

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: P283495

Luminaire Tested: **LDA2B059024D010 EU2B05FL409024 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283495  
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: LDA2B059024D010 EU2B05FL409024 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: 464.2 lumens  
Efficiency: N/A  
Efficacy: 66.3 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

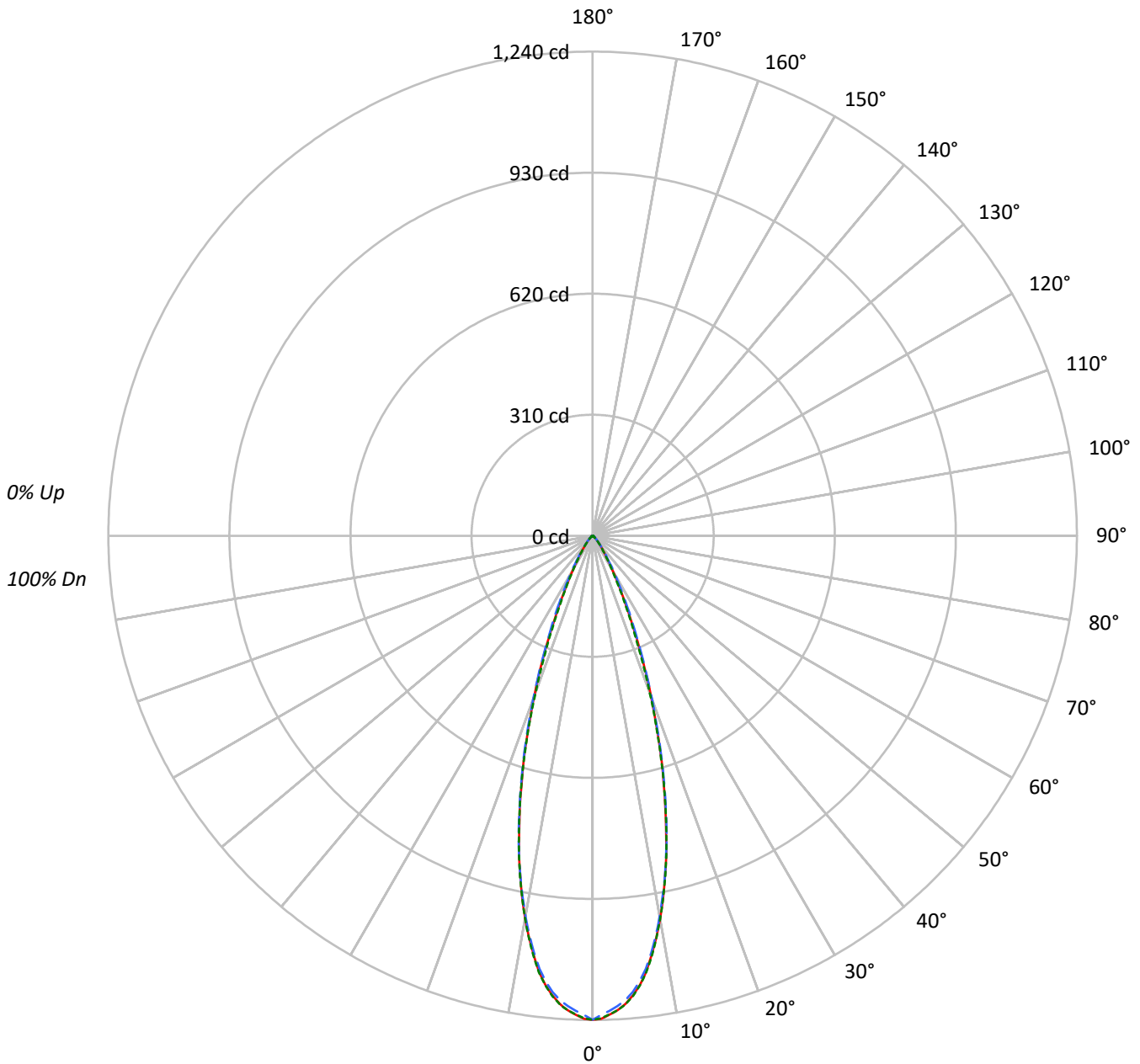
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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																			
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°	611571	611571	611571
5°	585282	580924	586223
10°	498668	495512	499169
15°	367547	369948	368722
20°	229436	233688	224396
25°	118508	127164	112575
30°	56798	65115	54177
35°	29331	32463	27464
40°	16423	17260	15586
45°	9977	9977	9629
50°	5219	6371	5219
55°	2666	4215	2925
60°	3059	3059	3059
65°	3385	3385	3385
70°	4183	3750	4183
75°	4003	4003	4003
80°	3694	3694	3694
85°	2830	2830	2830



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.6	23.0
10°-20°	195.9	42.2
20°-30°	106.2	22.9
30°-40°	34.1	7.3
40°-50°	11.6	2.5
50°-60°	4.1	0.9
60°-70°	3.0	0.6
70°-80°	2.2	0.5
80°-90°	0.6	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°	408.7	88.0
0°-40°	442.8	95.4
0°-60°	458.4	98.8
0°-90°	464.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	464.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1240	1240	1240	1240	1240	
5°	1182	1174	1173	1185	1184	107
15°	720	726	724	728	722	195
25°	218	228	234	218	207	104
35°	49	51	54	49	46	33
45°	14	15	14	14	14	11
55°	3	4	5	4	3	3
65°	3	3	3	3	3	3
75°	2	2	2	2	2	2
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1239.6	1239.6	1239.6	1239.6	1239.6
1°	1237.6	1228.7	1227.4	1238.9	1236.3
2°	1227.7	1219.3	1218.0	1229.5	1227.1
3°	1216.7	1209.2	1206.6	1218.5	1217.0
4°	1202.1	1195.1	1192.8	1204.7	1203.4
5°	1181.8	1174.5	1173.0	1184.7	1183.7
6°	1156.8	1150.8	1148.0	1159.7	1157.6
7°	1125.6	1120.1	1117.0	1125.6	1126.6
8°	1084.9	1082.3	1078.7	1087.3	1087.3
9°	1041.7	1039.4	1035.5	1043.3	1043.3
10°	995.4	993.8	989.1	996.4	996.4
11°	944.6	943.8	940.4	946.4	946.4
12°	891.2	893.0	889.9	895.1	893.3
13°	837.8	837.0	837.3	841.2	838.3
14°	777.4	782.1	782.9	785.2	780.8
15°	719.6	725.6	724.3	727.6	721.9
16°	660.4	667.2	667.0	667.7	662.3
17°	605.2	609.1	609.4	608.6	601.9
18°	546.4	551.8	551.8	550.5	542.5
19°	488.8	493.0	495.9	493.0	483.6
20°	437.0	439.9	445.1	437.8	427.4
21°	387.3	389.9	394.3	385.7	374.2
22°	339.6	343.0	347.2	337.3	325.3
23°	295.1	302.9	304.4	290.9	280.7
24°	254.2	263.0	265.6	251.8	241.2
25°	217.7	227.6	233.6	217.5	206.8
26°	186.2	195.8	203.1	187.0	176.8
27°	158.6	168.8	176.3	161.2	151.6
28°	134.9	144.8	152.6	138.5	129.4
29°	117.2	122.9	130.7	119.0	110.7
30°	99.7	106.0	114.3	102.3	95.1
32.5°	68.5	71.9	78.4	71.1	65.4
35°	48.7	50.8	53.9	49.0	45.6
37.5°	34.6	35.7	37.5	34.6	32.8
40°	25.5	26.0	26.8	25.3	24.2
42.5°	19.0	19.3	19.3	18.8	18.2
45°	14.3	14.6	14.3	14.3	13.8
47.5°	10.4	11.2	10.9	10.9	10.2
50°	6.8	8.3	8.3	8.1	6.8
52.5°	4.2	5.7	6.5	5.7	4.4
55°	3.1	3.9	4.9	3.9	3.4
57.5°	3.1	3.1	3.6	3.1	3.1
60°	3.1	3.1	3.1	3.1	3.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	2.9	2.9	2.9	2.9	2.9
70°	2.9	2.9	2.6	2.9	2.9
72.5°	2.6	2.6	2.3	2.6	2.3
75°	2.1	2.1	2.1	2.1	2.1
77.5°	1.6	1.6	1.6	1.6	1.6
80°	1.3	1.3	1.3	1.3	1.3
82.5°	0.8	0.8	0.8	1.0	0.8
85°	0.5	0.5	0.5	0.5	0.5
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°	3.1	3.1	3.1	3.1	3.1
65°	2.9	3.1	2.9	3.1	2.9



(END OF REPORT)