

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: P281582

Luminaire Tested: **LDA2B208050D010 EU2B20SP158050 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281582  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-6)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B208050D010 EU2B20SP158050 2LBASQC1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2094.1 lumens  
Efficiency: N/A  
Efficacy: 101.7 lumens/watt  
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

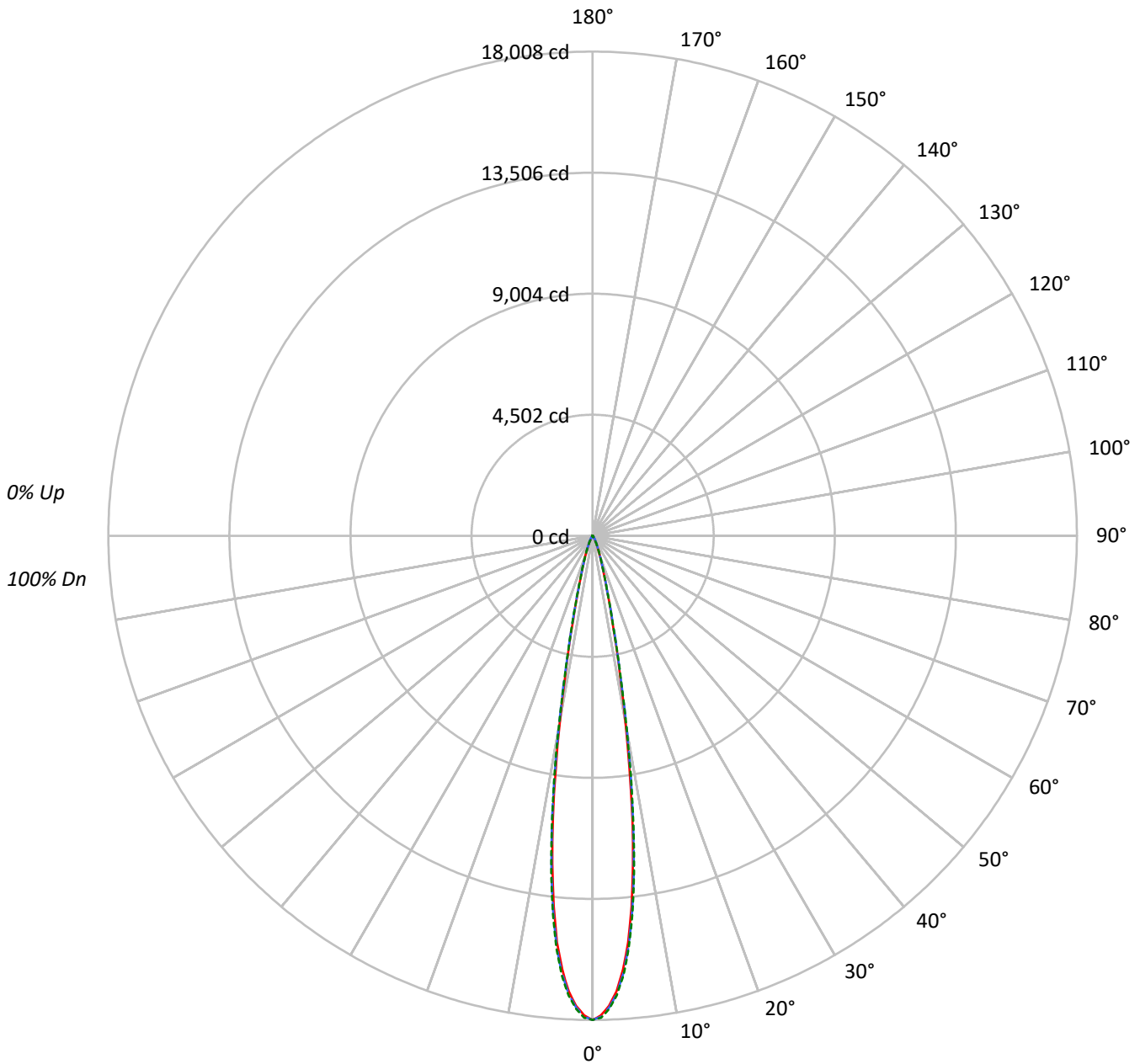
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P281582

CATALOG NUMBER: LDA2B208050D010 EU2B20SP158050 2LBASQC1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P281582

CATALOG NUMBER: LDA2B208050D010 EU2B20SP158050 2LBASQC1MMS

**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	116	114	112	111	113	112	110	109	108	107	106	104	103	102	101	100	99	98	98	98	98																
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96	96	96	96																
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94	94	94	94																
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92	92	92	92																
5	105	100	96	94	103	99	96	93	98	95	93	96	94	92	95	93	91	90	90	90	90																
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89	89	89	89																
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87	87	87	87																
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	86	86	86	86	86																
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84	84	84	84																
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83	83	83	83																

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

	0°	45°	90°
0°	8884360	8884360	8884360
5°	7519573	7598169	7631251
10°	3516277	3649486	3656600
15°	1029908	1044873	1044363
20°	413562	414139	414664
25°	184431	203102	188786
30°	78332	107727	71439
35°	35956	49929	33487
40°	11721	19514	10433
45°	0	7047	0
50°	0	0	0
55°	3441	1720	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	5682	0	0
85°	11321	0	0



TEST NUMBER: P281582

CATALOG NUMBER: LDA2B208050D010 EU2B20SP158050 2LBASQC1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1190.1	56.8
10°-20°	674.5	32.2
20°-30°	176.1	8.4
30°-40°	45.4	2.2
40°-50°	4.5	0.2
50°-60°	1.4	0.1
60°-70°	0.2	0.0
70°-80°	1.5	0.1
80°-90°	0.4	0.0
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°	2040.7	97.5
0°-40°	2086.1	99.6
0°-60°	2092.1	99.9
0°-90°	2094.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2094.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	18008	18008	18008	18008	18008	
5°	15184	15319	15342	15245	15409	1175
15°	2016	2044	2046	2022	2045	662
25°	339	367	373	356	347	168
35°	60	64	83	57	56	41
45°	0	4	10	1	0	3
55°	4	5	2	1	0	3
65°	0	0	0	0	0	1
75°	0	1	0	0	0	4
85°	2	0	0	0	0	2
90°	0	0	0	0	0	



TEST NUMBER: P281582

CATALOG NUMBER: LDA2B208050D010 EU2B20SP158050 2LBASQC1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	18007.8	18007.8	18007.8	18007.8	18007.8
1°	17838.9	17909.7	17888.5	17863.2	17934.0
2°	17495.1	17563.9	17557.8	17524.4	17607.4
3°	16965.2	17061.3	17061.3	17011.8	17114.9
4°	16175.5	16322.1	16336.3	16266.5	16394.9
5°	15183.5	15319.0	15342.2	15245.2	15409.0
6°	13839.6	14024.6	14077.2	13964.9	14132.8
7°	12295.4	12489.6	12569.5	12444.1	12632.2
8°	10629.9	10769.5	10865.6	10722.0	10913.1
9°	8766.3	8967.5	9055.5	8915.9	9102.0
10°	7018.9	7203.9	7284.8	7251.5	7299.0
11°	5451.5	5615.3	5669.9	5624.4	5646.7
12°	4268.4	4334.1	4369.5	4339.1	4354.3
13°	3241.0	3328.9	3345.1	3332.0	3339.0
14°	2531.1	2573.6	2591.8	2585.7	2588.7
15°	2016.4	2043.7	2045.7	2022.4	2044.7
16°	1624.0	1645.3	1654.4	1630.1	1659.4
17°	1330.8	1348.0	1358.1	1333.8	1345.9
18°	1095.2	1108.3	1122.5	1101.2	1119.4
19°	919.2	927.3	928.3	922.2	927.3
20°	787.7	783.7	788.8	777.6	789.8
22.5°	518.8	528.9	541.0	527.9	532.9
25°	338.8	367.1	373.1	355.9	346.8
26°	279.1	315.5	331.7	304.4	275.1
27°	231.6	257.9	279.1	242.7	219.4
28°	203.3	225.5	246.7	212.4	185.1
29°	169.9	192.1	228.5	189.1	171.9
30°	137.5	153.7	189.1	143.6	125.4
32.5°	77.9	91.0	122.4	84.9	69.8
35°	59.7	63.7	82.9	56.6	55.6
37.5°	51.6	46.5	64.7	46.5	37.4
40°	18.2	27.3	30.3	20.2	16.2
42.5°	8.1	8.1	13.1	4.0	4.0
45°	0.0	4.0	10.1	1.0	0.0
47.5°	0.0	0.0	2.0	0.0	0.0
50°	0.0	2.0	0.0	0.0	0.0
52.5°	2.0	0.0	0.0	0.0	0.0
55°	4.0	5.1	2.0	1.0	0.0
57.5°	6.1	5.1	2.0	2.0	2.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	2.0	1.0	0.0	0.0	0.0



TEST NUMBER: P281582

CATALOG NUMBER: LDA2B208050D010 EU2B20SP158050 2LBASQC1MMS

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	1.0	0.0	0.0	0.0
77.5°	10.1	2.0	3.0	2.0	4.0
80°	2.0	0.0	0.0	0.0	0.0
82.5°	4.0	0.0	0.0	0.0	0.0
85°	2.0	0.0	0.0	0.0	0.0
87.5°	0.0	1.0	0.0	1.0	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	0.0	0.0	0.0
72.5°	4.0	3.0	0.0	0.0	4.0



(END OF REPORT)