

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: P206431

Luminaire Tested: **LD4B20D010 EU4B10208030 4LBCSMB1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P206431  
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 EU4B10208030 4LBCSMB1  
Description: PORTFOLIO 4 INCH SHALLOW RECESSED DOWNLIGHT  
SHALLOW DISTRIBUTION WITH CAST MATTE METALLIC SILVER 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: 1978.8 lumens  
Efficiency: N/A  
Efficacy: 95.1 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

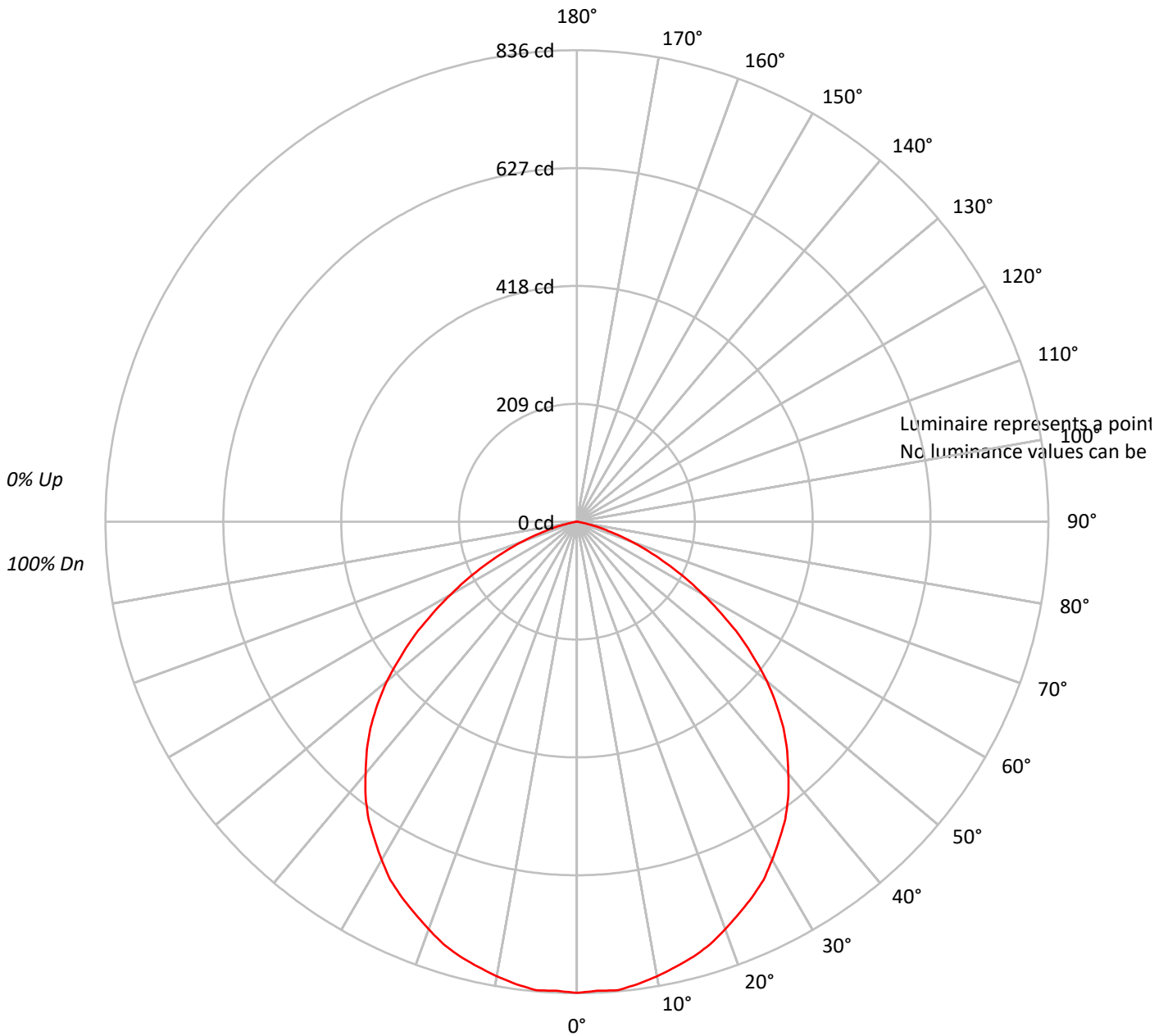
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88	88	88	88
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75	75	75	75
3	93	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65	65	65	65
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56	56	56	56
5	79	67	59	53	77	66	59	53	64	57	52	62	56	52	61	55	51	49	49	49	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43	43	43	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	39	39	39	39
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	35	35	35	35
9	60	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31	31	31	31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	28	28	28	28

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.0	4.0
10°-20°	225.2	11.4
20°-30°	338.5	17.1
30°-40°	401.6	20.3
40°-50°	397.4	20.1
50°-60°	312.2	15.8
60°-70°	175.0	8.8
70°-80°	49.2	2.5
80°-90°	0.8	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°	642.6	32.5
0°-40°	1044.2	52.8
0°-60°	1753.8	88.6
0°-90°	1978.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1978.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	836	
5°	834	79
15°	799	225
25°	735	338
35°	644	402
45°	518	397
55°	352	312
65°	174	175
75°	43	49
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	835.5
2.5°	832.7
5°	834.1
7.5°	827.0
10°	818.5
12.5°	808.6
15°	798.7
17.5°	785.9
20°	768.9
22.5°	751.8
25°	734.8
27.5°	716.4
30°	692.3
32.5°	668.2
35°	644.0
37.5°	615.7
40°	583.0
42.5°	551.8
45°	517.8
47.5°	479.5
50°	439.8
52.5°	394.4
55°	351.8
57.5°	303.6
60°	258.2
62.5°	217.0
65°	174.5
67.5°	137.6
70°	102.1
72.5°	69.5
75°	42.6
77.5°	21.3
80°	5.7
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)