

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: P282499

Luminaire Tested: **LDA2B108030D010 EU2B10SP158030 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282499
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: LDA2B108030D010 EU2B10SP158030 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 1000 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: 1081.9 lumens
Efficiency: N/A
Efficacy: 108.2 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

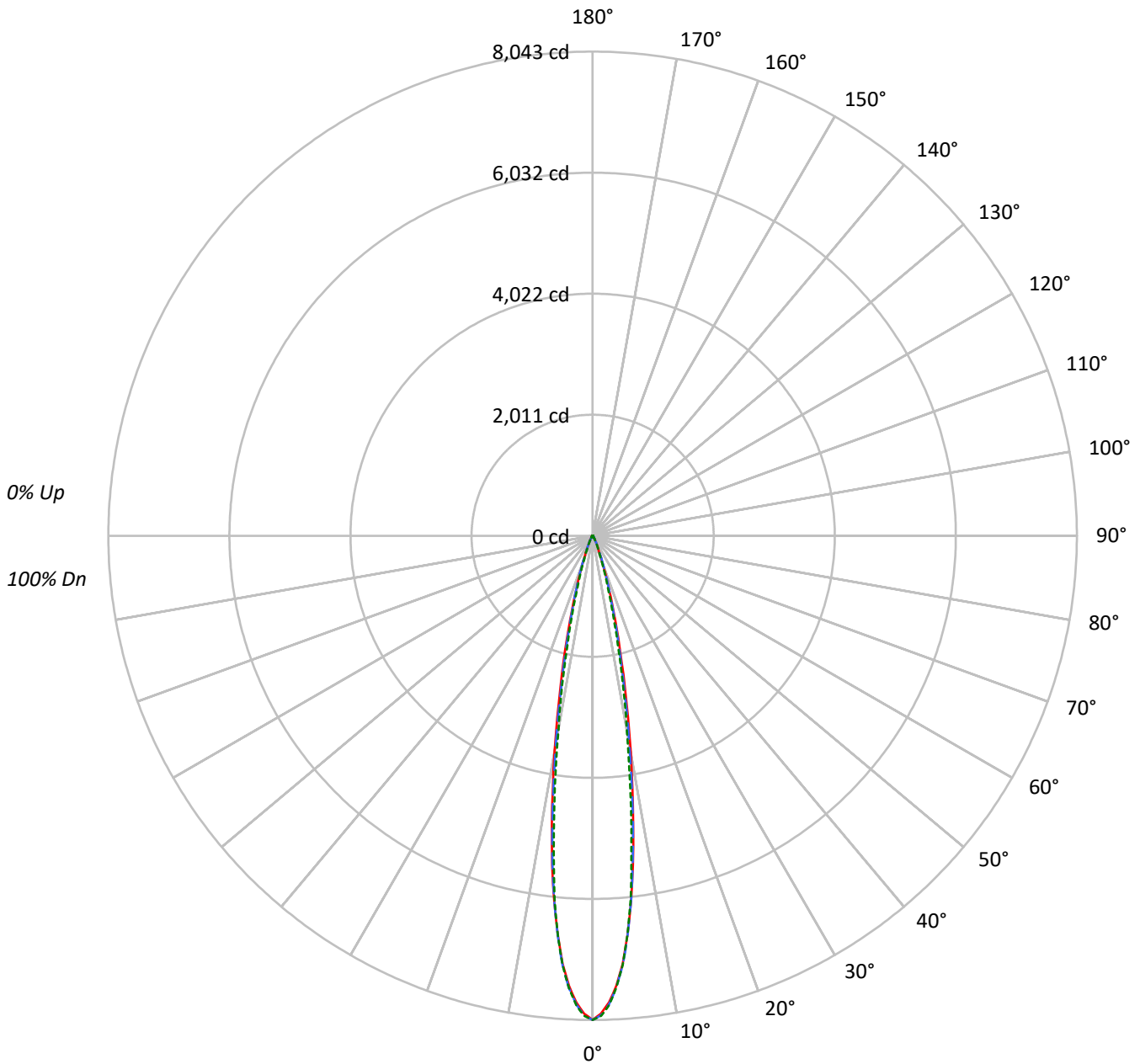
Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3968060	3968060	3968060
5°	3291902	3302600	3290070
10°	1821988	1756160	1635926
15°	737546	705419	626352
20°	247077	261987	212110
25°	94012	94338	89330
30°	42157	41473	40049
35°	20417	18189	14515
40°	13525	17067	11915
45°	3419	5582	5163
50°	921	1458	1919
55°	8515	7397	11698
60°	12137	9769	15788
65°	5720	15176	14359
70°	5337	4472	5337
75°	2287	5909	16393
80°	28127	38640	34946
85°	0	17548	20945



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	526.8	48.7
10°-20°	399.0	36.9
20°-30°	90.7	8.4
30°-40°	26.8	2.5
40°-50°	8.9	0.8
50°-60°	7.9	0.7
60°-70°	9.5	0.9
70°-80°	6.0	0.6
80°-90°	6.3	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°	1016.5	94.0
0°-40°	1043.3	96.4
0°-60°	1060.1	98.0
0°-90°	1081.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1081.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8043	8043	8043	8043	8043	
5°	6647	6699	6669	6582	6643	533
15°	1444	1464	1381	1252	1226	420
25°	173	186	173	172	164	90
35°	34	38	30	35	24	27
45°	5	14	8	14	7	7
55°	10	14	9	13	14	4
65°	5	10	13	12	12	5
75°	1	4	3	6	9	3
85°	0	0	3	3	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8042.9	8042.9	8042.9	8042.9	8042.9
1°	7939.3	7971.4	7968.3	7955.3	7978.1
2°	7756.7	7795.6	7791.9	7763.5	7804.2
3°	7489.0	7523.5	7518.0	7477.3	7521.7
4°	7131.2	7170.7	7155.3	7094.2	7151.0
5°	6647.0	6699.4	6668.6	6581.6	6643.3
6°	6110.4	6154.8	6106.0	5990.7	6051.1
7°	5509.6	5537.3	5473.2	5325.1	5284.4
8°	4853.9	4890.3	4800.8	4628.1	4583.7
9°	4227.2	4239.5	4130.9	3947.1	3891.0
10°	3636.9	3627.6	3505.5	3319.2	3265.5
11°	3077.4	3065.1	2936.1	2764.0	2781.3
12°	2568.5	2592.6	2442.7	2286.6	2289.7
13°	2150.3	2152.8	2023.8	1875.2	1866.5
14°	1760.4	1783.3	1672.9	1539.6	1514.9
15°	1444.0	1463.7	1381.1	1251.6	1226.3
16°	1155.9	1180.6	1121.4	1004.2	970.9
17°	930.8	962.3	923.4	825.3	787.1
18°	744.5	768.6	759.3	658.2	626.7
19°	587.8	621.2	623.6	539.1	501.5
20°	470.6	500.9	499.0	433.6	404.0
22.5°	270.2	286.2	286.8	256.0	238.7
25°	172.7	185.7	173.3	171.5	164.1
26°	149.9	160.4	146.8	146.8	140.0
27°	121.5	130.8	117.8	123.4	114.1
28°	102.4	112.3	101.2	99.9	98.7
29°	85.1	94.4	80.2	86.4	82.7
30°	74.0	80.8	72.8	82.0	70.3
32.5°	57.4	62.9	48.7	61.7	46.3
35°	33.9	37.6	30.2	35.2	24.1
37.5°	35.2	36.4	32.7	36.4	33.9
40°	21.0	21.6	26.5	26.5	18.5
42.5°	19.7	19.1	11.7	18.5	14.8
45°	4.9	14.2	8.0	14.2	7.4
47.5°	3.7	4.9	4.9	9.9	9.9
50°	1.2	4.9	1.9	3.7	2.5
52.5°	0.0	11.7	2.5	8.6	7.4
55°	9.9	14.2	8.6	13.0	13.6
57.5°	1.2	9.9	4.9	10.5	7.4
60°	12.3	16.7	9.9	17.9	16.0
62.5°	1.2	11.1	13.0	9.9	8.6
65°	4.9	10.5	13.0	12.3	12.3
67.5°	6.2	10.5	8.0	8.0	11.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.2	4.3	3.1	5.6	8.6
77.5°	1.2	4.9	4.3	9.9	7.4
80°	9.9	11.1	13.6	17.9	12.3
82.5°	8.6	8.6	13.6	9.9	7.4
85°	0.0	0.0	3.1	3.1	3.7
87.5°	0.0	2.5	6.2	4.9	8.6
90°	0.0	0.0	0.0	0.0	0.0



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







70°	3.7	1.2	3.1	3.1	3.7
72.5°	1.2	5.6	4.9	3.1	6.2



(END OF REPORT)