

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: P211517

Luminaire Tested: **LE\_4B20D010 EC4B10209027 4LBS1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211517  
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 EC4B10209027 4LBS1LI  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH SPECULAR CLEAR 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: 1975.7 lumens  
Efficiency: N/A  
Efficacy: 95.0 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.91 / 1  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

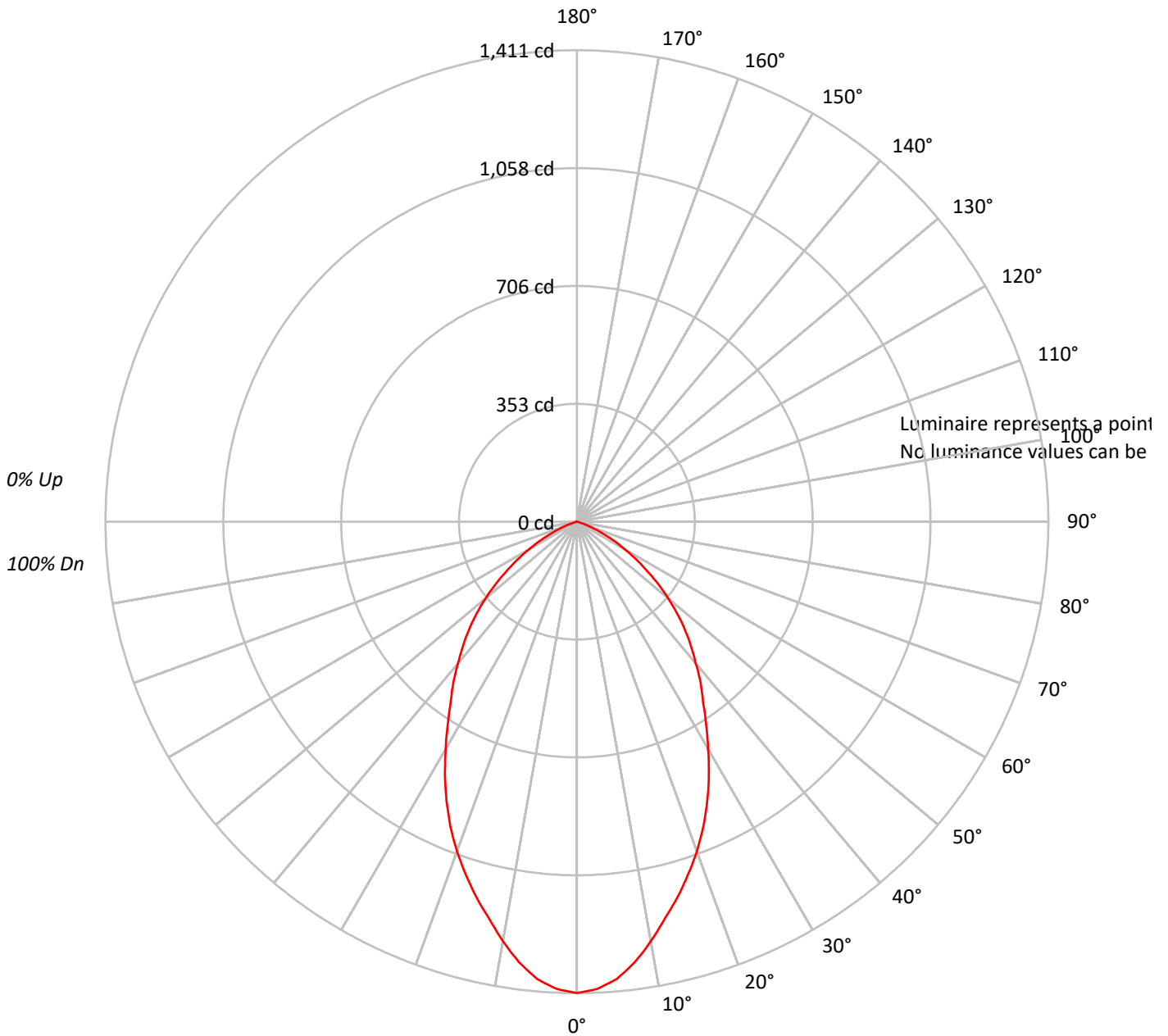
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63			
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57			
6	79	67	60	54	77	66	59	54	65	58	54	63	58	53	62	57	53	51			
7	74	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46			
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39			
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.9	6.5
10°-20°	326.2	16.5
20°-30°	422.7	21.4
30°-40°	414.2	21.0
40°-50°	351.1	17.8
50°-60°	230.2	11.6
60°-70°	92.5	4.7
70°-80°	10.6	0.5
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°	876.9	44.4
0°-40°	1291.1	65.3
0°-60°	1872.3	94.8
0°-90°	1975.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1975.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1411	
5°	1374	128
15°	1164	326
25°	923	423
35°	658	414
45°	457	351
55°	256	230
65°	90	93
75°	4	11
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1410.7
2.5°	1399.8
5°	1373.6
7.5°	1329.8
10°	1275.1
12.5°	1216.0
15°	1163.6
17.5°	1106.8
20°	1049.8
22.5°	988.6
25°	923.0
27.5°	855.2
30°	785.2
32.5°	719.5
35°	658.3
37.5°	608.1
40°	553.3
42.5°	505.2
45°	457.2
47.5°	406.8
50°	356.5
52.5°	306.2
55°	255.9
57.5°	210.0
60°	166.2
62.5°	126.9
65°	89.7
67.5°	59.0
70°	35.0
72.5°	15.3
75°	4.4
77.5°	2.2
80°	2.2
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)