

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: P282481

Luminaire Tested: **LDA2B059040D010 EU2B05SP159040 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282481
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: LDA2B059040D010 EU2B05SP159040 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 500 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: 681.0 lumens
Efficiency: N/A
Efficacy: 97.3 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

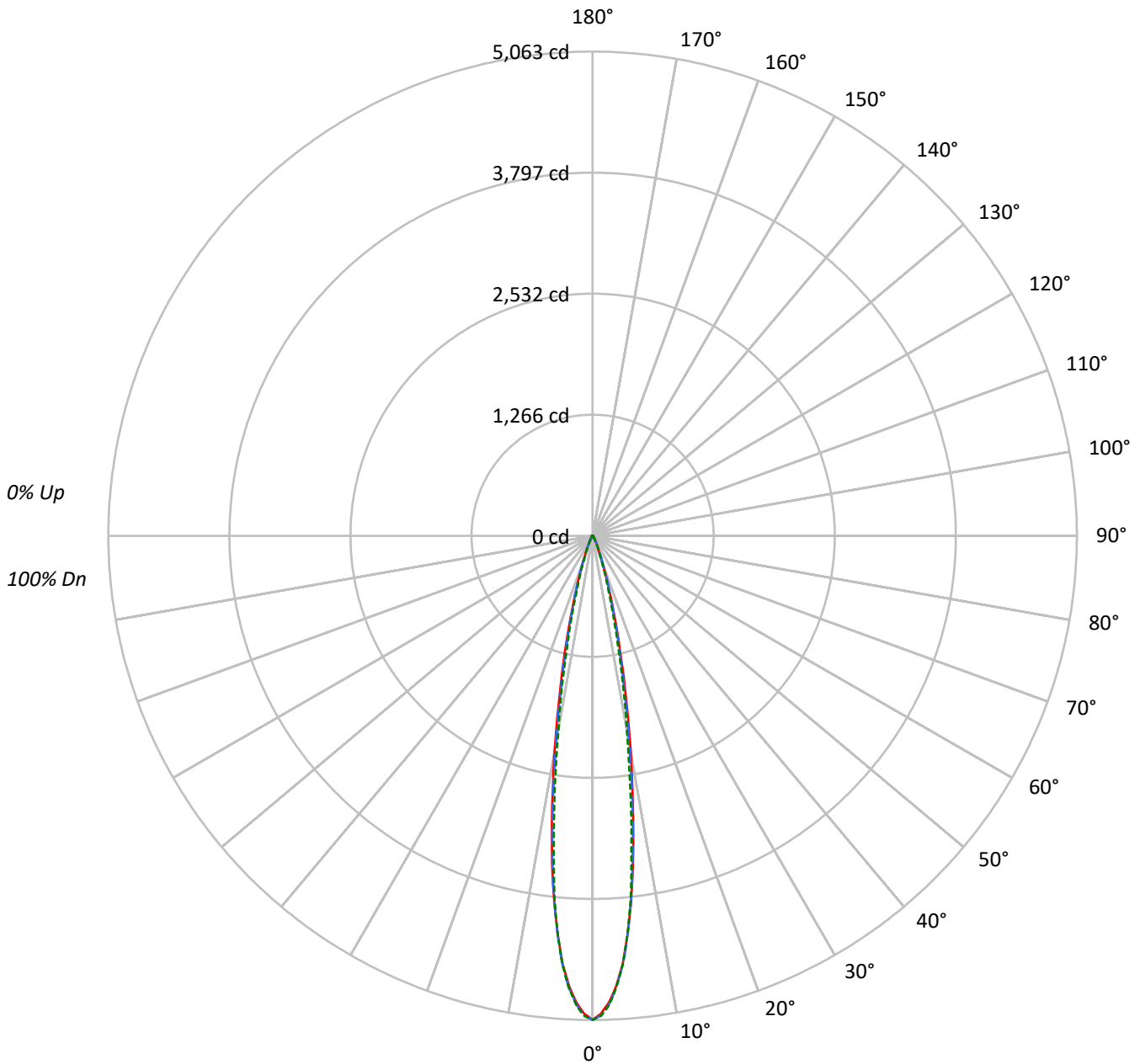
Input Watts (W): 7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	96	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	96	94	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°	2497841	2497841	2497841
5°	2072210	2078945	2071071
10°	1146927	1105446	1029799
15°	464286	444060	394260
20°	155565	164910	133514
25°	59172	59390	56233
30°	26547	26092	25237
35°	12889	11443	9094
40°	8501	10755	7471
45°	2163	3489	3279
50°	614	921	1228
55°	5333	4645	7311
60°	7696	6118	9966
65°	3619	9573	9106
70°	3318	2741	3318
75°	1525	3622	10293
80°	17615	24150	22161
85°	0	10755	13020



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.6	48.7
10°-20°	251.2	36.9
20°-30°	57.1	8.4
30°-40°	16.9	2.5
40°-50°	5.6	0.8
50°-60°	5.0	0.7
60°-70°	6.0	0.9
70°-80°	3.8	0.6
80°-90°	4.0	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°	639.9	94.0
0°-40°	656.7	96.4
0°-60°	667.3	98.0
0°-90°	681.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	681.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5063	5063	5063	5063	5063	
5°	4184	4217	4198	4143	4182	335
15°	909	921	869	788	772	264
25°	109	117	109	108	103	57
35°	21	24	19	22	15	17
45°	3	9	5	9	5	5
55°	6	9	5	8	8	3
65°	3	7	8	8	8	3
75°	1	3	2	4	5	2
85°	0	0	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5062.9	5062.9	5062.9	5062.9	5062.9
1°	4997.7	5017.9	5015.9	5007.8	5022.1
2°	4882.7	4907.2	4904.9	4887.0	4912.6
3°	4714.2	4736.0	4732.5	4706.8	4734.8
4°	4489.0	4513.9	4504.2	4465.7	4501.4
5°	4184.2	4217.2	4197.8	4143.0	4181.9
6°	3846.4	3874.3	3843.7	3771.1	3809.1
7°	3468.2	3485.7	3445.3	3352.1	3326.5
8°	3055.4	3078.4	3022.1	2913.3	2885.4
9°	2660.9	2668.7	2600.4	2484.7	2449.3
10°	2289.4	2283.5	2206.6	2089.4	2055.6
11°	1937.2	1929.4	1848.3	1739.9	1750.8
12°	1616.8	1632.0	1537.6	1439.4	1441.3
13°	1353.6	1355.1	1274.0	1180.4	1175.0
14°	1108.2	1122.5	1053.0	969.2	953.6
15°	909.0	921.4	869.4	787.8	771.9
16°	727.7	743.2	705.9	632.1	611.2
17°	585.9	605.7	581.3	519.5	495.5
18°	468.7	483.8	478.0	414.3	394.5
19°	370.0	391.0	392.6	339.4	315.7
20°	296.3	315.3	314.1	273.0	254.3
22.5°	170.1	180.2	180.6	161.1	150.3
25°	108.7	116.9	109.1	107.9	103.3
26°	94.4	101.0	92.4	92.4	88.1
27°	76.5	82.3	74.2	77.7	71.8
28°	64.5	70.7	63.7	62.9	62.1
29°	53.6	59.4	50.5	54.4	52.0
30°	46.6	50.9	45.8	51.6	44.3
32.5°	36.1	39.6	30.7	38.8	29.1
35°	21.4	23.7	19.0	22.1	15.1
37.5°	22.1	22.9	20.6	22.9	21.4
40°	13.2	13.6	16.7	16.7	11.6
42.5°	12.4	12.0	7.4	11.6	9.3
45°	3.1	8.9	5.0	8.9	4.7
47.5°	2.3	3.1	3.1	6.2	6.2
50°	0.8	3.1	1.2	2.3	1.6
52.5°	0.0	7.4	1.6	5.4	4.7
55°	6.2	8.9	5.4	8.2	8.5
57.5°	0.8	6.2	3.1	6.6	4.7
60°	7.8	10.5	6.2	11.3	10.1
62.5°	0.8	7.0	8.2	6.2	5.4
65°	3.1	6.6	8.2	7.8	7.8
67.5°	3.9	6.6	5.0	5.0	7.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.8	2.7	1.9	3.5	5.4
77.5°	0.8	3.1	2.7	6.2	4.7
80°	6.2	7.0	8.5	11.3	7.8
82.5°	5.4	5.4	8.5	6.2	4.7
85°	0.0	0.0	1.9	1.9	2.3
87.5°	0.0	1.6	3.9	3.1	5.4
90°	0.0	0.0	0.0	0.0	0.0



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







70°	2.3	0.8	1.9	1.9	2.3
72.5°	0.8	3.5	3.1	1.9	3.9



(END OF REPORT)