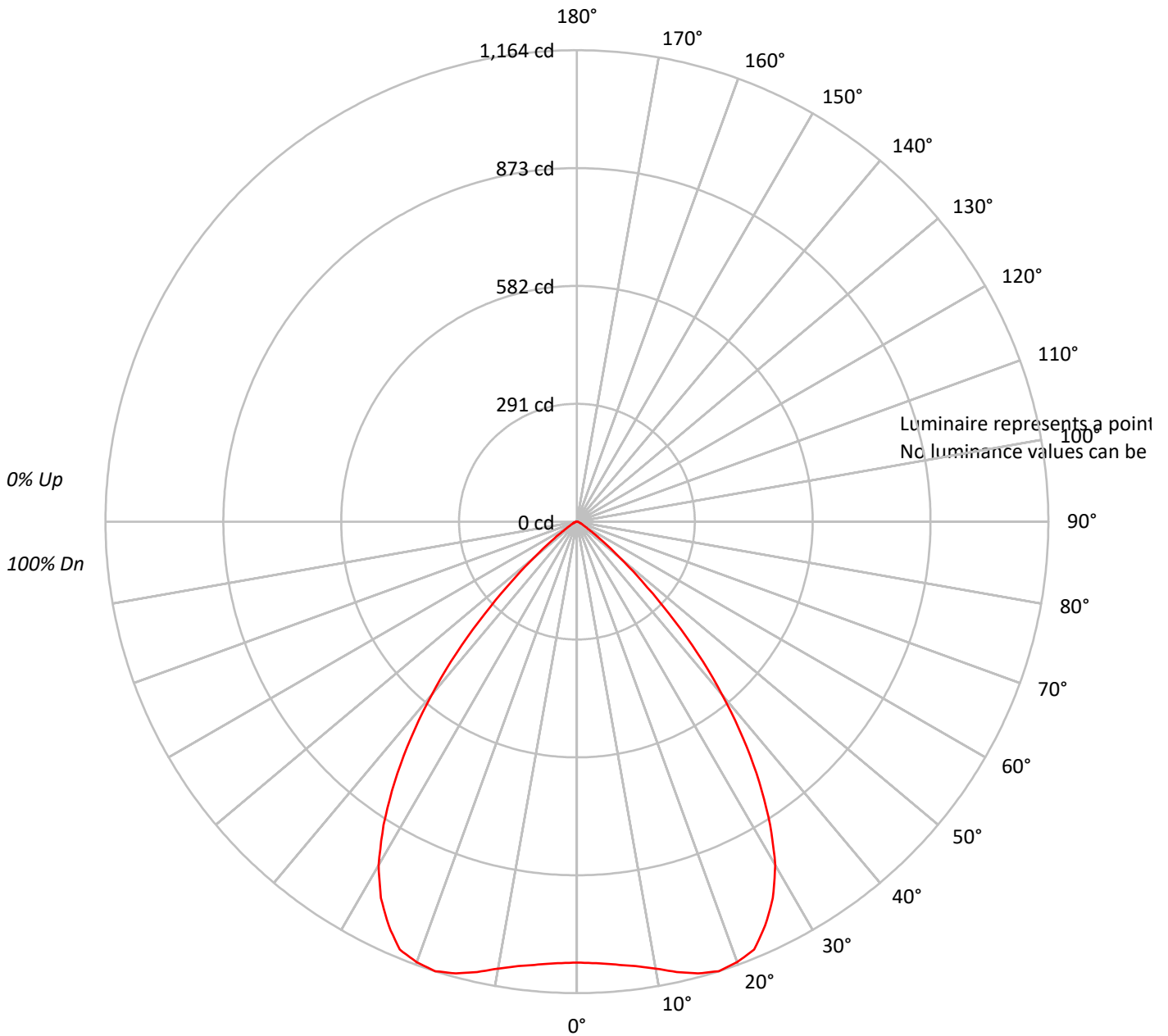
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92	92	92	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	85	84	84	84	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76	76	76	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69	69	69	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63	63	63	63
6	83	73	66	61	81	72	65	61	70	64	60	69	64	60	67	63	59	58	58	58	58
7	78	67	60	56	76	67	60	55	65	59	55	64	59	55	63	58	54	53	53	53	53
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49	49	49	49
9	69	58	51	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45	45	45	45
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41	41	41	41

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.5	6.1
10°-20°	326.3	18.7
20°-30°	501.9	28.8
30°-40°	484.3	27.8
40°-50°	252.5	14.5
50°-60°	53.1	3.1
60°-70°	12.4	0.7
70°-80°	4.8	0.3
80°-90°	0.3	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°	933.7	53.6
0°-40°	1418.0	81.4
0°-60°	1723.6	99.0
0°-90°	1741.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1741.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1089	
5°	1098	105
15°	1155	326
25°	1100	502
35°	786	484
45°	321	252
55°	48	53
65°	11	12
75°	4	5
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1088.7
2.5°	1090.9
5°	1097.7
7.5°	1106.9
10°	1120.4
12.5°	1138.8
15°	1154.7
17.5°	1163.7
20°	1157.0
22.5°	1143.3
25°	1100.0
27.5°	1047.6
30°	979.3
32.5°	888.2
35°	785.7
37.5°	674.1
40°	558.0
42.5°	441.8
45°	321.1
47.5°	216.3
50°	139.0
52.5°	84.2
55°	47.8
57.5°	29.6
60°	20.5
62.5°	15.9
65°	11.4
67.5°	9.2
70°	6.8
72.5°	6.8
75°	4.5
77.5°	2.3
80°	2.3
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)