

FCC PART 15.247

## TEST REPORT

For

### TECNO MOBILE LIMITED

FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-35 SHAN MEI STREET  
FOTAN NT Hong Kong

**FCC ID: 2ADYY-CG6J**

|                                                                                                                                                                                                                                                                                                                         |                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>Report Type:</b><br>Class II Permissive Change                                                                                                                                                                                                                                                                       | <b>Product Type:</b><br>Mobile Phone |
| <b>Report Number:</b> SZ1210901-45710E-RF-00BA1                                                                                                                                                                                                                                                                         |                                      |
| <b>Report Date:</b> 2021-09-13                                                                                                                                                                                                                                                                                          |                                      |
| <b>Reviewed By:</b> RF Engineer                                                                                                                                                                                                                                                                                         | Jacob Kong                           |
| <b>Prepared By:</b> Bay Area Compliance Laboratories Corp. (Shenzhen)<br>5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial<br>Building D, Shihua Rd, FuTian Free Trade Zone,<br>Shenzhen, China<br>Tel: +86-755-33320018<br>Fax: +86-755-33320008<br><a href="http://www.baclcorp.com.cn">www.baclcorp.com.cn</a> |                                      |

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## **TABLE OF CONTENTS**

|                                                                          |          |
|--------------------------------------------------------------------------|----------|
| <b>GENERAL INFORMATION.....</b>                                          | <b>3</b> |
| PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) .....                 | 3        |
| OBJECTIVE .....                                                          | 3        |
| TEST METHODOLOGY .....                                                   | 3        |
| MEASUREMENT UNCERTAINTY.....                                             | 4        |
| <b>SUMMARY OF TEST RESULTS .....</b>                                     | <b>5</b> |
| <b>TEST EQUIPMENT LIST .....</b>                                         | <b>6</b> |
| <b>FCC§15.247 (i), §1.1307 (b) (1) &amp; §2.1093 – RF EXPOSURE .....</b> | <b>7</b> |
| APPLICABLE STANDARD .....                                                | 7        |
| <b>FCC §15.203 - ANTENNA REQUIREMENT.....</b>                            | <b>8</b> |
| APPLICABLE STANDARD .....                                                | 8        |
| ANTENNA CONNECTOR CONSTRUCTION .....                                     | 8        |
| <b>FCC §15.209, §15.205 &amp; §15.247(d) - SPURIOUS EMISSIONS.....</b>   | <b>9</b> |
| APPLICABLE STANDARD .....                                                | 9        |
| EUT SETUP .....                                                          | 9        |
| EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP .....                        | 10       |
| TEST PROCEDURE .....                                                     | 10       |
| CORRECTED AMPLITUDE & MARGIN CALCULATION .....                           | 10       |
| TEST DATA .....                                                          | 10       |

## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

|                              |                                                                                          |
|------------------------------|------------------------------------------------------------------------------------------|
| Product                      | Mobile Phone                                                                             |
| Tested Model                 | CG6j                                                                                     |
| Frequency Range              | BLE_1M& BLE_2M: 2402-2480MHz<br>Wi-Fi: 2412-2462MHz & 2422-2452MHz                       |
| Maximum Conducted Peak Power | BLE: -3.62dBm<br>Wi-Fi: 16.72dBm                                                         |
| Modulation Technique         | BLE: GFSK<br>Wi-Fi: DSSS, OFDM                                                           |
| Antenna Specification*       | 1.2dBi(It is provided by the applicant)                                                  |
| Power Supply                 | Rechargeable Li-ion polymer battery DC3.85V-4900mAh                                      |
| Date of Test                 | 2021-09-07 to 2021-09-12                                                                 |
| Sample number                | SZ1210901-45710E-RFA1-S1<br>(Assigned by BACL, Shenzhen)                                 |
| Received date                | 2021-09-01                                                                               |
| Sample/EUT Status            | Good condition                                                                           |
| Adapter information          | Model: U180TSA<br>Input: 100-240V, 50/60Hz, 0.6A<br>Output: 5.0V-9.0V,2A,9.0V-12.0V,1.5A |

### Objective

This report is in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commission's rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

This is a CIIPC application of the device; the differences between the original device and the current one are as follows:

- (1) Changing the antenna of EUT
- (2) Changing the Camera of EUT

Based on above difference listed, it's will affect the test items of "Radiated Disturbance", those items will be performed ,the other test data and the EUT photos Please refer to the original report: JYTSZB-R12-2100024&JYTSZB-R12-2100026, which under the FCC ID: 2ADYY-CG6J, tested and granted by JianYan Testing Group Shenzhen Co.,Ltd. and issued date is 20 Jan., 2021.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

And KDB 558074 D01 15.247 Meas Guidance v05r02.

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.  
Each test item follows test standards and with no deviation.

## Measurement Uncertainty

| Parameter                          |            | Uncertainty |
|------------------------------------|------------|-------------|
| Occupied Channel Bandwidth         |            | ±5%         |
| RF Output Power with Power meter   |            | ±0.73dB     |
| RF conducted test with spectrum    |            | ±1.6dB      |
| AC Power Lines Conducted Emissions |            | ±1.95dB     |
| Emissions,<br>Radiated             | Below 1GHz | ±4.75dB     |
|                                    | Above 1GHz | ±4.88dB     |
| Temperature                        |            | ±1℃         |
| Humidity                           |            | ±6%         |
| Supply voltages                    |            | ±0.4%       |

*Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor  $K$  with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.*

## Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 342867, the FCC Designation No.: CN1221.

The test site has been registered with ISED Canada under ISED Canada Registration Number 3062B.

**SUMMARY OF TEST RESULTS**

| FCC Rules                             | Description of Test              | Result     |
|---------------------------------------|----------------------------------|------------|
| §15.247 (i), §1.1307 (b) (1)& §2.1093 | RF Exposure                      | Compliant  |
| §15.203                               | Antenna Requirement              | Compliant  |
| §15.207(a)                            | AC Line Conducted Emissions      | Compliant* |
| §15.205, §15.209 & §15.247(d)         | Radiated Emissions               | Compliant  |
| §15.247(a)(1)                         | 20 dB Emission Bandwidth         | Compliant* |
| §15.247(a)(1)                         | Channel Separation Test          | Compliant* |
| §15.247(a)(1)(iii)                    | Time of Occupancy (Dwell Time)   | Compliant* |
| §15.247(a)(1)(iii)                    | Quantity of hopping channel Test | Compliant* |
| §15.247(b)(1)                         | Peak Output Power Measurement    | Compliant* |
| §15.247(d)                            | Band edges                       | Compliant* |

Compliant\*: Please refer to the original report: JYTSZB-R12-2100024&JYTSZB-R12-2100026, which under the FCC ID: 2ADYY-CG6J, tested and granted by JianYan Testing Group Shenzhen Co.,Ltd. and issued date is 20 Jan.2021.

**TEST EQUIPMENT LIST**

| Manufacturer                  | Description        | Model           | Serial Number   | Calibration Date | Calibration Due Date |
|-------------------------------|--------------------|-----------------|-----------------|------------------|----------------------|
| <b>Radiated Emission Test</b> |                    |                 |                 |                  |                      |
| R&S                           | EMI Test Receiver  | ESR3            | 102455          | 2021/07/06       | 2022/07/05           |
| Sonoma instrument             | Pre-amplifier      | 310 N           | 186238          | 2021/08/03       | 2022/08/02           |
| Sunol Sciences                | Broadband Antenna  | JB1             | A040904-2       | 2020/12/22       | 2023/12/21           |
| Unknown                       | Cable              | Chamber Cable 1 | F-03-EM236      | 2021/08/03       | 2022/08/02           |
| Unknown                       | Cable              | Chamber Cable 4 | EC-007          | 2021/08/03       | 2022/08/02           |
| Rohde & Schwarz               | Auto test software | EMC 32          | V9.10.00        | NCR              | NCR                  |
| Rohde & Schwarz               | Spectrum Analyzer  | FSV40-N         | 102259          | 2021/07/06       | 2022/07/05           |
| COM-POWER                     | Pre-amplifier      | PA-122          | 181919          | 2020/11/29       | 2021/11/28           |
| A.H.System                    | Pre-amplifier      | PAM-1840VH      | 190             | 2021/08/03       | 2022/08/02           |
| Sunol Sciences                | Horn Antenna       | 3115            | 9107-3694       | 2021/01/15       | 2024/01/14           |
| Insulted Wire Inc.            | RF Cable           | SPS-2503-3150   | 02222010        | 2020/11/29       | 2021/11/28           |
| Unknown                       | RF Cable           | W1101-EQ1 OUT   | F-19-EM005      | 2020/11/29       | 2021/11/28           |
| MICRO-TRONICS                 | Passband filter    | HPM50111        | F-19-EM006      | 2021/04/20       | 2022/04/20           |
| Ducommun Technologies         | Horn antenna       | ARH-4223-02     | 1007726-02 1304 | 2020/12/06       | 2023/12/05           |

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## **FCC§15.247 (i), §1.1307 (b) (1) & §2.1093 – RF EXPOSURE**

### **Applicable Standard**

According to FCC §2.1093 and §1.1307(b) (1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D01 General RF Exposure Guidance

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot$

$[\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

1.  $f(\text{GHz})$  is the RF channel transmit frequency in GHz.

2. Power and distance are rounded to the nearest mW and mm before calculation.

3. The result is rounded to one decimal place for comparison.

4. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test Exclusion.

### **Measurement Result**

#### **For BLE:**

| Mode | Frequency (MHz) | Max Tune-up Conducted Power (dBm) | Max Tune-up Conducted Power (mW) | Calculated Distance (mm) | Calculated value | Threshold (1-g SAR) | SAR Test Exclusion |
|------|-----------------|-----------------------------------|----------------------------------|--------------------------|------------------|---------------------|--------------------|
| BLE  | 2402-2480       | -3.5                              | 0.45                             | 5                        | 0.1              | 3.0                 | Yes                |

**Result: No SAR test is required.**

#### **For Wi-Fi:**

Wi-Fi: please refer to the report number: SZ1210901-45710E-SAA1

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## FCC §15.203 - ANTENNA REQUIREMENT

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### Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
  - b. Antenna must use a unique type of connector to attach to the EUT.
- Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### Antenna Connector Construction

The EUT has an internal antenna arrangement, which was permanently attached and the antenna gain is 1.2dBi, fulfill the requirement of this section. Please refer to the EUT photos.

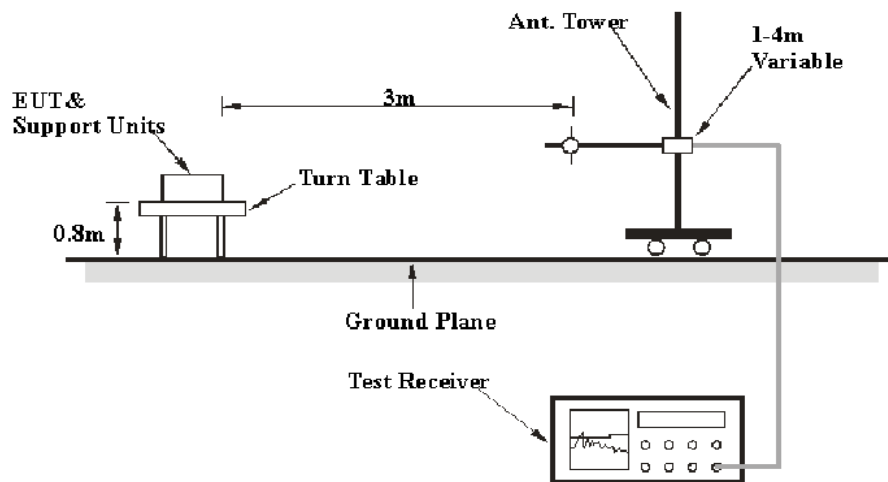
**Result:** Compliant.

**FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS****Applicable Standard**

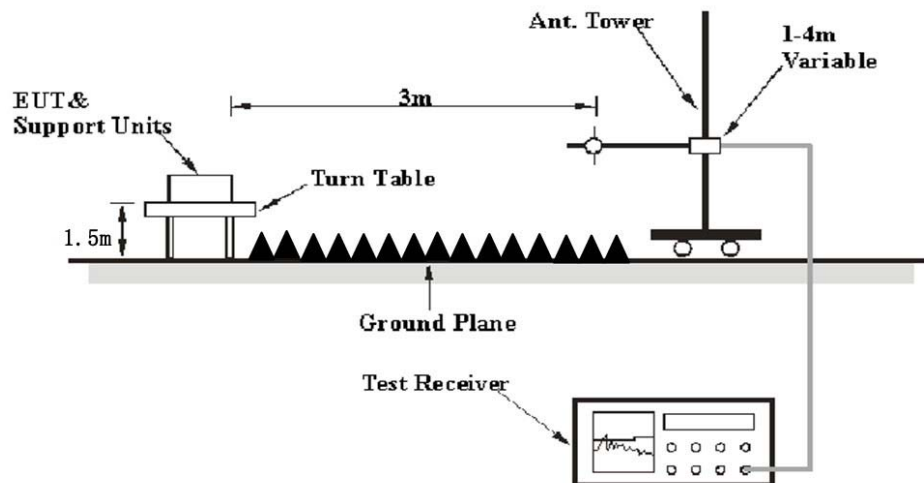
FCC §15.247 (d); §15.209; §15.205;

**EUT Setup**

**Below 1 GHz:**



**Above 1GHz:**



The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.247 limits.

## EMI Test Receiver & Spectrum Analyzer Setup

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

| Frequency Range   | RBW     | Video B/W               | IF B/W  | Measurement |
|-------------------|---------|-------------------------|---------|-------------|
| 30 MHz – 1000 MHz | 100 kHz | 300 kHz                 | 120 kHz | QP          |
| Above 1 GHz       | 1MHz    | 3 MHz                   | /       | PK          |
|                   | 1MHz    | 10 Hz <sup>Note 1</sup> | /       | Average     |
|                   | 1MHz    | > 1/T <sup>Note 2</sup> | /       | Average     |

Note 1: when duty cycle is no less than 98%

Note 2: when duty cycle is less than 98%

## Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

## Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

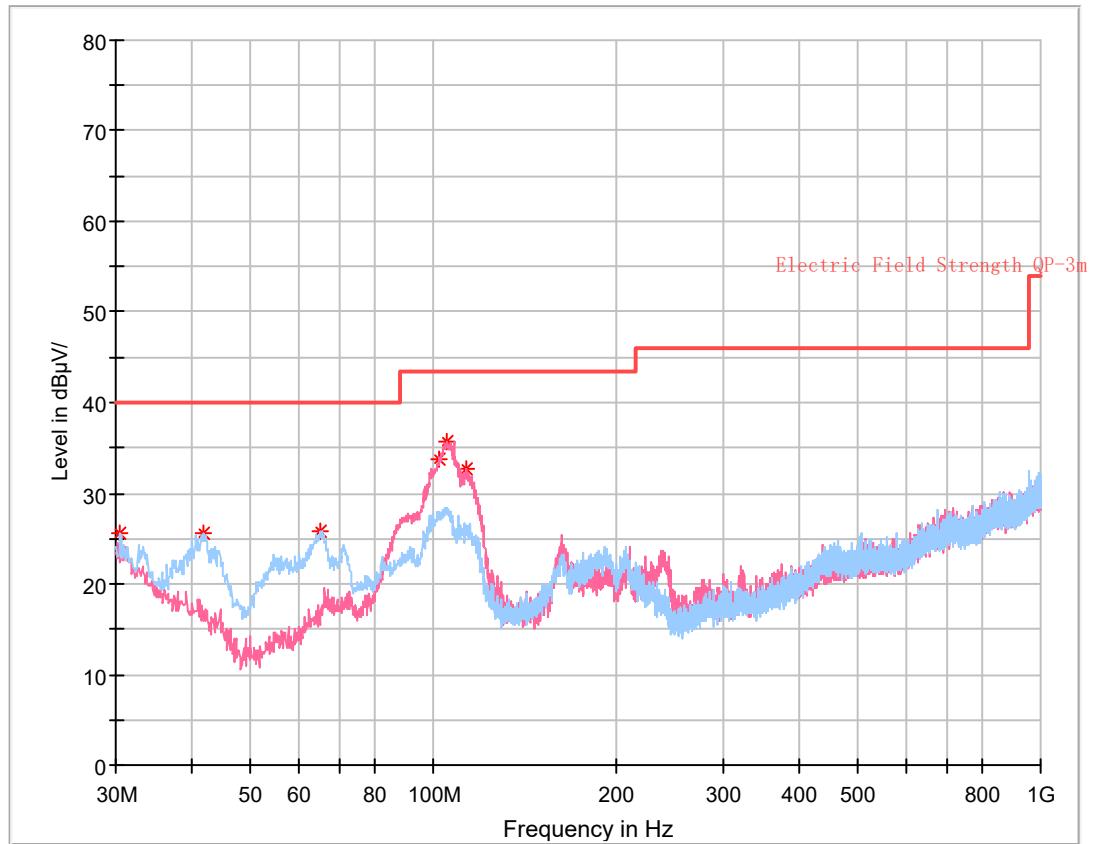
## Test Data

### Environmental Conditions

|                           |           |
|---------------------------|-----------|
| <b>Temperature:</b>       | 26~27.2°C |
| <b>Relative Humidity:</b> | 54~57 %   |
| <b>ATM Pressure:</b>      | 101 kPa   |

*The testing was performed by Cloud Qiu on 2021-09-07 for below 1GHz and Bruce Lin on 2021-09-12 for above 1GHz.*

*EUT operation mode: Transmitting*

**30 MHz~1 GHz: (Bluetooth & Wi-Fi transmitting)****Critical Freqs**

| Frequency (MHz) | MaxPeak (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------------|------------------|-------------|-------------|-----|---------------|------------|
| 30.485000       | 25.57              | 40.00            | 14.43       | 100.0       | H   | 300.0         | -3.9       |
| 41.882500       | 25.50              | 40.00            | 14.50       | 100.0       | H   | 24.0          | -11.7      |
| 64.920000       | 25.79              | 40.00            | 14.21       | 100.0       | H   | 0.0           | -16.3      |
| 102.265000      | 33.67              | 43.50            | 9.83        | 300.0       | V   | 70.0          | -13.1      |
| 105.538750      | 35.70              | 43.50            | 7.80        | 300.0       | V   | 91.0          | -12.3      |
| 113.541250      | 32.59              | 43.50            | 10.91       | 300.0       | V   | 70.0          | -10.9      |

**1 GHz-25 GHz (Wi-Fi):****802.11b Mode:**

| Frequency<br>(MHz)        | Receiver          |            | Turntable<br>Degree | Rx Antenna    |                | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|---------------------------|-------------------|------------|---------------------|---------------|----------------|-------------------------------|------------------------------------|-------------------|----------------|
|                           | Reading<br>(dBμV) | PK/QP/Ave. |                     | Height<br>(m) | Polar<br>(H/V) |                               |                                    |                   |                |
| Low Channel (2412 MHz)    |                   |            |                     |               |                |                               |                                    |                   |                |
| 2346.99                   | 28.95             | PK         | 85                  | 1.6           | H              | 31.64                         | 60.59                              | 74                | 13.41          |
| 2346.99                   | 14.58             | Ave.       | 85                  | 1.6           | H              | 31.64                         | 46.22                              | 54                | 7.78           |
| 2499.46                   | 28.32             | PK         | 213                 | 2.3           | H              | 32.13                         | 60.45                              | 74                | 13.55          |
| 2499.46                   | 14.14             | Ave.       | 213                 | 2.3           | H              | 32.13                         | 46.27                              | 54                | 7.73           |
| 4824.00                   | 49.40             | PK         | 223                 | 1.6           | H              | 6.28                          | 55.68                              | 74                | 18.32          |
| 4824.00                   | 43.32             | Ave.       | 124                 | 2.4           | H              | 6.28                          | 49.60                              | 54                | 4.40           |
| Middle Channel (2437 MHz) |                   |            |                     |               |                |                               |                                    |                   |                |
| 4874.00                   | 52.65             | PK         | 173                 | 1.1           | H              | 6.76                          | 59.41                              | 74                | 14.59          |
| 4874.00                   | 45.75             | Ave.       | 191                 | 2.3           | H              | 6.76                          | 52.51                              | 54                | 1.49           |
| High Channel (2462 MHz)   |                   |            |                     |               |                |                               |                                    |                   |                |
| 2329.62                   | 28.51             | PK         | 129                 | 2.3           | H              | 31.64                         | 60.15                              | 74                | 13.85          |
| 2329.62                   | 14.01             | Ave.       | 129                 | 2.3           | H              | 31.64                         | 45.65                              | 54                | 8.35           |
| 2486.12                   | 29.36             | PK         | 175                 | 1.1           | H              | 32.13                         | 61.49                              | 74                | 12.51          |
| 2486.12                   | 14.19             | Ave.       | 175                 | 1.1           | H              | 32.13                         | 46.32                              | 54                | 7.68           |
| 4924.00                   | 49.86             | PK         | 312                 | 1.5           | H              | 6.76                          | 56.62                              | 74                | 17.38          |
| 4924.00                   | 43.75             | Ave.       | 312                 | 1.5           | H              | 6.76                          | 50.51                              | 54                | 3.49           |

**802.11g Mode:**

| Frequency<br>(MHz)        | Receiver          |            | Turntable<br>Degree | Rx Antenna    |                | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|---------------------------|-------------------|------------|---------------------|---------------|----------------|-------------------------------|------------------------------------|-------------------|----------------|
|                           | Reading<br>(dBμV) | PK/QP/Ave. |                     | Height<br>(m) | Polar<br>(H/V) |                               |                                    |                   |                |
| Low Channel (2412 MHz)    |                   |            |                     |               |                |                               |                                    |                   |                |
| 2385.89                   | 29.87             | PK         | 18                  | 1.4           | H              | 31.87                         | 61.74                              | 74                | 12.26          |
| 2385.89                   | 16.05             | Ave.       | 18                  | 1.4           | H              | 31.87                         | 47.92                              | 54                | 6.08           |
| 2484.77                   | 28.46             | PK         | 61                  | 2.0           | H              | 32.13                         | 60.59                              | 74                | 13.41          |
| 2484.77                   | 14.98             | Ave.       | 61                  | 2.0           | H              | 32.13                         | 47.11                              | 54                | 6.89           |
| 4824.00                   | 43.82             | PK         | 216                 | 1.9           | H              | 6.28                          | 50.10                              | 74                | 23.90          |
| 4824.00                   | 30.41             | Ave.       | 216                 | 1.9           | H              | 6.28                          | 36.69                              | 54                | 17.31          |
| Middle Channel (2437 MHz) |                   |            |                     |               |                |                               |                                    |                   |                |
| 4874.00                   | 44.52             | PK         | 61                  | 1.5           | H              | 6.76                          | 51.28                              | 74                | 22.72          |
| 4874.00                   | 30.47             | Ave.       | 61                  | 1.5           | H              | 6.76                          | 37.23                              | 54                | 16.77          |
| High Channel (2462 MHz)   |                   |            |                     |               |                |                               |                                    |                   |                |
| 2310.29                   | 29.12             | PK         | 175                 | 1.4           | H              | 31.64                         | 60.76                              | 74                | 13.24          |
| 2310.29                   | 14.84             | Ave.       | 175                 | 1.4           | H              | 31.64                         | 46.48                              | 54                | 7.52           |
| 2483.58                   | 30.24             | PK         | 139                 | 2.4           | H              | 32.13                         | 62.37                              | 74                | 11.63          |
| 2483.58                   | 15.26             | Ave.       | 139                 | 2.4           | H              | 32.13                         | 47.39                              | 54                | 6.61           |
| 4924.00                   | 43.96             | PK         | 281                 | 1.0           | H              | 6.76                          | 50.72                              | 74                | 23.28          |
| 4924.00                   | 29.53             | Ave.       | 281                 | 1.0           | H              | 6.76                          | 36.29                              | 54                | 17.71          |

**802.11n-HT20 Mode:**

| Frequency<br>(MHz)        | Receiver          |            | Turntable<br>Degree | Rx Antenna    |                | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|---------------------------|-------------------|------------|---------------------|---------------|----------------|-------------------------------|------------------------------------|-------------------|----------------|
|                           | Reading<br>(dBμV) | PK/QP/Ave. |                     | Height<br>(m) | Polar<br>(H/V) |                               |                                    |                   |                |
| Low Channel (2412 MHz)    |                   |            |                     |               |                |                               |                                    |                   |                |
| 2389.83                   | 32.55             | PK         | 180                 | 1.7           | H              | 31.87                         | 64.42                              | 74                | 9.58           |
| 2389.83                   | 16.91             | Ave.       | 180                 | 1.7           | H              | 31.87                         | 48.78                              | 54                | 5.22           |
| 2490.65                   | 28.68             | PK         | 47                  | 2.0           | H              | 32.13                         | 60.81                              | 74                | 13.19          |
| 2490.65                   | 15.05             | Ave.       | 47                  | 2.0           | H              | 32.13                         | 47.18                              | 54                | 6.82           |
| 4824.00                   | 44.17             | PK         | 242                 | 1.1           | H              | 6.28                          | 50.45                              | 74                | 23.55          |
| 4824.00                   | 30.16             | Ave.       | 242                 | 1.1           | H              | 6.28                          | 36.44                              | 54                | 17.56          |
| Middle Channel (2437 MHz) |                   |            |                     |               |                |                               |                                    |                   |                |
| 4874.00                   | 44.89             | PK         | 329                 | 1.5           | H              | 6.76                          | 51.65                              | 74                | 22.35          |
| 4874.00                   | 30.34             | Ave.       | 329                 | 1.5           | H              | 6.76                          | 37.10                              | 54                | 16.90          |
| High Channel (2462 MHz)   |                   |            |                     |               |                |                               |                                    |                   |                |
| 2381.14                   | 28.54             | PK         | 106                 | 2.2           | H              | 31.87                         | 60.41                              | 74                | 13.59          |
| 2381.14                   | 14.8              | Ave.       | 106                 | 2.2           | H              | 31.87                         | 46.67                              | 54                | 7.33           |
| 2484.01                   | 32.36             | PK         | 268                 | 2.4           | H              | 32.13                         | 64.49                              | 74                | 9.51           |
| 2484.01                   | 15.28             | Ave.       | 268                 | 2.4           | H              | 32.13                         | 47.41                              | 54                | 6.59           |
| 4924.00                   | 44.28             | PK         | 56                  | 2.0           | H              | 6.76                          | 51.04                              | 74                | 22.96          |
| 4924.00                   | 29.64             | Ave.       | 56                  | 2.0           | H              | 6.76                          | 36.40                              | 54                | 17.60          |

**802.11n-HT40 Mode:**

| Frequency<br>(MHz)        | Receiver          |            | Turntable<br>Degree | Rx Antenna    |                | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|---------------------------|-------------------|------------|---------------------|---------------|----------------|-------------------------------|------------------------------------|-------------------|----------------|
|                           | Reading<br>(dBμV) | PK/QP/Ave. |                     | Height<br>(m) | Polar<br>(H/V) |                               |                                    |                   |                |
| Low Channel (2422 MHz)    |                   |            |                     |               |                |                               |                                    |                   |                |
| 2388.90                   | 38.12             | PK         | 64                  | 2.2           | H              | 31.87                         | 69.99                              | 74                | 4.01           |
| 2388.90                   | 19.06             | Ave.       | 64                  | 2.2           | H              | 31.87                         | 50.93                              | 54                | 3.07           |
| 2494.87                   | 29.04             | PK         | 266                 | 1.8           | H              | 32.13                         | 61.17                              | 74                | 12.83          |
| 2494.87                   | 15.24             | Ave.       | 266                 | 1.8           | H              | 32.13                         | 47.37                              | 54                | 6.63           |
| 4844.00                   | 44.09             | PK         | 133                 | 1.1           | H              | 6.28                          | 50.37                              | 74                | 23.63          |
| 4844.00                   | 30.06             | Ave.       | 133                 | 1.1           | H              | 6.28                          | 36.34                              | 54                | 17.66          |
| Middle Channel (2437 MHz) |                   |            |                     |               |                |                               |                                    |                   |                |
| 4874.00                   | 44.78             | PK         | 234                 | 1.1           | H              | 6.76                          | 51.54                              | 74                | 22.46          |
| 4874.00                   | 30.55             | Ave.       | 234                 | 1.1           | H              | 6.76                          | 37.31                              | 54                | 16.69          |
| High Channel (2452 MHz)   |                   |            |                     |               |                |                               |                                    |                   |                |
| 2330.21                   | 28.63             | PK         | 37                  | 2.3           | H              | 31.64                         | 60.27                              | 74                | 13.73          |
| 2330.21                   | 15.18             | Ave.       | 37                  | 2.3           | H              | 31.64                         | 46.82                              | 54                | 7.18           |
| 2484.73                   | 37.20             | PK         | 132                 | 2.4           | H              | 32.13                         | 69.33                              | 74                | 4.67           |
| 2484.73                   | 18.03             | Ave.       | 132                 | 2.4           | H              | 32.13                         | 50.16                              | 54                | 3.84           |
| 4904.00                   | 44.01             | PK         | 161                 | 1.6           | H              | 6.76                          | 50.77                              | 74                | 23.23          |
| 4904.00                   | 29.84             | Ave.       | 161                 | 1.6           | H              | 6.76                          | 36.60                              | 54                | 17.40          |

## BLE\_1M

| Frequency<br>(MHz)        | Receiver          |            | Turntable<br>Degree | Rx Antenna    |                | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|---------------------------|-------------------|------------|---------------------|---------------|----------------|-------------------------------|------------------------------------|-------------------|----------------|
|                           | Reading<br>(dBμV) | PK/QP/Ave. |                     | Height<br>(m) | Polar<br>(H/V) |                               |                                    |                   |                |
| Low Channel (2402 MHz)    |                   |            |                     |               |                |                               |                                    |                   |                |
| 2389.18                   | 29.44             | PK         | 210                 | 2.2           | H              | 31.87                         | 61.31                              | 74                | 12.69          |
| 2389.18                   | 15.65             | Ave.       | 210                 | 2.2           | H              | 31.87                         | 47.52                              | 54                | 6.48           |
| 2484.26                   | 29.89             | PK         | 126                 | 1.4           | H              | 32.13                         | 62.02                              | 74                | 11.98          |
| 2484.26                   | 15.56             | Ave.       | 126                 | 1.4           | H              | 32.13                         | 47.69                              | 54                | 6.31           |
| 4804.00                   | 43.51             | PK         | 215                 | 1.4           | H              | 6.28                          | 49.79                              | 74                | 24.21          |
| 4804.00                   | 30.07             | Ave.       | 215                 | 1.4           | H              | 6.28                          | 36.35                              | 54                | 17.65          |
| Middle Channel (2440 MHz) |                   |            |                     |               |                |                               |                                    |                   |                |
| 4880.00                   | 43.84             | PK         | 267                 | 1.1           | H              | 6.76                          | 50.60                              | 74                | 23.40          |
| 4880.00                   | 30.18             | Ave.       | 267                 | 1.1           | H              | 6.76                          | 36.94                              | 54                | 17.06          |
| High Channel (2480 MHz)   |                   |            |                     |               |                |                               |                                    |                   |                |
| 2389.22                   | 29.01             | PK         | 239                 | 2.0           | H              | 31.87                         | 60.88                              | 74                | 13.12          |
| 2389.22                   | 15.79             | Ave.       | 239                 | 2.0           | H              | 31.87                         | 47.66                              | 54                | 6.34           |
| 2484.25                   | 29.07             | PK         | 39                  | 1.5           | H              | 32.13                         | 61.20                              | 74                | 12.80          |
| 2484.25                   | 15.85             | Ave.       | 39                  | 1.5           | H              | 32.13                         | 47.98                              | 54                | 6.02           |
| 4960.00                   | 43.75             | PK         | 145                 | 1.3           | H              | 6.80                          | 50.55                              | 74                | 23.45          |
| 4960.00                   | 29.71             | Ave.       | 145                 | 1.3           | H              | 6.80                          | 36.51                              | 54                | 17.49          |

## BLE\_2M

| Frequency<br>(MHz)        | Receiver          |            | Turntable<br>Degree | Rx Antenna    |                | Corrected<br>Factor<br>(dB/m) | Corrected<br>Amplitude<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|---------------------------|-------------------|------------|---------------------|---------------|----------------|-------------------------------|------------------------------------|-------------------|----------------|
|                           | Reading<br>(dBμV) | PK/QP/Ave. |                     | Height<br>(m) | Polar<br>(H/V) |                               |                                    |                   |                |
| Low Channel (2402 MHz)    |                   |            |                     |               |                |                               |                                    |                   |                |
| 2389.08                   | 29.48             | PK         | 225                 | 1.1           | H              | 31.87                         | 61.35                              | 74                | 12.65          |
| 2389.08                   | 15.68             | Ave.       | 225                 | 1.1           | H              | 31.87                         | 47.55                              | 54                | 6.45           |
| 2484.38                   | 29.72             | PK         | 241                 | 1.4           | H              | 32.13                         | 61.85                              | 74                | 12.15          |
| 2484.38                   | 15.59             | Ave.       | 241                 | 1.4           | H              | 32.13                         | 47.72                              | 54                | 6.28           |
| 4804.00                   | 43.75             | PK         | 0                   | 2.1           | H              | 6.28                          | 50.03                              | 74                | 23.97          |
| 4804.00                   | 29.58             | Ave.       | 0                   | 2.1           | H              | 6.28                          | 35.86                              | 54                | 18.14          |
| Middle Channel (2440 MHz) |                   |            |                     |               |                |                               |                                    |                   |                |
| 4880.00                   | 43.51             | PK         | 81                  | 1.3           | H              | 6.76                          | 50.27                              | 74                | 23.73          |
| 4880.00                   | 29.95             | Ave.       | 81                  | 1.3           | H              | 6.76                          | 36.71                              | 54                | 17.29          |
| High Channel (2480 MHz)   |                   |            |                     |               |                |                               |                                    |                   |                |
| 2389.52                   | 29.77             | PK         | 227                 | 1.7           | H              | 31.87                         | 61.64                              | 74                | 12.36          |
| 2389.52                   | 15.58             | Ave.       | 227                 | 1.7           | H              | 31.87                         | 47.45                              | 54                | 6.55           |
| 2484.40                   | 29.29             | PK         | 52                  | 2.0           | H              | 32.13                         | 61.42                              | 74                | 12.58          |
| 2484.40                   | 15.77             | Ave.       | 52                  | 2.0           | H              | 32.13                         | 47.90                              | 54                | 6.10           |
| 4960.00                   | 43.57             | PK         | 277                 | 1.4           | H              | 6.80                          | 50.37                              | 74                | 23.63          |
| 4960.00                   | 29.42             | Ave.       | 277                 | 1.4           | H              | 6.80                          | 36.22                              | 54                | 17.78          |

**Note:**

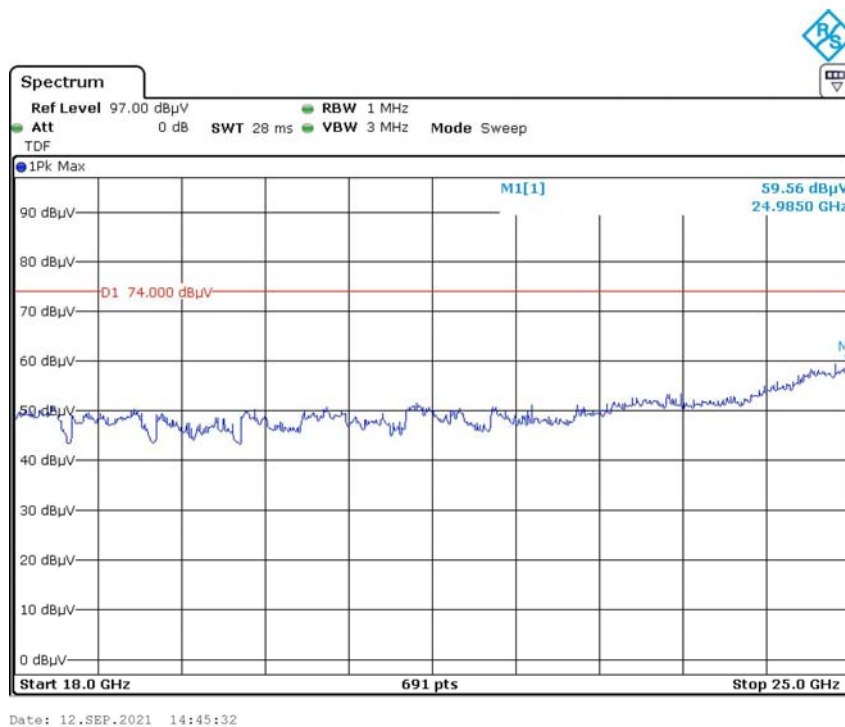
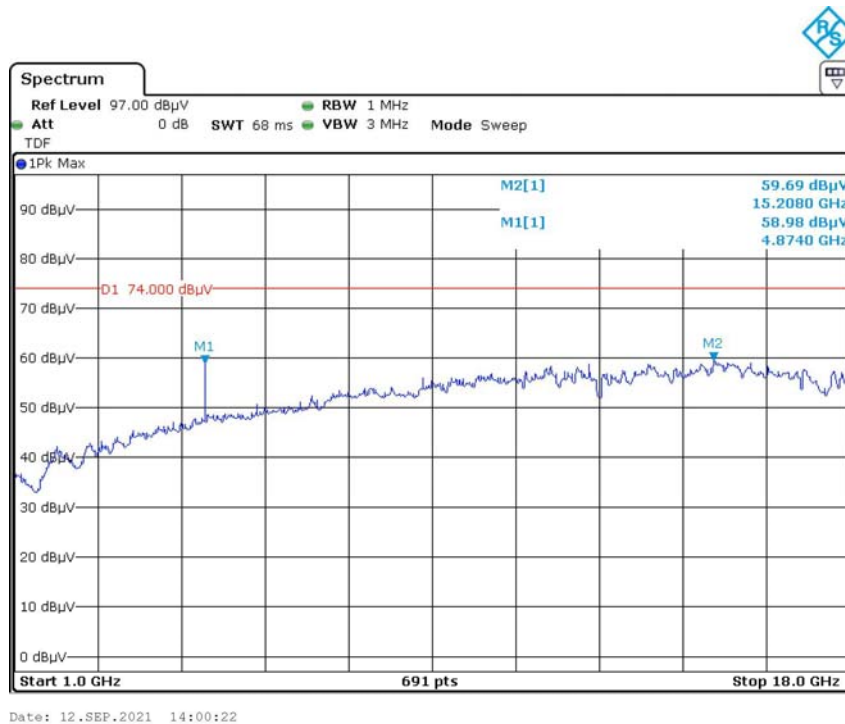
Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

Corrected Amplitude = Corrected Factor + Reading

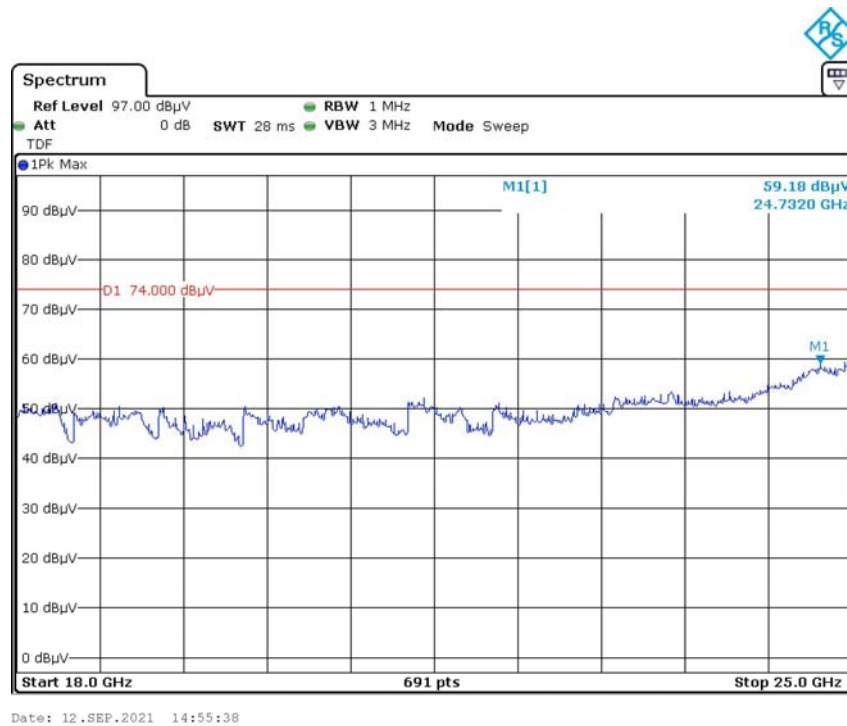
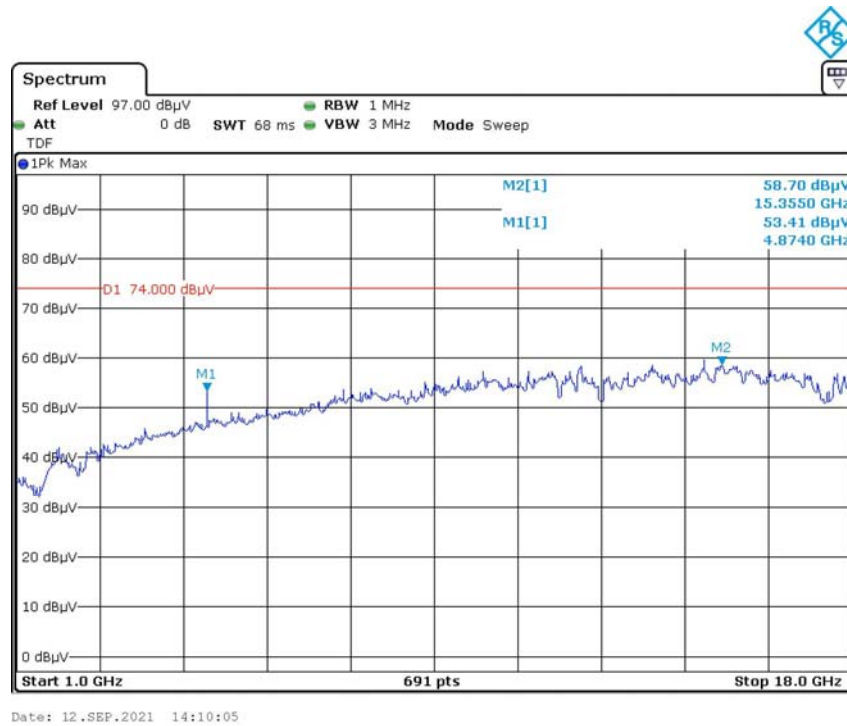
Margin = Limit - Corrected. Amplitude

The other spurious emission which is 20dB to the limit was not recorded.

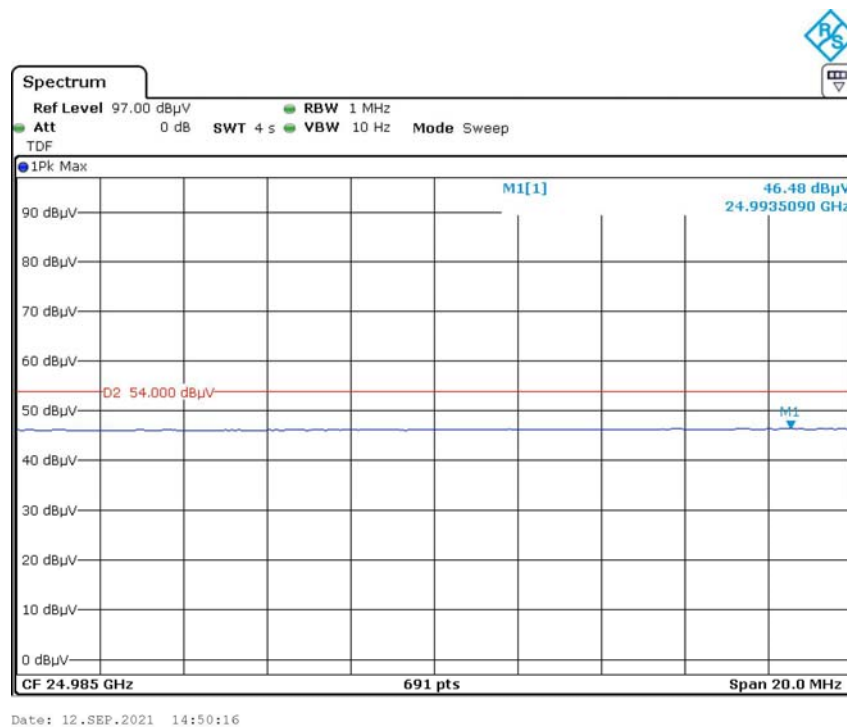
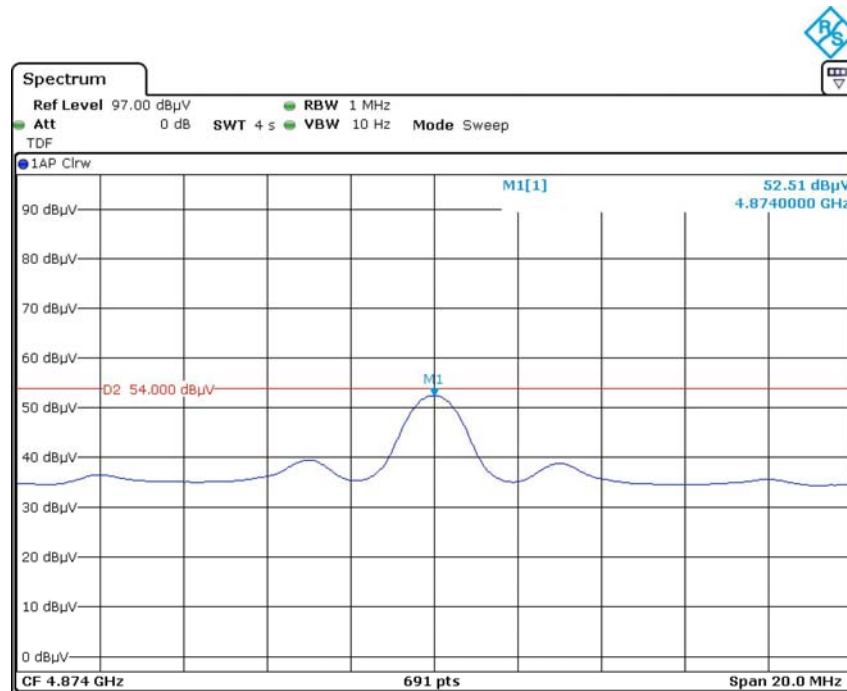
**Pre-scan with 802.11b Mode, Middle channel  
Horizontal**



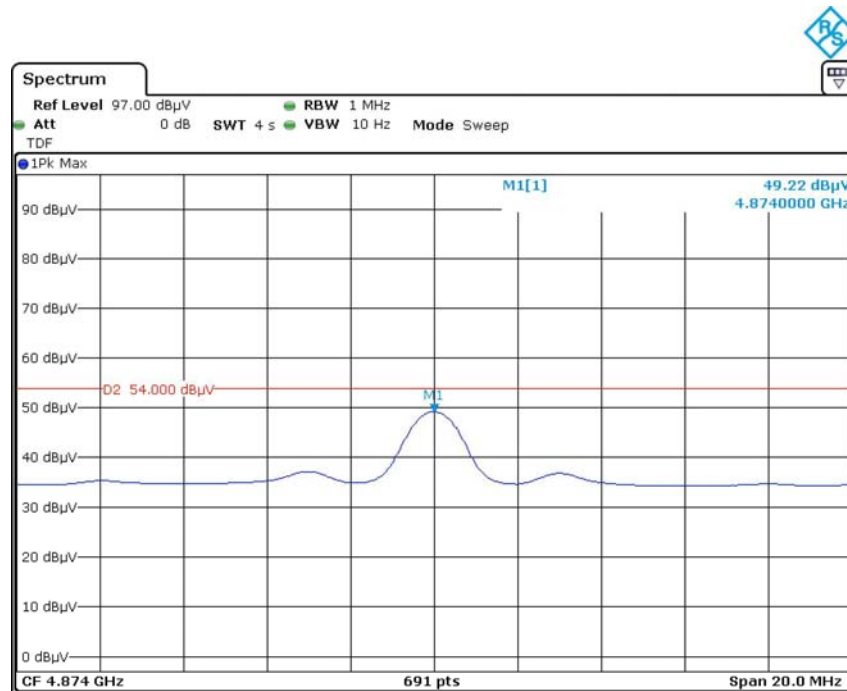
## Vertical



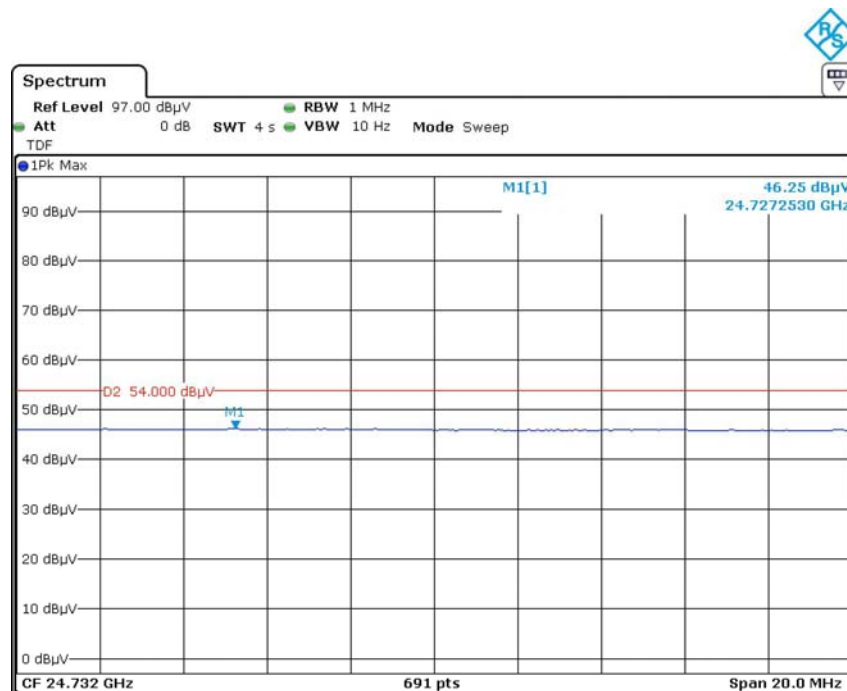
### Average Horizontal



Vertical



Date: 12.SEP.2021 14:15:11



Date: 12.SEP.2021 15:00:35

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