

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: P284104

Luminaire Tested: **LDA2B209040D010 EU2B20WFL559040 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P284104  
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: LDA2B209040D010 EU2B20WFL559040 2LBAPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH WIDE FLOOD OPTIC AND  
2in Adj SQ PinHole, MMS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1562.2 lumens  
Efficiency: N/A  
Efficacy: 75.8 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

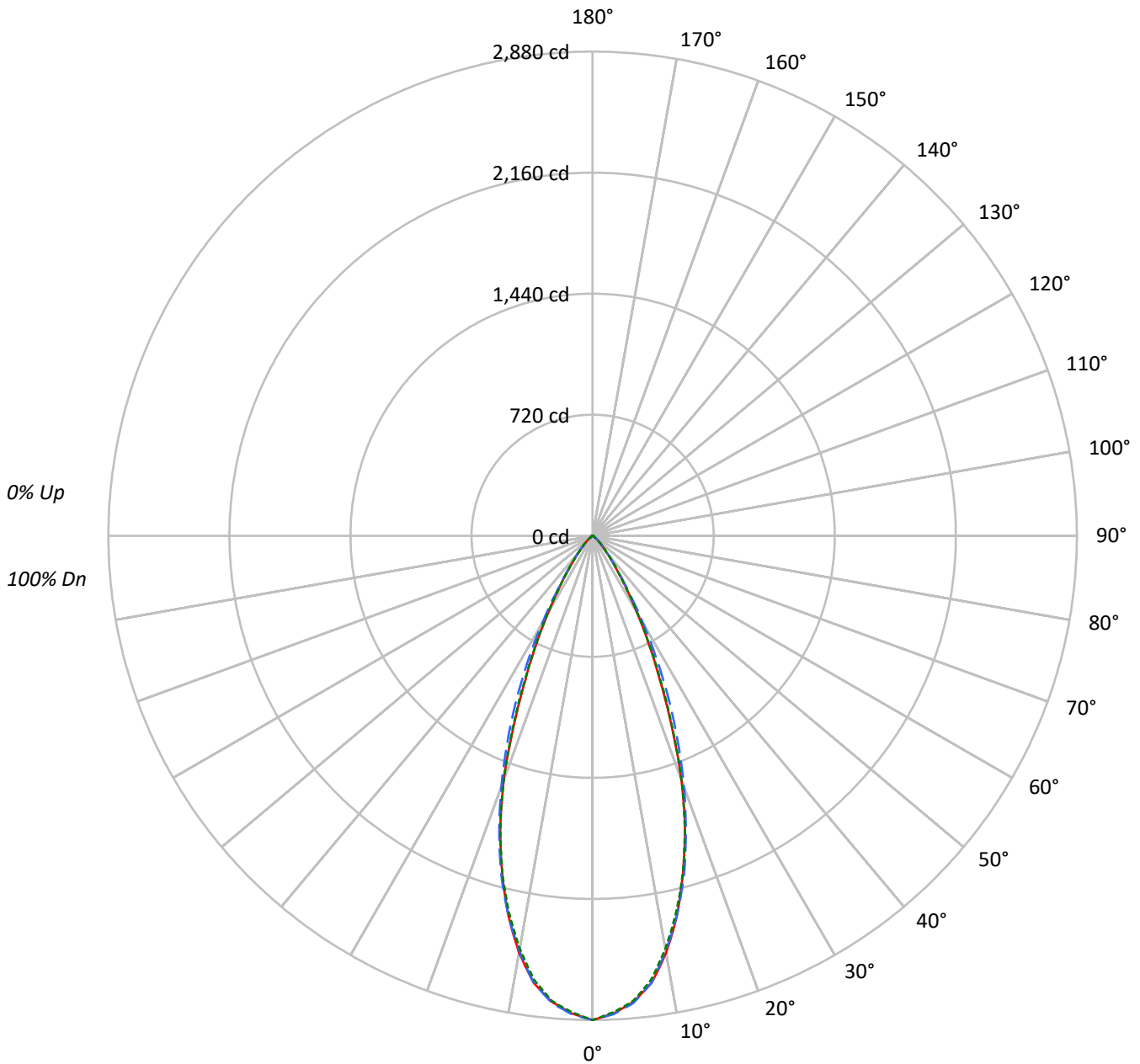
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P284104

CATALOG NUMBER: LDA2B209040D010 EU2B20WFL559040 2LBAPINSQ1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P284104

CATALOG NUMBER: LDA2B209040D010 EU2B20WFL559040 2LBAPINSQ1MMS

**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°	1420981	1420981	1420981
5°	1378271	1381589	1375398
10°	1261600	1256590	1249025
15°	1061167	1071025	1059481
20°	811531	833057	810218
25°	515350	581000	525366
30°	299711	338393	304952
35°	158461	168519	158943
40°	83661	87396	83661
45°	46747	48491	47375
50°	21875	27631	21875
55°	7913	15139	8688
60°	9078	9078	9078
65°	9806	10740	9806
70°	12117	10819	12117
75°	11247	11247	11247
80°	11933	9660	11933
85°	9623	9623	9623



TEST NUMBER: P284104

CATALOG NUMBER: LDA2B209040D010 EU2B20WFL559040 2LBAPINSQ1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	257.1	16.5
10°-20°	572.5	36.6
20°-30°	462.3	29.6
30°-40°	182.7	11.7
40°-50°	56.1	3.6
50°-60°	14.5	0.9
60°-70°	8.7	0.6
70°-80°	6.4	0.4
80°-90°	1.9	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°	1291.9	82.7
0°-40°	1474.6	94.4
0°-60°	1545.1	98.9
0°-90°	1562.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1562.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2880	2880	2880	2880	2880	
5°	2783	2788	2790	2784	2777	258
15°	2078	2084	2097	2088	2074	571
25°	947	992	1067	1010	965	441
35°	263	271	280	271	264	176
45°	67	68	70	69	68	55
55°	9	13	18	13	10	12
65°	8	9	9	9	8	9
75°	6	6	6	6	6	7
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P284104

CATALOG NUMBER: LDA2B209040D010 EU2B20WFL559040 2LBAPINSQ1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2880.2	2880.2	2880.2	2880.2	2880.2
2.5°	2844.2	2845.9	2848.4	2845.0	2836.7
5°	2783.0	2788.1	2789.7	2783.9	2777.2
7.5°	2682.5	2676.6	2681.7	2671.6	2663.2
10°	2518.3	2510.8	2508.3	2493.2	2493.2
12.5°	2315.6	2313.1	2314.7	2307.2	2295.5
15°	2077.6	2083.5	2096.9	2088.5	2074.3
17.5°	1825.5	1833.9	1845.6	1843.1	1823.8
20°	1545.7	1570.0	1586.7	1570.8	1543.2
22.5°	1227.3	1279.3	1322.0	1288.5	1243.2
25°	946.7	991.9	1067.3	1010.3	965.1
27.5°	718.0	750.6	819.3	763.2	732.2
30°	526.1	546.2	594.0	557.1	535.3
32.5°	376.2	390.4	410.5	388.7	377.8
35°	263.1	270.6	279.8	271.4	263.9
37.5°	185.1	187.7	194.4	187.7	184.3
40°	129.9	130.7	135.7	131.5	129.9
42.5°	93.8	93.8	96.3	94.7	93.8
45°	67.0	67.9	69.5	68.7	67.9
47.5°	47.8	49.4	49.4	50.3	46.9
50°	28.5	35.2	36.0	35.2	28.5
52.5°	15.1	20.9	26.0	20.9	15.1
55°	9.2	12.6	17.6	12.6	10.1
57.5°	9.2	9.2	11.7	10.1	9.2
60°	9.2	9.2	9.2	9.2	9.2
62.5°	9.2	9.2	9.2	9.2	9.2
65°	8.4	9.2	9.2	9.2	8.4
67.5°	8.4	8.4	8.4	8.4	8.4
70°	8.4	8.4	7.5	8.4	8.4
72.5°	7.5	7.5	6.7	7.5	7.5
75°	5.9	5.9	5.9	5.9	5.9
77.5°	5.0	5.0	5.0	5.0	5.0
80°	4.2	4.2	3.4	4.2	4.2
82.5°	2.5	2.5	2.5	2.5	2.5
85°	1.7	1.7	1.7	1.7	1.7
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)