

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: P282382

Luminaire Tested: **LDA2B208035D010 EU2B20NFL258035 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282382
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: LDA2B208035D010 EU2B20NFL258035 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: 1838.1 lumens
Efficiency: N/A
Efficacy: 89.2 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

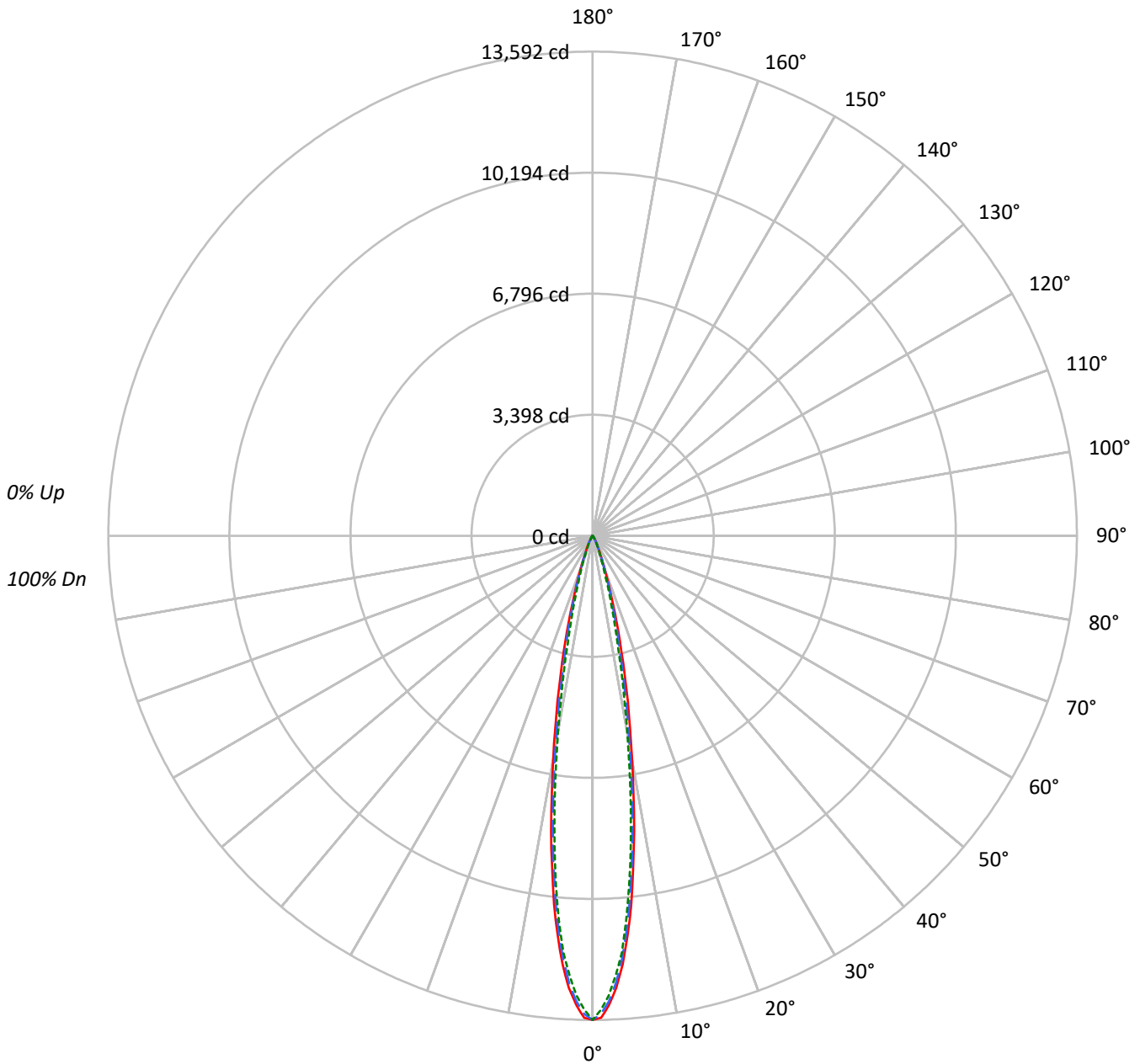
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6705773	6705773	6705773
5°	5579891	5477623	5367034
10°	3196106	2999173	2799085
15°	1421563	1262511	1058000
20°	515679	484860	384161
25°	198040	184866	159227
30°	85396	79414	70470
35°	40413	40413	33487
40°	20223	20931	16874
45°	11722	10954	10256
50°	8059	7215	7215
55°	6279	4473	5419
60°	5131	3059	4144
65°	3619	2452	3619
70°	3029	1442	3029
75°	1906	1906	1906
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	884.0	48.1
10°-20°	715.4	38.9
20°-30°	172.5	9.4
30°-40°	44.0	2.4
40°-50°	13.1	0.7
50°-60°	5.6	0.3
60°-70°	2.7	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°	1771.9	96.4
0°-40°	1815.9	98.8
0°-60°	1834.6	99.8
0°-90°	1838.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1838.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13592	13592	13592	13592	13592	
5°	11267	11163	11060	10964	10837	911
15°	2783	2717	2472	2226	2071	794
25°	364	366	340	308	292	188
35°	67	68	67	61	56	46
45°	17	17	16	15	15	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°	13592.0	13592.0	13592.0	13592.0	13592.0
1°	13531.2	13436.9	13425.3	13484.0	13311.1
2°	13185.3	13118.2	13079.4	13114.0	12918.0
3°	12710.4	12645.4	12575.2	12576.2	12357.1
4°	12063.6	12012.3	11893.8	11858.2	11731.3
5°	11266.9	11163.1	11060.4	10964.0	10837.1
6°	10386.4	10252.2	10105.4	9961.8	9831.8
7°	9350.7	9261.6	9067.6	8871.6	8761.5
8°	8376.8	8233.2	8006.8	7761.5	7668.2
9°	7329.6	7226.8	6966.9	6681.7	6588.4
10°	6379.8	6272.9	5986.7	5669.1	5587.3
11°	5488.8	5388.2	5090.5	4757.1	4670.1
12°	4735.1	4592.5	4250.8	3961.5	3876.5
13°	3984.5	3887.0	3563.1	3276.9	3112.3
14°	3346.1	3265.4	2971.9	2720.3	2546.3
15°	2783.2	2717.1	2471.8	2226.5	2071.4
16°	2283.2	2242.3	2048.3	1811.4	1684.6
17°	1852.3	1814.6	1690.9	1472.8	1365.9
18°	1495.9	1490.7	1387.9	1199.2	1103.8
19°	1230.7	1228.6	1134.2	975.9	897.3
20°	982.2	995.9	923.5	785.2	731.7
21°	800.9	808.2	750.6	645.7	597.5
22°	652.0	657.3	619.5	533.6	507.4
23°	534.6	537.8	506.3	442.4	419.3
24°	440.3	442.4	414.1	369.0	349.1
25°	363.8	365.9	339.6	308.2	292.5
26°	301.9	304.0	280.9	258.9	243.2
27°	250.5	254.7	231.7	218.0	201.3
28°	213.8	214.9	193.9	185.5	169.8
29°	175.1	181.4	163.5	156.2	144.7
30°	149.9	153.0	139.4	134.2	123.7
32.5°	99.6	101.7	95.4	91.2	82.8
35°	67.1	68.1	67.1	60.8	55.6
37.5°	46.1	46.1	47.2	39.8	37.7
40°	31.4	31.4	32.5	27.3	26.2
42.5°	23.1	23.1	22.0	18.9	18.9
45°	16.8	16.8	15.7	14.7	14.7
47.5°	13.6	12.6	11.5	11.5	11.5
50°	10.5	10.5	9.4	8.4	9.4
52.5°	8.4	8.4	7.3	7.3	7.3
55°	7.3	6.3	5.2	5.2	6.3
57.5°	5.2	5.2	4.2	4.2	5.2
60°	5.2	4.2	3.1	4.2	4.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	3.1	2.1	2.1	2.1	2.1
70°	2.1	2.1	1.0	1.0	2.1
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°	4.2	3.1	3.1	3.1	3.1
65°	3.1	3.1	2.1	2.1	3.1



(END OF REPORT)