

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: P282461

Luminaire Tested: **LDA2B058040D010 EU2B05SP158040 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282461  
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 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MW  
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

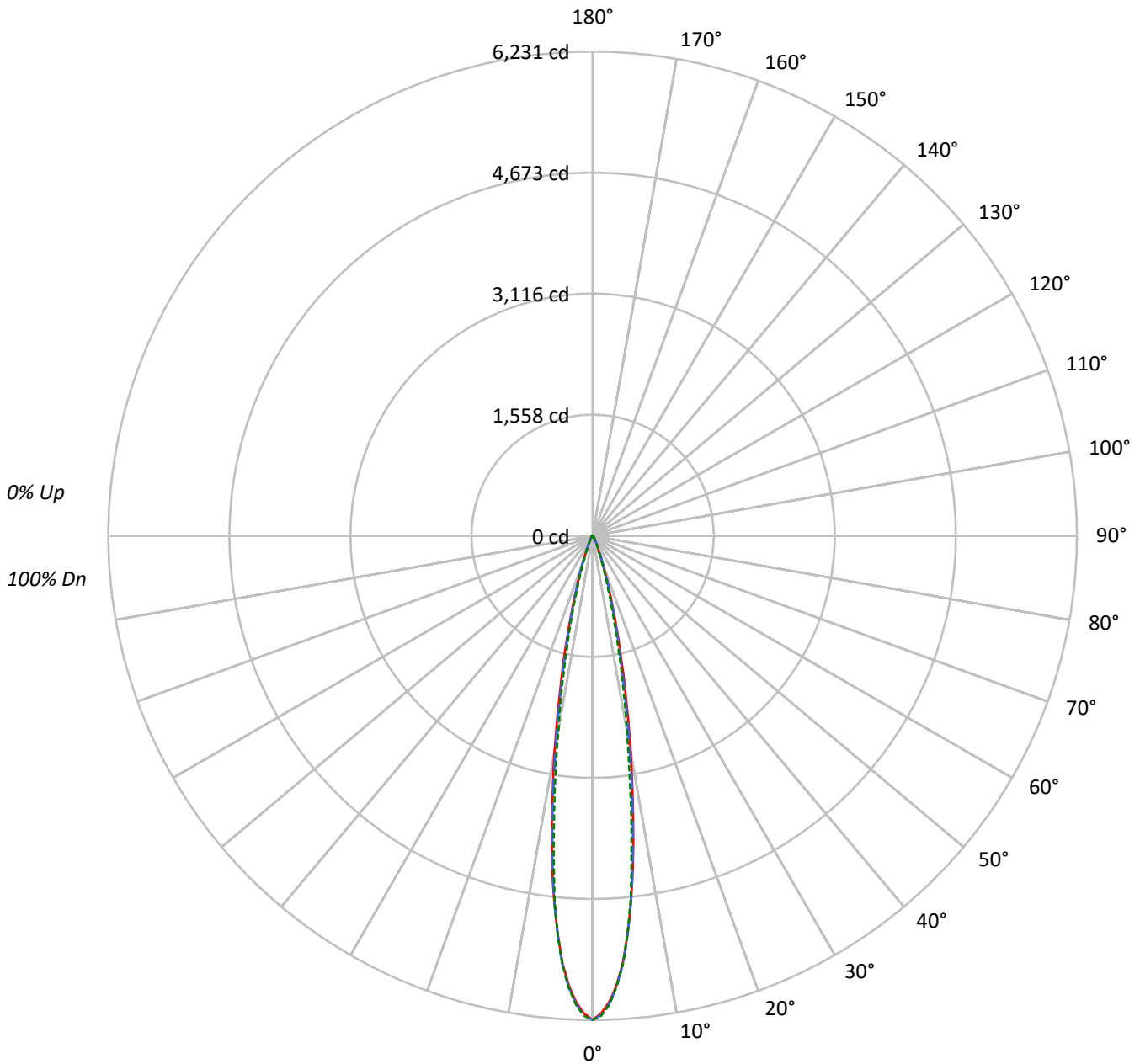
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									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	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	100	100	100	100	100	100	100	100	100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	96	96	96	96	96	96	96	96	96	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	94	94	94	94	94	94	94	94	94	94	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	91	91	91	91	91	91	91	91	91	91	91	91	91														
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	89	89	89	89	89	89	89	89	89	89	89	89	89														
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	87	87	87	87	87	87	87	87	87	87	87	87	87														
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	85	85	85	85	85	85	85	85	85	85	85	85	85														
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	83	83	83	83	83	83	83	83	83	83	83	83	83														
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	81	81	81	81	81	81	81	81	81	81	81	81	81														
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	80	80	80	80	80	80	80	80	80	80	80	80	80														
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	78	78	78	78	78	78	78	78	78	78	78	78	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)