

## FCC PART 15.225

### TEST REPORT

For

#### **Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.**

Building A2, Shangjinwan Headquarters Economic Park, No.2288, Wuzhong Avenue, Wuzhong  
Economic Development Zone, Suzhou Jiangsu, China

**FCC ID: 2A4GZ-C1ANDS1**

|                                                                                                                                                                                                                                                    |                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| <b>Report Type:</b><br>Original Report                                                                                                                                                                                                             | <b>Product Name:</b><br>NAVEE Electric Sharing Bicycle |
| <b>Report Number:</b> <u>RKSA240716001-00B</u>                                                                                                                                                                                                     |                                                        |
| <b>Report Date:</b> <u>2025-08-13</u>                                                                                                                                                                                                              |                                                        |
| <b>Reviewed By:</b> <u>Jenny Yang</u>                                                                                                                                                                                                              | <i>Jenny Yang</i>                                      |
| <b>Approved By:</b> <u>Kyle Xu</u>                                                                                                                                                                                                                 | <i>Kyle Xu</i>                                         |
| <b>Prepared By:</b><br>Bay Area Compliance Laboratories Corp. (Kunshan)<br>No.248 Chenghu Road, Kunshan, Jiangsu Province, China<br>Tel: +86-512-86175000<br>Fax: +86-512-88934268<br><a href="http://www.baclcorp.com.cn">www.baclcorp.com.cn</a> |                                                        |

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REPORT REVISION HISTORY

| Number of Revisions | Report No.        | Version | Issue Date | Description     |
|---------------------|-------------------|---------|------------|-----------------|
| 0                   | RKSA240716001-00B | R1V1    | 2025-08-13 | Initial Release |

## GENERAL INFORMATION

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

|                           |                                                                |
|---------------------------|----------------------------------------------------------------|
| Applicant:                | Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd. |
| Tested Model:             | S1                                                             |
| Series Model:             | C1                                                             |
| Model Difference:         | Model name, wheel hub design, battery pack                     |
| Product Name:             | NAVEE Electric Sharing Bicycle                                 |
| Power Supply:             | DC 42V from adapter or DC 36V from battery                     |
| RF Function:              | NFC                                                            |
| Operating Band/Frequency: | 13.56 MHz                                                      |
| Antenna Type:             | Loop Antenna                                                   |

#### Adapter Information:

Model: FY1694204000

Input: 100-240V, 50-60 Hz, 2.5A

Output: 42V, 4.0A

*Note: After testing with a representative tag and without the tags for all measurement, the one with a representative tag is the worst in this report.*

*All measurement and test data in this report was gathered from production sample serial number:*

*RKSA240716001-1 (Model: S1), RKSA240716001-2 (Model: C1). (Assigned by the BACL. The EUT supplied by the applicant was received on 2024-07-16.)*

### Objective

This Type approval report is prepared for *Brightway Innovation Intelligent Technology (Suzhou) Co., Ltd.* in accordance with Part 2- Subpart J, and Part 15-Subparts A and C of the Federal Communication Commission's rules.

The objective is to determine the Compliance of the EUT with FCC rules, sec 15.203, 15.205, 15.207, 15.209 and 15.225.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2020 + Cor.1-2023, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

**Measurement Uncertainty**

| Item                               |                | Uncertainty |
|------------------------------------|----------------|-------------|
| AC Power Lines Conducted Emissions |                | 3.19 dB     |
| RF conducted test with spectrum    |                | 0.9dB       |
| Radiated emission                  | 9 kHz~150 kHz  | 3.8 dB      |
|                                    | 150 kHz~30 MHz | 3.4 dB      |
|                                    | 30 MHz~1 GHz   | 6.11 dB     |
| Occupied Bandwidth                 |                | 0.5kHz      |
| Temperature                        |                | 1.0°C       |
| Humidity                           |                | 6%          |

**Test Facility**

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu Province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) is accredited in accordance with ISO/IEC 17025:2017 by NVLAP (Lab code: 600338-0), and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No.: CN5055.

## SYSTEM TEST CONFIGURATION

### Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

### EUT Exercise Software

The EUT is tested in the engineering mode.

### Equipment Modifications

No modification on the EUT.

### Support Equipment List and Details

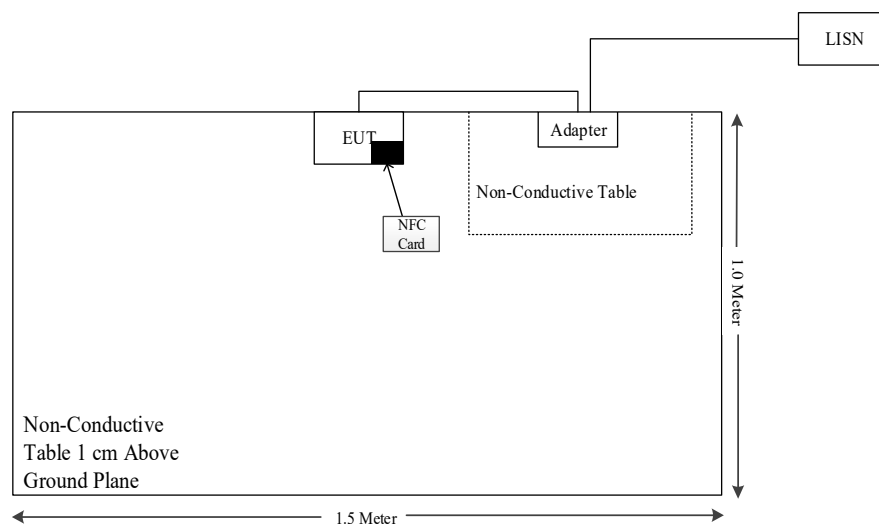
| Manufacturer | Description | Model | Serial Number |
|--------------|-------------|-------|---------------|
| /            | NFC Card    | /     | /             |

### External I/O Cable

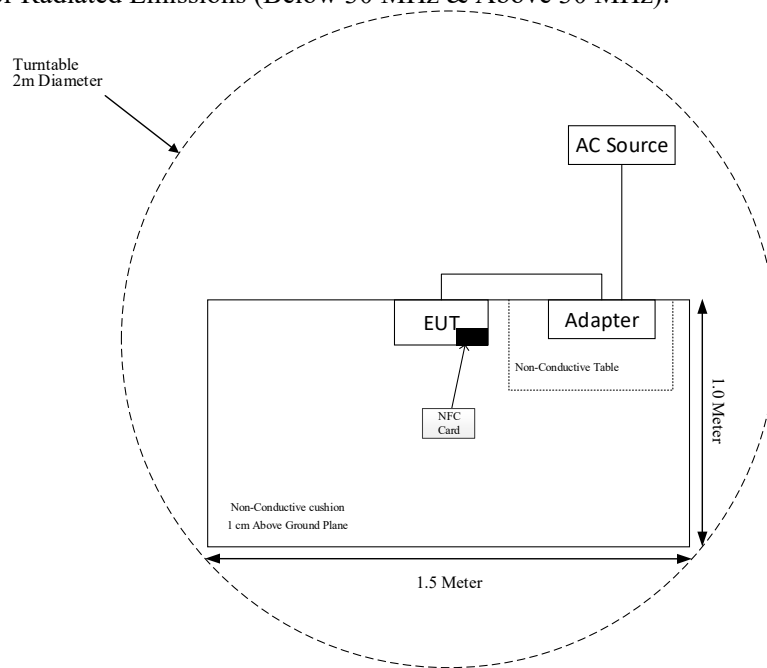
| Cable Description | Length (m) | From Port | To Port        |
|-------------------|------------|-----------|----------------|
| Power Cable 1     | 1.0        | EUT       | Adapter        |
| Power Cable 2     | 1.0        | Adapter   | AC Source/LISN |

### Block Diagram of Test Setup

For Conducted Emissions:



For Radiated Emissions (Below 30 MHz & Above 30 MHz):



**TEST EQUIPMENT LIST**

| Manufacturer                   | Description                    | Model       | Serial Number | Calibration Date | Calibration Due Date |
|--------------------------------|--------------------------------|-------------|---------------|------------------|----------------------|
| Rohde & Schwarz                | EMI Test Receiver              | ESCI        | 100195        | 2024-04-23       | 2025-04-22           |
| Sunol Sciences                 | Hybrid Antenna                 | JB3         | A090314-1     | 2023-11-11       | 2024-11-10           |
| Sonoma Instrument              | Amplifier                      | 310N        | 171205        | 2024-04-23       | 2025-04-22           |
| ETS-LINDGREN                   | Loop Antenna                   | 6512        | 108100        | 2023-11-09       | 2024-11-08           |
| Rohde & Schwarz                | Test Software                  | EMC32       | 100361        | N/A              | N/A                  |
| MICRO-COAX                     | Coaxial Cable                  | Cable-8     | 008           | 2024-04-23       | 2025-04-22           |
| MICRO-COAX                     | Coaxial Cable                  | Cable-9     | 009           | 2024-04-23       | 2025-04-22           |
| MICRO-COAX                     | Coaxial Cable                  | Cable-10    | 010           | 2024-04-23       | 2025-04-22           |
| BACL                           | Temperature & Humidity Chamber | BTH-150     | 30023         | 2024-04-25       | 2025-04-24           |
| EAST                           | Regulated DC Power Supply      | MCH-303D-II | 14070562      | N/A              | N/A                  |
| Narda                          | 6 dB Attenuator                | 771-6       | 10690812-2-1  | 2023-11-11       | 2024-11-10           |
| <b>Conducted Emission Test</b> |                                |             |               |                  |                      |
| Rohde & Schwarz                | EMI Test Receiver              | ESR         | 101746        | 2024-04-23       | 2025-04-22           |
| Rohde & Schwarz                | LISN                           | ENV216      | 101115        | 2024-04-23       | 2025-04-22           |
| Audix                          | Test Software                  | e3          | V9            | N/A              | N/A                  |
| Rohde & Schwarz                | Pulse limiter                  | ESH3-Z2     | 100552        | 2024-04-23       | 2025-04-22           |
| MICRO-COAX                     | Coaxial Cable                  | Cable-15    | 015           | 2024-04-23       | 2025-04-22           |

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

**SUMMARY OF TEST RESULTS**

| FCC Rules               | Description of Test                | Result    |
|-------------------------|------------------------------------|-----------|
| §1.1310 & §2.1091       | MAXIMUM PERMISSIBLE EXPOSURE (MPE) | Compliant |
| §15.203                 | Antenna Requirement                | Compliant |
| §15.207 (a)             | AC Line Conducted Emissions        | Compliant |
| §15.225 §15.209 §15.205 | Radiated Emission Test             | Compliant |
| §15.225(e)              | Frequency Stability                | Compliant |
| §15.215(c)              | 20dB Emission Bandwidth Testing    | Compliant |

## **FCC §1.1310 & §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)**

### **Applicable Standard**

According to subpart §2.1091 and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                                      |                                      |                                          |                                 |
|----------------------------------------------------------------|--------------------------------------|--------------------------------------|------------------------------------------|---------------------------------|
| <b>Frequency Range (MHz)</b>                                   | <b>Electric Field Strength (V/m)</b> | <b>Magnetic Field Strength (A/m)</b> | <b>Power Density (mW/cm<sup>2</sup>)</b> | <b>Averaging Time (minutes)</b> |
| 0.3-1.34                                                       | 614                                  | 1.63                                 | *(100)                                   | 30                              |
| 1.34-30                                                        | 824/f                                | 2.19/f                               | *(180/f <sup>2</sup> )                   | 30                              |
| 30-300                                                         | 27.5                                 | 0.073                                | 0.2                                      | 30                              |
| 300-1500                                                       | /                                    | /                                    | f/1500                                   | 30                              |
| 1500-100,000                                                   | /                                    | /                                    | 1.0                                      | 30                              |

f = frequency in MHz; \* = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

### **Calculated Formulary**

Predication of MPE limit at a given distance

$S = PG/4\pi R^2$  = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

**Calculated Data:**

| Mode                                                                                                                                           |             | Frequency Range (MHz) | Antenna Gain★ |           | Tune-up Output Power★ |        | Evaluation Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | MPE Limit (mW/cm <sup>2</sup> ) | MPE Ratio |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|---------------|-----------|-----------------------|--------|--------------------------|-------------------------------------|---------------------------------|-----------|
|                                                                                                                                                |             |                       | (dBi)         | (numeric) | (dBm)                 | (mW)   |                          |                                     |                                 |           |
| BLE                                                                                                                                            |             | 2402-2480             | 2.54          | 1.79      | 8                     | 6.31   | 20                       | 0.0022                              | 1.0                             | 0.0022    |
| GSM850 (GPRS/EGPRS)                                                                                                                            |             | 824-849               | -3.96         | 4.0       | 27                    | 501.19 | 20                       | 0.0399                              | 0.5493                          | 0.0399    |
| PCS1900 (GPRS/EGPRS)                                                                                                                           |             | 1850-1910             | 1.88          | 1.54      | 24                    | 251.19 | 20                       | 0.0769                              | 1.0                             | 0.0769    |
| LTE NB-IOT                                                                                                                                     | LTE Band 2  | 1850-1910             | 1.88          | 1.54      | 20.5                  | 112.20 | 20                       | 0.0344                              | 0.0428                          | 0.0344    |
|                                                                                                                                                | LTE Band 4  | 1710-1755             | 1.87          | 1.54      | 21.0                  | 125.89 | 20                       | 0.0386                              | 0.0391                          | 0.0386    |
|                                                                                                                                                | LTE Band 5  | 824-849               | -3.96         | 1.54      | 21.0                  | 125.89 | 20                       | 0.0386                              | 0.5493                          | 0.0386    |
|                                                                                                                                                | LTE Band 12 | 699-716               | -2.69         | 0.54      | 21.0                  | 125.89 | 20                       | 0.0135                              | 0.0296                          | 0.0135    |
|                                                                                                                                                | LTE Band 13 | 777-787               | -0.2          | 0.95      | 21.0                  | 125.89 | 20                       | 0.0238                              | 0.518                           | 0.0238    |
| LTE CAT-M                                                                                                                                      | LTE Band 2  | 1850-1910             | 1.88          | 1.54      | 22.5                  | 177.83 | 20                       | 0.0545                              | 0.0679                          | 0.0545    |
|                                                                                                                                                | LTE Band 4  | 1710-1755             | 1.87          | 1.54      | 22.5                  | 177.83 | 20                       | 0.0545                              | 0.0552                          | 0.0545    |
|                                                                                                                                                | LTE Band 5  | 824-849               | -3.96         | 0.04      | 22.5                  | 177.83 | 20                       | 0.0141                              | 0.5493                          | 0.0141    |
|                                                                                                                                                | LTE Band 12 | 699-716               | -2.69         | 0.54      | 22.5                  | 177.83 | 20                       | 0.0191                              | 0.0418                          | 0.0191    |
|                                                                                                                                                | LTE Band 13 | 777-787               | -0.2          | 0.95      | 22.5                  | 177.83 | 20                       | 0.0336                              | 0.518                           | 0.036     |
| NFC                                                                                                                                            |             | 13.56                 | 0.00          | 1.00      | -14.5                 | 0.04   | 20                       | <0.0001                             | 0.98                            | <0.0001   |
| NFC field strength is 80.43 dBμV/m = -14.77 dBm (0.04mW) EIRP. That equal to antenna gain is 0 dBi and used the EIRP value as conducted power. |             |                       |               |           |                       |        |                          |                                     |                                 |           |

1. The EUT Contains Transmitter FCC ID: 2A4GZ-NABE5 (Grant on: 07/18/2024).

2. Note: E[dBμV/m] = EIRP[dBm] + 95.2 for d = 3 m.

BLE, GSM/LTE and NFC can transmit simultaneously, as below:

$$\sum_i \frac{S_i}{S_{Limit,i}} = 0.0022 + 0.0769 + 0.0001 = 0.0792 < 1.0$$

3. The device meet FCC MPE at 20 cm distance.

**Result: Compliant.**

## **FCC§15.203 - ANTENNA REQUIREMENT**

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### **Applicable Standard**

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.

### **Antenna Connected Construction**

The EUT has a Loop antenna for 13.56 MHz, the antenna was permanently attached, fulfill the requirement of this section, please refer to the EUT photos.

**Result:** Compliant.

### Applicable Standard

## Test System Setup



**Test Procedure**

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

If the maximum peak value of the emissions is below the average limit, the QP value and average value measurement will not need to be performed and only record the maximum peak measured value to meet the requirements.

**Level & Over Limit Calculation**

The Level is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

$$\begin{aligned}\text{Factor (dB)} &= \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)} \\ \text{Level (dB}\mu\text{V)} &= \text{Read level (dB}\mu\text{V)} + \text{Factor (dB)}\end{aligned}$$

The “**Over Limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit of 7 dB means the emission is 7 dB above the limit. The equation for Over Limit calculation is as follows:

$$\text{Over Limit (dB)} = \text{Level (dB}\mu\text{V)} - \text{Limit (dB}\mu\text{V)}$$

**Test Results Summary**

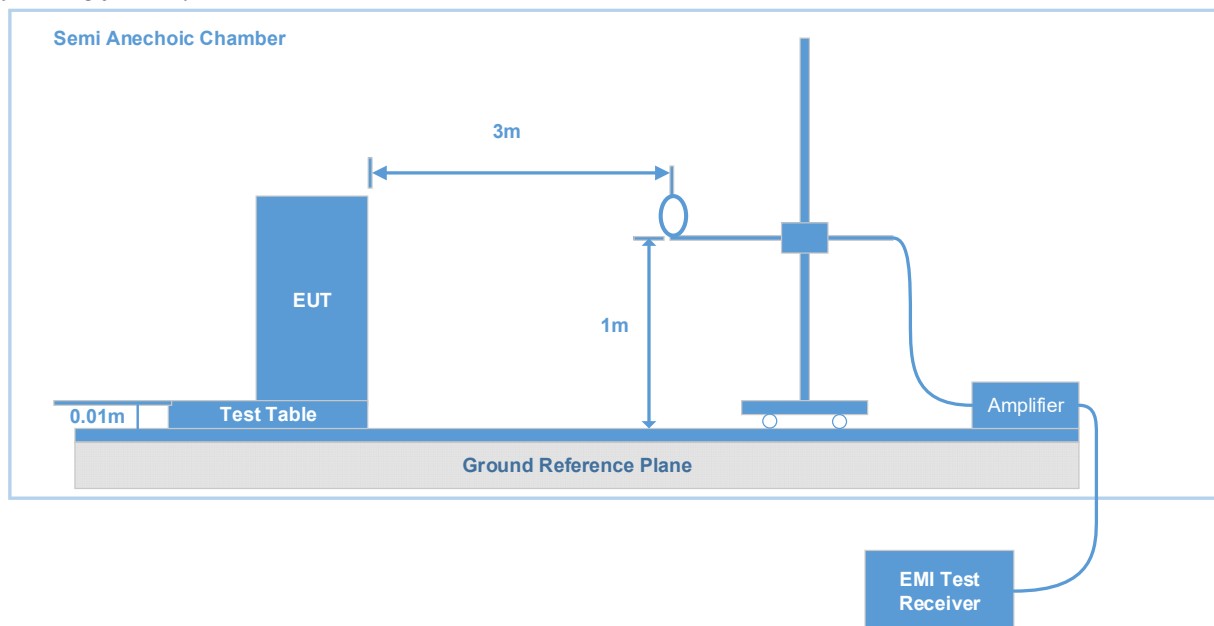
According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

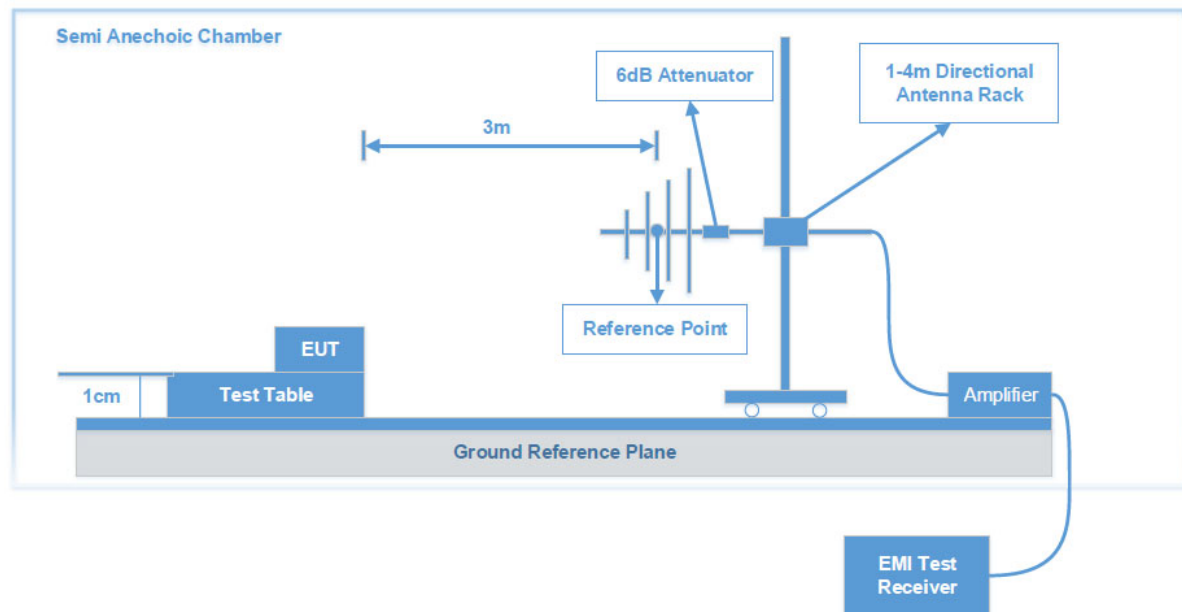
**Test Data:** See Appendix

**FCC§15.225, §15.205 & §15.209 - RADIATED EMISSIONS TEST****Applicable Standard**

As per FCC Part 15.225

- (a) The field strength of any emissions within the band 13.553–13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410–13.553 MHz and 13.567–13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110–13.410 MHz and 13.710–14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110–14.010 MHz band shall not exceed the general radiated emission limits in §15.209.

**Test System Setup****9 kHz-30 MHz:**

**30 MHz- 1 GHz:**

The radiated emission tests were performed in the 3-meter chamber a test site, using the setup accordance with the ANSI C63.10-2020 + Cor.1-2023. The specification used was the FCC Part Subpart C limits.

The spacing between the peripherals was 10 cm.

**EMI Test Receiver Setup**

According to FCC Rules, 47 CFR 15.33, the EUT emissions were investigated up to 1000 MHz.

During the radiated emission test, the EMI test Receiver was set with the following configurations:

| Frequency Range   | RBW     | VBW     | IF B/W  | Measurement |
|-------------------|---------|---------|---------|-------------|
| 9 kHz - 150 kHz   | 200 Hz  | 1 kHz   | 200 Hz  | QP/Average  |
| 150 kHz - 30 MHz  | 9 kHz   | 30 kHz  | 9 kHz   | QP/ Average |
| 30 MHz - 1000 MHz | 100 kHz | 300 kHz | /       | Peak        |
|                   | /       | /       | 120 kHz | QP          |

For 9 kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

**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:

Corrected Amplitude (dBμV/m) = Meter Reading (dBμV) + Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

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:

Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Note: The QuasiPeak (dBμV/m), MaxPeak (dBμV/m), Average (dBμV/m) which shown in the data table are all Corrected Amplitude.

**Test Results Summary**

According to the data in the following table, the EUT complied with the FCC Part 15.209, 15.205, 15.225.

**Test Data: See Appendix**

## **FCC§15.225(e) - FREQUENCY STABILITY**

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### **Applicable Standard**

The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.01\%$  of the operating frequency over a temperature variation of  $-20$  degrees to  $+50$  degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

### **Test Procedure**

a) Supply the EUT with a nominal ac voltage or install a new or fully charged battery in the EUT. If possible, a dummy load shall be connected to the EUT because an antenna near the metallic walls of an environmental test chamber could affect the output frequency of the EUT. If the EUT is equipped with a permanently attached, adjustable-length antenna, then the EUT shall be placed in the center of the chamber with the antenna adjusted to the shortest length possible. Turn ON the EUT and tune it to one of the number of frequencies shown in 5.6.

b) Couple the unlicensed wireless device output to the measuring instrument by connecting an antenna to the measuring instrument with a suitable length of coaxial cable and placing the measuring antenna near the EUT (e.g., 15 cm away), or by connecting a dummy load to the measuring instrument, through an attenuator if necessary.

NOTE-an instrument that has an adequate level of accuracy as specified by the procuring or regulatory agency is the recommended measuring instrument.

c) Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).

d) Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.

e) Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.

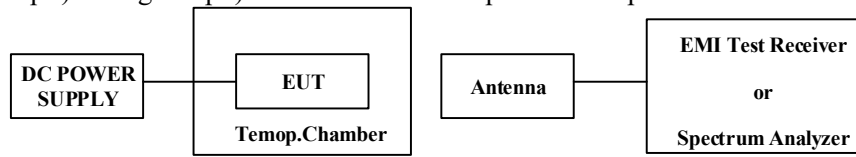
f) While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.

g) Measure the frequency at each of frequencies specified in 5.6.

h) Switch OFF the EUT but do not switch OFF the oscillator heater.

i) Lower the chamber temperature by not more than  $10^{\circ}\text{C}$ , and allow the temperature inside the chamber to stabilize.

j) Repeat step f) through step i) down to the lowest specified temperature.



**Test Data: See Appendix**

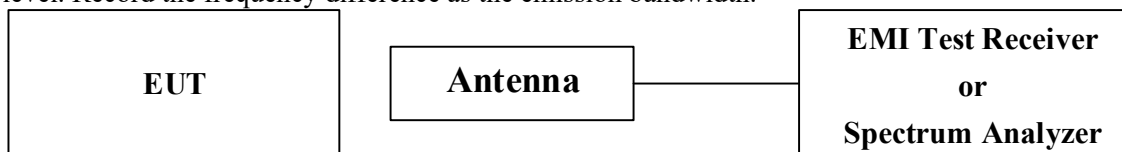
## §15.215(c) - 20dB EMISSION BANDWIDTH TESTING

### Requirement

Per 15.215 (c) Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

### Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.



**Test Data: See Appendix**

## **EUT PHOTOGRAPHS**

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Please refer to the attachment EXHIBIT A-EUT EXTERNAL PHOTOGRAPHS and EXHIBIT B-EUT INTERNAL PHOTOGRAPHS.

## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment EXHIBIT C-TEST SETUP PHOTOGRAPHS.

APPENDIX - TEST DATA

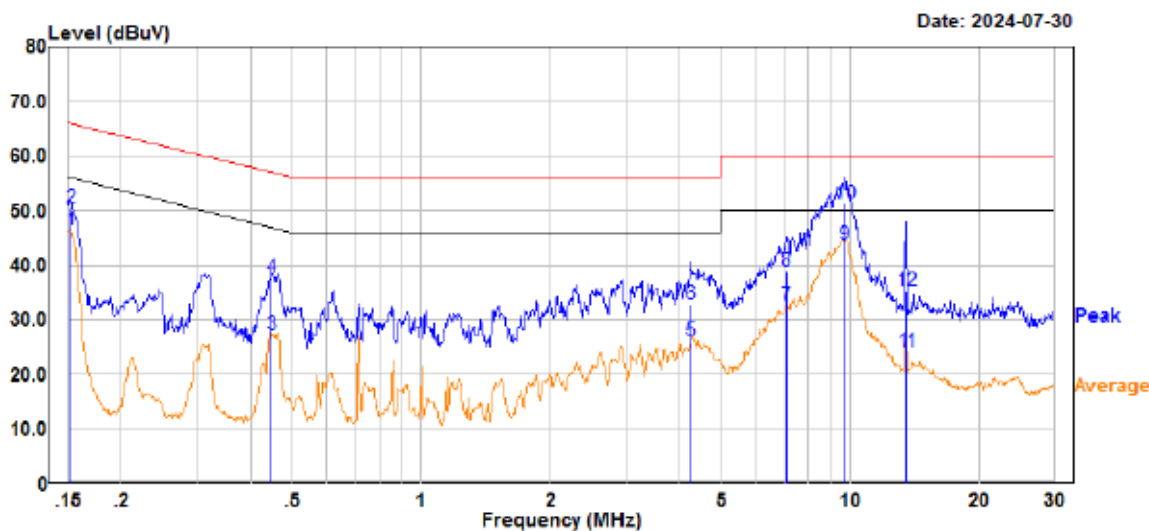
Environmental Conditions & Test Information

| Test Item:         | AC LINE CONDUCTED EMISSIONS | RADIATED EMISSIONS |                | FREQUENCY STABILITY | 20dB EMISSION BANDWIDTH TESTING |
|--------------------|-----------------------------|--------------------|----------------|---------------------|---------------------------------|
|                    |                             | 9 kHz - 30 MHz     | 30 MHz – 1 GHz |                     |                                 |
| Test Date:         | 2024-07-30                  | 2024-07-26         | 2024-07-26     | 2024-07-26          | 2024-07-26                      |
| Temperature:       | 27.5 °C                     | 26.3 °C            | 26.3 °C        | 26.3 °C             | 26.3 °C                         |
| Relative Humidity: | 55 %                        | 66 %               | 66 %           | 66 %                | 66 %                            |
| ATM Pressure:      | 100.8 kPa                   | 99.9 kPa           | 99.9 kPa       | 99.9 kPa            | 99.9 kPa                        |
| Test Result:       | Pass                        | Pass               | Pass           | Pass                | Pass                            |
| Test Engineer:     | Leah Li                     | Grace Luo          | Grace Luo      | Grace Luo           | Grace Luo                       |

**AC LINE CONDUCTED EMISSIONS***EUT operation mode: Transmitting*

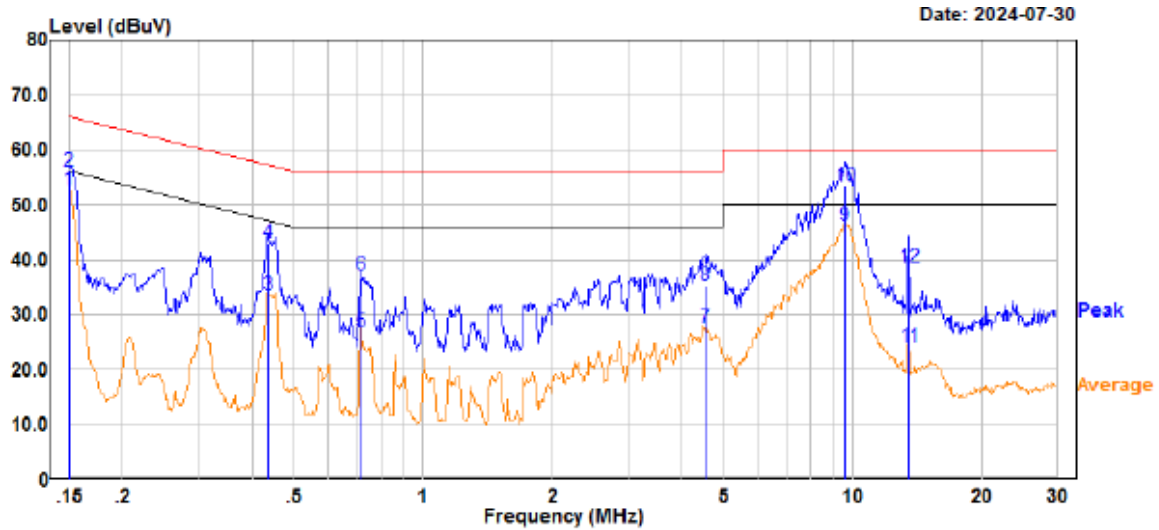
Model: S1

AC 120V/60 Hz, Line



Site : CE  
Condition : limit\FCC PART 15.207  
: DET:Peak  
Project No. : RKSA240716001  
Model : S1  
Phase : L  
Voltage : 120V/60Hz  
Mode : NFC  
Test Equipment : ENV216,ESR  
Temperature : 27.5℃  
Humidity : 55%  
Atmospheric pressure: 100.8kPa  
Test Engineer : Leah Li

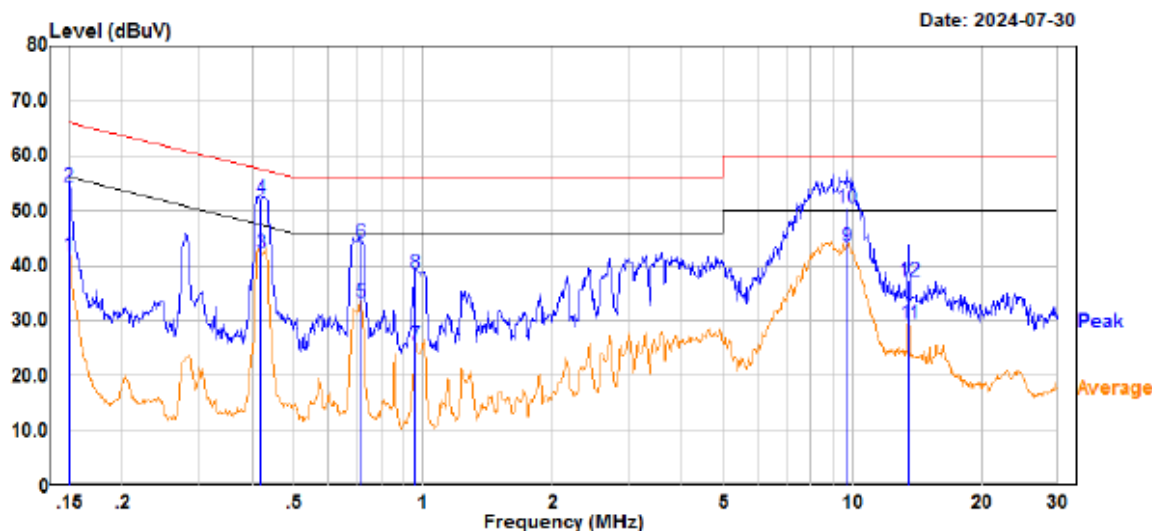
|    |        | Read  |        |       | Limit | Over   |         |
|----|--------|-------|--------|-------|-------|--------|---------|
|    | Freq   | Level | Factor | Level | Line  | Limit  | Remark  |
|    | MHz    | dBuV  | dB     | dBuV  | dBuV  | dB     |         |
| 1  | 0.152  | 26.30 | 20.12  | 46.42 | 55.88 | -9.46  | Average |
| 2  | 0.152  | 30.40 | 20.12  | 50.52 | 65.88 | -15.36 | QP      |
| 3  | 0.447  | 7.20  | 20.23  | 27.43 | 46.93 | -19.50 | Average |
| 4  | 0.447  | 17.50 | 20.23  | 37.73 | 56.93 | -19.20 | QP      |
| 5  | 4.252  | 5.90  | 20.27  | 26.17 | 46.00 | -19.83 | Average |
| 6  | 4.252  | 12.50 | 20.27  | 32.77 | 56.00 | -23.23 | QP      |
| 7  | 7.105  | 12.40 | 20.17  | 32.57 | 50.00 | -17.43 | Average |
| 8  | 7.105  | 18.80 | 20.17  | 38.97 | 60.00 | -21.03 | QP      |
| 9  | 9.725  | 23.80 | 20.02  | 43.82 | 50.00 | -6.18  | Average |
| 10 | 9.725  | 31.30 | 20.02  | 51.32 | 60.00 | -8.68  | QP      |
| 11 | 13.514 | 4.50  | 19.78  | 24.28 | 50.00 | -25.72 | Average |
| 12 | 13.514 | 15.50 | 19.78  | 35.28 | 60.00 | -24.72 | QP      |

**AC 120V/60 Hz, Neutral**

Site : CE  
 Condition : limit\FCC PART 15.207  
 : DET:Peak  
 Project No. : RKSA240716001  
 Model : S1  
 Phase : N  
 Voltage : 120V/60Hz  
 Mode : NFC  
 Test Equipment : ENV216,ESR  
 Temperature : 27.5°C  
 Humidity : 55%  
 Atmospheric pressure: 100.8kPa  
 Test Engineer : Leah Li

|    |        | Read  |        | Limit | Over  |                |
|----|--------|-------|--------|-------|-------|----------------|
|    | Freq   | Level | Factor | Level | Line  | Limit Remark   |
|    | MHz    | dBuV  | dB     | dBuV  | dBuV  | dB             |
| 1  | 0.150  | 32.50 | 20.12  | 52.62 | 56.00 | -3.38 Average  |
| 2  | 0.150  | 36.00 | 20.12  | 56.12 | 66.00 | -9.88 QP       |
| 3  | 0.436  | 13.29 | 20.23  | 33.52 | 47.14 | -13.62 Average |
| 4  | 0.436  | 22.69 | 20.23  | 42.92 | 57.14 | -14.22 QP      |
| 5  | 0.717  | 6.90  | 20.05  | 26.95 | 46.00 | -19.05 Average |
| 6  | 0.717  | 17.30 | 20.05  | 37.35 | 56.00 | -18.65 QP      |
| 7  | 4.536  | 7.40  | 20.28  | 27.68 | 46.00 | -18.32 Average |
| 8  | 4.536  | 14.90 | 20.28  | 35.18 | 56.00 | -20.82 QP      |
| 9  | 9.581  | 26.20 | 20.03  | 46.23 | 50.00 | -3.77 Average  |
| 10 | 9.581  | 33.30 | 20.03  | 53.33 | 60.00 | -6.67 QP       |
| 11 | 13.514 | 4.50  | 19.78  | 24.28 | 50.00 | -25.72 Average |
| 12 | 13.514 | 19.00 | 19.78  | 38.78 | 60.00 | -21.22 QP      |

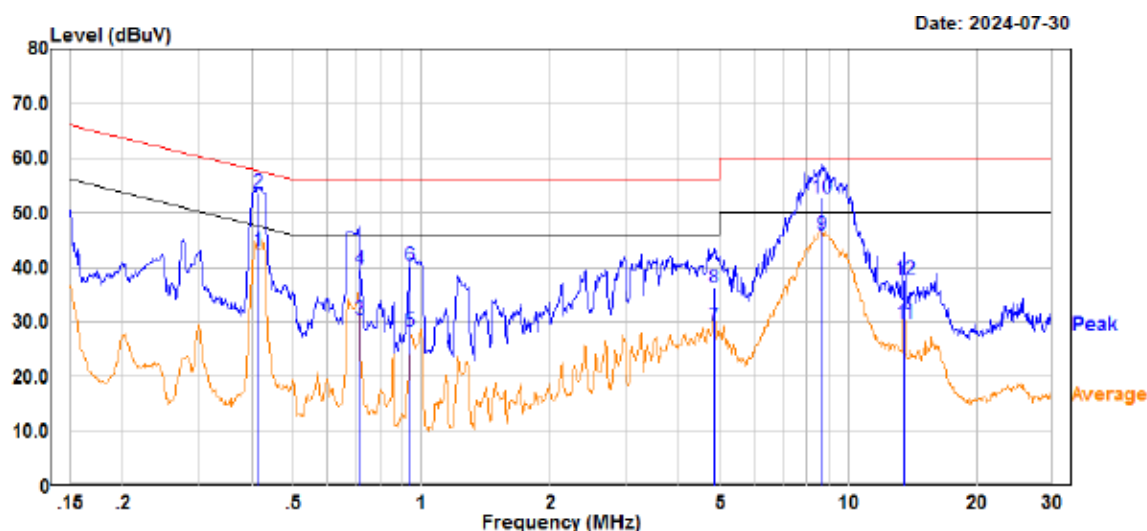
Model: C1  
AC 120V/60 Hz, Line



Site : CE  
Condition : limit\FCC PART 15.207  
Project No. : RKSA240716001  
Model : C1  
Phase : L  
Voltage : 120V/60Hz  
Mode : NFC  
Test Equipment : ENV216,ESR  
Temperature : 27.5°C  
Humidity : 55%  
Atmospheric pressure: 100.8kPa  
Test Engineer : Leah Li

|    |        | Read  |        |       | Limit | Over   |         |
|----|--------|-------|--------|-------|-------|--------|---------|
|    | Freq   | Level | Factor | Level | Line  | Limit  | Remark  |
|    | MHz    | dBuV  | dB     | dBuV  | dBuV  | dB     |         |
| 1  | 0.150  | 21.60 | 20.12  | 41.72 | 56.00 | -14.28 | Average |
| 2  | 0.150  | 34.20 | 20.12  | 54.32 | 66.00 | -11.68 | QP      |
| 3  | 0.419  | 22.10 | 20.21  | 42.31 | 47.47 | -5.16  | Average |
| 4  | 0.419  | 31.90 | 20.21  | 52.11 | 57.47 | -5.36  | QP      |
| 5  | 0.714  | 13.40 | 20.05  | 33.45 | 46.00 | -12.55 | Average |
| 6  | 0.714  | 24.30 | 20.05  | 44.35 | 56.00 | -11.65 | QP      |
| 7  | 0.958  | 5.90  | 19.76  | 25.66 | 46.00 | -20.34 | Average |
| 8  | 0.958  | 18.80 | 19.76  | 38.56 | 56.00 | -17.44 | QP      |
| 9  | 9.677  | 23.60 | 20.03  | 43.63 | 50.00 | -6.37  | Average |
| 10 | 9.677  | 30.50 | 20.03  | 50.53 | 60.00 | -9.47  | QP      |
| 11 | 13.514 | 9.60  | 19.78  | 29.38 | 50.00 | -20.62 | Average |
| 12 | 13.514 | 17.50 | 19.78  | 37.28 | 60.00 | -22.72 | QP      |

## AC 120V/60 Hz, Neutral



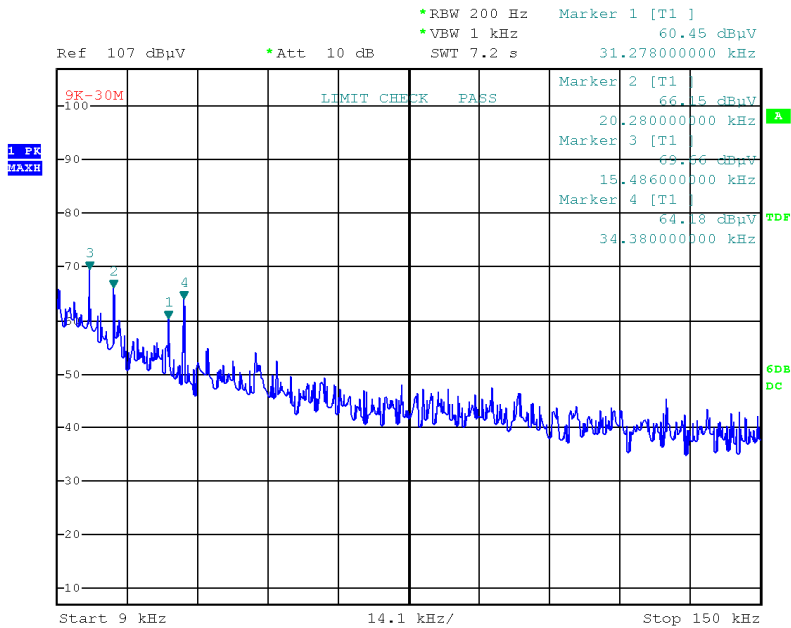
Site : CE  
Condition : limit\FCC PART 15.207  
DET:Peak  
Project No. : RKSA240716001  
Model : C1  
Phase : N  
Voltage : 120V/60Hz  
Mode : NFC  
Test Equipment : ENV216,ESR  
Temperature : 27.5°C  
Humidity : 55%  
Atmospheric pressure: 100.8kPa  
Test Engineer : Leah Li

|    | Freq   | Read Level | Factor | Level | Limit Line | Over Limit | Remark  |
|----|--------|------------|--------|-------|------------|------------|---------|
|    | MHz    | dBuV       | dB     | dBuV  | dBuV       | dB         |         |
| 1  | 0.413  | 22.90      | 20.21  | 43.11 | 47.60      | -4.49      | Average |
| 2  | 0.413  | 33.50      | 20.21  | 53.71 | 57.60      | -3.89      | QP      |
| 3  | 0.714  | 10.40      | 20.05  | 30.45 | 46.00      | -15.55     | Average |
| 4  | 0.714  | 19.70      | 20.05  | 39.75 | 56.00      | -16.25     | QP      |
| 5  | 0.939  | 8.60       | 19.78  | 28.38 | 46.00      | -17.62     | Average |
| 6  | 0.939  | 20.50      | 19.78  | 40.28 | 56.00      | -15.72     | QP      |
| 7  | 4.840  | 9.00       | 20.29  | 29.29 | 46.00      | -16.71     | Average |
| 8  | 4.840  | 16.00      | 20.29  | 36.29 | 56.00      | -19.71     | QP      |
| 9  | 8.629  | 25.90      | 20.08  | 45.98 | 50.00      | -4.02      | Average |
| 10 | 8.629  | 32.50      | 20.08  | 52.58 | 60.00      | -7.42      | QP      |
| 11 | 13.514 | 9.90       | 19.78  | 29.68 | 50.00      | -20.32     | Average |
| 12 | 13.514 | 18.00      | 19.78  | 37.78 | 60.00      | -22.22     | QP      |

RADIATED EMISSIONS TEST

Test mode: Transmitting

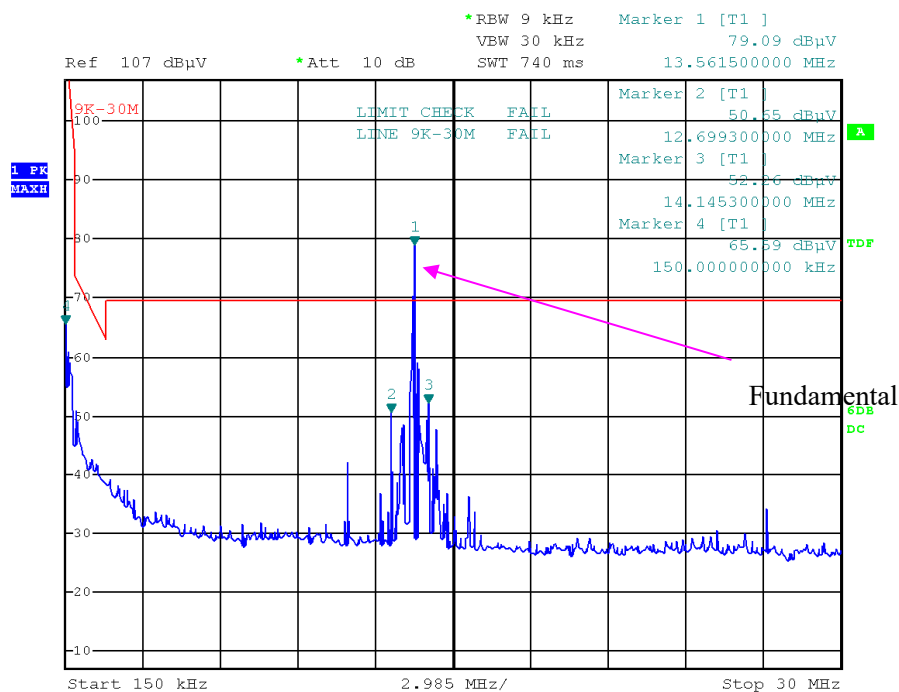
Model: S1  
For Ground-parallel  
1) 9 kHz~150 kHz:



Project No.RKSA240716001      Tester:Grace Luo  
Date: 26.JUL.2024    11:54:36

| Frequency<br>(kHz) | Corrected<br>Amplitude<br>(dBμV/m) @3m | Detector<br>PK/QP/Ave. | Corrected<br>Factor<br>(dB/m) | Limit<br>(dBμV/m)<br>@3m | Margin<br>(dB) |
|--------------------|----------------------------------------|------------------------|-------------------------------|--------------------------|----------------|
| 20.28              | 66.15                                  | PK                     | 49.92                         | 121.46                   | 55.31          |
| 15.49              | 69.66                                  | PK                     | 52.87                         | 123.80                   | 54.14          |
| 31.28              | 60.45                                  | PK                     | 46.87                         | 117.70                   | 57.25          |
| 34.38              | 64.18                                  | PK                     | 46.06                         | 116.88                   | 52.70          |

2) 150 kHz~30 MHz:



Project No.RKSA240716001

Tester:Grace Luo

Date: 26.JUL.2024 11:36:04

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 0.15            | 65.69                            | PK                  | 50.90                   | 104.08             | 38.39       |
| 12.70           | 50.65                            | PK                  | 6.18                    | 69.54              | 18.89       |
| 14.15           | 52.26                            | PK                  | 6.07                    | 69.54              | 17.28       |

Ref 107 dBuV      \*Att 10 dB      RBW 9 kHz      VBW 30 kHz      SWT 25 ms      Marker 4 [T1]      60.71 dBuV      13.77390000 MHz

LIMIT CHECK PASS

Marker 1 [T1]      78.80 dBuV      13.55970000 MHz

Marker 2 [T1]      66.73 dBuV      13.45350000 MHz

Marker 3 [T1]      63.19 dBuV      13.66770000 MHz

15.225

2      3      4

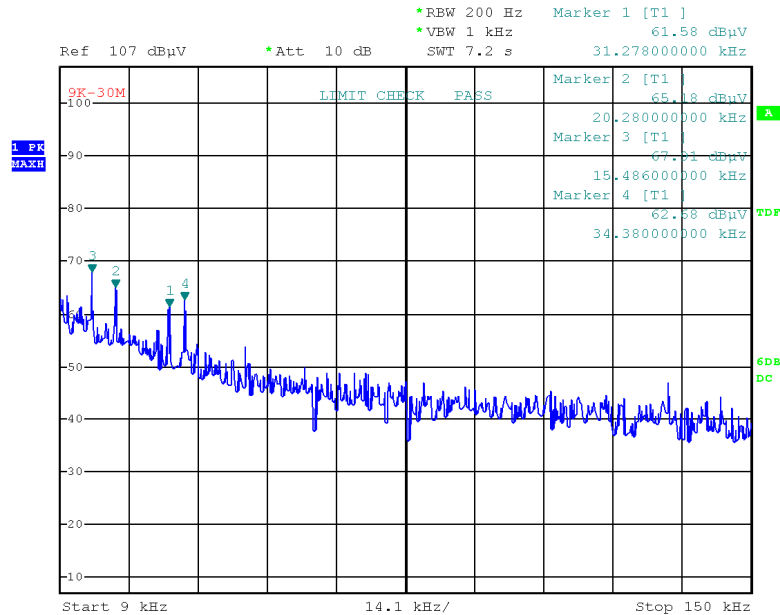
6dB      0C

Center 13.56 MHz      90 kHz/      Span 900 kHz

Tester:Grace Luo

| Frequency<br>(MHz) | Corrected<br>Amplitude<br>(dBμV/m)<br>@3m | Detector<br>PK/QP/Ave. | Corrected<br>Factor<br>(dB/m) | Limit<br>(dBμV/m)<br>@3m | Margin<br>(dB) |
|--------------------|-------------------------------------------|------------------------|-------------------------------|--------------------------|----------------|
| 13.56              | 78.90                                     | PK                     | 6.12                          | 124.00                   | 45.10          |
| 13.45              | 60.73                                     | PK                     | 6.12                          | 90.50                    | 29.77          |
| 13.77              | 60.71                                     | PK                     | 6.10                          | 80.50                    | 19.79          |
| 13.67              | 63.29                                     | PK                     | 6.11                          | 90.50                    | 27.21          |

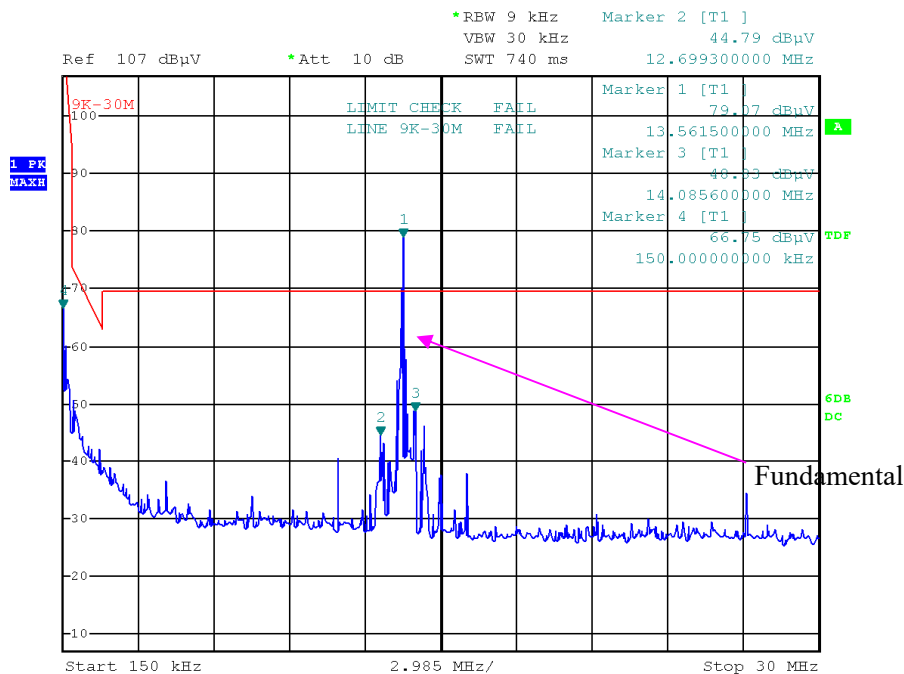
For Parallel  
1) 9 kHz~150 kHz:



Project No.RKSA240716001      Tester:Grace Luo  
Date: 26.JUL.2024 11:50:57

| Frequency<br>(kHz) | Corrected<br>Amplitude<br>(dBμV/m)<br>@3m | Detector<br>PK/QP/Ave. | Corrected<br>Factor<br>(dB/m) | Limit<br>(dBμV/m)<br>@3m | Margin<br>(dB) |
|--------------------|-------------------------------------------|------------------------|-------------------------------|--------------------------|----------------|
| 31.28              | 61.58                                     | PK                     | 46.87                         | 117.70                   | 56.12          |
| 20.28              | 65.18                                     | PK                     | 47.13                         | 121.46                   | 56.28          |
| 15.49              | 67.91                                     | PK                     | 52.87                         | 123.80                   | 55.89          |
| 34.38              | 62.68                                     | PK                     | 46.06                         | 116.88                   | 54.20          |

2) 150 kHz~30 MHz:



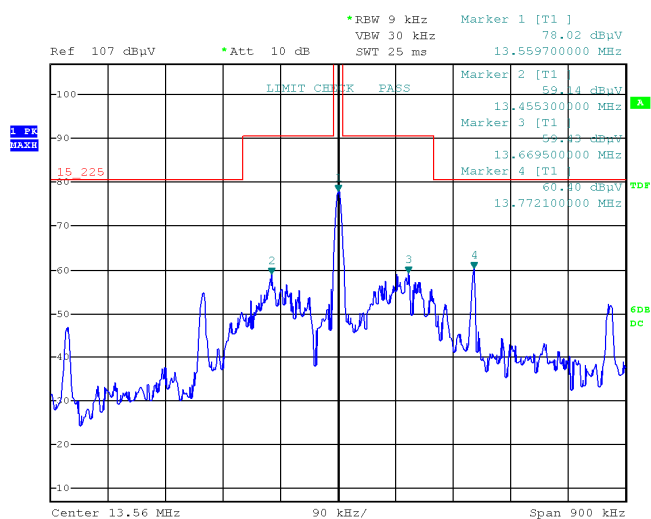
Project No.RKSA240716001

Tester:Grace Luo

Date: 26.JUL.2024 11:39:18

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 12.70           | 44.79                            | PK                  | 6.18                    | 69.54              | 24.75       |
| 0.15            | 66.75                            | PK                  | 50.90                   | 104.08             | 37.33       |
| 14.09           | 48.83                            | PK                  | 6.07                    | 69.54              | 20.71       |

3) 13.11 MHz~14.01 MHz:



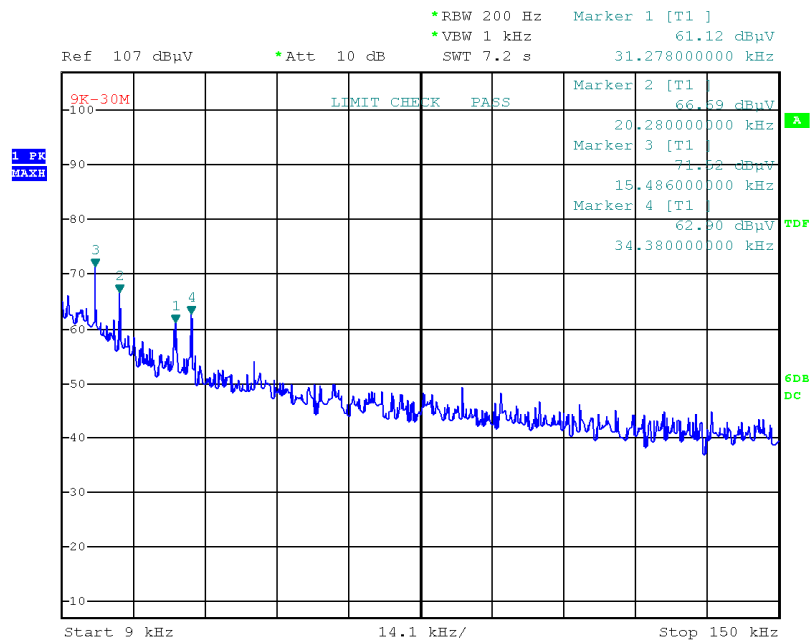
Project No.RKSA240716001

Tester:Grace Luo

Date: 26.JUL.2024 12:02:22

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 13.56           | 78.02                            | PK                  | 6.12                    | 124.00             | 45.98       |
| 13.46           | 59.14                            | PK                  | 6.12                    | 90.50              | 31.36       |
| 13.67           | 59.43                            | PK                  | 6.11                    | 90.50              | 31.07       |
| 13.77           | 60.40                            | PK                  | 6.10                    | 80.50              | 20.10       |

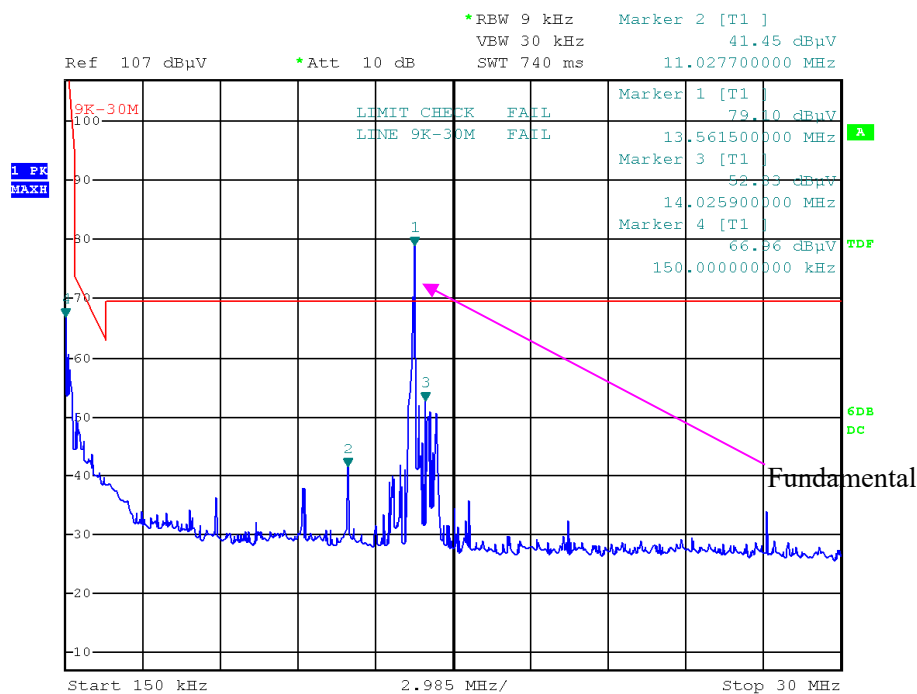
For Perpendicular  
1) 9 kHz~150 kHz:



Project No.RKSA240716001    Tester:Grace Luo  
Date: 26.JUL.2024    11:47:15

| Frequency (kHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 20.28           | 66.69                            | PK                  | 49.92                   | 121.46             | 54.77       |
| 15.49           | 71.52                            | PK                  | 52.87                   | 123.80             | 52.28       |
| 31.28           | 61.12                            | PK                  | 46.87                   | 117.70             | 56.58       |
| 34.38           | 62.90                            | PK                  | 46.06                   | 116.88             | 53.98       |

## 2) 150 kHz~30 MHz:



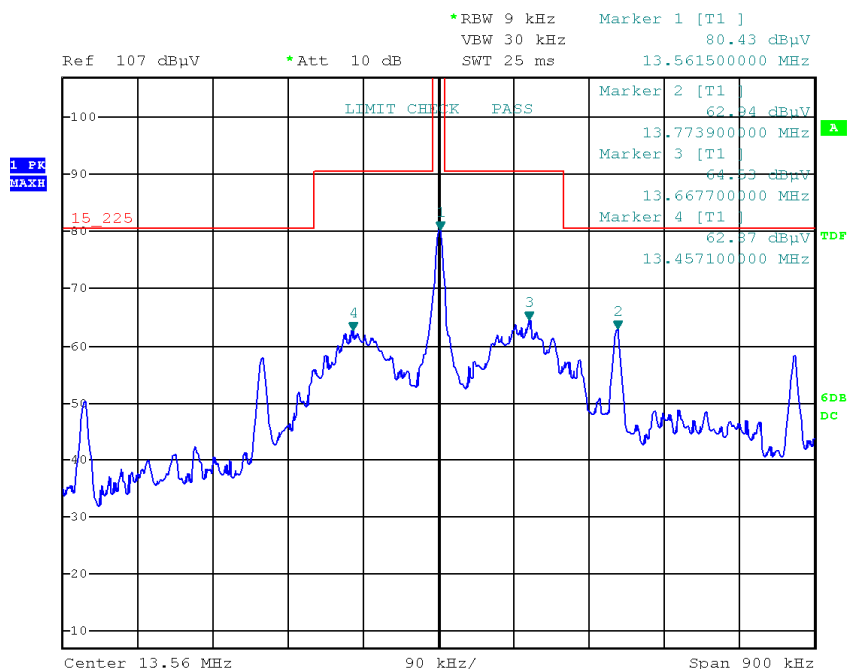
Project No. RKSA240716001

Tester: Grace Luo

Date: 26.JUL.2024 11:32:42

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 11.03           | 41.45                            | PK                  | 6.32                    | 69.54              | 28.09       |
| 0.15            | 66.96                            | PK                  | 50.90                   | 104.08             | 37.12       |
| 14.03           | 52.83                            | PK                  | 6.08                    | 69.54              | 16.71       |

3) 13.11 MHz~14.01 MHz:



Project No.RKSA240716001

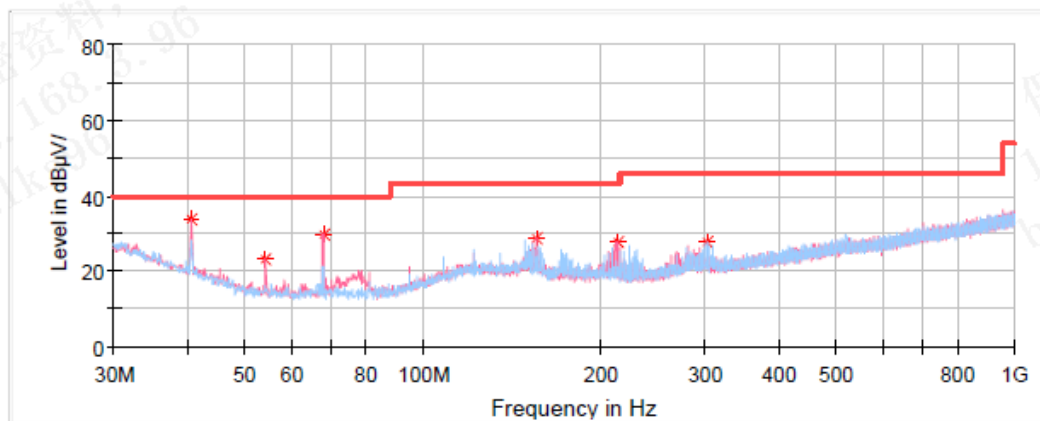
Tester:Grace Luo

Date: 26.JUL.2024 11:25:44

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 13.56           | 80.43                            | PK                  | 6.12                    | 124.00             | 43.57       |
| 13.77           | 62.94                            | PK                  | 6.10                    | 80.50              | 17.56       |
| 13.67           | 64.53                            | PK                  | 6.11                    | 90.50              | 25.97       |
| 13.46           | 62.87                            | PK                  | 6.12                    | 90.50              | 27.63       |

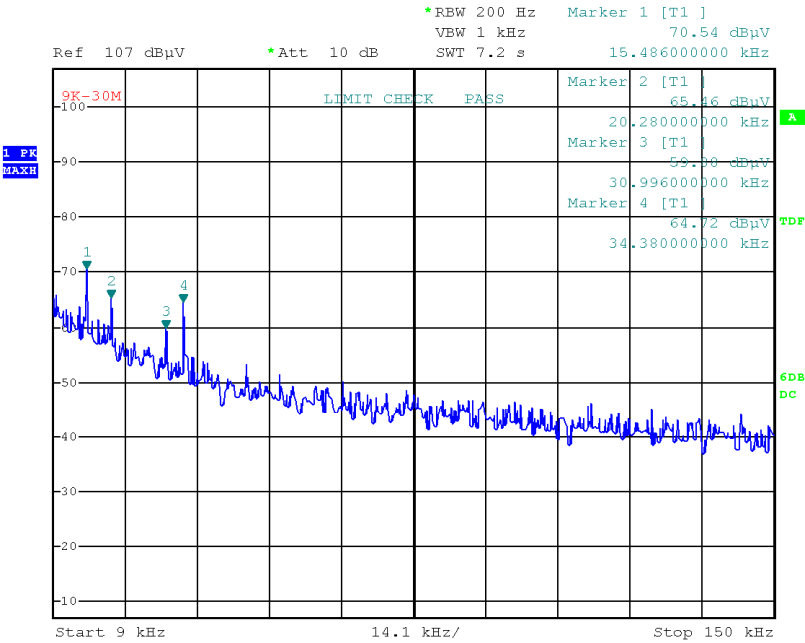
**30 MHz - 1 GHz:****Common Information**

Project No: RKSA240716001  
EUT Model: S1  
Test Mode: NFC  
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.225  
Test Equipment: ESCI, JB3, 310N  
Receiver Setting: RBW:100 kHz, VBW: 300 kHz, Sweep Time: Auto  
Temperature: 26.3°C  
Humidity: 66%  
Barometric Pressure: 99.9kPa  
Test Engineer: Grace Luo  
Test Date: 2024/7/26

**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dBμ V/m) | Limit (dBμ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|-------------------|-----------------|-------------|-----|--------------|
| 40.670000       | 33.88             | 40.00           | 6.12        | V   | -11.8        |
| 54.250000       | 22.91             | 40.00           | 17.09       | V   | -17.1        |
| 67.830000       | 29.85             | 40.00           | 10.15       | V   | -17.2        |
| 155.493750      | 28.49             | 43.50           | 15.01       | V   | -12.0        |
| 213.815000      | 27.69             | 43.50           | 15.81       | V   | -13.1        |
| 303.176250      | 27.70             | 46.00           | 18.30       | H   | -10.4        |

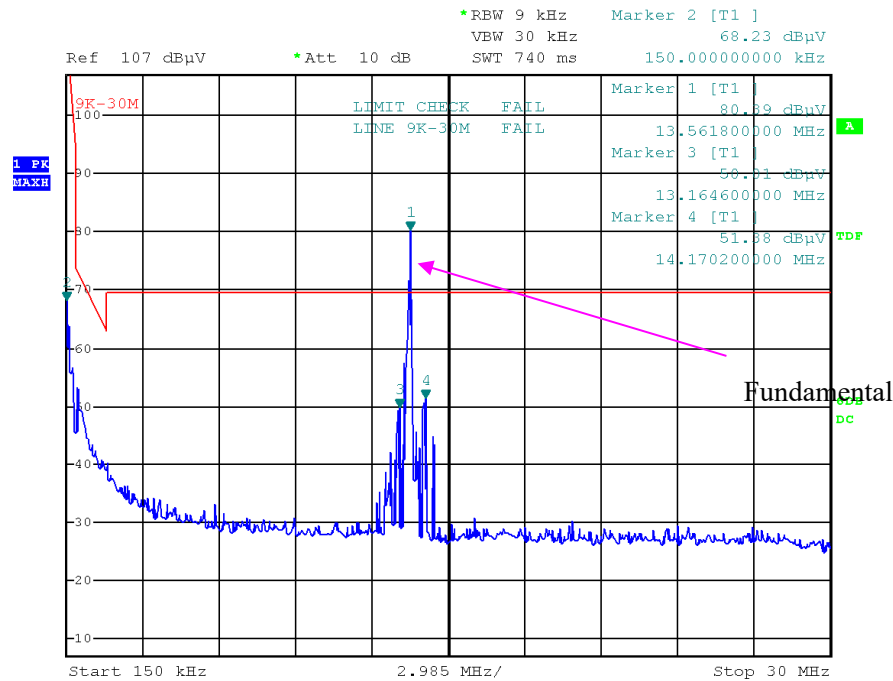
Model: C1  
For Ground-parallel  
1) 9 kHz~150 kHz:



Project No.RKSA240716001      Tester:Grace Luo  
Date: 26.JUL.2024    10:42:54

| Frequency (kHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 15.49           | 70.54                            | PK                  | 49.92                   | 121.46             | 50.92       |
| 20.28           | 65.46                            | PK                  | 52.87                   | 123.80             | 58.34       |
| 31.00           | 59.88                            | PK                  | 46.94                   | 117.78             | 57.90       |
| 34.38           | 64.72                            | PK                  | 46.06                   | 116.88             | 52.16       |

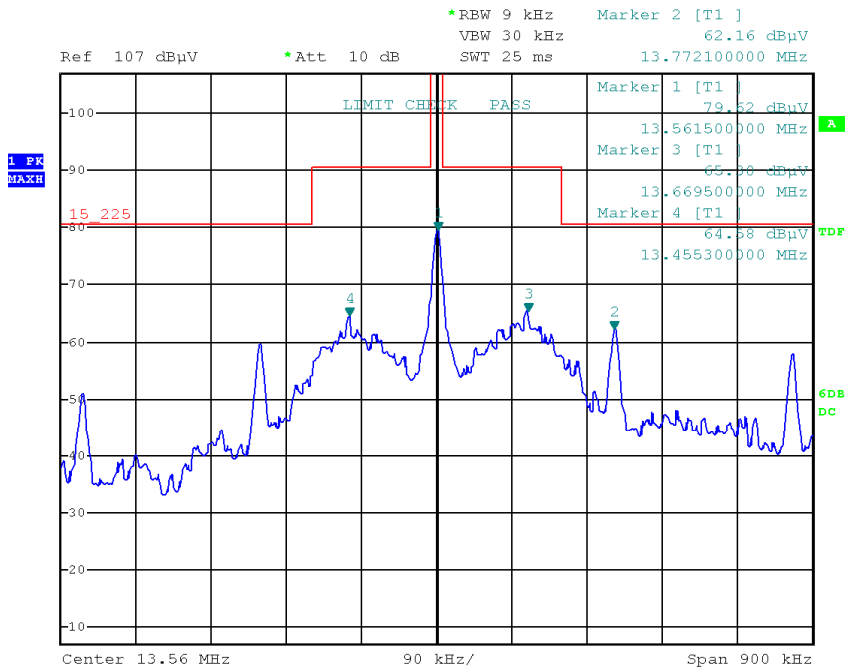
2) 150 kHz~30 MHz:



Project No.RKSA240716001      Tester:Grace Luo  
Date: 26.JUL.2024 10:35:31

| Frequency<br>(MHz) | Corrected<br>Amplitude<br>(dBμV/m)<br>@3m | Detector<br>PK/QP/Ave. | Corrected<br>Factor<br>(dB/m) | Limit<br>(dBμV/m)<br>@3m | Margin<br>(dB) |
|--------------------|-------------------------------------------|------------------------|-------------------------------|--------------------------|----------------|
| 0.15               | 68.23                                     | PK                     | 50.90                         | 104.08                   | 35.85          |
| 13.16              | 50.01                                     | PK                     | 6.18                          | 69.54                    | 19.53          |
| 14.17              | 51.38                                     | PK                     | 6.07                          | 69.54                    | 18.16          |

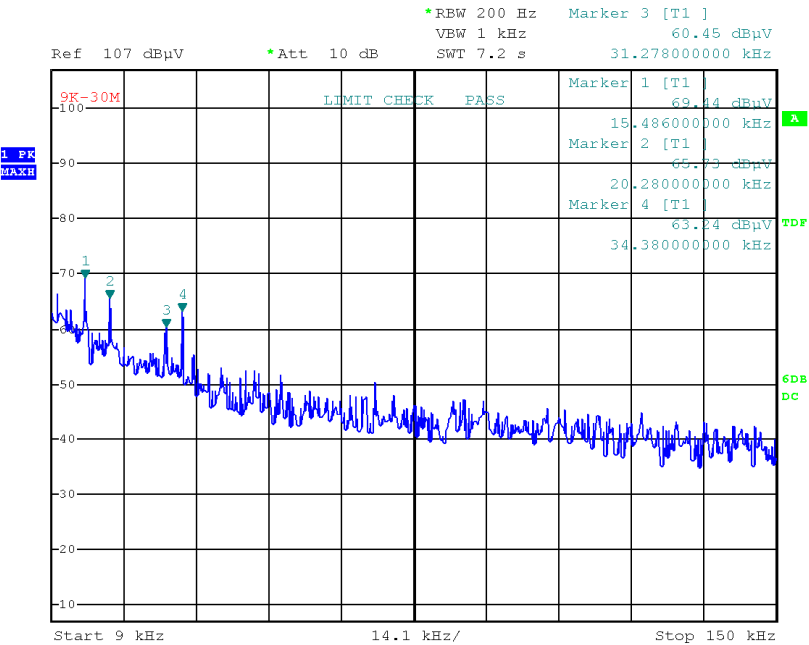
3) 13.11 MHz~14.01 MHz:



Project No.RKSA240716001      Tester:Grace Luo  
Date: 26.JUL.2024    11:00:59

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 13.56           | 79.62                            | PK                  | 6.12                    | 124.00             | 44.38       |
| 13.77           | 62.16                            | PK                  | 6.10                    | 80.50              | 18.34       |
| 13.67           | 65.30                            | PK                  | 6.11                    | 90.50              | 25.20       |
| 13.46           | 64.58                            | PK                  | 6.12                    | 90.50              | 25.92       |

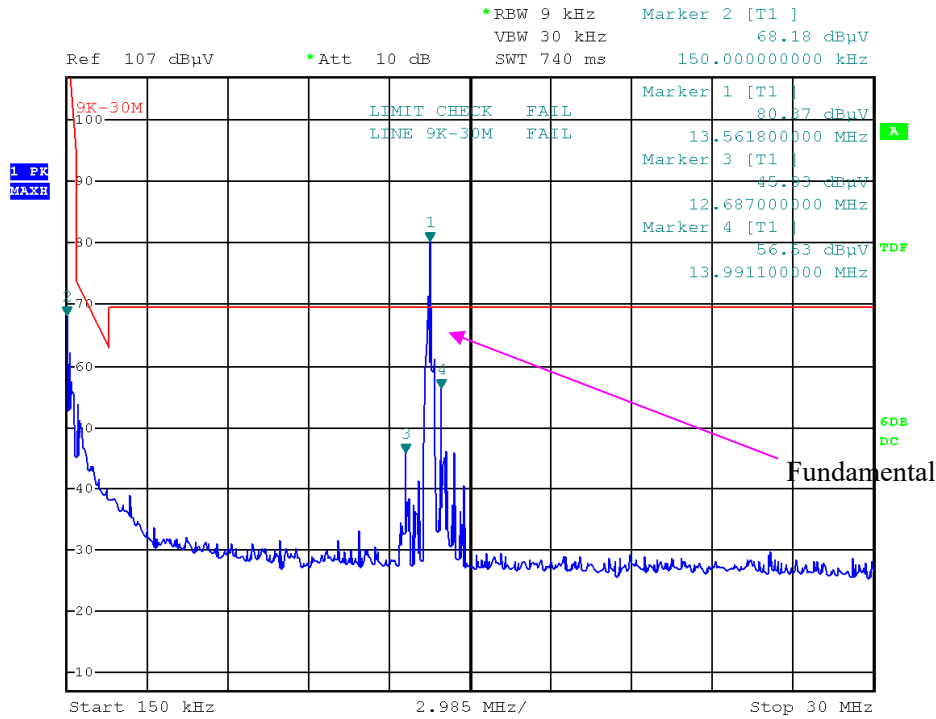
For Parallel  
1) 9 kHz~150 kHz:



Project No.RKSA240716001    Tester:Grace Luo  
Date: 26.JUL.2024    10:48:34

| Frequency (kHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 31.28           | 60.45                            | PK                  | 46.87                   | 117.70             | 57.25       |
| 20.28           | 65.73                            | PK                  | 47.13                   | 121.46             | 55.73       |
| 15.49           | 69.44                            | PK                  | 52.87                   | 123.80             | 54.36       |
| 34.38           | 63.24                            | PK                  | 46.06                   | 116.88             | 53.64       |

2) 150 kHz~30 MHz:



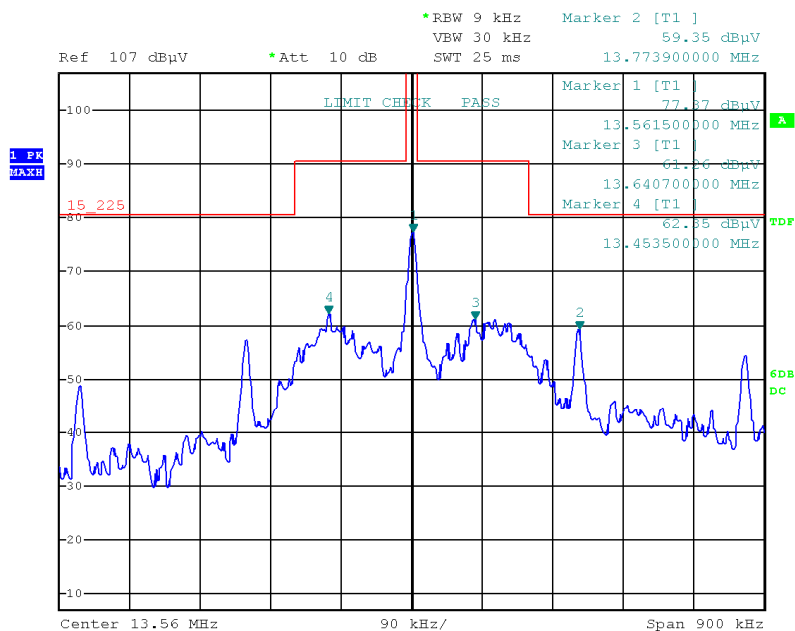
Project No.RKSA240716001

Tester:Grace Luo

Date: 26.JUL.2024 10:28:12

| Frequency<br>(MHz) | Corrected<br>Amplitude<br>(dBμV/m)<br>@3m | Detector<br>PK/QP/Ave. | Corrected<br>Factor<br>(dB/m) | Limit<br>(dBμV/m)<br>@3m | Margin<br>(dB) |
|--------------------|-------------------------------------------|------------------------|-------------------------------|--------------------------|----------------|
| 12.70              | 45.93                                     | PK                     | 6.18                          | 69.54                    | 23.61          |
| 0.15               | 68.18                                     | PK                     | 50.90                         | 104.08                   | 35.90          |
| 14.00              | 56.53                                     | PK                     | 6.07                          | 69.54                    | 13.01          |

## 3) 13.11 MHz~14.01 MHz:



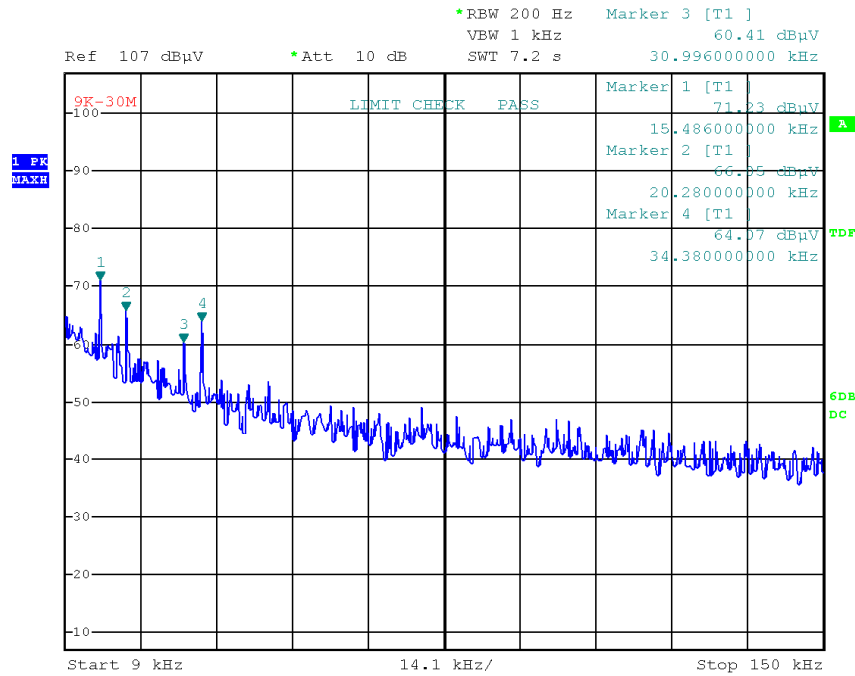
Project No.RKSA240716001

Tester:Grace Luo

Date: 26.JUL.2024 11:07:43

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 13.56           | 77.37                            | PK                  | 6.12                    | 124.00             | 46.63       |
| 13.77           | 59.35                            | PK                  | 6.10                    | 80.50              | 21.15       |
| 13.64           | 61.26                            | PK                  | 6.11                    | 90.50              | 29.24       |
| 13.45           | 62.35                            | PK                  | 6.12                    | 90.50              | 28.15       |

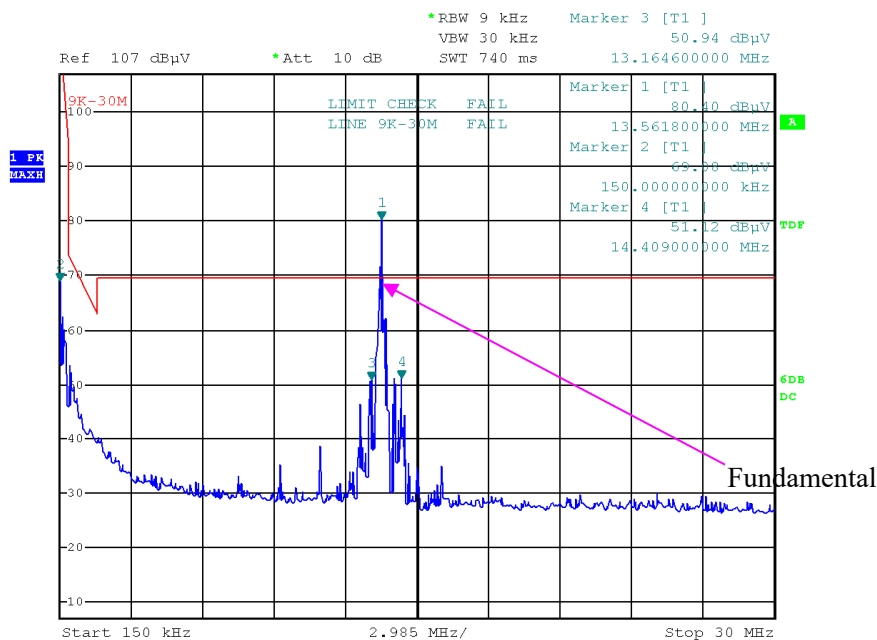
For Perpendicular  
1) 9 kHz~150 kHz:



Project No.RKSA240716001      Tester:Grace Luo  
Date: 26.JUL.2024 10:45:40

| Frequency (kHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 20.28           | 66.05                            | PK                  | 49.92                   | 121.46             | 55.41       |
| 15.49           | 71.23                            | PK                  | 52.87                   | 123.80             | 52.57       |
| 31.00           | 60.41                            | PK                  | 46.94                   | 117.78             | 57.37       |
| 34.38           | 64.07                            | PK                  | 46.06                   | 116.88             | 52.81       |

2) 150 kHz~30 MHz:



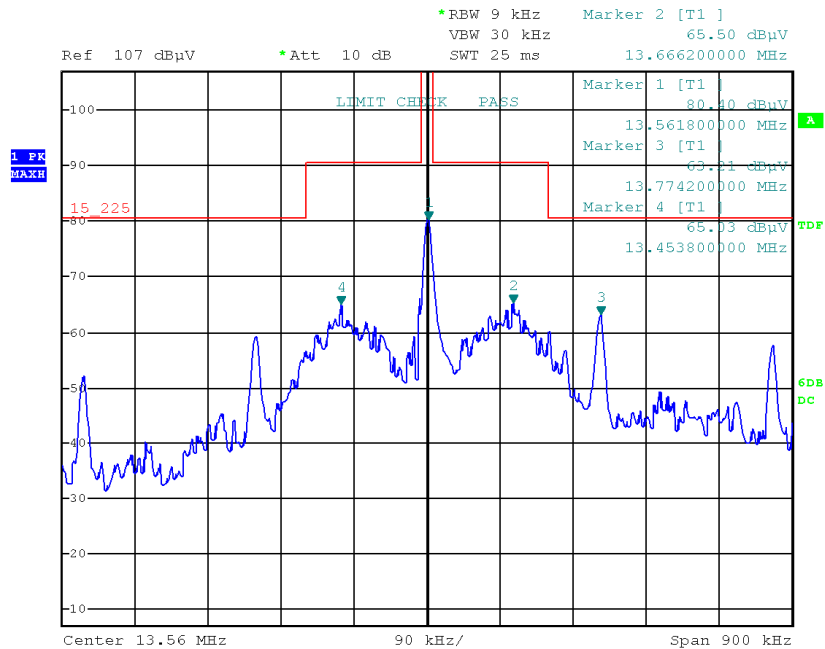
Project No.RKSA240716001

Tester:Grace Luo

Date: 26.JUL.2024 10:40:45

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 13.16           | 50.94                            | PK                  | 6.32                    | 69.54              | 18.60       |
| 0.15            | 69.08                            | PK                  | 50.90                   | 104.08             | 35.00       |
| 14.41           | 51.12                            | PK                  | 6.08                    | 69.54              | 18.42       |

3) 13.11 MHz~14.01 MHz:



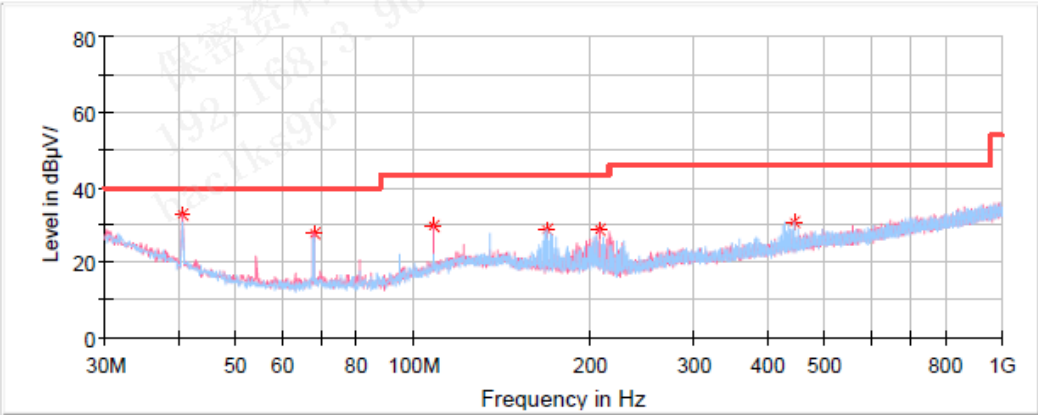
Project No.RKSA240716001      Tester:Grace Luo  
Date: 26.JUL.2024 10:23:46

| Frequency (MHz) | Corrected Amplitude (dBμV/m) @3m | Detector PK/QP/Ave. | Corrected Factor (dB/m) | Limit (dBμV/m) @3m | Margin (dB) |
|-----------------|----------------------------------|---------------------|-------------------------|--------------------|-------------|
| 13.56           | 80.40                            | PK                  | 6.12                    | 124.00             | 43.60       |
| 13.67           | 65.50                            | PK                  | 6.11                    | 90.50              | 25.00       |
| 13.77           | 63.21                            | PK                  | 6.10                    | 80.50              | 17.29       |
| 13.45           | 65.03                            | PK                  | 6.12                    | 90.50              | 25.47       |

30 MHz - 1 GHz:

Common Information

Project No: RKSA240716001  
EUT Model: C1  
Test Mode: NFC  
Standard: FCC Part 15.205&FCC Part 15.209&FCC Part 15.225  
Test Equipment: ESCI, JB3, 310N  
Receiver Setting: RBW:100 kHz, VBW: 300 kHz, Sweep Time: Auto  
Temperature: 26.3℃  
Humidity: 66%  
Barometric Pressure: 99.9kPa  
Test Engineer: Grace Luo  
Test Date: 2024/7/26



Critical Freqs

| Frequency (MHz) | MaxPeak (dBµ V/m) | Limit (dBµ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|-------------------|-----------------|-------------|-----|--------------|
| 40.670000       | 32.73             | 40.00           | 7.27        | V   | -11.8        |
| 67.830000       | 27.83             | 40.00           | 12.17       | V   | -17.2        |
| 108.448750      | 29.72             | 43.50           | 13.78       | V   | -12.9        |
| 169.073750      | 28.76             | 43.50           | 14.74       | H   | -12.5        |
| 207.388750      | 28.65             | 43.50           | 14.85       | V   | -12.7        |
| 442.613750      | 30.88             | 46.00           | 15.12       | H   | -6.9         |

**FREQUENCY STABILITY***Test Mode: Transmitting.**Test Result: Compliant*

Model: S1

| <b>F<sub>0</sub>=13.56MHz</b>       |                         |                                 |                            |                          |
|-------------------------------------|-------------------------|---------------------------------|----------------------------|--------------------------|
| <b>Power Supply(V<sub>DC</sub>)</b> | <b>Temperature (°C)</b> | <b>Measured Frequency (MHz)</b> | <b>Frequency Error (%)</b> | <b>Part 15.225 Limit</b> |
| 36                                  | -20                     | 13.560914                       | 0.00674                    | ±0.01%                   |
|                                     | -10                     | 13.560961                       | 0.00709                    | ±0.01%                   |
|                                     | 0                       | 13.560988                       | 0.00729                    | ±0.01%                   |
|                                     | 10                      | 13.561009                       | 0.00744                    | ±0.01%                   |
|                                     | 20                      | 13.560910                       | 0.00671                    | ±0.01%                   |
|                                     | 30                      | 13.560916                       | 0.00676                    | ±0.01%                   |
|                                     | 40                      | 13.560966                       | 0.00712                    | ±0.01%                   |
|                                     | 50                      | 13.560951                       | 0.00701                    | ±0.01%                   |
| 32.4                                | 20                      | 13.560936                       | 0.00690                    | ±0.01%                   |
| 39.6                                | 20                      | 13.560938                       | 0.00692                    | ±0.01%                   |

Model: C1

| <b>F<sub>0</sub>=13.56MHz</b>       |                         |                                 |                            |                          |
|-------------------------------------|-------------------------|---------------------------------|----------------------------|--------------------------|
| <b>Power Supply(V<sub>DC</sub>)</b> | <b>Temperature (°C)</b> | <b>Measured Frequency (MHz)</b> | <b>Frequency Error (%)</b> | <b>Part 15.225 Limit</b> |
| 36                                  | -20                     | 13.560914                       | 0.00674                    | ±0.01%                   |
|                                     | -10                     | 13.560961                       | 0.00709                    | ±0.01%                   |
|                                     | 0                       | 13.560988                       | 0.00729                    | ±0.01%                   |
|                                     | 10                      | 13.561009                       | 0.00744                    | ±0.01%                   |
|                                     | 20                      | 13.560910                       | 0.00671                    | ±0.01%                   |
|                                     | 30                      | 13.560916                       | 0.00676                    | ±0.01%                   |
|                                     | 40                      | 13.560966                       | 0.00712                    | ±0.01%                   |
|                                     | 50                      | 13.560951                       | 0.00701                    | ±0.01%                   |
| 32.4                                | 20                      | 13.560929                       | 0.00685                    | ±0.01%                   |
| 39.6                                | 20                      | 13.560974                       | 0.00718                    | ±0.01%                   |

20dB EMISSION BANDWIDTH TESTING

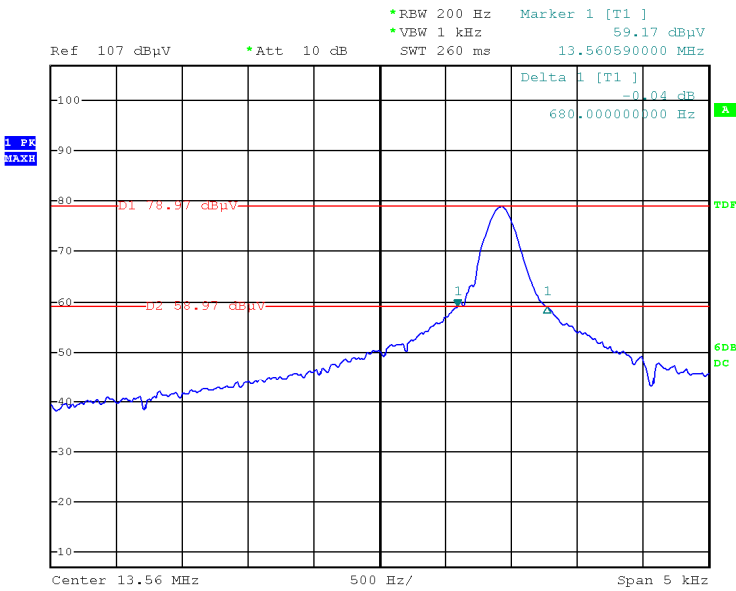
Test Mode: Transmitting

Test Result: Compliant

Model: S1

| Frequency (MHz) | 20 dB Bandwidth (kHz) |
|-----------------|-----------------------|
| 13.56           | 0.68                  |

20 dB Emission Bandwidth-13.56MHz

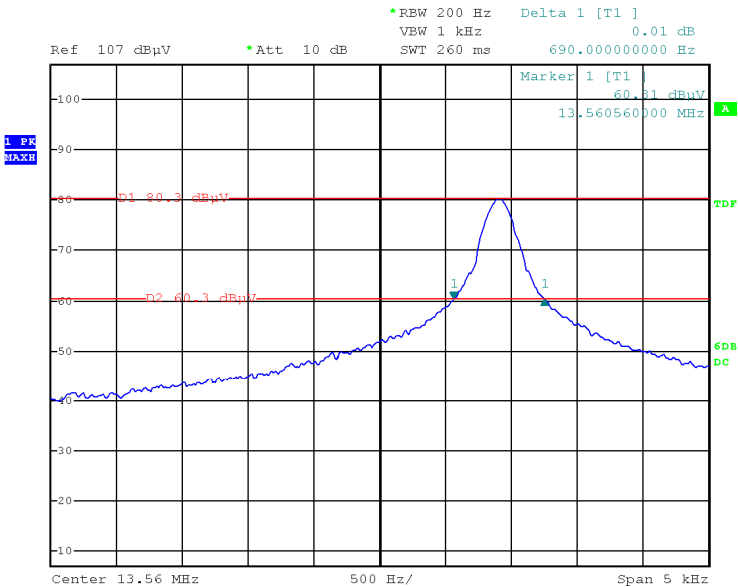


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Date: 26.JUL.2024      11:42:47

Model: C1

| Frequency<br>(MHz) | 20 dB Bandwidth<br>(kHz) |
|--------------------|--------------------------|
| 13.56              | 0.69                     |

20 dB Emission Bandwidth-13.56MHz



Project No.RKSA240716001    Tester:Grace Luo  
Date: 26.JUL.2024 10:11:28

### **Declarations**

1. The laboratory is not responsible for the authenticity of any information provided by the applicant. Information from the applicant that may affect test results is marked with “★”.
2. The test data was only valid for the test sample(s).
3. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
4. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
5. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor  $k=2$  with the 95.45% confidence interval.

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