

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: P282526

Luminaire Tested: **LDA2B109050D010 EU2B10SP159050 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282526  
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: LDA2B109050D010 EU2B10SP159050 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: 950.6 lumens  
Efficiency: N/A  
Efficacy: 95.1 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

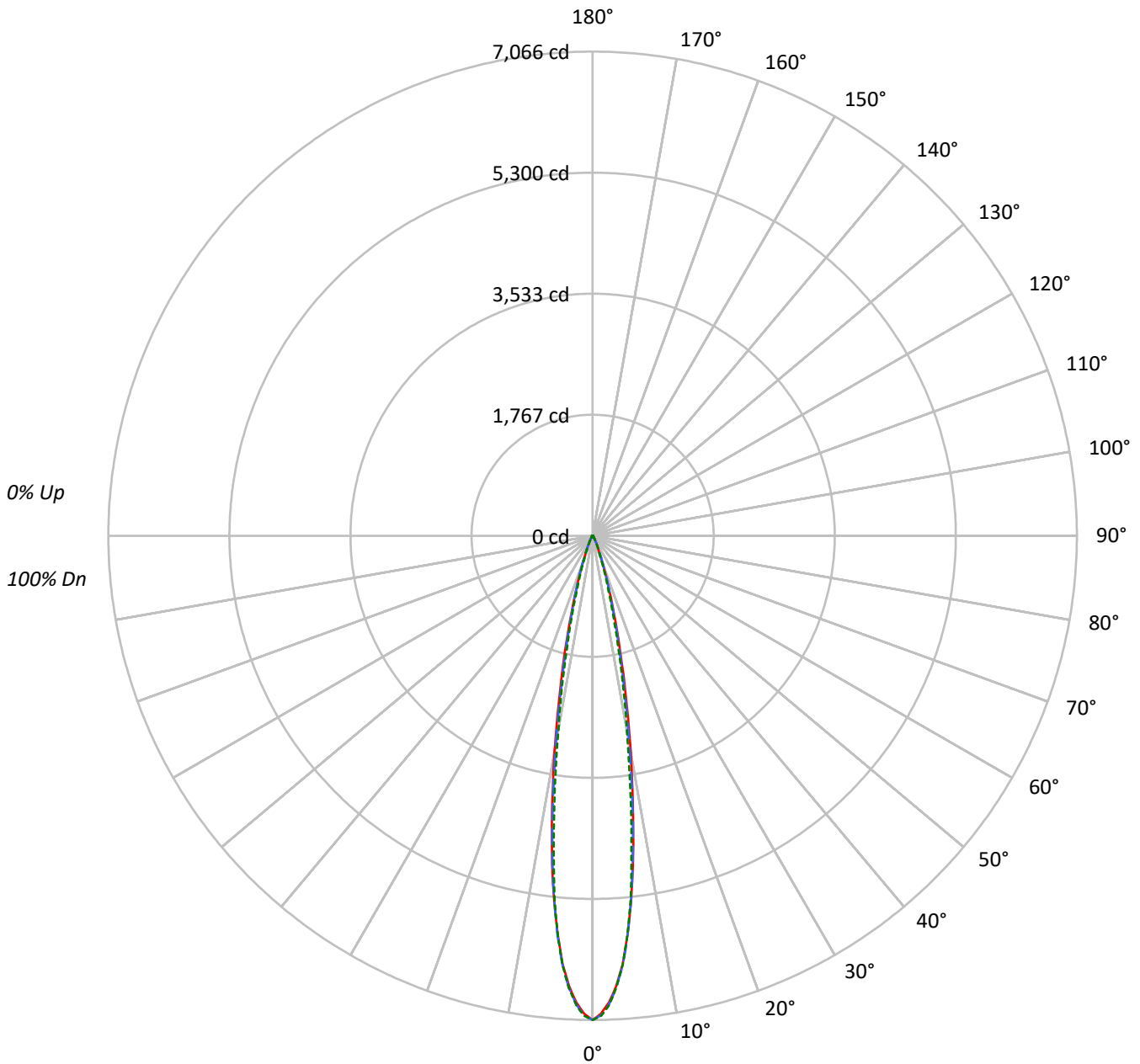
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	94	96	94	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	94	92	90	89															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	92	89	88	87	92	89	88	87															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	90	88	86	85															
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°	3486292	3486292	3486292
5°	2892239	2901648	2890654
10°	1600758	1542946	1437341
15°	648008	619763	550299
20°	217098	230171	186384
25°	82580	82907	78497
30°	37030	36403	35207
35°	17948	16021	12708
40°	11850	15006	10498
45°	3000	4884	4535
50°	844	1228	1689
55°	7483	6537	10236
60°	10657	8584	13913
65°	5020	13308	12608
70°	4760	3895	4760
75°	2097	5147	14487
80°	24718	33810	30684
85°	0	15284	18680



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	462.8	48.7
10°-20°	350.6	36.9
20°-30°	79.7	8.4
30°-40°	23.6	2.5
40°-50°	7.9	0.8
50°-60°	6.9	0.7
60°-70°	8.3	0.9
70°-80°	5.3	0.6
80°-90°	5.5	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°	893.1	94.0
0°-40°	916.6	96.4
0°-60°	931.4	98.0
0°-90°	950.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	950.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7066	7066	7066	7066	7066	
5°	5840	5886	5859	5783	5837	468
15°	1269	1286	1213	1100	1077	369
25°	152	163	152	151	144	79
35°	30	33	27	31	21	23
45°	4	12	7	12	6	6
55°	9	12	8	11	12	4
65°	4	9	11	11	11	4
75°	1	4	3	5	8	2
85°	0	0	3	3	3	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7066.4	7066.4	7066.4	7066.4	7066.4
1°	6975.4	7003.6	7000.9	6989.5	7009.5
2°	6815.0	6849.1	6845.9	6820.9	6856.7
3°	6579.8	6610.1	6605.2	6569.5	6608.5
4°	6265.4	6300.1	6286.6	6232.9	6282.8
5°	5840.0	5886.1	5859.0	5782.6	5836.8
6°	5368.5	5407.5	5364.7	5263.4	5316.5
7°	4840.7	4865.1	4808.7	4678.6	4642.9
8°	4264.6	4296.6	4218.0	4066.2	4027.2
9°	3714.0	3724.8	3629.4	3467.9	3418.6
10°	3195.3	3187.2	3079.9	2916.2	2869.1
11°	2703.8	2692.9	2579.7	2428.5	2443.6
12°	2256.7	2277.8	2146.1	2009.0	2011.7
13°	1889.2	1891.4	1778.1	1647.5	1639.9
14°	1546.7	1566.8	1469.8	1352.7	1331.0
15°	1268.7	1286.0	1213.4	1099.6	1077.4
16°	1015.6	1037.3	985.3	882.3	853.0
17°	817.8	845.4	811.3	725.1	691.5
18°	654.1	675.3	667.1	578.3	550.6
19°	516.5	545.7	547.9	473.7	440.6
20°	413.5	440.1	438.4	381.0	355.0
22.5°	237.4	251.5	252.0	224.9	209.7
25°	151.7	163.1	152.3	150.7	144.2
26°	131.7	140.9	129.0	129.0	123.0
27°	106.8	114.9	103.5	108.4	100.3
28°	90.0	98.6	88.9	87.8	86.7
29°	74.8	82.9	70.5	75.9	72.6
30°	65.0	71.0	63.9	72.1	61.8
32.5°	50.4	55.3	42.8	54.2	40.6
35°	29.8	33.1	26.6	30.9	21.1
37.5°	30.9	32.0	28.7	32.0	29.8
40°	18.4	19.0	23.3	23.3	16.3
42.5°	17.3	16.8	10.3	16.3	13.0
45°	4.3	12.5	7.0	12.5	6.5
47.5°	3.3	4.3	4.3	8.7	8.7
50°	1.1	4.3	1.6	3.3	2.2
52.5°	0.0	10.3	2.2	7.6	6.5
55°	8.7	12.5	7.6	11.4	11.9
57.5°	1.1	8.7	4.3	9.2	6.5
60°	10.8	14.6	8.7	15.7	14.1
62.5°	1.1	9.8	11.4	8.7	7.6
65°	4.3	9.2	11.4	10.8	10.8
67.5°	5.4	9.2	7.0	7.0	9.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	1.1	3.8	2.7	4.9	7.6
77.5°	1.1	4.3	3.8	8.7	6.5
80°	8.7	9.8	11.9	15.7	10.8
82.5°	7.6	7.6	11.9	8.7	6.5
85°	0.0	0.0	2.7	2.7	3.3
87.5°	0.0	2.2	5.4	4.3	7.6
90°	0.0	0.0	0.0	0.0	0.0



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







70°	3.3	1.1	2.7	2.7	3.3
72.5°	1.1	4.9	4.3	2.7	5.4



(END OF REPORT)