

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: P282505

Luminaire Tested: **LDA2B108040D010 EU2B10SP158040 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282505  
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: LDA2B108040D010 EU2B10SP158040 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1138.6 lumens  
Efficiency: N/A  
Efficacy: 113.9 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

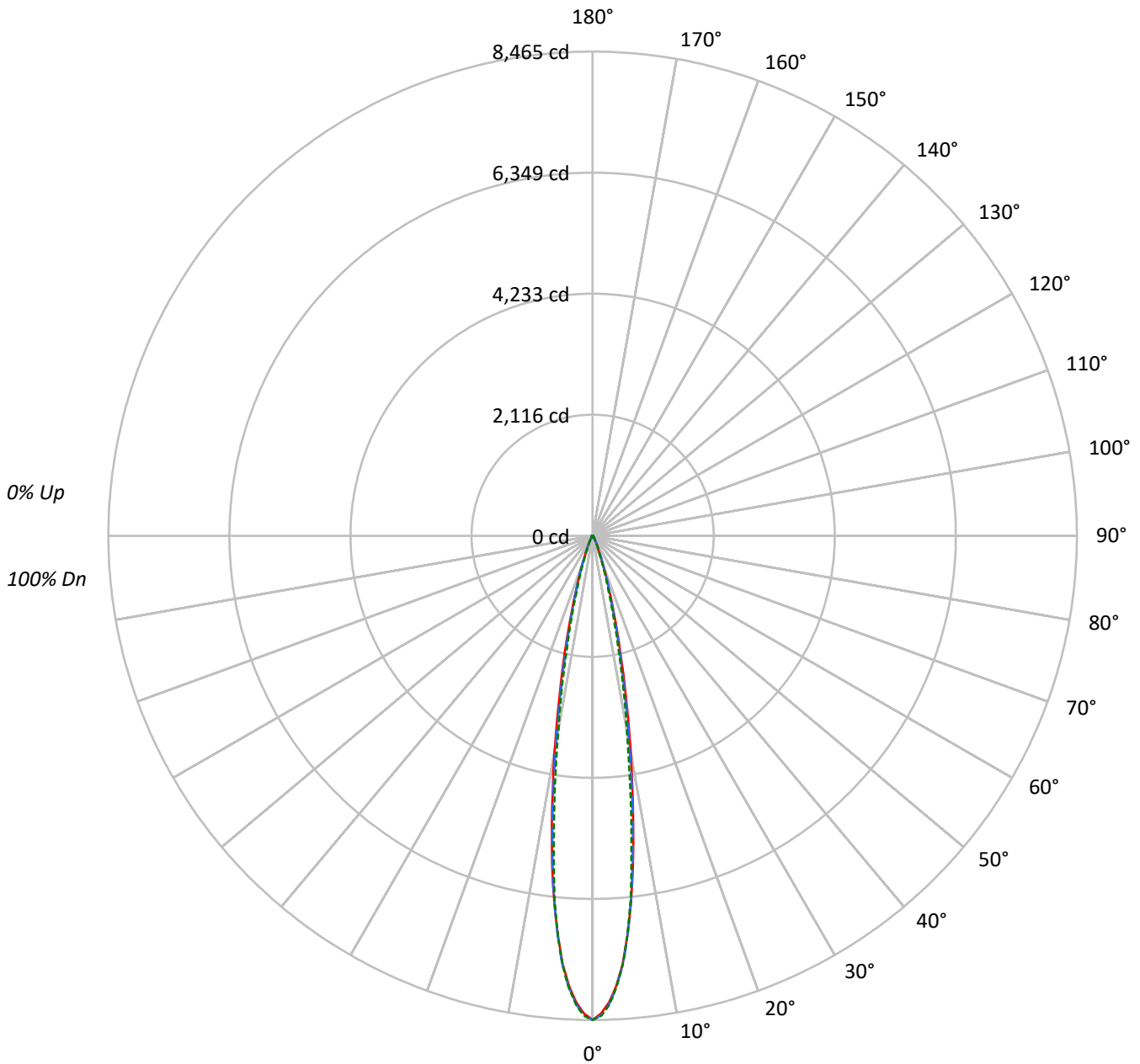
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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	96	98	96	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	96	94	92	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°	4176209	4176209	4176209
5°	3464595	3475837	3462663
10°	1917523	1848239	1721743
15°	776211	742398	659194
20°	260045	275743	223240
25°	98965	99292	94012
30°	44378	43638	42157
35°	21502	19153	15238
40°	14233	17969	12559
45°	3628	5861	5442
50°	998	1458	1996
55°	8946	7827	12300
60°	12827	10262	16676
65°	6070	15877	15176
70°	5626	4616	5626
75°	2478	6100	17346
80°	29548	40629	36935
85°	0	18114	22077



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	554.4	48.7
10°-20°	419.9	36.9
20°-30°	95.5	8.4
30°-40°	28.2	2.5
40°-50°	9.4	0.8
50°-60°	8.3	0.7
60°-70°	9.9	0.9
70°-80°	6.3	0.6
80°-90°	6.6	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°	1069.8	94.0
0°-40°	1098.0	96.4
0°-60°	1115.7	98.0
0°-90°	1138.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1138.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8465	8465	8465	8465	8465	
5°	6996	7051	7018	6927	6992	561
15°	1520	1540	1454	1317	1291	442
25°	182	195	182	180	173	95
35°	36	40	32	37	25	28
45°	5	15	8	15	8	8
55°	10	15	9	14	14	4
65°	5	11	14	13	13	5
75°	1	4	3	6	9	3
85°	0	0	3	3	4	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8464.8	8464.8	8464.8	8464.8	8464.8
1°	8355.7	8389.5	8386.2	8372.6	8396.6
2°	8163.5	8204.4	8200.5	8170.7	8213.5
3°	7881.8	7918.1	7912.3	7869.5	7916.2
4°	7505.3	7546.8	7530.6	7466.3	7526.0
5°	6995.7	7050.8	7018.4	6926.8	6991.8
6°	6430.9	6477.6	6426.3	6304.9	6368.5
7°	5798.5	5827.8	5760.2	5604.4	5561.6
8°	5108.5	5146.8	5052.6	4870.9	4824.1
9°	4448.9	4461.9	4347.6	4154.2	4095.1
10°	3827.6	3817.9	3689.3	3493.3	3436.8
11°	3238.8	3225.8	3090.1	2909.0	2927.2
12°	2703.2	2728.5	2570.8	2406.5	2409.8
13°	2263.1	2265.7	2130.0	1973.5	1964.4
14°	1852.8	1876.8	1760.6	1620.4	1594.4
15°	1519.7	1540.5	1453.5	1317.2	1290.6
16°	1216.6	1242.5	1180.2	1056.9	1021.8
17°	979.6	1012.7	971.8	868.6	828.4
18°	783.6	808.9	799.2	692.7	659.6
19°	618.7	653.7	656.3	567.4	527.8
20°	495.3	527.1	525.2	456.4	425.2
22.5°	284.3	301.2	301.9	269.4	251.2
25°	181.8	195.4	182.4	180.5	172.7
26°	157.8	168.8	154.5	154.5	147.4
27°	127.9	137.6	124.0	129.8	120.1
28°	107.8	118.2	106.5	105.2	103.9
29°	89.6	99.3	84.4	90.9	87.0
30°	77.9	85.0	76.6	86.3	74.0
32.5°	60.4	66.2	51.3	64.9	48.7
35°	35.7	39.6	31.8	37.0	25.3
37.5°	37.0	38.3	34.4	38.3	35.7
40°	22.1	22.7	27.9	27.9	19.5
42.5°	20.8	20.1	12.3	19.5	15.6
45°	5.2	14.9	8.4	14.9	7.8
47.5°	3.9	5.2	5.2	10.4	10.4
50°	1.3	5.2	1.9	3.9	2.6
52.5°	0.0	12.3	2.6	9.1	7.8
55°	10.4	14.9	9.1	13.6	14.3
57.5°	1.3	10.4	5.2	11.0	7.8
60°	13.0	17.5	10.4	18.8	16.9
62.5°	1.3	11.7	13.6	10.4	9.1
65°	5.2	11.0	13.6	13.0	13.0
67.5°	6.5	11.0	8.4	8.4	11.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	1.3	4.5	3.2	5.8	9.1
77.5°	1.3	5.2	4.5	10.4	7.8
80°	10.4	11.7	14.3	18.8	13.0
82.5°	9.1	9.1	14.3	10.4	7.8
85°	0.0	0.0	3.2	3.2	3.9
87.5°	0.0	2.6	6.5	5.2	9.1
90°	0.0	0.0	0.0	0.0	0.0



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







70°	3.9	1.3	3.2	3.2	3.9
72.5°	1.3	5.8	5.2	3.2	6.5



(END OF REPORT)