

# **RF Exposure Evaluation Declaration**

- FCC ID: T2C-WF50
- IC: 10741A-WF50

APPLICANT: YEALINK(XIAMEN) NETWORK TECHNOLOGY CO., LTD

- **Application Type:** Certification
- Product: Wi-Fi USB Dongle
- Model No.: WF50
- Brand Name: YEALINK
- FCC Classification: Digital Transmission System (DTS)
  - Unlicensed National Information Infrastructure (UNII)
- Test Procedure(s): KDB 447498 D01v06
- Test Date: January 13 ~ March 11, 2018

Surry Sur (Sunny Sun) **Reviewed By** Robin Wu Approved By TESTING LABORATORY CERTIFICATE #3628.01 Robin Wu

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

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## **Revision History**

Report No.	Version	Description	Issue Date	Note
1807RSU018-U3	Rev. 01	Initial Report	08-21-2018	Valid



### 1. PRODUCT INFORMATION

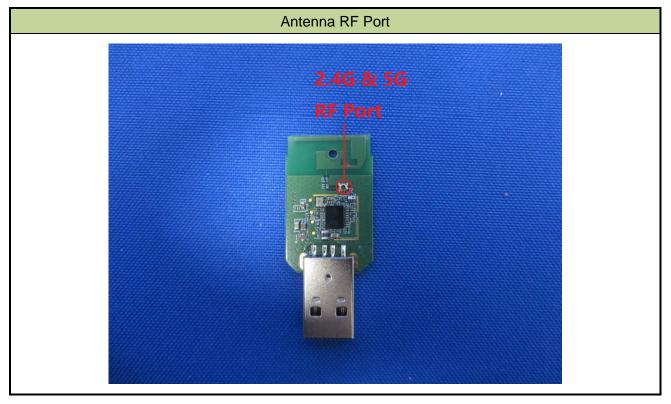
### 1.1. Equipment Description

Product Name	Wi-Fi USB Dongle	
Model No.	WF50	
Wi-Fi Specification	802.11a/b/g/n/ac	

### 1.2. Antenna Description

Antenna Type	Frequency Band (MHz)	TX Paths	Max Peak Gain (dBi)
Desilie	2400 ~ 2483.5	1	3
Built-in	5150 ~ 5850	1	3

### 1.3. Description of Antenna RF Port





### 2. **RF Exposure Evaluation**

### 2.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Frequency Range	Electric Field	Magnetic Field	Power Density	Average Time	
(MHz)	Strength (V/m)	Strength (A/m)	(mW/cm <sup>2</sup> )	(Minutes)	
(A) Limits for Occupational/ Control Exposures					
300-1500			f/300	6	
1500-100,000			5	6	
(B) Limits for General Population/ Uncontrolled Exposures					
300-1500			f/1500	6	
1500-100,000			1	30	

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

f= Frequency in MHz

Calculation Formula:  $Pd = (Pout^{*}G)/(4^{*}pi^{*}r^{2})$ 

Where

 $Pd = power density in mW/cm^2$ 

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

r = distance between observation point and center of the radiator in cm

Pd is the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.



### 2.2. Test Result of RF Exposure Evaluation

Product	Wi-Fi USB Dongle	
Test Item	RF Exposure Evaluation	

#### Antenna Gain: Refer to Clause 1.2 of antenna description.

Test Mode	Frequency Band (MHz)	Maximum Total Average Output Power (dBm)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )	Limit (mW/cm²)
802.11a/n/ac	5260 ~ 5720	21.21	0.0263	1

#### CONCLUSION:

Therefore, the Max Power Density at R (20 cm) = 0.0263 mW/cm<sup>2</sup> < 1mW/cm<sup>2</sup>. So the EUT complies with the requirement.