

## 10. SPURIOUS RF CONDUCTED EMISSION

### 10.1 Test Limit

1. Below -20dB of the highest emission level in operating band.
2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.
3. For below 30MHz, For 9KHz-150kHz, 150K-10MHz, We use the RBW 1KHz, 10KHz, So the limit need to calculated by " $10\lg(BW1/BW2)$ ". for example For 9KHz-150kHz, RBW 1KHz, The Limit= the highest emission level-20-10log(100/1)= the highest emission level-40.

### 10.2 Test Procedure

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2013, For 9KHz-150kHz, Set RBW=1kHz and VBW= 3KHz; For 150KHz-10MHz, Set RBW=10kHz and VBW= 30KHz; For 10MHz-25GHz, Set RBW=100kHz and VBW= 300KHz in order to measure the peak field strength, and measure frequency range from 9KHz to 25GHz.

### 10.3 Test Setup



### 10.4 Test Result

PASS

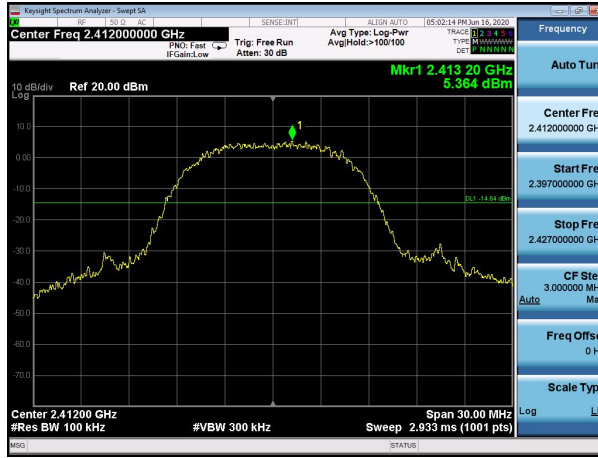
Remark: The measurement frequency range is from 9KHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandedge measurement data. and record the worstest data for 802.11b in report .

Test Mode:

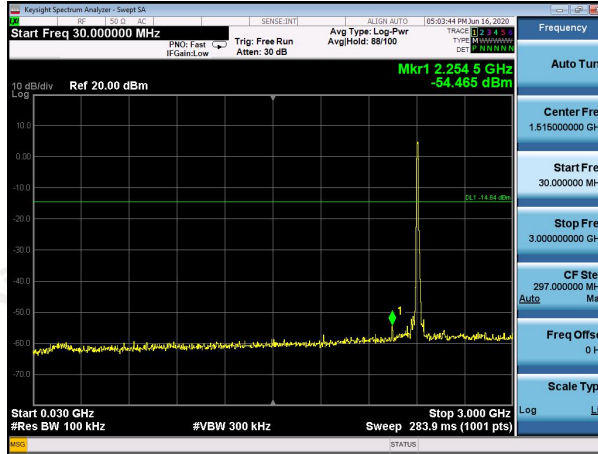
802.11b

Test channel :

01



Channel 01



30MHz ~3GHz



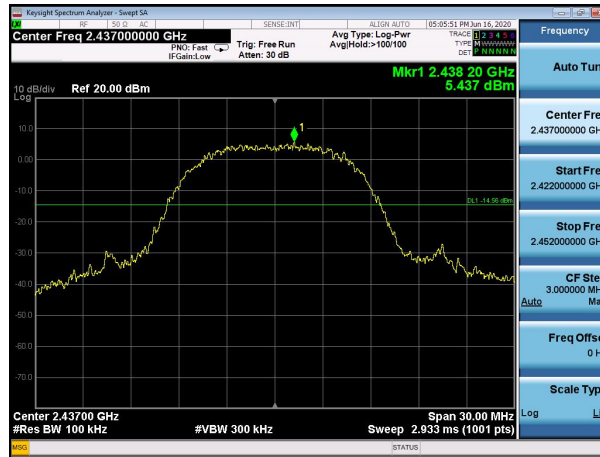
3GHz~25GHz

Test Mode:

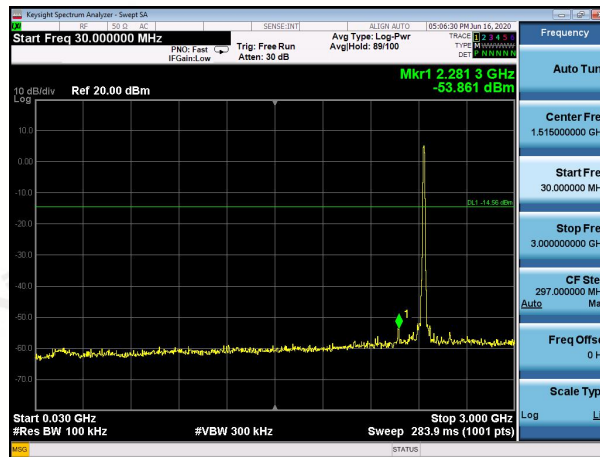
802.11b

Test channel :

06



Channel 06



30MHz ~3GHz



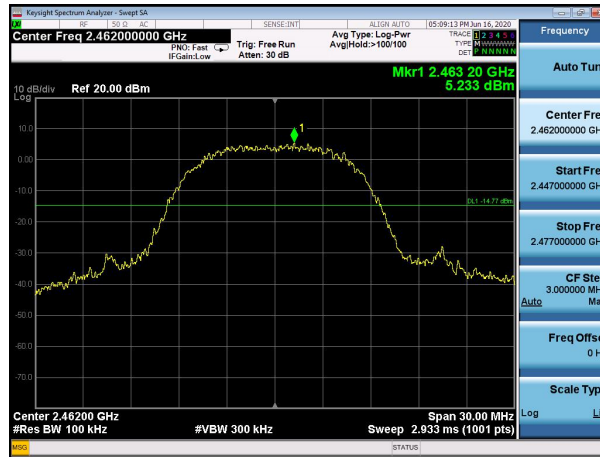
3GHz~25GHz

Test Mode:

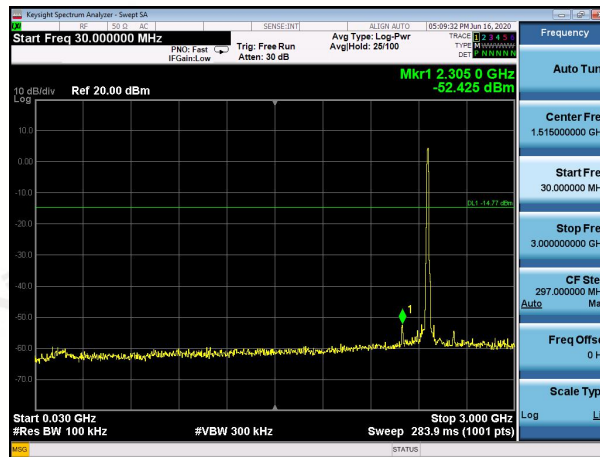
802.11b

Test channel :

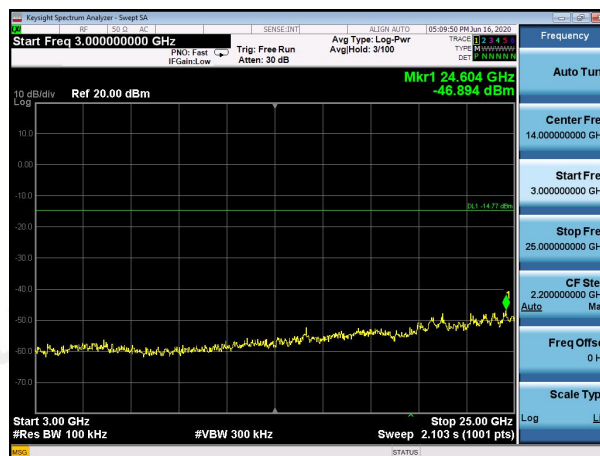
11



Channel 11



30MHz ~3GHz



3GHz~25GHz

## 11. ANTENNA REQUIREMENT

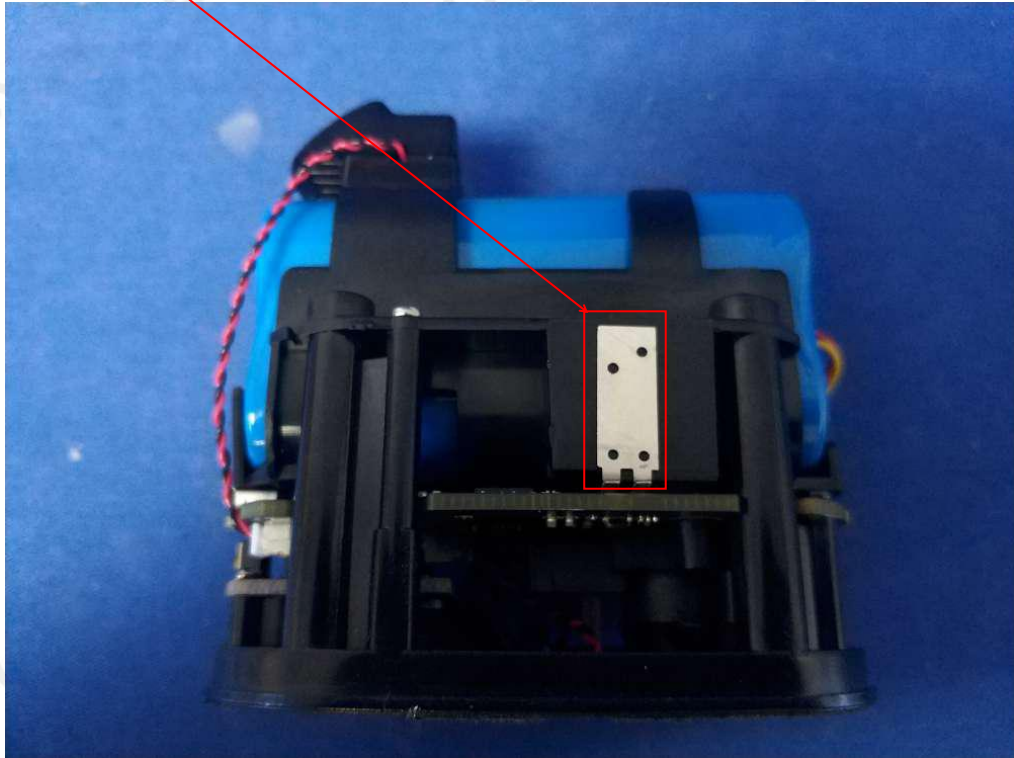
Standard Applicable:

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

Antenna Connected Construction

The antenna used in this product is an Internal Antenna, The directional gains of antenna used for transmitting is 1.52dBi.

ANTENNA:



12.PHOTOGRAPH OF TEST

**Radiated Emission  
(Below 1G)**



**Radiated Emission  
(Above 1G)**



**Conducted Emission**



\*\*\*End of Report\*\*\*