

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: P283735

Luminaire Tested: **LDA2B208040D010 EU2B20FL408040 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283735
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: LDA2B208040D010 EU2B20FL408040 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 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: 1712.3 lumens
Efficiency: N/A
Efficacy: 83.1 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

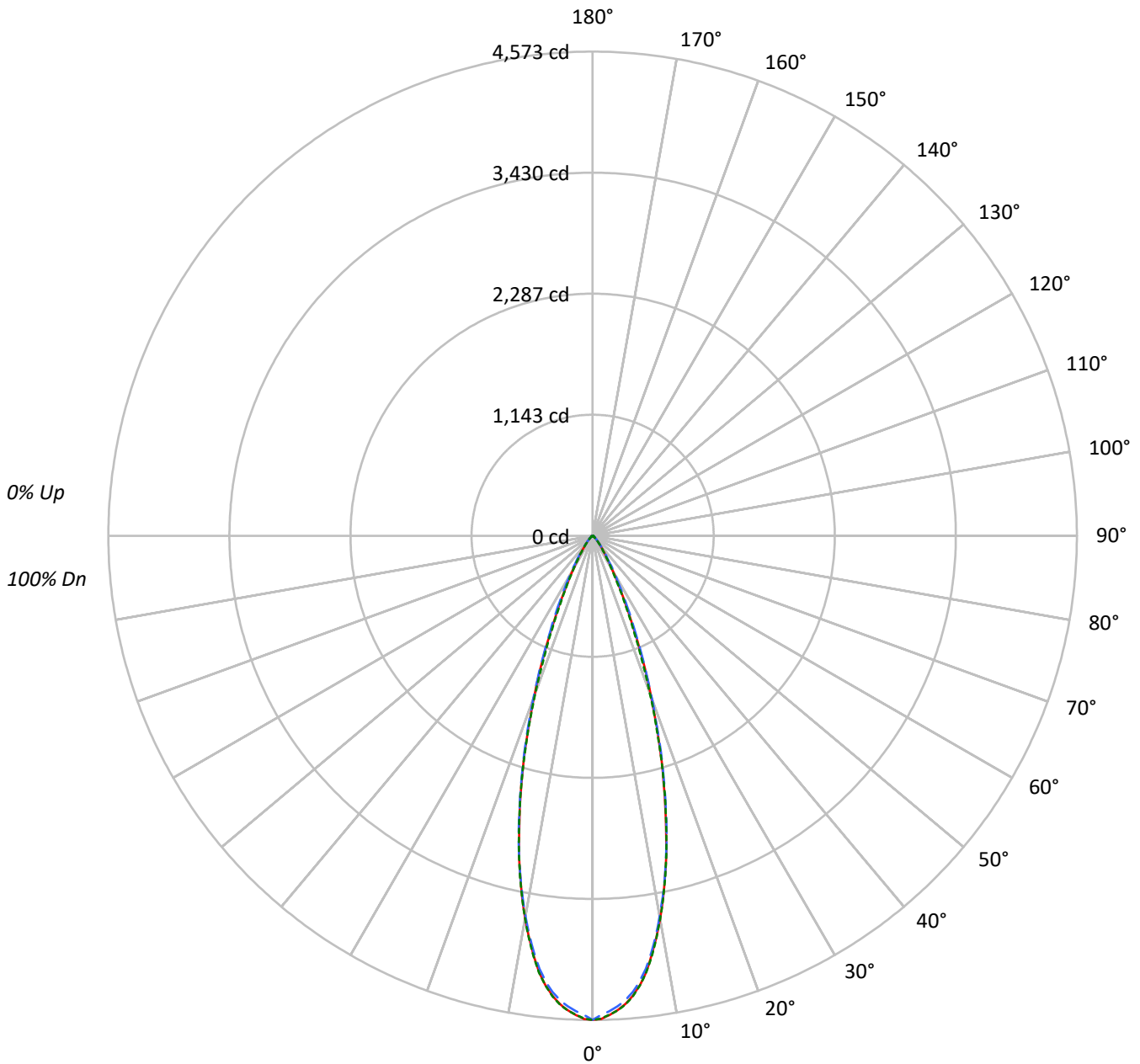
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P283735

CATALOG NUMBER: LDA2B208040D010 EU2B20FL408040 2LBALPINSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P283735

CATALOG NUMBER: LDA2B208040D010 EU2B20FL408040 2LBALPINSQ1MMS

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°	2255995	2255995	2255995
5°	2159026	2142832	2162345
10°	1839371	1827849	1841325
15°	1355725	1364562	1360118
20°	846340	861985	827649
25°	437179	469079	415241
30°	209587	240236	199732
35°	108170	119794	101244
40°	60604	63695	57513
45°	36840	36840	35514
50°	19188	23563	19188
55°	9892	15741	10752
60°	11347	11347	11347
65°	12374	12374	12374
70°	15290	13848	15290
75°	14678	14678	14678
80°	13638	13638	13638
85°	10755	10755	10755



TEST NUMBER: P283735

CATALOG NUMBER: LDA2B208040D010 EU2B20FL408040 2LBALPINSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	393.3	23.0
10°-20°	722.5	42.2
20°-30°	391.7	22.9
30°-40°	125.7	7.3
40°-50°	42.9	2.5
50°-60°	15.0	0.9
60°-70°	10.9	0.6
70°-80°	8.0	0.5
80°-90°	2.3	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°	1507.5	88.0
0°-40°	1633.2	95.4
0°-60°	1691.1	98.8
0°-90°	1712.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1712.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4573	4573	4573	4573	4573	
5°	4360	4333	4327	4370	4366	394
15°	2654	2676	2672	2684	2663	720
25°	803	840	862	802	763	385
35°	180	187	199	181	168	121
45°	53	54	53	53	51	42
55°	12	14	18	14	12	13
65°	11	12	11	12	11	11
75°	8	8	8	8	8	8
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P283735

CATALOG NUMBER: LDA2B208040D010 EU2B20FL408040 2LBALPINSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4572.7	4572.7	4572.7	4572.7	4572.7
1°	4565.1	4532.4	4527.6	4569.9	4560.3
2°	4528.6	4497.8	4493.0	4535.3	4526.6
3°	4488.2	4460.3	4450.7	4494.9	4489.2
4°	4434.4	4408.5	4399.8	4444.0	4439.2
5°	4359.5	4332.6	4326.8	4370.0	4366.2
6°	4267.3	4245.2	4234.6	4277.8	4270.1
7°	4152.0	4131.8	4120.3	4152.0	4155.8
8°	4002.1	3992.5	3979.1	4010.8	4010.8
9°	3842.6	3834.0	3819.6	3848.4	3848.4
10°	3671.6	3665.9	3648.6	3675.5	3675.5
11°	3484.3	3481.4	3468.9	3491.0	3491.0
12°	3287.4	3294.1	3282.6	3301.8	3295.1
13°	3090.4	3087.6	3088.5	3102.9	3092.4
14°	2867.6	2884.9	2887.7	2896.4	2880.1
15°	2654.3	2676.4	2671.6	2684.1	2662.9
16°	2436.2	2461.2	2460.3	2463.1	2443.0
17°	2232.6	2247.0	2247.9	2245.1	2220.1
18°	2015.5	2035.6	2035.6	2030.8	2001.1
19°	1803.2	1818.5	1829.1	1818.5	1783.9
20°	1612.0	1622.6	1641.8	1614.9	1576.4
21°	1428.5	1438.1	1454.4	1422.7	1380.5
22°	1252.7	1265.2	1280.6	1244.1	1199.9
23°	1088.4	1117.2	1123.0	1073.1	1035.6
24°	937.6	970.3	979.9	929.0	889.6
25°	803.1	839.6	861.7	802.2	762.8
26°	686.9	722.4	749.3	689.8	652.3
27°	585.0	622.5	650.4	594.6	559.1
28°	497.6	534.1	562.9	511.1	477.4
29°	432.3	453.4	482.3	439.0	408.3
30°	367.9	391.0	421.7	377.5	350.6
32.5°	252.7	265.1	289.2	262.3	241.1
35°	179.6	187.3	198.9	180.6	168.1
37.5°	127.8	131.6	138.3	127.8	121.0
40°	94.1	96.1	98.9	93.2	89.3
42.5°	70.1	71.1	71.1	69.2	67.2
45°	52.8	53.8	52.8	52.8	50.9
47.5°	38.4	41.3	40.3	40.3	37.5
50°	25.0	30.7	30.7	29.8	25.0
52.5°	15.4	21.1	24.0	21.1	16.3
55°	11.5	14.4	18.3	14.4	12.5
57.5°	11.5	11.5	13.4	11.5	11.5
60°	11.5	11.5	11.5	11.5	11.5



TEST NUMBER: P283735

CATALOG NUMBER: LDA2B208040D010 EU2B20FL408040 2LBALPINSQ1MMS

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	10.6	10.6	10.6	10.6	10.6
70°	10.6	10.6	9.6	10.6	10.6
72.5°	9.6	9.6	8.6	9.6	8.6
75°	7.7	7.7	7.7	7.7	7.7
77.5°	5.8	5.8	5.8	5.8	5.8
80°	4.8	4.8	4.8	4.8	4.8
82.5°	2.9	2.9	2.9	3.8	2.9
85°	1.9	1.9	1.9	1.9	1.9
87.5°	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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







62.5°	11.5	11.5	11.5	11.5	11.5
65°	10.6	11.5	10.6	11.5	10.6



(END OF REPORT)