



FCC PART 15C TEST REPORT

BLUETOOTH LOW ENERGY (BLE) PART

No. I22Z00641-IOT04

for

Hytera Communications Corporation Limited

PoC Mobile Radio

Model Name: MNC360

with

Hardware Version: V1.0.01.000.01

Software Version: V1.0.06.000.01

FCC ID: YAMMNC360

IC: 8913A-MNC360

Issued Date: 2022-05-11

Note:

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The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

Test Laboratory:

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1. Summary of Test Report

1.1. Test Items

| | |
|---------------------|---|
| Product Name | PoC Mobile Radio |
| Model Name | MNC360 |
| Applicant's name | Hytera Communications Corporation Limited |
| Manufacturer's Name | Hytera Communications Corporation Limited |

1.2. Test Standards

FCC Part15-2019; ANSI C63.10-2013; RSS-247 Issue 2; RSS-Gen Issue 5.

1.3. Test Result

Pass

Please refer to "5.2. Test Results"

1.4. Testing Location

Address: No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China100191

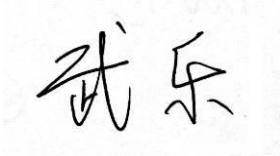
Address: No.18A, Kangding Street, Beijing Economic-Technology Development Area, Beijing,
P. R. China 100176

1.5. Project data

Testing Start Date: 2022-03-29

Testing End Date: 2022-05-11

1.6. Signature



Wu Le

(Prepared this test report)



Sun Zhenyu

(Reviewed this test report)



Hu Xiaoyu

(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: Hytera Communications Corporation Limited
Address: Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road,
Nanshan District, Shenzhen, P.R.C., P 518057
Contact Person Ruifen.Huang
E-Mail Ruifen.Huang@hytera.com
Telephone: 18925250460
Fax: /

2.2. Manufacturer Information

Company Name: Hytera Communications Corporation Limited
Address: Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road,
Nanshan District, Shenzhen, P.R.C., P 518057
Contact Person Ruifen.Huang
E-Mail Ruifen.Huang@hytera.com
Telephone: 18925250460
Fax: /

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

| | |
|-----------------------------------|-----------------------------------|
| Product Name | PoC Mobile Radio |
| Model Name | MNC360 |
| Frequency Range | 2400MHz~2483.5MHz |
| Type of Modulation | GFSK |
| Number of Channels | 40 |
| Antenna Type | Integrated |
| Antenna Gain | 0.20dBi |
| Power Supply | 13.6V DC by external power supply |
| FCC ID | YAMMNC360 |
| IC | 8913A-MNC360 |
| Condition of EUT as received | No abnormality in appearance |
| Product Marketing Name (PMN) | Hytera |
| Hardware Version ID.Number (FVIN) | MNC360 |
| Software Version ID.Number (FVIN) | N/A |
| Host Marketing Name (HMN) | N/A |

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of Shenzhen Academy of Information and Communications Technology.

3.2. Internal Identification of EUT used during the test

| EUT ID* | IMEI | HW Version | SW Version | Receive Date |
|----------------|-----------------|-------------------|-------------------|---------------------|
| UT03aa | 866346040178303 | V1.0.01.000.01 | V1.0.06.000.01 | 2022-03-28 |
| UT11aa | 866346040178394 | V1.0.01.000.01 | V1.0.06.000.01 | 2022-03-28 |

*EUT ID: is used to identify the test sample in the lab internally.

UT03aa is used for conduction test, UT11aa is used for radiation test.

3.3. Internal Identification of AE used during the test

| AE ID* | Description | AE ID* |
|---------------|--------------------|---------------|
| AE1 | GPS Antenna | / |
| AE2 | 2G/3G/4G Antenna | / |
| AE3 | DC power supply | / |
| AE4 | Palm microphone | / |

AE1

| | |
|--------------|---|
| Model | DAMA1575AT41 |
| Manufacturer | ZHANGJIAGANG FREE TRADE ZONE CAIQIN TECHNOLOGY CO.,LTD. |

AE2

| | |
|--------------|-----------|
| Model | AN1700W01 |
| Manufacturer | / |



AE3

Model ZUP60-14
Manufacturer /

AE4

Model SM16A1
Manufacturer Hytera Communications Corporation Limited

*AE ID: is used to identify the test sample in the lab internally.

3.4. General Description

The Equipment under Test (EUT) is a model of PoC Mobile Radio with integrated antenna. Manual and specifications of the EUT were provided to fulfil the test. Samples undergoing test were selected by the client.



4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

| Reference | Title | Version |
|------------------|---|--|
| FCC Part 15 | FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902–928MHz, 2400–2483.5 MHz, and 5725–5850 MHz | 2019 |
| ANSI C63.10 | American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices | 2013 |
| RSS-247 | Spectrum Management and Telecommunications Radio Standards Specification Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and License-Exempt Local Area Network (LE-LAN) Devices | Issue 2 February, 2017 |
| RSS-Gen | Spectrum Management and Telecommunications Radio Standards Specification General Requirements for Compliance of Radio Apparatus | Issue 5 February, 2021 Amendment 2 |

5. Test Results

5.1. Testing Environment

Normal Temperature: 15~35°C

Relative Humidity: 20~75%

5.2. Test Results

| No | Test cases | Sub-clause of Part 15C | Sub-clause of IC | Verdict |
|----|---|------------------------|--|----------|
| 0 | Antenna Requirement | 15.203 | / | P |
| 1 | Maximum Peak Output Power | 15.247 (b) | RSS-247 section 5.4 | P |
| 2 | Peak Power Spectral Density | 15.247 (e) | RSS-247 section 5.2 | P |
| 3 | 6dB Bandwidth | 15.247 (a) | RSS-247 section 5.2 | P |
| 4 | Band Edges Compliance | 15.247 (d) | RSS-247 section 5.5 | P |
| 5 | Transmitter Spurious Emission - Conducted | 15.247 (d) | RSS-247 section 5.5/ RSS-Gen section 6.13 | P |
| 6 | Transmitter Spurious Emission - Radiated | 15.247, 15.205, 15.209 | RSS-247 section 5.5/ RSS-Gen section 6.13 | P |
| 7 | 99% Occupied Bandwidth | / | RSS-Gen section 6.7 | / |

See **ANNEX A** for details.

5.3. Statements

SAICT has evaluated the test cases requested by the applicant/manufacture as listed in section 5.2 of this report, for the EUT specified in section 3, according to the standards or reference documents listed in section 4.2.

Disclaimer:

A. After confirmation with the customer, the sample information provided by the customer may affect the validity of the measurement results in this report, and the impact and consequences arising therefrom shall be borne by the customer.

B. The samples in this report are provided by the customer, and the test results are only applicable to the samples received.

6. Test Equipments Utilized

Conducted test system

| No. | Equipment | Model | Serial Number | Manufacturer | Calibration Due date | Calibration Period |
|-----|------------------------|----------|---------------|-----------------|----------------------|--------------------|
| 1 | Vector Signal Analyzer | FSV40 | 100903 | Rohde & Schwarz | 2022-12-29 | 1 year |
| 2 | Power Sensor | U2021XA | MY55430013 | Keysight | 2022-12-29 | 1 year |
| 3 | Data Acquisiton | U2531A | TW55443507 | Keysight | / | / |
| 4 | RF Control Unit | JS0806-2 | 21C8060398 | Tonscend | 2023-05-08 | 1 year |

Radiated emission test system

| No. | Equipment | Model | Serial Number | Manufacturer | Calibration Due date | Calibration Period |
|-----|--------------|----------|---------------|--------------|----------------------|--------------------|
| 1 | Antenna | VULB9163 | 01176 | Schwarzbeck | 2022-11-15 | 1 year |
| 2 | Loop Antenna | HFH2-Z2 | 829324/007 | Schwarzbeck | 2022-12-22 | 1 year |
| 3 | Receiver | ESU26 | 100376 | R&S | 2022-09-15 | 1 year |
| 4 | Antenna | 3117 | 00139065 | ETS-Lindgren | 2022-09-13 | 1 year |

Test software

| No. | Equipment | Manufacturer | Version |
|-----|-----------|-----------------|---------|
| 1 | JS1120-3 | Tonscend | 2.6 |
| 2 | EMC32 | Rohde & Schwarz | V8.53.0 |

EUT is engineering software provided by the customer to control the transmitting signal. The EUT was programmed to be in continuously transmitting mode.

Anechoic chamber

Fully anechoic chamber by ETS-Lindgren

7. Laboratory Environment

Semi/Full-anechoic chamber

| | |
|------------------------------------|---|
| Temperature | Min. = 15 °C, Max. = 35 °C |
| Relative humidity | Min. = 20 %, Max. = 75 % |
| Shielding effectiveness | 0.014MHz-1MHz > 60 dB; 1MHz-18000MHz > 90 dB |
| Electrical insulation | > 2M Ω |
| Ground system resistance | < 4 Ω |
| Normalised site attenuation (NSA) | < \pm 4 dB, 3 m distance, from 30 to 1000 MHz |
| Voltage Standing Wave Ratio (VSWR) | \leq 6 dB, from 1 to 18 GHz, 3 m distance |

Shielded room

| | |
|--------------------------|---|
| Temperature | Min. = 15 °C, Max. = 35 °C |
| Relative humidity | Min. = 20 %, Max. = 75 % |
| Shielding effectiveness | 0.014MHz-1MHz > 60 dB; 1MHz-1000MHz > 90 dB |
| Electrical insulation | > 2M Ω |
| Ground system resistance | < 4 Ω |

8. Measurement Uncertainty

| Test Name | Uncertainty ($k=2$) | |
|--|-----------------------|--------|
| 1. Maximum Peak Output Power | 1.32dB | |
| 2. Peak Power Spectral Density | 2.32dB | |
| 3. 6dB Bandwidth | 4.56kHz | |
| 4. Band Edges Compliance | 1.92dB | |
| 5. Transmitter Spurious Emission - Conducted | 30MHz≤f<1GHz | 1.41dB |
| | 1GHz≤f<7GHz | 1.92dB |
| | 7GHz≤f<13GHz | 2.31dB |
| | 13GHz≤f≤26GHz | 2.61dB |
| 6. Transmitter Spurious Emission - Radiated | 9kHz≤f<30MHz | 4.49dB |
| | 30MHz≤f<1GHz | 5.73dB |
| | 1GHz≤f<18GHz | 5.58dB |
| | 18GHz≤f≤40GHz | 3.37dB |
| 7. 99% Occupied Bandwidth | 4.56kHz | |

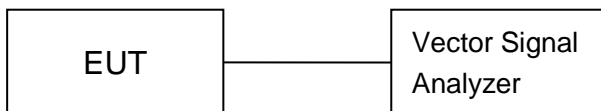
ANNEX A: Detailed Test Results

Test Configuration

The measurement is made according to ANSI C63.10.

1) Conducted Measurements

1. Connect the EUT to the test system correctly.
2. Set the EUT to the required work mode.
3. Set the EUT to the required channel.
4. Set the spectrum analyzer to start measurement.
5. Record the values.

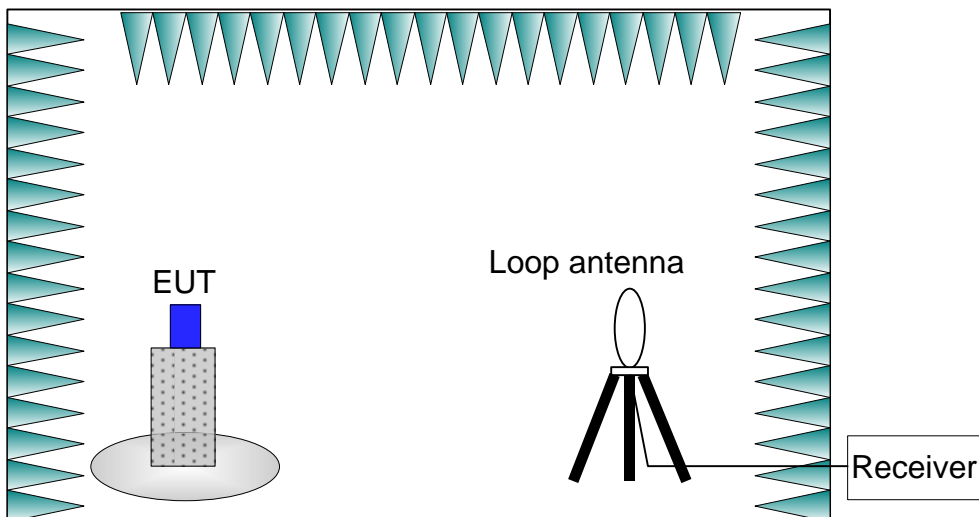


2) Radiated Measurements

Test setup:

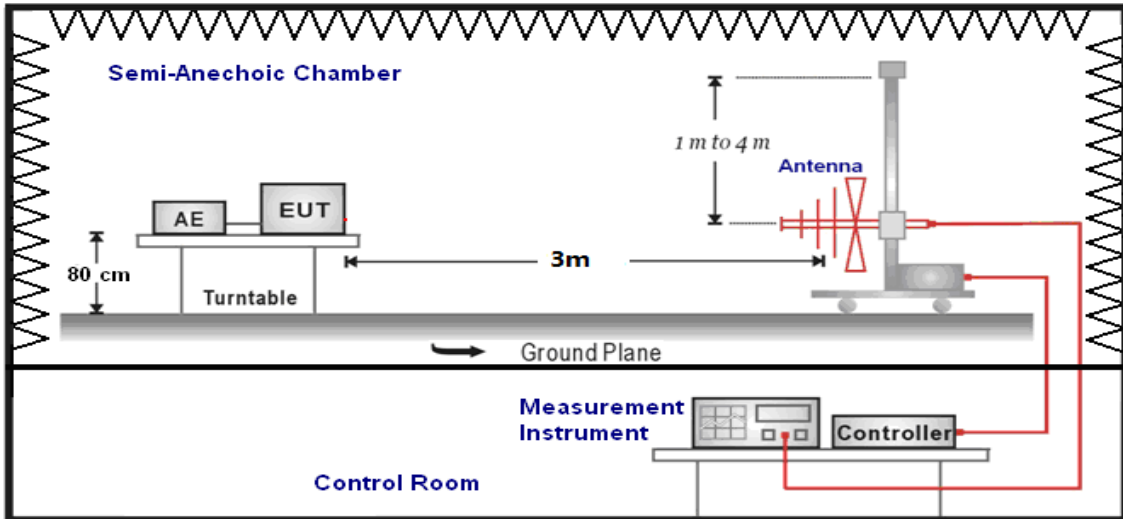
9kHz-30MHz:

The EUT are measured in a semi-anechoic chamber. The EUT is placed on a non-conductive stand of 80cm high, and at a measurement distance of 3m from the receiving antenna. The center of the receiving loop antenna is 1.0 meter above the ground. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT and adjusting the receiver antenna polarization.



30MHz-1GHz:

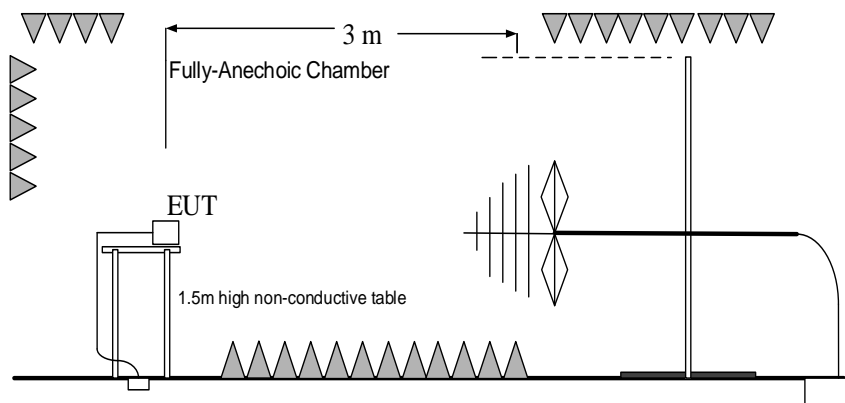
The EUT are measured in a semi-anechoic chamber. The EUT is placed on a non-conductive stand of 80cm high, and at a measurement distance of 3m from the receiving antenna. The center of the receiving antenna is 1.0 meter to 4.0 meter above the ground. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT and adjusting the receiver antenna polarization.



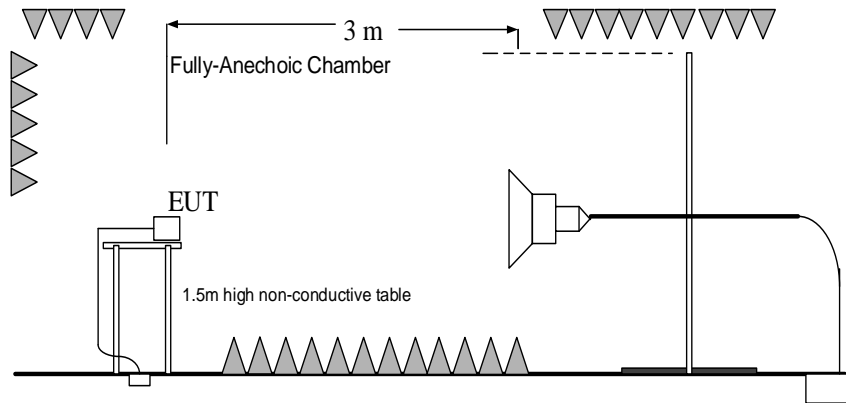
Above 1GHz:

EUT was placed on a 1.5 meter high non-conductive table at a 3 meter test distance from the receive antenna. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT and adjusting the receiving antenna polarization.

1GHz-3GHz:



3GHz-40GHz:





A.0 Antenna requirement

Measurement Limit:

| Standard | Requirement |
|---------------------|--|
| FCC CRF Part 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded. |

**Conclusion: The Directional gains of antenna used for transmitting is 0.20dBi.
The RF transmitter uses an integrate antenna without connector.**



A.1 Maximum Peak Output Power

Method of Measurement: See ANSI C63.10-clause 11.9.1.3

The maximum peak conducted output power may be measured using a broadband peak RF power meter.

Measurement Limit:

| Standard | Limit (dBm) | E.I.R.P Limit (dBm) |
|--|-------------|---------------------|
| FCC 47 CRF Part 15.247(b) & RSS-247 section 5.4 | < 30 | < 36 |

Measurement Results:

| Mode | Frequency (MHz) | Peak Conducted Output Power(dBm) | E.I.R.P (dBm) | Conclusion |
|-------|-----------------|----------------------------------|---------------|------------|
| LE 1M | 2402(CH0) | -1.57 | -1.37 | P |
| | 2440(CH19) | -0.65 | -0.45 | P |
| | 2480(CH39) | -1.38 | -1.18 | P |

Conclusion: Pass



A.2 Peak Power Spectral Density

Method of Measurement: See ANSI C63.10-clause 11.10.2

Measurement Limit:

| Standard | Limit |
|--|---------------|
| FCC 47 CRF Part 15.247(e) & RSS-247 section 5.2 | < 8 dBm/3 kHz |

Measurement Results:

| Mode | Frequency (MHz) | Peak Power Spectral Density (dBm) | | Conclusion |
|-------|-----------------|-----------------------------------|--------|------------|
| LE 1M | 2402(CH0) | Fig.1 | -13.37 | P |
| | 2440(CH19) | Fig.2 | -12.55 | P |
| | 2480(CH39) | Fig.3 | -13.30 | P |

See below for test graphs.

Conclusion: PASS

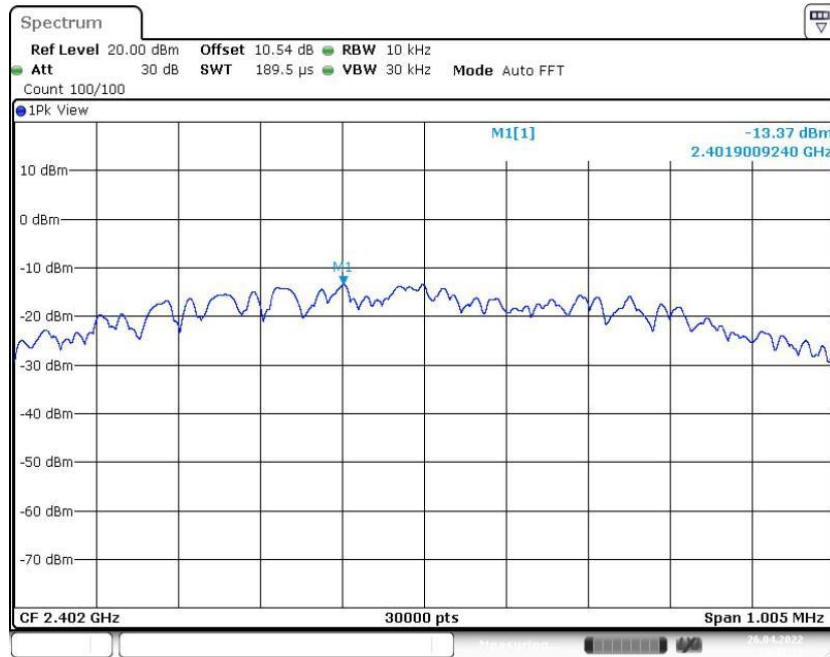


Fig.1 Power Spectral Density (CH0), LE 1M

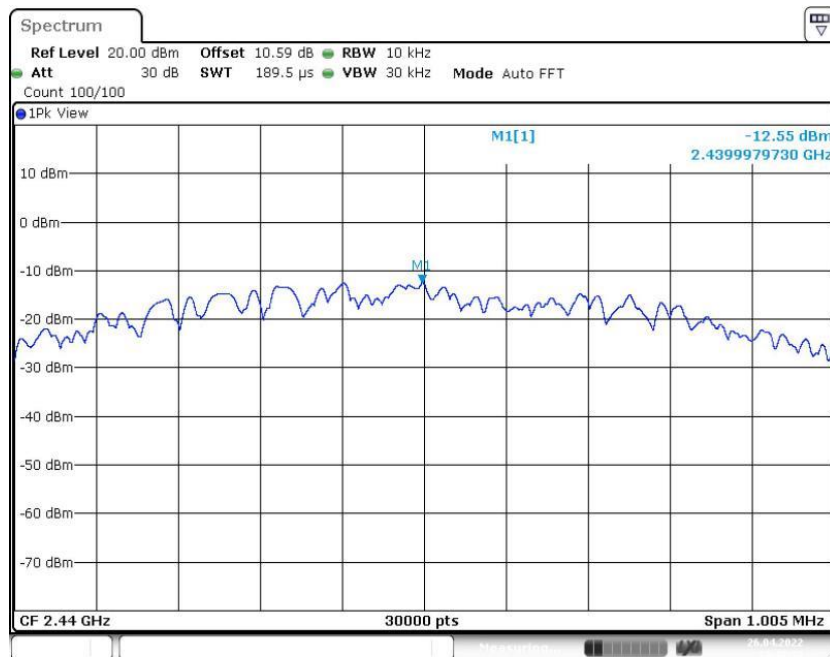


Fig.2 Power Spectral Density (CH19), LE 1M

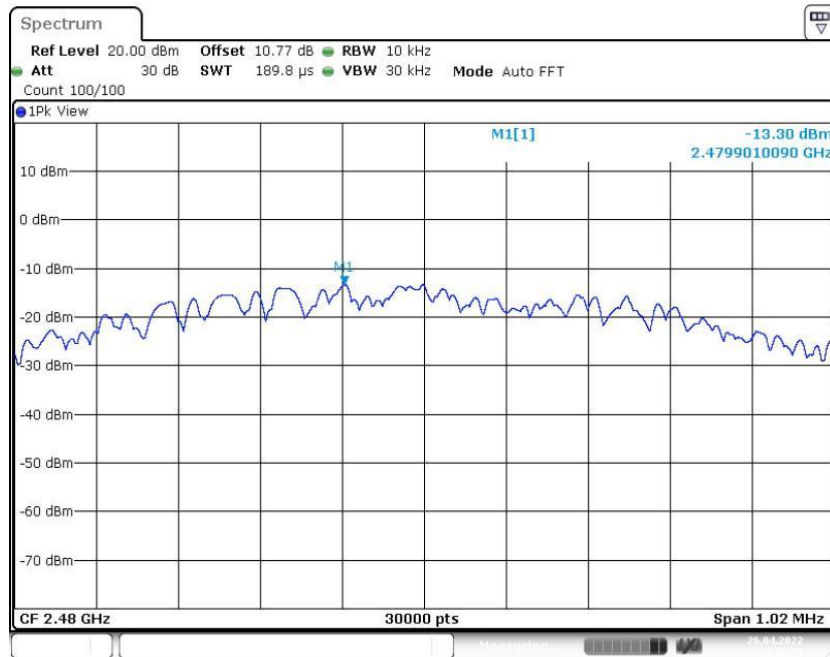


Fig.3 Power Spectral Density (CH39), LE 1M



A.3 6dB Bandwidth

Measurement Limit:

| Standard | Limit (kHz) |
|---|-------------|
| FCC 47 CFR Part 15.247 (a) & RSS-247 section 5.2 | ≥ 500 |

Measurement Result:

| Mode | Frequency (MHz) | Test Results (MHz) | | Conclusion |
|-------|-----------------|--------------------|------|------------|
| LE 1M | 2402(CH0) | Fig.4 | 0.67 | P |
| | 2440(CH19) | Fig.5 | 0.67 | P |
| | 2480(CH39) | Fig.6 | 0.68 | P |

See below for test graphs.

Conclusion: PASS

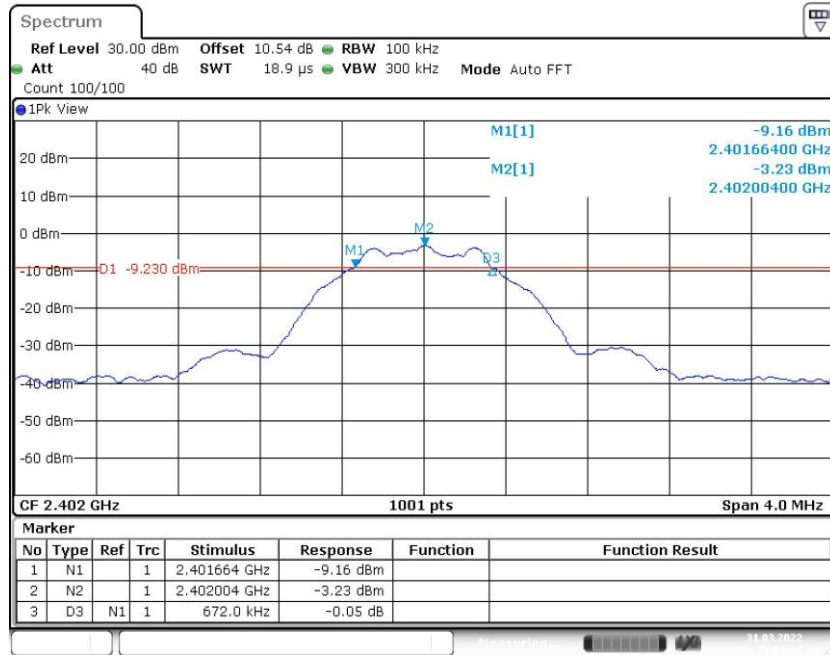


Fig.4 6dB Bandwidth (CH0), LE 1M

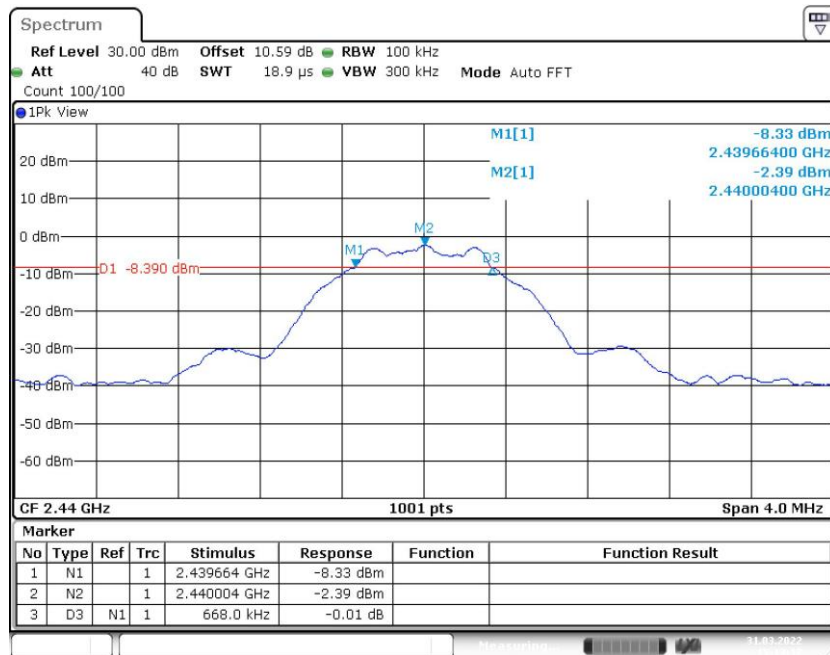


Fig.5 6dB Bandwidth (CH19), LE 1M

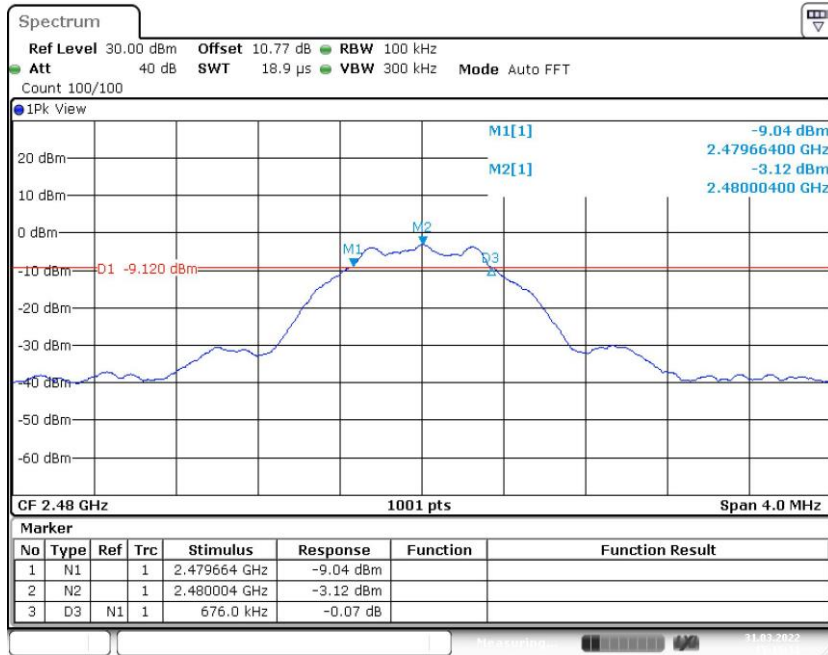


Fig.6 6dB Bandwidth (CH39), LE 1M



A.4 Band Edges Compliance

Measurement Limit:

| Standard | Limit (dBm) |
|---|-------------|
| FCC 47 CFR Part 15.247 (d) & RSS-247 section 5.5 | > 20 |

Measurement Result:

| Mode | Frequency (MHz) | Test Results (dBm) | | Conclusion |
|-------|-----------------|--------------------|-------|------------|
| LE 1M | 2402(CH0) | Fig.7 | 42.99 | P |
| | 2480(CH39) | Fig.8 | 42.75 | P |

See below for test graphs.

Conclusion: PASS

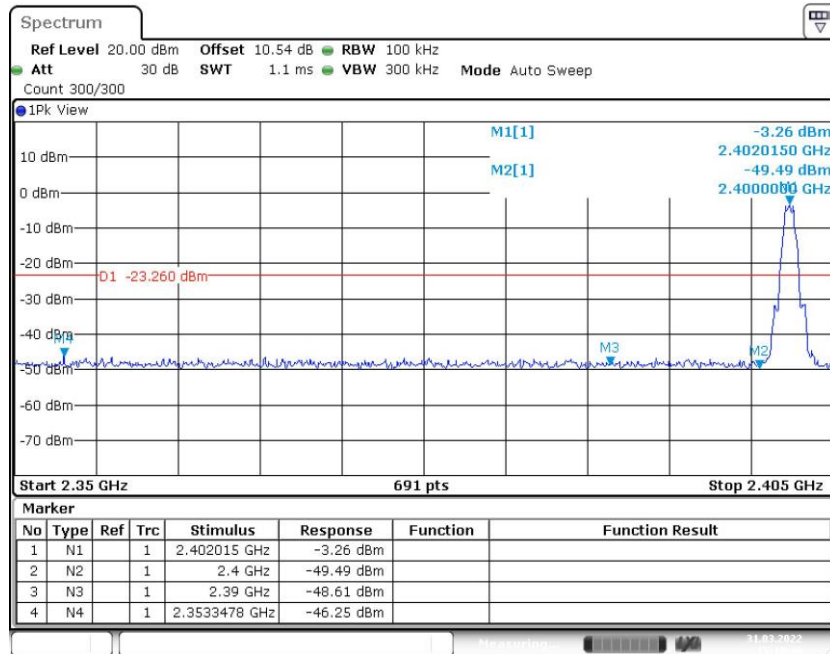


Fig.7 Band Edges (CH0), LE 1M

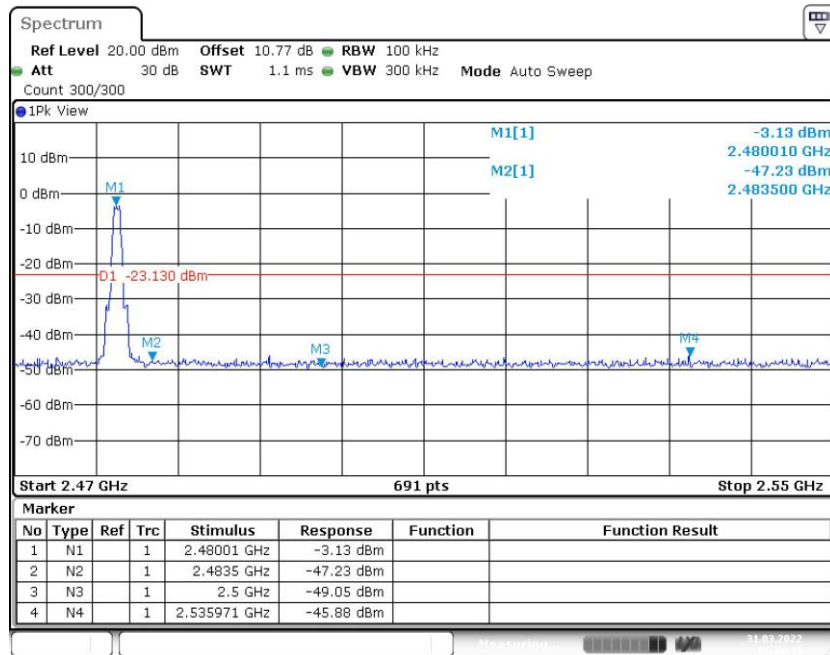


Fig.8 Band Edges (CH39), LE 1M



A.5 Transmitter Spurious Emission - Conducted

Measurement Limit:

| Standard | Limit |
|--|--|
| FCC 47 CFR Part 15.247 (d) & RSS-247 5.5/RSS-Gen section 6.13 | 20dB below peak output power in 100 kHz bandwidth |

Measurement Results:

| MODE | Channel | Frequency Range | Test Results | Conclusion |
|-------|---------|-----------------|--------------|------------|
| LE 1M | 0 | 2.402 GHz | Fig.9 | P |
| | | 30MHz -1GHz | Fig.10 | P |
| | | 1GHz-26.5GHz | Fig.11 | P |
| | 19 | 2.440 GHz | Fig.12 | P |
| | | 30MHz -1GHz | Fig.13 | P |
| | | 1GHz-26.5GHz | Fig.14 | P |
| | 39 | 2.480 GHz | Fig.15 | P |
| | | 30MHz -1GHz | Fig.16 | P |
| | | 1GHz-26.5GHz | Fig.17 | P |

See below for test graphs.

Conclusion: Pass



Fig.9 Conducted Spurious Emission (CH0, Center Frequency), LE 1M

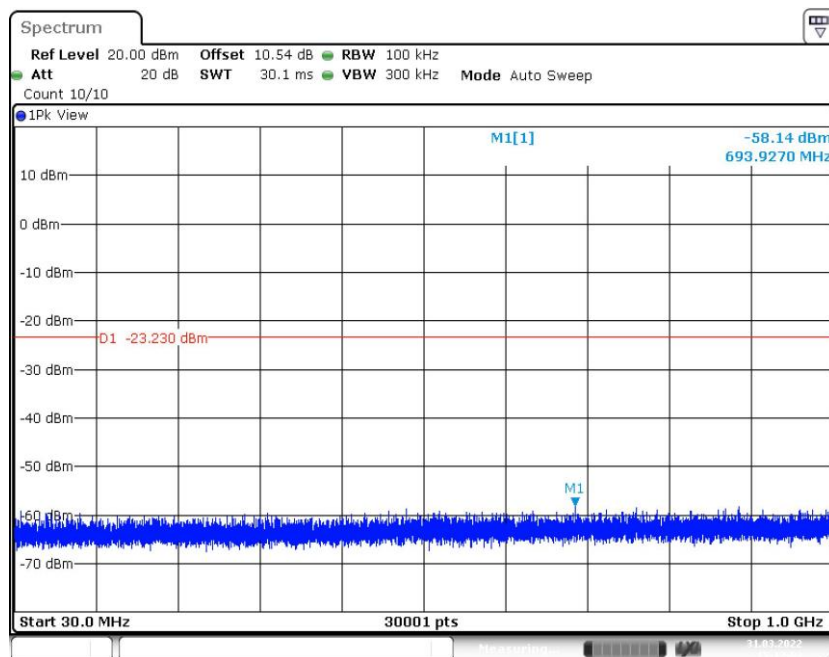


Fig.10 Conducted Spurious Emission (CH0, 30MHz -1GHz), LE 1M

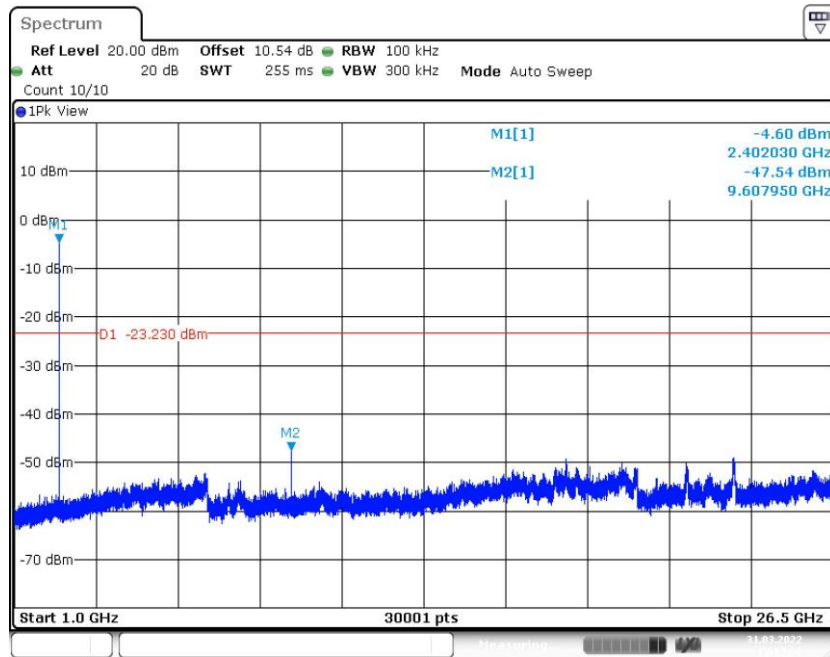


Fig.11 Conducted Spurious Emission (CH0, 1GHz-26.5GHz), LE 1M

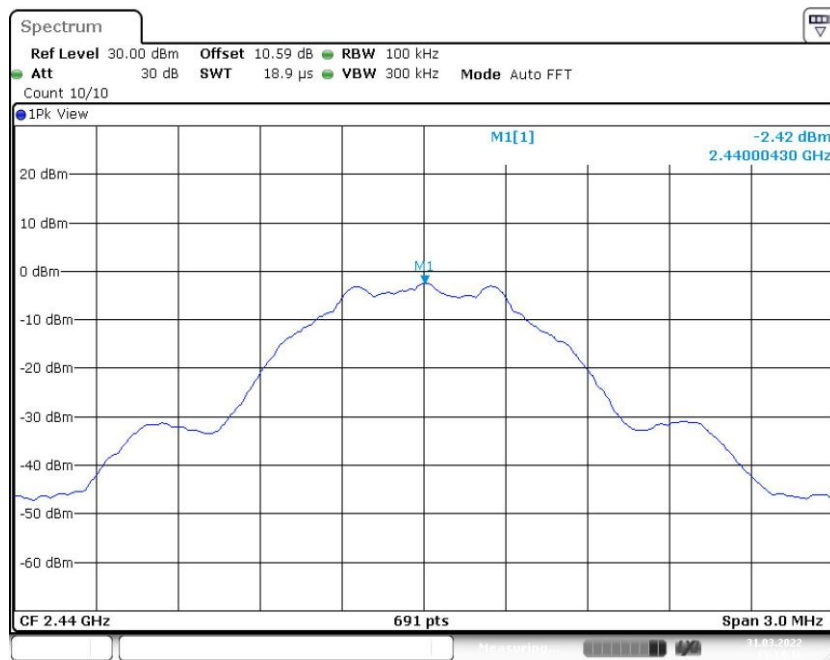


Fig.12 Conducted Spurious Emission (CH19, Center Frequency), LE 1M

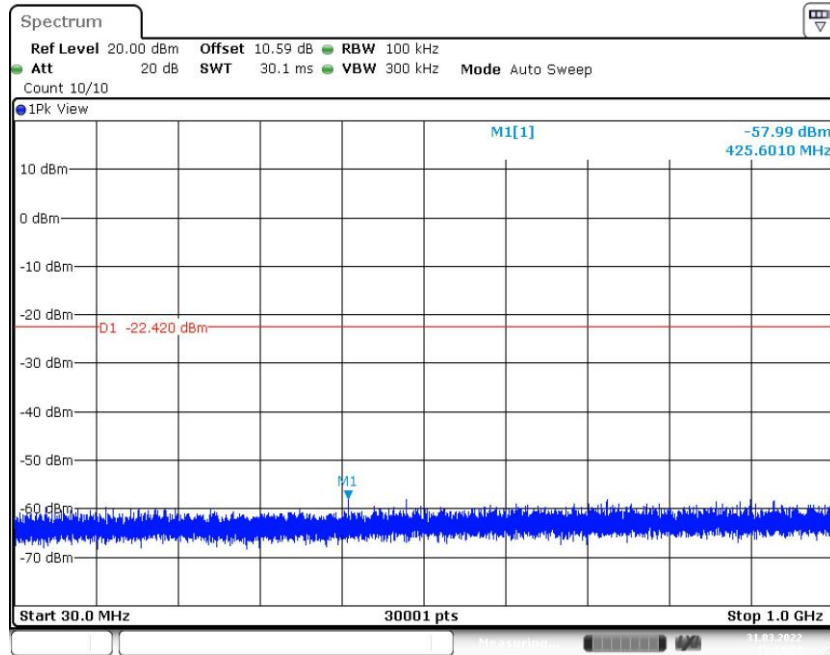


Fig.13 Conducted Spurious Emission (CH19, 30MHz -1GHz), LE 1M

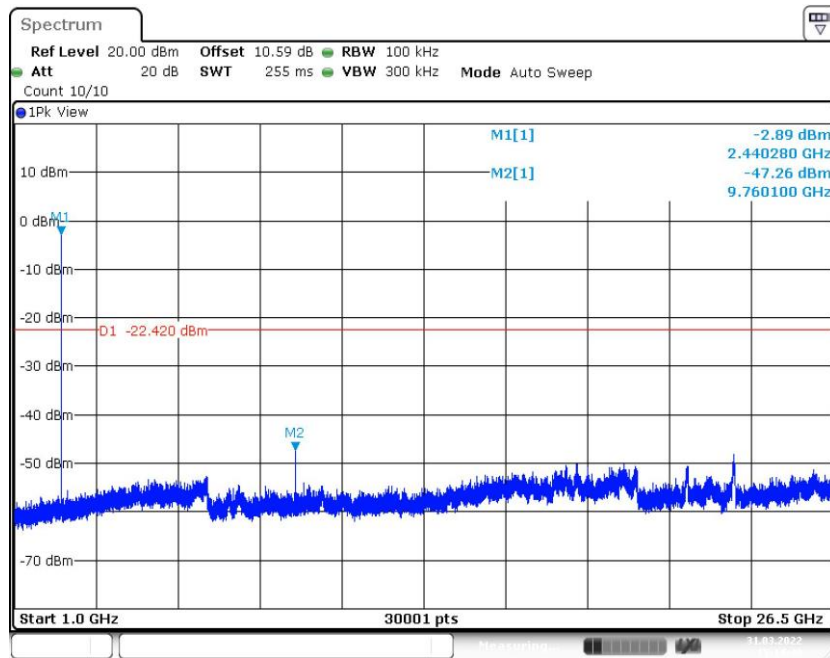


Fig.14 Conducted Spurious Emission (CH19, 1GHz-26.5GHz), LE 1M



Fig.15 Conducted Spurious Emission (CH39, Center Frequency), LE 1M

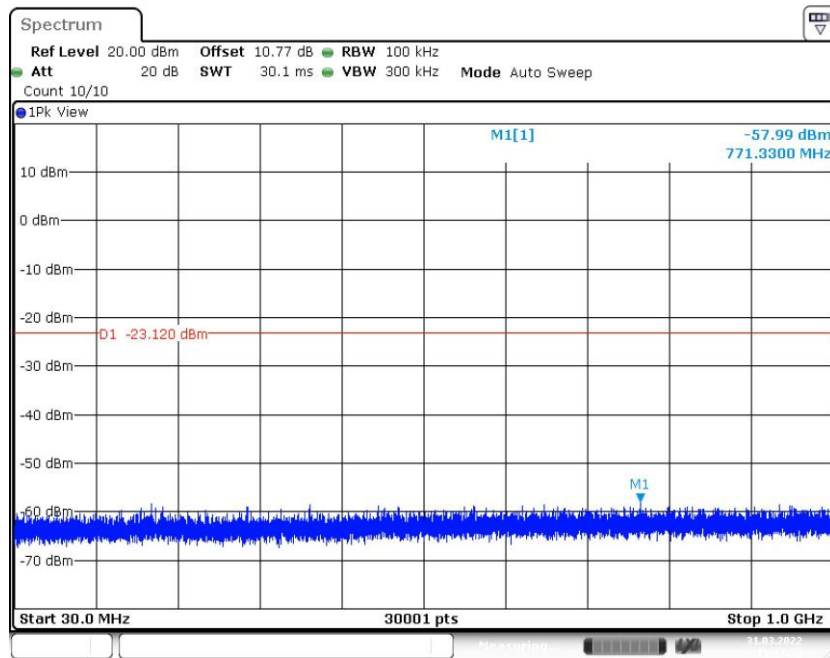


Fig.16 Conducted Spurious Emission (CH39, 30MHz -1GHz), LE 1M

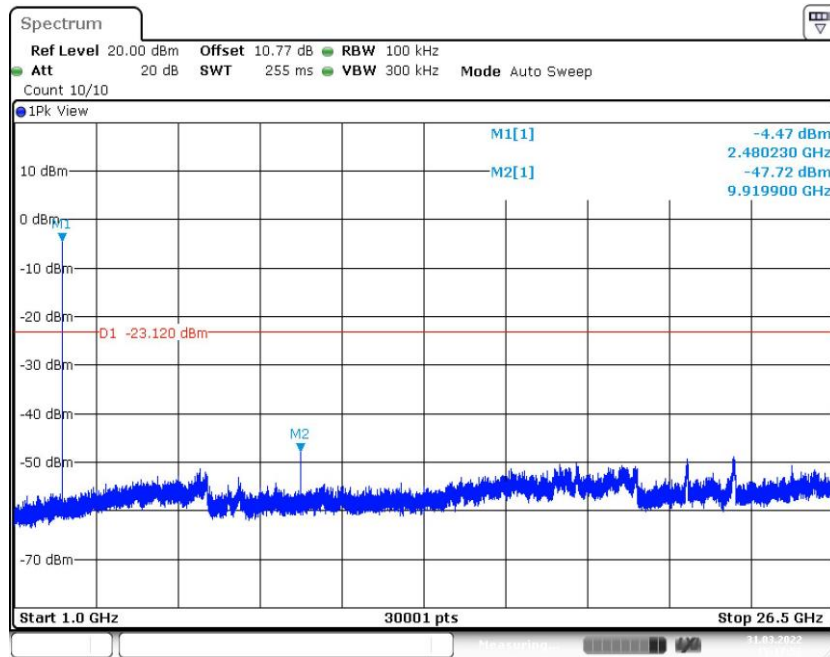


Fig.17 Conducted Spurious Emission (CH39, 1GHz-26.5GHz), LE 1M

A.6 Transmitter Spurious Emission - Radiated

Measurement Limit:

| Standard | Limit |
|---|------------------------------|
| FCC 47 CFR Part 15.247, 15.205, 15.209 & RSS-247 section 5.5/RSS-Gen section 6.13 | 20dB below peak output power |

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)).

Limit in restricted band:

| Frequency of emission (MHz) | Field strength($\mu\text{V}/\text{m}$) | Measurement distance(meters) |
|-----------------------------|--|------------------------------|
| 0.009-0.490 | 2400/F(kHz) | 300 |
| 0.490-1.705 | 24000/F(kHz) | 30 |
| 1.705-30.0 | 30 | 30 |
| 30-88 | 100 | 3 |
| 88-216 | 150 | 3 |
| 216-960 | 200 | 3 |
| Above 960 | 500 | 3 |

Test Condition:

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

| Frequency of emission (MHz) | RBW/VBW | Sweep Time(s) |
|-----------------------------|---------------|---------------|
| 30-1000 | 120kHz/300kHz | 5 |
| 1000-4000 | 1MHz/3MHz | 15 |
| 4000-18000 | 1MHz/3MHz | 40 |
| 18000-26500 | 1MHz/3MHz | 20 |

Note: According to the performance evaluation, the radiated emission margin of EUT is over 20dB in the band from 9kHz to 30MHz. Therefore, the measurement starts from 30MHz to tenth harmonic. The measurement results include the horizontal polarization and vertical polarization measurements.

Measurement Results:

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|-------|-----------------------|---------------------|--------------|------------|
| LE 1M | 0 | 1 GHz ~18 GHz | Fig.18 | P |
| | 19 | 1 GHz ~18 GHz | Fig.19 | P |
| | 39 | 1 GHz ~18 GHz | Fig.20 | P |
| | Restricted Band(CH0) | 2.38 GHz ~ 2.45 GHz | Fig.21 | P |
| | Restricted Band(CH39) | 2.45 GHz ~ 2.5 GHz | Fig.22 | P |
| | All channels | 9 kHz ~30 MHz | Fig.23 | P |
| | | 30 MHz ~1 GHz | Fig.24 | P |
| | | 18 GHz ~ 26.5 GHz | Fig.25 | P |

Worst Case Result
LE 1M CH19 (1-18GHz)

| Frequency (MHz) | MaxPeak (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|----------------------|-------------|-----|--------------|
| 9768.000000 | 45.36 | 74.00 | 28.64 | H | 7.5 |
| 10536.857143 | 46.77 | 74.00 | 27.23 | V | 8.8 |
| 12876.000000 | 49.19 | 74.00 | 24.81 | H | 11.0 |
| 14944.285714 | 49.45 | 74.00 | 24.55 | H | 12.9 |
| 16188.000000 | 50.67 | 74.00 | 23.33 | H | 14.7 |
| 17064.000000 | 55.13 | 74.00 | 18.87 | V | 18.5 |

| Frequency (MHz) | Average (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Pol | Corr. (dB/m) |
|-----------------|------------------------|----------------------|-------------|-----|--------------|
| 9768.000000 | 40.39 | 54.00 | 13.61 | H | 7.5 |
| 10536.857143 | 34.76 | 54.00 | 19.24 | V | 8.8 |
| 12876.000000 | 36.97 | 54.00 | 17.03 | H | 11.0 |
| 14944.285714 | 38.48 | 54.00 | 15.52 | H | 12.9 |
| 16188.000000 | 39.89 | 54.00 | 14.11 | H | 14.7 |
| 17064.000000 | 42.43 | 54.00 | 11.57 | V | 18.5 |

Note:

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and Antenna Factor, the gain of the preamplifier, the cable loss. P_{Mea} is the field strength recorded from the instrument. The measurement results are obtained as described below:

Result= P_{Mea} +Cable Loss +Antenna Factor-Gain of the preamplifier.

See below for test graphs.

Conclusion: Pass

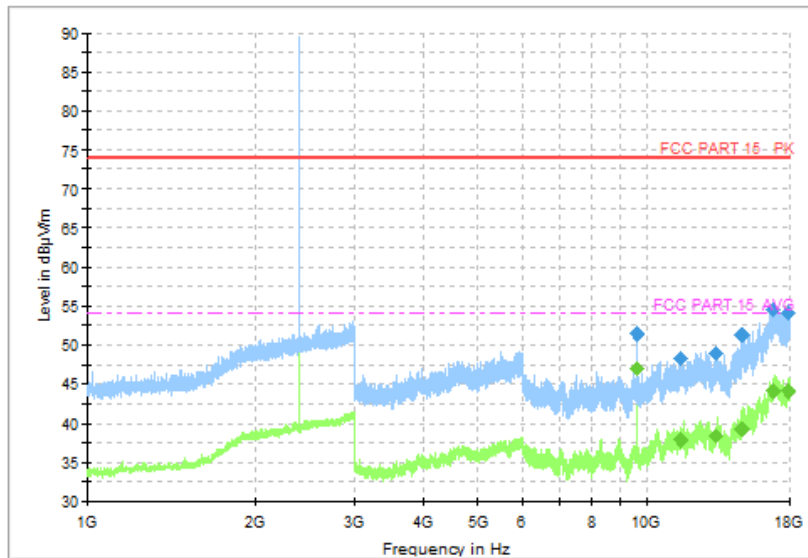


Fig.18 Radiated Spurious Emission (GFSK, Ch0, 1 GHz ~18 GHz), LE 1M

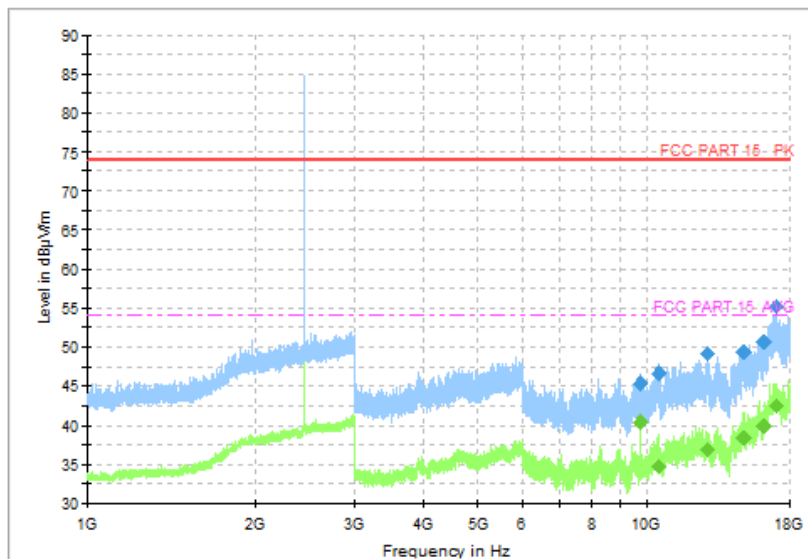


Fig.19 Radiated Spurious Emission (GFSK, Ch19, 1 GHz ~18 GHz), LE 1M

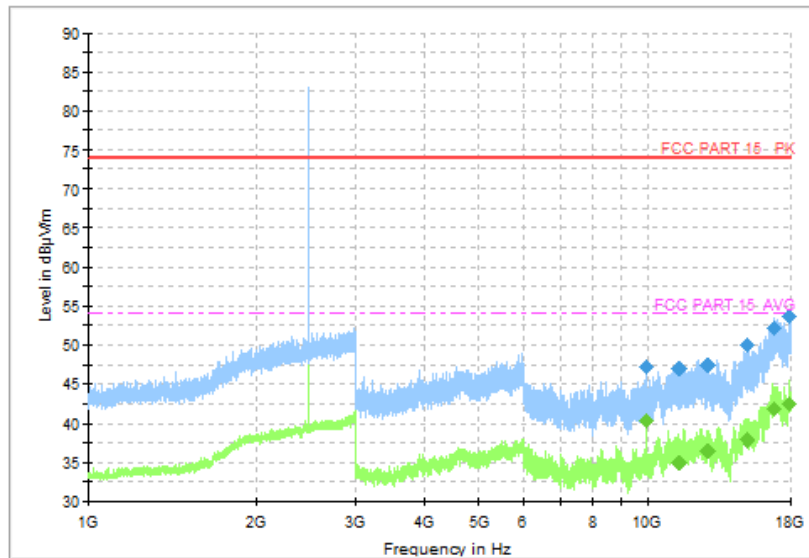


Fig.20 Radiated Spurious Emission (GFSK, Ch39, 1 GHz ~18 GHz), LE 1M

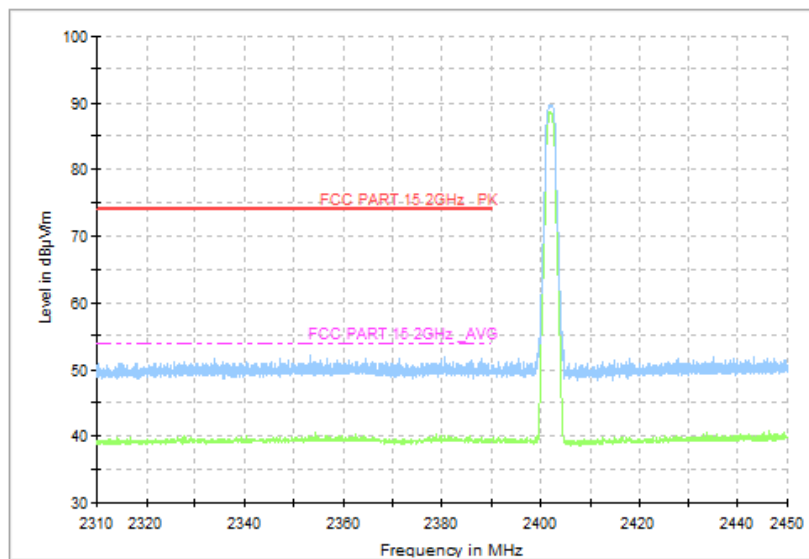


Fig.21 Radiated Band Edges (GFSK, Ch0, 2380GHz~2450GHz), LE 1M

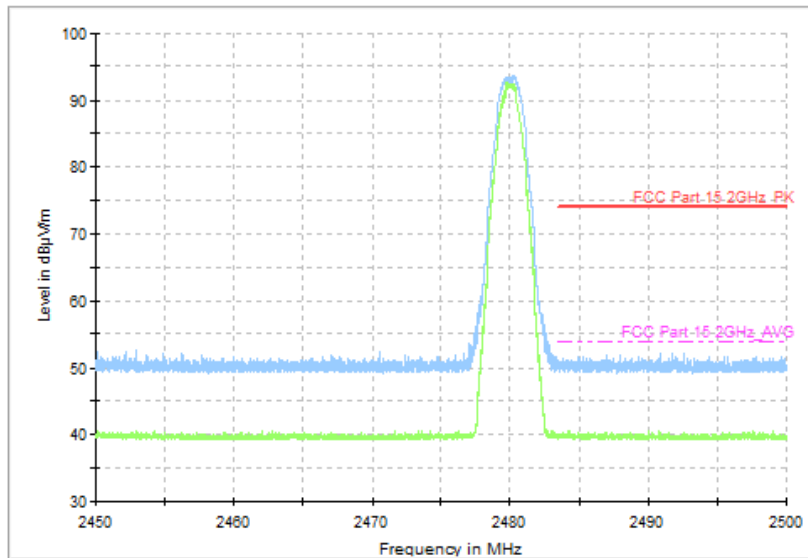


Fig.22 Radiated Band Edges (GFSK, Ch39, 2450GHz~2500GHz), LE 1M

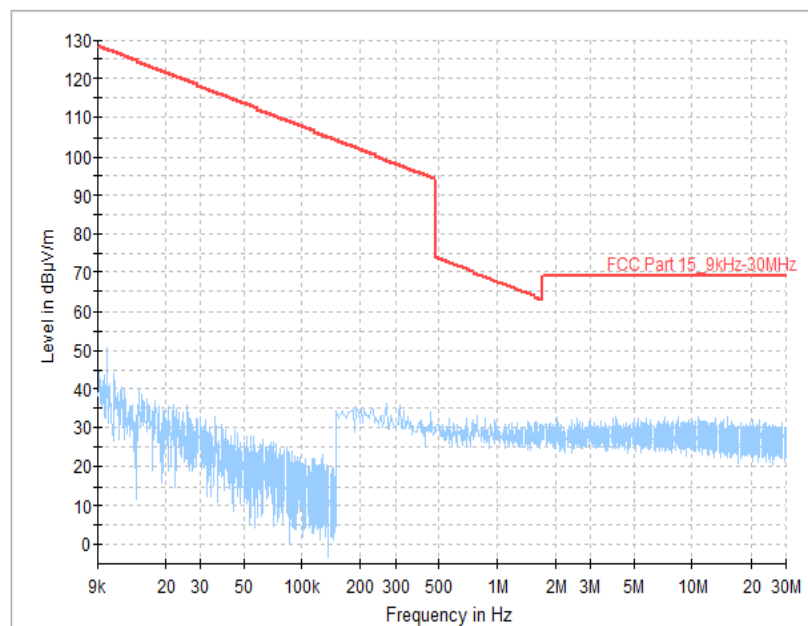


Fig.23 Radiated Spurious Emission (All Channels, 9 kHz-30 MHz), LE 1M

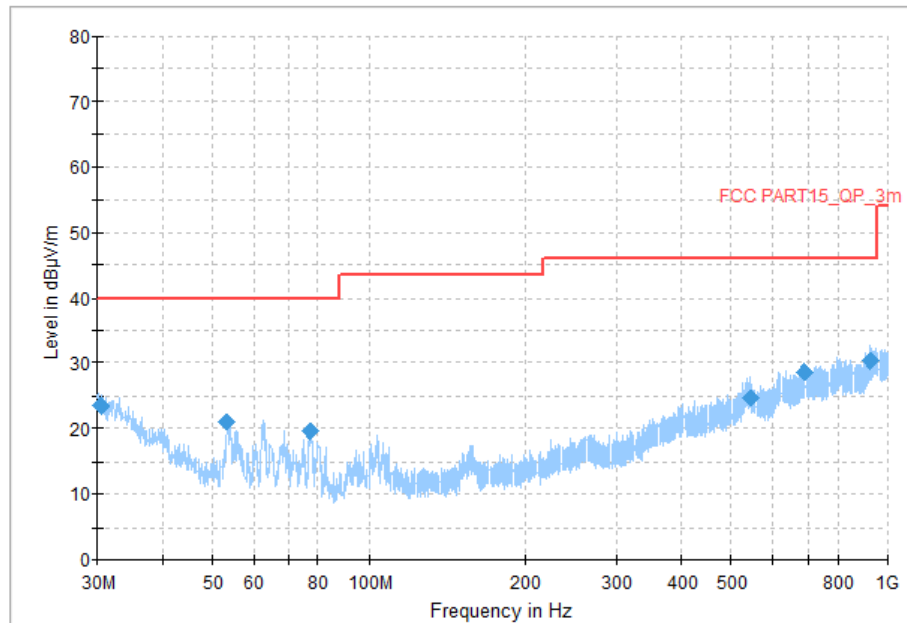


Fig.24 Radiated Spurious Emission (All Channels, 30 MHz-1 GHz), LE 1M

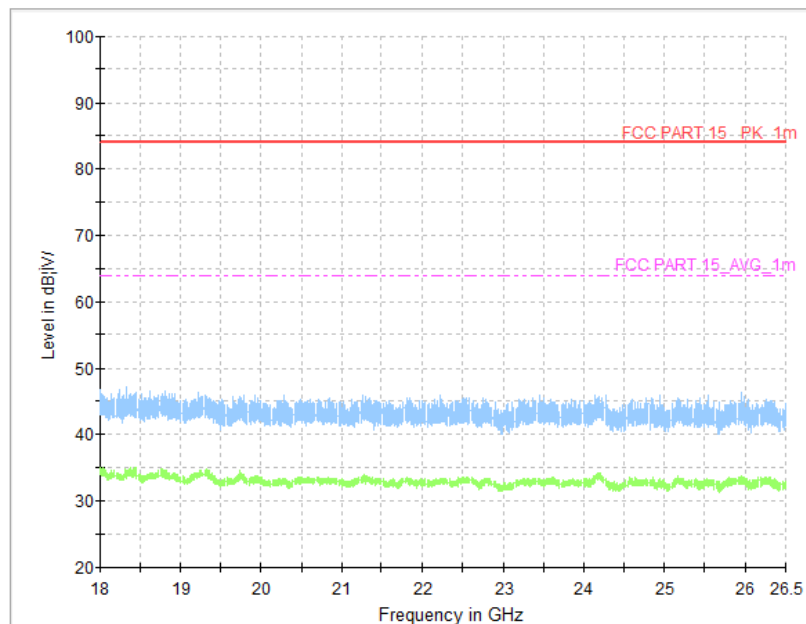


Fig.25 Radiated Spurious Emission (All Channels, 18 GHz-26.5 GHz), LE 1M



A.7 99% Occupied Bandwidth

Measurement Limit:

| Standard | Limit (kHz) |
|---------------------|-------------|
| RSS-Gen section 6.7 | / |

Measurement Result:

| Mode | Frequency (MHz) | Test Results (kHz) | | Conclusion |
|-------|-----------------|--------------------|---------|------------|
| LE 1M | 2402(CH0) | Fig.26 | 1095.00 | / |
| | 2440(CH19) | Fig.27 | 1091.00 | / |
| | 2480(CH39) | Fig.28 | 1095.00 | / |

See below for test graphs.

Conclusion: PASS

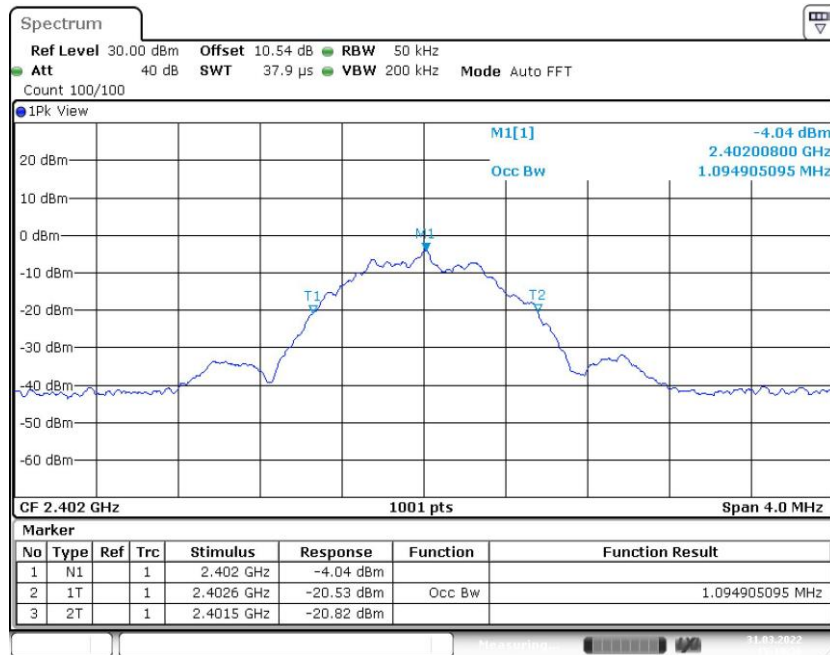


Fig.26 99% Occupied Bandwidth: GFSK, Channel 0, LE 1M

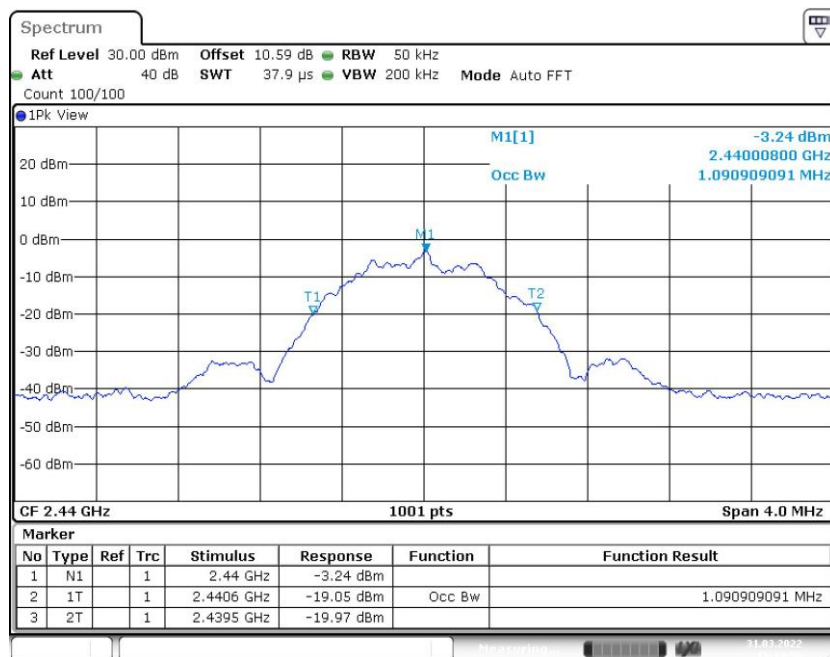


Fig.27 99% Occupied Bandwidth: GFSK, Channel 19, LE 1M

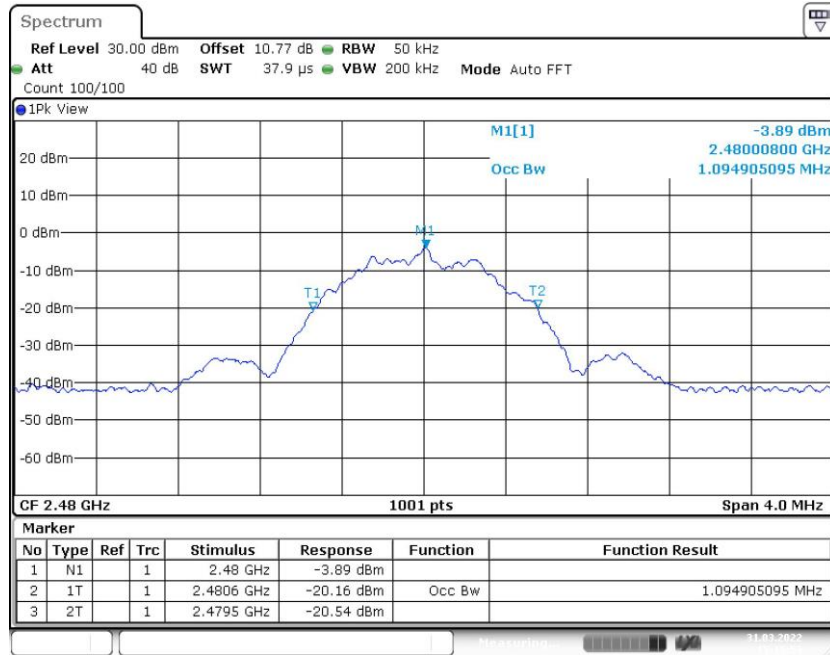



Fig.28 99% Occupied Bandwidth: GFSK, Channel 39, LE 1M

ANNEX B: Accreditation Certificate

| | |
|--|--|
| <p>United States Department of Commerce National Institute of Standards and Technology</p> <div style="display: flex; justify-content: space-around; align-items: center;"><div style="font-size: 2em; font-weight: bold; letter-spacing: 0.5em;">NVLAP[®]</div><div style="text-align: center;"></div></div> <hr/> <p style="text-align: center;">Certificate of Accreditation to ISO/IEC 17025:2017</p> <hr/> <p style="text-align: center;">NVLAP LAB CODE: 600118-0</p> <p style="text-align: center;">Telecommunication Technology Labs, CAICT Beijing China</p> <p style="text-align: center;"><i>is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:</i></p> <p style="text-align: center;">Electromagnetic Compatibility & Telecommunications</p> <p style="text-align: center;"><i>This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).</i></p> <div style="display: flex; justify-content: space-between; align-items: center;"><div style="text-align: center;"><hr/><p>2021-09-29 through 2022-09-30 <i>Effective Dates</i></p></div><div style="text-align: center;"></div><div style="text-align: center;"> <hr/><p><i>For the National Voluntary Laboratory Accreditation Program</i></p></div></div> | |
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END OF REPORT