

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: P211801

Luminaire Tested: **LE\_4B20D010 EC4B10209050 4LBN1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211801  
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 EC4B10209050 4LBN1MW  
Description: PORTFOLIO 4 INCH CYLINDER  
NARROW DISTRIBUTION WITH 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: 1460.5 lumens  
Efficiency: N/A  
Efficacy: 70.2 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.95  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

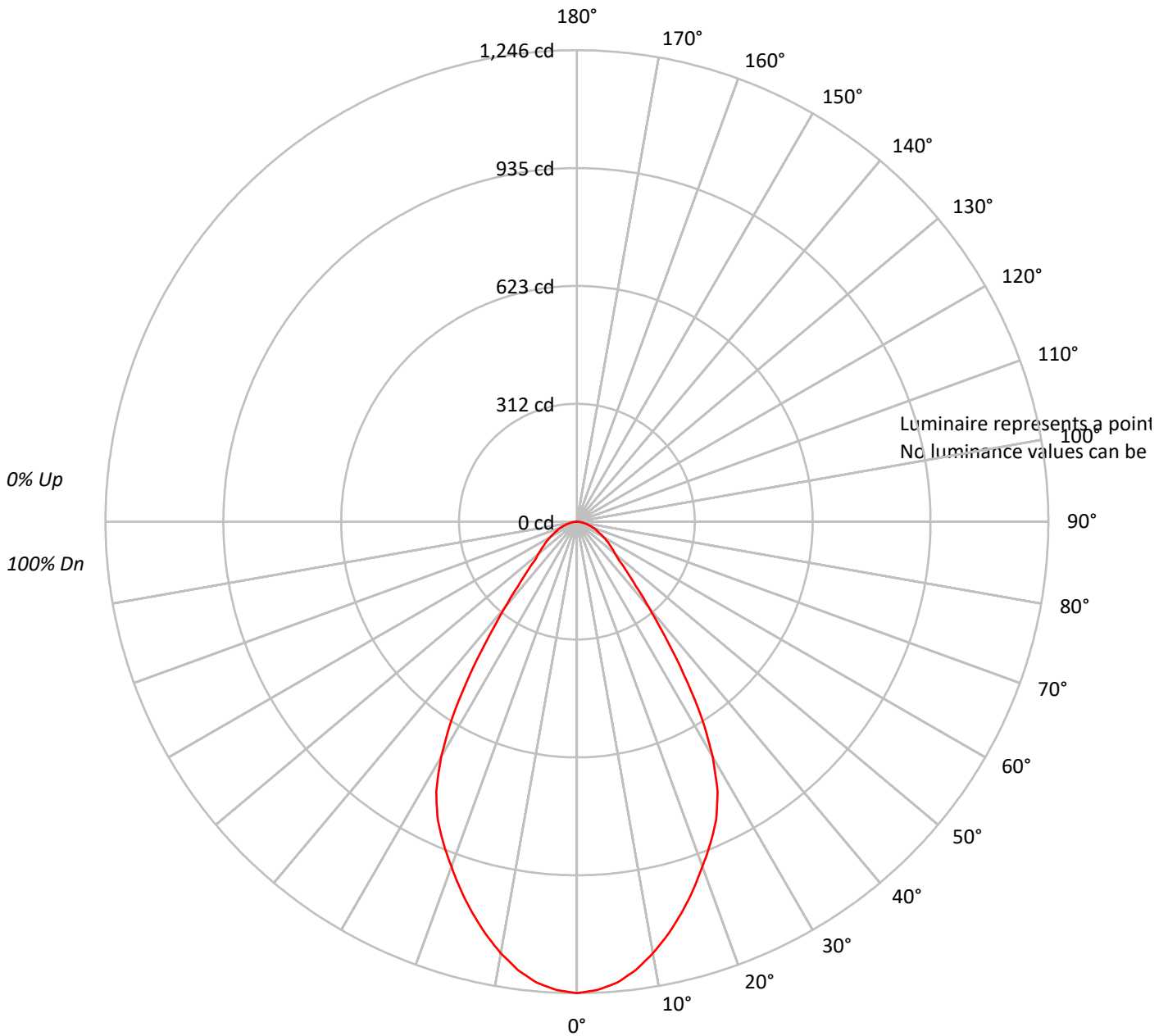
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73			
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61			
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56			
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	62	57	53	52			
8	73	62	55	50	71	61	55	50	60	54	50	59	53	49	58	53	49	48			
9	69	58	51	46	68	57	51	46	56	50	46	55	50	46	54	49	46	44			
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.6	7.8
10°-20°	299.9	20.5
20°-30°	394.7	27.0
30°-40°	307.3	21.0
40°-50°	149.2	10.2
50°-60°	94.3	6.5
60°-70°	60.8	4.2
70°-80°	31.8	2.2
80°-90°	7.9	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°	809.3	55.4
0°-40°	1116.5	76.4
0°-60°	1360.0	93.1
0°-90°	1460.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1460.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1246	
5°	1223	115
15°	1070	300
25°	870	395
35°	492	307
45°	186	149
55°	104	94
65°	60	61
75°	30	32
85°	7	8
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1246.0
2.5°	1239.0
5°	1222.8
7.5°	1194.9
10°	1157.8
12.5°	1116.0
15°	1069.6
17.5°	1020.9
20°	969.9
22.5°	921.2
25°	870.1
27.5°	805.2
30°	717.0
32.5°	612.6
35°	491.8
37.5°	380.5
40°	294.6
42.5°	229.7
45°	185.6
47.5°	150.8
50°	132.2
52.5°	118.3
55°	104.4
57.5°	92.8
60°	81.2
62.5°	69.6
65°	60.3
67.5°	53.4
70°	44.1
72.5°	37.1
75°	30.2
77.5°	23.2
80°	16.2
82.5°	11.6
85°	7.0
87.5°	2.3
90°	0.0



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— 0°-180°







(END OF REPORT)