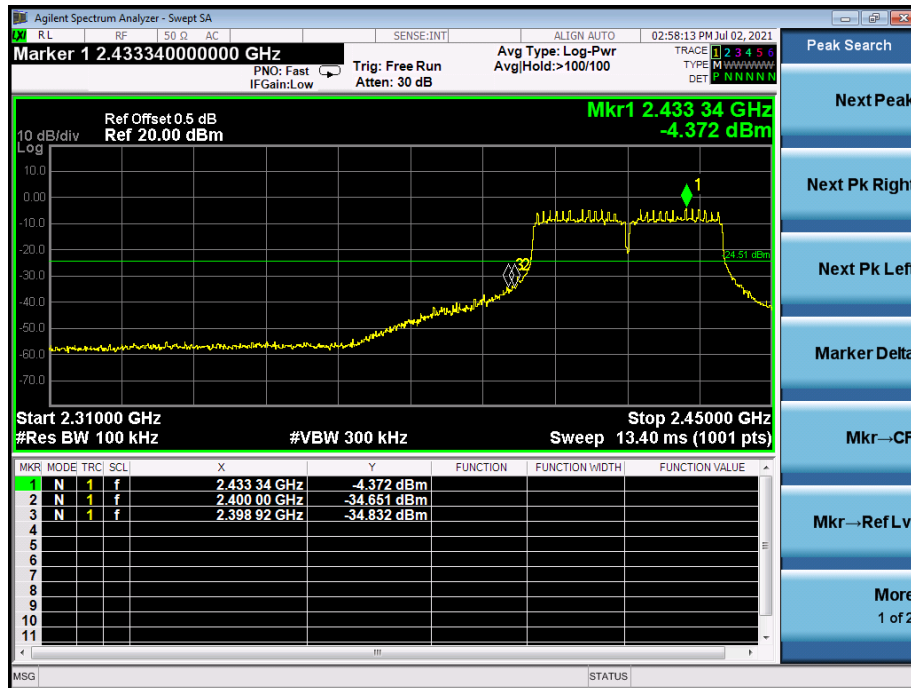
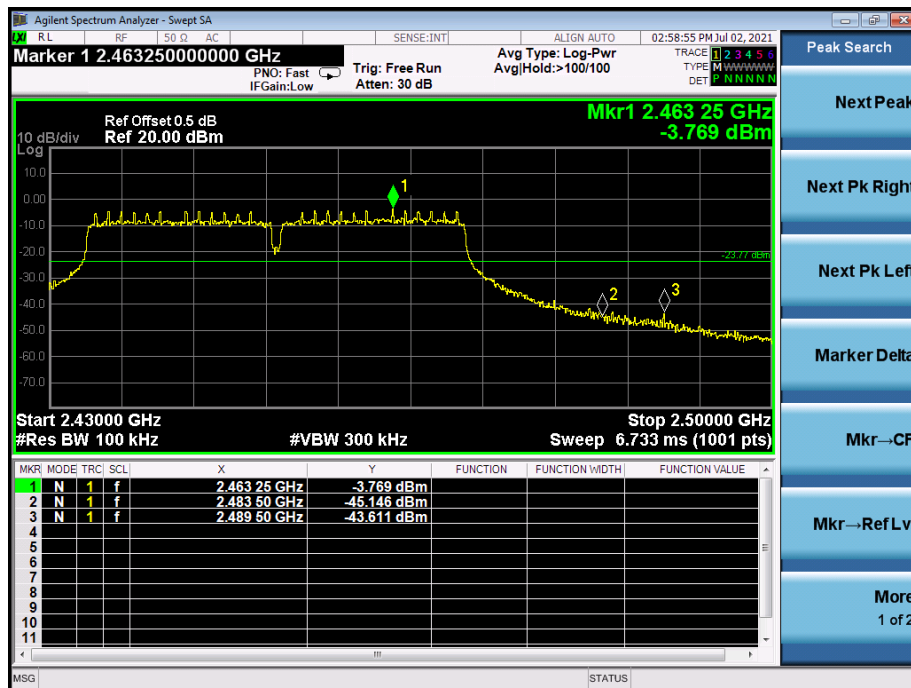


## 802.11n-HT40: Band Edge, Left Side



## 802.11n-HT40: Band Edge, Right Side

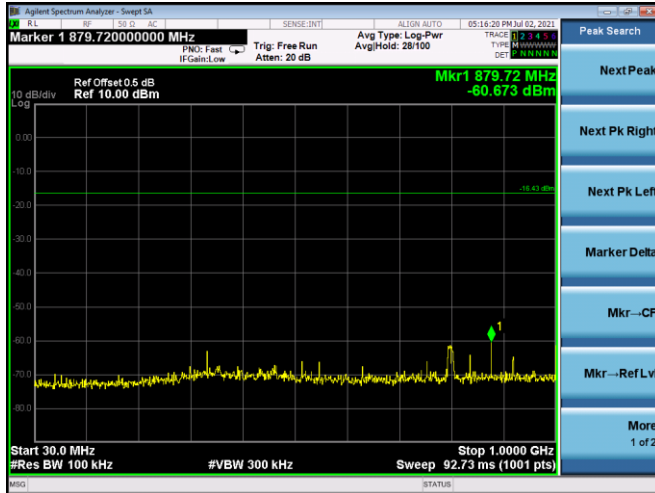


## CONDUCTED EMISSION MEASUREMENT

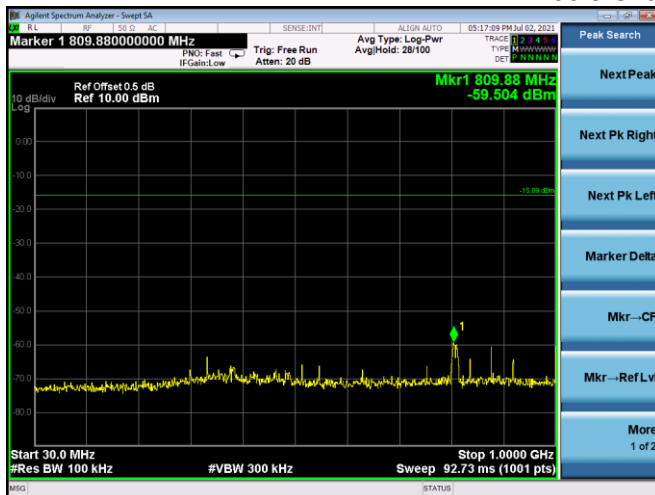
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B ,only shown Antenna B Plot.

802.11b

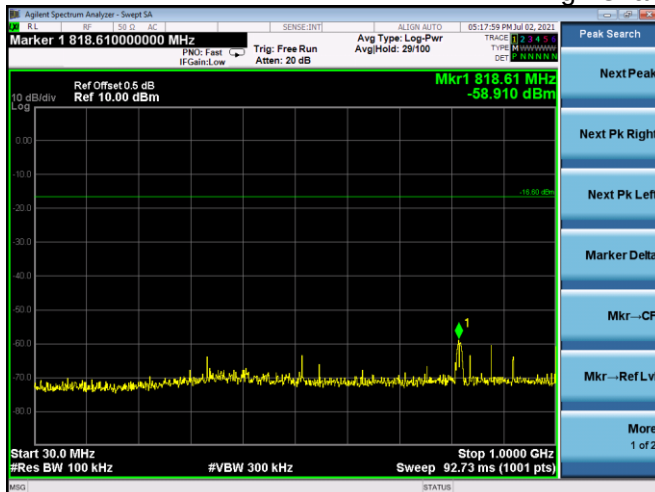
### Low Channel 2412MHz



### Middle Channel 2437MHz

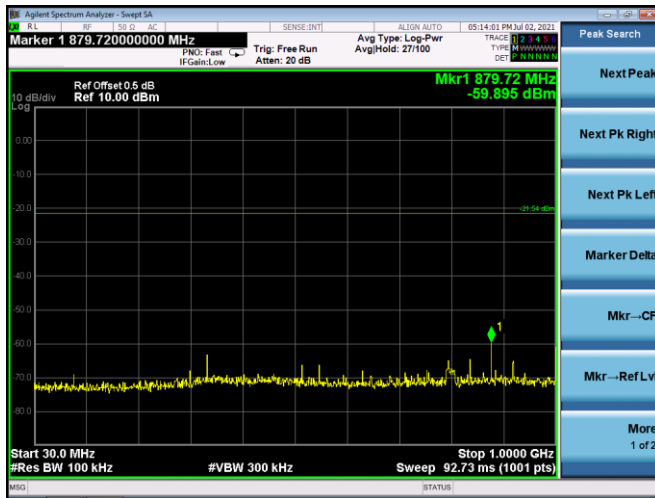


### High Channel 2462MHz

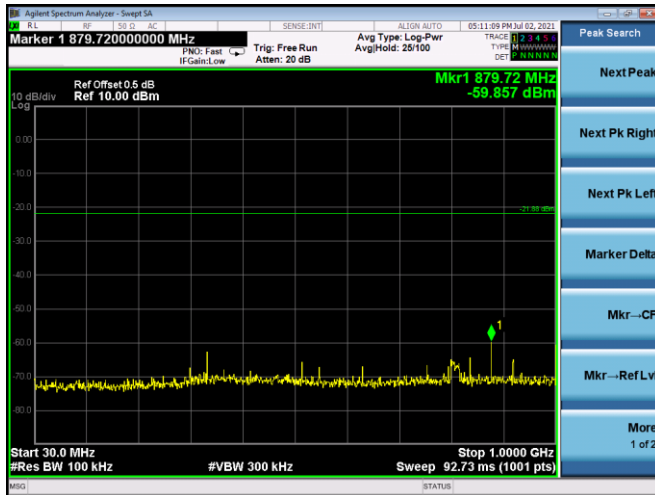


802.11g

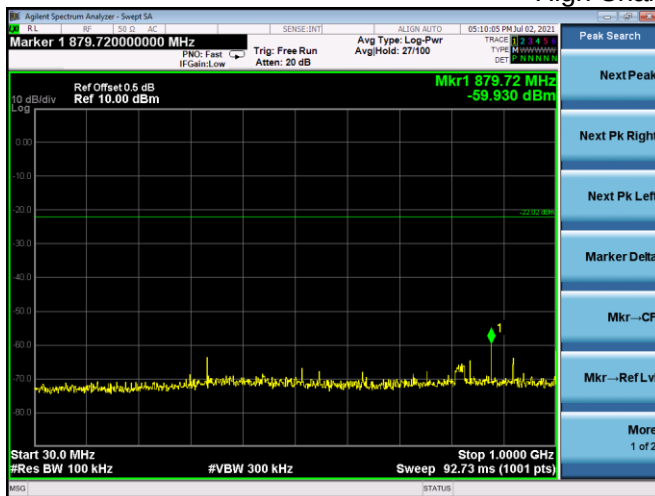
### Low Channel 2412MHz



### Middle Channel 2437MHz

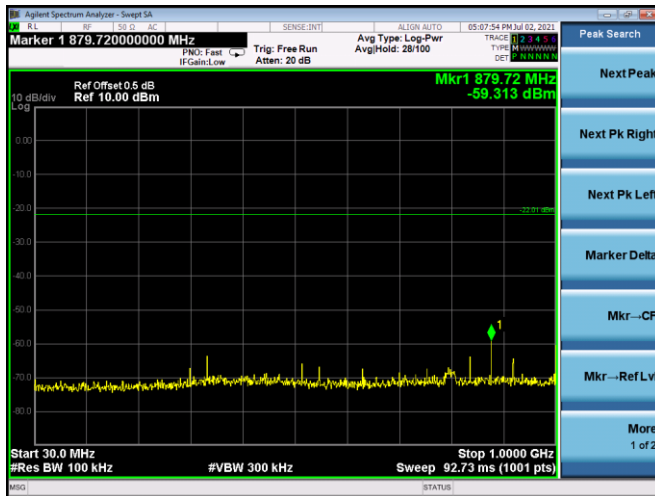


### High Channel 2462MHz

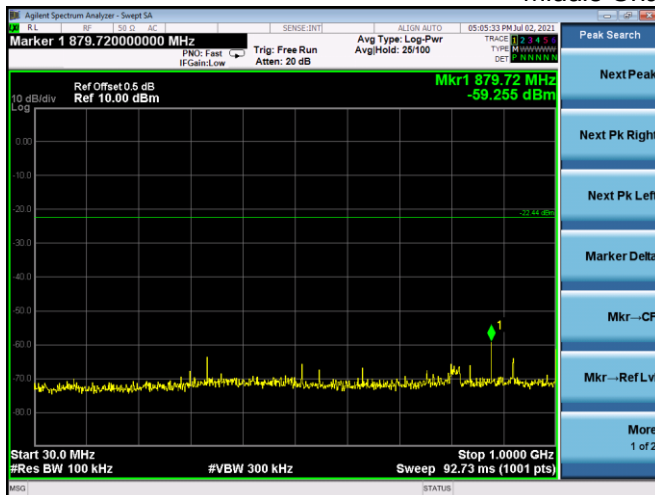


802.11n20

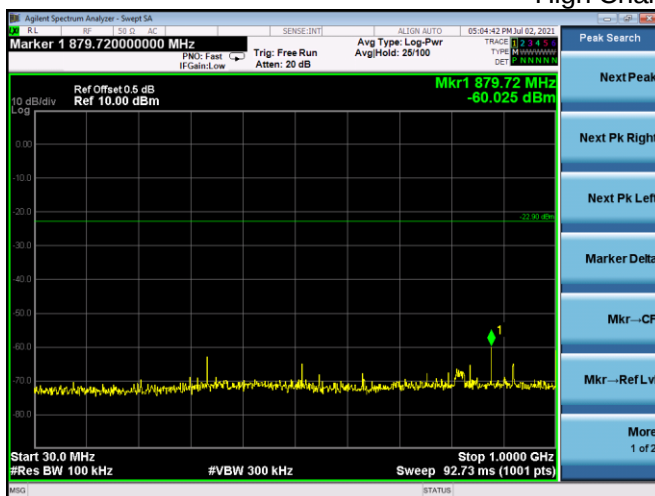
### Low Channel 2412MHz



### Middle Channel 2437MHz

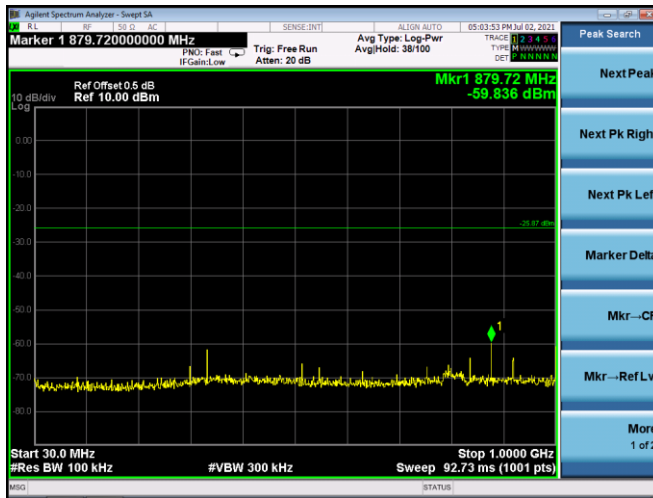


### High Channel 2462MHz

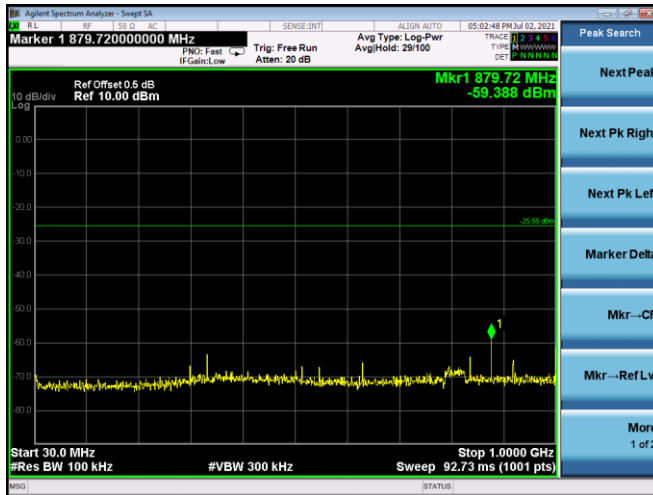


802.11n40

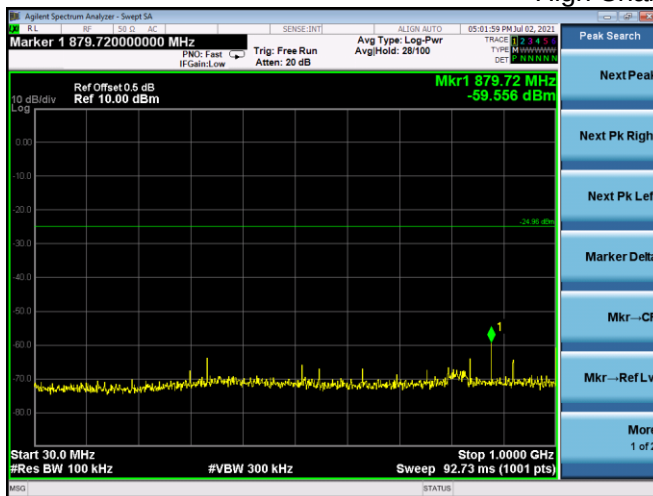
### Low Channel 2422MHz



### Middle Channel 2437MHz



### High Channel 2452MHz



## 9. DUTY CYCLE OF TEST SIGNAL

### 9.1 STANDARD REQUIREMENT

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle.

All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

### 9.2 FORMULA:

Duty Cycle =  $T_{on} / (T_{on} + T_{off})$

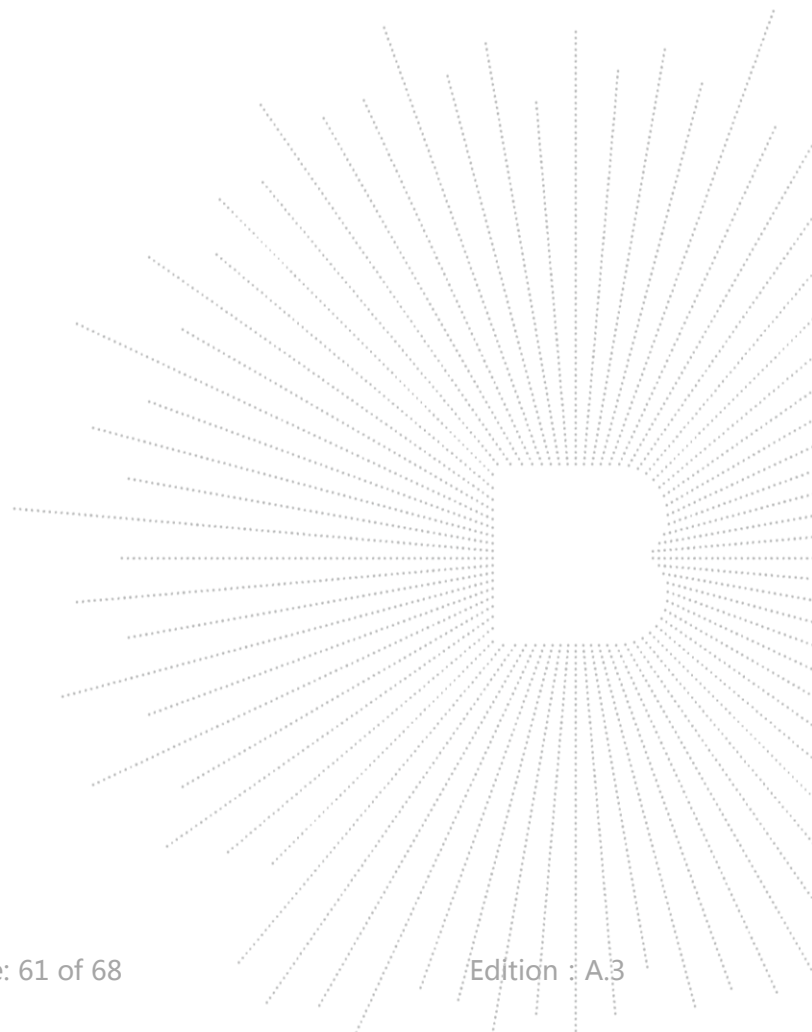
### Measurement Procedure:

1. Set span = Zero
2. RBW = 8MHz
3. VBW = 8MHz,
4. Detector = Peak

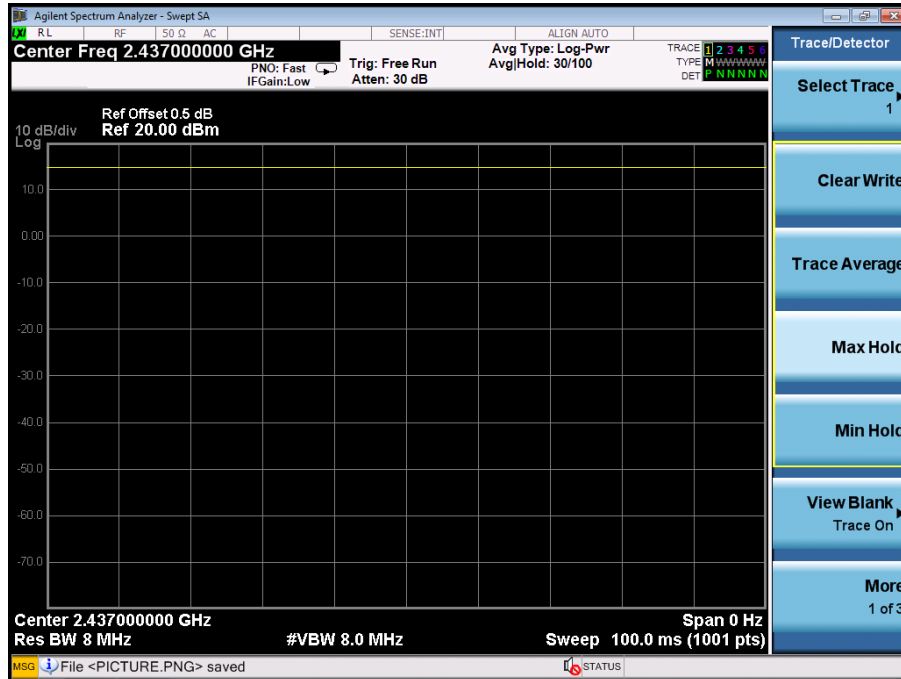
### Duty Cycle:

|               | Duty Cycle | Duty Fator<br>(dB) |
|---------------|------------|--------------------|
| 802.11b       | 1          | 0                  |
| 802.11g       | 1          | 0                  |
| 802.11n(HT20) | 1          | 0                  |
| 802.11n(HT40) | 1          | 0                  |

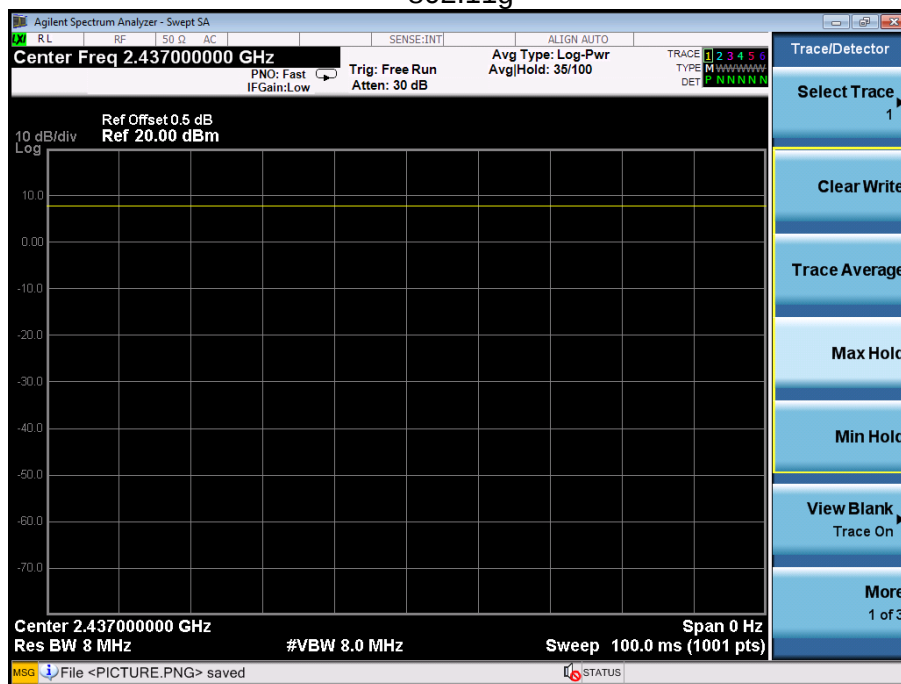
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B ,only shown Antenna B Plot.



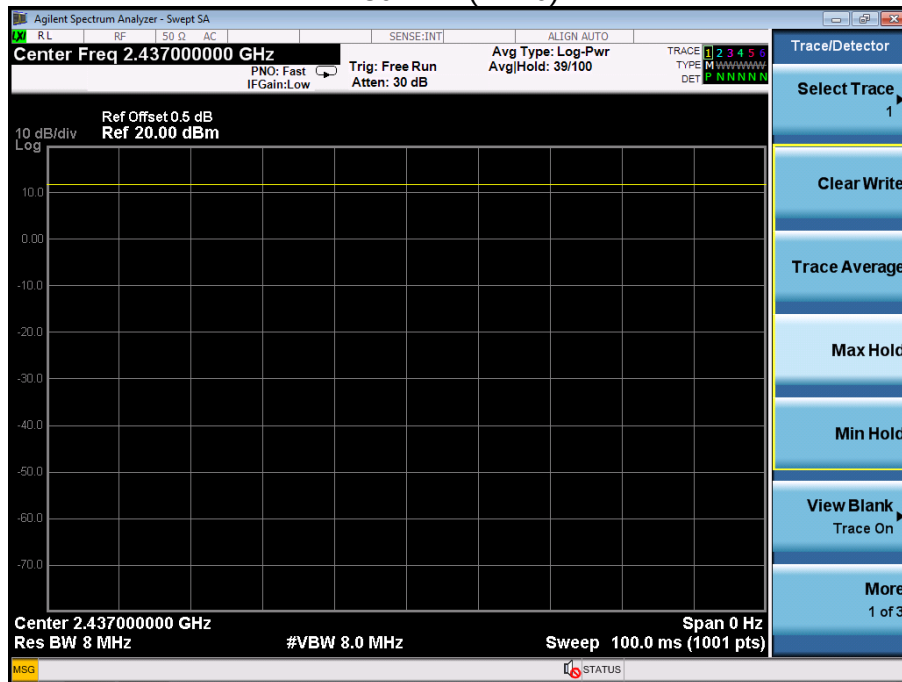
## 802.11b



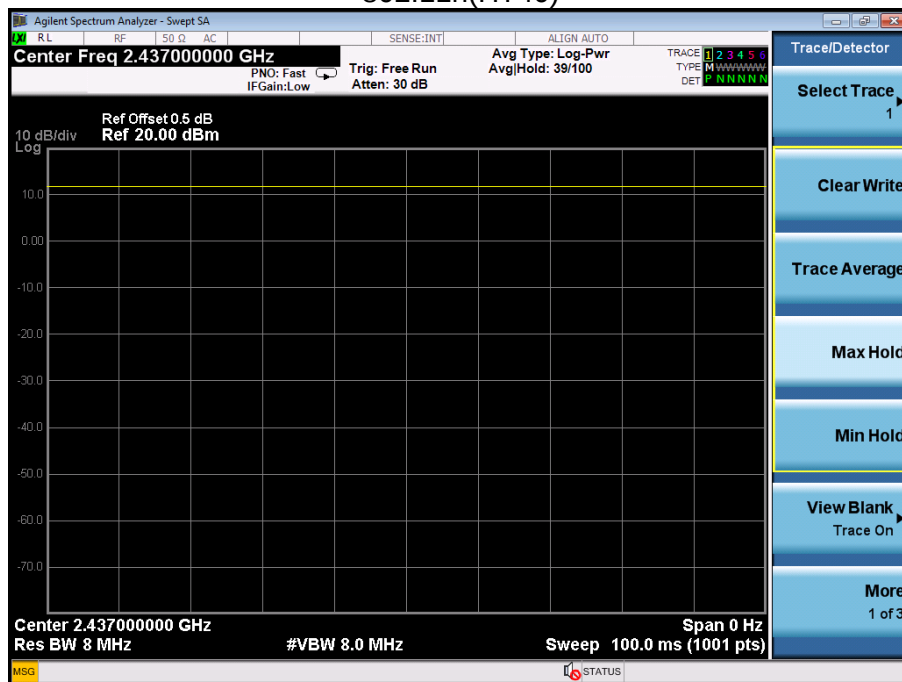
## 802.11g



### 802.11n(HT20)



### 802.11n(HT40)



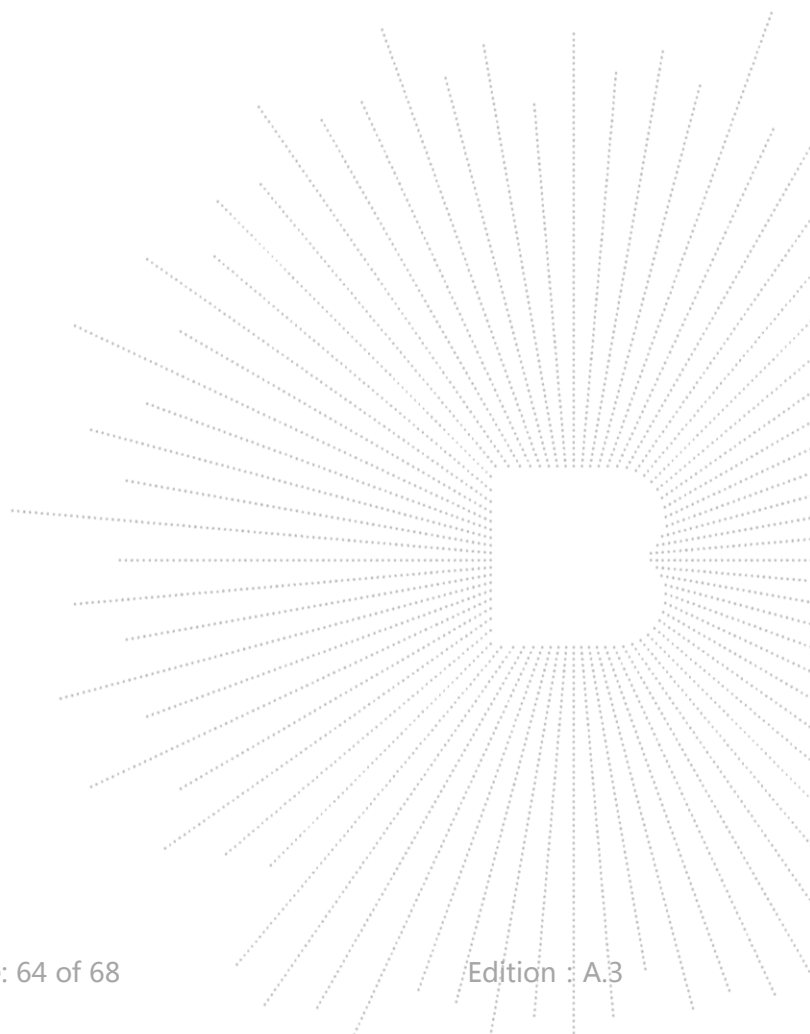
## 10. ANTENNA REQUIREMENT

### 10.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 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.

### 10.2 EUT ANTENNA

The EUT antenna is External antenna, antenna(A) Gain 2dBi, antenna(B) Gain 2dBi, impedance 50Ω. It comply with the standard requirement.

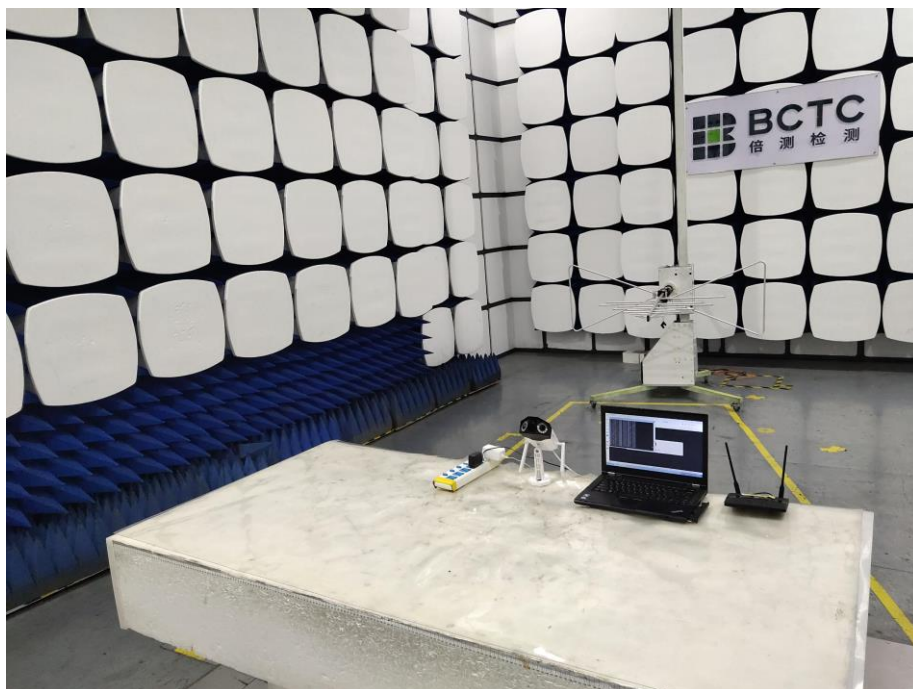


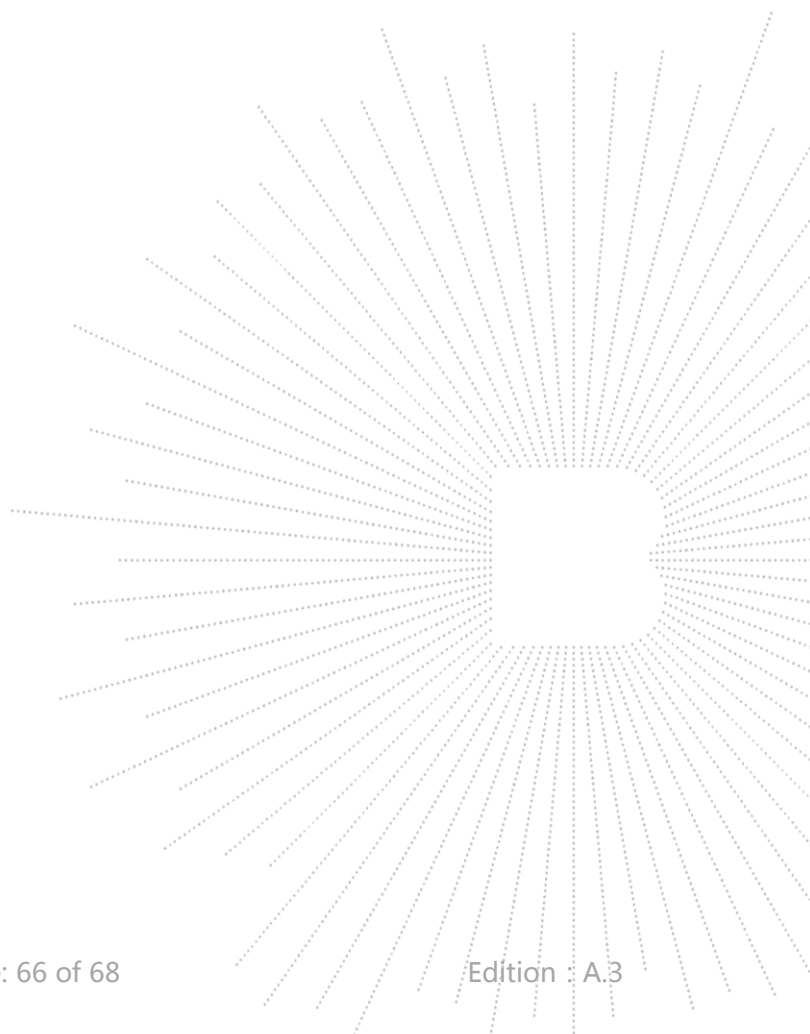
## 11. EUT TEST PHOTO

### Conducted Measurement Photos



### Radiated Measurement Photos





**12. EUT PHOTO****EUT Photo 1****EUT Photo 2**

## STATEMENT

- 1.The equipment lists are traceable to the national reference standards.
- 2.The test report can not be partially copied unless prior written approval is issued from our lab.
- 3.The test report is invalid without stamp of laboratory.
- 4.The test report is invalid without signature of person(s) testing and authorizing.
- 5.The test process and test result is only related to the Unit Under Test.
- 6.The quality system of our laboratory is in accordance with ISO/IEC17025.
- 7.If there is any objection to report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:

1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Tangwei, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

TEL : 400-788-9558

P. C.: 518103

FAX : 0755-33229357

Website : <http://www.chnbctc.com>

E-Mail : [bctc@bctc-lab.com.cn](mailto:bctc@bctc-lab.com.cn)

\*\*\*\*\* END \*\*\*\*\*