



## FCC REPORT

|                                |   |                                                                                                                                                                               |
|--------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant</b>               | : | GEOMATE POSITIONING PTE. LTD.                                                                                                                                                 |
| <b>Address of Applicant</b>    | : | 38 BEACH ROAD #29-11 SOUTH BEACH TOWER<br>SINGAPORE (189767)                                                                                                                  |
| <b>Manufacturer</b>            | : | GEOMATE POSITIONING PTE. LTD.                                                                                                                                                 |
| <b>Address of Manufacturer</b> | : | 38 BEACH ROAD #29-11 SOUTH BEACH TOWER<br>SINGAPORE (189767)                                                                                                                  |
| <b>Equipment under Test</b>    | : | Remote Controller                                                                                                                                                             |
| <b>Model No./HVIN</b>          | : | R100                                                                                                                                                                          |
| <b>FCC ID</b>                  | : | 2A7ZC-R100                                                                                                                                                                    |
| <b>IC</b>                      | : | 34552-R100                                                                                                                                                                    |
| <b>Test Standard(s)</b>        | : | FCC Rules and Regulations Part 15 Subpart C Section<br>15.247, RSS-247 Issue 3, RSS-Gen Issue 5, ANSI<br>C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata<br>to C63.10a-2024 |
| <b>Report No.</b>              | : | A2507399-C03-R02                                                                                                                                                              |
| <b>Issue Date</b>              | : | 2025/11/11                                                                                                                                                                    |
| <b>Issued By</b>               | : | Shenzhen Alpha Product Testing Co., Ltd.<br>Building i, No.2, Lixin Road, Fuyong Street, Bao'an<br>District, 518103, Shenzhen City, Guangdong Province,<br>P.R. China.        |

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Test Report Declare

|                         |   |                                                                                   |
|-------------------------|---|-----------------------------------------------------------------------------------|
| Applicant               | : | GEOMATE POSITIONING PTE. LTD.                                                     |
| Address of Applicant    | : | 38 BEACH ROAD #29-11 SOUTH BEACH TOWER<br>SINGAPORE (189767)                      |
| Manufacturer            | : | GEOMATE POSITIONING PTE. LTD.                                                     |
| Address of Manufacturer | : | 38 BEACH ROAD #29-11 SOUTH BEACH TOWER<br>SINGAPORE (189767)                      |
| Equipment under Test    | : | Remote Controller                                                                 |
| Model No./HVIN          | : | R100                                                                              |
| Trademark               | : |  |

Test Standard Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247, RSS-247 Issue 3, RSS-Gen Issue 5, ANSI C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024

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.

|                  |                  |               |                         |
|------------------|------------------|---------------|-------------------------|
| Report No.:      | A2507399-C03-R02 |               |                         |
| Date of Receipt: | 2025/09/08       | Date of Test: | 2025/09/08 - 2025/10/31 |

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 | 2025/11/11 | Yannis Wen |

## 1. Summary of Test Results

| No. | Test Parameter                       | Clause No.                                                                                             | Result |
|-----|--------------------------------------|--------------------------------------------------------------------------------------------------------|--------|
| 1   | RF Conducted Spurious Emissions      | FCC Part 15: 15.247(d), RSS-Gen Issue 5 (8.9), RSS-247 Issue 3 (6.6), ANSI C63.10                      | Pass   |
| 2   | Spurious Emission                    | FCC Part 15: 15.209, FCC Part 15: 15.247(d), RSS-Gen Issue 5 (8.9), RSS-247 Issue 3 (6.6), ANSI C63.10 | Pass   |
| 3   | Power Line Conducted Emissions       | CC Part 15: 15.207, RSS-Gen Issue 5 (8.8), ANSI C63.10                                                 | Pass   |
| 4   | Duty Cycle                           | ANSI C63.10                                                                                            | Pass   |
| 5   | Maximum Conducted Output Power       | FCC Part 15: 15.247(b)(3), RSS-247 Issue 3 (6.3.2), ANSI C63.10                                        | Pass   |
| 6   | Maximum Power Spectral Density Level | FCC PART 15:15.247(e), RSS-247 Issue 3 (6.3.1), ANSI C63.10                                            | Pass   |
| 7   | -6 dB Bandwidth and 99% Bandwidth    | FCC PART 15:15.247(a)(2), RSS-247 Issue 3 (6.3.1), ANSI C63.10                                         | Pass   |
| 8   | Band Edge(Conducted)                 | FCC Part 15: 15.247(d), RSS-Gen Issue 5 (8.9), RSS-247 Issue 3 (6.6), ANSI C63.10                      | Pass   |
| 9   | Band Edge(Radiated)                  | FCC Part 15: 15.247(d), RSS-Gen Issue 5 (6.13), ANSI C63.10                                            | Pass   |
| 10  | Frequency Stability                  | RSS-Gen Issue 5 (6.11)                                                                                 | Pass   |
| 11  | Antenna Requirement                  | FCC Part 15: 15.203, RSS-Gen Issue 5 (6.8)                                                             | 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      | MWRFTest     | V2.0.0.0  |

## 2. General Test Information

### 2.1. Description of EUT

|                            |                                                     |
|----------------------------|-----------------------------------------------------|
| EUT Name                   | : Remote Controller                                 |
| Model Number/HVIN          | : R100                                              |
| Difference of model number | : /                                                 |
| Power Supply               | : AC 100-240V 50/60Hz 1A(Max), DC 3.7V From Battery |
| Hardware Version           | : V1.0                                              |
| Software Version           | : V1.0                                              |

|                       |                                                                                                                                                          |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Radio Technology      | : IEEE 802.11b/g/n                                                                                                                                       |
| Operation frequency   | : IEEE 802.11b: 2412MHz to 2462MHz<br>IEEE 802.11g: 2412MHz to 2462MHz<br>IEEE 802.11n HT20: 2412MHz to 2462MHz<br>IEEE 802.11n HT40: 2422MHz to 2452MHz |
| Modulation            | : IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK)<br>IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)<br>IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)               |
| Antenna Type          | : FPC Antenna                                                                                                                                            |
| Max Antenna Gain(dBi) | : 2dBi(Antenna information is provided by applicant.)                                                                                                    |

| Channel information |                 |    |                 |    |                 |
|---------------------|-----------------|----|-----------------|----|-----------------|
| CH                  | Frequency (MHz) | CH | Frequency (MHz) | CH | Frequency (MHz) |
| 1                   | 2412            | 5  | 2432            | 9  | 2452            |
| 2                   | 2417            | 6  | 2437            | 10 | 2457            |
| 3                   | 2422            | 7  | 2442            | 11 | 2462            |
| 4                   | 2427            | 8  | 2447            | /  | /               |

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.

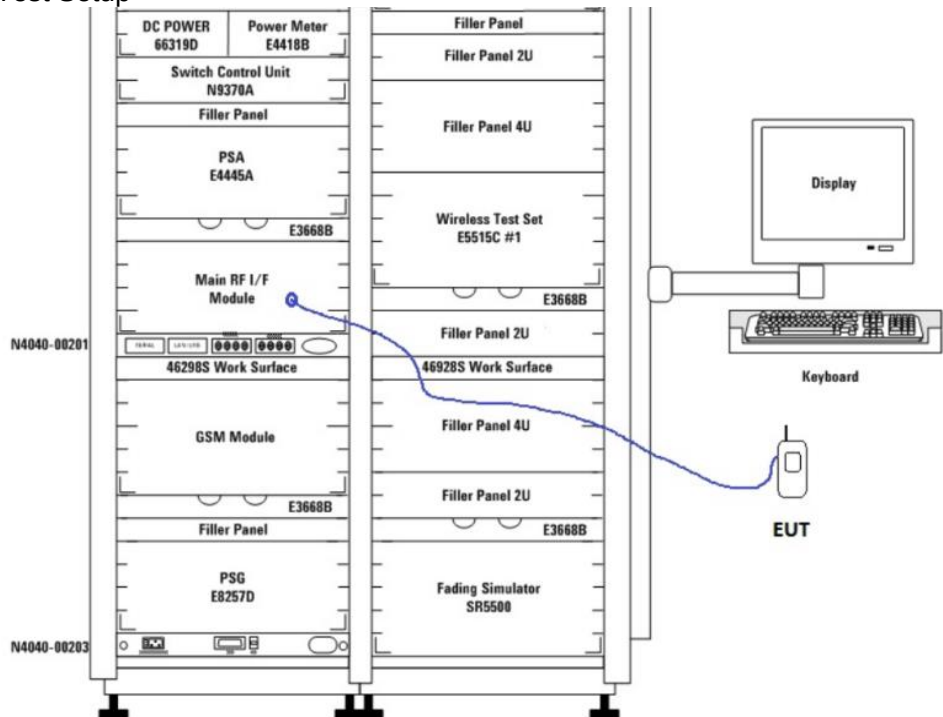
“☑” means to be chosen or applicable; “☐” means don't to be chosen or not applicable; This note applies to entire report.

### 2.2. Accessories of EUT

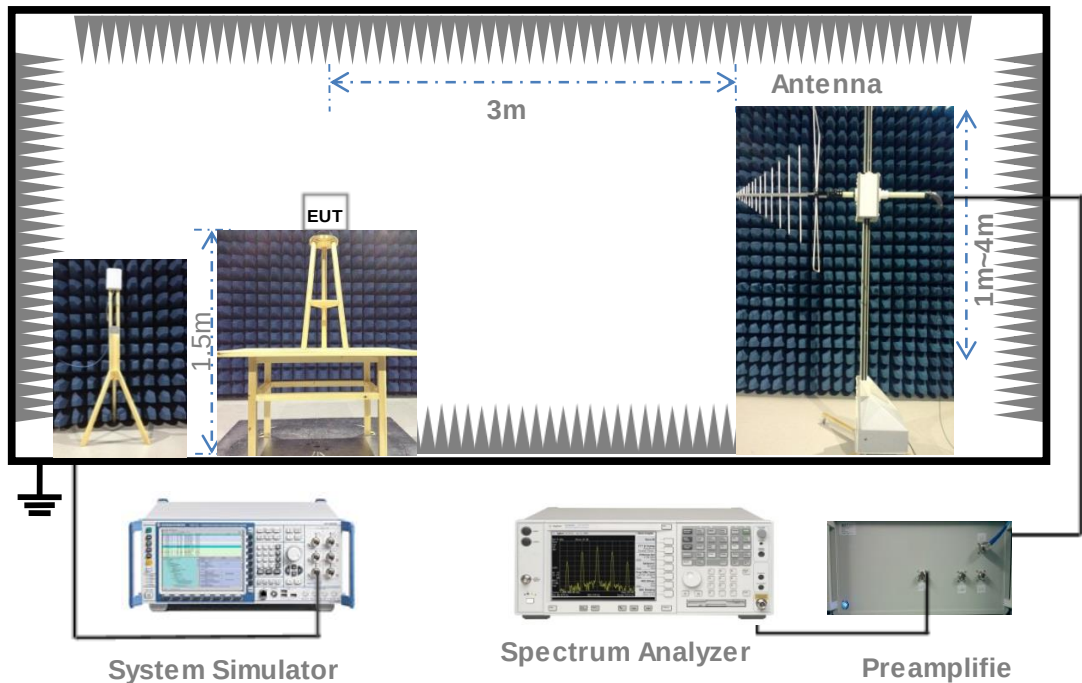
| Accessories   | Manufacturer                           | Model number    | Description                                         |
|---------------|----------------------------------------|-----------------|-----------------------------------------------------|
| AC/DC ADAPTER | Dongguan GaoFanDe Technology Co., Ltd. | GFDA7-09004000U | Input: 100~240V~50/60Hz 1A Max<br>Output: 9.0V=4.0A |

2.3. Block diagram of EUT configuration for test

Conducted Test Setup



Radiated Test Setup



2.4. Test mode description

The test software “QRCT Version3.0.265.0” was used to control EUT work in Continuous TX mode, and select test channel, default power level, wireless mode:

| Mode No. | Mode | Data rate (Mbps) | Channel | Frequency(MHz) |
|----------|------|------------------|---------|----------------|
|----------|------|------------------|---------|----------------|

|                                                                                                                                      |                      |      |             |      |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------|------|-------------|------|
| Mode 1                                                                                                                               | IEEE 802.11b         | 1    | Low :CH1    | 2412 |
| Mode 2                                                                                                                               |                      | 1    | Middle: CH6 | 2437 |
| Mode 3                                                                                                                               |                      | 1    | High: CH11  | 2462 |
| Mode 4                                                                                                                               | IEEE 802.11g         | 6    | Low :CH1    | 2412 |
| Mode 5                                                                                                                               |                      | 6    | Middle: CH6 | 2437 |
| Mode 6                                                                                                                               |                      | 6    | High: CH11  | 2462 |
| Mode 7                                                                                                                               | IEEE 802.11n<br>HT20 | MCS0 | Low :CH1    | 2412 |
| Mode 8                                                                                                                               |                      | MCS0 | Middle: CH6 | 2437 |
| Mode 9                                                                                                                               |                      | MCS0 | High: CH11  | 2462 |
| Mode 10                                                                                                                              | IEEE 802.11n<br>HT40 | MCS0 | Low :CH3    | 2422 |
| Mode 11                                                                                                                              |                      | MCS0 | Middle: CH6 | 2437 |
| Mode 12                                                                                                                              |                      | MCS0 | High: CH9   | 2452 |
| Note1: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test. |                      |      |             |      |

## 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**

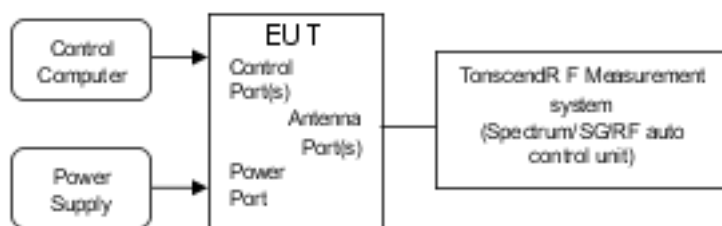
| Item                                                                   | Uncertainty               |
|------------------------------------------------------------------------|---------------------------|
| Uncertainty for Power point Conducted Emissions Test                   | 1.63dB                    |
| Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)    | 3.5dB                     |
| Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)  | 3.74dB(Polarize: V)       |
|                                                                        | 3.76dB(Polarize: H)       |
| Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)  | 3.77dB(Polarize: V)       |
|                                                                        | 3.80dB(Polarize: H)       |
| Uncertainty for Radiation Emission test in 3m chamber (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°C                     |
| Uncertainty for humidity                                               | 1%                        |
| Uncertainty for DC and low frequency voltages                          | 0.06%                     |

### 3. RF Conducted Spurious Emissions

#### 3.1. Test equipment

| Equipment               | Manufacturer      | Model No. | Serial No. | Last Cal.  | Cal Due To |
|-------------------------|-------------------|-----------|------------|------------|------------|
| CMW500                  | ROHDE&SCH<br>WARZ | CMW500    | Aa-EE073   | 2025/08/04 | 2026/08/03 |
| Spectrum analyzer       | ROHDE&SCH<br>WARZ | FSV40-N   | Aa-EE081   | 2025/08/04 | 2026/08/03 |
| Signal Analyzer         | Agilent           | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | Agilent           | E9300A    | Aa-EE046   | 2025/08/04 | 2026/08/03 |
| Vector Signal Generator | Agilent           | N5182A    | Aa-EE040   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | DARE              | RPR3006W  | Aa-EE071   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | DARE              | RPR3006W  | Aa-EE070   | 2025/08/04 | 2026/08/03 |
| Power meter             | Agilent           | E4419B    | Aa-EE045   | 2025/08/04 | 2026/08/03 |

#### 3.2. Block diagram of test setup



#### 3.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20dB.

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

Attenuation below the general field strength limits specified in RSS-Gen is not required.

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with

#### 3.4. Assistant equipment used for test

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

### 3.5. Test procedure

The test receiver set RBW = 100kHz, VBW $\geq$ 3\*RBW =300kHz, sweep time set auto, detail see the test plot

### 3.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/08--2025/09/15 |
| Condition: 24.2°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: offset=cable factor      |                                   |

|                                    |                                                                   |
|------------------------------------|-------------------------------------------------------------------|
| EUT Name: Remote Controller        | EUT Model: R100                                                   |
| Sample No.: A2507399-S0002         | Test Mode: All modes                                              |
| Power supply: DC 3.7V from battery | Memo: Please refer to Conducted RF Spurious Emission of the Annex |

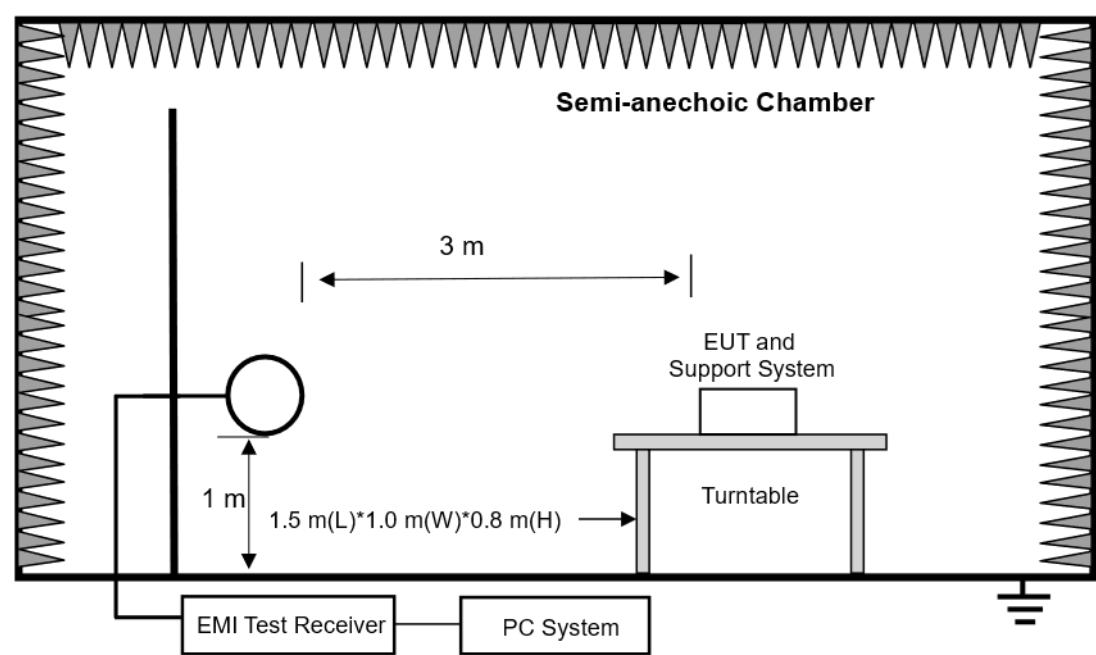
/

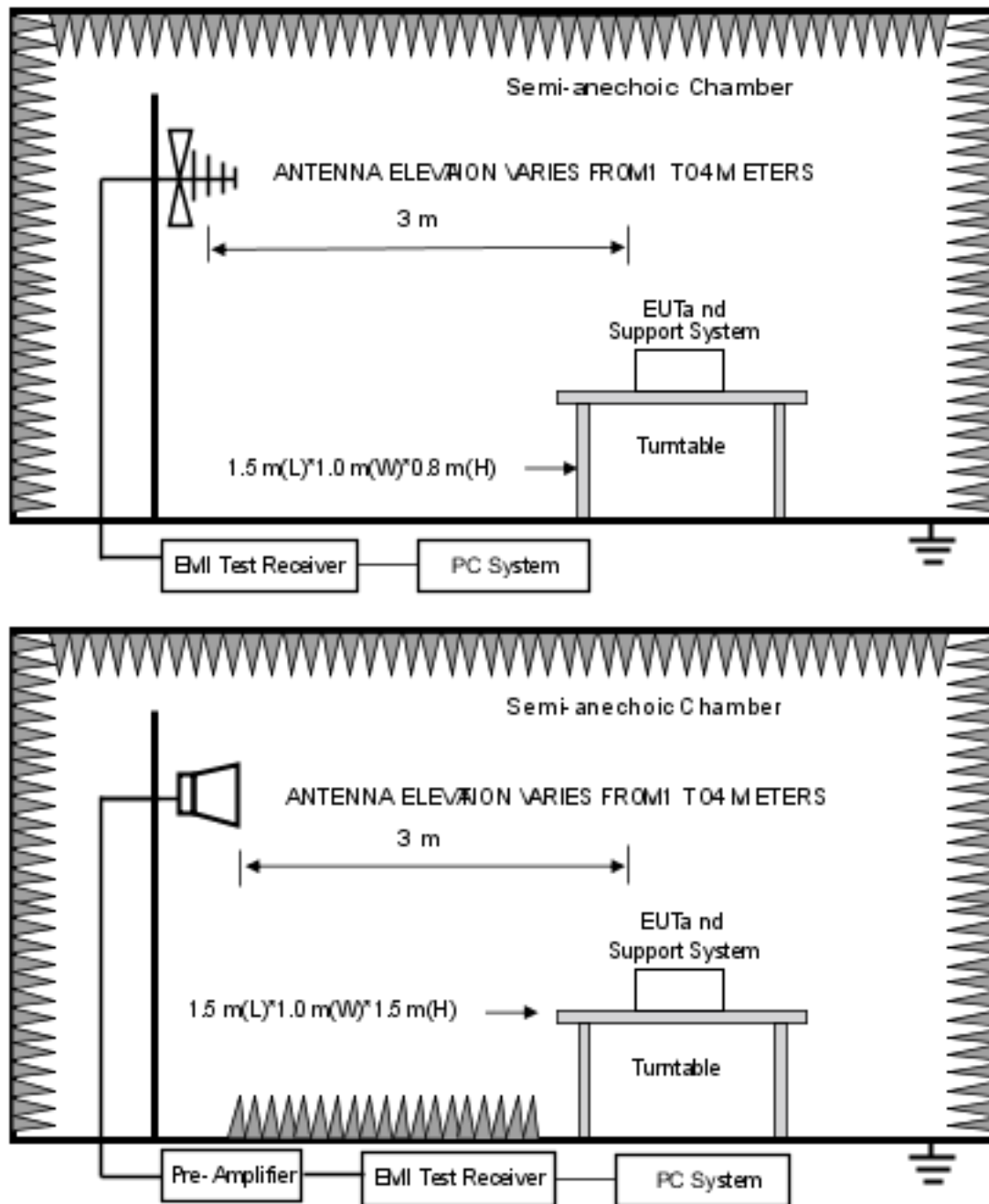
4. Spurious Emission

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

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

(1) 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

(2) FCC 15.209 Limit

| FREQUENCY<br>MHz | DISTANCE<br>Meters | FIELD STRENGTHS LIMIT                       |               |
|------------------|--------------------|---------------------------------------------|---------------|
|                  |                    | uV/m                                        | dBuV/m        |
| 0.009 ~ 0.490    | 300                | 2400/F(kHz)                                 | 67.6-20log(F) |
| 0.490 ~ 1.705    | 30                 | 24000/F(kHz)                                | 87.6-20log(F) |
| 1.705 ~ 30.0     | 30                 | 30                                          | 29.54         |
| 30~88            | 3                  | 100                                         | 40.0          |
| 88~216           | 3                  | 150                                         | 43.5          |
| 216~960          | 3                  | 200                                         | 46.0          |
| 960~1000         | 3                  | 500                                         | 54.0          |
| Above 1000       | 3                  | 74.0 dBuV/m (Peak)<br>54.0 dBuV/m (Average) |               |

Note: Harmonic emissions limits comply with below 54 dBuV/m at 3m. Other emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or comply with the radiated emissions limits specified in section 15.209(a) limit in the table below has to be followed.

RSS-Gen Restricted frequency band

| MHz               | MHz                   | GHz           |
|-------------------|-----------------------|---------------|
| 0.090 - 0.110     | 149.9 - 150.05        | 9.0 - 9.2     |
| 0.495 - 0.505     | 156.52475 - 156.52525 | 9.3 - 9.5     |
| 2.1735 - 2.1905   | 156.7 - 156.9         | 10.6 - 12.7   |
| 3.020 - 3.026     | 162.0125 - 167.17     | 13.25 - 13.4  |
| 4.125 - 4.128     | 167.72 - 173.2        | 14.47 - 14.5  |
| 4.17725 - 4.17775 | 240 - 285             | 15.35 - 16.2  |
| 4.20725 - 4.20775 | 322 - 335.4           | 17.7 - 21.4   |
| 5.677 - 5.683     | 399.9 - 410           | 22.01 - 23.12 |
| 6.215 - 6.218     | 608 - 614             | 23.6 - 24.0   |

|                     |                 |              |
|---------------------|-----------------|--------------|
| 6.26775 - 6.26825   | 960 - 1427      | 31.2 - 31.8  |
| 6.31175 - 6.31225   | 1435 - 1626.5   | 36.43 - 36.5 |
| 8.291 - 8.294       | 1645.5 - 1646.5 | Above 38.6   |
| 8.362 - 8.366       | 1660 - 1710     |              |
| 8.37625 - 8.38675   | 1718.8 - 1722.2 |              |
| 8.41425 - 8.41475   | 2200 - 2300     |              |
| 12.29 - 12.293      | 2310 - 2390     |              |
| 12.51975 - 12.52025 | 2483.5 - 2500   |              |
| 12.57675 - 12.57725 | 2655 - 2900     |              |
| 13.36 - 13.41       | 3260 - 3267     |              |
| 16.42 - 16.423      | 3332 - 3339     |              |
| 16.69475 - 16.69525 | 3345.8 - 3358   |              |
| 16.80425 - 16.80475 | 3500 - 4400     |              |
| 25.5 - 25.67        | 4500 - 5150     |              |
| 37.5 - 38.25        | 5350 - 5460     |              |
| 73 - 74.6           | 7250 - 7750     |              |
| 74.8 - 75.2         | 8025 - 8500     |              |
| 108 - 138           |                 |              |

Note 1: Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

| Table 5-General field strength limits at frequencies above 30 MHz |                              |
|-------------------------------------------------------------------|------------------------------|
| Frequency(MHz)                                                    | Field strength (uV/m at 3 m) |
| 30-88                                                             | 100                          |
| 88-216                                                            | 150                          |
| 216-960                                                           | 200                          |
| Above 960                                                         | 500                          |

| Table 6-General field strength limits at frequencies below 30 MHz |                                         |                          |
|-------------------------------------------------------------------|-----------------------------------------|--------------------------|
| Frequency                                                         | Magnetic field strength (H-Field) (uAm) | Measurement distance (m) |
| 9 -490 kHz <sup>Note 1</sup>                                      | 6.37/F(F in kHz)                        | 300                      |
| 490-1705 kHz                                                      | 63.7/F(F in kHz)                        | 30                       |
| 1.705 -30 MHz                                                     | 0.08                                    | 30                       |

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

#### 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 at frequency up to 1GHz and above 1GHz, The EUT was placed on a rotating 0.8 m high above ground for below 1GHz and 1.5m high for above1GHz testing, The table was rotated 360 degrees to determine the position of the highest radiation

The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set of make measurement.

The initial step in collecting conducted emission data is a spectrum analyzer Peak detector mode pre-scanning the measurement frequency range. Significant Peaks are then marked. and then Qusia Peak Detector mode premeasured

If Peak value comply with QP limit Below 1GHz.The EUT deemed to comply with QP limit. But the Peak value and average value both need to comply with applicable limit above 1GHz.

For the actual test configuration, please see the test setup photo.

#### 4.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: Chamber 1#(RSE)     | Test Date: 2025/10/09--2025/10/09 |
| Condition: 22.4°C,55%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                                  |                                      |
|----------------------------------|--------------------------------------|
| EUT Name: Remote Controller      | EUT Model: R100                      |
| Sample No.: A2507399-S0001       | Test Mode: All modes                 |
| Power supply: DC 5V from adapter | Memo: See below detailed test result |

Test Condition

Continual Transmitting in maximum power.

|              |           |            |
|--------------|-----------|------------|
| 9KHz~150KHz  | RBW200Hz  | VBW1KHz    |
| 150KHz~30MHz | RBW9KHz   | VBW 30KHz  |
| 30MHz~1GHz   | RBW120KHz | VBW 300KHz |
| Above1GHz    | RBW1MHz   | VBW 3MHz   |

We have scanned the 10th harmonic from 9 kHz to the EUT.

Detailed information please see the following page.

From 9KHz to 30MHz: Conclusion: PASS

Note: 1.The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

2. Only show the test data of the worst Channel in this report.

4.7. Test data



深圳阿尔法商品检验有限公司

SHENZHEN ALPHA PRODUCT TESTING CO.,LTD.

深圳阿尔法商品检验有限公司

Shenzhen Alpha Product Testing Co.,Ltd.

地址: ALPHA 广东省深圳市宝安区福永街道立新路 2 号 i 栋

TEL: 4008-3008-95

Site LAB 966 Chamber 1

Polarization: **Vertical**

Temperature: 22.4

Limit: FCC Part 15 Class B Radiation (30-1000)

Power: DC 5V From Adapter

Humidity: 55 %

EUT/Task No : A2507399-C03 C06

Distance: 3m

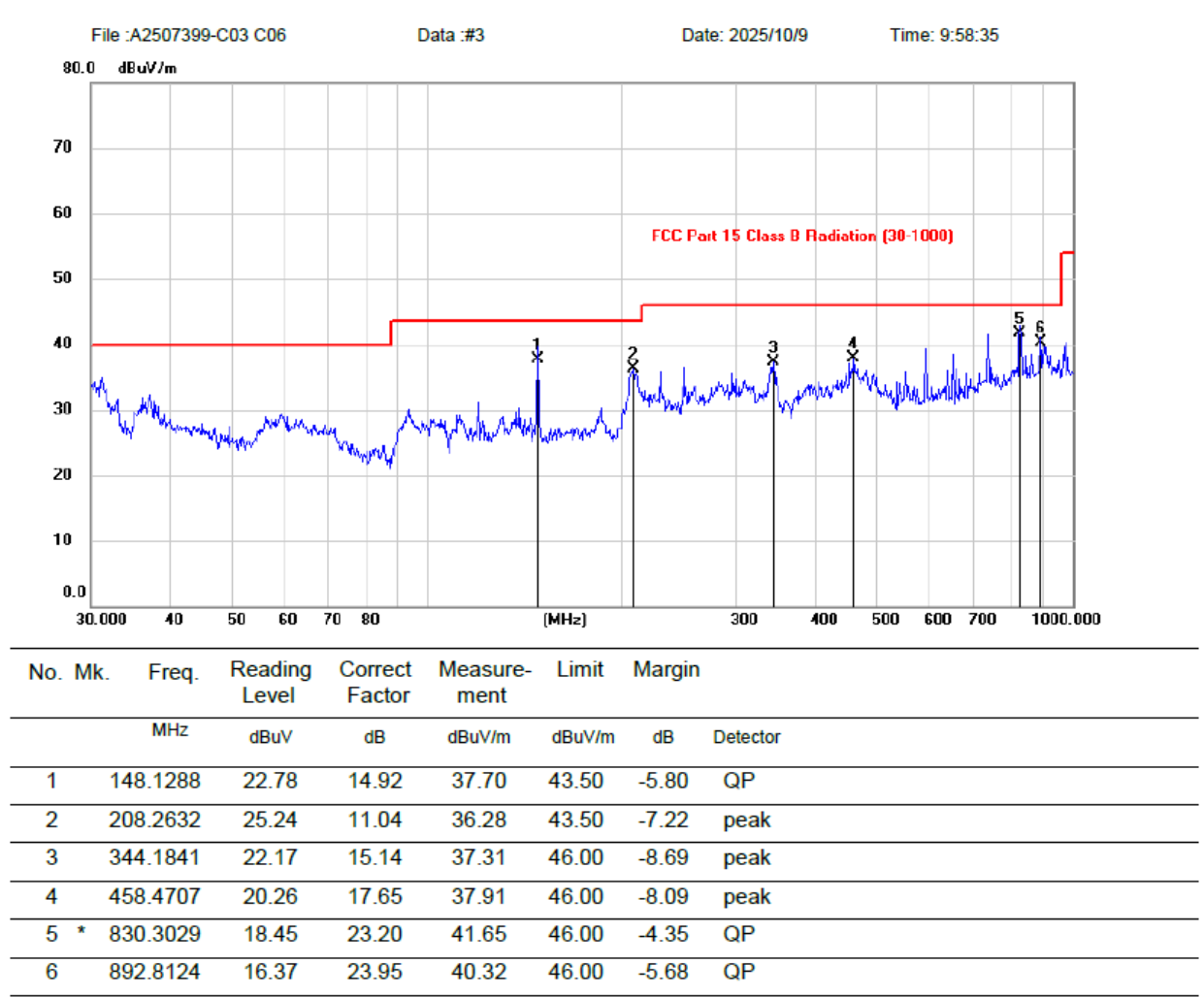
M/N/Sample No: A2507399-S0001

Mode : Mode 1

Note:

Engineer Signature: *Yanni3 wen*

Radiated Emission Measurement



Note:1. \*:Maximum data; x:Over limit; !:over margin.  
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

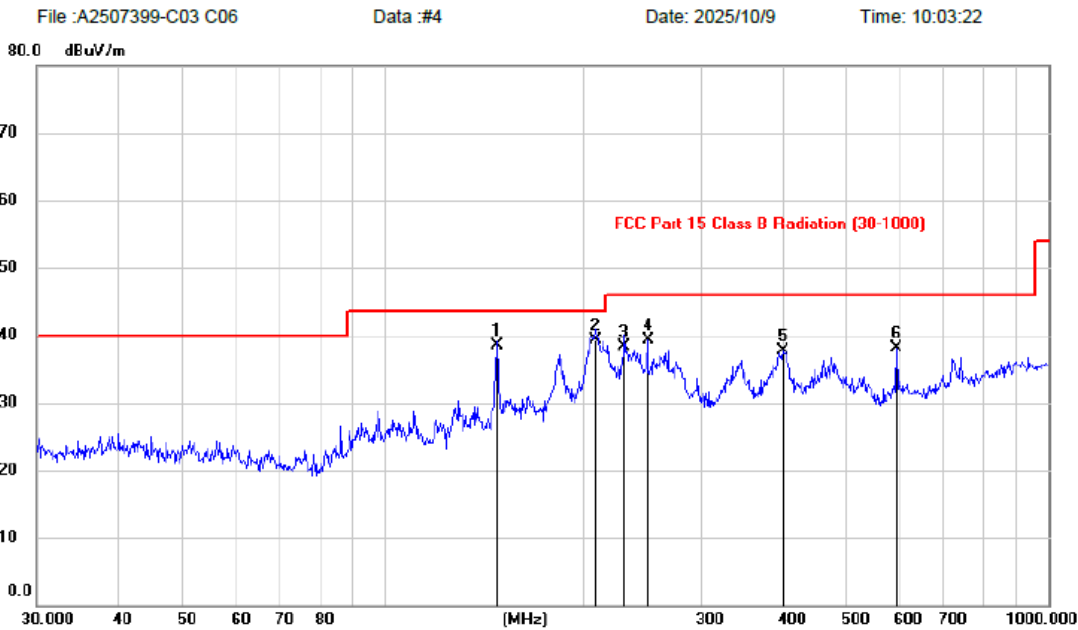


深圳阿尔法商品检验有限公司 深圳阿尔法商品检验有限公司  
SHENZHEN ALPHA PRODUCT TESTING CO.,LTD. Shenzhen Alpha Product Testing Co.,Ltd.

地址: ALPHA 广东省深圳市宝安区福永街道立新路 2 号 i 栋  
TEL: 4008-3008-95

Site LAB 966 Chamber 1 Polarization: **Horizontal** Temperature: 22.4  
Limit: FCC Part 15 Class B Radiation (30-1000) Power: DC 5V From Adapter Humidity: 55 %  
EUT/Task No : A2507399-C03 C06 Distance: 3m  
M/N/Sample No: A2507399-S0001  
Mode : Mode 1  
Note:  
Engineer Signature: *Yanni's wen*

Radiated Emission Measurement



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Margin |          |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     | Detector |
| 1   |     | 148.1459 | 23.59         | 14.92          | 38.51       | 43.50  | -4.99  | QP       |
| 2   | *   | 208.8974 | 28.23         | 11.05          | 39.28       | 43.50  | -4.22  | QP       |
| 3   |     | 230.1792 | 25.93         | 12.31          | 38.24       | 46.00  | -7.76  | QP       |
| 4   |     | 250.0380 | 26.48         | 12.77          | 39.25       | 46.00  | -6.75  | peak     |
| 5   |     | 399.1700 | 21.48         | 16.23          | 37.71       | 46.00  | -8.29  | peak     |
| 6   |     | 592.5646 | 18.03         | 20.07          | 38.10       | 46.00  | -7.90  | peak     |

Note:1. \*:Maximum data; x:Over limit; !:over margin.  
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

From 1G-25GHz

| Test Mode: IEEE 802.11b TX Low                                                                    |                     |             |                       |                |                 |                 |                |             |        |
|---------------------------------------------------------------------------------------------------|---------------------|-------------|-----------------------|----------------|-----------------|-----------------|----------------|-------------|--------|
| Freq (MHz)                                                                                        | Read Level (dBUV/m) | Polar (H/V) | Antenna Factor (dB/m) | Cable loss(dB) | Amp Factor (dB) | Result (dBUV/m) | Limit (dBUV/m) | Margin (dB) | Remark |
| 4824                                                                                              | 44.62               | V           | 33.95                 | 10.18          | 34.26           | 54.49           | 74             | -19.51      | PK     |
| 4824                                                                                              | 36.81               | V           | 33.95                 | 10.18          | 34.26           | 46.68           | 54             | -7.32       | AV     |
| 7236                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9648                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4824                                                                                              | 43.36               | H           | 33.95                 | 10.18          | 34.26           | 53.23           | 74             | -20.77      | PK     |
| 4824                                                                                              | 36.37               | H           | 33.95                 | 10.18          | 34.26           | 46.24           | 54             | -7.76       | AV     |
| 7236                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9648                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Test Mode: IEEE 802.11b TX Mid                                                                    |                     |             |                       |                |                 |                 |                |             |        |
| 4874                                                                                              | 44.85               | V           | 33.93                 | 10.2           | 34.29           | 54.69           | 74             | -19.31      | PK     |
| 4874                                                                                              | 31.13               | V           | 33.93                 | 10.2           | 34.29           | 40.97           | 54             | -13.03      | AV     |
| 7311                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9748                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4874                                                                                              | 44.53               | H           | 33.93                 | 10.2           | 34.29           | 54.37           | 74             | -19.63      | PK     |
| 4874                                                                                              | 34.74               | H           | 33.93                 | 10.2           | 34.29           | 44.58           | 54             | -9.42       | AV     |
| 7311                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9748                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Test Mode: IEEE 802.11b TX High                                                                   |                     |             |                       |                |                 |                 |                |             |        |
| 4924                                                                                              | 44.88               | V           | 33.98                 | 10.22          | 34.25           | 54.83           | 74             | -19.17      | PK     |
| 4924                                                                                              | 35.47               | V           | 33.98                 | 10.22          | 34.25           | 45.42           | 54             | -8.58       | AV     |
| 7386                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9848                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4924                                                                                              | 49.32               | H           | 33.98                 | 10.22          | 34.25           | 59.27           | 74             | -14.73      | PK     |
| 4924                                                                                              | 36.08               | H           | 33.98                 | 10.22          | 34.25           | 46.03           | 54             | -7.97       | AV     |
| 7386                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9848                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Note:                                                                                             |                     |             |                       |                |                 |                 |                |             |        |
| 1, Result = Read level + Antenna factor + cable loss-Amp factor                                   |                     |             |                       |                |                 |                 |                |             |        |
| 2, All the other emissions not reported were too low to read and deemed to comply with FCC limit. |                     |             |                       |                |                 |                 |                |             |        |

| Test Mode: IEEE 802.11g TX Low                                                                    |                     |             |                       |                |                 |                 |                |             |        |
|---------------------------------------------------------------------------------------------------|---------------------|-------------|-----------------------|----------------|-----------------|-----------------|----------------|-------------|--------|
| Freq (MHz)                                                                                        | Read Level (dBuV/m) | Polar (H/V) | Antenna Factor (dB/m) | Cable loss(dB) | Amp Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
| 4824                                                                                              | 45.40               | V           | 33.95                 | 10.18          | 34.26           | 55.27           | 74             | -18.73      | PK     |
| 4824                                                                                              | 33.78               | V           | 33.95                 | 10.18          | 34.26           | 43.65           | 54             | -10.35      | AV     |
| 7236                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9648                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4824                                                                                              | 43.50               | H           | 33.95                 | 10.18          | 34.26           | 53.37           | 74             | -20.63      | PK     |
| 4824                                                                                              | 34.82               | H           | 33.95                 | 10.18          | 34.26           | 44.69           | 54             | -9.31       | AV     |
| 7236                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9648                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Test Mode: IEEE 802.11g TX Mid                                                                    |                     |             |                       |                |                 |                 |                |             |        |
| 4874                                                                                              | 44.83               | V           | 33.93                 | 10.2           | 34.29           | 54.67           | 74             | -19.33      | PK     |
| 4874                                                                                              | 32.52               | V           | 33.93                 | 10.2           | 34.29           | 42.36           | 54             | -11.64      | AV     |
| 7311                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9748                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4874                                                                                              | 44.56               | H           | 33.93                 | 10.2           | 34.29           | 54.40           | 74             | -19.60      | PK     |
| 4874                                                                                              | 35.27               | H           | 33.93                 | 10.2           | 34.29           | 45.11           | 54             | -8.89       | AV     |
| 7311                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9748                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Test Mode: IEEE 802.11g TX High                                                                   |                     |             |                       |                |                 |                 |                |             |        |
| 4924                                                                                              | 48.11               | V           | 33.98                 | 10.22          | 34.25           | 58.06           | 74             | -15.94      | PK     |
| 4924                                                                                              | 36.55               | V           | 33.98                 | 10.22          | 34.25           | 46.50           | 54             | -7.50       | AV     |
| 7386                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9848                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4924                                                                                              | 45.69               | H           | 33.98                 | 10.22          | 34.25           | 55.64           | 74             | -18.36      | PK     |
| 4924                                                                                              | 36.08               | H           | 33.98                 | 10.22          | 34.25           | 46.03           | 54             | -7.97       | AV     |
| 7386                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9848                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Note:                                                                                             |                     |             |                       |                |                 |                 |                |             |        |
| 1, Result = Read level + Antenna factor + cable loss-Amp factor                                   |                     |             |                       |                |                 |                 |                |             |        |
| 2, All the other emissions not reported were too low to read and deemed to comply with FCC limit. |                     |             |                       |                |                 |                 |                |             |        |

| Test Mode: IEEE 802.11n HT20 TX Low                                                               |                     |             |                       |                |                 |                 |                |             |        |
|---------------------------------------------------------------------------------------------------|---------------------|-------------|-----------------------|----------------|-----------------|-----------------|----------------|-------------|--------|
| Freq (MHz)                                                                                        | Read Level (dBuV/m) | Polar (H/V) | Antenna Factor (dB/m) | Cable loss(dB) | Amp Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
| 4824                                                                                              | 45.84               | V           | 33.95                 | 10.18          | 34.26           | 55.71           | 74             | -18.29      | PK     |
| 4824                                                                                              | 33.59               | V           | 33.95                 | 10.18          | 34.26           | 43.46           | 54             | -10.54      | AV     |
| 7236                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9648                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4824                                                                                              | 45.84               | H           | 33.95                 | 10.18          | 34.26           | 55.71           | 74             | -18.29      | PK     |
| 4824                                                                                              | 33.90               | H           | 33.95                 | 10.18          | 34.26           | 43.77           | 54             | -10.23      | AV     |
| 7236                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9648                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Test Mode: IEEE 802.11n HT20 TX Mid                                                               |                     |             |                       |                |                 |                 |                |             |        |
| 4874                                                                                              | 44.39               | V           | 33.93                 | 10.2           | 34.29           | 54.23           | 74             | -19.77      | PK     |
| 4874                                                                                              | 31.10               | V           | 33.93                 | 10.2           | 34.29           | 40.94           | 54             | -13.06      | AV     |
| 7311                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9748                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4874                                                                                              | 47.83               | H           | 33.93                 | 10.2           | 34.29           | 57.67           | 74             | -16.33      | PK     |
| 4874                                                                                              | 33.59               | H           | 33.93                 | 10.2           | 34.29           | 43.43           | 54             | -10.57      | AV     |
| 7311                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9748                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Test Mode: IEEE 802.11n HT20 TX High                                                              |                     |             |                       |                |                 |                 |                |             |        |
| 4924                                                                                              | 45.46               | V           | 33.98                 | 10.22          | 34.25           | 55.41           | 74             | -18.59      | PK     |
| 4924                                                                                              | 35.25               | V           | 33.98                 | 10.22          | 34.25           | 45.20           | 54             | -8.80       | AV     |
| 7386                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9848                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4924                                                                                              | 48.67               | H           | 33.98                 | 10.22          | 34.25           | 58.62           | 74             | -15.38      | PK     |
| 4924                                                                                              | 32.59               | H           | 33.98                 | 10.22          | 34.25           | 42.54           | 54             | -11.46      | AV     |
| 7386                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9848                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Note:                                                                                             |                     |             |                       |                |                 |                 |                |             |        |
| 1, Result = Read level + Antenna factor + cable loss-Amp factor                                   |                     |             |                       |                |                 |                 |                |             |        |
| 2, All the other emissions not reported were too low to read and deemed to comply with FCC limit. |                     |             |                       |                |                 |                 |                |             |        |

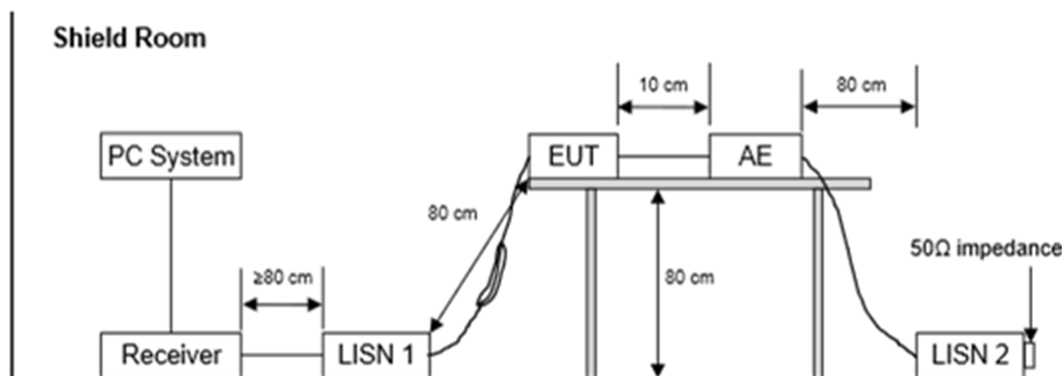
| Test Mode: IEEE 802.11n HT40 TX Low                                                               |                     |             |                       |                |                 |                 |                |             |        |
|---------------------------------------------------------------------------------------------------|---------------------|-------------|-----------------------|----------------|-----------------|-----------------|----------------|-------------|--------|
| Freq (MHz)                                                                                        | Read Level (dBuV/m) | Polar (H/V) | Antenna Factor (dB/m) | Cable loss(dB) | Amp Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
| 4844                                                                                              | 42.35               | V           | 33.95                 | 10.18          | 34.26           | 52.22           | 74             | -21.78      | PK     |
| 4844                                                                                              | 35.34               | V           | 33.95                 | 10.18          | 34.26           | 45.21           | 54             | -8.79       | AV     |
| 7266                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9688                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4844                                                                                              | 44.25               | H           | 33.95                 | 10.18          | 34.26           | 54.12           | 74             | -19.88      | PK     |
| 4844                                                                                              | 34.57               | H           | 33.95                 | 10.18          | 34.26           | 44.44           | 54             | -9.56       | AV     |
| 7266                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9688                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Test Mode: IEEE 802.11n HT40 TX Mid                                                               |                     |             |                       |                |                 |                 |                |             |        |
| 4874                                                                                              | 43.96               | V           | 33.93                 | 10.2           | 34.29           | 53.80           | 74             | -20.20      | PK     |
| 4874                                                                                              | 35.12               | V           | 33.93                 | 10.2           | 34.29           | 44.96           | 54             | -9.04       | AV     |
| 7311                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9748                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4874                                                                                              | 44.49               | H           | 33.93                 | 10.2           | 34.29           | 54.33           | 74             | -19.67      | PK     |
| 4874                                                                                              | 36.92               | H           | 33.93                 | 10.2           | 34.29           | 46.76           | 54             | -7.24       | AV     |
| 7311                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9748                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Test Mode: IEEE 802.11n HT40 TX High                                                              |                     |             |                       |                |                 |                 |                |             |        |
| 4904                                                                                              | 43.76               | V           | 33.98                 | 10.22          | 34.25           | 53.71           | 74             | -20.29      | PK     |
| 4904                                                                                              | 36.05               | V           | 33.98                 | 10.22          | 34.25           | 46.00           | 54             | -8.00       | AV     |
| 7356                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9808                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 4904                                                                                              | 44.10               | H           | 33.98                 | 10.22          | 34.25           | 54.05           | 74             | -19.95      | PK     |
| 4904                                                                                              | 33.88               | H           | 33.98                 | 10.22          | 34.25           | 43.83           | 54             | -10.17      | AV     |
| 7356                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| 9808                                                                                              | /                   | /           | /                     | /              | /               | /               | /              | /           | /      |
| Note:                                                                                             |                     |             |                       |                |                 |                 |                |             |        |
| 1, Result = Read level + Antenna factor + cable loss-Amp factor                                   |                     |             |                       |                |                 |                 |                |             |        |
| 2, All the other emissions not reported were too low to read and deemed to comply with FCC limit. |                     |             |                       |                |                 |                 |                |             |        |

## 5. Power Line Conducted Emissions

### 5.1. 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 |

### 5.2. Block diagram of test setup



### 5.3. Limits

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

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

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

3. The limit decreases in line with the logarithm of the frequency in rang of 0.15 to 0.50 MH

### 5.4. Assistant equipment used for test

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

### 5.5. Test procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10 on Conducted Emission Measurement.

The bandwidth of test receiver is set at 9 kHz.

## 5.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: Shield Room CE 1#   | Test Date: 2025/09/18--2025/09/18 |
| Condition: 23.3°C,52%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                                  |                                      |
|----------------------------------|--------------------------------------|
| EUT Name: Remote Controller      | EUT Model: R100                      |
| Sample No.: A2507399-S0001       | Test Mode: All modes                 |
| Power supply: DC 5V From Adapter | Memo: See below detailed test result |

**Pass. (See below detailed test result)**

Note1: All emissions not reported below are too low against the prescribed limits.

Note2: “----” means Peak detection; “----” means Average detection.

Note3: Pre-test AC conducted emission at both voltage AC 120V/60Hz and AC 240V/50Hz, recorded the worst case.

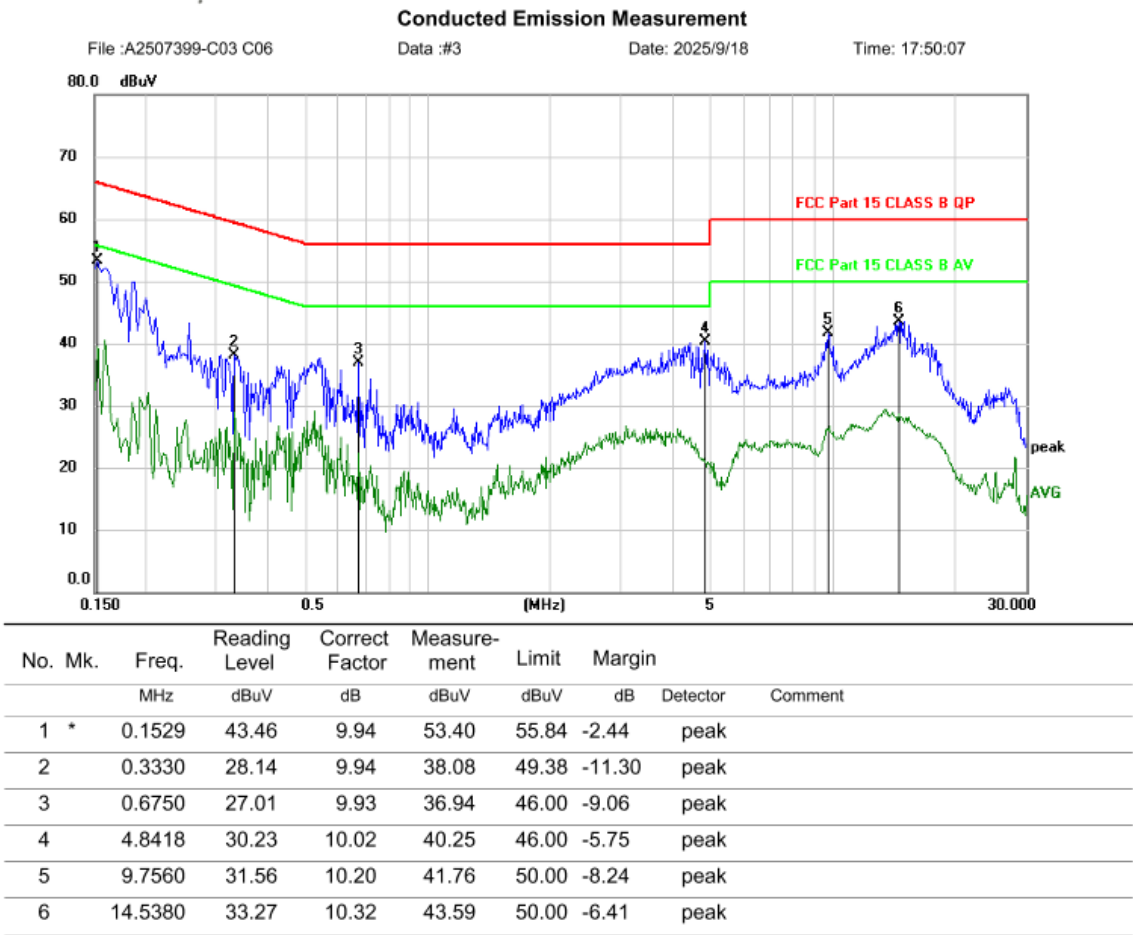
5.7. Test data



深圳阿尔法商品检验有限公司  
SHENZHEN ALPHA PRODUCT TESTING CO.,LTD.

深圳阿尔法商品检验有限公司  
Shenzhen Alpha Product Testing Co.,Ltd.  
地址: ALPHA 广东省深圳市宝安区福永街道立新路 2 号 i 栋  
TEL: 4008-3008-95

|                                |                           |                   |
|--------------------------------|---------------------------|-------------------|
| Site LAB                       | Phase: L1                 | Temperature: 23.3 |
| Limit: FCC Part 15 CLASS B QP  | Power: DC 5V From Adapter | Humidity: 52 %    |
| EUT/Task No : A2507399-C03 C06 |                           |                   |
| M/N/Sample No: A2507399-S0001  |                           |                   |
| Mode : Mode 1                  |                           |                   |
| Note:                          |                           |                   |
| Engineer Signature: yanni3 wen |                           |                   |



\*:Maximum data    x:Over limit    !:over margin    <Reference Only  
Note: Measurement=Reading Level+Correc Factor.    Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable



深圳阿尔法商品检验有限公司  
SHENZHEN ALPHA PRODUCT TESTING CO.,LTD.

深圳阿尔法商品检验有限公司  
Shenzhen Alpha Product Testing Co.,Ltd.

地址: ALPHA 广东省深圳市宝安区福永街道立新路 2 号 i 栋  
TEL: 4008-3008-95

Site LAB

Phase: N

Temperature: 23.3

Limit: FCC Part 15 CLASS B QP

Power: DC 5V From Adapter

Humidity: 52 %

EUT/Task No : A2507399-C03 C06

M/N/Sample No: A2507399-S0001

Mode : Mode 1

Note:

Engineer Signature: Yannick Wen

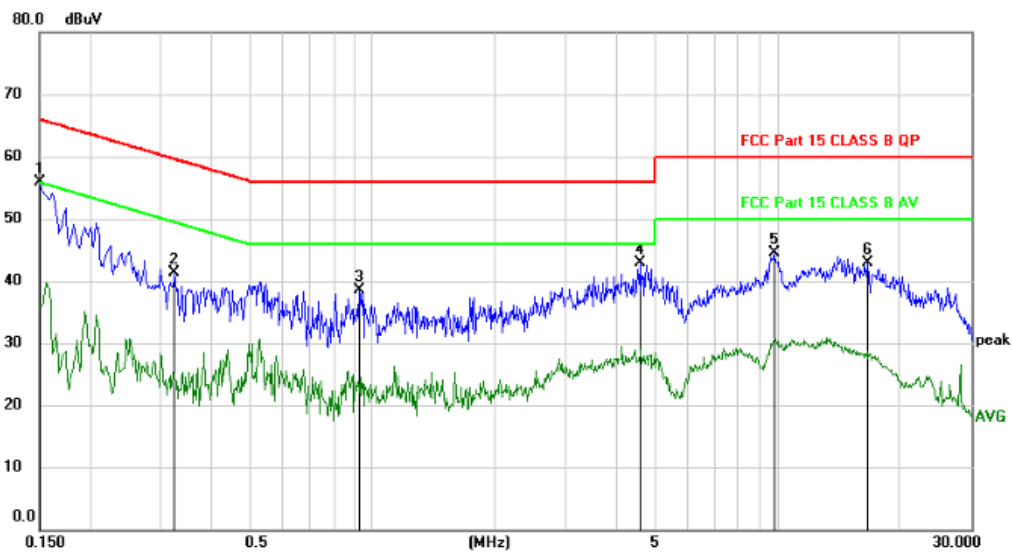
### Conducted Emission Measurement

File :A2507399-C03 C06

Data :#4

Date: 2025/9/18

Time: 17:52:45



| No. | Mk. | Freq.   | Reading Level | Correct Factor | Measurement | Limit | Margin |                  |
|-----|-----|---------|---------------|----------------|-------------|-------|--------|------------------|
|     |     | MHz     | dBuV          | dB             | dBuV        | dBuV  | dB     | Detector Comment |
| 1   | *   | 0.1500  | 46.01         | 9.94           | 55.95       | 56.00 | -0.05  | peak             |
| 2   |     | 0.3240  | 31.43         | 9.93           | 41.36       | 49.60 | -8.24  | peak             |
| 3   |     | 0.9270  | 28.51         | 9.96           | 38.47       | 46.00 | -7.53  | peak             |
| 4   |     | 4.5838  | 32.98         | 10.01          | 42.99       | 46.00 | -3.01  | peak             |
| 5   |     | 9.8070  | 34.40         | 10.20          | 44.60       | 50.00 | -5.40  | peak             |
| 6   |     | 16.6350 | 32.46         | 10.38          | 42.84       | 50.00 | -7.16  | peak             |

\*:Maximum data    x:Over limit    !:over margin

&lt;Reference Only

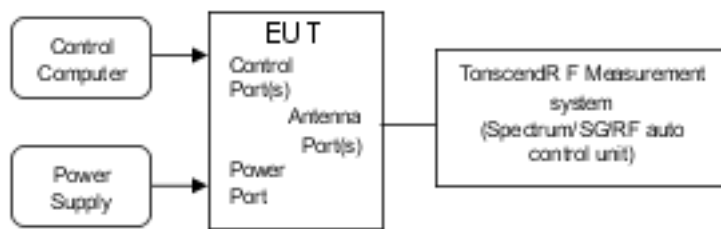
Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

## 6. Duty Cycle

### 6.1. Test equipment

| Equipment                  | Manufacturer      | Model No. | Serial No. | Last Cal.  | Cal Due To |
|----------------------------|-------------------|-----------|------------|------------|------------|
| CMW500                     | ROHDE&SCH<br>WARZ | CMW500    | Aa-EE073   | 2025/08/04 | 2026/08/03 |
| Spectrum analyzer          | ROHDE&SCH<br>WARZ | FSV40-N   | Aa-EE081   | 2025/08/04 | 2026/08/03 |
| Signal Analyzer            | Agilent           | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | Agilent           | E9300A    | Aa-EE046   | 2025/08/04 | 2026/08/03 |
| Vector Signal<br>Generator | Agilent           | N5182A    | Aa-EE040   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | DARE              | RPR3006W  | Aa-EE071   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | DARE              | RPR3006W  | Aa-EE070   | 2025/08/04 | 2026/08/03 |
| Power meter                | Agilent           | E4419B    | Aa-EE045   | 2025/08/04 | 2026/08/03 |

### 6.2. Block diagram of test setup



### 6.3. Limits

Please refer KDB 558074 D01 Meas Guidance v05r02.

The duty cycle refers to the fraction of time over which the transmitter is ON and is transmitting at its maximum power control level. The duty cycle is considered to be constant if variations are less than  $\pm 2\%$ ; otherwise, the duty cycle is considered to be nonconstant.

### 6.4. Assistant equipment used for test

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

### 6.5. Test procedure

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on- and off-times of the transmitted signal.

- 1) Set the center frequency of the instrument to the center frequency of the transmission.
- 2) Set RBW  $\geq$  OBW if possible; otherwise, set RBW to the largest available value.
- 3) Set detector = average.

4) The zero-span measurement method shall not be used unless both RBW and VBW are  $> 50/T$  and the number of sweep points across duration T exceeds 100.

#### 6.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/08--2025/09/15 |
| Condition: 24.2°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| EUT Name: Remote Controller        | EUT Model: R100                               |
| Sample No.: A2507399-S0002         | Test Mode: All modes                          |
| Power supply: DC 3.7V from battery | Memo: Please refer to Duty Cycle of the Annex |

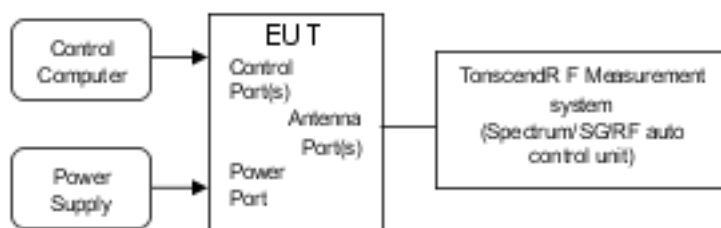
/

## 7. Maximum Conducted Output Power

### 7.1. Test equipment

| Equipment               | Manufacturer      | Model No. | Serial No. | Last Cal.  | Cal Due To |
|-------------------------|-------------------|-----------|------------|------------|------------|
| CMW500                  | ROHDE&SCH<br>WARZ | CMW500    | Aa-EE073   | 2025/08/04 | 2026/08/03 |
| Spectrum analyzer       | ROHDE&SCH<br>WARZ | FSV40-N   | Aa-EE081   | 2025/08/04 | 2026/08/03 |
| Signal Analyzer         | Agilent           | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | Agilent           | E9300A    | Aa-EE046   | 2025/08/04 | 2026/08/03 |
| Vector Signal Generator | Agilent           | N5182A    | Aa-EE040   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | DARE              | RPR3006W  | Aa-EE071   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | DARE              | RPR3006W  | Aa-EE070   | 2025/08/04 | 2026/08/03 |
| Power meter             | Agilent           | E4419B    | Aa-EE045   | 2025/08/04 | 2026/08/03 |

### 7.2. Block diagram of test setup



### 7.3. Limits

Please refer section RSS-247 & 15.247.

The limit of Maximum Peak conducted output power Measurement is 1W(30dBm). The e.i.r.p. shall not exceed 4 W(36dBm).

### 7.4. Assistant equipment used for test

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

### 7.5. Test procedure

Uses trace averaging across ON and OFF times of the EUT transmissions, followed by duty cycle correction. The procedure for this method is as follows:

- Measure the duty cycle D of the transmitter output signal.
- Set span to >1.5 times the OBW.
- Set RBW = 1% to 5% of the OBW, but do not exceed 1 MHz.
- Set VBW  $\geq$   $[3 \times \text{RBW}]$ .

- e) Number of points in sweep  $\geq [2 \times \text{span} / \text{RBW}]$ . (This gives bin-to-bin spacing  $\leq \text{RBW} / 2$ , so that narrowband signals are not lost between frequency bins.)
- f) Sweep time = auto.
- g) Detector = Power averaging (rms).
- h) Do not use sweep triggering. Allow the sweep to “free run.”
- i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 until trace is stabilized so that the average accurately represents the true average over the ON and OFF periods of the transmitter.
- j) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band-power measurement function with band limits set equal to the OBW band-edges. If the instrument does not have a band-power function, then sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.
- k) Add  $[10 \log (1 / D)]$ , where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission).

## 7.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/08--2025/09/15 |
| Condition: 24.2°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                                    |                                                                   |
|------------------------------------|-------------------------------------------------------------------|
| EUT Name: Remote Controller        | EUT Model: R100                                                   |
| Sample No.: A2507399-S0002         | Test Mode: All modes                                              |
| Power supply: DC 3.7V from battery | Memo: Please refer to Maximum Conducted Output Power of the Annex |

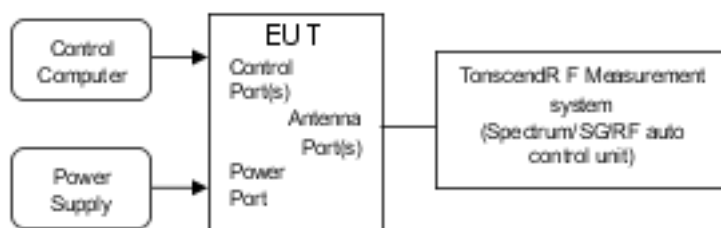
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## 8. Maximum Power Spectral Density Level

### 8.1. Test equipment

| Equipment                  | Manufacturer      | Model No. | Serial No. | Last Cal.  | Cal Due To |
|----------------------------|-------------------|-----------|------------|------------|------------|
| CMW500                     | ROHDE&SCH<br>WARZ | CMW500    | Aa-EE073   | 2025/08/04 | 2026/08/03 |
| Spectrum analyzer          | ROHDE&SCH<br>WARZ | FSV40-N   | Aa-EE081   | 2025/08/04 | 2026/08/03 |
| Signal Analyzer            | Agilent           | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | Agilent           | E9300A    | Aa-EE046   | 2025/08/04 | 2026/08/03 |
| Vector Signal<br>Generator | Agilent           | N5182A    | Aa-EE040   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | DARE              | RPR3006W  | Aa-EE071   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | DARE              | RPR3006W  | Aa-EE070   | 2025/08/04 | 2026/08/03 |
| Power meter                | Agilent           | E4419B    | Aa-EE045   | 2025/08/04 | 2026/08/03 |

### 8.2. Block diagram of test setup



### 8.3. Limits

Uses trace averaging across ON and OFF times of the EUT transmissions, followed by duty cycle correction.

The following procedure is applicable when the EUT cannot be configured to transmit continuously, when sweep triggering/signal gating cannot be used to measure only when the EUT is transmitting at its maximum power control level, and when the transmission duty cycle is constant.

- Measure the duty cycle (D) of the transmitter output signal.
- Set instrument center frequency to DTS channel center frequency.
- Set span to  $> 1.5$  times the OBW.
- Set RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
- Set VBW  $\geq [3 \times \text{RBW}]$ .
- Detector = power averaging (rms) or sample detector (when rms not available).
- Ensure that the number of measurement points in the sweep  $\geq [2 \times \text{span} / \text{RBW}]$ .
- Sweep time = auto couple.
- Do not use sweep triggering; allow sweep to “free run.”
- Employ trace averaging (rms) mode over a minimum of 100 traces.

k) Use the peak marker function to determine the maximum amplitude level.

l) Add  $[10 \log (1 / D)]$ , where D is the duty cycle measured in step a), to the measured PSD to compute the average PSD during the actual transmission time.

m) If measured value exceeds requirement specified by regulatory agency, then reduce RBW (but no less than 3 kHz) and repeat (note that this might require zooming in on the emission of interest and reducing the span to meet the minimum measurement point requirement as the RBW is reduced).

#### 8.4. Assistant equipment used for test

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

#### 8.5. Test procedure

Details see the KDB 558074 D01 15.247 Meas Guidance v05r02

Place the EUT on the table and set it in transmitting mode.

Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

Set the spectrum analyzer as RBW = 3kHz(Set the RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .), VBW = 10kHz(Set the  $\text{VBW} \geq 3 \times \text{RBW}$ ), span=1.5×DTS

bandwidth, detail see the test plot.

Record the max reading.

Repeat the above procedure until the measurements for all frequencies are completed.

#### 8.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/08--2025/09/15 |
| Condition: 24.2°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                                    |                                                                         |
|------------------------------------|-------------------------------------------------------------------------|
| EUT Name: Remote Controller        | EUT Model: R100                                                         |
| Sample No.: A2507399-S0002         | Test Mode: All modes                                                    |
| Power supply: DC 3.7V from battery | Memo: Please refer to Maximum Power Spectral Density Level of the Annex |

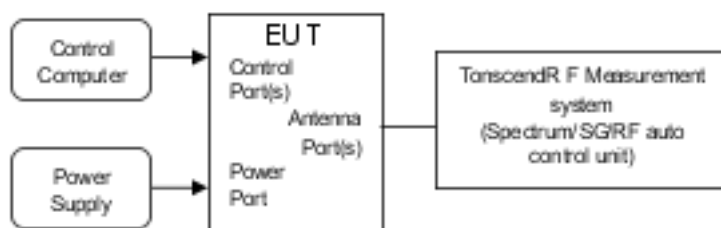
/

## 9. -6 dB Bandwidth and 99% Bandwidth

### 9.1. Test equipment

| Equipment               | Manufacturer      | Model No. | Serial No. | Last Cal.  | Cal Due To |
|-------------------------|-------------------|-----------|------------|------------|------------|
| CMW500                  | ROHDE&SCH<br>WARZ | CMW500    | Aa-EE073   | 2025/08/04 | 2026/08/03 |
| Spectrum analyzer       | ROHDE&SCH<br>WARZ | FSV40-N   | Aa-EE081   | 2025/08/04 | 2026/08/03 |
| Signal Analyzer         | Agilent           | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | Agilent           | E9300A    | Aa-EE046   | 2025/08/04 | 2026/08/03 |
| Vector Signal Generator | Agilent           | N5182A    | Aa-EE040   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | DARE              | RPR3006W  | Aa-EE071   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | DARE              | RPR3006W  | Aa-EE070   | 2025/08/04 | 2026/08/03 |
| Power meter             | Agilent           | E4419B    | Aa-EE045   | 2025/08/04 | 2026/08/03 |

### 9.2. Block diagram of test setup



### 9.3. Limits

Please refer section 15.247 and RSS-247.

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500 kHz.

### 9.4. Assistant equipment used for test

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

### 9.5. Test procedure

Details see the KDB 558074 D01 15.247 Meas Guidance v05r02

a) The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

b) The test receiver set RBW = 100kHz, VBW ≥ 3\*RBW = 300kHz, sweep time set auto, detail see the test plot.

9.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/08--2025/09/15 |
| Condition: 24.2°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                                    |                                                                              |
|------------------------------------|------------------------------------------------------------------------------|
| EUT Name: Remote Controller        | EUT Model: R100                                                              |
| Sample No.: A2507399-S0002         | Test Mode: All modes                                                         |
| Power supply: DC 3.7V from battery | Memo: Please refer to -6dB Bandwidth&Occupied Channel Bandwidth of the Annex |

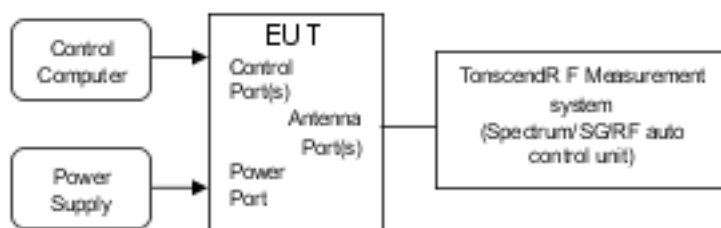
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## 10.Band Edge(Conducted)

### 10.1. Test equipment

| Equipment                  | Manufacturer      | Model No. | Serial No. | Last Cal.  | Cal Due To |
|----------------------------|-------------------|-----------|------------|------------|------------|
| CMW500                     | ROHDE&SCH<br>WARZ | CMW500    | Aa-EE073   | 2025/08/04 | 2026/08/03 |
| Spectrum analyzer          | ROHDE&SCH<br>WARZ | FSV40-N   | Aa-EE081   | 2025/08/04 | 2026/08/03 |
| Signal Analyzer            | Agilent           | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | Agilent           | E9300A    | Aa-EE046   | 2025/08/04 | 2026/08/03 |
| Vector Signal<br>Generator | Agilent           | N5182A    | Aa-EE040   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | DARE              | RPR3006W  | Aa-EE071   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | DARE              | RPR3006W  | Aa-EE070   | 2025/08/04 | 2026/08/03 |
| Power meter                | Agilent           | E4419B    | Aa-EE045   | 2025/08/04 | 2026/08/03 |

### 10.2. Block diagram of test setup



### 10.3. Limits

Please refer section 15.247 and RSS-247.

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum device, digitally modulated device, or hybrid system is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power – based on either an RF conducted or a radiated measurement – provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 6.3.2, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

### 10.4. Assistant equipment used for test

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

### 10.5. Test procedure

- 1) Span: Wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products that fall outside of the authorized band of operation.
- 2) Reference level: As required to keep the signal from exceeding the maximum instrument input mixer level for linear operation.
- 3) Attenuation: Auto (at least 10 dB preferred).
- 4) Sweep time: Coupled.
- 5) Resolution bandwidth: 100 kHz.
- 6) Video bandwidth: 300 kHz.
- 7) Detector: Peak.
- 8) Trace: Max hold.

### 10.6. Test result

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/08--2025/09/15 |
| Condition: 24.2°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                                    |                                              |
|------------------------------------|----------------------------------------------|
| EUT Name: Remote Controller        | EUT Model: R100                              |
| Sample No.: A2507399-S0002         | Test Mode: IEEE 802.11 b/g/n20/n40-L/H       |
| Power supply: DC 3.7V from battery | Memo: Please refer to Band Edge of the Annex |

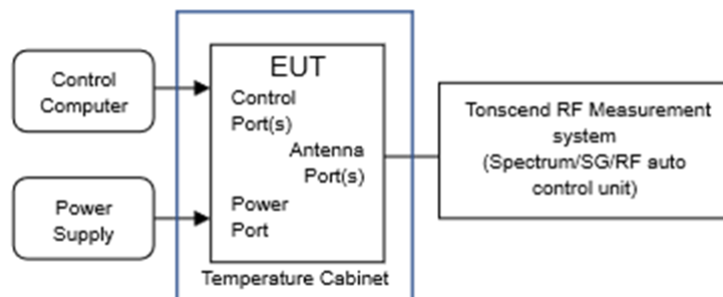
/

## 11.Frequency Stability

### 11.1. Test equipment

| Equipment                  | Manufacturer      | Model No. | Serial No. | Last Cal.  | Cal Due To |
|----------------------------|-------------------|-----------|------------|------------|------------|
| CMW500                     | ROHDE&SCH<br>WARZ | CMW500    | Aa-EE073   | 2025/08/04 | 2026/08/03 |
| Spectrum analyzer          | ROHDE&SCH<br>WARZ | FSV40-N   | Aa-EE081   | 2025/08/04 | 2026/08/03 |
| Signal Analyzer            | Agilent           | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | Agilent           | E9300A    | Aa-EE046   | 2025/08/04 | 2026/08/03 |
| Vector Signal<br>Generator | Agilent           | N5182A    | Aa-EE040   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | DARE              | RPR3006W  | Aa-EE071   | 2025/08/04 | 2026/08/03 |
| Power Sensor               | DARE              | RPR3006W  | Aa-EE070   | 2025/08/04 | 2026/08/03 |
| Power meter                | Agilent           | E4419B    | Aa-EE045   | 2025/08/04 | 2026/08/03 |

### 11.2. Block diagram of test setup



### 11.3. Limits

Please refer section RSS-Gen.

Regulation RSS-Gen If the frequency stability of the licence-exempt radio apparatus is not specified in the applicable RSS, the fundamental emissions of the radio apparatus should be kept within at least the central 80% of its permitted operating frequency band in order to minimize the possibility of out-of-band operation. In addition, its occupied bandwidth shall be entirely outside the restricted bands and the prohibited TV bands of 54-72 MHz, 76-88 MHz, 174-216 MHz, and 470-602 MHz, unless otherwise indicated.

### 11.4. Assistant equipment used for test

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

### 11.5. Test procedure

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 11.6. Test result

|                          |                                   |
|--------------------------|-----------------------------------|
| Test Site: RF Laboratory | Test Date: 2025/09/08--2025/09/08 |
|--------------------------|-----------------------------------|

|                                |                           |
|--------------------------------|---------------------------|
| Condition: 24.2°C,56%RH,101kPa | Test Engineer: Yannis Wen |
| Memo: /                        |                           |

|                                    |                      |
|------------------------------------|----------------------|
| EUT Name: Remote Controller        | EUT Model: R100      |
| Sample No.: A2507399-S0002         | Test Mode: All modes |
| Power supply: DC 3.7V from battery | Memo: /              |

/

### 11.7. Test data

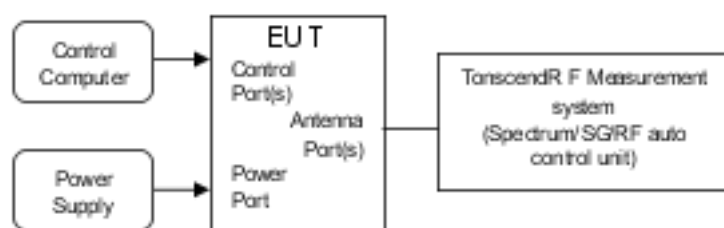
| Assigned Frequency(MHz): 2402MHz |             |                          |                          |            |
|----------------------------------|-------------|--------------------------|--------------------------|------------|
| Voltage                          | Temperature | Measured Frequency (MHz) | Frequency stability(MHz) | Limit(MHz) |
| Low<br>DC 3.2V                   | +20°C       | 2401.996                 | -0.004                   | ±0.020     |
| Normal<br>DC 3.7V                | -10°C       | 2401.999                 | -0.001                   | ±0.020     |
|                                  | -5°C        | 2401.997                 | -0.003                   | ±0.020     |
|                                  | 0°C         | 2401.996                 | -0.004                   | ±0.020     |
|                                  | +10°C       | 2401.995                 | -0.005                   | ±0.020     |
|                                  | +20°C       | 2401.999                 | -0.001                   | ±0.020     |
|                                  | +30°C       | 2402.000                 | 0.000                    | ±0.020     |
|                                  | +40°C       | 2401.995                 | -0.005                   | ±0.020     |
|                                  | +50°C       | 2402.000                 | 0.000                    | ±0.020     |
|                                  | +60°C       | 2401.993                 | -0.007                   | ±0.020     |
| High<br>DC 4.2V                  | +20°C       | 2401.999                 | -0.001                   | ±0.020     |

## 12. Antenna Requirement

### 12.1. Test equipment

| Equipment               | Manufacturer      | Model No. | Serial No. | Last Cal.  | Cal Due To |
|-------------------------|-------------------|-----------|------------|------------|------------|
| CMW500                  | ROHDE&SCH<br>WARZ | CMW500    | Aa-EE073   | 2025/08/04 | 2026/08/03 |
| Spectrum analyzer       | ROHDE&SCH<br>WARZ | FSV40-N   | Aa-EE081   | 2025/08/04 | 2026/08/03 |
| Signal Analyzer         | Agilent           | N9020A    | Aa-EE039   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | Agilent           | E9300A    | Aa-EE046   | 2025/08/04 | 2026/08/03 |
| Vector Signal Generator | Agilent           | N5182A    | Aa-EE040   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | DARE              | RPR3006W  | Aa-EE071   | 2025/08/04 | 2026/08/03 |
| Power Sensor            | DARE              | RPR3006W  | Aa-EE070   | 2025/08/04 | 2026/08/03 |
| Power meter             | Agilent           | E4419B    | Aa-EE045   | 2025/08/04 | 2026/08/03 |

### 12.2. Block diagram of test setup



### 12.3. Limits

According to 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

According to RSS-Gen 6.8

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

**12.4. Assistant equipment used for test**

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

**12.5. Test procedure**

Please see EUT photo for details.

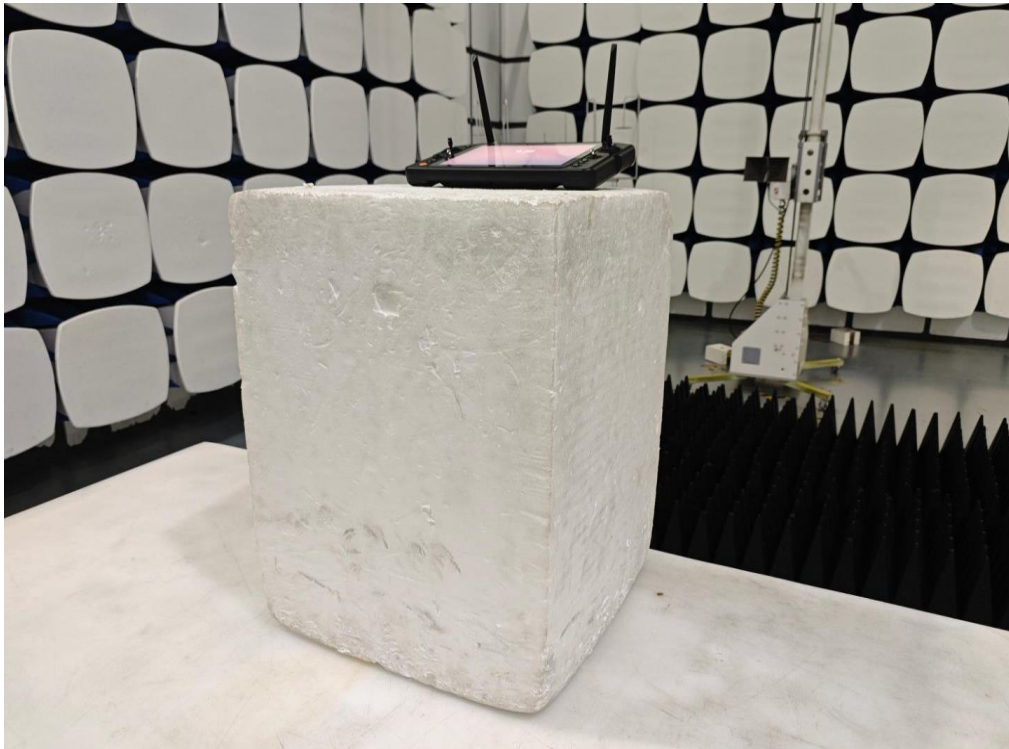
**12.6. Test result**

|                                |                                   |
|--------------------------------|-----------------------------------|
| Test Site: RF Laboratory       | Test Date: 2025/09/08--2025/09/08 |
| Condition: 24.2°C,56%RH,101kPa | Test Engineer: Yannis Wen         |
| Memo: /                        |                                   |

|                             |                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------|
| EUT Name: Remote Controller | EUT Model: R100                                                                       |
| Sample No.: A2507399-S0002  | Test Mode: /                                                                          |
| Power supply: /             | Memo: The EUT antenna is Internal Antenna. It complies with the standard requirement. |

/

### 13. Test Setup Photograph





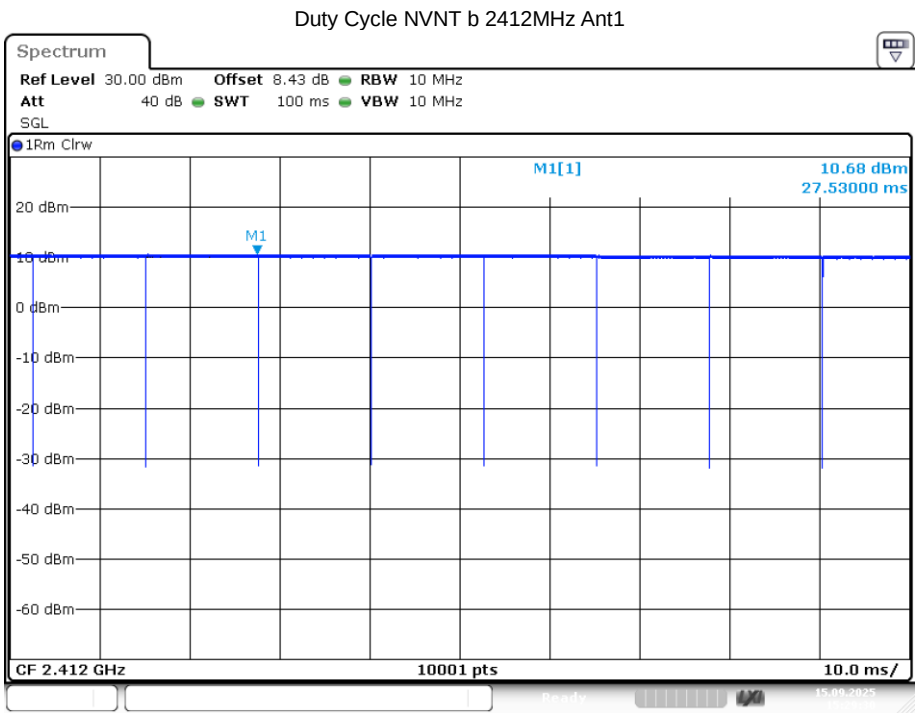
## **14. Photos of the EUT**

Please refer to the report A2507399-C03-R01.

15. Annex

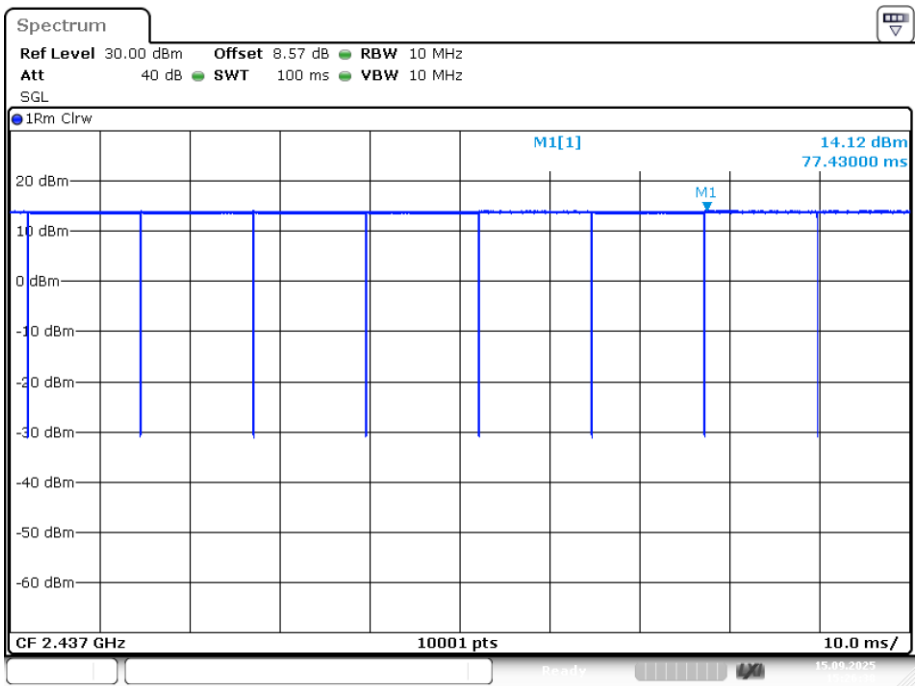
Duty Cycle

| Condition | Mode | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) |
|-----------|------|-----------------|---------|----------------|------------------------|
| NVNT      | b    | 2412            | Ant1    | 99.27          | 0.03                   |
| NVNT      | b    | 2437            | Ant1    | 99.25          | 0.03                   |
| NVNT      | b    | 2462            | Ant1    | 99.2           | 0.03                   |
| NVNT      | g    | 2412            | Ant1    | 95.52          | 0.2                    |
| NVNT      | g    | 2437            | Ant1    | 95.5           | 0.2                    |
| NVNT      | g    | 2462            | Ant1    | 95.5           | 0.2                    |
| NVNT      | n20  | 2412            | Ant1    | 95.12          | 0.22                   |
| NVNT      | n20  | 2437            | Ant1    | 95.19          | 0.21                   |
| NVNT      | n20  | 2462            | Ant1    | 95.1           | 0.22                   |
| NVNT      | n40  | 2422            | Ant1    | 91.68          | 0.38                   |
| NVNT      | n40  | 2437            | Ant1    | 91.59          | 0.38                   |
| NVNT      | n40  | 2452            | Ant1    | 91.01          | 0.41                   |



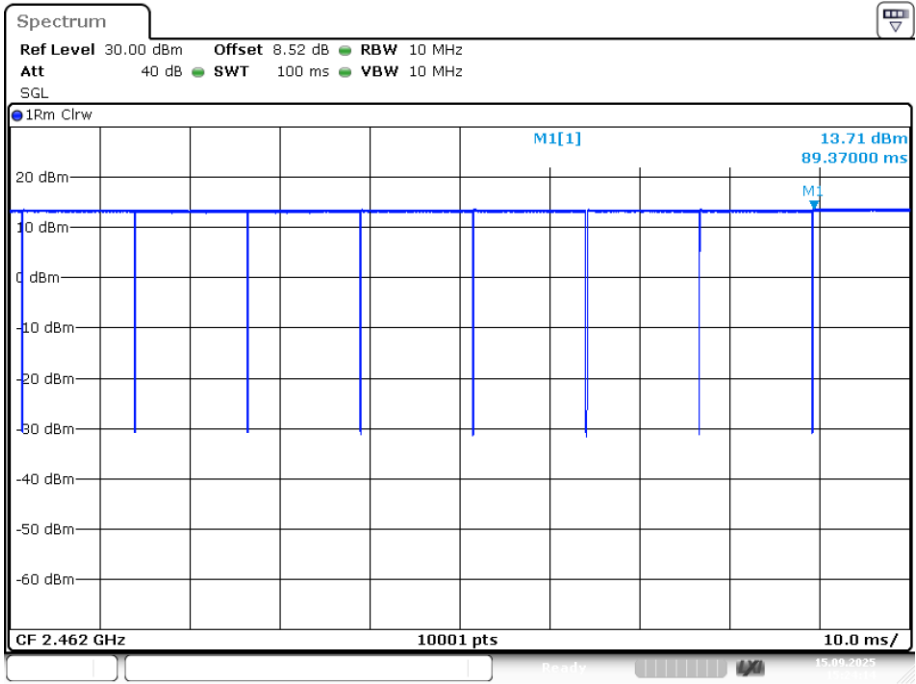
Date: 15.SEP.2025 15:29:30

Duty Cycle NVNT b 2437MHz Ant1



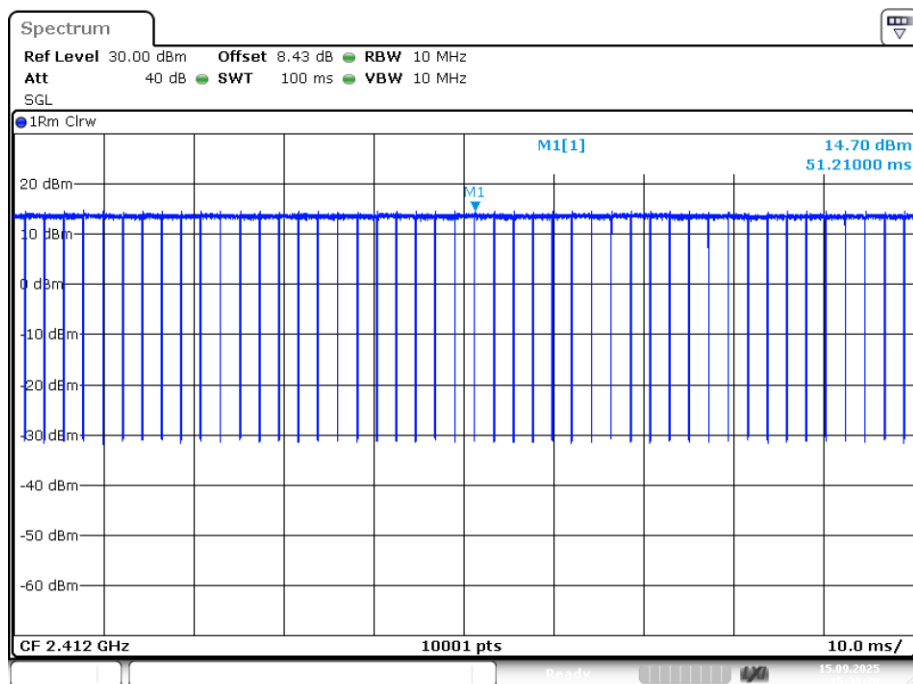
Date: 15.SEP.2025 15:26:38

Duty Cycle NVNT b 2462MHz Ant1



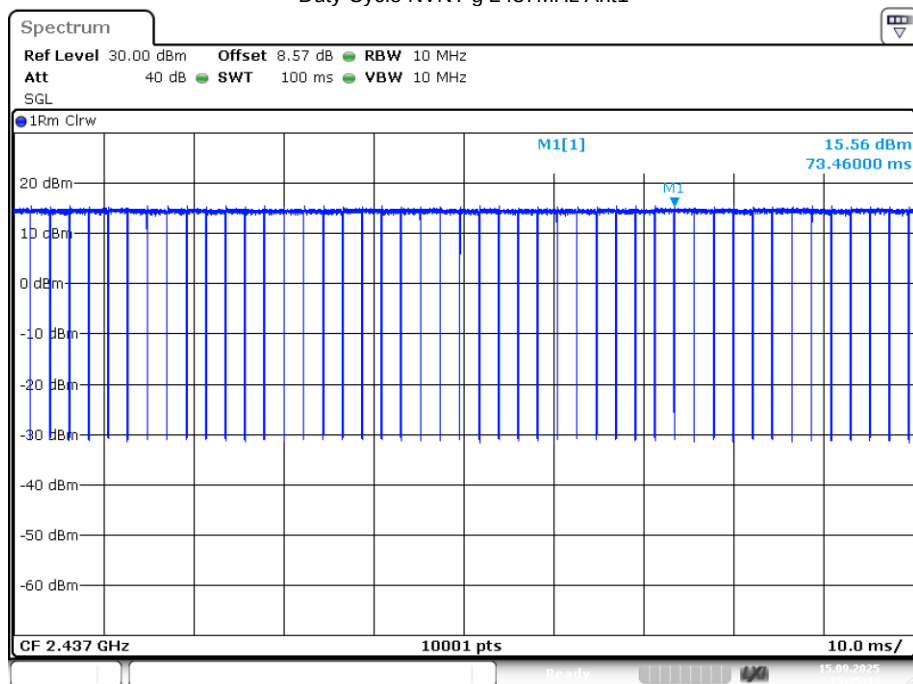
Date: 15.SEP.2025 15:24:14

Duty Cycle NVNT g 2412MHz Ant1



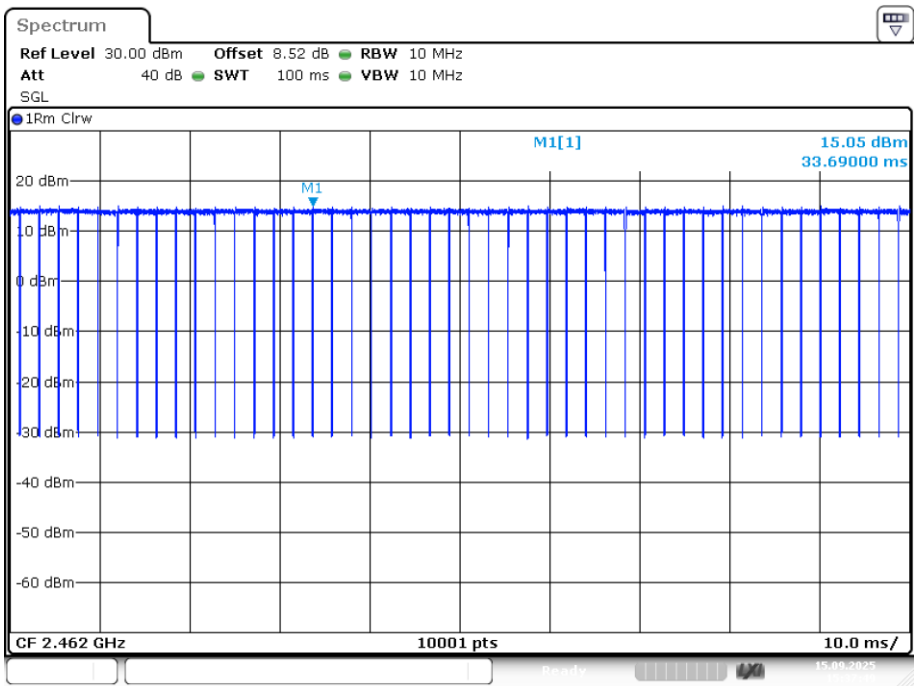
Date: 15.SEP.2025 15:33:38

Duty Cycle NVNT g 2437MHz Ant1



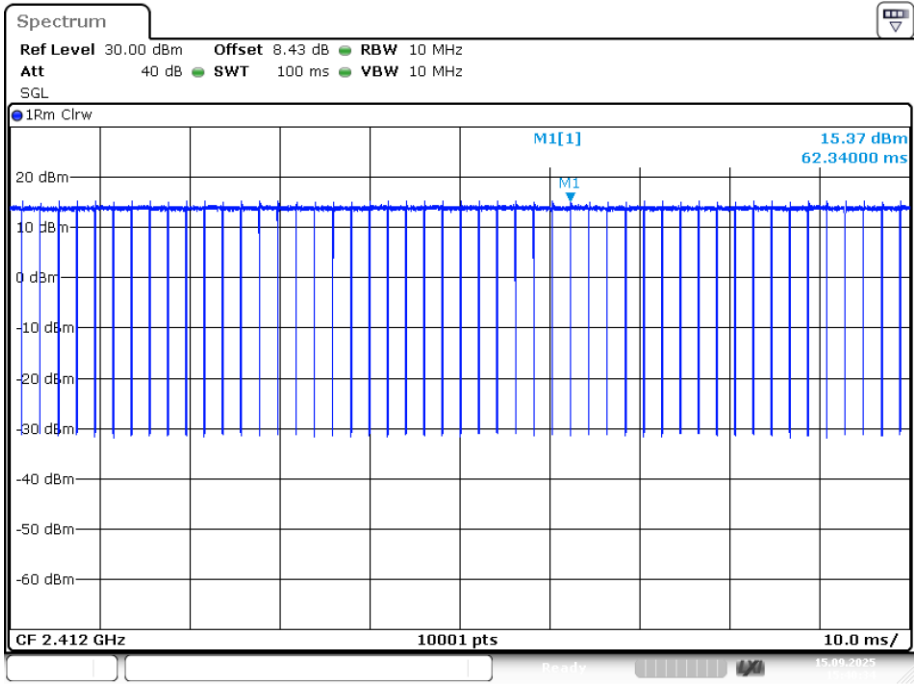
Date: 15.SEP.2025 15:35:43

Duty Cycle NVNT g 2462MHz Ant1



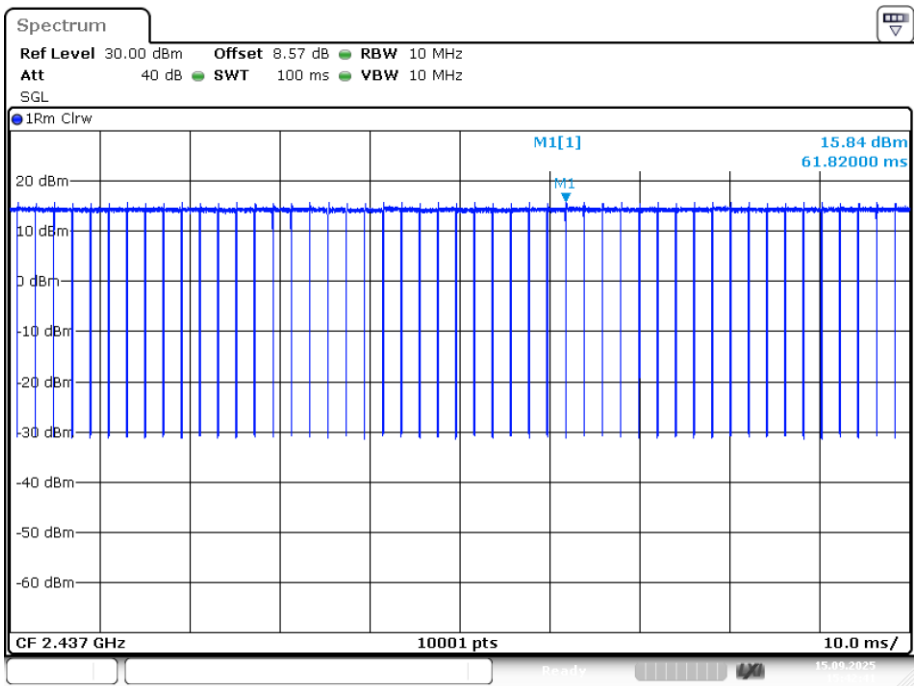
Date: 15.SEP.2025 15:37:49

Duty Cycle NVNT n20 2412MHz Ant1



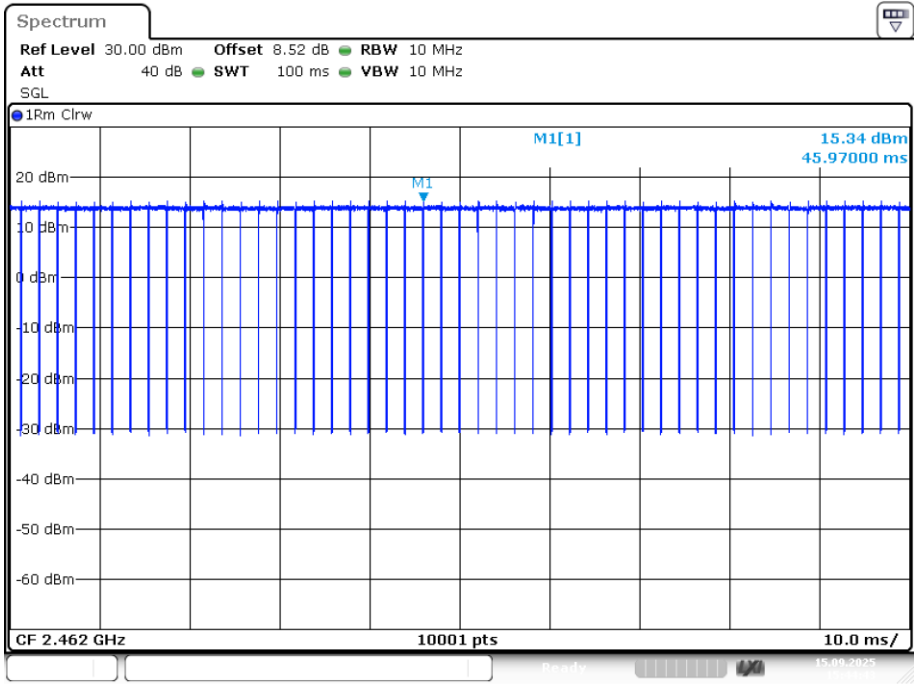
Date: 15.SEP.2025 15:40:34

Duty Cycle NVNT n20 2437MHz Ant1



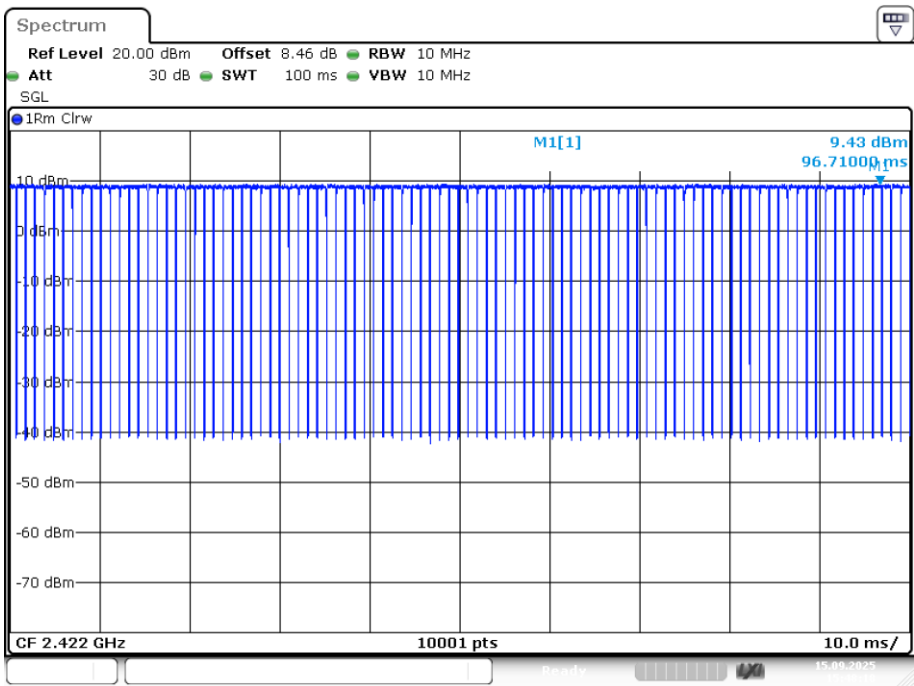
Date: 15.SEP.2025 15:42:42

Duty Cycle NVNT n20 2462MHz Ant1



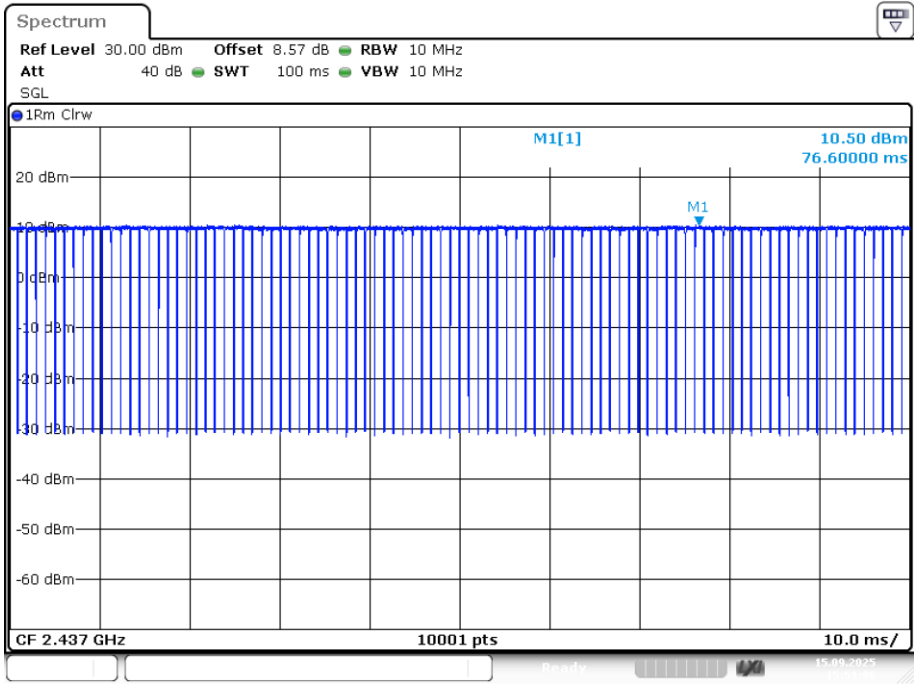
Date: 15.SEP.2025 15:44:43

Duty Cycle NVNT n40 2422MHz Ant1



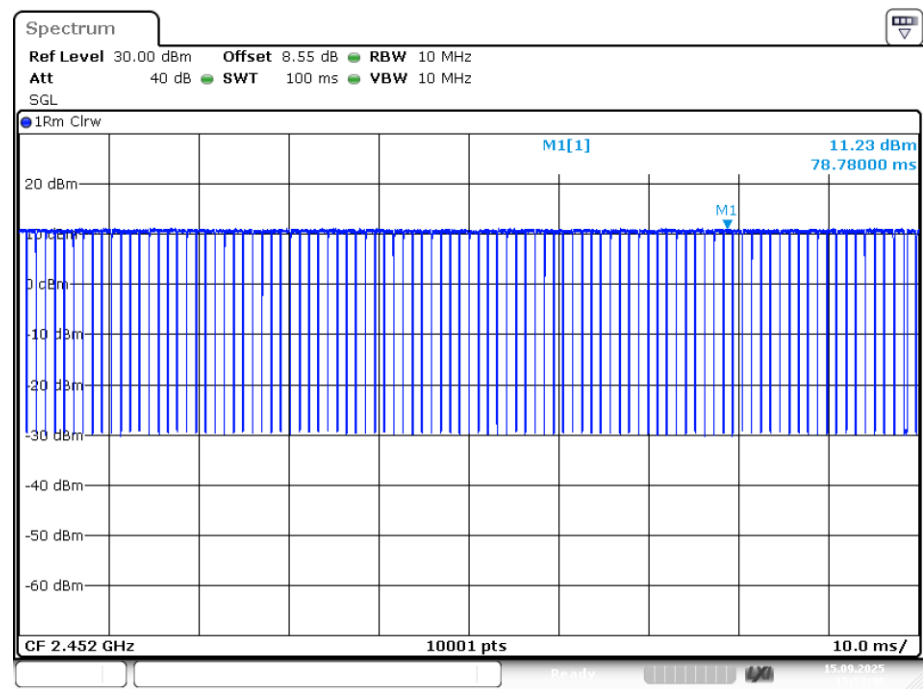
Date: 15.SEP.2025 15:48:18

Duty Cycle NVNT n40 2437MHz Ant1



Date: 15.SEP.2025 15:51:06

Duty Cycle NVNT n40 2452MHz Ant1

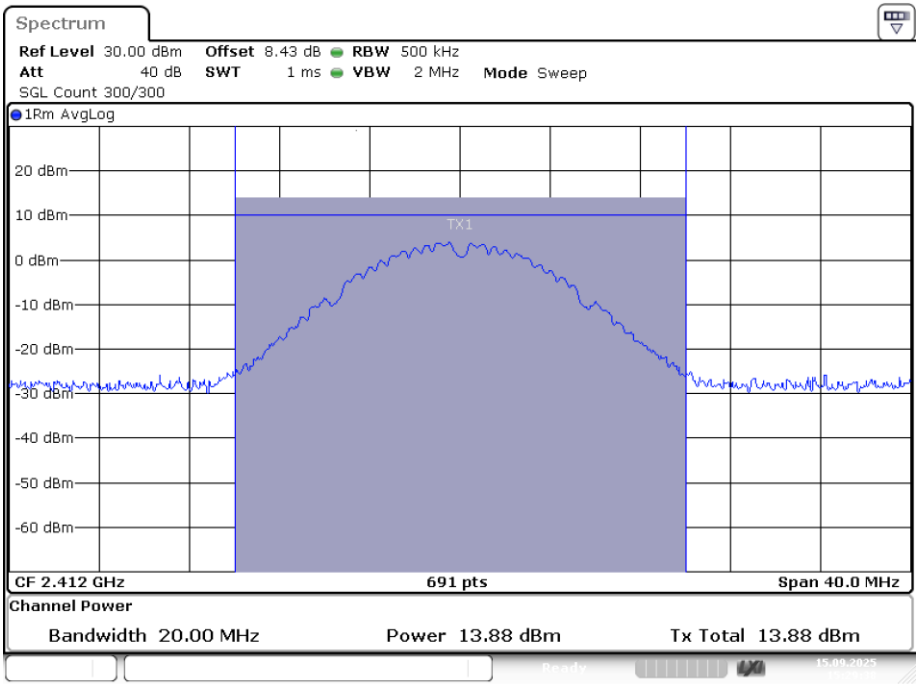


Date: 15.SEP.2025 15:53:41

Maximum Conducted Output Power

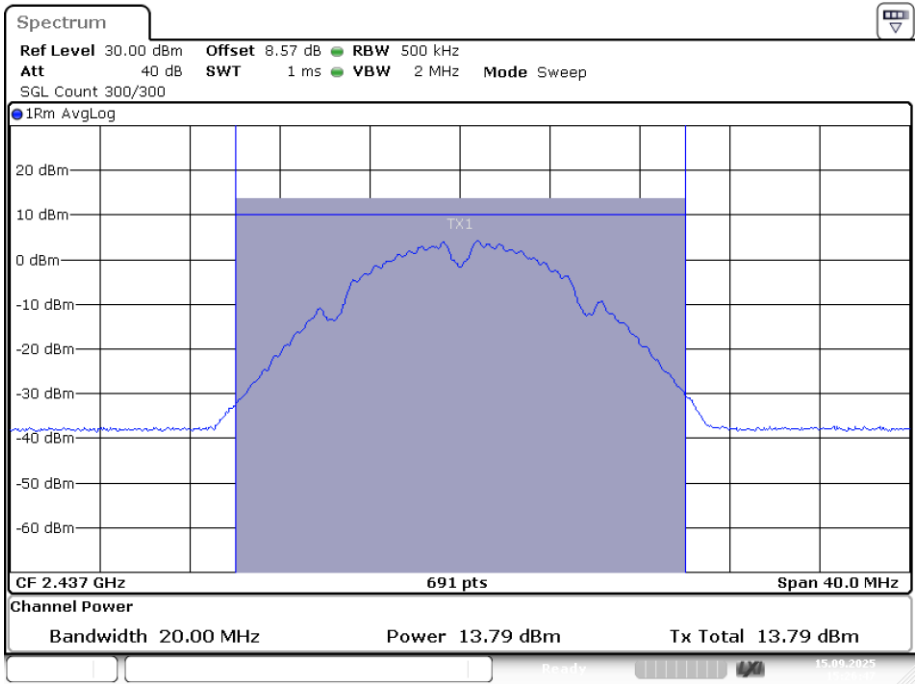
| Condition | Mode | Frequency (MHz) | Antenna Gain(dBi) | Conducted Power (dBm) | Duty Factor (dB) | Total Power (dBm) | EIRP (dBm) | Power Limit (dBm) | EIRP Limit (dBm) | Verdict |
|-----------|------|-----------------|-------------------|-----------------------|------------------|-------------------|------------|-------------------|------------------|---------|
| NVNT      | b    | 2412            | 2                 | 13.884                | 0.03             | 13.914            | 15.914     | 30                | 36               | Pass    |
| NVNT      | b    | 2437            | 2                 | 13.792                | 0.03             | 13.822            | 15.822     | 30                | 36               | Pass    |
| NVNT      | b    | 2462            | 2                 | 13.359                | 0.03             | 13.389            | 15.389     | 30                | 36               | Pass    |
| NVNT      | g    | 2412            | 2                 | 12.423                | 0.2              | 12.623            | 14.623     | 30                | 36               | Pass    |
| NVNT      | g    | 2437            | 2                 | 13.9                  | 0.2              | 14.1              | 16.1       | 30                | 36               | Pass    |
| NVNT      | g    | 2462            | 2                 | 13.698                | 0.2              | 13.898            | 15.898     | 30                | 36               | Pass    |
| NVNT      | n20  | 2412            | 2                 | 13.029                | 0.22             | 13.249            | 15.249     | 30                | 36               | Pass    |
| NVNT      | n20  | 2437            | 2                 | 13.76                 | 0.21             | 13.97             | 15.97      | 30                | 36               | Pass    |
| NVNT      | n20  | 2462            | 2                 | 12.999                | 0.22             | 13.219            | 15.219     | 30                | 36               | Pass    |
| NVNT      | n40  | 2422            | 2                 | 13.881                | 0.38             | 14.261            | 16.261     | 30                | 36               | Pass    |
| NVNT      | n40  | 2437            | 2                 | 14.229                | 0.38             | 14.609            | 16.609     | 30                | 36               | Pass    |
| NVNT      | n40  | 2452            | 2                 | 14.038                | 0.41             | 14.448            | 16.448     | 30                | 36               | Pass    |

Power NVNT b 2412MHz Ant1



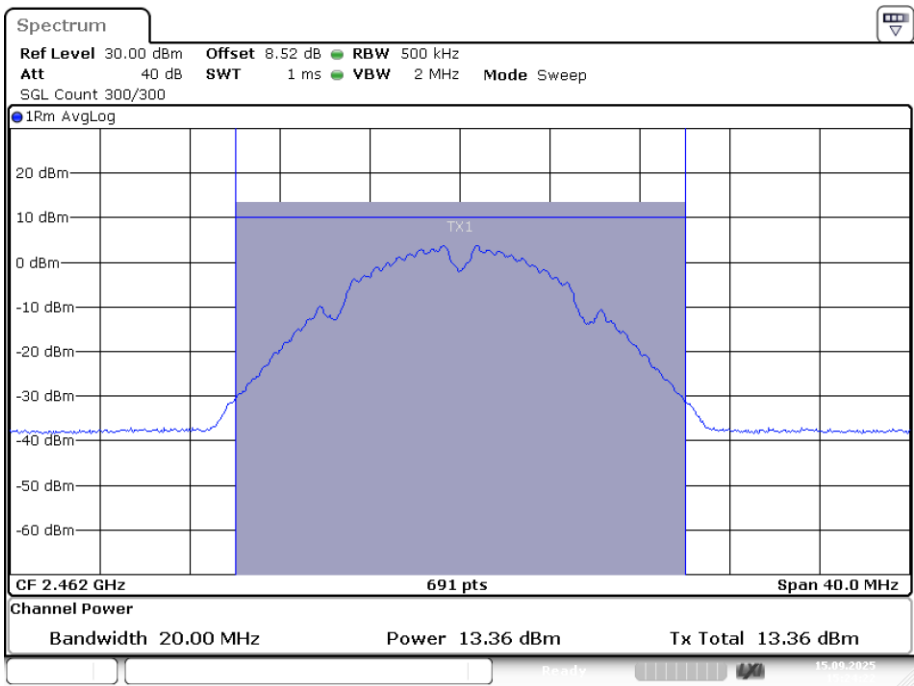
Date: 15.SEP.2025 15:29:37

Power NVNT b 2437MHz Ant1



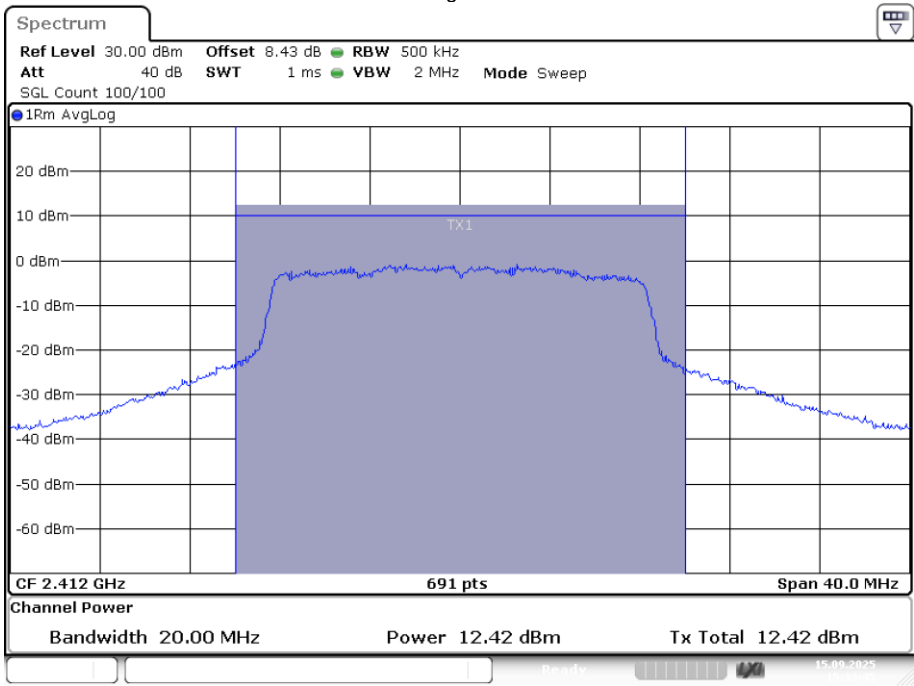
Date: 15.SEP.2025 15:26:46

Power NVNT b 2462MHz Ant1



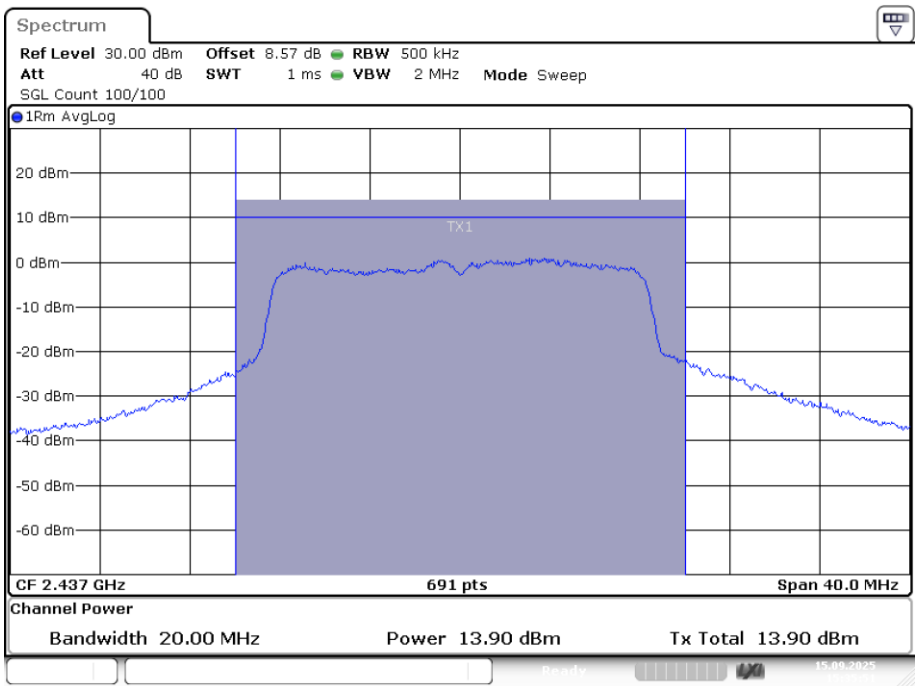
Date: 15.SEP.2025 15:24:22

Power NVNT g 2412MHz Ant1



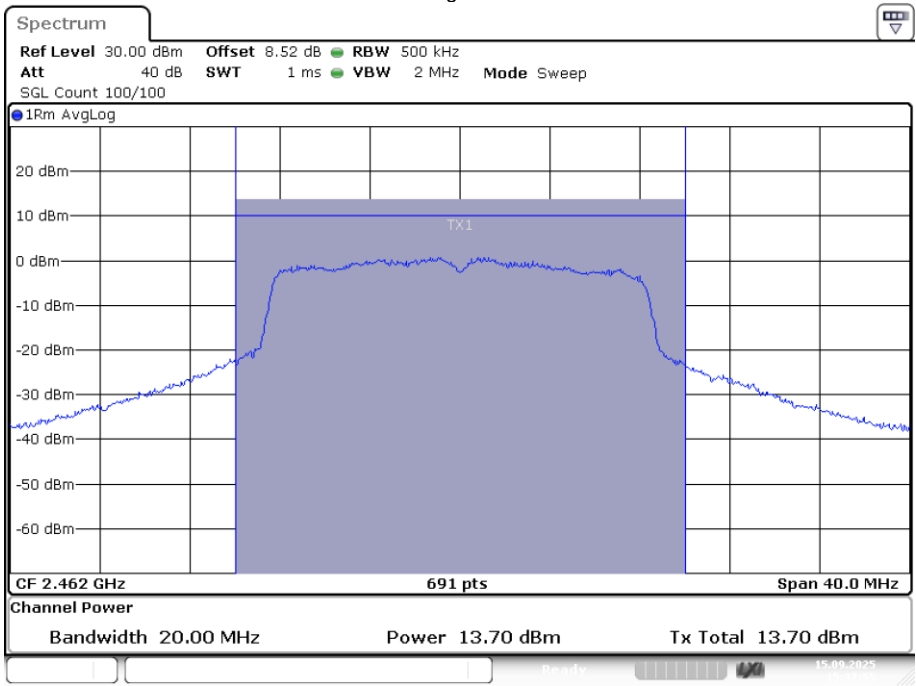
Date: 15.SEP.2025 15:33:45

Power NVNT g 2437MHz Ant1



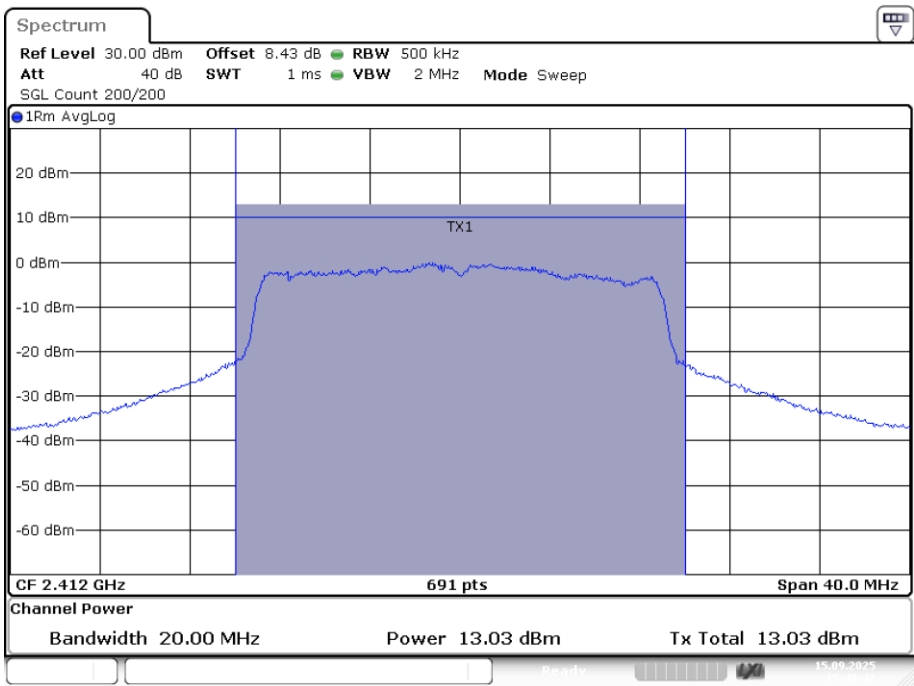
Date: 15.SEP.2025 15:35:50

Power NVNT g 2462MHz Ant1



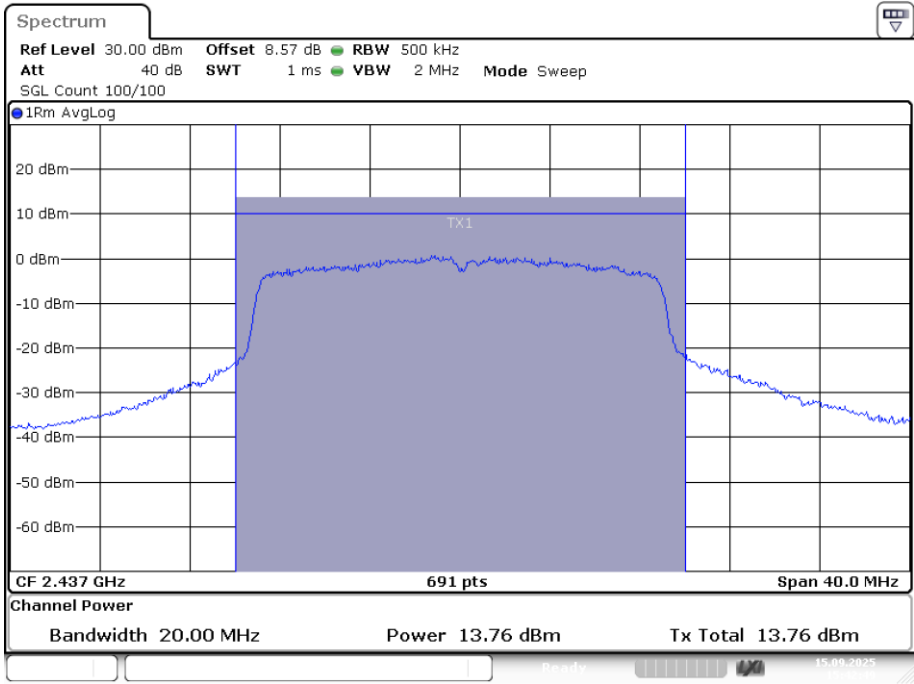
Date: 15.SEP.2025 15:37:56

Power NVNT n20 2412MHz Ant1



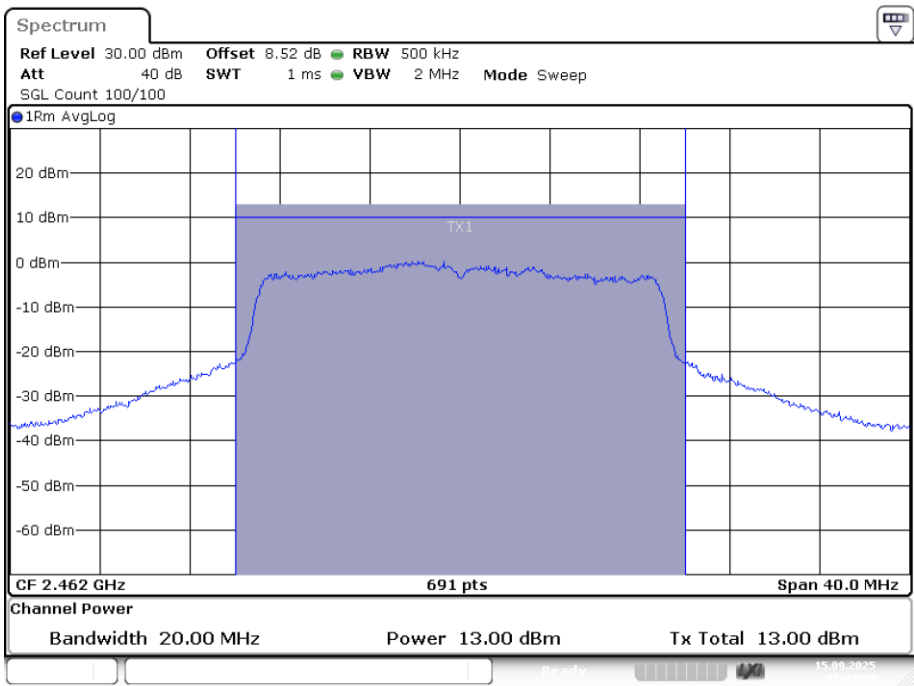
Date: 15.SEP.2025 15:40:41

Power NVNT n20 2437MHz Ant1



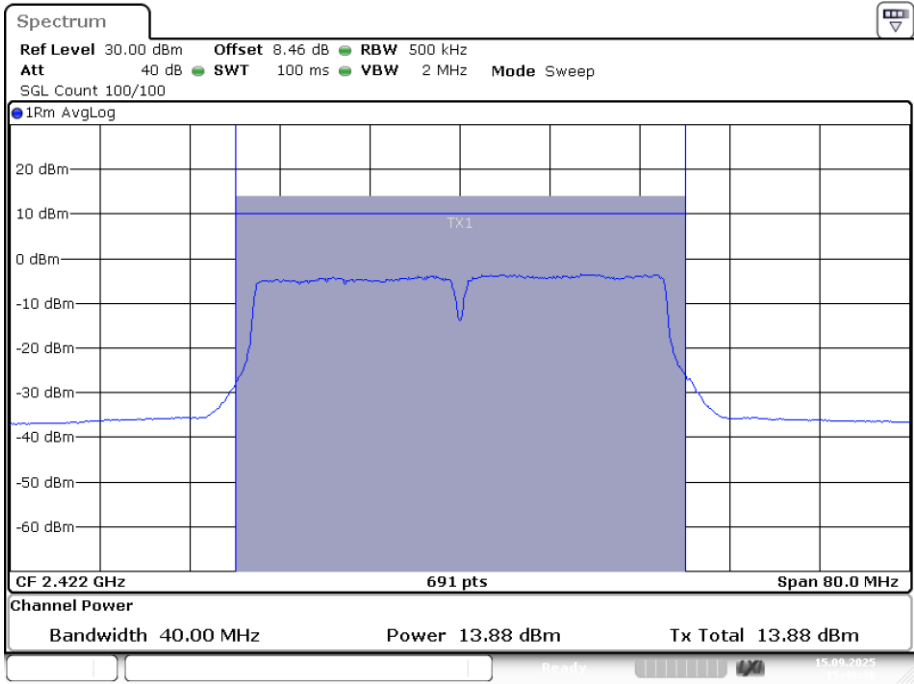
Date: 15.SEP.2025 15:42:48

Power NVNT n20 2462MHz Ant1



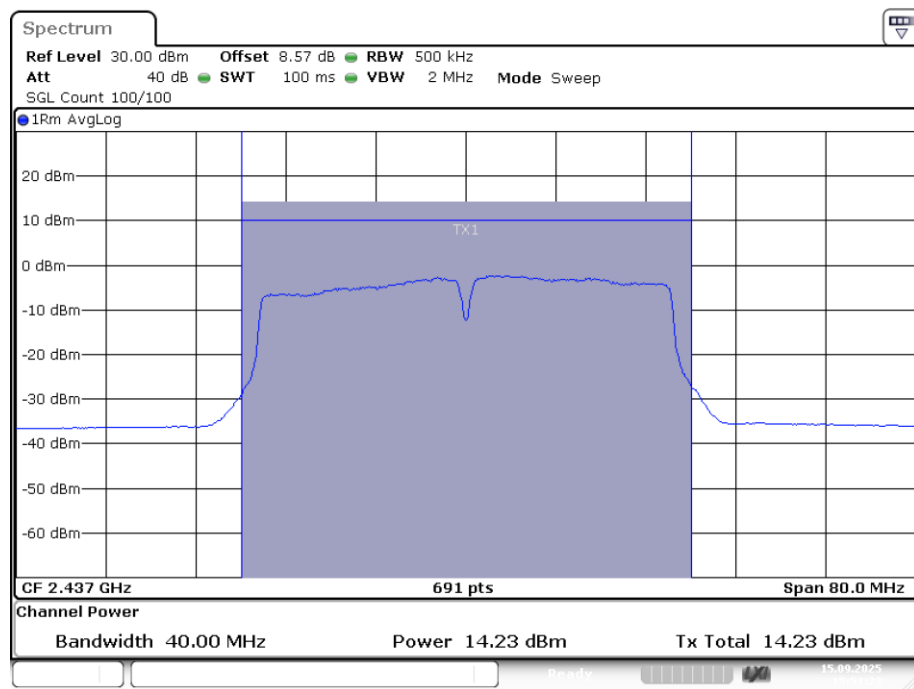
Date: 15.SEP.2025 15:44:50

Power NVNT n40 2422MHz Ant1

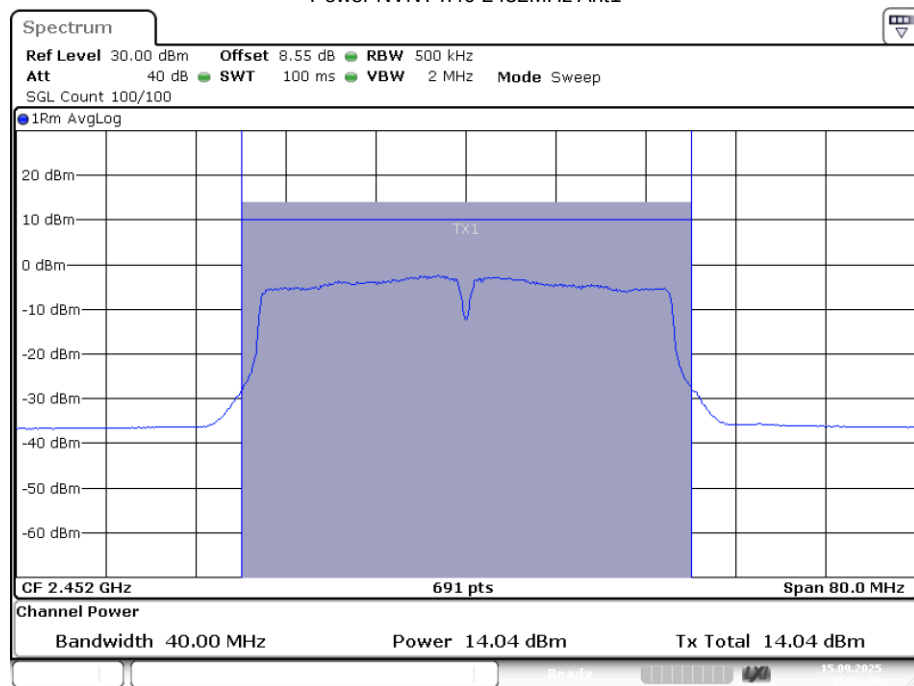


Date: 15.SEP.2025 15:48:35

Power NVNT n40 2437MHz Ant1

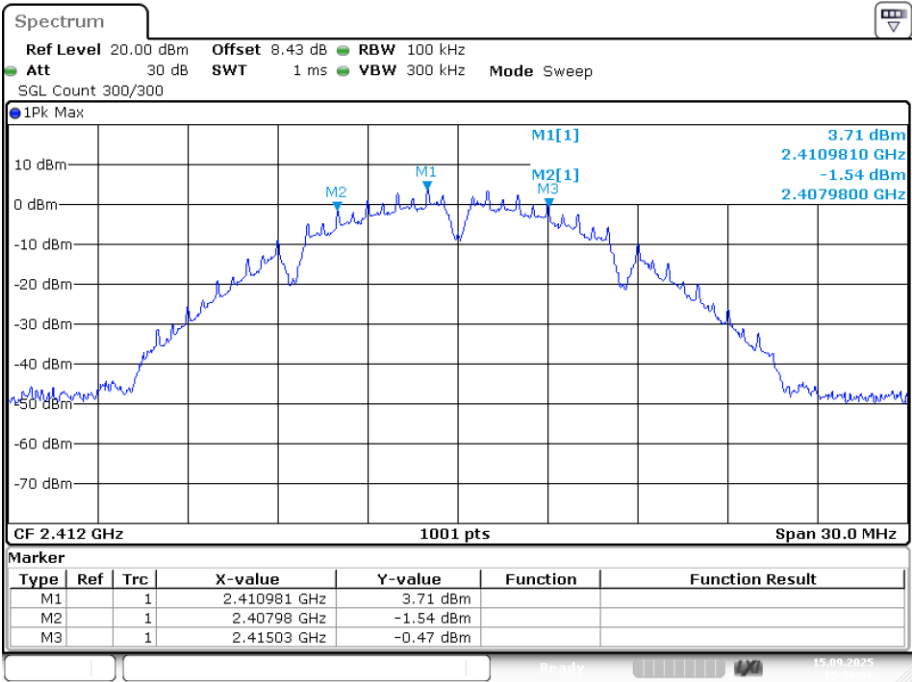


Power NVNT n40 2452MHz Ant1

**-6dB Bandwidth**

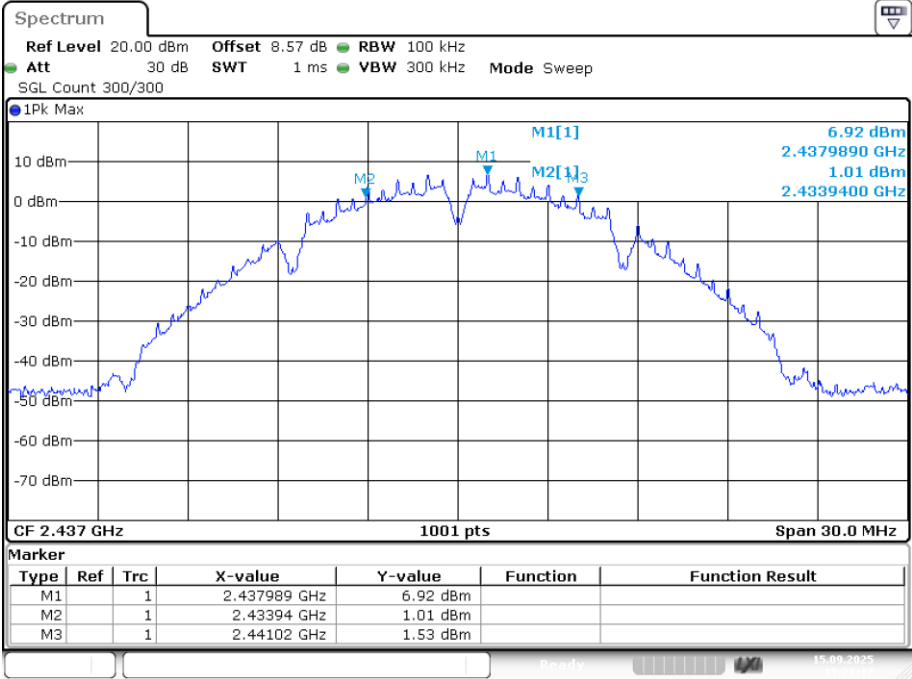
| Condition | Mode | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|-----------|------|-----------------|---------|-----------------------|-----------------------------|---------|
| NVNT      | b    | 2412            | Ant1    | 7.05                  | 0.5                         | Pass    |
| NVNT      | b    | 2437            | Ant1    | 7.08                  | 0.5                         | Pass    |
| NVNT      | b    | 2462            | Ant1    | 8.01                  | 0.5                         | Pass    |
| NVNT      | g    | 2412            | Ant1    | 14.28                 | 0.5                         | Pass    |
| NVNT      | g    | 2437            | Ant1    | 14.76                 | 0.5                         | Pass    |
| NVNT      | g    | 2462            | Ant1    | 15.72                 | 0.5                         | Pass    |
| NVNT      | n20  | 2412            | Ant1    | 14.73                 | 0.5                         | Pass    |
| NVNT      | n20  | 2437            | Ant1    | 13.8                  | 0.5                         | Pass    |
| NVNT      | n20  | 2462            | Ant1    | 16.95                 | 0.5                         | Pass    |
| NVNT      | n40  | 2422            | Ant1    | 36                    | 0.5                         | Pass    |
| NVNT      | n40  | 2437            | Ant1    | 35.76                 | 0.5                         | Pass    |
| NVNT      | n40  | 2452            | Ant1    | 35.34                 | 0.5                         | Pass    |

-6dB Bandwidth NVNT b 2412MHz Ant1



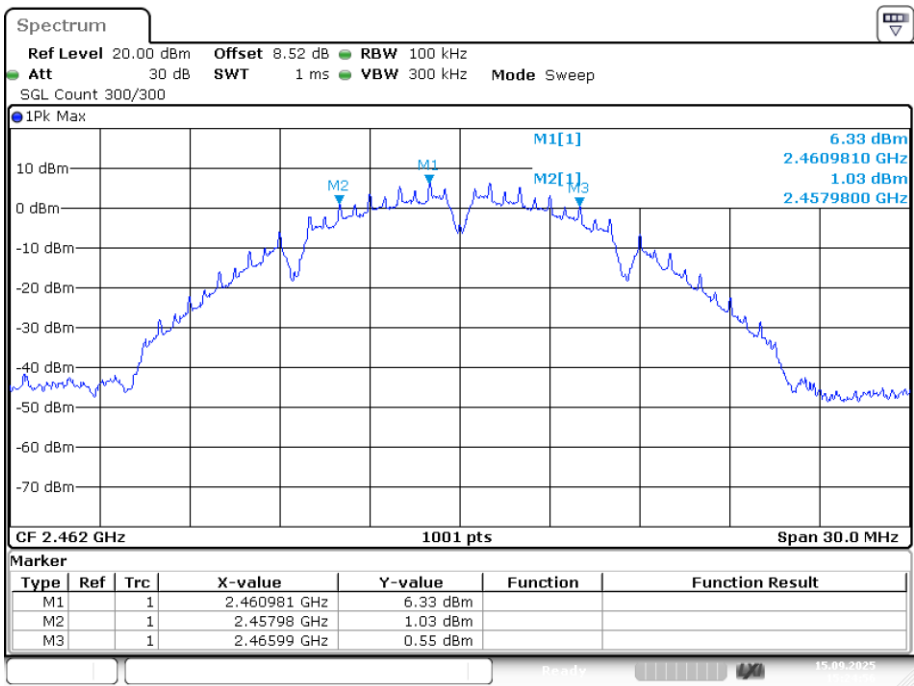
Date: 15.SEP.2025 15:30:06

-6dB Bandwidth NVNT b 2437MHz Ant1

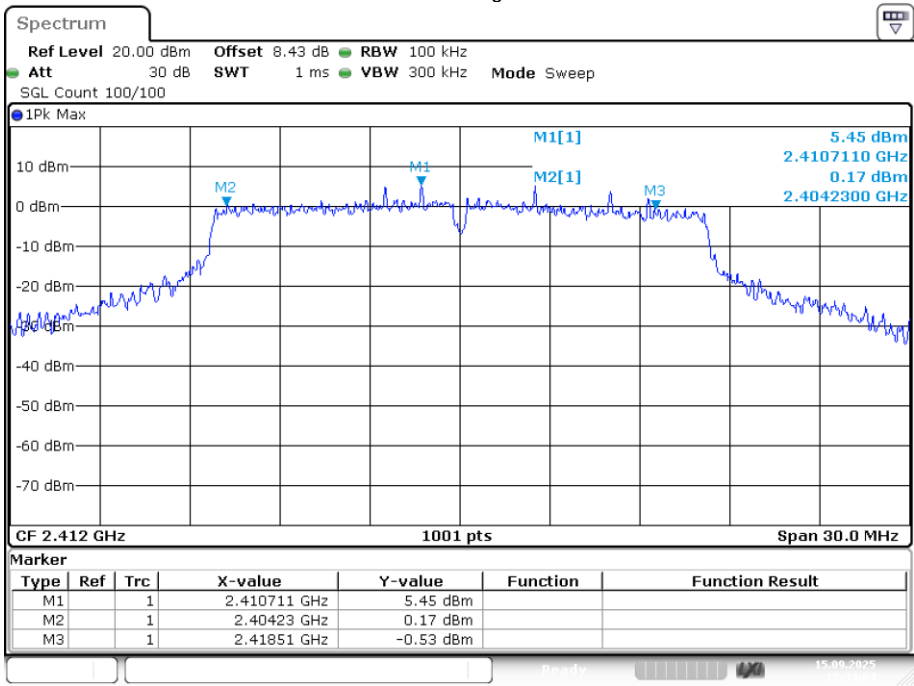


Date: 15.SEP.2025 15:27:16

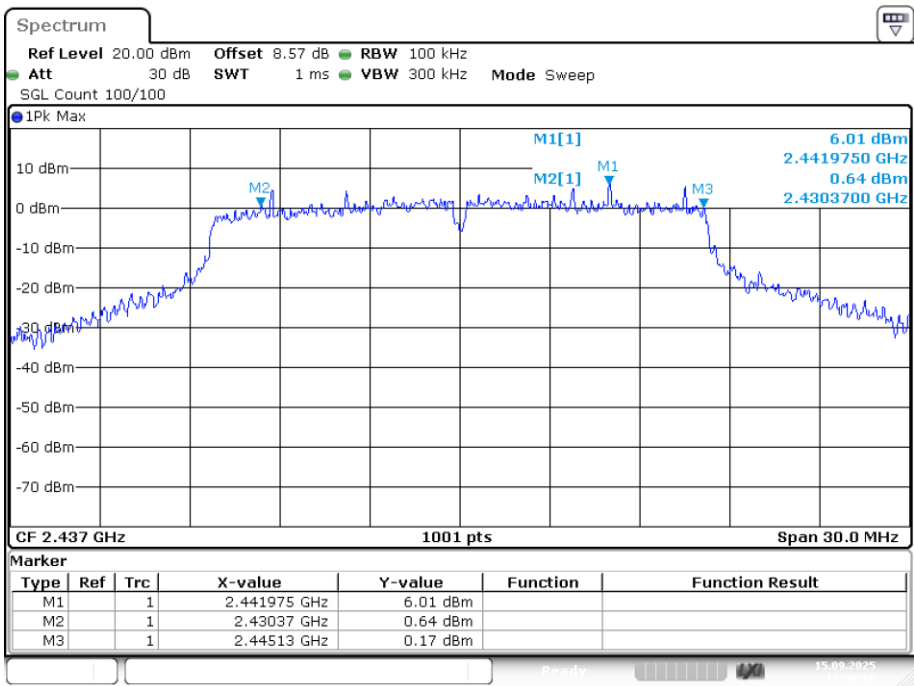
-6dB Bandwidth NVNT b 2462MHz Ant1



-6dB Bandwidth NVNT g 2412MHz Ant1

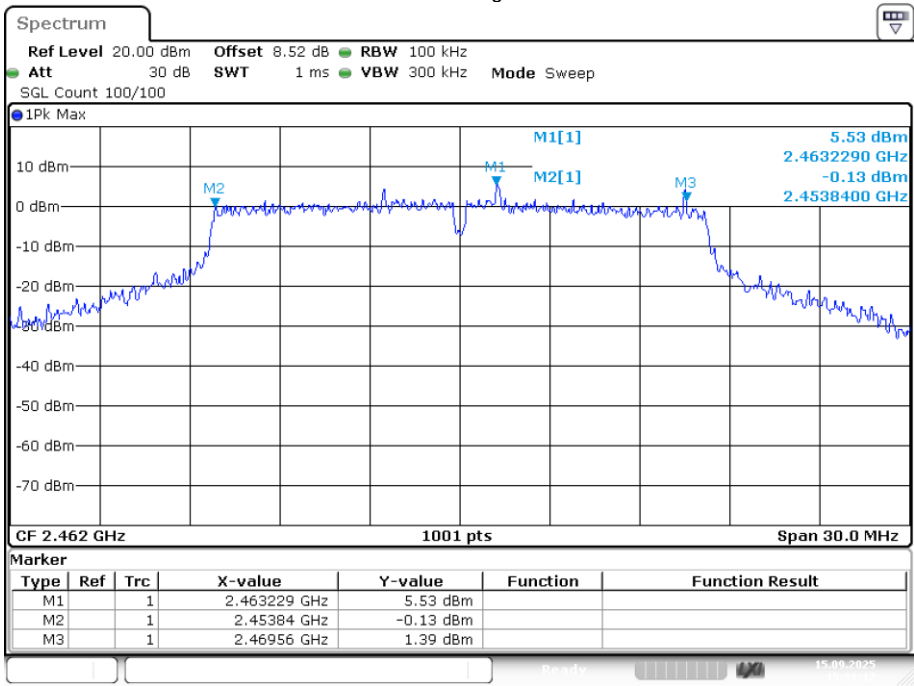


-6dB Bandwidth NVNT g 2437MHz Ant1



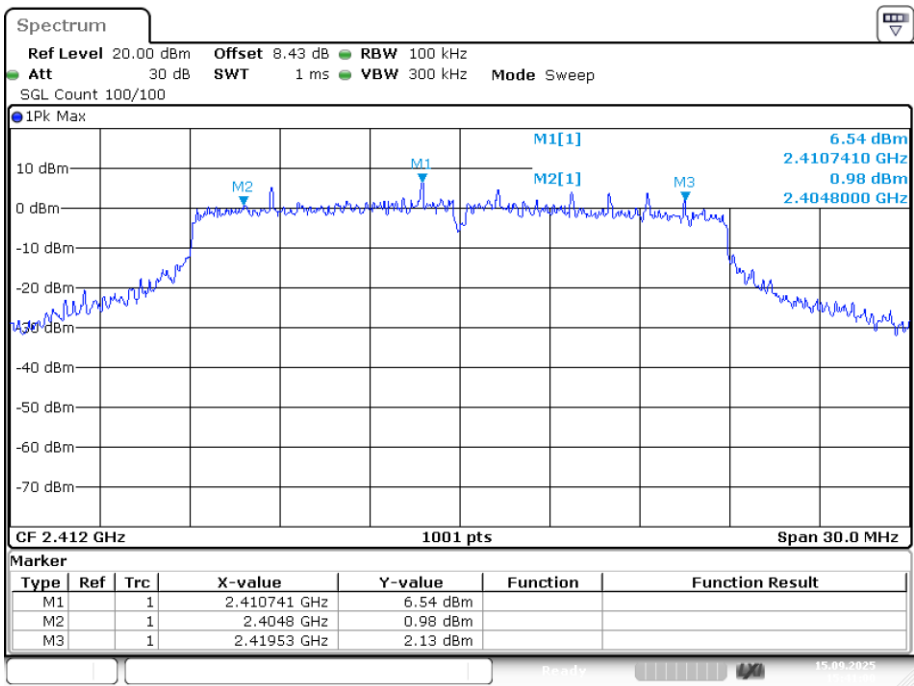
Date: 15.SEP.2025 15:36:09

-6dB Bandwidth NVNT g 2462MHz Ant1



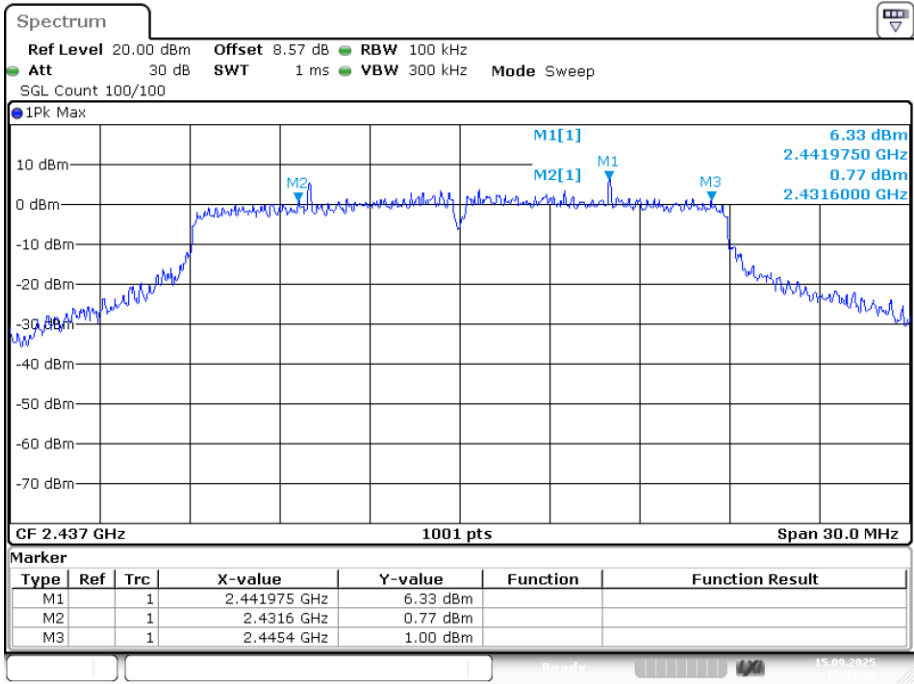
Date: 15.SEP.2025 15:38:16

-6dB Bandwidth NVNT n20 2412MHz Ant1



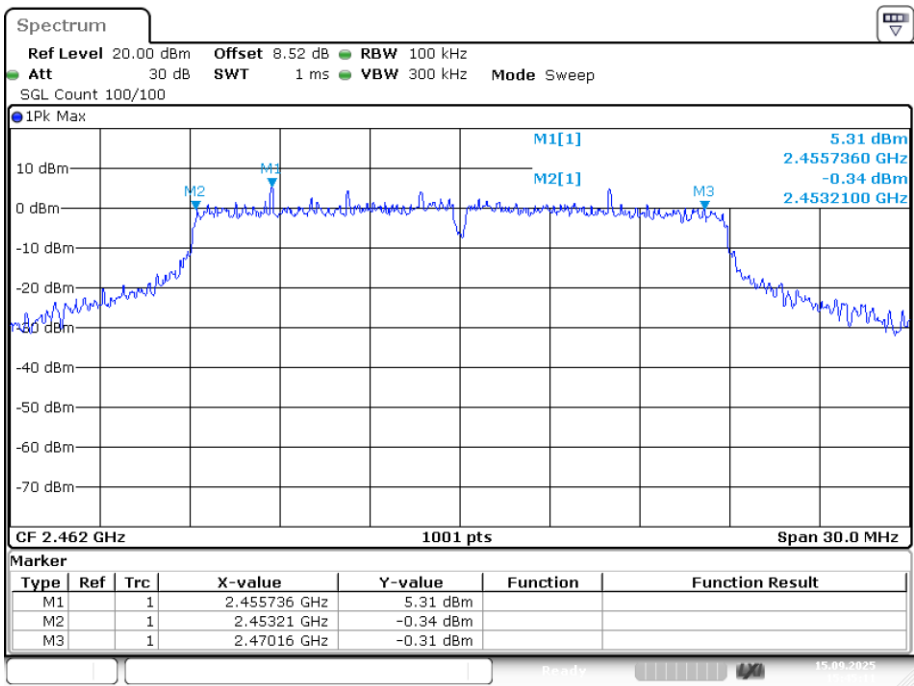
Date: 15.SEP.2025 15:41:00

-6dB Bandwidth NVNT n20 2437MHz Ant1



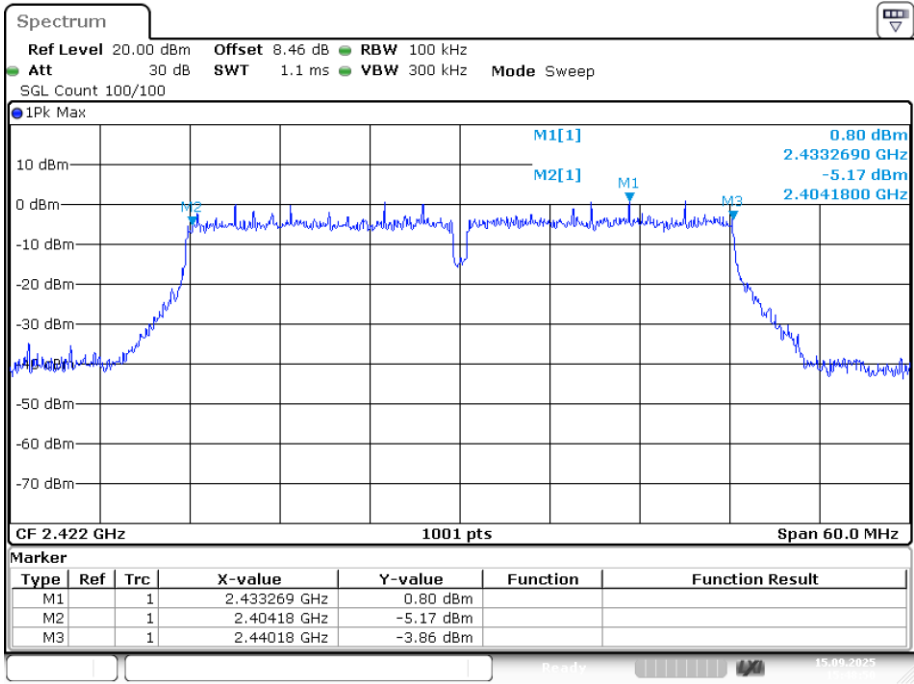
Date: 15.SEP.2025 15:43:07

-6dB Bandwidth NVNT n20 2462MHz Ant1



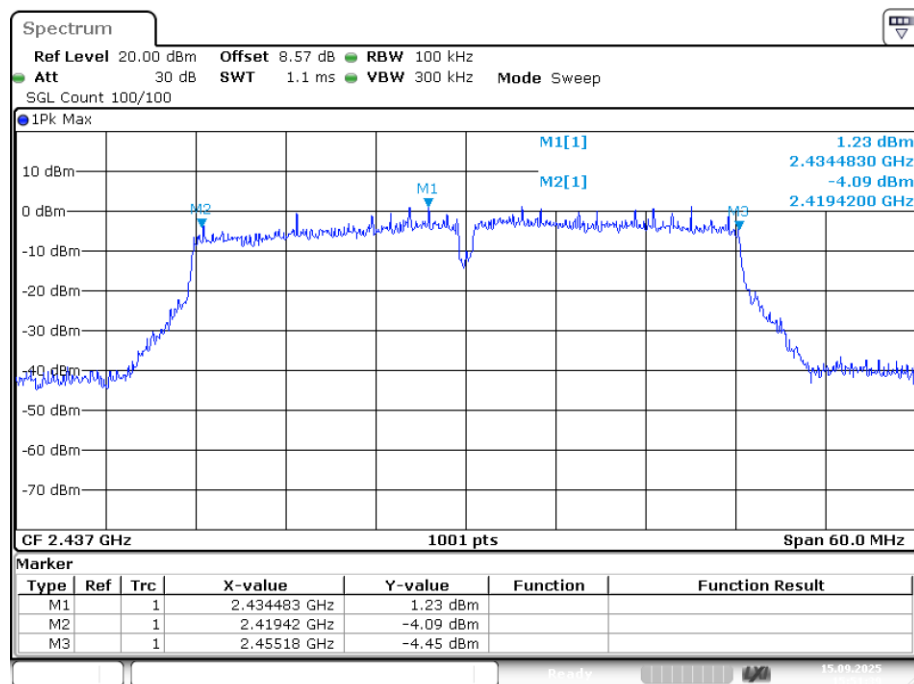
Date: 15.SEP.2025 15:45:10

-6dB Bandwidth NVNT n40 2422MHz Ant1

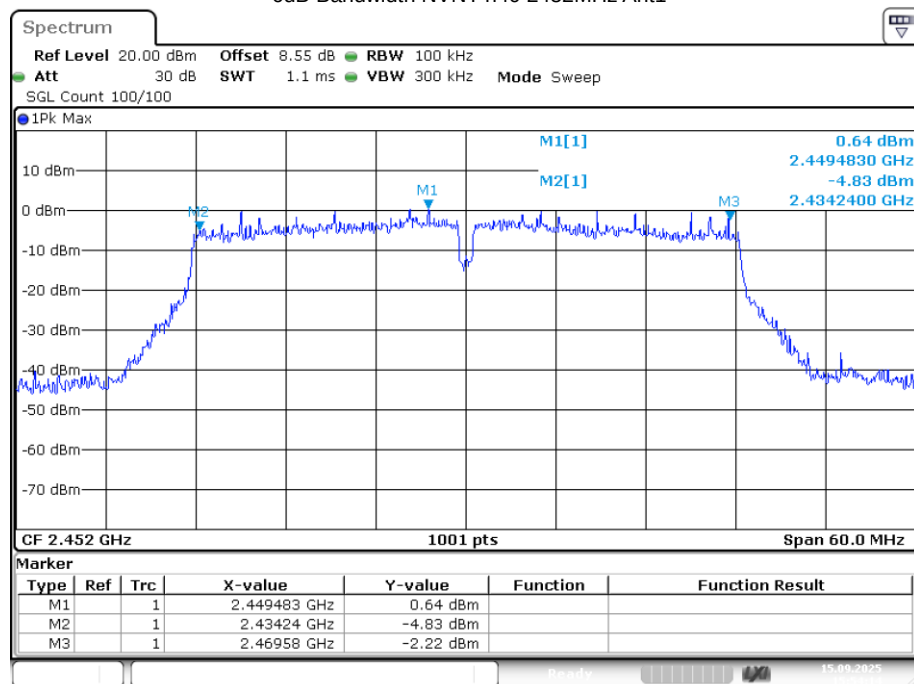


Date: 15.SEP.2025 15:48:50

-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1



### Occupied Channel Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|-----------|------|-----------------|---------|---------------|
| NVNT      | b    | 2412            | Ant1    | 12.617        |
| NVNT      | b    | 2437            | Ant1    | 12.587        |
| NVNT      | b    | 2462            | Ant1    | 12.857        |
| NVNT      | g    | 2412            | Ant1    | 16.513        |
| NVNT      | g    | 2437            | Ant1    | 16.543        |
| NVNT      | g    | 2462            | Ant1    | 16.663        |
| NVNT      | n20  | 2412            | Ant1    | 17.742        |
| NVNT      | n20  | 2437            | Ant1    | 17.742        |
| NVNT      | n20  | 2462            | Ant1    | 17.802        |
| NVNT      | n40  | 2422            | Ant1    | 36.384        |
| NVNT      | n40  | 2437            | Ant1    | 36.144        |
| NVNT      | n40  | 2452            | Ant1    | 36.144        |