



## FCC REPORT

|                                |   |                                                                                                                                                                 |
|--------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant</b>               | : | Remote Tech LLC                                                                                                                                                 |
| <b>Address of Applicant</b>    | : | 310 ALDER RD,Dover,DE 19904,USA                                                                                                                                 |
| <b>Manufacturer</b>            | : | Remote Tech LLC                                                                                                                                                 |
| <b>Address of Manufacturer</b> | : | 310 ALDER RD,Dover,DE 19904,USA                                                                                                                                 |
| <b>Equipment under Test</b>    | : | REMOTE KEY                                                                                                                                                      |
| <b>Model No.</b>               | : | RE-NT8TX9                                                                                                                                                       |
| <b>FCC ID</b>                  | : | 2AOKM-JLR3                                                                                                                                                      |
| <b>Test Standard(s)</b>        | : | FCC Rules and Regulations Part 15 Subpart C Section 15.231, ANSI C63.10-2020+Cor.1-2023                                                                         |
| <b>Report No.</b>              | : | A2507314-C01-R01                                                                                                                                                |
| <b>Issue Date</b>              | : | 2025/09/28                                                                                                                                                      |
| <b>Issued By</b>               | : | Shenzhen Alpha Product Testing Co., Ltd.<br>Building i, No.2, Lixin Road, Fuyong Street, Bao'an District,518103, Shenzhen City, Guangdong Province, P.R. China. |

## Table of Contents

|      |                                                  |    |
|------|--------------------------------------------------|----|
| 1.   | Summary of Test Results .....                    | 6  |
| 2.   | General Test Information.....                    | 7  |
| 2.1. | Description of EUT.....                          | 7  |
| 2.2. | Accessories of EUT .....                         | 7  |
| 2.3. | Block diagram of EUT configuration for test..... | 8  |
| 2.4. | Test mode description .....                      | 8  |
| 2.5. | Deviations of test standard .....                | 8  |
| 2.6. | Test environment conditions.....                 | 8  |
| 2.7. | Test laboratory .....                            | 8  |
| 2.8. | Measurement uncertainty .....                    | 9  |
| 3.   | Duty Cycle Correction Factor .....               | 10 |
| 3.1. | Test equipment .....                             | 10 |
| 3.2. | Block diagram of test setup .....                | 10 |
| 3.3. | Limits.....                                      | 10 |
| 3.4. | Assistant equipment used for test .....          | 10 |
| 3.5. | Test procedure .....                             | 10 |
| 3.6. | Test result .....                                | 11 |
| 3.7. | Test data .....                                  | 11 |
| 4.   | Field Strength of Fundamental .....              | 13 |
| 4.1. | Test equipment .....                             | 13 |
| 4.2. | Block diagram of test setup .....                | 13 |
| 4.3. | Limits.....                                      | 14 |
| 4.4. | Assistant equipment used for test .....          | 15 |
| 4.5. | Test procedure .....                             | 16 |
| 4.6. | Test result .....                                | 16 |
| 4.7. | Test data .....                                  | 17 |
| 5.   | Radiated Emission.....                           | 18 |
| 5.1. | Test equipment .....                             | 18 |
| 5.2. | Block diagram of test setup .....                | 18 |
| 5.3. | Limits.....                                      | 19 |
| 5.4. | Assistant equipment used for test .....          | 20 |
| 5.5. | Test procedure .....                             | 21 |
| 5.6. | Test result .....                                | 21 |
| 5.7. | Test data .....                                  | 22 |
| 6.   | Power Line Conducted Emissions.....              | 26 |
| 6.1. | Test equipment .....                             | 26 |

|      |                                         |    |
|------|-----------------------------------------|----|
| 6.2. | Block diagram of test setup .....       | 26 |
| 6.3. | Limits.....                             | 26 |
| 6.4. | Assistant equipment used for test ..... | 26 |
| 6.5. | Test procedure.....                     | 26 |
| 6.6. | Test result .....                       | 27 |
| 7.   | 20dB Bandwidth and 99% Bandwidth .....  | 28 |
| 7.1. | Test equipment.....                     | 28 |
| 7.2. | Block diagram of test setup .....       | 28 |
| 7.3. | Limits.....                             | 28 |
| 7.4. | Assistant equipment used for test ..... | 28 |
| 7.5. | Test procedure.....                     | 28 |
| 7.6. | Test result .....                       | 28 |
| 7.7. | Test data .....                         | 29 |
| 8.   | Transmission Time .....                 | 30 |
| 8.1. | Test equipment.....                     | 30 |
| 8.2. | Block diagram of test setup .....       | 30 |
| 8.3. | Limits.....                             | 30 |
| 8.4. | Assistant equipment used for test ..... | 30 |
| 8.5. | Test procedure.....                     | 30 |
| 8.6. | Test result .....                       | 31 |
| 8.7. | Test data .....                         | 31 |
| 9.   | Antenna Requirement.....                | 32 |
| 9.1. | Standard Requirement.....               | 32 |
| 9.2. | Antenna Connected Construction.....     | 32 |
| 9.3. | Test result .....                       | 32 |
| 10.  | Test Setup Photograph.....              | 33 |
| 11.  | Photos of the EUT .....                 | 34 |

## Test Report Declare

|                                |   |                                 |
|--------------------------------|---|---------------------------------|
| <b>Applicant</b>               | : | Remote Tech LLC                 |
| <b>Address of Applicant</b>    | : | 310 ALDER RD,Dover,DE 19904,USA |
| <b>Manufacturer</b>            | : | Remote Tech LLC                 |
| <b>Address of Manufacturer</b> | : | 310 ALDER RD,Dover,DE 19904,USA |
| <b>Equipment under Test</b>    | : | REMOTE KEY                      |
| <b>Model No.</b>               | : | RE-NT8TX9                       |
| <b>Trademark</b>               | : | /                               |

**Test Standard Used:**

FCC Rules and Regulations Part 15 Subpart C Section 15.231, ANSI C63.10-2020+Cor.1-2023

**We Declare:**

The equipment described above is tested by Shenzhen Alpha Product Testing Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

|                         |                  |                      |                         |
|-------------------------|------------------|----------------------|-------------------------|
| <b>Report No.:</b>      | A2507314-C01-R01 |                      |                         |
| <b>Date of Receipt:</b> | 2025/09/22       | <b>Date of Test:</b> | 2025/09/22 - 2025/09/28 |

**Prepared By:**

Yannis Wen/Engineer

**Approved By:**

Jack Xu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Revision History

| Rev. | Revisions     | Issue Date | Revised By |
|------|---------------|------------|------------|
| V0   | Initial issue | 2025/09/28 | Yannis Wen |

## 1. Summary of Test Results

| No. | Test Parameter                   | Clause No.                                                  | Result |
|-----|----------------------------------|-------------------------------------------------------------|--------|
| 1   | Duty Cycle Correction Factor     | ANSI C63.10-2020+Cor.1-2023 Section 7.5                     | N/A    |
| 2   | Field Strength of Fundamental    | FCC Part 15: 15.231(b), 15.209, ANSI C63.10-2020+Cor.1-2023 | Pass   |
| 3   | Radiated Emission                | FCC Part 15: 15.231(b), 15.209, ANSI C63.10-2020+Cor.1-2023 | Pass   |
| 4   | Power Line Conducted Emissions   | FCC Part 15: 15.207, ANSI C63.10-2020+Cor.1-2023            | N/A    |
| 5   | 20dB Bandwidth and 99% Bandwidth | FCC Part 15: 15.231(c), ANSI C63.10-2020+Cor.1-2023         | Pass   |
| 6   | Transmission Time                | FCC Part 15: 15.231(a)                                      | Pass   |
| 7   | Antenna Requirement              | FCC Part 15: 15.203                                         | Pass   |

Note: 1.N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device or no need to test according to standard.

2. Decision rules for the conclusion of this test report: decision by actual test data without considering measurement uncertainty.

| Software Information |               |              |           |
|----------------------|---------------|--------------|-----------|
| Test Item            | Software Name | Manufacturer | Version   |
| RE                   | EZ-EMC        | Farad        | Alpha-3A1 |
| RF-CE                | MTS 8310      | MWRFTtest    | V2.0.0.0  |

## 2. General Test Information

### 2.1. Description of EUT

|                            |   |                    |
|----------------------------|---|--------------------|
| EUT Name                   | : | REMOTE KEY         |
| Model Number               | : | RE-NT8TX9          |
| Difference of model number | : | /                  |
| Power Supply               | : | DC 3V from battery |
| Hardware Version           | : | /                  |
| Software Version           | : | /                  |

|                       |   |                                                      |
|-----------------------|---|------------------------------------------------------|
| Radio Technology      | : | SRD                                                  |
| Operation frequency   | : | 315.1 MHz                                            |
| Modulation            | : | ASK                                                  |
| Antenna Type          | : | PCB Antenna                                          |
| Max Antenna Gain(dBi) | : | 0dBi (Antenna information is provided by applicant.) |

| Channel information |                 |
|---------------------|-----------------|
| Channel             | Frequency (MHz) |
| 1                   | 315.1           |

Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

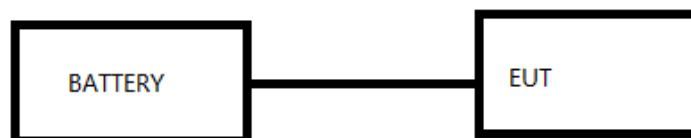
“☒” means to be chosen or applicable; “☐” means don't to be chosen or not applicable; This note applies to entire report.

### 2.2. Accessories of EUT

| Accessories | Manufacturer | Model number | Description |
|-------------|--------------|--------------|-------------|
| /           | /            | /            | /           |

### 2.3. Block diagram of EUT configuration for test

#### Radiated Emission and RF Conduction method



### 2.4. Test mode description

EUT work in Nomal TX mode, and select test channel, wireless mode

| Tested mode and channel, information |         |                |
|--------------------------------------|---------|----------------|
| Mode                                 | Channel | Frequency(MHz) |
| ASK                                  | CH1     | 315.1MHz       |

### 2.5. Deviations of test standard

No deviation.

### 2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

| Items              | Required  |
|--------------------|-----------|
| Temperature range: | 15-35°C   |
| Humidity range:    | 25-75%    |
| Pressure range:    | 86-106kPa |

Note: The specific temperature and humidity information of each test item refers to the temperature and humidity record in the corresponding test data.

### 2.7. Test laboratory

Shenzhen Alpha Product Testing Co., Ltd.

Add.: Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen City, Guangdong Province, P.R. China.

Tel.: 4008-3008-95, Website: <http://www.a-lab.cn>, Email: [service@a-lab.cn](mailto:service@a-lab.cn)

CNAS Accreditation No. L7472; A2LA Accreditation Number: 4762.01

FCC Designation Number: CN1182, Test Firm Registration Number: 203110

Innovation, Science and Economic Development Canada Site Registration Number: 12135A

CAB identifier: CN0085

**2.8. Measurement uncertainty**

| Item                                                                      | Uncertainty               |
|---------------------------------------------------------------------------|---------------------------|
| Uncertainty for Power point Conducted Emissions Test                      | 1.63dB                    |
| Uncertainty for Radiation Emission test in 3m chamber<br>(below 30MHz)    | 3.5dB                     |
| Uncertainty for Radiation Emission test in 3m chamber<br>(30MHz to 1GHz)  | 3.74dB(Polarize: V)       |
|                                                                           | 3.76dB(Polarize: H)       |
| Uncertainty for Radiation Emission test in 3m chamber<br>(1GHz to 25GHz)  | 3.77dB(Polarize: V)       |
|                                                                           | 3.80dB(Polarize: H)       |
| Uncertainty for Radiation Emission test in 3m chamber<br>(18GHz to 40GHz) | 4.31 dB(Polarize: V)      |
|                                                                           | 4.30 dB(Polarize: H)      |
| Uncertainty for radio frequency                                           | $5.06 \times 10^{-8}$ GHz |
| Uncertainty for conducted RF Power                                        | 0.40dB                    |
| Uncertainty for temperature                                               | 0.2℃                      |
| Uncertainty for humidity                                                  | 1%                        |
| Uncertainty for DC and low frequency voltages                             | 0.06%                     |
| Uncertainty for Duty Cycle                                                | 0.25%                     |
| Uncertainty for Occupied-Bandwidth                                        | 968Hz                     |

### 3. Duty Cycle Correction Factor

#### 3.1. Test equipment

| Equipment       | Manufacturer | Model No. | Serial No. | Last Cal.  | Cal Due To |
|-----------------|--------------|-----------|------------|------------|------------|
| Signal Analyzer | Agilent      | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |

#### 3.2. Block diagram of test setup



#### 3.3. Limits

/

#### 3.4. Assistant equipment used for test

| Assistant equipment | Manufacturer | Model number | Description | other |
|---------------------|--------------|--------------|-------------|-------|
| /                   | /            | /            | /           | /     |

#### 3.5. Test procedure

Please refer to ANSI C63.10-2013 Section 7.5

Set the Centre frequency of the spectrum analyzer to the transmitting frequency;

Set the span=0MHz, RBW=1MHz, VBW=3MHz

Adjust the SWEEP TIME to obtain at least a 100 ms period of time on the horizontal display axis of the spectrum analyzer.;

a. If the pulse train is periodic, and the period (T) is less than or equal to 100 ms, then:

1. Set the TRIGGER on the spectrum analyzer to capture at least one period of the pulse train, including any blanking intervals.
2. Determine the total maximum pulse "ON time" ( $t_{ON}$ ) over one period of the pulse train. If the pulse train contains pulses of different widths, then  $t_{ON}$  is determined by summing the duration of all of the pulses within the pulse train.
3. The duty cycle is then determined by dividing the total maximum "ON time" by the period of the pulse train ( $t_{ON} / T$ ).

b. If the pulse train is nonperiodic or is periodic with a period that exceeds 100 ms, or as an alternative to step f), then:

1. Set the TRIGGER on the spectrum analyzer to capture the greatest amount of pulse "ON time" over 100 ms.

2. Find the 100 ms period that contains the maximum "ON time" ; this may require summing the duration of multiple pulses as described in step a2
3. Determine the duty cycle by dividing the total maximum "ON time" by 100 ms (tON /100 ms).

duty cycle correction factor (dB)=20log(duty cycle (dimensionless))

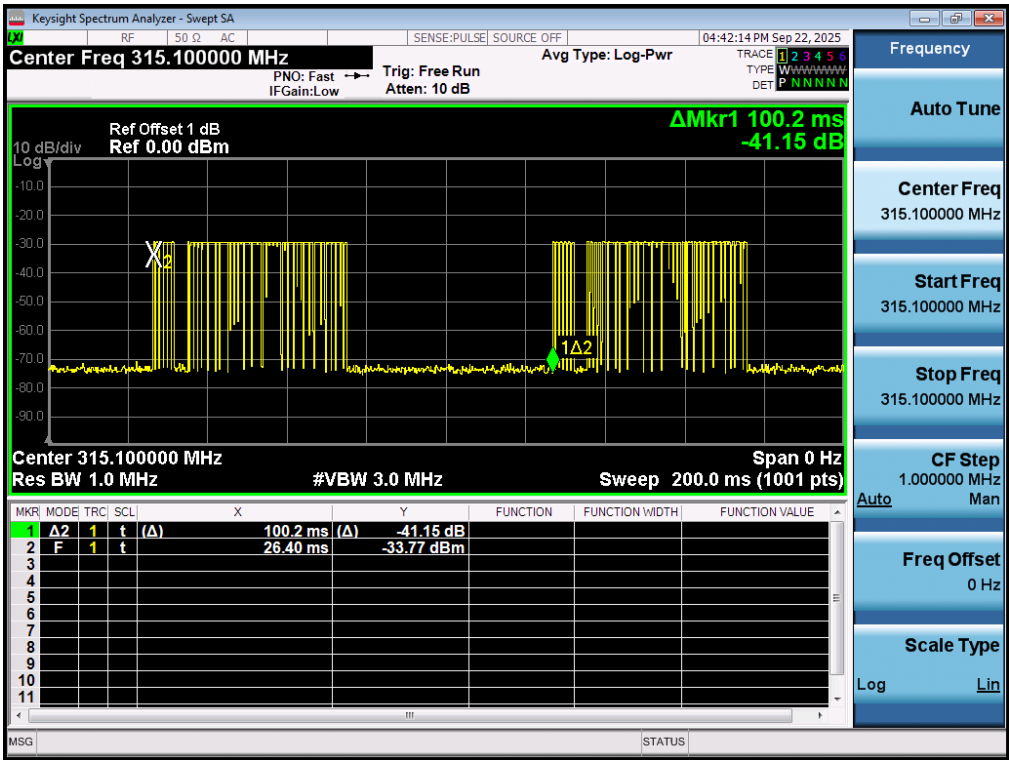
3.6. Test result

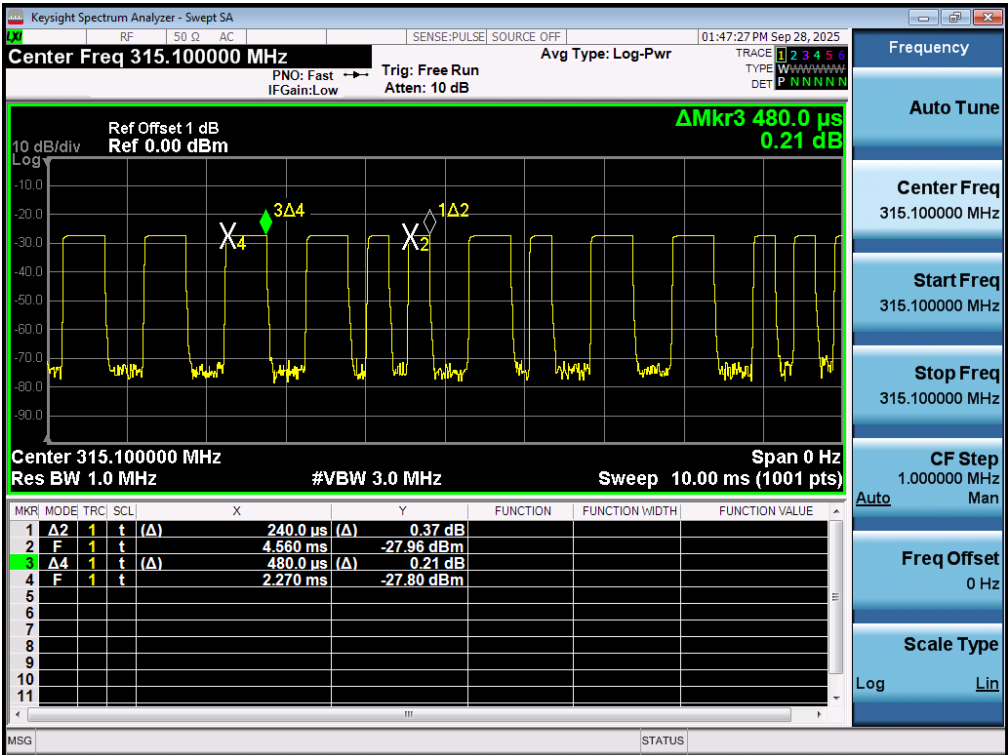
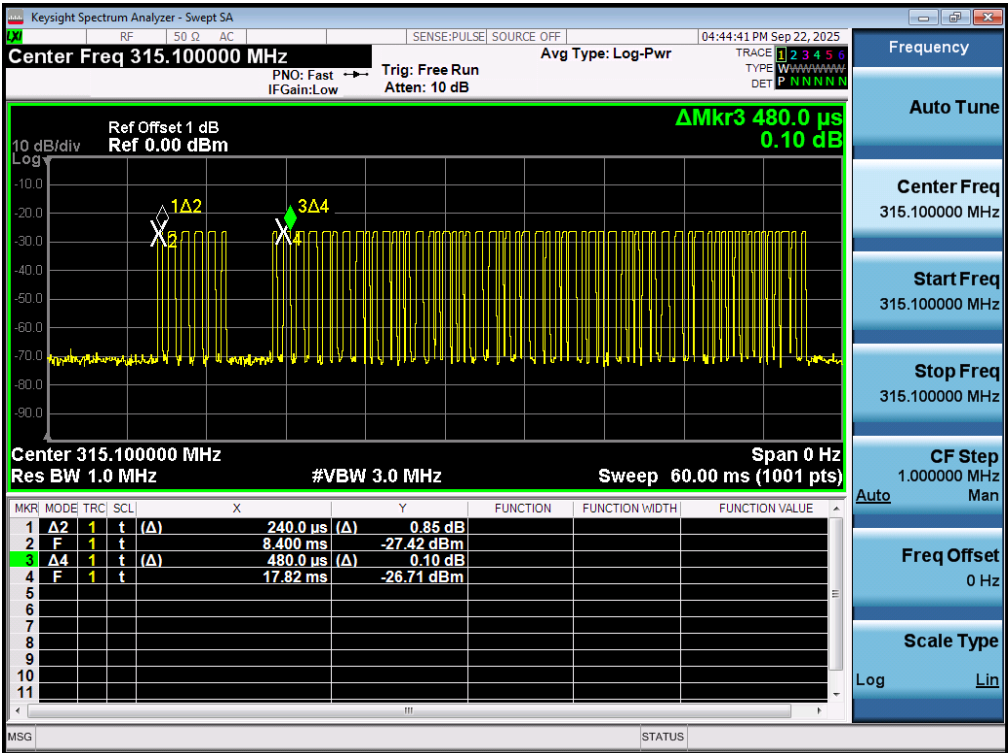
|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/22--2025/09/28 |
| Condition: 24.1°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                                  |                        |
|----------------------------------|------------------------|
| EUT Name: REMOTE KEY             | EUT Model: RE-NT8TX9   |
| Sample No.: A2507314-S0001       | Test Mode: 315.1MHz TX |
| Power supply: DC 3V from battery | Memo: /                |

/

3.7. Test data





| Frequency (MHz) | Pulse signal NO. | Pulse Width(us) | Number of pulse | Time of Occupancy (us) |
|-----------------|------------------|-----------------|-----------------|------------------------|
| 315.1           | Pulse signal 1   | 240             | 38              | 9120                   |
| 315.1           | Pulse signal 2   | 480             | 23              | 11040                  |

$T_{ON} = \text{Pulse signal 1} + \text{Pulse signal 2} = 20160\mu s = 20.16\text{ms}$

$T = 100.2\text{ms}$ , the period that exceeds 100 ms

So Duty Cycle  $= T_{ON} / 100\text{ms} = 20.16 / 100\text{ms} = 0.2016$

Average should be determined by duty cycle factor.

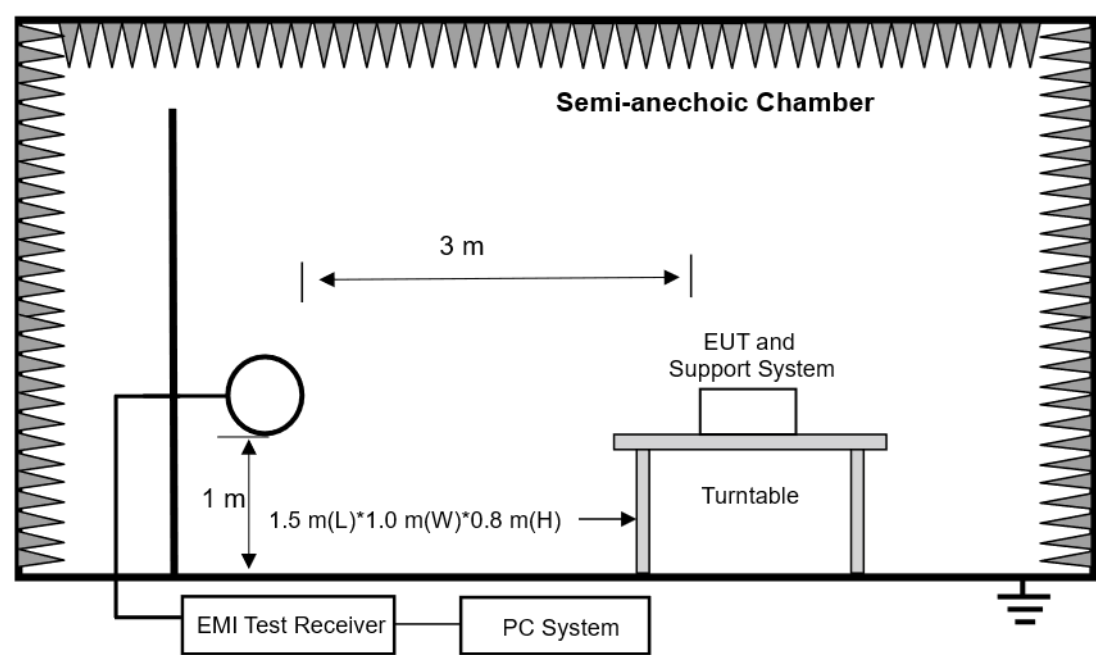
duty cycle correction factor  $= 20 \log (0.2016) = -13.9102$

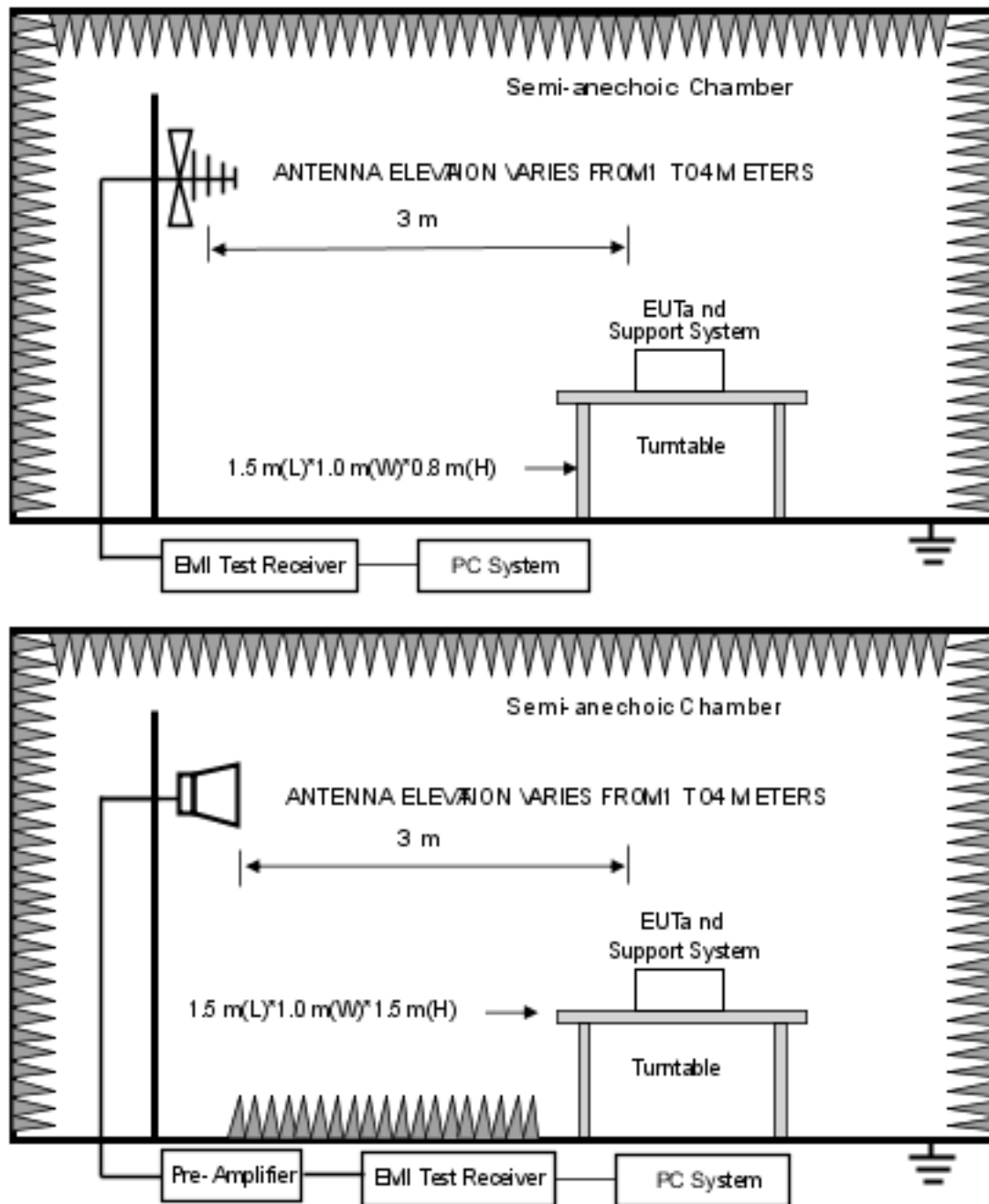
4. Field Strength of Fundamental

4.1. Test equipment

| Equipment         | Manufacturer  | Model No.     | Serial No. | Last Cal.  | Cal Due To |
|-------------------|---------------|---------------|------------|------------|------------|
| Spectrum analyzer | ROHDE&SCHWARZ | FSU           | Aa-EE075   | 2025/08/04 | 2026/08/03 |
| Horn Antenna      | SCHWARZBECK   | BBHA 9120 D   | Aa-EE076   | 2025/08/11 | 2027/08/10 |
| Test Receiver     | ROHDE&SCHWARZ | ESR           | Aa-EE048   | 2025/08/04 | 2026/08/03 |
| Bilog Antenna     | SCHWARZBECK   | VULB 9168     | Aa-EE001   | 2025/08/11 | 2027/08/10 |
| Amplifier         | SKET          | LNPA_0118G-45 | Aa-EE087   | 2025/08/04 | 2026/08/03 |
| Horn Antenna      | SCHWARZBECK   | BBHA 9170     | Aa-EE077   | 2025/08/11 | 2027/08/10 |
| Loop Antenna      | SCHWARZBECK   | FMZB 1519B    | Aa-EE074   | 2025/08/11 | 2027/08/10 |

4.2. Block diagram of test setup





### 4.3. Limits

FCC 15.205 Restricted frequency band

| MHz                      | MHz               | MHz           | GHz       |
|--------------------------|-------------------|---------------|-----------|
| 0.090-0.110              | 16.42-16.423      | 399.9-410     | 4.5-5.15  |
| <sup>1</sup> 0.495-0.505 | 16.69475-16.69525 | 608-614       | 5.35-5.46 |
| 2.1735-2.1905            | 16.80425-16.80475 | 960-1240      | 7.25-7.75 |
| 4.125-4.128              | 25.5-25.67        | 1300-1427     | 8.025-8.5 |
| 4.1772&4.17775           | 37.5-38.25        | 1435-1626.5   | 9.0-9.2   |
| 4.2072&4.20775           | 73-74.6           | 1645.5-1646.5 | 9.3-9.5   |
| 6.215-6.218              | 74.8-75.2         | 1660-1710     | 10.6-12.7 |

|                   |                     |               |                  |
|-------------------|---------------------|---------------|------------------|
| 6.26775-6.26825   | 108-121.94          | 1718.8-1722.2 | 13.25-13.4       |
| 6.31175-6.31225   | 123-138             | 2200-2300     | 14.47-14.5       |
| 8.291-8.294       | 149.9-150.05        | 2310-2390     | 15.35-16.2       |
| 8.362-8.366       | 156.52475-156.52525 | 2483.5-2500   | 17.7-21.4        |
| 8.37625-8.38675   | 156.7-156.9         | 2690-2900     | 22.01-23.12      |
| 8.41425-8.41475   | 162.0125-167.17     | 3260-3267     | 23.6-24.0        |
| 12.29-12.293      | 167.72-173.2        | 3332-3339     | 31.2-31.8        |
| 12.51975-12.52025 | 240-285             | 3345.8-3358   | 36.43-36.5       |
| 12.57675-12.57725 | 322-335.4           | 3600-4400     | ( <sup>2</sup> ) |
| 13.36-13.41       |                     |               |                  |

1Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

2Above 38.6

20dB in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on Part 15.205(a), then the Part 15.209(a)and Part 15.231(e) limit in the table below has to be followed.

Limits Of Radiated Emission Measurement (0.009MHz - 1000MHz)

| Frequencies (MHz) | Field Strength (micorvolts/meter) | Measurement Distance (meters) |
|-------------------|-----------------------------------|-------------------------------|
| 0.009~0.490       | 2400/F(KHz)                       | 300                           |
| 0.490~1.705       | 24000/F(KHz)                      | 30                            |
| 1.705~30.0        | 30                                | 30                            |
| 30~40.66          | 100                               | 3                             |

Limits Of Radiated Emission Measurement ( FCC 15.231)

| Fundamental Frequency (MHz) | Field Strength of fundamental (microvolts/meter) | Field Strength of Unwanted Emissions(microvolts/meter) |
|-----------------------------|--------------------------------------------------|--------------------------------------------------------|
| 40.66 - 40.70               | 2250                                             | 225                                                    |
| 70 - 130                    | 1250                                             | 125                                                    |
| 130 - 174                   | 1250 to 3750*                                    | 125 to 375*                                            |
| 174 - 260                   | 3750                                             | 375                                                    |
| 260 - 470                   | 3750 to 12500*                                   | 375 to 1250*                                           |
| Above 470                   | 12500                                            | 1250                                                   |

Limits Of Radiated Emission Measurement (Above 1000MHz)

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

NOTE:\* linear interpolations

[Where F is the frequency in MHz, the formulas for calculating the maximum permitted fundamental field strengths are as follows:

For the band 130-174 MHz,  $\mu\text{V/m}$  at 3 meters =  $56.81818(F) - 6136.3636$ ;

for the band 260-470 MHz,  $\mu\text{V/m}$  at 3 meters =  $41.6667(F) - 7083.3333$ . The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.]

#### 4.4. Assistant equipment used for test

| Assistant equipment | Manufacturer | Model number | Description | other |
|---------------------|--------------|--------------|-------------|-------|
|---------------------|--------------|--------------|-------------|-------|

|   |   |   |   |   |
|---|---|---|---|---|
| / | / | / | / | / |
|---|---|---|---|---|

#### 4.5. Test procedure

- The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Below 1GHz)
- The measuring distance of 3m shall used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Above 1GHz)
- The height of the test antenna shall vary between 1m to 4m.Both horizontal and vertical polarization of the antenna are set to make the measurement.
- The initial step in collecting radiated emission data is a receive peak detector mode. Pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- All readings are peak unless otherwise stated QP in column of Note. Peak denoted that the Peak reading compliance with the QP limits and then QP Mode measurement didn't perform (Below 1GHz)
- All readings are Peak mode value unless otherwise stated AVG in column of Note. If the Peak mode measured value compliance with the Peak limits and lower than AVG Limits, the EUT shall be deemed to meet Peak & AVG limits and then only Peak mode was measured, but AVG mode didn't perform.(Above 1GHz)
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note: Both horizontal and vertical antenna polarities were tested, use triaxial test method for below 30M and performed pretest to three orthogonal axis. The worst case emissions were reported.

duty cycle correction factor may then be subtracted from the peak pulse amplitude (in dB) to find the average emission.

#### 4.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: Chamber 1#(RSE)     | Test Date: 2025/09/22--2025/09/22 |
| Condition: 23.1°C,55%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                                  |                        |
|----------------------------------|------------------------|
| EUT Name: REMOTE KEY             | EUT Model: RE-NT8TX9   |
| Sample No.: A2507314-S0001       | Test Mode: 315.1MHz TX |
| Power supply: DC 3V from battery | Memo: /                |

/

#### 4.7. Test data

Detector: PK

| No.                           | Frequency (MHz) | Reading (dBuV/m) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Polarity   |
|-------------------------------|-----------------|------------------|---------------|----------------|----------------|-------------|------------|
| 1                             | 315.1094        | 36.88            | 14.49         | 51.37          | 95.63          | -44.26      | Horizontal |
| 2                             | 315.1094        | 30.80            | 14.49         | 45.29          | 95.63          | -50.34      | Vertical   |
| Margin = Level(dBuV/m)– Limit |                 |                  |               |                |                |             |            |

Detector: AV

| No.                           | Frequency (MHz) | Peak (dBuV/m) | Duty Cycle Correction Factor | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Polarity   |
|-------------------------------|-----------------|---------------|------------------------------|----------------|----------------|-------------|------------|
| 1                             | 315.1094        | 51.37         | -13.9102                     | 37.4598        | 75.63          | -38.1702    | Horizontal |
| 2                             | 315.1094        | 45.29         | -13.9102                     | 31.3798        | 75.63          | -44.2502    | Vertical   |
| Margin = Level(dBuV/m)– Limit |                 |               |                              |                |                |             |            |

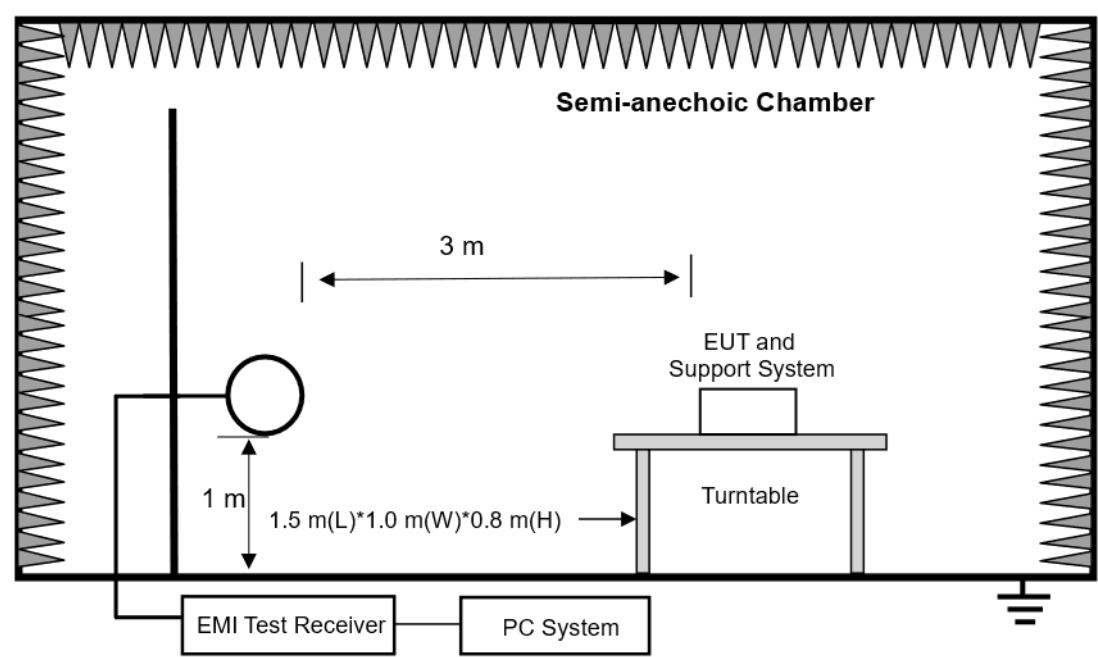
Remark: AV=PK + Duty Cycle Correction Factor(See 3.7 section)

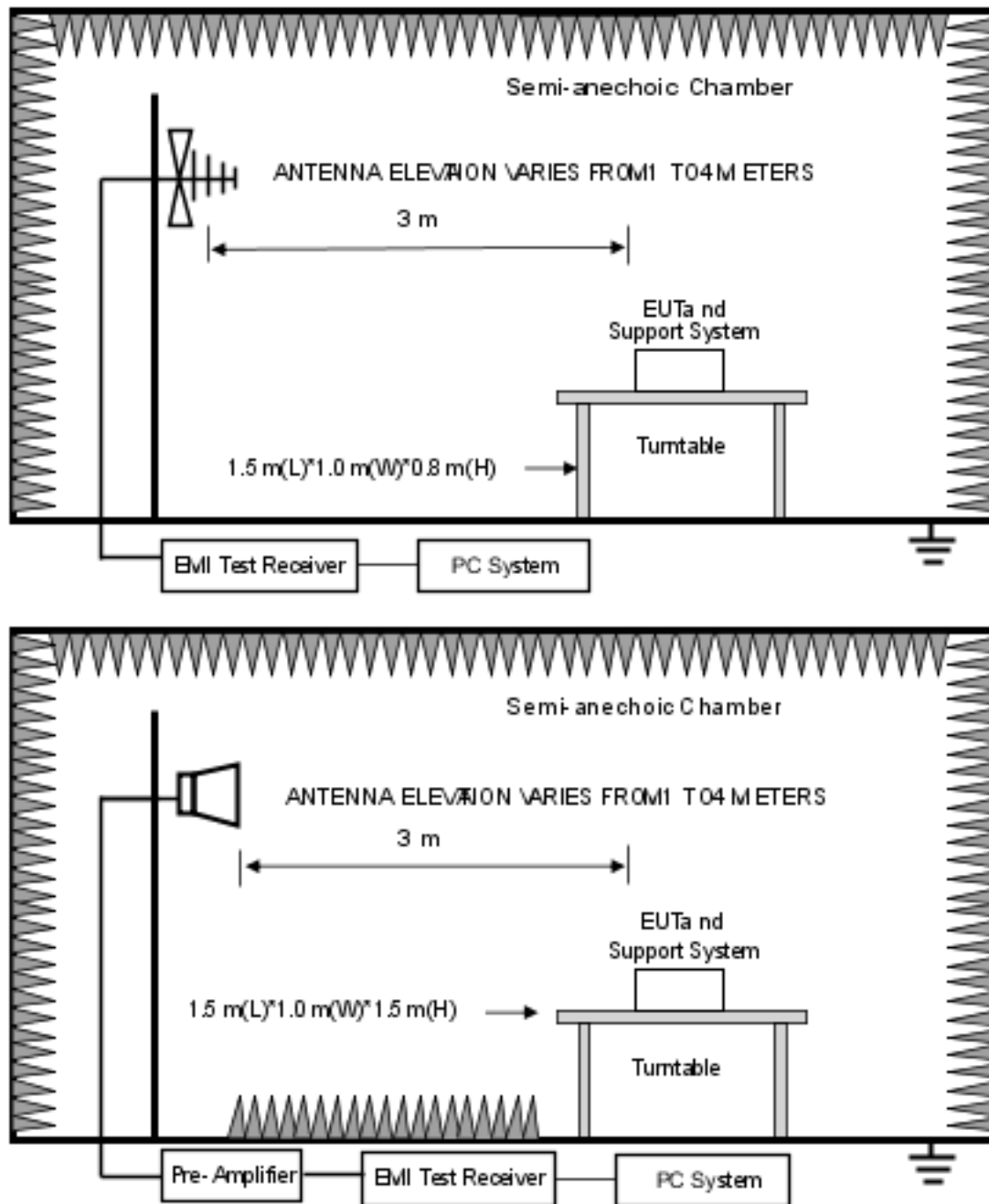
5. Radiated Emission

5.1. Test equipment

| Equipment         | Manufacturer  | Model No.     | Serial No. | Last Cal.  | Cal Due To |
|-------------------|---------------|---------------|------------|------------|------------|
| Spectrum analyzer | ROHDE&SCHWARZ | FSU           | Aa-EE075   | 2025/08/04 | 2026/08/03 |
| Horn Antenna      | SCHWARZBECK   | BBHA 9120 D   | Aa-EE076   | 2025/08/11 | 2027/08/10 |
| Test Receiver     | ROHDE&SCHWARZ | ESR           | Aa-EE048   | 2025/08/04 | 2026/08/03 |
| Bilog Antenna     | SCHWARZBECK   | VULB 9168     | Aa-EE001   | 2025/08/11 | 2027/08/10 |
| Amplifier         | SKET          | LNPA_0118G-45 | Aa-EE087   | 2025/08/04 | 2026/08/03 |
| Horn Antenna      | SCHWARZBECK   | BBHA 9170     | Aa-EE077   | 2025/08/11 | 2027/08/10 |
| Loop Antenna      | SCHWARZBECK   | FMZB 1519B    | Aa-EE074   | 2025/08/11 | 2027/08/10 |

5.2. Block diagram of test setup





### 5.3. Limits

FCC 15.205 Restricted frequency band

| MHz                      | MHz               | MHz           | GHz       |
|--------------------------|-------------------|---------------|-----------|
| 0.090-0.110              | 16.42-16.423      | 399.9-410     | 4.5-5.15  |
| <sup>1</sup> 0.495-0.505 | 16.69475-16.69525 | 608-614       | 5.35-5.46 |
| 2.1735-2.1905            | 16.80425-16.80475 | 960-1240      | 7.25-7.75 |
| 4.125-4.128              | 25.5-25.67        | 1300-1427     | 8.025-8.5 |
| 4.1772&4.17775           | 37.5-38.25        | 1435-1626.5   | 9.0-9.2   |
| 4.2072&4.20775           | 73-74.6           | 1645.5-1646.5 | 9.3-9.5   |
| 6.215-6.218              | 74.8-75.2         | 1660-1710     | 10.6-12.7 |

|                   |                     |               |                  |
|-------------------|---------------------|---------------|------------------|
| 6.26775-6.26825   | 108-121.94          | 1718.8-1722.2 | 13.25-13.4       |
| 6.31175-6.31225   | 123-138             | 2200-2300     | 14.47-14.5       |
| 8.291-8.294       | 149.9-150.05        | 2310-2390     | 15.35-16.2       |
| 8.362-8.366       | 156.52475-156.52525 | 2483.5-2500   | 17.7-21.4        |
| 8.37625-8.38675   | 156.7-156.9         | 2690-2900     | 22.01-23.12      |
| 8.41425-8.41475   | 162.0125-167.17     | 3260-3267     | 23.6-24.0        |
| 12.29-12.293      | 167.72-173.2        | 3332-3339     | 31.2-31.8        |
| 12.51975-12.52025 | 240-285             | 3345.8-3358   | 36.43-36.5       |
| 12.57675-12.57725 | 322-335.4           | 3600-4400     | ( <sup>2</sup> ) |
| 13.36-13.41       |                     |               |                  |

1Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

2Above 38.6

20dB in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on Part 15.205(a), then the Part 15.209(a) and Part 15.231(e) limit in the table below has to be followed.

Limits Of Radiated Emission Measurement (0.009MHz - 1000MHz)

| Frequencies (MHz) | Field Strength (micorvolts/meter) | Measurement Distance (meters) |
|-------------------|-----------------------------------|-------------------------------|
| 0.009~0.490       | 2400/F(KHz)                       | 300                           |
| 0.490~1.705       | 24000/F(KHz)                      | 30                            |
| 1.705~30.0        | 30                                | 30                            |
| 30~40.66          | 100                               | 3                             |

Limits Of Radiated Emission Measurement ( FCC 15.231)

| Fundamental Frequency (MHz) | Field Strength of fundamental (microvolts/meter) | Field Strength of Unwanted Emissions(microvolts/meter) |
|-----------------------------|--------------------------------------------------|--------------------------------------------------------|
| 40.66 - 40.70               | 2250                                             | 225                                                    |
| 70 - 130                    | 1250                                             | 125                                                    |
| 130 - 174                   | 1250 to 3750*                                    | 125 to 375*                                            |
| 174 - 260                   | 3750                                             | 375                                                    |
| 260 - 470                   | 3750 to 12500*                                   | 375 to 1250*                                           |
| Above 470                   | 12500                                            | 1250                                                   |

Limits Of Radiated Emission Measurement (Above 1000MHz)

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

NOTE:\* linear interpolations

[Where F is the frequency in MHz, the formulas for calculating the maximum permitted fundamental field strengths are as follows:

For the band 130-174 MHz,  $\mu\text{V/m}$  at 3 meters =  $56.81818(F) - 6136.3636$ ;

for the band 260-470 MHz,  $\mu\text{V/m}$  at 3 meters =  $41.6667(F) - 7083.3333$ . The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.]

#### 5.4. Assistant equipment used for test

| Assistant equipment | Manufacturer | Model number | Description | other |
|---------------------|--------------|--------------|-------------|-------|
|---------------------|--------------|--------------|-------------|-------|

|   |   |   |   |   |
|---|---|---|---|---|
| / | / | / | / | / |
|---|---|---|---|---|

### 5.5. Test procedure

- The measuring distance of 3m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Below 1GHz)
- The measuring distance of 3m shall used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation(Above 1GHz)
- The height of the test antenna shall vary between 1m to 4m.Both horizontal and vertical polarization of the antenna are set to make the measurement.
- The initial step in collecting radiated emission data is a receive peak detector mode. Pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- All readings are peak unless otherwise stated QP in column of Note. Peak denoted that the Peak reading compliance with the QP limits and then QP Mode measurement didn't perform (Below 1GHz)
- All readings are Peak mode value unless otherwise stated AVG in column of Note. If the Peak mode measured value compliance with the Peak limits and lower than AVG Limits, the EUT shall be deemed to meet Peak & AVG limits and then only Peak mode was measured, but AVG mode didn't perform.(Above 1GHz)
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note: Both horizontal and vertical antenna polarities were tested, use triaxial test method for below 30M and performed pretest to three orthogonal axis. The worst case emissions were reported.

duty cycle correction factor may then be subtracted from the peak pulse amplitude (in dB) to find the average emission.

### 5.6. Test result

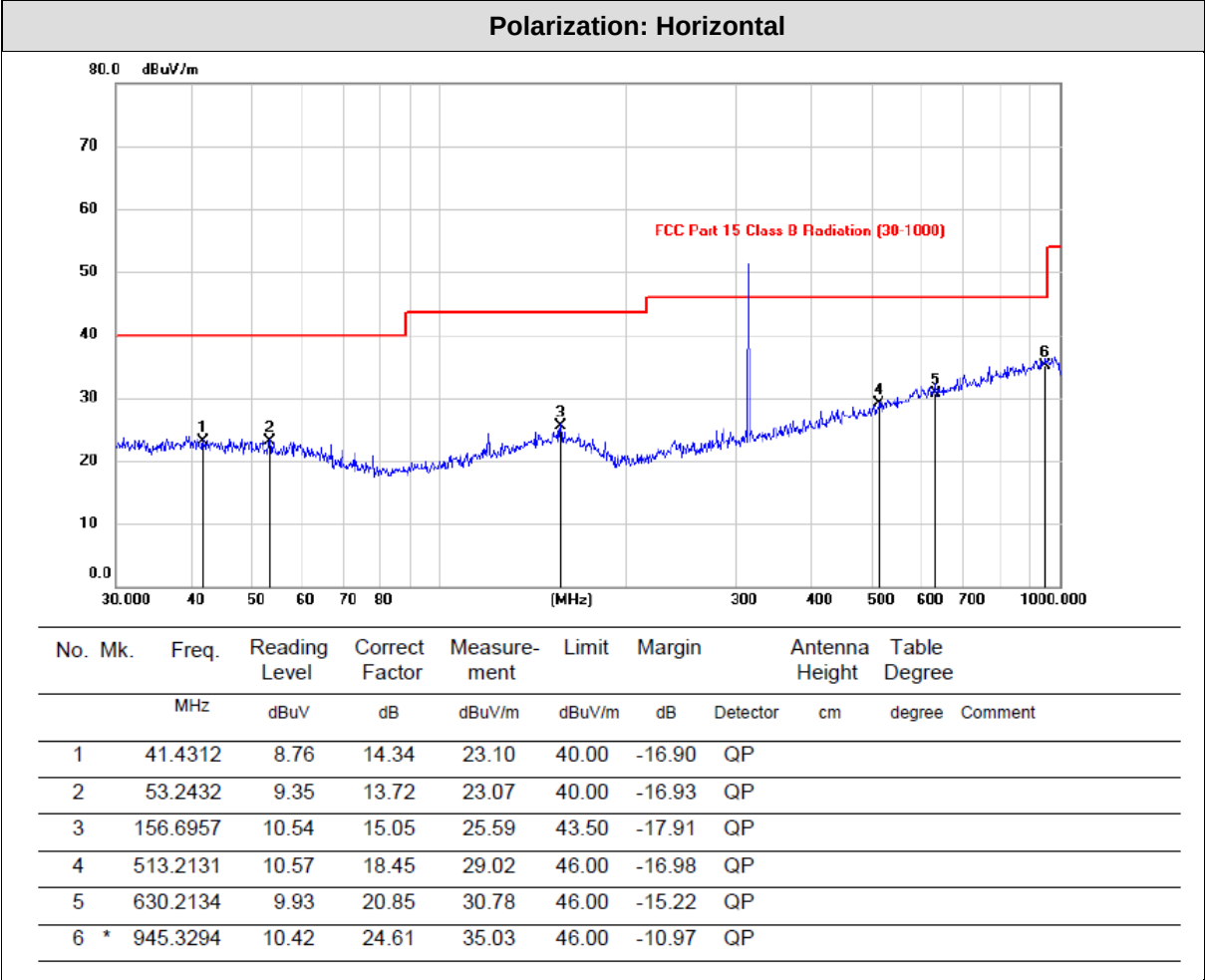
|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: Chamber 1#(RSE)     | Test Date: 2025/09/22--2025/09/22 |
| Condition: 23.1°C,55%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

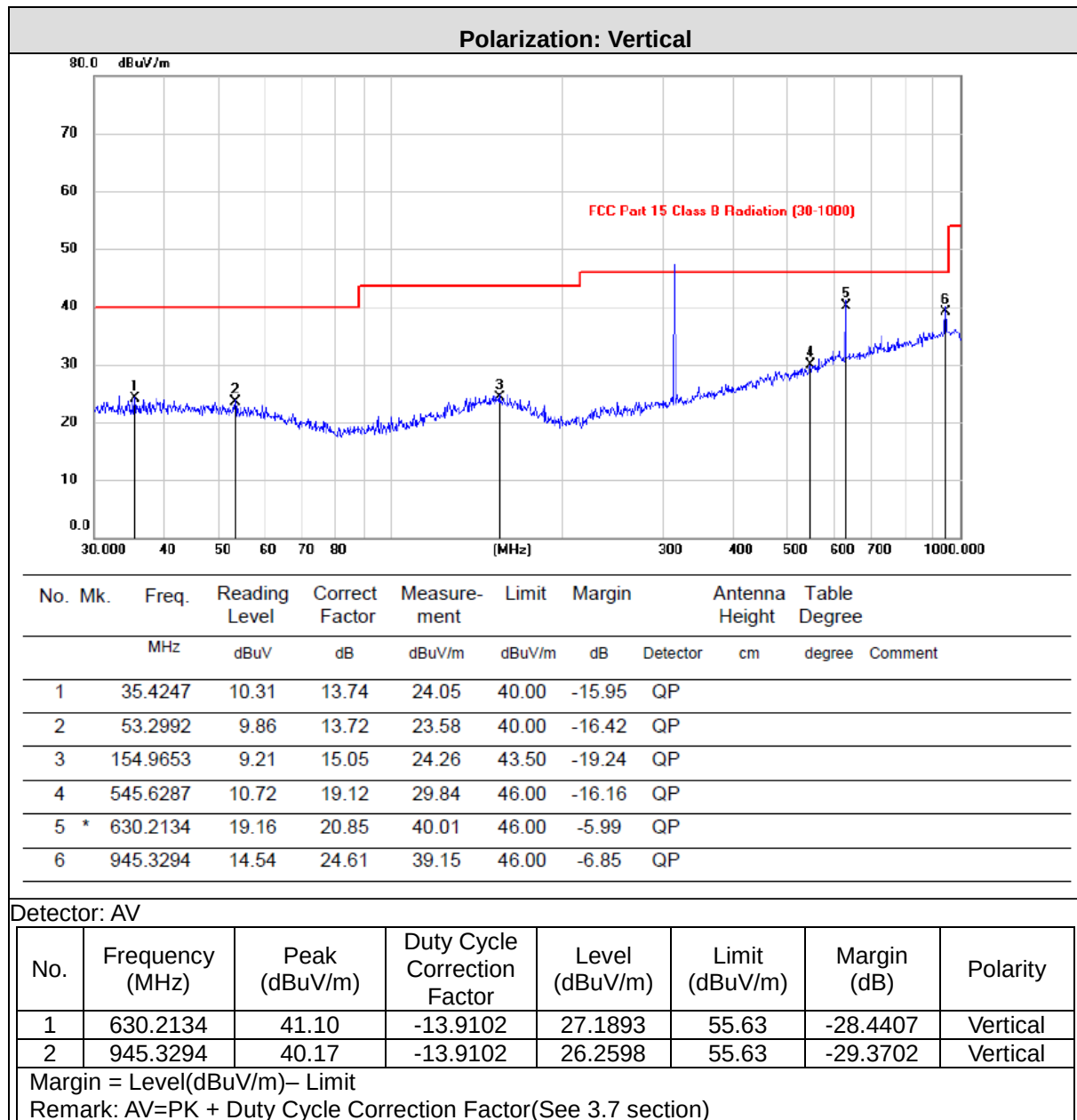
|                                  |                        |
|----------------------------------|------------------------|
| EUT Name: REMOTE KEY             | EUT Model: RE-NT8TX9   |
| Sample No.: A2507314-S0001       | Test Mode: 315.1MHz TX |
| Power supply: DC 3V from battery | Memo: /                |

/

5.7. Test data

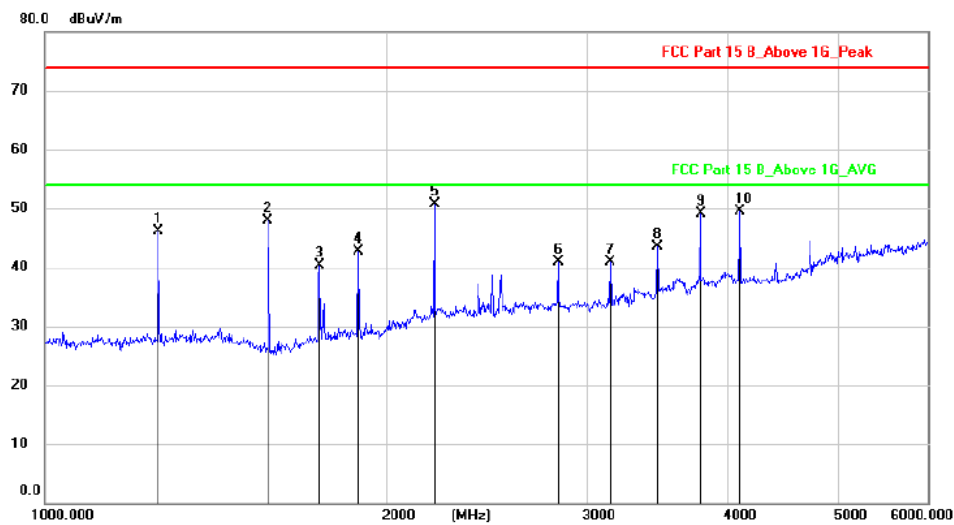
Below 1GHz:





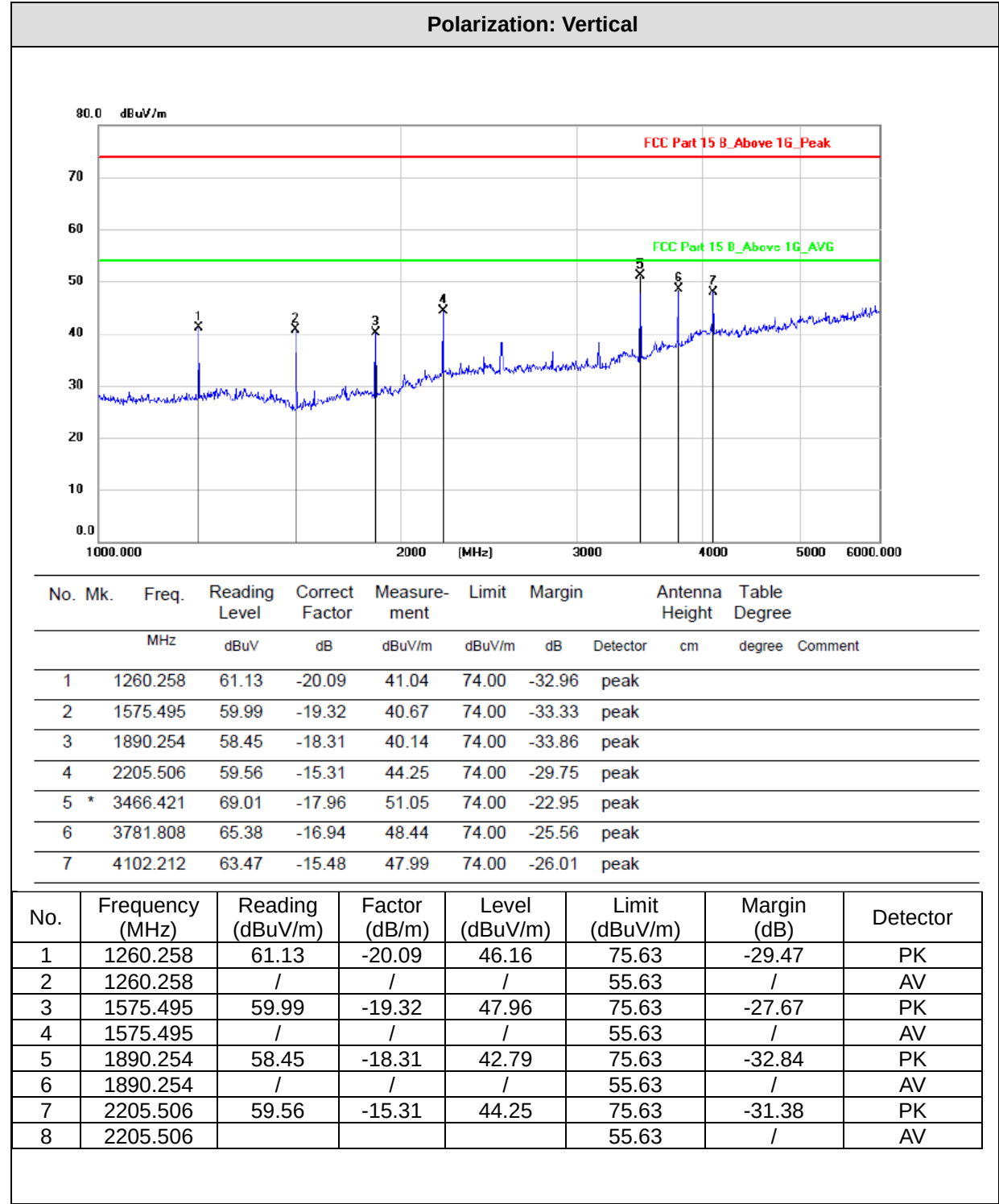
Above 1GHz:

Polarization: Horizontal



| No. Mk. | Freq.    | Reading | Correct | Measure- | Limit  | Margin | Antenna  | Table  |        |
|---------|----------|---------|---------|----------|--------|--------|----------|--------|--------|
|         | MHz      | Level   | Factor  | ment     |        |        | Height   | Degree |        |
|         |          | dBuV    | dB      | dBuV/m   | dBuV/m | dB     | Detector | cm     | degree |
| 1       | 1260.258 | 66.25   | -20.09  | 46.16    | 74.00  | -27.84 | peak     |        |        |
| 2       | 1575.495 | 67.28   | -19.32  | 47.96    | 74.00  | -26.04 | peak     |        |        |
| 3       | 1746.816 | 59.26   | -19.05  | 40.21    | 74.00  | -33.79 | peak     |        |        |
| 4       | 1890.254 | 61.10   | -18.31  | 42.79    | 74.00  | -31.21 | peak     |        |        |
| 5 *     | 2205.737 | 65.95   | -15.31  | 50.64    | 74.00  | -23.36 | peak     |        |        |
| 6       | 2835.035 | 55.15   | -14.16  | 40.99    | 74.00  | -33.01 | peak     |        |        |
| 7       | 3151.485 | 54.41   | -13.50  | 40.91    | 74.00  | -33.09 | peak     |        |        |
| 8       | 3465.761 | 61.54   | -17.97  | 43.57    | 74.00  | -30.43 | peak     |        |        |
| 9       | 3784.131 | 66.04   | -16.94  | 49.10    | 74.00  | -24.90 | peak     |        |        |
| 10      | 4102.212 | 64.98   | -15.48  | 49.50    | 74.00  | -24.50 | peak     |        |        |

| No. | Frequency (MHz) | Reading (dBuV/m) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|------------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1260.258        | 66.25            | -20.09        | 46.16          | 75.63          | -29.47      | PK       |
| 2   | 1260.258        | /                | /             | /              | 55.63          | /           | AV       |
| 3   | 1575.495        | 67.28            | -19.32        | 47.96          | 75.63          | -27.67      | PK       |
| 4   | 1575.495        | /                | /             | /              | 55.63          | /           | AV       |
| 5   | 1746.816        | 59.26            | -19.05        | 40.21          | 75.63          | -35.42      | PK       |
| 6   | 1746.816        | /                | /             | /              | 55.63          | /           | AV       |
| 7   | 1890.254        | 61.10            | -18.31        | 42.79          | 75.63          | -32.84      | PK       |
| 8   | 1890.254        | /                | /             | /              | 55.63          | /           | AV       |
| 9   | 2205.737        | 65.95            | -15.31        | 50.64          | 75.63          | -24.99      | PK       |
| 10  | 2205.737        | /                | /             | /              | 55.63          | /           | AV       |
| 11  | 2835.035        | 55.15            | -14.16        | 40.99          | 75.63          | -34.64      | PK       |
| 12  | 2835.035        | /                | /             | /              | 55.63          | /           | AV       |
| 13  | 3151.485        | 54.41            | -13.50        | 40.91          | 75.63          | -34.72      | PK       |
| 14  | 3151.485        | /                | /             | /              | 55.63          | /           | AV       |

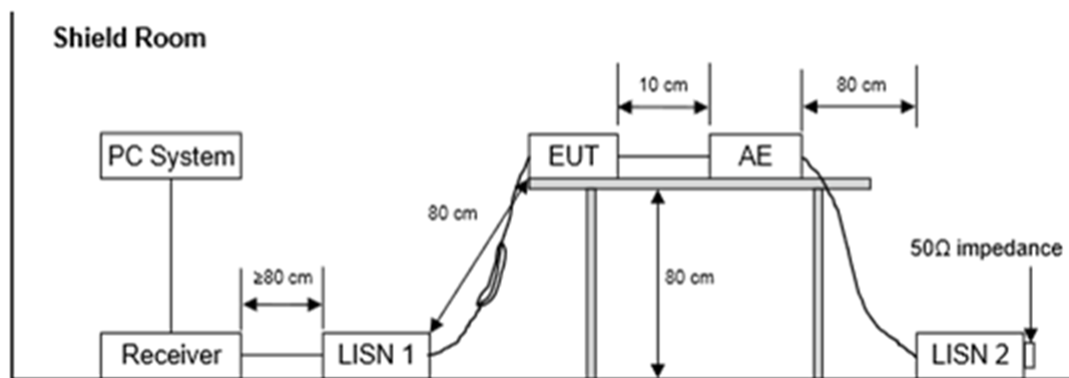


## 6. Power Line Conducted Emissions

### 6.1. Test equipment

| Equipment     | Manufacturer  | Model No. | Serial No. | Last Cal.  | Cal Due To |
|---------------|---------------|-----------|------------|------------|------------|
| Test Receiver | ROHDE&SCHWARZ | ESCI      | Aa-EE005   | 2025/08/04 | 2026/08/03 |
| Pulse Limiter | SCHWARZBEC K  | 9516F     | Aa-EE004   | 2025/08/04 | 2026/08/03 |
| L.I.S.N.      | SCHWARZBEC K  | NSLK8126  | Aa-EE003   | 2025/08/04 | 2026/08/03 |

### 6.2. Block diagram of test setup



### 6.3. Limits

| Frequency       | Quasi-Peak Level<br>dB(uV) | Average Level<br>dB(uV) |
|-----------------|----------------------------|-------------------------|
| 150 kHz~500 kHz | 66 ~ 56*                   | 56 ~ 46*                |
| 500 kHz~5 MHz   | 56                         | 46                      |
| 5 MHz~30 MHz    | 60                         | 50                      |

Note 1: \* Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

### 6.4. Assistant equipment used for test

| Assistant equipment | Manufacturer | Model number | Description | other |
|---------------------|--------------|--------------|-------------|-------|
| /                   | /            | /            | /           | /     |

### 6.5. Test procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

## 6.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: Shield Room CE 1#   | Test Date: 2025/08/29--2025/08/29 |
| Condition: 24.2°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                            |                                                                |
|----------------------------|----------------------------------------------------------------|
| EUT Name: REMOTE KEY       | EUT Model: RE-NT8TX9                                           |
| Sample No.: A2507314-S0001 | Test Mode: /                                                   |
| Power supply: /            | Memo: EUT power supply by battery, so the test not applicable. |

/

## 7. 20dB Bandwidth and 99% Bandwidth

### 7.1. Test equipment

| Equipment       | Manufacturer | Model No. | Serial No. | Last Cal.  | Cal Due To |
|-----------------|--------------|-----------|------------|------------|------------|
| Signal Analyzer | Agilent      | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |

### 7.2. Block diagram of test setup



### 7.3. Limits

The bandwidth of the emission shall be no wider than 0.25% of the center frequency of devices operation above 70MHz and below 900MHz.

### 7.4. Assistant equipment used for test

| Assistant equipment | Manufacturer | Model number | Description | other |
|---------------------|--------------|--------------|-------------|-------|
| /                   | /            | /            | /           | /     |

### 7.5. Test procedure

- (1) Connect EUT's antenna output to spectrum analyzer by RF cable.
- (2) The bandwidth of the fundamental frequency was measured by spectrum analyzer with 1kHz RBW and 3kHz VBW. Use the 99% bandwidth function of the spectrum analyzer to measure the occupied bandwidth of the EUT.

### 7.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/22--2025/09/22 |
| Condition: 24.1°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

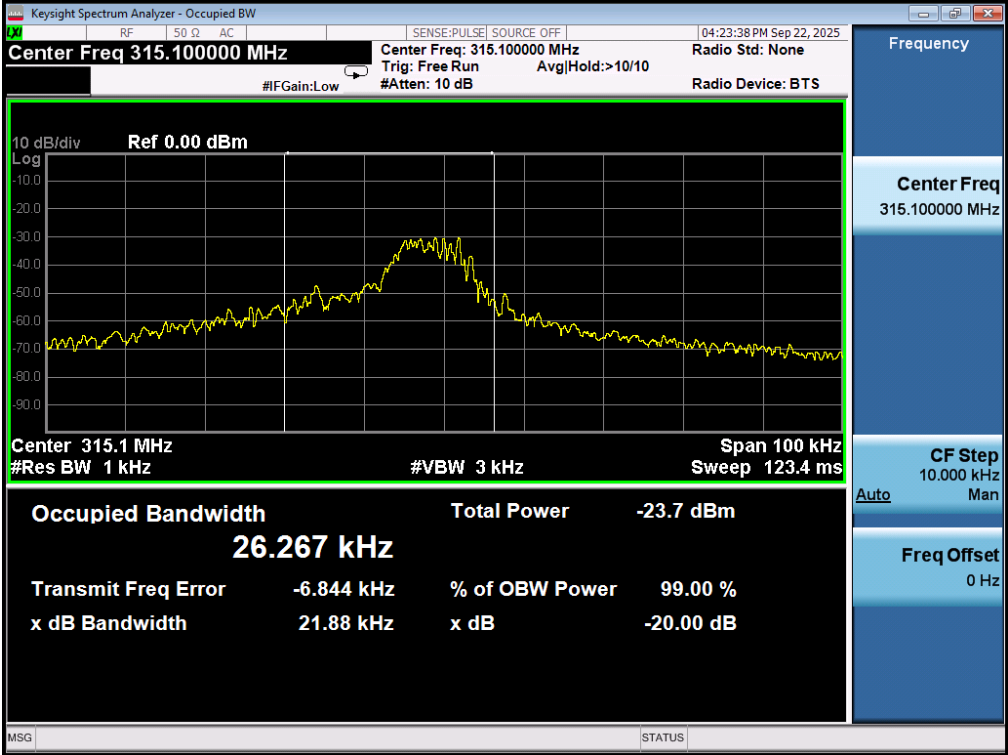
|                                  |                        |
|----------------------------------|------------------------|
| EUT Name: REMOTE KEY             | EUT Model: RE-NT8TX9   |
| Sample No.: A2507314-S0001       | Test Mode: 315.1MHz TX |
| Power supply: DC 3V from battery | Memo: /                |

/

7.7. Test data

| Mode | Freq (MHz) | 20dB Bandwidth(kHz) | 99% Bandwidth(kHz) | Limit (kHz) | Conclusion |
|------|------------|---------------------|--------------------|-------------|------------|
| ASK  | 315.1      | 21.88               | 26.267             | 788.75      | PASS       |

Note: Limit=315.1MHz \*0.25%=788.75kHz



## 8. Transmission Time

### 8.1. Test equipment

| Equipment       | Manufacturer | Model No. | Serial No. | Last Cal.  | Cal Due To |
|-----------------|--------------|-----------|------------|------------|------------|
| Signal Analyzer | Agilent      | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |

### 8.2. Block diagram of test setup



### 8.3. Limits

(a) The provisions of this section are restricted to periodic operation within the band 40.66-40.70 MHz and above 70 MHz. Except as shown in paragraph (e) of this section, the intentional radiator is restricted to the transmission of a control signal such as those used with alarm systems, door openers, remote switches, etc. Continuous transmissions, voice, video and the radio control of toys are not permitted. Data is permitted to be sent with a control signal. The following conditions shall be met to comply with the provisions for this periodic operation:

- (1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.
- (2) A transmitter activated automatically shall cease transmission within 5 seconds after activation.
- (3) Periodic transmissions at regular predetermined intervals are not permitted. However, polling or supervision transmissions, including data, to determine system integrity of transmitters used in security or safety applications are allowed if the total duration of transmissions does not exceed more than two seconds per hour for each transmitter. There is no limit on the number of individual transmissions, provided the total transmission time does not exceed two seconds per hour.

### 8.4. Assistant equipment used for test

| Assistant equipment | Manufacturer | Model number | Description | other |
|---------------------|--------------|--------------|-------------|-------|
| /                   | /            | /            | /           | /     |

### 8.5. Test procedure

- (1) The EUT's RF signal was coupled to spectrum analyzer by antenna connected to spectrum analyzer.
- (2) Set the spectrum to zero span mode, and centered of EUT frequency.
- (3) Measure the stop transmitting time after release EUT button.

8.6. Test result

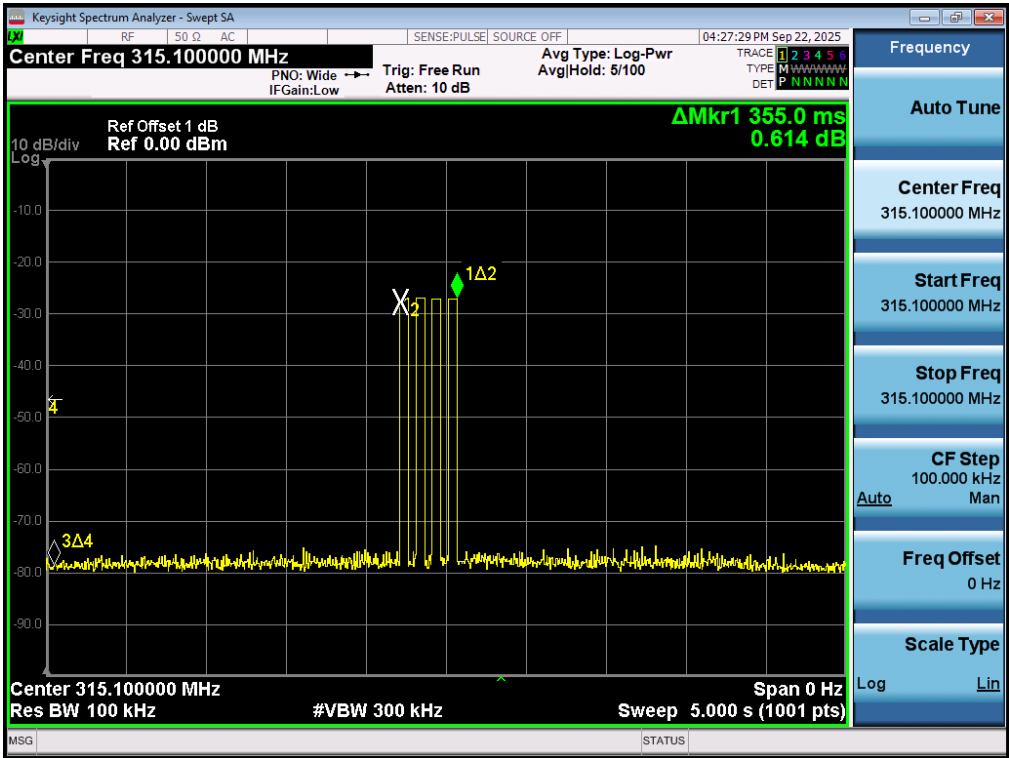
|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/22--2025/09/22 |
| Condition: 24.1°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                                   |                        |
|-----------------------------------|------------------------|
| EUT Name: REMOTE KEY              | EUT Model: RE-NT8TX9   |
| Sample No.: A2507314-S0001        | Test Mode: 315.1MHz TX |
| Power supply: DC 3V from battaery | Memo: /                |

8.7. Test data

| Freq (MHz) | Test Result(s) | Limit (s) | Conclusion |
|------------|----------------|-----------|------------|
| 315.1      | 0.355          | < 5s      | PASS       |

EUT After Release the button, EUT emission Continue 0.355 seconds, Compliance with 15.231 a(1) section.



## 9. Antenna Requirement

### 9.1. Standard Requirement

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 use of a standard antenna jack or electrical connector is prohibited.

### 9.2. Antenna Connected Construction

The directional gains of antenna used for transmitting is 0 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Please see EUT photo for details.

### 9.3. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/28--2025/09/28 |
| Condition: 24.1°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

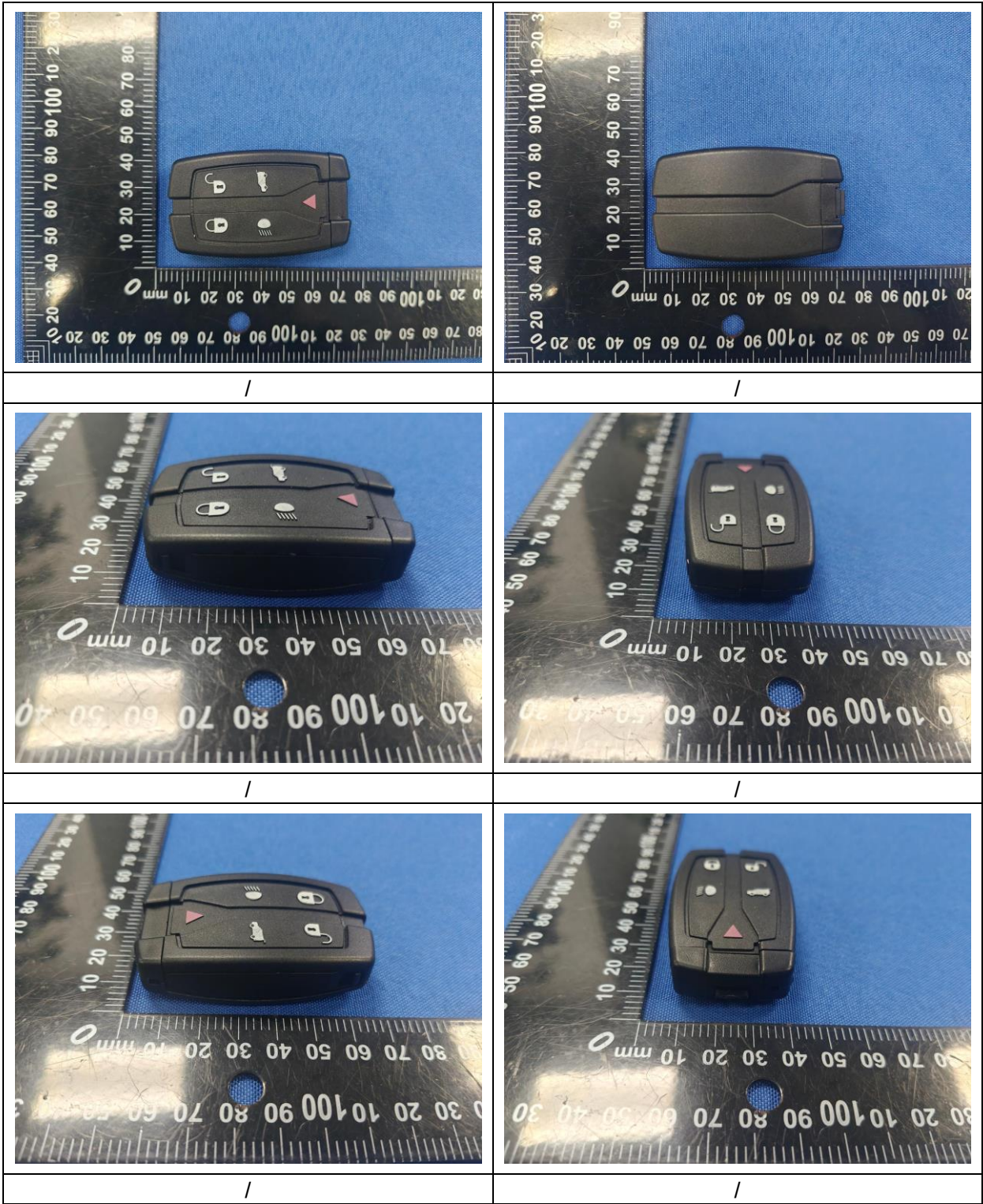
|                            |                                                                                  |
|----------------------------|----------------------------------------------------------------------------------|
| EUT Name: REMOTE KEY       | EUT Model: RE-NT8TX9                                                             |
| Sample No.: A2507314-S0001 | Test Mode: /                                                                     |
| Power supply: /            | Memo: The EUT antenna is PCB Antenna. It complies with the standard requirement. |

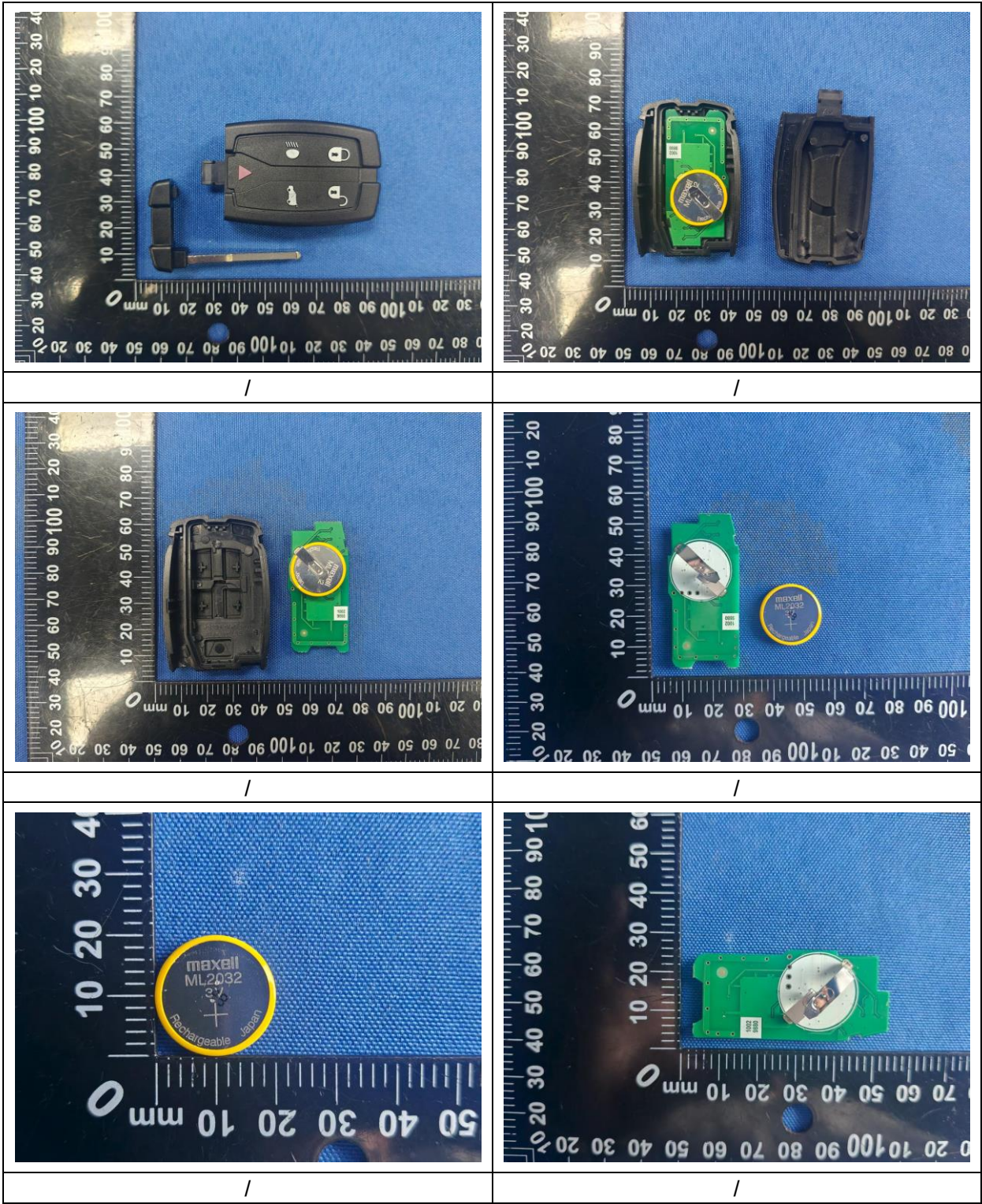
/

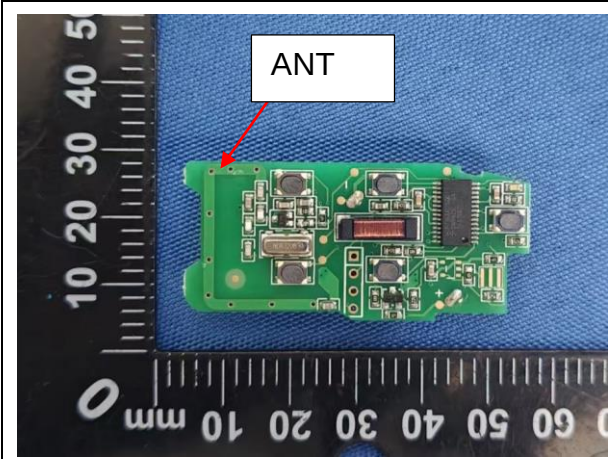
## 10. Test Setup Photograph



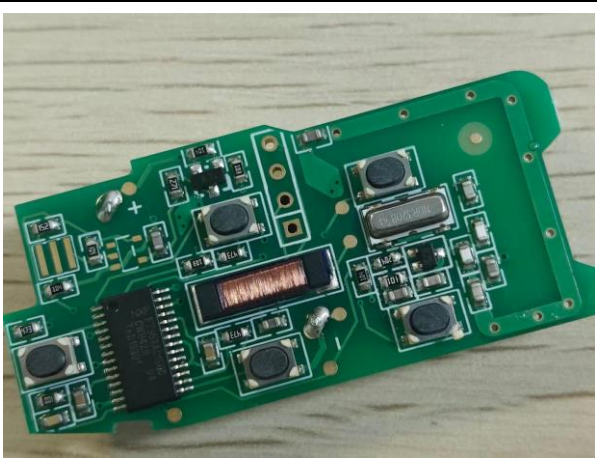
11. Photos of the EUT







/



/

-----End Report-----