

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: P282549

Luminaire Tested: **LDA2B158050D010 EU2B15SP158050 2LBALPINSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282549
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-7)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B158050D010 EU2B15SP158050 2LBALPINSQ1MB
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MB
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1505.2 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

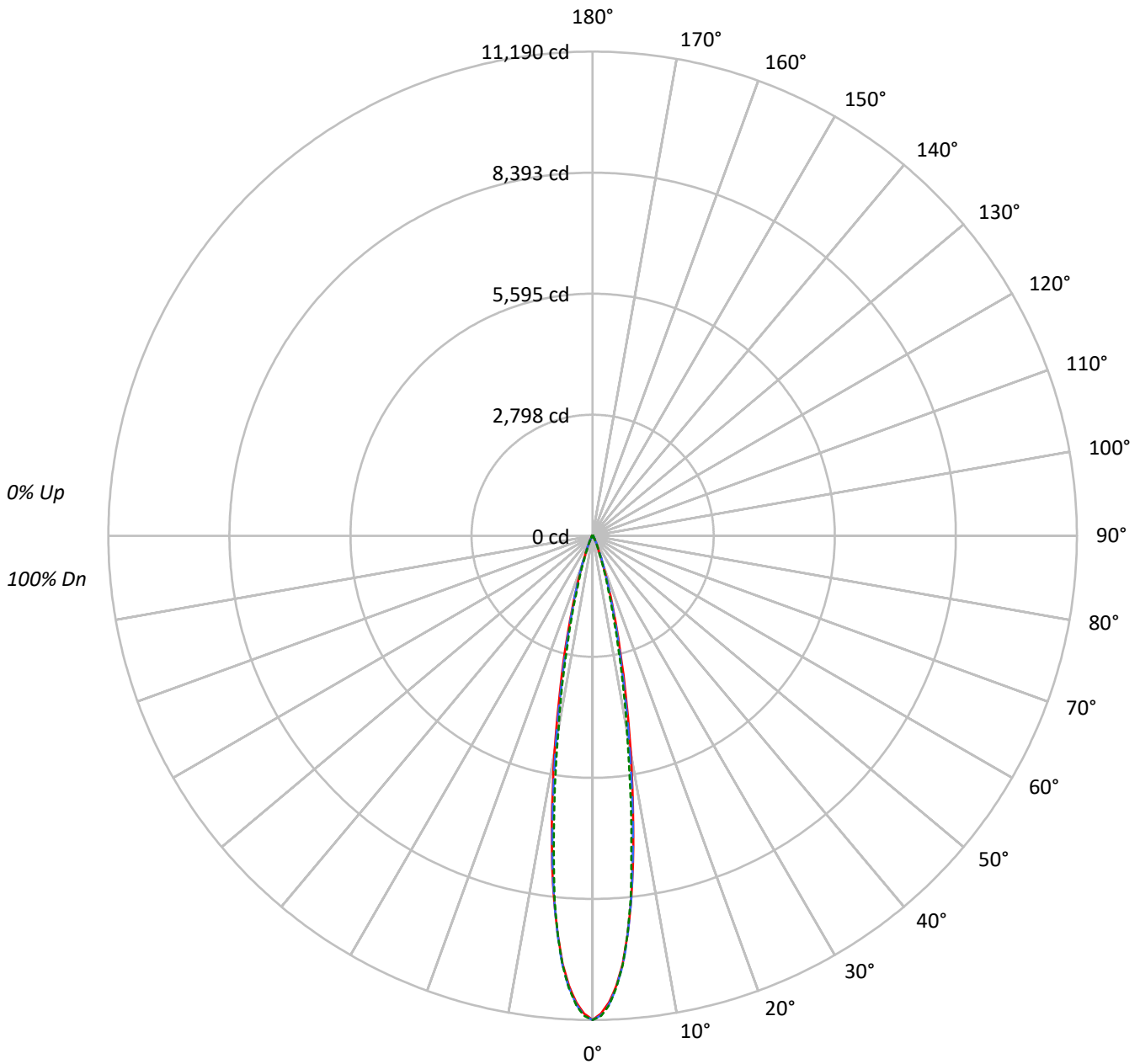
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	95	94	92	91	89	87	85	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	0								
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	92	91	89	87	85	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	0										
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	98	95	94	92	91	89	87	85	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	0											
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	87	85	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	0													
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	85	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	0														
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	0															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	0																
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	0																	
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	0																		
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	77	75	73	71	69	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1	0																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5520570	5520570	5520570
5°	4579890	4594747	4577314
10°	2534822	2443244	2276019
15°	1026128	981436	871417
20°	343786	364525	295116
25°	130811	131246	124278
30°	58678	57709	55715
35°	28428	25356	20176
40°	18806	23765	16552
45°	4814	7814	7187
50°	1305	1996	2610
55°	11784	10322	16257
60°	16972	13518	22004
65°	8055	21013	20079
70°	7357	6203	7357
75°	3241	8197	22874
80°	38924	53698	48868
85°	0	24341	28870



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	732.9	48.7
10°-20°	555.1	36.9
20°-30°	126.2	8.4
30°-40°	37.3	2.5
40°-50°	12.4	0.8
50°-60°	10.9	0.7
60°-70°	13.2	0.9
70°-80°	8.4	0.6
80°-90°	8.8	0.6
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°	1414.2	94.0
0°-40°	1451.5	96.4
0°-60°	1474.8	98.0
0°-90°	1505.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1505.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11190	11190	11190	11190	11190	
5°	9248	9321	9278	9157	9242	741
15°	2009	2036	1922	1741	1706	584
25°	240	258	241	239	228	126
35°	47	52	42	49	34	37
45°	7	20	11	20	10	10
55°	14	20	12	18	19	6
65°	7	15	18	17	17	7
75°	2	6	4	8	12	4
85°	0	0	4	4	5	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11189.7	11189.7	11189.7	11189.7	11189.7
1°	11045.6	11090.2	11085.9	11067.9	11099.6
2°	10791.5	10845.6	10840.5	10801.0	10857.6
3°	10419.1	10467.1	10459.4	10402.8	10464.6
4°	9921.4	9976.3	9954.8	9869.9	9948.8
5°	9247.7	9320.6	9277.7	9156.7	9242.5
6°	8501.1	8562.9	8495.1	8334.6	8418.7
7°	7665.2	7703.8	7614.6	7408.6	7352.0
8°	6753.0	6803.6	6679.2	6438.9	6377.1
9°	5881.1	5898.2	5747.2	5491.5	5413.4
10°	5059.8	5046.9	4877.0	4617.8	4543.2
11°	4281.4	4264.3	4084.9	3845.5	3869.5
12°	3573.4	3606.9	3398.4	3181.3	3185.5
13°	2991.6	2995.0	2815.7	2608.8	2596.8
14°	2449.2	2481.0	2327.4	2142.0	2107.7
15°	2009.0	2036.4	1921.5	1741.2	1706.1
16°	1608.2	1642.5	1560.2	1397.1	1350.8
17°	1295.0	1338.8	1284.7	1148.2	1095.0
18°	1035.8	1069.3	1056.4	915.7	871.9
19°	817.8	864.2	867.6	750.0	697.7
20°	654.8	696.8	694.3	603.3	562.1
22.5°	375.9	398.2	399.1	356.1	332.1
25°	240.3	258.3	241.1	238.6	228.3
26°	208.5	223.1	204.2	204.2	194.8
27°	169.1	181.9	163.9	171.6	158.8
28°	142.5	156.2	140.7	139.0	137.3
29°	118.4	131.3	111.6	120.1	115.0
30°	103.0	112.4	101.3	114.1	97.8
32.5°	79.8	87.5	67.8	85.8	64.4
35°	47.2	52.3	42.1	48.9	33.5
37.5°	48.9	50.6	45.5	50.6	47.2
40°	29.2	30.0	36.9	36.9	25.7
42.5°	27.5	26.6	16.3	25.7	20.6
45°	6.9	19.7	11.2	19.7	10.3
47.5°	5.1	6.9	6.9	13.7	13.7
50°	1.7	6.9	2.6	5.1	3.4
52.5°	0.0	16.3	3.4	12.0	10.3
55°	13.7	19.7	12.0	18.0	18.9
57.5°	1.7	13.7	6.9	14.6	10.3
60°	17.2	23.2	13.7	24.9	22.3
62.5°	1.7	15.4	18.0	13.7	12.0
65°	6.9	14.6	18.0	17.2	17.2
67.5°	8.6	14.6	11.2	11.2	15.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.7	6.0	4.3	7.7	12.0
77.5°	1.7	6.9	6.0	13.7	10.3
80°	13.7	15.4	18.9	24.9	17.2
82.5°	12.0	12.0	18.9	13.7	10.3
85°	0.0	0.0	4.3	4.3	5.1
87.5°	0.0	3.4	8.6	6.9	12.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







70°	5.1	1.7	4.3	4.3	5.1
72.5°	1.7	7.7	6.9	4.3	8.6



(END OF REPORT)