



EN62311 TEST REPORT

Product Name: 4 channel with rf control intelligent switch

Trademark: 

Model Number: Sonoff 4CH Pro R2

Serial Model: Sonoff 4CH R2

Prepared For: Shenzhen Sonoff Technologies Co., Ltd.

Address: 301, 3F, BLDG 52, The Third Industrial Park, Bantian, Longgang Dist Shenzhen, GD, 518055 China.

Manufacturer: Shenzhen Sonoff Technologies Co., Ltd.

Address: 301, 3F, BLDG 52, The Third Industrial Park, Bantian, Longgang Dist Shenzhen, GD, 518055 China.

Prepared By: Shenzhen BCTC Testing Co., Ltd.

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Sample Received Date: Apr. 02, 2018

Sample tested Date: Apr. 03, 2018 to Apr. 10, 2018

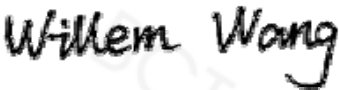
Issue Date: Apr. 10, 2018


Report No.: BCTC-FY180301676-1E

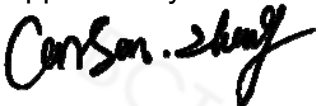
Test Standards EN 62311:2008

Test Results PASS

Remark: This is RED Health test report.

Compiled by: 
Willen Wang

Reviewed by: 
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Approved by: 
Carson Zhang/Manager

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1. VERSION

Report No.	Issue Date	Description	Approved
BCTC-FY180301676-1E	Apr. 10, 2018	Original	Valid



2. GENERAL INFORMATION

2.1 Description of Device (EUT)

Model(s):	Sonoff 4CH Pro R2
Serial Model:	Sonoff 4CH R2
Model Description:	The product is different for model number and outlook color.
Wi-Fi Specification:	IEEE 802.11b/g/n
SRD	433.92MHz
Hardware Version:	N/A
Software Version:	N/A
Operation Frequency:	WiFi: IEEE 802.11b/g/n 20: 2412-2472MHz SDR: RX 433.92MHz
Max. RF output power:	WiFi (2.4G) : 9.58dBm
Type of Modulation:	WiFi: DSSS, OFDM SRD: FSK
Antenna installation:	WiFi: Internal antenna SRD: Internal antenna
Antenna Gain:	WiFi (2.4G) : 1dBi
Ratings:	Input: AC 90-264V 50/60Hz DC 5-24V
Adapter:	N/A



3. HEALTH REQUIREMENTS

3.1 Limits

According to Council Recommendation: the criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation.

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

3.2 Limit

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (μT)	Equivalent plane wave power density Seq (W/m ²)
0-1 Hz	-	3.2×10^4	4×10^4	-
1-8 Hz	10000	$3.2 \times 10^4 / f^2$	$4 \times 10^4 / f^2$	-
8-25 Hz	10000	$4000 / f$	$5000 / f$	-
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	0.095	2
400-2000 MHz	$1.375 f^{1/2}$	$0.0037 f^{1/2}$	$0.0046 f^{1/2}$	$f / 200$
2-300 GHz	61	0.16	0.2	10



3.3 Test Method

From Council Recommendation 1999/519/EC table 2, the maximum power density is 10 W/m².

Power density (S) is calculated by the following formula:

$$S = PG * \text{Duty factor} / 4\pi R^2$$

P = Peak Power Input to antenna (Watts)

G =Antenna Gain (numeric)

R = distance to the center of radiation of antenna (in meter) = 0.20 m

Note:

1) $P \text{ (Watts)} = (10^{(\text{dBm} / 10)}) / 1000$

2) $G \text{ (Antenna gain in numeric)} = 10^{(\text{Antenna gain in dBi} / 10)}$

3) Duty factor=1.0

4) $\pi = 3.142$

WIFI 2.4GHz

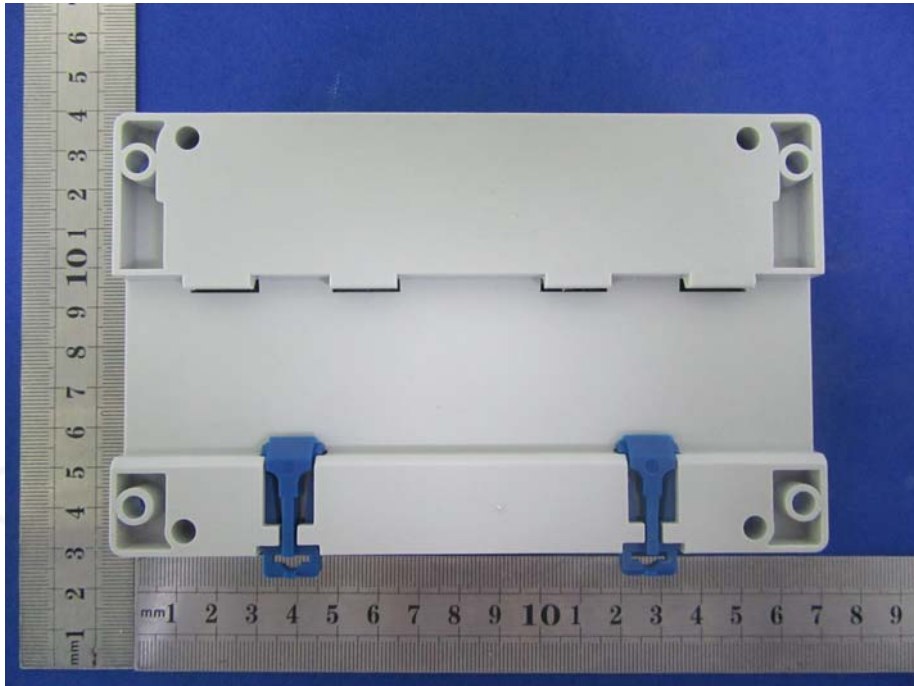
Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (W)	Duty factor	Calculated RF Exposure (W/ m ²)	Limit (W/ m ²)
1.00	1.259	9.58	0.009	1.00	0.0227	10

4. EUT PHOTOGRAPHS

EUT Photo 1



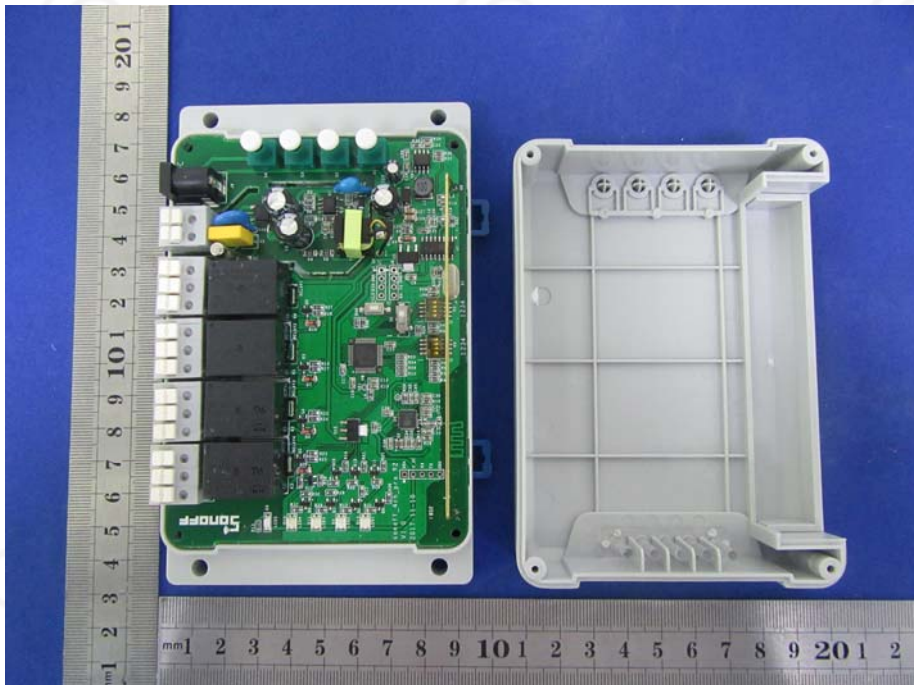
EUT Photo 2



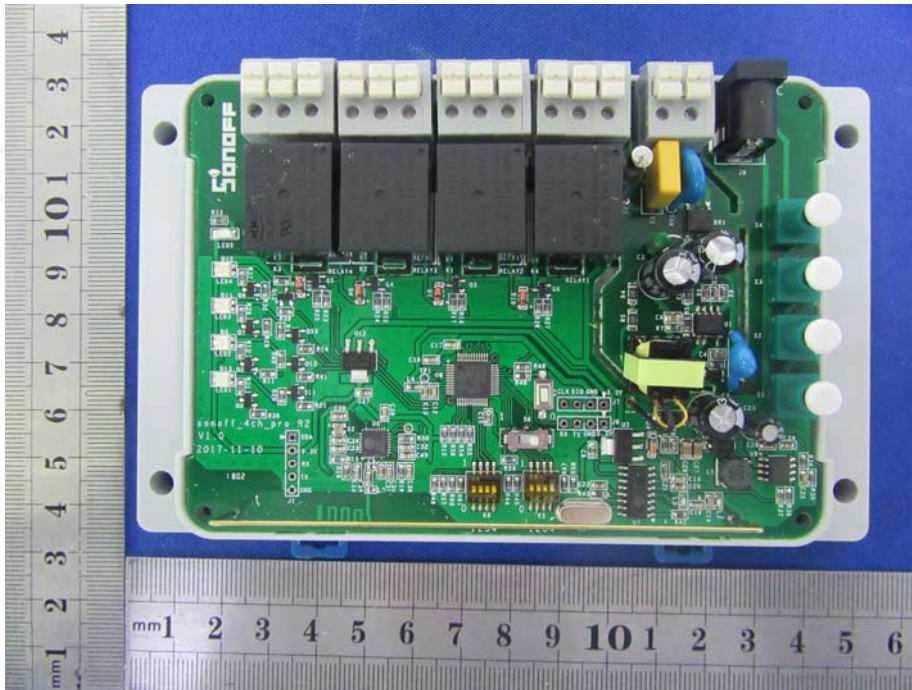
EUT Photo 3



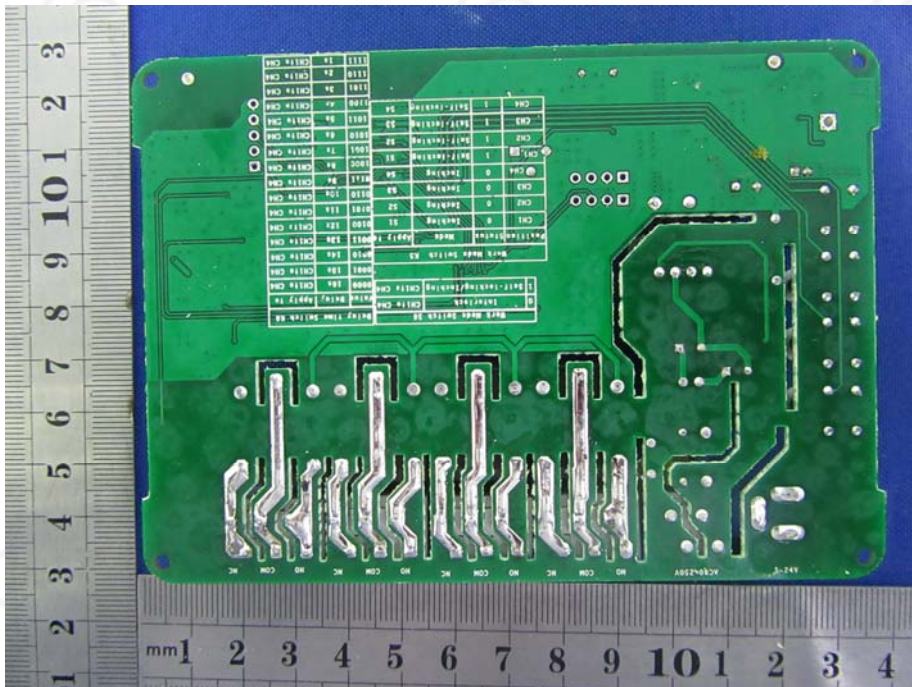
EUT Photo 4



EUT Photo 5



EUT Photo 6



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