

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: P282520

Luminaire Tested: **LDA2B109035D010 EU2B10SP159035 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282520
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: LDA2B109035D010 EU2B10SP159035 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: 906.0 lumens
Efficiency: N/A
Efficacy: 90.6 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

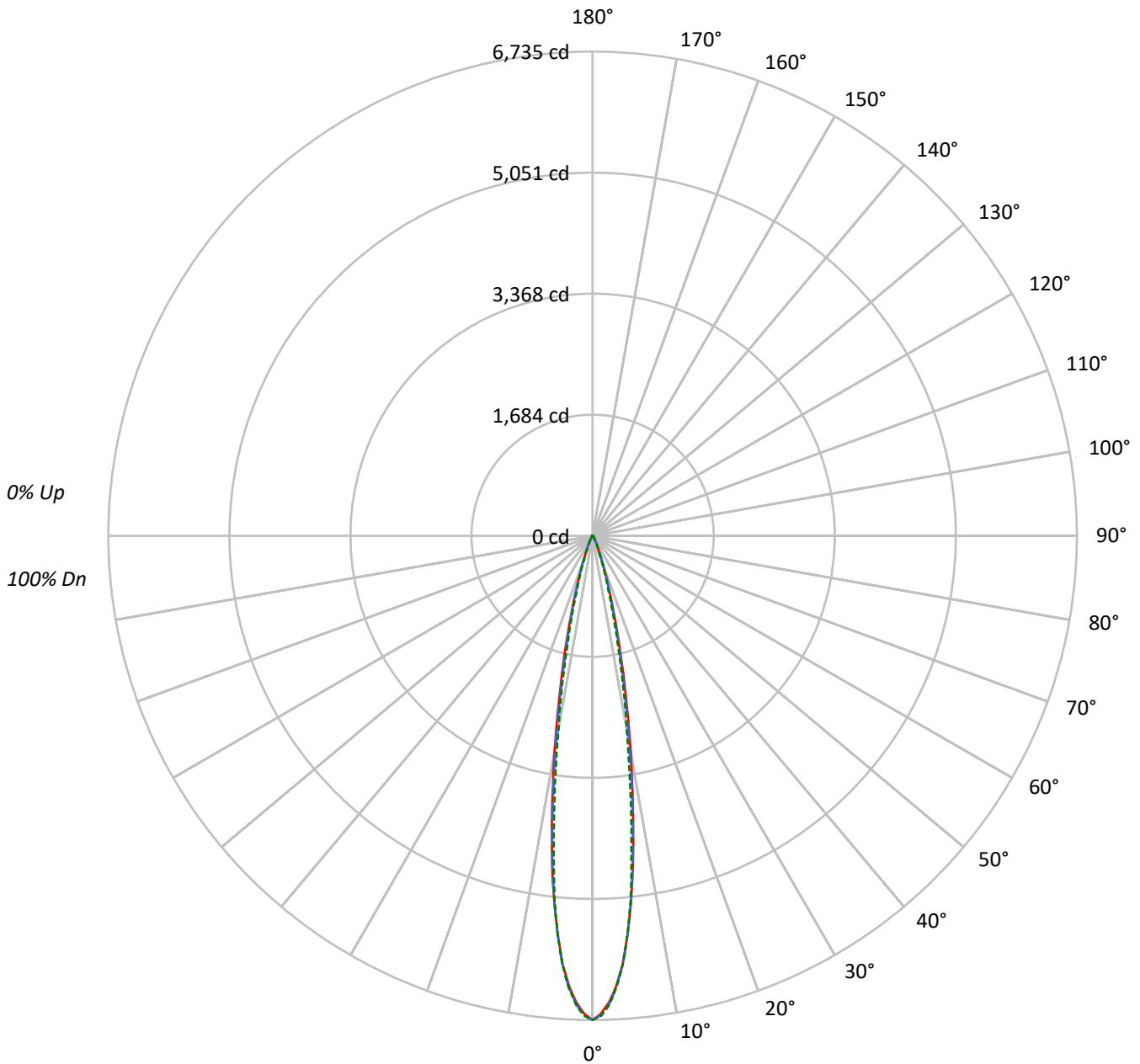
Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	98	98	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	96	95	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	94	92	90	89															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	92	89	88	87	92	89	88	87															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	90	88	86	85															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	88	86	84	83															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	86	84	83															
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	84	82	81															
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	82	81	80															
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	81	79	78															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3322841	3322841	3322841
5°	2756640	2765555	2755105
10°	1525712	1470605	1369910
15°	617618	590701	524505
20°	206912	219408	177616
25°	78715	78987	74796
30°	35320	34751	33554
35°	17105	15238	12106
40°	11335	14298	9983
45°	2861	4675	4326
50°	768	1151	1612
55°	7139	6193	9806
60°	10163	8190	13222
65°	4786	12608	12024
70°	4472	3750	4472
75°	1906	4956	13725
80°	23582	32389	29264
85°	0	14718	17548



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	441.1	48.7
10°-20°	334.1	36.9
20°-30°	75.9	8.4
30°-40°	22.5	2.5
40°-50°	7.5	0.8
50°-60°	6.6	0.7
60°-70°	7.9	0.9
70°-80°	5.1	0.6
80°-90°	5.3	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°	851.2	94.0
0°-40°	873.6	96.4
0°-60°	887.7	98.0
0°-90°	906.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	906.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6735	6735	6735	6735	6735	
5°	5566	5610	5584	5511	5563	446
15°	1209	1226	1156	1048	1027	351
25°	145	156	145	144	137	76
35°	28	32	25	29	20	22
45°	4	12	7	12	6	6
55°	8	12	7	11	11	3
65°	4	9	11	10	10	4
75°	1	4	3	5	7	2
85°	0	0	3	3	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6735.1	6735.1	6735.1	6735.1	6735.1
1°	6648.3	6675.2	6672.6	6661.7	6680.8
2°	6495.4	6527.9	6524.8	6501.1	6535.2
3°	6271.2	6300.2	6295.5	6261.4	6298.6
4°	5971.6	6004.7	5991.8	5940.6	5988.2
5°	5566.2	5610.1	5584.2	5511.4	5563.1
6°	5116.8	5154.0	5113.2	5016.6	5067.2
7°	4613.7	4636.9	4583.2	4459.2	4425.1
8°	4064.6	4095.1	4020.2	3875.5	3838.4
9°	3539.8	3550.1	3459.2	3305.3	3258.3
10°	3045.5	3037.7	2935.5	2779.5	2734.5
11°	2577.0	2566.7	2458.7	2314.6	2329.0
12°	2150.8	2171.0	2045.5	1914.8	1917.4
13°	1800.6	1802.7	1694.7	1570.3	1563.0
14°	1474.2	1493.3	1400.8	1289.3	1268.6
15°	1209.2	1225.7	1156.5	1048.0	1026.9
16°	968.0	988.6	939.1	840.9	813.0
17°	779.4	805.8	773.2	691.1	659.1
18°	623.5	643.6	635.9	551.1	524.8
19°	492.3	520.1	522.2	451.4	419.9
20°	394.1	419.4	417.9	363.1	338.3
22.5°	226.2	239.7	240.2	214.4	199.9
25°	144.6	155.5	145.1	143.6	137.4
26°	125.5	134.3	122.9	122.9	117.3
27°	101.8	109.5	98.7	103.3	95.6
28°	85.7	94.0	84.7	83.7	82.6
29°	71.3	79.0	67.1	72.3	69.2
30°	62.0	67.7	61.0	68.7	58.9
32.5°	48.0	52.7	40.8	51.7	38.7
35°	28.4	31.5	25.3	29.4	20.1
37.5°	29.4	30.5	27.4	30.5	28.4
40°	17.6	18.1	22.2	22.2	15.5
42.5°	16.5	16.0	9.8	15.5	12.4
45°	4.1	11.9	6.7	11.9	6.2
47.5°	3.1	4.1	4.1	8.3	8.3
50°	1.0	4.1	1.5	3.1	2.1
52.5°	0.0	9.8	2.1	7.2	6.2
55°	8.3	11.9	7.2	10.8	11.4
57.5°	1.0	8.3	4.1	8.8	6.2
60°	10.3	13.9	8.3	15.0	13.4
62.5°	1.0	9.3	10.8	8.3	7.2
65°	4.1	8.8	10.8	10.3	10.3
67.5°	5.2	8.8	6.7	6.7	9.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.0	3.6	2.6	4.6	7.2
77.5°	1.0	4.1	3.6	8.3	6.2
80°	8.3	9.3	11.4	15.0	10.3
82.5°	7.2	7.2	11.4	8.3	6.2
85°	0.0	0.0	2.6	2.6	3.1
87.5°	0.0	2.1	5.2	4.1	7.2
90°	0.0	0.0	0.0	0.0	0.0



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







70°	3.1	1.0	2.6	2.6	3.1
72.5°	1.0	4.6	4.1	2.6	5.2



(END OF REPORT)