

TEST REPORT

Application No.: SZEM1901010841CR
Applicant: Suunto Oy
Address of Applicant: Tammiston kauppatie 7A VANTAA FIN-01510 Finland
Manufacturer: Suunto Oy
Address of Manufacturer: Tammiston kauppatie 7A, 01510 Vantaa, Finland
Factory: IDT ELECTRONIC (SHENZHEN) LIMITED
Address of Factory: ChenTian Industrial Estate, Xixiang Town, BaoAn District, Shenzhen, China
Equipment Under Test (EUT):
EUT Name: SUUNTO 5
Model No.: OW186
Standard(s) : MIC Item 19 of Article 2 Paragraph 1
Date of Receipt: 2019-01-30
Date of Test: 2019-02-01
Date of Issue: 2019-03-06

| | |
|---------------------|--------------|
| Test Result: | Pass* |
|---------------------|--------------|

* In the configuration tested, the EUT complied with the standards specified above.



Keny Xu
EMC Laboratory Manager



| <i>Revision Record</i> | | | | |
|------------------------|----------------|-------------|-----------------|---------------|
| <i>Version</i> | <i>Chapter</i> | <i>Date</i> | <i>Modifier</i> | <i>Remark</i> |
| 01 | | 2019-03-06 | | Original |
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|---------------------------------|--|---|--|
| Authorized for issue by: | | | |
| | |  | |
| | | _____ Leo Lai /Project Engineer | |
| | |  | |
| | | _____ Eric Fu /Reviewer | |



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2 Test Summary

| Radio Spectrum Technical Requirement | | | | |
|--------------------------------------|--------------------------------------|--------|--------------------------------------|--------|
| Item | Standard | Method | Requirement | Result |
| Antenna Requirement | MIC Item 19 of Article 2 Paragraph 1 | N/A | MIC Item 19 of Article 2 Paragraph 1 | Pass |
| RF accessibility | MIC Item 19 of Article 2 Paragraph 1 | N/A | MIC Item 19 of Article 2 Paragraph 1 | Pass |

| Radio Spectrum Matter Part | | | | |
|---------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|--------|
| Item | Standard | Method | Requirement | Result |
| Frequency Error | MIC Item 19 of Article 2 Paragraph 1 | MIC Notice No.88 Appendix No.43 | MIC Item 19 of Article 2 Paragraph 1 | Pass |
| Occupied Bandwidth(99%) | MIC Item 19 of Article 2 Paragraph 1 | MIC Notice No.88 Appendix No.43 | MIC Item 19 of Article 2 Paragraph 1 | Pass |
| Antenna Power | MIC Item 19 of Article 2 Paragraph 1 | MIC Notice No.88 Appendix No.43 | MIC Item 19 of Article 2 Paragraph 1 | Pass |
| Spurious emission Intensity | MIC Item 19 of Article 2 Paragraph 1 | MIC Notice No.88 Appendix No.43 | MIC Item 19 of Article 2 Paragraph 1 | Pass |
| Limit of secondary radiated emissions | MIC Item 19 of Article 2 Paragraph 1 | MIC Notice No.88 Appendix No.43 | MIC Item 19 of Article 2 Paragraph 1 | Pass |
| Interference prevention capability | MIC Item 19 of Article 2 Paragraph 1 | MIC Notice No.88 Appendix No.43 | MIC Item 19 of Article 2 Paragraph 1 | Pass |



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4 General Information

4.1 Details of E.U.T.

| | |
|----------------------|--|
| Power supply: | DC 3.8V rechargeable battery which can be charge by USB port |
| Cable: | USB cable: 100cm shield |
| Operation Frequency: | 2402MHz to 2480MHz |
| Bluetooth Version: | V4.0 LE |
| Channel Spacing: | 2MHz |
| Modulation Type: | GFSK |
| Number of Channels: | 40 |
| Antenna Type: | Integrated Antenna |
| Antenna Gain: | -6.92dBi |

4.1 Test Conditions

Power Supply DC 3.8V rechargeable battery which can be charge by USB port

The RF unit is supplied DC3.2V. The fluctuation of input voltage to the circuit of RF unit of test equipment is under $\pm 1\%$, when input voltage from DC5.0V to the test equipment is fluctuated by $\pm 10\%$. So, all measurement has been conducted by only rated voltage.

The measurement result of the voltage fluctuation at RF circuit when DC5.0V +/- 10%.

| DC Input | DC3V20 |
|----------|--------|
| 5.50V | 3.202V |
| 5.00V | 3.201V |
| 4.50V | 3.199V |

Temperature: -10 -50 °C
Humidity: 45-85 % RH
Atmospheric Pressure: 1000 -1010 mbar

Note:

VN: Normal Voltage
TN: Normal Temperature
TL: Low Extreme Test Temperature
TH: High Extreme Test Temperature

Test Frequencies: If the EUT can be set to 3 of more different (carrier) frequencies in 1 allocated band, testing shall be performed using the Lowest, Middle and the Highest frequency (L, M and H). If there are 2 or fewer frequencies, testing shall be performed with the available frequencies.



| Operation Frequency each of channel | | | | | | | |
|-------------------------------------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 1 | 2402 | 11 | 2422 | 21 | 2442 | 31 | 2462 |
| 2 | 2404 | 12 | 2424 | 22 | 2444 | 32 | 2464 |
| 3 | 2406 | 13 | 2426 | 23 | 2446 | 33 | 2466 |
| 4 | 2408 | 14 | 2428 | 24 | 2448 | 34 | 2468 |
| 5 | 2410 | 15 | 2430 | 25 | 2450 | 35 | 2470 |
| 6 | 2412 | 16 | 2432 | 26 | 2452 | 36 | 2472 |
| 7 | 2414 | 17 | 2434 | 27 | 2454 | 37 | 2474 |
| 8 | 2416 | 18 | 2436 | 28 | 2456 | 38 | 2476 |
| 9 | 2418 | 19 | 2438 | 29 | 2458 | 39 | 2478 |
| 10 | 2420 | 20 | 2440 | 30 | 2460 | 40 | 2480 |

| Selected Test Channel | |
|----------------------------|-----------|
| Channel | Frequency |
| The lowest channel (CH1) | 2402MHz |
| The middle channel (CH21) | 2442MHz |
| The highest channel (CH40) | 2480MHz |

4.2 Description of Support Units

The EUT has been tested as an independent unit.

4.3 Measurement Uncertainty

| No. | Item | Measurement Uncertainty |
|-----|---------------------------------|---------------------------------|
| 1 | Radio Frequency | $\pm 7.25 \times 10^{-8}$ |
| 2 | Duty cycle | $\pm 0.37\%$ |
| 3 | Occupied Bandwidth | $\pm 3\%$ |
| 4 | RF conducted power | $\pm 0.75\text{dB}$ |
| 5 | RF power density | $\pm 2.84\text{dB}$ |
| 6 | Conducted Spurious emissions | $\pm 0.75\text{dB}$ |
| 7 | RF Radiated power | $\pm 4.5\text{dB}$ (below 1GHz) |
| | | $\pm 4.8\text{dB}$ (above 1GHz) |
| 8 | Radiated Spurious emission test | $\pm 4.5\text{dB}$ (Below 1GHz) |
| | | $\pm 4.8\text{dB}$ (Above 1GHz) |
| 9 | Temperature test | $\pm 1^\circ\text{C}$ |
| 10 | Humidity test | $\pm 3\%$ |
| 11 | Supply voltages | $\pm 1.5\%$ |
| 12 | Time | $\pm 3\%$ |



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4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

| Equipment list | | | | | | | |
|--------------------------------------|---|-------------|--------------|------------|--------------|------------------|----------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date | Calibration body | Classification |
| DC Power Supply | ZhaoXin | RXN-305D | SEM011-02 | 2018-09-25 | 2019-09-24 | CEPREI | (c) |
| Spectrum Analyze (20Hz-43GHz) | Rohde & Schwarz | F5U43 | SEM004-08 | 2018-04-02 | 2019-04-01 | CEPREI | (c) |
| Signal Generator (9kHz-40GHz) | KEYSIGHT | N5173B | SEM006-05 | 2018-09-27 | 2019-09-26 | CEPREI | (c) |
| Multimeter | FLUKE | Fluke 73III | SEM022-01 | 2018-04-08 | 2019-04-07 | CEPREI | (c) |
| Bluetooth Tester | Rohde & Schwarz | CBT | W060-01 | 2018-06-21 | 2019-06-20 | CEPREI | (c) |
| Universal Radio Communication Tester | Rohde & Schwarz | CMW 500 | SEM010-03 | 2018-04-02 | 2019-04-01 | CEPREI | (c) |
| Humidity/ Temperature Indicator | Shanghai Meteorological Industry Factory | ZJ1-2B | SEM002-03 | 2018-09-27 | 2019-09-26 | CEPREI | (c) |
| Barometer | Changchun Meteorological Industry Factory | DYM3 | SEM002-01 | 2018-04-08 | 2019-04-07 | CEPREI | (c) |

Remark:

- (a) Calibration conducted by the National Institute of Information and Communications Technology (NICT) in Japan (hereinafter referred to as "NICT") or a designated calibration agency under Article 102-18 paragraph (1) in JRL.
- (b) Correction conducted pursuant to the provisions of Article 135 or Article 144 of the Measurement Act (Act No. 51 of 1992) .
- (c) Calibration conducted in countries except Japan, which shall be equivalent to the calibration conducted by the NICT or a designated calibration agency under Article 102-18 paragraph (1).
- (d) Calibration, etc. conducted by using measuring instruments and other equipment listed in the right column of appended table No. 3, which shall have been given any type of calibration, etc. listed above from (a) to (c).

From JRL Article 24-2, paragraph 4, Item 2



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6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

MIC Item 19 of Article 2 Paragraph 1

6.1.2 Conclusion

Standard requirement:

Applicable for equipment with an antenna terminal, including testing terminals. If an antenna connector is available, all relevant tests will be carried out conducted. If not, tests will be carried out in an anechoic room or with a suitable test-fixture.

EUT Details:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is -1.0dBi.



Result:

An antenna connector is available, all relevant tests will be carried out conducted.

6.2 RF accessibility

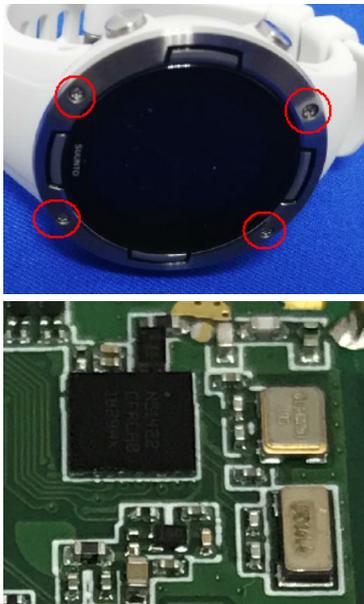
6.2.1 Test Requirement:

MIC Item 19 of Article 2 Paragraph 1

6.2.2 Conclusion

Standard Requirement:

The EUT shall be constructed in such a way that sensitive RF parts, (like modulation and oscillator parts) cannot be reached easily by the user. These parts shall be covered by soldered metal caps or glue or by other mechanical covers. If the covers are fixed with screws, these shall be not the common type(s) like a Phillips, but special versions like Torx, so that the user cannot open the device with common tools.



EUT Details:

The product was sealed with special screws. RF and Modulation parts are mounted on PCB with surface mount technology, and there is no any adjustable parts on PCB or adjustable parts are not exposed. The main IC is use FPGA technology, user can't remove the component with common tools.

7 Radio Spectrum Matter Test Results

7.1 Frequency Error

Test Requirement MIC Item 19 of Article 2 Paragraph 1
Test Method: MIC Notice No.88 Appendix No.43
Limit: Tolerance of frequency: $\pm 50E-6$

7.1.1 E.U.T. Operation

Operating Environment:
Temperature: 21.6 °C Humidity: 56.2 % RH Atmospheric Pressure: 1020 mbar
Test mode a:TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.1.2 Measurement Procedure and Data

1. Test Conditions:
Spectrum Analyzer is used for measurement.
2. EUT conditions:
Modulation/Spread/Hopping OFF, CW Tx
3. Spectrum Analyzer conditions:
Frequency: Test Frequency
Span 1MHz
RBW 10 kHz (Modulation OFF),
VBW 10 kHz (Modulation OFF),
Sweep Time Auto
Detector mode Positive peak
Indication mode Max hold
Alternative method:
Frequency: Test Frequency
Span 2 times channel bandwidth
RBW 100 kHz (Modulation ON),
VBW 100 kHz (Modulation ON),
Sweep Time Auto
Detector mode Positive peak
Indication mode Max hold

The detailed test data see: Appendix MIC19-2



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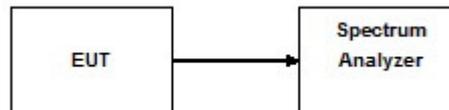
7.2 Occupied Bandwidth(99%)

Test Requirement MIC Item 19 of Article 2 Paragraph 1
 Test Method: MIC Notice No.88 Appendix No.43
 Limit:
 FH: 83.5MHz or less
 FH + DS: 83.5MHz or less
 FH + OFDM: 83.5MHz or less
 OFDM: 38MHz or less
 Others: 26MHz or less

7.2.1 E.U.T. Operation

Operating Environment:
 Temperature: 21.6 °C Humidity: 56.2 % RH Atmospheric Pressure: 1020 mbar
 Test mode a:TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.2.2 Test Setup Diagram



7.2.3 Measurement Procedure and Data

- Test Conditions:
 Spectrum Analyzer is used for measurement.
- EUT conditions:
 Modulation/Spread/Hopping ON, Modulation Tx
 For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
- Spectrum Analyzer conditions:
 Frequency: Test Frequency
 Span 83.5 MHz (FHSS); 40/60 MHz (OFDM; DSSS); 2-5 times OBW (Others)
 RBW 1 MHz (FHSS); 300kHz (OFDM; DSSS); 3% OBW (Others)
 VBW 1 MHz (FHSS); 300kHz (OFDM; DSSS); 3 times RBW (Others)
 Sweep Time Auto
 detector mode Positive peak
 Indication mode Max hold
 OBW 99%

The detailed test data see: Appendix MIC19-2



7.3 Antenna Power

Test Requirement MIC Item 19 of Article 2 Paragraph 1
 Test Method: MIC Notice No.88 Appendix No.43
 Limit: Designated value
 (1) FH, FH+DS, FH+OFDM: 3mW/MHz
 (used in the range of 2427 - 2470.75 MHz)
 (2) OFDM, DS other than (1) 10mW/MHz
 (3) Other than (1) & (2) 10mW
 (4) OFDM OBW 26 - 38MHz: 5mW/MHz
 Tolerance:+20%,-80%

7.3.1 E.U.T. Operation

Operating Environment:
 Temperature: 21.6 °C Humidity: 56.2 % RH Atmospheric Pressure: 1020 mbar
 Test mode a:TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.3.2 Test Setup Diagram



7.3.3 Measurement Procedure and Data

1. Test Conditions:
 Spectrum Analyzer is used for measurement.
2. EUT conditions:
 Modulation/Spread/Hopping ON, Modulation Tx
 For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
3. Spectrum Analyzer conditions:
 Frequency: Test Frequency
 Span 25 MHz(FHSS); 40/60 MHz (OFDM; DSSS); Enough to capture the emission (Others)
 RBW 1 MHz (FHSS; OFDM; DSSS); More than OBW (Others)
 VBW 1 MHz (FHSS; OFDM; DSSS); More than RBW (Others)
 Sweep Time Auto
 detector mode RMS
 Indication mode Max hold

The detailed test data see: Appendix MIC19-2



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7.4 Spurious emission Intensity

Test Requirement MIC Item 19 of Article 2 Paragraph 1
Test Method: MIC Notice No.88 Appendix No.43
Limit:

- (1) Below 2387 MHz : 2.5 μ W/MHz
- (2) 2387 to 2400 MHz : 25 μ W/MHz
- (3) 2483.5 through 2496.5 MHz : 25 μ W/MHz
- (4) Over 2496.5 MHz : 2.5 μ W/MHz



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7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 21.6 °C Humidity: 56.2 % RH Atmospheric Pressure: 1020 mbar
Test mode a:TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.4.2 Measurement Procedure and Data

1. Test Conditions:

Spectrum Analyzer is used for measurement.

2. EUT conditions:

Modulation/Spread/Hopping ON, , Modulation Tx

For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.

3. Spectrum Analyzer conditions:

Step 1

All spurious are measured from 30 MHz to 13 GHz by peak mode.

Step 2

IF the value measured by Step1 is 2 dB or less, measure in average mode.

Test setup for Step 1:

Frequency: 30 MHz – 2400 MHz , 2483.5 MHz –13 GHz

RBW 1 MHz

VBW 1 MHz

Sweep Time Auto

detector mode Positive peak

Indication mode Max hold

Test setup for Step 2:

Frequency: Spurious Frequency

RBW 1 MHz

VBW 1 MHz

Sweep Time Auto

detector mode Sample

Indication mode Max hold

The detailed test data see: Appendix MIC19-2



7.5 Limit of secondary radiated emissions

Test Requirement MIC Item 19 of Article 2 Paragraph 1
Test Method: MIC Notice No.88 Appendix No.43
Limit: (1) Below 1 GHz : 4 nW or less
(2) 1 GHz and over : 20 nW or less

7.5.1 E.U.T. Operation

Operating Environment:
Temperature: 21.6 °C Humidity: 56.2 % RH Atmospheric Pressure: 1020 mbar
Test mode a:TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.5.2 Measurement Procedure and Data

1. Test Conditions:
Spectrum Analyzer is used for measurement.
2. EUT conditions:
Modulation/Spread/Hopping ON
For equipment using diffusion code, set to the test diffusion code and modulate with standard coding test signal.
3. Spectrum Analyzer conditions:
Step 1
All spurious are measured from 30 MHz to 13 GHz by peak mode.
Step 2
IF the value measured by Step1 is 2 dB or less, measure in average mode.
Test setup for Step 1:
Frequency: 30 MHz – 2400 MHz , 2483.5 MHz –13 GHz
RBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)
VBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)
Sweep Time Auto
detector mode Positive peak
Indication mode Max hold
Test setup for Step 2:
Frequency: Spurious Frequency
Span 0 Hz
RBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)
VBW 100 kHz (30 – 1GHz) , 1 MHz (over 1GHz)
Sweep Time Auto
detector mode Sample
Indication mode Max hold

The detailed test data see: Appendix MIC19-2



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7.6 Interference prevention capability

Test Requirement MIC Item 19 of Article 2 Paragraph 1
Test Method: MIC Notice No.88 Appendix No.43
Limit:

Article 2, Item (19) Notice 88 Appendix 43, 44, 45

The EUT shall be constructed in such a way that sensitive RF parts, (like modulation and oscillator parts) cannot be reached easily by the user. These parts shall be covered by soldered metal caps or glue or by other mechanical covers. If the covers are fixed with screws, these shall be not the common type(s) like a Phillips, but special versions like Torx, so that the user cannot open the device with common tools.



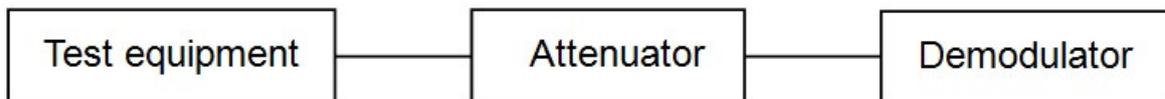
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7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 21.6 °C Humidity: 56.2 % RH Atmospheric Pressure: 1020 mbar
Test mode a:TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.6.2 Test Setup Diagram



7.6.3 Measurement Procedure and Data

Standard Requirement:

- 1) Measurement system diagram as shown above and test equipment keep transmitting identification code.
- 2) Condition of measuring instrument
 - (1) Demodulator must be able to demodulate the transmitting signal emitted by test equipment and to indicate the identification code.
- 3) Condition of test equipment The mode of normal use.
- 4) Measuring operation procedure
 - (1) When test equipment has the function to transmit identification code automatically:
 - A) Transmit the predetermined identification code from test equipment.
 - B) Confirm the transmitted identification code by demodulator.

EUT Details:

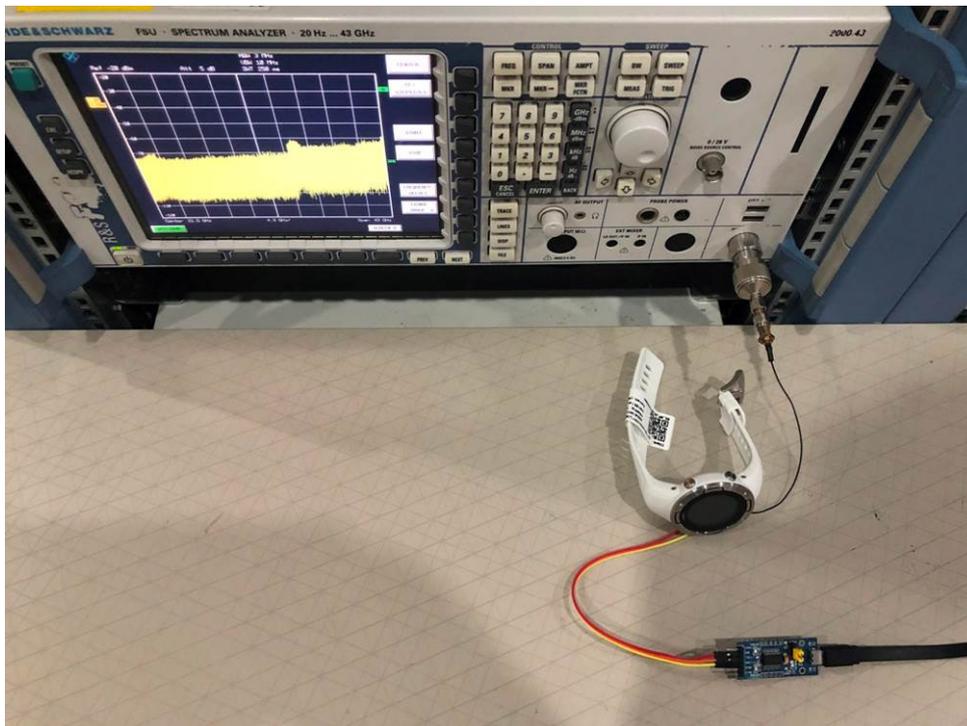
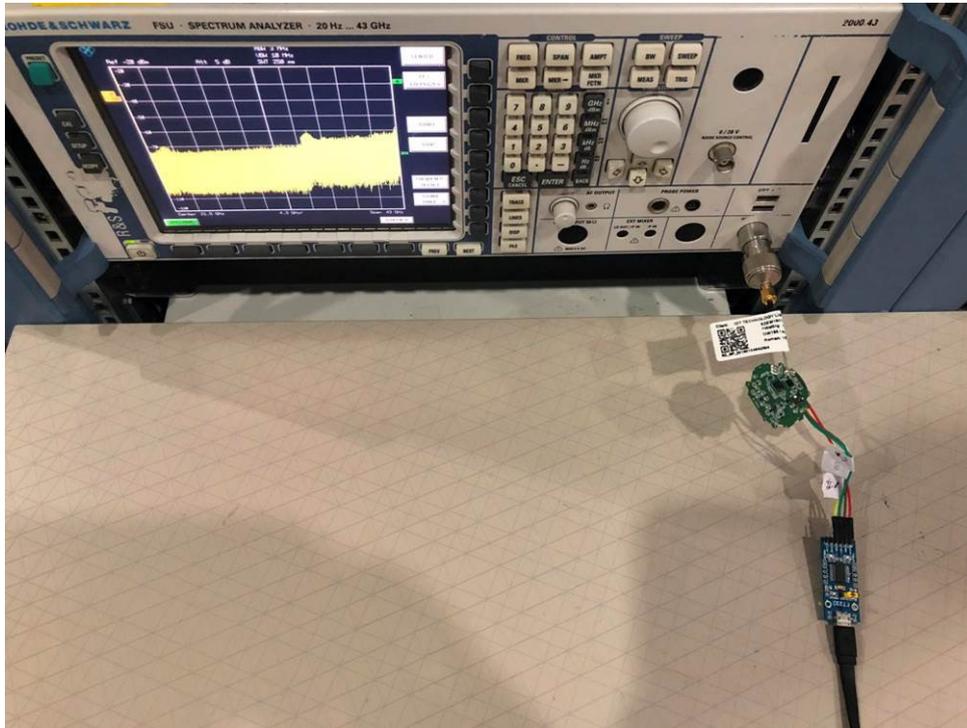
0C:8C:DC:EB:00:AE

The unit does meet the requirements (Good).



8 Photographs

8.1 Setup photo





8.2 EUT Constructional Details (EUT Photos)

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1901010841CR.



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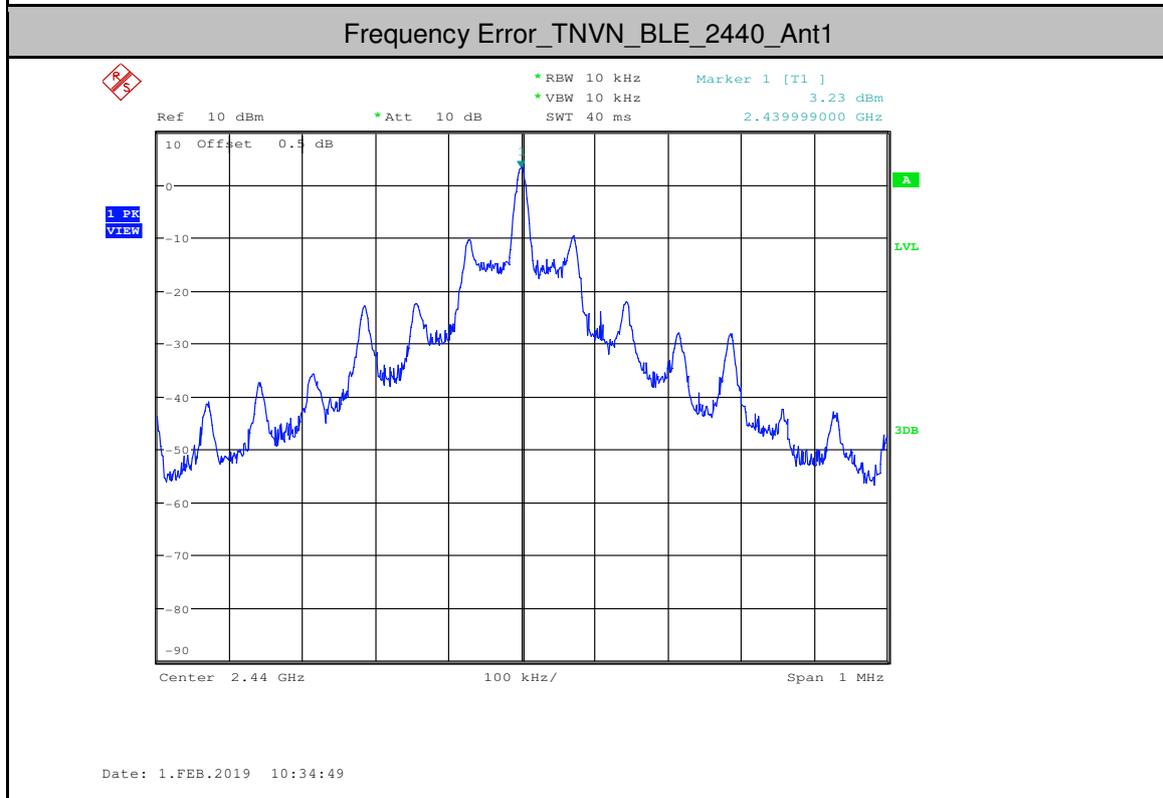
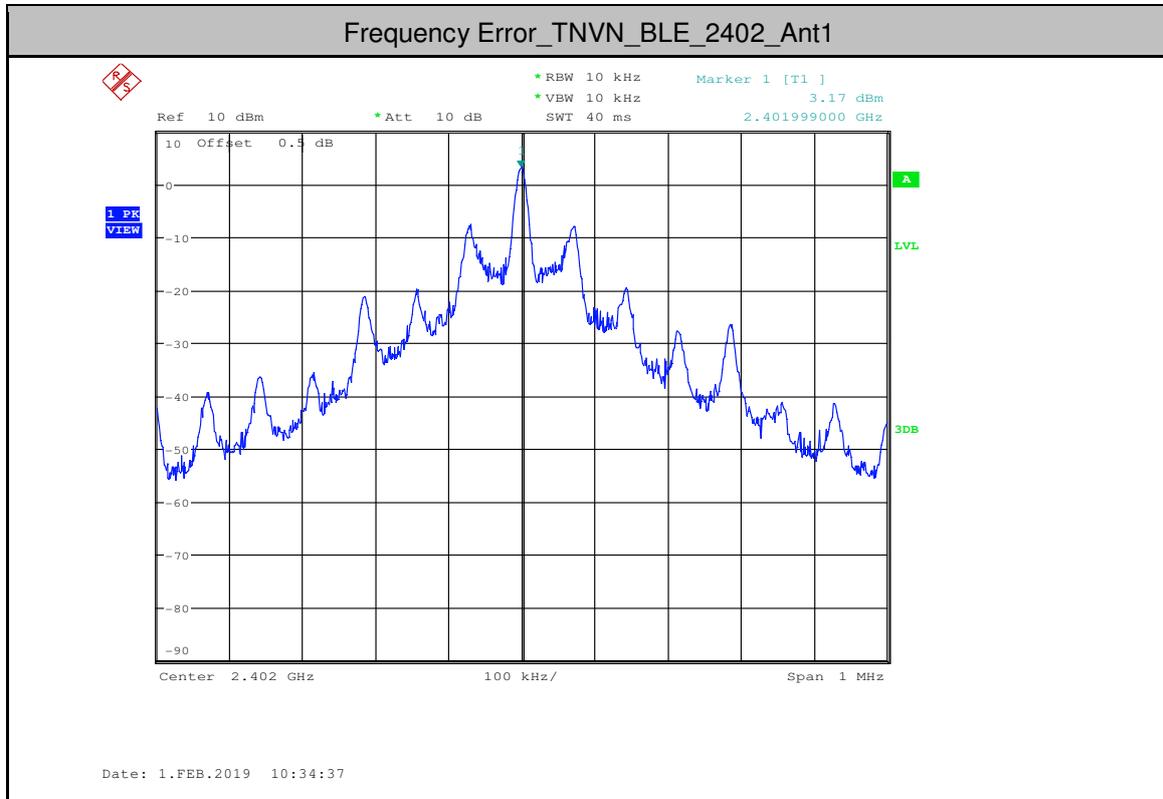
9 Appendix

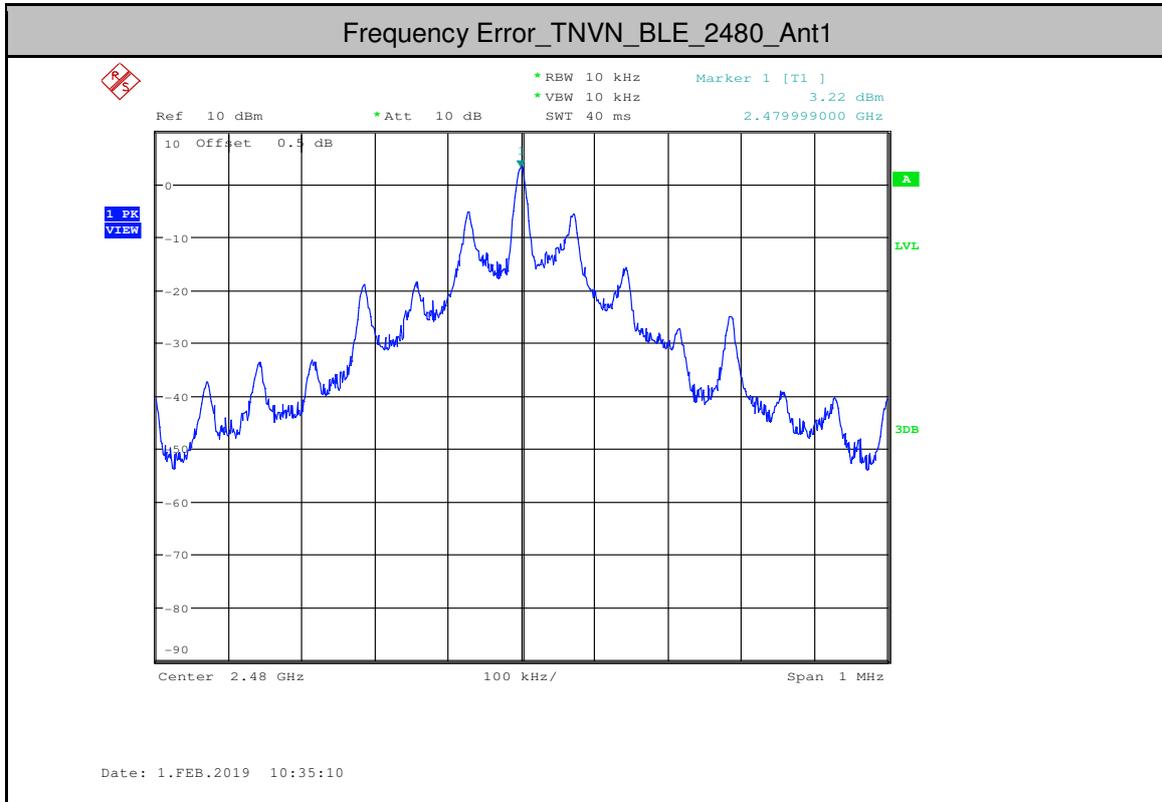
9.1 Appendix MIC19-2

1.Frequency Error

| Test Condition | Test Mode | Test Channel | Ant | Result [MHz] | Result [PPM] | Limit [PPM] | Verdict |
|----------------|-----------|--------------|------|--------------|--------------|---------------|---------|
| TNVN | BLE | 2402 | Ant1 | 2401.999 | -0.42 | $\leq \pm 50$ | PASS |
| TNVN | BLE | 2440 | Ant1 | 2439.999 | -0.41 | $\leq \pm 50$ | PASS |
| TNVN | BLE | 2480 | Ant1 | 2479.999 | -0.4 | $\leq \pm 50$ | PASS |







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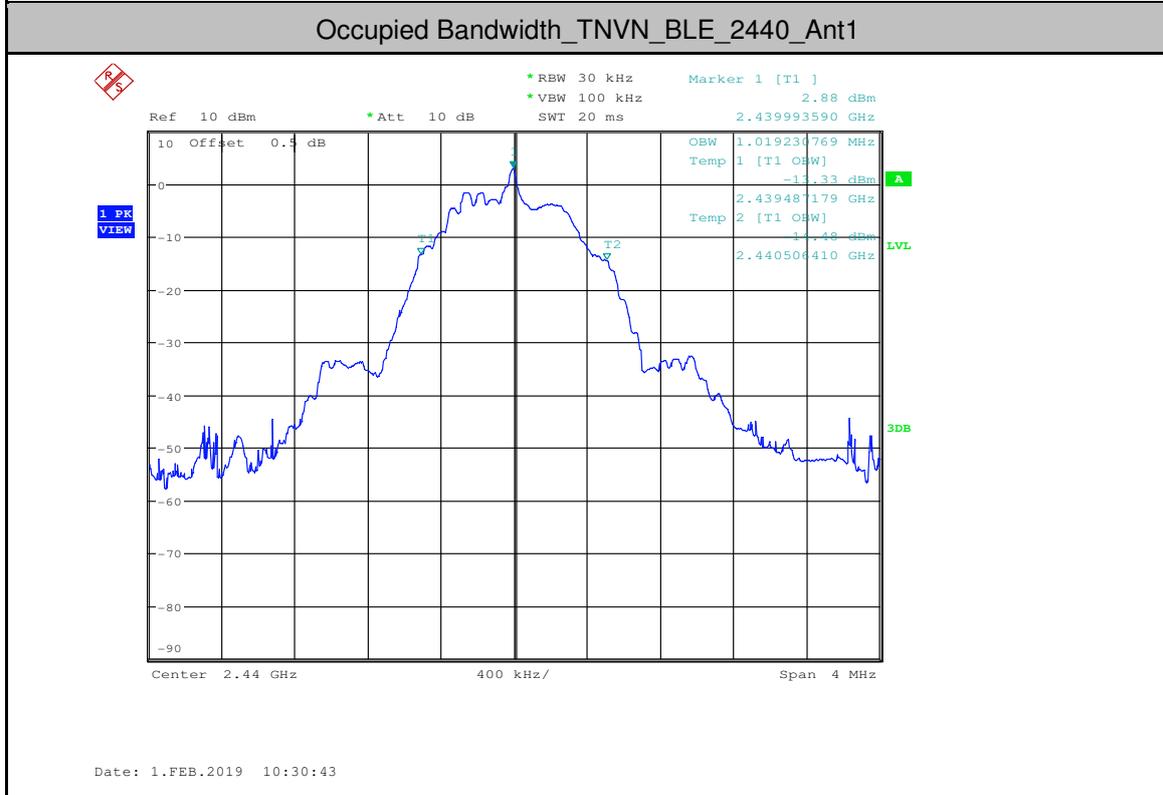
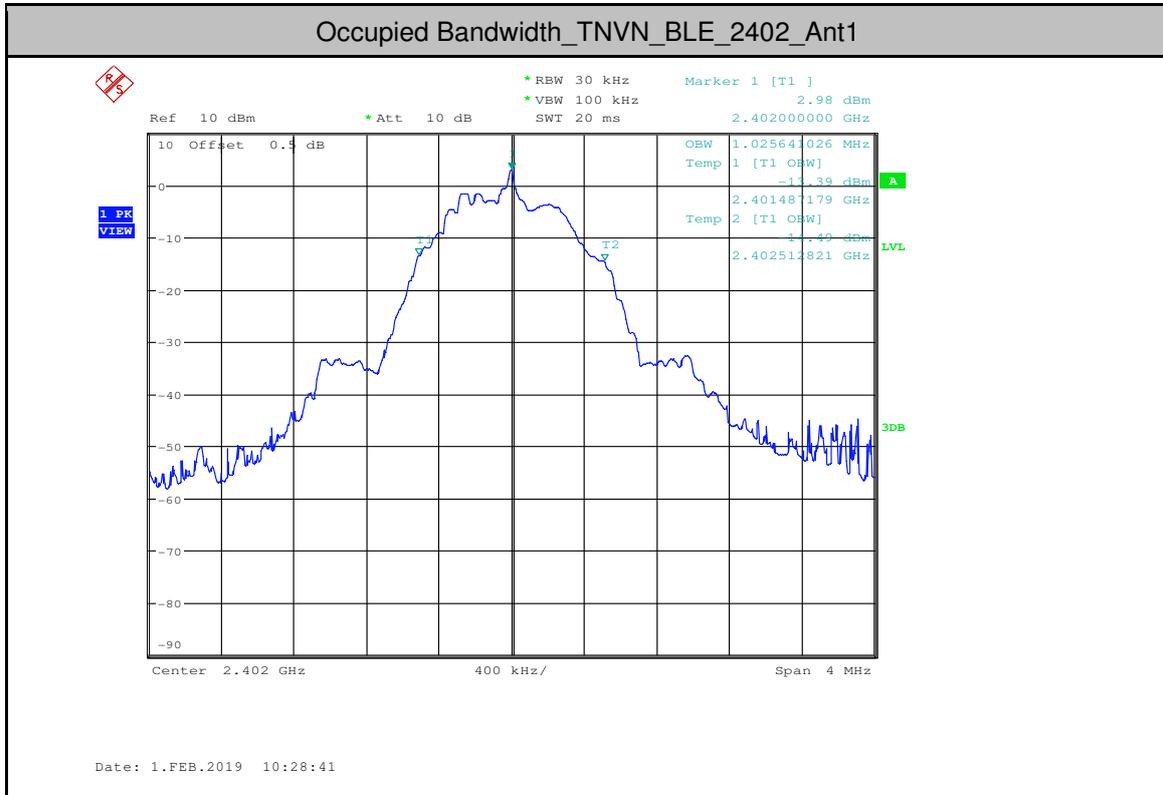
2.Occupied Bandwidth (99%)

| Test Condition | Test Mode | Test Channel | Ant | Test Result [MHz] | Limit [MHz] | Verdict |
|----------------|-----------|--------------|------|-------------------|-------------|---------|
| TNVN | BLE | 2402 | Ant1 | 1.026 | <=26 | PASS |
| TNVN | BLE | 2440 | Ant1 | 1.019 | <=26 | PASS |
| TNVN | BLE | 2480 | Ant1 | 1.032 | <=26 | PASS |



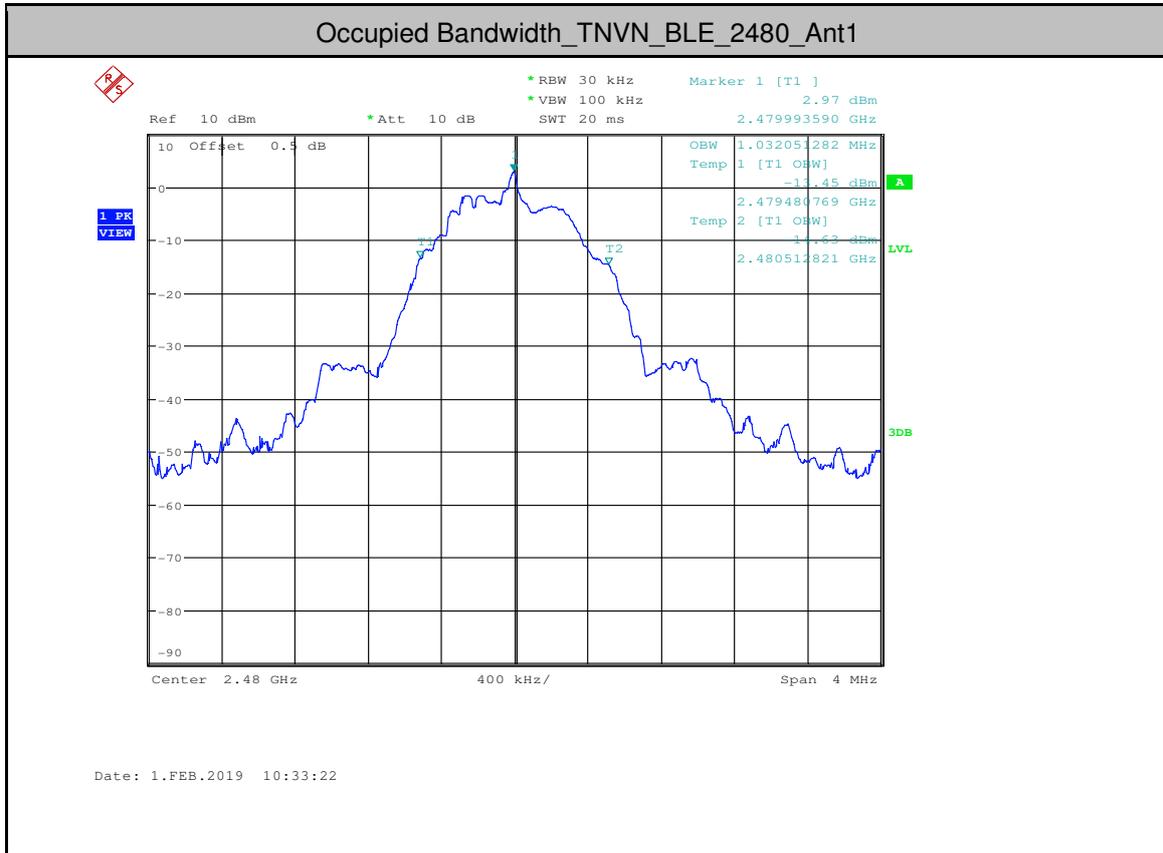
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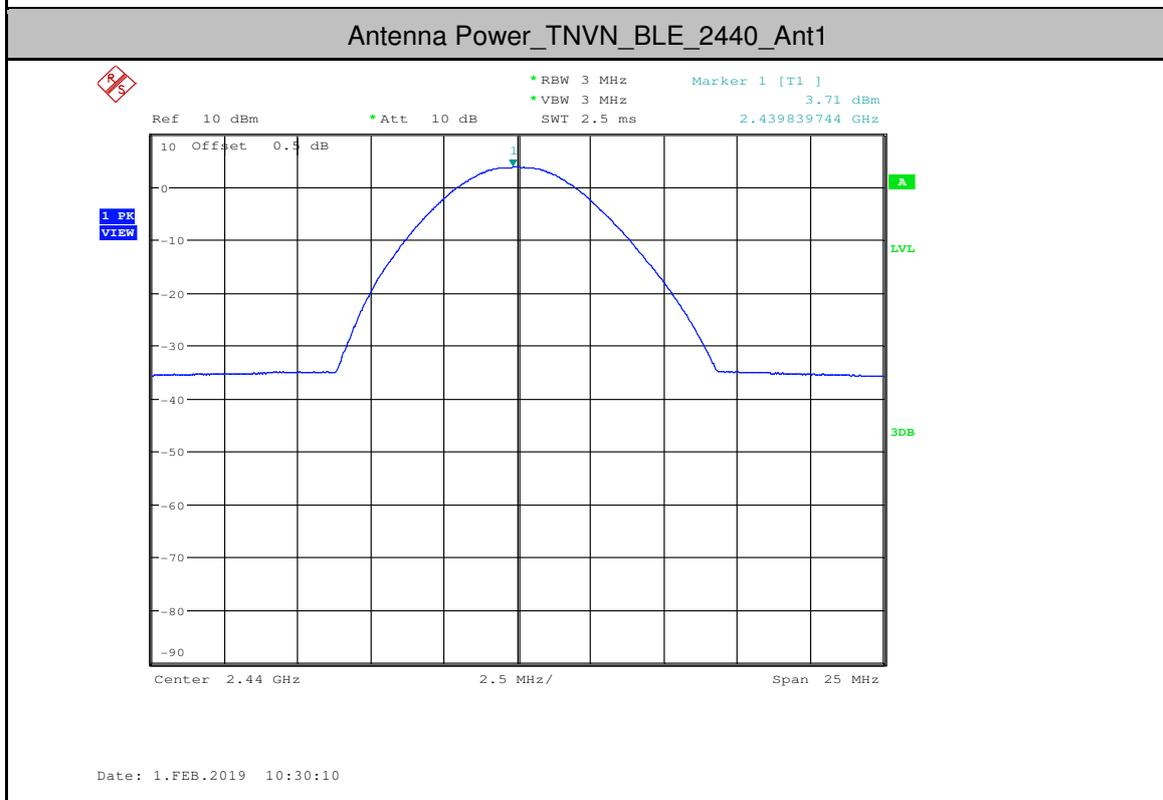
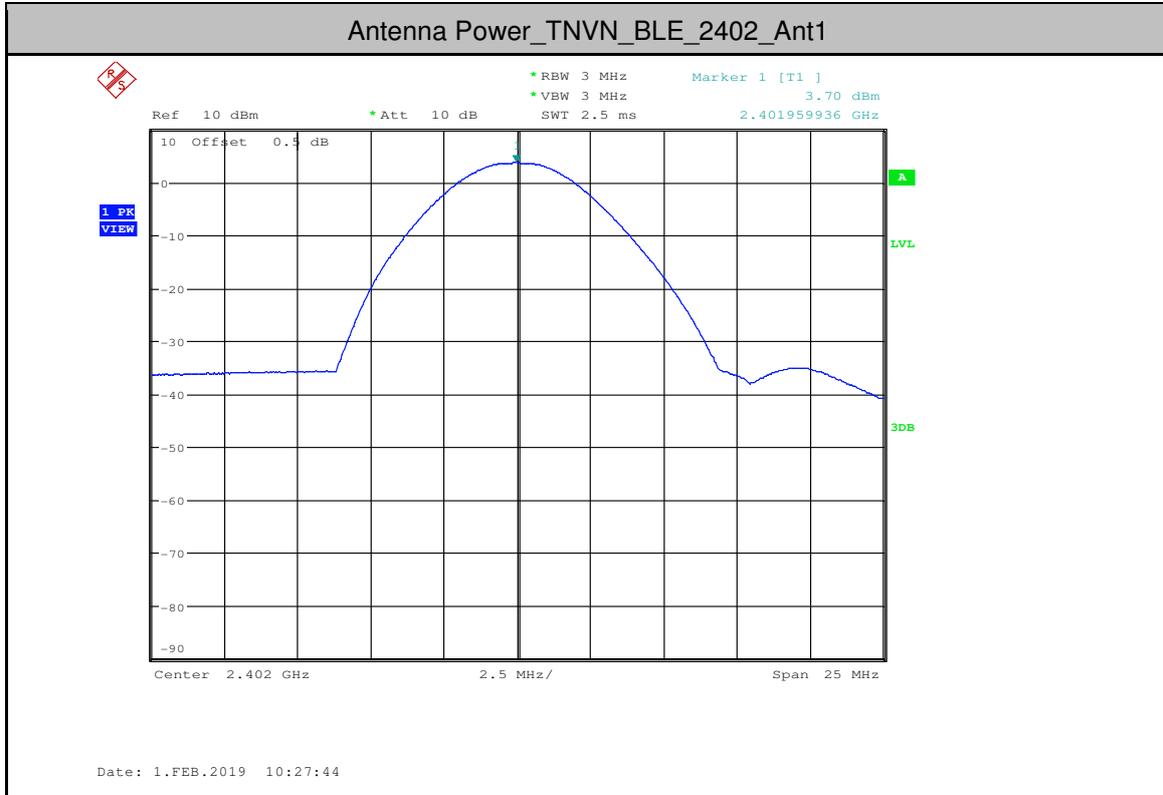
3. Antenna Power

| Test Condition | Test Mode | Test Channel | Ant | Power[mW] | Limit[mW] | Normal Power [mW] | Tolerance[%] | Limit [%] | Verdict |
|----------------|-----------|--------------|------|-----------|-----------|-------------------|--------------|------------|---------|
| TNVN | BLE | 2402 | Ant1 | 2.34 | 10 | 2.5 | -6.400 | -80 to +20 | PASS |
| TNVN | BLE | 2440 | Ant1 | 2.35 | 10 | 2.5 | -6.000 | -80 to +20 | PASS |
| TNVN | BLE | 2480 | Ant1 | 2.37 | 10 | 2.5 | -5.200 | -80 to +20 | PASS |



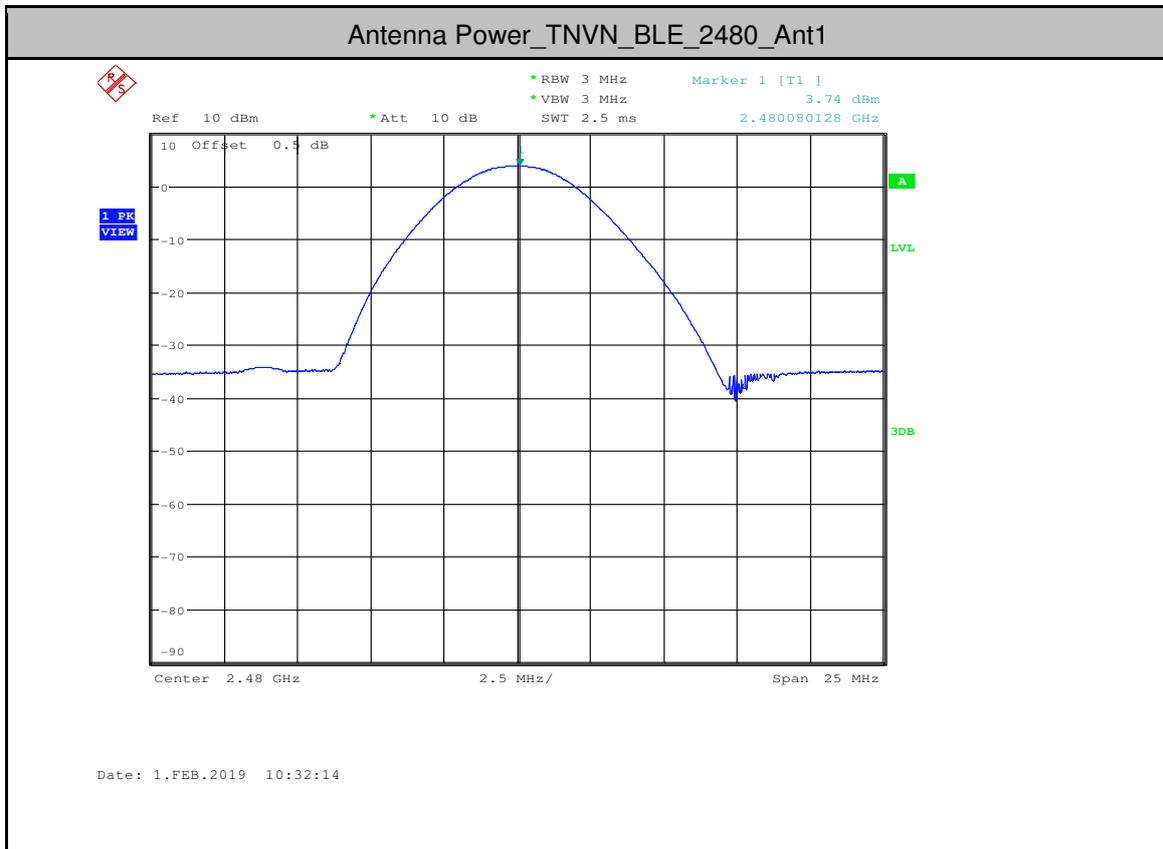
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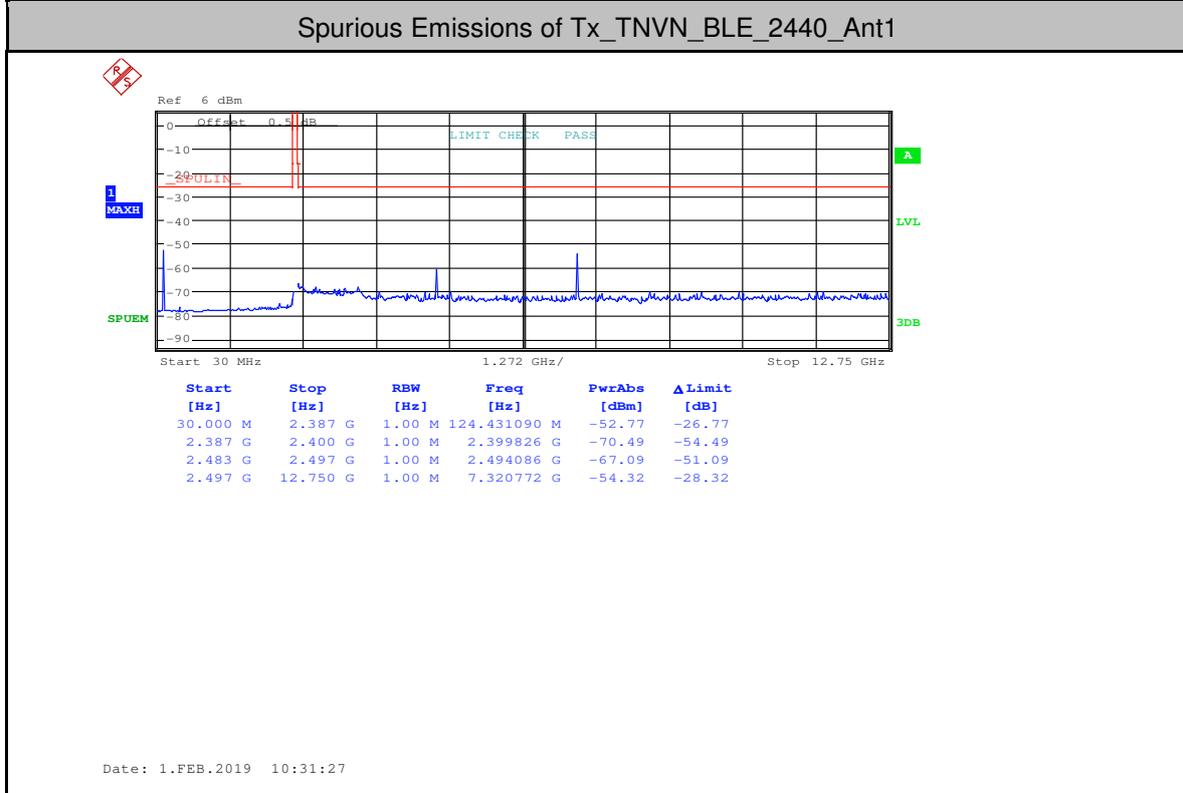
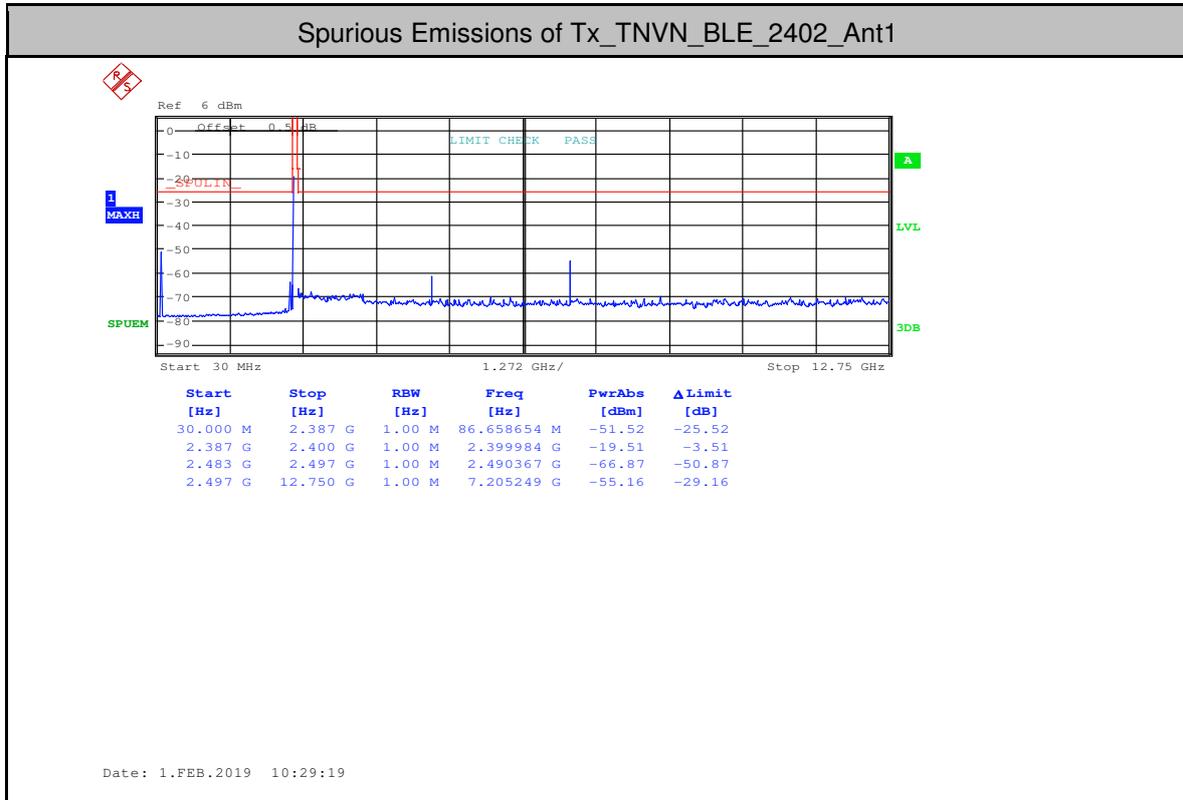
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4.Spurious Emissions of Tx

| Test Mode | Test Channel | StartFre[MHz] | StopFre[MHz] | Max.Fre[MHz] | Max.Level[μW] | Limit [μW] | Verdict |
|-----------|--------------|---------------|--------------|--------------|---------------|------------|---------|
| BLE | 2402 | 30 | 2387 | 86.66 | 0.0070 | 2.5 | PASS |
| BLE | 2402 | 2387 | 2400 | 2399.98 | 11.1944 | 25.1 | PASS |
| BLE | 2402 | 2483.5 | 2496.5 | 2490.37 | 0.0002 | 25.1 | PASS |
| BLE | 2402 | 2496.5 | 13000 | 7205.25 | 0.0030 | 2.5 | PASS |
| BLE | 2440 | 30 | 2387 | 124.43 | 0.0053 | 2.5 | PASS |
| BLE | 2440 | 2387 | 2400 | 2399.83 | 0.0001 | 25.1 | PASS |
| BLE | 2440 | 2483.5 | 2496.5 | 2494.09 | 0.0002 | 25.1 | PASS |
| BLE | 2440 | 2496.5 | 13000 | 7320.77 | 0.0037 | 2.5 | PASS |
| BLE | 2480 | 30 | 2387 | 165.98 | 0.0060 | 2.5 | PASS |
| BLE | 2480 | 2387 | 2400 | 2399.74 | 0.0001 | 25.1 | PASS |
| BLE | 2480 | 2483.5 | 2496.5 | 2483.54 | 0.2070 | 25.1 | PASS |
| BLE | 2480 | 2496.5 | 13000 | 2574.77 | 0.1892 | 2.5 | PASS |

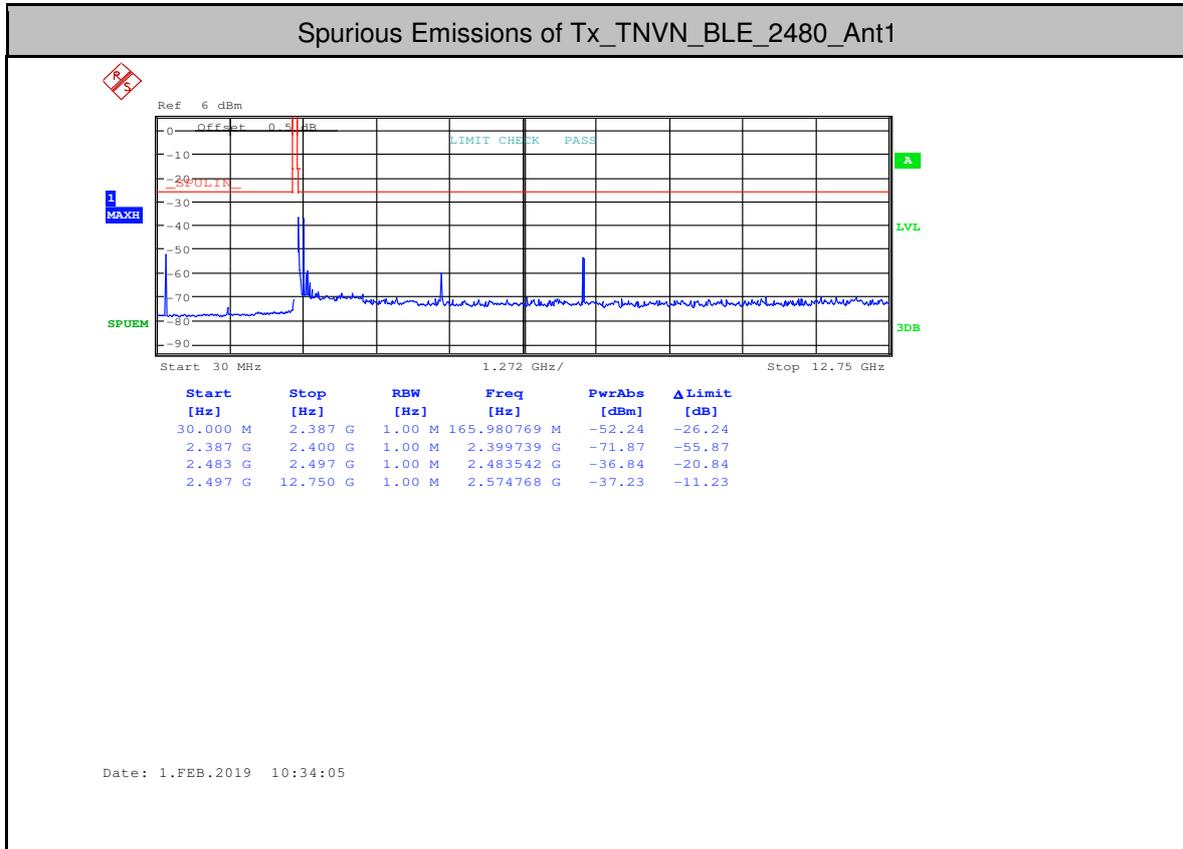


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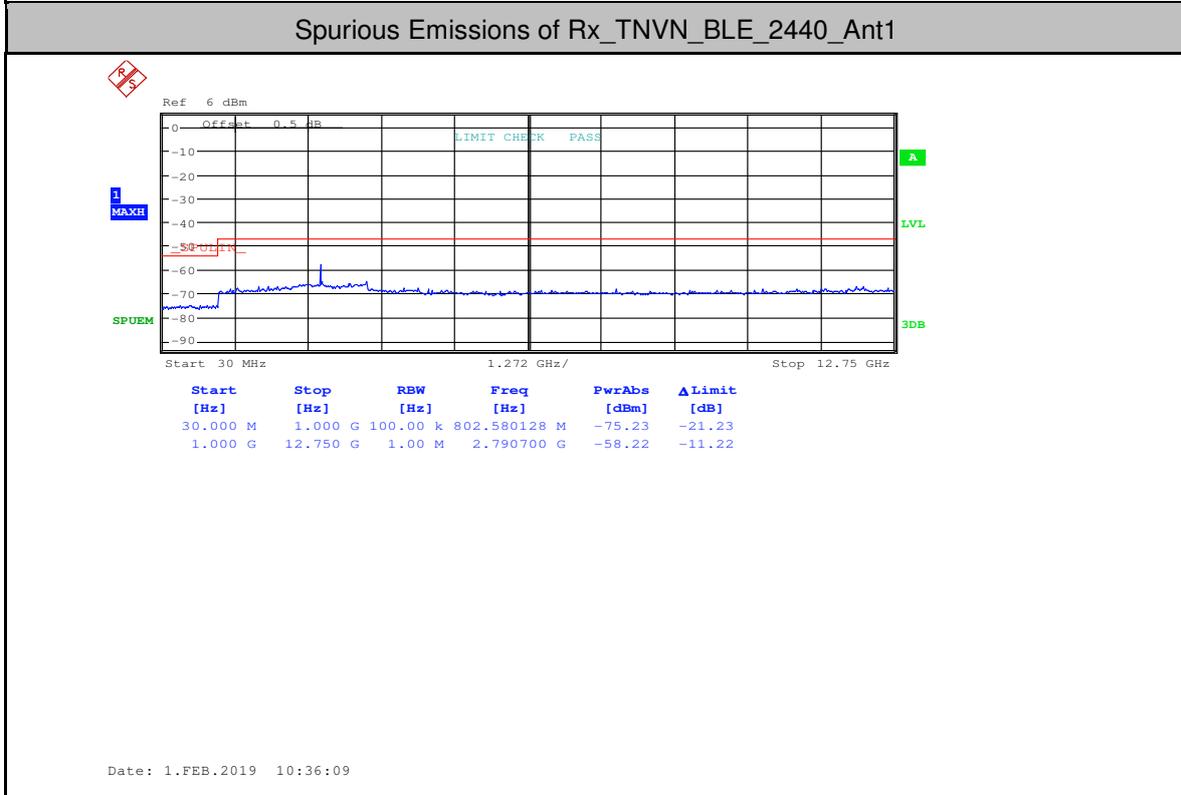
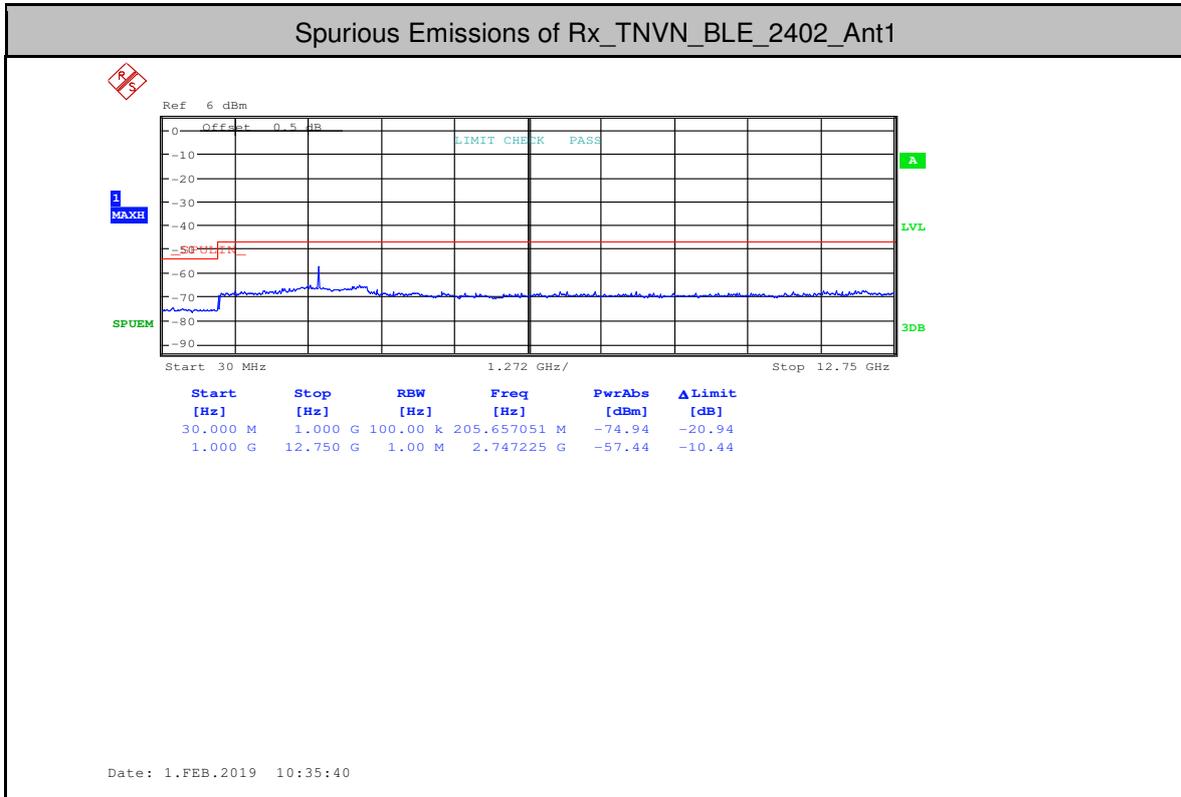
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5.Spurious Emissions of Rx

| Test Mode | Test Channel | StartFre[MHz] | StopFre[MHz] | Max.Fre[MHz] | Max.Level[nW] | Limit [nW] | Verdict |
|-----------|--------------|---------------|--------------|--------------|---------------|------------|---------|
| BLE | 2402 | 1000 | 13000 | 2747.23 | 1.803 | 20 | PASS |
| BLE | 2402 | 30 | 1000 | 205.66 | 0.032 | 4 | PASS |
| BLE | 2440 | 1000 | 13000 | 2790.70 | 1.507 | 20 | PASS |
| BLE | 2440 | 30 | 1000 | 802.58 | 0.030 | 4 | PASS |
| BLE | 2480 | 1000 | 13000 | 2836.53 | 1.084 | 20 | PASS |
| BLE | 2480 | 30 | 1000 | 886.52 | 0.029 | 4 | PASS |

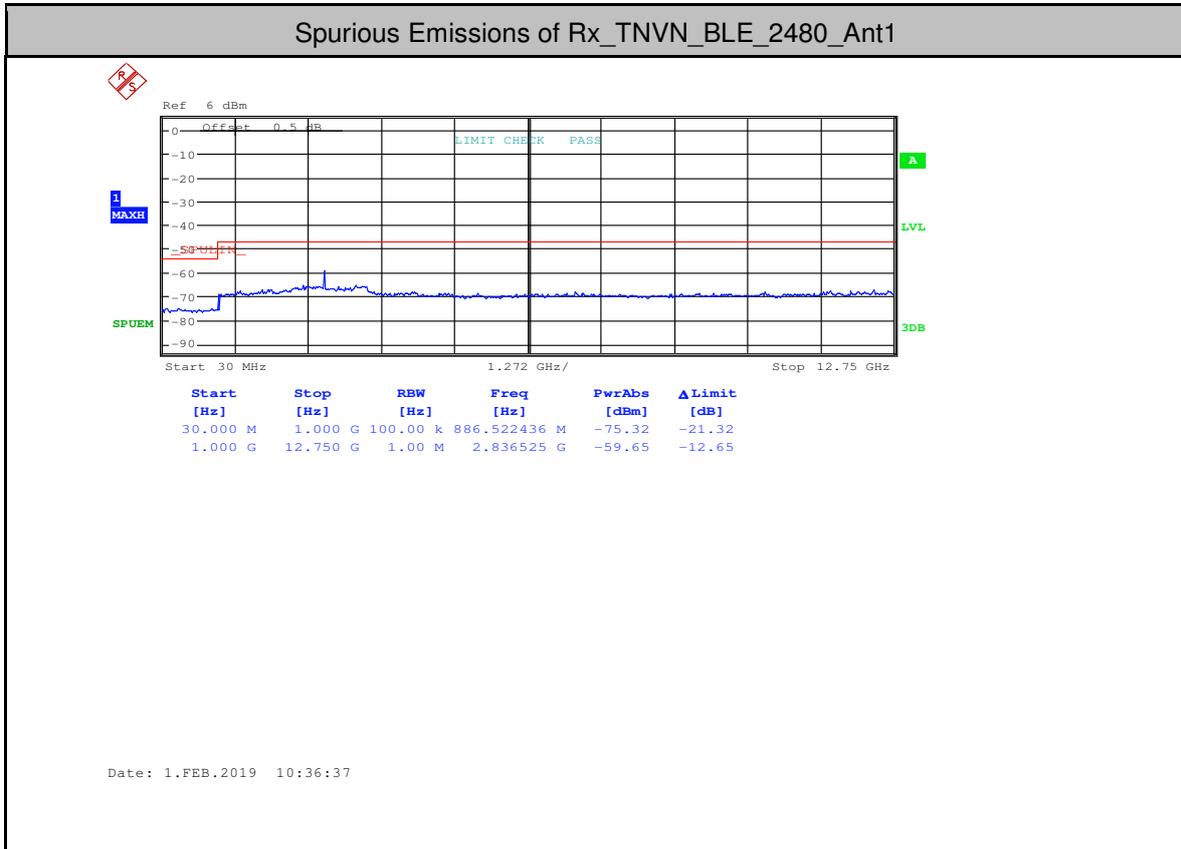


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- End of the Report -



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