

EN 62311:2008  
ASSESSMENT REPORT

For

**Shenzhen Sonoff Technologies Co.,Ltd.**

Room 1001, 10F, Building 8, Lianhua Industrial Park, Longyuan Road, Longhua District,  
Shenzhen, GD, China

**Tested Model: iFan03**

<b>Report Type:</b> Original Report	<b>Product Type:</b> Wi-Fi Fan&Light Controller
<b>Report Number:</b> RDG190222001	
<b>Report Date:</b> 2019-03-11	
<b>Reviewed By:</b> Robin Zheng RF Engineer	<i>Robin Zheng</i>
<b>Test Laboratory:</b> Bay Area Compliance Laboratories Corp. (Dongguan) No.69 Pulongcun, Puxinhu Industry Area, Tangxia, Dongguan, Guangdong, China Tel: +86-769-86858888 Fax: +86-769-86858891 <a href="http://www.baclcorp.com.cn">www.baclcorp.com.cn</a>	

**Note:** This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Dongguan).

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## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

<b>EUT Name:</b>	Wi-Fi Fan&Light Controller
<b>EUT Model:</b>	iFan03
<b>Rated Input Voltage:</b>	AC 100-240V
<b>External Dimension:</b>	116mm(L)*55mm(W)*26mm(H)
<b>Serial Number:</b>	190222001
<b>EUT Received Date:</b>	2019/02/22

### Objective

This report is prepared on behalf of *Shenzhen Sonoff Technologies Co.,Ltd.* in accordance with EN 62311:2008, Generic standard to demonstrate the compliance of electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (0 Hz–300 GHz) is to demonstrate the compliance of apparatus with the basic restrictions or reference levels on exposure of the general public related to electric, magnetic, electromagnetic fields as well as induced and contact current.

The objective is to determine the compliance of EUT with EN 62311:2008.

### Related Submittal(s)/Grant(s)

No related submittal(s).

### Test Methodology

All measurements contained in this report were conducted with EN 62311:2008.

## Technical Requirements Specification in EN 62311

### General Description of Applied Standards

EN 62311 Generic standard to demonstrate the compliance of electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic fields (0 Hz–300 GHz) is to demonstrate the compliance of apparatus with the basic restrictions or reference levels on exposure of the general public related to electric, magnetic, electromagnetic fields as well as induced and contact current.

### RF Exposure Evaluation

#### Limit:

According to EN 62311, the criteria listed in the below table shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified table 2 of Council Recommendation 1999/519/EC.

Reference levels for electric, magnetic and electromagnetic fields  
(0 Hz to 300 GHz, unperturbed rms values)

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field( $\mu$ T)	Equivalent plane wave power density $S_{eq}(W/m^2)$
0-1 Hz	-	$3,2 \times 10^4$	$4 \times 10^4$	-
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	-
8-25 Hz	10 000	4 000/f	5 000/f	-
0,025-0,8 kHz	250/f	4/f	5/f	-
0,8-3 kHz	250/f	5	6,25	-
3-150 kHz	87	5	6,25	-
0,15-1 MHz	87	0,73/f	0,92/f	-
1-10 MHz	$87/f^{1/2}$	0,73/f	0,92/f	-
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375 f^{1/2}$	$0,0037 f^{1/2}$	$0,0046 f^{1/2}$	f/200
2-300 GHz	61	0,16	0,20	10

Notes:

- f as indicated in the frequency range column.

**Test method**

The antenna of the product, under normal use condition is at least 20cm away from the body of the user. Warning statement of the user for keeping 20cm separation distance and the prohibition of operating to a person has been printed on the user manual. So, this product under normal use is located on electromagnetic far field between the human body.

**Far Field Calculation Formula**

$$E = \frac{\sqrt{30PG(\theta, \phi)}}{r}$$

G= antenna gain relative to an isotropic antenna  
 $\theta, \phi$  = elevation and azimuth angles to point of investigation  
 r= distance from observation point to the antenna

**Test Data**

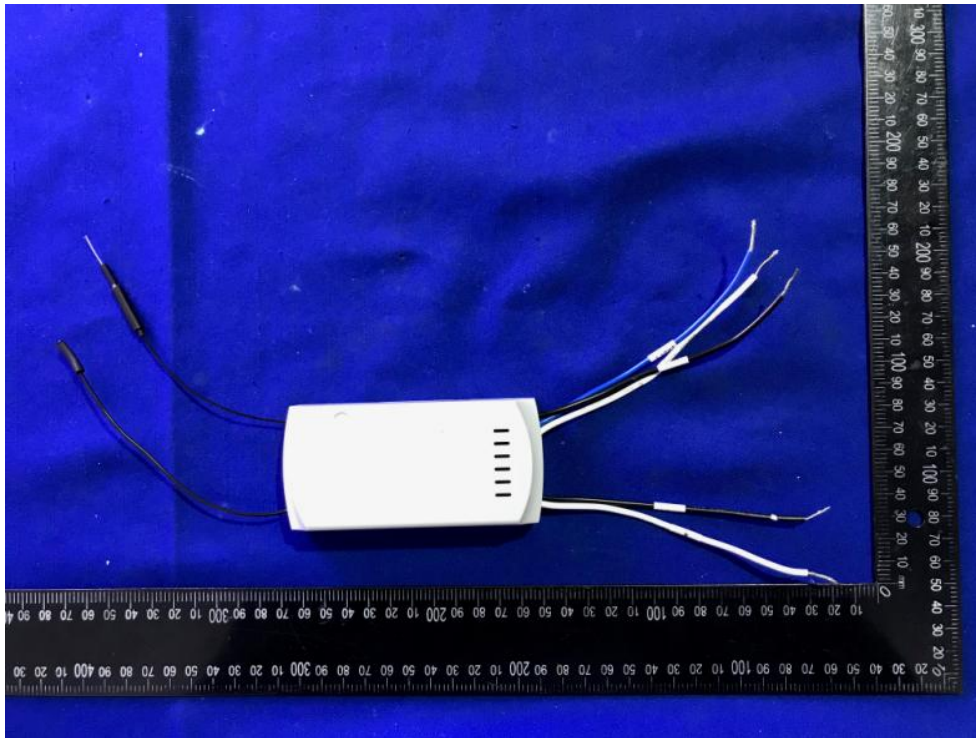
*Test Mode: Transmitting*

Mode	EIRP	EIRP	E-Field Strength	E-Field Limit	Result
	(dBm)	(W)	(V/m)	(V/m)	
2.4G WIFI	14.35	0.03	4.74	61	Pass

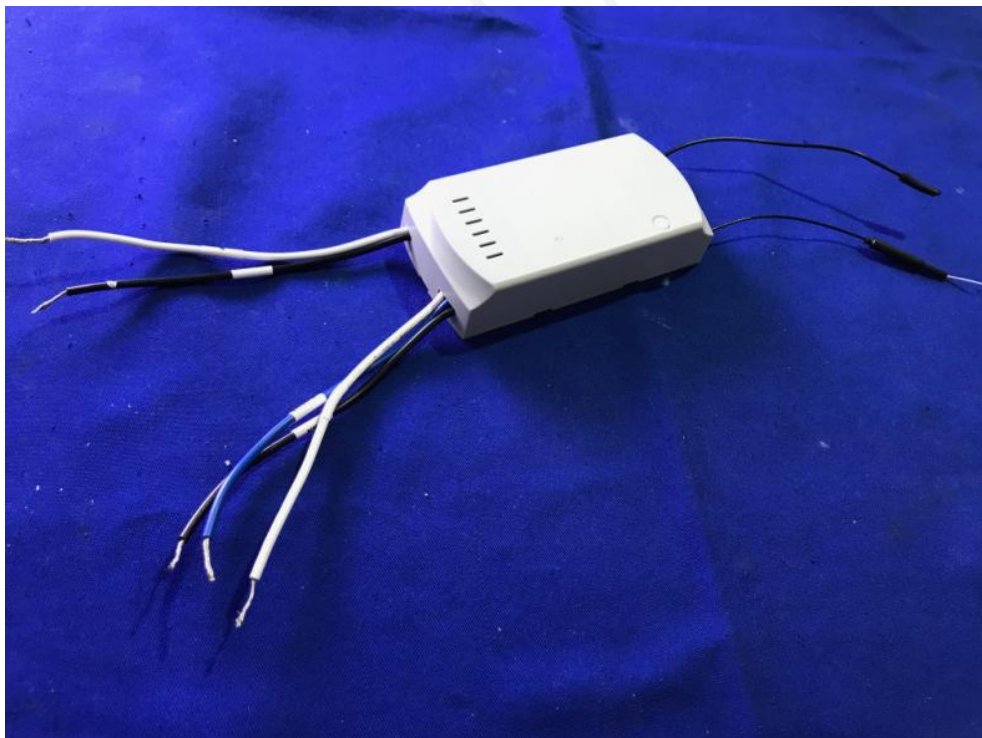
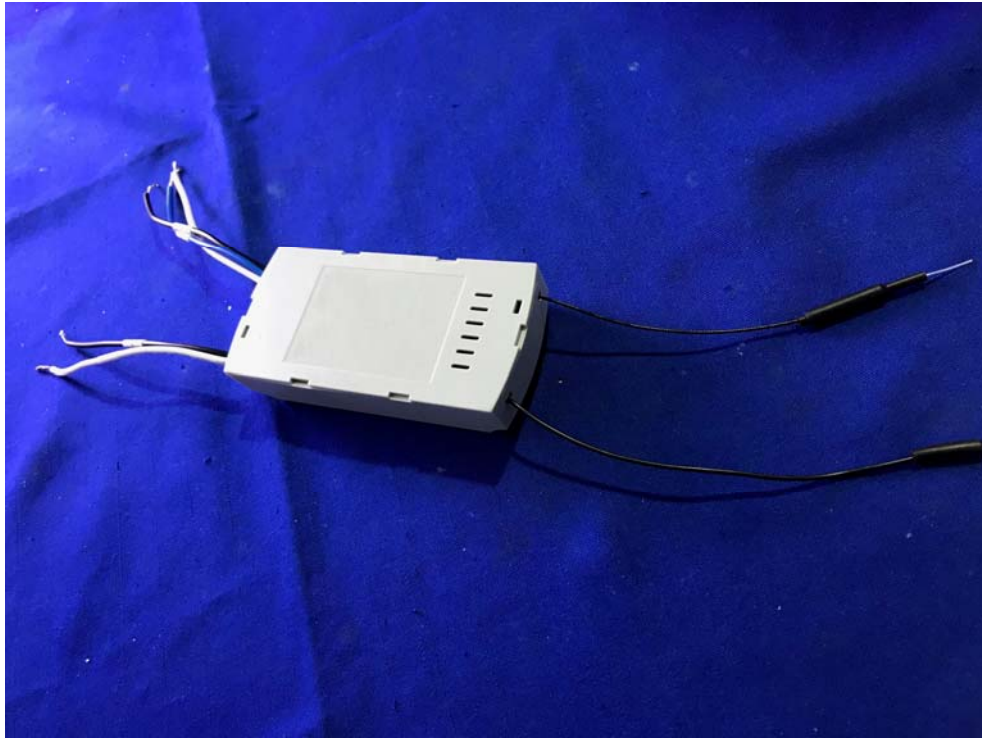
Note: The distance from observation point to the antenna is 20 cm.

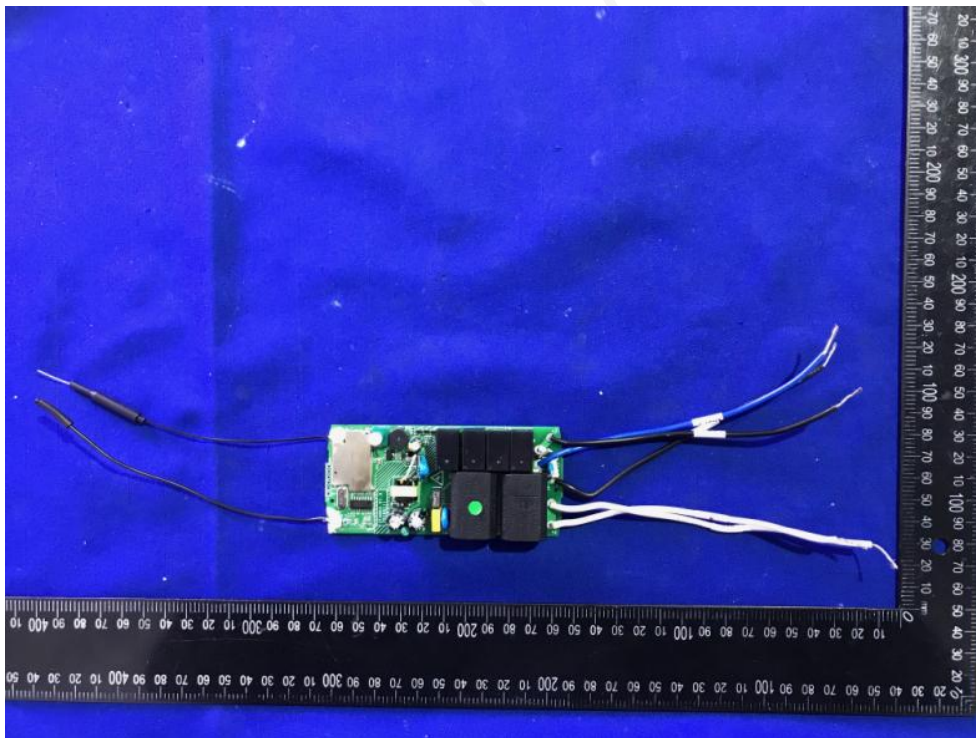
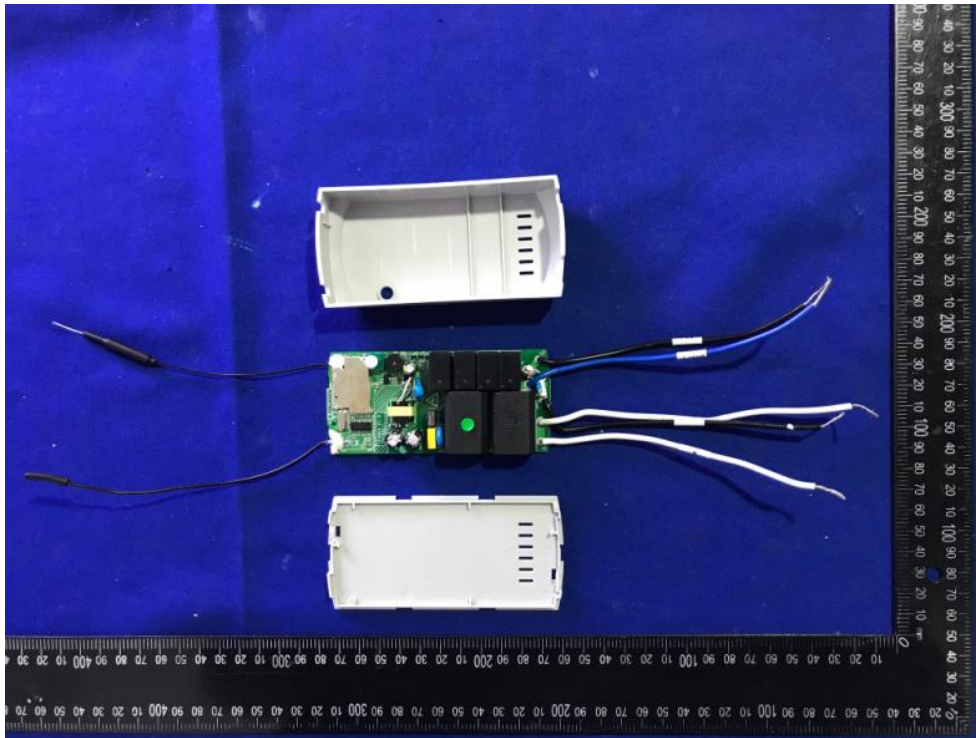
Conclusion: Compliance

**EXHIBIT A - EUT PHOTOGRAPHS**

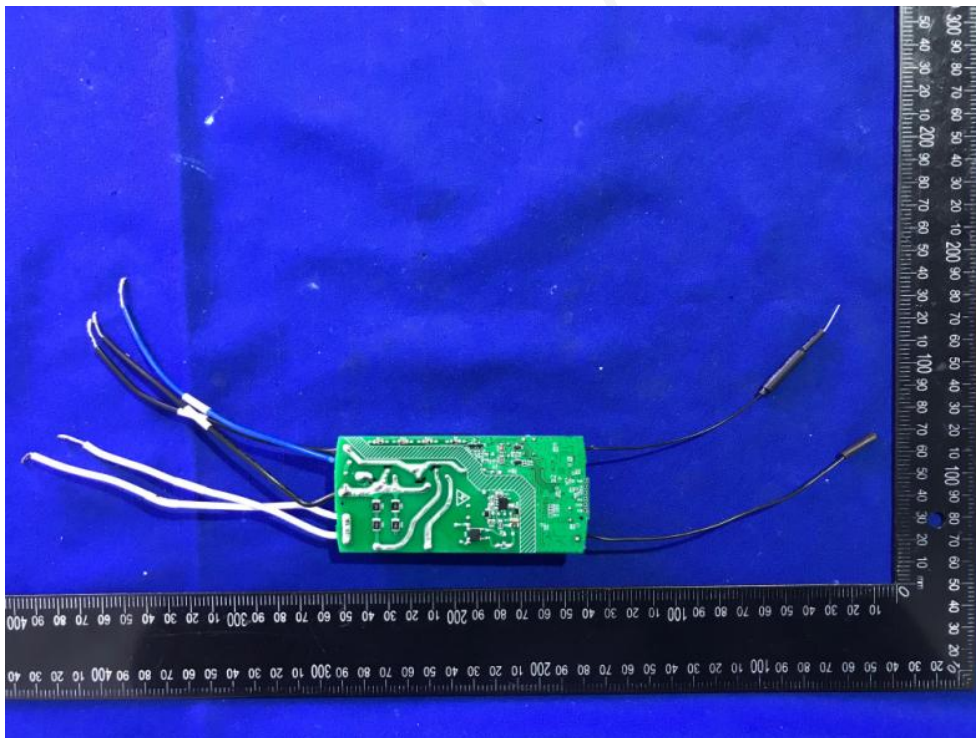
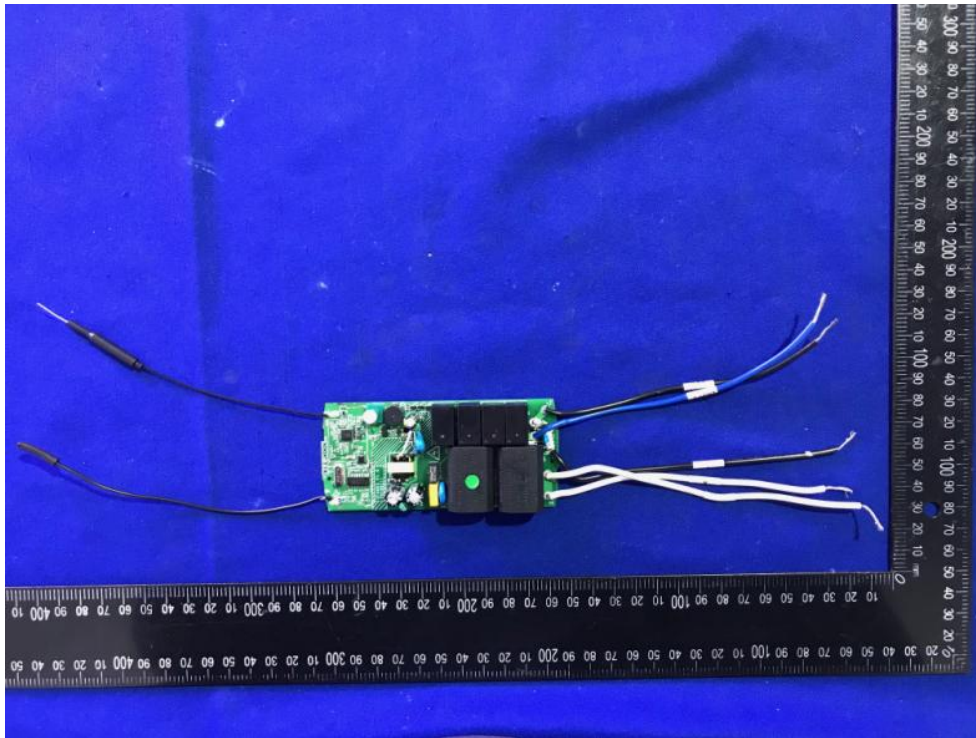




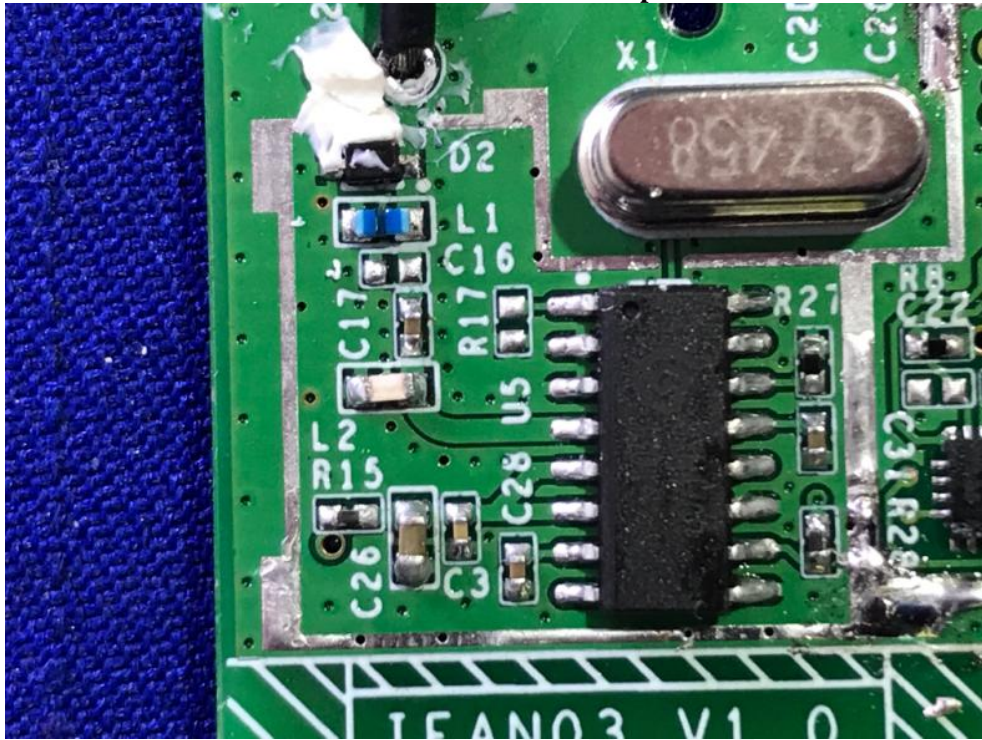




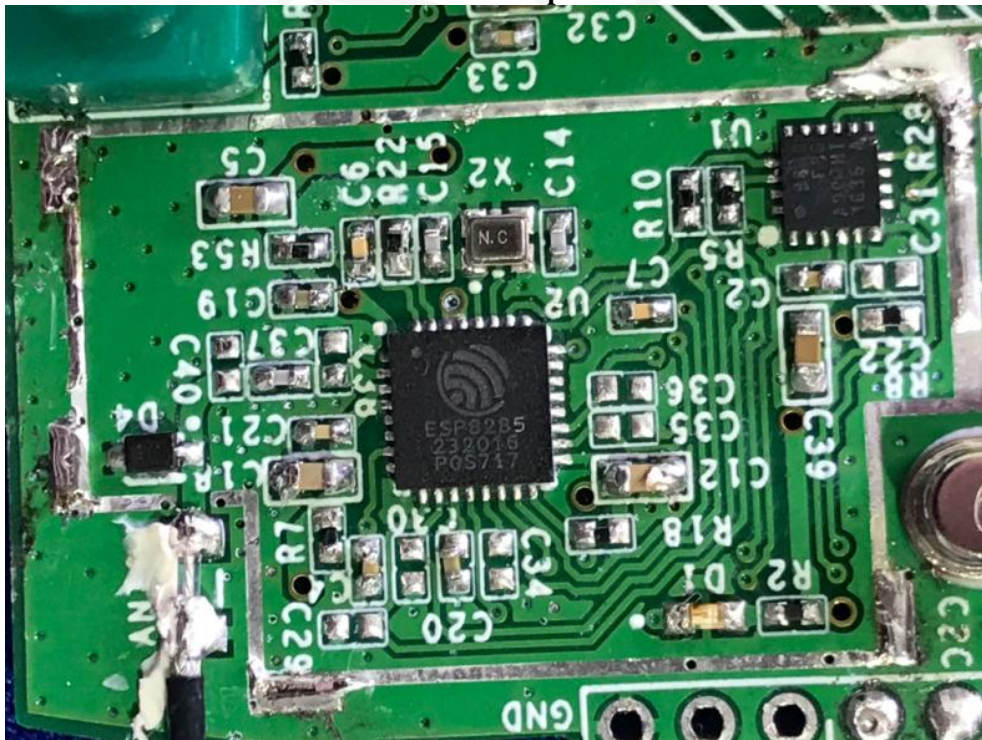




433.92MHz Receiver Chip

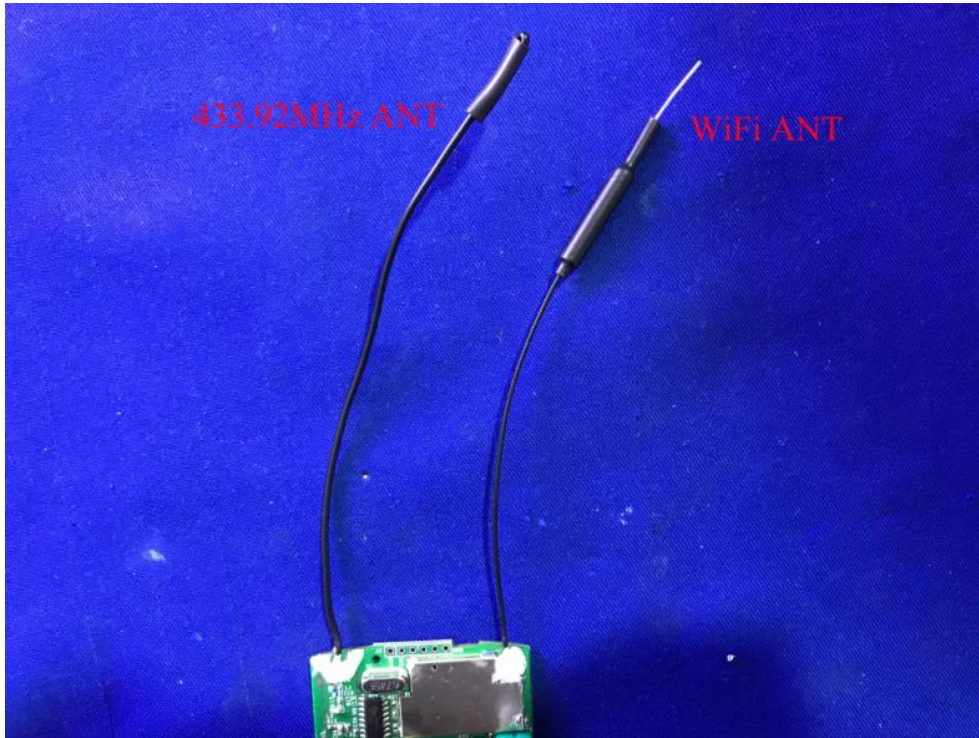


WIFI Chip





**Antenna View**



**\*\*\*\*END OF REPORT\*\*\*\***

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