

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: P282483

Luminaire Tested: **LDA2B059050D010 EU2B05SP159050 2LBALPINSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-7)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B059050D010 EU2B05SP159050 2LBALPINSQ1MB
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MB
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 699.7 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

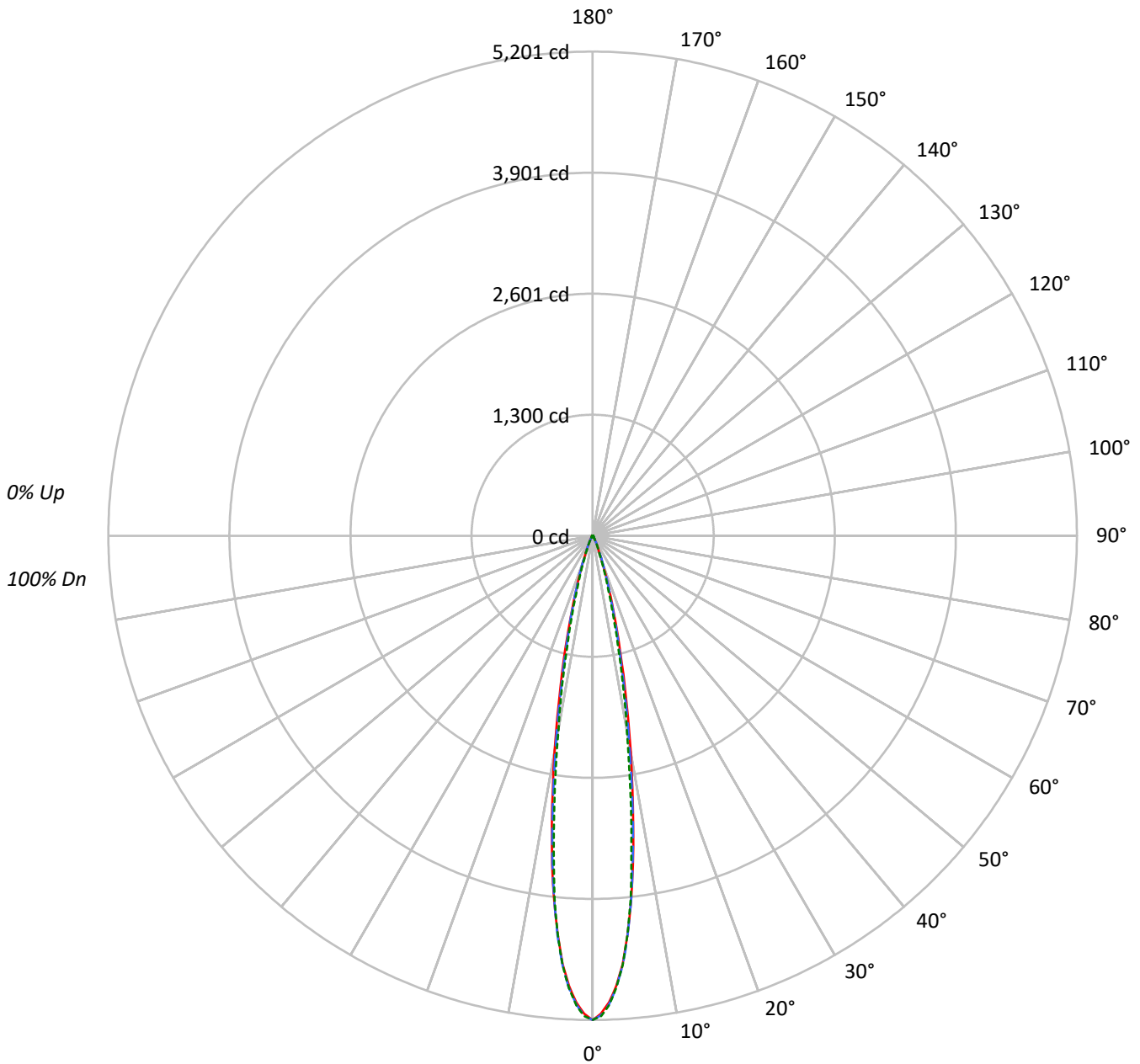
Input Watts (W): 7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P282483

CATALOG NUMBER: LDA2B059050D010 EU2B05SP159050 2LBALPINSQ1MB

Luminous Intensity Polar Plot





TEST NUMBER: P282483

CATALOG NUMBER: LDA2B059050D010 EU2B05SP159050 2LBALPINSQ1MB

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				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	98	96	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	95	94	92	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	95	94	92	91	95	94	92	91															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	94	92	90	89															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	92	89	88	87															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	90	88	86	85															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	86	84	83															
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	84	82	81															
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	82	81	80															
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	81	79	78															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2566172	2566172	2566172
5°	2128915	2135799	2127727
10°	1178288	1135705	1057954
15°	477004	456216	405037
20°	159818	169425	137189
25°	60806	61023	57757
30°	27288	26832	25921
35°	13190	11745	9396
40°	8759	11077	7728
45°	2233	3628	3349
50°	614	921	1228
55°	5505	4817	7569
60°	7894	6315	10262
65°	3736	9806	9339
70°	3462	2885	3462
75°	1525	3812	10675
80°	18183	25002	22729
85°	0	11321	13586



TEST NUMBER: P282483

CATALOG NUMBER: LDA2B059050D010 EU2B05SP159050 2LBALPINSQ1MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.7	48.7
10°-20°	258.1	36.9
20°-30°	58.7	8.4
30°-40°	17.3	2.5
40°-50°	5.8	0.8
50°-60°	5.1	0.7
60°-70°	6.1	0.9
70°-80°	3.9	0.6
80°-90°	4.1	0.6
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°	657.4	93.9
0°-40°	674.7	96.4
0°-60°	685.6	98.0
0°-90°	699.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	699.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5201	5201	5201	5201	5201	
5°	4299	4333	4313	4256	4296	345
15°	934	947	893	809	793	271
25°	112	120	112	111	106	58
35°	22	24	20	23	16	17
45°	3	9	5	9	5	5
55°	6	9	6	8	9	3
65°	3	7	8	8	8	3
75°	1	3	2	4	6	2
85°	0	0	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P282483

CATALOG NUMBER: LDA2B059050D010 EU2B05SP159050 2LBALPINSQ1MB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5201.4	5201.4	5201.4	5201.4	5201.4
1°	5134.4	5155.1	5153.1	5144.8	5159.5
2°	5016.3	5041.5	5039.1	5020.7	5047.0
3°	4843.2	4865.5	4861.9	4835.6	4864.3
4°	4611.8	4637.4	4627.4	4587.9	4624.6
5°	4298.7	4332.6	4312.6	4256.4	4296.3
6°	3951.6	3980.3	3948.8	3874.2	3913.3
7°	3563.1	3581.0	3539.5	3443.8	3417.5
8°	3139.0	3162.6	3104.7	2993.0	2964.3
9°	2733.7	2741.7	2671.5	2552.6	2516.3
10°	2352.0	2346.0	2267.0	2146.5	2111.8
11°	1990.2	1982.2	1898.8	1787.5	1798.7
12°	1661.1	1676.6	1579.7	1478.8	1480.8
13°	1390.6	1392.2	1308.8	1212.7	1207.1
14°	1138.5	1153.3	1081.9	995.7	979.7
15°	933.9	946.6	893.2	809.4	793.0
16°	747.6	763.5	725.2	649.4	627.9
17°	602.0	622.3	597.2	533.7	509.0
18°	481.5	497.0	491.1	425.6	405.3
19°	380.2	401.7	403.3	348.6	324.3
20°	304.4	323.9	322.7	280.4	261.3
22.5°	174.7	185.1	185.5	165.5	154.4
25°	111.7	120.1	112.1	110.9	106.1
26°	96.9	103.7	94.9	94.9	90.6
27°	78.6	84.6	76.2	79.8	73.8
28°	66.2	72.6	65.4	64.6	63.8
29°	55.0	61.0	51.9	55.8	53.5
30°	47.9	52.3	47.1	53.1	45.5
32.5°	37.1	40.7	31.5	39.9	29.9
35°	21.9	24.3	19.5	22.7	15.6
37.5°	22.7	23.5	21.1	23.5	21.9
40°	13.6	14.0	17.2	17.2	12.0
42.5°	12.8	12.4	7.6	12.0	9.6
45°	3.2	9.2	5.2	9.2	4.8
47.5°	2.4	3.2	3.2	6.4	6.4
50°	0.8	3.2	1.2	2.4	1.6
52.5°	0.0	7.6	1.6	5.6	4.8
55°	6.4	9.2	5.6	8.4	8.8
57.5°	0.8	6.4	3.2	6.8	4.8
60°	8.0	10.8	6.4	11.6	10.4
62.5°	0.8	7.2	8.4	6.4	5.6
65°	3.2	6.8	8.4	8.0	8.0
67.5°	4.0	6.8	5.2	5.2	7.2



TEST NUMBER: P282483

CATALOG NUMBER: LDA2B059050D010 EU2B05SP159050 2LBALPINSQ1MB

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.8	2.8	2.0	3.6	5.6
77.5°	0.8	3.2	2.8	6.4	4.8
80°	6.4	7.2	8.8	11.6	8.0
82.5°	5.6	5.6	8.8	6.4	4.8
85°	0.0	0.0	2.0	2.0	2.4
87.5°	0.0	1.6	4.0	3.2	5.6
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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







70°	2.4	0.8	2.0	2.0	2.4
72.5°	0.8	3.6	3.2	2.0	4.0



(END OF REPORT)