

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: P282773

Luminaire Tested: **LDA2B209040D010 EU2B20NFL259040 2LBALPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282773
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: LDA2B209040D010 EU2B20NFL259040 2LBALPINSQ1MW
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1448.5 lumens
Efficiency: N/A
Efficacy: 70.3 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

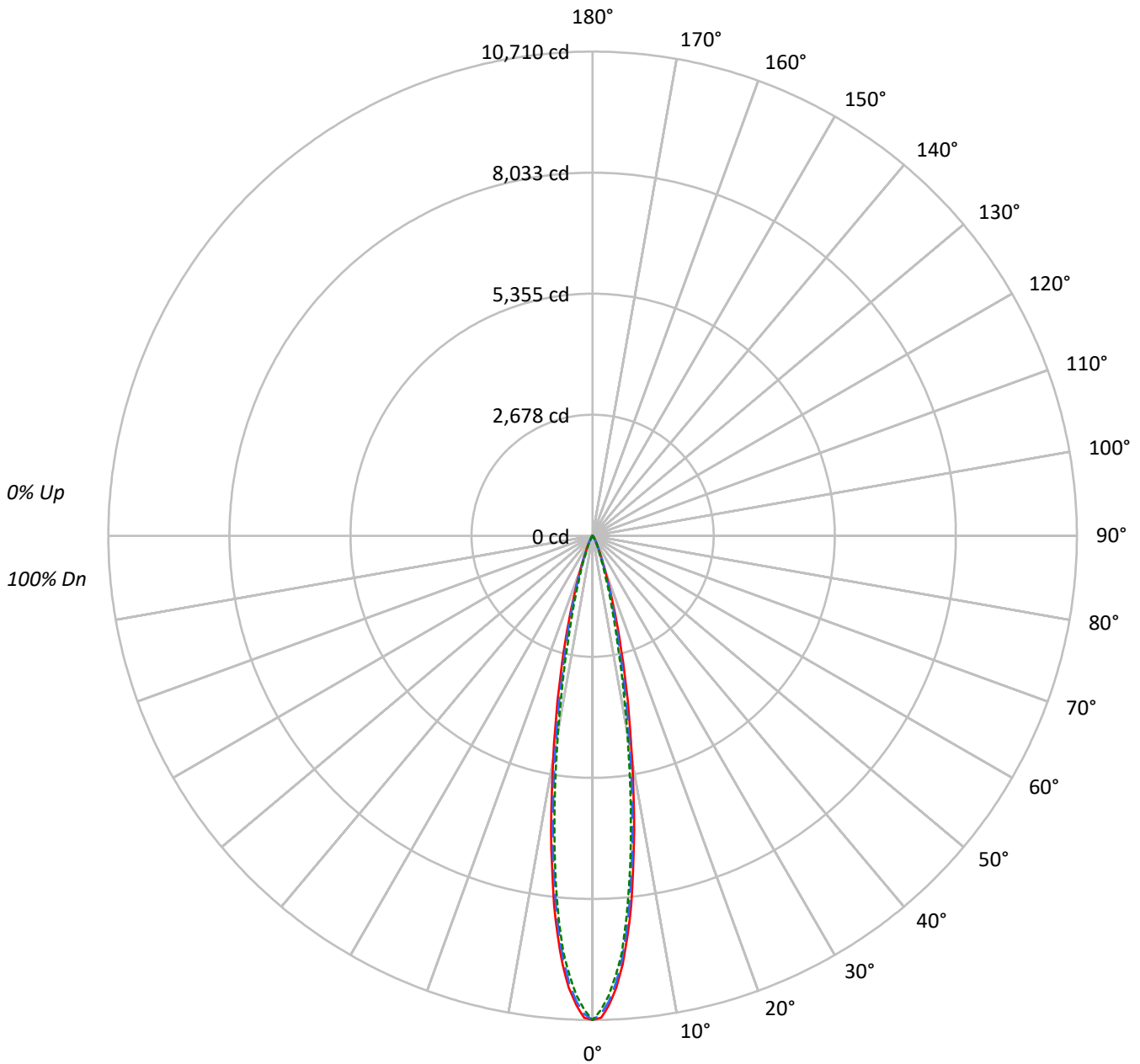
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5284003	5284003	5284003
5°	4396847	4316270	4229107
10°	2518490	2363289	2205632
15°	1120160	994869	833672
20°	406369	382060	302729
25°	156015	145672	125476
30°	67280	62608	55544
35°	31861	31861	26380
40°	15972	16487	13332
45°	9210	8652	8094
50°	6371	5680	5680
55°	4989	3527	4301
60°	4046	2467	3256
65°	2918	1985	2918
70°	2452	1154	2452
75°	1525	1525	1525
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	696.6	48.1
10°-20°	563.7	38.9
20°-30°	135.9	9.4
30°-40°	34.7	2.4
40°-50°	10.3	0.7
50°-60°	4.4	0.3
60°-70°	2.2	0.1
70°-80°	0.7	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°	1396.2	96.4
0°-40°	1430.9	98.8
0°-60°	1445.6	99.8
0°-90°	1448.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1448.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10710	10710	10710	10710	10710	
5°	8878	8796	8715	8639	8539	718
15°	2193	2141	1948	1754	1632	625
25°	287	288	268	243	230	148
35°	53	54	53	48	44	36
45°	13	13	12	12	12	11
55°	6	5	4	4	5	5
65°	2	2	2	2	2	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°	10710.2	10710.2	10710.2	10710.2	10710.2
1°	10662.3	10587.9	10578.9	10625.1	10488.8
2°	10389.7	10336.8	10306.3	10333.5	10179.1
3°	10015.5	9964.3	9909.0	9909.8	9737.1
4°	9505.9	9465.4	9372.0	9344.0	9244.0
5°	8878.1	8796.3	8715.4	8639.4	8539.4
6°	8184.2	8078.5	7962.8	7849.7	7747.3
7°	7368.1	7297.9	7145.1	6990.6	6903.9
8°	6600.7	6487.6	6309.2	6115.9	6042.3
9°	5775.5	5694.6	5489.7	5265.1	5191.5
10°	5027.2	4942.9	4717.4	4467.1	4402.7
11°	4325.0	4245.8	4011.2	3748.5	3679.9
12°	3731.1	3618.8	3349.5	3121.5	3054.6
13°	3139.7	3062.9	2807.6	2582.1	2452.5
14°	2636.7	2573.1	2341.8	2143.5	2006.4
15°	2193.1	2141.0	1947.8	1754.5	1632.2
16°	1799.1	1766.9	1614.0	1427.4	1327.4
17°	1459.6	1429.8	1332.4	1160.6	1076.3
18°	1178.7	1174.6	1093.7	945.0	869.8
19°	969.7	968.1	893.8	769.0	707.1
20°	774.0	784.7	727.7	618.7	576.6
21°	631.1	636.9	591.4	508.8	470.8
22°	513.8	517.9	488.2	420.4	399.8
23°	421.3	423.7	399.0	348.6	330.4
24°	346.9	348.6	326.3	290.8	275.1
25°	286.6	288.3	267.6	242.9	230.5
26°	237.9	239.5	221.4	204.0	191.6
27°	197.4	200.7	182.6	171.8	158.6
28°	168.5	169.3	152.8	146.2	133.8
29°	137.9	142.9	128.9	123.1	114.0
30°	118.1	120.6	109.9	105.7	97.5
32.5°	78.5	80.1	75.2	71.9	65.3
35°	52.9	53.7	52.9	47.9	43.8
37.5°	36.3	36.3	37.2	31.4	29.7
40°	24.8	24.8	25.6	21.5	20.7
42.5°	18.2	18.2	17.3	14.9	14.9
45°	13.2	13.2	12.4	11.6	11.6
47.5°	10.7	9.9	9.1	9.1	9.1
50°	8.3	8.3	7.4	6.6	7.4
52.5°	6.6	6.6	5.8	5.8	5.8
55°	5.8	5.0	4.1	4.1	5.0
57.5°	4.1	4.1	3.3	3.3	4.1
60°	4.1	3.3	2.5	3.3	3.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.5	1.7	1.7	1.7	1.7
70°	1.7	1.7	0.8	0.8	1.7
72.5°	0.8	0.8	0.8	0.8	0.8
75°	0.8	0.8	0.8	0.8	0.8
77.5°	0.8	0.8	0.0	0.0	0.8
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°	3.3	2.5	2.5	2.5	2.5
65°	2.5	2.5	1.7	1.7	2.5



(END OF REPORT)