

TEST REPORT FOR WCDMA TESTING

Report No.: SRTC2023-9004(F)-23071101(B)

Product Name: tracker

Product Model: MK40

Applicant: TCL Communication Ltd.

Manufacturer: TCL Communication Ltd.

Specification: FCC Part 24E, Part 22H, Part 2, Part 27 (2022)

FCC ID: 2ACCJB172

The State Radio_monitoring_center Testing Center (SRTC)

15th Building, No.30 Shixing Street, Shijingshan District,

Beijing, P.R.China

Tel: 86-10-57996183 Fax: 86-10-57996388

CONTENTS

1. GENERAL INFORMATION	2
1.1 NOTES OF THE TEST REPORT	2
1.2 INFORMATION ABOUT THE TESTING LABORATORY	2
1.3 APPLICANT’S DETAILS	2
1.4 MANUFACTURER’S DETAILS	2
1.5 TEST ENVIRONMENT	2
2 DESCRIPTION OF THE DEVICE UNDER TEST	4
2.1 FINAL EQUIPMENT BUILD STATUS	4
2.2 SUPPORT EQUIPMENT	6
3 REFERENCE SPECIFICATION	7
4 KEY TO NOTES AND RESULT CODES	7
5 RESULT SUMMARY	8
6 TEST RESULT	9
6.1 RF Power Output	9
6.2 Effective Radiated Power and Effective Isotropic Radiated Power	10
6.3 Occupied Bandwidth	12
6.4 Emission Bandwidth	13
6.5 Spurious Emissions at antenna terminal	14
6.6 Band Edges Compliance	15
6.7 Frequency Stability	16
6.8 Radiated Spurious Emissions	17
6.9 Peak-Average Ratio	19
7 MEASUREMENT UNCERTAINTIES	20
8 TEST EQUIPMENTS	21
APPENDIX A – TEST DATA OF CONDUCTED EMISSION	23
WCDMA BAND IV	23
1. RF POWER OUTPUT	23
2. OCCUPIED BANDWIDTH	24
3. EMISSION BANDWIDTH	27
4. SPURIOUS EMISSIONS AT ANTENNA TERMINAL	30
5. BAND EDGES COMPLIANCE	31
6. FREQUENCY STABILITY	32
7. PEAK-AVERAGE RATIO	33
8. EFFECTIVE RADIATED POWER AND EFFECTIVE ISOTROPIC RADIATED POWER	36
APPENDIX B – TEST DATA OF RADIATED EMISSION	72

1. GENERAL INFORMATION

1.1 Notes of the test report

The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written permission of The State Radio_monitoring_center Testing Center (SRTC). The test results relate only to individual items of the samples which have been tested. The certification and accreditation identifiers used in this report shall not be applicable to the tested or calibrated samples thereof. The manufacturer shall not mark the tested samples or items (or a separate part of the item) with the identifiers of certification and accreditation to mislead relevant parties about the tested samples or items.

1.2 Information about the testing laboratory

Company:	The State Radio_monitoring_center Testing Center (SRTC)
Address:	15th Building, No.30 Shixing Street, Shijingshan District, P.R.China
City:	Beijing
Country or Region:	P.R.China
Contacted person:	Liu Jia
Tel:	+86 10 57996183
Fax:	+86 10 57996388
Email:	liujiaf@srtc.org.cn

1.3 Applicant's details

Company:	TCL Communication Ltd.
Address:	5/F, Building 22E, 22 Science Park East Avenue Hong Kong Science Park, Shatin, NT
City:	Shenzhen
Country or Region:	China
Contacted person:	Emily
Tel:	15089742056
Fax:	---
Email:	zhangxuzhu@yulong.com

1.4 Manufacturer's details

Company:	TCL Communication Ltd.
Address:	5/F, Building 22E, 22 Science Park East Avenue Hong Kong Science Park, Shatin, NT
Contacted person:	Peter Yang
Tel:	+8675536645759
Email:	peter.yang@tcl.com

1.5 Test Environment

Date of Receipt of test sample at SRTC:	2023-07-11
---	------------

Testing Start Date:	2023-07-12
Testing End Date:	2023-07-31

Environmental Data:	Temperature (°C)	Humidity (%)
Ambient	25	30
Maximum Extreme	55	---
Minimum Extreme	-10	---

Normal Supply Voltage (V d.c.):	3.85
Maximum Extreme Supply Voltage (V d.c.):	4.30
Minimum Extreme Supply Voltage (V d.c.):	3.60

2 DESCRIPTION OF THE DEVICE UNDER TEST

2.1 Final Equipment Build Status

Frequency Range	WCDMA Band II: Tx:1850~1910MHz Rx:1930~1990MHz WCDMA Band IV: Tx: 1710~1755MHz Rx: 2110~2155MHz WCDMA Band V: Tx: 824~849MHz Rx: 869~894MHz
Mode	HSDPA/HSUPA
Duplex Mode	FDD
Duplex Spacing	WCDMA Band II:80MHz WCDMA Band IV:400MHz WCDMA Band V:45MHz
Antenna Type	Fixed Internal Antenna
Antenna Gain	WCDMA Band II:: -1.61dBi WCDMA Band IV:: -1.10dBi WCDMA Band V: -6.20dBi
Power Supply	Battery/Charger
Hardware Version	P1
Software Version	3.18.505.P0.200514.cp314AT
IMEI	864156050000038

Declaration of changes from Initial MK40 to Variant MK40

General: MK40 is a variant product of MK40:

● **SOFTWARE MODIFICATIONS:**

- OS update (e.g. from Android 12 to 13) / change (e.g. from Android to other OS) : **NO**
- Protocol Stack changes: **NO**
- MMS/STK/USAT/USIM changes: **NO**
- DM/SUPL/VT/FUMO/SWP/HCI: **NO**
- Other changes detail: **NO**

● **HARDWARE MODIFICATIONS:**

- Baseband changes: NO
Band changes: NO
- PCB layout/material changes: NO
- Main components changes:

LTE	Base Band	Antenna	Transceiver	AS M	Power Amplifier	Tx SAW Filter	Rx SAW Filter (SAW Duplexer)
LTE B2	NO	NO	NO	/	Yes	NO	NO
LTE B4	NO	NO	NO	/	Yes	NO	NO

LTE B5	NO	NO	NO	/	Yes	NO	NO
LTE B12	NO	NO	NO	/	Yes	NO	NO
LTE B13	NO	NO	NO	/	Yes	NO	NO
LTE B25	NO	NO	NO	/	Yes	NO	NO
LTE B26	NO	NO	NO	/	Yes	NO	NO
LTE B41	NO	NO	NO	/	Yes	NO	NO
LTE B66	NO	NO	NO	/	Yes	NO	NO
LTE B71	NO	NO	NO	/	Yes	NO	NO
UTMS B2	NO	NO	NO	/	Yes	NO	NO
UTMS B4	NO	NO	NO	/	Yes	NO	NO
UTMS B5	NO	NO	NO	/	Yes	NO	NO

Other Radio	Antenna	AP	MODE M	Transceiver	Balun	Band pass filter	Triplexer
Wi-Fi	NO	NO	/	NO	/	NO	NO

- FM changes: NO
- GPS changes: TBD (e.g. Saw is different): NO
- Memory/TP/LCD/ Camera/SIM changes: NO
- Other changes detailed:

● **MECHANICAL MODIFICATIONS:**

- Use new metal front/back cover or keypad: NO
- Mechanical shell changes: No
- Whole size of EUT: No
- Distance of Ear reference point to bottom of handset: No
- Other trinkets to change the surface of handset: NO
- Other changes detailed: No (e.g. new mechanical design)

● **Accessory changes:**

- Use new charger/battery/headset/USB cable: NO

According to the difference description:

For the WCDMA band , based on original report test date (report No.: SRTC2020-9004(R)-20050604(B)), The power of band4 in the original report is the maximum, so measures the band4.

2.2 Support Equipment

The following support equipment was used to exercise the DUT during testing:

Equipment	Battery
Manufacturer	Lishen
Model Number	CPLD-432
Serial Number	---

Equipment	Charger
Manufacturer	Shenzhen RUIDE
Model Number	RD0501000-USBA-18MG
Serial Number	---

3 REFERENCE SPECIFICATION

Specification	Version	Title
FCC Part 2	2022	Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz
FCC Part 22	2022	2 GHz Personal Communications Services
FCC Part 24	2022	Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710-1780 MHz and 2110-2180 MHz
FCC Part 27	2022	General Requirements for Compliance of Radio Apparatus
ANSI C63.26	2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
KDB 971168 D01	April 9, 2018	Measurement Guidance For Certification Of Licensed Digital Transmitters


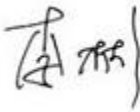
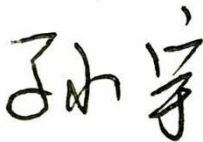
4 KEY TO NOTES AND RESULT CODES

The following are the definition of the test result.

Code	Meaning
PASS	Test result shows that the requirements of the relevant specification have been met.
FAIL	Test result shows that the requirements of the relevant specification have not been met.
NT	Normal Temperature
NV	Nominal voltage
HV	High voltage
LV	Low voltage

5 RESULT SUMMARY

No.	Test case	FCC reference	Verdict
1	RF Power Output	2.1046	Pass
2	Effective Radiated Power and Effective Isotropic Radiated Power	22.913(a),24.232(c),27.50(d)(4)	Pass
3	Occupied Bandwidth	2.1049	Pass
4	Emission Bandwidth	2.1049	Pass
5	Spurious Emissions at antenna terminal	2.1051,22.917(a),24.238(a),27.53(h)	Pass
6	Band Edges Compliance	2.1051,22.917(a),24.238(b),27.53(h)	Pass
7	Frequency Stability	2.1055,22.355,24.235,27.54	Pass
8	Radiated Spurious Emissions	2.1053,22.917(a),24.238(a),27.53(h)	Pass
9	Peak-Average Ratio	24.232(d),27.50(d) (5)	Pass

This Test Report Is Issued by: Mr. Peng Zhen 	Checked by: Mr. Li Bin 
Tested and Issued by: Mr. Sun Yu 	Issued date: 20230728

6 TEST RESULT

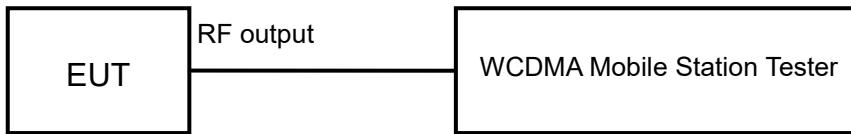
6.1 RF Power Output

Rule Part(s):
 2.1046

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:

After a radio link has been established between EUT and Tester, the output power of the cell signal of the testing equipment will be decreased until the output power of the EUT reach a maximum value. Then the test data can be read at the tester screen. The loss between RF output port of the EUT and the input port of the tester will be taken into consideration. The measurement will be conducted at three channels (Low, middle and High channels).

Limits: Limits: No specific conduct power requirements in part 2.1046.

Test result:

The test results are shown in Appendix A.

6.2 Effective Radiated Power and Effective Isotropic Radiated Power

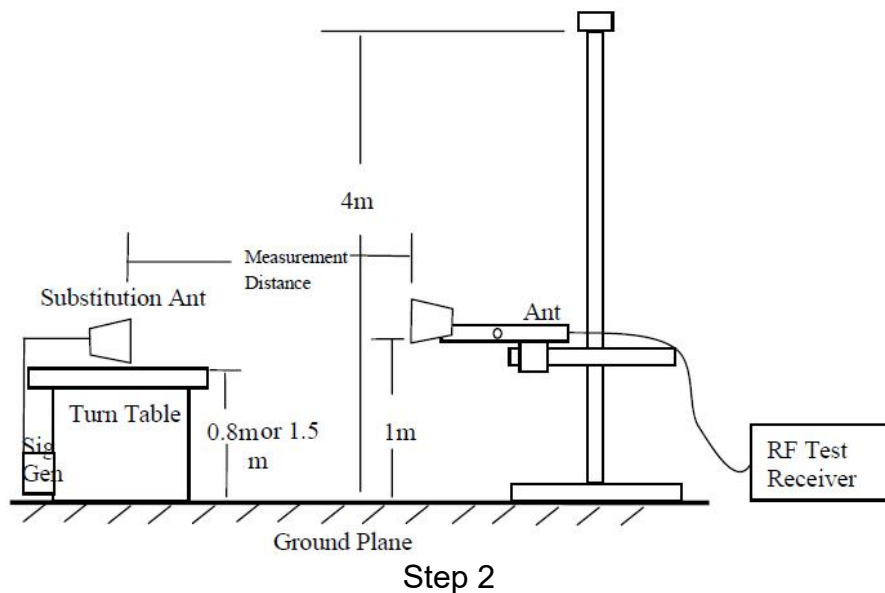
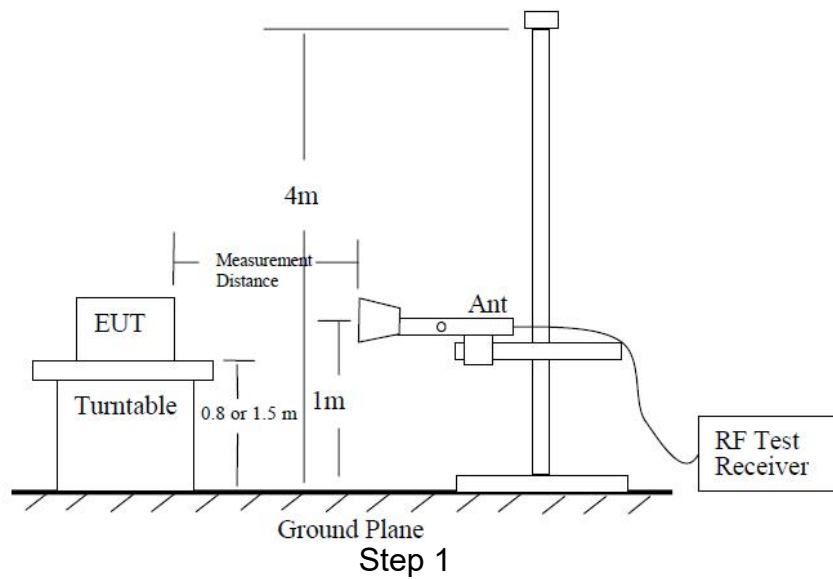
Rule Part(s):

FCC: 22.913(a) (5), 24.232(c), 27.50(d) (4)

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test setup:



Test procedure:

The measurements procedures in TIA-603-E-2016 are used.

Step 1:

The measurement is carried out in the chamber. EUT was placed on a 0.8m ($f < 1\text{GHz}$)/1.5m ($f > 1\text{GHz}$) high non-conductive table at a 3 meters test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. The height of receiving antenna from 1m to 4m and varies in certain range to find the maximum power value. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. A peak detector is used and RBW is set to the 99% power bandwidth of the fundamental signal. The antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum power value on spectrum analyzer or receiver. And the maximum value of the receiver should be recorded as (Pr).

Step 2:

A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator. To repeat the same procedure as step1 and the level of signal generator will be adjusted till the same power value on the spectrum analyzer or receiver. The ERP/EIRP of the EUT can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna.

A power (P_{mea}) is applied to the input of the substitution antenna, and adjusts the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (P_{mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

A "reference path loss" should be calculated after test. The attenuation of "reference path loss" is the cable loss between the Signal Source with the Substitution Antenna (P_{ca}) and the Substitution Antenna Gain (G_a).

The measurement results are obtained as described below:

Power (EIRP) = $P_{mea} + P_{ca} + G_a$

ERP/EIRP LIMIT

This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15 \text{ (dB)}$.

22.913(a) (5)

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

24.232(c)

Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

27.50(d) (4)

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications

Test result:

The test results are shown in Appendix B.

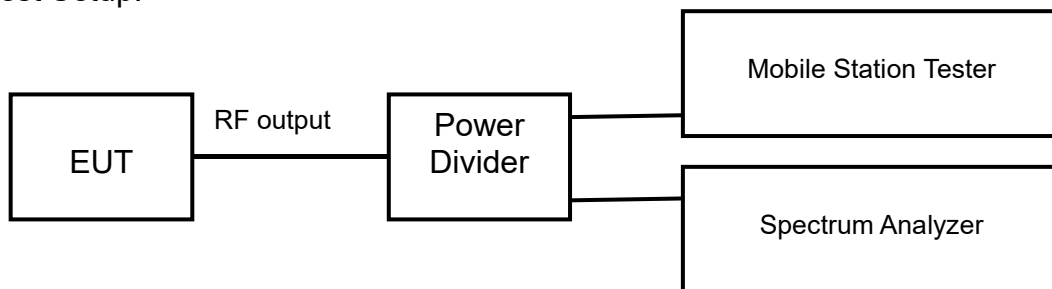
6.3 Occupied Bandwidth

Rule Part(s):
FCC: 2.1049

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:
KDB 971168 D01 v03r01 – Section 4.2

Test Settings

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5% of the expected OBW
3. VBW \geq 3 x RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the 99% occupied bandwidth observed in Step 7

Limits: No specific occupied bandwidth requirements in part 2.1049

Test result:
The test results are shown in Appendix A.

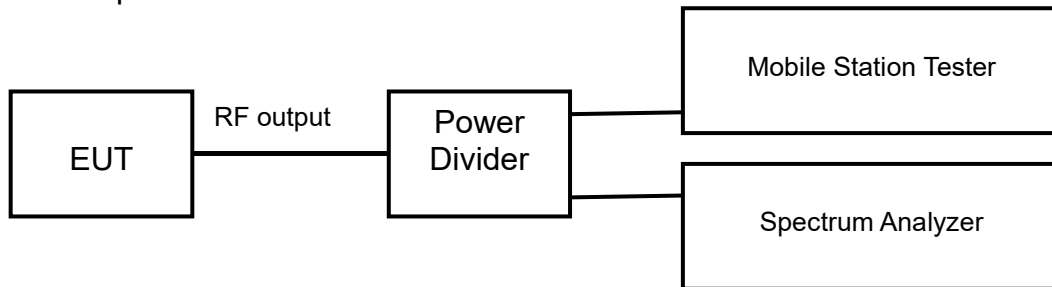
6.4 Emission Bandwidth

Rule Part(s):
FCC: 2.1049

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:
KDB 971168 D01 v03r01 – Section 4.2

Test Settings

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 26dB occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5% of the expected OBW
3. VBW \geq 3 x RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the emission bandwidth observed in Step 7

Limits: No specific occupied bandwidth requirements in part 2.1049

Test result:

The test results are shown in Appendix A.

6.5 Spurious Emissions at antenna terminal

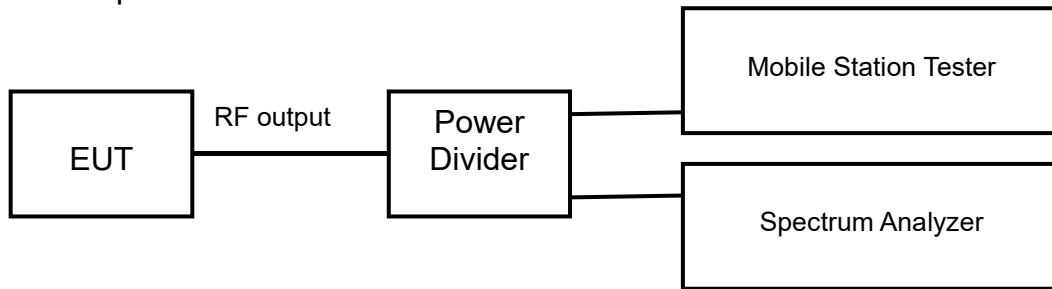
Rule Part(s):

FCC: 2.1051, 22.917(a), 24.238(a), 27.53(h)

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to 10GHz for Cell, 20GHz for PCS
2. RBW=100 kHz (For below 1GHz), 1MHz (For above 1GHz)
3. VBW $\geq 3 \times$ RBW
4. Detector = RMS
5. Trace mode = trace average for continuous emissions, max hold for pulse emissions
6. Sweep time = auto couple
7. The trace was allowed to stabilize

Limits:

The minimum permissible attenuation level of any spurious emission is $43 + \log_{10}(P_{[Watts]})$, where P is the transmitter power in Watts.

Test result:

The test results are shown in Appendix A.

6.6 Band Edges Compliance

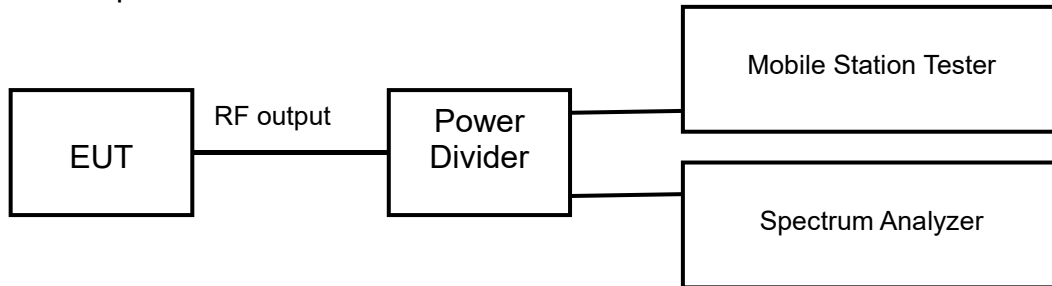
Rule Part(s)

FCC: 2.1051, 22.917(a), 24.238(a), 27.53(c)

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span=2MHz
3. RBW > 1% of the emission bandwidth
4. VBW > 3 x RBW
5. Detector = RMS
6. Number of sweep points $\geq 2 \times \text{Span}/\text{RBW}$
7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Limit: The minimum permissible attenuation level of any spurious emission is $43 + \log_{10}(P)$ (P [Watts]), where P is the transmitter power in Watts.

Test result:

The test results are shown in Appendix A.

6.7 Frequency Stability

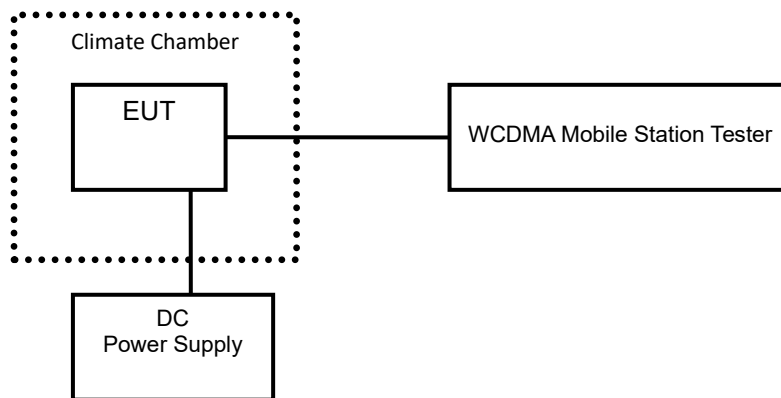
Rule Part(s)

FCC: 2.1055, 22.355, 24.235, 27.54

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test setup:



Test Procedure:

ANSI/TIA-603-E-2016

Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C (The temperature range can be declared by the manufacturer). A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Limits: For Part 22, the frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ (± 2.5 ppm) of the center frequency. For Part 24, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test result:

The test results are shown in Appendix A.

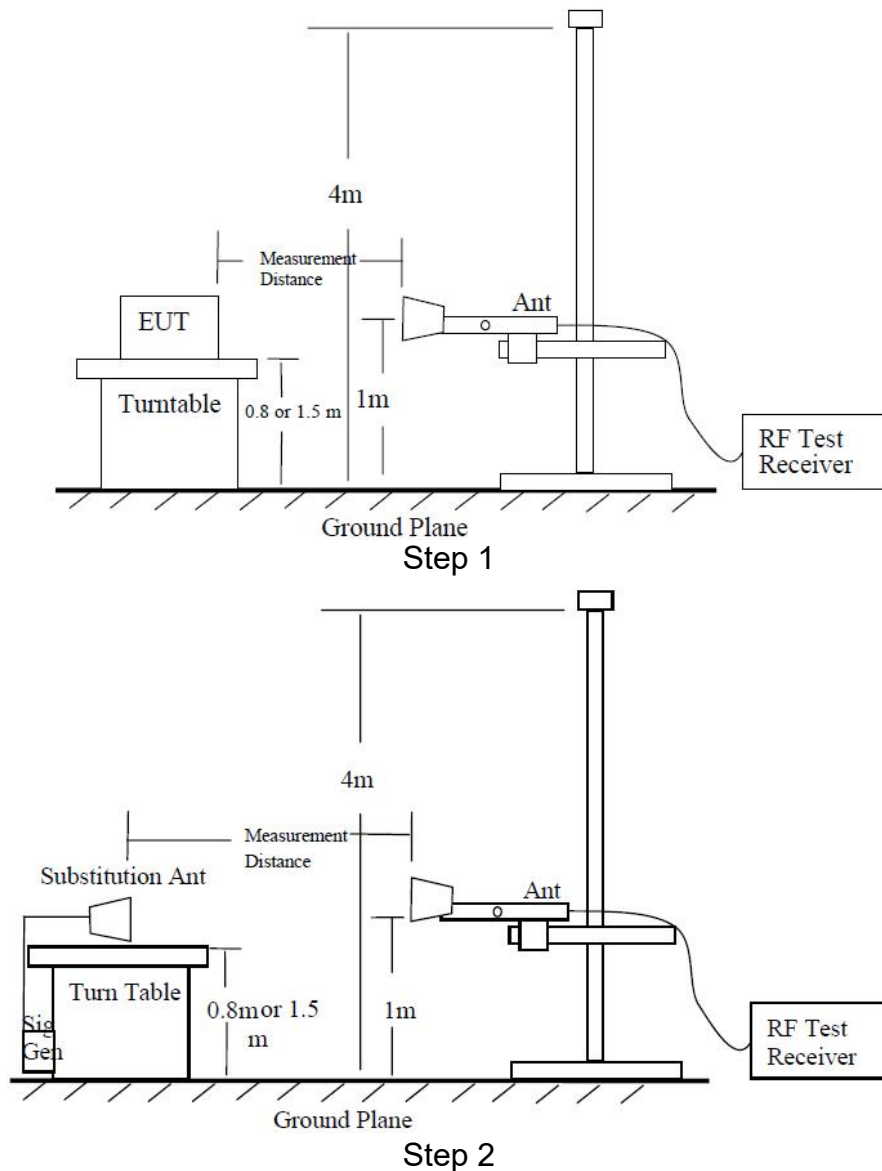
6.8 Radiated Spurious Emissions

Rule Part(s)
FCC: 2.1053, 22.917(a), 24.238(a), 27.53(h)

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:

The measurements procedures in TIA-603-E-2016 are used.

The spectrum was scanned from 30MHz to the 10th harmonic of the highest frequency generated within the equipment.

Step 1:

The measurement is carried out in the chamber. EUT was placed on a 0.8m ($f < 1\text{GHz}$)/1.5m ($f > 1\text{GHz}$) high non-conductive table at a 3 meters test distance from the test receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT. The height of receiving antenna from 1m to 4m and varies in certain range to find the maximum power value. A radio link shall be established between EUT and Tester. The output power of the cell signal of the tester will be decreased until the output power of the EUT reach a maximum value. A peak detector is used and RBW is set to 100 kHz ($f < 1\text{GHz}$)/1MHz ($f > 1\text{GHz}$). The antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum power value on spectrum analyzer or receiver. The spectrum analyzer scans from 30MHz to 10th harmonic of the carrier. A notch filter is necessary in the band near to the carrier frequency. A high pass filter is needed to avoid the distortion of the testing equipment in the band above the carrier frequency.

Step 2:

A log-periodic antenna or double-ridged waveguide 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.

A power (P_{mea}) is applied to the input of the substitution antenna, and adjusts the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

A "reference path loss" should be calculated after test. The attenuation of "reference path loss" is the cable loss between the Signal Source with the Substitution Antenna (P_{ca}) and the Substitution Antenna Gain (G_a).

Calculation procedure:

The data of cable loss and antenna gain has been calibrated in full testing frequency range before the testing.

The power of the Radiated Spurious Emissions is calculated by adding the cable loss and antenna gain. The basic equation with a sample calculation is as followed:

$$\text{Power (EIRP)} = P_{mea} + P_{ca} + G_a$$

This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15 \text{ (dB)}$.

Assumed the power of signal source record is -20dBm. A cable loss of -30dB, and an antenna gain of 11dB are added.

$$P = P_{mea} + P_{ca} + G_a = (-20\text{dBm}) + (-30\text{dB}) + (11\text{dB}) = -39\text{dBm}$$

Test result:

The test results are shown in Appendix B.

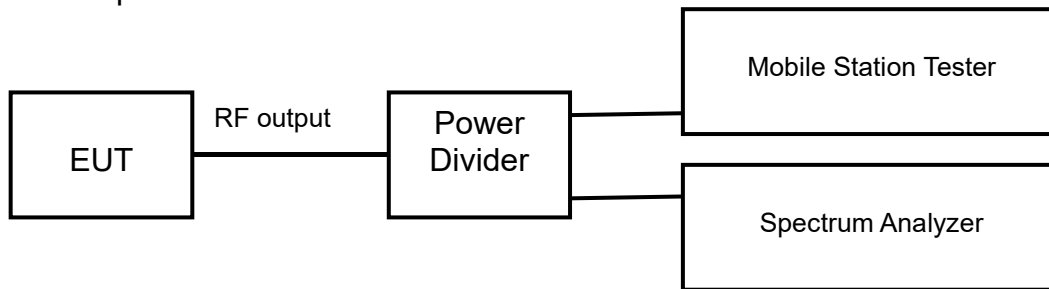
6.9 Peak-Average Ratio

Rule Part(s)
FCC: 24.232(d), 27.50(d) (5)

Ambient condition:

Temperature	Relative humidity	Pressure
25°C	30%	101.9kPa

Test Setup:



Test procedure:
KDB 971168 D01 v03r01 – Section 5.7.1

Test settings:

1. The signal analyzer's CCDF measurement profile is enabled
2. Frequency = carrier center frequency
3. Measurement BW > Emission bandwidth of signal
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

Limits: the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

Test result:

The test results are shown in Appendix A

7 MEASUREMENT UNCERTAINTIES

Items	Uncertainty	
RF Power Output	U=0.6 dB	
Occupied Bandwidth	3kHz	
Spurious Emissions	9kHz~2GHz	U=1.2dB
	2G~3.6GHz	U=1.4dB
	3.6G~8GHz	U=2.2dB
	8G~12.75GHz	U=2.7dB
Band Edges Compliance	1.2dB	
Frequency Stability	U=48 Hz	

8 TEST EQUIPMENTS

No.	Name/Model	Manufacturer	S/N	Calibration Date	Calibration Due Date
1	Mobile Station Tester / MT8820C	Anritsu	6201300660	2023.06.21	2024.06.20
2	Radio Communication Station / CMW500	R&S	161702	2023.06.21	2024.06.20
3	Spectrum Analyzer / FSV40	R&S	101065	2023.06.21	2024.06.20
4	Spectrum Analyzer / N9020A	Agilent	MY48010771	2023.03.06	2024.03.05
5	Power Divider / 11667A	HP	19632	2023.06.21	2024.06.20
6	DC Power Supply / E3645A	Agilent	MY40000741	2023.03.06	2024.03.05
7	Temperature chamber / SH241	ESPEC	92013758	2023.06.21	2024.06.20
8	Fully-Anechoic Chamber / 12.65m×8.03m×7.50m	FRANKONIA	----	----	----
9	Semi-Anechoic/Chamber / 23.18m×16.88m×9.60m	FRANKONIA	---	----	----
10	Turn table Diameter:1m	FRANKONIA	----	----	----
11	Turn table Diameter:5m	FRANKONIA	----	----	----
12	Antenna master FAC(MA4.0)	MATURO	----	----	----
13	Antenna master SAC(MA4.0)	MATURO	----	----	----
14	Shielding room / 9.080m×5.255m×3.525m	FRANKONIA	----	----	----
15	Double-Ridged Waveguide Horn Antenna / HF 907	R&S	100512	2023.06.21	2024.06.20
16	Double-Ridged Waveguide Horn Antenna / HF 907	R&S	100513	2023.06.21	2024.06.20
17	Ultra log antenna / HL562	R&S	100016	2023.06.21	2024.06.20
18	Receive antenna /3160-09	SCHWARZ-BECK	002058-002	2023.06.21	2024.06.20
19	EMI test receiver / ESI 40	R&S	100015	2023.06.21	2024.06.20
20	EMI test receiver / ESCS30	R&S	100029	2023.06.21	2024.06.20
21	Receive antenna / HL562	R&S	100167	2023.06.21	2024.06.20
22	AMN / ENV216	R&S	3560.6550.12	2023.06.21	2024.06.20
23	FCC auto test system / RT9100L-2	Radiosky	V1.05	/	/
24	EMI test software / EMC32	R&S	V10.20.01	/	/

The origin report :
TEST EQUIPMENTS

No.	Name/Model	Manufacturer	S/N	Calibration Date	Calibration Due Date
1	E5515C(8960) Mobile Station Tester	Agilent	MY50266302	2020.08.20	2021.08.19
2	N9020A Spectrum Analyzer	Agilent	MY48010771	2020.08.20	2021.08.19
3	6007 Power Divider	Weinschel	6007-GJ-1	2020.08.20	2021.08.19
4	DC Power Supply E3645A	Agilent	MY40000741	2020.03.01	2021.02.28
5	Temperature chamber SH241	ESPEC	92013758	2020.08.20	2021.08.19
6	12.65m×8.03m×7.50m Fully-Anechoic Chamber	FRANKONIA	----	----	----
7	23.18m×16.88m×9.60m Semi-Anechoic Chamber	FRANKONIA	---	----	----
8	Turn table Diameter:1m	FRANKONIA	----	----	----
9	Turn table Diameter:5m	FRANKONIA	----	----	----
10	Antenna master FAC(MA4.0)	MATURO	----	----	----
11	Antenna master SAC(MA4.0)	MATURO	----	----	----
12	9.080m×5.255m×3.525m Shielding room	FRANKONIA	----	----	----
13	HF 907 Double-Ridged Waveguide Horn Antenna	R&S	100512	2020.08.20	2021.08.19
14	HF 907 Double-Ridged Waveguide Horn Antenna	R&S	100513	2020.08.20	2021.08.19
15	HL562 Ultra log antenna	R&S	100016	2020.08.20	2021.08.19
16	3160-09 Receive antenna	SCHWARZ-BECK	002058-002	2020.08.20	2021.08.19
17	ESI 40 EMI test receiver	R&S	100015	2020.08.20	2021.08.19
18	ESCS30 EMI test receiver	R&S	100029	2020.08.20	2021.08.19
19	HL562 Receive antenna	R&S	100167	2020.08.20	2021.08.19
20	ENV216 AMN	R&S	3560.6550.12	2020.08.20	2021.08.19

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

WCDMA Band IV

1. RF Power Output

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
Release 99	RMC,12.2kbps	1712.4	1312	23.20
Release 99	RMC,12.2kbps	1732.6	1412	23.39
Release 99	RMC,12.2kbps	1752.6	1513	23.78

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
HSDPA	Subtest1	1712.4	1312	22.24
HSDPA	Subtest1	1732.6	1412	22.40
HSDPA	Subtest1	1752.6	1513	22.73
HSDPA	Subtest2	1712.4	1312	21.79
HSDPA	Subtest2	1732.6	1412	22.02
HSDPA	Subtest2	1752.6	1513	22.35
HSDPA	Subtest3	1712.4	1312	21.76
HSDPA	Subtest3	1732.6	1412	21.74
HSDPA	Subtest3	1752.6	1513	22.26
HSDPA	Subtest4	1712.4	1312	21.56
HSDPA	Subtest4	1732.6	1412	21.83
HSDPA	Subtest4	1752.6	1513	22.22

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
HSUPA	Subtest1	1712.4	1312	22.19
HSUPA	Subtest1	1732.6	1412	21.65
HSUPA	Subtest1	1752.6	1513	22.07
HSUPA	Subtest2	1712.4	1312	20.98
HSUPA	Subtest2	1732.6	1412	21.32
HSUPA	Subtest2	1752.6	1513	21.71
HSUPA	Subtest3	1712.4	1312	21.12
HSUPA	Subtest3	1732.6	1412	20.90
HSUPA	Subtest3	1752.6	1513	21.23
HSUPA	Subtest4	1712.4	1312	21.85
HSUPA	Subtest4	1732.6	1412	21.61
HSUPA	Subtest4	1752.6	1513	21.76
HSUPA	Subtest5	1712.4	1312	22.68
HSUPA	Subtest5	1732.6	1412	22.40
HSUPA	Subtest5	1752.6	1513	22.81

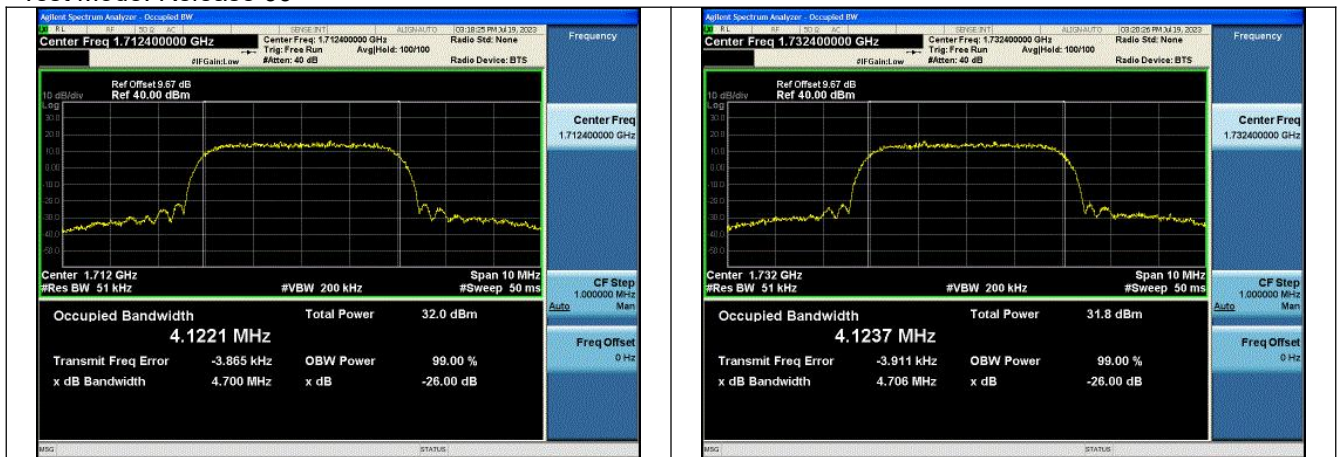
2. Occupied Bandwidth

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
Release 99	1712.4	1312	4.12
Release 99	1732.6	1412	4.12
Release 99	1752.6	1513	4.13

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
HSDPA	1712.4	1312	4.11
HSDPA	1732.6	1412	4.11
HSDPA	1752.6	1513	4.11

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
HSUPA	1712.4	1312	4.13
HSUPA	1732.6	1412	4.13
HSUPA	1752.6	1513	4.13

Test Mode: Release 99



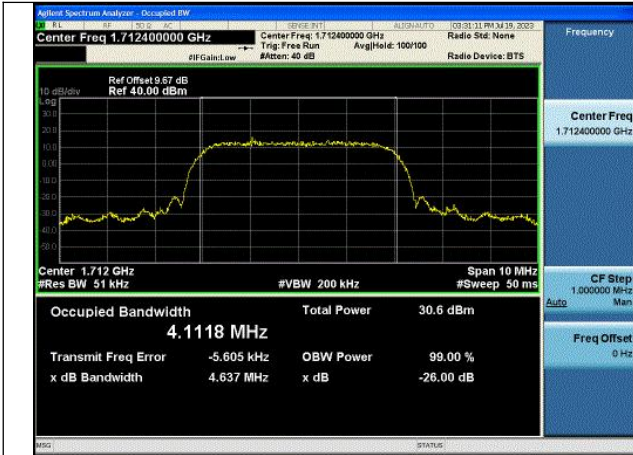
Channel 1312

Channel 1412

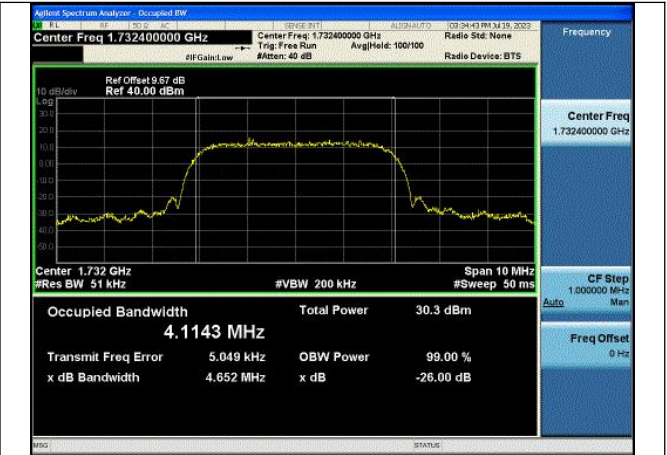


Channel 1513

Test Mode: HSDPA



Channel 1312

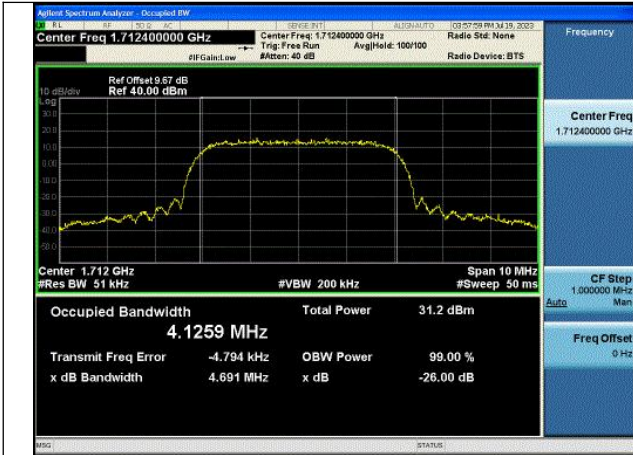


Channel 1412

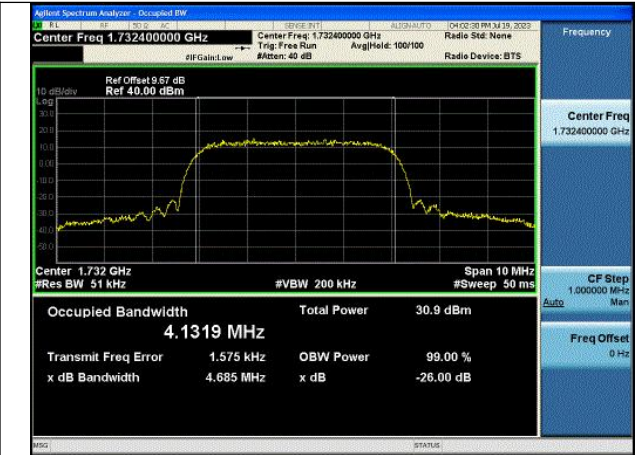


Channel 1513

Test Mode: HSUPA



Channel 1312



Channel 1412



Channel 1513

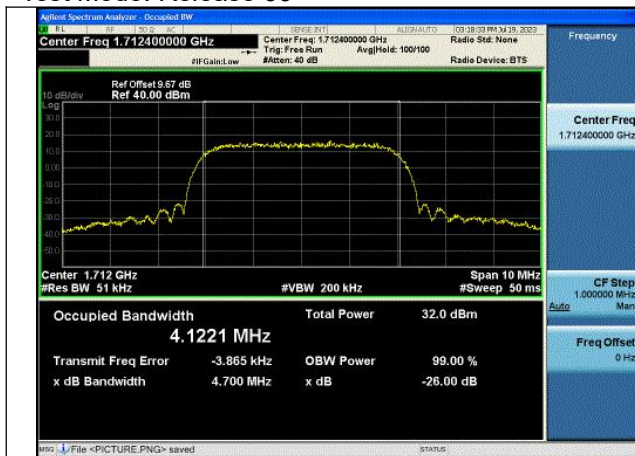
3. Emission Bandwidth

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
Release 99	1712.4	1312	4.70
Release 99	1732.6	1412	4.71
Release 99	1752.6	1513	4.71

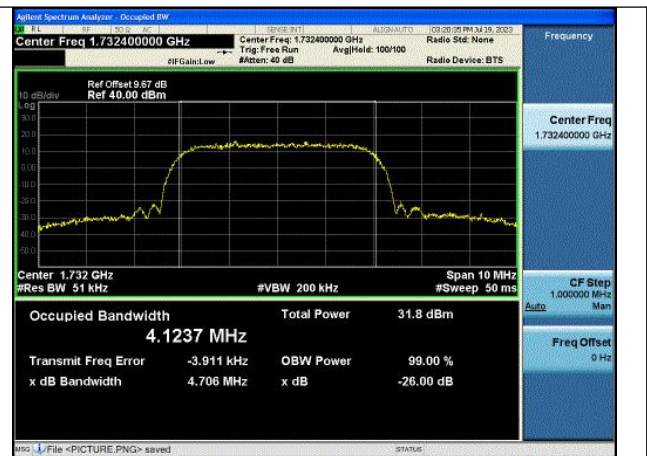
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
HSDPA	1712.4	1312	4.64
HSDPA	1732.6	1412	4.65
HSDPA	1752.6	1513	4.64

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
HSUPA	1712.4	1312	4.69
HSUPA	1732.6	1412	4.68
HSUPA	1752.6	1513	4.70

Test Mode: Release 99



Channel 1312

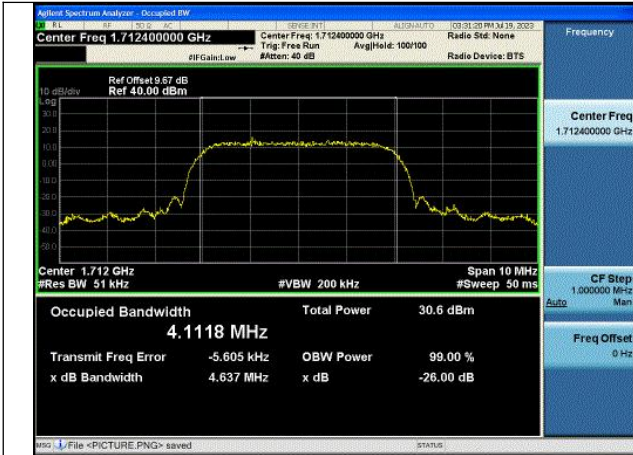


Channel 1412

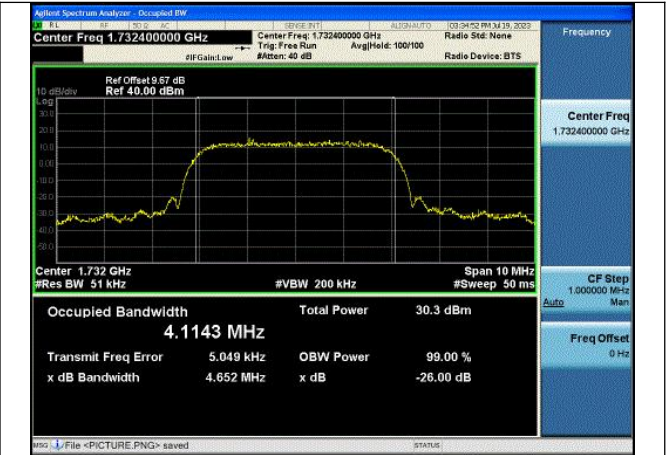


Channel 1513

Test Mode: HSDPA



Channel 1312



Channel 1412



Channel 1513

Test Mode: HSUPA



Channel 1312



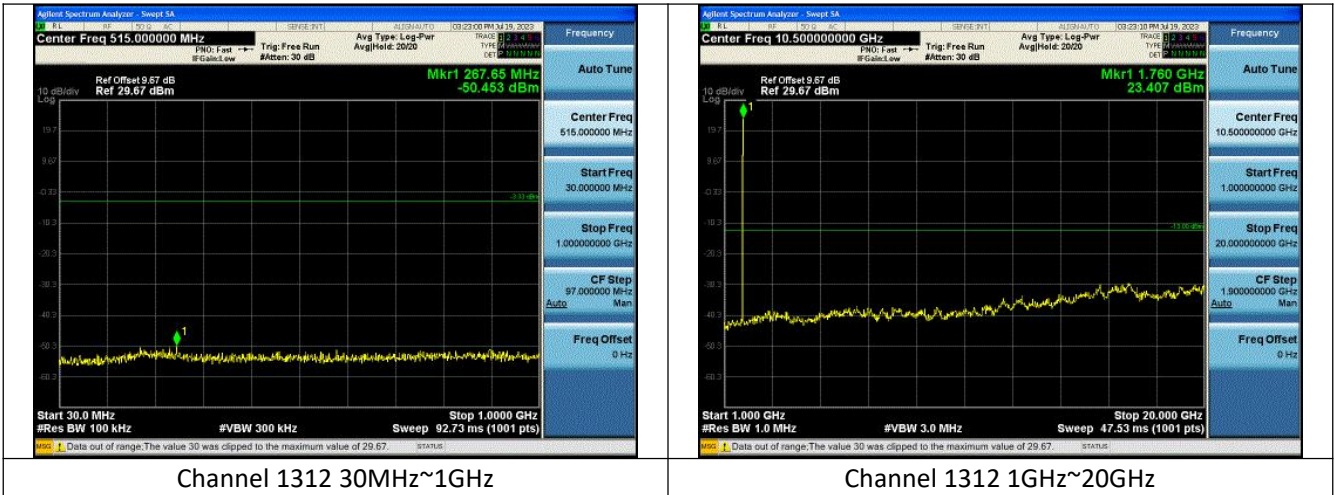
Channel 1412



Channel 1513

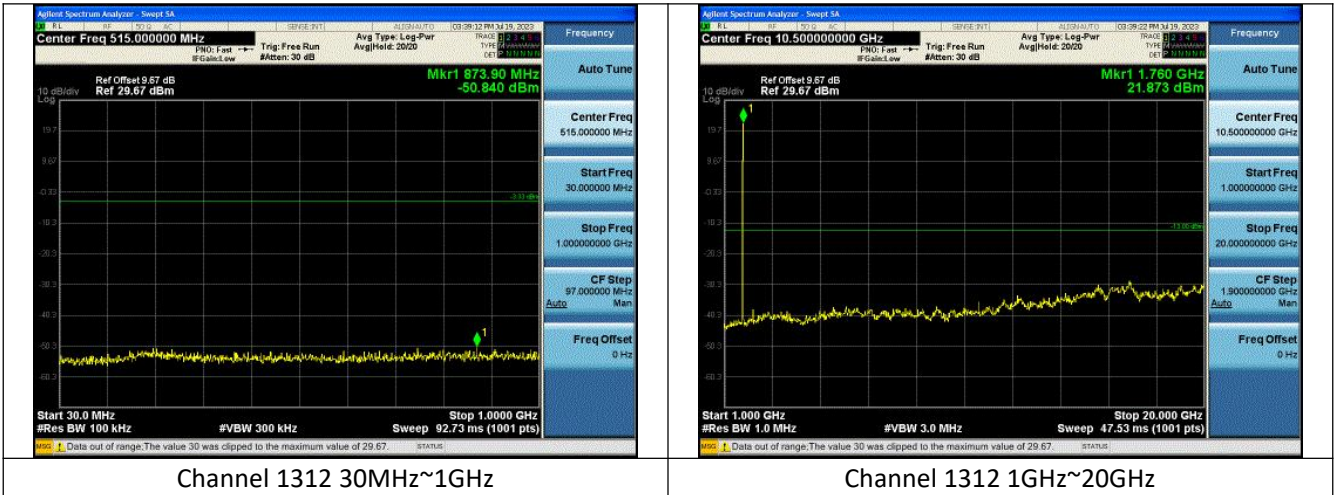
4. Spurious Emissions at antenna terminal

Test Mode: Release 99



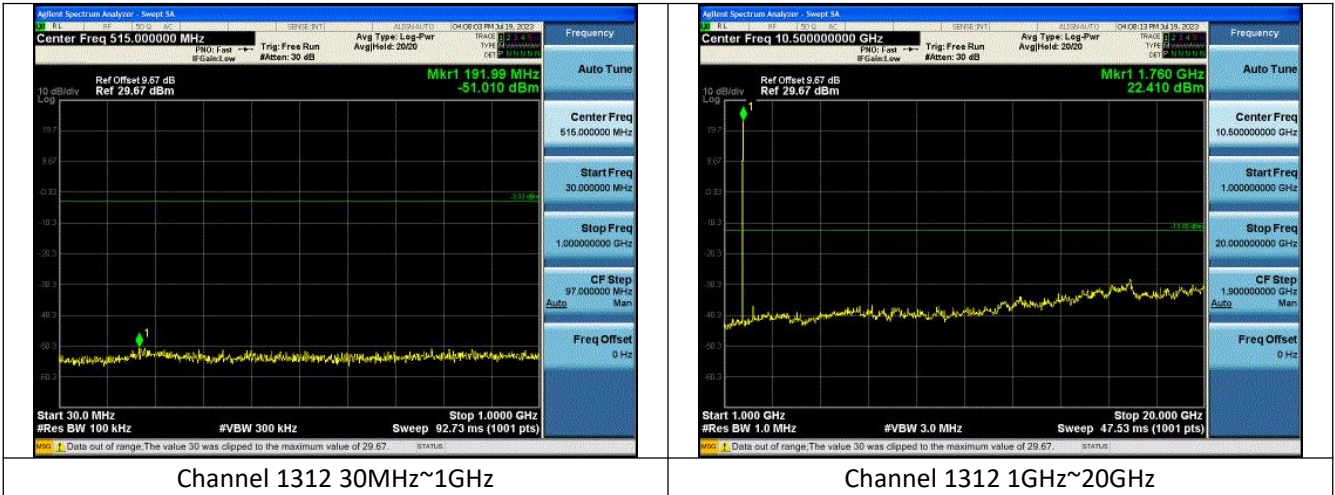
Note: The signal beyond the limit is the signal transmitted by EUT.

Test Mode: HSDPA



Note: The signal beyond the limit is the signal transmitted by EUT.

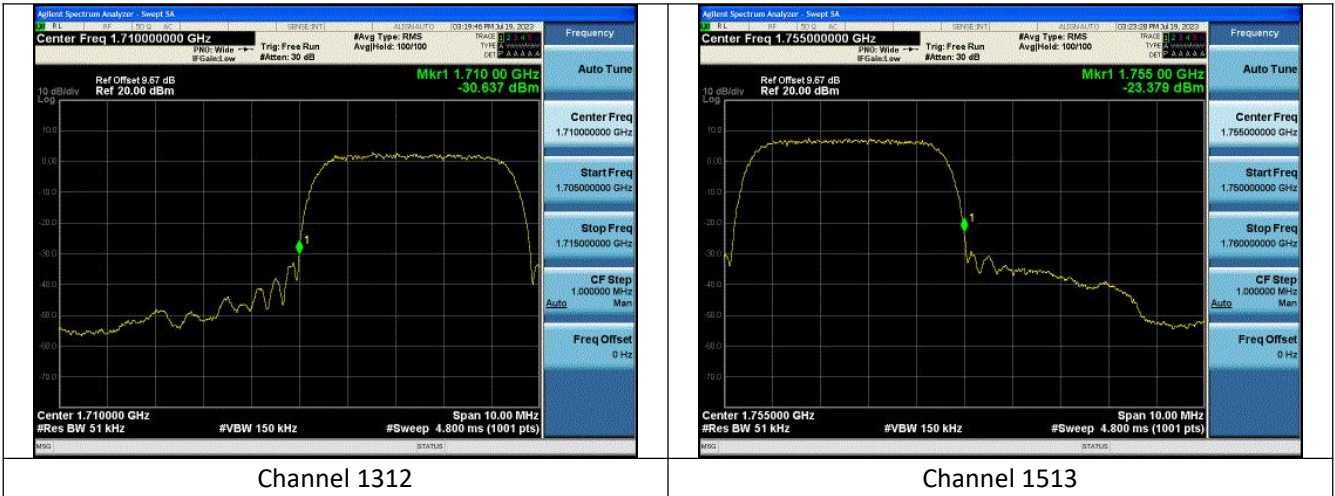
Test Mode: HSUPA



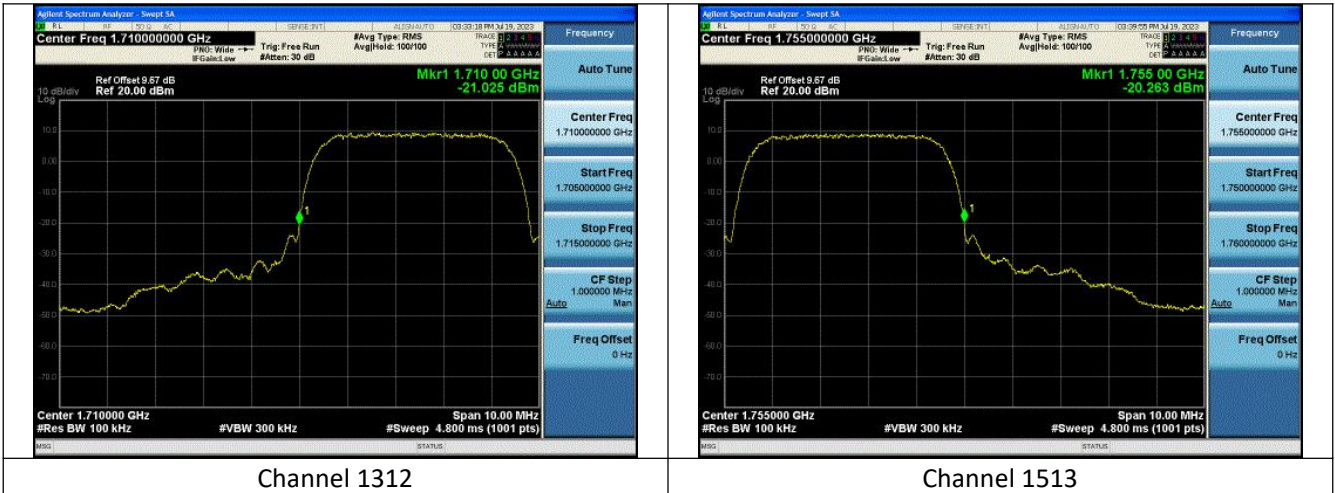
Note: The signal beyond the limit is the signal transmitted by EUT.

5. Band Edges Compliance

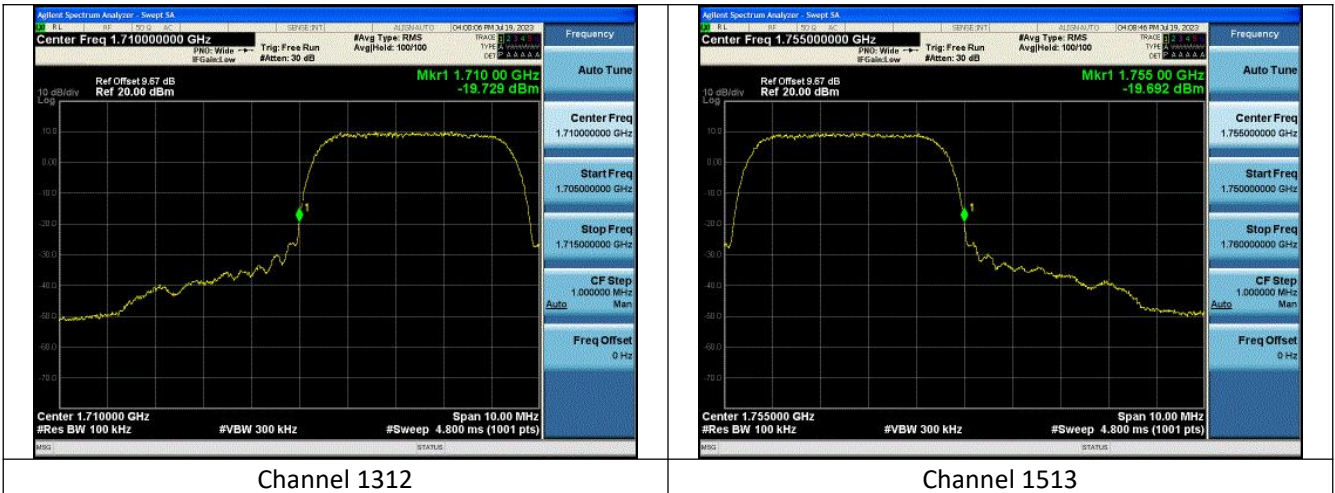
Test Mode: Release 99



Test Mode: HSDPA



Test Mode: HSUPA



6. Frequency Stability

Test Mode: Release 99

Name	Temperature(°C)	Test Result (ppm)@NV		
		Channel 1312	Channel 1412	Channel 1513
Release 99	-10	0.003	0.002	0.004
Release 99	-0	0.005	0.003	0.000
Release 99	+10	0.004	0.004	0.003
Release 99	+20	0.001	0.002	0.004
Release 99	+30	0.003	0.000	0.004
Release 99	+40	0.005	0.002	0.001
Release 99	+50	0.001	0.004	0.005
Release 99	+55	0.003	0.004	0.004
Name	Voltage	Test Result (ppm)@NT		
		Channel 1312	Channel 1412	Channel 1513
Release 99	LV	0.004	0.004	0.003
Release 99	HV	0.004	0.001	0.004

Test Mode: HSDPA

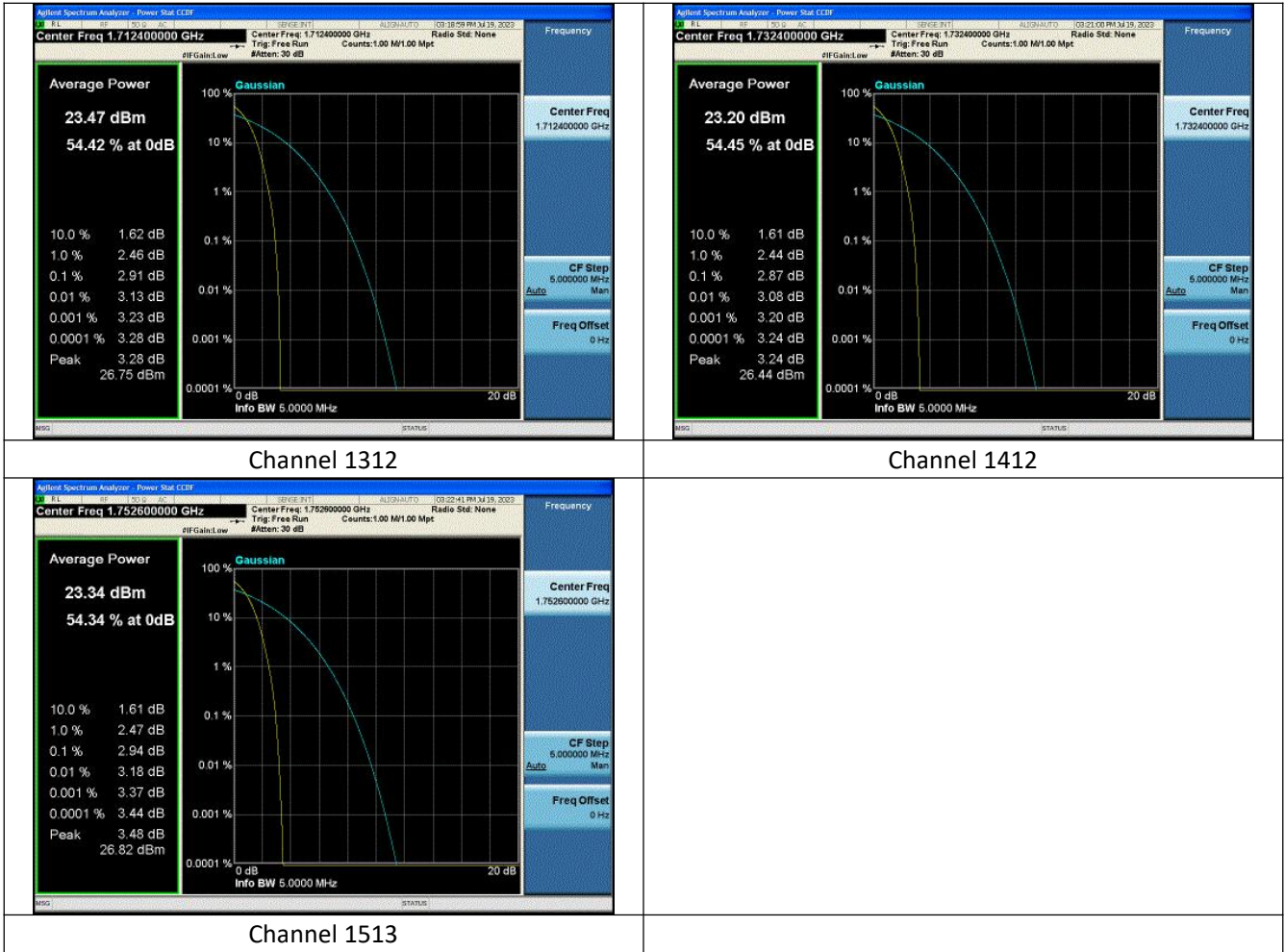
Name	Temperature(°C)	Test Result (ppm)@NV		
		Channel 1312	Channel 1412	Channel 1513
Subtest1	-10	0.002	0.001	0.004
Subtest1	-0	0.004	0.004	0.004
Subtest1	+10	0.004	0.002	0.000
Subtest1	+20	0.002	0.004	0.003
Subtest1	+30	0.002	0.004	0.004
Subtest1	+40	0.000	0.004	0.001
Subtest1	+50	0.005	0.001	0.001
Subtest1	+55	0.003	0.002	0.002
Name	Voltage	Test Result (ppm)@NT		
		Channel 1312	Channel 1412	Channel 1513
Subtest1	LV	0.001	0.004	0.002
Subtest1	HV	0.003	0.002	0.004

Test Mode: HSUPA

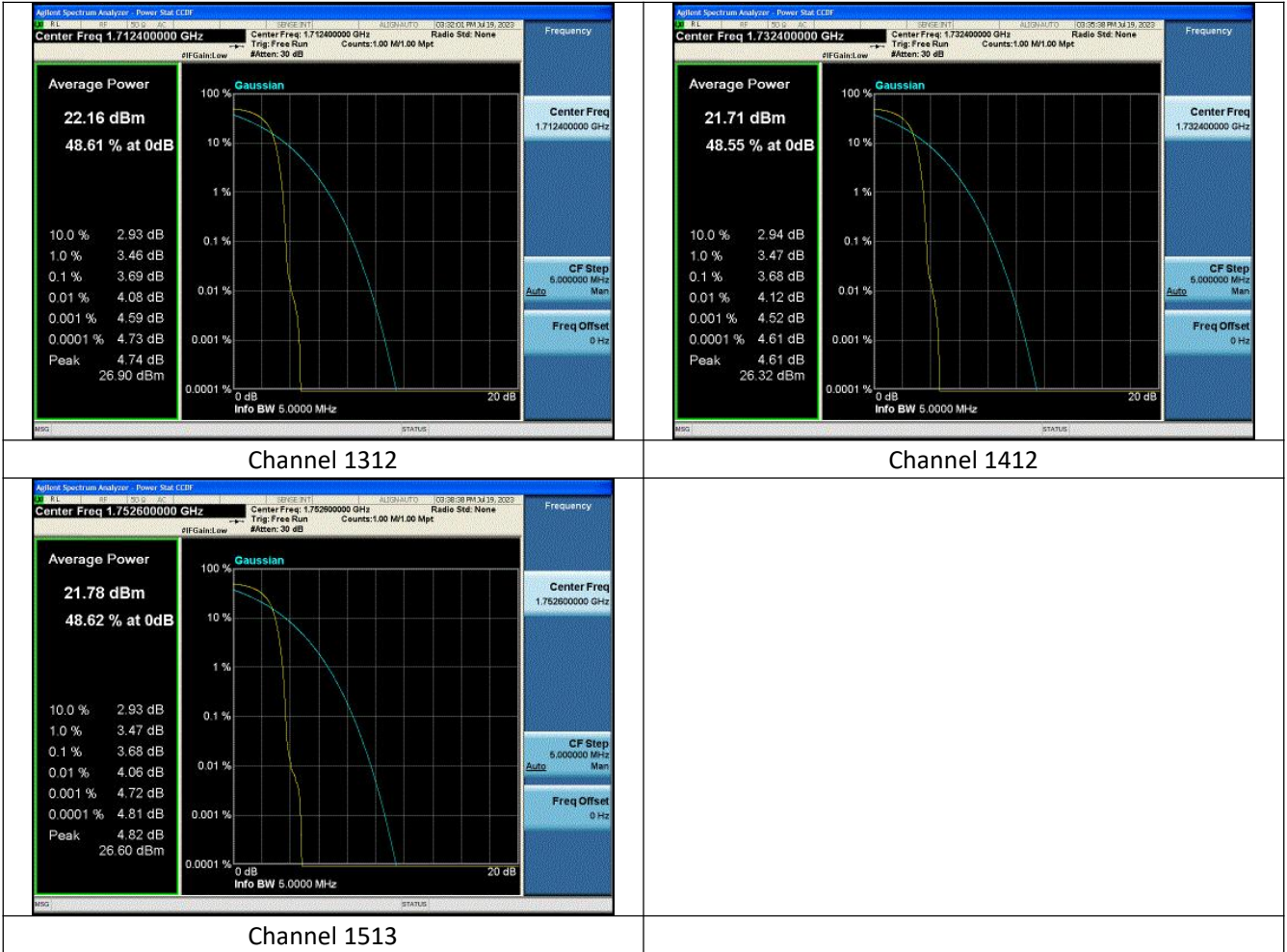
Name	Temperature(°C)	Test Result (ppm)@NV		
		Channel 1312	Channel 1412	Channel 1513
Subtest1	-10	0.001	0.004	0.001
Subtest1	-0	0.004	0.003	0.004
Subtest1	+10	0.005	0.002	0.005
Subtest1	+20	0.003	0.004	0.004
Subtest1	+30	0.002	0.003	0.003
Subtest1	+40	0.000	0.004	0.002
Subtest1	+50	0.003	0.000	0.004
Subtest1	+55	0.002	0.003	0.001
Name	Voltage	Test Result (ppm)@NT		
		Channel 1312	Channel 1412	Channel 1513
Subtest1	LV	0.004	0.001	0.003

Subtest1	HV	0.004	0.000	0.001
----------	----	-------	-------	-------

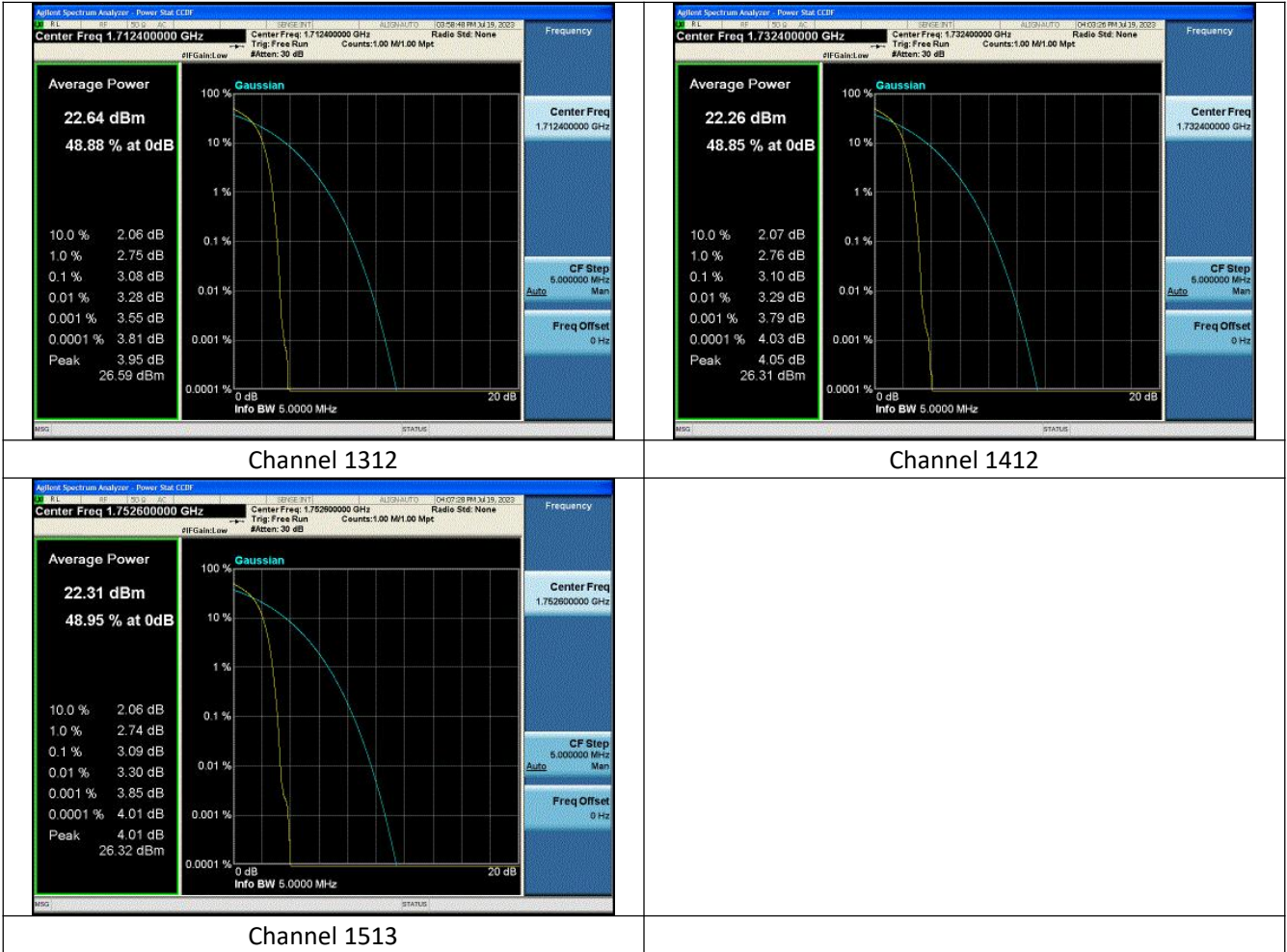
7. Peak-Average Ratio
Test Mode: Release 99



Test Mode: HSDPA



Test Mode: HSUPA



8. Effective Radiated Power and Effective Isotropic Radiated Power

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
Release 99	RMC,12.2kbps	1712.4	1312	23.20	22.10	0.162
Release 99	RMC,12.2kbps	1732.6	1412	23.39	22.29	0.169
Release 99	RMC,12.2kbps	1752.6	1513	23.78	22.68	0.185

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
HSDPA	Subtest1	1712.4	1312	22.24	21.14	0.130
HSDPA	Subtest1	1732.6	1412	22.40	21.30	0.135
HSDPA	Subtest1	1752.6	1513	22.73	21.63	0.146
HSDPA	Subtest2	1712.4	1312	21.79	20.69	0.117
HSDPA	Subtest2	1732.6	1412	22.02	20.92	0.124
HSDPA	Subtest2	1752.6	1513	22.35	21.25	0.133
HSDPA	Subtest3	1712.4	1312	21.76	20.66	0.116
HSDPA	Subtest3	1732.6	1412	21.74	20.64	0.116
HSDPA	Subtest3	1752.6	1513	22.26	21.16	0.131
HSDPA	Subtest4	1712.4	1312	21.56	20.46	0.111
HSDPA	Subtest4	1732.6	1412	21.83	20.73	0.118
HSDPA	Subtest4	1752.6	1513	22.22	21.12	0.129

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
HSUPA	Subtest1	1712.4	1312	22.19	21.09	0.129
HSUPA	Subtest1	1732.6	1412	21.65	20.55	0.114
HSUPA	Subtest1	1752.6	1513	22.07	20.97	0.125
HSUPA	Subtest2	1712.4	1312	20.98	19.88	0.097
HSUPA	Subtest2	1732.6	1412	21.32	20.22	0.105
HSUPA	Subtest2	1752.6	1513	21.71	20.61	0.115
HSUPA	Subtest3	1712.4	1312	21.12	20.02	0.100
HSUPA	Subtest3	1732.6	1412	20.90	19.80	0.095
HSUPA	Subtest3	1752.6	1513	21.23	20.13	0.103
HSUPA	Subtest4	1712.4	1312	21.85	20.75	0.119
HSUPA	Subtest4	1732.6	1412	21.61	20.51	0.112
HSUPA	Subtest4	1752.6	1513	21.76	20.66	0.116
HSUPA	Subtest5	1712.4	1312	22.68	21.58	0.144
HSUPA	Subtest5	1732.6	1412	22.40	21.30	0.135
HSUPA	Subtest5	1752.6	1513	22.81	21.71	0.148

The original report test date:
RF Power Output
WCDMA band II

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)	ERP/EIRP (dBm)
Release 99	RMC,12.2kbps	1852.4	9262	21.86	0.106
		1880.0	9400	21.88	0.106
		1907.6	9538	21.75	0.103
HSDPA	Subtest 1	1852.4	9262	21.00	0.087
		1880.0	9400	21.04	0.088
		1907.6	9538	20.97	0.086
	Subtest 2	1852.4	9262	20.93	0.086
		1880.0	9400	20.96	0.086
		1907.6	9538	20.93	0.086
	Subtest 3	1852.4	9262	20.89	0.085
		1880.0	9400	20.91	0.085
		1907.6	9538	20.87	0.084
	Subtest 4	1852.4	9262	20.83	0.084
		1880.0	9400	20.85	0.084
		1907.6	9538	20.79	0.083
HSUPA	Subtest 1	1852.4	9262	21.05	0.088
		1880.0	9400	21.06	0.088
		1907.6	9538	21.01	0.087
	Subtest 2	1852.4	9262	21.08	0.089
		1880.0	9400	21.11	0.089
		1907.6	9538	21.04	0.088
	Subtest 3	1852.4	9262	21.03	0.087
		1880.0	9400	21.01	0.087
		1907.6	9538	20.99	0.087
	Subtest 4	1852.4	9262	21.07	0.088
		1880.0	9400	21.11	0.089
		1907.6	9538	21.03	0.087
	Subtest 5	1852.4	9262	20.99	0.087
		1880.0	9400	21.01	0.087

		1907.6	9538	20.96	0.086
HSPA+	QPSK	1852.4	9262	21.11	0.089
		1880.0	9400	21.14	0.090
		1907.6	9538	21.09	0.089
	16QAM	1852.4	9262	20.78	0.083
		1880.0	9400	20.81	0.083
		1907.6	9538	20.75	0.082
DC-HSDPA	Subtest 1	1852.4	9262	20.91	0.085
		1880.0	9400	20.94	0.086
		1907.6	9538	20.88	0.085
	Subtest 2	1852.4	9262	20.86	0.084
		1880.0	9400	20.87	0.084
		1907.6	9538	20.85	0.084
	Subtest 3	1852.4	9262	20.79	0.083
		1880.0	9400	20.83	0.084
		1907.6	9538	20.78	0.083
	Subtest 4	1852.4	9262	20.76	0.082
		1880.0	9400	20.77	0.082
		1907.6	9538	20.72	0.081

WCDMA band V

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)	ERP/EIRP (dBm)
Release 99	RMC, 12.2kbps	826.4	4132	22.57	0.026
		836.6	4183	22.58	0.026
		846.6	4233	22.68	0.027
HSDPA	Subtest 1	826.4	4132	21.82	0.022
		836.6	4183	21.85	0.022
		846.6	4233	21.89	0.023
	Subtest 2	826.4	4132	21.79	0.022
		836.6	4183	21.8	0.022
		846.6	4233	21.86	0.022
	Subtest 3	826.4	4132	21.73	0.022
		836.6	4183	21.77	0.022
		846.6	4233	21.82	0.022
	Subtest 4	826.4	4132	21.7	0.022
		836.6	4183	21.73	0.022
		846.6	4233	21.78	0.022
HSUPA	Subtest 1	826.4	4132	21.86	0.022
		836.6	4183	21.89	0.023
		846.6	4233	21.94	0.023
	Subtest 2	826.4	4132	21.8	0.022
		836.6	4183	21.84	0.022
		846.6	4233	21.88	0.023
	Subtest 3	826.4	4132	21.77	0.022
		836.6	4183	21.82	0.022
		846.6	4233	21.85	0.022
	Subtest 4	826.4	4132	21.78	0.022
		836.6	4183	21.8	0.022
		846.6	4233	21.87	0.022
	Subtest 5	826.4	4132	21.76	0.022
		836.6	4183	21.79	0.022
		846.6	4233	21.84	0.022
HSPA+	QPSK	826.4	4132	21.75	0.022

		836.6	4183	21.77	0.022
		846.6	4233	21.81	0.022
	16QAM	826.4	4132	21.68	0.022
		836.6	4183	21.71	0.022
		846.6	4233	21.75	0.022
DC-HSDPA	Subtest 1	826.4	4132	21.71	0.022
		836.6	4183	21.74	0.022
		846.6	4233	21.79	0.022
	Subtest 2	826.4	4132	21.71	0.022
		836.6	4183	21.73	0.022
		846.6	4233	21.75	0.022
	Subtest 3	826.4	4132	21.66	0.021
		836.6	4183	21.69	0.022
		846.6	4233	21.71	0.022
	Subtest 4	826.4	4132	21.63	0.021
		836.6	4183	21.66	0.021
		846.6	4233	21.69	0.022

WCDMA band IV

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)	ERP/EIRP (dBm)
Release 99	RMC, 12.2kbps	1712.4	1312	22.61	0.142
		1732.4	1412	22.64	0.143
		1752.6	1513	22.65	0.143
HSDPA	Subtest 1	1712.4	1312	21.97	0.122
		1732.4	1412	21.86	0.119
		1752.6	1513	21.90	0.120
	Subtest 2	1712.4	1312	21.79	0.117
		1732.4	1412	21.81	0.118
		1752.6	1513	21.82	0.118
	Subtest 3	1712.4	1312	21.75	0.116
		1732.4	1412	21.77	0.117
		1752.6	1513	21.81	0.118
	Subtest 4	1712.4	1312	21.71	0.115
		1732.4	1412	21.74	0.116
		1752.6	1513	21.78	0.117
HSUPA	Subtest 1	1712.4	1312	22.01	0.123
		1732.4	1412	22.03	0.124
		1752.6	1513	22.04	0.124
	Subtest 2	1712.4	1312	21.98	0.122
		1732.4	1412	21.98	0.122
		1752.6	1513	22.01	0.123
	Subtest 3	1712.4	1312	21.96	0.122
		1732.4	1412	21.99	0.123
		1752.6	1513	22.02	0.124
	Subtest 4	1712.4	1312	21.93	0.121
		1732.4	1412	21.95	0.122
		1752.6	1513	21.98	0.122
	Subtest 5	1712.4	1312	21.96	0.122
		1732.4	1412	21.97	0.122
		1752.6	1513	21.99	0.123
HSPA+	QPSK	1712.4	1312	21.85	0.119

		1732.4	1412	21.87	0.119
		1752.6	1513	21.84	0.119
	16QAM	1712.4	1312	21.73	0.116
		1732.4	1412	21.77	0.117
		1752.6	1513	21.72	0.115
DC-HSDPA	Subtest 1	1712.4	1312	21.89	0.120
		1732.4	1412	21.79	0.117
		1752.6	1513	21.80	0.117
	Subtest 2	1712.4	1312	21.70	0.115
		1732.4	1412	21.73	0.116
		1752.6	1513	21.73	0.116
	Subtest 3	1712.4	1312	21.64	0.113
		1732.4	1412	21.69	0.115
		1752.6	1513	21.72	0.115
	Subtest 4	1712.4	1312	21.60	0.112
		1732.4	1412	21.64	0.113
		1752.6	1513	21.69	0.115

Occupied Bandwidth

WCDMA band II

REL99 Mode:

Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
1852.4	9262	4.1352
1880.0	9400	4.1333
1907.6	9538	4.1431

HSUPA Mode:

Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
1852.4	9262	4.1390
1880.0	9400	4.1165
1907.6	9538	4.1355

WCDMA band V

REL99 Mode:

Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
826.4	4132	4.1586
836.6	4183	4.1450
846.6	4233	4.1808

HSUPA Mode:

Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
826.4	4132	4.1478
836.6	4183	4.1449
846.6	4233	4.1912

WCDMA band IV

REL99 Mode:

Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
1712.4	1312	4.1531
1732.4	1412	4.1428
1752.6	1513	4.1353

HSUPA Mode:

Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
1712.4	1312	4.1214
1732.4	1412	4.1349
1752.6	1513	4.1244

Emission Bandwidth

WCDMA band II
REL99 Mode:

Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
1852.4	9262	4.674
1880.0	9400	4.653
1907.6	9538	4.705

HSUPA Mode:

Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
1852.4	9262	4.711
1880.0	9400	4.651
1907.6	9538	4.674

WCDMA band V
REL99 Mode:

Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
826.4	4132	4.719
836.6	4183	4.735
846.6	4233	4.805

HSUPA Mode:

Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
826.4	4132	4.720
836.6	4183	4.745
846.6	4233	4.797

WCDMA band IV
REL99 Mode:

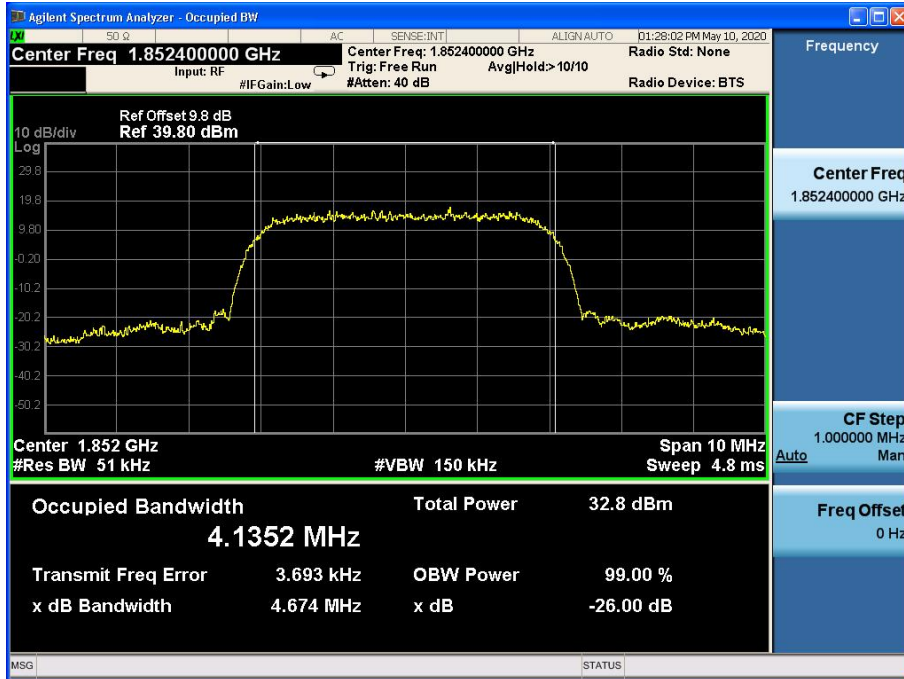
Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
1712.4	1312	4.694
1732.4	1412	4.696
1752.6	1513	4.669

HSUPA Mode:

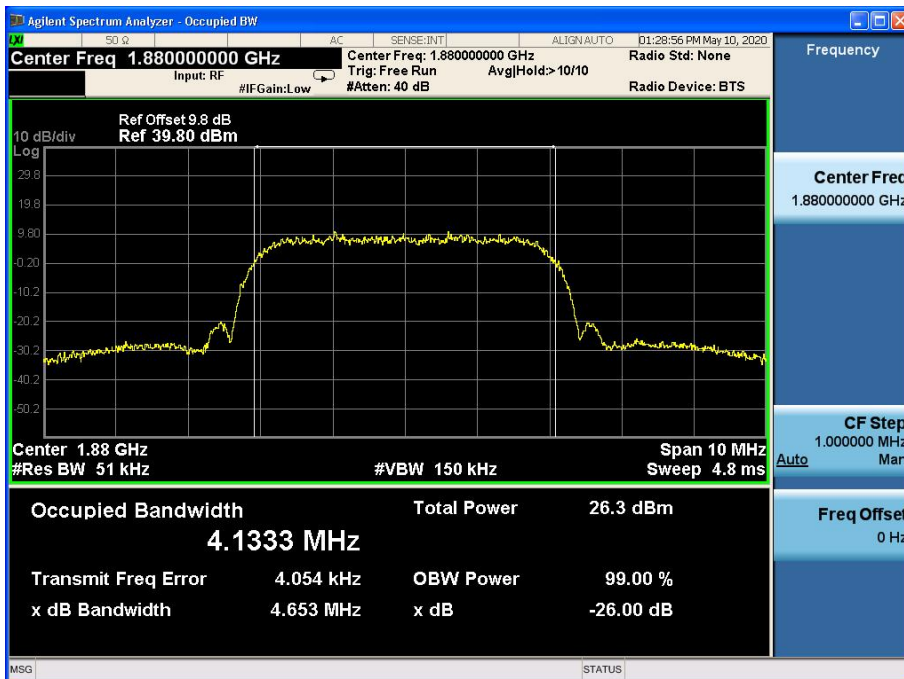
Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
1712.4	1312	4.662
1732.4	1412	4.723
1752.6	1513	4.678

WCDMA band II

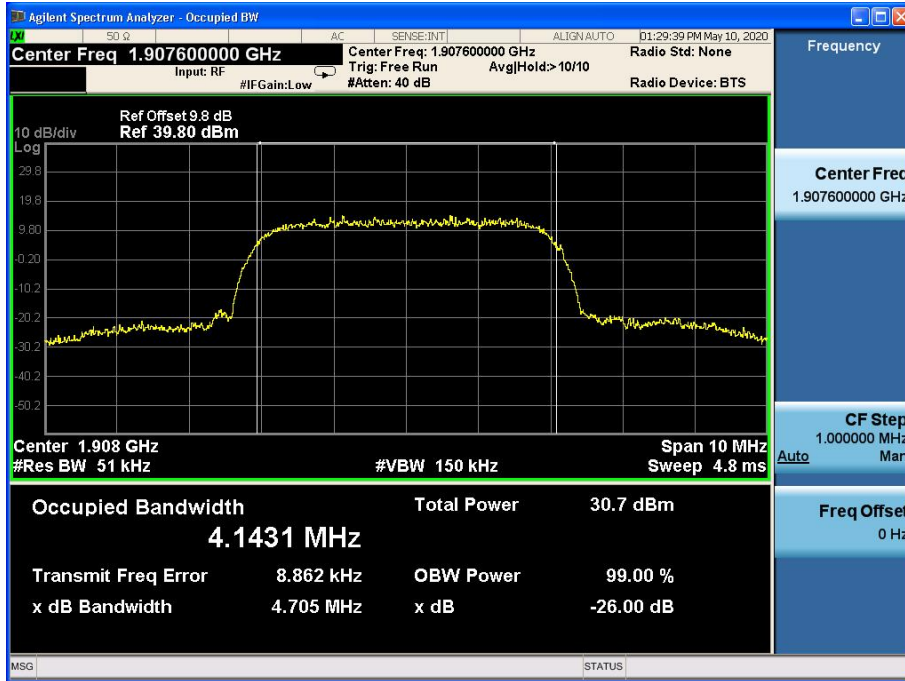
REL99 Mode:



Channel 9262

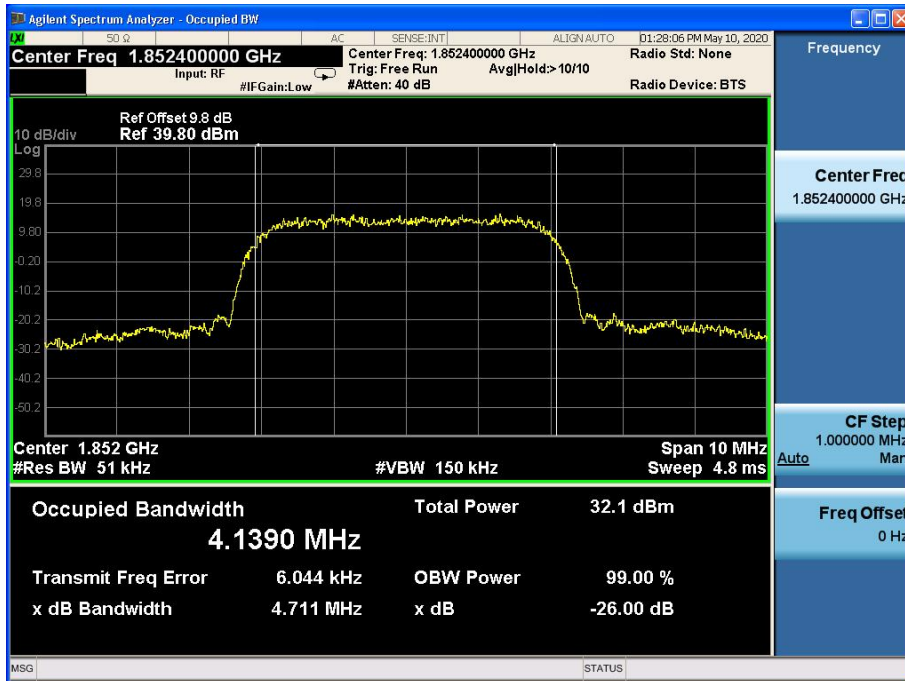


Channel 9400

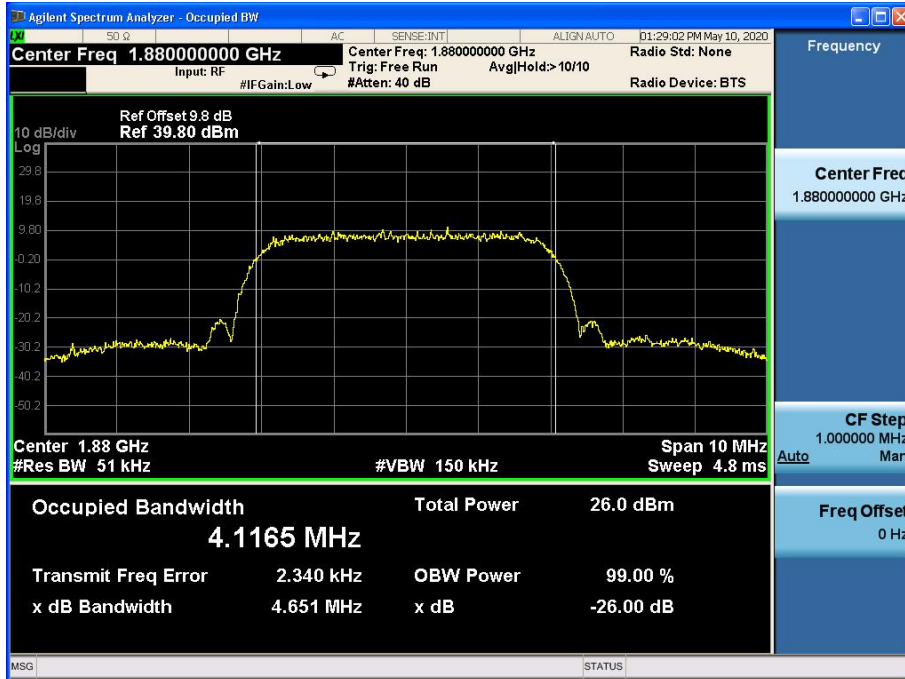


Channel 9538

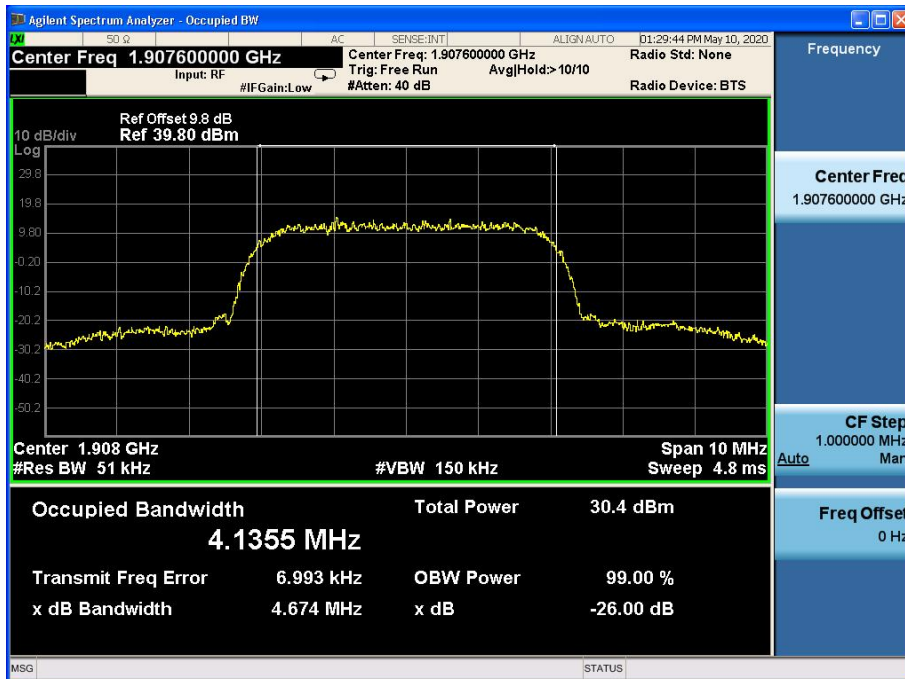
HSUPA Mode:



Channel 9262



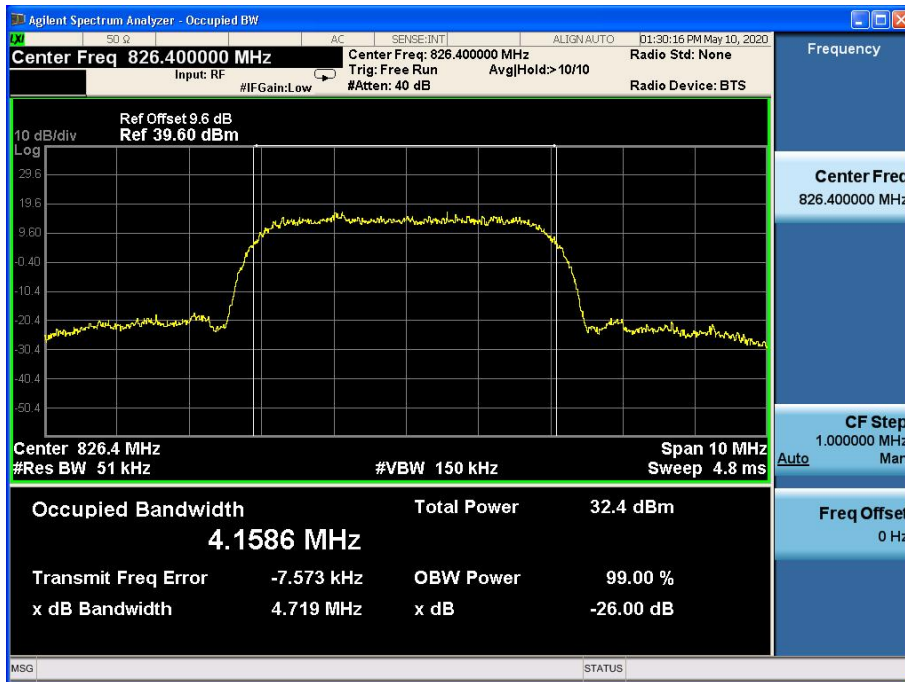
Channel 9400



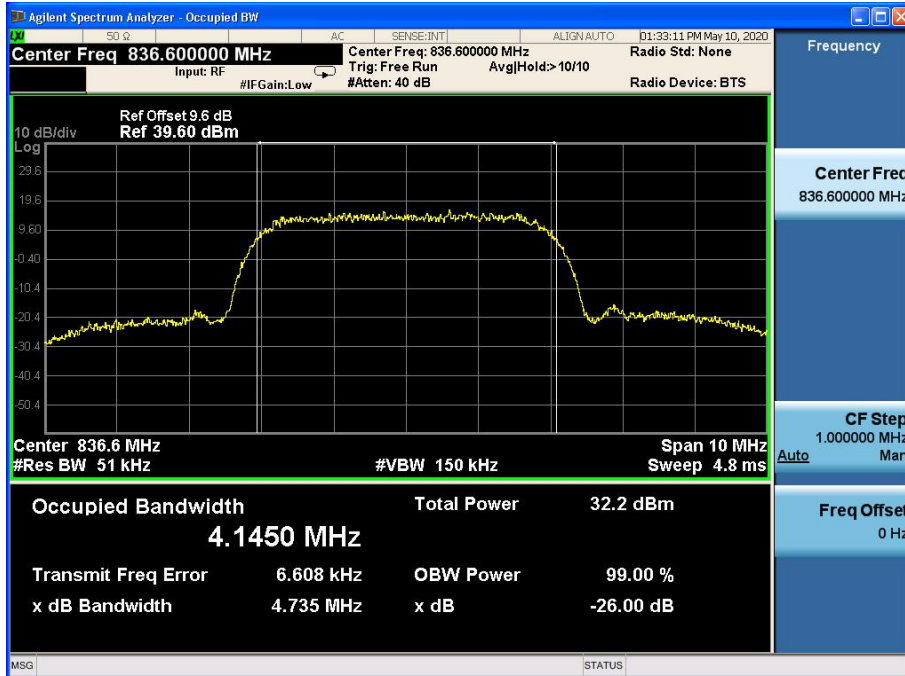
Channel 9538

WCDMA band V

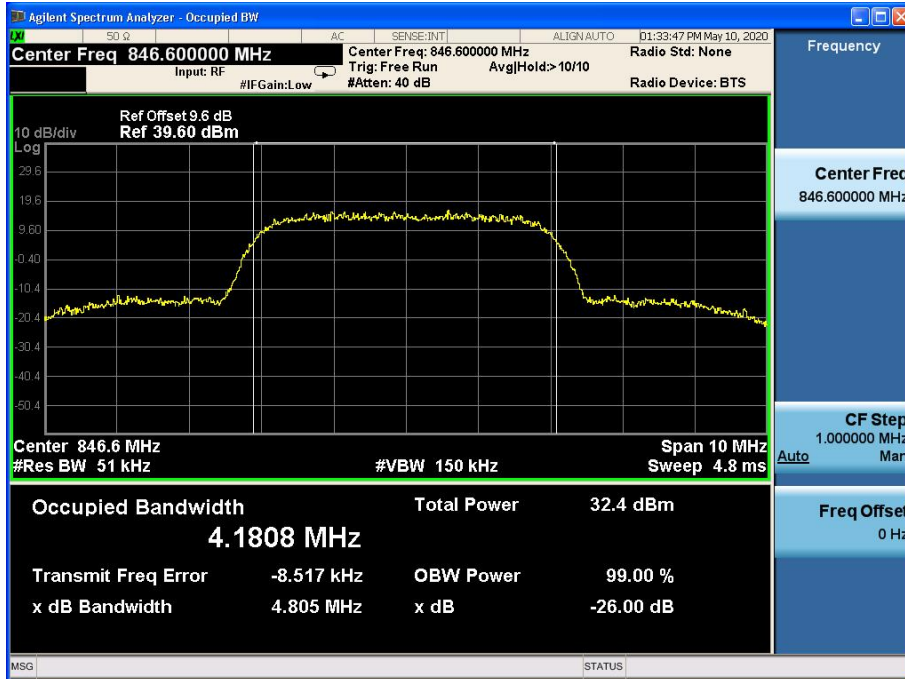
REL99 Mode:



Channel 4132

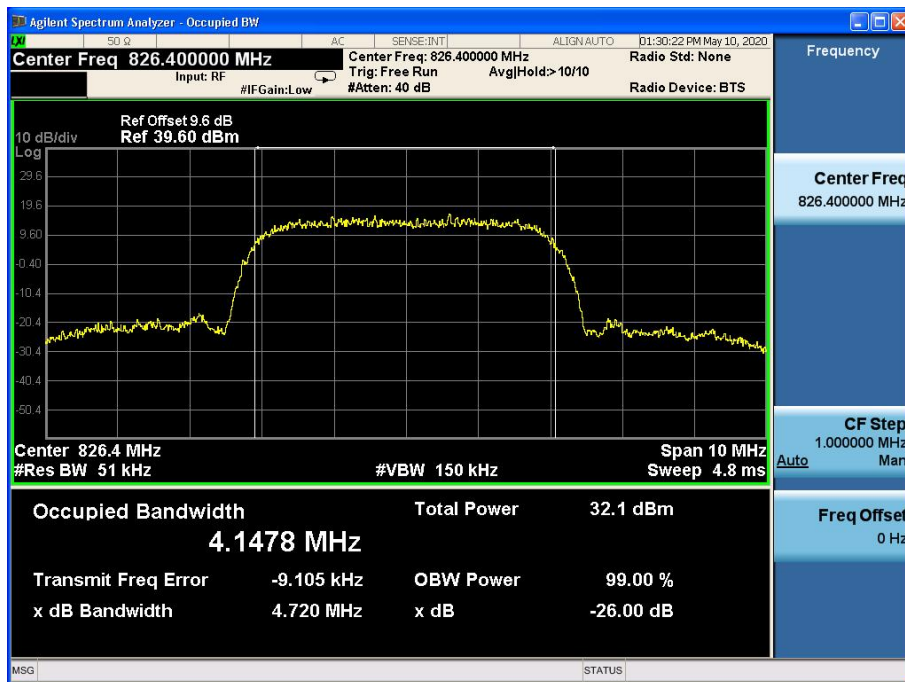


Channel 4183

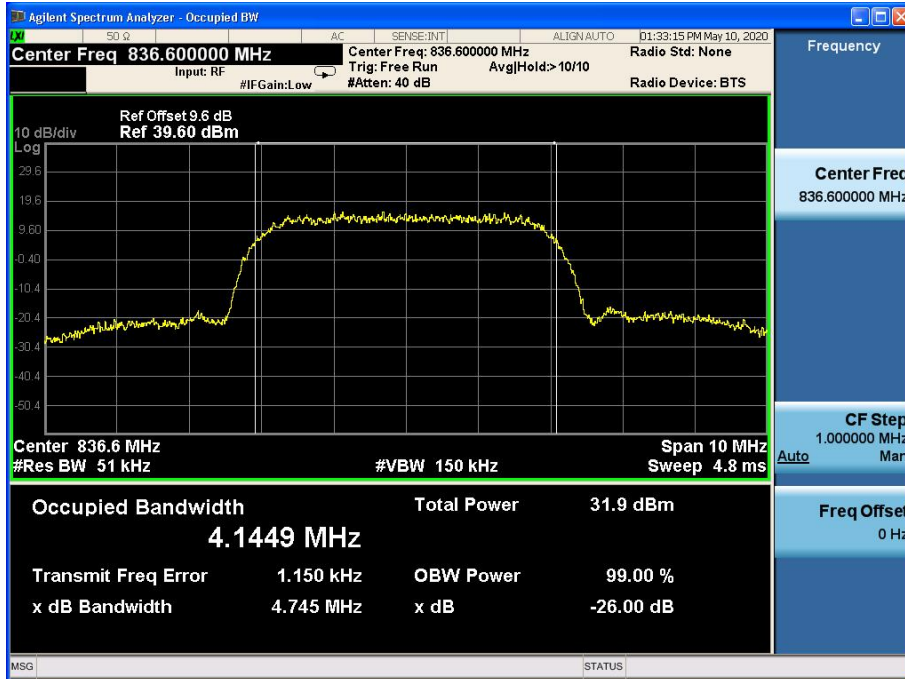


Channel 4233

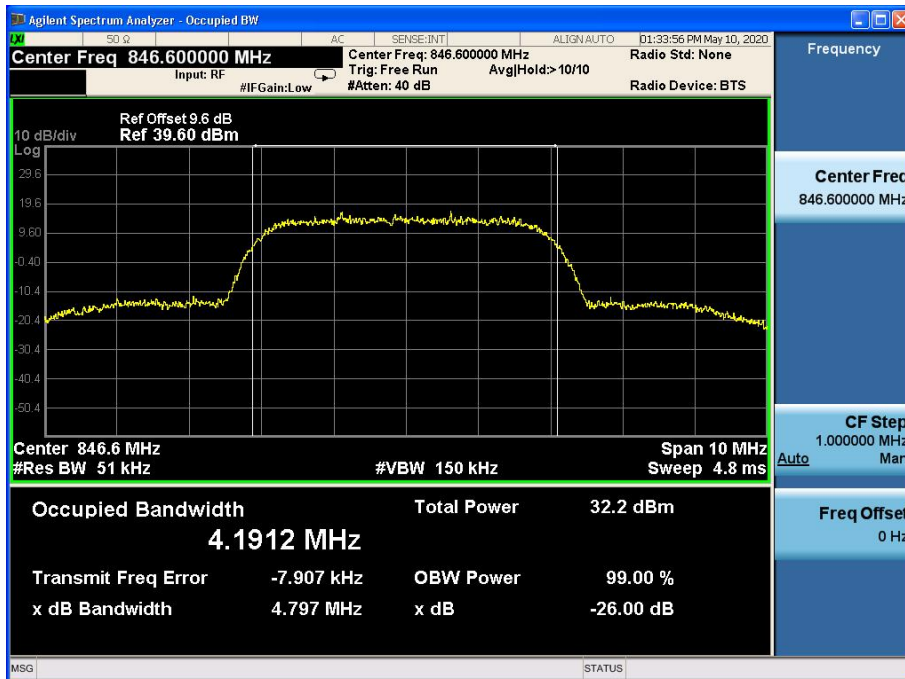
HSUPA Mode:



Channel 4132



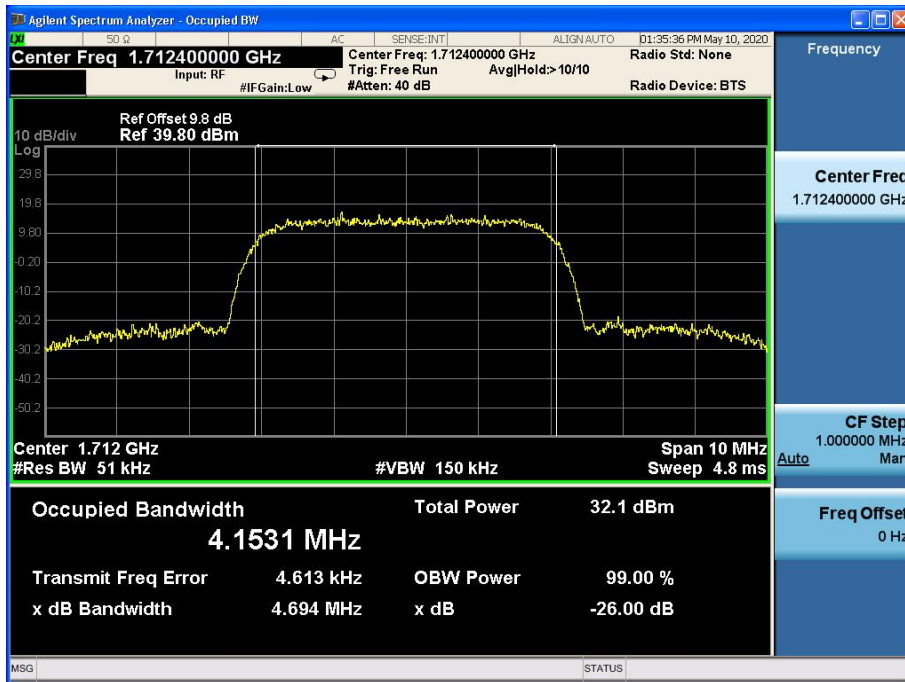
Channel 4183



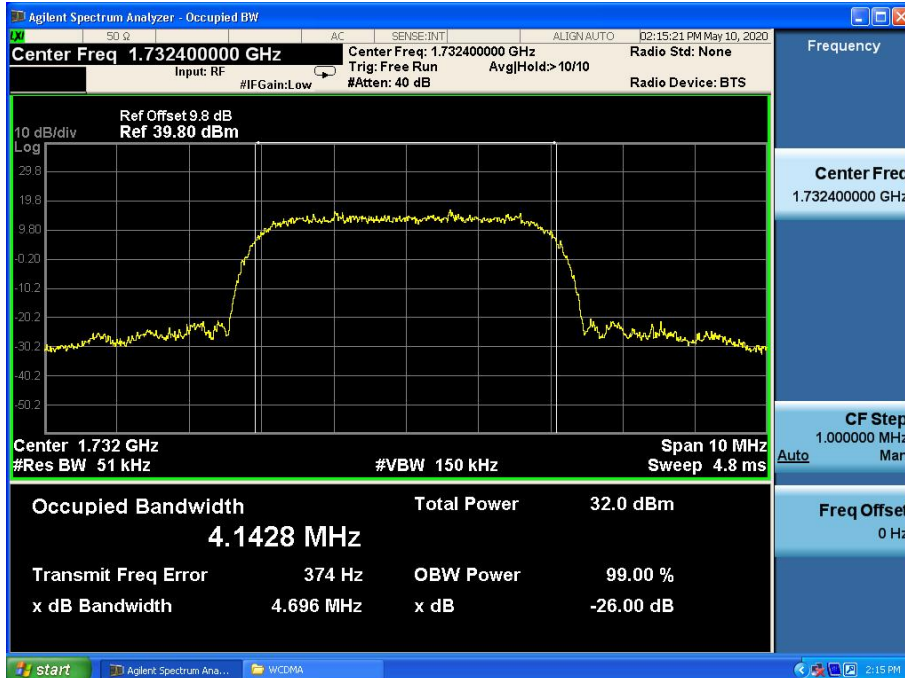
Channel 4233

WCDMA band IV

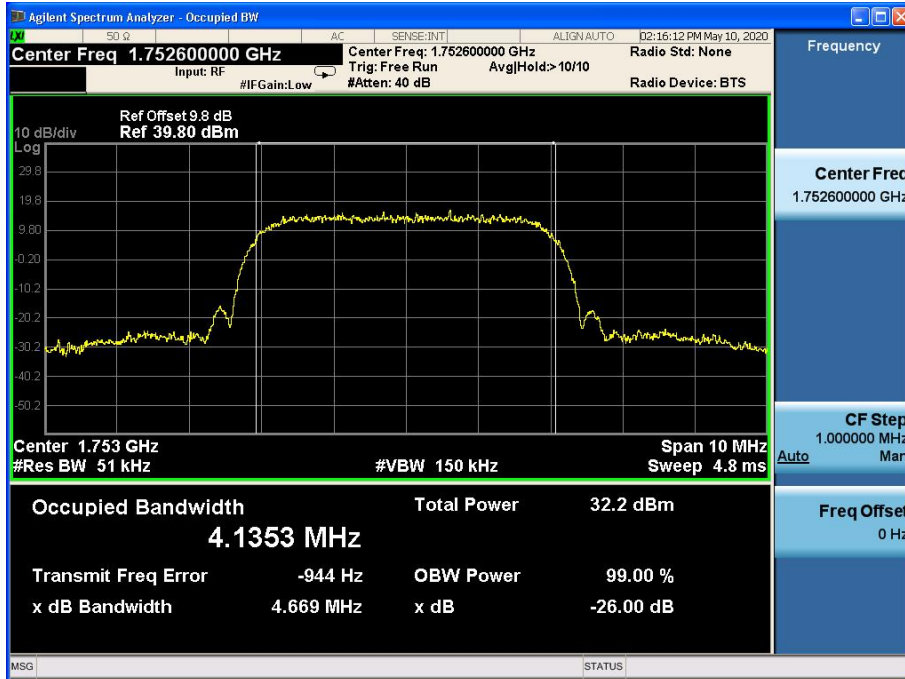
REL99 Mode:



Channel 1312

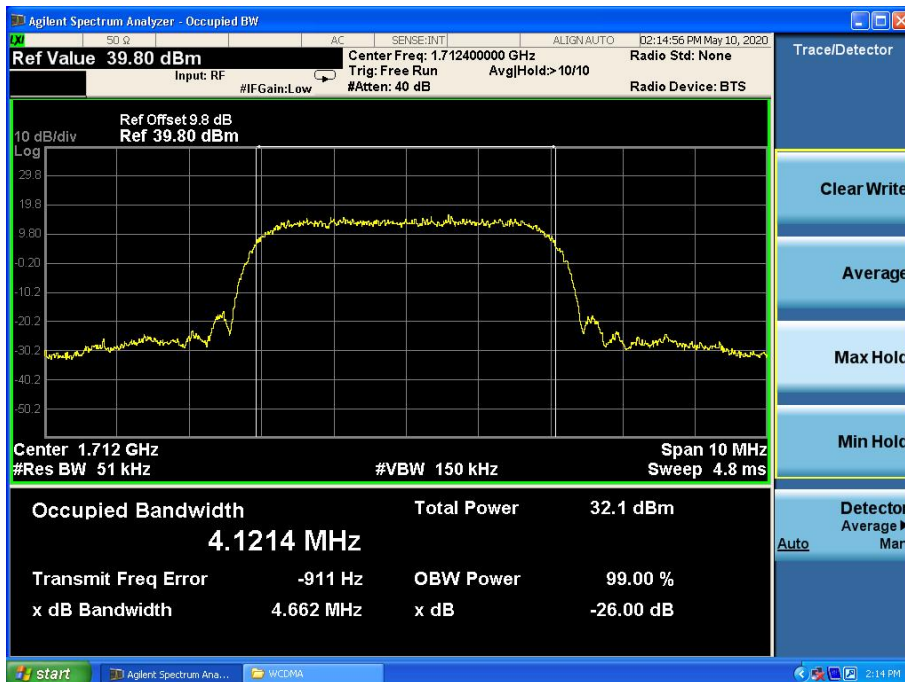


Channel 1412

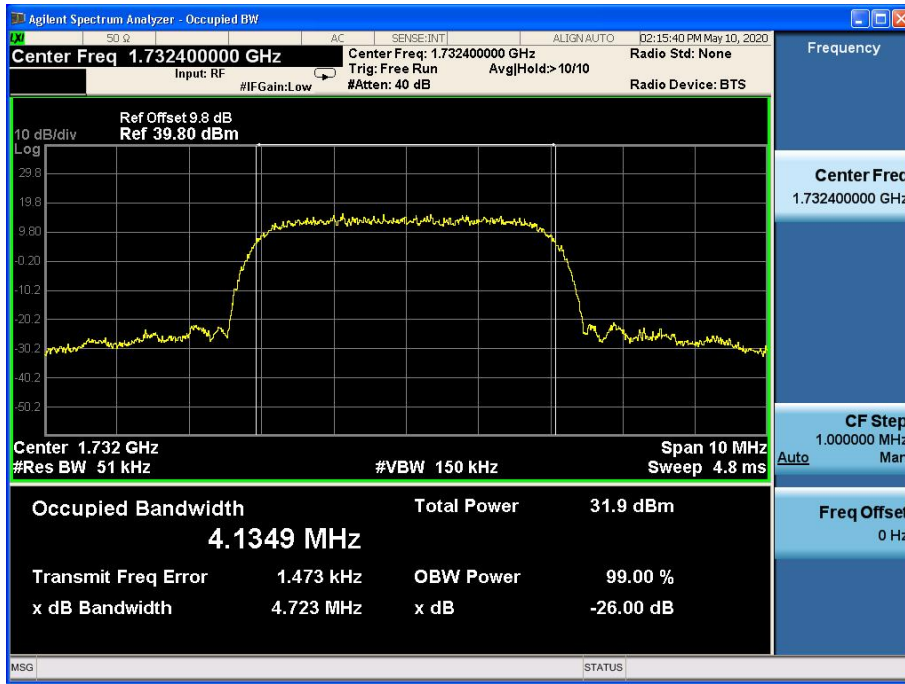


Channel 1513

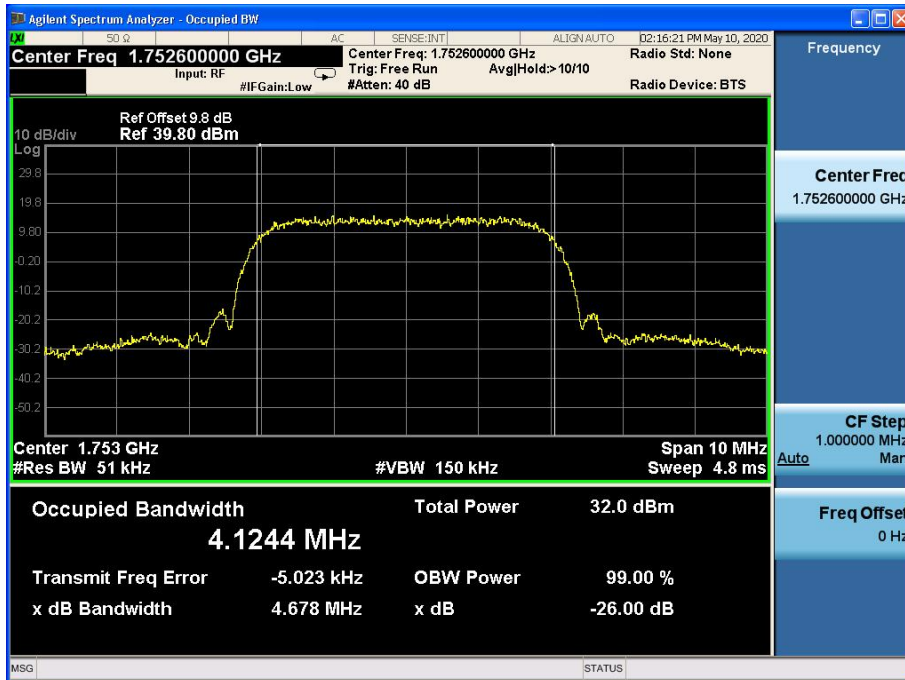
HSUPA Mode:



Ch7annel 1312



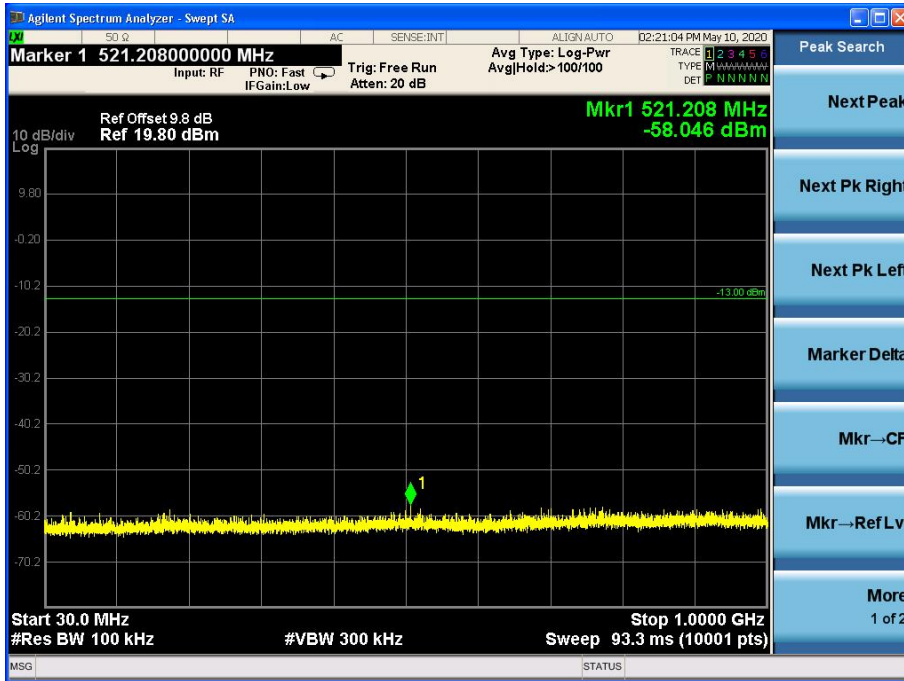
Channel 1412



Channel 1513

Spurious Emissions at antenna terminal
WCDMA band II

REL99 Mode:



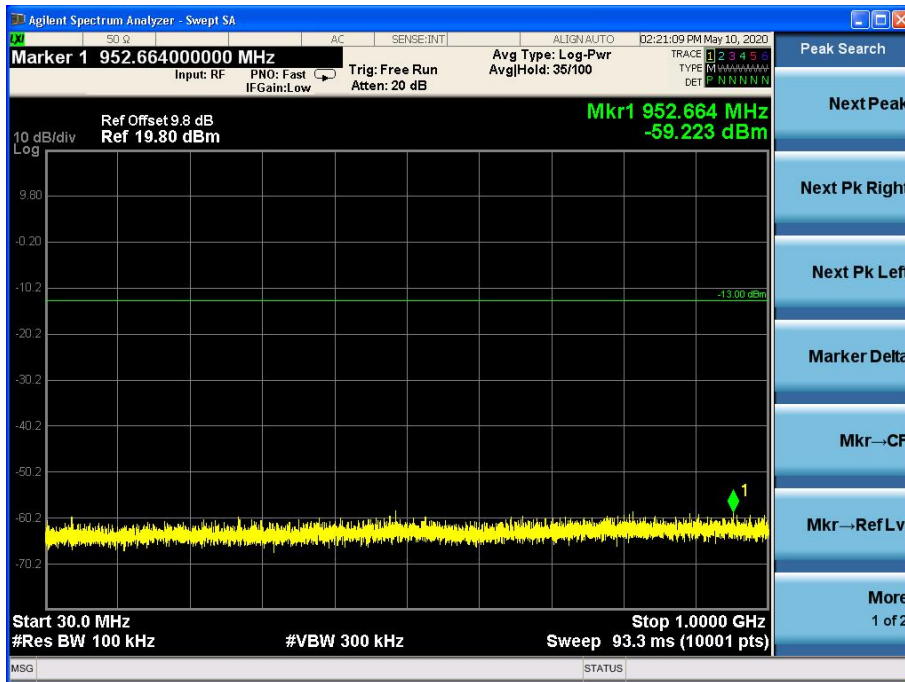
Channel 9400, 30MHz~1GHz



Channel 9400, 1GHz~20GHz

Note: The signal beyond the limit is the signal transmitted by EUT.

HSUPA Mode:



Channel 9400, 30MHz~1GHz

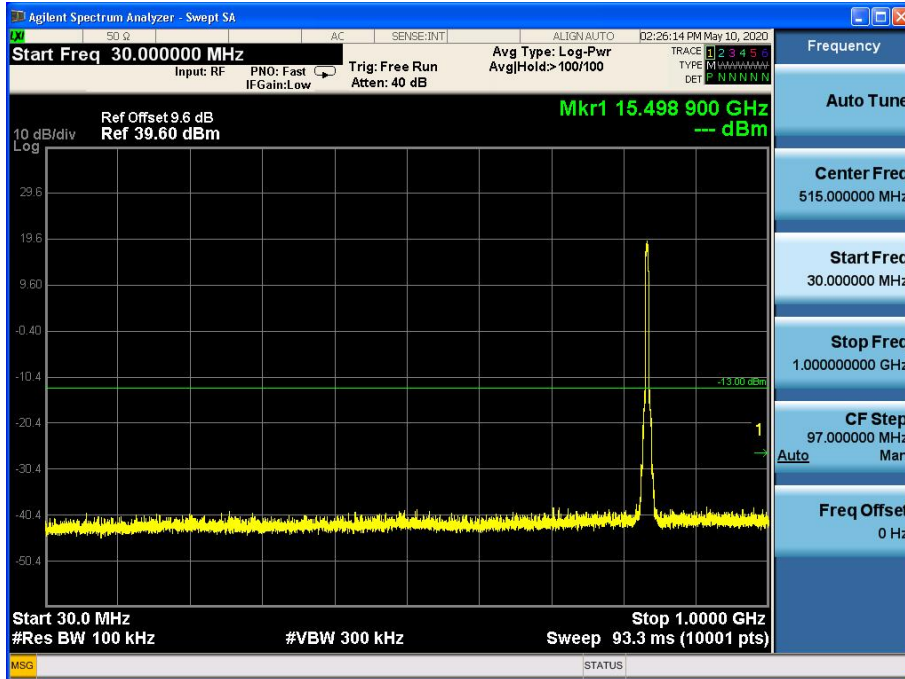


Channel 9400, 1GHz~20GHz

Note: The signal beyond the limit is the signal transmitted by EUT.

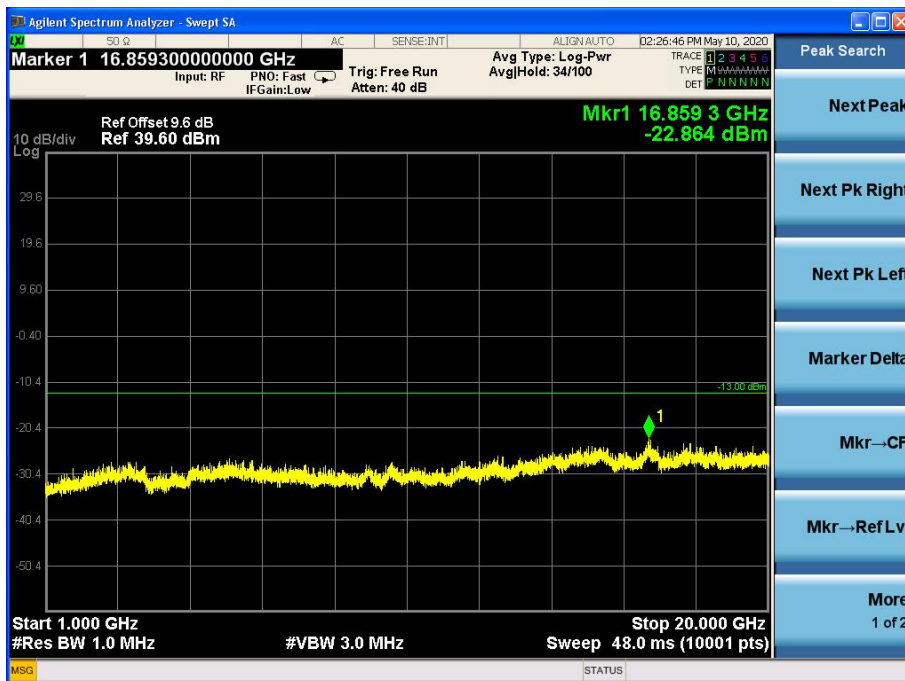
WCDMA band V

REL99 Mode:



Channel 4183, 30MHz~1GHz

Note: The signal beyond the limit is the signal transmitted by EUT.



Channel 4183, 1GHz~10GHz