

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: P282751

Luminaire Tested: **LDA2B208030D010 EU2B20NFL258030 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282751
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: LDA2B208030D010 EU2B20NFL258030 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: 1697.9 lumens
Efficiency: N/A
Efficacy: 82.4 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

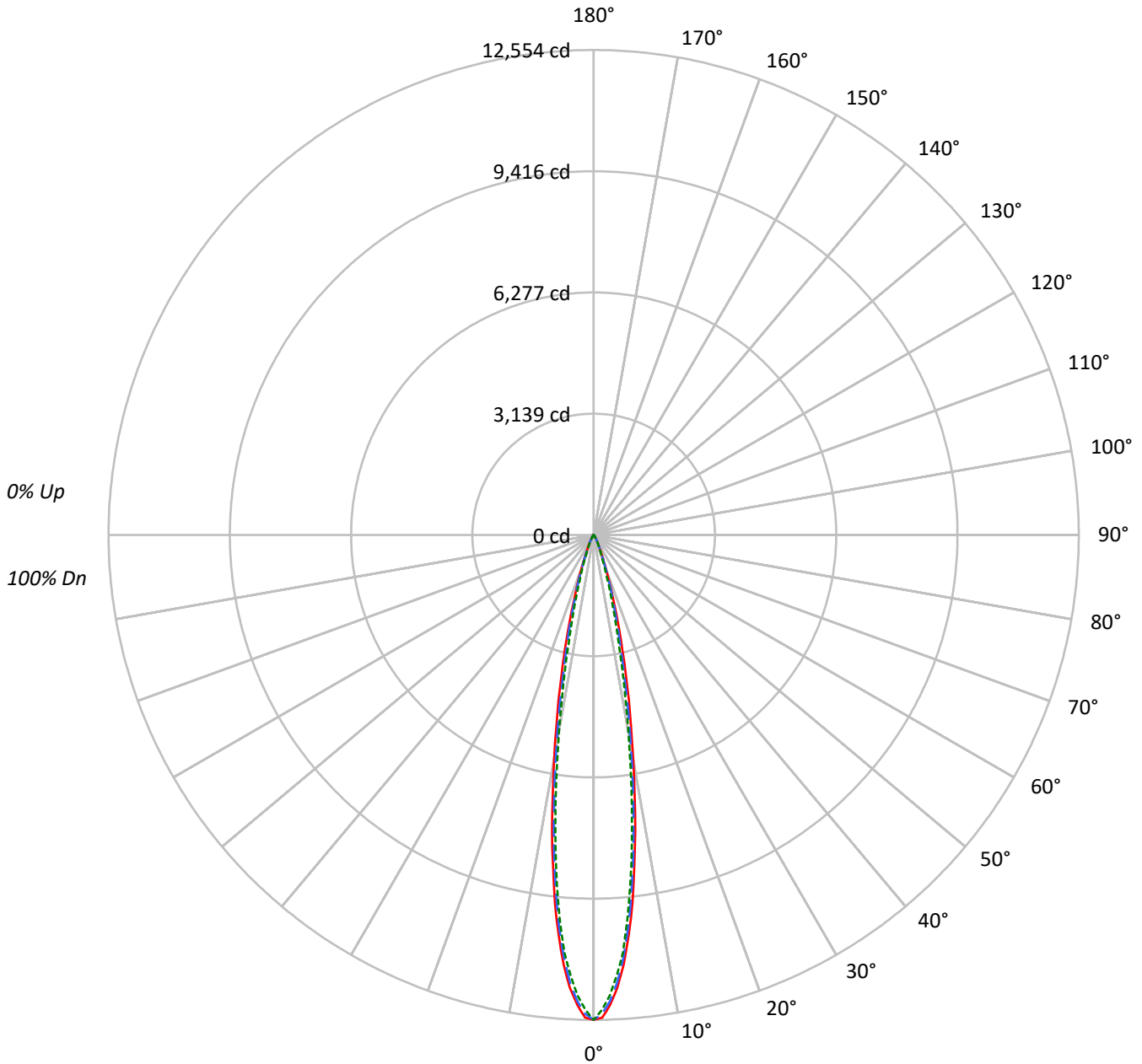
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6193812	6193812	6193812
5°	5153880	5059437	4957317
10°	2952132	2770229	2585420
15°	1313025	1166129	977248
20°	476302	447846	354812
25°	182906	170767	147033
30°	78901	73375	65115
35°	37342	37342	30897
40°	18677	19321	15586
45°	10815	10117	9489
50°	7445	6678	6678
55°	5849	4129	4989
60°	4736	2861	3848
65°	3385	2218	3385
70°	2741	1442	2741
75°	1906	1906	1906
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	816.5	48.1
10°-20°	660.8	38.9
20°-30°	159.3	9.4
30°-40°	40.6	2.4
40°-50°	12.1	0.7
50°-60°	5.2	0.3
60°-70°	2.5	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°	1636.6	96.4
0°-40°	1677.3	98.8
0°-60°	1694.5	99.8
0°-90°	1697.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1697.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12554	12554	12554	12554	12554	
5°	10407	10311	10216	10127	10010	842
15°	2571	2510	2283	2057	1913	733
25°	336	338	314	285	270	174
35°	62	63	62	56	51	43
45°	16	16	14	14	14	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°	12554.3	12554.3	12554.3	12554.3	12554.3
1°	12498.2	12411.0	12400.4	12454.6	12294.8
2°	12178.6	12116.7	12080.8	12112.8	11931.7
3°	11740.0	11680.0	11615.1	11616.1	11413.7
4°	11142.6	11095.2	10985.8	10952.8	10835.7
5°	10406.7	10310.9	10216.0	10126.9	10009.8
6°	9593.4	9469.5	9333.9	9201.3	9081.2
7°	8636.8	8554.5	8375.4	8194.3	8092.6
8°	7737.3	7604.6	7395.5	7168.9	7082.7
9°	6770.0	6675.1	6435.0	6171.6	6085.4
10°	5892.8	5794.0	5529.7	5236.3	5160.8
11°	5069.8	4976.8	4701.8	4393.9	4313.6
12°	4373.6	4241.9	3926.3	3659.0	3580.6
13°	3680.3	3590.3	3291.1	3026.7	2874.7
14°	3090.7	3016.1	2745.0	2512.6	2351.9
15°	2570.7	2509.7	2283.1	2056.6	1913.3
16°	2108.8	2071.1	1892.0	1673.1	1556.0
17°	1710.9	1676.0	1561.8	1360.4	1261.6
18°	1381.7	1376.9	1282.0	1107.7	1019.6
19°	1136.7	1134.8	1047.6	901.4	828.8
20°	907.2	919.8	853.0	725.2	675.8
21°	739.7	746.5	693.3	596.4	551.9
22°	602.3	607.1	572.2	492.8	468.6
23°	493.8	496.7	467.7	408.6	387.3
24°	406.7	408.6	382.5	340.8	322.4
25°	336.0	337.9	313.7	284.7	270.1
26°	278.9	280.8	259.5	239.2	224.6
27°	231.4	235.3	214.0	201.4	185.9
28°	197.5	198.5	179.1	171.4	156.9
29°	161.7	167.5	151.0	144.3	133.6
30°	138.5	141.4	128.8	123.9	114.3
32.5°	92.0	93.9	88.1	84.2	76.5
35°	62.0	62.9	62.0	56.2	51.3
37.5°	42.6	42.6	43.6	36.8	34.9
40°	29.0	29.0	30.0	25.2	24.2
42.5°	21.3	21.3	20.3	17.4	17.4
45°	15.5	15.5	14.5	13.6	13.6
47.5°	12.6	11.6	10.7	10.7	10.7
50°	9.7	9.7	8.7	7.7	8.7
52.5°	7.7	7.7	6.8	6.8	6.8
55°	6.8	5.8	4.8	4.8	5.8
57.5°	4.8	4.8	3.9	3.9	4.8
60°	4.8	3.9	2.9	3.9	3.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.9	1.9	1.9	1.9	1.9
70°	1.9	1.9	1.0	1.0	1.9
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°	3.9	2.9	2.9	2.9	2.9
65°	2.9	2.9	1.9	1.9	2.9



(END OF REPORT)