



FCC RADIO TEST REPORT

FCC ID : N7NEM92

Equipment: Wireless Module

Brand Name : AirPrime
Model Name : EM9293

Applicant : Sierra Wireless, ULC

13811 Wireless Way, Richmond, BC V6V 3A4 Canada

Manufacturer : Sierra Wireless, ULC

13811 Wireless Way, Richmond, BC V6V 3A4 Canada

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

The product was received on Dec. 20, 2022 and testing was performed from Apr. 06, 2023 to Jul. 19, 2023. 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 from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

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

TEL: 886-3-327-3456 Page Number : 1 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

Table of Contents

Report No. : FG2D2006E

His	tory	of this test report	3
Su	mmar	ry of Test Result	4
1	Gene	eral Description	5
	1.1	Feature of Equipment Under Test	5
	1.2	Modification of EUT	
	1.3	Testing Site	5
	1.4	Applied Standards	6
2	Test	Configuration of Equipment Under Test	7
	2.1	Test Mode	7
	2.2	Connection Diagram of Test System	8
	2.3	Support Unit used in test configuration and system	8
	2.4	Measurement Results Explanation Example	
	2.5	Frequency List of Low/Middle/High Channels	9
3	Con	ducted Test Items	10
	3.1	Measuring Instruments	10
	3.2	Conducted Output Power Measurement	11
	3.3	Peak-to-Average Ratio	12
	3.4	99% Occupied Bandwidth and 26dB Bandwidth Measurement	13
	3.5	Emissions Mask Measurement	14
	3.6	Emissions Mask – Out Of Band Emissions Measurement	15
	3.7	Frequency Stability Measurement	16
	3.8	Field Strength of Spurious Radiation Measurement	17
4	List	of Measuring Equipment	20
5	Meas	surement Uncertainty	21
Ap	pendi	ix A. Test Results of Conducted Test	
Ap	pendi	ix B. Test Results of Radiated Test	

TEL: 886-3-327-3456 Page Number : 2 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

History of this test report

Report No. : FG2D2006E

Report No.	Version	Description	Issue Date
FG2D2006E	01	Initial issue of report	Sep. 07, 2023

TEL: 886-3-327-3456 Page Number : 3 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

Summary of Test Result

Report No.: FG2D2006E

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046 §90.635	Conducted Output Power	Pass	-
3.3	-	Peak-to-Average Ratio	Reporting only	-
3.4	§2.1049 §90.209	Occupied Bandwidth and 26dB Bandwidth	Reporting only	-
3.5	§2.1051 §90.691	Emission masks – In-band emissions	Pass	-
3.6	§2.1051 §90.691	Emission masks – Out of band emissions	Pass	-
3.7	§2.1055 §90.213	Frequency Stability for Temperature & Voltage	Pass	-
3.8	§2.1053 §90.691	Field Strength of Spurious Radiation	Pass	32.76 dB under the limit at 2443.00 MHz

Conformity Assessment Condition:

- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the
 regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who
 shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken
 into account.
- The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:

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

Reviewed by: Danny Lee

Report Producer: Rachel Hsieh

TEL: 886-3-327-3456 Page Number : 4 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

1 General Description

1.1 Feature of Equipment Under Test

Product Feature
General Specs
WCDMA/LTE/5G NR, and GNSS.

Report No.: FG2D2006E

Remark:

- 1. The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.
- 2. The maximum allowable antenna gain is determined by the manufacturer.

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 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.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No.
Test Site No.	TH03-HY
Test Engineer	Cotty Hsu
Temperature (°C)	22.3~22.9
Relative Humidity (%)	52~54

Test Site Sporton International Inc. Wensan Laboratory					
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855				
Test Site No.	Sporton Site No.				
Test Site No.	03CH11-HY (TAF Code: 3786)				
Test Engineer	Yuan Lee, Bank Lin and Troye Hsieh				
Temperature (°C)	19.8~23.5				
Relative Humidity (%)	53.1~68.1				
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

TEL: 886-3-327-3456 Page Number : 5 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

1.4 Applied Standards

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

Report No.: FG2D2006E

- 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:

- All the test items were validated and recorded in accordance with the standards without any
 modification during the testing.
- 2. The TAF code is not including all the FCC KDB listed without accreditation.

TEL: 886-3-327-3456 Page Number : 6 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

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. Horizontal and Ant. Vertical), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report.

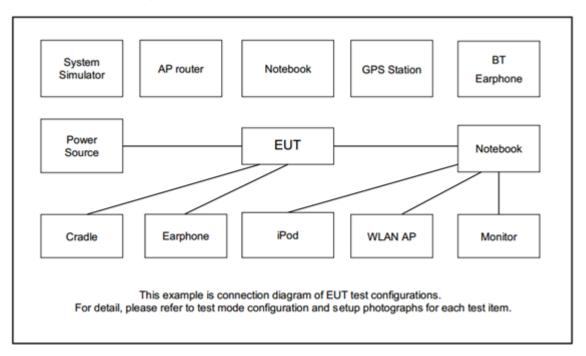
Report No.: FG2D2006E

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

Conducted		Bandwidth (MHz)			Modulation			RB#			Test Channel						
Test Cases	Band	1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	М	Н
Max. Output Power	26	٧	٧	v	v	٧	-	v	v	v	v	v	v	v	٧	٧	v
Peak-to-Average Ratio	26				v	>	-	v	v	v	v			v		٧	
26dB and 99% Bandwidth	26	>	>	v	v	>	-	v	v	v	v			٧	>	>	
Emission masks In-band emissions	26	v	v	v	v	v	-	v	v	v	v	v		٧	v		v
Emission masks – Out of band emissions	26	٧	v	v	v	v	-	v				v			v	v	v
Frequency Stability	26	-	-		v	v	-	v						٧	v	v	
Radiated Spurious Emission	26		Worst Case V V					v									
Remark	2. Th 3. LT El	 The mark "-" means that this bandwidth is not supported. LTE Band26 transmit frequency for part22 rule is 824MHz-849MHz, for part90 rule is 814MHz-824MHz. total ERP of 15MHz bandwidth across Part 22H and Part 90S complies the ERP limit line of part22 rule, therefore ERP of the partial frequency spectrum which falls within part 22 also complies. 															

TEL: 886-3-327-3456 Page Number : 7 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

2.2 Connection Diagram of Test System



Report No.: FG2D2006E

2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	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)

TEL: 886-3-327-3456 Page Number : 8 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

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	-	-					
40	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					

Report No.: FG2D2006E

LTE Band 26 Channel and Frequency List								
BW [MHz]	Channel/Frequency(MHz)	-	cross-rule channels	-				
15	Channel	-	26790	-				
15	Frequency	-	824	-				
40	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	-				

TEL: 886-3-327-3456 Page Number : 9 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

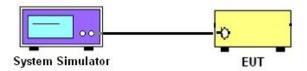
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

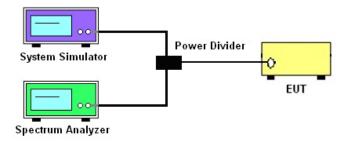
3.1.1 Test Setup

3.1.2 Conducted Output Power

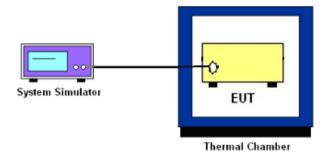


Report No.: FG2D2006E

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.

TEL: 886-3-327-3456 Page Number : 10 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

3.2 Conducted Output Power Measurement

3.2.1 Description of the Conducted Output Power 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.

Report No.: FG2D2006E

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

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.

TEL: 886-3-327-3456 Page Number : 11 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

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.

Report No.: FG2D2006E

- 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.

TEL: 886-3-327-3456 Page Number : 12 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

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.

Report No.: FG2D2006E

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.

TEL: 886-3-327-3456 Page Number : 13 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

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)

Report No.: FG2D2006E

- (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.

TEL: 886-3-327-3456 Page Number : 14 of 21
FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

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 10th harmonic.

Report No.: FG2D2006E

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)

TEL: 886-3-327-3456 Page Number : 15 of 21
FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

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.

Report No.: FG2D2006E

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.

TEL: 886-3-327-3456 Page Number : 16 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

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.

Report No.: FG2D2006E

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+10log₁₀(P[Watts]) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

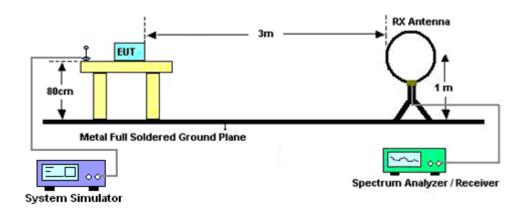
3.8.2 Test Procedures

- 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)

TEL: 886-3-327-3456 Page Number : 17 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

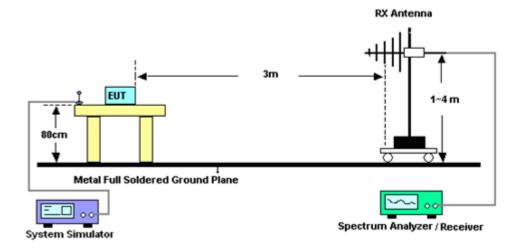
3.8.3 Test Setup

For radiated test below 30MHz



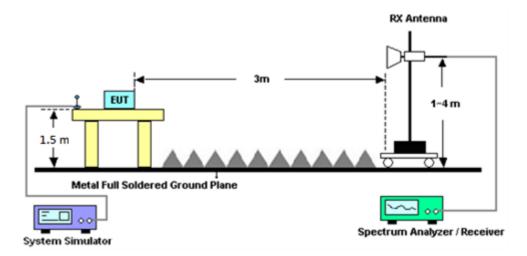
Report No. : FG2D2006E

For radiated test from 30MHz to 1GHz



TEL: 886-3-327-3456 Page Number : 18 of 21 FAX: 886-3-328-4978 : Sep. 07, 2023

For radiated test above 1GHz



Report No.: FG2D2006E

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.

TEL: 886-3-327-3456 Page Number : 19 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LOOP Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 20, 2022	Apr. 06, 2023~ Jul. 19, 2023	Sep. 19, 2023	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 08, 2022	Apr. 06, 2023~ Jul. 19, 2023	Oct. 07, 2023	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-01620	1GHz~18GHz	Aug. 24, 2022	Apr. 06, 2023~ Jul. 19, 2023	Aug. 23, 2023	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1326	1GHz~18GHz	Aug. 24, 2022	Apr. 06, 2023~ Jul. 19, 2023	Aug. 23, 2023	Radiation (03CH11-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	Jan. 11, 2023	Apr. 06, 2023~ Jul. 19, 2023	Jan. 10, 2024	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 09, 2022	Apr. 06, 2023~ Jul. 19, 2023	Dec. 08, 2023	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 09, 2022	Apr. 06, 2023~ Jul. 19, 2023	Nov. 08, 2023	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-303	17100018000 55007	1GHz~18GHz	Jun. 15, 2022	Apr. 06, 2023~ Jun. 13, 2023	Jun. 14, 2023	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-303	17100018000 55007	1GHz~18GHz	Jun. 14, 2023	Jun. 14, 2023~ Jul. 19, 2023	Jun. 13, 2024	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 07, 2022	Apr. 06, 2023~ Jul. 19, 2023	Oct. 06, 2023	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Apr. 06, 2023~ Jul. 19, 2023	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Apr. 06, 2023~ Jul. 19, 2023	N/A	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-001053	N/A	N/A	Apr. 06, 2023~ Jul. 19, 2023	N/A	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz~40GHz	Mar. 07, 2023	Apr. 06, 2023~ Jul. 19, 2023	Mar. 06, 2024	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801595/2	30MHz~40GHz	Mar. 07, 2023	Apr. 06, 2023~ Jul. 19, 2023	Mar. 06, 2024	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 07, 2023	Apr. 06, 2023~ Jul. 19, 2023	Mar. 06, 2024	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	30M~40G	Mar. 07, 2023	Apr. 06, 2023~ Jul. 19, 2023	Mar. 06, 2024	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-2700-3 000-18000-60SS	SN3	3GHz High Pass Filter	Sep. 12, 2022	Apr. 06, 2023~ Jul. 19, 2023	Sep. 11, 2023	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-900-10 00-15000-60SS	SN12	1GHz High Pass Filter	Sep. 12, 2022	Apr. 06, 2023~ Jul. 19, 2023	Sep. 11, 2023	Radiation (03CH11-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 13, 2022	Apr. 18, 2023~ Jul. 10, 2023	Oct. 12, 2023	Conducted (TH03-HY)
Thermal Chamber	ESPEC	SH-641	92013720	-40°C ~90°C	Sep. 07, 2022	Apr. 18, 2023~ Jul. 10, 2023	Sep. 06, 2023	Conducted (TH03-HY)
DC Power Supply	GW Instek	GPP-2323	GES906037	0V~64V ; 0A~6A	Dec. 29, 2022	Apr. 18, 2023~ Jul. 10, 2023	Dec. 28, 2023	Conducted (TH03-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#B	1-18GHz	Jan. 06, 2023	Apr. 18, 2023~ Jul. 10, 2023	Jan. 05, 2024	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101908	10Hz~40GHz	Sep. 27, 2022	Apr. 18, 2023~ Jul. 10, 2023	Sep. 26, 2023	Conducted (TH03-HY)

Report No. : FG2D2006E

TEL: 886-3-327-3456 Page Number : 20 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

5 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.22 dB
Confidence of 95 % (0 = 200(y))	

Report No.: FG2D2006E

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.53 dB
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TEL: 886-3-327-3456 Page Number : 21 of 21 FAX: 886-3-328-4978 Issue Date : Sep. 07, 2023

Appendix A. Test Results of Conducted Test

Conducted Output Power (Average power)

		LTE B	Sand 26 Ma	aximum A	/erage Pov	wer [dBm]		
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	Maximum Output Power (dBm)	Maximum Output Power (W)
15	1	0		23.58	-	-		, ,
15	1	37		23.43	-	-		
15	1	74		23.42	-	-		
15	36	0	QPSK	22.54	-	-	23.58	0.2280
15	36	20		22.40	-	-		
15	36	39		22.52	-	-		
15	75	0		22.51	-	-		
15	1	0		22.72	-	-		
15	1	37		22.86	-	-		
15	1	74		22.94	-	-		
15	36	0	16-QAM	21.53	-	-	22.94	0.1968
15	36	20		21.64	-	-		
15	36	39		21.59	-	-		
15	75	0		21.56	-	-		
15	1	0		21.72	-	-		
15	1	37		21.67	-	-		
15	1	74		21.63	-	-		
15	36	0	64-QAM	20.38	-	-	21.72	0.1486
15	36	20		20.53	-	-		
15	36	39		20.54	-	-		
15	75	0		20.36	-	-		
15	1	0		18.47	-	-		
15	1	37		18.67	-	-		
15	1	74		18.55	-	-		
15	36	0	256-QAM	18.51			18.83	0.0764
15	36	20		18.64	-	-		0.0704
15	36	39		18.83	-	-		
15	75	0		18.71	-	-		



		LTE B	and 26 Ma	aximum Av	erage Pov	ver [dBm]		
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	Maximum	Maximum Output Power (W)
10	1	0		-	23.47	-		
10	1	25		-	23.26	-		
10	1	49		-	23.24	-		
10	25	0	QPSK	-	22.35	-	23.47	0.2223
10	25	12		-	22.33	-		
10	25	25		-	22.25	-		
10	50	0		-	22.27	-		
10	1	0		-	22.83	-		
10	1	25		-	22.51	-		
10	1	49		-	22.52	-		
10	25	0	16-QAM	-	21.44	-	22.83	0.1919
10	25	12		-	21.45	-		
10	25	25		-	21.46	-		
10	50	0		-	21.25	-		
10	1	0		-	21.66	-		
10	1	25		-	21.50	-		
10	1	49		-	21.30	-		
10	25	0	64-QAM	-	20.38	-	21.66	0.1466
10	25	12		-	20.40	-		
10	25	25		1	20.29	-		
10	50	0		-	20.27	-		
10	1	0		-	18.53	-		
10	1	25		-	18.47	-		
10	1	49		-	18.44	-		
10	25	0	256-QAM	-	18.28	-	18.72	0.0745
10	25	12		-	18.72	-		0.07 40
10	25	25		-	18.62	-		
10	50	0		1	18.46	-		



		I TE B	Band 26 Ma	avimum As	vorage Pov	vor [dBm]		
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	Maximum Output Power (dBm)	Maximum Output Power (W)
5	1	0		23.49	23.55	23.35		
5	1	12		23.52	23.25	23.18]	
5	1	24		23.29	23.28	23.08]	
5	12	0	QPSK	22.55	22.41	22.14	23.55	0.2265
5	12	7		22.36	22.30	22.15	1	
5	12	13		22.39	22.16	22.21		
5	25	0		22.35	22.18	22.26]	
5	1	0		22.66	22.60	22.51		
5	1	12		22.70	22.55	22.40]	
5	1	24		22.93	22.65	22.47	1	
5	12	0	16-QAM	21.36	21.51	21.31	22.93	0.1963
5	12	7		21.58	21.29	21.21		
5	12	13		21.41	21.24	21.20		
5	25	0		21.43	21.26	21.25		
5	1	0		21.50	21.63	21.35		
5	1	12		21.73	21.64	21.19		
5	1	24		21.43	21.35	21.27		
5	12	0	64-QAM	20.43	20.45	20.29	21.73	0.1489
5	12	7		20.61	20.42	20.10		
5	12	13		20.52	20.27	20.17		
5	25	0		20.39	20.23	20.01		
5	1	0		18.43	18.39	18.16		
5	1	12		18.54	18.51	18.19		
5	1	24		18.60	18.42	18.25		
5	12	0	256-QAM	18.46	18.36	18.30	18.70	0.0741
5	12	7		18.56	18.66	18.37		0.0741
5	12	13		18.66	18.70	18.51		
5	25	0		18.64	18.42	18.29		



		LTE B	and 26 Ma	aximum A	verage Pov	ver [dBm]		
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	Maximum Output Power (dBm)	Maximum Output Power (W)
3	1	0		23.40	23.47	23.42		
3	1	8		23.37	23.21	23.16		
3	1	14		23.29	23.18	23.03		
3	8	0	QPSK	22.38	22.46	22.26	23.47	0.2223
3	8	4		22.43	22.37	22.16		
3	8	7		22.49	22.28	22.17		
3	15	0		22.41	22.18	22.26		
3	1	0		22.64	22.80	22.57		
3	1	8		22.86	22.63	22.50		
3	1	14		22.84	22.65	22.54		
3	8	0	16-QAM	21.35	21.41	21.32	22.86	0.1932
3	8	4		21.65	21.33	21.21		
3	8	7		21.55	21.37	21.03		
3	15	0		21.35	21.24	21.27		
3	1	0		21.59	21.44	21.43		
3	1	8		21.77	21.48	21.28		
3	1	14		21.55	21.34	21.15		
3	8	0	64-QAM	20.32	20.31	20.12	21.77	0.1503
3	8	4		20.41	20.41	20.18		
3	8	7		20.42	20.20	20.19	1	
3	15	0		20.40	20.24	20.11		
3	1	0		18.42	18.54	18.30		
3	1	8		18.59	18.53	18.21		
3	1	14		18.36	18.53	18.28		
3	8	0	256-QAM	18.54	18.49	18.07	18.85	0.0767
3	8	4		18.41	18.66	18.44		0.0707
3	8	7		18.85	18.68	18.38		
3	15	0		18.59	18.45	18.26		



		LTE B	Band 26 Ma	aximum Av	verage Pov	wer [dBm]		
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	Maximum Output Power (dBm)	Maximum Output Power (W)
1.4	1	0		23.16	23.25	23.19		
1.4	1	3		23.30	23.24	23.00		
1.4	1	5		23.47	23.27	22.93		
1.4	3	0	QPSK	23.42	23.21	23.27	23.47	0.2223
1.4	3	1		23.37	23.13	23.07		
1.4	3	3		23.34	23.11	22.88		
1.4	6	0		22.34	22.30	22.26		
1.4	1	0		22.44	22.18	22.09		
1.4	1	3		22.34	22.09	21.89		
1.4	1	5		22.54	22.14	22.30		
1.4	3	0	16-QAM	22.75	22.63	22.64	22.75	0.1884
1.4	3	1	22.68 22.45 22.56					
1.4	3	3		22.74	22.49	22.43		
1.4	6	0		21.48	21.30	21.28		
1.4	1	0		21.44	21.22	20.98		
1.4	1	3		21.36	21.26	21.22	1	i
1.4	1	5		21.60	21.27	21.16		
1.4	3	0	64-QAM	21.45	21.51	21.41	21.60	0.1445
1.4	3	1		21.57	21.52	21.13		
1.4	3	3		21.47	21.41	21.23		
1.4	6	0		20.42	20.33	20.12		
1.4	1	0		18.38	18.39	18.12		
1.4	1	3		18.55	18.42	18.27		
1.4	1	5		18.45	18.30	18.08		
1.4	3	0	256-QAM	18.37	18.24	18.14	18.67	0.0736
1.4	3	1		18.46	18.59	18.50		0.0730
1.4	3	3	18.59 18.65 18.30					
1.4	6	0		18.67	18.37	18.20		



	LTE Band 26 Straddle Maximum Average Power [dBm]												
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	Maximum Output Power (dBm)	Maximum Output Power (W)					
15	1	0		-	23.53	-							
15	1	37		-	23.52	-	1						
15	1	74		-	23.53	-							
15	36	0	QPSK	-	22.56	-	23.53	0.2254					
15	36	20		-	22.62	-							
15	36	39		-	22.50	-							
15	75	0		-	22.63	-							
15	1	0		-	22.74	-							
15	1	37		-	22.99	-	1						
15	1	74		-	22.94	-	1						
15	36	0	16-QAM	-	21.48	-	22.99	0.1991					
15	36	20		-	21.66	-	1						
15	36	39		-	21.67	-	1						
15	75	0		-	21.65	-							
15	1	0		-	21.75	-							
15	1	37		-	21.91	-	1						
15	1	74		-	21.64	-							
15	36	0	64-QAM	-	20.47	-	21.91	0.1552					
15	36	20		-	20.56	-	1						
15	36	39		-	20.69	-	1						
15	75	0		-	20.58	-							
15	1	0		-	18.51	-							
15	1	37		-	18.64	-							
15	1	74		-	18.52	-							
15	36	0	256-QAM	-	18.71	-	18.86	0.0769					
15	36	20		-	18.63	-		0.0700					
15	36	39		-	18.86	-							
15	75	0		-	18.78	-							



		LTE Band	26 Straddi	o Mavimu	m Average	Dower Id	IRm1	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	Maximum	Maximum Output Power (W)
10	1	0		-	23.64	-		
10	1	25		-	23.56	-		
10	1	49		-	23.50	-		
10	25	0	QPSK	-	22.57	-	23.64	0.2312
10	25	12		-	22.51	-		
10	25	25		-	22.43	-		
10	50	0		-	22.57	-		
10	1	0		-	22.73	-		
10	1	25		-	22.91	-		
10	1	49		-	22.90	-		
10	25	0	16-QAM	-	21.54	-	22.91	0.1954
10	25	12		-	21.55	-		
10	25	25		-	21.61	-		
10	50	0		-	21.48	-		
10	1	0		-	21.60	-		
10	1	25		-	21.76	-		
10	1	49		-	21.61	-		
10	25	0	64-QAM	-	20.51	-	21.76	0.1500
10	25	12		-	20.52	-		
10	25	25		-	20.46	-		
10	50	0		-	20.49	-		
10	1	0		-	18.49	-		
10	1	25		-	18.66	-		
10	1	49		-	18.59	-		
10	25	0	256-QAM	-	18.63	-	18.79	0.0757
10	25	12		-	18.68	-		0.0707
10	25	25		-	18.79	-		
10	50	0		-	18.64	-		

		I TE Band	26 Straddl	o Mavimu	m Average	Power Id	Rm1	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	Maximum	Maximum Output Power (W)
5	1	0		-	23.55	-		
5	1	12		-	23.54	-		
5	1	24		-	23.34	-		
5	12	0	QPSK	-	22.63	-	23.55	0.2265
5	12	7		-	22.50	-		
5	12	13		-	22.65	-		
5	25	0		-	22.49	-		
5	1	0		-	22.76	-		
5	1	12		-	22.76	-		
5	1	24		-	22.98	-		
5	12	0	16-QAM	-	21.44	-	22.98	0.1986
5	12	7		-	21.65	-		
5	12	13		-	21.62	-		
5	25	0		-	21.41	-		
5	1	0			21.72	-		
5	1	12		1	21.76	-		
5	1	24		1	21.54	-		
5	12	0	64-QAM	1	20.40	-	21.76	0.1500
5	12	7			20.62	-		
5	12	13			20.51	-		
5	25	0		1	20.41	-		
5	1	0		1	18.58	-		
5	1	12		-	18.79	-		
5	1	24		-	18.50	-		
5	12	0	256-QAM	-	18.70	-	18.93	0.0782
5	12	7	- 18.55 - - 18.93 -	-	18.55	-		0.0.02
5	12	13						
5	25	0		-	18.66	-		



		I TF Band	26 Straddl	e Maximu	m Average	Power Id	Rm1	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	Maximum	Maximum Output Power (W)
3	1	0		-	23.50	-		
3	1	8		-	23.61	-		
3	1	14		-	23.44	-		
3	8	0	QPSK	-	22.44	-	23.61	0.2296
3	8	4		-	22.63	-		
3	8	7		-	22.52	-		
3	15	0		-	22.44	-	1	
3	1	0		-	22.65	-		
3	1	8		-	22.93	-		
3	1	14		-	22.80	-	1	
3	8	0	16-QAM	-	21.45	-	22.93	0.1963
3	8	4	-	21.74	-			
3	8	7		-	21.51	-	1	
3	15	0		-	21.44	-		
3	1	0		-	21.74	-		
3	1	8		-	21.91	-	1	
3	1	14		-	21.69	-		
3	8	0	64-QAM	-	20.58	-	21.91	0.1552
3	8	4		-	20.57	-		
3	8	7		-	20.42	-		
3	15	0		-	20.58	-		
3	1	0		-	18.50	-		
3	1	8		-	18.76	-		
3	1	14		-	18.62	-		
3	8	0	256-QAM	-	18.61	-	18.85	0.0767
3	8	4		-	18.57	-		0.0707
3	8	7		-	18.85	-		
3	15	0		-	18.69	-		



		LTE Band	26 Straddl	e Maximu	m Average	Power Id	IRm1	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	Maximum	Maximum Output Power (W)
1.4	1	0		-	23.22	-		
1.4	1	3		-	23.46	-		
1.4	1	5		-	23.48	-		
1.4	3	0	QPSK	-	23.51	-	23.54	0.2259
1.4	3	1		-	23.37	-		
1.4	3	3		-	23.54	-		
1.4	6	0		-	22.49	-		
1.4	1	0		-	22.59	-		
1.4	1	3		-	22.45	-		
1.4	1	5		-	22.57	-		
1.4	3	0	16-QAM	-	22.80	-	22.87	0.1936
1.4	3	1		-	22.84	-		
1.4	3	3		-	22.87	-		
1.4	6	0		-	21.48	-		
1.4	1	0		-	21.55	-		
1.4	1	3		-	21.43	-		
1.4	1	5		-	21.54	-		
1.4	3	0	64-QAM	-	21.55	-	21.67	0.1469
1.4	3	1		-	21.67	-		
1.4	3	3		-	21.48	-		
1.4	6	0		-	20.57	-		
1.4	1	0		-	18.48	-		
1.4	1	3		-	18.66	-		
1.4	1	5		-	18.55	-		
1.4	3	0	256-QAM	-	18.51	-	18.73	0.0746
1.4	3	1		-	18.49	-		0.0740
1.4	3	3		-	18.68	-		
1.4	6	0		-	18.73	-		

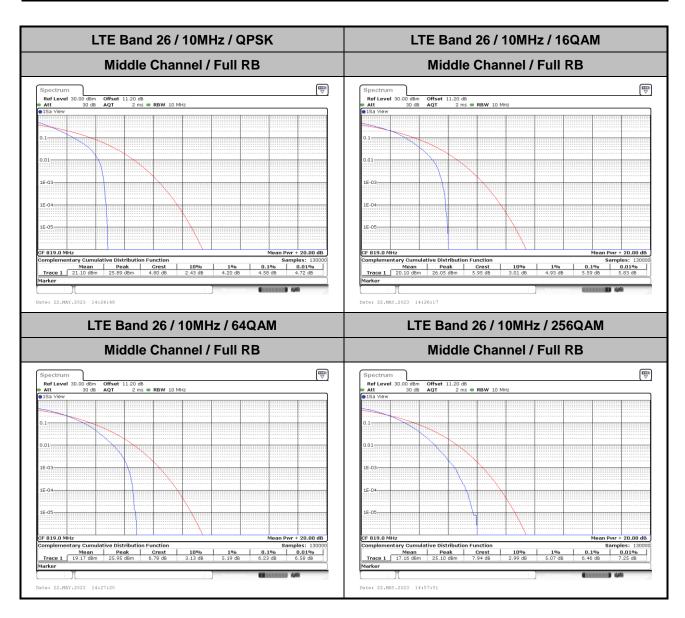


LTE Band 26

Peak-to-Average Ratio

Mode									
Mod.	QPSK	QPSK 16QAM 64QAM 256QAM							
RB Size	Full RB	Full RB Full RB Full RB							
Middle CH	4.58	5.59	6.23	6.46	PASS				

Report No.: FG2D2006E



TEL: 886-3-327-3456 Page Number: A2-1 of 26

FAX: 886-3-328-4978

26dB Bandwidth

Mode	LTE Band 26 : 26dB BW(MHz)									
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Low CH	-	-	-	-	-	-	-	-	14.72	14.27
Middle CH	1.30	1.32	3.14	3.07	5.06	4.97	10.25	9.85	-	-
Mode	LTE Band 26 : 26dB BW(MHz)									
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Low CH	-	-	-	-	-	-	-	-	14.69	14.60
Middle CH	1.35	1.33	3.05	3.09	5.22	5.07	9.85	9.69	-	-

Report No. : FG2D2006E

TEL: 886-3-327-3456 Page Number : A2-2 of 26

FAX: 886-3-328-4978

LTE Band 26 Middle Channel / 1.4MHz / QPSK Middle Channel / 1.4MHz / 16QAM 15.24 dBm 819.33010 MH: 26.00 dE 1.320300000 MH: 620.6 M1[1] 16.10 dBn 819.51190 MH: 26.00 dt 1.295100000 MH: M1[1] dBm--20 dBm-30 dBm 40 dBm CF 819.0 M CF 819.0 MH Function Result 1.3203 MHz 26.00 dB 620.6
 X-value
 Y-value
 Function

 819.5119 MHz
 16.10 dBm
 nd8 down

 819.3427 MHz
 -9.92 dBm
 nd8

 819.6378 MHz
 -9.86 dBm
 Q factor
 Function Result 1.2951 MHz Type Ref Trc
 Type
 Ref
 Trc
 X-value
 Y-value
 Function

 M1
 1
 819.3301 MHz
 15.24 dBm
 nd8 down
 Middle Channel / 3MHz / QPSK Middle Channel / 3MHz / 16QAM Ref Level 30.00 dBm
Att 30 dB
SGL Count 100/100
PIPK Max 11.20 dB **RBW** 100 kHz 19 μs **VBW** 300 kHz **Mode** Auto FFT Offset 11.20 dB ● RBW 100 kHz SWT 19 µs ● VBW 300 kHz Mode Auto FFT 20 dBm--10 dBm-40 dBm 50 dBm -50 dBm-Type Ref Trc Date: 22.MAY.2023 14:06:48 Date: 22.MAY.2023 14:07:18 Middle Channel / 5MHz / QPSK Middle Channel / 5MHz / 16QAM 13.86 dBi 818.78000 MF 26.00 d 5.055000000 MF 10 dBm-162 20 dBm -30 dBm--60 dBm--60 dBm-CF 819.0 MHz darker CF 819.0 MHz n 10.0 MHz 10.0 MHz Function Result 5.055 MHz 26.00 dB 162.0 Function Result 4.965 MHz 26.00 dB 165.3 Type Ref Trc
 X-value
 Y-value
 Function

 818.78 MHz
 13.86 dBm
 nd8 down

 916.512 MHz
 -12.23 dBm
 nd8

 821.567 MHz
 -12.13 dBm
 Q factor

 X-value
 Y-value
 Function

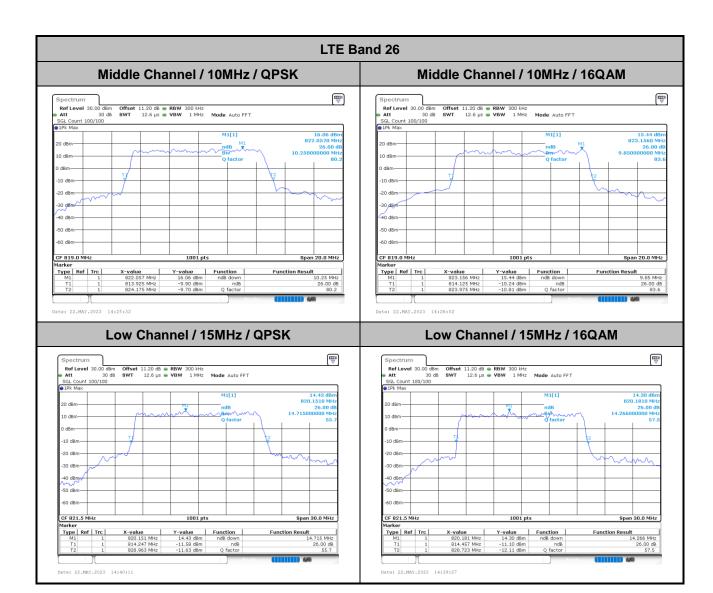
 820.658 MHz
 14.67 dbm
 nd8 down

 916.522 MHz
 -11.44 dbm
 nd8

 821.488 MHz
 -11.13 dbm
 Q factor

Report No.: FG2D2006E

Date: 22.MAY.2023 14:15:21



TEL: 886-3-327-3456 Page Number: A2-4 of 26

FAX: 886-3-328-4978

LTE Band 26 Middle Channel / 1.4MHz / 64QAM Middle Channel / 3MHz / 64QAM Ref Level 30.00 dBm Offset 11.20 dB @ RBW 30 kHz
Ref Level 30.00 dBm Offset 11.20 dB @ RBW 30 kHz
Act 30 dB SWT 63.2 µs @ VBW 100 kHz Mode Auto FFT
SGL Count 100/100
1Pk Max 15.31 dBn 818.44260 MH 26.00 d M1[1] 13.53 dBn 819.13150 MH: 26.00 dt 1.351000000 MH: M1[1] dBm--20 dBm-30 dBm-40 dBm CF 819.0 MHz
 X-value
 Y-value
 Function

 819.1315 MHz
 13.53 dBm
 nd8 down

 818.3007 MHz
 -12.35 dBm
 nd8

 819.6517 MHz
 -12.47 dBm
 Q factor
 Type Ref Trc
 Type
 Ref
 Trc
 X-value
 Y-value
 Function

 M1
 1
 818.4426 MHz
 15.31 dBm
 nd8 down
 Function Result Function Result 818.4426 MHz 15.31 dBm 817.4715 MHz -10.86 dBm 820.5165 MHz -10.63 dBm Middle Channel / 5MHz / 64QAM Middle Channel / 10MHz / 64QAM Ref Level 30.00 dBm
Att 30 dB
SGL Count 100/100
Pk Max Ref Level 3.0.0 dbm Offset 11.20 db • RBW 100 kHz
Att 30 db SWT 19 µs • VBW 300 kHz Mode Auto FFT
SGL Count 100/100
1PR Max Offset 11.20 dB ● RBW 300 kHz SWT 12.6 µs ● VBW 1 MHz Mode Auto FFT 12.85 dB 817.25200 MI 14.71 dBr 817.3020 MH 20 dBm--10 dBm-40 dBm--50 dBm-
 X-value
 Y-value
 Function

 817.252 MHz
 12.85 dbm
 nd8 down

 916.423 MHz
 -13.32 dbm
 nd8

 921.637 MHz
 -12.93 dbm
 Q factor

 X-value
 Y-value
 Function

 817.302 MHz
 14.71 dBm
 nd8 down

 814.025 MHz
 -10.95 dBm
 nd8

 923.975 MHz
 -11.22 dbm
 Q factor
 Type Ref Trc Date: 22.MAY.2023 14:13:22 Date: 22.MAY.2023 14:24:03 Low Channel / 15MHz / 64QAM 13.46 dBi 819.0420 MF 26.00 d 14.685000000 MF Function Result 14.685 MHz 26.00 dB 55.8 Type Ref Trc
 X-value
 Y-value
 Function

 819,042 MHz
 13.46 dBm
 nd8 down

 814.157 MHz
 -12.55 dBm
 nd8

 828.843 MHz
 -12.39 dBm
 Q factor

Report No.: FG2D2006E

TEL: 886-3-327-3456 Page Number : A2-5 of 26 FAX: 886-3-328-4978

LTE Band 26 Middle Channel / 1.4MHz / 256QAM Middle Channel / 3MHz / 256QAM Ref Level 30.00 dbm Offset 11.20 db e RBW 30 kHz
Ref Level 30.00 dbm Offset 11.20 db e RBW 30 kHz
Act 30 db SWT 63.2 µs e VBW 100 kHz Mode Auto FFT
SGL Count 100/100
1Pk Max 12.57 dBn 819.62340 MH 26.00 di M1[1] 11.82 dBn 818.97760 MH: 26.00 dt 1.334300000 MH: M1[1] -20 dBm--30 dBa CF 819.0 MHz Function Result 3.0929 MHz 26.00 dB 265.0
 X-value
 Y-value
 Function

 818.9776 MHz
 11.82 dBm
 nd8 down

 818.3399 MHz
 -14.16 dBm
 nd8

 819.6741 MHz
 -14.23 dBm
 Q factor
 Function Result 1.3343 MHz Type Ref Trc
 Type
 Ref
 Trc
 X-value
 Y-value
 Function

 M1
 1
 819.6234 MHz
 12.57 dBm
 ndB down
 Middle Channel / 5MHz / 256QAM Middle Channel / 10MHz / 256QAM 11.20 dB **RBW** 100 kHz 19 μs **VBW** 300 kHz **Mode** Auto FFT 10.54 dBr 819.79900 MH 20 dBm-26.00 d 5.065000000 MF 161 -10 dBm--50 dBm-
 X-value
 Y-value
 Function

 819,799 MHz
 10.54 dBm
 nd8 down

 915.363 MHz
 -15.21 dBm
 nd8

 821.428 MHz
 -15.52 dBm
 Q factor

 X-value
 Y-value
 Function

 820.259 MHz
 12.78 dBm
 nd8 down

 814.165 MHz
 -13.31 dBm
 nd8

 823.855 MHz
 -12.64 dBm
 Q factor
 Type Ref Trc Date: 22.MAY.2023 14:50:48 Date: 22.MAY.2023 14:54:20 Low Channel / 5MHz / 256QAM 11.08 dBr 815.8960 MH 26.00 d 14.595000000 MH Function Result 14.595 MHz 26.00 dB 55.9 Type Ref Trc
 X-value
 Y-value
 Function

 815.896 MHz
 11.08 dBm
 nd8 down

 814.367 MHz
 -15.68 dBm
 nd8

 826.963 MHz
 -14.87 dBm
 Q factor

Report No.: FG2D2006E

TEL: 886-3-327-3456 Page Number : A2-6 of 26

Occupied Bandwidth

Mode	LTE Band 26 : 99%OBW(MHz)									
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Low CH	-	-	-	-	-	-	-	-	13.40	13.49
Middle CH	1.10	1.11	2.73	2.74	4.51	4.51	9.01	9.05	-	-
Mode	LTE Band 26 : 99%OBW(MHz)									
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Low CH	-	-	1	-	1	-	1	-	13.40	13.49
Middle CH	1.10	1.09	2.72	2.72	4.50	4.50	9.07	8.99	-	-

Report No. : FG2D2006E

TEL: 886-3-327-3456 Page Number : A2-7 of 26

LTE Band 26 Middle Channel / 1.4MHz / QPSK Middle Channel / 1.4MHz / 16QAM 15.19 dBn 818.90490 MH 1.113286713 MH M1[1] -10 dBm--10 dBm--40 dBm-40 dBm--50 dBm -50 dBm CF 819.0 MHz CF 819.0 MHz Span 2.8 MHz Type Ref Trc Type Ref Trc
 X-value
 Y-value
 Function
 Function Result

 818.9049 MHz
 15.19 dBm
 Function
 Function
 5.03 dBm Occ Bw 5.86 dBm 8.14 dBm Occ Bw 8.28 dBm 1.113286713 MHz Date: 22.MAY.2023 13:44:35 Date: 22.MAY.2023 13:45:05 Middle Channel / 3MHz / QPSK Middle Channel / 3MHz / 16QAM ### And Count 100/100 | Count 17.10 dBr 820.05490 MH 2.733266732 * 20 dBm 10 dBm--10 dBm -10 dBm--20 dBm -20 dBman diam 40 dBm 40 dBm -50 dBm -50 dBm-
 X-value
 Y-value
 Function

 820.0549 MHz
 17.10 dBm
 917.63936 MHz

 820.37263 MHz
 10.28 dBm
 Occ Bw

 820.37263 MHz
 10.29 dBm
 Function Result Type Ref Trc 2.733266733 MHz 2.739260739 MHz Date: 22.MAY.2023 14:05:48 Date: 22.MAY.2023 14:06:18 Middle Channel / 5MHz / 16QAM Middle Channel / 5MHz / QPSK 15.46 dBn 820.34900 MH: 4.505494505 MH: 14.87 dBn 820.74800 MH; 4.505494505 MH; M1[1] M1[1] 10 dBm-0 dBm--10 dBm -20 dBm-30 dBm--30 dBm-40 dBm 40 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
 820.349 MHz
 15.46 dBm

 T1
 1
 916.75225 MHz
 9.74 dBm
 Occ 8w

 T2
 1
 821.25774 MHz
 9.00 dBm
 Occ 8w

 Marker

 Type | Ref
 Trc
 X-value
 Y-value
 Function

 M1
 1
 820.748 MHz
 14.87 d8m
 14.97 d8m

 T1
 1
 816.75225 MHz
 8.64 d8m
 Occ 8w

 T2
 1
 821.25774 MHz
 6.62 d8m
 Occ 8w
 Function Result Function Result 4.505494505 MHz 4.505494505 MHz 1111111 444 Date: 22.MAY.2023 14:13:52 Date: 22.MAY.2023 14:14:22

Report No.: FG2D2006E

TEL: 886-3-327-3456 Page Number : A2-8 of 26 FAX: 886-3-328-4978

LTE Band 26 Middle Channel / 10MHz / QPSK Middle Channel / 10MHz / 16QAM Ref Level 30.00 dBm Offset 11.20 dB • RBW 300 kHz
Att 30 dB SWT 12.6 µs • VBW 1 MHz Mode Auto FFT
SGL Count 100/100 14.87 dBn 820.9580 MH 9.050949051 MH M1[1] M1[1] 10 dBmdBm--20 dBm--30 dBm--30 dBit 40 dBm-CF 819.0 MHz CF 819.0 MHz Marker Span 20.0 MHz | Span 2 | S
 Marker
 Trpe
 Ref
 Trc
 X-value
 Y-value
 Function
 Function Result

 M1
 1
 815.444 MHz
 16.07 dbm
 Dcc 8w
 9.010985

 T1
 1
 814.5045 MHz
 10.16 dbm
 Occ 8w
 9.010985

 T2
 1
 823.5158 MHz
 10.31 dbm
 Occ 8w
 9.010985
 9.050949051 MHz 9.010989011 MHz Date: 22.MAY.2023 14:25:02 Low Channel / 15MHz / QPSK Low Channel / 15MHz / 16QAM 20 dBm--10 dBm--20 dBm-40 dBm
 X-value
 Y-value
 Function

 826.625 MHz
 15.43 dBm
 S82.814.8167 MHz
 7.99 dBm
 Occ Bw

 828.2133 MHz
 8.52 dbm
 Occ Bw
 Occ Bw

 Marker
 Trype
 Ref
 Trc
 X-value
 Y-value
 Function

 M1
 1
 825.726 MHz
 13.45 dbm
 Occ 8w

 T1
 1
 814.8167 MHz
 7.62 dbm
 Occ 8w

 T2
 1
 828.3032 MHz
 6.81 dbm
 6.81 dbm
 Function Result 13.396603397 MHz 13.486513487 MHz Date: 22.MAY.2023 14:39:57 Date: 22.MAY.2023 14:39:13

Report No.: FG2D2006E

LTE Band 26 Middle Channel / 1.4MHz / 64QAM Middle Channel / 3MHz / 64QAM 15.31 dBn 818.46650 MHz 2.721278721 MHz M1[1] -10 dBm--10 dBm--40 dBm 40 dBm--50 dBm -50 dBm CF 819.0 MHz CF 819.0 MHz Span 2.8 MHz
 Morker
 Type
 Ref
 Trc
 X-value
 Y-value
 Function
 Function Result

 M1
 1
 819.221 MHz
 14.35 dbm
 Punction
 1.09650

 T1
 1
 818.45175 MHz
 5.45 dbm
 Occ Bw
 1.09650

 T2
 1
 819.54825 MHz
 7.36 dbm
 Occ Bw
 1.09650
 Type Ref Trc 1.096503497 MHz 2.721278721 MHz Date: 22.MAY.2023 13:42:31 Date: 22.MAY.2023 14:05:04 Middle Channel / 10MHz / 64QAM Middle Channel / 5MHz / 64QAM ▽ 13.13 dBr 819.23000 MH 4.495504496 20 dBm-10 dBm--10 dBm--10 dBm -20 dBm--40 dBm-40 dBm -50 dBm -50 dBm-
 X-value
 Y-value
 Function

 819.939 MHz
 14.31 dBm

 914.4645 MHz
 9.07 dBm
 Occ Bw

 823.5355 MHz
 8.86 dBm
 Function Result Type Ref Trc 4.495504496 MHz 9.070929071 MHz Date: 22.MAY.2023 14:13:08 Date: 22.MAY.2023 14:23:48 Low Channel / 5MHz / 64QAM M1[1] 13.18 dBn 822.9690 MH: 13.396603397 MH: h-30 dBm--60 dBm-CF 821.5 MHz 1001 pts
 Marker
 Trc
 X-value
 Y-value
 Function

 M1
 1
 822,959 MHz
 13.18 dBm

 T1
 1
 814,8167 MHz
 8.02 dBm
 Occ 8w

 T2
 1
 826,2133 MHz
 7.93 dBm
 Occ 8w
 Function Result 13.396603397 MHz Date: 22.MAY.2023 14:38:30

Report No.: FG2D2006E

TEL: 886-3-327-3456 Page Number : A2-10 of 26 FAX: 886-3-328-4978

LTE Band 26 Middle Channel / 1.4MHz / 256QAM Middle Channel / 3MHz / 256QAM Spectrum

Ref Level 30.80 dBm Offset 11:20 dB • RBW 30 kHz
Att 30 dB SWT 63:2 µs • VBW 100 kHz Mode Auto FFT
SGL Count 100/100 12.60 dBn 820.04900 MH 2.715284715 MH M1[1] -10 dBm--10 dBm--20 dBm--30 dBm -40 dBm-40 dBm--50 dBm -50 dBm CF 819.0 MHz CF 819.0 MHz Span 2.8 MHz
 X-value
 Y-value
 Function
 Function Result

 819.18/74 MHz
 12.45 dBm
 12.45 dBm
 12.45 dBm

 819.18/454S5 MHz
 4.90 dBm
 Occ BW
 1.09370

 819.54825 MHz
 4.66 dBm
 0cc BW
 1.09370

 Marker
 Trpe
 Ref
 Trc
 X-value
 Y-value
 Function
 Function Result

 M1
 1
 820.049 MHz
 12.60 dbm
 Process
 Process
 Process
 Process
 Process
 Process
 Process
 2.715284

 T2
 1
 820.36064 MHz
 6.40 dbm
 Occ Bw
 2.715284
 Type Ref Trc 1.093706294 MHz 2.715284715 MHz Date: 22.MAY.2023 14:40:46 Date: 22.MAY.2023 14:47:02 Middle Channel / 5MHz / 256QAM Middle Channel / 10MHz / 256QAM 11.07 dBn 817.56100 MH 4.495504496 20 dBm 10 dBm--10 dBm -10 dBm--20 dBm--20 dBm-40 asm--50 dBm -50 dBm-| X-value | Y-value | Function | | | 817.551 MHz | 11.07 dBm | | | 815.74226 MHz | 5.96 dBm | Occ Bw | | | 821.23776 MHz | 6.34 dBm |
 X-value
 Y-value
 Function

 820.898 MHz
 15.12 dBm

 814.5045 MHz
 7.02 dBm
 Occ Bw

 823.4955 MHz
 8.01 dBm
 Function Result Type Ref Trc 4.495504496 MHz 8.991008991 MHz Date: 22.MAY.2023 14:50:34 Date: 22.MAY.2023 14:54:06 Low Channel / 15MHz / 256QAM M1[1] 11.16 dBn 819.6720 MH: 13.486513487 MH: -60 dBm-CF 821.5 MHz Marker 1001 pts
 Marker
 Trc
 X-value
 Y-value
 Function

 M1
 1
 819.672 MHz
 11.16 dbm
 11.6 dbm

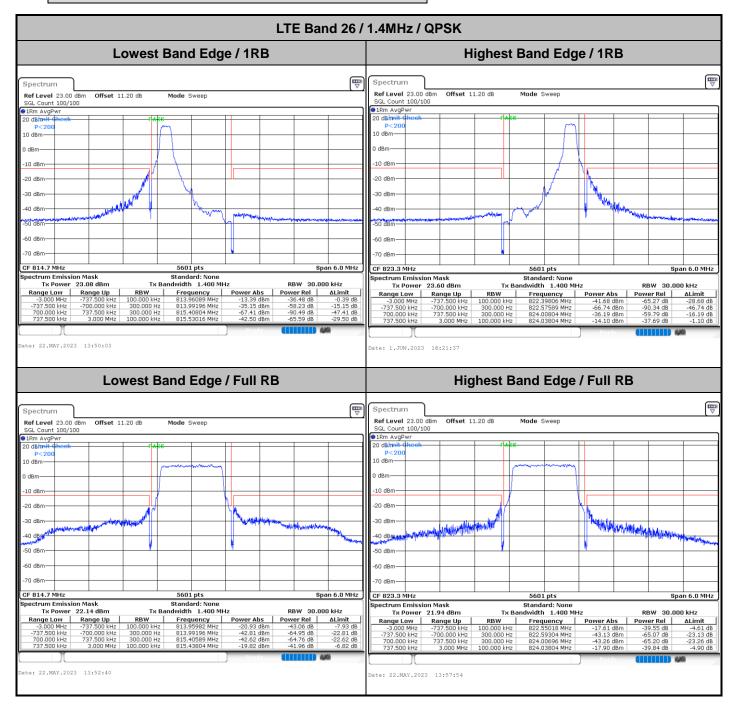
 T1
 1
 814.7867 MHz
 6.04 dbm
 Occ Bw

 T2
 1
 828.2732 MHz
 6.09 dbm
 Occ Bw
 Function Result 13.486513487 MHz Date: 22.MAY.2023 14:57:01

Report No.: FG2D2006E

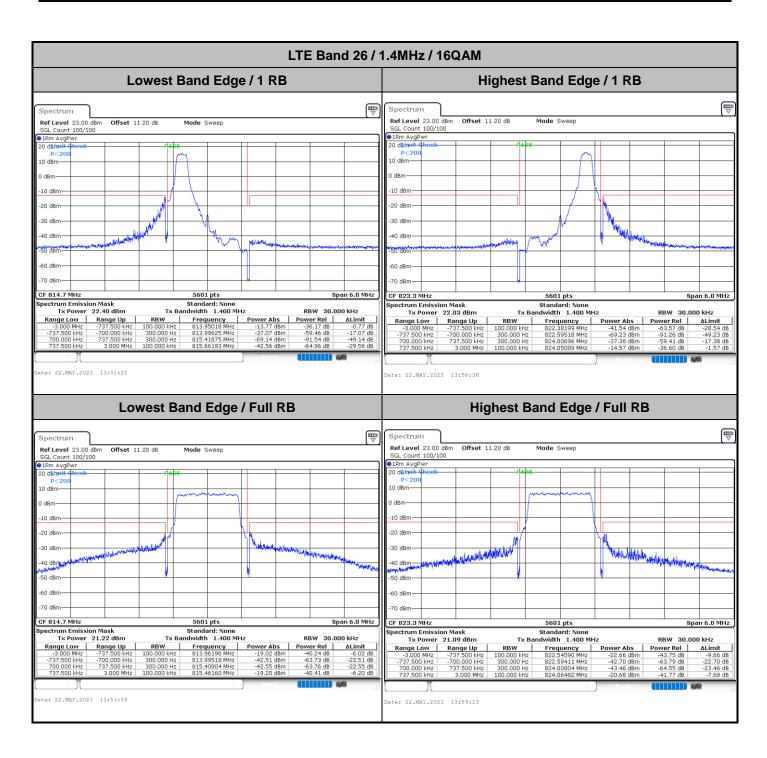
TEL: 886-3-327-3456 Page Number : A2-11 of 26 FAX: 886-3-328-4978

Emission masks - In-band emissions

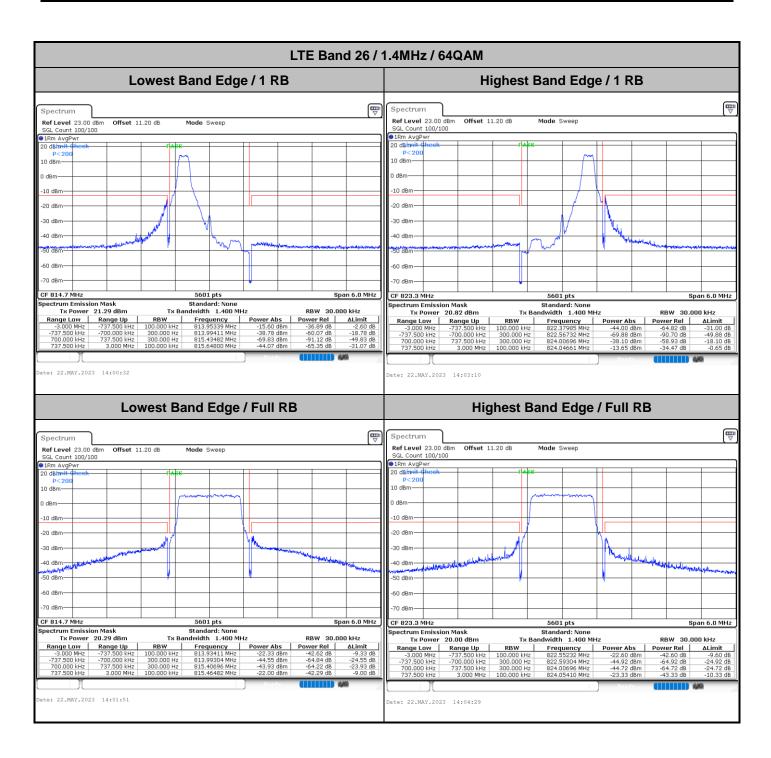


Report No.: FG2D2006E

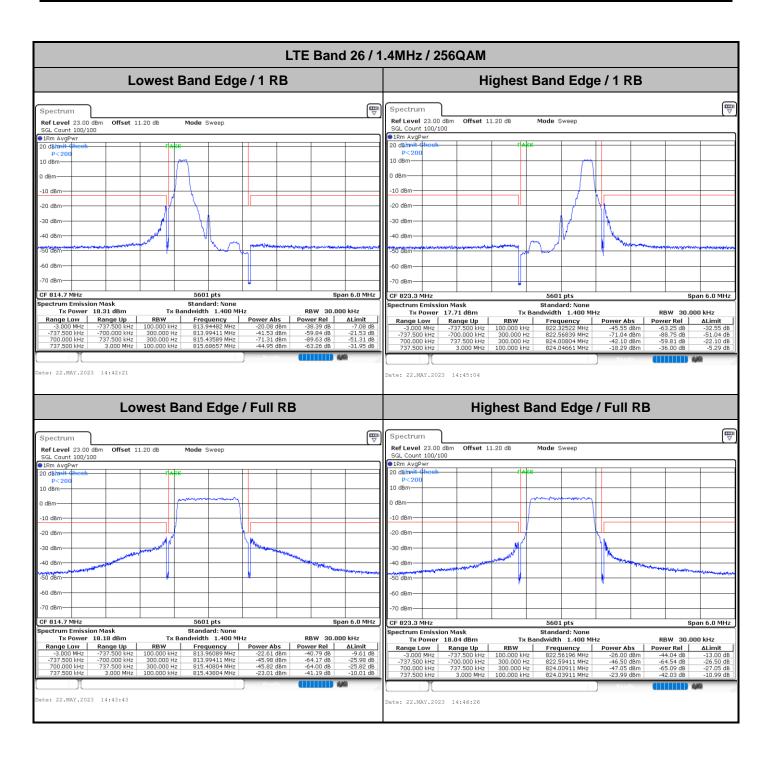
TEL: 886-3-327-3456 Page Number: A2-12 of 26



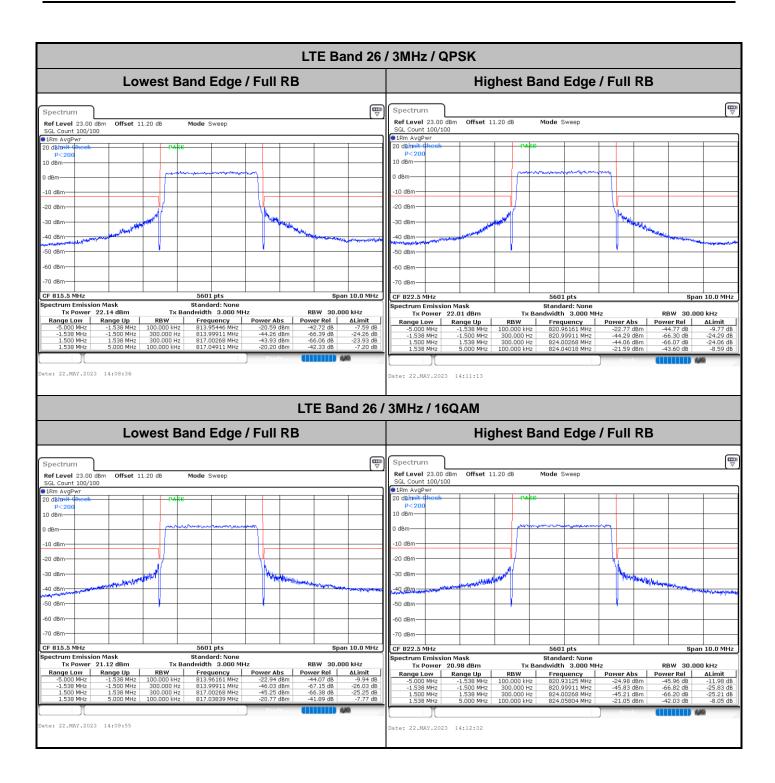
TEL: 886-3-327-3456 Page Number : A2-13 of 26



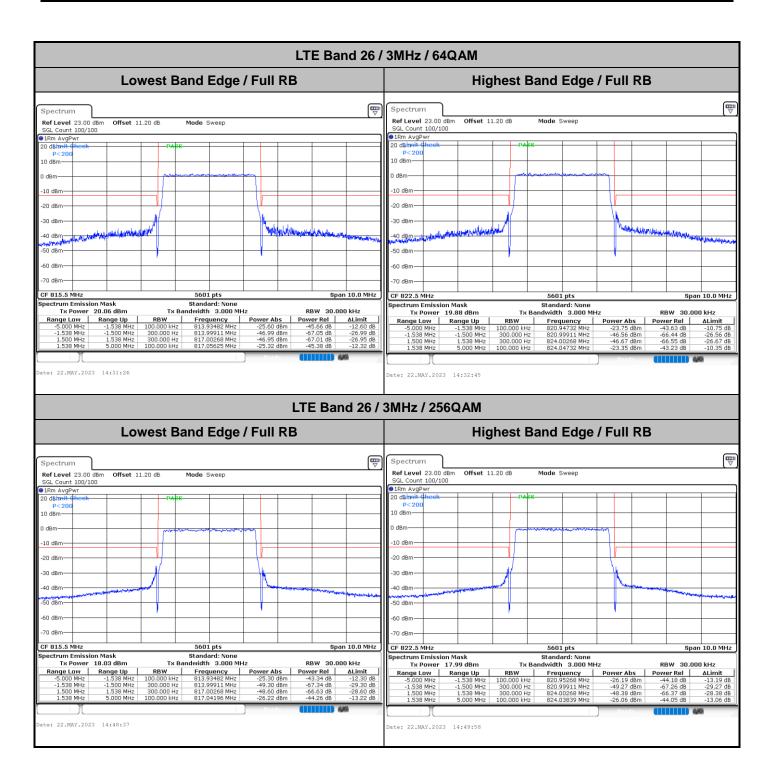
TEL: 886-3-327-3456 Page Number: A2-14 of 26



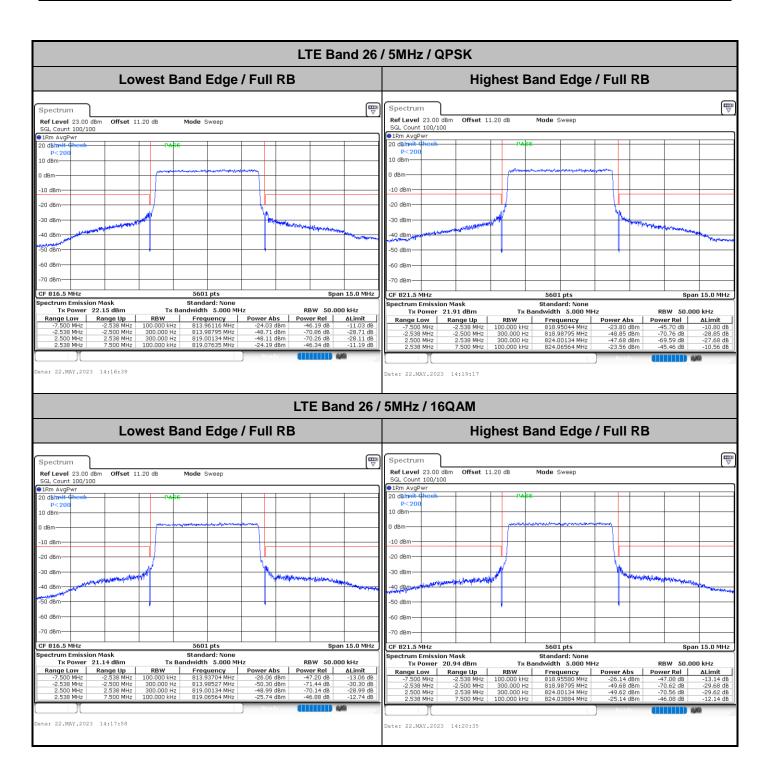
TEL: 886-3-327-3456 Page Number: A2-15 of 26



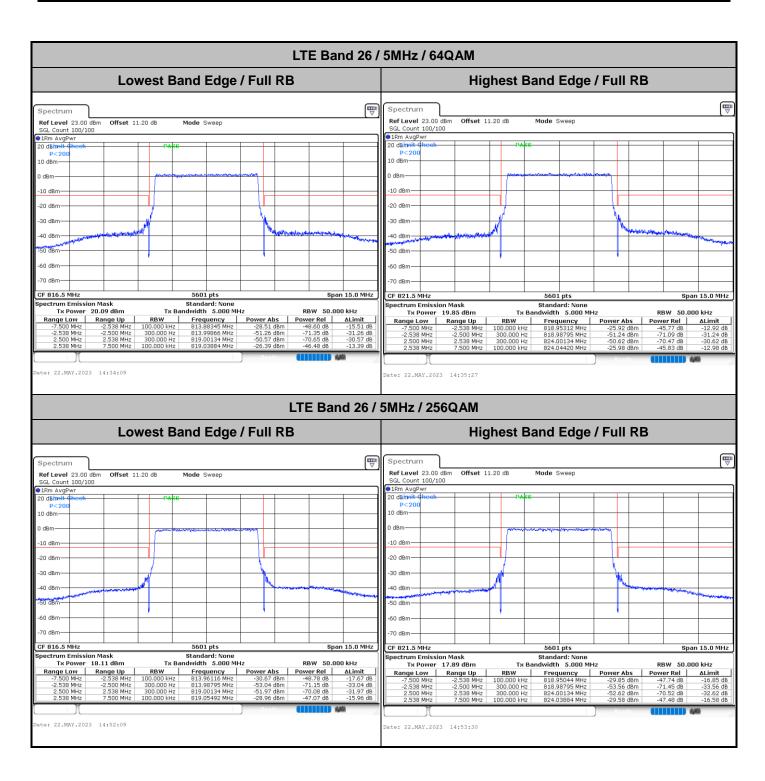
TEL: 886-3-327-3456 Page Number : A2-16 of 26



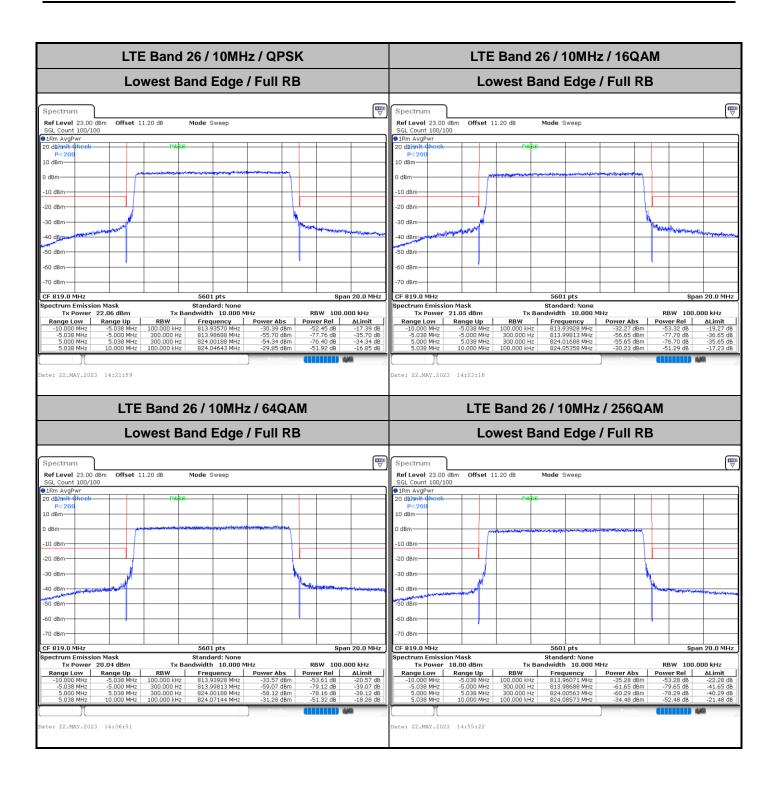
TEL: 886-3-327-3456 Page Number: A2-17 of 26



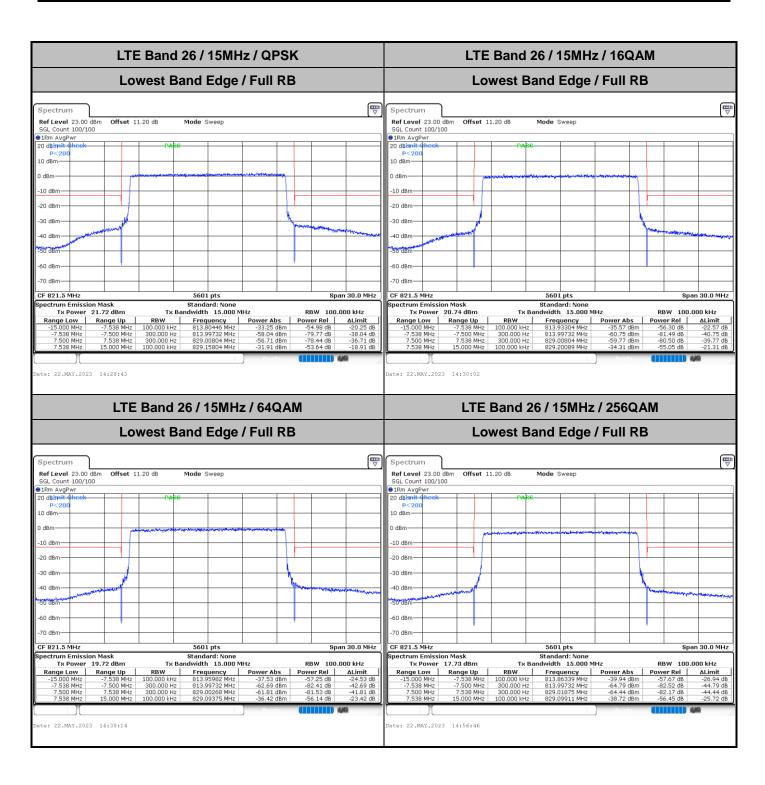
TEL: 886-3-327-3456 Page Number : A2-18 of 26



TEL: 886-3-327-3456 Page Number: A2-19 of 26

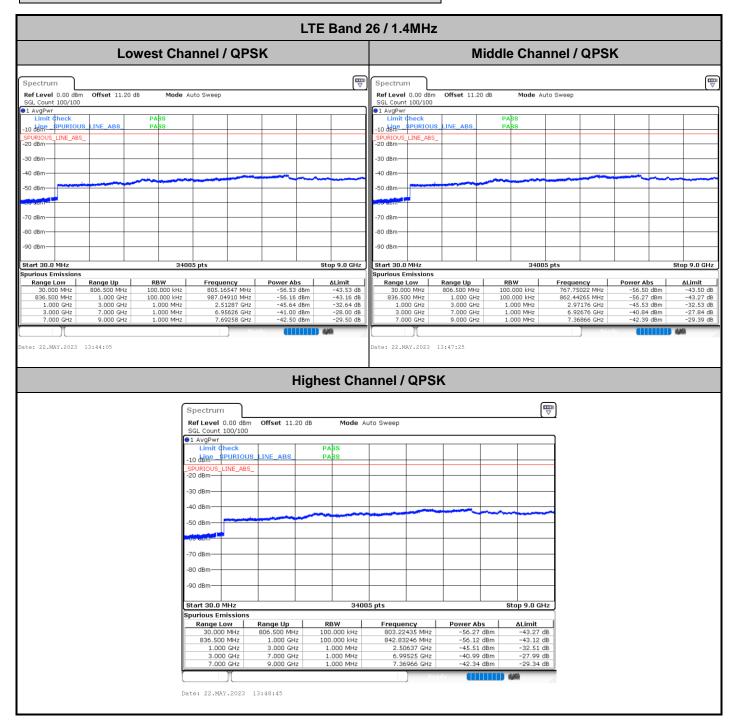


TEL: 886-3-327-3456 Page Number: A2-20 of 26



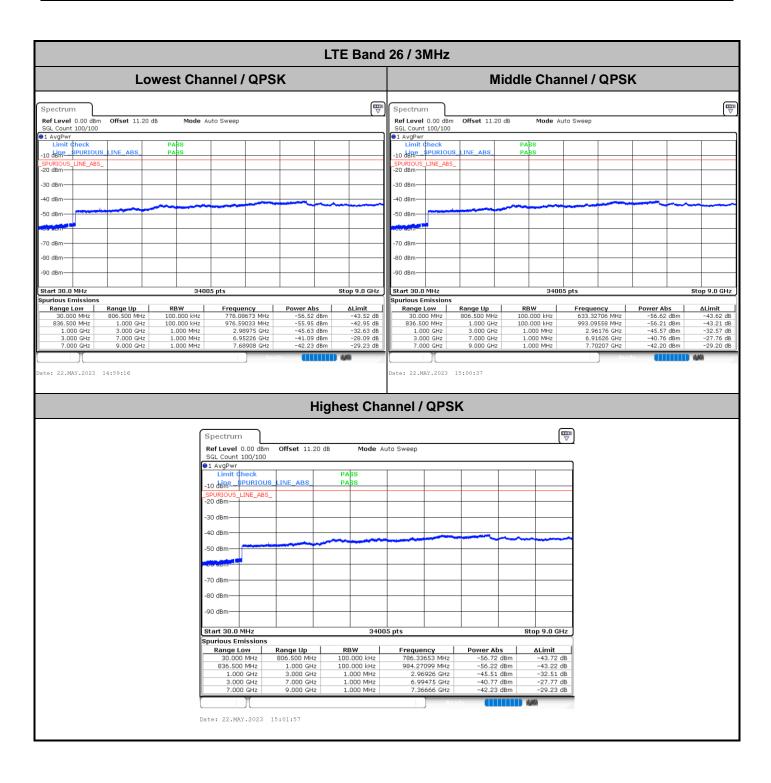
TEL: 886-3-327-3456 Page Number: A2-21 of 26

Emission masks - Out of band emissions



Report No.: FG2D2006E

TEL: 886-3-327-3456 Page Number: A2-22 of 26



TEL: 886-3-327-3456 Page Number : A2-23 of 26