

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: P211758

Luminaire Tested: **LE\_4B20D010 EC4B10209040 4LBW1WH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211758  
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 EC4B10209040 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: 1768.4 lumens  
Efficiency: N/A  
Efficacy: 85.0 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

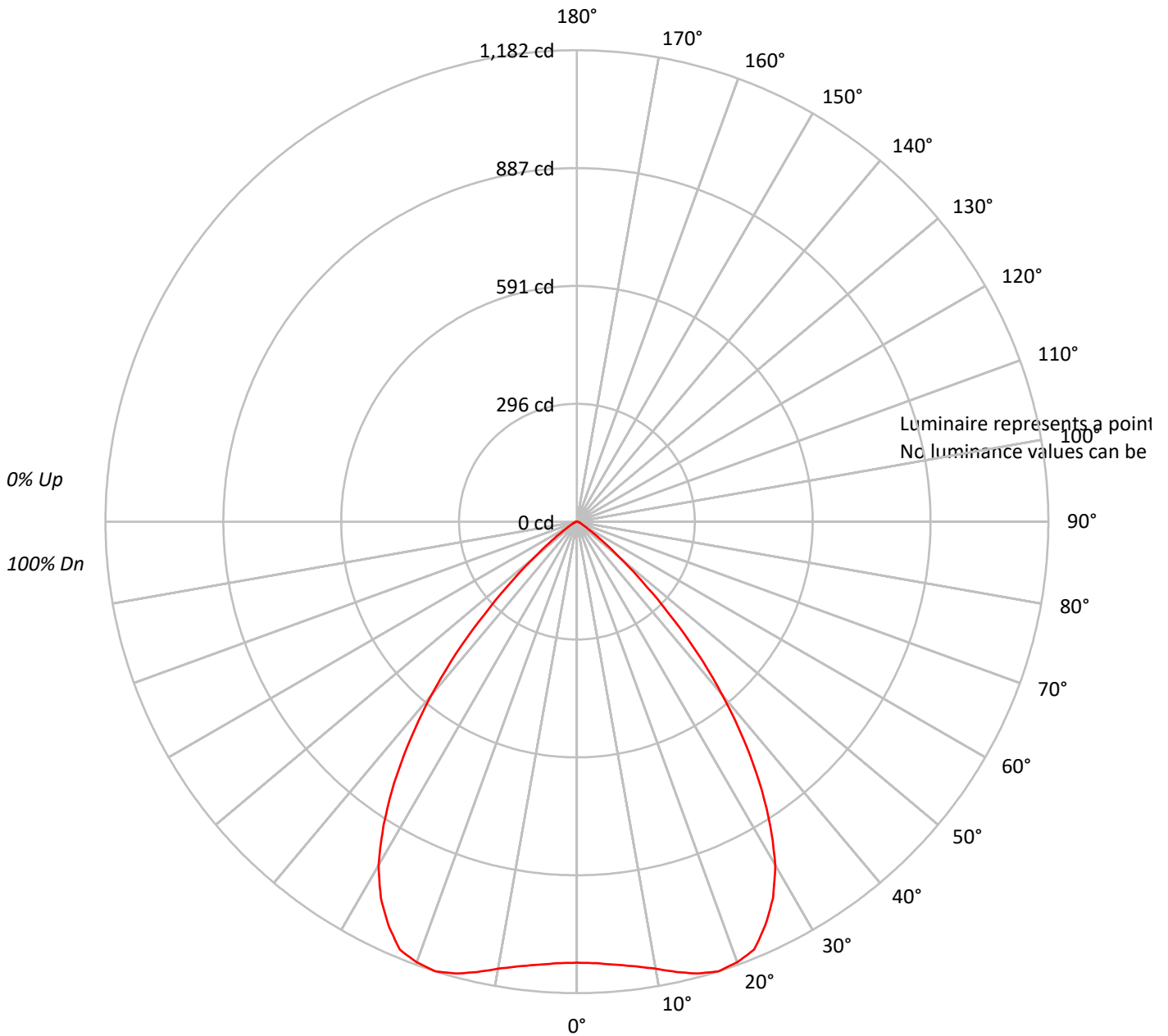
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.1	6.1
10°-20°	331.4	18.7
20°-30°	509.8	28.8
30°-40°	491.8	27.8
40°-50°	256.4	14.5
50°-60°	54.0	3.1
60°-70°	12.6	0.7
70°-80°	4.9	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°	948.3	53.6
0°-40°	1440.2	81.4
0°-60°	1750.6	99.0
0°-90°	1768.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1768.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1106	
5°	1115	107
15°	1173	331
25°	1117	510
35°	798	492
45°	326	256
55°	49	54
65°	12	13
75°	5	5
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1105.6
2.5°	1107.9
5°	1114.9
7.5°	1124.2
10°	1138.1
12.5°	1156.5
15°	1172.8
17.5°	1181.9
20°	1175.1
22.5°	1161.2
25°	1117.2
27.5°	1064.1
30°	994.6
32.5°	902.1
35°	798.0
37.5°	684.6
40°	566.7
42.5°	448.7
45°	326.2
47.5°	219.7
50°	141.1
52.5°	85.6
55°	48.6
57.5°	30.0
60°	20.8
62.5°	16.2
65°	11.6
67.5°	9.3
70°	7.0
72.5°	7.0
75°	4.6
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)