

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: P283516

Luminaire Tested: **LDA2B059040D010 EU2B05FL409040 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283516  
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 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MMS

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 592.6 lumens  
Efficiency: N/A  
Efficacy: 84.7 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

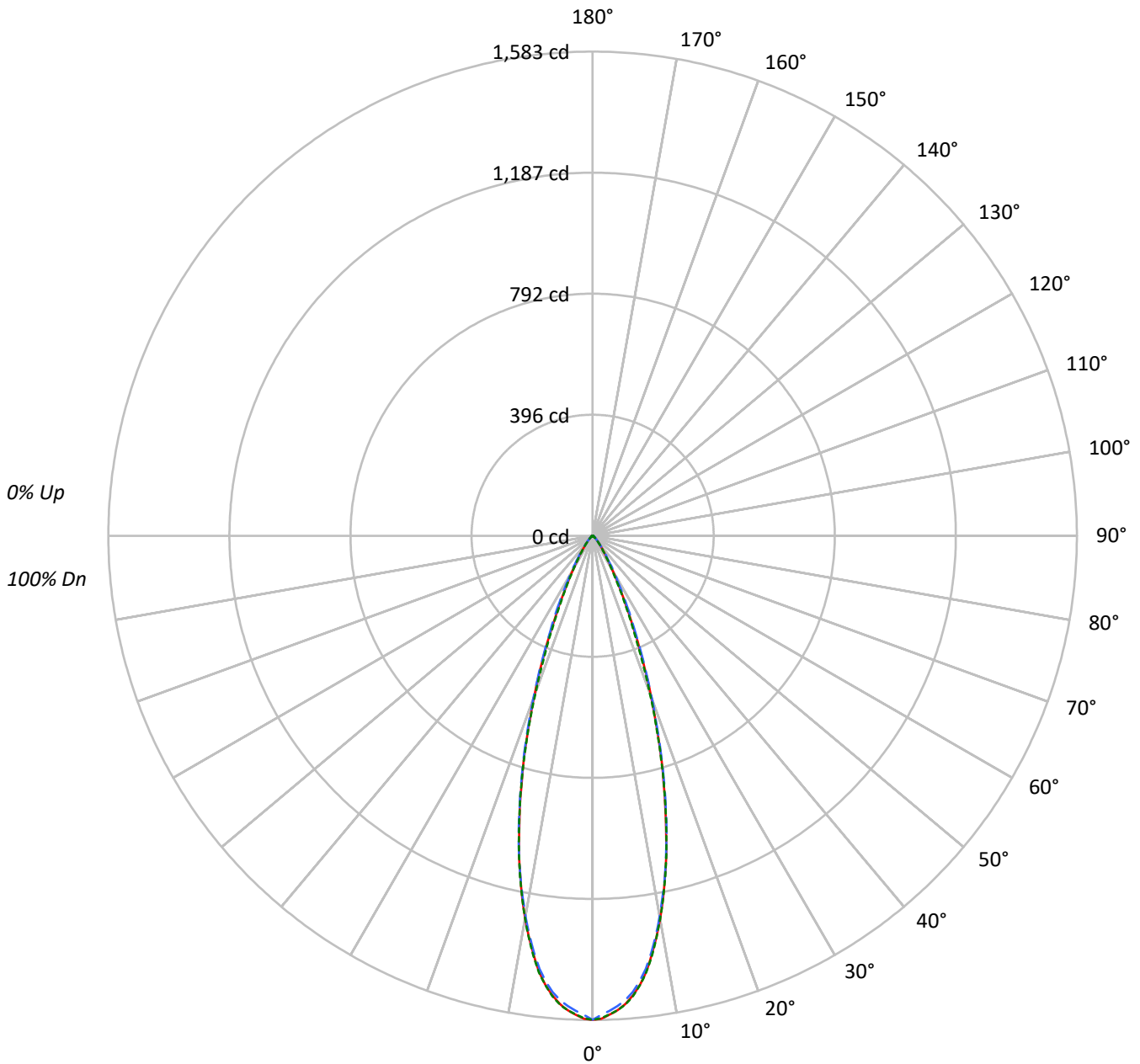
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	74	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°	780794	780794	780794
5°	747228	741631	748367
10°	636586	632578	637237
15°	469189	472254	470722
20°	292911	298319	286453
25°	151279	162329	143712
30°	72521	83174	69160
35°	37462	41437	35053
40°	20996	22026	19901
45°	12768	12768	12280
50°	6601	8136	6601
55°	3441	5419	3699
60°	3947	3947	3947
65°	4319	4319	4319
70°	5337	4760	5337
75°	5147	5147	5147
80°	4830	4830	4830
85°	3962	3962	3962



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.1	23.0
10°-20°	250.0	42.2
20°-30°	135.6	22.9
30°-40°	43.5	7.3
40°-50°	14.8	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°	521.7	88.0
0°-40°	565.2	95.4
0°-60°	585.3	98.8
0°-90°	592.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	592.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1509	1499	1498	1512	1511	136
15°	919	926	925	929	922	249
25°	278	291	298	278	264	133
35°	62	65	69	62	58	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°	1582.6	1582.6	1582.6	1582.6	1582.6
1°	1579.9	1568.6	1566.9	1581.6	1578.2
2°	1567.3	1556.6	1555.0	1569.6	1566.6
3°	1553.3	1543.7	1540.3	1555.6	1553.6
4°	1534.7	1525.7	1522.7	1538.0	1536.4
5°	1508.8	1499.4	1497.5	1512.4	1511.1
6°	1476.8	1469.2	1465.5	1480.5	1477.8
7°	1436.9	1430.0	1426.0	1436.9	1438.3
8°	1385.1	1381.8	1377.1	1388.1	1388.1
9°	1329.9	1326.9	1321.9	1331.9	1331.9
10°	1270.7	1268.7	1262.7	1272.0	1272.0
11°	1205.9	1204.9	1200.6	1208.2	1208.2
12°	1137.7	1140.0	1136.1	1142.7	1140.4
13°	1069.6	1068.6	1068.9	1073.9	1070.2
14°	992.4	998.4	999.4	1002.4	996.8
15°	918.6	926.3	924.6	928.9	921.6
16°	843.1	851.8	851.5	852.5	845.5
17°	772.7	777.7	778.0	777.0	768.3
18°	697.5	704.5	704.5	702.8	692.5
19°	624.0	629.4	633.0	629.4	617.4
20°	557.9	561.5	568.2	558.9	545.6
21°	494.4	497.7	503.4	492.4	477.8
22°	433.5	437.9	443.2	430.6	415.3
23°	376.7	386.7	388.7	371.4	358.4
24°	324.5	335.8	339.1	321.5	307.9
25°	277.9	290.6	298.2	277.6	264.0
26°	237.7	250.0	259.3	238.7	225.7
27°	202.5	215.4	225.1	205.8	193.5
28°	172.2	184.9	194.8	176.9	165.2
29°	149.6	156.9	166.9	151.9	141.3
30°	127.3	135.3	146.0	130.7	121.4
32.5°	87.4	91.8	100.1	90.8	83.5
35°	62.2	64.8	68.8	62.5	58.2
37.5°	44.2	45.5	47.9	44.2	41.9
40°	32.6	33.2	34.2	32.2	30.9
42.5°	24.3	24.6	24.6	23.9	23.3
45°	18.3	18.6	18.3	18.3	17.6
47.5°	13.3	14.3	14.0	14.0	13.0
50°	8.6	10.6	10.6	10.3	8.6
52.5°	5.3	7.3	8.3	7.3	5.7
55°	4.0	5.0	6.3	5.0	4.3
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	3.3	3.7	3.7
72.5°	3.3	3.3	3.0	3.3	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)