

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: P284113

Luminaire Tested: **LDA2B209050D010 EU2B20WFL559050 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P284113  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-61)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B209050D010 EU2B20WFL559050 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH WIDE FLOOD OPTIC AND  
2in Adj SQ Pinhole w-lens, MMS

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1486.9 lumens  
Efficiency: N/A  
Efficacy: 72.2 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

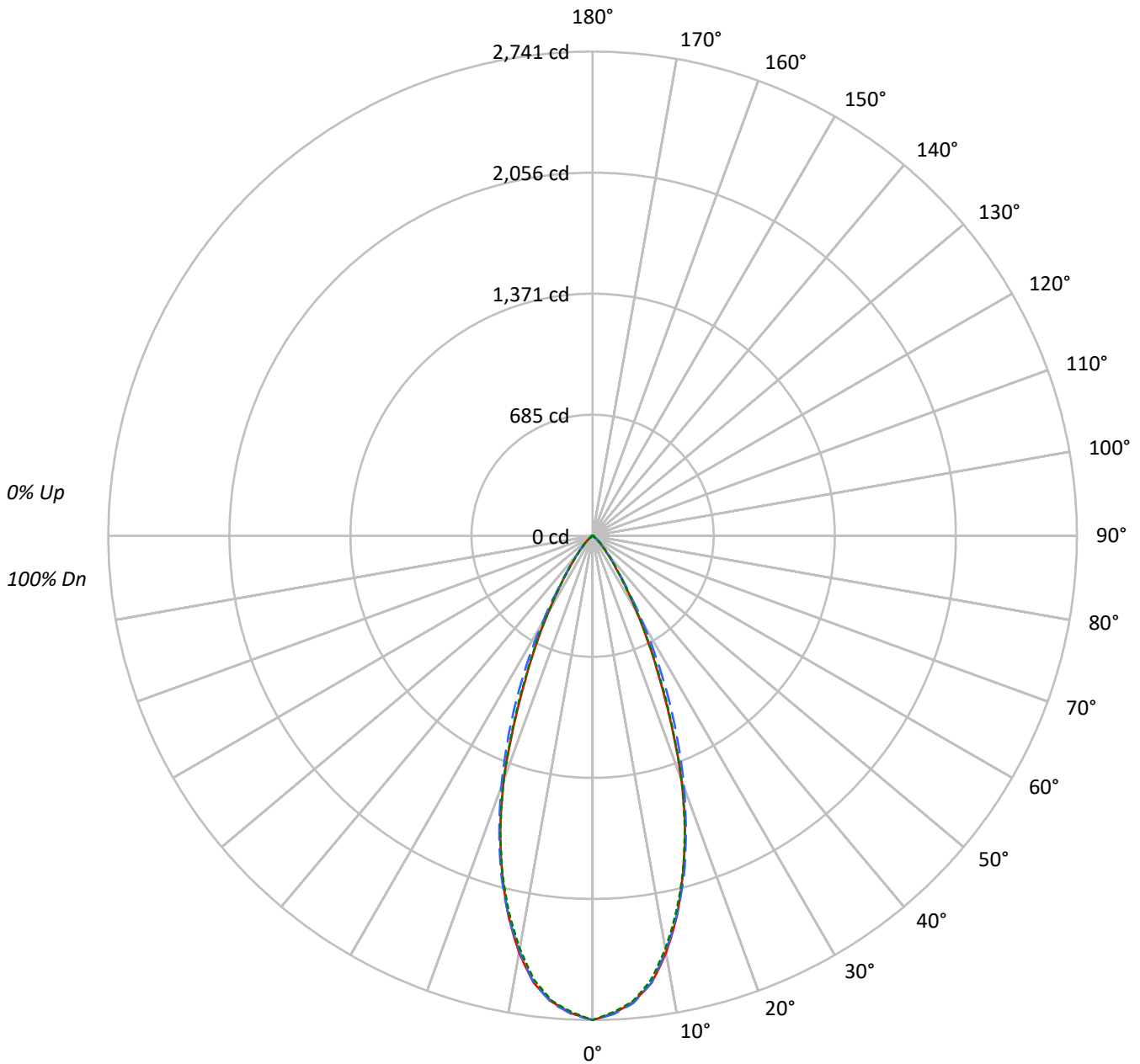
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P284113

CATALOG NUMBER: LDA2B209050D010 EU2B20WFL559050 2LBALPINSQ1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P284113

CATALOG NUMBER: LDA2B209050D010 EU2B20WFL559050 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	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	109	104	101	98	107	103	99	96	100	97	94	97	94	92	94	92	90	89																			
3	104	98	94	90	102	97	93	89	94	91	88	92	89	87	90	87	85	84																			
4	100	93	88	84	98	92	87	83	90	86	82	88	84	81	86	83	81	79																			
5	95	88	82	79	94	87	82	78	85	81	78	84	80	77	82	79	76	75																			
6	91	83	78	74	90	82	77	74	81	77	73	80	76	73	78	75	72	71																			
7	87	79	74	70	86	78	73	70	77	73	69	76	72	69	75	71	69	67																			
8	84	75	70	66	83	75	70	66	74	69	66	73	69	66	72	68	65	64																			
9	81	72	67	63	80	71	66	63	71	66	63	70	66	63	69	65	62	61																			
10	77	69	64	60	76	68	63	60	68	63	60	67	63	60	66	62	60	58																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1352354	1352354	1352354
5°	1311759	1314879	1308986
10°	1200681	1195872	1188708
15°	1009937	1019335	1008303
20°	772311	792840	771051
25°	490472	552965	499999
30°	285241	322043	290255
35°	150812	160388	151294
40°	79603	83210	79603
45°	44514	46189	45073
50°	20800	26326	20800
55°	7569	14365	8257
60°	8683	8683	8683
65°	9339	10273	9339
70°	11540	10386	11540
75°	10675	10675	10675
80°	11365	9092	11365
85°	9057	9057	9057



TEST NUMBER: P284113

CATALOG NUMBER: LDA2B209050D010 EU2B20WFL559050 2LBALPINSQ1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.7	16.5
10°-20°	544.8	36.6
20°-30°	440.0	29.6
30°-40°	173.9	11.7
40°-50°	53.4	3.6
50°-60°	13.8	0.9
60°-70°	8.4	0.6
70°-80°	6.1	0.4
80°-90°	1.8	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°	1229.5	82.7
0°-40°	1403.4	94.4
0°-60°	1470.6	98.9
0°-90°	1486.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1486.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2741	2741	2741	2741	2741	
5°	2649	2653	2655	2650	2643	245
15°	1977	1983	1996	1988	1974	543
25°	901	944	1016	962	918	419
35°	250	258	266	258	251	168
45°	64	65	66	65	65	52
55°	9	12	17	12	10	11
65°	8	9	9	9	8	8
75°	6	6	6	6	6	6
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P284113

CATALOG NUMBER: LDA2B209050D010 EU2B20WFL559050 2LBALPINSQ1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2741.1	2741.1	2741.1	2741.1	2741.1
2.5°	2706.9	2708.5	2710.8	2707.7	2699.7
5°	2648.7	2653.4	2655.0	2649.5	2643.1
7.5°	2553.0	2547.4	2552.2	2542.6	2534.6
10°	2396.7	2389.5	2387.1	2372.8	2372.8
12.5°	2203.8	2201.4	2203.0	2195.8	2184.6
15°	1977.3	1982.9	1995.7	1987.7	1974.1
17.5°	1737.3	1745.3	1756.5	1754.1	1735.7
20°	1471.0	1494.2	1510.1	1495.0	1468.6
22.5°	1168.1	1217.5	1258.2	1226.3	1183.2
25°	901.0	944.0	1015.8	961.6	918.5
27.5°	683.3	714.4	779.8	726.3	696.8
30°	500.7	519.8	565.3	530.2	509.5
32.5°	358.0	371.5	390.7	370.0	359.6
35°	250.4	257.5	266.3	258.3	251.2
37.5°	176.2	178.6	185.0	178.6	175.4
40°	123.6	124.4	129.2	125.2	123.6
42.5°	89.3	89.3	91.7	90.1	89.3
45°	63.8	64.6	66.2	65.4	64.6
47.5°	45.4	47.0	47.0	47.8	44.6
50°	27.1	33.5	34.3	33.5	27.1
52.5°	14.4	19.9	24.7	19.9	14.4
55°	8.8	12.0	16.7	12.0	9.6
57.5°	8.8	8.8	11.2	9.6	8.8
60°	8.8	8.8	8.8	8.8	8.8
62.5°	8.8	8.8	8.8	8.8	8.8
65°	8.0	8.8	8.8	8.8	8.0
67.5°	8.0	8.0	8.0	8.0	8.0
70°	8.0	8.0	7.2	8.0	8.0
72.5°	7.2	7.2	6.4	7.2	7.2
75°	5.6	5.6	5.6	5.6	5.6
77.5°	4.8	4.8	4.8	4.8	4.8
80°	4.0	4.0	3.2	4.0	4.0
82.5°	2.4	2.4	2.4	2.4	2.4
85°	1.6	1.6	1.6	1.6	1.6
87.5°	0.8	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093







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







(END OF REPORT)