

Report No.: FG1N2419-01C



## FCC RADIO TEST REPORT

FCC ID : LHJ-FE5RW0D31

Equipment : FE5RW0D31

Brand Name : Continental

Model Name : FE5RW0D31

Applicant : Continental Automotive Systems, Inc.

21440 W Lake Cook Rd., Deer Park, IL 60010, USA

Manufacturer : Continental Automotive Systems, Inc.

21440 W Lake Cook Rd., Deer Park, IL 60010, USA

Standard : FCC 47 CFR Part 2, and 90(S)

The product was received on Nov. 26, 2021 and testing was performed from Jan. 18, 2022 to Apr. 27, 2022. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

Louis Win

Sporton International Inc. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

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## History of this test report

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| Report No.   | Version | Description   | Issued Date   |
|--------------|---------|---|---------------|
| FG1N2419-01C | 01      | Initial issue of report   | May 26, 2022  |
| FG1N2419-01C | 02      | <ol> <li>Revise antenna gain and appendix A</li> <li>Add remark in section 1.1</li> </ol> | Jun. 06, 2022 |
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#### **Summary of Test Result**

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| Report<br>Clause | Ref Std.<br>Clause | Test Items  | Result<br>(PASS/FAIL) | Remark                                     |
|------------------|--------------------|---|-----------------------|--|
| 3.2              | §2.1046<br>§90.635 | Conducted Output Power and Effective Radiated Power | Pass                  | -  |
| 3.3              | -                  | Peak-to-Average Ratio                               | Reporting only        | -  |
| 3.4              | §2.1049<br>§90.209 | Occupied Bandwidth and 26dB Bandwidth               | Reporting only        | -  |
| 3.5              | §2.1051<br>§90.691 | Emission masks –<br>In-band emissions               | Pass                  | -  |
| 3.6              | §2.1051<br>§90.691 | Emission masks –<br>Out of band emissions           | Pass                  | -  |
| 3.7              | §2.1055<br>§90.213 | Frequency Stability for<br>Temperature & Voltage    | Pass                  | -  |
| 3.8              | §2.1053<br>§90.691 | Field Strength of Spurious Radiation                | Pass                  | Under limit<br>36.82 dB at<br>2445.000 MHz |

#### **Declaration of Conformity:**

- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
   It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
- The measurement uncertainty please refer to this report "Uncertainty of Evaluation".

#### **Comments and Explanations:**

The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Yun Huang Report Producer: Lucy Wu

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### 1 General Description

#### 1.1 Feature of Equipment Under Test

|                                 | Product Feature                     |
|---------------------------------|-------------------------------------|
| Equipment                       | FE5RW0D31                           |
| Brand Name                      | Continental                         |
| Model Name                      | FE5RW0D31                           |
| FCC ID                          | LHJ-FE5RW0D31                       |
| EUT supports Radios application | GSM/EGPRS/WCDMA/HSPA/LTE/5G NR/GNSS |
| HW Version                      | P2                                  |
| EUT Stage                       | Identical Prototype                 |

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#### Remark:

- 1. The above EUT's information was declared by manufacturer.
- 2. The test antenna TAOGLAS TG.55.8113W provided by the applicant is used for the purpose of radiated testing. The EUT is not equipped with an antenna.

#### 1.2 Product Specification of Equipment Under Test

| Product Specification is subjective to this standard |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Tx Frequency   | 814.7 ~ 823.3 MHz                        |  |  |  |  |  |
| Rx Frequency   | 859.7 ~ 868.3 MHz                        |  |  |  |  |  |
| Bandwidth  | 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz     |  |  |  |  |  |
| Maximum Output Power to Antenna                      | 22.53 dBm                                |  |  |  |  |  |
| Antenna Type / Gain                                  | Fixed External Antenna with gain 4.5 dBi |  |  |  |  |  |
| Type of Modulation                                   | QPSK / 16QAM / 64QAM                     |  |  |  |  |  |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

#### 1.3 Modification of EUT

No modifications are made to the EUT during all test items.

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## 1.4 Testing Site

| Test Site             | Sporton International Inc. EMC & Wireless Communications Laboratory  |  |  |  |
|-----------------------|--|--|--|--|
| Test Site Location    | No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 |  |  |  |
| Test Site No.         | Sporton Site No.   |  |  |  |
| Test Site No.         | TH03-HY  |  |  |  |
| Test Engineer         | HaoEn Zhang  |  |  |  |
| Temperature (°C)      | 22.5~25.6  |  |  |  |
| Relative Humidity (%) | 51.3~55.4  |  |  |  |

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| Test Site             | Sporton International Inc. Wensan Laboratory   |
|-----------------------|--|
| Test Site Location    | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,<br>Taoyuan City 333010, Taiwan (R.O.C.)<br>TEL: +886-3-327-0868<br>FAX: +886-3-327-0855 |
| Test Site No.         | Sporton Site No.   |
| Test Site No.         | 03CH12-HY (TAF Code: 3786)   |
| Test Engineer         | Jack Cheng, Lance Chiang and Chuan Chu   |
| Temperature (°C)      | 21.4~23.8  |
| Relative Humidity (%) | 54.7~69.3  |
| Remark                | The Radiated Spurious Emission test item subcontracted to Sporton  |
|                       | International Inc. Wensan Laboratory.  |

**Note:** The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW3786

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#### 1.5 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

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- FCC 47 CFR Part 2, 90
- ANSI / TIA-603-E
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01
- Interim Guidance for Equipment Authorization of Devices with Channel Bandwidths Combined Across Two Contiguous Service Rule Allocations OET/Lab/EACB, June 6, 2013

#### Remark:

- 1. All test items were verified and recorded according to the standards and without any deviation during the test.
- 2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.
- 3. The TAF code is not including all the FCC KDB listed without accreditation.

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## 2 Test Configuration of Equipment Under Test

#### 2.1 Test Mode

During all testing, EUT is in link mode with base station emulator at maximum power level.

For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in two Config (Ant. Degree 0 and Ant. Degree 90), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and find Ant. Degree 0 for LTE Band 26\_824MHz; Ant. Degree 90 for LTE Band 26 as worst plane.

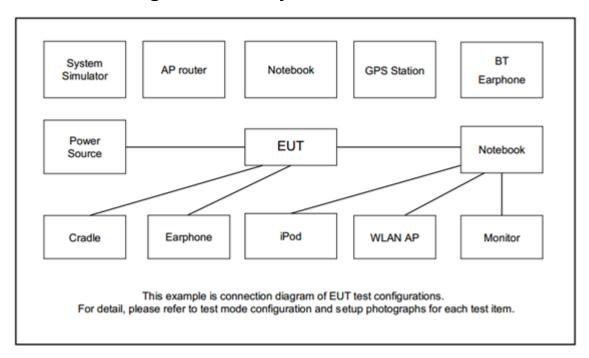
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Frequency range investigated for radiated emission is 30 MHz to 9000 MHz.

| Conducted                                    | David  | Bandwidth (MHz)   |   |   | Modulation |    | RB# |      |       | Test Channel |   | nnel |      |      |             |   |
|--|--|-------------------|---|---|------------|----|-----|------|-------|--------------|---|------|------|------|-------------|---|
| Test Cases                                   | Band   | 1.4               | 3 | 5 | 10         | 15 | 20  | QPSK | 16QAM | 64QAM        | 1 | Half | Full | L    | М           | Н |
| Max. Output<br>Power                         | 26   | ٧                 | ٧ | v | v          | v  | 1   | v    | v     | v            | ٧ | v    | v    | ٧    | ٧           | ٧ |
| Peak-to-Average<br>Ratio                     | 26   |                   |   |   | v          | V  | ı   | v    | v     | v            |   |      | v    |      | <b>&gt;</b> |   |
| 26dB and 99%<br>Bandwidth                    | 26   | v                 | v | v | v          | v  | -   | v    | v     | v            |   |      | v    | ٧    | v           |   |
| Emission masks<br>In-band emissions          | 26   | ٧                 | ٧ | v | v          | v  | 1   | v    | v     | v            | ٧ |      | v    | ٧    |             | v |
| Emission masks –<br>Out of band<br>emissions | 26   | V                 | V | v | v          | v  | -   | v    |       |              | ٧ |      |      | V    | v           | v |
| Frequency<br>Stability                       | 26   | -                 | - |   | v          | v  | -   | v    |       |              |   |      | v    | V    | v           |   |
| E.R.P.                                       | 26   | v                 | v | v | v          | v  | -   | v    | v     | v            |   |      | Мах. | Powe | r           |   |
| Radiated Spurious<br>Emission                | 26   | 26 Worst Case V V |   |   |            |    |     |      | V     |              |   |      |      |      |             |   |
| Remark                                       | <ol> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>LTE Band26 transmit frequency for part22 rule is 824MHz-849MHz, for part90 rule is 814MHz-824MHz.<br/>ERP over 15MHz bandwidth complies the ERP limit line of part22 rule, therefore ERP of the partial frequency spectrum which falls within part 22 also complies.</li> </ol> |                   |   |   |            |    |     |      |       |              |   |      |      |      |             |   |

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#### 2.2 Connection Diagram of Test System



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#### 2.3 Support Unit used in test configuration and system

| Item | Equipment        | Brand Name | Model No.  | FCC ID | Data Cable | Power Cord        |
|------|------------------|------------|------------|--------|------------|-------------------|
| 1.   | Antenna          | Taoglas    | TG.55.8113 | N/A    | N/A        | N/A               |
| 2.   | DC Power Supply  | GW Instek  | GEU810960  | N/A    | N/A        | Unshielded, 1.8m  |
| 3.   | System Simulator | Anritsu    | MT8821C    | N/A    | N/A        | Unshielded, 1.8 m |

## 2.4 Measurement Results Explanation Example

#### For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

The following shows an offset computation example with RF cable loss 4.2 dB and a 10dB attenuator.

#### Example:

 $Offset(dB) = RF \ cable \ loss(dB) + attenuator \ factor(dB).$ 

$$= 4.2 + 10 = 14.2 (dB)$$

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## 2.5 Frequency List of Low/Middle/High Channels

| LTE Band 26 Channel and Frequency List |                        |        |        |         |  |  |  |  |  |
|--|------------------------|--------|--------|---------|--|--|--|--|--|
| BW [MHz]                               | Channel/Frequency(MHz) | Lowest | Middle | Highest |  |  |  |  |  |
| 15                                     | Channel                | 26765  | -      | -       |  |  |  |  |  |
| 15                                     | Frequency              | 821.5  | -      | -       |  |  |  |  |  |
| 10                                     | Channel                | -      | 26740  | -       |  |  |  |  |  |
| 10                                     | Frequency              | -      | 819    | -       |  |  |  |  |  |
| 5                                      | Channel                | 26715  | 26740  | 26765   |  |  |  |  |  |
| 5                                      | Frequency              | 816.5  | 819    | 821.5   |  |  |  |  |  |
| 3                                      | Channel                | 26705  | 26740  | 26775   |  |  |  |  |  |
| 3                                      | Frequency              | 815.5  | 819    | 822.5   |  |  |  |  |  |
| 1.4                                    | Channel                | 26697  | 26740  | 26783   |  |  |  |  |  |
| 1.4                                    | Frequency              | 814.7  | 819    | 823.3   |  |  |  |  |  |

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|          | LTE Band 26 Channel and Frequency List |   |                        |   |  |  |  |  |  |
|----------|--|---|------------------------|---|--|--|--|--|--|
| BW [MHz] | GW [MHz] Channel/Frequency(MHz)        |   | cross-rule<br>channels | - |  |  |  |  |  |
| 15       | Channel                                | - | 26790                  | - |  |  |  |  |  |
| 15       | Frequency                              | - | 824                    | - |  |  |  |  |  |
| 10       | Channel                                | - | 26790                  | - |  |  |  |  |  |
| 10       | Frequency                              | - | 824                    | - |  |  |  |  |  |
| 5        | Channel                                | - | 26790                  | - |  |  |  |  |  |
| 5        | Frequency                              | - | 824                    | - |  |  |  |  |  |
| 3        | Channel                                | - | 26790                  | - |  |  |  |  |  |
| 3        | Frequency                              | - | 824                    | - |  |  |  |  |  |
| 1.4      | Channel                                | - | 26790                  | - |  |  |  |  |  |
| 1.4      | Frequency                              | - | 824                    | - |  |  |  |  |  |

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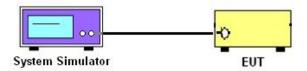
#### 3 Conducted Test Items

#### 3.1 Measuring Instruments

See list of measuring instruments of this test report.

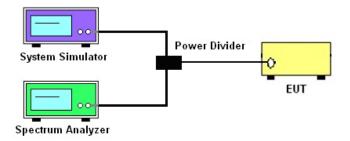
#### 3.1.1 Test Setup

#### 3.1.2 Conducted Output Power

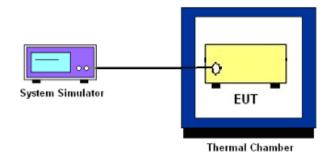


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# 3.1.3 Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band-Edge, Emission Mask, Emissions Mask – Out Of Band Emissions, and Conducted Spurious Emission



#### 3.1.4 Frequency Stability



#### 3.1.5 Test Result of Conducted Test

Please refer to Appendix A.

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#### 3.2 Conducted Output Power Measurement and ERP Measurement

## 3.2.1 Description of the Conducted Output Power Measurement and ERP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

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The ERP of mobile transmitters must not exceed 100 Watts for LTE Band 26.

According to KDB 412172 D01 Power Approach,

 $EIRP = P_T + G_T - L_C$ , where

 $P_T$  = transmitter output power in dBm

 $G_T$  = gain of the transmitting antenna in dBi

L<sub>C</sub> = signal attenuation in the connecting cable between the transmitter and antenna in dB

#### 3.2.2 Test Procedures

- 1. The transmitter output port was connected to the system simulator.
- 2. Set EUT at maximum power through system simulator.
- 3. Select lowest, middle, and highest channels for each band and different modulation.
- 4. Measure and record the power level from the system simulator.

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#### 3.3 Peak-to-Average Ratio

#### 3.3.1 Description of the PAR Measurement

Reporting only

#### 3.3.2 Test Procedures

- 1. The EUT was connected to spectrum and system simulator via a power divider.
- 2. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.

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- 3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
- 4. Record the deviation as Peak to Average Ratio.

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#### 3.4 99% Occupied Bandwidth and 26dB Bandwidth Measurement

#### 3.4.1 Description of (Occupied) Bandwidth Limitations Measurement

The 99% occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

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The emission bandwidth is defined as the width of the signal between two points, located at the 2 sides of the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

#### 3.4.2 Test Procedures

- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- 2. The 26dB and 99% occupied bandwidth (BW) of the middle channel for the highest RF power with full RB sizes were measured.

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#### 3.5 Emissions Mask Measurement

#### 3.5.1 Description of Emissions Mask Measurement

Equipment used in this licensed to EA or non-EA systems shall comply with the emission mask provisions of FCC Part 90.691.(a)

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- (a) Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:
- (1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116  $\log_{10}(f/6.1)$  decibels or 50 + 10  $\log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.
- (2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \text{Log}_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

#### 3.5.2 Test Procedures

- 1. The EUT was connected to spectrum analyzer and base station via power divider.
- 2. The emissions mask of low and high channels for the highest RF powers were measured.
- 3. Set RBW and VBW 3 times of RBW to make the measurement with the spectrum analyzer's, and according to KDB 971168 D02 Misc Rev Approve License Devices v02r01 standards, set RBW = 300 Hz to make offsets less than 37.5 kHz from a channel edge, RBW = 100 kHz to make offsets greater than 37.5 kHz, that is allowed.
- 4. The test results were shown below plots with a correction offset factor including cable loss, insertion loss of power divider.

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#### 3.6 Emissions Mask - Out Of Band Emissions Measurement

#### 3.6.1 Description of Conducted Emissions Out of band emissions measurement

The power of any emission FCC Part 90.691 (a)(2) on any frequency removed from the assigned frequency by out of the authorized bandwidth at least 43 + 10 log (P) dB. It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10<sup>th</sup> harmonic.

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#### 3.6.2 Test Procedures

- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- 2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 3. The middle channel for the highest RF power within the transmitting frequency was measured.
- 4. The conducted spurious emission for the whole frequency range was taken.
- 5. For testing below 1GHz, make the measurement with the spectrum analyzer's RBW = 100 kHz, VBW = 3MHz, taking the record of maximum spurious emission.
- 6. For testing above 1GHz, make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
- The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 8. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)

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#### 3.7 Frequency Stability Measurement

#### 3.7.1 Description of Frequency Stability Measurement

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

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#### 3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

#### 3.7.3 Test Procedures for Temperature Variation

- 1. The EUT was set up in the thermal chamber and connected with the base station.
- 2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
- 3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

#### 3.7.4 Test Procedures for Voltage Variation

- 1. The EUT was placed in a temperature chamber at 20±5° C and connected with the base station.
- The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
- 3. The variation in frequency was measured for the worst case.

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#### 3.8 Field Strength of Spurious Radiation Measurement

#### 3.8.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. The power of any emission FCC Part 90.691 on any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

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The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43+10log<sub>10</sub>(P[Watts]) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

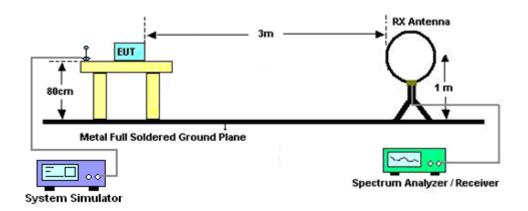
#### 3.8.2 Test Procedures

- 1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
- 2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
- 4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
- 5. For testing below 1GHz, make the measurement with the spectrum analyzer's RBW = 100 kHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
- 6. For testing above 1GHz, make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
- 7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- 8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- 9. Taking the record of output power at antenna port.
- 10. Repeat step 7 to step 8 for another polarization.
- 11. EIRP (dBm) = S.G. Power Tx Cable Loss + Tx Antenna Gain
- 12. ERP (dBm) = EIRP 2.15
- 13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 14. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

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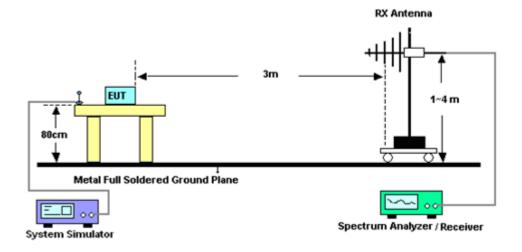
#### 3.8.3 Test Setup

#### For radiated test below 30MHz



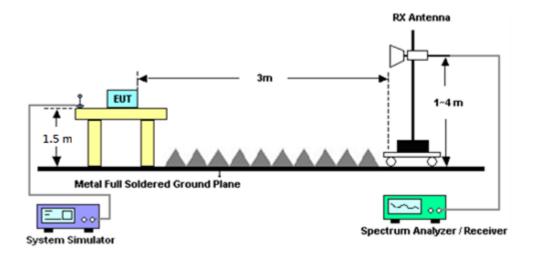
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#### For radiated test from 30MHz to 1GHz



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#### For radiated test above 1GHz



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#### 3.8.4 Test Result of Field Strength of Spurious Radiated

Please refer to Appendix B.

#### Note:

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

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## 4 List of Measuring Equipment

| Instrument           | Brand Name         | Model No.                         | Serial No.           | Characteristics            | Calibration<br>Date | Test Date                       | Due Date      | Remark                   |
|----------------------|--------------------|-----------------------------------|----------------------|----------------------------|---------------------|---------------------------------|---------------|--------------------------|
| Loop Antenna         | Rohde &<br>Schwarz | HFH2-Z2                           | 100488               | 9 kHz~30 MHz               | Sep. 07, 2021       | Feb. 09, 2022~<br>Apr. 27, 2022 | Sep. 06, 2022 | Radiation<br>(03CH12-HY) |
| Bilog Antenna        | TESEQ              | CBL 6111D &<br>00800N1D01N-0<br>6 | 37059 & 01           | 30MHz~1GHz                 | Oct. 09, 2021       | Feb. 09, 2022~<br>Apr. 27, 2022 | Oct. 08. 2022 | Radiation<br>(03CH12-HY) |
| Bilog Antenna        | TESEQ              | CBL 6111D &<br>N-6-06             | 35414 &<br>AT-N0602  | 30MHz~1GHz                 | Oct. 09, 2021       | Feb. 09, 2022~<br>Apr. 27, 2022 | Oct. 08. 2022 | Radiation<br>(03CH12-HY) |
| Horn Antenna         | SCHWARZBE<br>CK    | BBHA 9120 D                       | 9120D-1326           | 1GHz~18GHz                 | Oct. 25, 2021       | Feb. 09, 2022~<br>Apr. 27, 2022 | Oct. 24, 2022 | Radiation<br>(03CH12-HY) |
| Horn Antenna         | SCHWARZBE<br>CK    | BBHA 9120 D                       | 9120D-1212           | 1GHz~18GHz                 | May 18, 2021        | Feb. 09, 2022~<br>Apr. 27, 2022 | May 17, 2022  | Radiation<br>(03CH12-HY) |
| Preamplifier         | COM-POWE<br>R      | PA-103                            | 161075               | 10MHz~1GHz                 | Mar. 24, 2021       | Feb. 09, 2022~<br>Mar. 22, 2022 | Mar. 23, 2022 | Radiation<br>(03CH12-HY) |
| Preamplifier         | COM-POWE<br>R      | PA-103                            | 161075               | 10MHz~1GHz                 | Mar. 23, 2022       | Mar. 23, 2022~<br>Apr. 27, 2022 | Mar. 22, 2023 | Radiation<br>(03CH12-HY) |
| Preamplifier         | Aglient            | 8449B                             | 3008A02375           | 1GHz~26.5GHz               | May 25, 2021        | Feb. 09, 2022~<br>Apr. 27, 2022 | May 24, 2022  | Radiation<br>(03CH12-HY) |
| Preamplifier         | Jet-Power          | JPA0118-55-303<br>K               | 17100018000<br>54002 | 1GHz~18GHz                 | Jun. 16, 2021       | Feb. 09, 2022~<br>Apr. 27, 2022 | Jun. 15, 2022 | Radiation<br>(03CH12-HY) |
| Spectrum<br>Analyzer | Agilent            | N9010A                            | MY53470118           | 10Hz~44GHz                 | Jan. 12, 2022       | Feb. 09, 2022~<br>Apr. 27, 2022 | Jan. 11, 2023 | Radiation<br>(03CH12-HY) |
| RF Cable             | HUBER +<br>SUHNER  | SUCOFLEX 104                      | MY9837/4PE           | 9kHz~30MHz                 | Mar. 11, 2021       | Feb. 09, 2022~<br>Mar. 09, 2022 | Mar. 10, 2022 | Radiation<br>(03CH12-HY) |
| RF Cable             | HUBER +<br>SUHNER  | SUCOFLEX 104                      | MY9837/4PE           | 9kHz~30MHz                 | Mar. 10, 2022       | Mar. 10, 2022~<br>Apr. 27, 2022 | Mar. 09, 2023 | Radiation<br>(03CH12-HY) |
| RF Cable             | HUBER +<br>SUHNER  | SUCOFLEX<br>126E                  | 0058/126E            | 30MHz~18GHz                | Dec. 10, 2021       | Feb. 09, 2022~<br>Apr. 27, 2022 | Dec. 09, 2022 | Radiation<br>(03CH12-HY) |
| RF Cable             | HUBER +<br>SUHNER  | SUCOFLEX 102                      | 505134/2             | 30MHz~40GHz                | Feb. 22, 2021       | Feb. 09, 2022~<br>Feb. 20, 2022 | Feb. 21, 2022 | Radiation<br>(03CH12-HY) |
| RF Cable             | HUBER +<br>SUHNER  | SUCOFLEX 102                      | 505134/2             | 30MHz~40GHz                | Feb. 21, 2022       | Feb. 21, 2022~<br>Apr. 27, 2022 | Feb. 20, 2023 | Radiation<br>(03CH12-HY) |
| RF Cable             | HUBER +<br>SUHNER  | SUCOFLEX 102                      | 800740/2             | 30MHz~40GHz                | Feb. 22, 2021       | Feb. 09, 2022~<br>Feb. 20, 2022 | Feb. 21, 2022 | Radiation<br>(03CH12-HY) |
| RF Cable             | HUBER +<br>SUHNER  | SUCOFLEX 102                      | 800740/2             | 30MHz~40GHz                | Feb. 21, 2022       | Feb. 21, 2022~<br>Apr. 27, 2022 | Feb. 20, 2023 | Radiation<br>(03CH12-HY) |
| Filter               | Wainwright         | WLKS1200-12S<br>S                 | SN2                  | 1.2GHz Low<br>Pass Filter  | Mar. 17, 2021       | Feb. 09, 2022~<br>Mar. 14, 2022 | Mar. 16, 2022 | Radiation<br>(03CH12-HY) |
| Filter               | Wainwright         | WLKS1200-12S<br>S                 | SN2                  | 1.2GHz Low<br>Pass Filter  | Mar. 15, 2022       | Mar. 15, 2022~<br>Apr. 27, 2022 | Mar. 14, 2023 | Radiation<br>(03CH12-HY) |
| Filter               | Wainwright         | WHKX12-1080-1<br>200-15000-60SS   | SN1                  | 1.2GHz High<br>Pass Filter | Mar. 17, 2021       | Feb. 09, 2022~<br>Mar. 14, 2022 | Mar. 16, 2022 | Radiation<br>(03CH12-HY) |
| Filter               | Wainwright         | WHKX12-1080-1<br>200-15000-60SS   | SN1                  | 1.2GHz High<br>Pass Filter | Mar. 15, 2022       | Mar. 15, 2022~<br>Apr. 27, 2022 | Mar. 14, 2023 | Radiation (03CH12-HY)    |
| Filter               | Wainwright         | WHKX12-2700-3<br>000-18000-60ST   | SN2                  | 3GHz High Pass<br>Filter   | Jul. 12, 2021       | Feb. 09, 2022~<br>Apr. 27, 2022 | Jul. 11, 2022 | Radiation (03CH12-HY)    |
| Hygrometer           | TECPEL             | DTM-303B                          | TP140349             | N/A                        | Sep. 30, 2021       | Feb. 09, 2022~<br>Apr. 27, 2022 | Sep. 29, 2022 | Radiation (03CH12-HY)    |

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| Instrument                          | Brand Name         | Model No.                              | Serial No. | Characteristics   | Calibration<br>Date | Test Date                       | Due Date      | Remark                   |
|-------------------------------------|--------------------|--|------------|---|---------------------|---------------------------------|---------------|--------------------------|
| Controller                          | EMEC               | EM1000                                 | N/A        | Control Turn table & Ant Mast   | N/A                 | Feb. 09, 2022~<br>Apr. 27, 2022 | N/A           | Radiation<br>(03CH12-HY) |
| Antenna Mast                        | EMEC               | AM-BS-4500-B                           | N/A        | 1m~4m   | N/A                 | Feb. 09, 2022~<br>Apr. 27, 2022 | N/A           | Radiation<br>(03CH12-HY) |
| Turn Table                          | EMEC               | TT2000                                 | N/A        | 0~360 Degree  | N/A                 | Feb. 09, 2022~<br>Apr. 27, 2022 | N/A           | Radiation<br>(03CH12-HY) |
| Software                            | Audix              | E3 6.2009-8-24                         | RK-000989  | N/A   | N/A                 | Feb. 09, 2022~<br>Apr. 27, 2022 | N/A           | Radiation<br>(03CH12-HY) |
| Radio<br>Communicatio<br>n Analyzer | Anritsu            | MT8821C                                | 6201664755 | 2/3/4G/LTE<br>FDD/TDD<br>with44)/LTE-3C<br>C DLCA/2CC<br>ULCA,<br>CatM1/NB1/NB2 | Jul. 21, 2021       | Jan. 18, 2022~<br>Apr. 22, 2022 | Jul. 20, 2022 | Conducted<br>(TH03-HY)   |
| Spectrum<br>Analyzer                | Rohde &<br>Schwarz | FSV40                                  | 101908     | 10Hz~40GHz  | Oct. 01, 2021       | Jan. 18, 2022~<br>Apr. 22, 2022 | Sep. 30, 2022 | Conducted<br>(TH03-HY)   |
| Thermal<br>Chamber                  | ESPEC              | SH-641                                 | 92013720   | -40°C ~90°C   | Sep. 09, 2021       | Jan. 18, 2022~<br>Apr. 22, 2022 | Sep. 08, 2022 | Conducted<br>(TH03-HY)   |
| DC Power<br>Supply                  | GW Instek          | GPP-2323                               | GES906037  | 0V~64V ; 0A~6A  | Jan. 06, 2022       | Jan. 18, 2022~<br>Apr. 22, 2022 | Jan. 05, 2023 | Conducted<br>(TH03-HY)   |
| Coupler                             | Warison            | 20dB 25W SMA<br>Directional<br>Coupler | #B         | 1-18GHz   | Jan. 07, 2022       | Jan. 18, 2022~<br>Apr. 22, 2022 | Jan. 06, 2023 | Conducted<br>(TH03-HY)   |

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## 5 Uncertainty of Evaluation

#### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

| Measuring Uncertainty for a Level of | 3.10 dB |
|--------------------------------------|---------|
| Confidence of 95% (U = 2Uc(y))       | 3.10 dB |

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#### **Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)**

| Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y)) | 3.39 dB |
|---|---------|
|   |         |

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## **Appendix A. Test Results of Conducted Test**

## Conducted Output Power(Average power & ERP)

|          | LTE     | Band 26 N   | laximum A | verage Po | wer [dBm | ] (GT - LC : | = 4.5 dB) |         |  |
|----------|---------|-------------|-----------|-----------|----------|--------------|-----------|---------|--|
| BW [MHz] | RB Size | RB Offset   | Mod       | Lowest    | Middle   | Highest      | ERP (dBm) | ERP (W) |  |
| 15       | 1       | 0           |           | 22.47     | -        | -            |           |         |  |
| 15       | 1       | 37          |           | 22.46     | -        | -            |           |         |  |
| 15       | 1       | 74          |           | 22.41     | -        | -            |           |         |  |
| 15       | 36      | 0           | QPSK      | 21.44     | -        | -            | 24.82     | 0.3034  |  |
| 15       | 36      | 20          |           | 21.60     | •        | -            |           |         |  |
| 15       | 36      | 39          |           | 21.51     | •        | -            |           |         |  |
| 15       | 75      | 0           |           | 21.51     | •        | -            |           |         |  |
| 15       | 1       | 0           |           | 21.84     | 1        | -            |           | 0.2624  |  |
| 15       | 1       | 37          |           | 21.80     | -        | -            | 24.19     |         |  |
| 15       | 1       | 74          | 16-QAM    | 21.78     | ı        | -            |           |         |  |
| 15       | 36      | 0           |           | 20.50     | •        | -            |           |         |  |
| 15       | 36      | 20          |           | 20.62     | 1        | -            |           |         |  |
| 15       | 36      | 39          |           | 20.53     | 1        | -            |           |         |  |
| 15       | 75      | 0           |           | 20.53     | ı        | -            |           |         |  |
| 15       | 1       | 0           |           | 20.68     | ı        | -            |           |         |  |
| 15       | 1       | 37          |           | 20.74     | •        | -            |           |         |  |
| 15       | 1       | 74          |           | 20.64     | 1        | -            |           |         |  |
| 15       | 36      | 0           | 64-QAM    | 19.48     | -        | -            | 23.09     | 0.2037  |  |
| 15       | 36      | 20          | -         | 19.63     | -        | -            |           |         |  |
| 15       | 36      | 39          |           | 19.51     | -        | -            |           |         |  |
| 15       | 75      | 0           |           | 19.56     | -        | -            |           |         |  |
| Limit    | P       | ower < 100' | W         |           | Result   |              | Pa        | ISS     |  |

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|          | LTE     | Band 26 N   | laximum A | verage Po | wer [dBm] | (GT - LC : | = 4.5 dB) |         |  |
|----------|---------|-------------|-----------|-----------|-----------|------------|-----------|---------|--|
| BW [MHz] | RB Size | RB Offset   | Mod       | Lowest    | Middle    | Highest    | ERP (dBm) | ERP (W) |  |
| 10       | 1       | 0           |           | ı         | 22.42     | -          |           |         |  |
| 10       | 1       | 25          |           | -         | 22.27     | -          |           |         |  |
| 10       | 1       | 49          |           | -         | 22.23     | -          |           |         |  |
| 10       | 25      | 0           | QPSK<br>- | -         | 21.32     | -          | 24.77     | 0.2999  |  |
| 10       | 25      | 12          |           | -         | 21.49     | -          |           |         |  |
| 10       | 25      | 25          |           | -         | 21.40     | -          |           |         |  |
| 10       | 50      | 0           |           | -         | 21.27     | -          |           |         |  |
| 10       | 1       | 0           |           | -         | 21.64     | -          |           | 0.2529  |  |
| 10       | 1       | 25          | 16-QAM    | -         | 21.68     | -          | 24.03     |         |  |
| 10       | 1       | 49          |           | -         | 21.59     | -          |           |         |  |
| 10       | 25      | 0           |           | -         | 20.29     | -          |           |         |  |
| 10       | 25      | 12          |           | -         | 20.39     | -          |           |         |  |
| 10       | 25      | 25          |           | -         | 20.32     | -          |           |         |  |
| 10       | 50      | 0           |           | -         | 20.38     | -          |           |         |  |
| 10       | 1       | 0           |           | -         | 20.53     | -          |           |         |  |
| 10       | 1       | 25          |           | -         | 20.74     | -          |           |         |  |
| 10       | 1       | 49          |           | -         | 20.61     | -          |           |         |  |
| 10       | 25      | 0           | 64-QAM    | -         | 19.28     | -          | 23.09     | 0.2037  |  |
| 10       | 25      | 12          |           | -         | 19.51     | -          |           |         |  |
| 10       | 25      | 25          |           | -         | 19.41     | -          |           |         |  |
| 10       | 50      | 0           |           | -         | 19.31     | -          |           |         |  |
| Limit    | P       | ower < 100' | W         | _         | Result    | _          | Pa        | ISS     |  |



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|          | LTE     | Band 26 M   | laximum A | verage Po | wer [dBm | (GT - LC : | = 4.5 dB) |         |  |
|----------|---------|-------------|-----------|-----------|----------|------------|-----------|---------|--|
| BW [MHz] | RB Size | RB Offset   | Mod       | Lowest    | Middle   | Highest    | ERP (dBm) | ERP (W) |  |
| 5        | 1       | 0           |           | 22.46     | 22.53    | 22.49      |           |         |  |
| 5        | 1       | 12          |           | 22.34     | 22.42    | 22.24      |           |         |  |
| 5        | 1       | 24          |           | 22.36     | 22.34    | 22.46      |           |         |  |
| 5        | 12      | 0           | QPSK      | 21.32     | 21.35    | 21.42      | 24.88     | 0.3076  |  |
| 5        | 12      | 7           |           | 21.51     | 21.56    | 21.51      |           |         |  |
| 5        | 12      | 13          |           | 21.37     | 21.40    | 21.46      |           |         |  |
| 5        | 25      | 0           |           | 21.37     | 21.28    | 21.42      |           |         |  |
| 5        | 1       | 0           |           | 21.67     | 21.73    | 21.59      |           | 0.2559  |  |
| 5        | 1       | 12          |           | 21.61     | 21.68    | 21.71      | 24.08     |         |  |
| 5        | 1       | 24          | 16-QAM    | 21.62     | 21.70    | 21.59      |           |         |  |
| 5        | 12      | 0           |           | 20.41     | 20.45    | 20.32      |           |         |  |
| 5        | 12      | 7           |           | 20.45     | 20.38    | 20.50      |           |         |  |
| 5        | 12      | 13          |           | 20.47     | 20.57    | 20.41      |           |         |  |
| 5        | 25      | 0           |           | 20.36     | 20.40    | 20.26      |           |         |  |
| 5        | 1       | 0           |           | 20.49     | 20.56    | 20.54      |           |         |  |
| 5        | 1       | 12          |           | 20.61     | 20.69    | 20.61      |           |         |  |
| 5        | 1       | 24          |           | 20.45     | 20.46    | 20.50      |           |         |  |
| 5        | 12      | 0           | 64-QAM    | 19.36     | 19.26    | 19.34      | 23.04     | 0.2014  |  |
| 5        | 12      | 7           | -         | 19.50     | 19.56    | 19.40      |           |         |  |
| 5        | 12      | 13          |           | 19.50     | 19.58    | 19.54      | 1         |         |  |
| 5        | 25      | 0           |           | 19.45     | 19.36    | 19.38      |           |         |  |
| Limit    | P       | ower < 100' | W         |           | Result   |            | Pa        | ISS     |  |

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|          | LTE     | Band 26 N   | Maximum A | verage Po | wer [dBm | (GT - LC : | = 4.5 dB) |         |
|----------|---------|-------------|-----------|-----------|----------|------------|-----------|---------|
| BW [MHz] | RB Size | RB Offset   | Mod       | Lowest    | Middle   | Highest    | ERP (dBm) | ERP (W) |
| 3        | 1       | 0           |           | 22.46     | 22.52    | 22.36      |           |         |
| 3        | 1       | 8           |           | 22.26     | 22.24    | 22.16      |           |         |
| 3        | 1       | 14          |           | 22.22     | 22.18    | 22.31      |           |         |
| 3        | 8       | 0           | QPSK      | 21.43     | 21.36    | 21.45      | 24.87     | 0.3069  |
| 3        | 8       | 4           |           | 21.57     | 21.64    | 21.62      |           |         |
| 3        | 8       | 7           |           | 21.39     | 21.29    | 21.37      |           |         |
| 3        | 15      | 0           |           | 21.31     | 21.40    | 21.26      |           |         |
| 3        | 1       | 0           |           | 21.74     | 21.82    | 21.70      |           | 0.2612  |
| 3        | 1       | 8           |           | 21.62     | 21.52    | 21.68      | 24.17     |         |
| 3        | 1       | 14          | 16-QAM    | 21.68     | 21.69    | 21.65      |           |         |
| 3        | 8       | 0           |           | 20.46     | 20.49    | 20.45      |           |         |
| 3        | 8       | 4           |           | 20.44     | 20.47    | 20.38      |           |         |
| 3        | 8       | 7           |           | 20.48     | 20.44    | 20.39      |           |         |
| 3        | 15      | 0           |           | 20.35     | 20.26    | 20.33      |           |         |
| 3        | 1       | 0           |           | 20.49     | 20.58    | 20.54      |           |         |
| 3        | 1       | 8           |           | 20.59     | 20.50    | 20.55      |           |         |
| 3        | 1       | 14          |           | 20.64     | 20.63    | 20.54      |           |         |
| 3        | 8       | 0           | 64-QAM    | 19.42     | 19.46    | 19.40      | 22.99     | 0.1991  |
| 3        | 8       | 4           |           | 19.47     | 19.50    | 19.40      |           |         |
| 3        | 8       | 7           |           | 19.51     | 19.61    | 19.49      | 1         |         |
| 3        | 15      | 0           |           | 19.37     | 19.32    | 19.42      |           |         |
| Limit    | P       | ower < 100' | W         | ·         | Result   |            | Pa        | ISS     |

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|          | LTE     | Band 26 N   | laximum A | verage Po | wer [dBm | ] (GT - LC : | = 4.5 dB) |         |  |
|----------|---------|-------------|-----------|-----------|----------|--------------|-----------|---------|--|
| BW [MHz] | RB Size | RB Offset   | Mod       | Lowest    | Middle   | Highest      | ERP (dBm) | ERP (W) |  |
| 1.4      | 1       | 0           |           | 22.41     | 22.49    | 22.45        |           |         |  |
| 1.4      | 1       | 3           |           | 22.31     | 22.34    | 22.40        |           |         |  |
| 1.4      | 1       | 5           |           | 22.39     | 22.38    | 22.42        |           |         |  |
| 1.4      | 3       | 0           | QPSK      | 22.23     | 22.21    | 22.23        | 24.84     | 0.3048  |  |
| 1.4      | 3       | 1           |           | 22.19     | 22.22    | 22.22        |           |         |  |
| 1.4      | 3       | 3           |           | 22.31     | 22.21    | 22.30        |           |         |  |
| 1.4      | 6       | 0           |           | 21.32     | 21.28    | 21.34        |           |         |  |
| 1.4      | 1       | 0           |           | 21.68     | 21.59    | 21.59        |           | 0.2636  |  |
| 1.4      | 1       | 3           |           | 21.77     | 21.86    | 21.85        | 24.21     |         |  |
| 1.4      | 1       | 5           | 16-QAM    | 21.69     | 21.71    | 21.67        |           |         |  |
| 1.4      | 3       | 0           |           | 21.51     | 21.60    | 21.61        |           |         |  |
| 1.4      | 3       | 1           |           | 21.70     | 21.77    | 21.61        |           |         |  |
| 1.4      | 3       | 3           |           | 21.56     | 21.63    | 21.48        |           |         |  |
| 1.4      | 6       | 0           |           | 20.50     | 20.57    | 20.55        |           |         |  |
| 1.4      | 1       | 0           |           | 20.66     | 20.63    | 20.64        |           |         |  |
| 1.4      | 1       | 3           |           | 20.68     | 20.72    | 20.72        |           |         |  |
| 1.4      | 1       | 5           |           | 20.46     | 20.45    | 20.44        |           |         |  |
| 1.4      | 3       | 0           | 64-QAM    | 20.63     | 20.59    | 20.69        | 23.07     | 0.2028  |  |
| 1.4      | 3       | 1           |           | 20.54     | 20.54    | 20.50        |           |         |  |
| 1.4      | 3       | 3           |           | 20.38     | 20.45    | 20.47        | 1         |         |  |
| 1.4      | 6       | 0           |           | 19.40     | 19.37    | 19.30        |           |         |  |
| Limit    | P       | ower < 100' | W         |           | Result   |              | Pa        | ISS     |  |

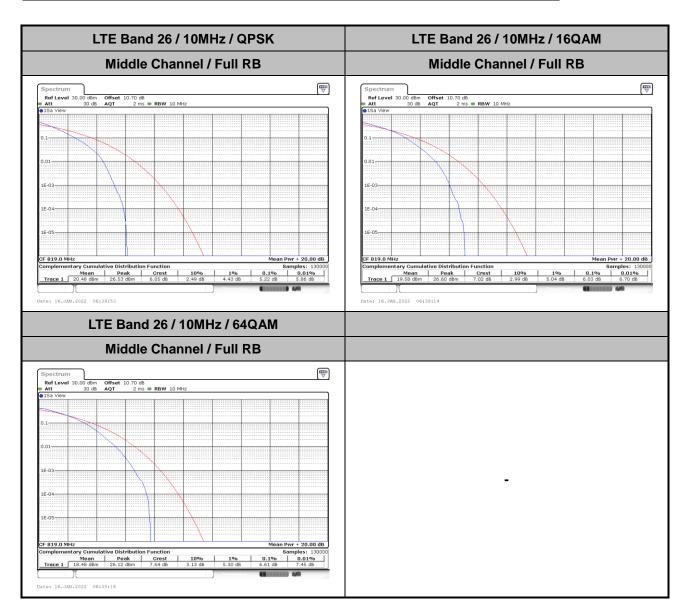
Report No.: FG1N2419-01C

#### LTE Band 26

## Peak-to-Average Ratio

| Mode      | נז      |         |         |             |  |
|-----------|---------|---------|---------|-------------|--|
| Mod.      | QPSK    | 16QAM   | 64QAM   | Limit: 13dB |  |
| RB Size   | Full RB | Full RB | Full RB | Result      |  |
| Middle CH | 5.22    | 6.03    | 6.61    | PASS        |  |

Report No.: FG1N2419-01C



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## 26dB Bandwidth

| Mode      |        |            |       |            | LTE Ba | and 26 :   | 26dB BV | V(MHz)     |       |            |       |            |
|-----------|--------|------------|-------|------------|--------|------------|---------|------------|-------|------------|-------|------------|
| BW        | 1.4MHz |            | 3MHz  |            | 5N     | 5MHz       |         | 10MHz      |       | ИНz        | 20MHz |            |
| Mod.      | QPSK   | 16QAM      | QPSK  | 16QAM      | QPSK   | 16QAM      | QPSK    | 16QAM      | QPSK  | 16QAM      | QPSK  | 16QAM      |
| Low CH    | -      | -          | -     | -          | -      | -          | -       | -          | 14.51 | 14.18      | -     | -          |
| Middle CH | 1.23   | 1.24       | 3.06  | 3.07       | 4.87   | 4.75       | 9.77    | 9.77       | -     | -          | -     | -          |
| Mode      |        |            |       |            | LTE Ba | and 26 :   | 26dB BV | V(MHz)     |       |            |       |            |
| BW        | 1.41   | MHz        | 3M    | lHz        | 5MHz   |            | 10MHz   |            | 15MHz |            | 20MHz |            |
| Mod.      | 64QAM  | 256<br>QAM | 64QAM | 256<br>QAM | 64QAM  | 256<br>QAM | 64QAM   | 256<br>QAM | 64QAM | 256<br>QAM | 64QAM | 256<br>QAM |
| Low CH    | -      | -          | -     | -          | -      | -          | -       | -          | 14.42 | -          | -     | -          |
| Middle CH | 1.23   | -          | 3.06  | -          | 4.88   | -          | 9.75    | -          | -     | -          | -     | -          |

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Report No.: FG1N2419-01C LTE Band 26 Middle Channel / 1.4MHz / QPSK Middle Channel / 1.4MHz / 16QAM 14.55 dBm 818.80420 MHz 26.00 dB 1.236400000 MHz 14.61 dBm 818.53850 MHz 26.00 dE 1.230800000 MHz M1[1] M1[1] dBm--20 dBm--30 dBm 30 dBm 40 dBm-CF 819.0 MHz Function Result 1.2364 MHz 26.00 dB 662.3 
 X-value
 Y-value
 Function

 818.5385 MHz
 14.61 dBm
 nd8 down

 818.3874 MHz
 -11.19 dBm
 nd8

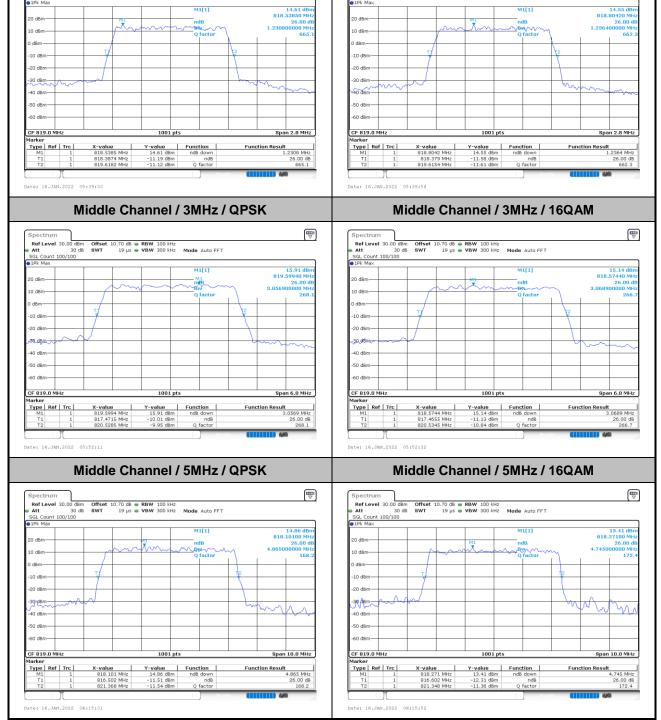
 819.6182 MHz
 -11.12 dBm
 Q factor
 Function Result 1.2308 MHz Type Ref Trc 
 Type
 Ref
 Trc
 X-value
 Y-value
 Function

 M1
 1
 818.8042 MHz
 14.55 dBm
 ndB down
 Middle Channel / 3MHz / QPSK Middle Channel / 3MHz / 16QAM Ref Level 30.00 dBm

Att 30 dB

SGL Count 100/100

PIPK Max .70 dB **● RBW** 100 kHz 19 μs **● VBW** 300 kHz **Mode** Auto FFT 1.70 dB • RBW 100 kHz 19 µs • VBW 300 kHz Mode Auto FFT 15.91 dBi 819.59940 MI 15.14 dBr 818.57440 MH 20 dBm -10 dBm-40 dBm 50 dBm -50 dBm-Type Ref Trc Type Ref Trc Date: 16.JAN.2022 05:52:11 Date: 16.JAN.2022 05:52:32 Middle Channel / 5MHz / QPSK Middle Channel / 5MHz / 16QAM 



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LTE Band 26 Middle Channel / 10MHz / QPSK Middle Channel / 10MHz / 16QAM 14.32 dBn 822.3970 MH 26.00 di M1[1] M1[1] CF 819.0 MHz 
 Marker
 Trc
 X-value
 Y-value
 Function

 M1
 1
 618.061 MHz
 16.42 dBm
 nd8 down

 T1
 1
 614.145 MHz
 -9.21 dBm
 nd8

 T2
 1
 823.915 MHz
 -9.70 dBm
 Q factor
 | Market | Trc | X-value | Y-value | Function | M1 | 1 | 822.397 MHz | 14.32 dbm | ndb down | T1 | 1 | 814.105 MHz | -11.175 dbm | ndb down | T2 | 1 | 823.875 MHz | -11.45 dbm | Q factor | Function Result Function Result Low Channel / 15MHz / QPSK Low Channel / 15MHz / 16QAM Age Lavel 30.00 dBm Offset 10.70 dB RBW 300 kHz
Att 30 dB SWT 12.6 µs VBW 1 MHz Mode Auto FFT

50L Count 100/100

1Pk Max 15.68 dBr 816.6750 MH 20 dBm--10 dBm-20 dBm-

40 dBm

Type Ref Trc

Date: 16.JAN.2022 06:58:34

Function ndB down

Report No.: FG1N2419-01C

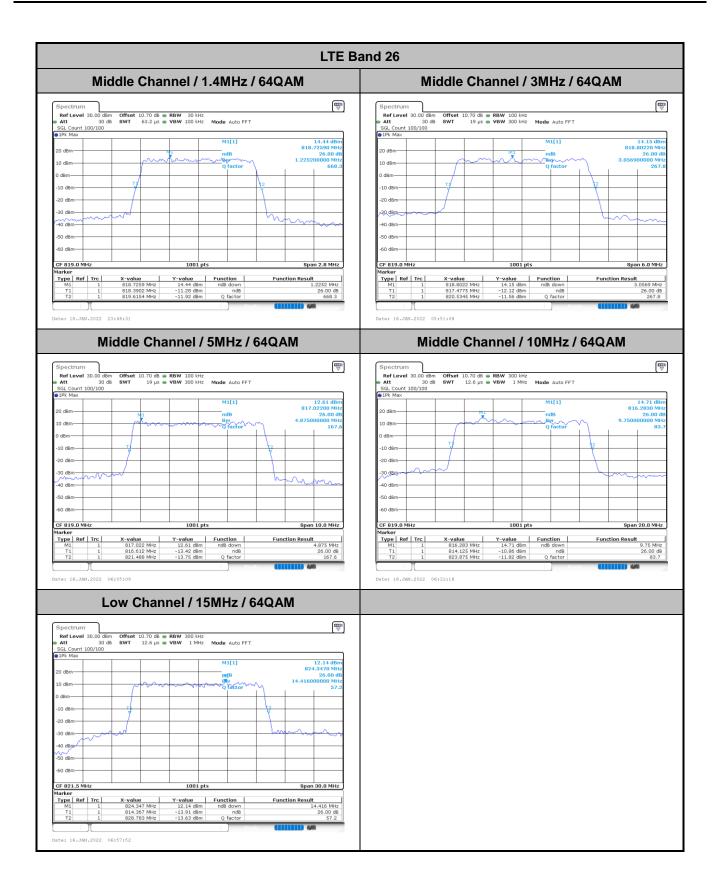
TEL: 886-3-327-3456 Page Number : A2 - 4 of 31

FAX: 886-3-328-4978

Date: 16.JAN.2022 06:59:16

X-value Y-value 1 816.675 MHz 15.68 dBm 814.247 MHz -10.85 dBm 828.753 MHz -10.69 dBm

Function ndB down CC RADIO TEST REPORT Report No. : FG1N2419-01C



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## **Occupied Bandwidth**

| Mode      |        | LTE Band 26 : 99%OBW(MHz) |       |            |        |            |        |            |       |            |       |            |
|-----------|--------|---------------------------|-------|------------|--------|------------|--------|------------|-------|------------|-------|------------|
| BW        | 1.4MHz |                           | 3M    | lHz        | 5N     | 5MHz       |        | 10MHz      |       | ИHz        | 20MHz |            |
| Mod.      | QPSK   | 16QAM                     | QPSK  | 16QAM      | QPSK   | 16QAM      | QPSK   | 16QAM      | QPSK  | 16QAM      | QPSK  | 16QAM      |
| Low CH    | -      | -                         | -     | -          | -      | -          | -      | -          | 13.49 | 13.46      | -     | -          |
| Middle CH | 1.10   | 1.09                      | 2.73  | 2.71       | 4.52   | 4.50       | 9.05   | 9.03       | -     | -          | -     | -          |
| Mode      |        |                           |       |            | LTE Ba | and 26 :   | 99%OBV | V(MHz)     |       |            |       |            |
| BW        | 1.4    | ИНz                       | 3M    | lHz        | 5N     | lHz        | 10MHz  |            | 15MHz |            | 20MHz |            |
| Mod.      | 64QAM  | 256<br>QAM                | 64QAM | 256<br>QAM | 64QAM  | 256<br>QAM | 64QAM  | 256<br>QAM | 64QAM | 256<br>QAM | 64QAM | 256<br>QAM |
| Low CH    | -      | _                         | -     | -          | -      | _          | -      | -          | 13.46 | -          | -     | -          |
| Middle CH | 1.09   | -                         | 2.77  | -          | 4.48   | -          | 9.03   | -          | -     | -          | ı     | -          |

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LTE Band 26 Middle Channel / 1.4MHz / QPSK Middle Channel / 1.4MHz / 16QAM 
 Spectrum
 Offset
 10.70 dB ● RBW
 30 kHz

 Ref Level
 3.0.00 dBm
 Offset
 10.70 dB ● RBW
 30 kHz

 Att
 30 dB
 SWT
 63.2 μs ● VBW
 100 kHz
 Mode
 Auto FFT

 SGL Count
 100/100
 100/100
 100/100
 100/100
 100/100
 100/100
 100/100
 100/100
 100/100
 100/100
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 100 15.64 dBi 818.64480 MH 1.099300 M1[1] 14.47 dBn 819.02800 MH -10 dBm--10 dBm--20 dBm-~~~ 40 dBm--50 dBm -50 dBm CF 819.0 MHz CF 819.0 MHz Span 2.8 MHz 
 X-value
 Y-value
 Function

 818.6448 MHz
 15.64 dBm

 Morker
 Type | Ref
 Trc
 X-value
 Y-value
 Function
 Function Result

 M1
 1
 819.028 MHz
 14.47 dbm
 Occ BW
 1.08811

 T1
 1
 819.45455 MHz
 8.19 dbm
 Occ BW
 1.08811

 T2
 1
 819.45426 MHz
 8.88 dbm
 1.08811
 Type Ref Trc Function Result 7.70 dBm Occ Bw 8.70 dBm 8.18 dBm Occ Bw 8.88 dBm 1.099300699 MHz 1.088111888 MHz Date: 16.JAN.2022 05:38:50 Date: 16.JAN.2022 05:39:12 Middle Channel / 3MHz / QPSK Middle Channel / 3MHz / 16QAM 16.30 dBr 818.66430 MH 2.727272727 MH 20 dBm 10 dBm--10 dBm -10 dBm--20 dBm -20 dBm--40 dBm-40 dBm -50 dBm -50 dBm- 
 X-value
 Y-value
 Function

 818.6643 MHz
 16.30 dBm
 9.32 dBm

 817.63936 MHz
 10.32 dBm
 Occ Bw

 820.36663 MHz
 9.59 dBm
 Function Result Type Ref Trc 
 X-value
 Y-value
 Function

 819.6833 MHz
 15.19 dBm
 2.727272727 MHz 9.57 dBm Occ Bw 9.09 dBm 2.709290709 MHz 817.63936 MHz 820.34865 MHz Date: 16.JAN.2022 05:51:29 Date: 16.JAN.2022 05:51:50 Middle Channel / 5MHz / QPSK Middle Channel / 5MHz / 16QAM 16.12 dBn 817.06200 MH 4.515484515 MH 13.16 dBm 818.36100 MH: 4.495504496 MH: M1[1] M1[1] 10 dBm 0 dBm--10 dBm -30/dBm--30 dBm--60 dBm--60 dBm-CF 819.0 MHz Marker 1001 pts CF 819.0 MHz Span 10.0 MHz 1001 pts Span 10.0 MHz 
 Marker
 Trc
 X-value
 Y-value
 Function

 M1
 1
 817.062 bHz
 16.12 dBm

 T1
 1
 916.75225 MHz
 8.85 dBm
 Occ 8W

 T2
 1
 821.26973 MHz
 9.81 dBm
 Occ 8W

 Marker
 Trope | Ref | Trc |
 X-value |
 Y-value |
 Function

 M1
 1
 818.361 MHz |
 13.16 dBm |
 13.16 dBm |
 17.11 |
 13.16 dBm |
 0.03 dBm |
 0.05 dBm |
 0 Function Result Function Result

Report No.: FG1N2419-01C

4.495504496 MHz

Date: 16.JAN.2022 06:15:10

4.515484515 MHz 1111111 444

Date: 16.JAN.2022 06:06:22

 X-value
 Y-value
 Function

 820.331 MHz
 13.92 dBm
 S814.7567 MHz
 9.38 dBm
 Occ BW

 828.2433 MHz
 10.22 dbm
 Occ BW
 Occ BW

Function Result 13.486513487 MHz

LTE Band 26 Middle Channel / 10MHz / QPSK Middle Channel / 10MHz / 16QAM Ref Level 30.00 dBm Offset 10.70 dB ● RBW 300 kHz
Att 30 dB SWT 12.6 μs ● VBW 1 MHz Mode Auto FFT
SGL Count 100/100
11Pk Max 15.08 dBn 819.5000 MH 9.030969031 MH M1[1] M1[1] 10 dBmdBm--20 dBm--ap dBm 40 dBm-CF 819.0 MHz CF 819.0 MHz Marker Span 20.0 MHz 
 Marker
 Trope
 Ref
 Trc
 X-value
 Y-value
 Function
 Function Result

 M1
 1
 815.563 MHz
 16.12 dbm
 Punction
 Punction Result

 T1
 1
 814.4645 MHz
 10.55 dbm
 Occ 8w
 9.050945

 T2
 1
 823.5155 MHz
 10.37 dbm
 Occ 8w
 9.050945

 Marker
 Trc
 X-value
 Y-value
 Function
 Function Result

 M1
 1
 819,5 MHz
 15,00 dfm
 Process
 Process 9.050949051 MHz 9.030969031 MHz Low Channel / 15MHz / QPSK Low Channel / 15MHz / 16QAM 20 dBm-10 dBm--10 dBm -10 dBm--20 dBm--40 dBm -40 dβm² -50 dBm-

 Marker
 Trppe
 Ref
 Trc
 X-value
 Y-value
 Function

 M1
 1
 823.238 MHz
 13.45 dbm
 13.45 dbm

 T1
 1
 814.7867 MHz
 8.54 dbm
 Occ 8w

 T2
 1
 828.2433 MHz
 8.83 dbm
 Occ 8w

Date: 16.JAN.2022 06:58:13

Report No.: FG1N2419-01C

13.456543457 MHz

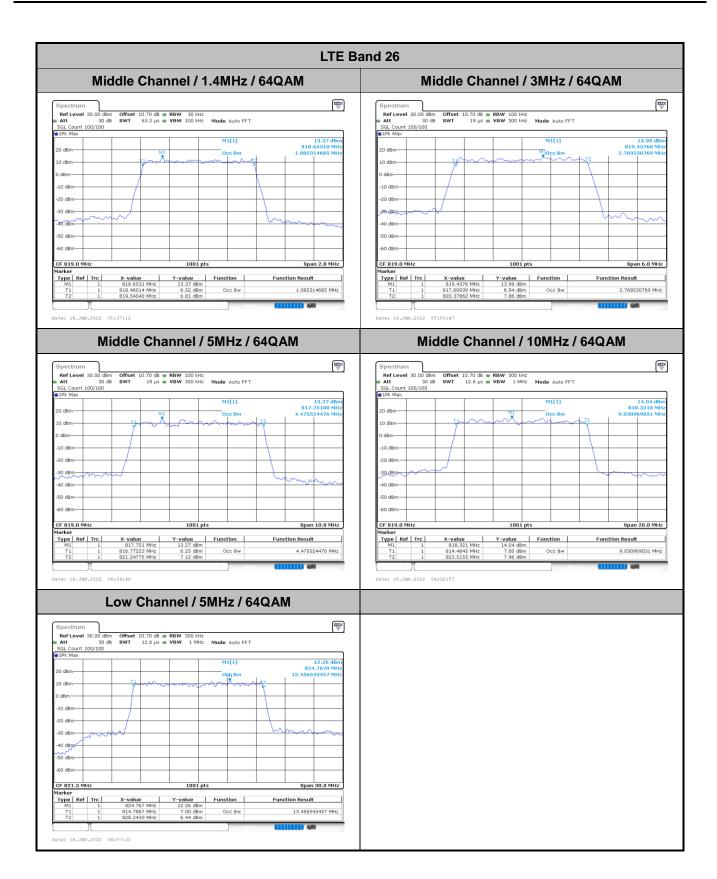
TEL: 886-3-327-3456 Page Number : A2 - 8 of 31

FAX: 886-3-328-4978

Type Ref Trc

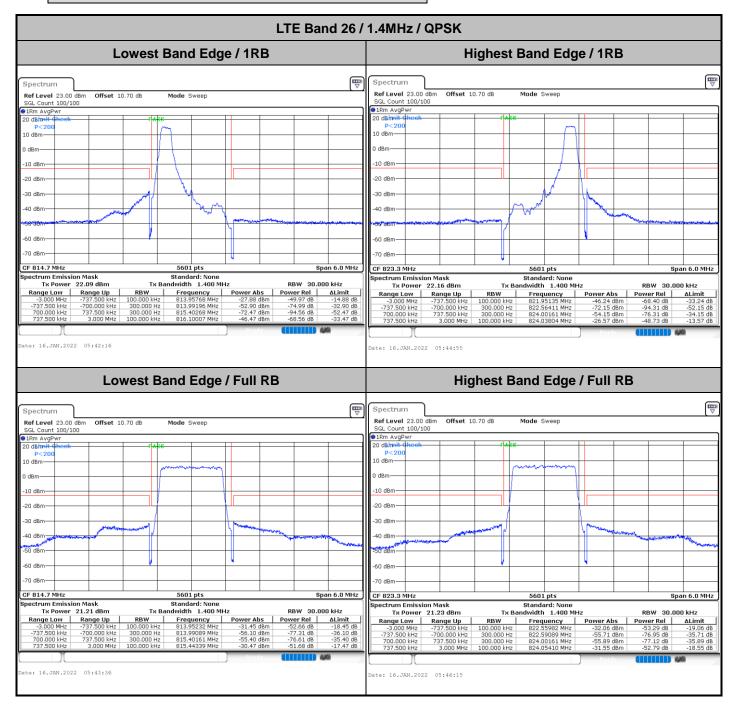
Date: 16.JAN.2022 06:58:55

CC RADIO TEST REPORT Report No. : FG1N2419-01C



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## Emission masks - In-band emissions



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LTE Band 26 / 1.4MHz / 16QAM Lowest Band Edge / 1 RB Highest Band Edge / 1 RB Spectrum Ref Level 23.00 dBm Offset 10.70 dB Mode Sweep Ref Level 23.00 dBm SGL Count 100/100 Offset 10.70 dB Mode Sweep SGL Count 100/100 SGL CC ●1Rm AvgPwr -10 dBm -10 dBm 20 dBr -20 dBm 5601 pts n 6.0 MHz Span 6.0 MHz CF 823.3 MHz 5601 pts Standard: None Tx Bandwidth 1.400 MHz Spectrum Emission Mask Standard: None Tx Power 21.72 dBm

Range Low Range Up

-3,000 MHz -737,500 kHz Tx Bandwidth 1.400 MHz RBW 30.000 kHz Frequency Power Abs
2 813.95982 MHz -26.97 dBm
5 813.99304 MHz -53.48 dBm
6 815.4804 MHz -73.14 dBm
7 815.55052 MHz -46.88 dBm Frequency te: 16.JAN.2022 05:42:56 Date: 16.JAN.2022 05:45:35 Lowest Band Edge / Full RB **Highest Band Edge / Full RB** Spectrum Offset 10.70 dB Ref Level 23.00 dBm Offset 10.70 dB Mode Sweep SGL Count 100/100 1Rm AvgPwr GL Count 100/100 20 dBim 10 dBm -10 dBm -10 dBm -20 dBm 30 dBm -30 dBm 40 dBm 60 dBn -60 dBm 70 dBm CF 823.3 MHz

spectrum Emis sor Mask
Tx Power 20.33 dBm
Tx Bange Low
Range Low
3,000 MHz -737.500 kHz 100.000 kHz
-737.500 kHz -737.500 kHz 300.000 Hz
-700.000 kHz 737.500 kHz 300.000 Hz
-700.000 kHz 737.500 kHz 100.000 kHz Span 6.0 MHz 5601 pts 5601 pts Span 6.0 MHz ctrum Emission Mask Standard: None Tx Bandwidth 1.400 MHz Standard: None dwidth 1.400 MHz RBW 30.000 kHz Tx Power 20.38 dBm Тх Ва RBW 30.000 kHz 
 Frequency
 Power Abs

 822.56196 MHz
 -32.65 dB
 te: 16.JAN.2022 05:44:15 Date: 16.JAN.2022 05:46:54

Report No.: FG1N2419-01C

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LTE Band 26 / 1.4MHz / 64QAM Lowest Band Edge / 1 RB Highest Band Edge / 1 RB Spectrum Ref Level 23.00 dBm Offset 10.70 dB Mode Sweep Ref Level 23.00 dBm SGL Count 100/100 Offset 10.70 dB Mode Sweep SGL Count 100/100 SGL C. ●1Rm AvgPwr -10 dBm -10 dBm 20 dBr -20 dBm CF 814.7 MHz 5601 pts n 6.0 MHz Span 6.0 MHz CF 823.3 MHz 5601 pts ectrum Emission Mask Tx Power 19.38 dBm Standard: None Tx Bandwidth 1.400 MHz Spectrum Emission Mask Standard: None Tx Power 20.59 dBm

nge Low Range Up

-3.000 MHz -737.500 kHz Tx Bandwidth 1.400 MHz RBW 30.000 kHz Range Low Range Up
-3.000 MHz -737.500 kHz
-737.500 kHz -700.000 kHz
700.000 kHz 737.500 kHz
737.500 kHz 3.000 MHz Frequency Power Abs 2 813.96089 MHz -28.60 dBm 813.99196 MHz -53.77 dBm 2 815.42946 MHz -73.41 dBm 2 815.57194 MHz -47.35 dBm te: 16.JAN.2022 05:47:34 Date: 16.JAN.2022 05:48:53 Lowest Band Edge / Full RB **Highest Band Edge / Full RB** Spectrum Offset 10.70 dB Ref Level 23.00 dBm Offset 10.70 dB Mode Sweep SGL Count 100/100 1Rm AvgPwr GL Count 100/100 20 dBim 10 dBm -10 dBm -10 dBm -20 dBm 30 dBm -30 dBm 40 dBm 60 dBn -60 dBm 70 dBm CF 823.3 MHz

spectrum Emission Mask
Tx Power 19.28 dBm

Range Low Range Up

-3,000 MHz -737.500 kHz 100.000 kHz
-737.500 kHz -730.000 kHz 300.000 Hz

-700.000 kHz 737.500 kHz 300.000 Hz

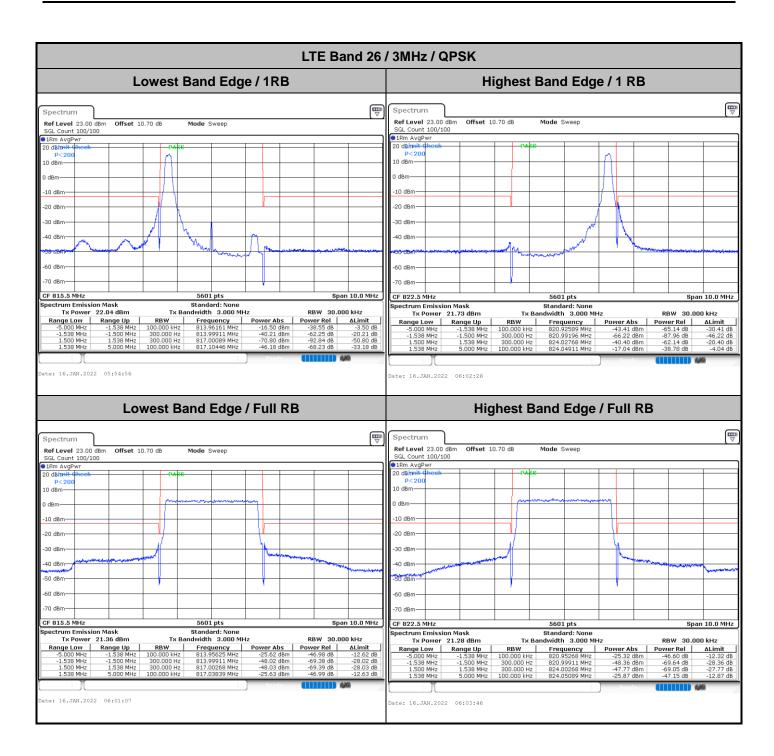
-700.000 kHz 737.500 kHz 100.000 kHz
-700.000 kHz 737.500 kHz 100.000 kHz Span 6.0 MHz 5601 pts CF 823.3 MHz 5601 pts Span 6.0 MHz ctrum Emission Mask Standard: None Tx Bandwidth 1.400 MHz Standard: None dwidth 1.400 MHz RBW 30.000 kHz Tx Power 19.35 dBm Тх Ва RBW 30.000 kHz Frequency 813.95982 MHz 
 Frequency
 Power Abs

 822,54482 MHz
 -33.86 dB

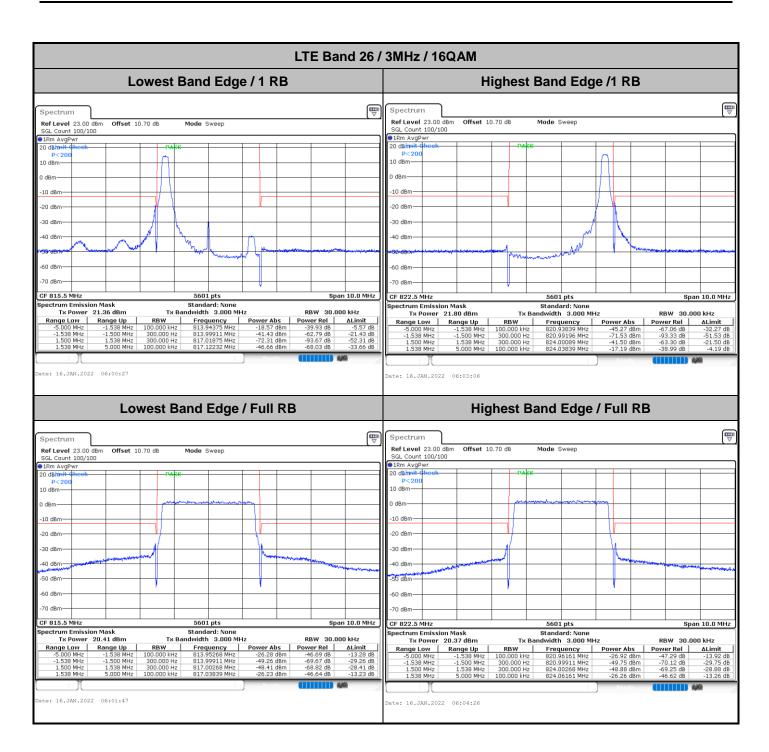
 822,59411 MHz
 -59.27 dB
 Power Rel | ALimit te: 16.JAN.2022 05:48:13 Date: 16.JAN.2022 05:49:33

Report No.: FG1N2419-01C

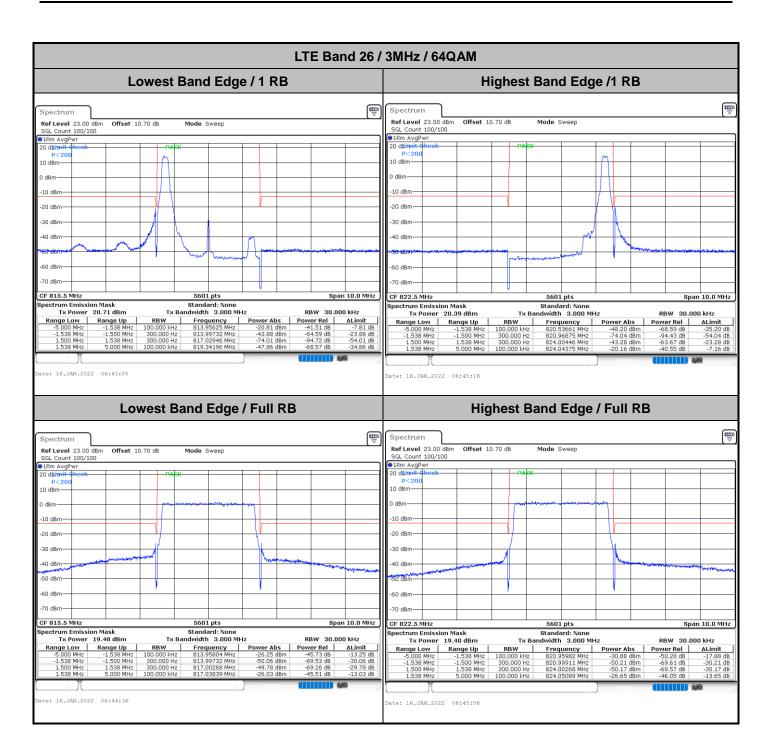
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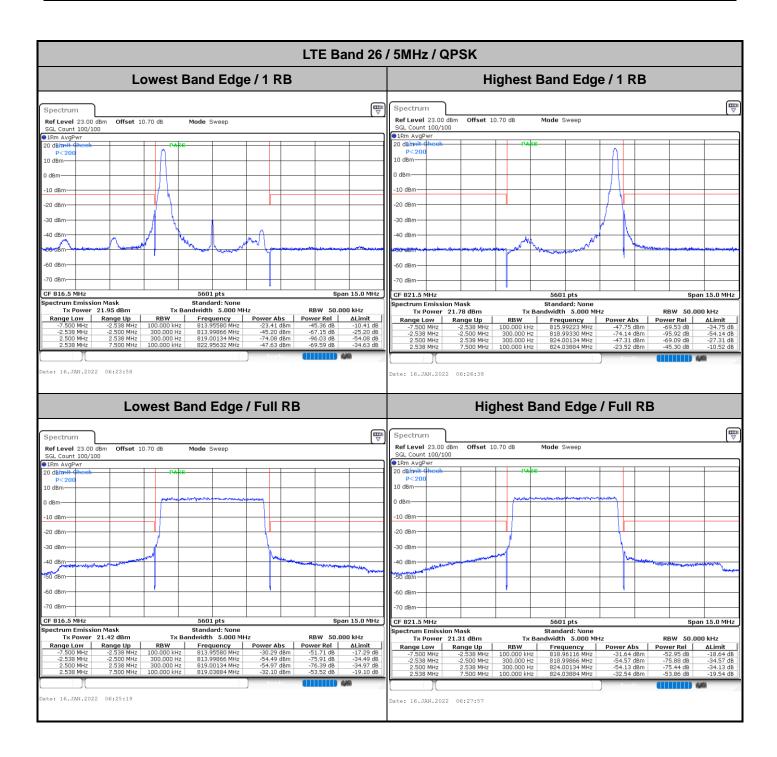
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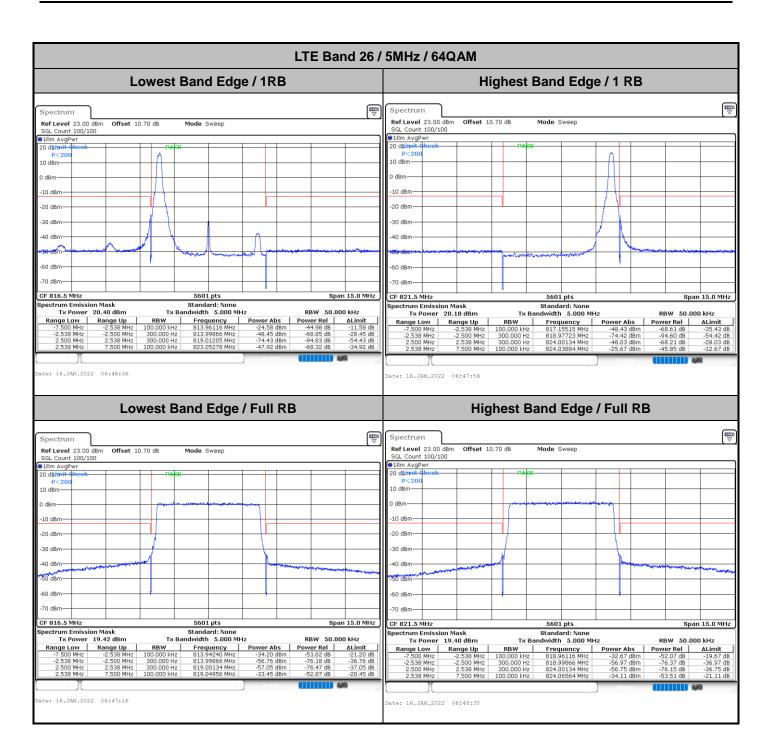
LTE Band 26 / 5MHz / 16QAM Lowest Band Edge / 1RB Highest Band Edge / 1 RB Spectrum Ref Level 23.00 dBm Offset 10.70 dB Mode Sweep Ref Level 23.00 dBm SGL Count 100/100 Offset 10.70 dB Mode Sweep SGL Cou. 1Rm AvgPwr SGL Count 100/100 -10 dBm 10 dBm -20 dBm 5601 pts 15.0 MHz Span 15.0 MHz CF 821.5 MHz 5601 pts Dectrum Emission Mask
Tx Power 21.32 dBm
Range Low Range Up
-7.500 MHz -2.538 MHz
-2.530 MHz -2.500 MHz
2.530 MHz 7.500 MHz
2.538 MHz 7.500 MHz Standard: None Tx Bandwidth 5.000 MHz Spectrum Emission Mask Standard: None RBW 50.000 kHz Tx Power 21.09 dBm

nge Low Range Up

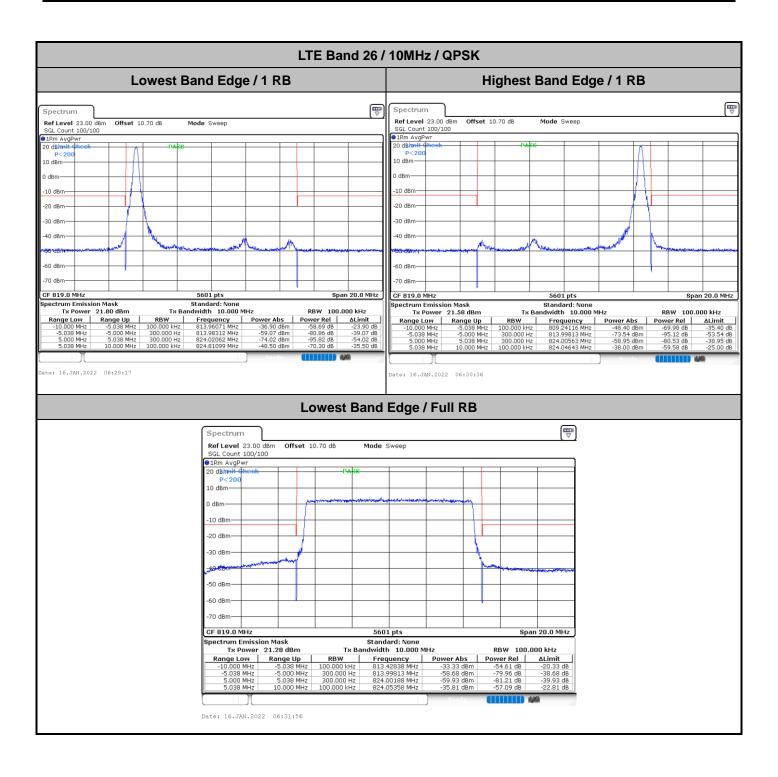
-7.500 MHz -2.538 MH; Tx Bandwidth 5.000 MHz RBW 50.000 kHz Frequency Power Abs
2 813.96116 MHz -23.26 dBm
813.99866 MHz -47.89 dBm
2 819.00402 MHz -74.18 dBm
2 822.92953 MHz -47.73 dBm Frequency 817.18463 MHz te: 16.JAN.2022 06:24:39 Date: 16.JAN.2022 06:27:18 Lowest Band Edge / Full RB **Highest Band Edge / Full RB** Spectrum Offset 10.70 dB Ref Level 23.00 dBm Offset 10.70 dB Mode Sweep SGL Count 100/100 1Rm AvgPwr GL Count 100/100 20 dBim 10 dBm -10 dBm -10 dBm -20 dBm 30 dBm -30 dBm 40 dBm -60 dBm 5601 pts Span 15.0 MHz Span 15.0 MHz CF 816.5 MHz CF 821.5 MHz 5601 pts GF 821.5 MHz
spectrum Emission Mask
Tx Power 20.38 dBm
Range Low Range Up
7.500 MHz 2.538 MHz
2.538 MHz -2.500 MHz
2.538 MHz 2.538 MHz
2.538 MHz 7.500 MHz ctrum Emission Mask Standard: None Tx Bandwidth 5.000 MHz Standard: None dwidth 5.000 MHz Tx Power 20.46 dBm RBW 50.000 kHz Тх Ва RBW 50.000 kHz Range Up -2 538 MH; RBW 100.000 kHz 300.000 Hz 300.000 Hz 100.000 kHz Frequency Power Abs 818.95848 MHz -32.83 dB te: 16.JAN.2022 06:25:58 Date: 16.JAN.2022 06:28:37

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LTE Band 26 / 10MHz / 16QAM Lowest Band Edge / 1 RB Highest Band Edge / 1 RB Spectrum Ref Level 23.00 dBm SGL Count 100/100 Offset 10.70 dB Ref Level 23.00 dBm Offset 10.70 dB Mode Sweep SGL Count 100/100 ●1Rm AvgPw 20 dBi<del>mnit Gl</del> 1Rm AvgPwr 10 dBm dBm -10 dBm -20 dBr 20 dBr 30 dBm CF 819.0 MHz 5601 pts CF 819.0 MHz 5601 pts | Tell | United | Column | Col | Spectrum Emission Mask | Tx Power | 21.05 dBm | Range Low | Range Up | -10.000 MHz | -5.038 MHz | Standard: None Tx Bandwidth 10.000 MHz Standard: None RBW 100.000 kHz Тх Ba dwidth 10.000 MHz RBW 100.000 kHz Frequency 912.19579 MHz 
 Frequency
 Power Abs

 813.96071 MHz
 -37.18 dBm

 813.99813 MHz
 -60.14 dBm

 824.00563 MHz
 -74.39 dBm

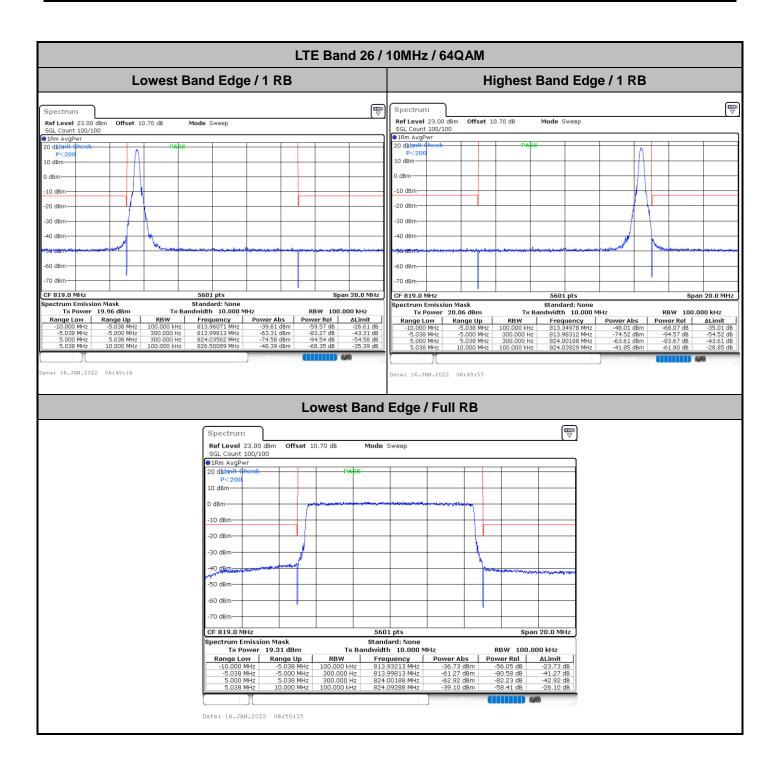
 827.16898 MHz
 -48.30 dBm
 te: 16.JAN.2022 06:29:57 Lowest Band Edge / Full RB Spectrum Ref Level 23.00 dBm Mode Sweep SGL Count 100/100 ●1Rm AvgPwr 10 dBm-0 dBm -10 dBm--20 dBm -30 dBm--60 dBm CF 819.0 MHz 5601 pts pectrum Emission Mask Standard: None Tx Power 20.25 dBm

Range Low Range Up

-10.000 MHz -5.038 MH Tx Bandwidth 10.000 MHz RBW 100.000 kHz | RBW | Frequency | 10.000 | RBW | Frequency | 100.000 kHz | 813.96071 MHz | 300.000 Hz | 813.9813 MHz | 2 300.000 Hz | 824.00188 MHz | 100.000 kHz | 824.05000 MHz | 824.0500 Date: 16.JAN.2022 06:32:35

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LTE Band 26 / 15MHz / QPSK Lowest Band Edge / 1 RB Highest Band Edge / 1 RB Spectrum **Ref Level** 23.00 dBm **Offset** 10.70 dB SGL Count 100/100 Ref Level 23.00 dBm SGL Count 100/100 • 1Rm AvgPwr Offset 10.70 dB Mode Sweep Mode Sweep O 1Rm AvgPw 20 dBimit G P<200 P<20 10 dBm— -10 dBm--20 dBn 20 dBn CF 821.5 MHz 5601 pts CF 821.5 MHz 5601 pts Span 30.0 MHz Tectrum Emission Mask
Tx Power 21.37 dBm
Range Low Range Up
-15.000 MHz -7.538 MHz
-7.538 MHz -7.500 MHz
-7.538 MHz 15.000 MHz
-7.538 MHz 15.000 MHz | Spectrum Emission Mask | Tx Power | 21.62 dBm | Range Low | Range Up | -15.000 MHz | -7.538 MHz | Standard: None Tx Bandwidth 15.000 MHz Standard: None RBW 100.000 kHz Tx Bandwidth 15.000 MHz RBW 100.000 kHz 
 RBW
 Frequency
 Power Abs

 100.000 kHz
 813.95446 MHz
 -37.59 dBm

 300.000 Hz
 813.99732 MHz
 -60.00 dBm

 300.000 Hz
 829.03482 MHz
 -71.66 dBm

 100.000 kHz
 829.07768 MHz
 -46.34 dBm
 te: 16.JAN.2022 06:39:56 Lowest Band Edge / Full RB Spectrum Ref Level 23.00 dBm Mode Sweep SGL Count 100/100

1Rm AvgPwr
20 dBimit theek
P<200 10 dBm-0 dBm -10 dBm--30 dBm--40 dBm -60 dBm 5601 pts Span 30.0 MHz CF 821.5 MHz Spectrum Emission Mask Tx Power 21.19 dBm

Range Low Range Up

-15.000 MHz -7.538 MHz Tx Bandwidth 15.000 MHz RBW 100.000 kHz Power Rel ΔLimit
-57.64 dB -23.45
-82.62 dB -41.43
-81.41 dB -40.22
-56.31 dB -22.12 Date: 16.JAN.2022 06:42:35

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LTE Band 26 / 15MHz / 16QAM Lowest Band Edge / 1 RB Highest Band Edge / 1 RB Spectrum **Ref Level** 23.00 dBm **Offset** 10.70 dB SGL Count 100/100 Ref Level 23.00 dBm SGL Count 100/100 • 1Rm AvgPwr Offset 10.70 dB Mode Sweep Mode Sweep O 1Rm AvgPw 20 dBimit G P<200 P<20 10 dBm— -10 dBm -20 dBn 20 dBr CF 821.5 MHz 5601 pts CF 821.5 MHz 5601 pts Span 30.0 MHz | Spectrum Emission Mask | Tx Power | 20.72 dBm | Range Low | Range Up | -15.000 MHz | -7.538 MHz | Standard: None Tx Bandwidth 15.000 MHz Standard: None RBW 100.000 kHz Tx Bandwidth 15.000 MHz RBW 100.000 kHz 
 RBW
 Frequency
 Power Abs

 100.000 kHz
 813.93839 MHz
 -38.47 dBm

 300.000 Hz
 813.99732 MHz
 -60.56 dBm

 300.000 Hz
 829.00804 MHz
 -73.89 dBm

 100.000 kHz
 829.12054 MHz
 -48.39 dBm
 te: 16.JAN.2022 06:40:36 Lowest Band Edge / Full RB Spectrum Ref Level 23.00 dBm Mode Sweep SGL Count 100/100

1Rm AvgPwr
20 dBimit theek
P<200 10 dBm-0 dBm -10 dBm--30 dBm--40 dBm -60 dBm 5601 pts Span 30.0 MHz CF 821.5 MHz Spectrum Emission Mask Standard: None Tx Power 20.24 dBm

Range Low Range Up

-15 000 MHz -7 538 MHz Tx Bandwidth 15.000 MHz RBW 100.000 kHz Frequency 913,93304 MHz Power Rel ∆Limit Date: 16.JAN.2022 06:43:15

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LTE Band 26 / 15MHz / 64QAM Lowest Band Edge / 1 RB Highest Band Edge / 1 RB Spectrum **Ref Level** 23.00 dBm **Offset** 10.70 dB SGL Count 100/100 Ref Level 23.00 dBm SGL Count 100/100 • 1Rm AvgPwr Offset 10.70 dB Mode Sweep Mode Sweep O 1Rm AvgPw 20 dBimit G P<200 P<20 10 dBm— -10 dBm -20 dBn 20 dBn 5601 pts 5601 pts Span 30.0 MHz Standard: None Tx Bandwidth 15.000 MHz Standard: None RBW 100.000 kHz Tx Bandwidth 15.000 MHz RBW 100.000 kHz | Frequency | Power Abs | 813.93839 MHz | -36.88 dBm | 61.76 dBm | 62.829.02411 MHz | -74.50 dBm | 836.09554 MHz | -48.07 dBm | te: 16.JAN.2022 06:51:49 Lowest Band Edge / Full RB Spectrum Ref Level 23.00 dBm Mode Sweep SGL Count 100/100

1Rm AvgPwr
20 dBimit theek
P<200 10 dBm-0 dBm -10 dBm--30 dBm -40 dBm -60 dBm 5601 pts Span 30.0 MHz CF 821.5 MHz Spectrum Emission Mask Sto...

3andwidth 10...

Frequency

z 813.95982 MHz
813.98125 MHz
70804 MHz Standard: None Tx Power 19.22 dBm

Range Low | Range Up Tx Bandwidth 15.000 MHz RBW 100.000 kHz Date: 16.JAN.2022 06:57:09

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