

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: P252108

Luminaire Tested: **LD4B40D010 EU4B30509027 4LBBA1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252108  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-4)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD4B40D010 EU4B30509027 4LBBA1MB  
Description: PORTFOLIO 4 INCH BAFFLE RECESSED DOWNLIGHT, WITH MATTE BLACK TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1678.0 lumens  
Efficiency: N/A  
Efficacy: 39.0 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 0.94  
Luminous Opening: Circular (Dia: 0.38' x H: 0')  
CIE Type: Direct

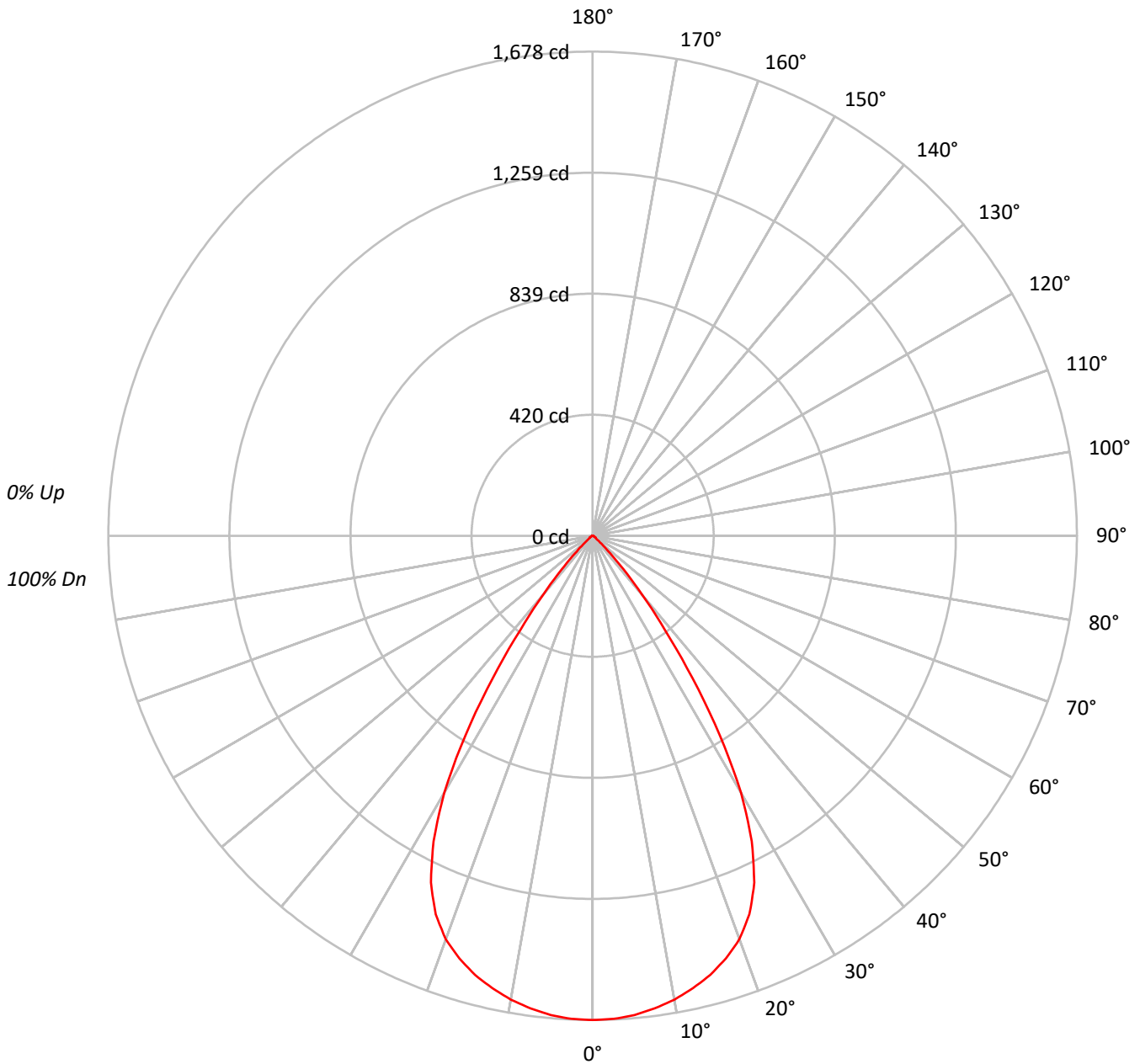
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93			
2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87			
3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81			
4	97	90	84	80	95	88	83	79	86	82	78	84	81	77	82	79	77	75			
5	92	84	78	74	91	83	77	73	81	76	73	79	75	72	78	74	71	70			
6	88	79	73	68	86	78	72	68	76	71	68	75	70	67	74	70	67	65			
7	83	74	68	63	82	73	67	63	72	67	63	71	66	63	69	65	62	61			
8	79	69	63	59	78	69	63	59	68	63	59	67	62	59	66	61	58	57			
9	75	65	59	55	74	65	59	55	64	59	55	63	58	55	62	58	55	53			
10	72	62	56	52	71	61	56	52	60	55	52	60	55	52	59	55	51	50			

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

	0°
0°	163554
5°	163103
10°	161525
15°	158931
20°	154283
25°	142535
30°	115630
35°	71682
40°	33727
45°	11770
50°	3320
55°	2226
60°	1715
65°	1522
70°	1254
75°	828
80°	1235
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.0	9.4
10°-20°	442.8	26.4
20°-30°	595.2	35.5
30°-40°	380.2	22.7
40°-50°	80.8	4.8
50°-60°	12.2	0.7
60°-70°	6.0	0.4
70°-80°	2.6	0.2
80°-90°	0.3	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°	1195.9	71.3
0°-40°	1576.2	93.9
0°-60°	1669.2	99.5
0°-90°	1678.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1678.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1678	
5°	1667	158
15°	1575	443
25°	1326	595
35°	602	380
45°	85	81
55°	13	12
65°	7	6
75°	2	3
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1678.2
2.5°	1676.0
5°	1667.2
7.5°	1651.9
10°	1632.2
12.5°	1605.9
15°	1575.2
17.5°	1535.8
20°	1487.6
22.5°	1419.7
25°	1325.5
27.5°	1194.0
30°	1027.5
32.5°	821.6
35°	602.5
37.5°	411.9
40°	265.1
42.5°	157.7
45°	85.4
47.5°	43.8
50°	21.9
52.5°	15.3
55°	13.1
57.5°	11.0
60°	8.8
62.5°	6.6
65°	6.6
67.5°	4.4
70°	4.4
72.5°	2.2
75°	2.2
77.5°	2.2
80°	2.2
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)