

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: P283499

Luminaire Tested: **LDA2B059027D010 EU2B05FL409027 2LBALPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283499  
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: LDA2B059027D010 EU2B05FL409027 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: 511.4 lumens  
Efficiency: N/A  
Efficacy: 73.1 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

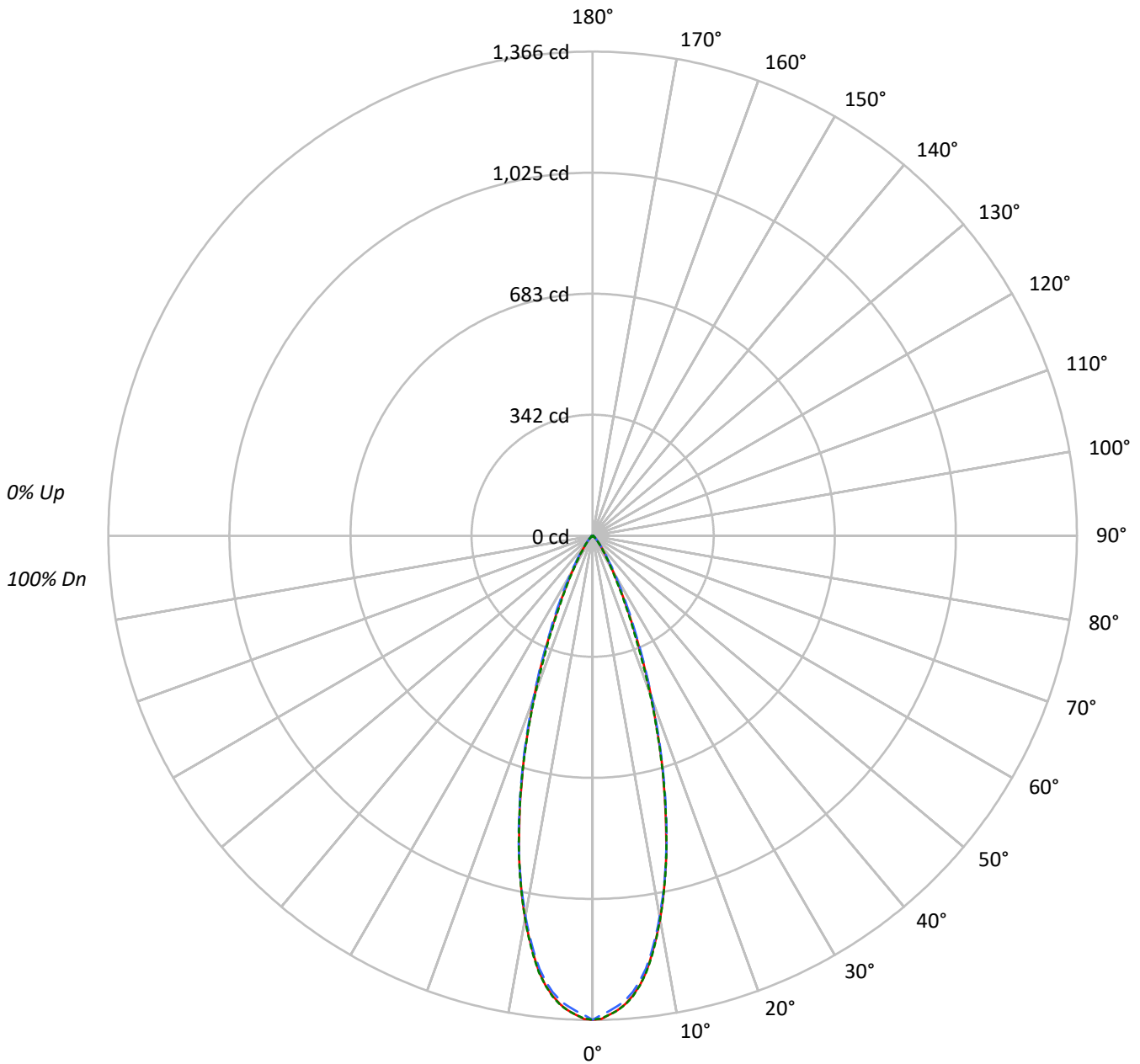
Input Watts (W): 7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P283499

CATALOG NUMBER: LDA2B059027D010 EU2B05FL409027 2LBALPINSQ1MW

### Luminous Intensity Polar Plot





TEST NUMBER: P283499

CATALOG NUMBER: LDA2B059027D010 EU2B05FL409027 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°	673834	673834	673834
5°	644860	640007	645851
10°	549367	545910	549968
15°	404935	407540	406212
20°	252799	257472	247182
25°	130593	140119	124006
30°	62608	71780	59646
35°	32343	35776	30235
40°	18097	19064	17196
45°	11024	11024	10605
50°	5757	7061	5757
55°	2925	4731	3183
60°	3355	3355	3355
65°	3736	3736	3736
70°	4616	4183	4616
75°	4384	4384	4384
80°	3978	3978	3978
85°	3396	3396	3396



TEST NUMBER: P283499

CATALOG NUMBER: LDA2B059027D010 EU2B05FL409027 2LBALPINSQ1MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.5	23.0
10°-20°	215.8	42.2
20°-30°	117.0	22.9
30°-40°	37.6	7.3
40°-50°	12.8	2.5
50°-60°	4.5	0.9
60°-70°	3.3	0.6
70°-80°	2.4	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°	450.2	88.0
0°-40°	487.8	95.4
0°-60°	505.1	98.8
0°-90°	511.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	511.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1366	1366	1366	1366	1366	
5°	1302	1294	1292	1305	1304	118
15°	793	799	798	802	795	215
25°	240	251	257	240	228	115
35°	54	56	59	54	50	36
45°	16	16	16	16	15	13
55°	3	4	6	4	4	4
65°	3	3	3	3	3	3
75°	2	2	2	2	2	2
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P283499

CATALOG NUMBER: LDA2B059027D010 EU2B05FL409027 2LBALPINSQ1MW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1365.8	1365.8	1365.8	1365.8	1365.8
1°	1363.5	1353.7	1352.3	1364.9	1362.0
2°	1352.6	1343.4	1341.9	1354.6	1352.0
3°	1340.5	1332.2	1329.3	1342.5	1340.8
4°	1324.4	1316.7	1314.1	1327.3	1325.9
5°	1302.1	1294.0	1292.3	1305.2	1304.1
6°	1274.5	1267.9	1264.8	1277.7	1275.4
7°	1240.1	1234.1	1230.6	1240.1	1241.2
8°	1195.3	1192.4	1188.4	1197.9	1197.9
9°	1147.7	1145.1	1140.8	1149.4	1149.4
10°	1096.6	1094.9	1089.7	1097.8	1097.8
11°	1040.7	1039.8	1036.1	1042.7	1042.7
12°	981.8	983.9	980.4	986.2	984.1
13°	923.0	922.2	922.5	926.8	923.6
14°	856.5	861.6	862.5	865.1	860.2
15°	792.8	799.4	797.9	801.7	795.3
16°	727.6	735.1	734.8	735.7	729.6
17°	666.8	671.1	671.4	670.5	663.1
18°	602.0	608.0	608.0	606.6	597.7
19°	538.6	543.1	546.3	543.1	532.8
20°	481.5	484.6	490.4	482.3	470.8
21°	426.7	429.5	434.4	424.9	412.3
22°	374.1	377.9	382.5	371.6	358.4
23°	325.1	333.7	335.4	320.5	309.3
24°	280.0	289.8	292.7	277.5	265.7
25°	239.9	250.8	257.4	239.6	227.8
26°	205.1	215.8	223.8	206.0	194.8
27°	174.7	185.9	194.2	177.6	167.0
28°	148.6	159.5	168.1	152.6	142.6
29°	129.1	135.4	144.0	131.1	121.9
30°	109.9	116.8	126.0	112.8	104.7
32.5°	75.5	79.2	86.4	78.3	72.0
35°	53.7	55.9	59.4	53.9	50.2
37.5°	38.2	39.3	41.3	38.2	36.2
40°	28.1	28.7	29.6	27.8	26.7
42.5°	20.9	21.2	21.2	20.7	20.1
45°	15.8	16.1	15.8	15.8	15.2
47.5°	11.5	12.3	12.1	12.1	11.2
50°	7.5	9.2	9.2	8.9	7.5
52.5°	4.6	6.3	7.2	6.3	4.9
55°	3.4	4.3	5.5	4.3	3.7
57.5°	3.4	3.4	4.0	3.4	3.4
60°	3.4	3.4	3.4	3.4	3.4



TEST NUMBER: P283499

CATALOG NUMBER: LDA2B059027D010 EU2B05FL409027 2LBALPINSQ1MW

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	3.2	3.2	3.2	3.2	3.2
70°	3.2	3.2	2.9	3.2	3.2
72.5°	2.9	2.9	2.6	2.9	2.6
75°	2.3	2.3	2.3	2.3	2.3
77.5°	1.7	1.7	1.7	1.7	1.7
80°	1.4	1.4	1.4	1.4	1.4
82.5°	0.9	0.9	0.9	1.1	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



Report Generated By E9808895 / USPTCWHP6082093







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







62.5°	3.4	3.4	3.4	3.4	3.4
65°	3.2	3.4	3.2	3.4	3.2



(END OF REPORT)