

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: P283514

Luminaire Tested: **LDA2B059040D010 EU2B05FL409040 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283514  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-15)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B059040D010 EU2B05FL409040 2LBAPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MW  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 599.3 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.55  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

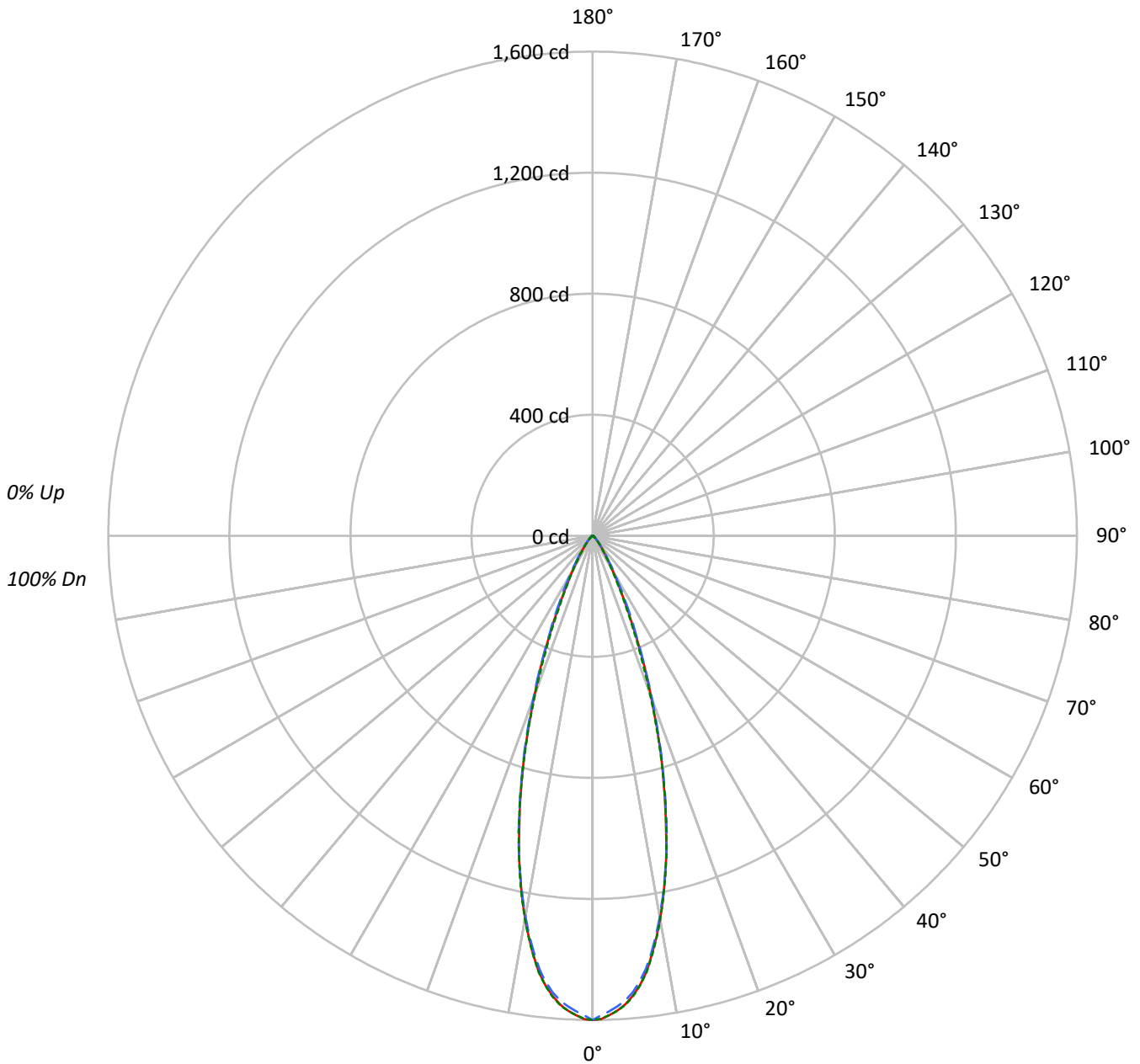
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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																			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82																			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	75	71	78	74	71	77	73	71	76	73	70	69																			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67																			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	789626	789626	789626
5°	755696	750051	756835
10°	643800	639792	644501
15°	474501	477617	476085
20°	296219	301679	289709
25°	153021	164180	145345
30°	73375	84086	69900
35°	37884	41919	35414
40°	21253	22284	20158
45°	12908	12908	12419
50°	6678	8289	6678
55°	3441	5505	3785
60°	3947	3947	3947
65°	4319	4319	4319
70°	5337	4904	5337
75°	5147	5147	5147
80°	4830	4830	4830
85°	3962	3962	3962



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.7	23.0
10°-20°	252.9	42.2
20°-30°	137.1	22.9
30°-40°	44.0	7.3
40°-50°	15.0	2.5
50°-60°	5.2	0.9
60°-70°	3.8	0.6
70°-80°	2.8	0.5
80°-90°	0.8	0.1
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°	527.6	88.0
0°-40°	571.7	95.4
0°-60°	591.9	98.8
0°-90°	599.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	599.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1526	1516	1514	1530	1528	138
15°	929	937	935	940	932	252
25°	281	294	302	281	267	135
35°	63	66	70	63	59	42
45°	18	19	18	18	18	15
55°	4	5	6	5	4	4
65°	4	4	4	4	4	4
75°	3	3	3	3	3	3
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1600.5	1600.5	1600.5	1600.5	1600.5
1°	1597.8	1586.4	1584.7	1599.5	1596.2
2°	1585.1	1574.3	1572.6	1587.4	1584.4
3°	1570.9	1561.2	1557.8	1573.3	1571.3
4°	1552.1	1543.0	1540.0	1555.5	1553.8
5°	1525.9	1516.5	1514.5	1529.6	1528.2
6°	1493.6	1485.9	1482.2	1497.3	1494.6
7°	1453.3	1446.2	1442.2	1453.3	1454.6
8°	1400.8	1397.4	1392.7	1403.8	1403.8
9°	1345.0	1342.0	1336.9	1347.0	1347.0
10°	1285.1	1283.1	1277.1	1286.5	1286.5
11°	1219.6	1218.6	1214.2	1221.9	1221.9
12°	1150.6	1153.0	1149.0	1155.7	1153.3
13°	1081.7	1080.7	1081.0	1086.1	1082.4
14°	1003.7	1009.7	1010.8	1013.8	1008.1
15°	929.0	936.8	935.1	939.5	932.1
16°	852.7	861.5	861.1	862.1	855.1
17°	781.4	786.5	786.8	785.8	777.1
18°	705.4	712.5	712.5	710.8	700.4
19°	631.1	636.5	640.2	636.5	624.4
20°	564.2	567.9	574.6	565.2	551.8
21°	500.0	503.4	509.1	498.0	483.2
22°	438.5	442.8	448.2	435.4	420.0
23°	381.0	391.1	393.1	375.6	362.5
24°	328.2	339.6	343.0	325.1	311.4
25°	281.1	293.9	301.6	280.8	267.0
26°	240.4	252.9	262.3	241.4	228.3
27°	204.8	217.9	227.6	208.1	195.7
28°	174.2	187.0	197.0	178.9	167.1
29°	151.3	158.7	168.8	153.7	142.9
30°	128.8	136.9	147.6	132.1	122.7
32.5°	88.4	92.8	101.2	91.8	84.4
35°	62.9	65.6	69.6	63.2	58.8
37.5°	44.7	46.1	48.4	44.7	42.4
40°	33.0	33.6	34.6	32.6	31.3
42.5°	24.5	24.9	24.9	24.2	23.5
45°	18.5	18.8	18.5	18.5	17.8
47.5°	13.4	14.5	14.1	14.1	13.1
50°	8.7	10.8	10.8	10.4	8.7
52.5°	5.4	7.4	8.4	7.4	5.7
55°	4.0	5.0	6.4	5.0	4.4
57.5°	4.0	4.0	4.7	4.0	4.0
60°	4.0	4.0	4.0	4.0	4.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	3.7	3.7	3.7	3.7	3.7
70°	3.7	3.7	3.4	3.7	3.7
72.5°	3.4	3.4	3.0	3.4	3.0
75°	2.7	2.7	2.7	2.7	2.7
77.5°	2.0	2.0	2.0	2.0	2.0
80°	1.7	1.7	1.7	1.7	1.7
82.5°	1.0	1.0	1.0	1.3	1.0
85°	0.7	0.7	0.7	0.7	0.7
87.5°	0.3	0.3	0.3	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	4.0	4.0	4.0	4.0	4.0
65°	3.7	4.0	3.7	4.0	3.7



(END OF REPORT)