

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: P282544

Luminaire Tested: **LDA2B158035D010 EU2B15SP158035 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282544
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: LDA2B158035D010 EU2B15SP158035 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 1500 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: 1455.6 lumens
Efficiency: N/A
Efficacy: 103.2 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

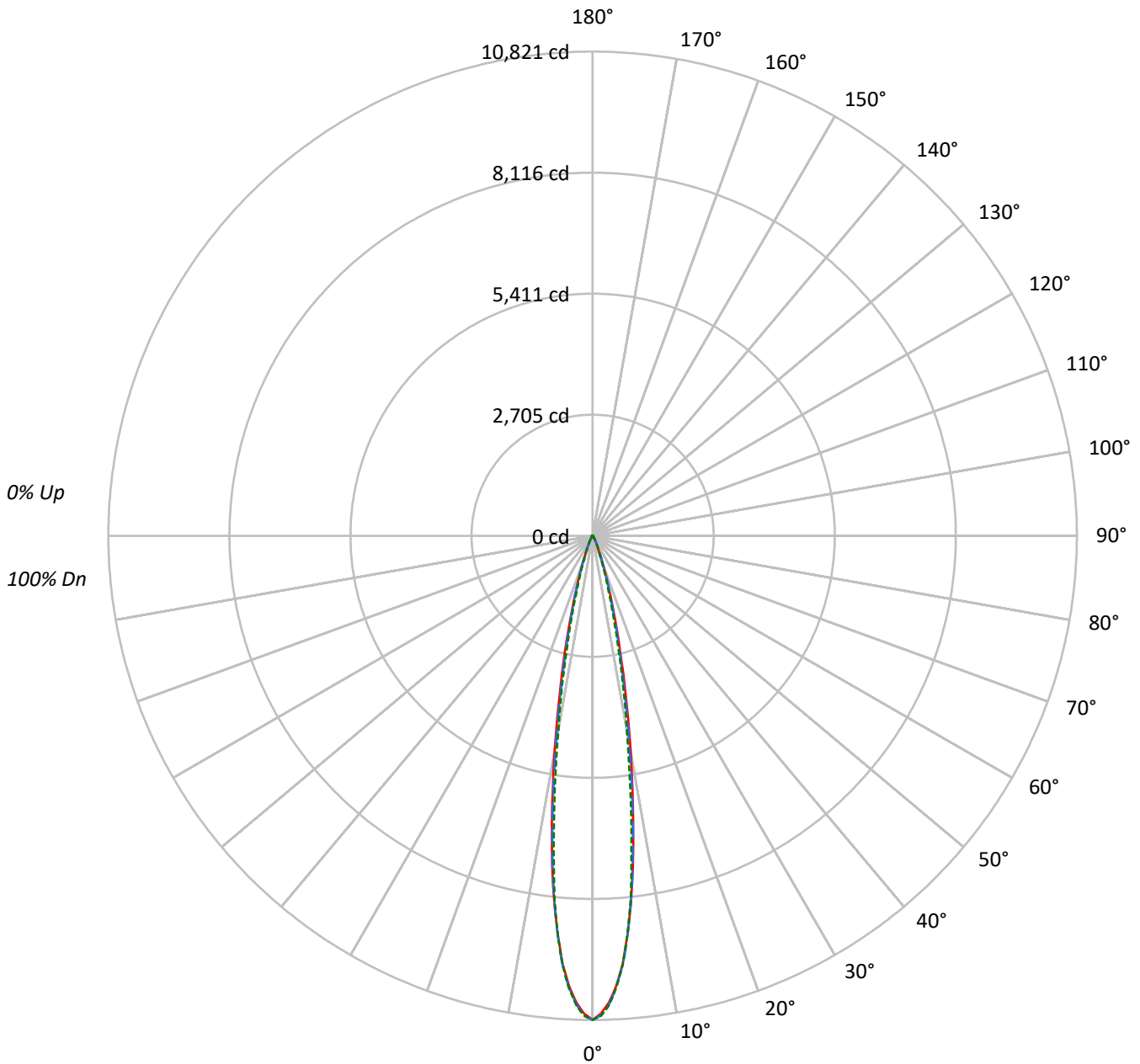
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									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	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	100	100	100	100	100	100	100	100	100	100															
	1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	96	96	96	96	96	96	96	96	96															
	2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	94	94	94	94	94	94	94	94	94	94															
	3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	91	91	91	91	91	91	91	91	91	91	91															
	4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	89	89	89	89	89	89	89	89	89	89	89															
	5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	87	87	87	87	87	87	87	87	87	87	87															
	6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	85	85	85	85	85	85	85	85	85	85	85															
	7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	83	83	83	83	83	83	83	83	83	83	83															
	8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	81	81	81	81	81	81	81	81	81	81	81															
	9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	80	80	80	80	80	80	80	80	80	80	80															
	10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	78	78	78	78	78	78	78	78	78	78	78															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5338471	5338471	5338471
5°	4428790	4443202	4426314
10°	2451209	2362637	2200923
15°	992265	949054	842661
20°	332446	352502	285403
25°	126510	126946	120141
30°	56741	55772	53892
35°	27464	24513	19514
40°	18162	22992	16037
45°	4605	7535	6977
50°	1305	1919	2533
55°	11440	9978	15741
60°	16380	13123	21313
65°	7705	20313	19379
70°	7212	5914	7212
75°	3241	7815	22112
80°	37787	51993	47163
85°	0	23209	28303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	708.7	48.7
10°-20°	536.8	36.9
20°-30°	122.0	8.4
30°-40°	36.1	2.5
40°-50°	12.0	0.8
50°-60°	10.6	0.7
60°-70°	12.7	0.9
70°-80°	8.1	0.6
80°-90°	8.5	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°	1367.5	94.0
0°-40°	1403.6	96.4
0°-60°	1426.2	98.0
0°-90°	1455.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1455.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10821	10821	10821	10821	10821	
5°	8943	9013	8972	8855	8938	717
15°	1943	1969	1858	1684	1650	565
25°	232	250	233	231	221	122
35°	46	51	41	47	32	36
45°	7	19	11	19	10	10
55°	13	19	12	17	18	6
65°	7	14	17	17	17	7
75°	2	6	4	8	12	4
85°	0	0	4	4	5	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10820.6	10820.6	10820.6	10820.6	10820.6
1°	10681.2	10724.3	10720.2	10702.7	10733.5
2°	10435.5	10487.8	10482.8	10444.7	10499.4
3°	10075.4	10121.8	10114.4	10059.6	10119.4
4°	9594.1	9647.2	9626.4	9544.3	9620.6
5°	8942.6	9013.1	8971.7	8854.6	8937.6
6°	8220.6	8280.4	8214.8	8059.6	8141.0
7°	7412.3	7449.7	7363.4	7164.2	7109.4
8°	6530.2	6579.2	6458.8	6226.5	6166.7
9°	5687.1	5703.7	5557.6	5310.3	5234.8
10°	4892.9	4880.4	4716.1	4465.5	4393.3
11°	4140.2	4123.6	3950.1	3718.6	3741.9
12°	3455.6	3487.9	3286.3	3076.3	3080.5
13°	2892.9	2896.2	2722.8	2522.8	2511.2
14°	2368.4	2399.1	2250.6	2071.3	2038.1
15°	1942.7	1969.3	1858.1	1683.8	1649.8
16°	1555.2	1588.4	1508.7	1351.0	1306.2
17°	1252.3	1294.6	1242.3	1110.4	1058.9
18°	1001.6	1034.0	1021.6	885.5	843.1
19°	790.9	835.7	839.0	725.3	674.7
20°	633.2	673.8	671.4	583.4	543.6
22.5°	363.5	385.1	385.9	344.4	321.2
25°	232.4	249.8	233.2	230.7	220.7
26°	201.7	215.8	197.5	197.5	188.4
27°	163.5	175.9	158.5	166.0	153.5
28°	137.8	151.0	136.1	134.4	132.8
29°	114.5	127.0	107.9	116.2	111.2
30°	99.6	108.7	97.9	110.4	94.6
32.5°	77.2	84.6	65.6	83.0	62.2
35°	45.6	50.6	40.7	47.3	32.4
37.5°	47.3	49.0	44.0	49.0	45.6
40°	28.2	29.0	35.7	35.7	24.9
42.5°	26.6	25.7	15.8	24.9	19.9
45°	6.6	19.1	10.8	19.1	10.0
47.5°	5.0	6.6	6.6	13.3	13.3
50°	1.7	6.6	2.5	5.0	3.3
52.5°	0.0	15.8	3.3	11.6	10.0
55°	13.3	19.1	11.6	17.4	18.3
57.5°	1.7	13.3	6.6	14.1	10.0
60°	16.6	22.4	13.3	24.1	21.6
62.5°	1.7	14.9	17.4	13.3	11.6
65°	6.6	14.1	17.4	16.6	16.6
67.5°	8.3	14.1	10.8	10.8	14.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.7	5.8	4.1	7.5	11.6
77.5°	1.7	6.6	5.8	13.3	10.0
80°	13.3	14.9	18.3	24.1	16.6
82.5°	11.6	11.6	18.3	13.3	10.0
85°	0.0	0.0	4.1	4.1	5.0
87.5°	0.0	3.3	8.3	6.6	11.6
90°	0.0	0.0	0.0	0.0	0.0



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







70°	5.0	1.7	4.1	4.1	5.0
72.5°	1.7	7.5	6.6	4.1	8.3



(END OF REPORT)