

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: P211704

Luminaire Tested: **LE\_4B20D010 EC4B10208040 4LBM1B**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211704  
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 EC4B10208040 4LBM1B  
Description: PORTFOLIO 4 INCH CYLINDER  
MEDIUM DISTRIBUTION WITH SPECULAR BLACK 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: 1001.9 lumens  
Efficiency: N/A  
Efficacy: 48.2 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.87  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

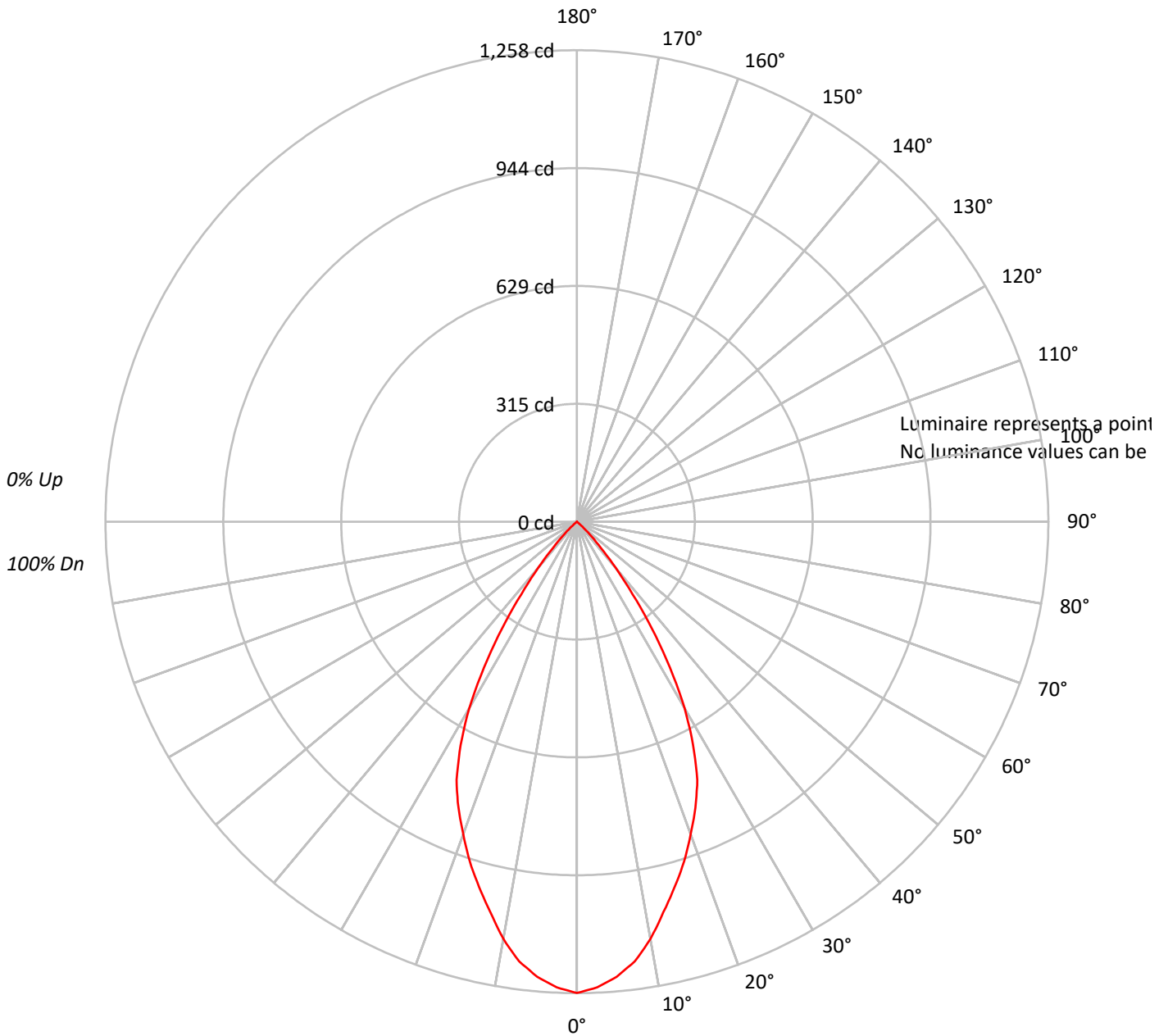
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	114	111	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94																																				
2	108	104	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88																																				
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82																																				
4	98	91	85	81	96	90	85	81	87	83	80	85	82	79	84	81	78	77																																				
5	93	85	79	75	92	84	79	75	82	78	74	81	77	74	79	76	73	72																																				
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67																																				
7	84	75	70	65	83	75	69	65	73	68	65	72	68	65	71	67	64	63																																				
8	80	71	65	61	79	71	65	61	69	64	61	68	64	61	67	63	60	59																																				
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56																																				
10	73	64	58	54	72	63	58	54	62	57	54	62	57	54	61	57	54	52																																				

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.6	11.3
10°-20°	282.5	28.2
20°-30°	341.7	34.1
30°-40°	217.9	21.8
40°-50°	45.5	4.5
50°-60°	0.6	0.1
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	0.0	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°	737.8	73.6
0°-40°	955.8	95.4
0°-60°	1001.9	100.0
0°-90°	1001.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1001.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1258	
5°	1219	114
15°	1009	283
25°	760	342
35°	348	218
45°	47	45
55°	0	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1257.6
2.5°	1243.8
5°	1218.8
7.5°	1183.0
10°	1130.4
12.5°	1066.9
15°	1008.9
17.5°	950.7
20°	887.2
22.5°	826.4
25°	760.0
27.5°	671.6
30°	574.9
32.5°	461.6
35°	348.2
37.5°	243.3
40°	160.3
42.5°	94.0
45°	47.0
47.5°	19.4
50°	5.6
52.5°	0.0
55°	0.0
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)