

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: P211476

Luminaire Tested: **LE\_4B20D010 EC4B10208027 4LBM1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211476  
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 EC4B10208027 4LBM1MW  
Description: PORTFOLIO 4 INCH CYLINDER  
MEDIUM 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: 1759.1 lumens  
Efficiency: N/A  
Efficacy: 84.6 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 0.99 / 0.97  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

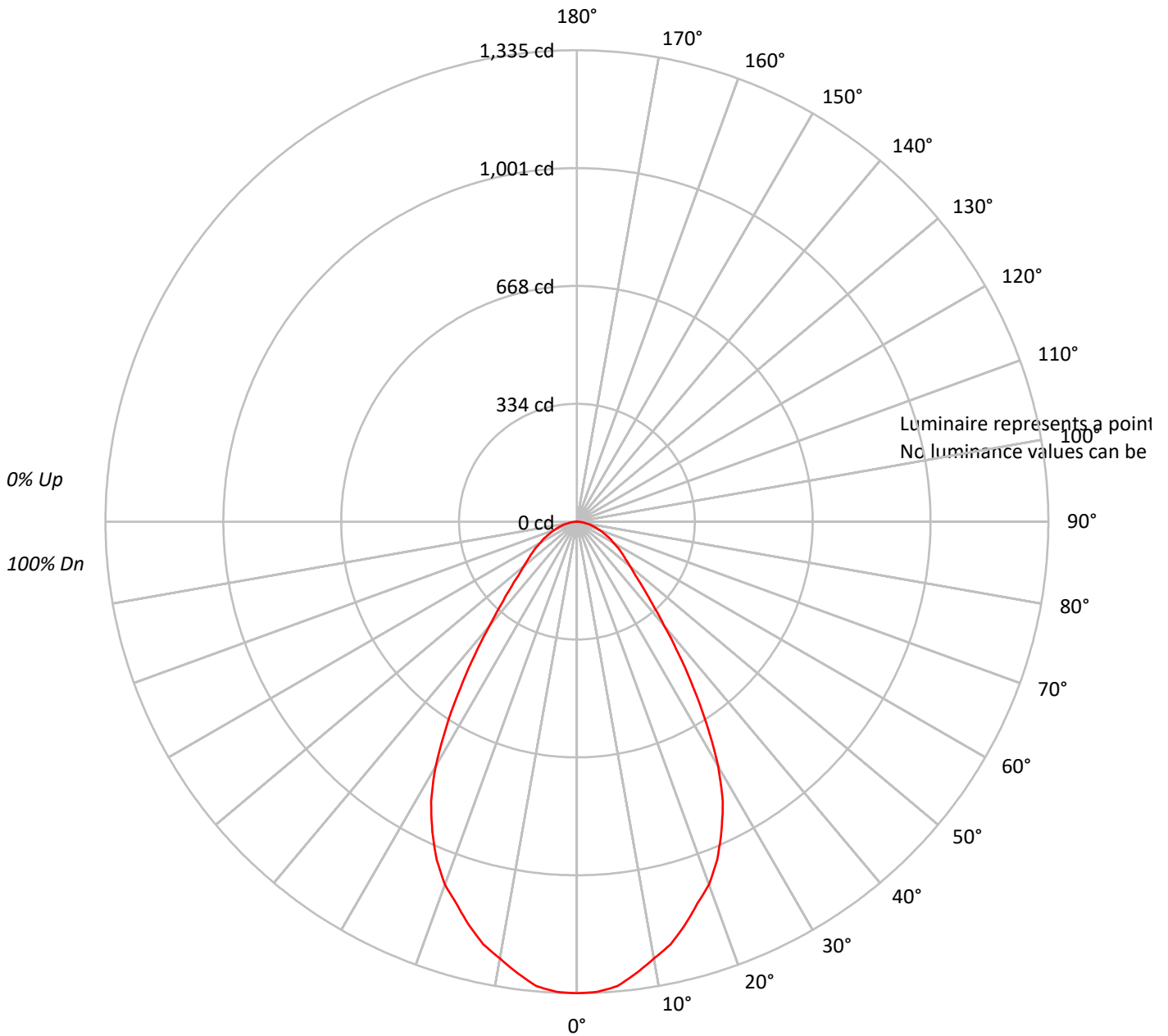
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	102	99	97	98	96	94	94	93	91	89			
2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80			
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53			
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45			
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42			
10	63	52	45	41	62	51	45	41	51	45	40	50	44	40	49	44	40	39			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.8	7.0
10°-20°	331.8	18.9
20°-30°	441.2	25.1
30°-40°	360.8	20.5
40°-50°	210.2	11.9
50°-60°	139.4	7.9
60°-70°	91.7	5.2
70°-80°	48.3	2.7
80°-90°	11.8	0.7
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°	896.8	51.0
0°-40°	1257.6	71.5
0°-60°	1607.2	91.4
0°-90°	1759.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1759.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1335	
5°	1320	124
15°	1182	332
25°	968	441
35°	576	361
45°	265	210
55°	155	139
65°	92	92
75°	46	48
85°	10	12
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1335.3
2.5°	1332.7
5°	1320.1
7.5°	1289.5
10°	1256.3
12.5°	1225.8
15°	1182.4
17.5°	1134.0
20°	1093.2
22.5°	1037.2
25°	968.4
27.5°	894.5
30°	800.2
32.5°	688.0
35°	575.9
37.5°	474.0
40°	384.8
42.5°	316.0
45°	265.1
47.5°	224.2
50°	196.3
52.5°	173.3
55°	155.4
57.5°	137.6
60°	119.8
62.5°	107.1
65°	91.8
67.5°	79.0
70°	66.2
72.5°	56.0
75°	45.8
77.5°	35.7
80°	25.5
82.5°	17.9
85°	10.2
87.5°	2.6
90°	0.0



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— 0°-180°







(END OF REPORT)