

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: P282462

Luminaire Tested: **LDA2B058040D010 EU2B05SP158040 2LBALPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282462  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-7)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B058040D010 EU2B05SP158040 2LBALPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 838.1 lumens  
Efficiency: N/A  
Efficacy: 119.7 lumens/watt  
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

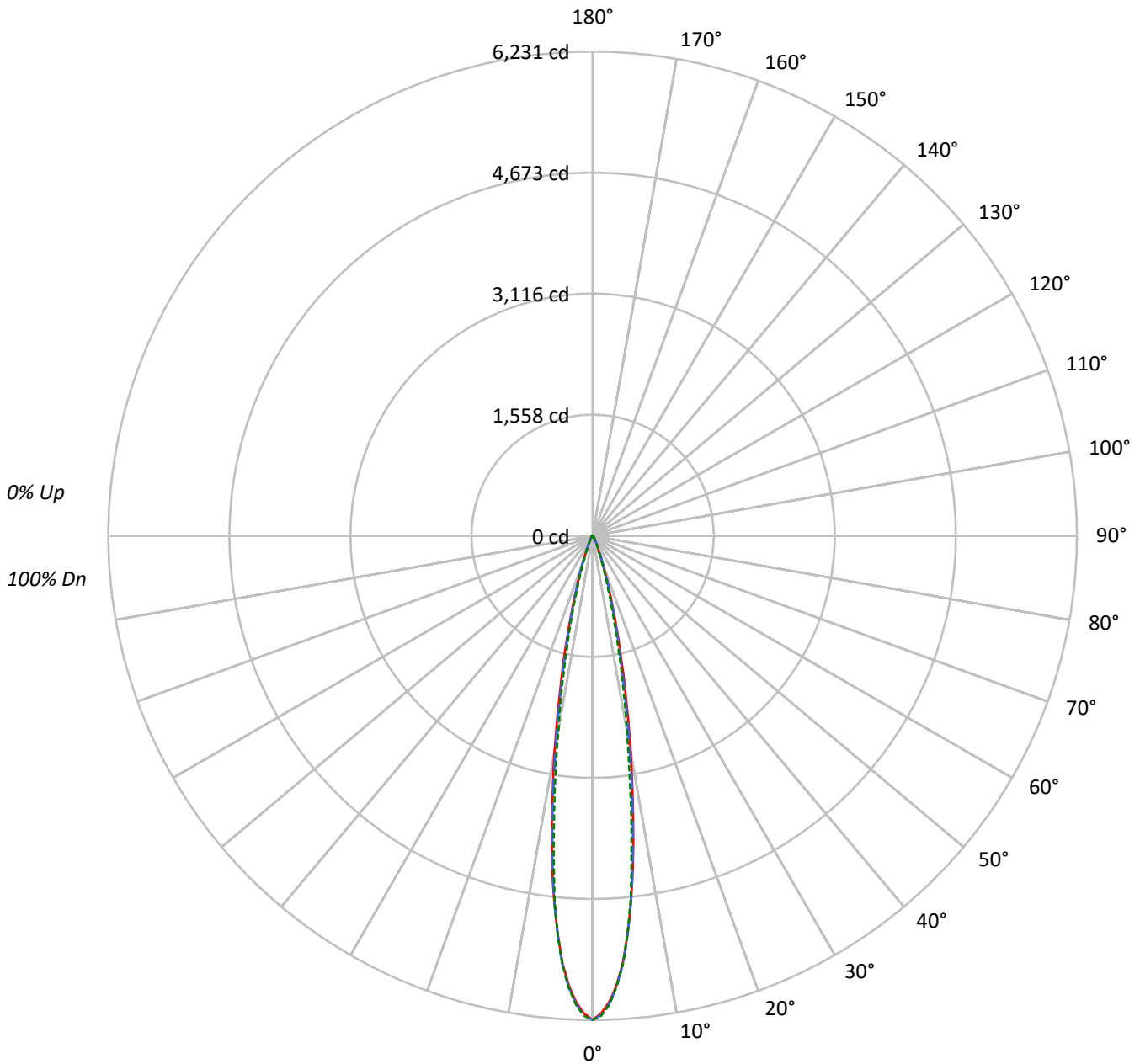
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	98	99	98	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	98	96	95	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	96	94	92	91															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	94	92	90	89															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	92	89	88	87															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	90	88	86	85															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	86	84	83															
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	84	82	81															
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	82	81	80															
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	81	79	78															

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

	0°	45°	90°
0°	3073989	3073989	3073989
5°	2550172	2558443	2548736
10°	1411440	1360441	1267311
15°	571343	546468	485227
20°	191424	202975	164333
25°	72836	73108	69189
30°	32643	32130	31048
35°	15840	14093	11202
40°	10433	13203	9210
45°	2651	4326	3977
50°	768	1075	1458
55°	6537	5763	9032
60°	9473	7499	12235
65°	4436	11674	11207
70°	4183	3462	4183
75°	1906	4575	12772
80°	21593	29832	27275
85°	0	13586	16416



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	408.1	48.7
10°-20°	309.1	36.9
20°-30°	70.3	8.4
30°-40°	20.8	2.5
40°-50°	6.9	0.8
50°-60°	6.1	0.7
60°-70°	7.3	0.9
70°-80°	4.7	0.6
80°-90°	4.9	0.6
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°	787.4	94.0
0°-40°	808.2	96.4
0°-60°	821.2	98.0
0°-90°	838.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	838.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6231	6231	6231	6231	6231	
5°	5149	5190	5166	5099	5146	413
15°	1119	1134	1070	970	950	325
25°	134	144	134	133	127	70
35°	26	29	23	27	19	21
45°	4	11	6	11	6	6
55°	8	11	7	10	10	3
65°	4	8	10	10	10	4
75°	1	3	2	4	7	2
85°	0	0	2	2	3	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6230.7	6230.7	6230.7	6230.7	6230.7
1°	6150.4	6175.3	6172.9	6162.8	6180.5
2°	6009.0	6039.1	6036.2	6014.2	6045.8
3°	5801.6	5828.3	5824.0	5792.5	5826.9
4°	5524.4	5555.0	5543.1	5495.8	5539.7
5°	5149.3	5189.9	5166.0	5098.7	5146.4
6°	4733.6	4768.0	4730.2	4640.9	4687.7
7°	4268.2	4289.7	4240.0	4125.3	4093.7
8°	3760.2	3788.4	3719.1	3585.3	3550.9
9°	3274.7	3284.3	3200.2	3057.8	3014.3
10°	2817.4	2810.2	2715.6	2571.3	2529.7
11°	2384.0	2374.4	2274.6	2141.2	2154.6
12°	1989.8	2008.4	1892.3	1771.4	1773.8
13°	1665.8	1667.7	1567.8	1452.7	1446.0
14°	1363.8	1381.5	1295.9	1192.7	1173.6
15°	1118.6	1133.9	1069.9	969.6	950.0
16°	895.5	914.6	868.7	777.9	752.1
17°	721.1	745.4	715.3	639.4	609.7
18°	576.8	595.4	588.2	509.9	485.5
19°	455.4	481.2	483.1	417.6	388.5
20°	364.6	388.0	386.6	335.9	313.0
22.5°	209.3	221.7	222.2	198.3	184.9
25°	133.8	143.8	134.3	132.8	127.1
26°	116.1	124.2	113.7	113.7	108.5
27°	94.1	101.3	91.3	95.6	88.4
28°	79.3	87.0	78.4	77.4	76.5
29°	65.9	73.1	62.1	66.9	64.0
30°	57.3	62.6	56.4	63.6	54.5
32.5°	44.4	48.7	37.8	47.8	35.8
35°	26.3	29.1	23.4	27.2	18.6
37.5°	27.2	28.2	25.3	28.2	26.3
40°	16.2	16.7	20.5	20.5	14.3
42.5°	15.3	14.8	9.1	14.3	11.5
45°	3.8	11.0	6.2	11.0	5.7
47.5°	2.9	3.8	3.8	7.6	7.6
50°	1.0	3.8	1.4	2.9	1.9
52.5°	0.0	9.1	1.9	6.7	5.7
55°	7.6	11.0	6.7	10.0	10.5
57.5°	1.0	7.6	3.8	8.1	5.7
60°	9.6	12.9	7.6	13.9	12.4
62.5°	1.0	8.6	10.0	7.6	6.7
65°	3.8	8.1	10.0	9.6	9.6
67.5°	4.8	8.1	6.2	6.2	8.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	1.0	3.3	2.4	4.3	6.7
77.5°	1.0	3.8	3.3	7.6	5.7
80°	7.6	8.6	10.5	13.9	9.6
82.5°	6.7	6.7	10.5	7.6	5.7
85°	0.0	0.0	2.4	2.4	2.9
87.5°	0.0	1.9	4.8	3.8	6.7
90°	0.0	0.0	0.0	0.0	0.0



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







70°	2.9	1.0	2.4	2.4	2.9
72.5°	1.0	4.3	3.8	2.4	4.8



(END OF REPORT)