





# RF TEST REPORT

**Applicant** Honor Device Co., Ltd.

FCC ID 2AYGCVNE-LX3

**Product** Smart Phone

Model VNE-LX3

**Report No.** R2207A0619-R4V2

Issue Date August 2, 2022

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in FCC CFR47 Part 2 (2021)/ FCC CFR 47 Part 90S (2021). The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Version	Revision description	Issue Date
Rev.0	Initial issue of report.	July 25, 2022
Rev.1	Update description.	July 29, 2022
Rev.2	Update description.	August 2, 2022

Note: This revised report (Report No. R2207A0619-R4V2) supersedes and replaces the previously issued report (Report No. R2207A0619-R4V1). Please discard or destroy the previously issued report and dispose of it accordingly.



### **Summary of measurement results**

No.	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective Radiated Power	2.1046/90.635(b)	PASS
2	Occupied Bandwidth	2.1049/ 90.209	PASS
3	Emission Masks	2.1051 / 90.691	PASS
4	Peak-to-Average Power Ratio	KDB 971168 D01(5.7)	PASS
5	Frequency Stability	2.1055 / 90.213	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 / 90.691	PASS
7	Radiates Spurious Emission	2.1053 /90.691	PASS

Date of Testing: July 18, 2022 ~ July 24, 2022

Date of Sample Received: July 5, 2022

Note: PASS: The EUT complies with the essential requirements in the standard.

FAIL: The EUT does not comply with the essential requirements in the standard.

All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.



1. Test Laboratory

1.1. Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of TA technology

(shanghai) co., Ltd. The results documented in this report apply only to the tested sample, under the

conditions and modes of operation as described herein .Measurement Uncertainties were not taken

into account and are published for informational purposes only. This report is written to support

regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission

list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory

Accreditation to perform electromagnetic emission measurement.

1.3. Testing Location

Company:

TA Technology (Shanghai) Co., Ltd.

Address:

Building 3, No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China

City:

Shanghai

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Country:

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E-mail:

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# 2. General Description of Equipment under Test

# 2.1. Applicant and Manufacturer Information

Applicant Honor Device Co., Ltd.	
Applicant address	Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China
Manufacturer	Honor Device Co., Ltd.
Manufacturer address	Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China

#### 2.2. General Information

EUT Description								
Model		VNE-LX3						
SN	A96BNU2625200405							
Hardware Version		HL1VNEM						
Software Version		2.1.0.34(SP0	02C900E	5R1P	<b>'</b> 1)			
Power Supply		Battery / AC	adapter					
Antenna Type		Internal Ante	enna					
Antenna Gain		Band			Main Antenna Gain(dBi)	Second Anto Gain(dB		
		LTE Band 26	3		-0.3	-1.7		
Test Mode(s)		LTE Band 26	3					
Test Modulation		QPSK, 16QAM(Uplink); QPSK, 16QAM,64QAM(Downlink);						
LTE Category		4						
Maximum E.R.P.		LTE Band 26: 21.65dBm						
Rated Power Suppl	ly Voltage	3.87V						
Operating Voltage		Minimum: 3.	6V Ma	aximuı	m: 4.45V			
Operating Tempera	ture	Lowest: -0°C	Lowest: -0°C Highest: +35°C					
Testing Temperatur	е	Lowest: -30°C Highest: +50°C						
Operating Frequence	cy Range(s)	Band		Tx (MHz)		Rx (MHz	<b>:</b> )	
Operating Frequent	cy rtange(s)	LTE Band 26		and 26 814 ~ 824		859 ~ 869		
		EUT	Access	ory				
Accessory	Мо	del	Manufacture				No.	
			Honor Device Co., Ltd.				1	
	HW-050200E02		(Manufacturer: Huntkey)					
			Honor Device Co., Ltd.				2	
Adapter			(Manufacturer: BYD)  Honor Device Co., Ltd.					
			(Manufacturer: Huntkey)				3	
			Honor Device Co., Ltd.				4	

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	(Manufacturer: BYD)			
	Honor Device Co., Ltd.			
H/W 0502001103	(Manufacturer: Huntkey)			
HVV-030200002	Honor Device Co., Ltd.	6		
	(Manufacturer: BYD)	O		
	Honor Device Co., Ltd.	1		
HB/06500EEW/	(Manufacturer: SCUD)	ı		
11D490390L1 VV	Honor Device Co., Ltd.	2		
	(Manufacturer: NVT)			
	Honor Device Co., Ltd.	3		
HB496590EFW-F	(Manufacturer: SCUD)	3		
	Honor Device Co., Ltd.			
(Manufacturer: NVT)				
MEND1532B528C00	Jiangxi Lianchuang Hongsheng Electronic	1		
WIEND 1332B320000	Co., LTD.	'		
1203-3283-3 5mm-330	BOLUO COUNTY QUANCHENG ELECTRONIC CO.,LTD.			
1290-3200-3.311111-339				
RY0002	NingBo Broad Telecommunication Co., Ltd.	1		
AU2-CRO013HF	Freeport Resources Enterprises Corp.	2		
2120-00001-0 MING JI ELECTRONICS CO., LTD.		3		
1405110007-00-11	LUXSHARE PRECISION INDUSTRY CO.,	4		
L1250C007-CS-H LTD.		4		
CUDU01B-HC451-EH	FOXCONN INTERCONNECT TECHNOLOGY	5		
	MEND1532B528C00  1293-3283-3.5mm-339  RY0002  AU2-CRO013HF  2120-00001-0  L125UC007-CS-H	Honor Device Co., Ltd. (Manufacturer: Huntkey)   Honor Device Co., Ltd. (Manufacturer: BYD)		

Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.

2. There is more than Adapter/ Earphone / Data cable/ Battery, each one should be applied throughout the compliance test respectively, and however, only the worst case (Adapter 6/ Earphone 1 / Data cable 1/ Battery 3) will be recorded in this report.



# 3. Applied Standards

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

Test standards:

FCC CFR 47 Part 90S (2021)

FCC CFR47 Part 2 (2021)

Reference standard:

ANSI C63.26-2015

KDB 971168 D01 Power Meas License Digital Systems v03r01



# 4. Test Configuration

There is more than one SIM card slot, each one should be applied throughout the compliance test re spectively, and however, only the worst case (SIM 1) will be recorded in this report.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (Z axis, vertical polarization) and the worst case was recorded.

All mode and data rates and positions were investigated.

The following testing in LTE is set based on the maximum RF Output Power.

Test modes are chosen as the worst case configuration below for LTE Band 26

Test items		Bandv	vidth (	MHz)		Mod	ulation	RB			Test Channel		
rest items	1.4	3	5	10	15	QPSK	16QAM	1	50%	100%	L	M	н
RF Power Output and Effective Radiated Power	0	0	0	0	0	0	0	0	0	0	0	0	0
Occupied Bandwidth	0	0	0	0	0	0	0	-	-	0	0	0	0
Emission Mask	0	0	0	0	0	0	0	0	-	0	0	1	0
Peak-to-Average Power Ratio	0	0	0	0	0	0	0	1	-	0	0	0	0
Frequency Stability	0	0	0	0	0	0	0	0	-	-	-	0	-
Spurious Emissions at Antenna Terminals	0	0	0	0	0	0	-	0	-	-	0	0	0
Radiates Spurious Emission	0	-	0	-	0	0	-	0	-	-	-	0	-
Note  1. The mark "O" means that this configuration is chosen for testing.  2. The mark "-" means that this configuration is not testing.													

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#### 5. Test Case

#### 5.1. RF Power Output and Effective Radiated Power

#### **Ambient condition**

Temperature	Relative humidity
21°C ~25°C	40%~60%

#### **Methods of Measurement**

During the process of the testing, The EUT was connected to the Base Station Simulator with a known loss. The EUT is controlled by the Base Station Simulator test set to ensure max power transmission with proper modulation.

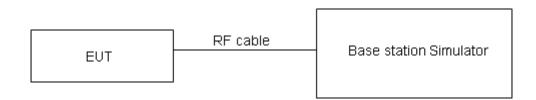
ERP can then be calculated as follows:

EIRP (dBm) = Output Power (dBm) - Losses (dB) + Antenna Gain (dBi)

where:dBd refers to gain relative to an ideal dipole.

EIRP (dBm) = ERP (dBm) + 2.15 (dB.)

#### **Test Setup**



#### Limits

Part 90.635 (b) the maximum output power of the transmitter for mobile stations is 100 watts.

Rule Part 90.635(b) specifies that "The maximum output power of the transmitter for mobile stations is 100 watts".

Limit	≤ 100 W (50 dBm)
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#### **Measurement Uncertainty**

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U = 0.4 dB for RF power output, k = 2, U = 1.19 dB for ERP.

#### **Test Results**

Refer to the section 6.1 of this report for test data.



#### 5.2. Occupied Bandwidth

#### **Ambient condition**

Temperature	Relative humidity
21°C ~25°C	40%~60%

#### **Method of Measurement**

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The occupied bandwidth is measured using spectrum analyzer.

RBW is set to 30 kHz, VBW is set to 91 kHz for LTE Band 26 (1.4MHz),

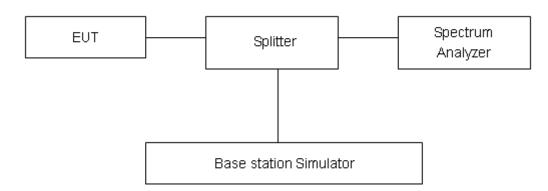
RBW is set to 62 kHz, VBW is set to 180 kHz for LTE Band 26 (3MHz).

RBW is set to 100 kHz, VBW is set to 300 kHz for LTE Band 26 (5MHz).

RBW is set to 200 kHz, VBW is set to 620kHz for LTE Band 26 (10MHz). .

99% power and -26dBc occupied bandwidths are recorded. Spectrum analyzer plots are included on the following pages.

#### **Test Setup**



#### Limits

No specific occupied bandwidth requirements in part 2.1049.

Part 90.209 (a) Each authorization issued to a station licensed under this part will show an emission designator representing the class of emission authorized. The designator will be prefixed by a specified necessary bandwidth. This number does not necessarily indicate the bandwidth occupied by the emission at any instant. In those cases where part 2.202 of this chapter does not provide a formula for the computation of necessary bandwidth, the occupied bandwidth, as defined in part 2 of this chapter, may be used in lieu of the necessary bandwidth.

#### **Measurement Uncertainty**

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U = 624Hz.

#### **Test Results**

Refer to the section 6.2 of this report for test data.



# Ambient condition

5.3. Emission Mask

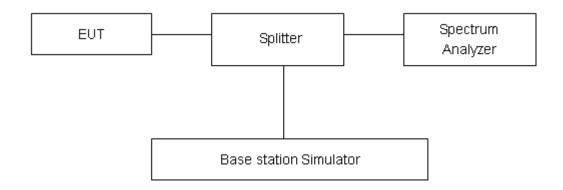
Temperature	Relative humidity
21°C ~25°C	40%~60%

#### **Method of Measurement**

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The band edge of the lowest and highest channels were measured. The average detector is used. For Section 90.691(a) compliance testing, use RBW = 300 Hz for offsets less than 37.5 kHz from a channel edge; RBW = 100 kHz for offsets greater than 37.5 kHz is allowed.

Spectrum analyzer plots are included on the following pages.

#### **Test Setup**



#### Limits

Rule Part 90.691(a) specifies that "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."

#### **Measurement Uncertainty**

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U=0.684dB.

#### **Test Results**

Refer to the section 6.3 of this report for test data.

#### 5.4. Peak-to-Average Power Ratio (PAPR)

#### **Ambient condition**

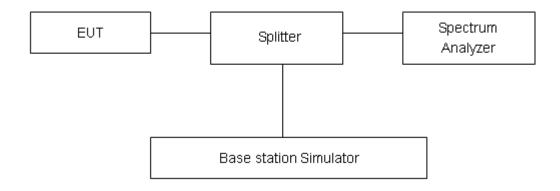
Temperature	Relative humidity
21°C ~25°C	40%~60%

#### **Methods of Measurement**

Measure the total peak power and record as PPk. And measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (*e.g.*, dBm). Determine the PAPR from:

PAPR (dB) = PPk (dBm) - PAvg (dBm).

#### **Test Setup**



#### Limits

In measuring transmissions in this band using an average power technique, the peakto-average ratio (PAR) of the transmission may not exceed 13 dB in 24.232(d).

#### **Measurement Uncertainty**

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U = 0.4 dB.

#### **Test Results**

Refer to the section 6.4 of this report for test data.



#### 5.5. Frequency Stability

#### **Ambient condition**

Temperature	Relative humidity	
21°C ~25°C	40%~60%	

#### **Method of Measurement**

1. Frequency Stability (Temperature Variation)

The temperature inside the climate chamber is varied from -30°C to +50°C in 10°C step size,

- (1) With all power removed, the temperature was decreased to 0°C and permitted to stabilize for three hours.
- (2) Measure the carrier frequency with the test equipment in a "call mode". These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.
- (3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements.
- 2. Frequency Stability (Voltage Variation)

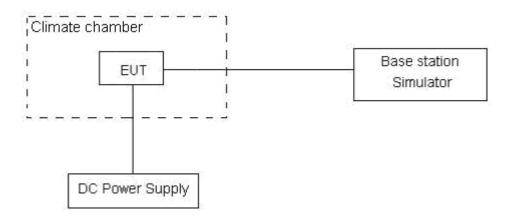
The frequency stability shall be measured with variation of primary supply voltage as follows:

**Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried,

battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

This transceiver is specified to operate with an input voltage of between 3.6 V and 4.45 V, with a nominal voltage of 3.87V.

#### **Test setup**





#### Limits

According to the Sec. 90.213.(a) Unless noted elsewhere, transmitters used in the services governed by this part must have a minimum frequency stability as specified in the following table.

Minimum Frequency Stability

[Parts per million (ppm)]

		Mobile stations		
Frequency range	Fixed and base	Over 2 watts output	2 watts or less output	
(MHz)	stations	power	power	
814 ~ 824	1.5	2.5	2.5	

#### **Measurement Uncertainty**

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor k = 3, U = 0.01ppm.

#### **Test Results**

Refer to the section 6.5 of this report for test data.

#### 5.6. Spurious Emissions at Antenna Terminals

#### **Ambient condition**

Temperature	Relative humidity	
21°C ~25°C	40%~60%	

#### **Method of Measurement**

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The measurement is carried out using a spectrum analyzer. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. RBW and VBW are set to 100 kHz, RBW is set to 1 kHz (0.009MHz~ 0.15 MHz),

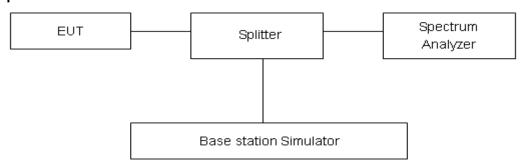
RBW is set to 10 kHz (0.15 MHz~ 30 MHz)

RBW is set to 100 kHz (30MHz~1000 MHz)

RBW is set to 1000 kHz (above 1000MHz)

Sweep is set to ATUO.

#### **Test setup**



#### Limits

Rule Part 90.691 specifies that "The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB."

Limit	-13 dBm
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#### **Measurement Uncertainty**

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor k = 1.96.

Frequency	Uncertainty
9kHz-1GHz	0.684 dB
1GHz-10GHz	1.407 dB

#### **Test Results**

Refer to the section 6.6 of this report for test data.



#### 5.7. Radiates Spurious Emission

#### **Ambient condition**

Temperature	Relative humidity	
21°C ~25°C	40%~60%	

#### **Method of Measurement**

- 1. The testing follows FCC KDB 971168 v03r01 Section 5.8 and ANSI C63.26-2015.
- 2. Below 1GHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H). Above 1GHz: (Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.) The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).
- 3. A loop antenna, A log-periodic antenna or horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
- 4. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=100kHz, VBW=300kHz, and the maximum value of the receiver should be recorded as (Pr).
- 5. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
- 6. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (PcI), the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
- 7. The measurement results are obtained as described below:

Power(EIRP)=PMea- PAg - Pcl + Ga

The measurement results are amend as described below:

Power(EIRP)=PMea- PcI + Ga

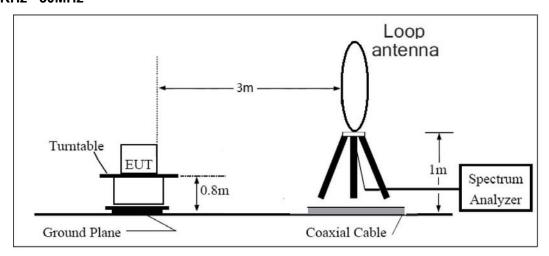
8. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP

#### = EIRP-2.15dBi.

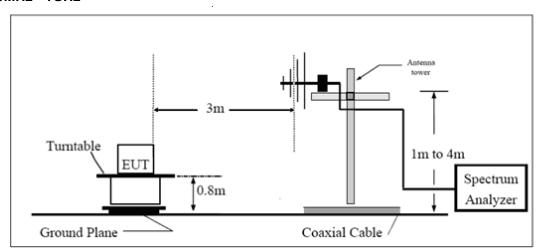
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

#### **Test setup**

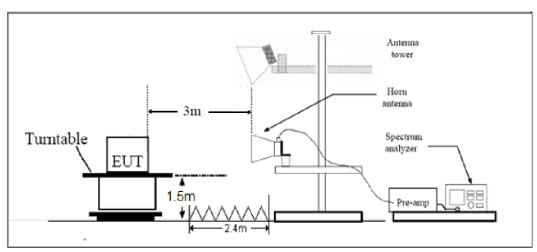
#### 9KHz~30MHz



#### 30MHz~1GHz



#### **Above 1GHz**



Note: Area side:2.4mX3.6m



Limits

Rule Part 90.691 specifies that "The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB."

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Limit -13 dBm
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#### **Measurement Uncertainty**

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U = 3.55 dB.

#### **Test Results**

Refer to the section 6.7 of this report for test data.

# 6. Test Results

# 6.1. RF Power Output and Effective Radiated Power

LTE Band 26							
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Main Antenna ERP(dBm)	Second Antenna ERP(dBm)
1.4	26697	1	#0	QPSK	23.84	21.39	19.99
1.4	26697	1	#Mid	QPSK	24.10	21.65	20.25
1.4	26697	1	#Max	QPSK	23.86	21.41	20.01
1.4	26697	3	#0	QPSK	23.92	21.47	20.07
1.4	26697	3	#Mid	QPSK	23.88	21.43	20.03
1.4	26697	3	#Max	QPSK	23.88	21.43	20.03
1.4	26697	6	#0	QPSK	22.80	20.35	18.95
1.4	26697	1	#0	16QAM	22.76	20.31	18.91
1.4	26697	1	#Mid	16QAM	23.11	20.66	19.26
1.4	26697	1	#Max	16QAM	22.80	20.35	18.95
1.4	26697	3	#0	16QAM	22.99	20.54	19.14
1.4	26697	3	#Mid	16QAM	22.99	20.54	19.14
1.4	26697	3	#Max	16QAM	23.02	20.57	19.17
1.4	26697	6	#0	16QAM	21.83	19.38	17.98
1.4	26740	1	#0	QPSK	23.74	21.29	19.89
1.4	26740	1	#Mid	QPSK	23.99	21.54	20.14
1.4	26740	1	#Max	QPSK	23.74	21.29	19.89
1.4	26740	3	#0	QPSK	23.90	21.45	20.05
1.4	26740	3	#Mid	QPSK	23.88	21.43	20.03
1.4	26740	3	#Max	QPSK	23.82	21.37	19.97
1.4	26740	6	#0	QPSK	22.84	20.39	18.99
1.4	26740	1	#0	16QAM	22.93	20.48	19.08
1.4	26740	1	#Mid	16QAM	23.17	20.72	19.32
1.4	26740	1	#Max	16QAM	22.95	20.50	19.10
1.4	26740	3	#0	16QAM	22.88	20.43	19.03
1.4	26740	3	#Mid	16QAM	22.84	20.39	18.99
1.4	26740	3	#Max	16QAM	22.89	20.44	19.04
1.4	26740	6	#0	16QAM	21.79	19.34	17.94
1.4	26783	1	#0	QPSK	23.83	21.38	19.98
1.4	26783	1	#Mid	QPSK	24.08	21.63	20.23
1.4	26783	1	#Max	QPSK	23.89	21.44	20.04
1.4	26783	3	#0	QPSK	23.94	21.49	20.09
1.4	26783	3	#Mid	QPSK	23.95	21.50	20.10
1.4	26783	3	#Max	QPSK	23.81	21.36	19.96

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Report No.: R2207A0619-R4V2 #0 **QPSK** 22.84 1.4 26783 6 20.39 18.99 1.4 26783 1 #0 16QAM 22.70 20.25 18.85 1 1.4 26783 #Mid 16QAM 22.94 20.49 19.09 1.4 26783 1 #Max 16QAM 22.76 20.31 18.91 26783 3 #0 20.44 1.4 16QAM 22.89 19.04 1.4 26783 3 #Mid 16QAM 22.91 20.46 19.06 3 1.4 26783 16QAM 22.89 20.44 19.04 #Max 1.4 26783 6 #0 16QAM 19.42 18.02 21.87 1 3 26705 #0 **QPSK** 23.81 21.36 19.96 3 26705 1 #Mid **QPSK** 21.36 23.81 19.96 3 1 #Max **QPSK** 21.34 19.94 26705 23.79 3 26705 8 #0 **QPSK** 22.77 20.32 18.92 3 8 26705 #Mid **QPSK** 22.76 20.31 18.91 3 8 **QPSK** 20.40 26705 #Max 22.85 19.00 15 #0 **QPSK** 20.35 3 26705 22.80 18.95 3 26705 1 #0 16QAM 22.99 20.54 19.14 3 26705 1 #Mid 16QAM 22.91 20.46 19.06 3 1 26705 #Max 16QAM 22.92 20.47 19.07 3 26705 8 #0 16QAM 21.84 19.39 17.99 3 8 17.99 26705 #Mid 16QAM 21.84 19.39 3 26705 8 #Max 16QAM 21.86 19.41 18.01 3 26705 15 #0 16QAM 21.71 19.26 17.86 #0 3 26740 1 **QPSK** 21.38 19.98 23.83 3 1 #Mid 23.92 21.47 20.07 26740 **QPSK** 3 26740 1 #Max **QPSK** 23.88 21.43 20.03 3 26740 8 #0 **QPSK** 22.85 20.40 19.00 3 26740 8 #Mid **QPSK** 22.83 20.38 18.98 3 26740 8 #Max **QPSK** 22.84 20.39 18.99 3 26740 15 #0 **QPSK** 22.83 20.38 18.98 3 26740 1 #0 22.67 20.22 18.82 16QAM 3 26740 1 #Mid 16QAM 22.71 20.26 18.86 3 1 26740 #Max 16QAM 22.74 20.29 18.89 3 26740 8 #0 16QAM 19.42 21.87 18.02 3 8 #Mid 16QAM 19.41 18.01 26740 21.86 3 26740 8 #Max 16QAM 21.91 19.46 18.06 3 26740 15 #0 16QAM 21.88 19.43 18.03 3 1 #0 **QPSK** 21.32 19.92 26775 23.77 **QPSK** 3 1 #Mid 23.84 21.39 19.99 26775 3 26775 1 #Max **QPSK** 23.81 21.36 19.96 3 26775 8 #0 **QPSK** 22.85 20.40 19.00 3 8 #Mid **QPSK** 22.81 20.36 18.96 26775 3 26775 8 #Max **QPSK** 22.88 20.43 19.03 3 26775 15 #0 **QPSK** 22.87 20.42 19.02



Report No.: R2207A0619-R4V2 #0 16QAM 23.09 3 26775 1 20.64 19.24 3 26775 1 #Mid 16QAM 23.10 20.65 19.25 1 3 26775 #Max 16QAM 23.10 20.65 19.25 3 #0 8 16QAM 21.89 19.44 18.04 26775 3 8 26775 #Mid 16QAM 21.90 19.45 18.05 3 26775 8 #Max 16QAM 21.90 19.45 18.05 3 15 #0 26775 16QAM 21.87 19.42 18.02 5 #0 **QPSK** 21.26 19.86 26715 1 23.71 5 26715 1 #Mid **QPSK** 23.84 21.39 19.99 5 1 **QPSK** 23.70 21.25 26715 #Max 19.85 5 12 #0 **QPSK** 22.73 20.28 18.88 26715 5 26715 12 #Mid **QPSK** 22.74 20.29 18.89 5 26715 12 #Max **QPSK** 22.84 20.39 18.99 5 25 #0 **QPSK** 20.40 26715 22.85 19.00 1 #0 20.44 19.04 5 26715 16QAM 22.89 5 26715 1 #Mid 16QAM 23.01 20.56 19.16 5 26715 1 #Max 16QAM 22.92 20.47 19.07 5 12 #0 16QAM 21.71 19.26 17.86 26715 5 26715 12 #Mid 16QAM 21.71 19.26 17.86 5 12 26715 #Max 16QAM 21.86 19.41 18.01 5 26715 25 #0 16QAM 21.88 19.43 18.03 5 26740 1 #0 **QPSK** 23.64 21.19 19.79 5 26740 1 #Mid **QPSK** 21.35 19.95 23.80 5 1 23.67 21.22 19.82 26740 #Max **QPSK** 5 26740 12 #0 **QPSK** 22.83 20.38 18.98 5 26740 12 #Mid **QPSK** 22.84 20.39 18.99 5 26740 12 #Max **QPSK** 22.87 20.42 19.02 5 26740 25 #0 **QPSK** 22.87 20.42 19.02 5 26740 1 #0 16QAM 22.94 20.49 19.09 5 26740 1 #Mid 16QAM 23.05 20.60 19.20 5 26740 1 #Max 16QAM 22.99 20.54 19.14 5 26740 12 #0 16QAM 21.86 19.41 18.01 5 26740 12 #Mid 16QAM 19.41 21.86 18.01 5 12 #Max 16QAM 19.44 18.04 26740 21.89 5 25 26740 #0 16QAM 21.93 19.48 18.08 5 26765 1 #0 **QPSK** 23.70 21.25 19.85 5 **QPSK** 23.90 21.45 20.05 26765 1 #Mid **QPSK** 5 26765 1 #Max 23.73 21.28 19.88 5 12 #0 18.97 26765 **QPSK** 22.82 20.37 5 26765 12 #Mid **QPSK** 22.82 20.37 18.97 5 12 #Max **QPSK** 22.81 20.36 18.96 26765 5 25 #0 26765 **QPSK** 22.87 20.42 19.02 5 26765 1 #0 16QAM 23.01 20.56 19.16



Report No.: R2207A0619-R4V2 **RF Test Report** 

<u> </u>	at Report					Report No.: R220	7771001011111
5	26765	1	#Mid	16QAM	23.21	20.76	19.36
5	26765	1	#Max	16QAM	23.05	20.60	19.20
5	26765	12	#0	16QAM	21.84	19.39	17.99
5	26765	12	#Mid	16QAM	21.82	19.37	17.97
5	26765	12	#Max	16QAM	21.81	19.36	17.96
5	26765	25	#0	16QAM	21.92	19.47	18.07
10	26740	1	#0	QPSK	23.83	21.38	19.98
10	26740	1	#Mid	QPSK	23.94	21.49	20.09
10	26740	1	#Max	QPSK	23.87	21.42	20.02
10	26740	25	#0	QPSK	22.83	20.38	18.98
10	26740	25	#Mid	QPSK	22.82	20.37	18.97
10	26740	25	#Max	QPSK	22.92	20.47	19.07
10	26740	50	#0	QPSK	22.87	20.42	19.02
10	26740	1	#0	16QAM	23.02	20.57	19.17
10	26740	1	#Mid	16QAM	23.17	20.72	19.32
10	26740	1	#Max	16QAM	23.02	20.57	19.17
10	26740	25	#0	16QAM	21.92	19.47	18.07
10	26740	25	#Mid	16QAM	21.89	19.44	18.04
10	26740	25	#Max	16QAM	22.02	19.57	18.17
10	26740	50	#0	16QAM	21.89	19.44	18.04

# 6.2. Occupied Bandwidth

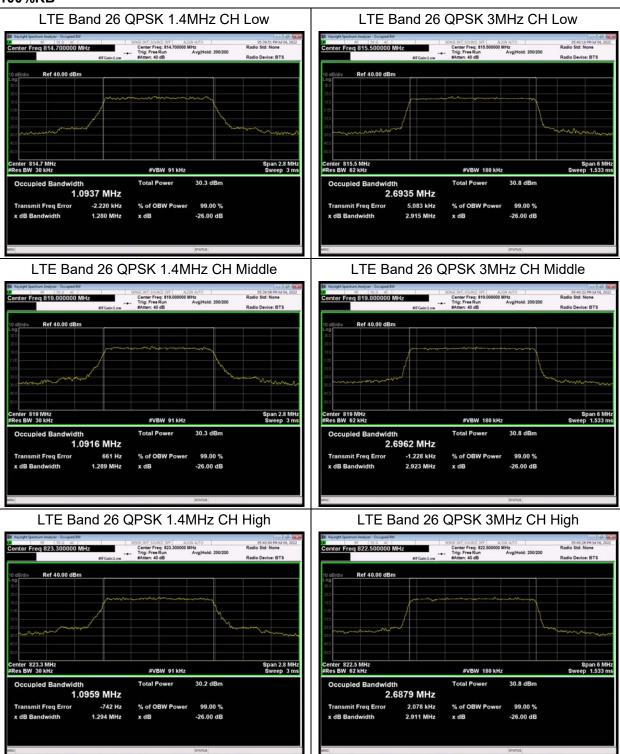
LTE Band 26								
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)		
			26697	814.7	1.09	1.28		
		1.4	26740	819	1.09	1.29		
			26783	823.3	1.10	1.29		
			26705	815.5	2.69	2.92		
	ODCK	3	26740	819	2.70	2.92		
	QPSK		26775	822.5	2.69	2.91		
			26715	816.5	4.50	4.89		
		5	26740	819	4.51	4.94		
			26765	821.5	4.50	4.91		
100%		10	26740	819	8.96	9.75		
100%			26697	814.7	1.09	1.29		
		1.4	26740	819	1.10	1.31		
	16QAM		26783	823.3	1.09	1.26		
			26705	815.5	2.68	2.94		
		3	26740	819	2.69	2.91		
			26775	822.5	2.69	2.92		
			26715	816.5	4.51	4.96		
		5	26740	819	4.51	4.88		
			26765	821.5	4.50	4.91		
		10	26740	819	8.95	9.59		
			26697	814.7	0.300	0.465		
		1.4	26740	819	0.292	0.465		
			26783	823.3	0.299	0.477		
			26705	815.5	0.391	0.601		
1RB	OBSK	3	26740	819	0.393	0.571		
IND	QPSK		26775	822.5	0.397	0.604		
			26715	816.5	0.689	0.963		
		5	26740	819	0.724	1.048		
			26765	821.5	0.699	0.946		
		10	26740	819	1.134	1.640		

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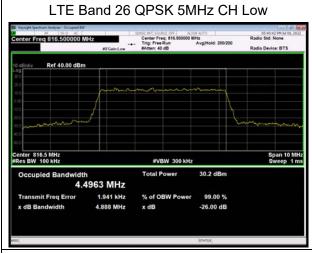


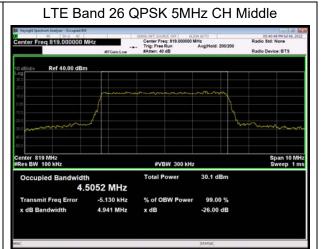
			26697	814.7	0.301	0.457
		1.4	26740	819	0.295	0.477
			26783	823.3	0.295	0.482
			26705	815.5	0.385	0.545
	16QAM	3	26740	819	0.375	0.518
			26775	822.5	0.399	0.579
		5 2	26715	816.5	0.720	0.965
			26740	819	0.701	1.031
			26765	821.5	0.718	0.954
		10	26740	819	1.068	1.467

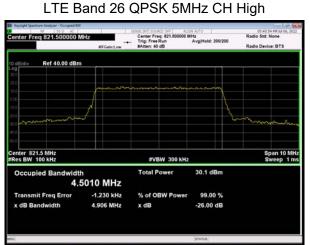
#### 100%RB

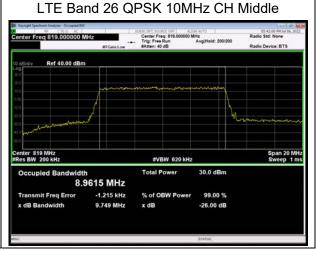














LTE Band 26 16QAM 3MHz CH Low LTE Band 26 16QAM 1.4MHz CH Low Ref 40.00 dB Ref 40.00 dBm Span 2.8 MHz Sweep 3 ms Span 6 MH. eep 1.533 m 1.0891 MHz 2.6834 MHz 956 Hz 1,600 kHz % of OBW Power 99.00 % % of OBW Power 99.00 % LTE Band 26 16QAM 1.4MHz CH Middle LTE Band 26 16QAM 3MHz CH Middle Span 6 MH Sweep 1.533 m Span 2.8 MHz Sweep 3 ms 1.1008 MHz 2.6877 MHz -3.193 kHz 1.870 kHz 99.00 % 99.00 % % of OBW Power % of OBW Power LTE Band 26 16QAM 1.4MHz CH High LTE Band 26 16QAM 3MHz CH High Center Freq: 823.300000 MHz
Trig: Free Run AvgiHold: 200/200
Salmi.ow SAtten: 40 dB Center Freq: 822.500000 MHz

Trig: Free Run Avg

1.0867 MHz

-2.723 kHz

**#VBW 91 kHz** 

% of OBW Power 99.00 %

Span 6 MH Sweep 1.533 m

#VBW 180 kHz

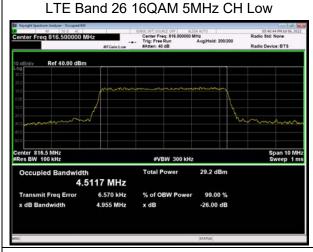
2.6926 MHz

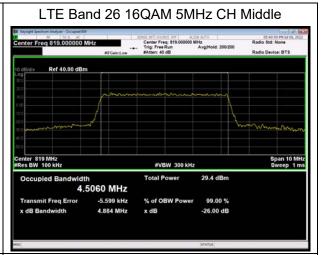
-2.318 kHz

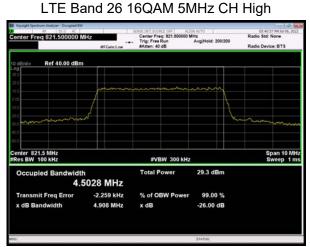
Report No.: R2207A0619-R4V2

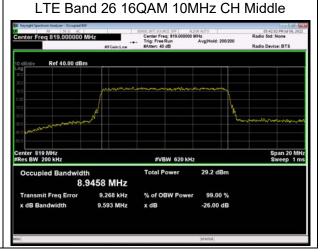
Span 2.8 MHz Sweep 3 ms





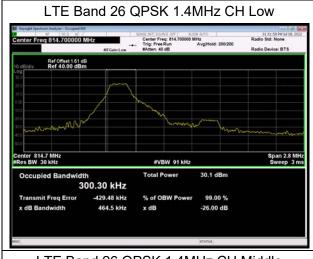


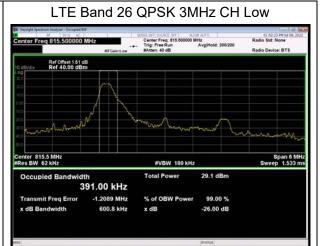




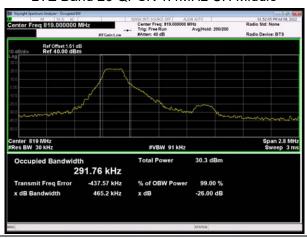


#### 1 RB

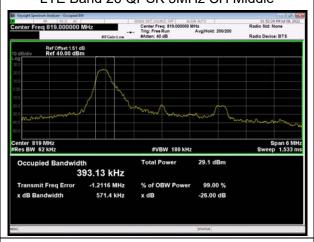




LTE Band 26 QPSK 1.4MHz CH Middle



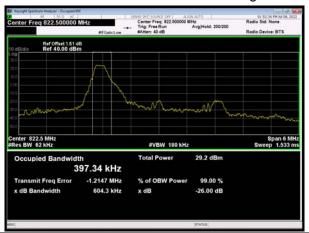
#### LTE Band 26 QPSK 3MHz CH Middle



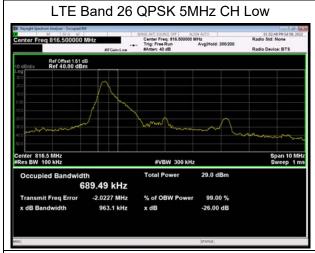
LTE Band 26 QPSK 1.4MHz CH High

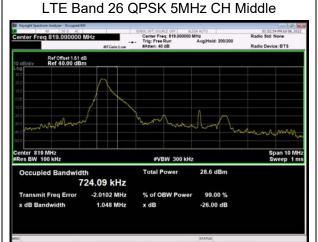


#### LTE Band 26 QPSK 3MHz CH High

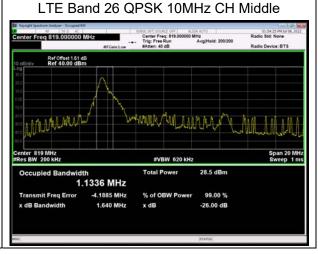




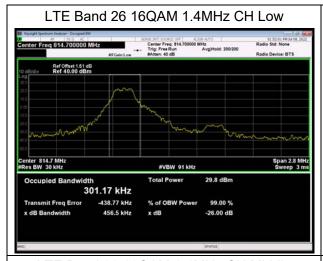


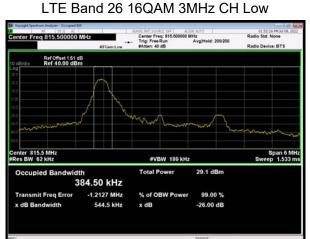


LTE Band 26 QPSK 5MHz CH High Span 10 MHz Sweep 1 ms 699.13 kHz -2.0229 MHz 99.00 %

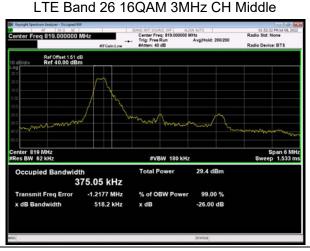


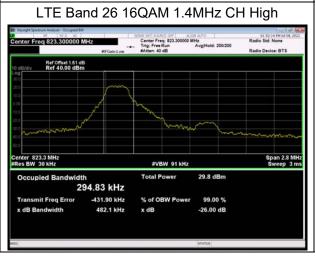


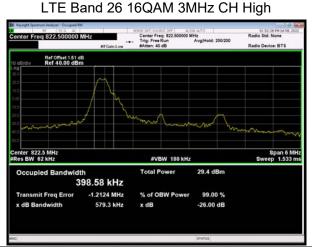




LTE Band 26 16QAM 1.4MHz CH Middle Span 2.8 MHz Sweep 3 ms 295.24 kHz -430.93 kHz 99.00 %

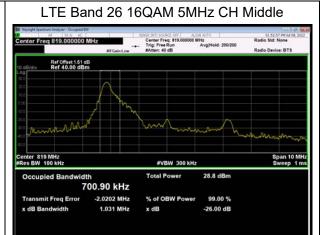


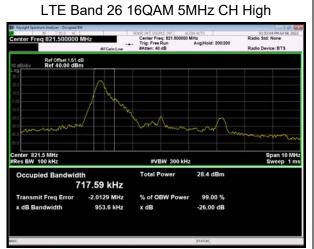


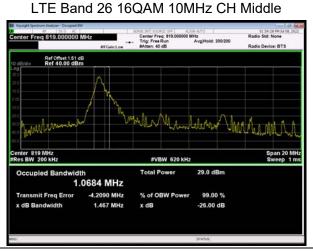




# LTE Band 26 16QAM 5MHz CH Low Span 10 MHz Sweep 1 ms 719.88 kHz -2.0156 MHz 99.00 %

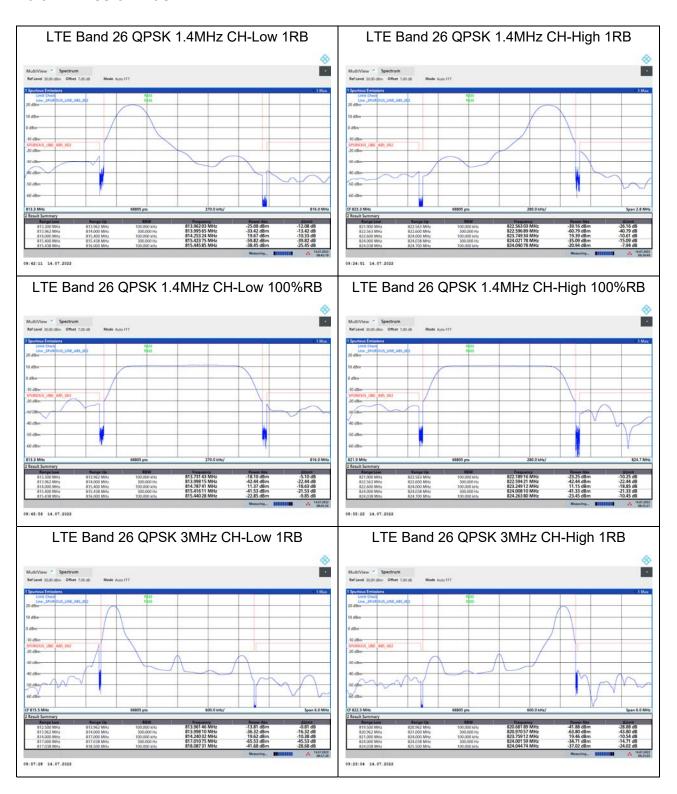








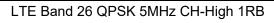
#### 6.3. Emission Mask

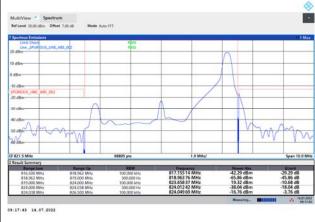


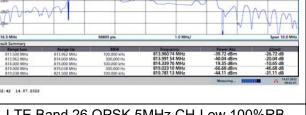
**RF Test Report** Report No.: R2207A0619-R4V2 LTE Band 26 QPSK 3MHz CH-Low 100%RB LTE Band 26 QPSK 3MHz CH-High 100%RB Span 6.0 MH

09:00:37 14.07.2022

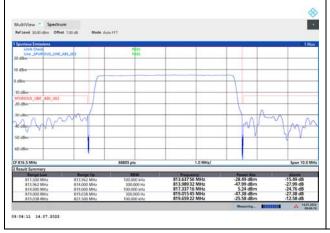
# LTE Band 26 QPSK 5MHz CH-Low 1RB .





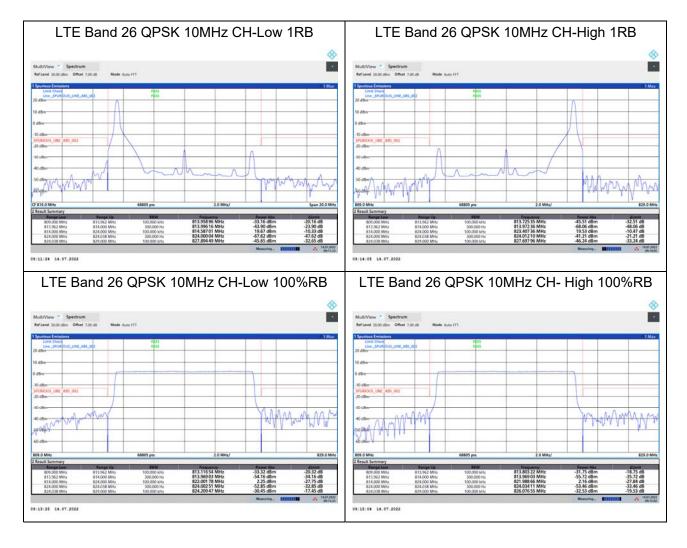


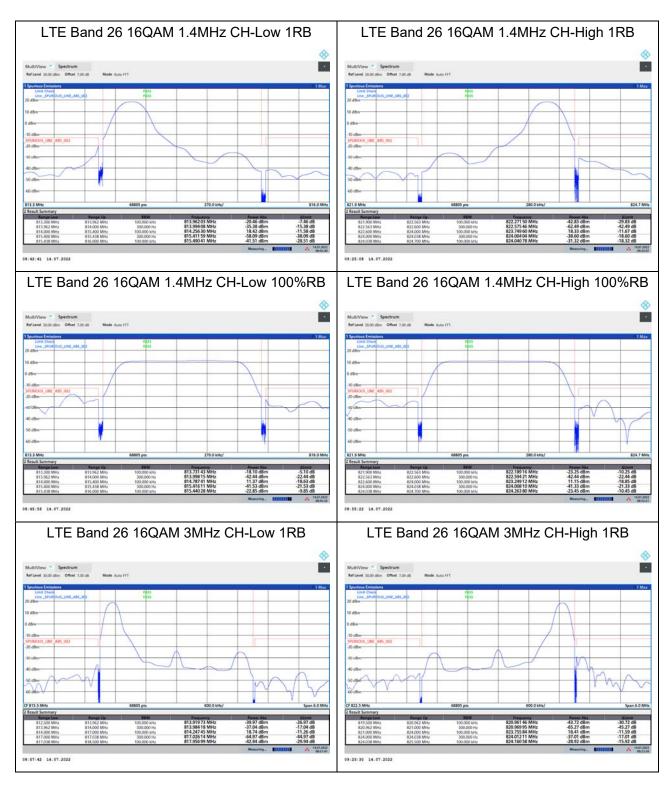
#### LTE Band 26 QPSK 5MHz CH-Low 100%RB

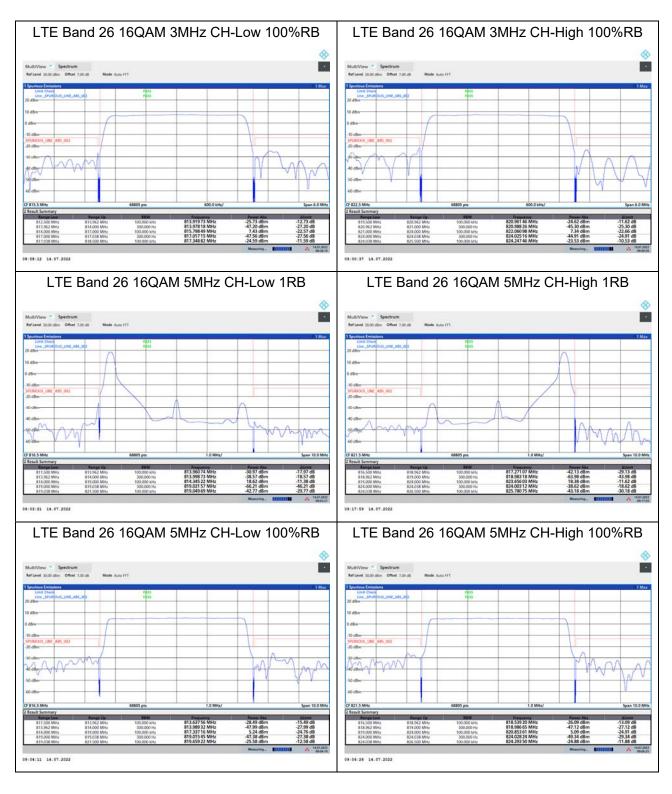


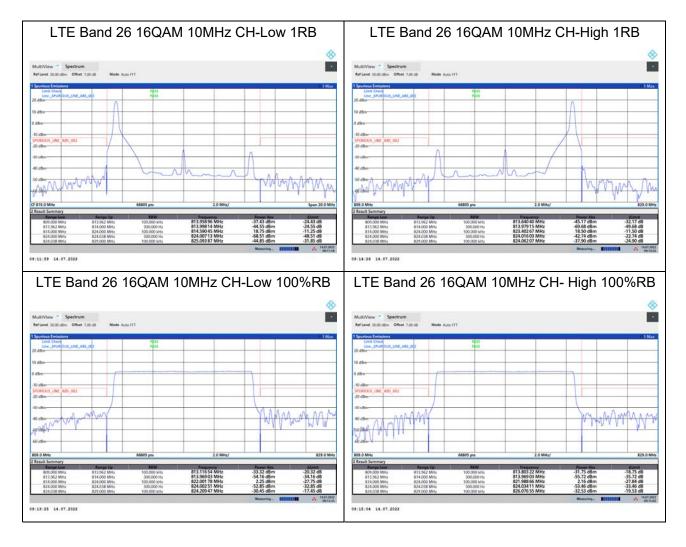
#### LTE Band 26 QPSK 5MHz CH-High 100%RB













## 6.4. Peak-to-Average Power Ratio (PAPR)

Mode	Channel	Frequency (MHz)	Peak(dBm)	Avg(dBm)	PAPR(dB)	Limit(dB)	Conclusion
	26697	814.7	27.63	22.18	5.45	13	PASS
1.4 MHz (QPSK)	26740	819	27.56	22.18	5.38	13	PASS
(QI OIL)	26783	823.3	27.91	22.22	5.69	13	PASS
	26697	814.7	27.63	22.16	5.47	13	PASS
3 MHz (QPSK)	26740	819	27.66	22.22	5.44	13	PASS
(QI OIL)	26783	823.3	27.87	22.20	5.67	13	PASS
	26697	814.7	27.74	22.20	5.54	13	PASS
5 MHz (QPSK)	26740	819	27.75	22.25	5.50	13	PASS
(QI OIL)	26783	823.3	27.84	22.21	5.63	13	PASS
10 MHz (QPSK)	26740	819	27.78	22.24	5.54	13	PASS

Mode	Channel	Frequency (MHz)	Peak(dBm)	Avg(dBm)	PAPR(dB)	Limit(dB)	Conclusion
	26697	814.7	27.50	21.20	6.30	13	PASS
1.4 MHz (16QAM)	26740	819	27.39	21.22	6.17	13	PASS
(10QAIII)	26783	823.3	27.81	21.32	6.49	13	PASS
	26697	814.7	27.51	21.21	6.30	13	PASS
3 MHz (16QAM)	26740	819	27.54	21.32	6.22	13	PASS
(TOQAIII)	26783	823.3	27.77	21.27	6.50	13	PASS
	26697	814.7	27.55	21.28	6.27	13	PASS
5 MHz (16QAM)	26740	819	27.57	21.30	6.27	13	PASS
(10QAIII)	26783	823.3	27.63	21.26	6.37	13	PASS
10 MHz (16QAM)	26740	819	27.64	21.31	6.33	13	PASS

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TA-MB-04-010R

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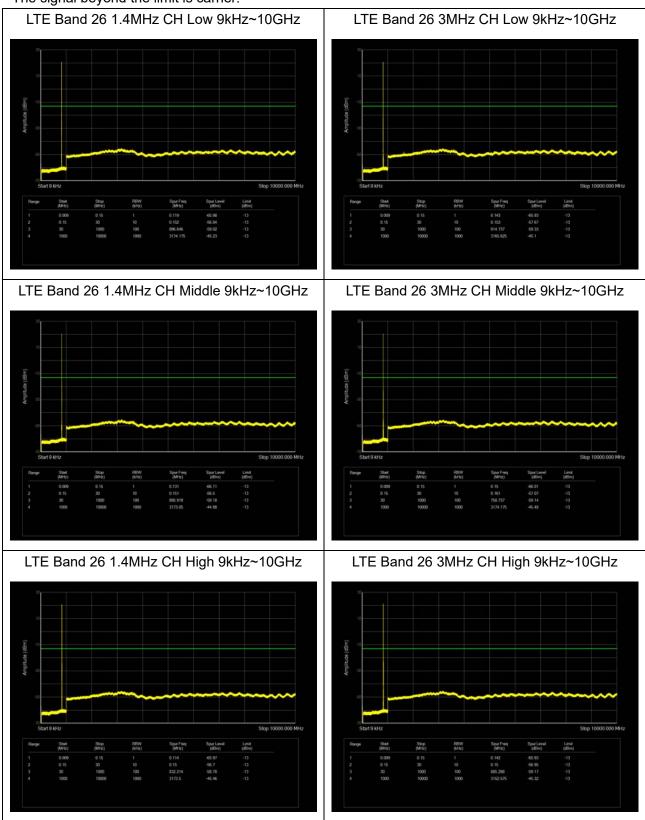
# 6.5. Frequency Stability

			LTE Band 2	26		
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	1.4MHz	(112)	(112)	Otdomty (ppm)	Otdomty (ppm)	VCIGICE
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)		11.67	12.03	0.01424	0.01469	PASS
Extreme (50°C)		13.80	14.85	0.01685	0.01813	PASS
Extreme (40°C)		3.34	8.11	0.00408	0.00990	PASS
Extreme (30°C)		6.18	9.75	0.00754	0.01190	PASS
Extreme (20°C)	Normal	6.92	17.13	0.00845	0.02091	PASS
Extreme (10°C)	Nomai	1.10	2.75	0.00135	0.00336	PASS
Extreme (0°C)		5.00	7.04	0.00611	0.00860	PASS
Extreme (-10℃)		16.39	11.95	0.02001	0.01459	PASS
Extreme (-20°C)		6.53	3.21	0.00797	0.00393	PASS
Extreme (-30°C)		3.14	1.91	0.00383	0.00234	PASS
25℃	LV	1.88	13.56	0.00229	0.01655	PASS
<b>25</b> ℃	HV	13.57	14.13	0.01657	0.01726	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz	(: :=)	(: :=)			7 01 01101
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)		4.51	8.14	0.00551	0.00993	PASS
Extreme (50°C)		6.20	11.12	0.00756	0.01357	PASS
Extreme (40°C)		13.31	5.34	0.01625	0.00652	PASS
Extreme (30°C)		16.32	10.85	0.01992	0.01325	PASS
Extreme (20°C)	Normal	5.90	8.22	0.00720	0.01003	PASS
Extreme (10°C)	Nomiai	5.60	11.50	0.00683	0.01404	PASS
Extreme (0°C)		4.67	4.61	0.00570	0.00562	PASS
Extreme (-10°C)		8.54	13.07	0.01043	0.01596	PASS
Extreme (-20℃)		7.07	16.31	0.00863	0.01992	PASS
Extreme (-30°C)		3.06	15.97	0.00374	0.01950	PASS
<b>25</b> ℃	LV	15.26	11.16	0.01863	0.01363	PASS
20 0	HV	2.52	1.67	0.00307	0.00204	PASS

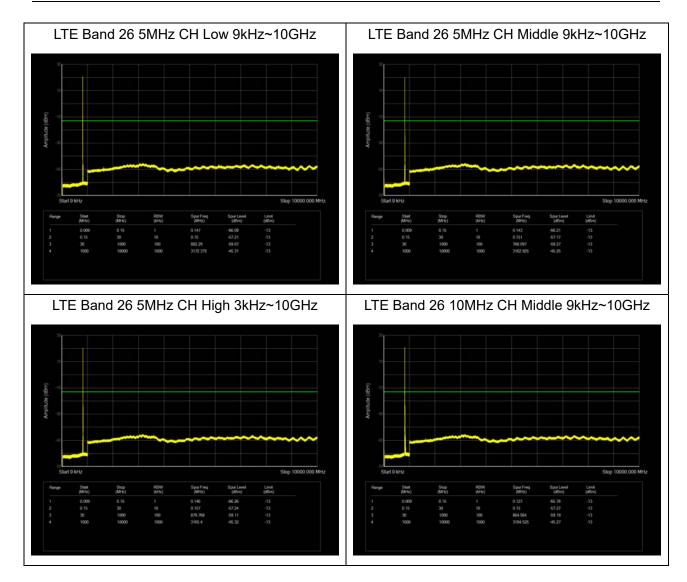
Condition		Freq.Error	Freq.Error	Frequency	Frequency	
BANDWIDTH	5MHz	(Hz)	(Hz)	Stability (ppm)	Stability (ppm)	Verdict
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)		13.08	3.05	0.01597	0.00373	PASS
Extreme (50°C)		13.08	7.13	0.01597	0.00870	PASS
Extreme (40°C)		4.58	12.41	0.00559	0.01516	PASS
Extreme (30°C)		14.28	3.90	0.01744	0.00476	PASS
Extreme (20℃)	Normal	17.62	3.76	0.02151	0.00459	PASS
Extreme (10°C)	Nomai	17.66	11.53	0.02156	0.01408	PASS
Extreme (0°C)		6.27	12.02	0.00765	0.01468	PASS
Extreme (-10℃)		4.21	11.53	0.00514	0.01408	PASS
Extreme (-20℃)		4.94	17.27	0.00604	0.02108	PASS
Extreme (-30°C)		14.36	9.45	0.01754	0.01153	PASS
25°○	LV	9.16	6.65	0.01118	0.00812	PASS
25℃	HV	6.14	9.44	0.00749	0.01153	PASS
Condition		Freq.Error	Freq.Error	Frequency	Frequency	
BANDWIDTH	10MHz	(Hz)	(Hz)	Stability (ppm)	Stability (ppm)	Verdict
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)		10.94	16.59	0.01336	0.02026	PASS
Extreme (50°C)		7.89	13.28	0.00963	0.01622	PASS
Extreme (40°C)		11.85	12.28	0.01447	0.01500	PASS
Extreme (30°C)		13.33	8.40	0.01628	0.01025	PASS
Extreme (20°C)	Marmal	17.41	9.81	0.02126	0.01198	PASS
Extreme (10°C)	Normal	4.27	6.59	0.00521	0.00805	PASS
Extreme (0°C)		17.68	7.93	0.02159	0.00968	PASS
Extreme (-10℃)		12.15	17.13	0.01484	0.02092	PASS
Extreme (-20℃)		3.54	10.96	0.00432	0.01339	PASS
Extreme (-30°C)		3.74	2.60	0.00456	0.00318	PASS
25℃	LV	4.95	9.91	0.00605	0.01210	PASS
23 (	HV	11.66	8.84	0.01423	0.01080	PASS

## 6.6. Spurious Emissions at Antenna Terminals

If disturbances were found more than 20dB below limit line, the mark is not required for the EUT. The signal beyond the limit is carrier.



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### 6.7. Radiates Spurious Emission

Sweep the whole frequency band through the range from 30MHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

#### Main Antenna

LTE Band 26 1.4MHz CH Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1637.00	-65.02	1.70	8.70	Vertical	-60.17	-13.00	47.17	45
3	2454.90	-66.30	2.30	12.00	Vertical	-58.75	-13.00	45.75	180
4	3273.20	-63.54	2.20	13.10	Vertical	-54.79	-13.00	41.79	180
5	4091.50	-63.05	3.00	12.50	Vertical	-55.70	-13.00	42.70	225
6	4909.80	-64.12	3.10	12.50	Vertical	-56.87	-13.00	43.87	270
7	5728.10	-56.99	3.40	12.50	Vertical	-50.04	-13.00	37.04	0
8	6546.40	-51.94	3.80	11.50	Vertical	-46.39	-13.00	33.39	180
9	7364.70	-51.11	4.20	12.20	Vertical	-45.26	-13.00	32.26	45
10	8183.00	-53.90	4.30	12.30	Vertical	-48.05	-13.00	35.05	180

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

#### LTE Band 26 5MHz CH Middle

ETE Band 20 JWH IZ CIT Wildele									
Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1633.60	-65.56	1.70	8.70	Vertical	-60.71	-13.00	47.71	0
3	2450.55	-62.68	2.30	12.00	Vertical	-55.13	-13.00	42.13	180
4	3266.00	-65.62	2.20	13.10	Vertical	-56.87	-13.00	43.87	180
5	4082.50	-62.99	3.00	12.50	Vertical	-55.64	-13.00	42.64	315
6	4899.00	-63.87	3.10	12.50	Vertical	-56.62	-13.00	43.62	0
7	5715.50	-61.13	3.40	12.50	Vertical	-54.18	-13.00	41.18	315
8	6532.00	-54.87	3.80	11.50	Vertical	-49.32	-13.00	36.32	270
9	7348.50	-52.75	4.20	12.20	Vertical	-46.90	-13.00	33.90	0
10	8165.00	-54.25	4.30	12.30	Vertical	-48.40	-13.00	35.40	180

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

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#### LTE Band 26 10MHz CH Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1628.95	-64.81	1.70	8.70	Vertical	-59.96	-13.00	46.96	315
3	2442.00	-65.99	2.30	12.00	Vertical	-58.44	-13.00	45.44	0
4	3256.00	-65.29	2.20	13.10	Vertical	-56.54	-13.00	43.54	315
5	4070.00	-64.45	3.00	12.50	Vertical	-57.10	-13.00	44.10	45
6	4884.00	-63.80	3.10	12.50	Vertical	-56.55	-13.00	43.55	0
7	5698.00	-61.03	3.40	12.50	Vertical	-54.08	-13.00	41.08	0
8	6512.00	-54.60	3.80	11.50	Vertical	-49.05	-13.00	36.05	180
9	7326.00	-53.48	4.20	12.20	Vertical	-47.63	-13.00	34.63	45
10	8140.00	-54.11	4.30	12.30	Vertical	-48.26	-13.00	35.26	0

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.

#### **Second Antenna**

LTE Band 26 1.4MHz CH Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1637.00	-60.63	1.70	8.70	Horizontal	-55.78	-13.00	42.78	45
3	2454.90	-56.48	2.30	12.00	Horizontal	-48.93	-13.00	35.93	45
4	3273.20	-65.49	2.20	13.10	Horizontal	-56.74	-13.00	43.74	180
5	4091.50	-63.87	3.00	12.50	Horizontal	-56.52	-13.00	43.52	225
6	4909.80	-64.04	3.10	12.50	Horizontal	-56.79	-13.00	43.79	270
7	5728.10	-63.72	3.40	12.50	Horizontal	-56.77	-13.00	43.77	0
8	6546.40	-55.37	3.80	11.50	Horizontal	-49.82	-13.00	36.82	180
9	7364.70	-53.69	4.20	12.20	Horizontal	-47.84	-13.00	34.84	45
10	8183.00	-54.41	4.30	12.30	Horizontal	-48.56	-13.00	35.56	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

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<sup>2.</sup> The worst emission was found in the antenna is Vertical position.

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#### LTE Band 26 5MHz CH Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1633.60	-65.28	1.70	8.70	Horizontal	-60.43	-13.00	47.43	0
3	2450.55	-49.22	2.30	12.00	Horizontal	-41.67	-13.00	28.67	180
4	3266.00	-65.72	2.20	13.10	Horizontal	-56.97	-13.00	43.97	180
5	4082.50	-64.18	3.00	12.50	Horizontal	-56.83	-13.00	43.83	315
6	4899.00	-64.07	3.10	12.50	Horizontal	-56.82	-13.00	43.82	0
7	5715.50	-63.58	3.40	12.50	Horizontal	-56.63	-13.00	43.63	315
8	6532.00	-60.32	3.80	11.50	Horizontal	-54.77	-13.00	41.77	270
9	7348.50	-56.62	4.20	12.20	Horizontal	-50.77	-13.00	37.77	0
10	8165.00	-54.58	4.30	12.30	Horizontal	-48.73	-13.00	35.73	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

#### LTE Band 26 10MHz CH Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1628.95	-61.03	1.70	8.70	Horizontal	-56.18	-13.00	43.18	270
3	2442.00	-59.16	2.30	12.00	Horizontal	-51.61	-13.00	38.61	90
4	3256.00	-64.47	2.20	13.10	Horizontal	-55.72	-13.00	42.72	315
5	4070.00	-64.19	3.00	12.50	Horizontal	-56.84	-13.00	43.84	45
6	4884.00	-64.43	3.10	12.50	Horizontal	-57.18	-13.00	44.18	0
7	5698.00	-62.00	3.40	12.50	Horizontal	-55.05	-13.00	42.05	0
8	6512.00	-54.03	3.80	11.50	Horizontal	-48.48	-13.00	35.48	180
9	7326.00	-54.07	4.20	12.20	Horizontal	-48.22	-13.00	35.22	45
10	8140.00	-54.24	4.30	12.30	Horizontal	-48.39	-13.00	35.39	0

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Horizontal position.

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## 7. Main Test Instruments

Name	Manufacturer	Туре	Serial Number	Calibration Date	Expiration Date
Base Station Simulator	R&S	CMW500	113824	2022-05-14	2023-05-13
Spectrum Analyzer	Keysight	N9020A	MY50510203	2021-12-12	2022-12-11
Universal Radio Communication Tester	Agilent	E5515C	GB44400275	2021-12-12	2022-12-11
Signal Analyzer	R&S	FSV3030	101411	2021-12-12	2022-12-11
Climatic Chamber	ESPEC	SU-242	93000506	2021-12-12	2022-12-11
	Radiat	es Spurious Emis	ssion		
Signal Analyzer	R&S	FSV30	100815	2021-12-12	2022-12-11
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2020-04-02	2023-04-01
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2019-12-16	2022-12-15
Horn Antenna	R&S	HF907	102723	2020-08-11	2023-08-10
Software	R&S	EMC32	10.35.10	1	/

\*\*\*\*\*\*END OF REPORT \*\*\*\*\*\*



# **ANNEX A: The EUT Appearance**

The EUT Appearance is submitted separately.



# **ANNEX B: Test Setup Photos**

The Test Setup Photos is submitted separately.