

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: P206337

Luminaire Tested: **LD4B20D010 EU4B10209050 4LBCSMW1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P206337  
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: LD4B20D010 EU4B10209050 4LBCSMW1  
Description: PORTFOLIO 4 INCH SHALLOW RECESSED DOWNLIGHT  
SHALLOW DISTRIBUTION WITH CAST 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: 1841.5 lumens  
Efficiency: N/A  
Efficacy: 88.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.23 / 1.33  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

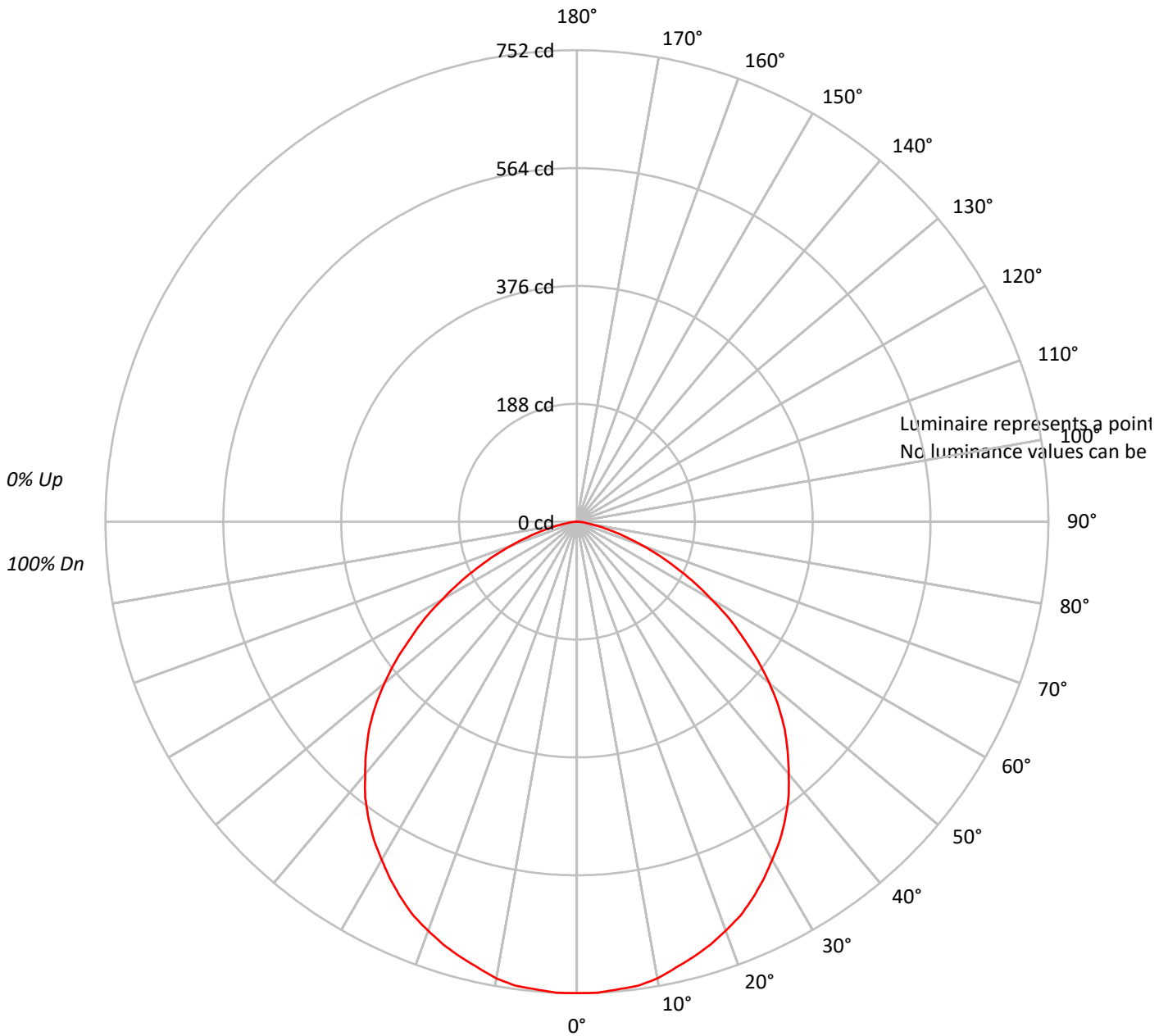
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74	74	74	74
3	93	83	75	70	90	81	74	69	79	73	68	76	71	67	73	69	65	63	63	63	63
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	66	61	57	55	55	55	55
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48	48	48	48
6	73	60	52	45	71	59	51	45	57	50	45	56	49	44	54	49	44	42	42	42	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37	37	37	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33	33	33	33
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30	30	30	30
10	55	42	35	30	54	42	34	30	41	34	29	40	34	29	39	33	29	27	27	27	27

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.3	3.9
10°-20°	202.9	11.0
20°-30°	305.2	16.6
30°-40°	361.7	19.6
40°-50°	359.9	19.5
50°-60°	290.1	15.8
60°-70°	175.5	9.5
70°-80°	65.1	3.5
80°-90°	9.7	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°	579.3	31.5
0°-40°	941.0	51.1
0°-60°	1591.1	86.4
0°-90°	1841.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1841.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	752	
5°	749	71
15°	719	203
25°	663	305
35°	579	362
45°	469	360
55°	324	290
65°	176	176
75°	59	65
85°	8	10
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	752.1
2.5°	752.1
5°	748.8
7.5°	746.6
10°	739.9
12.5°	728.7
15°	718.7
17.5°	707.5
20°	694.1
22.5°	680.7
25°	662.9
27.5°	643.9
30°	622.7
32.5°	602.6
35°	579.2
37.5°	554.6
40°	525.6
42.5°	497.7
45°	468.7
47.5°	436.3
50°	400.6
52.5°	363.8
55°	323.6
57.5°	287.9
60°	247.7
62.5°	212.0
65°	176.3
67.5°	142.8
70°	111.6
72.5°	83.7
75°	59.1
77.5°	37.9
80°	22.3
82.5°	13.4
85°	7.8
87.5°	3.3
90°	0.0



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— 0°-180°







(END OF REPORT)