

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: P282410

Luminaire Tested: **LDA2B209030D010 EU2B20NFL259030 2LBAPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282410
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: LDA2B209030D010 EU2B20NFL259030 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: 1481.4 lumens
Efficiency: N/A
Efficacy: 71.9 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

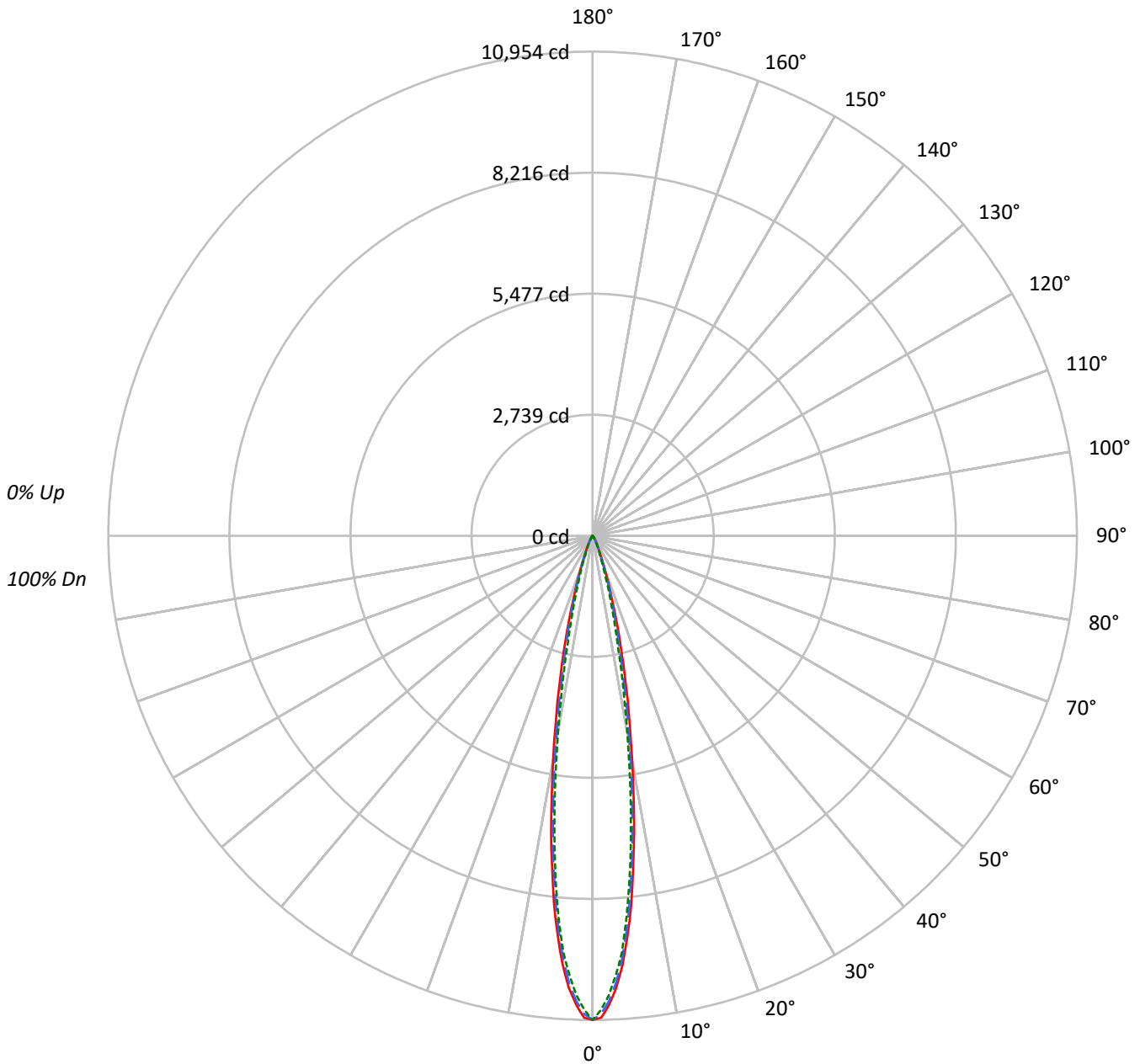
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P282410

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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	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°	5404433	5404433	5404433
5°	4497035	4414626	4325531
10°	2575901	2417143	2255880
15°	1145699	1017547	852672
20°	415610	390776	309607
25°	159608	148993	128307
30°	68818	64033	56798
35°	32584	32584	26982
40°	16294	16874	13589
45°	9419	8861	8233
50°	6447	5833	5833
55°	5075	3613	4387
60°	4144	2467	3355
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°	712.5	48.1
10°-20°	576.6	38.9
20°-30°	139.0	9.4
30°-40°	35.4	2.4
40°-50°	10.6	0.7
50°-60°	4.5	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°	1428.1	96.4
0°-40°	1463.5	98.8
0°-60°	1478.6	99.8
0°-90°	1481.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1481.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10954	10954	10954	10954	10954	
5°	9080	8997	8914	8836	8734	734
15°	2243	2190	1992	1794	1669	640
25°	293	295	274	248	236	151
35°	54	55	54	49	45	37
45°	14	14	13	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10954.3	10954.3	10954.3	10954.3	10954.3
1°	10905.3	10829.3	10820.0	10867.3	10727.9
2°	10626.5	10572.5	10541.2	10569.1	10411.1
3°	10243.8	10191.4	10134.8	10135.7	9959.1
4°	9722.5	9681.1	9585.7	9556.9	9454.7
5°	9080.4	8996.8	8914.0	8836.3	8734.1
6°	8370.8	8262.6	8144.4	8028.6	7923.8
7°	7536.1	7464.2	7308.0	7150.0	7061.3
8°	6751.2	6635.5	6453.0	6255.3	6180.1
9°	5907.2	5824.4	5614.9	5385.1	5309.9
10°	5141.8	5055.6	4824.9	4568.9	4503.0
11°	4423.6	4342.5	4102.6	3833.9	3763.8
12°	3816.2	3701.3	3425.9	3192.7	3124.3
13°	3211.3	3132.7	2871.6	2641.0	2508.4
14°	2696.8	2631.7	2395.1	2192.4	2052.1
15°	2243.1	2189.9	1992.2	1794.5	1669.4
16°	1840.1	1807.1	1650.8	1459.9	1357.7
17°	1492.8	1462.4	1362.7	1187.0	1100.8
18°	1205.6	1201.4	1118.6	966.5	889.6
19°	991.9	990.2	914.1	786.6	723.2
20°	791.6	802.6	744.3	632.8	589.7
21°	645.5	651.4	604.9	520.4	481.6
22°	525.5	529.7	499.3	430.0	408.9
23°	430.9	433.4	408.1	356.5	337.9
24°	354.8	356.5	333.7	297.4	281.3
25°	293.2	294.9	273.7	248.4	235.7
26°	243.3	245.0	226.4	208.7	196.0
27°	201.9	205.3	186.7	175.7	162.2
28°	172.3	173.2	156.3	149.5	136.9
29°	141.1	146.2	131.8	125.9	116.6
30°	120.8	123.3	112.4	108.1	99.7
32.5°	80.3	82.0	76.9	73.5	66.7
35°	54.1	54.9	54.1	49.0	44.8
37.5°	37.2	37.2	38.0	32.1	30.4
40°	25.3	25.3	26.2	22.0	21.1
42.5°	18.6	18.6	17.7	15.2	15.2
45°	13.5	13.5	12.7	11.8	11.8
47.5°	11.0	10.1	9.3	9.3	9.3
50°	8.4	8.4	7.6	6.8	7.6
52.5°	6.8	6.8	5.9	5.9	5.9
55°	5.9	5.1	4.2	4.2	5.1
57.5°	4.2	4.2	3.4	3.4	4.2
60°	4.2	3.4	2.5	3.4	3.4



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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°	3.4	2.5	2.5	2.5	2.5
65°	2.5	2.5	1.7	1.7	2.5



(END OF REPORT)