

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: P283493

Luminaire Tested: **LDA2B059024D010 EU2B05FL409024 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283493  
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 2LBALPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 474.6 lumens  
Efficiency: N/A  
Efficacy: 67.8 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

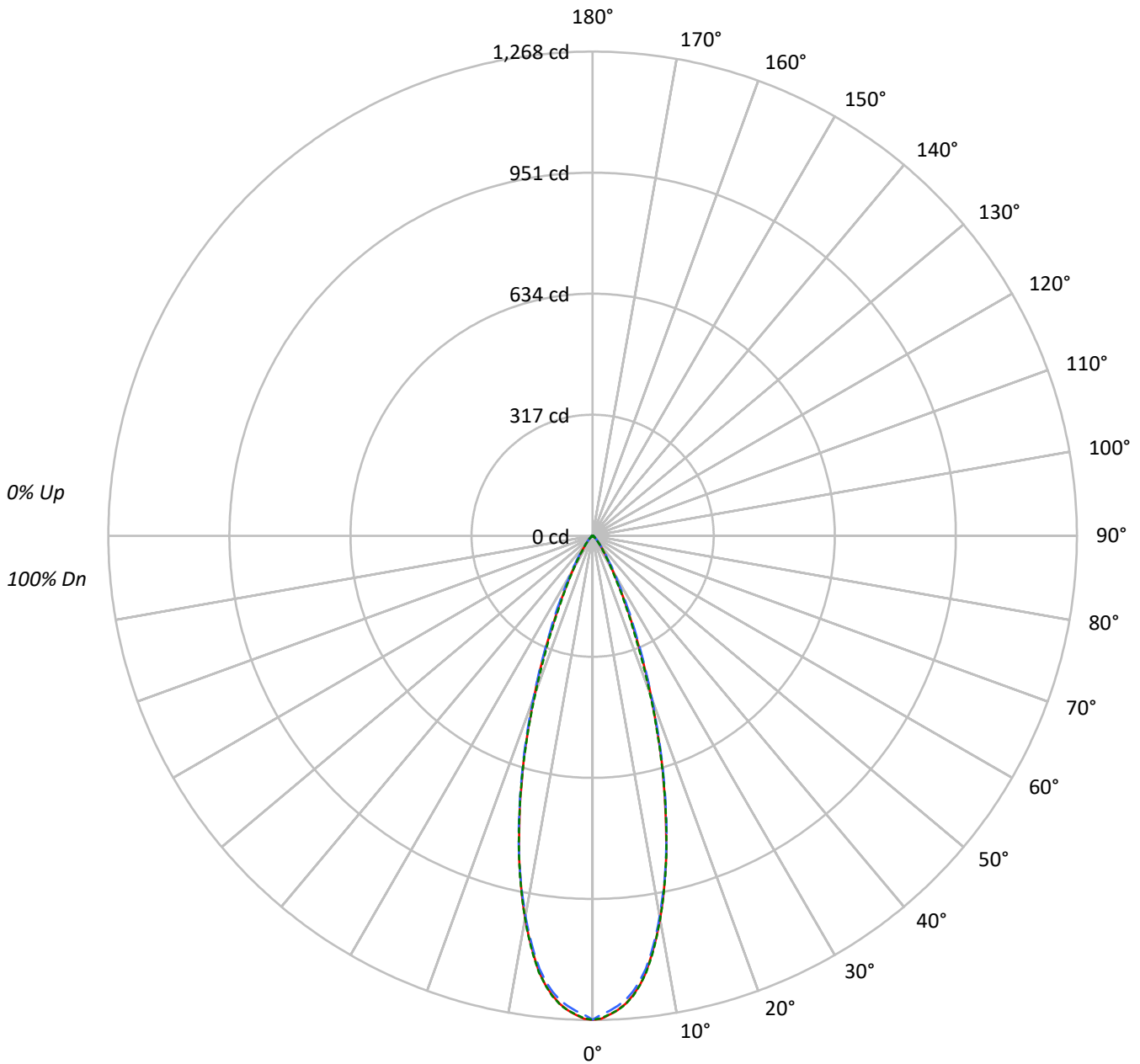
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P283493

CATALOG NUMBER: LDA2B059024D010 EU2B05FL409024 2LBALPINSQ1MW

### Luminous Intensity Polar Plot





TEST NUMBER: P283493

CATALOG NUMBER: LDA2B059024D010 EU2B05FL409024 2LBALPINSQ1MW

**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°	625336	625336	625336
5°	598456	593998	599397
10°	509840	506684	510391
15°	375821	378222	376996
20°	234581	238939	229436
25°	121176	130049	115079
30°	58108	66596	55373
35°	29994	33186	28066
40°	16809	17647	15972
45°	10187	10187	9838
50°	5296	6524	5296
55°	2752	4387	3011
60°	3158	3158	3158
65°	3385	3385	3385
70°	4183	3895	4183
75°	4003	4003	4003
80°	3694	3694	3694
85°	2830	2830	2830



TEST NUMBER: P283493

CATALOG NUMBER: LDA2B059024D010 EU2B05FL409024 2LBALPINSQ1MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.0	23.0
10°-20°	200.3	42.2
20°-30°	108.6	22.9
30°-40°	34.9	7.3
40°-50°	11.9	2.5
50°-60°	4.2	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°	417.9	88.0
0°-40°	452.7	95.4
0°-60°	468.8	98.8
0°-90°	474.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	474.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1208	1201	1199	1211	1210	109
15°	736	742	740	744	738	199
25°	223	233	239	222	211	107
35°	50	52	55	50	47	34
45°	15	15	15	15	14	12
55°	3	4	5	4	4	4
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	



TEST NUMBER: P283493

CATALOG NUMBER: LDA2B059024D010 EU2B05FL409024 2LBALPINSQ1MW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1267.5	1267.5	1267.5	1267.5	1267.5
1°	1265.4	1256.3	1255.0	1266.7	1264.1
2°	1255.3	1246.8	1245.4	1257.1	1254.7
3°	1244.1	1236.4	1233.7	1246.0	1244.4
4°	1229.2	1222.0	1219.6	1231.8	1230.5
5°	1208.4	1201.0	1199.4	1211.3	1210.3
6°	1182.8	1176.7	1173.8	1185.8	1183.6
7°	1150.9	1145.3	1142.1	1150.9	1152.0
8°	1109.4	1106.7	1103.0	1111.7	1111.7
9°	1065.1	1062.8	1058.8	1066.7	1066.7
10°	1017.7	1016.2	1011.4	1018.8	1018.8
11°	965.8	965.0	961.6	967.7	967.7
12°	911.2	913.1	909.9	915.2	913.4
13°	856.6	855.8	856.1	860.1	857.2
14°	794.9	799.7	800.5	802.9	798.3
15°	735.8	741.9	740.5	744.0	738.1
16°	675.3	682.2	682.0	682.8	677.2
17°	618.9	622.8	623.1	622.3	615.4
18°	558.7	564.3	564.3	562.9	554.7
19°	499.8	504.1	507.0	504.1	494.5
20°	446.8	449.8	455.1	447.6	437.0
21°	396.0	398.6	403.2	394.4	382.7
22°	347.2	350.7	355.0	344.8	332.6
23°	301.7	309.7	311.3	297.4	287.1
24°	259.9	268.9	271.6	257.5	246.6
25°	222.6	232.7	238.9	222.3	211.4
26°	190.4	200.2	207.7	191.2	180.8
27°	162.2	172.6	180.3	164.8	155.0
28°	137.9	148.1	156.0	141.7	132.3
29°	119.8	125.7	133.7	121.7	113.2
30°	102.0	108.4	116.9	104.7	97.2
32.5°	70.0	73.5	80.2	72.7	66.8
35°	49.8	51.9	55.1	50.1	46.6
37.5°	35.4	36.5	38.3	35.4	33.6
40°	26.1	26.6	27.4	25.8	24.8
42.5°	19.4	19.7	19.7	19.2	18.6
45°	14.6	14.9	14.6	14.6	14.1
47.5°	10.7	11.5	11.2	11.2	10.4
50°	6.9	8.5	8.5	8.3	6.9
52.5°	4.3	5.9	6.7	5.9	4.5
55°	3.2	4.0	5.1	4.0	3.5
57.5°	3.2	3.2	3.7	3.2	3.2
60°	3.2	3.2	3.2	3.2	3.2



TEST NUMBER: P283493

CATALOG NUMBER: LDA2B059024D010 EU2B05FL409024 2LBALPINSQ1MW

**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	2.7	2.9	2.9
72.5°	2.7	2.7	2.4	2.7	2.4
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	1.1	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



Report Generated By E9808895 / USPTCWHP6082093







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







62.5°	3.2	3.2	3.2	3.2	3.2
65°	2.9	3.2	2.9	3.2	2.9



(END OF REPORT)