

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: P282777

Luminaire Tested: **LDA2B209050D010 EU2B20NFL259050 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282777  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B209050D010 EU2B20NFL259050 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1467.1 lumens  
Efficiency: N/A  
Efficacy: 71.2 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

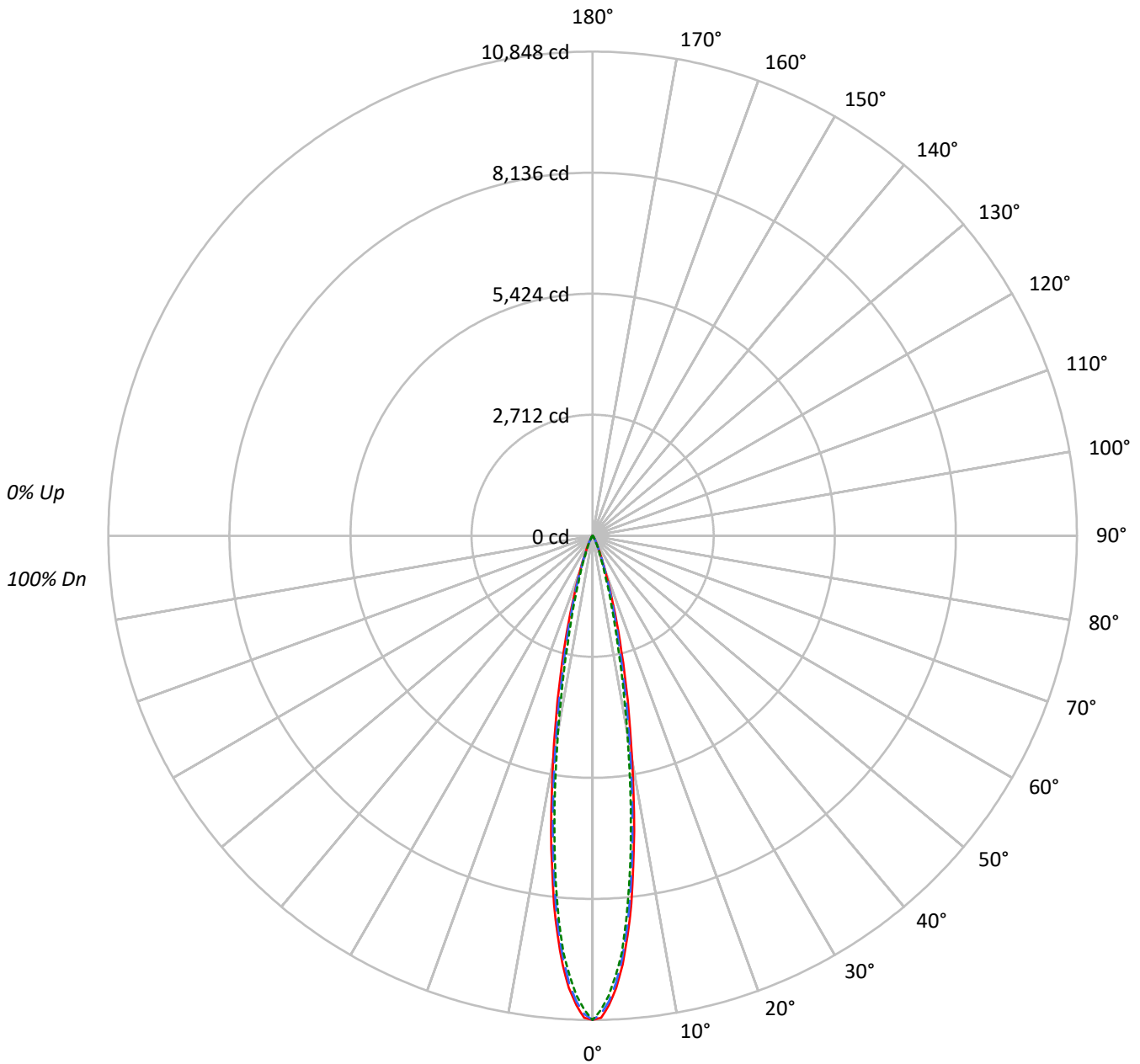
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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															
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97				97															
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95				95															
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92				92															
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90				90															
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88				88															
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86				86															
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84				84															
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83				83															
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81				81															
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79				79															

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

	0°	45°	90°
0°	5352186	5352186	5352186
5°	4453602	4371936	4283683
10°	2551003	2393798	2234088
15°	1134615	1007690	844449
20°	411619	386996	306614
25°	158029	147577	127055
30°	68134	63406	56228
35°	32222	32222	26681
40°	16165	16681	13460
45°	9349	8791	8163
50°	6447	5757	5757
55°	5075	3613	4301
60°	4144	2467	3256
65°	2918	1985	2918
70°	2452	1154	2452
75°	1525	1525	1525
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	705.6	48.1
10°-20°	571.0	38.9
20°-30°	137.7	9.4
30°-40°	35.1	2.4
40°-50°	10.5	0.7
50°-60°	4.5	0.3
60°-70°	2.2	0.1
70°-80°	0.7	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°	1414.3	96.4
0°-40°	1449.4	98.8
0°-60°	1464.3	99.8
0°-90°	1467.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1467.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10848	10848	10848	10848	10848	
5°	8993	8910	8828	8751	8650	727
15°	2221	2169	1973	1777	1653	633
25°	290	292	271	246	233	150
35°	54	54	54	48	44	37
45°	13	13	13	12	12	11
55°	6	5	4	4	5	5
65°	2	2	2	2	2	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10848.4	10848.4	10848.4	10848.4	10848.4
1°	10799.9	10724.6	10715.4	10762.3	10624.2
2°	10523.8	10470.3	10439.3	10466.9	10310.4
3°	10144.8	10092.9	10036.9	10037.7	9862.8
4°	9628.5	9587.6	9493.0	9464.6	9363.3
5°	8992.7	8909.8	8827.8	8750.9	8649.6
6°	8289.9	8182.8	8065.6	7951.0	7847.3
7°	7463.2	7392.1	7237.3	7080.8	6993.0
8°	6685.9	6571.3	6390.6	6194.8	6120.3
9°	5850.1	5768.1	5560.6	5333.0	5258.6
10°	5092.1	5006.7	4778.3	4524.8	4459.5
11°	4380.9	4300.6	4062.9	3796.9	3727.4
12°	3779.3	3665.5	3392.7	3161.8	3094.1
13°	3180.2	3102.4	2843.9	2615.5	2484.1
14°	2670.7	2606.3	2372.0	2171.2	2032.3
15°	2221.4	2168.7	1972.9	1777.1	1653.3
16°	1822.3	1789.7	1634.9	1445.8	1344.5
17°	1478.4	1448.3	1349.6	1175.5	1090.2
18°	1193.9	1189.8	1107.8	957.2	881.0
19°	982.3	980.6	905.3	779.0	716.2
20°	784.0	794.8	737.1	626.7	584.0
21°	639.2	645.1	599.1	515.4	476.9
22°	520.4	524.6	494.5	425.9	405.0
23°	426.7	429.2	404.1	353.1	334.7
24°	351.4	353.1	330.5	294.5	278.6
25°	290.3	292.0	271.1	246.0	233.4
26°	241.0	242.6	224.2	206.7	194.1
27°	200.0	203.3	184.9	174.0	160.6
28°	170.7	171.5	154.8	148.1	135.5
29°	139.7	144.7	130.5	124.7	115.5
30°	119.6	122.2	111.3	107.1	98.7
32.5°	79.5	81.2	76.1	72.8	66.1
35°	53.5	54.4	53.5	48.5	44.3
37.5°	36.8	36.8	37.7	31.8	30.1
40°	25.1	25.1	25.9	21.8	20.9
42.5°	18.4	18.4	17.6	15.1	15.1
45°	13.4	13.4	12.6	11.7	11.7
47.5°	10.9	10.0	9.2	9.2	9.2
50°	8.4	8.4	7.5	6.7	7.5
52.5°	6.7	6.7	5.9	5.9	5.9
55°	5.9	5.0	4.2	4.2	5.0
57.5°	4.2	4.2	3.3	3.3	4.2
60°	4.2	3.3	2.5	3.3	3.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	2.5	1.7	1.7	1.7	1.7
70°	1.7	1.7	0.8	0.8	1.7
72.5°	0.8	0.8	0.8	0.8	0.8
75°	0.8	0.8	0.8	0.8	0.8
77.5°	0.8	0.8	0.0	0.0	0.8
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







62.5°	3.3	2.5	2.5	2.5	2.5
65°	2.5	2.5	1.7	1.7	2.5



(END OF REPORT)