

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: P283513

Luminaire Tested: **LDA2B059035D010 EU2B05FL409035 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283513  
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: LDA2B059035D010 EU2B05FL409035 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 541.6 lumens  
Efficiency: N/A  
Efficacy: 77.4 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

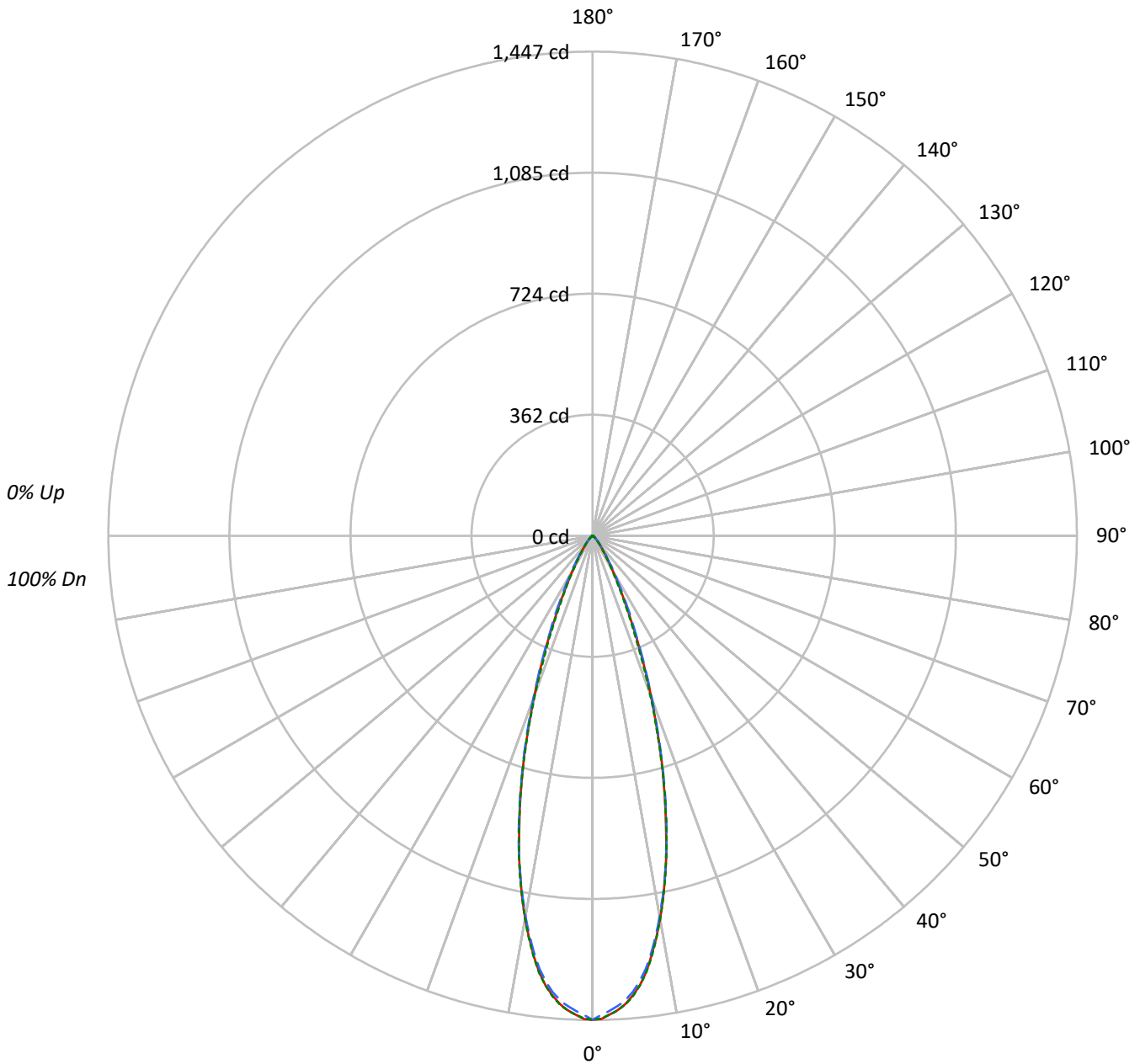
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	66	71	68	65	64																			

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

	0°	45°	90°
0°	713746	713746	713746
5°	683044	677943	684133
10°	581930	578273	582531
15°	428941	431699	430320
20°	267763	272698	261882
25°	138323	148394	131355
30°	66311	75996	63178
35°	34210	37884	32041
40°	19192	20158	18226
45°	11652	11652	11233
50°	6064	7445	6064
55°	3097	4989	3441
60°	3552	3552	3552
65°	3852	3852	3852
70°	4760	4327	4760
75°	4575	4575	4575
80°	4262	4262	4262
85°	3396	3396	3396



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.4	23.0
10°-20°	228.6	42.2
20°-30°	123.9	22.9
30°-40°	39.8	7.3
40°-50°	13.6	2.5
50°-60°	4.7	0.9
60°-70°	3.4	0.6
70°-80°	2.5	0.5
80°-90°	0.7	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°	476.9	88.1
0°-40°	516.7	95.4
0°-60°	535.0	98.8
0°-90°	541.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	541.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1447	1447	1447	1447	1447	
5°	1379	1371	1369	1383	1381	125
15°	840	847	845	849	842	228
25°	254	266	273	254	241	122
35°	57	59	63	57	53	38
45°	17	17	17	17	16	13
55°	4	5	6	5	4	4
65°	3	4	3	4	3	3
75°	2	2	2	2	2	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°	1446.7	1446.7	1446.7	1446.7	1446.7
1°	1444.3	1434.0	1432.4	1445.8	1442.8
2°	1432.7	1423.0	1421.5	1434.9	1432.1
3°	1420.0	1411.2	1408.1	1422.1	1420.3
4°	1403.0	1394.8	1392.0	1406.0	1404.5
5°	1379.2	1370.7	1368.9	1382.6	1381.4
6°	1350.1	1343.1	1339.7	1353.4	1351.0
7°	1313.6	1307.2	1303.6	1313.6	1314.8
8°	1266.2	1263.1	1258.9	1268.9	1268.9
9°	1215.7	1213.0	1208.4	1217.6	1217.6
10°	1161.6	1159.8	1154.3	1162.8	1162.8
11°	1102.4	1101.5	1097.5	1104.5	1104.5
12°	1040.1	1042.2	1038.5	1044.6	1042.5
13°	977.8	976.8	977.1	981.7	978.4
14°	907.2	912.7	913.6	916.4	911.2
15°	839.8	846.8	845.2	849.2	842.5
16°	770.8	778.7	778.4	779.3	772.9
17°	706.3	710.9	711.2	710.3	702.4
18°	637.7	644.0	644.0	642.5	633.1
19°	570.5	575.3	578.7	575.3	564.4
20°	510.0	513.3	519.4	510.9	498.8
21°	451.9	455.0	460.2	450.1	436.8
22°	396.3	400.3	405.1	393.6	379.6
23°	344.4	353.5	355.3	339.5	327.6
24°	296.6	307.0	310.0	293.9	281.4
25°	254.1	265.6	272.6	253.8	241.3
26°	217.3	228.6	237.1	218.2	206.4
27°	185.1	196.9	205.8	188.1	176.9
28°	157.4	169.0	178.1	161.7	151.1
29°	136.8	143.5	152.6	138.9	129.2
30°	116.4	123.7	133.4	119.4	110.9
32.5°	79.9	83.9	91.5	83.0	76.3
35°	56.8	59.3	62.9	57.1	53.2
37.5°	40.4	41.6	43.8	40.4	38.3
40°	29.8	30.4	31.3	29.5	28.3
42.5°	22.2	22.5	22.5	21.9	21.3
45°	16.7	17.0	16.7	16.7	16.1
47.5°	12.2	13.1	12.8	12.8	11.9
50°	7.9	9.7	9.7	9.4	7.9
52.5°	4.9	6.7	7.6	6.7	5.2
55°	3.6	4.6	5.8	4.6	4.0
57.5°	3.6	3.6	4.3	3.6	3.6
60°	3.6	3.6	3.6	3.6	3.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	3.3	3.3	3.3	3.3	3.3
70°	3.3	3.3	3.0	3.3	3.3
72.5°	3.0	3.0	2.7	3.0	2.7
75°	2.4	2.4	2.4	2.4	2.4
77.5°	1.8	1.8	1.8	1.8	1.8
80°	1.5	1.5	1.5	1.5	1.5
82.5°	0.9	0.9	0.9	1.2	0.9
85°	0.6	0.6	0.6	0.6	0.6
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°	3.6	3.6	3.6	3.6	3.6
65°	3.3	3.6	3.3	3.6	3.3



(END OF REPORT)