

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: P282422

Luminaire Tested: **LDA2B209040D010 EU2B20NFL259040 2LBAPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282422
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 2LBAPINSQ1MW
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MW
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1570.7 lumens
Efficiency: N/A
Efficacy: 76.2 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

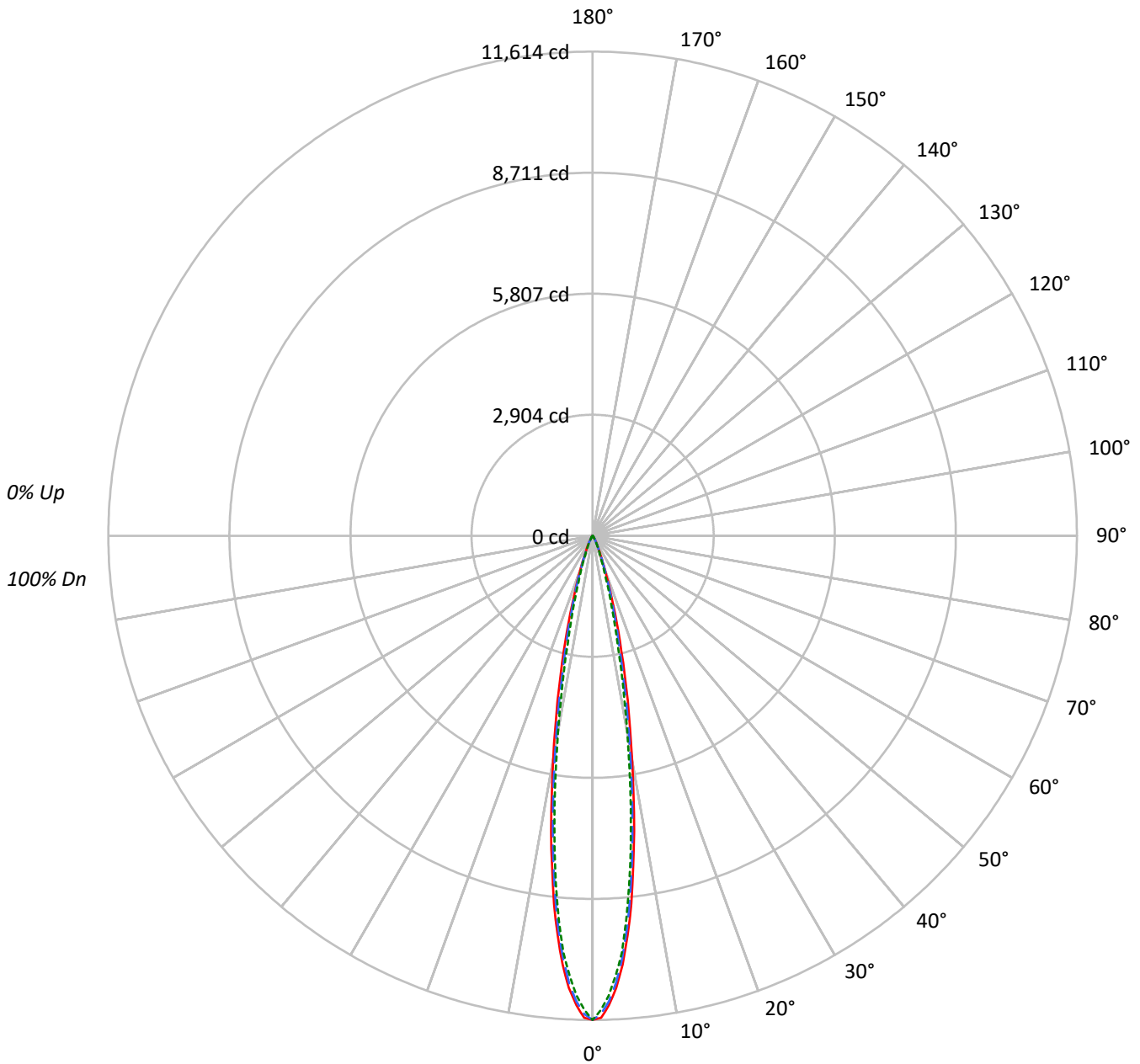
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5730002	5730002	5730002
5°	4767935	4680573	4586080
10°	2731053	2562776	2391794
15°	1214703	1078839	904055
20°	440653	414297	328245
25°	169188	157975	136037
30°	72977	67849	60216
35°	34511	34511	28608
40°	17325	17904	14426
45°	9977	9349	8721
50°	6908	6217	6217
55°	5419	3871	4645
60°	4440	2664	3552
65°	3152	2101	3152
70°	2596	1298	2596
75°	1716	1716	1716
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	755.4	48.1
10°-20°	611.3	38.9
20°-30°	147.4	9.4
30°-40°	37.6	2.4
40°-50°	11.2	0.7
50°-60°	4.8	0.3
60°-70°	2.3	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°	1514.1	96.4
0°-40°	1551.7	98.8
0°-60°	1567.7	99.8
0°-90°	1570.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1570.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11614	11614	11614	11614	11614	
5°	9627	9539	9451	9369	9260	779
15°	2378	2322	2112	1903	1770	678
25°	311	313	290	263	250	161
35°	57	58	57	52	48	40
45°	14	14	13	12	12	12
55°	6	5	4	4	5	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°	11614.2	11614.2	11614.2	11614.2	11614.2
1°	11562.2	11481.6	11471.8	11521.9	11374.1
2°	11266.6	11209.3	11176.2	11205.7	11038.2
3°	10860.9	10805.3	10745.3	10746.2	10559.0
4°	10308.2	10264.3	10163.1	10132.6	10024.2
5°	9627.4	9538.7	9451.0	9368.6	9260.2
6°	8875.0	8760.3	8634.9	8512.2	8401.2
7°	7990.0	7913.9	7748.2	7580.7	7486.6
8°	7157.9	7035.1	6841.7	6632.1	6552.3
9°	6263.0	6175.2	5953.1	5709.5	5629.7
10°	5451.5	5360.1	5115.6	4844.2	4774.3
11°	4690.1	4604.1	4349.7	4064.9	3990.5
12°	4046.1	3924.2	3632.2	3385.0	3312.4
13°	3404.7	3321.4	3044.6	2800.1	2659.5
14°	2859.2	2790.2	2539.4	2324.4	2175.8
15°	2378.2	2321.8	2112.2	1902.6	1770.0
16°	1950.9	1916.0	1750.3	1547.8	1439.5
17°	1582.8	1550.5	1444.8	1258.5	1167.2
18°	1278.2	1273.7	1186.0	1024.7	943.2
19°	1051.6	1049.8	969.2	833.9	766.8
20°	839.3	851.0	789.1	670.9	625.2
21°	684.3	690.6	641.4	551.8	510.6
22°	557.2	561.6	529.4	455.9	433.5
23°	456.8	459.5	432.6	378.0	358.3
24°	376.2	378.0	353.8	315.3	298.3
25°	310.8	312.6	290.2	263.3	249.9
26°	258.0	259.8	240.1	221.2	207.8
27°	214.1	217.7	198.0	186.3	172.0
28°	182.7	183.6	165.7	158.5	145.1
29°	149.6	155.0	139.7	133.5	123.6
30°	128.1	130.8	119.1	114.7	105.7
32.5°	85.1	86.9	81.5	77.9	70.8
35°	57.3	58.2	57.3	52.0	47.5
37.5°	39.4	39.4	40.3	34.0	32.2
40°	26.9	26.9	27.8	23.3	22.4
42.5°	19.7	19.7	18.8	16.1	16.1
45°	14.3	14.3	13.4	12.5	12.5
47.5°	11.6	10.7	9.9	9.9	9.9
50°	9.0	9.0	8.1	7.2	8.1
52.5°	7.2	7.2	6.3	6.3	6.3
55°	6.3	5.4	4.5	4.5	5.4
57.5°	4.5	4.5	3.6	3.6	4.5
60°	4.5	3.6	2.7	3.6	3.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.7	1.8	1.8	1.8	1.8
70°	1.8	1.8	0.9	0.9	1.8
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°	3.6	2.7	2.7	2.7	2.7
65°	2.7	2.7	1.8	1.8	2.7



(END OF REPORT)