

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: P281136

Luminaire Tested: **LDA2B108040D010 EU2B10SP158040 2LBALD1WHH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281136  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-5)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B108040D010 EU2B10SP158040 2LBALD1WHH  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
ADJ spun Refl w/lens Self-Flanged, WHH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1138.7 lumens  
Efficiency: N/A  
Efficacy: 113.9 lumens/watt  
Spacing Criteria (0/90/45): 0.33 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

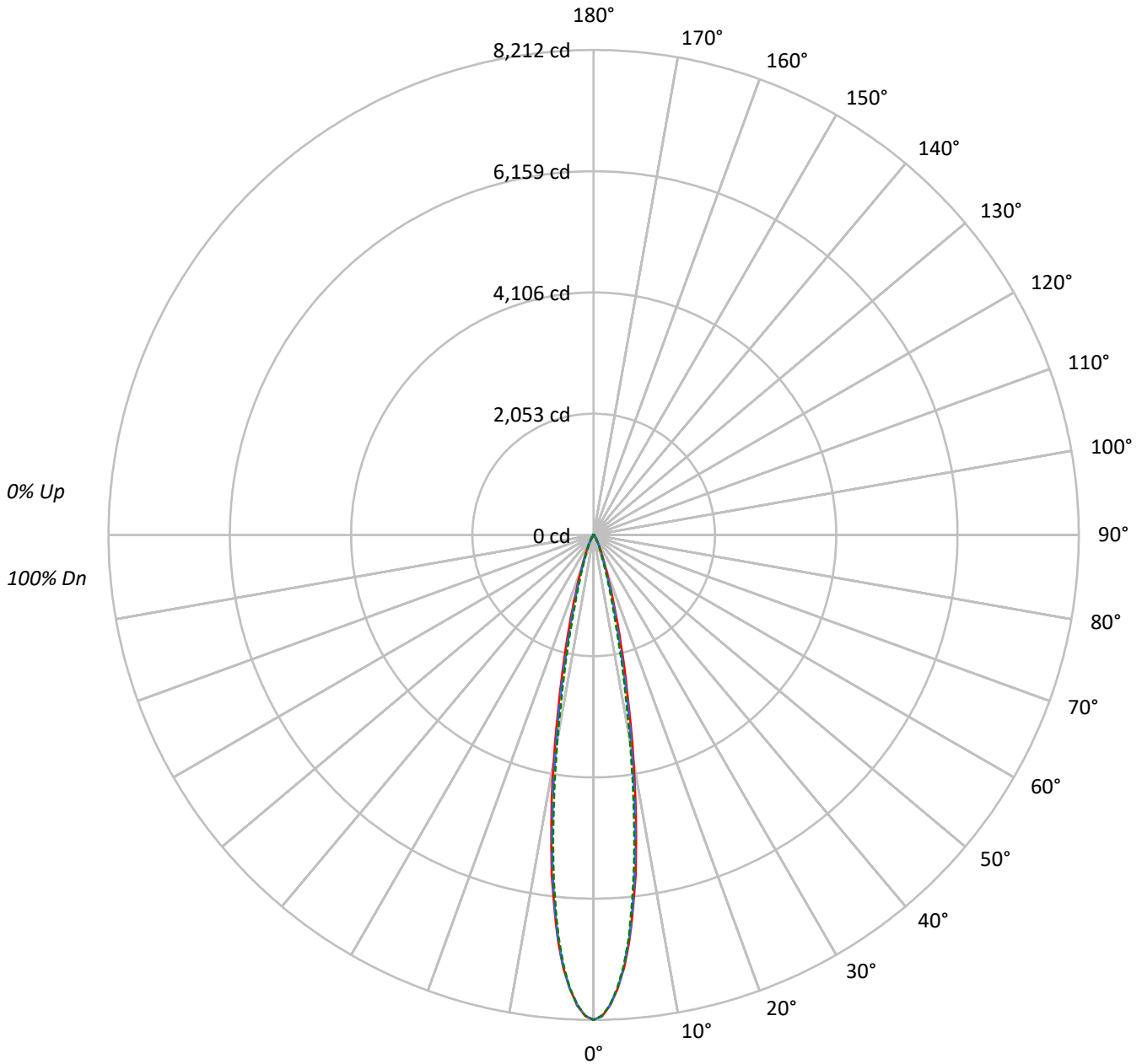
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P281136

CATALOG NUMBER: LDA2B108040D010 EU2B10SP158040 2LBALD1WHH

### Luminous Intensity Polar Plot





TEST NUMBER: P281136

CATALOG NUMBER: LDA2B108040D010 EU2B10SP158040 2LBALD1WHH

**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	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97																			
2	112	108	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95																			
3	109	104	101	98	107	103	100	98	101	98	96	98	96	95	96	95	93	92																			
4	106	101	97	95	104	100	97	94	98	95	93	96	94	92	94	93	91	90																			
5	103	98	94	91	102	97	93	91	95	92	90	94	91	89	93	90	89	88																			
6	101	95	91	88	99	94	91	88	93	90	88	92	89	87	91	88	87	86																			
7	98	92	89	86	97	92	88	86	91	88	85	90	87	85	89	87	85	84																			
8	96	90	86	84	95	90	86	84	89	86	83	88	85	83	87	85	83	82																			
9	94	88	84	82	93	88	84	82	87	84	82	86	83	81	86	83	81	80																			
10	92	86	83	80	91	86	82	80	85	82	80	85	82	80	84	81	80	79																			

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

	0°	45°	90°
0°	4051536	4051536	4051536
5°	3423143	3404868	3379759
10°	1948433	1862616	1767883
15°	806857	714663	629570
20°	306929	268813	246079
25°	135601	130266	115786
30°	62722	69274	55202
35°	33005	38908	30897
40°	14491	16681	9661
45°	5652	4396	6419
50°	2686	3070	4452
55°	0	1978	0
60°	0	0	1184
65°	0	0	0
70°	0	865	0
75°	0	0	0
80°	3409	0	0
85°	32832	29436	13020



TEST NUMBER: P281136

CATALOG NUMBER: LDA2B108040D010 EU2B10SP158040 2LBALD1WHH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	549.1	48.2
10°-20°	419.8	36.9
20°-30°	116.7	10.3
30°-40°	37.9	3.3
40°-50°	8.4	0.7
50°-60°	2.6	0.2
60°-70°	1.5	0.1
70°-80°	0.9	0.1
80°-90°	1.9	0.2
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°	1085.6	95.3
0°-40°	1123.5	98.7
0°-60°	1134.5	99.6
0°-90°	1138.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1138.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8212	8212	8212	8212	8212	
5°	6912	6861	6875	6824	6824	559
15°	1580	1525	1399	1291	1233	461
25°	249	252	239	225	213	125
35°	55	59	65	49	51	36
45°	8	12	6	6	9	8
55°	0	4	2	1	0	2
65°	0	2	0	0	0	2
75°	0	0	0	1	0	0
85°	6	3	5	3	2	2
90°	0	0	0	0	0	



TEST NUMBER: P281136

CATALOG NUMBER: LDA2B108040D010 EU2B10SP158040 2LBALD1WHH

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8212.1	8212.1	8212.1	8212.1	8212.1
1°	8149.2	8118.7	8148.1	8130.8	8140.6
2°	7972.3	7934.2	7964.8	7940.5	7960.7
3°	7696.7	7667.3	7694.4	7663.8	7680.0
4°	7351.3	7308.7	7335.8	7294.8	7304.6
5°	6912.0	6861.3	6875.1	6823.8	6824.4
6°	6358.5	6323.4	6331.4	6251.3	6245.5
7°	5817.2	5734.2	5725.5	5633.8	5616.0
8°	5159.9	5084.4	5059.6	4951.8	4913.8
9°	4529.8	4435.8	4385.1	4260.0	4215.6
10°	3889.3	3794.1	3718.0	3576.8	3528.9
11°	3296.6	3210.7	3116.1	2965.1	2918.4
12°	2746.6	2679.1	2575.4	2429.5	2380.5
13°	2297.5	2219.6	2108.4	1972.9	1930.8
14°	1908.3	1824.7	1713.4	1597.6	1515.7
15°	1579.7	1524.9	1399.2	1291.4	1232.6
16°	1290.9	1244.2	1135.8	1042.4	1000.9
17°	1058.5	1021.0	928.8	855.6	821.0
18°	873.4	826.7	754.1	706.2	679.2
19°	708.6	672.2	619.2	582.3	555.2
20°	584.6	554.6	512.0	479.1	468.7
22.5°	377.6	372.4	344.8	326.9	318.2
25°	249.1	251.9	239.3	225.4	212.7
26°	212.7	214.5	202.9	194.9	178.7
27°	182.2	182.8	182.8	167.8	152.2
28°	148.7	155.1	149.3	142.4	127.4
29°	127.4	135.5	132.6	125.7	111.3
30°	110.1	115.9	121.6	110.7	96.9
32.5°	77.3	82.4	88.8	83.0	71.5
35°	54.8	59.4	64.6	49.0	51.3
37.5°	37.5	45.5	43.8	39.8	34.0
40°	22.5	23.6	25.9	27.7	15.0
42.5°	16.1	19.0	17.3	19.6	6.9
45°	8.1	11.5	6.3	6.3	9.2
47.5°	5.8	9.8	3.5	3.5	1.2
50°	3.5	7.5	4.0	1.7	5.8
52.5°	5.8	6.9	4.6	5.2	1.2
55°	0.0	3.5	2.3	1.2	0.0
57.5°	2.3	4.0	2.3	1.2	2.3
60°	0.0	0.0	0.0	0.6	1.2
62.5°	0.0	1.2	0.0	1.7	2.3
65°	0.0	2.3	0.0	0.0	0.0
67.5°	3.5	4.0	2.3	4.6	6.9



TEST NUMBER: P281136

CATALOG NUMBER: LDA2B108040D010 EU2B10SP158040 2LBALD1WHH

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	1.2	0.0
77.5°	0.0	5.8	1.7	1.7	2.3
80°	1.2	0.0	0.0	0.6	0.0
82.5°	0.0	4.6	0.6	2.3	3.5
85°	5.8	2.9	5.2	2.9	2.3
87.5°	0.0	0.6	1.2	0.6	0.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093







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







70°	0.0	0.0	0.6	0.6	0.0
72.5°	1.2	0.0	0.0	0.0	0.0



(END OF REPORT)