

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: P282502

Luminaire Tested: **LDA2B108035D010 EU2B10SP158035 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282502
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: LDA2B108035D010 EU2B10SP158035 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1093.9 lumens
Efficiency: N/A
Efficacy: 109.4 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

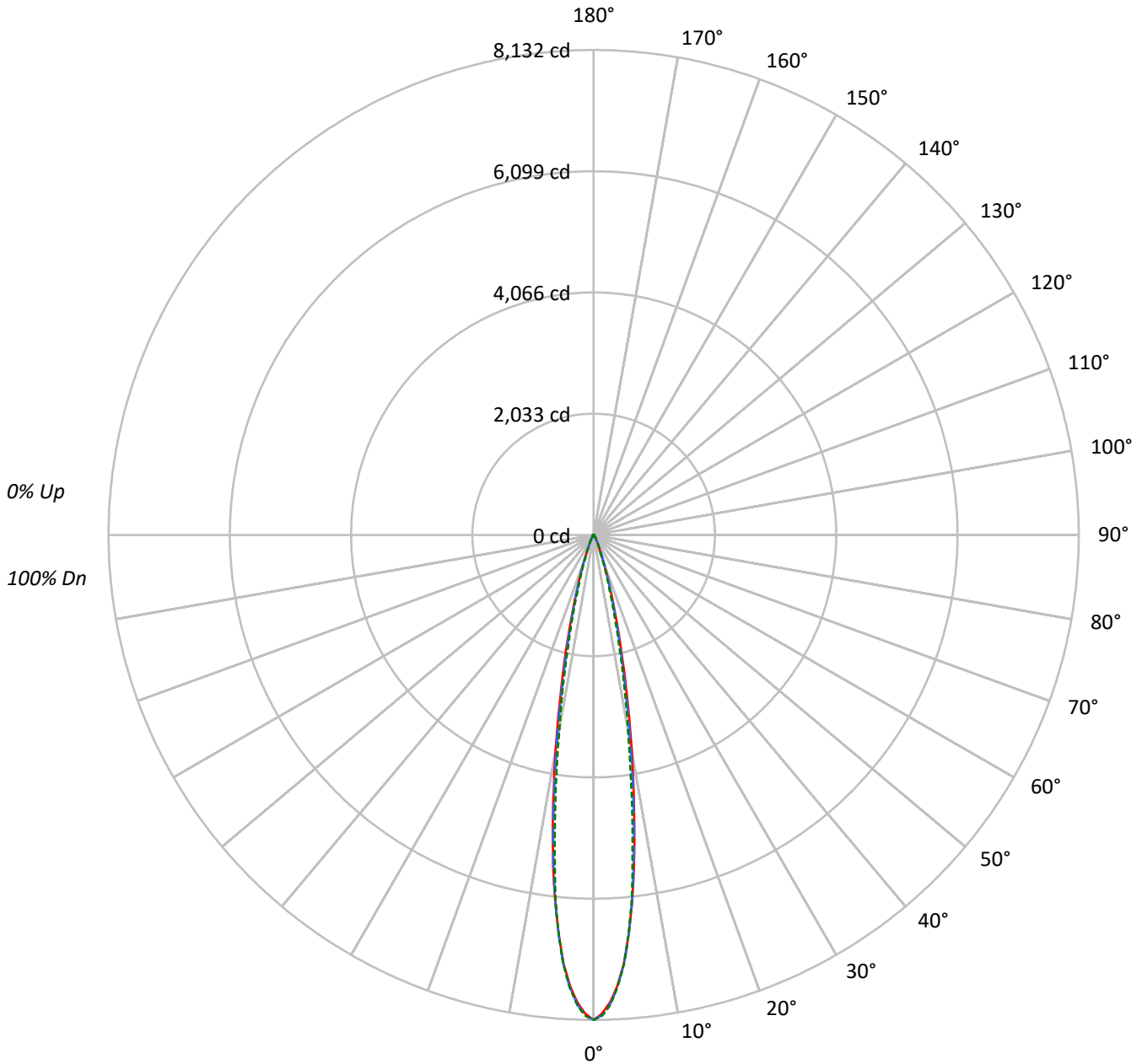
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20													
RC	80					70					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	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	93	92	91	90	89	88	87							
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	93	92	91	90	89	88	87	86	85							
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	90	89	88	87	86	85	84	83	82							
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	88	87	86	85	84	83	82	81	80							
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	86	85	84	83	82	81	80	79								
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	84	83	82	81	80	79	78									
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	82	81	80	79	78	77	76	75	74							
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	86	84	82	81	80	79	78	77	76	75	74	73	72							
9	94	88	84	81	93	87	84	81	86	83	81	85	83	81	84	82	81	80	79	78	77	76	75	74	73	72	71							
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	83	81	79	78	77	76	75	74	73	72	71	70	69							

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4012117	4012117	4012117
5°	3328452	3339248	3326570
10°	1842177	1775648	1654112
15°	745718	713233	633298
20°	249859	264927	214473
25°	95046	95427	90310
30°	42612	41929	40505
35°	20658	18430	14635
40°	13654	17260	12044
45°	3489	5652	5233
50°	921	1458	1919
55°	8602	7483	11784
60°	12334	9867	15985
65°	5837	15293	14592
70°	5337	4472	5337
75°	2287	5909	16584
80°	28412	38924	35514
85°	0	17548	20945



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	532.6	48.7
10°-20°	403.4	36.9
20°-30°	91.7	8.4
30°-40°	27.1	2.5
40°-50°	9.0	0.8
50°-60°	7.9	0.7
60°-70°	9.6	0.9
70°-80°	6.1	0.6
80°-90°	6.4	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°	1027.8	94.0
0°-40°	1054.9	96.4
0°-60°	1071.8	98.0
0°-90°	1093.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1093.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8132	8132	8132	8132	8132	
5°	6721	6774	6743	6655	6717	539
15°	1460	1480	1396	1265	1240	424
25°	175	188	175	173	166	91
35°	34	38	31	36	24	27
45°	5	14	8	14	8	7
55°	10	14	9	13	14	4
65°	5	11	13	12	12	5
75°	1	4	3	6	9	3
85°	0	0	3	3	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8132.2	8132.2	8132.2	8132.2	8132.2
1°	8027.4	8059.8	8056.7	8043.6	8066.7
2°	7842.8	7882.1	7878.3	7849.6	7890.8
3°	7572.1	7607.0	7601.4	7560.2	7605.1
4°	7210.4	7250.3	7234.7	7172.9	7230.3
5°	6720.8	6773.8	6742.6	6654.7	6717.0
6°	6178.2	6223.1	6173.8	6057.2	6118.3
7°	5570.7	5598.8	5533.9	5384.2	5343.1
8°	4907.7	4944.5	4854.1	4679.5	4634.6
9°	4274.1	4286.5	4176.8	3990.9	3934.2
10°	3677.2	3667.9	3544.4	3356.0	3301.8
11°	3111.5	3099.1	2968.7	2794.7	2812.2
12°	2597.0	2621.3	2469.8	2312.0	2315.1
13°	2174.1	2176.6	2046.3	1896.0	1887.3
14°	1780.0	1803.1	1691.4	1556.7	1531.8
15°	1460.0	1480.0	1396.4	1265.4	1239.9
16°	1168.8	1193.7	1133.8	1015.3	981.7
17°	941.1	972.9	933.6	834.5	795.8
18°	752.8	777.1	767.7	665.5	633.7
19°	594.4	628.0	630.5	545.1	507.1
20°	475.9	506.4	504.6	438.4	408.5
22.5°	273.2	289.4	290.0	258.8	241.4
25°	174.6	187.7	175.3	173.4	165.9
26°	151.6	162.2	148.4	148.4	141.6
27°	122.9	132.2	119.1	124.7	115.4
28°	103.5	113.5	102.3	101.0	99.8
29°	86.1	95.4	81.1	87.3	83.6
30°	74.8	81.7	73.6	82.9	71.1
32.5°	58.0	63.6	49.3	62.4	46.8
35°	34.3	38.0	30.6	35.5	24.3
37.5°	35.5	36.8	33.1	36.8	34.3
40°	21.2	21.8	26.8	26.8	18.7
42.5°	20.0	19.3	11.8	18.7	15.0
45°	5.0	14.3	8.1	14.3	7.5
47.5°	3.7	5.0	5.0	10.0	10.0
50°	1.2	5.0	1.9	3.7	2.5
52.5°	0.0	11.8	2.5	8.7	7.5
55°	10.0	14.3	8.7	13.1	13.7
57.5°	1.2	10.0	5.0	10.6	7.5
60°	12.5	16.8	10.0	18.1	16.2
62.5°	1.2	11.2	13.1	10.0	8.7
65°	5.0	10.6	13.1	12.5	12.5
67.5°	6.2	10.6	8.1	8.1	11.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.2	4.4	3.1	5.6	8.7
77.5°	1.2	5.0	4.4	10.0	7.5
80°	10.0	11.2	13.7	18.1	12.5
82.5°	8.7	8.7	13.7	10.0	7.5
85°	0.0	0.0	3.1	3.1	3.7
87.5°	0.0	2.5	6.2	5.0	8.7
90°	0.0	0.0	0.0	0.0	0.0



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







70°	3.7	1.2	3.1	3.1	3.7
72.5°	1.2	5.6	5.0	3.1	6.2



(END OF REPORT)