

# TEST REPORT

FCC ID: 2AIZN-X6857

Product: Mobile Phone

Model No.: X6857

Trade Mark: Infinix

Report No.: WSCT-ANAB-R&amp;E250100002A-Wi-Fi2

Issued Date: 14 February 2025

Issued for:

INFINIX MOBILITY LIMITED  
FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET  
FOTAN NT HONGKONG

Issued By:

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## 1 Test Certification

**Product:** Mobile Phone

**Model No.:** X6857

**Additional Model:** Infinix

**Applicant:** INFINIX MOBILITY LIMITED  
FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN  
MEI STREET FOTAN NT HONGKONG

**Manufacturer:** INFINIX MOBILITY LIMITED  
FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN  
MEI STREET FOTAN NT HONGKONG

**Date of Test:** 10 December 2024 to 13 February 2025

**Applicable Standards:** FCC CFR Title 47 FCC Part 15 Subpart E

The above equipment has been tested by World Standardization Certification & Testing Group(Shenzhen)Co., Ltd. and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Tested By:

  
(Wang Xiang)

Checked By:

  
( Qin Shuiquan)

Approved By:

  
( Li Huaibi)

Date:

  
14 February 2025



## 2 EUT Description

|                             |                                                                                                                                                                                                                                                                                                                          |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>             | Mobile Phone                                                                                                                                                                                                                                                                                                             |
| <b>Model No.:</b>           | X6857                                                                                                                                                                                                                                                                                                                    |
| <b>Trade Mark:</b>          | Infinix                                                                                                                                                                                                                                                                                                                  |
| <b>Operation Frequency:</b> | Band 1: 5180-5240 MHz<br>Band 2: 5260-5320 MHz<br>Band 3: 5500-5700 MHz<br>Band 4: 5745-5825 MHz                                                                                                                                                                                                                         |
| <b>Modulation type:</b>     | IEEE 802.11a/n/ac/ax: OFDM<br>(BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)                                                                                                                                                                                                                                                     |
| <b>Antenna Type:</b>        | Integral Antenna                                                                                                                                                                                                                                                                                                         |
| <b>Antenna Gain</b>         | -1.65dBi                                                                                                                                                                                                                                                                                                                 |
| <b>Operating Voltage:</b>   | Adapter: U450XSB<br>Input: 100-240V~50/60Hz 1.8A<br>Output: 5.0V~3.0A 15W or 5.0-10.0V~4.5A<br>or 11.0V~4.1A 45.0W MAX<br>Rechargeable Li-ion Polymer Battery Model: BL-54BX<br>Rated Voltage: 3.91V<br>Rated Capacity: 5100mAh<br>Nominal Energy: 19.95Wh<br>Typical Capacity: 5200mAh<br>Limited Charge Voltage: 4.50V |
| <b>Remark:</b>              | N/A.                                                                                                                                                                                                                                                                                                                     |

Note: 1. N/A stands for no applicable.

2. The antenna gain is provided by the customer. For any reported data issues caused by the antenna gain, World Standardization Certification&Testing Group (Shenzhen) Co., Ltd assumes no responsibility.



### 3 TEST DESCRIPTION

#### 3.1 MEASUREMENT UNCERTAINTY

| No. | Item                                                  | Uncertainty               |
|-----|-------------------------------------------------------|---------------------------|
| 1   | Conducted Emission Test                               | $\pm 3.2\text{dB}$        |
| 2   | RF power, conducted                                   | $\pm 0.16\text{dB}$       |
| 3   | Spurious emissions, conducted                         | $\pm 0.21\text{dB}$       |
| 4   | All emissions, radiated(<1GHz)                        | $\pm 4.7\text{dB}$        |
| 5   | All emissions, radiated(>1GHz)                        | $\pm 4.7\text{dB}$        |
| 6   | Temperature                                           | $\pm 0.5^{\circ}\text{C}$ |
| 7   | Humidity                                              | $\pm 2\%$                 |
| 8   | Receiver Spurious Emissions                           | $\pm 2.5\%$               |
| 9   | Transmitter Unwanted Emissions in the Spurious Domain | $\pm 2.5\%$               |
| 10  | Transmitter Unwanted Emission in the out-of Band      | $\pm 1.3\%$               |
| 11  | Occupied Channel Bandwidth                            | $\pm 2.4\%$               |

NOTE:1.The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

2. The  $U_{\text{lab}}$  is less than  $U_{\text{cispr}}$ , compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit; non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

3. For conducted emission test of laboratory have a measurement uncertainty greater than that specified in harmonized standard, this equipment can still be used provided that an adjustment is made follows : any additional uncertainty in the test system over and above that specified in harmonized standard should be used to tighten the test requirements-making the test harder to pass. This procedure will ensure that a test system not compliant with harmonized standard does not increase the probability of passing a EUT that would otherwise have failed a test if a test system compliant with harmonized standard had been used.



### 3.2 TEST ENVIRONMENT AND MODE

#### Operating Environment:

|                       |           |
|-----------------------|-----------|
| Temperature:          | 25.0 °C   |
| Humidity:             | 56 % RH   |
| Atmospheric Pressure: | 1010 mbar |

#### Test Mode:

|                   |                                                                                                              |
|-------------------|--------------------------------------------------------------------------------------------------------------|
| Engineering mode: | Keep the EUT in continuous transmitting by select channel and modulations(The value of duty cycle is 98.46%) |
|-------------------|--------------------------------------------------------------------------------------------------------------|

The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. For the full battery state and The output power to the maximum state.

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

| Test Mode | Description |
|-----------|-------------|
| Mode 1    | 802.11a     |
| Mode 2    | 802.11n20   |
| Mode 3    | 802.11n40   |
| Mode 4    | 802.11ac20  |
| Mode 5    | 802.11ac40  |
| Mode 6    | 802.11ac80  |

Note:

- (1) The measurements are performed at the highest, lowest available channels.
- (2) The EUT use new battery.
- (3) Record the worst case of each test item in this report.



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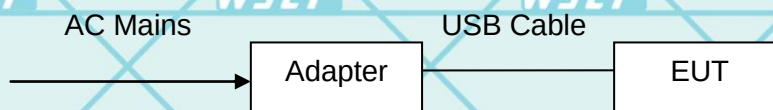
### 3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

| Test program | *##3646633##*        |      |      |      |      |      |      |      |
|--------------|----------------------|------|------|------|------|------|------|------|
| Mode         | Test Frequency (MHz) |      |      |      |      |      |      |      |
|              | NCB: 20MHz           |      |      |      |      |      |      |      |
| 802.11a      | 5180                 | 5240 | 5260 | 5320 | 5500 | 5700 | 5745 | 5825 |
| 802.11n      | 5180                 | 5240 | 5260 | 5320 | 5500 | 5700 | 5745 | 5825 |
| 802.11ac     | 5180                 | 5240 | 5260 | 5320 | 5500 | 5700 | 5745 | 5825 |
|              | NCB: 40MHz           |      |      |      |      |      |      |      |
|              |                      |      |      |      |      |      |      |      |
| 802.11n      | 5190                 | 5230 | 5270 | 5310 | 5510 | 5670 | 5755 | 5795 |
| 802.11ac     | 5190                 | 5230 | 5270 | 5310 | 5510 | 5670 | 5755 | 5795 |
|              | NCB: 80MHz           |      |      |      |      |      |      |      |
|              |                      |      |      |      |      |      |      |      |
| 802.11ac     | 5210                 | 5290 | 5530 | 5610 | 5775 |      |      |      |



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## CONFIGURATION OF SYSTEM UNDER TEST



(EUT: Mobile Phone)

**3.4 DESCRIPTION OF SUPPORT UNITS (CONDUCTED MODE)**

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment | Mfr/Brand | Model/Type No. | Series No. | Note |
|------|-----------|-----------|----------------|------------|------|
| 1    | Adapter   | /         | U900XSA        | /          | /    |

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.
- (4) The adapter supply by the applicant.



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## 4 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

| FCC Part15 Subpart C&E |                                                                    |          |          |
|------------------------|--------------------------------------------------------------------|----------|----------|
| Standard Section       | Test Item                                                          | Judgment | Remark   |
| 2.1049<br>15.403(i)    | 26dB & 99% Bandwidth                                               | PASS     | Complies |
| 15.407(e)              | 6dB Spectrum Bandwidth                                             | PASS     | Complies |
| 15.407(a)              | Maximum Conducted Output Power                                     | PASS     | Complies |
| 15.407(a)              | Power Spectral Density                                             | PASS     | Complies |
| 15.407(b)              | Unwanted Emissions                                                 | PASS     | Complies |
| 15.207                 | AC Conducted Emission                                              | PASS     | Complies |
| 15.407(g)              | Frequency Stability                                                | PASS     | Complies |
| 15.407(c)              | Automatically Discontinue Transmission                             | PASS     | Complies |
| 15.203 &<br>15.407(a)  | Antenna Requirement                                                | PASS     | Complies |
| 15.407(h)              | Transmit Power Control (TPC) and Dynamic Frequency Selection (DFS) | PASS     | Complies |

NOTE:

(1) "N/A" denotes test is not applicable in this test report.



## 5 MEASUREMENT INSTRUMENTS

| NAME OF EQUIPMENT                    | MANUFACTURER           | MODEL        | SERIAL NUMBER | Calibration Date | Calibration Due. |
|--------------------------------------|------------------------|--------------|---------------|------------------|------------------|
| Test software                        | --                     | EZ-EMC       | CON-03A       | -                | -                |
| Test software                        | --                     | MTS8310      | -             | -                | -                |
| EMI Test Receiver                    | R&S                    | ESCI         | 100005        | 11/05/2024       | 11/04/2025       |
| LISN                                 | AFJ                    | LS16         | 16010222119   | 11/05/2024       | 11/04/2025       |
| LISN(EUT)                            | Mestec                 | AN3016       | 04/10040      | 11/05/2024       | 11/04/2025       |
| Universal Radio Communication Tester | R&S                    | CMU 200      | 1100.0008.02  | 11/05/2024       | 11/04/2025       |
| Coaxial cable                        | Megalon                | LMR400       | N/A           | 11/05/2024       | 11/04/2025       |
| GPIO cable                           | Megalon                | GPIO         | N/A           | 11/05/2024       | 11/04/2025       |
| Spectrum Analyzer                    | R&S                    | FSU          | 100114        | 11/05/2024       | 11/04/2025       |
| Pre Amplifier                        | H.P.                   | HP8447E      | 2945A02715    | 11/05/2024       | 11/04/2025       |
| Pre-Amplifier                        | CDSI                   | PAP-1G18-38  | --            | 11/05/2024       | 11/04/2025       |
| Bi-log Antenna                       | SCHWARZBECK            | VULB9168     | 01488         | 7/29/2024        | 7/28/2025        |
| 9*6*6 Anechoic                       | --                     | --           | --            | 11/05/2024       | 11/04/2025       |
| Horn Antenna                         | COMPLIANCE ENGINEERING | CE18000      | --            | 11/05/2024       | 11/04/2025       |
| Horn Antenna                         | SCHWARZBECK            | BBHA9120D    | 9120D-631     | 11/05/2024       | 11/04/2025       |
| Cable                                | TIME MICROWAVE         | LMR-400      | N-TYPE04      | 11/05/2024       | 11/04/2025       |
| System-Controller                    | CCS                    | N/A          | N/A           | N.C.R            | N.C.R            |
| Turn Table                           | CCS                    | N/A          | N/A           | N.C.R            | N.C.R            |
| Antenna Tower                        | CCS                    | N/A          | N/A           | N.C.R            | N.C.R            |
| RF cable                             | Murata                 | MXHQ87WA3000 | -             | 11/05/2024       | 11/04/2025       |
| Loop Antenna                         | EMCO                   | 6502         | 00042960      | 11/05/2024       | 11/04/2025       |
| Horn Antenna                         | SCHWARZBECK            | BBHA 9170    | 1123          | 11/05/2024       | 11/04/2025       |
| Power meter                          | Anritsu                | ML2487A      | 6K00003613    | 11/05/2024       | 11/04/2025       |
| Power sensor                         | Anritsu                | MX248XD      | --            | 11/05/2024       | 11/04/2025       |
| Spectrum Analyzer                    | Keysight               | N9010B       | MY60241089    | 11/05/2024       | 11/04/2025       |



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## 6 Facilities and Accreditations

### 6.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

**Building A-B, Baoli'an Industrial Park, No.58 and 60, Tangtou Avenue, Shiyan Street, Bao'an District, Shenzhen City, Guangdong Province, China** of the World Standardization Certification & Testing Group (Shenzhen) Co., Ltd.

The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

### 6.2 ACCREDITATIONS

**ANAB - Certificate Number: AT-3951**

The EMC Laboratory has been accredited by the American Association for Laboratory Accreditation (ANAB). Certification Number: AT-3951



## 7 Test Results and Measurement Data

### 7.1 CONDUCTED EMISSION MEASUREMENT

#### POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

| FREQUENCY (MHz) | Class A (dBuV) |         | Class B (dBuV) |           | Standard |
|-----------------|----------------|---------|----------------|-----------|----------|
|                 | Quasi-peak     | Average | Quasi-peak     | Average   |          |
| 0.15 -0.5       | 79.00          | 66.00   | 66 - 56 *      | 56 - 46 * | FCC      |
| 0.50 -5.0       | 73.00          | 60.00   | 56.00          | 46.00     | FCC      |
| 5.0 -30.0       | 73.00          | 60.00   | 60.00          | 50.00     | FCC      |

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

| Receiver Parameters | Setting  |
|---------------------|----------|
| Attenuation         | 10 dB    |
| Start Frequency     | 0.15 MHz |
| Stop Frequency      | 30 MHz   |
| IF Bandwidth        | 9 kHz    |



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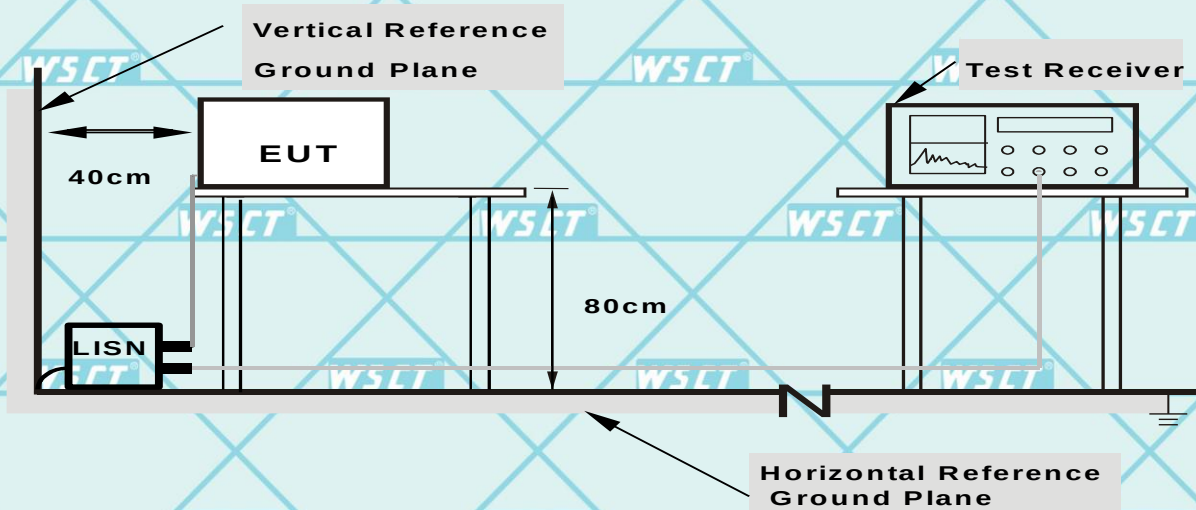
### 7.1.1 TEST PROCEDURE

- The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

### 7.2 DEVIATION FROM TEST STANDARD

No deviation

#### TEST SETUP



**Note: 1.**Support units were connected to second LISN.

**2.**Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

### 7.2.1 EUT OPERATING CONDITIONS

The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

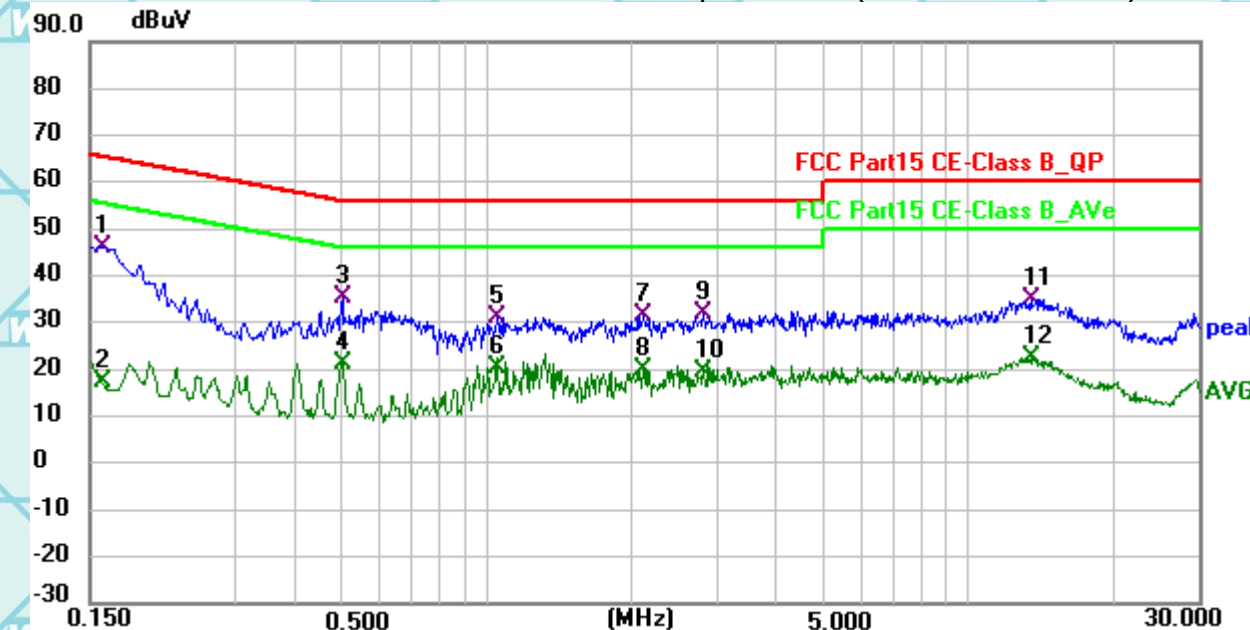
Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.



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## 7.2.2 TEST RESULTS

Conducted Emission on Line Terminal of the power line (150 kHz to 30MHz)-worst



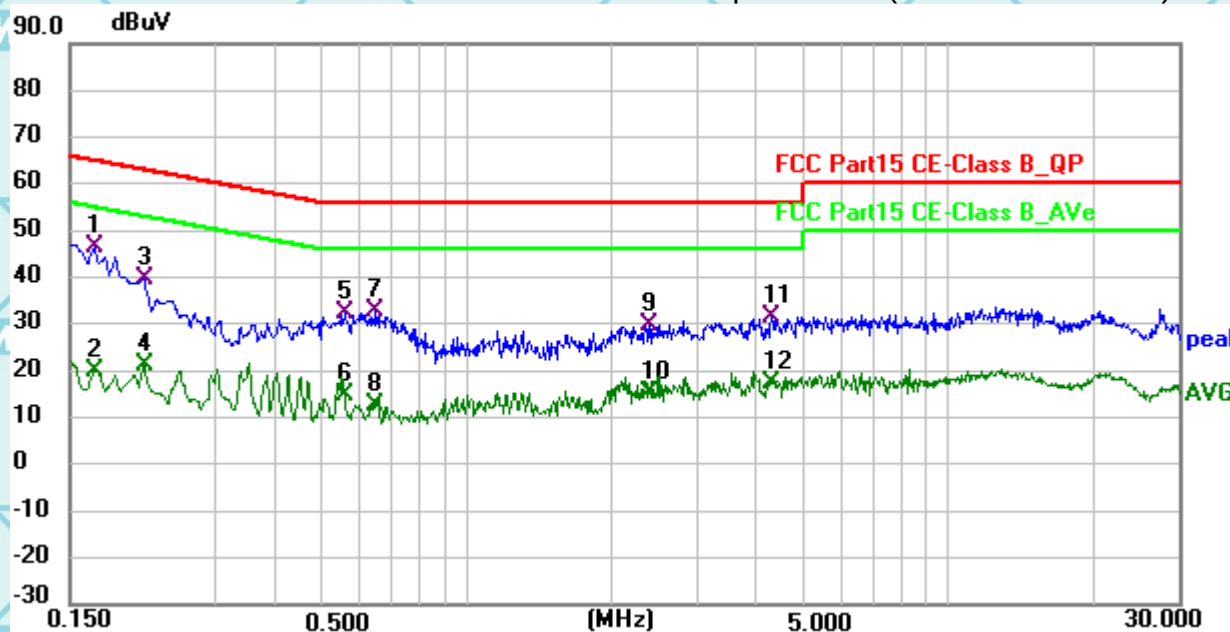
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector |
|-----|-----------------|----------------|-------------|--------------|--------------|-------------|----------|
| 1 * | 0.1590          | 25.51          | 20.72       | 46.23        | 65.52        | -19.29      | QP       |
| 2   | 0.1590          | -3.34          | 20.72       | 17.38        | 55.52        | -38.14      | AVG      |
| 3   | 0.5010          | 14.71          | 20.51       | 35.22        | 56.00        | -20.78      | QP       |
| 4   | 0.5010          | 0.55           | 20.51       | 21.06        | 46.00        | -24.94      | AVG      |
| 5   | 1.0545          | 10.53          | 20.67       | 31.20        | 56.00        | -24.80      | QP       |
| 6   | 1.0545          | -0.21          | 20.67       | 20.46        | 46.00        | -25.54      | AVG      |
| 7   | 2.1210          | 10.83          | 20.61       | 31.44        | 56.00        | -24.56      | QP       |
| 8   | 2.1210          | -0.86          | 20.61       | 19.75        | 46.00        | -26.25      | AVG      |
| 9   | 2.8275          | 11.26          | 20.60       | 31.86        | 56.00        | -24.14      | QP       |
| 10  | 2.8275          | -1.28          | 20.60       | 19.32        | 46.00        | -26.68      | AVG      |
| 11  | 13.5330         | 14.76          | 20.25       | 35.01        | 60.00        | -24.99      | QP       |
| 12  | 13.5330         | 2.12           | 20.25       | 22.37        | 50.00        | -27.63      | AVG      |

Remark: All the modes have been investigated, and only worst mode is presented in this report.



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Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector |
|-----|-----------------|----------------|-------------|--------------|--------------|-------------|----------|
| 1 * | 0.1680          | 25.69          | 20.72       | 46.41        | 65.06        | -18.65      | QP       |
| 2   | 0.1680          | -0.84          | 20.72       | 19.88        | 55.06        | -35.18      | AVG      |
| 3   | 0.2130          | 19.08          | 20.68       | 39.76        | 63.09        | -23.33      | QP       |
| 4   | 0.2130          | 0.67           | 20.68       | 21.35        | 53.09        | -31.74      | AVG      |
| 5   | 0.5595          | 11.75          | 20.52       | 32.27        | 56.00        | -23.73      | QP       |
| 6   | 0.5595          | -5.73          | 20.52       | 14.79        | 46.00        | -31.21      | AVG      |
| 7   | 0.6495          | 12.34          | 20.53       | 32.87        | 56.00        | -23.13      | QP       |
| 8   | 0.6495          | -7.77          | 20.53       | 12.76        | 46.00        | -33.24      | AVG      |
| 9   | 2.4045          | 9.25           | 20.60       | 29.85        | 56.00        | -26.15      | QP       |
| 10  | 2.4045          | -5.36          | 20.60       | 15.24        | 46.00        | -30.76      | AVG      |
| 11  | 4.2990          | 10.85          | 20.58       | 31.43        | 56.00        | -24.57      | QP       |
| 12  | 4.2990          | -3.28          | 20.58       | 17.30        | 46.00        | -28.70      | AVG      |

**Note1:**

Freq. = Emission frequency in MHz

Reading level (dBuV) = Receiver reading

Corr. Factor (dB) = Antenna factor + Cable loss

Measurement (dBuV) = Reading level (dBuV) + Corr. Factor (dB)

Limit (dBuV) = Limit stated in standard

Margin (dB) = Measurement (dBuV) - Limits (dBuV)

Q.P. = Quasi-Peak AVG = average

\* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.



### 7.3 RADIATED EMISSION MEASUREMENT

#### Radiated Emission Limits (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

| Frequencies (MHz) | Field Strength (micromvolts/meter) | Measurement Distance (meters) |
|-------------------|------------------------------------|-------------------------------|
| 0.009~0.490       | 2400/F(KHz)                        | 300                           |
| 0.490~1.705       | 24000/F(KHz)                       | 30                            |
| 1.705~30.0        | 30                                 | 30                            |
| 30~88             | 100                                | 3                             |
| 88~216            | 150                                | 3                             |
| 216~960           | 200                                | 3                             |
| Above 960         | 500                                | 3                             |

#### LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

| FREQUENCY (MHz) | Limit (dBuV/m) (at 3M) |         |
|-----------------|------------------------|---------|
|                 | PEAK                   | AVERAGE |
| Above 1000      | 74                     | 54      |

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

| Spectrum Parameter                    | Setting                                         |
|---------------------------------------|-------------------------------------------------|
| Attenuation                           | Auto                                            |
| Start Frequency                       | 1000 MHz                                        |
| Stop Frequency                        | 10th carrier harmonic                           |
| RB / VB (emission in restricted band) | 1 MHz / 1 MHz for Peak, 1 MHz / 1Hz for Average |

| Receiver Parameter     | Setting                          |
|------------------------|----------------------------------|
| Attenuation            | Auto                             |
| Start ~ Stop Frequency | 9kHz~150kHz / RB 200Hz for QP    |
| Start ~ Stop Frequency | 150kHz~30MHz / RB 9kHz for QP    |
| Start ~ Stop Frequency | 30MHz~1000MHz / RB 120kHz for QP |



Report No.: WSCT-ANAB-R&amp;E250100002A-Wi-Fi2

### 7.3.1 TEST PROCEDURE

- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

***Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported***

### 7.3.2 DEVIATION FROM TEST STANDARD

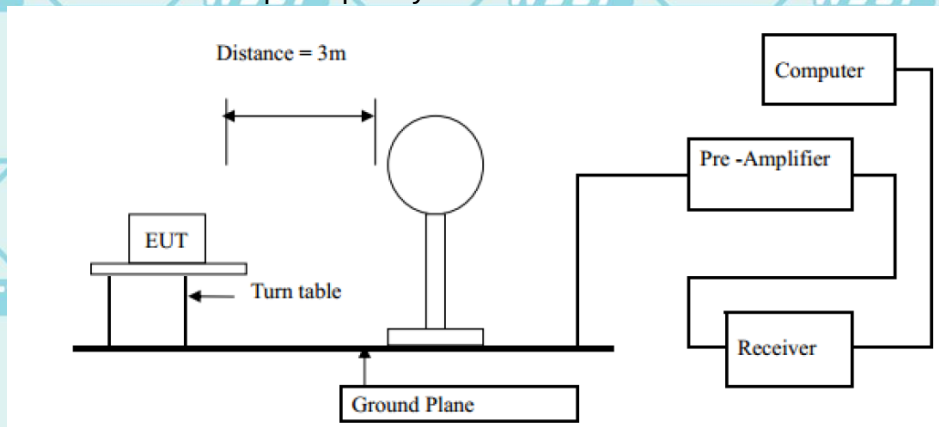
No deviation



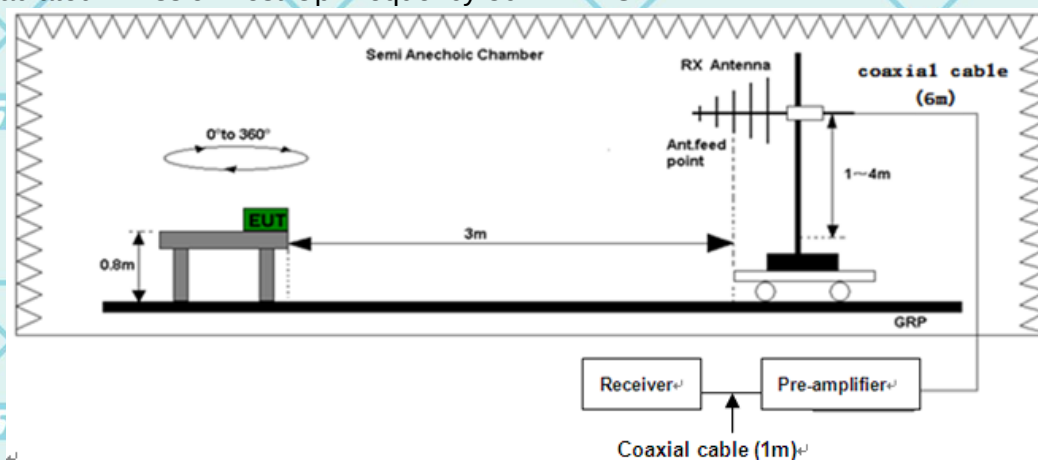
Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

### 7.3.3 TEST SETUP

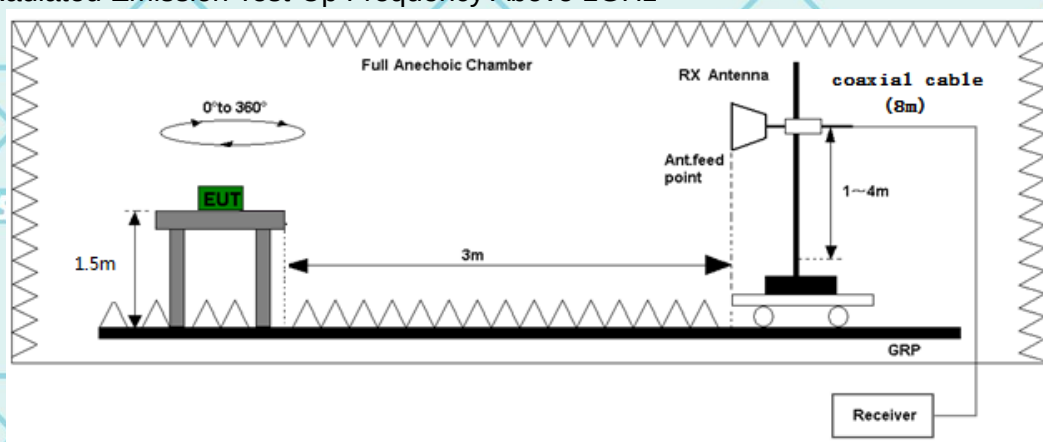
#### (A) Radiated Emission Test-Up Frequency Below 30MHz



#### (B) Radiated Emission Test-Up Frequency 30MHz~1GHz



#### (C) Radiated Emission Test-Up Frequency Above 1GHz





Report No.: WSCT-ANAB-R&amp;E250100002A-Wi-Fi2

### 7.3.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

### 7.3.5 RESULTS (BELOW 30 MHZ)

| Freq. | Reading  | Limit    | Margin | State |
|-------|----------|----------|--------|-------|
| (MHz) | (dBuV/m) | (dBuV/m) | (dB)   | P/F   |
| --    | --       | --       | --     | P     |
| --    | --       | --       | --     | P     |

Note 1: The symbol of “--” in the table which means not application.

Note 2: For the test data above 1 GHz, According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 3: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note 4: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

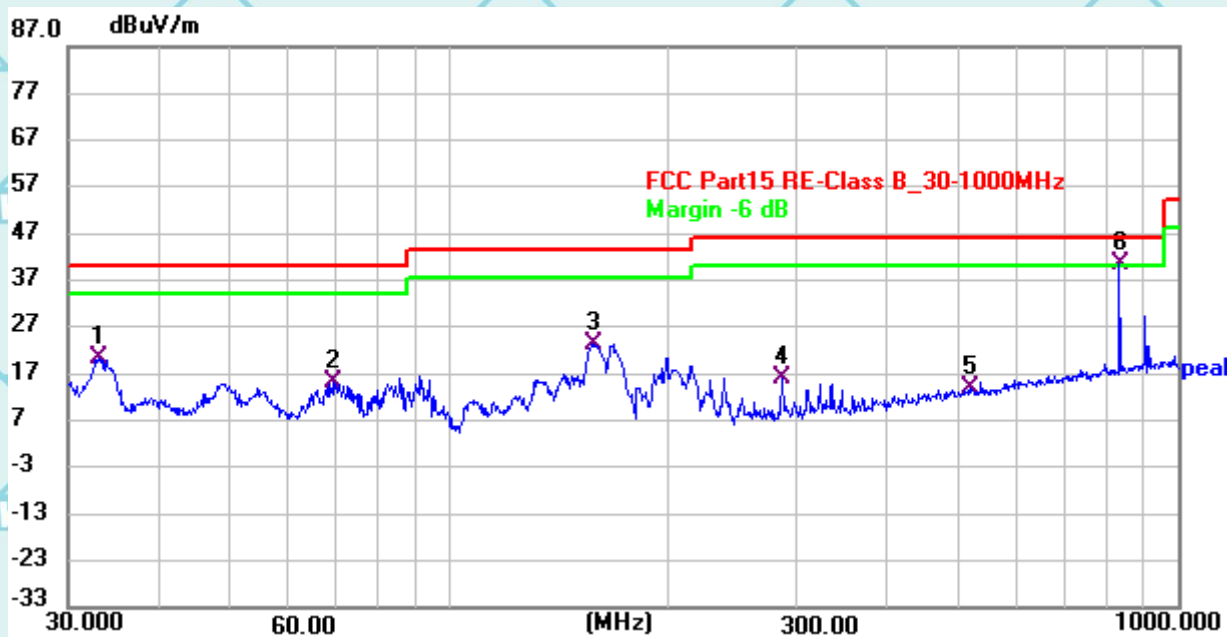


Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

### 7.3.6 TEST RESULTS (BETWEEN 30M – 1000 MHZ)

Please refer to following diagram for individual  
Below 1GHz

Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 33.1967         | 39.68          | -19.53        | 20.15          | 40.00          | -19.85      | QP       |
| 2   | 69.8143         | 37.61          | -22.31        | 15.30          | 40.00          | -24.70      | QP       |
| 3   | 157.4207        | 42.92          | -19.49        | 23.43          | 43.50          | -20.07      | QP       |
| 4   | 286.9823        | 36.89          | -20.70        | 16.19          | 46.00          | -29.81      | QP       |
| 5   | 520.4318        | 29.10          | -15.13        | 13.97          | 46.00          | -32.03      | QP       |
| 6 * | 832.5869        | 51.18          | -10.55        | 40.63          | 46.00          | -5.37       | QP       |

Remark: All the modes have been investigated, and only worst mode is presented in this report.



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Vertical:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 33.2347         | 54.74          | -19.54        | 35.20          | 40.00          | -4.80       | QP       |
| 2   | 48.5441         | 49.14          | -18.98        | 30.16          | 40.00          | -9.84       | QP       |
| 3   | 85.5977         | 53.66          | -23.91        | 29.75          | 40.00          | -10.25      | QP       |
| 4   | 171.0174        | 40.12          | -20.77        | 19.35          | 43.50          | -24.15      | QP       |
| 5   | 287.1082        | 37.57          | -20.70        | 16.87          | 46.00          | -29.13      | QP       |
| 6   | 630.3055        | 29.28          | -13.05        | 16.23          | 46.00          | -29.77      | QP       |

Note1:

Freq. = Emission frequency in MHz

Reading level (dBuV) = Receiver reading

Corr. Factor (dB) = Antenna factor + Cable loss - Amplifier factor.

Measurement (dBuV) = Reading level (dBuV) + Corr. Factor (dB)

Limit (dBuV) = Limit stated in standard

Margin (dB) = Measurement (dBuV) - Limits (dBuV)



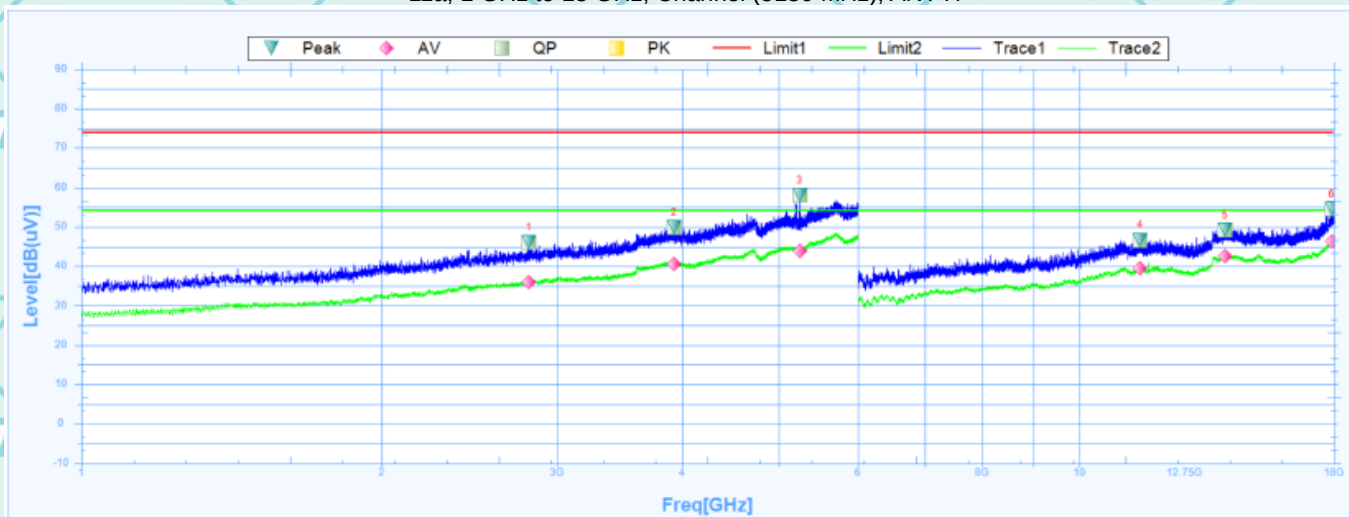
Report No.: WSCT-ANAB-R&amp;E250100002A-Wi-Fi2

**7.3.7 TEST RESULTS (ABOVE 1GHZ)**

Note: 1.The spurious above 18G is noise only, do not show on the report.

2. Report and only recorded the worst-case scenario 802.11a.

11a, 1 GHz to 18 GHz, Channel (5180 MHz), ANT H



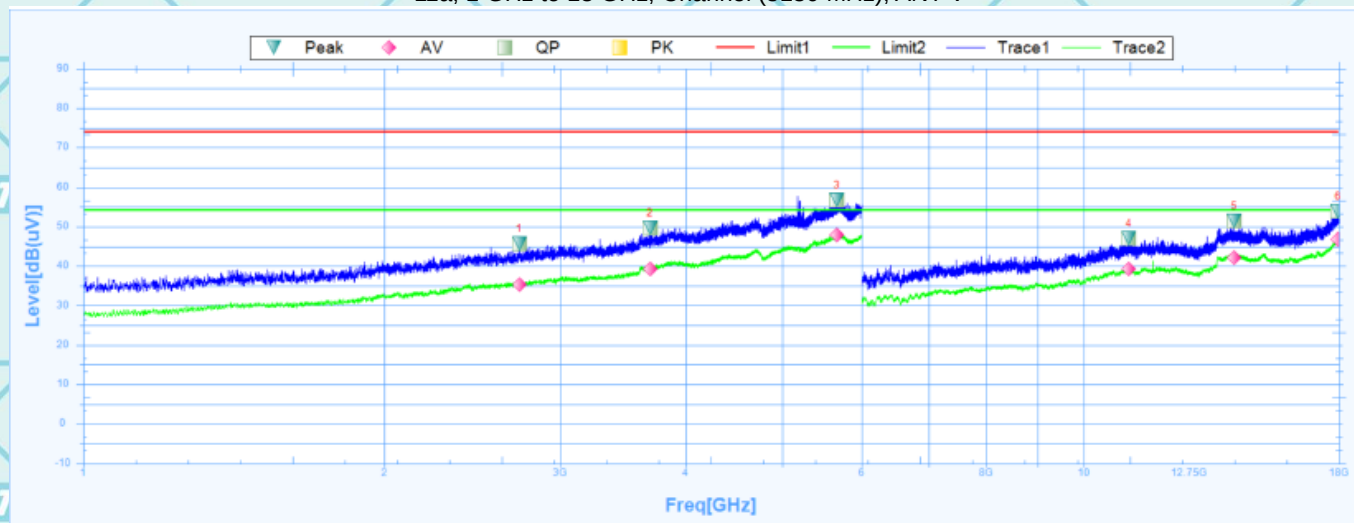
Suspected Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity   | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|------------|-------|---------|
| 1   | 2808.7500   | 46.14            | 27.97       | 18.17          | 74         | -27.86      | 85.8    | Horizontal | PK    | Pass    |
| 1   | 2808.7500   | 35.91            | 27.97       | 7.94           | 54         | -18.09      | 85.8    | Horizontal | AV    | Pass    |
| 2   | 3928.7500   | 49.79            | 29.53       | 20.26          | 74         | -24.21      | 0       | Horizontal | PK    | Pass    |
| 2   | 3928.7500   | 40.51            | 29.53       | 10.98          | 54         | -13.49      | 0       | Horizontal | AV    | Pass    |
| 3   | 5247.5000   | 57.97            | 31.8        | 26.17          | 74         | -16.03      | 138.4   | Horizontal | PK    | Pass    |
| 3   | 5247.5000   | 43.93            | 31.8        | 12.13          | 54         | -10.07      | 138.4   | Horizontal | AV    | Pass    |
| 4   | 11511.0000  | 46.67            | 16.16       | 30.51          | 74         | -27.33      | 233.6   | Horizontal | PK    | Pass    |
| 4   | 11511.0000  | 39.58            | 16.16       | 23.42          | 54         | -14.42      | 233.6   | Horizontal | AV    | Pass    |
| 5   | 13999.5000  | 49.23            | 19.12       | 30.11          | 74         | -24.77      | 1.2     | Horizontal | PK    | Pass    |
| 5   | 13999.5000  | 42.5             | 19.12       | 23.38          | 54         | -11.5       | 1.2     | Horizontal | AV    | Pass    |
| 6   | 17907.0000  | 54.42            | 23.31       | 31.11          | 74         | -19.58      | 158.3   | Horizontal | PK    | Pass    |
| 6   | 17907.0000  | 46.45            | 23.31       | 23.14          | 54         | -7.55       | 158.3   | Horizontal | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5180 MHz), ANT V



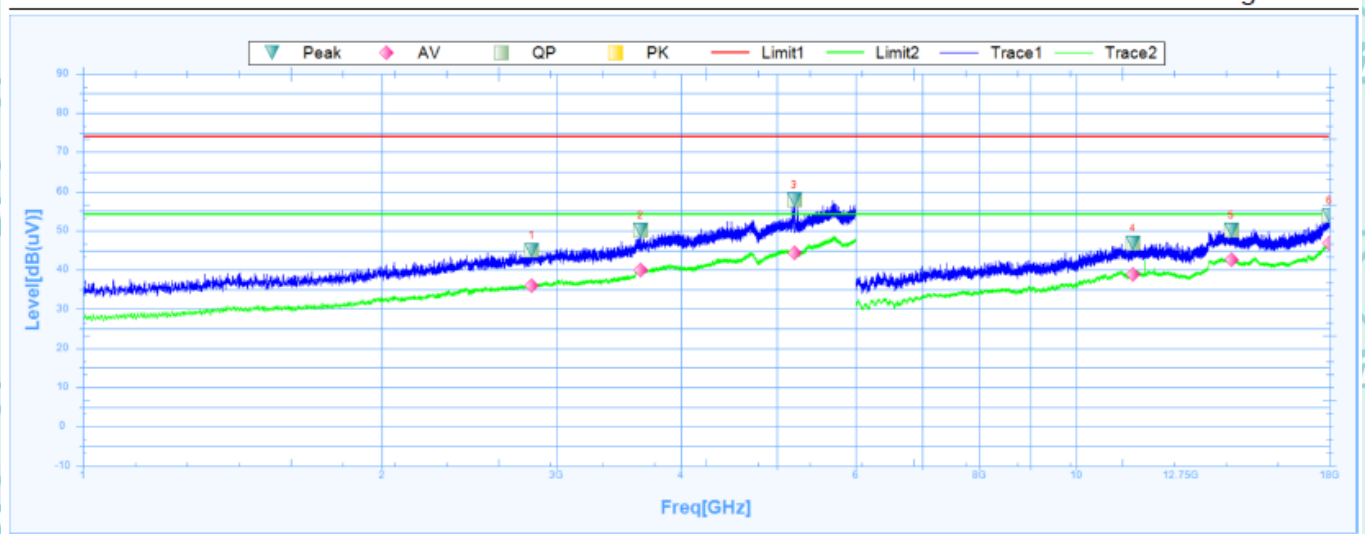
**Susputed Data List**

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|----------|-------|---------|
| 1   | 2728.1250   | 45.57            | 27.87       | 17.7           | 74         | -28.43      | 95.3    | Vertical | PK    | Pass    |
| 1   | 2728.1250   | 35.21            | 27.87       | 7.34           | 54         | -18.79      | 95.3    | Vertical | AV    | Pass    |
| 2   | 3686.8750   | 49.7             | 28.95       | 20.75          | 74         | -24.3       | 341.8   | Vertical | PK    | Pass    |
| 2   | 3686.8750   | 39.38            | 28.95       | 10.43          | 54         | -14.62      | 341.8   | Vertical | AV    | Pass    |
| 3   | 5670.0000   | 56.68            | 32.27       | 24.41          | 74         | -17.32      | 359.6   | Vertical | PK    | Pass    |
| 3   | 5670.0000   | 47.79            | 32.27       | 15.52          | 54         | -6.21       | 359.6   | Vertical | AV    | Pass    |
| 4   | 11098.5000  | 46.94            | 15.87       | 31.07          | 74         | -27.06      | 191.8   | Vertical | PK    | Pass    |
| 4   | 11098.5000  | 39.26            | 15.87       | 23.39          | 54         | -14.74      | 191.8   | Vertical | AV    | Pass    |
| 5   | 14148.0000  | 51.44            | 18.98       | 32.46          | 74         | -22.56      | 24.4    | Vertical | PK    | Pass    |
| 5   | 14148.0000  | 42.24            | 18.98       | 23.26          | 54         | -11.76      | 24.4    | Vertical | AV    | Pass    |
| 6   | 17962.5000  | 53.88            | 23.66       | 30.22          | 74         | -20.12      | 201.3   | Vertical | PK    | Pass    |
| 6   | 17962.5000  | 46.79            | 23.66       | 23.13          | 54         | -7.21       | 201.3   | Vertical | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5240 MHz), ANT H



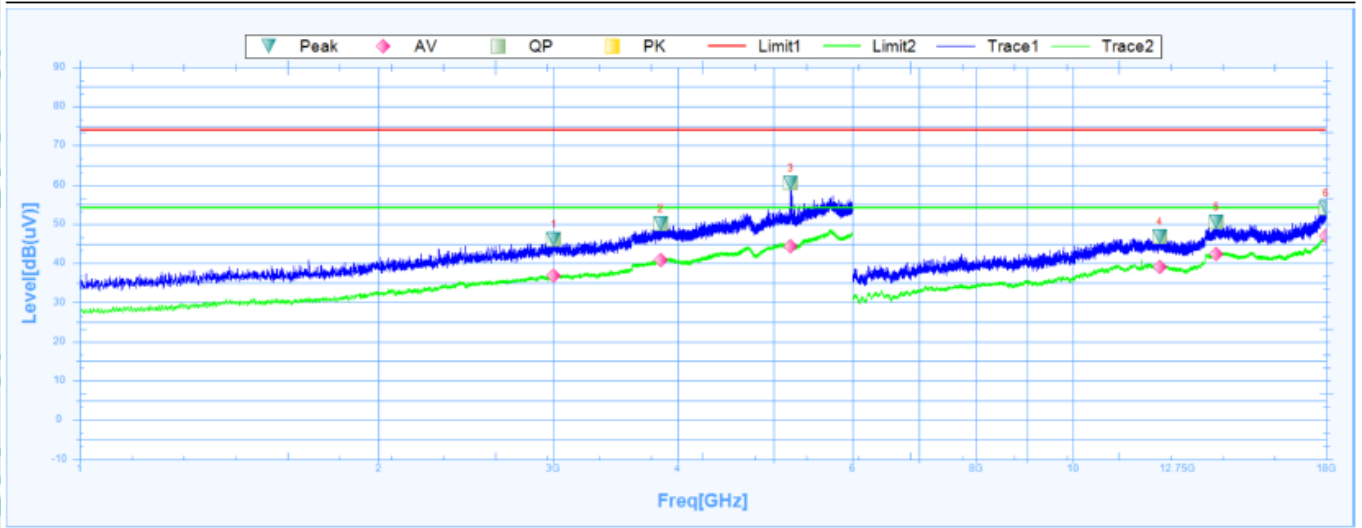
#### Susputed Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity   | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|------------|-------|---------|
| 1   | 2831.8750   | 45.01            | 28          | 17.01          | 74         | -28.99      | 265     | Horizontal | PK    | Pass    |
| 1   | 2831.8750   | 36.01            | 28          | 8.01           | 54         | -17.99      | 265     | Horizontal | AV    | Pass    |
| 2   | 3645.0000   | 50.16            | 28.85       | 21.31          | 74         | -23.84      | 315.3   | Horizontal | PK    | Pass    |
| 2   | 3645.0000   | 39.84            | 28.85       | 10.99          | 54         | -14.16      | 315.3   | Horizontal | AV    | Pass    |
| 3   | 5203.7500   | 57.73            | 31.76       | 25.97          | 74         | -16.27      | 265     | Horizontal | PK    | Pass    |
| 3   | 5203.7500   | 44.45            | 31.76       | 12.69          | 54         | -9.55       | 265     | Horizontal | AV    | Pass    |
| 4   | 11407.5000  | 46.86            | 15.87       | 30.99          | 74         | -27.14      | 0.4     | Horizontal | PK    | Pass    |
| 4   | 11407.5000  | 38.82            | 15.87       | 22.95          | 54         | -15.18      | 0.4     | Horizontal | AV    | Pass    |
| 5   | 14331.0000  | 50.11            | 18.79       | 31.32          | 74         | -23.89      | 129.6   | Horizontal | PK    | Pass    |
| 5   | 14331.0000  | 42.67            | 18.79       | 23.88          | 54         | -11.33      | 129.6   | Horizontal | AV    | Pass    |
| 6   | 17994.0000  | 53.75            | 23.89       | 29.86          | 74         | -20.25      | 299.4   | Horizontal | PK    | Pass    |
| 6   | 17994.0000  | 46.8             | 23.89       | 22.91          | 54         | -7.2        | 299.4   | Horizontal | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5240 MHz), ANT V



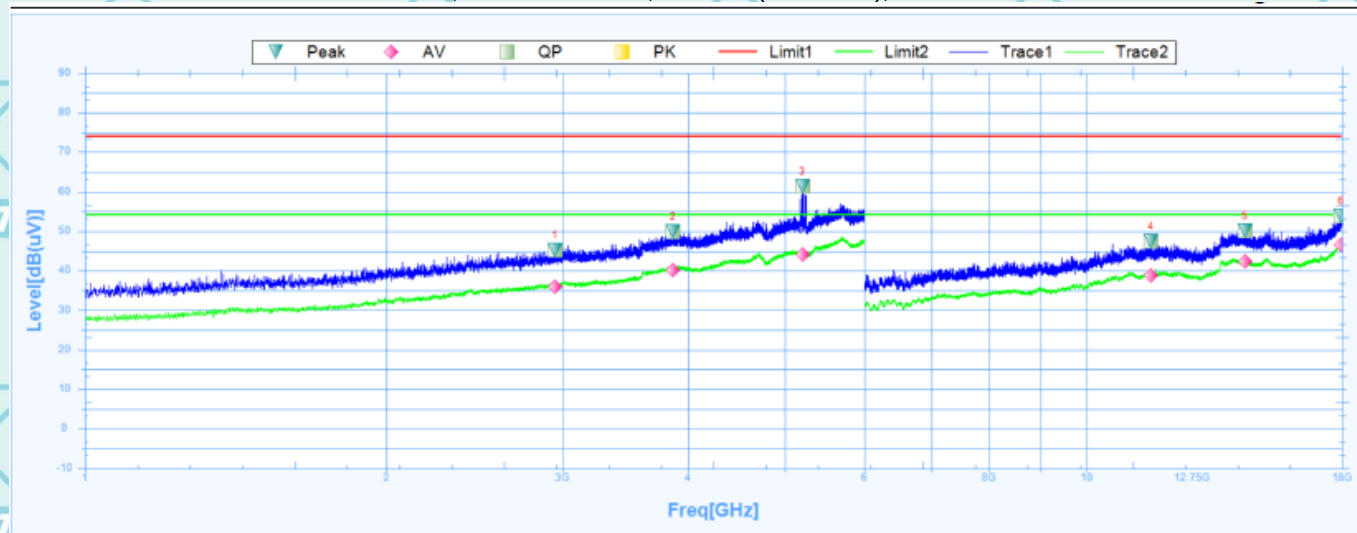
**Susputed Data List**

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|----------|-------|---------|
| 1   | 3003.1250   | 46.12            | 28.2        | 17.92          | 74         | -27.88      | 341.8   | Vertical | PK    | Pass    |
| 1   | 3003.1250   | 36.86            | 28.2        | 8.66           | 54         | -17.14      | 341.8   | Vertical | AV    | Pass    |
| 2   | 3848.7500   | 50.04            | 29.34       | 20.7           | 74         | -23.96      | 145.5   | Vertical | PK    | Pass    |
| 2   | 3848.7500   | 40.81            | 29.34       | 11.47          | 54         | -13.19      | 145.5   | Vertical | AV    | Pass    |
| 3   | 5203.1250   | 60.37            | 31.76       | 28.61          | 74         | -13.63      | 290.2   | Vertical | PK    | Pass    |
| 3   | 5203.1250   | 44.32            | 31.76       | 12.56          | 54         | -9.68       | 290.2   | Vertical | AV    | Pass    |
| 4   | 12235.5000  | 46.75            | 16.49       | 30.26          | 74         | -27.25      | 0.4     | Vertical | PK    | Pass    |
| 4   | 12235.5000  | 39.13            | 16.49       | 22.64          | 54         | -14.87      | 0.4     | Vertical | AV    | Pass    |
| 5   | 13959.0000  | 50.57            | 19          | 31.57          | 74         | -23.43      | 116.5   | Vertical | PK    | Pass    |
| 5   | 13959.0000  | 42.37            | 19          | 23.37          | 54         | -11.63      | 116.5   | Vertical | AV    | Pass    |
| 6   | 17997.0000  | 54.06            | 23.91       | 30.15          | 74         | -19.94      | 8       | Vertical | PK    | Pass    |
| 6   | 17997.0000  | 46.94            | 23.91       | 23.03          | 54         | -7.06       | 8       | Vertical | AV    | Pass    |



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11a, 1 GHz to 18 GHz, Channel (5260 MHz), ANT H



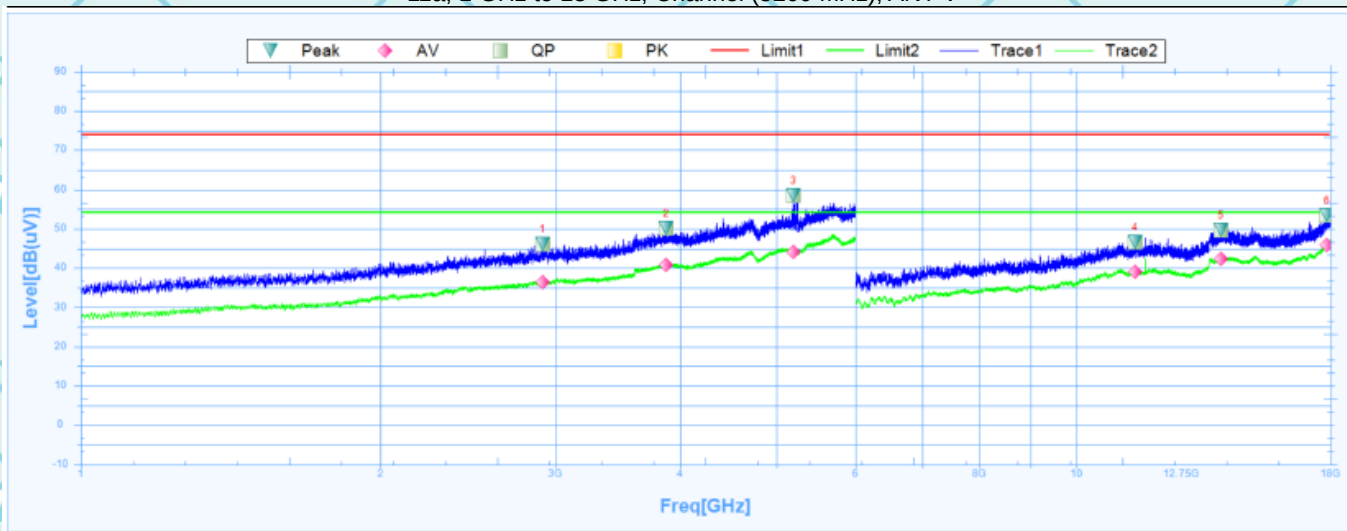
## Suspected Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity   | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|------------|-------|---------|
| 1   | 2947.5000   | 45.15            | 28.14       | 17.01          | 74         | -28.85      | 158.7   | Horizontal | PK    | Pass    |
| 1   | 2947.5000   | 36.04            | 28.14       | 7.9            | 54         | -17.96      | 158.7   | Horizontal | AV    | Pass    |
| 2   | 3866.8750   | 49.95            | 29.38       | 20.57          | 74         | -24.05      | 202.9   | Horizontal | PK    | Pass    |
| 2   | 3866.8750   | 40.22            | 29.38       | 10.84          | 54         | -13.78      | 202.9   | Horizontal | AV    | Pass    |
| 3   | 5205.6250   | 61.32            | 31.76       | 29.56          | 74         | -12.68      | 108.5   | Horizontal | PK    | Pass    |
| 3   | 5205.6250   | 44.1             | 31.76       | 12.34          | 54         | -9.9        | 108.5   | Horizontal | AV    | Pass    |
| 4   | 11598.0000  | 47.45            | 16.19       | 31.26          | 74         | -26.55      | 1.4     | Horizontal | PK    | Pass    |
| 4   | 11598.0000  | 38.86            | 16.19       | 22.67          | 54         | -15.14      | 1.4     | Horizontal | AV    | Pass    |
| 5   | 14395.5000  | 50.19            | 18.73       | 31.46          | 74         | -23.81      | 123.6   | Horizontal | PK    | Pass    |
| 5   | 14395.5000  | 42.33            | 18.73       | 23.6           | 54         | -11.67      | 123.6   | Horizontal | AV    | Pass    |
| 6   | 17956.5000  | 53.88            | 23.62       | 30.26          | 74         | -20.12      | 300.5   | Horizontal | PK    | Pass    |
| 6   | 17956.5000  | 46.65            | 23.62       | 23.03          | 54         | -7.35       | 300.5   | Horizontal | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5260 MHz), ANT V



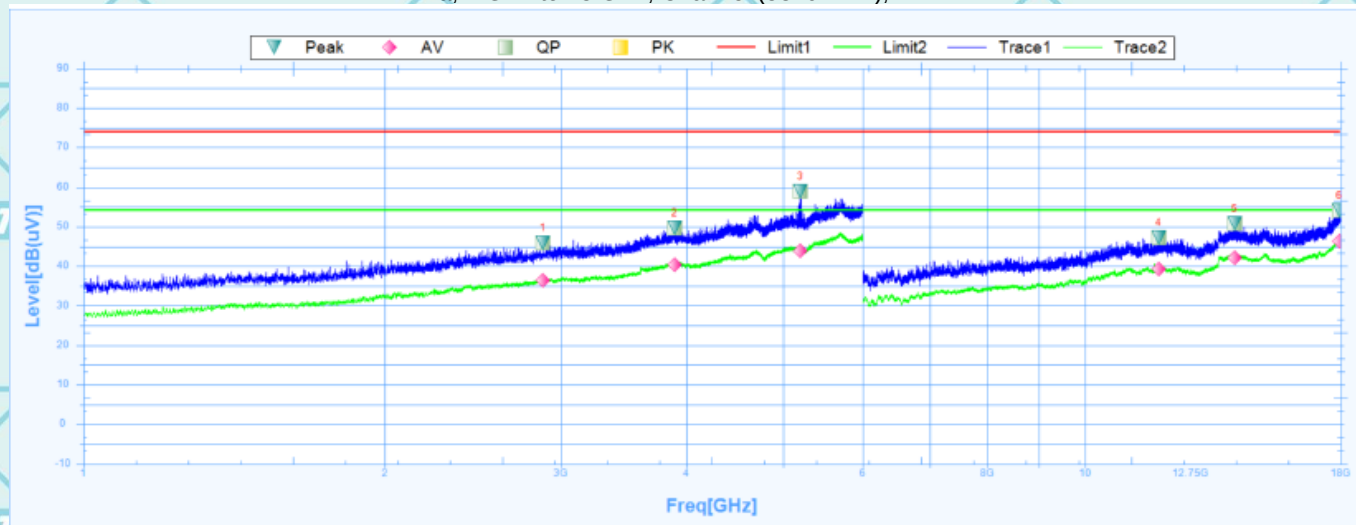
**Susputed Data List**

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|----------|-------|---------|
| 1   | 2909.3750   | 46.13            | 28.09       | 18.04          | 74         | -27.87      | 108.5   | Vertical | PK    | Pass    |
| 1   | 2909.3750   | 36.51            | 28.09       | 8.42           | 54         | -17.49      | 108.5   | Vertical | AV    | Pass    |
| 2   | 3874.3750   | 50.02            | 29.4        | 20.62          | 74         | -23.98      | 49.9    | Vertical | PK    | Pass    |
| 2   | 3874.3750   | 40.88            | 29.4        | 11.48          | 54         | -13.12      | 49.9    | Vertical | AV    | Pass    |
| 3   | 5201.8750   | 58.45            | 31.76       | 26.69          | 74         | -15.55      | 2.4     | Vertical | PK    | Pass    |
| 3   | 5201.8750   | 44.07            | 31.76       | 12.31          | 54         | -9.93       | 2.4     | Vertical | AV    | Pass    |
| 4   | 11457.0000  | 46.53            | 16.01       | 30.52          | 74         | -27.47      | 213.2   | Vertical | PK    | Pass    |
| 4   | 11457.0000  | 39.11            | 16.01       | 23.1           | 54         | -14.89      | 213.2   | Vertical | AV    | Pass    |
| 5   | 13978.5000  | 49.71            | 19.06       | 30.65          | 74         | -24.29      | 298.1   | Vertical | PK    | Pass    |
| 5   | 13978.5000  | 42.45            | 19.06       | 23.39          | 54         | -11.55      | 298.1   | Vertical | AV    | Pass    |
| 6   | 17862.0000  | 53.4             | 23.02       | 30.38          | 74         | -20.6       | 298.1   | Vertical | PK    | Pass    |
| 6   | 17862.0000  | 45.83            | 23.02       | 22.81          | 54         | -8.17       | 298.1   | Vertical | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5320 MHz), ANT H



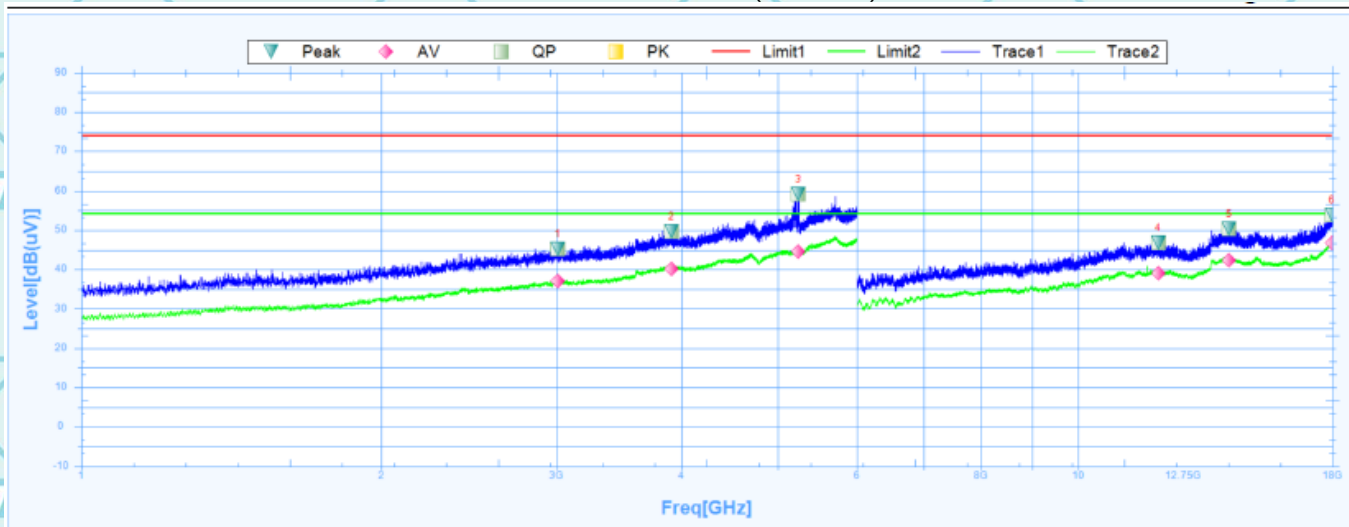
**Susputed Data List**

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity   | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|------------|-------|---------|
| 1   | 2877.5000   | 45.86            | 28.05       | 17.81          | 74         | -28.14      | 335.6   | Horizontal | PK    | Pass    |
| 1   | 2877.5000   | 36.43            | 28.05       | 8.38           | 54         | -17.57      | 335.6   | Horizontal | AV    | Pass    |
| 2   | 3894.3750   | 49.64            | 29.45       | 20.19          | 74         | -24.36      | -0.1    | Horizontal | PK    | Pass    |
| 2   | 3894.3750   | 40.43            | 29.45       | 10.98          | 54         | -13.57      | -0.1    | Horizontal | AV    | Pass    |
| 3   | 5201.8750   | 58.95            | 31.76       | 27.19          | 74         | -15.05      | 339.9   | Horizontal | PK    | Pass    |
| 3   | 5201.8750   | 44.02            | 31.76       | 12.26          | 54         | -9.98       | 339.9   | Horizontal | AV    | Pass    |
| 4   | 11851.5000  | 47.16            | 16.37       | 30.79          | 74         | -26.84      | 38.8    | Horizontal | PK    | Pass    |
| 4   | 11851.5000  | 39.29            | 16.37       | 22.92          | 54         | -14.71      | 38.8    | Horizontal | AV    | Pass    |
| 5   | 14107.5000  | 50.67            | 19.02       | 31.65          | 74         | -23.33      | 1.3     | Horizontal | PK    | Pass    |
| 5   | 14107.5000  | 42.23            | 19.02       | 23.21          | 54         | -11.77      | 1.3     | Horizontal | AV    | Pass    |
| 6   | 17941.5000  | 54               | 23.53       | 30.47          | 74         | -20         | 2.4     | Horizontal | PK    | Pass    |
| 6   | 17941.5000  | 46.41            | 23.53       | 22.88          | 54         | -7.59       | 2.4     | Horizontal | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5320 MHz), ANT V



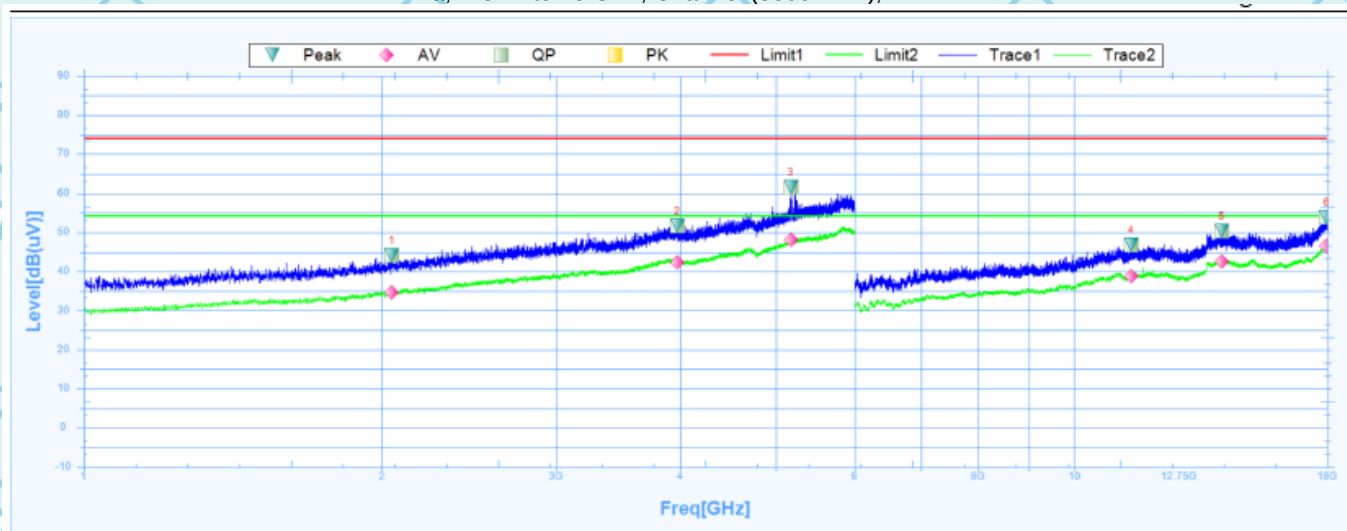
#### Susputed Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|----------|-------|---------|
| 1   | 3006.2500   | 45.25            | 28.2        | 17.05          | 74         | -28.75      | -0.1    | Vertical | PK    | Pass    |
| 1   | 3006.2500   | 37.01            | 28.2        | 8.81           | 54         | -16.99      | -0.1    | Vertical | AV    | Pass    |
| 2   | 3910.6250   | 49.74            | 29.49       | 20.25          | 74         | -24.26      | 358.8   | Vertical | PK    | Pass    |
| 2   | 3910.6250   | 40.26            | 29.49       | 10.77          | 54         | -13.74      | 358.8   | Vertical | AV    | Pass    |
| 3   | 5245.0000   | 59.14            | 31.8        | 27.34          | 74         | -14.86      | 267.4   | Vertical | PK    | Pass    |
| 3   | 5245.0000   | 44.66            | 31.8        | 12.86          | 54         | -9.34       | 267.4   | Vertical | AV    | Pass    |
| 4   | 12034.5000  | 46.82            | 16.78       | 30.04          | 74         | -27.18      | 8       | Vertical | PK    | Pass    |
| 4   | 12034.5000  | 39.05            | 16.78       | 22.27          | 54         | -14.95      | 8       | Vertical | AV    | Pass    |
| 5   | 14182.5000  | 50.29            | 18.94       | 31.35          | 74         | -23.71      | 38.7    | Vertical | PK    | Pass    |
| 5   | 14182.5000  | 42.47            | 18.94       | 23.53          | 54         | -11.53      | 38.7    | Vertical | AV    | Pass    |
| 6   | 17980.5000  | 53.88            | 23.79       | 30.09          | 74         | -20.12      | 10.6    | Vertical | PK    | Pass    |
| 6   | 17980.5000  | 46.89            | 23.79       | 23.1           | 54         | -7.11       | 10.6    | Vertical | AV    | Pass    |



Report No.: WSCT-ANAB-R&amp;E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5500 MHz), ANT H



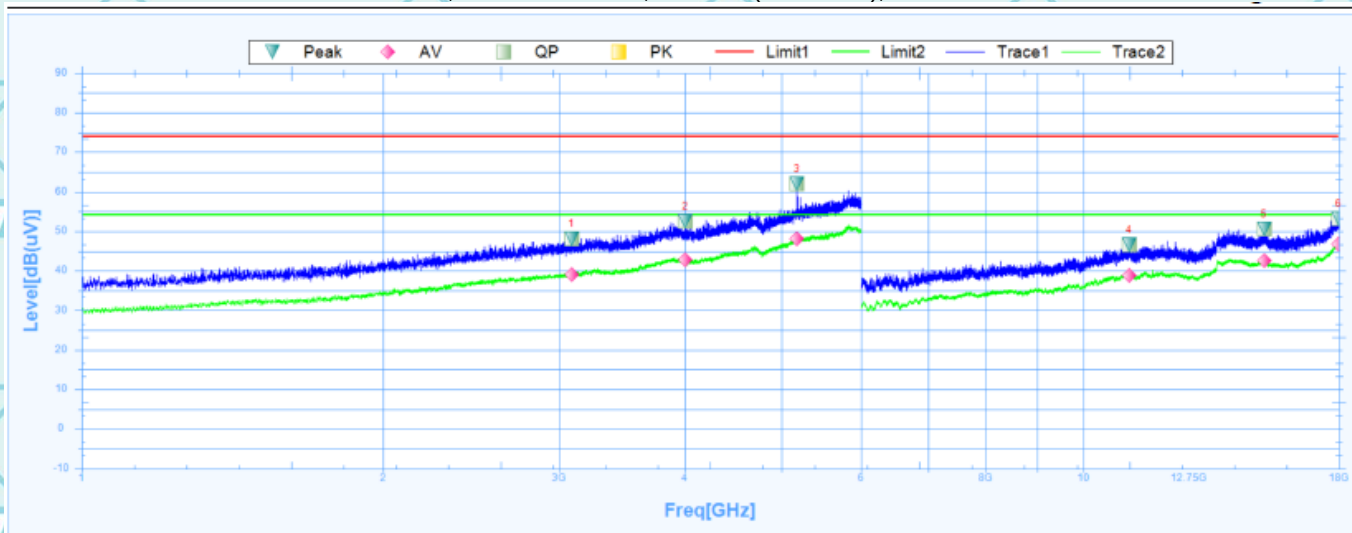
## Suspected Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity   | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|------------|-------|---------|
| 1   | 2046.2500   | 44.14            | 26.06       | 18.08          | 74         | -29.86      | 163.1   | Horizontal | PK    | Pass    |
| 1   | 2046.2500   | 34.7             | 26.06       | 8.64           | 54         | -19.3       | 163.1   | Horizontal | AV    | Pass    |
| 2   | 3974.3750   | 51.7             | 29.64       | 22.06          | 74         | -22.3       | 251.5   | Horizontal | PK    | Pass    |
| 2   | 3974.3750   | 42.42            | 29.64       | 12.78          | 54         | -11.58      | 251.5   | Horizontal | AV    | Pass    |
| 3   | 5173.1250   | 61.56            | 31.74       | 29.82          | 74         | -12.44      | 1.3     | Horizontal | PK    | Pass    |
| 3   | 5173.1250   | 48               | 31.74       | 16.26          | 54         | -6          | 1.3     | Horizontal | AV    | Pass    |
| 4   | 11412.0000  | 46.8             | 15.88       | 30.92          | 74         | -27.2       | 302.2   | Horizontal | PK    | Pass    |
| 4   | 11412.0000  | 38.74            | 15.88       | 22.86          | 54         | -15.26      | 302.2   | Horizontal | AV    | Pass    |
| 5   | 14086.5000  | 50.32            | 19.04       | 31.28          | 74         | -23.68      | 90.6    | Horizontal | PK    | Pass    |
| 5   | 14086.5000  | 42.48            | 19.04       | 23.44          | 54         | -11.52      | 90.6    | Horizontal | AV    | Pass    |
| 6   | 17970.0000  | 53.94            | 23.72       | 30.22          | 74         | -20.06      | 0       | Horizontal | PK    | Pass    |
| 6   | 17970.0000  | 46.64            | 23.72       | 22.92          | 54         | -7.36       | 0       | Horizontal | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5500 MHz), ANT V



### Susputed Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|----------|-------|---------|
| 1   | 3083.1250   | 48.13            | 28.25       | 19.88          | 74         | -25.87      | 287.8   | Vertical | PK    | Pass    |
| 1   | 3083.1250   | 38.96            | 28.25       | 10.71          | 54         | -15.04      | 287.8   | Vertical | AV    | Pass    |
| 2   | 4007.5000   | 52.45            | 29.71       | 22.74          | 74         | -21.55      | 2.9     | Vertical | PK    | Pass    |
| 2   | 4007.5000   | 42.75            | 29.71       | 13.04          | 54         | -11.25      | 2.9     | Vertical | AV    | Pass    |
| 3   | 5181.8750   | 62.06            | 31.75       | 30.31          | 74         | -11.94      | 46.3    | Vertical | PK    | Pass    |
| 3   | 5181.8750   | 48.01            | 31.75       | 16.26          | 54         | -5.99       | 46.3    | Vertical | AV    | Pass    |
| 4   | 11113.5000  | 46.65            | 15.86       | 30.79          | 74         | -27.35      | 91.4    | Vertical | PK    | Pass    |
| 4   | 11113.5000  | 38.87            | 15.86       | 23.01          | 54         | -15.13      | 91.4    | Vertical | AV    | Pass    |
| 5   | 15156.0000  | 50.53            | 19.49       | 31.04          | 74         | -23.47      | 360     | Vertical | PK    | Pass    |
| 5   | 15156.0000  | 42.54            | 19.49       | 23.05          | 54         | -11.46      | 360     | Vertical | AV    | Pass    |
| 6   | 17983.5000  | 53.23            | 23.81       | 29.42          | 74         | -20.77      | 28      | Vertical | PK    | Pass    |
| 6   | 17983.5000  | 46.88            | 23.81       | 23.07          | 54         | -7.12       | 28      | Vertical | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5700 MHz), ANT H



#### Susputed Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity   | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|------------|-------|---------|
| 1   | 3175.0000   | 49.08            | 28.3        | 20.78          | 74         | -24.92      | 3       | Horizontal | PK    | Pass    |
| 1   | 3175.0000   | 39.76            | 28.3        | 11.46          | 54         | -14.24      | 3       | Horizontal | AV    | Pass    |
| 2   | 3965.6250   | 51.94            | 29.62       | 22.32          | 74         | -22.06      | 200.6   | Horizontal | PK    | Pass    |
| 2   | 3965.6250   | 42.72            | 29.62       | 13.1           | 54         | -11.28      | 200.6   | Horizontal | AV    | Pass    |
| 3   | 5936.2500   | 59.94            | 32.7        | 27.24          | 74         | -14.06      | 83.4    | Horizontal | PK    | Pass    |
| 3   | 5936.2500   | 50.36            | 32.7        | 17.66          | 54         | -3.64       | 83.4    | Horizontal | AV    | Pass    |
| 4   | 11548.5000  | 46.89            | 16.22       | 30.67          | 74         | -27.11      | 161.9   | Horizontal | PK    | Pass    |
| 4   | 11548.5000  | 39.61            | 16.22       | 23.39          | 54         | -14.39      | 161.9   | Horizontal | AV    | Pass    |
| 5   | 14170.5000  | 51.65            | 18.96       | 32.69          | 74         | -22.35      | 145.1   | Horizontal | PK    | Pass    |
| 5   | 14170.5000  | 42.45            | 18.96       | 23.49          | 54         | -11.55      | 145.1   | Horizontal | AV    | Pass    |
| 6   | 17979.0000  | 54.04            | 23.78       | 30.26          | 74         | -19.96      | 1.8     | Horizontal | PK    | Pass    |
| 6   | 17979.0000  | 46.68            | 23.78       | 22.9           | 54         | -7.32       | 1.8     | Horizontal | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5700 MHz), ANT V



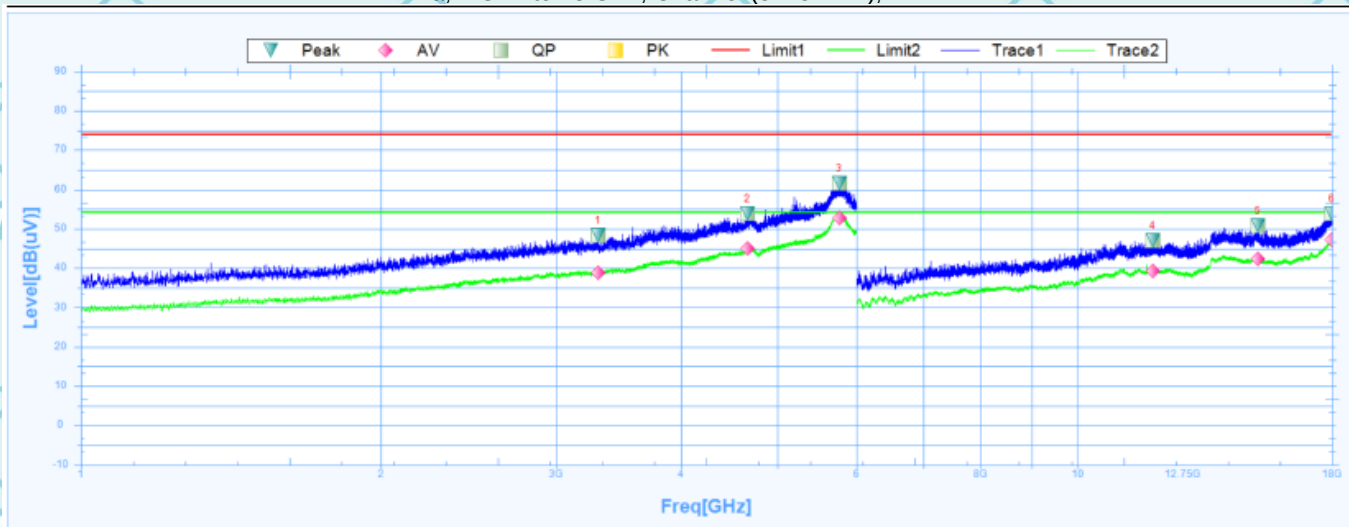
**Susputed Data List**

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|----------|-------|---------|
| 1   | 2785.6250   | 47.68            | 27.94       | 19.74          | 74         | -26.32      | 6.3     | Vertical | PK    | Pass    |
| 1   | 2785.6250   | 37.81            | 27.94       | 9.87           | 54         | -16.19      | 6.3     | Vertical | AV    | Pass    |
| 2   | 3999.3750   | 51.46            | 29.7        | 21.76          | 74         | -22.54      | 356.5   | Vertical | PK    | Pass    |
| 2   | 3999.3750   | 42.49            | 29.7        | 12.79          | 54         | -11.51      | 356.5   | Vertical | AV    | Pass    |
| 3   | 5243.1250   | 61.9             | 31.79       | 30.11          | 74         | -12.1       | 273.4   | Vertical | PK    | Pass    |
| 3   | 5243.1250   | 48.08            | 31.79       | 16.29          | 54         | -5.92       | 273.4   | Vertical | AV    | Pass    |
| 4   | 11022.0000  | 46.71            | 15.69       | 31.02          | 74         | -27.29      | 77      | Vertical | PK    | Pass    |
| 4   | 11022.0000  | 39.17            | 15.69       | 23.48          | 54         | -14.83      | 77      | Vertical | AV    | Pass    |
| 5   | 14001.0000  | 50.16            | 19.12       | 31.04          | 74         | -23.84      | 2.1     | Vertical | PK    | Pass    |
| 5   | 14001.0000  | 42.97            | 19.12       | 23.85          | 54         | -11.03      | 2.1     | Vertical | AV    | Pass    |
| 6   | 17938.5000  | 54.24            | 23.51       | 30.73          | 74         | -19.76      | 233.7   | Vertical | PK    | Pass    |
| 6   | 17938.5000  | 46.62            | 23.51       | 23.11          | 54         | -7.38       | 233.7   | Vertical | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5745 MHz), ANT H



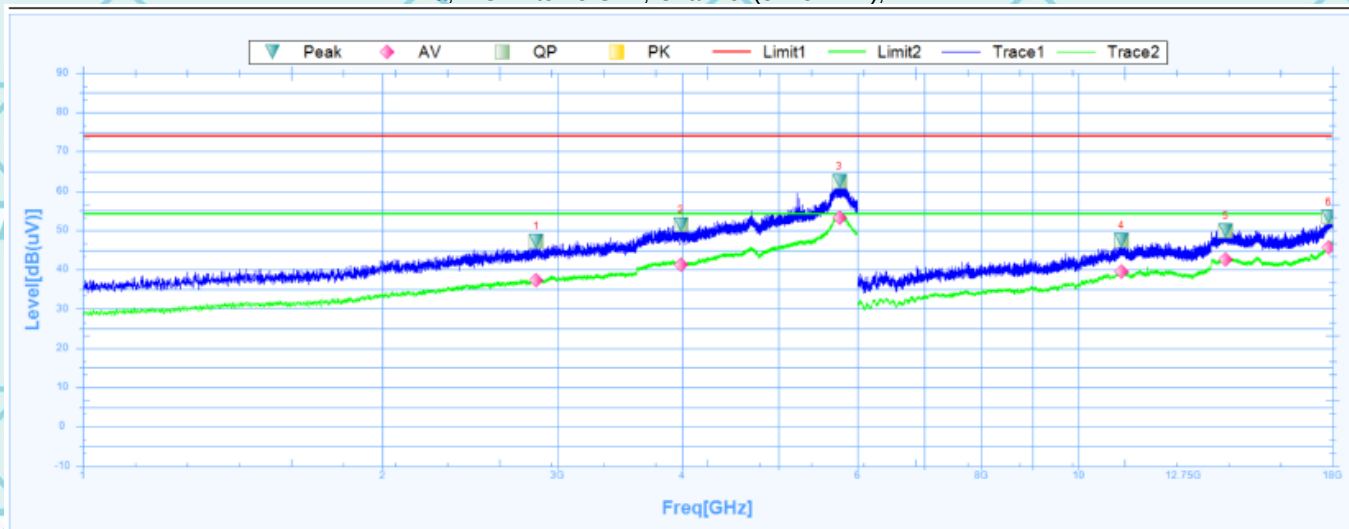
### Susputed Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity   | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|------------|-------|---------|
| 1   | 3301.8750   | 48.3             | 28.38       | 19.92          | 74         | -25.7       | 106.1   | Horizontal | PK    | Pass    |
| 1   | 3301.8750   | 38.82            | 28.38       | 10.44          | 54         | -15.18      | 106.1   | Horizontal | AV    | Pass    |
| 2   | 4663.7500   | 53.8             | 30.93       | 22.87          | 74         | -20.2       | 350.1   | Horizontal | PK    | Pass    |
| 2   | 4663.7500   | 45.09            | 30.93       | 14.16          | 54         | -8.91       | 350.1   | Horizontal | AV    | Pass    |
| 3   | 5764.3750   | 61.66            | 32.42       | 29.24          | 74         | -12.34      | 113.3   | Horizontal | PK    | Pass    |
| 3   | 5764.3750   | 52.79            | 32.42       | 20.37          | 54         | -1.21       | 113.3   | Horizontal | AV    | Pass    |
| 4   | 11890.5000  | 46.98            | 16.5        | 30.48          | 74         | -27.02      | 337.6   | Horizontal | PK    | Pass    |
| 4   | 11890.5000  | 39.33            | 16.5        | 22.83          | 54         | -14.67      | 337.6   | Horizontal | AV    | Pass    |
| 5   | 15165.0000  | 50.68            | 19.42       | 31.26          | 74         | -23.32      | 165.5   | Horizontal | PK    | Pass    |
| 5   | 15165.0000  | 42.46            | 19.42       | 23.04          | 54         | -11.54      | 165.5   | Horizontal | AV    | Pass    |
| 6   | 17982.0000  | 53.75            | 23.8        | 29.95          | 74         | -20.25      | 139.2   | Horizontal | PK    | Pass    |
| 6   | 17982.0000  | 47.26            | 23.8        | 23.46          | 54         | -6.74       | 139.2   | Horizontal | AV    | Pass    |



Report No.: WSCT-ANAB-R&amp;E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5745 MHz), ANT V



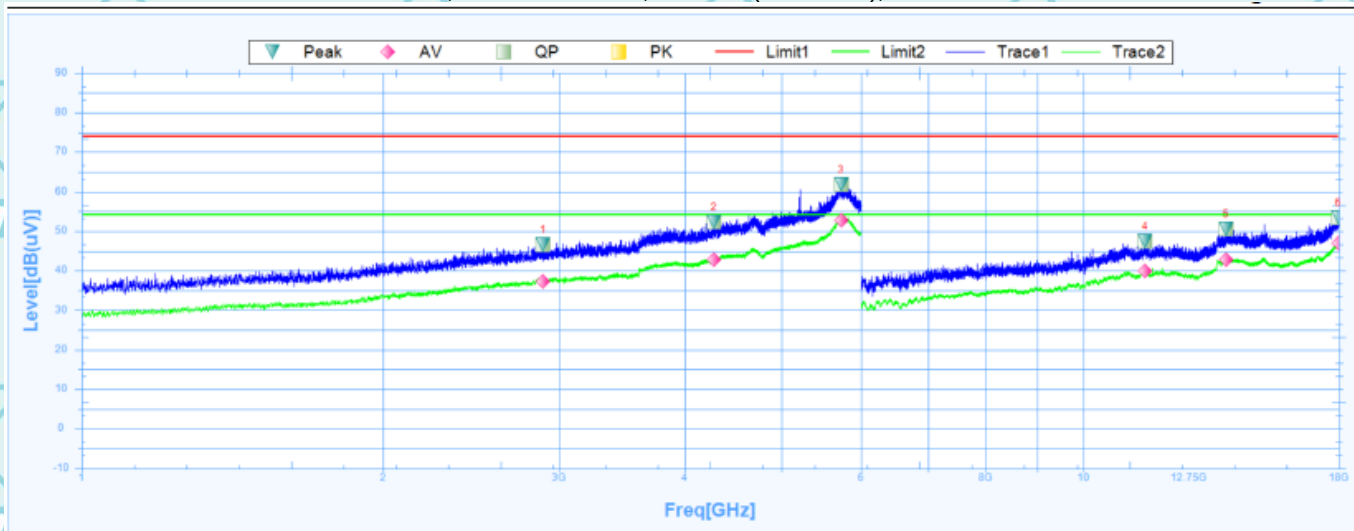
## Suspected Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|----------|-------|---------|
| 1   | 2856.2500   | 47.26            | 28.03       | 19.23          | 74         | -26.74      | 88.2    | Vertical | PK    | Pass    |
| 1   | 2856.2500   | 37.37            | 28.03       | 9.34           | 54         | -16.63      | 88.2    | Vertical | AV    | Pass    |
| 2   | 3990.6250   | 51.43            | 29.68       | 21.75          | 74         | -22.57      | 14.1    | Vertical | PK    | Pass    |
| 2   | 3990.6250   | 41.31            | 29.68       | 11.63          | 54         | -12.69      | 14.1    | Vertical | AV    | Pass    |
| 3   | 5753.1250   | 62.43            | 32.4        | 30.03          | 74         | -11.57      | 151.6   | Vertical | PK    | Pass    |
| 3   | 5753.1250   | 53.08            | 32.4        | 20.68          | 54         | -0.92       | 151.6   | Vertical | AV    | Pass    |
| 4   | 11047.5000  | 47.51            | 15.77       | 31.74          | 74         | -26.49      | 360     | Vertical | PK    | Pass    |
| 4   | 11047.5000  | 39.4             | 15.77       | 23.63          | 54         | -14.6       | 360     | Vertical | AV    | Pass    |
| 5   | 14062.5000  | 49.93            | 19.06       | 30.87          | 74         | -24.07      | 219.2   | Vertical | PK    | Pass    |
| 5   | 14062.5000  | 42.51            | 19.06       | 23.45          | 54         | -11.49      | 219.2   | Vertical | AV    | Pass    |
| 6   | 17841.0000  | 53.48            | 22.88       | 30.6           | 74         | -20.52      | 319.6   | Vertical | PK    | Pass    |
| 6   | 17841.0000  | 45.69            | 22.88       | 22.81          | 54         | -8.31       | 319.6   | Vertical | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5825 MHz), ANT H



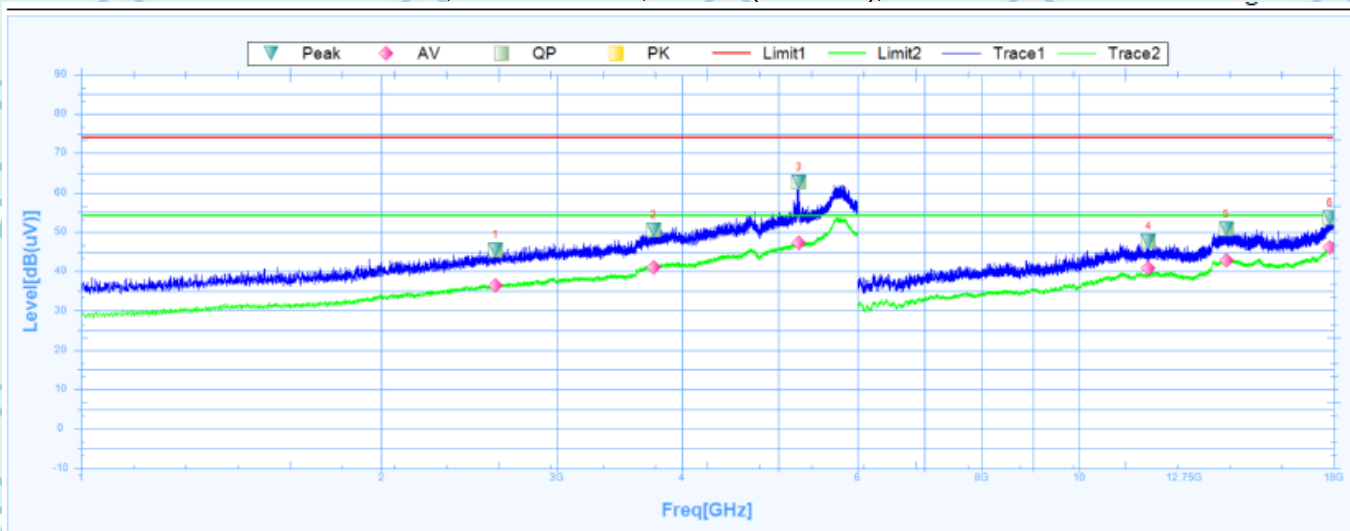
### Susputed Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity   | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|------------|-------|---------|
| 1   | 2890.0000   | 46.48            | 28.07       | 18.41          | 74         | -27.52      | 193.4   | Horizontal | PK    | Pass    |
| 1   | 2890.0000   | 37.32            | 28.07       | 9.25           | 54         | -16.68      | 193.4   | Horizontal | AV    | Pass    |
| 2   | 4282.5000   | 52.28            | 30.21       | 22.07          | 74         | -21.72      | 301     | Horizontal | PK    | Pass    |
| 2   | 4282.5000   | 42.73            | 30.21       | 12.52          | 54         | -11.27      | 301     | Horizontal | AV    | Pass    |
| 3   | 5730.6250   | 61.75            | 32.37       | 29.38          | 74         | -12.25      | -0.1    | Horizontal | PK    | Pass    |
| 3   | 5730.6250   | 52.84            | 32.37       | 20.47          | 54         | -1.16       | -0.1    | Horizontal | AV    | Pass    |
| 4   | 11532.0000  | 47.37            | 16.21       | 31.16          | 74         | -26.63      | 167.8   | Horizontal | PK    | Pass    |
| 4   | 11532.0000  | 39.83            | 16.21       | 23.62          | 54         | -14.17      | 167.8   | Horizontal | AV    | Pass    |
| 5   | 13891.5000  | 50.5             | 18.81       | 31.69          | 74         | -23.5       | 43.5    | Horizontal | PK    | Pass    |
| 5   | 13891.5000  | 42.8             | 18.81       | 23.99          | 54         | -11.2       | 43.5    | Horizontal | AV    | Pass    |
| 6   | 17974.5000  | 53.43            | 23.75       | 29.68          | 74         | -20.57      | 201.3   | Horizontal | PK    | Pass    |
| 6   | 17974.5000  | 47.11            | 23.75       | 23.36          | 54         | -6.89       | 201.3   | Horizontal | AV    | Pass    |



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

11a, 1 GHz to 18 GHz, Channel (5825 MHz), ANT V



#### Susputed Data List

| NO. | Freq. [MHz] | Reading [dB(uV)] | Factor [dB] | Level [dB(uV)] | Limit [dB] | Margin [dB] | Deg [°] | Polarity | Trace | Verdict |
|-----|-------------|------------------|-------------|----------------|------------|-------------|---------|----------|-------|---------|
| 1   | 2601.8750   | 45.43            | 27.72       | 17.71          | 74         | -28.57      | 163.5   | Vertical | PK    | Pass    |
| 1   | 2601.8750   | 36.39            | 27.72       | 8.67           | 54         | -17.61      | 163.5   | Vertical | AV    | Pass    |
| 2   | 3748.7500   | 50.63            | 29.1        | 21.53          | 74         | -23.37      | 75      | Vertical | PK    | Pass    |
| 2   | 3748.7500   | 41.03            | 29.1        | 11.93          | 54         | -12.97      | 75      | Vertical | AV    | Pass    |
| 3   | 5243.1250   | 62.73            | 31.79       | 30.94          | 74         | -11.27      | 187.4   | Vertical | PK    | Pass    |
| 3   | 5243.1250   | 47.25            | 31.79       | 15.46          | 54         | -6.75       | 187.4   | Vertical | AV    | Pass    |
| 4   | 11745.0000  | 47.57            | 16.11       | 31.46          | 74         | -26.43      | 148.6   | Vertical | PK    | Pass    |
| 4   | 11745.0000  | 40.85            | 16.11       | 24.74          | 54         | -13.15      | 148.6   | Vertical | AV    | Pass    |
| 5   | 14049.0000  | 50.68            | 19.08       | 31.6           | 74         | -23.32      | 55.4    | Vertical | PK    | Pass    |
| 5   | 14049.0000  | 42.76            | 19.08       | 23.68          | 54         | -11.24      | 55.4    | Vertical | AV    | Pass    |
| 6   | 17853.0000  | 53.65            | 22.97       | 30.68          | 74         | -20.35      | 209.6   | Vertical | PK    | Pass    |
| 6   | 17853.0000  | 46.15            | 22.97       | 23.18          | 54         | -7.85       | 209.6   | Vertical | AV    | Pass    |

#### Note:

1. All emissions not reported were more than 20dB below the specified limit or in the noise floor.
2. Emission Level= Reading Level+ Probe Factor +Cable Loss.
3. Data of measurement within this frequency range shown "--" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.



Report No.: WSCT-ANAB-R&amp;E250100002A-Wi-Fi2

### 7.3.8 RESTRICTED BANDS REQUIREMENTS

Test Result(Only recorded the worst case in the report):

| Frequency                        | Reading  | Correct Factor | Emission Level | Limit    | Margin | Polar | Detector |
|----------------------------------|----------|----------------|----------------|----------|--------|-------|----------|
| (MHz)                            | (dBuV/m) | dB/m           | (dBuV/m)       | (dBuV/m) | (dB)   | H/V   |          |
| 802.11a(6Mbps) Test channel:36   |          |                |                |          |        |       |          |
| 5150                             | 64.67    | -5.24          | 59.43          | 68.23    | 8.80   | H     | PK       |
| 5150                             | 52.70    | -5.24          | 47.46          | 54       | 6.54   | H     | AV       |
| 5150                             | 61.08    | -4.87          | 56.21          | 68.23    | 12.02  | V     | PK       |
| 5150                             | 52.25    | -4.87          | 47.38          | 54       | 6.62   | V     | AV       |
| 802.11a(6Mbps) Test channel:48   |          |                |                |          |        |       |          |
| 5350                             | 64.94    | -5.24          | 59.70          | 68.23    | 8.53   | H     | PK       |
| 5350                             | 53.06    | -5.24          | 47.82          | 54       | 6.18   | H     | AV       |
| 5350                             | 60.55    | -4.87          | 55.68          | 68.23    | 12.55  | V     | PK       |
| 5350                             | 53.07    | -4.87          | 48.20          | 54       | 5.80   | V     | AV       |
| 802.11a(6Mbps) Test channel: 165 |          |                |                |          |        |       |          |
| 5850                             | 64.68    | -5.24          | 59.44          | 122.23   | 62.79  | H     | PK       |
| 5850                             | 54.81    | -4.87          | 49.94          | 122.23   | 72.29  | V     | PK       |

Note: Freq. = Emission frequency in MHz

Reading level (dBuV) = Receiver reading

Corr. Factor (dB) = Attenuation factor + Cable loss

Level (dBuV) = Reading level (dBuV) + Corr. Factor (dB)

Limit (dBuV) = Limit stated in standard

Margin (dB) = Level (dBuV) – Limits (dBuV)



Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

#### 7.4 ANTENNA REQUIREMENT

##### Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

##### Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

##### Antenna Gain

The Bluetooth antenna is a Integral Antenna, it meets the standards, and the best case gain of the antenna is -1.65dBi.

Please refer to the attached "X6857 Internal Photo" for the antenna location



Report No.: WSCT-ANAB-R&amp;E250100002A-Wi-Fi2

## 7.5 EMISSION BANDWIDTH

### 7.5.1 TEST EQUIPMENT

Please refer to Section 5 this report.

### 7.5.2 TEST PROCEDURE

|                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>-26dB Bandwidth and 99% Occupied Bandwidth:</b>                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Test Method:                                                                                                                                                                                      | a)The transmitter was radiated to the spectrum analyzer in peak hold mode.<br>b)Measure the maximum width of the emission that is 26 dB down from the peak of the emission Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Test Equipment Setting – 26dB Bandwidth:                                                                                                                                                          | Test Equipment Setting – 99%% Bandwidth:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| a)Attenuation: Auto<br>b)Span Frequency: > 26dB Bandwidth<br>c)RBW: Approximately 1% of the emission bandwidth<br>d)VBW: VBW > RBW<br>e)Detector: Peak<br>f)Trace: Max Hold<br>g)Sweep Time: Auto | a)Span: 1.5 times to 5.0 times the OBW<br>b)RBW: 1 % to 5 % of the OBW<br>c)VBW: $\geq 3 \times$ RBW<br>d)Detector: Peak<br>e)Trace: Max Hold                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>6 dB Bandwidth:</b>                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Test Method:                                                                                                                                                                                      | a)The transmitter was radiated to the spectrum analyzer in peak hold mode.<br>b)Test was performed in accordance with KDB789033 D02 v01 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (C) Emission Bandwidth.<br>c)Multiple antenna system was performed in accordance with KDB662911 D01 v02r01 Emissions Testing of Transmitters with Multiple Outputs in the Same Band.<br>d)Measured the spectrum width with power higher than 6dB below carrier.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Test Equipment Setting:                                                                                                                                                                           | a)Attenuation: Auto<br>b)Span Frequency: > 6dB Bandwidth<br>c)RBW: 100kHz<br>d)VBW: $\geq 3 \times$ RBW<br>e)Detector: Peak<br>f)Trace: Max Hold<br>g)Sweep Time: Auto                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Maximum Conducted Output Power Measurement:</b>                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Test Method:                                                                                                                                                                                      | a)The transmitter output (antenna port) was connected to the power meter.<br>b)Test was performed in accordance with KDB789033 D02 v01 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (E) Maximum conducted output power =>3. Measurement using a Power Meter (PM) =>b) Method PM-G (Measurement using a gated RF average power meter).<br>c)Multiple antenna systems was performed in accordance with KDB662911 D01 v02r01 Emissions Testing of Transmitters with Multiple Outputs in the Same Band.<br>d)When measuring maximum conducted output power with multiple antenna systems, add every result of the values by mathematic formula.                                                                                                                                                                                                                                              |
| Test Equipment Setting: Detector - Average                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Power Spectral Density:</b>                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Test Method:                                                                                                                                                                                      | a)The transmitter output (antenna port) was connected RF switch to the spectrum analyzer.<br>b)Test was performed in accordance with KDB789033 D02 v01 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (F) Maximum Power Spectral Density (PSD).<br>c)Multiple antenna systems was performed in accordance KDB662911 D01 v02r01 in-Band Power Spectral Density (PSD) Measurements (a) Measure and sum the spectra across the outputs.<br>d)When measuring first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3 and so on up to the Nth output to obtain the value for the first frequency bin of the summed spectrum. The summed spectrum value for each of the other frequency bins is computed in the same way.<br>e)For 5.725~5.85 GHz, the measured result of PSD level must add 10log(500kHz/RBW) |



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and the final result should  $\leq 30$  dBm.

**Test Equipment Setting:**

a) Attenuation: Auto

b) Span Frequency: Encompass the entire emissions bandwidth (EBW) of the signal

c) RBW: 1000 kHz

d) VBW: 3000 kHz

e) Detector: RMS

f) Trace: AVERAGE

g) Sweep Time: Auto

h) Trace Average: 100 times

Note: If measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10\log(500\text{kHz}/\text{RBW})$  to the measured result, whereas RBW ( $< 500$  kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

**Frequency Stability Measurement:**
**Test Method:**

a) The transmitter output (antenna port) was connected to the spectrum analyzer.

b) EUT have transmitted absence of modulation signal and fixed channelize.

c) Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.

d) Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.

e)  $f_c$  is declaring of channel frequency. Then the frequency error formula is  $(f_c - f)/f_c \times 10^6$  ppm and

the limit is less than  $\pm 20$  ppm (IEEE 802.11 specification).

f) The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value

g) Extreme temperature is  $0^\circ\text{C} \sim 40^\circ\text{C}$ 
**Test Equipment Setting:**

a) Attenuation: Auto

b) Span Frequency: Entire absence of modulation emissions bandwidth

c) RBW: 10 kHz

d) VBW: 10 kHz

e) Sweep Time: Auto

### 7.5.3 CONFIGURATION OF THE EUT

Same as section 3.4 of this report

### 7.5.4 EUT OPERATING CONDITION

Same as section 3.5 of this report.



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### 7.5.5 LIMIT

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>-26dB Bandwidth and 99% Occupied Bandwidth:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Limit:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No restriction limits.                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>-6 dB Bandwidth:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Limit:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | For digital modulation systems, the minimum 6dB bandwidth shall be at least 500 kHz.                                                                                                                                                                                                                                                                                                                                   |
| Test Equipment Setting:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| a)Attenuation: Auto                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | e)Detector: Peak                                                                                                                                                                                                                                                                                                                                                                                                       |
| b)Span Frequency: > 6dB Bandwidth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | f)Trace: Max Hold                                                                                                                                                                                                                                                                                                                                                                                                      |
| c)RBW: 100kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | g)Sweep Time: Auto                                                                                                                                                                                                                                                                                                                                                                                                     |
| d)VBW: $\geq 3 \times$ RBW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Maximum Conducted Output Power Measurement:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> 5.15~5.25 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <input type="checkbox"/> Limit of Outdoor access point:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <input type="checkbox"/> Limit of Indoor access point:                                                                                                                                                                                                                                                                                                                                                                 |
| The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).                      | The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.    |
| <input type="checkbox"/> Limit of Fixed point-to-point access points:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input checked="" type="checkbox"/> Limit of Mobile and portable client devices:                                                                                                                                                                                                                                                                                                                                       |
| The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. | The maximum conducted output power over the frequency band of operation shall not exceed 250 mW (24dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. |
| <input checked="" type="checkbox"/> 5.25-5.35 GHz & <input checked="" type="checkbox"/> 5.470-5.725 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> 5.725~5.85 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power.                   |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Power Spectral Density</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> 5.15~5.25 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <input type="checkbox"/> Limit of Outdoor access point: 17 dBm/MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <input type="checkbox"/> Limit of Indoor access point: 17 dBm/MHz                                                                                                                                                                                                                                                                                                                                                      |
| <input type="checkbox"/> Limit of Fixed point-to-point access points: 17 dBm/MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input checked="" type="checkbox"/> Limit of Mobile and portable client devices: 11 dBm/MHz                                                                                                                                                                                                                                                                                                                            |
| <input type="checkbox"/> 5.25-5.35 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 11 dBm/MHz                                                                                                                                                                                                                                                                                                                                                                                                             |
| <input type="checkbox"/> 5.470-5.725 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 11 dBm/MHz                                                                                                                                                                                                                                                                                                                                                                                                             |
| <input checked="" type="checkbox"/> 5.725~5.85 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 30 dBm/500kHz                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Frequency Stability Measurement:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Limit:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.<br>The transmitter center frequency tolerance shall be $\pm 20$ ppm maximum for the 5 GHz band (IEEE 802.11n specification).                                                                                                                                                   |



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## 7.5.6 TEST RESULT

### -26dB Bandwidth and 99% Occupied Bandwidth

|              |                                                             |             |                   |
|--------------|-------------------------------------------------------------|-------------|-------------------|
| Product      | : EUT-Sample                                                | Test Mode   | : See section 3.4 |
| Test Item    | : -26dB Bandwidth/-6dB Bandwidth and 99% Occupied Bandwidth | Temperature | : 25 °C           |
| Test Voltage | : DC 3.91V                                                  | Humidity    | : 56%RH           |
| Test Result  | : PASS                                                      |             |                   |

### -26dB&99% Bandwidth

| Mode | Frequency (MHz) | -26 dB Bandwidth (MHz) | 99%dB Bandwidth (MHz) | Verdict |
|------|-----------------|------------------------|-----------------------|---------|
| a    | 5180            | 20.46                  | 16.434                | Pass    |
| a    | 5240            | 20.04                  | 16.439                | Pass    |
| a    | 5260            | 20.08                  | 16.451                | Pass    |
| a    | 5320            | 20.77                  | 16.479                | Pass    |
| a    | 5500            | 20.34                  | 16.462                | Pass    |
| a    | 5700            | 19.92                  | 16.431                | Pass    |
| n20  | 5180            | 20.96                  | 17.652                | Pass    |
| n20  | 5240            | 21.17                  | 17.651                | Pass    |
| n20  | 5260            | 20.71                  | 17.642                | Pass    |
| n20  | 5320            | 20.98                  | 17.694                | Pass    |
| n20  | 5500            | 21.55                  | 17.664                | Pass    |
| n20  | 5700            | 22.43                  | 17.637                | Pass    |
| n40  | 5190            | 41.77                  | 36.125                | Pass    |
| n40  | 5230            | 40.56                  | 36.158                | Pass    |
| n40  | 5270            | 41.24                  | 36.128                | Pass    |
| n40  | 5310            | 53.29                  | 36.257                | Pass    |
| n40  | 5510            | 46.67                  | 36.181                | Pass    |
| n40  | 5670            | 46.37                  | 36.174                | Pass    |
| ac20 | 5180            | 20.77                  | 17.620                | Pass    |
| ac20 | 5240            | 20.94                  | 17.671                | Pass    |
| ac20 | 5260            | 21.16                  | 17.642                | Pass    |
| ac20 | 5320            | 22.04                  | 17.678                | Pass    |
| ac20 | 5500            | 21.10                  | 17.645                | Pass    |
| ac20 | 5700            | 20.66                  | 17.639                | Pass    |
| ac40 | 5190            | 40.53                  | 36.191                | Pass    |
| ac40 | 5230            | 40.84                  | 36.207                | Pass    |
| ac40 | 5270            | 40.24                  | 36.125                | Pass    |
| ac40 | 5310            | 40.78                  | 36.175                | Pass    |
| ac40 | 5510            | 40.77                  | 36.156                | Pass    |
| ac40 | 5670            | 41.78                  | 36.144                | Pass    |
| ac80 | 5210            | 79.68                  | 75.382                | Pass    |
| ac80 | 5290            | 79.66                  | 75.474                | Pass    |
| ac80 | 5530            | 79.53                  | 75.611                | Pass    |
| ac80 | 5610            | 79.56                  | 75.494                | Pass    |
| ax20 | 5180            | 20.84                  | 17.670                | Pass    |
| ax20 | 5240            | 21.12                  | 17.659                | Pass    |



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|      |      |       |        |      |
|------|------|-------|--------|------|
| ax20 | 5260 | 21.23 | 18.859 | Pass |
| ax20 | 5320 | 20.69 | 18.903 | Pass |
| ax20 | 5500 | 21.80 | 18.894 | Pass |
| ax20 | 5700 | 20.90 | 18.882 | Pass |
| ax40 | 5190 | 40.82 | 37.633 | Pass |
| ax40 | 5230 | 41.08 | 37.609 | Pass |
| ax40 | 5270 | 40.34 | 37.639 | Pass |
| ax40 | 5310 | 40.99 | 37.741 | Pass |
| ax40 | 5510 | 40.81 | 37.628 | Pass |
| ax40 | 5670 | 41.48 | 37.599 | Pass |
| ax80 | 5210 | 79.87 | 77.463 | Pass |
| ax80 | 5290 | 79.36 | 77.374 | Pass |
| ax80 | 5530 | 79.74 | 77.274 | Pass |
| ax80 | 5610 | 79.80 | 77.370 | Pass |

### -6dB&99% Bandwidth

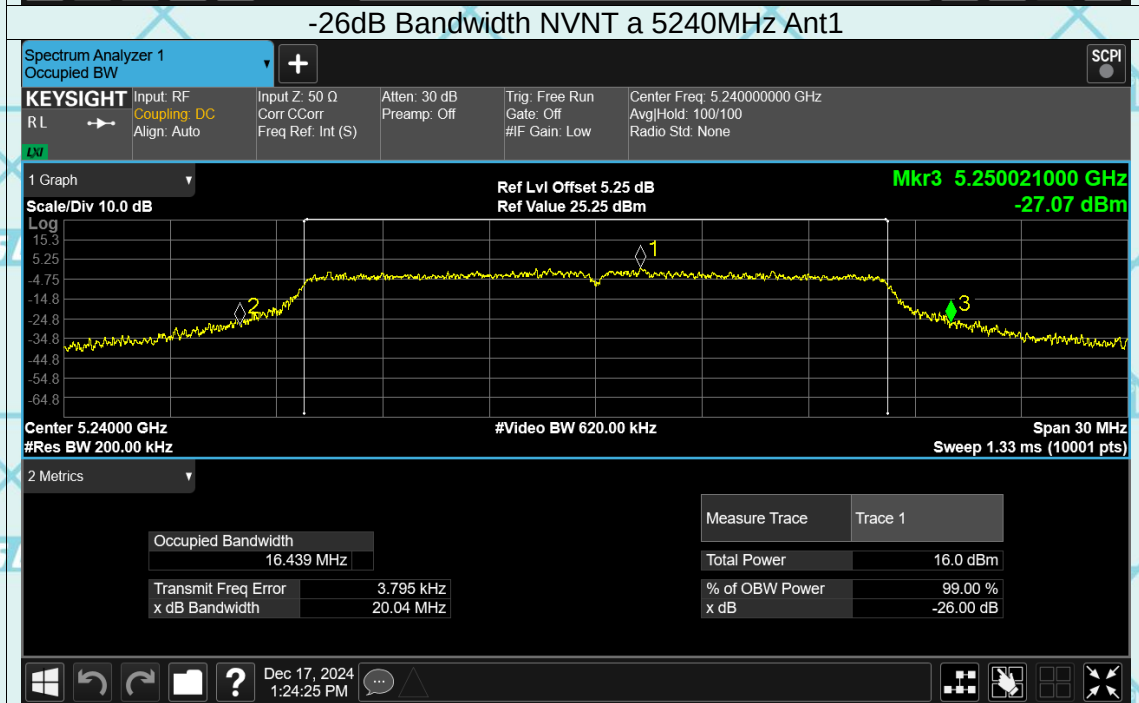
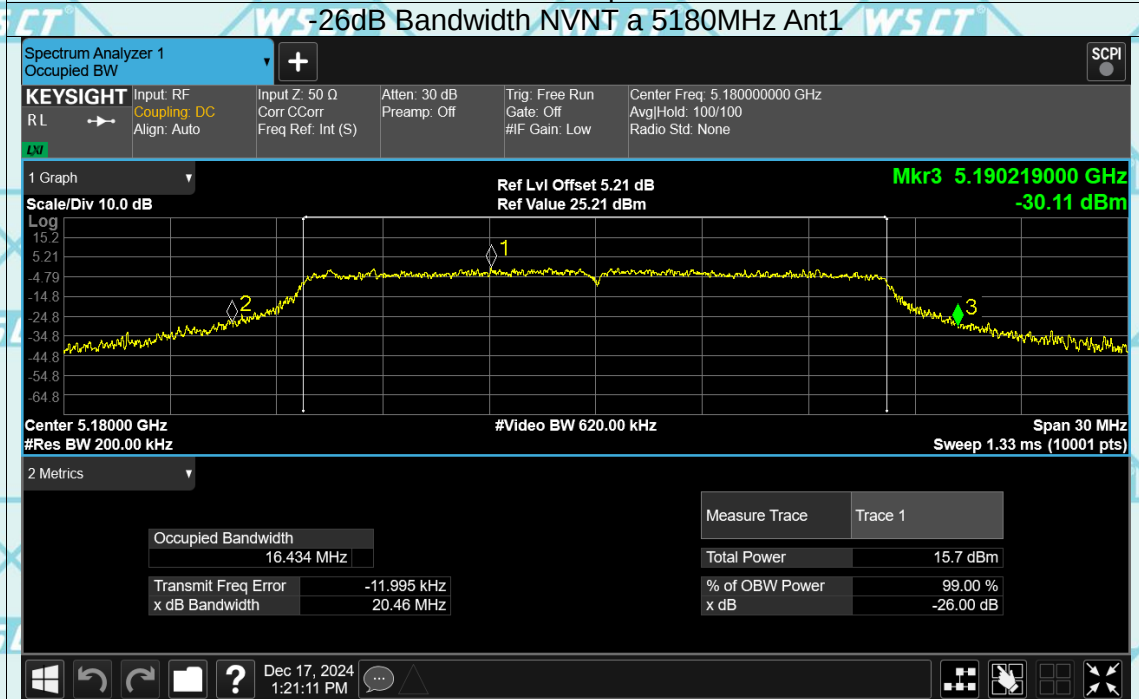
| Mode | Frequency (MHz) | -6 dB Bandwidth (MHz) | 99%dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|------|-----------------|-----------------------|-----------------------|-----------------------------|---------|
| a    | 5745            | 16.32                 | 16.385                | 0.5                         | Pass    |
| a    | 5825            | 15.06                 | 16.368                | 0.5                         | Pass    |
| n20  | 5745            | 17.28                 | 17.598                | 0.5                         | Pass    |
| n20  | 5825            | 16.93                 | 17.598                | 0.5                         | Pass    |
| n40  | 5755            | 35.13                 | 36.104                | 0.5                         | Pass    |
| n40  | 5795            | 35.09                 | 36.014                | 0.5                         | Pass    |
| ac20 | 5745            | 17.55                 | 17.597                | 0.5                         | Pass    |
| ac20 | 5825            | 16.05                 | 17.582                | 0.5                         | Pass    |
| ac40 | 5755            | 35.03                 | 36.051                | 0.5                         | Pass    |
| ac40 | 5795            | 33.90                 | 36.061                | 0.5                         | Pass    |
| ac80 | 5775            | 75.08                 | 75.370                | 0.5                         | Pass    |
| ax20 | 5745            | 17.30                 | 17.595                | 0.5                         | Pass    |
| ax20 | 5825            | 15.03                 | 17.586                | 0.5                         | Pass    |
| ax40 | 5755            | 35.20                 | 36.088                | 0.5                         | Pass    |
| ax40 | 5795            | 35.15                 | 36.017                | 0.5                         | Pass    |
| ax80 | 5775            | 75.04                 | 75.294                | 0.5                         | Pass    |



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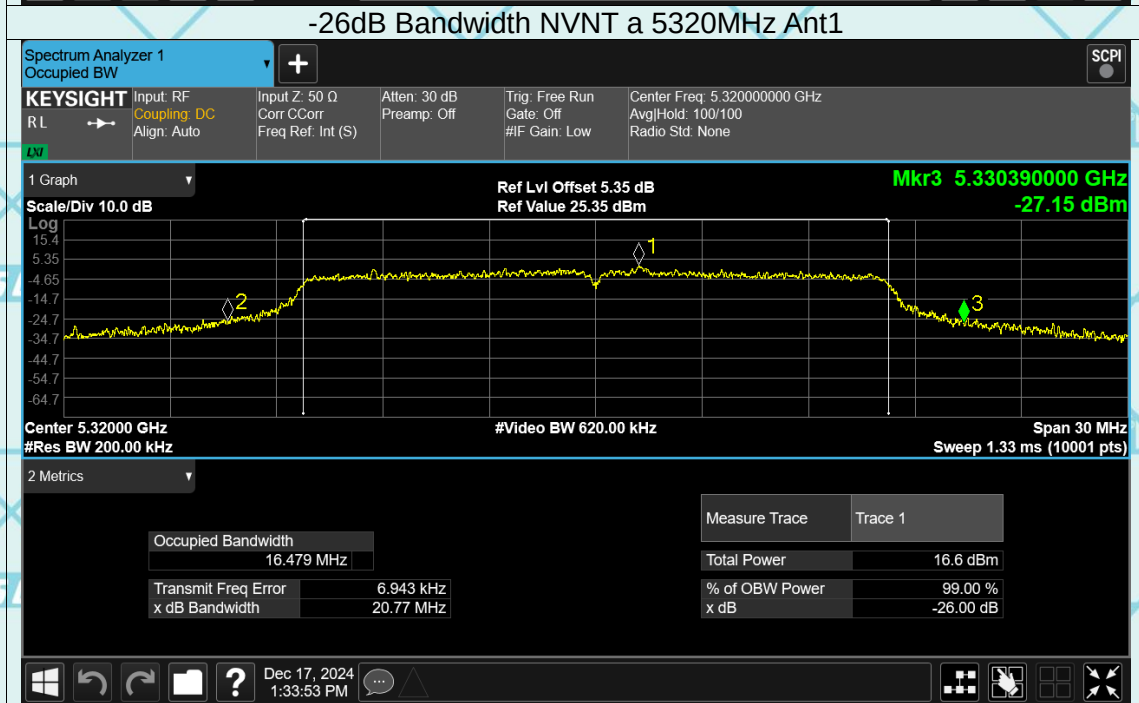
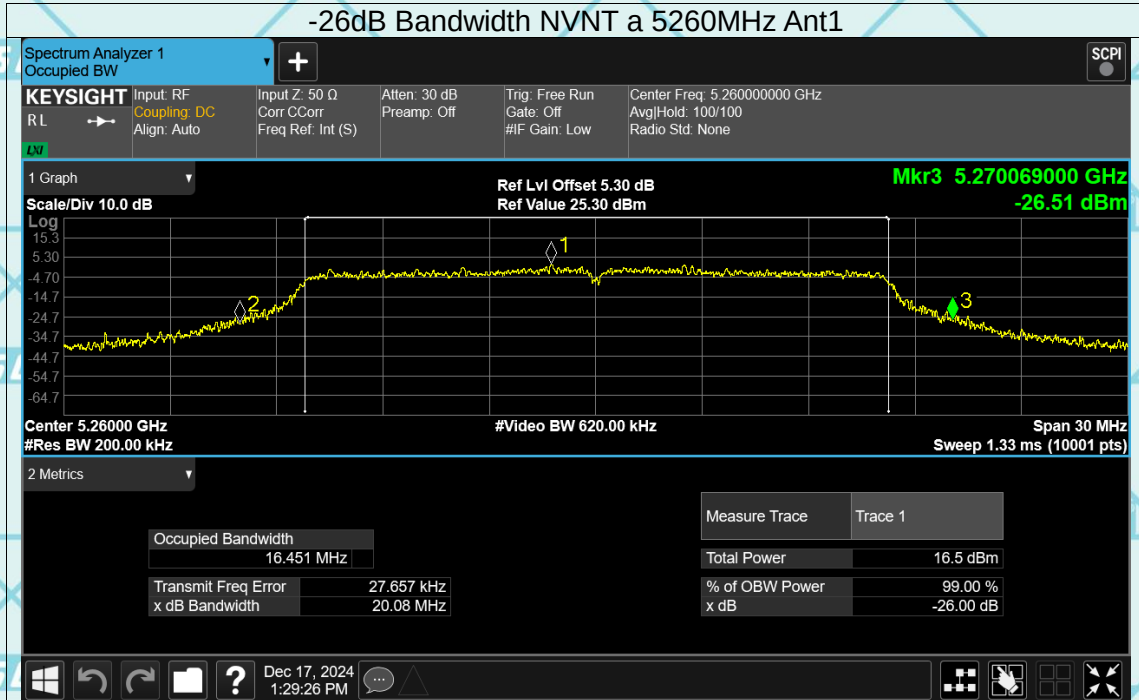
## -26Db&99% Bandwidth

### Test Graphs





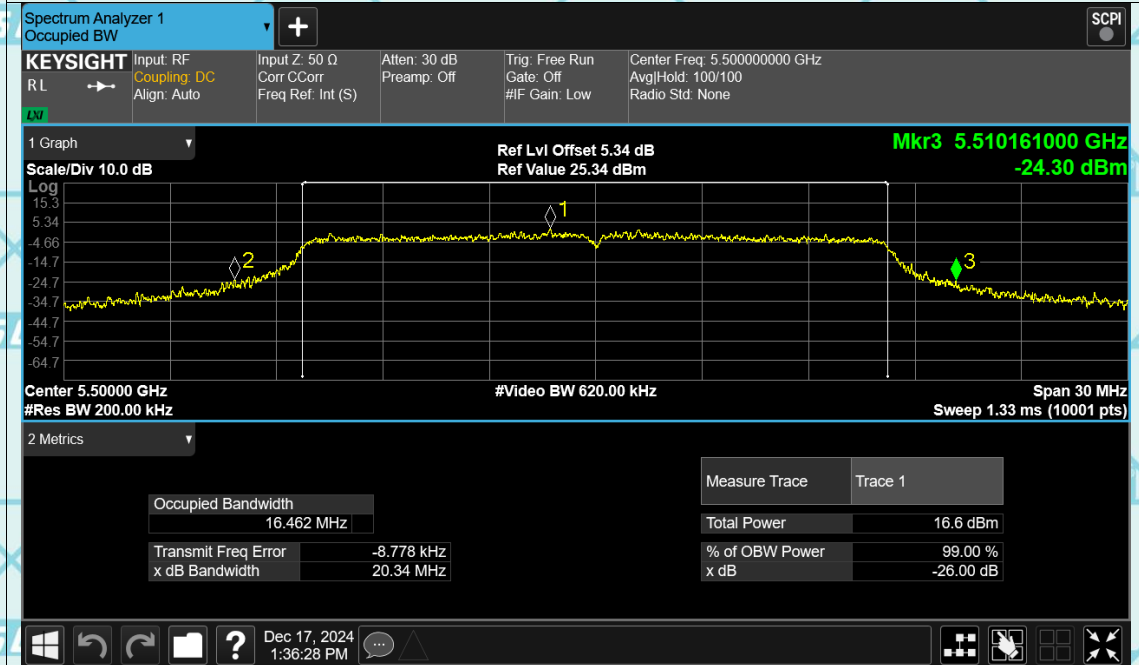
Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2



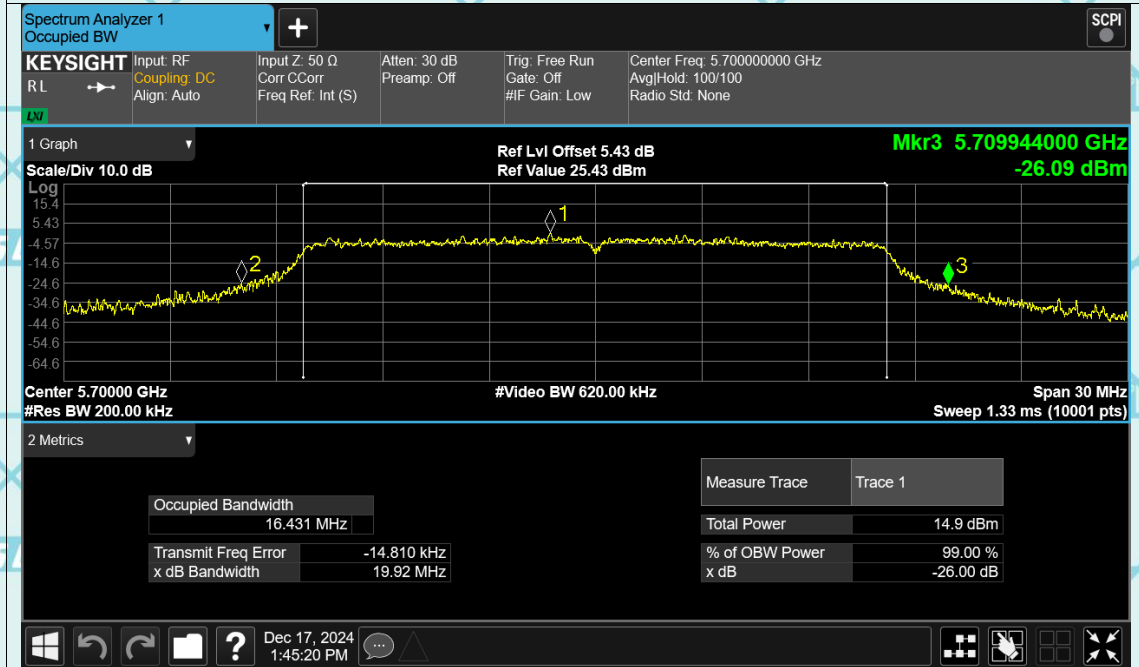


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### -26dB Bandwidth NVNT a 5500MHz Ant1

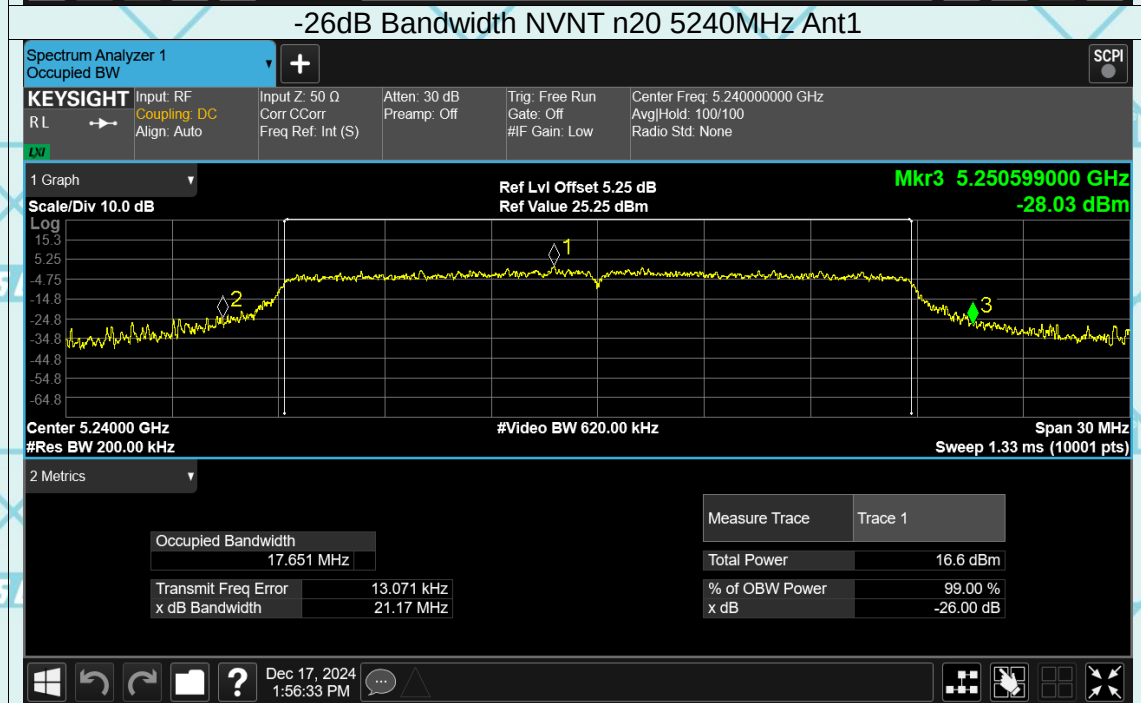
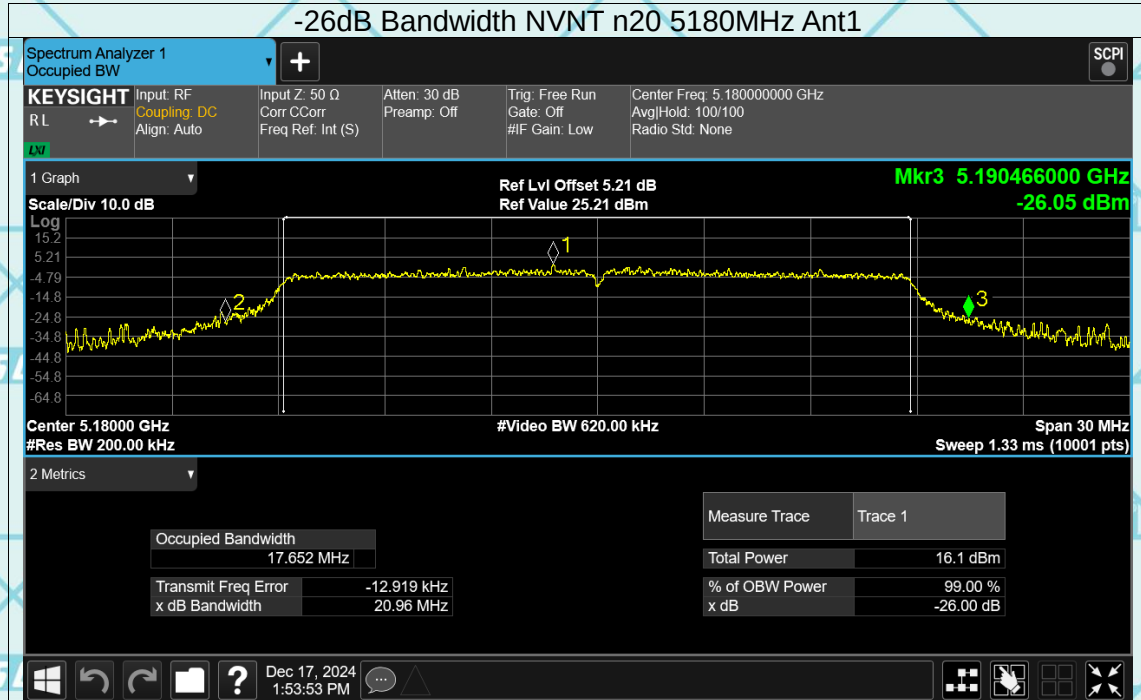


### -26dB Bandwidth NVNT a 5700MHz Ant1



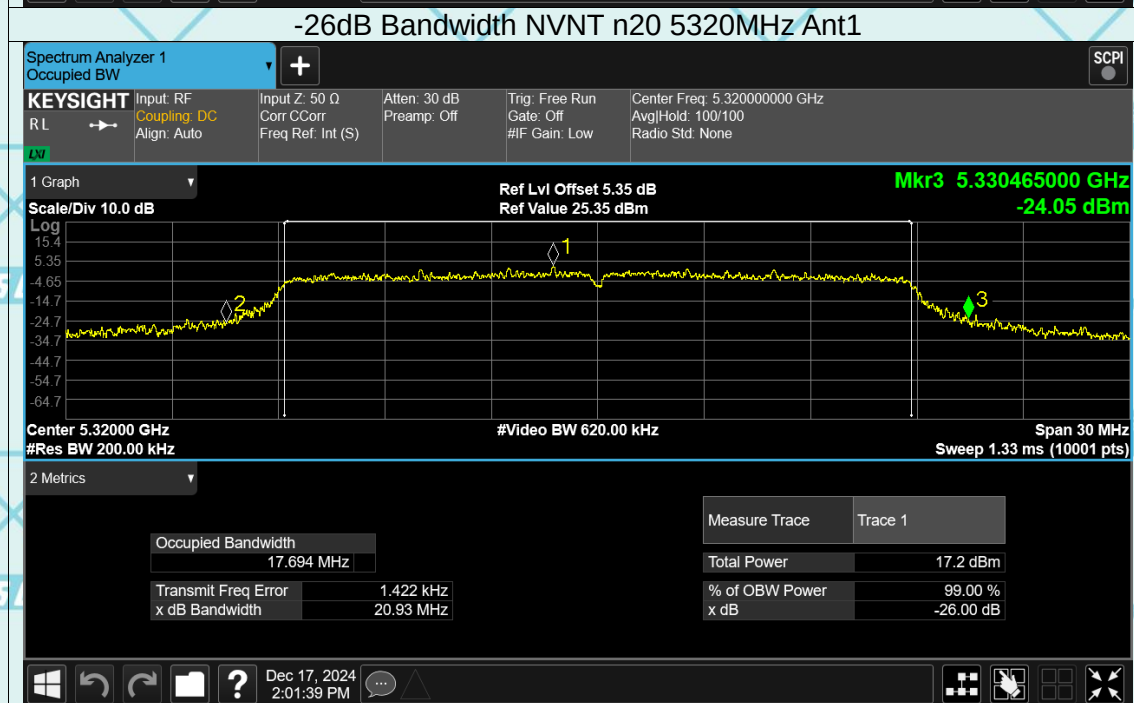
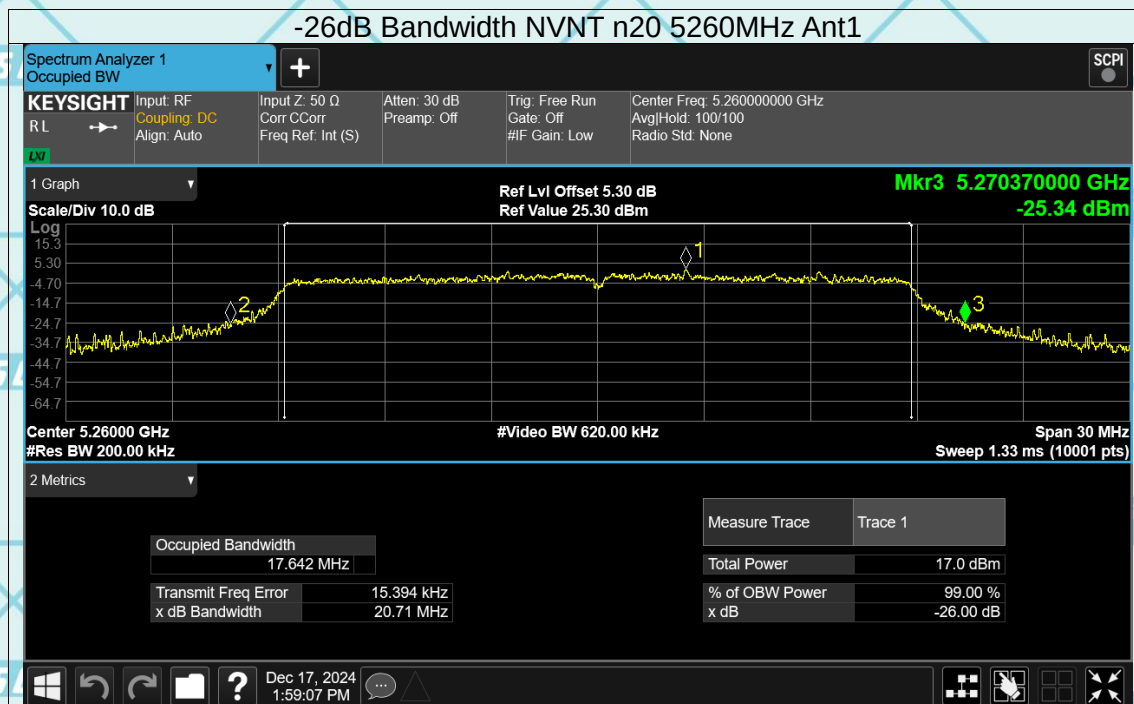


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Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2





Report No.: WSCT-ANAB-R&E250100002A-Wi-Fi2

