

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: P282748

Luminaire Tested: **LDA2B208027D010 EU2B20NFL258027 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282748
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 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: 1665.6 lumens
Efficiency: N/A
Efficacy: 80.9 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

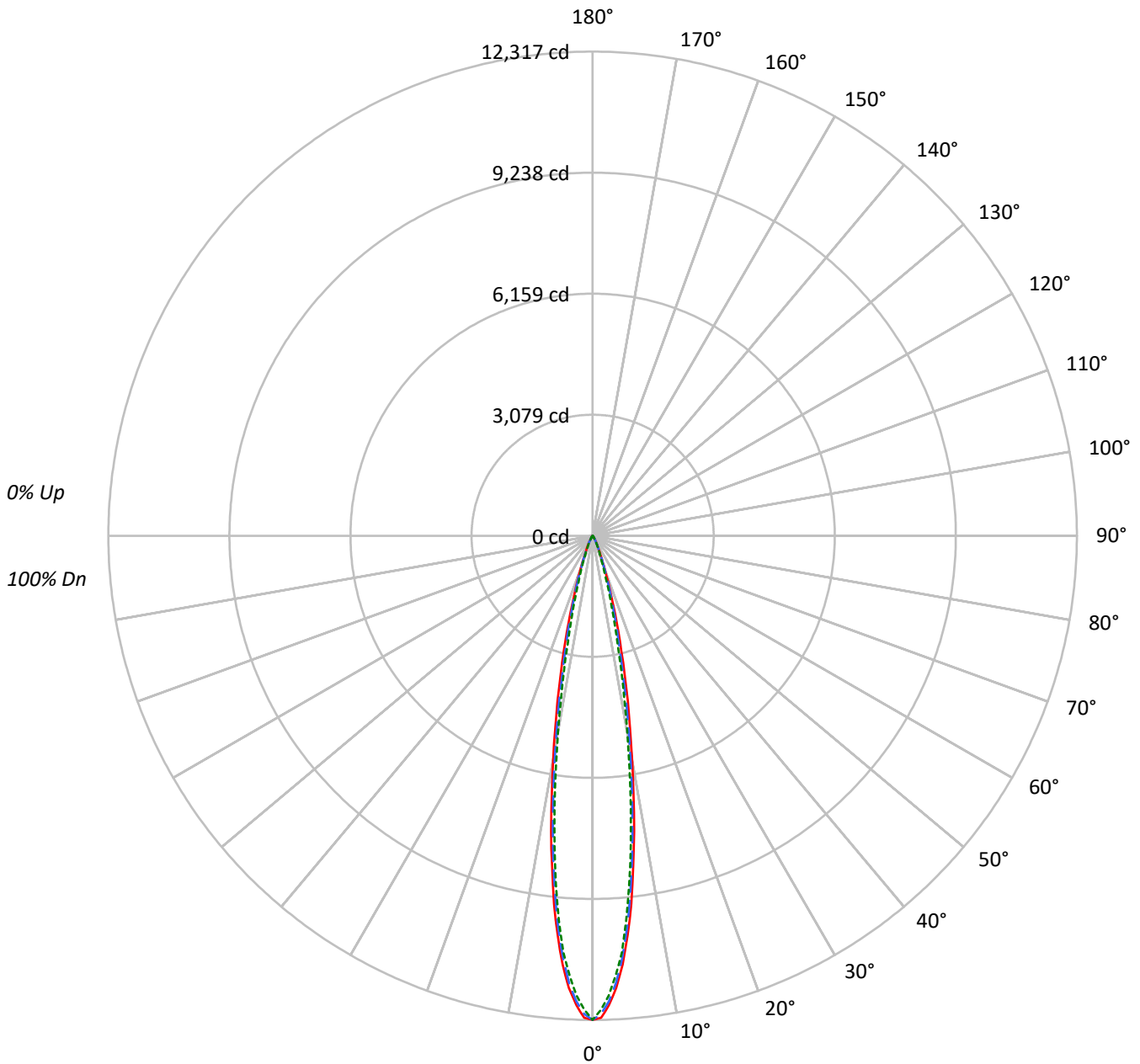
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6076638	6076638	6076638
5°	5056416	4963755	4863517
10°	2896273	2717827	2536475
15°	1288202	1144064	958758
20°	467324	439393	348144
25°	179423	167555	144257
30°	77363	71951	63862
35°	36619	36619	30295
40°	18355	18935	15264
45°	10605	9908	9280
50°	7292	6524	6524
55°	5677	4043	4903
60°	4638	2763	3750
65°	3269	2218	3269
70°	2741	1298	2741
75°	1716	1716	1716
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	801.1	48.1
10°-20°	648.3	38.9
20°-30°	156.3	9.4
30°-40°	39.8	2.4
40°-50°	11.9	0.7
50°-60°	5.0	0.3
60°-70°	2.4	0.1
70°-80°	0.8	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°	1605.7	96.4
0°-40°	1645.5	98.8
0°-60°	1662.4	99.8
0°-90°	1665.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1665.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12317	12317	12317	12317	12317	
5°	10210	10116	10023	9935	9820	826
15°	2522	2462	2240	2018	1877	719
25°	330	332	308	279	265	170
35°	61	62	61	55	50	42
45°	15	15	14	13	13	13
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°	12316.8	12316.8	12316.8	12316.8	12316.8
1°	12261.7	12176.3	12165.8	12219.0	12062.3
2°	11948.3	11887.5	11852.3	11883.7	11706.0
3°	11518.0	11459.1	11395.4	11396.4	11197.8
4°	10931.8	10885.3	10778.0	10745.7	10630.7
5°	10209.9	10115.8	10022.8	9935.4	9820.4
6°	9411.9	9290.4	9157.4	9027.2	8909.4
7°	8473.4	8392.7	8216.9	8039.3	7939.5
8°	7590.9	7460.8	7255.6	7033.3	6948.8
9°	6641.9	6548.8	6313.3	6054.9	5970.3
10°	5781.3	5684.4	5425.1	5137.2	5063.1
11°	4973.9	4882.7	4612.9	4310.8	4232.0
12°	4290.9	4161.7	3852.0	3589.8	3512.9
13°	3610.7	3522.4	3228.8	2969.5	2820.4
14°	3032.2	2959.0	2693.1	2465.1	2307.4
15°	2522.1	2462.2	2239.9	2017.7	1877.1
16°	2069.0	2031.9	1856.2	1641.5	1526.5
17°	1678.5	1644.3	1532.2	1334.7	1237.8
18°	1355.6	1350.8	1257.7	1086.7	1000.3
19°	1115.2	1113.3	1027.8	884.4	813.1
20°	890.1	902.4	836.9	711.5	663.1
21°	725.7	732.4	680.2	585.2	541.5
22°	590.9	595.6	561.4	483.5	459.8
23°	484.5	487.3	458.8	400.9	380.0
24°	399.0	400.9	375.2	334.4	316.3
25°	329.6	331.5	307.8	279.3	265.0
26°	273.6	275.5	254.6	234.6	220.4
27°	227.0	230.8	209.9	197.6	182.4
28°	193.8	194.7	175.7	168.1	153.9
29°	158.6	164.3	148.2	141.5	131.1
30°	135.8	138.7	126.3	121.6	112.1
32.5°	90.2	92.1	86.4	82.6	75.0
35°	60.8	61.7	60.8	55.1	50.3
37.5°	41.8	41.8	42.7	36.1	34.2
40°	28.5	28.5	29.4	24.7	23.7
42.5°	20.9	20.9	19.9	17.1	17.1
45°	15.2	15.2	14.2	13.3	13.3
47.5°	12.3	11.4	10.4	10.4	10.4
50°	9.5	9.5	8.5	7.6	8.5
52.5°	7.6	7.6	6.6	6.6	6.6
55°	6.6	5.7	4.7	4.7	5.7
57.5°	4.7	4.7	3.8	3.8	4.7
60°	4.7	3.8	2.8	3.8	3.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.8	1.9	1.9	1.9	1.9
70°	1.9	1.9	0.9	0.9	1.9
72.5°	0.9	0.9	0.9	0.9	0.9
75°	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	0.9	0.0	0.0	0.9
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°	3.8	2.8	2.8	2.8	2.8
65°	2.8	2.8	1.9	1.9	2.8



(END OF REPORT)