

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: P282514

Luminaire Tested: **LDA2B109027D010 EU2B10SP159027 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282514
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: LDA2B109027D010 EU2B10SP159027 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: 836.5 lumens
Efficiency: N/A
Efficacy: 83.6 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

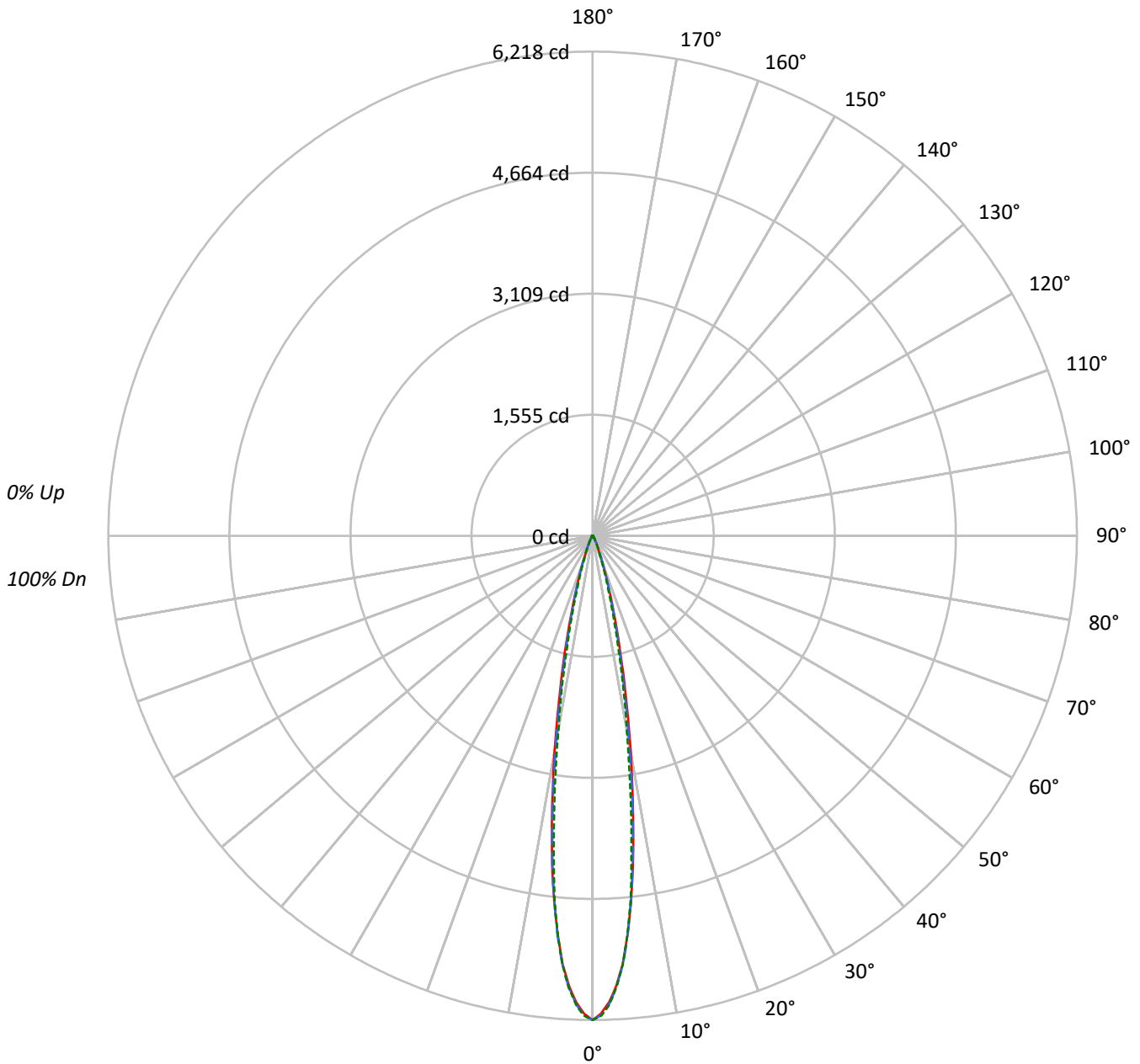
Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	99	98	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	98	96	95	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	96	94	92	91															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	94	92	90	89															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	92	89	88	87															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	90	88	86	85															
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°	3067872	3067872	3067872
5°	2545071	2553342	2543684
10°	1408635	1357736	1264806
15°	570219	545396	484257
20°	191056	202555	164018
25°	72673	72945	69080
30°	32586	32073	30991
35°	15780	14093	11202
40°	10433	13203	9210
45°	2651	4326	3977
50°	768	1075	1458
55°	6537	5763	9032
60°	9374	7499	12235
65°	4436	11674	11090
70°	4183	3462	4183
75°	1906	4575	12772
80°	21593	29832	26991
85°	0	13586	16416



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	407.3	48.7
10°-20°	308.5	36.9
20°-30°	70.1	8.4
30°-40°	20.7	2.5
40°-50°	6.9	0.8
50°-60°	6.1	0.7
60°-70°	7.3	0.9
70°-80°	4.7	0.6
80°-90°	4.9	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°	785.9	94.0
0°-40°	806.6	96.4
0°-60°	819.6	98.0
0°-90°	836.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	836.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6218	6218	6218	6218	6218	
5°	5139	5180	5156	5088	5136	412
15°	1116	1132	1068	968	948	324
25°	134	144	134	133	127	70
35°	26	29	23	27	19	21
45°	4	11	6	11	6	6
55°	8	11	7	10	10	3
65°	4	8	10	10	10	4
75°	1	3	2	4	7	2
85°	0	0	2	2	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6218.3	6218.3	6218.3	6218.3	6218.3
1°	6138.1	6162.9	6160.5	6150.5	6168.2
2°	5997.0	6027.0	6024.2	6002.2	6033.7
3°	5790.0	5816.7	5812.4	5780.9	5815.3
4°	5513.4	5543.9	5532.0	5484.8	5528.7
5°	5139.0	5179.6	5155.7	5088.5	5136.2
6°	4724.1	4758.5	4720.8	4631.6	4678.4
7°	4259.6	4281.1	4231.5	4117.0	4085.6
8°	3752.7	3780.8	3711.7	3578.2	3543.8
9°	3268.2	3277.7	3193.8	3051.7	3008.3
10°	2811.8	2804.6	2710.2	2566.2	2524.7
11°	2379.2	2369.7	2270.0	2137.0	2150.3
12°	1985.8	2004.4	1888.5	1767.9	1770.2
13°	1662.5	1664.4	1564.7	1449.8	1443.1
14°	1361.1	1378.7	1293.3	1190.3	1171.3
15°	1116.4	1131.7	1067.8	967.6	948.1
16°	893.7	912.8	867.0	776.4	750.6
17°	719.6	744.0	713.9	638.1	608.5
18°	575.6	594.2	587.1	508.8	484.5
19°	454.5	480.2	482.1	416.8	387.7
20°	363.9	387.2	385.8	335.3	312.4
22.5°	208.9	221.3	221.8	197.9	184.6
25°	133.5	143.5	134.0	132.6	126.9
26°	115.9	124.0	113.5	113.5	108.3
27°	93.9	101.1	91.1	95.4	88.2
28°	79.2	86.8	78.2	77.3	76.3
29°	65.8	73.0	62.0	66.8	63.9
30°	57.2	62.5	56.3	63.4	54.4
32.5°	44.4	48.6	37.7	47.7	35.8
35°	26.2	29.1	23.4	27.2	18.6
37.5°	27.2	28.1	25.3	28.1	26.2
40°	16.2	16.7	20.5	20.5	14.3
42.5°	15.3	14.8	9.1	14.3	11.4
45°	3.8	11.0	6.2	11.0	5.7
47.5°	2.9	3.8	3.8	7.6	7.6
50°	1.0	3.8	1.4	2.9	1.9
52.5°	0.0	9.1	1.9	6.7	5.7
55°	7.6	11.0	6.7	10.0	10.5
57.5°	1.0	7.6	3.8	8.1	5.7
60°	9.5	12.9	7.6	13.8	12.4
62.5°	1.0	8.6	10.0	7.6	6.7
65°	3.8	8.1	10.0	9.5	9.5
67.5°	4.8	8.1	6.2	6.2	8.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.0	3.3	2.4	4.3	6.7
77.5°	1.0	3.8	3.3	7.6	5.7
80°	7.6	8.6	10.5	13.8	9.5
82.5°	6.7	6.7	10.5	7.6	5.7
85°	0.0	0.0	2.4	2.4	2.9
87.5°	0.0	1.9	4.8	3.8	6.7
90°	0.0	0.0	0.0	0.0	0.0



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







70°	2.9	1.0	2.4	2.4	2.9
72.5°	1.0	4.3	3.8	2.4	4.8



(END OF REPORT)