

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: P282370

Luminaire Tested: **LDA2B208027D010 EU2B20NFL258027 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282370
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: LDA2B208027D010 EU2B20NFL258027 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: 1783.6 lumens
Efficiency: N/A
Efficacy: 86.6 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

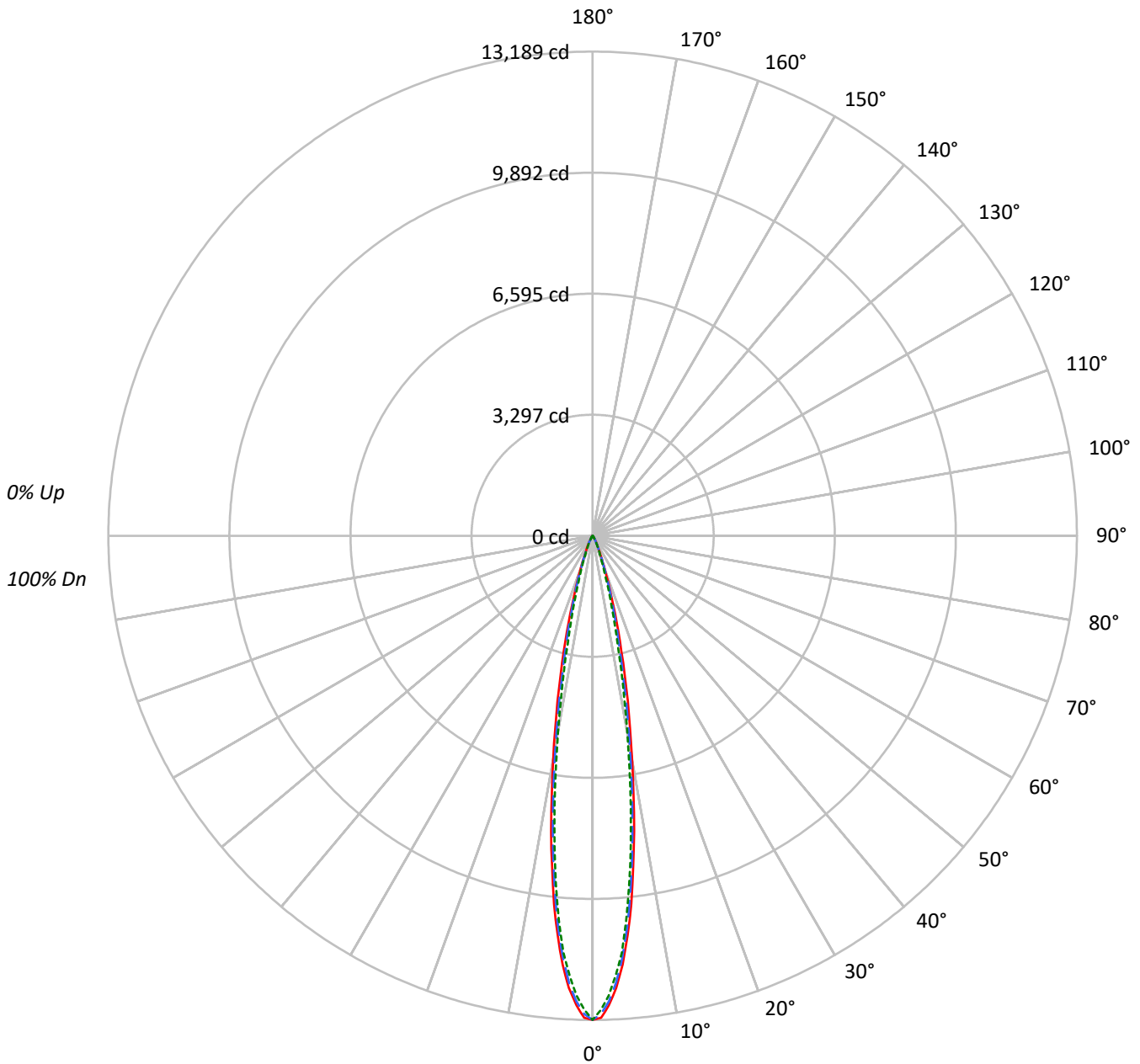
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6506751	6506751	6506751
5°	5414281	5315033	5207763
10°	3101271	2910150	2716023
15°	1379374	1225072	1026588
20°	500401	470475	372768
25°	192161	179423	154491
30°	82889	77078	68362
35°	39209	39209	32463
40°	19643	20287	16359
45°	11373	10675	9908
50°	7829	7061	7061
55°	6107	4387	5247
60°	5032	3059	4046
65°	3619	2335	3619
70°	2885	1442	2885
75°	1906	1906	1906
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	857.8	48.1
10°-20°	694.2	38.9
20°-30°	167.4	9.4
30°-40°	42.7	2.4
40°-50°	12.7	0.7
50°-60°	5.4	0.3
60°-70°	2.6	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°	1719.3	96.4
0°-40°	1762.0	98.8
0°-60°	1780.2	99.8
0°-90°	1783.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1783.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13189	13189	13189	13189	13189	
5°	10932	10832	10732	10638	10516	884
15°	2701	2636	2398	2160	2010	770
25°	353	355	330	299	284	182
35°	65	66	65	59	54	45
45°	16	16	15	14	14	14
55°	7	6	5	5	6	6
65°	3	3	2	2	3	3
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°	13188.6	13188.6	13188.6	13188.6	13188.6
1°	13129.6	13038.0	13026.8	13083.8	12916.0
2°	12793.9	12728.8	12691.2	12724.7	12534.5
3°	12333.1	12270.1	12201.9	12202.9	11990.3
4°	11705.5	11655.7	11540.8	11506.2	11383.1
5°	10932.5	10831.8	10732.1	10638.5	10515.5
6°	10078.1	9947.9	9805.5	9666.1	9540.0
7°	9073.1	8986.7	8798.5	8608.3	8501.5
8°	8128.2	7988.8	7769.1	7531.1	7440.6
9°	7112.0	7012.3	6760.1	6483.4	6392.9
10°	6190.5	6086.7	5809.0	5500.8	5421.5
11°	5325.9	5228.2	4939.4	4615.9	4531.5
12°	4594.5	4456.2	4124.6	3843.9	3761.5
13°	3866.2	3771.6	3457.3	3179.7	3020.0
14°	3246.8	3168.5	2883.7	2639.5	2470.7
15°	2700.6	2636.5	2398.5	2160.5	2009.9
16°	2215.4	2175.7	1987.5	1757.7	1634.6
17°	1797.3	1760.7	1640.7	1429.1	1325.4
18°	1451.5	1446.4	1346.7	1163.6	1071.1
19°	1194.2	1192.1	1100.6	947.0	870.7
20°	953.1	966.3	896.1	761.9	710.0
21°	777.1	784.2	728.3	626.6	579.8
22°	632.7	637.8	601.1	517.7	492.3
23°	518.8	521.8	491.3	429.2	406.9
24°	427.2	429.2	401.8	358.0	338.7
25°	353.0	355.0	329.6	299.0	283.8
26°	292.9	295.0	272.6	251.2	236.0
27°	243.1	247.2	224.8	211.6	195.3
28°	207.5	208.5	188.2	180.0	164.8
29°	169.9	176.0	158.7	151.6	140.4
30°	145.5	148.5	135.3	130.2	120.0
32.5°	96.6	98.7	92.6	88.5	80.4
35°	65.1	66.1	65.1	59.0	53.9
37.5°	44.8	44.8	45.8	38.7	36.6
40°	30.5	30.5	31.5	26.4	25.4
42.5°	22.4	22.4	21.4	18.3	18.3
45°	16.3	16.3	15.3	14.2	14.2
47.5°	13.2	12.2	11.2	11.2	11.2
50°	10.2	10.2	9.2	8.1	9.2
52.5°	8.1	8.1	7.1	7.1	7.1
55°	7.1	6.1	5.1	5.1	6.1
57.5°	5.1	5.1	4.1	4.1	5.1
60°	5.1	4.1	3.1	4.1	4.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	3.1	2.0	2.0	2.0	2.0
70°	2.0	2.0	1.0	1.0	2.0
72.5°	1.0	1.0	1.0	1.0	1.0
75°	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	0.0	0.0	1.0
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°	4.1	3.1	3.1	3.1	3.1
65°	3.1	3.1	2.0	2.0	3.1



(END OF REPORT)