

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: P282784

Luminaire Tested: **LDA2B209730D010 EU2B20NFL259730 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282784
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: LDA2B209730D010 EU2B20NFL259730 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1257.1 lumens
Efficiency: N/A
Efficacy: 61.0 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

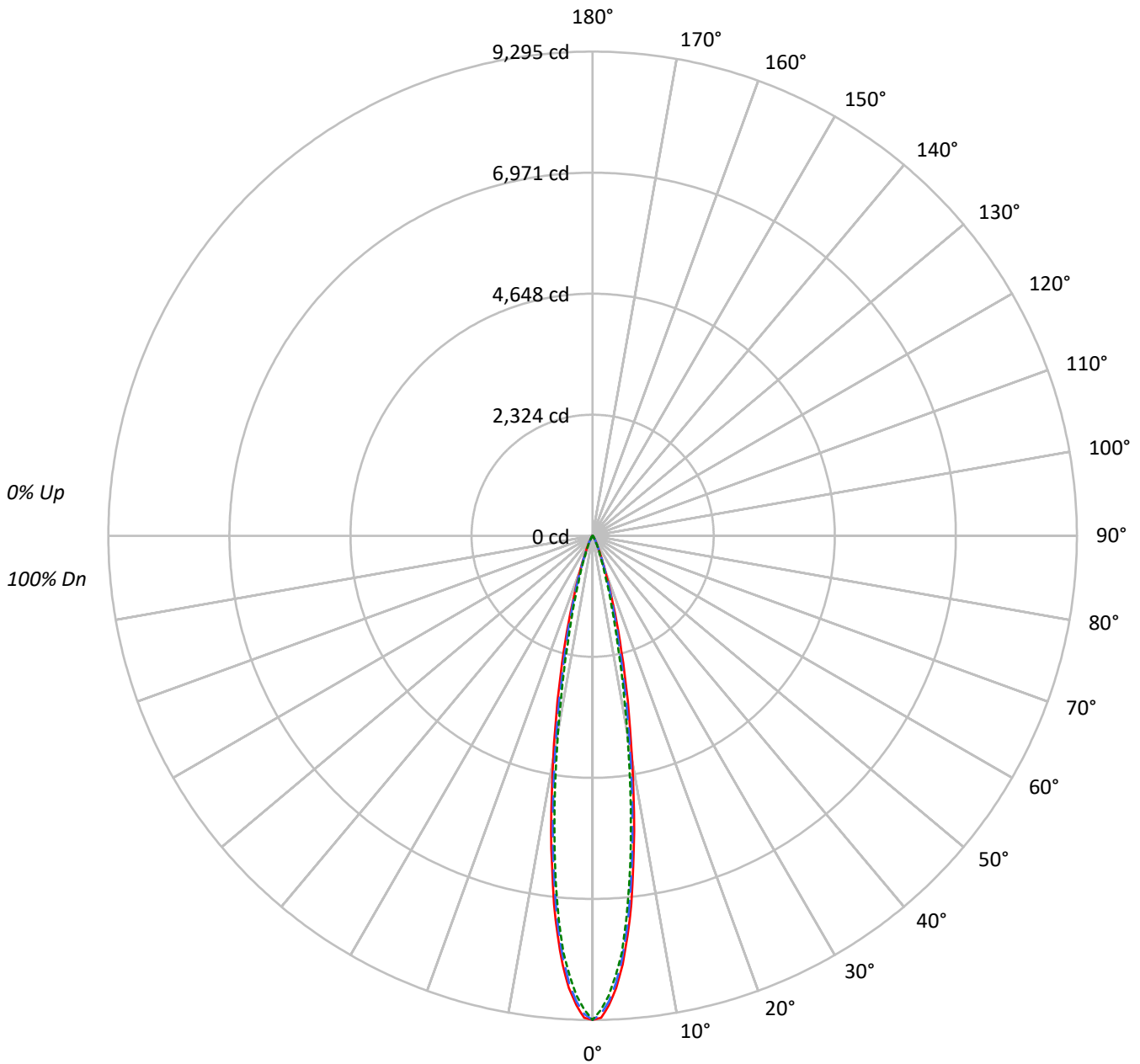
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4585748	4585748	4585748
5°	3815824	3745845	3670221
10°	2185644	2050982	1914167
15°	972140	863398	723500
20°	352659	331606	262722
25°	135438	126456	108873
30°	58393	54291	48195
35°	27645	27645	22887
40°	13847	14298	11528
45°	8024	7535	6977
50°	5526	4989	4989
55°	4301	3097	3699
60°	3552	2171	2861
65°	2568	1634	2568
70°	2019	1010	2019
75°	1334	1334	1334
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	604.5	48.1
10°-20°	489.2	38.9
20°-30°	118.0	9.4
30°-40°	30.1	2.4
40°-50°	9.0	0.7
50°-60°	3.8	0.3
60°-70°	1.9	0.1
70°-80°	0.6	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°	1211.7	96.4
0°-40°	1241.8	98.8
0°-60°	1254.6	99.8
0°-90°	1257.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1257.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9295	9295	9295	9295	9295	
5°	7705	7634	7564	7498	7411	623
15°	1903	1858	1690	1523	1416	543
25°	249	250	232	211	200	128
35°	46	47	46	42	38	32
45°	12	12	11	10	10	10
55°	5	4	4	4	4	4
65°	2	2	1	1	2	2
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°	9294.9	9294.9	9294.9	9294.9	9294.9
1°	9253.3	9188.8	9180.9	9221.0	9102.7
2°	9016.7	8970.8	8944.3	8968.0	8833.9
3°	8692.0	8647.5	8599.5	8600.2	8450.4
4°	8249.7	8214.6	8133.5	8109.2	8022.4
5°	7704.9	7633.9	7563.6	7497.7	7410.9
6°	7102.7	7010.9	6910.6	6812.4	6723.5
7°	6394.4	6333.5	6200.9	6066.8	5991.6
8°	5728.5	5630.3	5475.4	5307.7	5243.9
9°	5012.3	4942.1	4764.3	4569.3	4505.5
10°	4362.8	4289.7	4094.0	3876.8	3820.9
11°	3753.5	3684.7	3481.1	3253.1	3193.6
12°	3238.1	3140.6	2906.9	2709.0	2651.0
13°	2724.8	2658.1	2436.6	2240.9	2128.4
14°	2288.2	2233.0	2032.3	1860.3	1741.3
15°	1903.3	1858.1	1690.4	1522.6	1416.5
16°	1561.3	1533.4	1400.8	1238.7	1152.0
17°	1266.7	1240.9	1156.3	1007.2	934.1
18°	1023.0	1019.4	949.1	820.1	754.9
19°	841.6	840.2	775.6	667.4	613.6
20°	671.7	681.0	631.6	536.9	500.4
21°	547.7	552.7	513.3	441.6	408.6
22°	445.9	449.5	423.7	364.9	347.0
23°	365.6	367.8	346.2	302.5	286.7
24°	301.1	302.5	283.2	252.3	238.7
25°	248.8	250.2	232.3	210.8	200.0
26°	206.5	207.9	192.1	177.1	166.3
27°	171.3	174.2	158.4	149.1	137.6
28°	146.2	147.0	132.6	126.9	116.1
29°	119.7	124.0	111.8	106.8	98.9
30°	102.5	104.7	95.3	91.8	84.6
32.5°	68.1	69.5	65.2	62.4	56.6
35°	45.9	46.6	45.9	41.6	38.0
37.5°	31.5	31.5	32.3	27.2	25.8
40°	21.5	21.5	22.2	18.6	17.9
42.5°	15.8	15.8	15.1	12.9	12.9
45°	11.5	11.5	10.8	10.0	10.0
47.5°	9.3	8.6	7.9	7.9	7.9
50°	7.2	7.2	6.5	5.7	6.5
52.5°	5.7	5.7	5.0	5.0	5.0
55°	5.0	4.3	3.6	3.6	4.3
57.5°	3.6	3.6	2.9	2.9	3.6
60°	3.6	2.9	2.2	2.9	2.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.2	1.4	1.4	1.4	1.4
70°	1.4	1.4	0.7	0.7	1.4
72.5°	0.7	0.7	0.7	0.7	0.7
75°	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.0	0.0	0.7
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°	2.9	2.2	2.2	2.2	2.2
65°	2.2	2.2	1.4	1.4	2.2



(END OF REPORT)