

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: P282394

Luminaire Tested: **LDA2B208050D010 EU2B20NFL258050 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P282394  
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: LDA2B208050D010 EU2B20NFL258050 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1900.9 lumens  
Efficiency: N/A  
Efficacy: 92.3 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

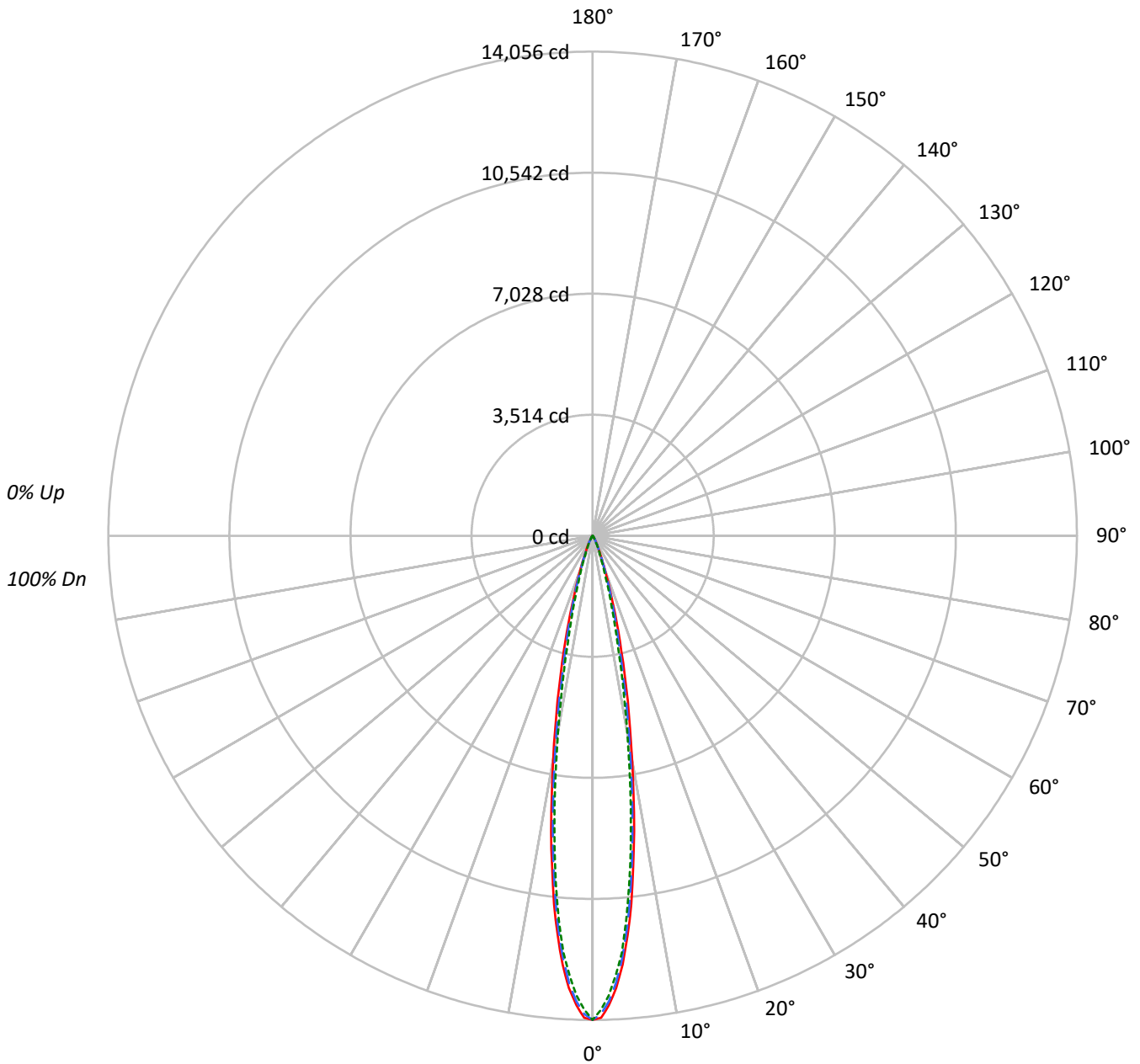
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	6934545	6934545	6934545
5°	5770264	5664479	5550127
10°	3305167	3101522	2894570
15°	1470035	1305619	1094111
20°	533268	501399	397286
25°	204790	191181	164616
30°	88301	82149	72863
35°	41798	41798	34631
40°	20931	21640	17453
45°	12071	11373	10605
50°	8289	7522	7522
55°	6537	4645	5591
60°	5328	3256	4243
65°	3852	2568	3852
70°	3173	1587	3173
75°	2097	2097	2097
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	914.2	48.1
10°-20°	739.8	38.9
20°-30°	178.4	9.4
30°-40°	45.5	2.4
40°-50°	13.6	0.7
50°-60°	5.8	0.3
60°-70°	2.8	0.1
70°-80°	0.9	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°	1832.4	96.4
0°-40°	1877.9	98.8
0°-60°	1897.2	99.8
0°-90°	1900.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1900.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	14056	14056	14056	14056	14056	
5°	11651	11544	11438	11338	11207	942
15°	2878	2810	2556	2302	2142	821
25°	376	378	351	319	302	194
35°	69	70	69	63	58	48
45°	17	17	16	15	15	15
55°	8	6	5	5	6	7
65°	3	3	2	2	3	4
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	14055.7	14055.7	14055.7	14055.7	14055.7
1°	13992.8	13895.3	13883.3	13944.0	13765.2
2°	13635.1	13565.7	13525.6	13561.4	13358.7
3°	13144.0	13076.8	13004.2	13005.3	12778.7
4°	12475.2	12422.0	12299.6	12262.7	12131.5
5°	11651.3	11544.0	11437.7	11338.0	11206.8
6°	10740.7	10601.9	10450.2	10301.7	10167.2
7°	9669.7	9577.5	9377.0	9174.3	9060.4
8°	8662.6	8514.1	8279.9	8026.3	7929.8
9°	7579.6	7473.4	7204.5	6909.7	6813.2
10°	6597.5	6486.9	6191.0	5862.5	5777.9
11°	5676.0	5572.0	5264.1	4919.4	4829.4
12°	4896.6	4749.2	4395.8	4096.6	4008.8
13°	4120.4	4019.6	3684.7	3388.7	3218.5
14°	3460.3	3376.8	3073.3	2813.1	2633.1
15°	2878.1	2809.8	2556.2	2302.5	2142.1
16°	2361.0	2318.8	2118.2	1873.2	1742.1
17°	1915.5	1876.5	1748.6	1523.1	1412.5
18°	1546.9	1541.5	1435.3	1240.1	1141.5
19°	1272.7	1270.5	1172.9	1009.2	927.9
20°	1015.7	1029.8	955.0	811.9	756.7
21°	828.2	835.8	776.2	667.8	617.9
22°	674.3	679.7	640.7	551.8	524.7
23°	552.9	556.1	523.6	457.5	433.6
24°	455.3	457.5	428.2	381.6	361.0
25°	376.2	378.3	351.2	318.7	302.4
26°	312.2	314.4	290.5	267.8	251.5
27°	259.1	263.4	239.6	225.5	208.1
28°	221.1	222.2	200.5	191.9	175.6
29°	181.0	187.5	169.1	161.5	149.6
30°	155.0	158.3	144.2	138.8	127.9
32.5°	103.0	105.2	98.6	94.3	85.6
35°	69.4	70.5	69.4	62.9	57.5
37.5°	47.7	47.7	48.8	41.2	39.0
40°	32.5	32.5	33.6	28.2	27.1
42.5°	23.8	23.8	22.8	19.5	19.5
45°	17.3	17.3	16.3	15.2	15.2
47.5°	14.1	13.0	11.9	11.9	11.9
50°	10.8	10.8	9.8	8.7	9.8
52.5°	8.7	8.7	7.6	7.6	7.6
55°	7.6	6.5	5.4	5.4	6.5
57.5°	5.4	5.4	4.3	4.3	5.4
60°	5.4	4.3	3.3	4.3	4.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	3.3	2.2	2.2	2.2	2.2
70°	2.2	2.2	1.1	1.1	2.2
72.5°	1.1	1.1	1.1	1.1	1.1
75°	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	1.1	0.0	0.0	1.1
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°	4.3	3.3	3.3	3.3	3.3
65°	3.3	3.3	2.2	2.2	3.3



(END OF REPORT)