

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: P211777

Luminaire Tested: **LE\_4B20D010 EC4B10208050 4LBS1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211777  
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 EC4B10208050 4LBS1H  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH SEMI-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: 2388.8 lumens  
Efficiency: N/A  
Efficacy: 114.8 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 1.17  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

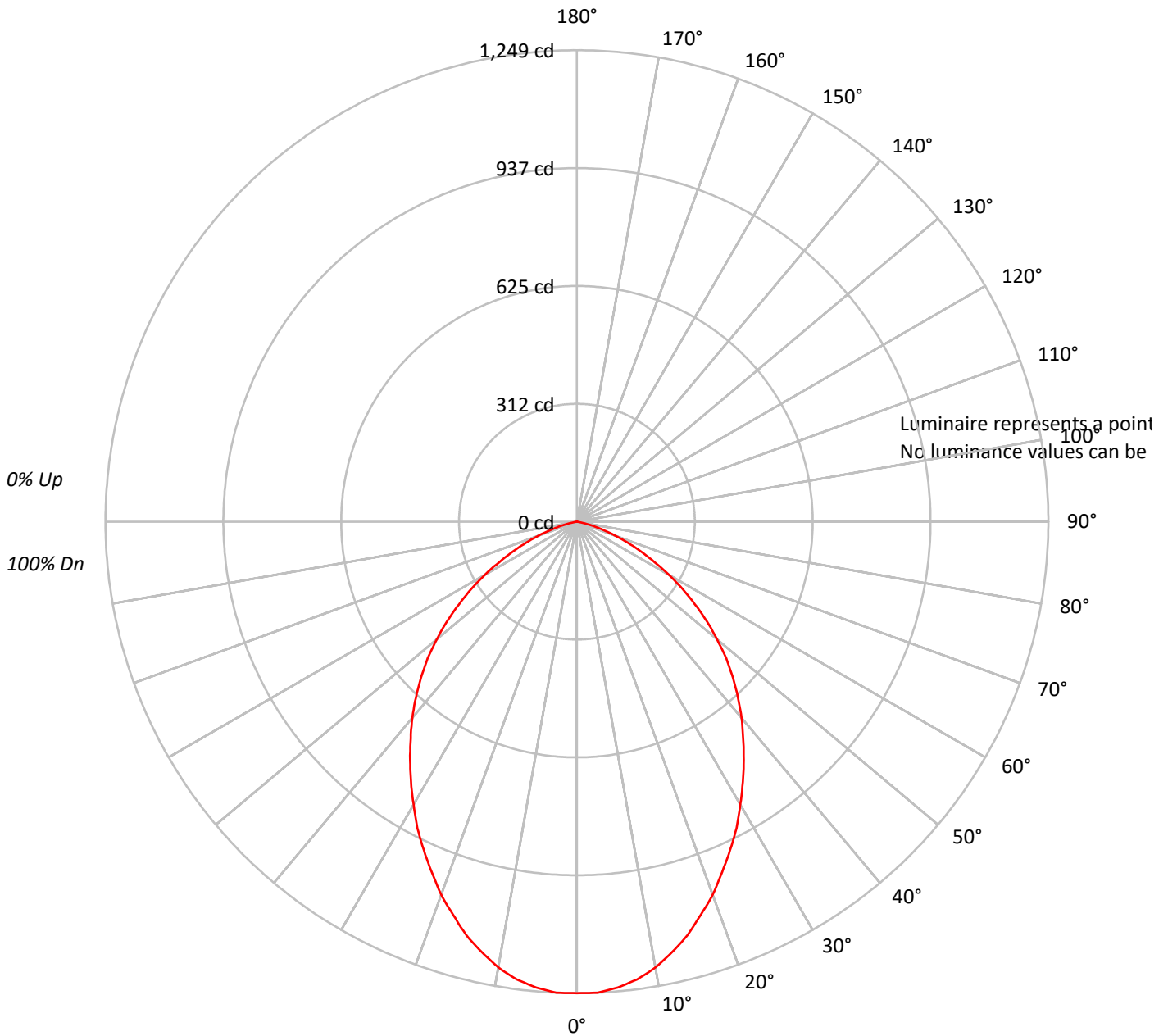
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88			
2	102	96	90	85	100	94	88	84	90	86	82	87	83	80	84	81	79	77			
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67			
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58			
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51			
6	75	63	55	49	73	62	54	49	60	54	49	59	53	48	57	52	48	46			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41			
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	34			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.0	4.9
10°-20°	318.1	13.3
20°-30°	441.7	18.5
30°-40°	482.0	20.2
40°-50°	449.7	18.8
50°-60°	341.3	14.3
60°-70°	186.9	7.8
70°-80°	51.4	2.2
80°-90°	0.7	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°	876.8	36.7
0°-40°	1358.8	56.9
0°-60°	2149.8	90.0
0°-90°	2388.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2388.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1249	
5°	1239	117
15°	1134	318
25°	960	442
35°	771	482
45°	584	450
55°	381	341
65°	187	187
75°	45	51
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1249.3
2.5°	1249.3
5°	1238.8
7.5°	1223.0
10°	1199.3
12.5°	1167.8
15°	1133.6
17.5°	1091.4
20°	1052.0
22.5°	1004.7
25°	960.0
27.5°	915.2
30°	865.4
32.5°	817.9
35°	770.6
37.5°	723.3
40°	678.6
42.5°	631.3
45°	583.9
47.5°	536.5
50°	484.0
52.5°	434.0
55°	381.4
57.5°	331.4
60°	281.4
62.5°	231.4
65°	186.8
67.5°	144.7
70°	107.9
72.5°	73.7
75°	44.7
77.5°	21.0
80°	5.2
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)