
TEST REPORT FOR WCDMA TESTING

Report No.: SRTC2022-9004(F)-22011003(B)

Product Name: LTE/WCDMA/GSM(GPRS) Multi-Mode Digital Mobile Phone

Product Model: ZTE Blade A32

Applicant: ZTE CORPORATION

Manufacturer: ZTE CORPORATION

Specification: FCC Part 24E, Part 22H, Part 27,Part 2 (2020)

FCC ID: SRQ-ZTEA32-2

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	3
2 DESCRIPTION OF THE DEVICE UNDER TEST	4
2.1 Final Equipment Build Status	4
2.2 Support Equipment	4
3 REFERENCE SPECIFICATION	5
4 KEY TO NOTES AND RESULT CODES	5
5 RESULT SUMMARY	6
6 TEST RESULT	7
6.1 RF Power Output	7
6.2 Effective Radiated Power and Effective Isotropic Radiated Power	8
6.3 Occupied Bandwidth	9
6.4 Emission Bandwidth	10
6.5 Spurious Emissions at antenna terminal	11
6.6 Band Edges Compliance	12
6.7 Frequency Stability	13
6.8 Radiated Spurious Emissions	14
6.9 Peak-Average Ratio	16
7 MEASUREMENT UNCERTAINTIES	17
8 TEST EQUIPMENTS	18
APPENDIX A – TEST DATA OF CONDUCTED EMISSION	19
APPENDIX B – TEST DATA OF RADIATED EMISSION	70

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
Designation Number:	CN1267
Registration number:	239125

1.3 Applicant's details

Company:	ZTE Corporation
Address:	ZTE Plaza, #55 Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.4 Manufacturer's details

Company:	ZTE Corporation
Address:	ZTE Plaza, #55 Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.5 Test Environment

Date of Receipt of test sample at SRTC:	2021-01-10
Testing Start Date:	2021-01-24
Testing End Date:	2022-02-09

Environmental Data:	Temperature (°C)	Humidity (%)
Ambient:	25	40
Maximum Extreme:	55	---
Minimum Extreme:	-10	---

Normal Supply Voltage (V d.c.):	3.85
Maximum Extreme Supply Voltage (V d.c.):	4.40
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:1852.4~1907.6MHz Rx:1932.4~1987.6MHz WCDMA Band IV: Tx:1712.4~1752.6MHz Rx:2112.4~2152.6MHz WCDMA Band V: Tx:826.4~846.6MHz Rx:871.4~891.6MHz
Mode:	HSDPA/HSUPA/HSPA+/DC-HSDPA
Emission Designator:	4M50F9W
Duplex Mode:	FDD
Duplex Spacing:	WCDMA Band II:80MHz WCDMA Band IV:400MHz WCDMA Band V:45MHz
Antenna Type:	Internal Antenna
Antenna Gain:	WCDMA Band II: -0.6dBi WCDMA Band IV: -0.6dBi WCDMA Band V: -1.6dBi ERP = EIRP(Power+Gain) – 2.15 (dB)
Power Supply:	Charger
Software Revision:	W1.0.0_A32
Hardware Revision:	19765_1_10M11
IMEI:	860855060001803

2.2 Support Equipment

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

3 REFERENCE SPECIFICATION

Specification	Version	Title
FCC Part2	2020	Frequency allocations and radio treaty matters; general rules and regulations
FCC Part22	2020	Public mobile services
FCC Part24	2020	Personal communications services
FCC Part27	2020	Miscellaneous wireless communications services
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
TIA-603-E-2016	March 2016	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards

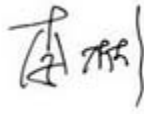
4 KEY TO NOTES AND RESULT CODES

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

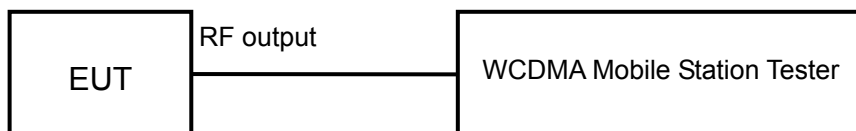
This Test Report Is Issued by: Mr. Peng Zhen 	Checked by: Mr. Li Bin 
Tested by: Mr. Wang Hao 	Issued date: 20220215

6 TEST RESULT

6.1 RF Power Output

Rule Part(s):
2.1046

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:

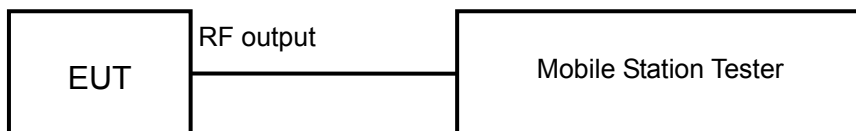
The test results are shown in Appendix A.

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)

Test setup:



Test procedure:

KDB 971168 D01 v03r01 – Section 5.6

Test Settings

Subclause 5.2.5.5 of ANSI C63.26-2015 is applicable, along with the following provisions. For personal/portable radios utilizing an integral antenna, the factor LC is typically negligible. However, in a fixed station transmit system that utilizes a long cable run between the transmitter and the transmitting antenna, this factor can be significant. The minimum cable loss should be used in this equation.

The relevant equation for determining the ERP or EIRP from the conducted RF output power measured is:

$$\text{ERP/EIRP} = \text{PMeas} - \text{LC} + \text{GT}$$

Where:

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm)

PMeas = measured transmitter output power or PSD, in dBW or dBm

LC = signal attenuation in the connecting cable between the transmitter and antenna in dB

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

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, $\text{ERP} = \text{EIRP} - 2.15 \text{ (dB)}$.

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

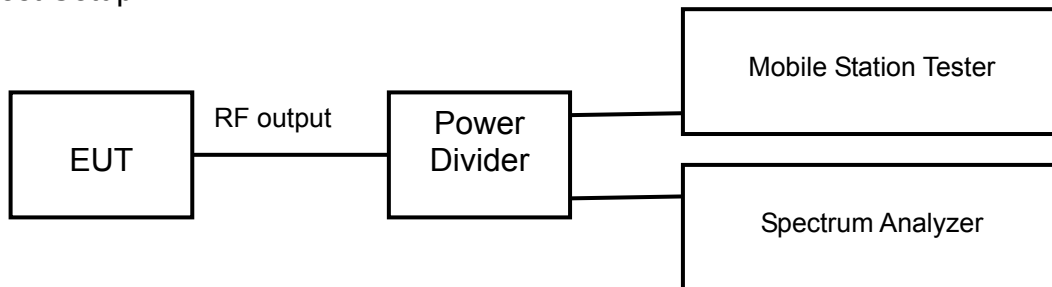
Test result:

The test results are shown in Appendix A.

6.3 Occupied Bandwidth

Rule Part(s):
FCC: 2.1049

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 $\geq 3 \times$ 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

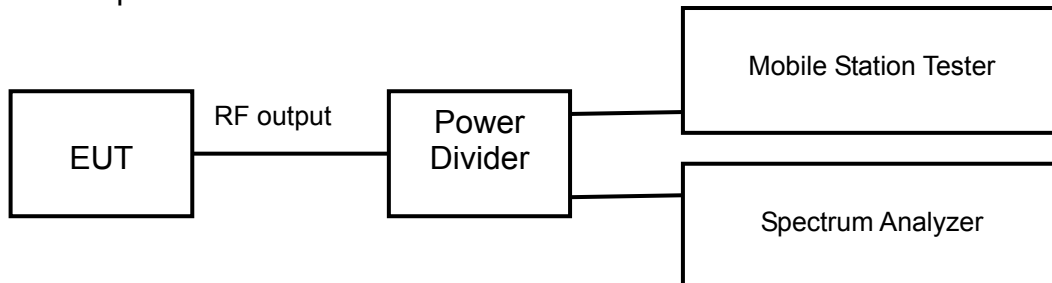
Test result:
The test results are shown in Appendix A.

6.4 Emission Bandwidth

Rule Part(s):

FCC: 2.1049

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 $\geq 3 \times$ 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:

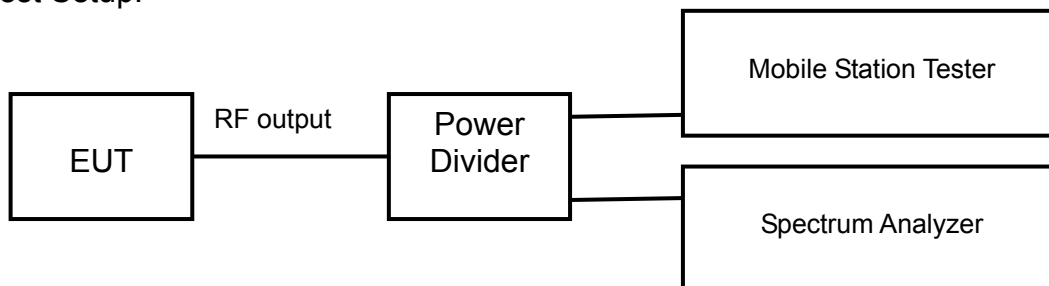
The test results are shown in Appendix A.

6.5 Spurious Emissions at antenna terminal

Rule Part(s):

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

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 $43 + \log_{10}(P_{\text{[Watts]}})$, where P is the transmitter power in Watts.

Test result:

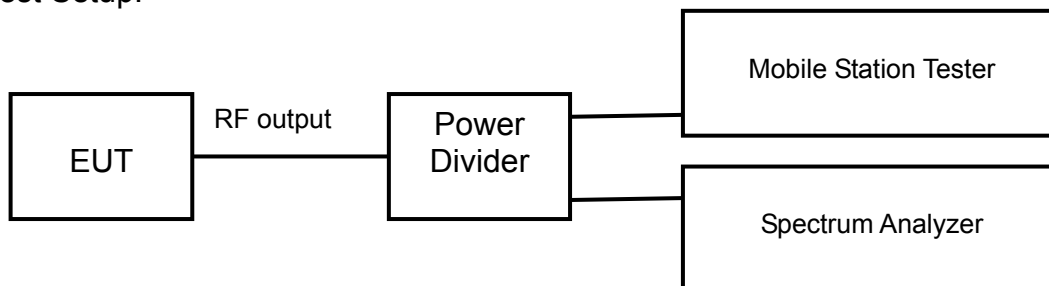
The test results are shown in Appendix A.

6.6 Band Edges Compliance

Rule Part(s)

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

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 $\geq 2 \times \text{Span/RBW}$
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 $43 + \log_{10}(P_{\text{[Watts]}})$, where P is the transmitter power in Watts.

Test result:

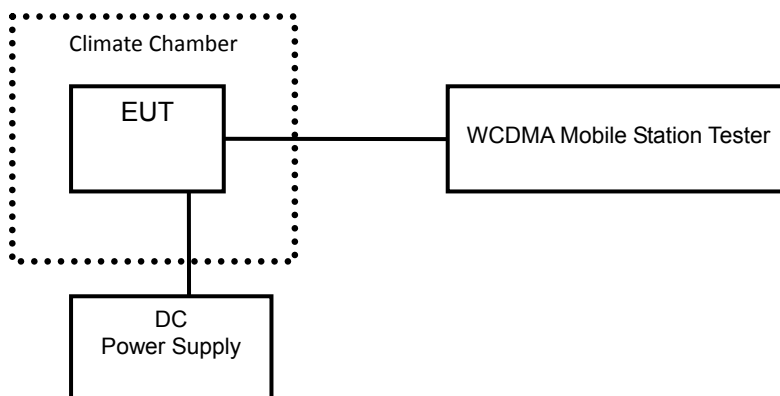
The test results are shown in Appendix A.

6.7 Frequency Stability

Rule Part(s)

FCC: 2.1055, 22.355, 24.235, 27.54

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:

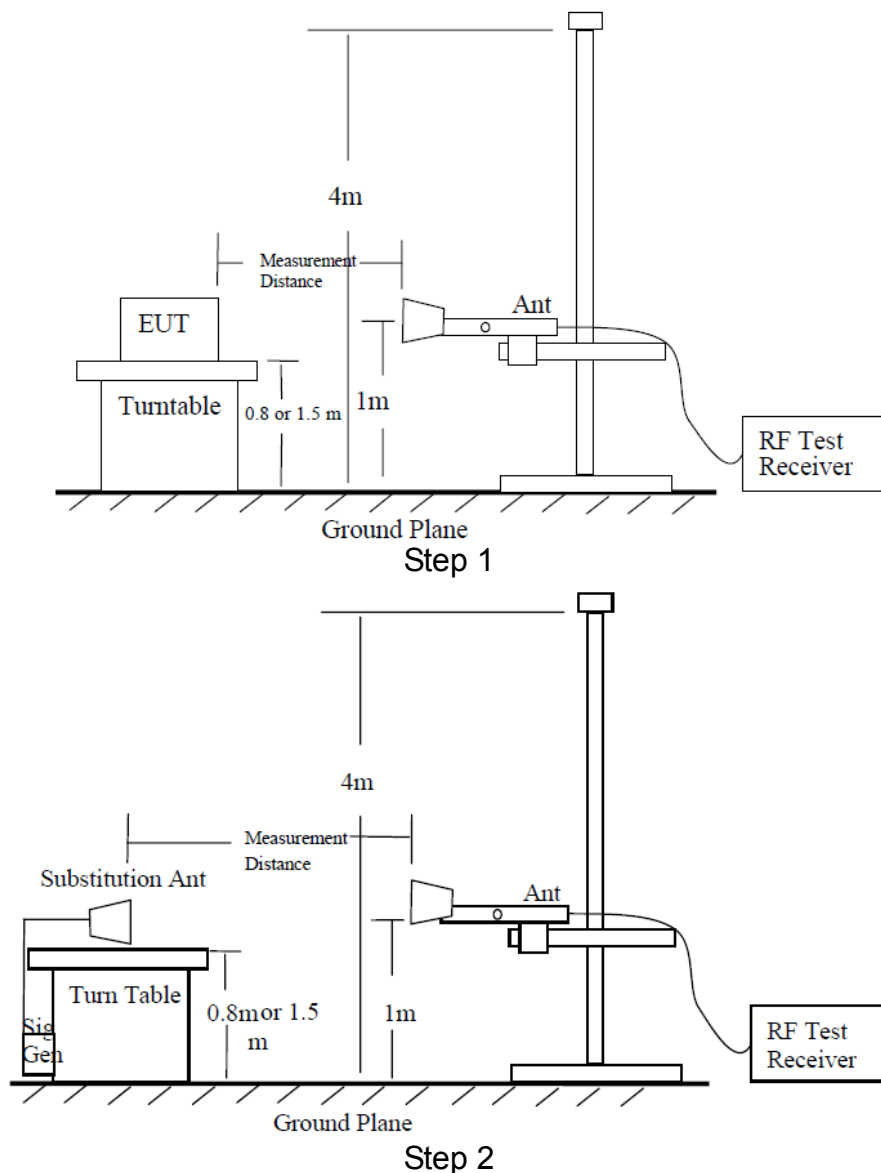
The test results are shown in Appendix A.

6.8 Radiated Spurious Emissions

Rule Part(s)

FCC: 2.1053, 22.917(a), 24.238(a), 27.53(h)

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:

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

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, $\text{ERP} = \text{EIRP} - 2.15 \text{ (dB)}$.

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

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

Note: We tested both horizontal and vertical polarization, but only the largest numerical polarity of the two polarities was recorded in the final report.

Test result:

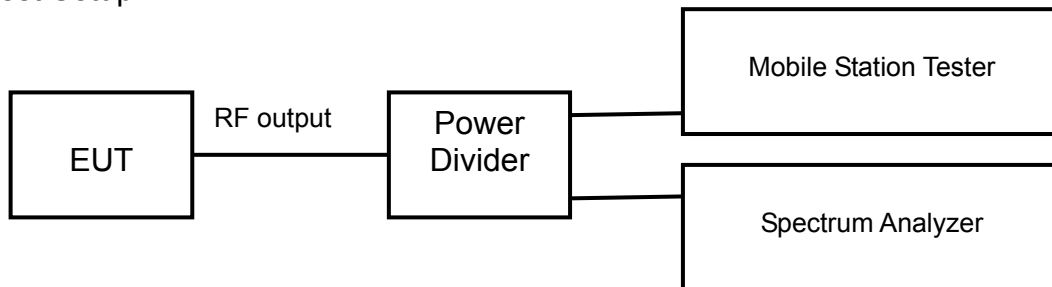
The test results are shown in Appendix B.

6.9 Peak-Average Ratio

Rule Part(s)

FCC: 24.232(d), 27.50(d) (5)

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	0.6 dB	
Effective Radiated Power and Effective Isotropic Radiated Power	0.6 dB	
Occupied Bandwidth	3kHz	
Emission Bandwidth	3kHz	
Peak-Average Ratio	0.8dB	
Frequency Stability	48Hz	
Band Edges Compliance	1.2dB	
Spurious Emissions at antenna terminal	9kHz~2GHz	1.2dB
	2G~3.6GHz	1.4dB
	3.6G~8GHz	2.2dB
	8G~12.75GHz	2.7dB
Radiated Emission Measurement	30MHz~200MHz	4.88dB
	200MHz~1GHz	4.87dB
	1GHz~18GHz	4.58dB
	18GHz~40GHz	4.35dB

8 TEST EQUIPMENTS

No.	Name/Model	Manufacturer	S/N	Calibration Date	Calibration Due Date
1	Mobile Station Tester / MT8820C	Anritsu	6201300660	2021.06.21	2022.06.20
2	Radio Communication Station / CMW500	R&S	161702	2021.06.21	2022.06.20
3	Spectrum Analyzer / FSV40	R&S	101065	2021.06.21	2022.06.20
4	Spectrum Analyzer / N9020A	Agilent	MY48010771	2021.05.18	2022.05.17
5	Power Divider / 11667A	HP	19632	2021.06.21	2022.06.20
6	DC Power Supply / E3645A	Agilent	MY40000741	2021.04.22	2022.04.21
7	Temperature chamber / SH241	ESPEC	92013758	2021.06.21	2022.06.20
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	2021.06.21	2022.06.20
16	Double-Ridged Waveguide Horn Antenna / HF 907	R&S	100513	2021.06.21	2022.06.20
17	Ultra log antenna / HL562	R&S	100016	2021.06.21	2022.06.20
18	Receive antenna /3160-09	SCHWARZ-BECK	002058-002	2021.06.21	2022.06.20
19	EMI test receiver / ESI 40	R&S	100015	2021.06.21	2022.06.20
20	EMI test receiver / ESCS30	R&S	100029	2021.06.21	2022.06.20
21	Receive antenna / HL562	R&S	100167	2021.06.21	2022.06.20
22	AMN / ENV216	R&S	3560.6550.12	2021.06.21	2022.06.20

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

1. RF Power Output WCDMA band II

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
Release 99	RMC, 12.2kbps	1852.4	9262	23.66
Release 99	RMC, 12.2kbps	1880	9400	23.68
Release 99	RMC, 12.2kbps	1907.6	9538	23.82

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
HSDPA	Subtest1	1852.4	9262	23.24
HSDPA	Subtest1	1880	9400	23.17
HSDPA	Subtest1	1907.6	9538	22.96
HSDPA	Subtest2	1852.4	9262	22.79
HSDPA	Subtest2	1880	9400	22.81
HSDPA	Subtest2	1907.6	9538	22.55
HSDPA	Subtest3	1852.4	9262	23.00
HSDPA	Subtest3	1880	9400	22.93
HSDPA	Subtest3	1907.6	9538	22.68
HSDPA	Subtest4	1852.4	9262	22.65
HSDPA	Subtest4	1880	9400	22.59
HSDPA	Subtest4	1907.6	9538	22.39

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
HSUPA	Subtest1	1852.4	9262	20.34
HSUPA	Subtest1	1880	9400	20.39
HSUPA	Subtest1	1907.6	9538	20.26
HSUPA	Subtest2	1852.4	9262	21.00
HSUPA	Subtest2	1880	9400	21.12
HSUPA	Subtest2	1907.6	9538	20.80
HSUPA	Subtest3	1852.4	9262	21.01
HSUPA	Subtest3	1880	9400	21.20
HSUPA	Subtest3	1907.6	9538	20.86
HSUPA	Subtest4	1852.4	9262	20.89
HSUPA	Subtest4	1880	9400	21.04
HSUPA	Subtest4	1907.6	9538	20.78
HSUPA	Subtest5	1852.4	9262	22.17
HSUPA	Subtest5	1880	9400	22.25
HSUPA	Subtest5	1907.6	9538	20.78

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
HSPA+	QPSK	1852.4	9262	25.22
HSPA+	QPSK	1880	9400	25.08
HSPA+	QPSK	1907.6	9538	24.77
HSPA+	16QAM	1852.4	9262	25.07
HSPA+	16QAM	1880	9400	25.21
HSPA+	16QAM	1907.6	9538	24.75

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
DC-HSDPA	Subtest1	1852.4	9262	25.65
DC-HSDPA	Subtest1	1880	9400	25.68
DC-HSDPA	Subtest1	1907.6	9538	24.85
DC-HSDPA	Subtest2	1852.4	9262	25.23
DC-HSDPA	Subtest2	1880	9400	25.26
DC-HSDPA	Subtest2	1907.6	9538	25.02
DC-HSDPA	Subtest3	1852.4	9262	25.35
DC-HSDPA	Subtest3	1880	9400	25.37
DC-HSDPA	Subtest3	1907.6	9538	25.11
DC-HSDPA	Subtest4	1852.4	9262	25.08
DC-HSDPA	Subtest4	1880	9400	25.04
DC-HSDPA	Subtest4	1907.6	9538	24.81

2. Occupied Bandwidth

WCDMA band II

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
Release 99	1852.4	9262	4.15
Release 99	1880	9400	4.15
Release 99	1907.6	9538	4.16

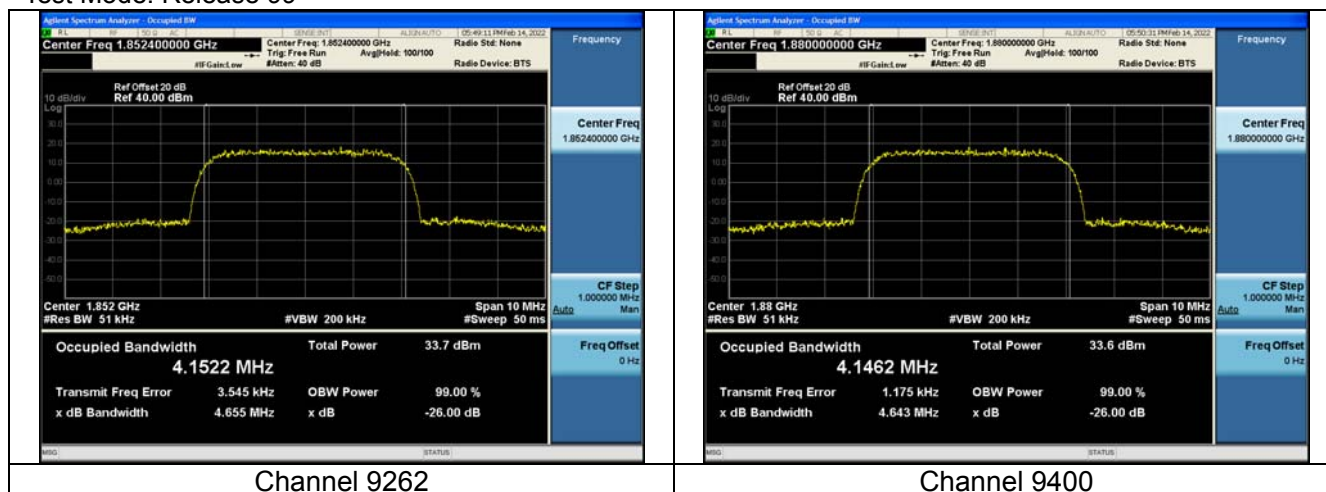
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
HSDPA	1852.4	9262	4.14
HSDPA	1880	9400	4.15
HSDPA	1907.6	9538	4.13

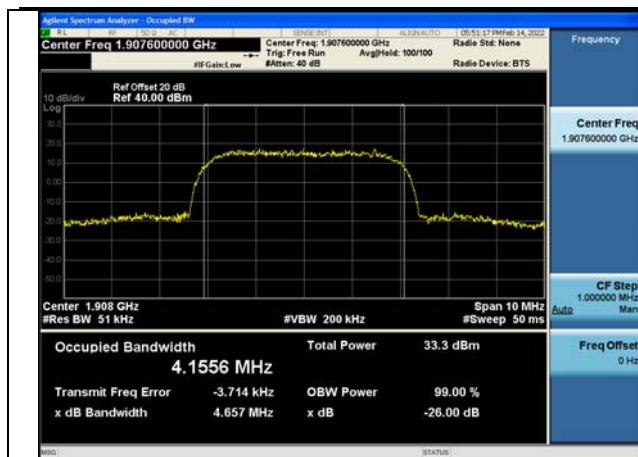
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
HSUPA	1852.4	9262	4.15
HSUPA	1880	9400	4.15
HSUPA	1907.6	9538	4.14

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
HSPA+	1852.4	9262	4.15
HSPA+	1880	9400	4.15
HSPA+	1907.6	9538	4.16

WCDMA band II

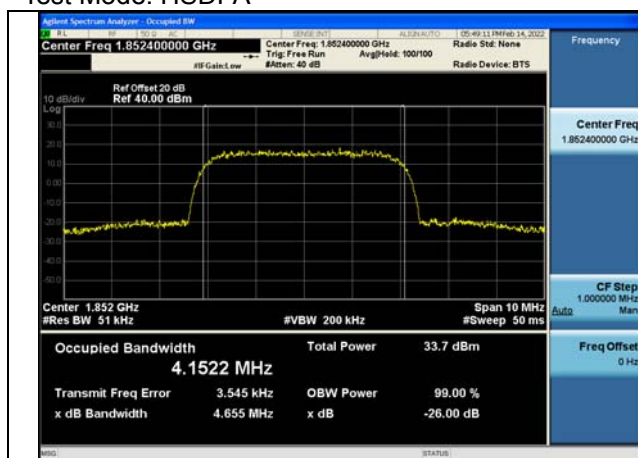
Test Mode: Release 99



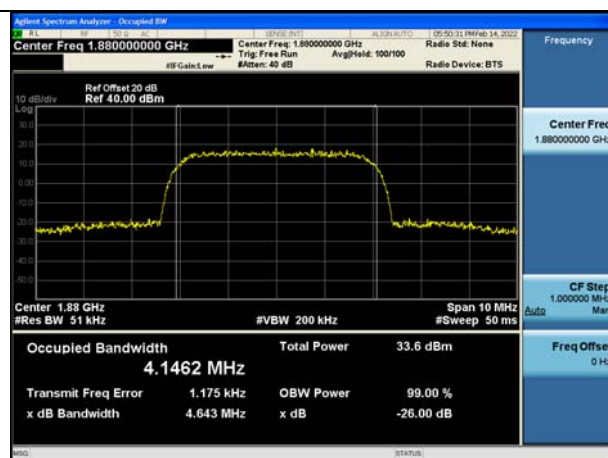


Channel 9538

Test Mode: HSDPA



Channel 9262

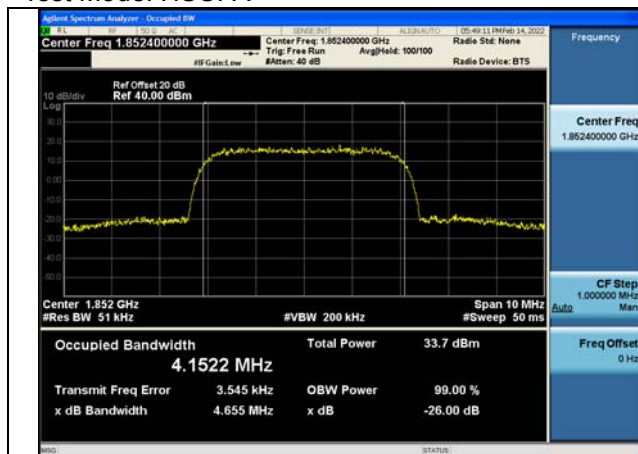


Channel 9400

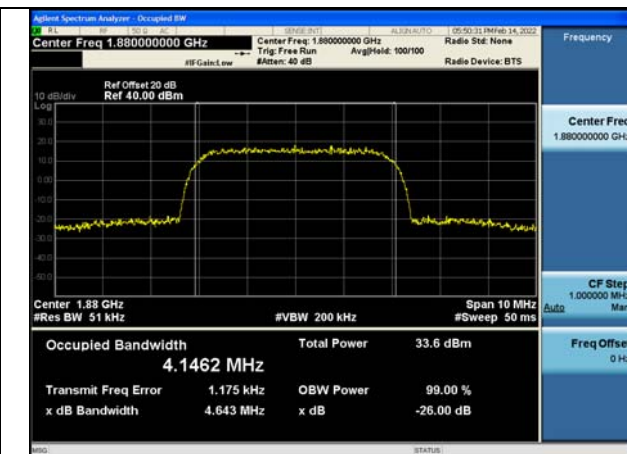


Channel 9538

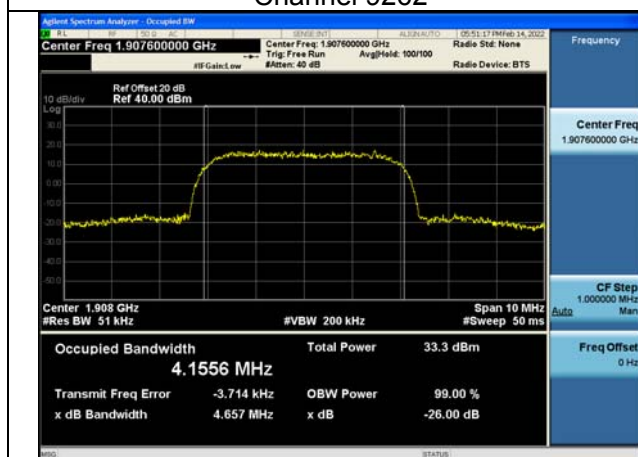
Test Mode: HSUPA



Channel 9262

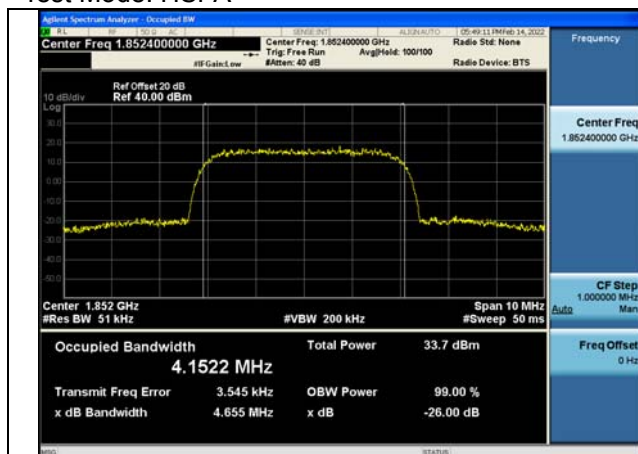


Channel 9400

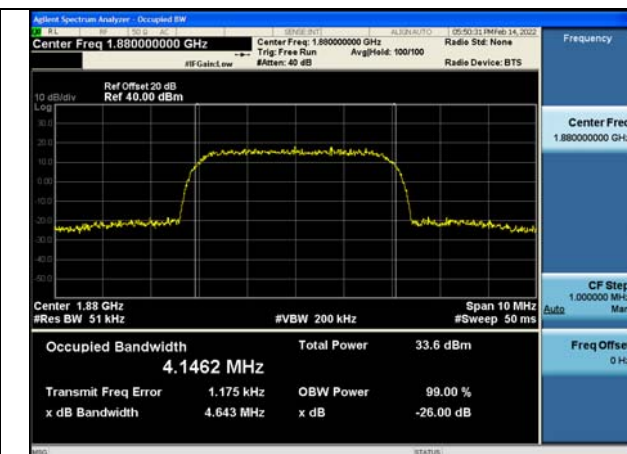


Channel 9538

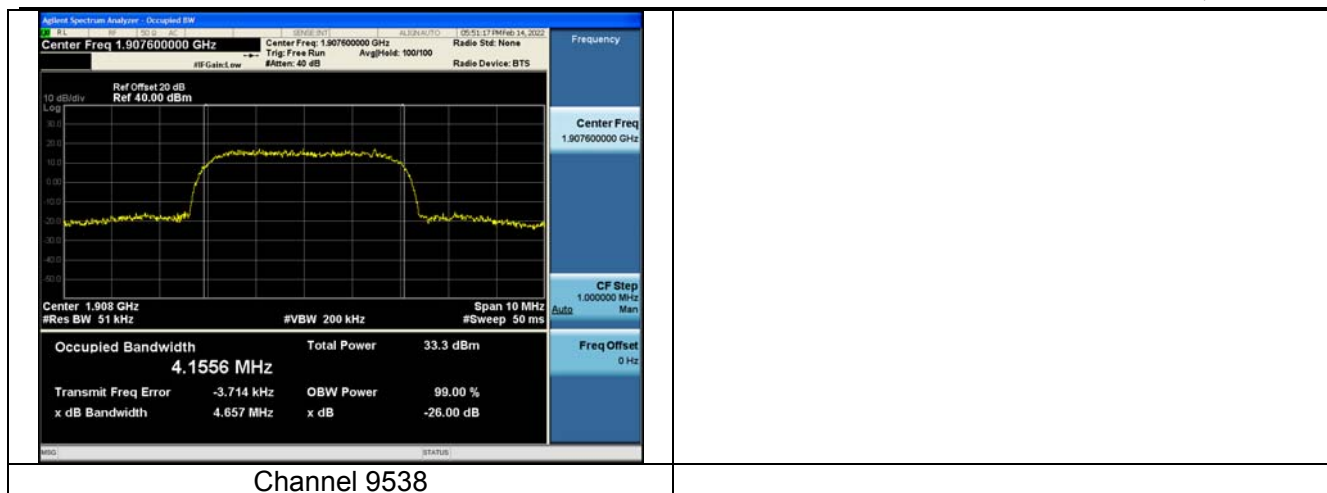
Test Mode: HSPA+



Channel 9262



Channel 9400



3. Emission Bandwidth

WCDMA band II

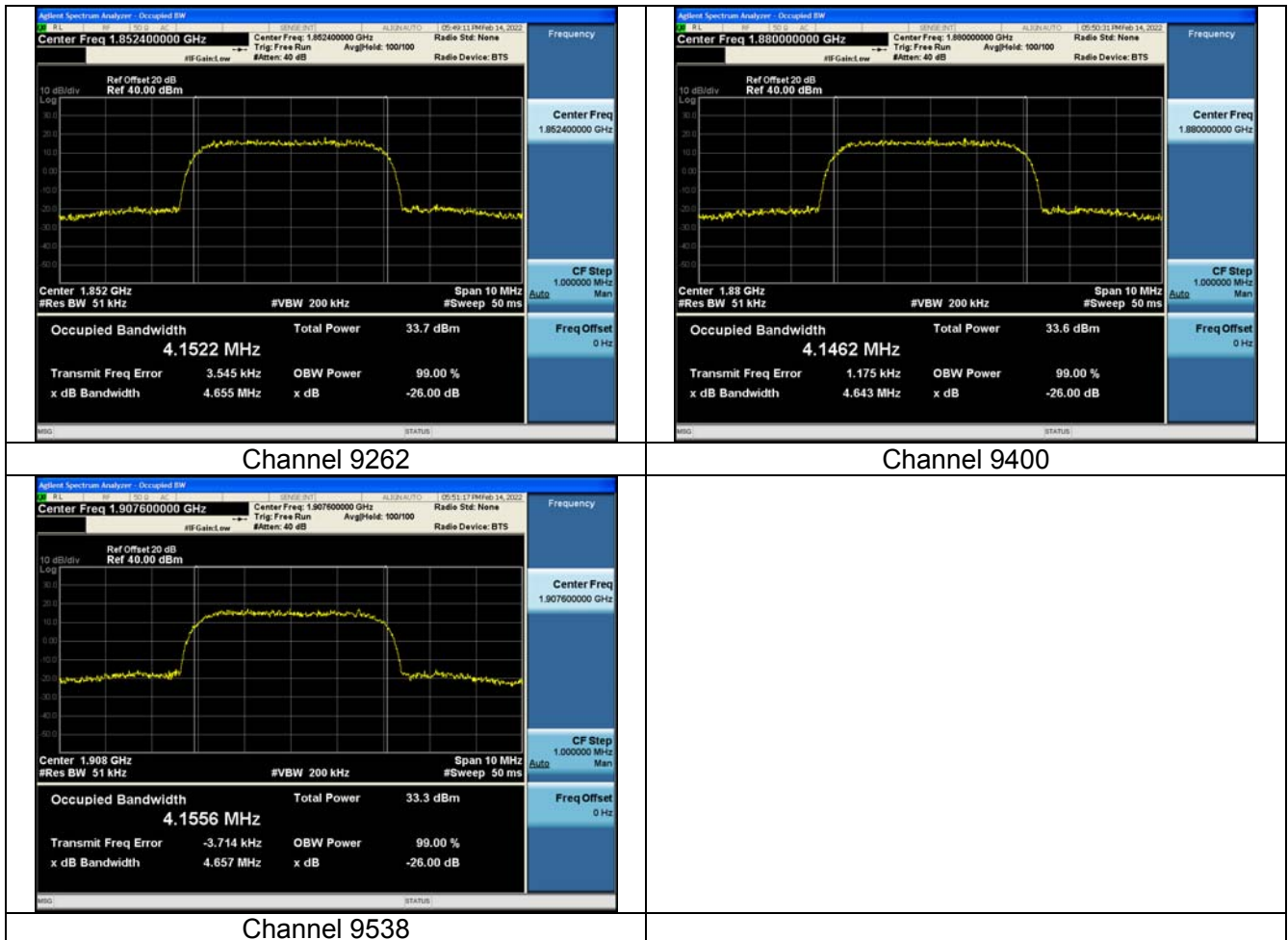
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
Release 99	1852.4	9262	4.63
Release 99	1880	9400	4.65
Release 99	1907.6	9538	4.67

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
HSDPA	1852.4	9262	4.64
HSDPA	1880	9400	4.62
HSDPA	1907.6	9538	4.62

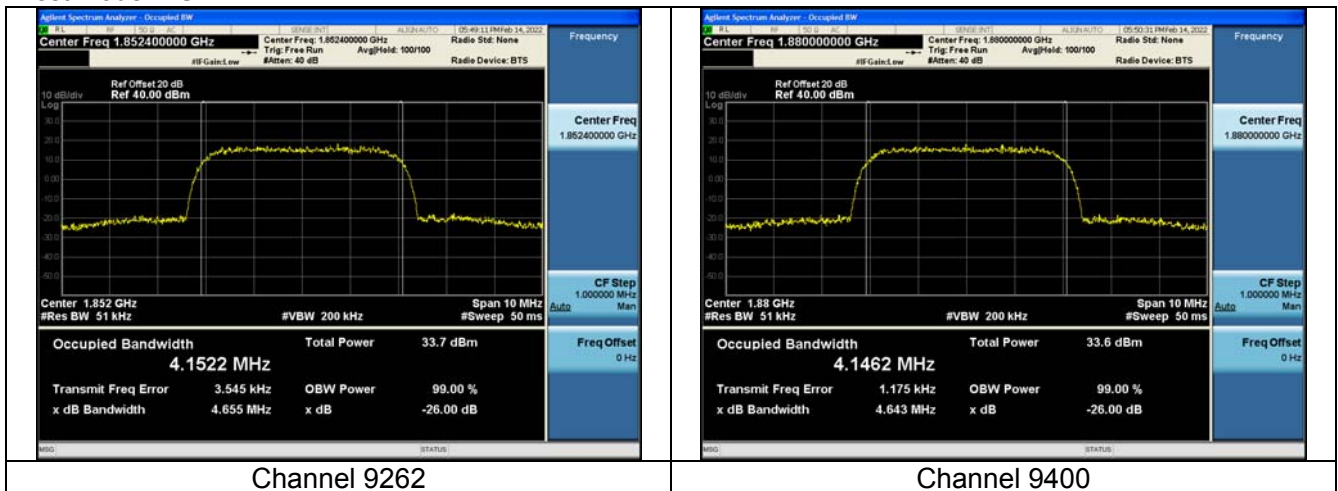
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
HSUPA	1852.4	9262	4.63
HSUPA	1880	9400	4.63
HSUPA	1907.6	9538	4.61

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
HSPA+	1852.4	9262	4.66
HSPA+	1880	9400	4.64
HSPA+	1907.6	9538	4.66

WCDMA band II
Test Mode: Release 99



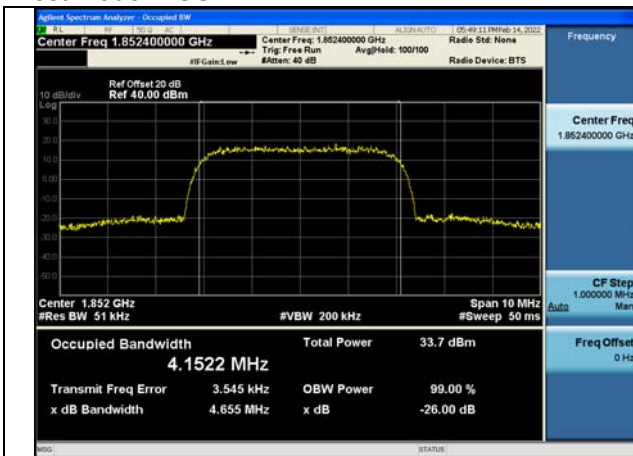
Test Mode: HSDPA



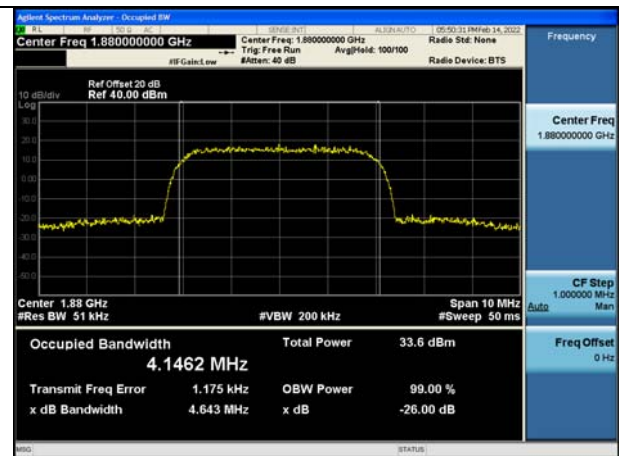


Channel 9538

Test Mode: HSPA



Channel 9262

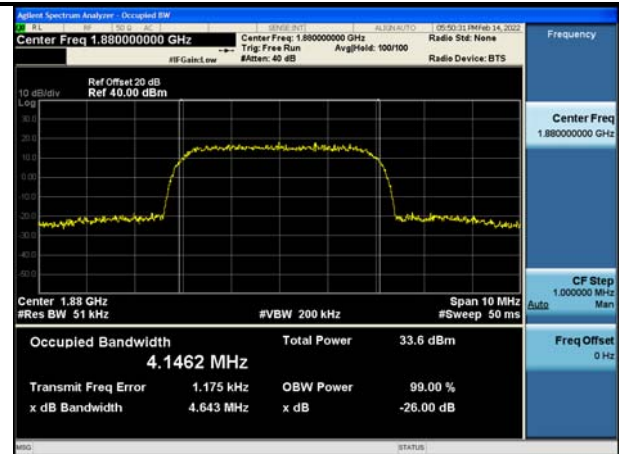
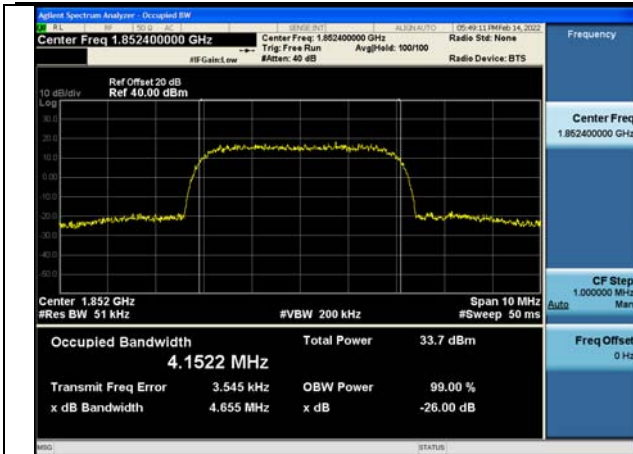


Channel 9400



Channel 9538

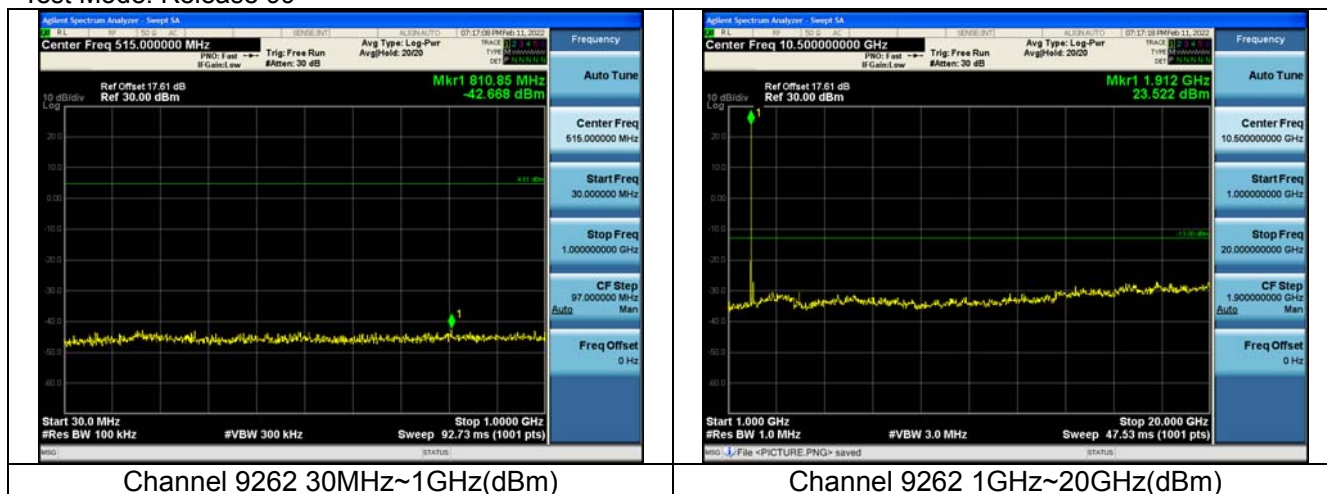
Test Mode: HSPA+



4. Spurious Emissions at antenna terminal

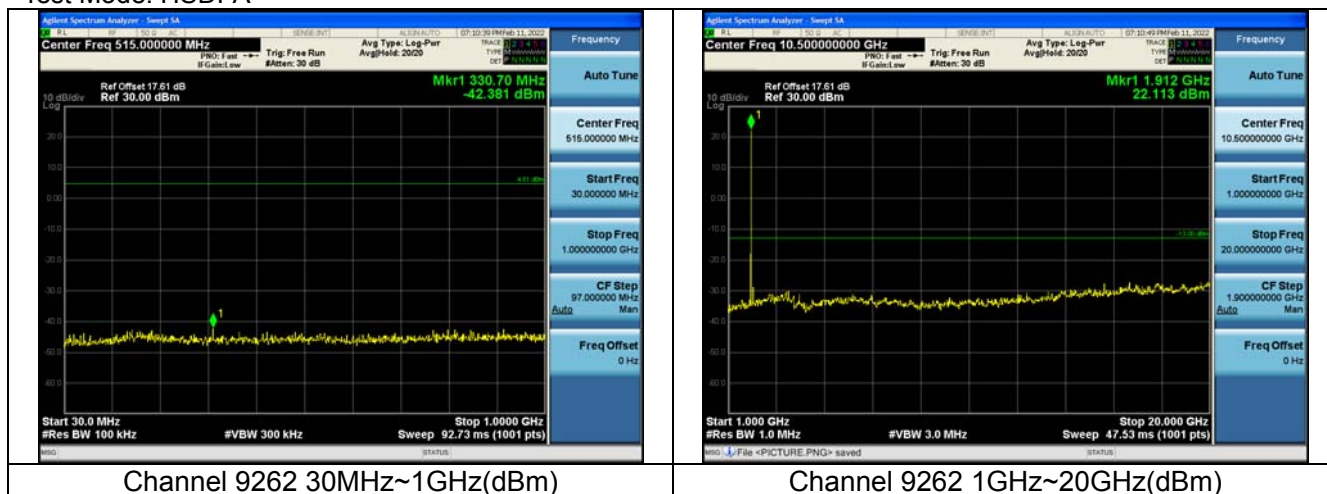
WCDMA band II

Test Mode: Release 99



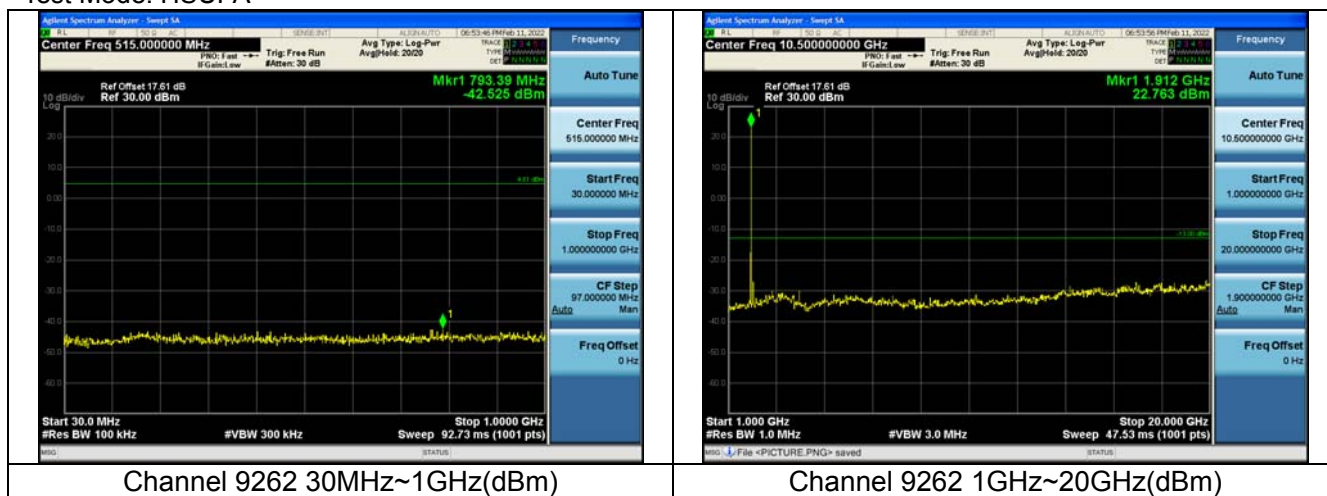
Note: The signal beyond the limit is the signal transmitted by EUT.

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.

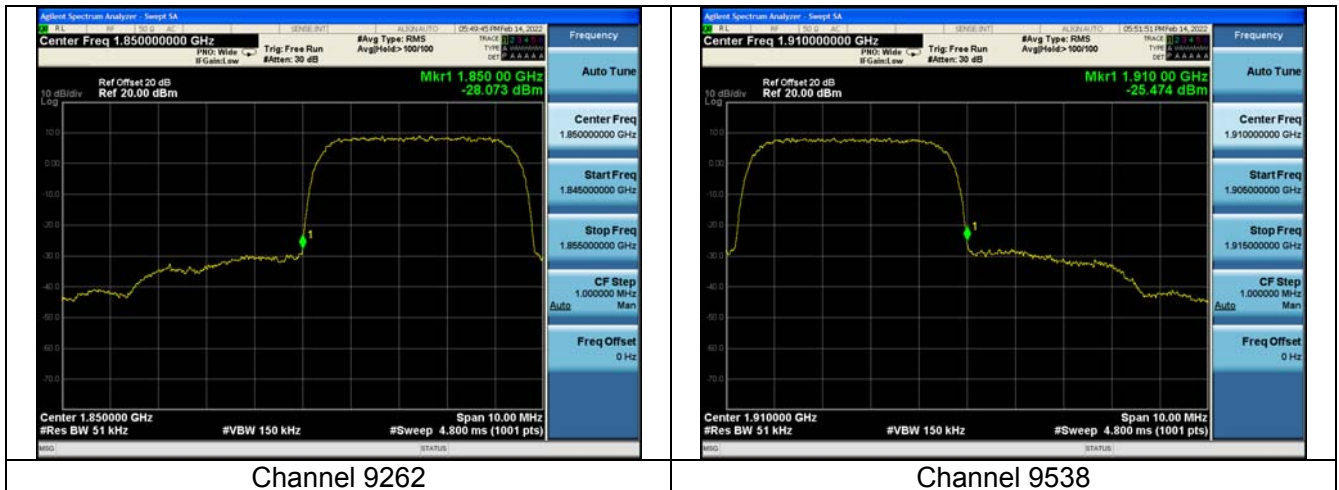
5. Band Edges Compliance

WCDMA band II

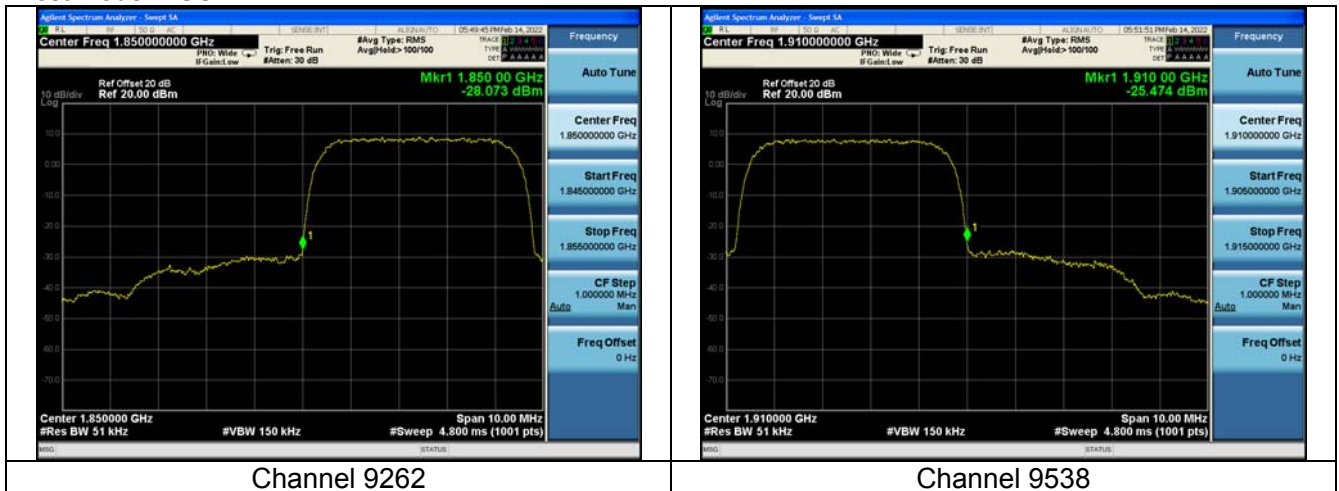
Test Mode: Release 99



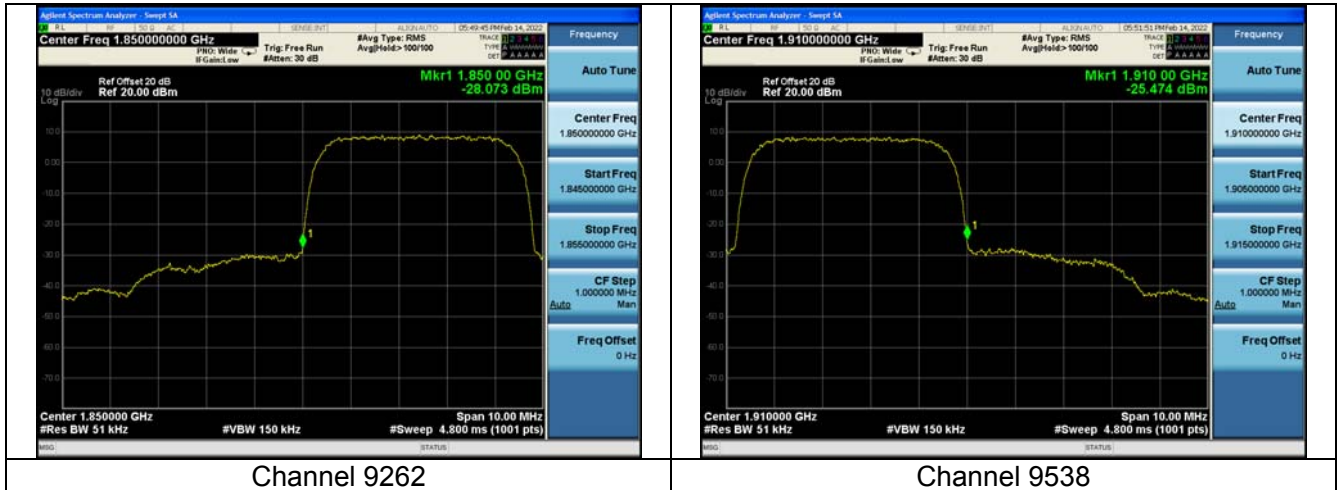
Test Mode: HSDPA



Test Mode: HSUPA



Test Mode: HSPA+



6. Frequency Stability

WCDMA band II

Mode	Temperature(°C)	Test Result (ppm)@NV		
		Channel 9262	Channel 9400	Channel 9538
Release 99	-10	0.070	-0.470	0.730
Release 99	-0	0.390	-0.810	0.130
Release 99	+10	-0.180	-0.610	0.640
Release 99	+30	0.340	-0.420	0.620
Release 99	+40	0.290	-0.650	0.020
Release 99	+55	-0.110	-0.560	0.570
Mode	Voltage	Test Result (ppm)@NT		
		Channel 9262	Channel 9400	Channel 9538
Release 99	LV	-0.500	-0.710	0.390
Release 99	HV	0.300	-0.340	0.440

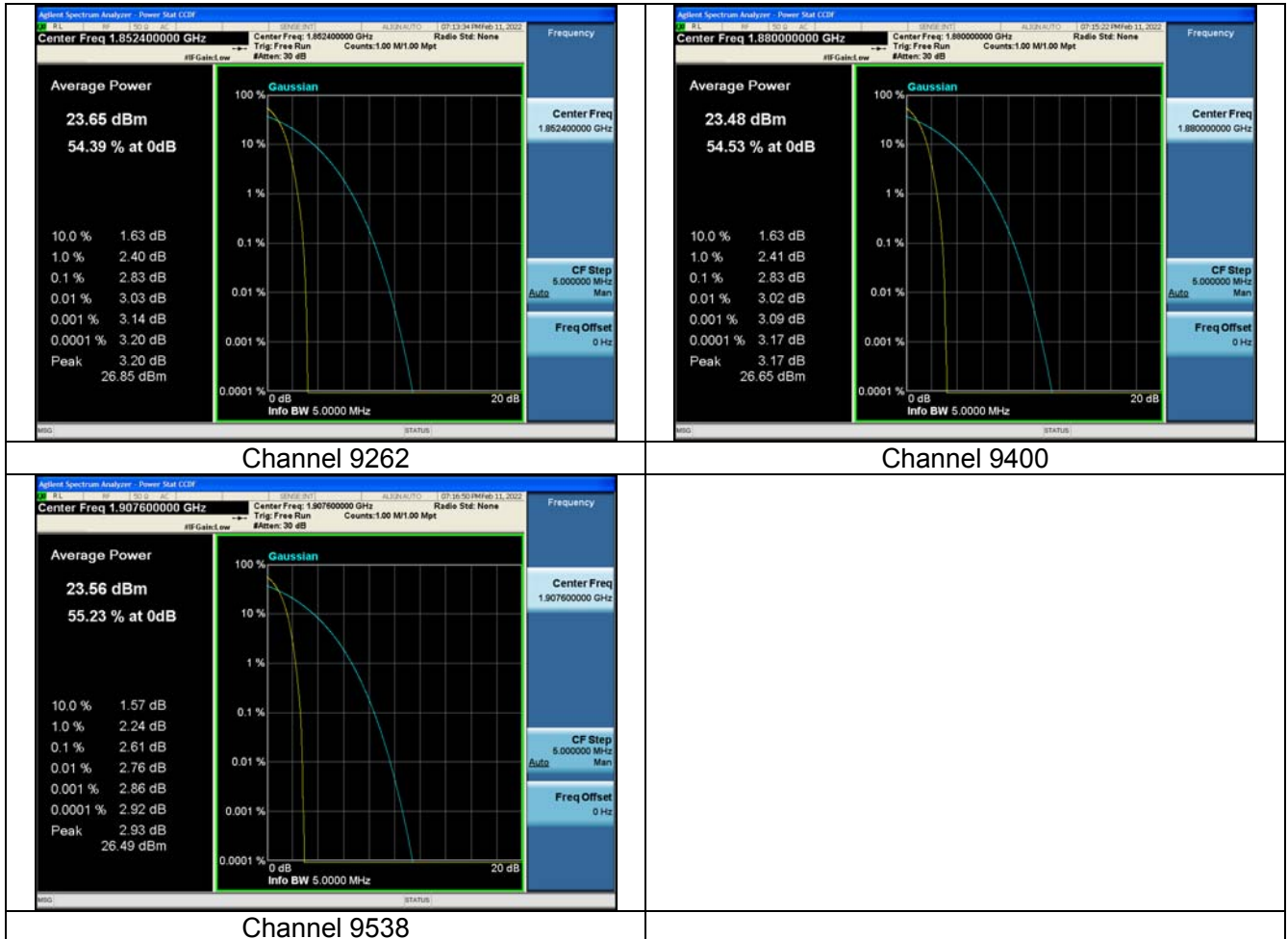
Mode	Temperature(°C)	Test Result (ppm)@NV		
		Channel 9262	Channel 9400	Channel 9538
HSDPA	-10	0.070	0.170	-0.170
HSDPA	-0	1.030	-0.150	0.020
HSDPA	+10	0.460	-0.150	-0.720
HSDPA	+30	0.560	0.610	-0.380
HSDPA	+40	0.420	-0.200	-0.200
HSDPA	+55	0.730	0.490	-0.160
Mode	Voltage	Test Result (ppm)@NT		
		Channel 9262	Channel 9400	Channel 9538
HSDPA	LV	0.940	-0.010	-0.100
HSDPA	HV	1.000	0.150	0.400

Mode	Temperature(°C)	Test Result (ppm)@NV		
		Channel 9262	Channel 9400	Channel 9538
HSUPA	-10	0.400	0.090	0.440
HSUPA	-0	0.260	0.440	0.480
HSUPA	+10	0.430	0.090	0.440
HSUPA	+30	0.490	-0.330	0.280
HSUPA	+40	0.570	-0.350	-0.530
HSUPA	+55	0.760	0.740	-0.150
Mode	Voltage	Test Result (ppm)@NT		
		Channel 9262	Channel 9400	Channel 9538
HSUPA	LV	0.170	0.370	0.060
HSUPA	HV	0.450	0.260	-0.050

7. Peak-Average Ratio

WCDMA band II

Test Mode: Release 99



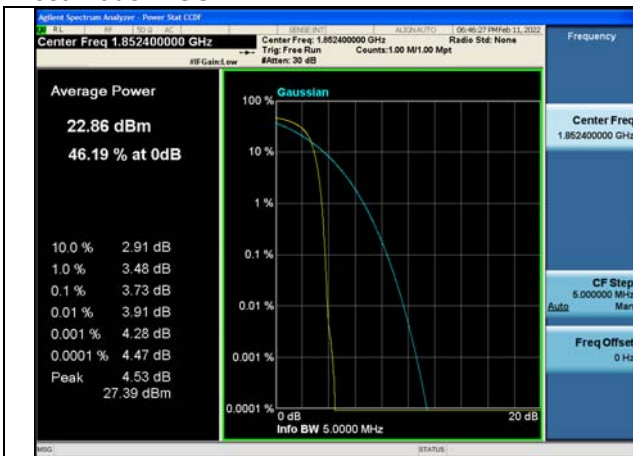
Test Mode: HSDPA





Channel 9538

Test Mode: HSUPA



Channel 9262



Channel 9400



Channel 9538

8. Effective Radiated Power and Effective Isotropic Radiated Power

WCDMA band II

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
Release 99	RMC, 12.2kbps	1852.4	9262	23.66	23.06	0.202
Release 99	RMC, 12.2kbps	1880	9400	23.68	23.08	0.203
Release 99	RMC, 12.2kbps	1907.6	9538	23.82	23.22	0.210

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
HSDPA	Subtest1	1852.4	9262	23.24	22.64	0.184
HSDPA	Subtest1	1880	9400	23.17	22.57	0.181
HSDPA	Subtest1	1907.6	9538	22.96	22.36	0.172
HSDPA	Subtest2	1852.4	9262	22.79	22.19	0.166
HSDPA	Subtest2	1880	9400	22.81	22.21	0.166
HSDPA	Subtest2	1907.6	9538	22.55	21.95	0.157
HSDPA	Subtest3	1852.4	9262	23	22.40	0.174
HSDPA	Subtest3	1880	9400	22.93	22.33	0.171
HSDPA	Subtest3	1907.6	9538	22.68	22.08	0.161
HSDPA	Subtest4	1852.4	9262	22.65	22.05	0.160
HSDPA	Subtest4	1880	9400	22.59	21.99	0.158
HSDPA	Subtest4	1907.6	9538	22.39	21.79	0.151

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
HSUPA	Subtest1	1852.4	9262	20.34	19.74	0.094
HSUPA	Subtest1	1880	9400	20.39	19.79	0.095
HSUPA	Subtest1	1907.6	9538	20.26	19.66	0.092
HSUPA	Subtest2	1852.4	9262	21	20.40	0.110
HSUPA	Subtest2	1880	9400	21.12	20.52	0.113
HSUPA	Subtest2	1907.6	9538	20.8	20.20	0.105
HSUPA	Subtest3	1852.4	9262	21.01	20.41	0.110
HSUPA	Subtest3	1880	9400	21.2	20.60	0.115
HSUPA	Subtest3	1907.6	9538	20.86	20.26	0.106
HSUPA	Subtest4	1852.4	9262	20.89	20.29	0.107
HSUPA	Subtest4	1880	9400	21.04	20.44	0.111
HSUPA	Subtest4	1907.6	9538	20.78	20.18	0.104
HSUPA	Subtest5	1852.4	9262	22.17	21.57	0.144
HSUPA	Subtest5	1880	9400	22.25	21.65	0.146
HSUPA	Subtest5	1907.6	9538	20.78	20.18	0.104

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
HSPA+	QPSK	1852.4	9262	25.22	24.62	0.290
HSPA+	QPSK	1880	9400	25.08	24.48	0.281
HSPA+	QPSK	1907.6	9538	24.77	24.17	0.261
HSPA+	16QAM	1852.4	9262	25.07	24.47	0.280
HSPA+	16QAM	1880	9400	25.21	24.61	0.289
HSPA+	16QAM	1907.6	9538	24.75	24.15	0.260

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
DC-HSDPA	Subtest1	1852.4	9262	25.65	25.05	0.320
DC-HSDPA	Subtest1	1880	9400	25.68	25.08	0.322
DC-HSDPA	Subtest1	1907.6	9538	24.85	24.25	0.266
DC-HSDPA	Subtest2	1852.4	9262	25.23	24.63	0.290
DC-HSDPA	Subtest2	1880	9400	25.26	24.66	0.292
DC-HSDPA	Subtest2	1907.6	9538	25.02	24.42	0.277
DC-HSDPA	Subtest3	1852.4	9262	25.35	24.75	0.299
DC-HSDPA	Subtest3	1880	9400	25.37	24.77	0.300
DC-HSDPA	Subtest3	1907.6	9538	25.11	24.51	0.282
DC-HSDPA	Subtest4	1852.4	9262	25.08	24.48	0.281
DC-HSDPA	Subtest4	1880	9400	25.04	24.44	0.278
DC-HSDPA	Subtest4	1907.6	9538	24.81	24.21	0.264

1. RF Power Output

WCDMA band IV

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
Release 99	RMC, 12.2kbps	1712.4	1312	23.18
Release 99	RMC, 12.2kbps	1732.6	1412	23.32
Release 99	RMC, 12.2kbps	1752.6	1513	23.39

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
HSDPA	Subtest1	1712.4	1312	20.84
HSDPA	Subtest1	1732.6	1412	21.01
HSDPA	Subtest1	1752.6	1513	21.16
HSDPA	Subtest2	1712.4	1312	21.29
HSDPA	Subtest2	1732.6	1412	21.48
HSDPA	Subtest2	1752.6	1513	21.72
HSDPA	Subtest3	1712.4	1312	21.32
HSDPA	Subtest3	1732.6	1412	21.43
HSDPA	Subtest3	1752.6	1513	21.65
HSDPA	Subtest4	1712.4	1312	21.31
HSDPA	Subtest4	1732.6	1412	21.41
HSDPA	Subtest4	1752.6	1513	21.67

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
HSUPA	Subtest1	1712.4	1312	19.18
HSUPA	Subtest1	1732.6	1412	19.28
HSUPA	Subtest1	1752.6	1513	19.58
HSUPA	Subtest2	1712.4	1312	19.14
HSUPA	Subtest2	1732.6	1412	19.25
HSUPA	Subtest2	1752.6	1513	19.54
HSUPA	Subtest3	1712.4	1312	19.69
HSUPA	Subtest3	1732.6	1412	20.07
HSUPA	Subtest3	1752.6	1513	20.05
HSUPA	Subtest4	1712.4	1312	19.09
HSUPA	Subtest4	1732.6	1412	19.4
HSUPA	Subtest4	1752.6	1513	19.46
HSUPA	Subtest5	1712.4	1312	21.41
HSUPA	Subtest5	1732.6	1412	21.62
HSUPA	Subtest5	1752.6	1513	21.32

2. Occupied Bandwidth

WCDMA band IV

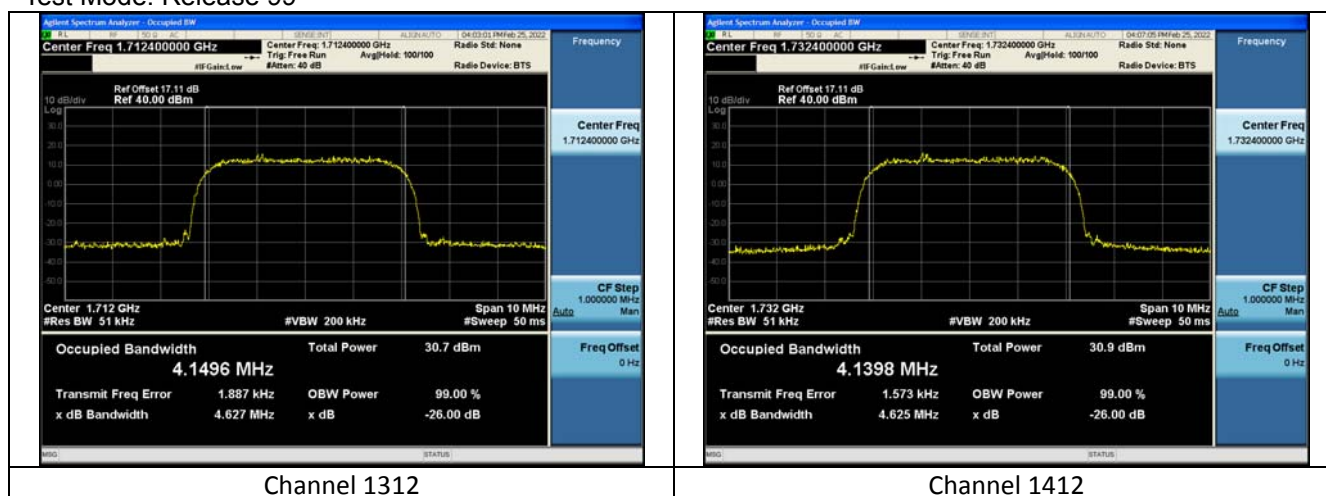
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
Release 99	1712.4	1312	4.16
Release 99	1732.6	1412	4.14
Release 99	1752.6	1513	4.16

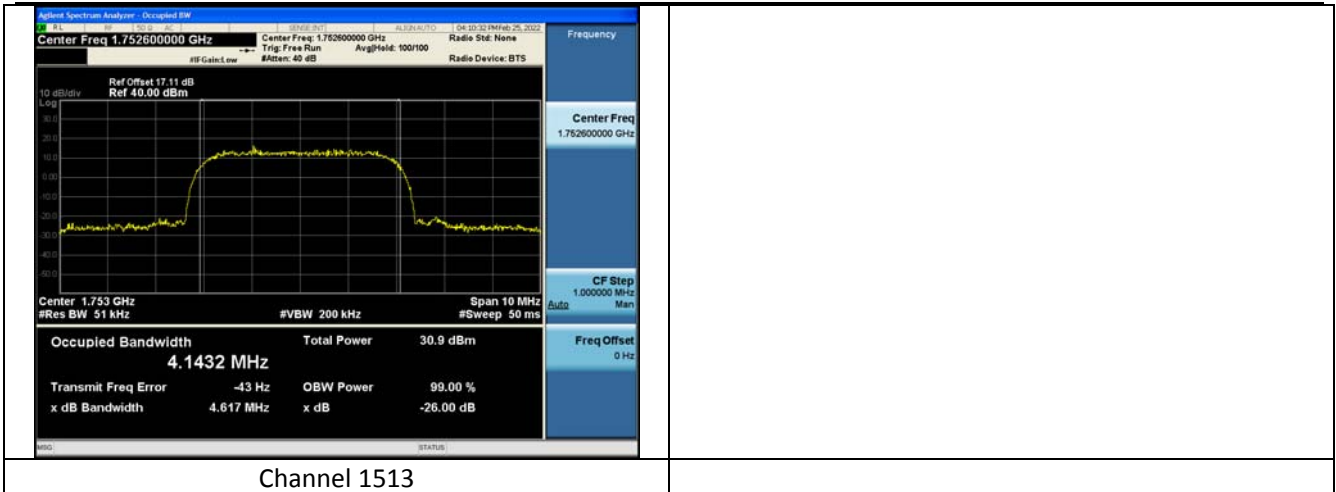
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
HSDPA	1712.4	1312	4.15
HSDPA	1732.6	1412	4.17
HSDPA	1752.6	1513	4.15

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
HSUPA	1712.4	1312	4.15
HSUPA	1732.6	1412	4.14
HSUPA	1752.6	1513	4.14

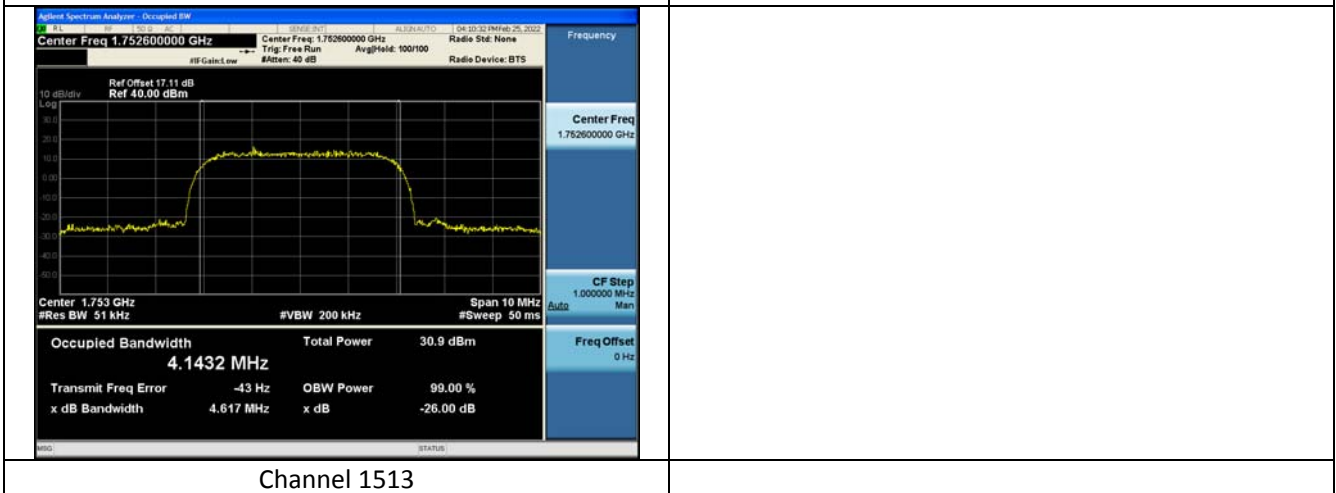
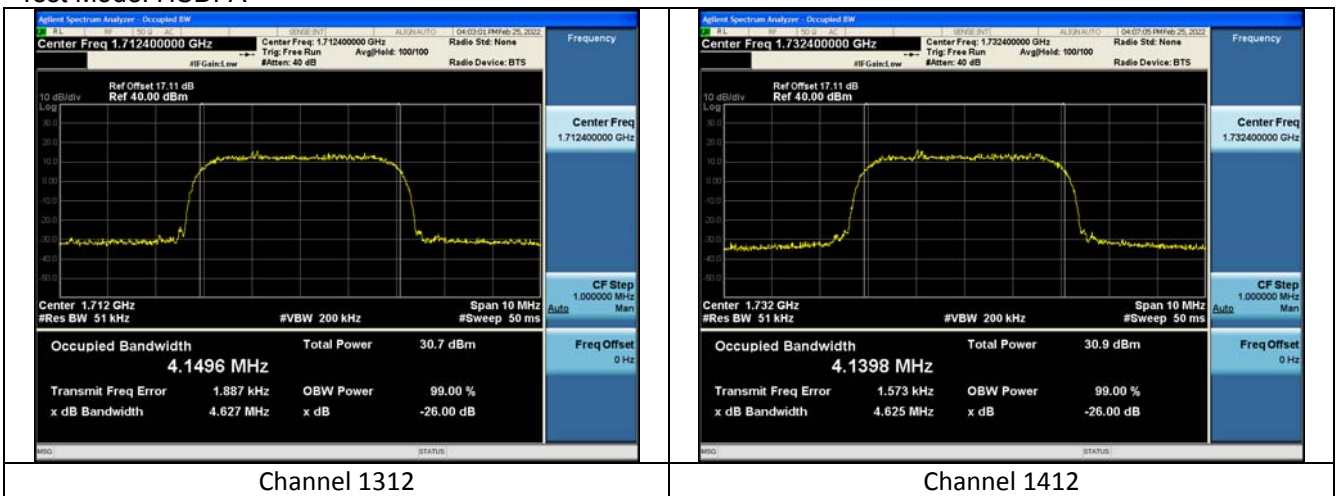
WCDMA band IV

Test Mode: Release 99

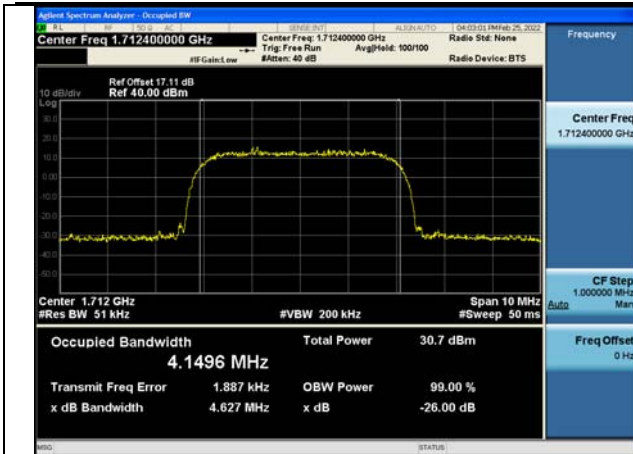




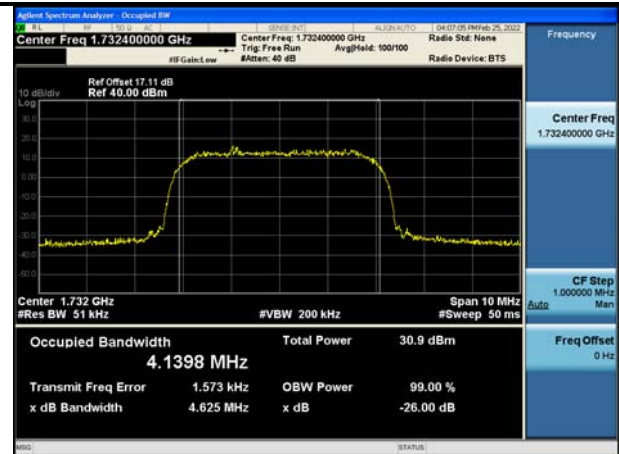
Test Mode: HSDPA



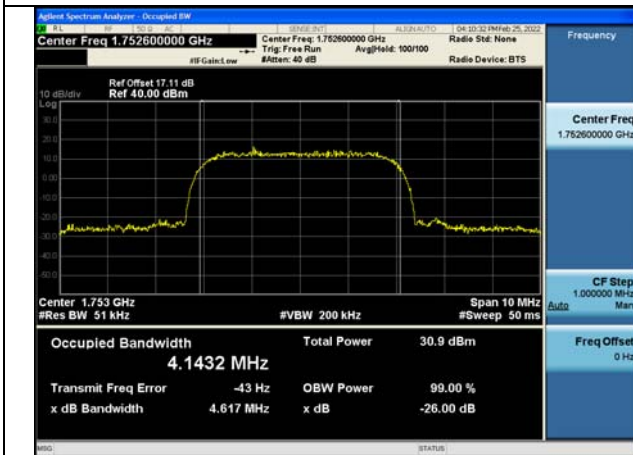
Test Mode: HSUPA



Channel 1312



Channel 1412



Channel 1513

3. Emission Bandwidth

WCDMA band IV

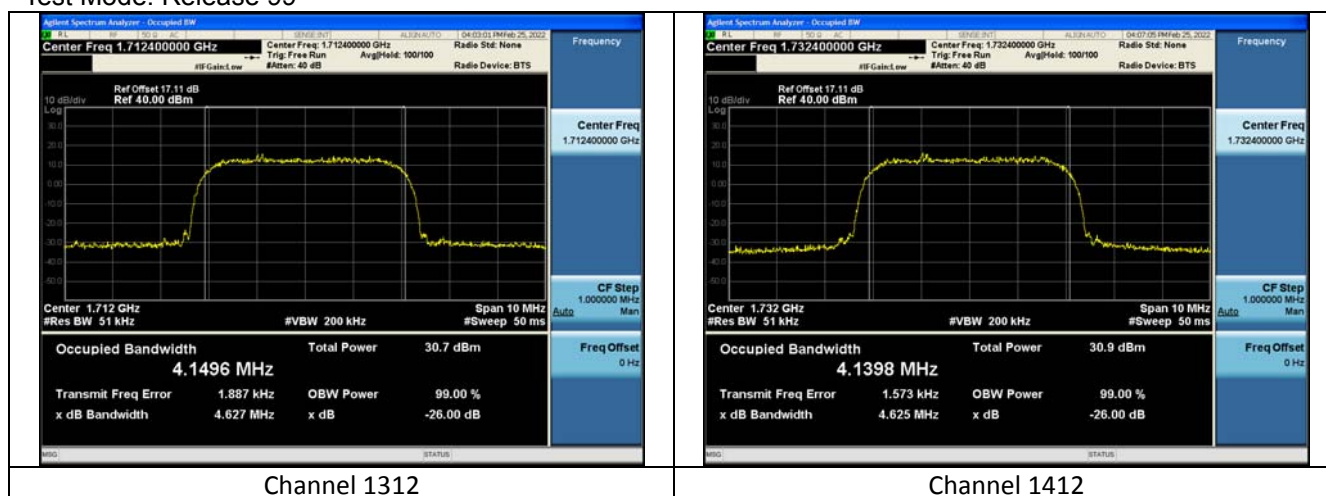
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
Release 99	1712.4	1312	4.64
Release 99	1732.6	1412	4.64
Release 99	1752.6	1513	4.65

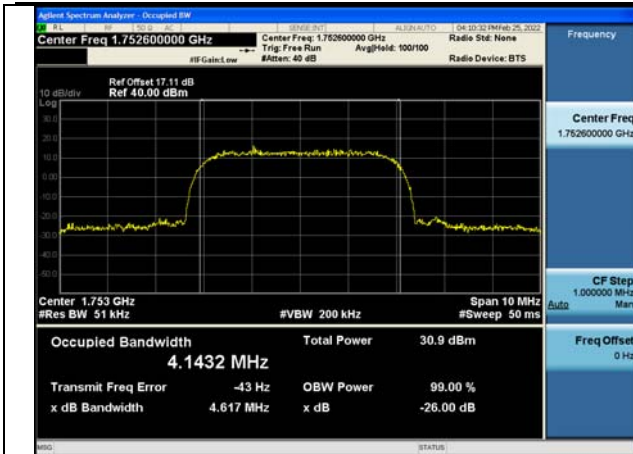
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
HSDPA	1712.4	1312	4.64
HSDPA	1732.6	1412	4.64
HSDPA	1752.6	1513	4.63

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
HSUPA	1712.4	1312	4.63
HSUPA	1732.6	1412	4.62
HSUPA	1752.6	1513	4.62

WCDMA band IV

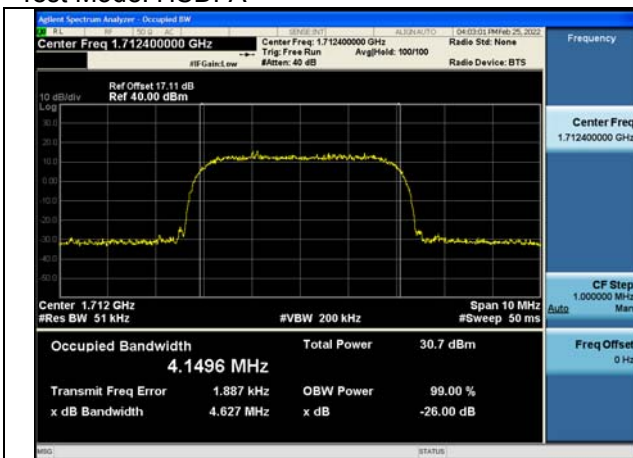
Test Mode: Release 99



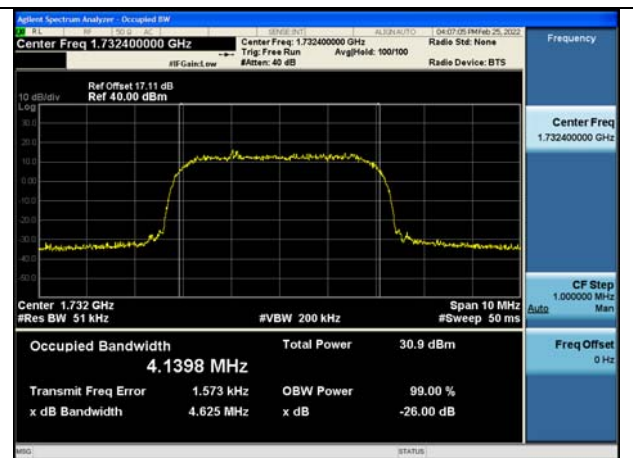


Channel 1513

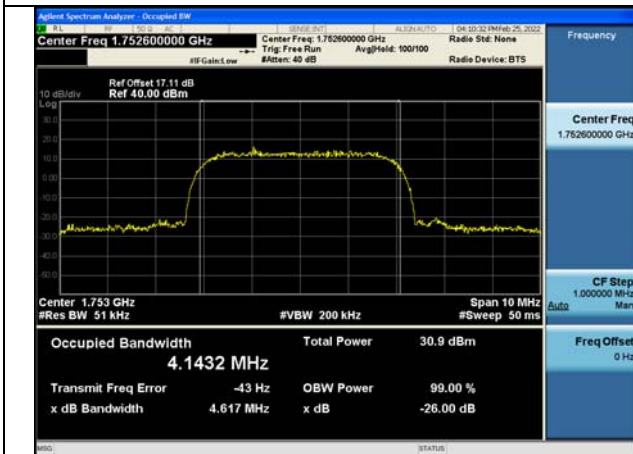
Test Mode: HSDPA



Channel 1312

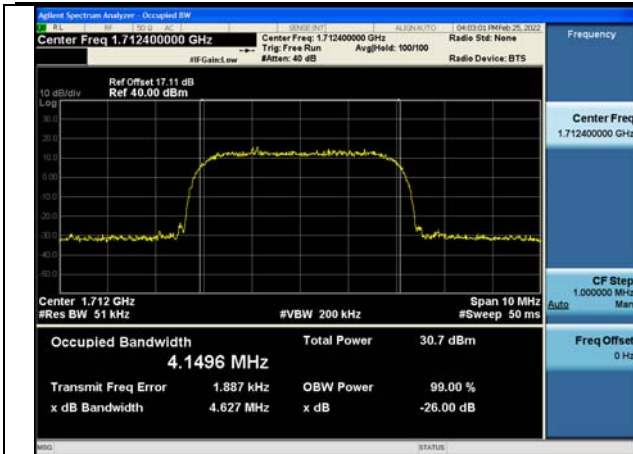


Channel 1412

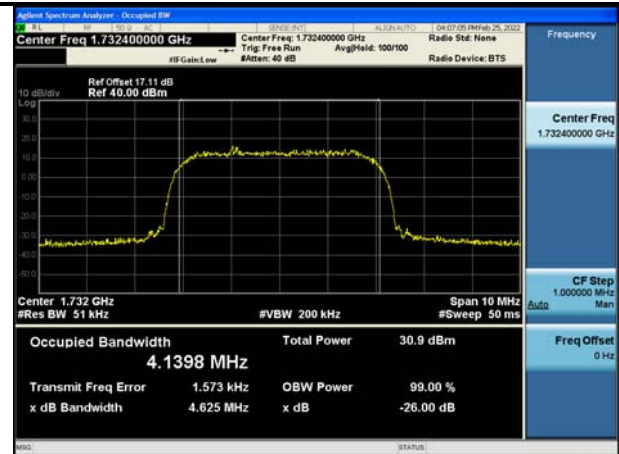


Channel 1513

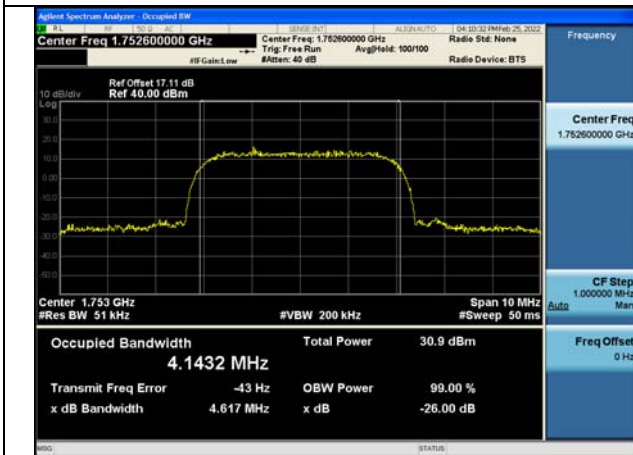
Test Mode: HSUPA



Channel 1312



Channel 1412

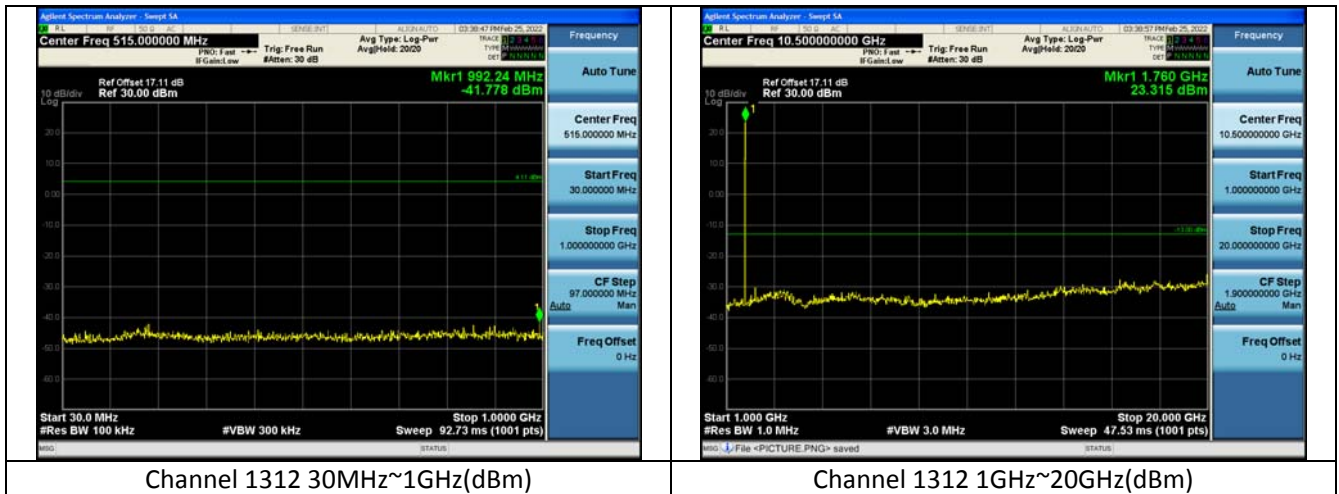


Channel 1513

4. Spurious Emissions at antenna terminal

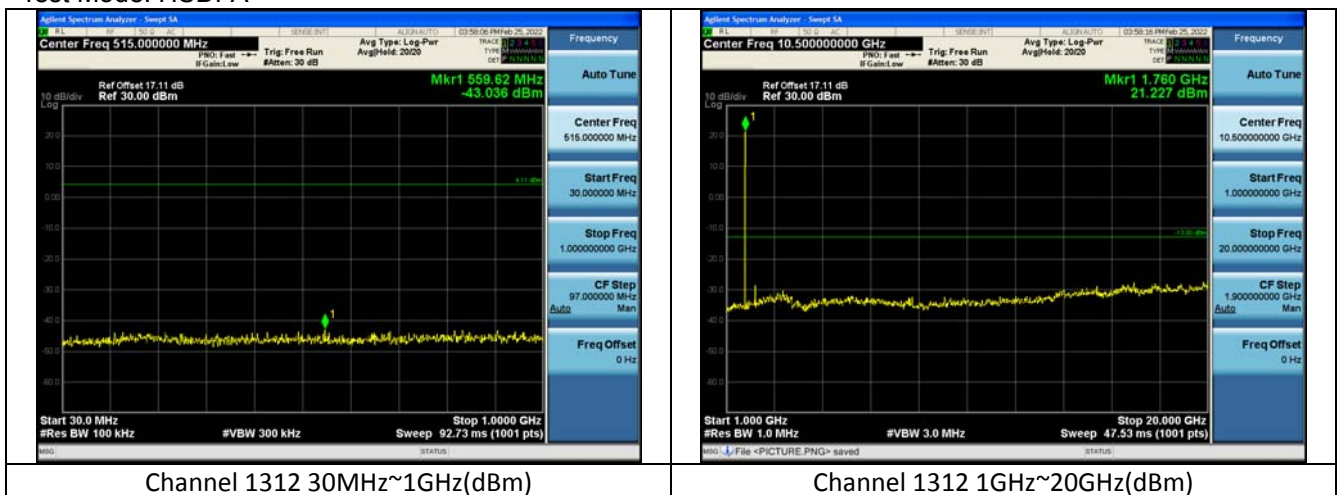
WCDMA band IV

Test Mode: Release 99



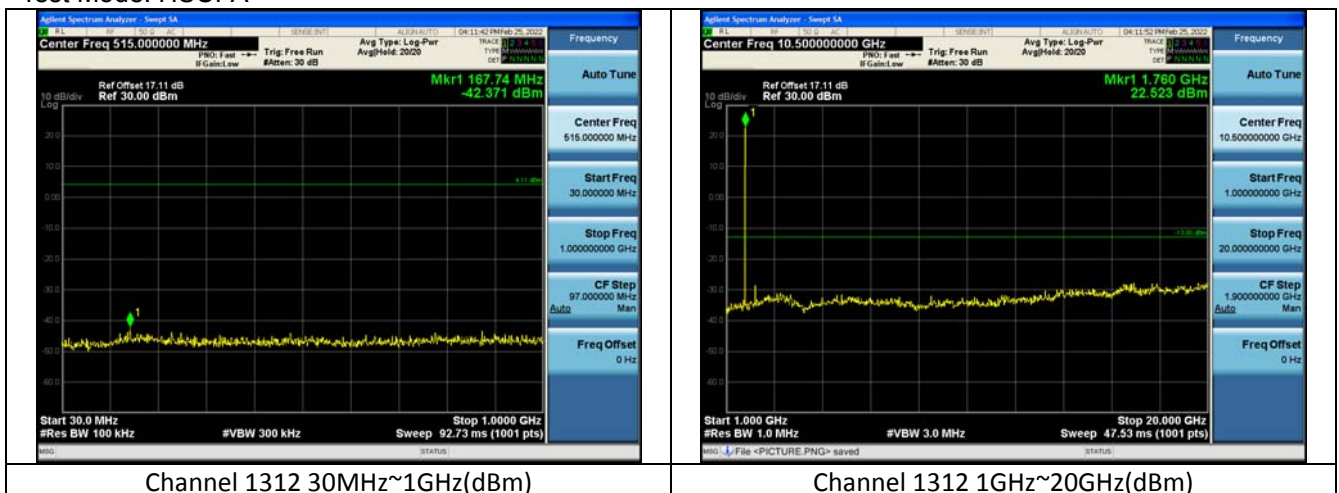
Note: The signal beyond the limit is the signal transmitted by EUT.

Test Mode: HSDPA



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

Test Mode: HSUPA

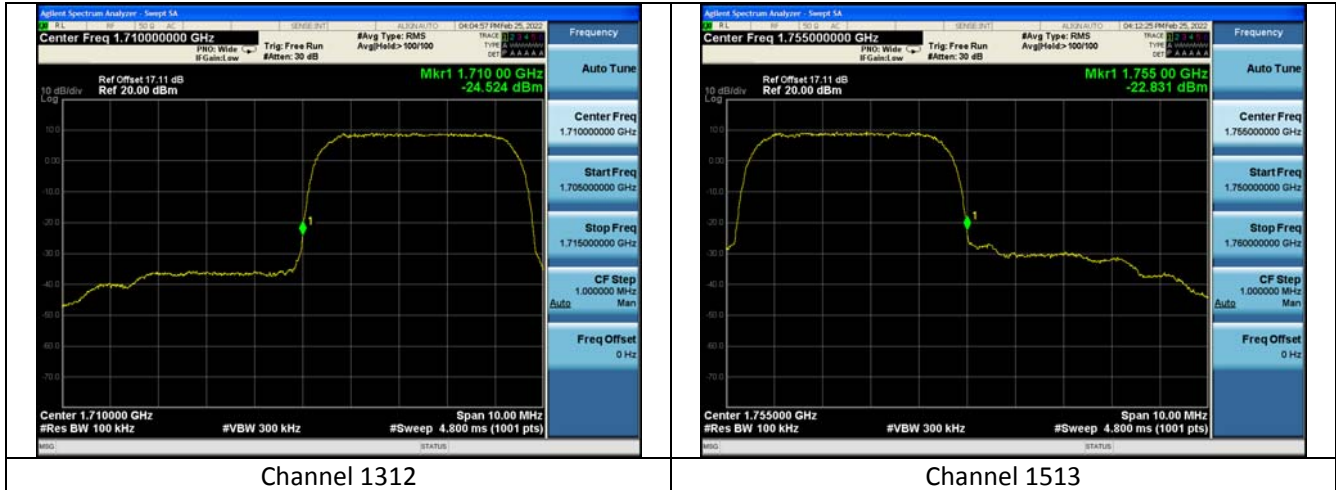


Note: The signal beyond the limit is the signal transmitted by EUT.

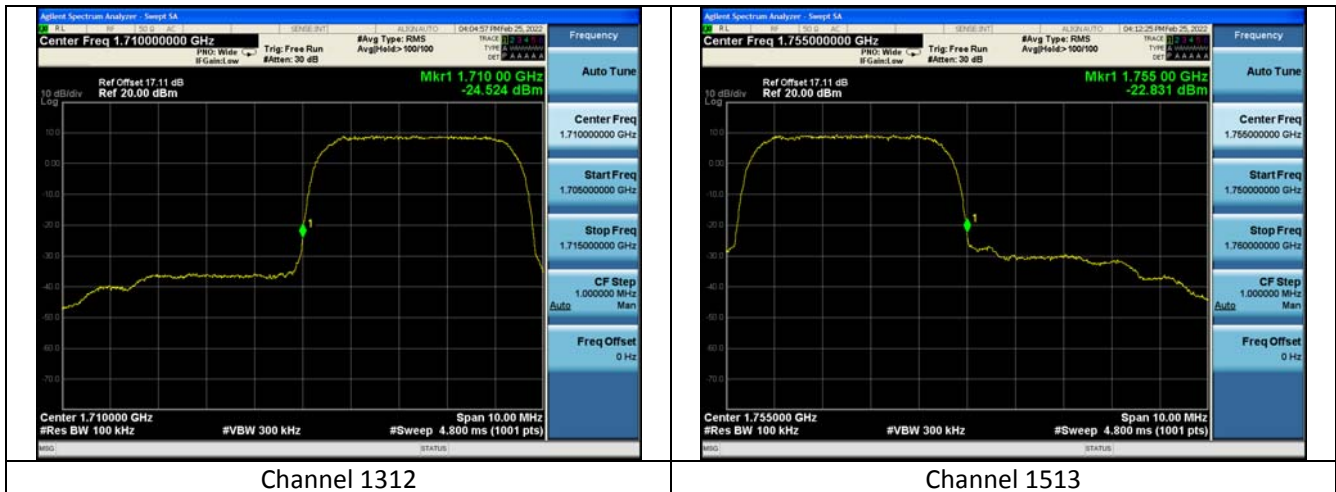
5. Band Edges Compliance

WCDMA band IV

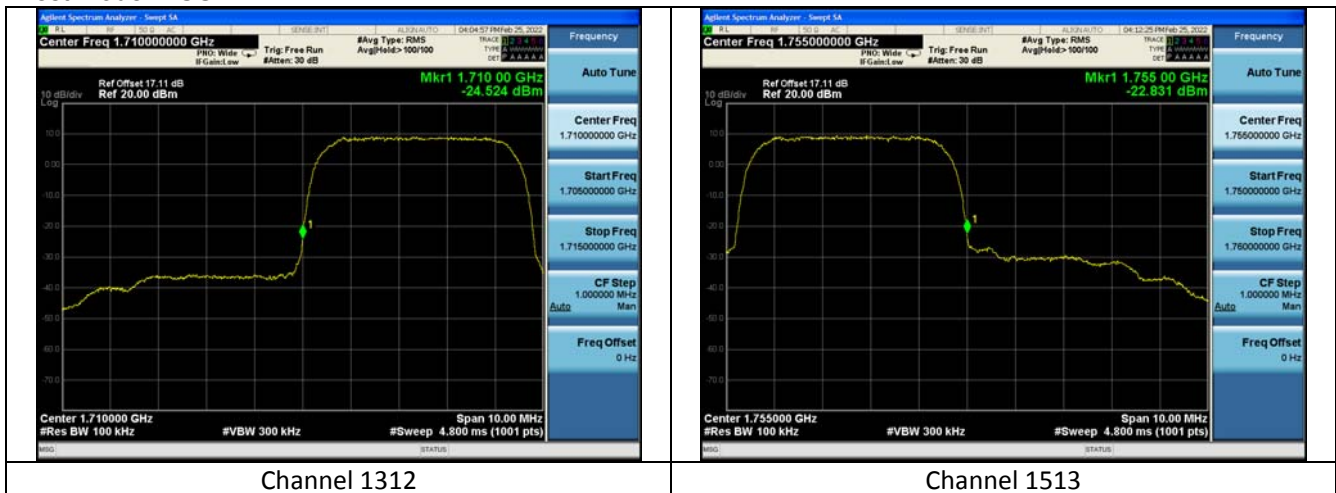
Test Mode: Release 99



Test Mode: HSDPA



Test Mode: HSUPA



6. Frequency Stability

WCDMA band IV

Mode	Temperature(°C)	Test Result (ppm)@NV		
		Channel 1312	Channel 1412	Channel 1513
Release 99	-10	-0.480	-0.370	-0.530
Release 99	-0	0.150	0.480	-0.100
Release 99	+10	-0.560	-0.290	-0.530
Release 99	+30	-0.400	-0.020	-0.690
Release 99	+40	-0.220	-0.030	-0.190
Release 99	+55	-0.340	0.150	-0.760
Mode	Voltage	Test Result (ppm)@NT		
		Channel 1312	Channel 1412	Channel 1513
Release 99	LV	-0.160	0.000	-0.810
Release 99	HV	-0.380	0.000	-0.490

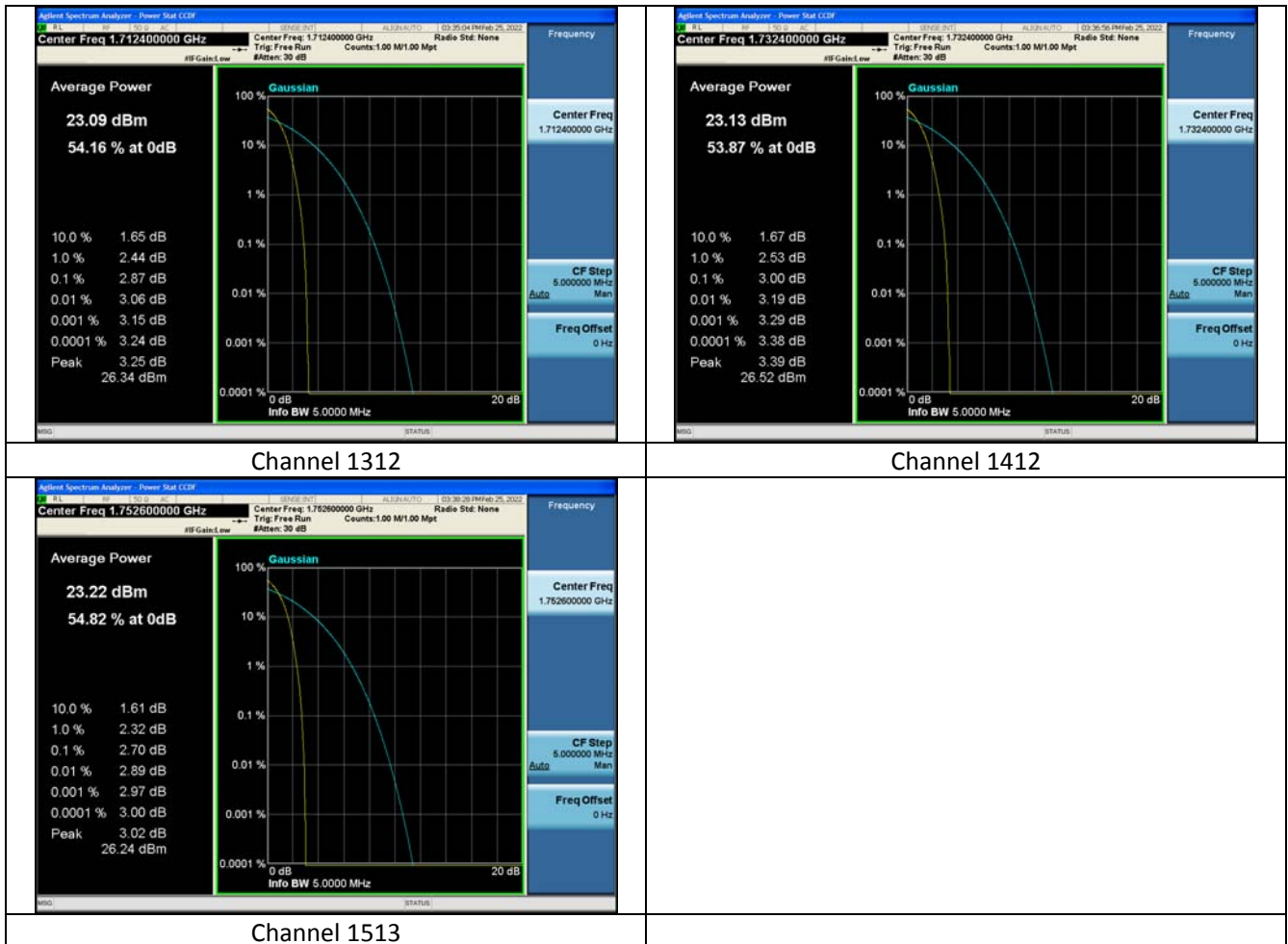
Mode	Temperature(°C)	Test Result (ppm)@NV		
		Channel 1312	Channel 1412	Channel 1513
HSDPA	-10	0.640	0.420	0.070
HSDPA	-0	1.470	0.310	0.960
HSDPA	+10	0.980	0.690	0.960
HSDPA	+30	0.520	0.070	0.920
HSDPA	+40	0.860	0.720	0.240
HSDPA	+55	0.770	0.370	0.410
Mode	Voltage	Test Result (ppm)@NT		
		Channel 1312	Channel 1412	Channel 1513
HSDPA	LV	0.290	0.370	0.760
HSDPA	HV	0.550	0.190	0.860

Mode	Temperature(°C)	Test Result (ppm)@NV		
		Channel 1312	Channel 1412	Channel 1513
HSUPA	-10	-0.660	-0.640	-0.390
HSUPA	-0	-0.390	-0.290	0.570
HSUPA	+10	-0.320	-0.890	-0.060
HSUPA	+30	-0.310	-0.520	0.330
HSUPA	+40	-0.340	-0.880	0.260
HSUPA	+55	-0.330	-0.780	0.050
Mode	Voltage	Test Result (ppm)@NT		
		Channel 1312	Channel 1412	Channel 1513
HSUPA	LV	0.120	-0.720	0.230
HSUPA	HV	-0.060	-0.770	0.250

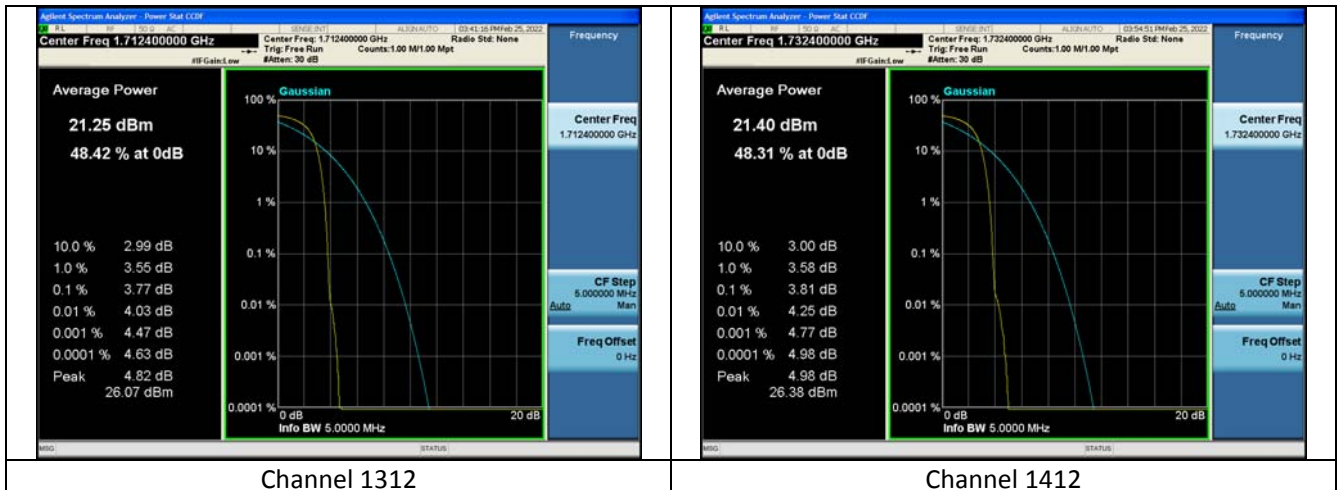
7. Peak-Average Ratio

WCDMA band IV

Test Mode: Release 99



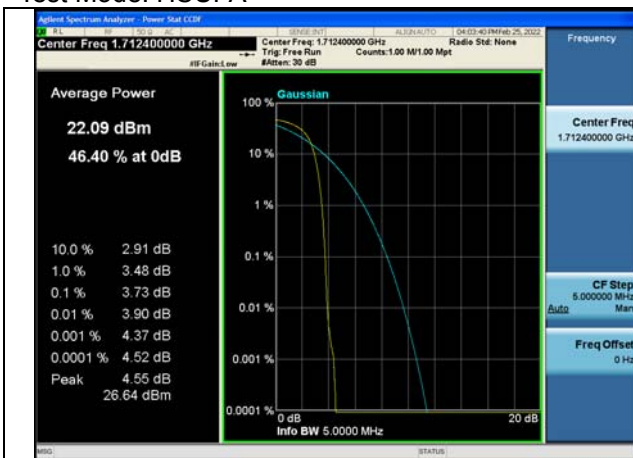
Test Mode: HSDPA



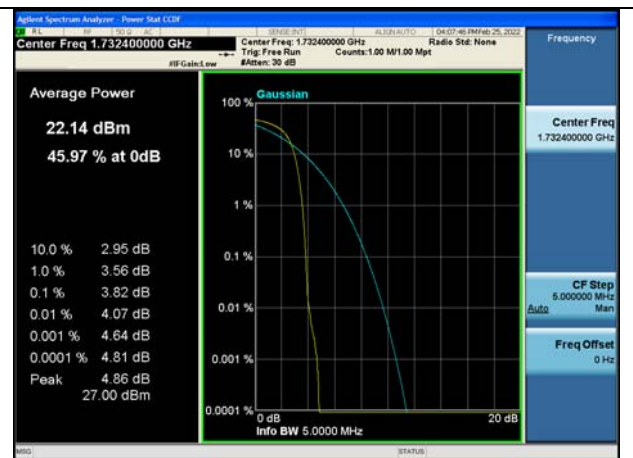


Channel 1513

Test Mode: HSUPA



Channel 1312



Channel 1412



Channel 1513

8. Effective Radiated Power and Effective Isotropic Radiated Power

WCDMA band IV

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
Release 99	RMC, 12.2kbp/s	1712.4	1312	23.18	22.58	0.181
Release 99	RMC, 12.2kbp/s	1732.6	1412	23.32	22.72	0.187
Release 99	RMC, 12.2kbp/s	1752.6	1513	23.39	22.79	0.190

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
HSDPA	Subtest1	1712.4	1312	20.84	20.24	0.106
HSDPA	Subtest1	1732.6	1412	21.01	20.41	0.110
HSDPA	Subtest1	1752.6	1513	21.16	20.56	0.114
HSDPA	Subtest2	1712.4	1312	21.29	20.69	0.117
HSDPA	Subtest2	1732.6	1412	21.48	20.88	0.122
HSDPA	Subtest2	1752.6	1513	21.72	21.12	0.129
HSDPA	Subtest3	1712.4	1312	21.32	20.72	0.118
HSDPA	Subtest3	1732.6	1412	21.43	20.83	0.121
HSDPA	Subtest3	1752.6	1513	21.65	21.05	0.127
HSDPA	Subtest4	1712.4	1312	21.31	20.71	0.118
HSDPA	Subtest4	1732.6	1412	21.41	20.81	0.121
HSDPA	Subtest4	1752.6	1513	21.67	21.07	0.128

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
HSUPA	Subtest1	1712.4	1312	19.18	18.58	0.072
HSUPA	Subtest1	1732.6	1412	19.28	18.68	0.074
HSUPA	Subtest1	1752.6	1513	19.58	18.98	0.079
HSUPA	Subtest2	1712.4	1312	19.14	18.54	0.071
HSUPA	Subtest2	1732.6	1412	19.25	18.65	0.073
HSUPA	Subtest2	1752.6	1513	19.54	18.94	0.078
HSUPA	Subtest3	1712.4	1312	19.69	19.09	0.081
HSUPA	Subtest3	1732.6	1412	20.07	19.47	0.089
HSUPA	Subtest3	1752.6	1513	20.05	19.45	0.088
HSUPA	Subtest4	1712.4	1312	19.09	18.49	0.071

HSUPA	Subtest4	1732.6	1412	19.4	18.80	0.076
HSUPA	Subtest4	1752.6	1513	19.46	18.86	0.077
HSUPA	Subtest5	1712.4	1312	21.41	20.81	0.121
HSUPA	Subtest5	1732.6	1412	21.62	21.02	0.126
HSUPA	Subtest5	1752.6	1513	21.32	20.72	0.118

1. RF Power Output

WCDMA band V

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
Release 99	RMC,12.2kbps	826.4	4132	23.14
Release 99	RMC,12.2kbps	836.6	4183	23.28
Release 99	RMC,12.2kbps	846.6	4233	23.43

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
HSDPA	Subtest1	826.4	4132	22.16
HSDPA	Subtest1	836.6	4183	22.08
HSDPA	Subtest1	846.6	4233	21.54
HSDPA	Subtest2	826.4	4132	21.81
HSDPA	Subtest2	836.6	4183	21.74
HSDPA	Subtest2	846.6	4233	21.95
HSDPA	Subtest3	826.4	4132	21.49
HSDPA	Subtest3	836.6	4183	21.40
HSDPA	Subtest3	846.6	4233	21.64
HSDPA	Subtest4	826.4	4132	21.01
HSDPA	Subtest4	836.6	4183	21.07
HSDPA	Subtest4	846.6	4233	21.45

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
HSUPA	Subtest1	826.4	4132	20.10
HSUPA	Subtest1	836.6	4183	22.14
HSUPA	Subtest1	846.6	4233	22.20
HSUPA	Subtest2	826.4	4132	20.38
HSUPA	Subtest2	836.6	4183	19.89
HSUPA	Subtest2	846.6	4233	20.27
HSUPA	Subtest3	826.4	4132	20.45
HSUPA	Subtest3	836.6	4183	20.50
HSUPA	Subtest3	846.6	4233	20.79
HSUPA	Subtest4	826.4	4132	19.85
HSUPA	Subtest4	836.6	4183	19.80
HSUPA	Subtest4	846.6	4233	20.18
HSUPA	Subtest5	826.4	4132	20.77
HSUPA	Subtest5	836.6	4183	22.34
HSUPA	Subtest5	846.6	4233	22.02

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
HSPA+	QPSK	826.4	4132	22.03
HSPA+	QPSK	836.6	4183	22.54
HSPA+	QPSK	846.6	4233	22.23
HSPA+	16QAM	826.4	4132	22.22
HSPA+	16QAM	836.6	4183	22.3
HSPA+	16QAM	846.6	4233	22.24

Mode		Carrier frequency (MHz)	Channel No.	RF Power Output (dBm)
DC-HSDPA	Subtest1	826.4	4132	21.98
DC-HSDPA	Subtest1	836.6	4183	21.16
DC-HSDPA	Subtest1	846.6	4233	21.45
DC-HSDPA	Subtest2	826.4	4132	21.82
DC-HSDPA	Subtest2	836.6	4183	21.77
DC-HSDPA	Subtest2	846.6	4233	21.95
DC-HSDPA	Subtest3	826.4	4132	21.14
DC-HSDPA	Subtest3	836.6	4183	21.24
DC-HSDPA	Subtest3	846.6	4233	21.56
DC-HSDPA	Subtest4	826.4	4132	21
DC-HSDPA	Subtest4	836.6	4183	21.14
DC-HSDPA	Subtest4	846.6	4233	21.45

2. Occupied Bandwidth

WCDMA band V

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
Release 99	826.4	4132	4.15
Release 99	836.6	4183	4.15
Release 99	846.6	4233	4.15

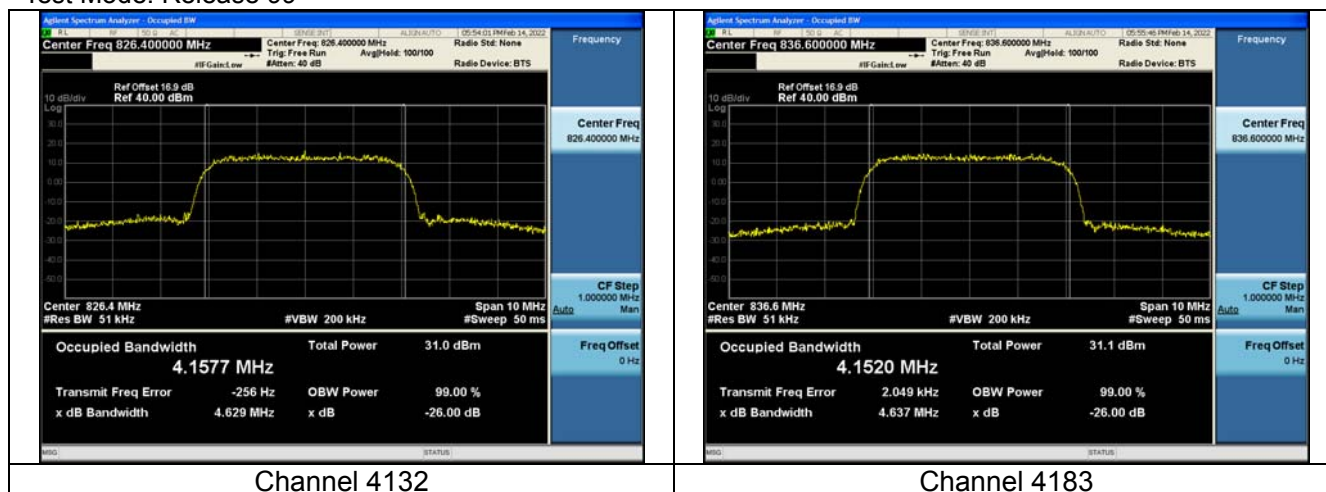
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
HSDPA	826.4	4132	4.15
HSDPA	836.6	4183	4.14
HSDPA	846.6	4233	4.13

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
HSUPA	826.4	4132	4.15
HSUPA	836.6	4183	4.14
HSUPA	846.6	4233	4.14

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of 99% Power (MHz)
HSPA+	826.4	4132	4.16
HSPA+	836.6	4183	4.15
HSPA+	846.6	4233	4.14

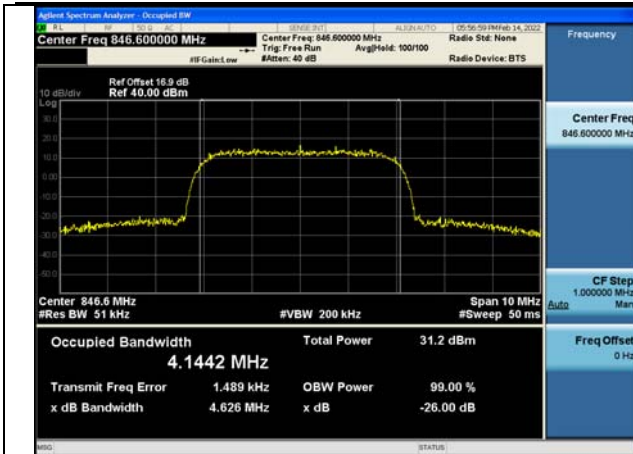
WCDMA band V

Test Mode: Release 99



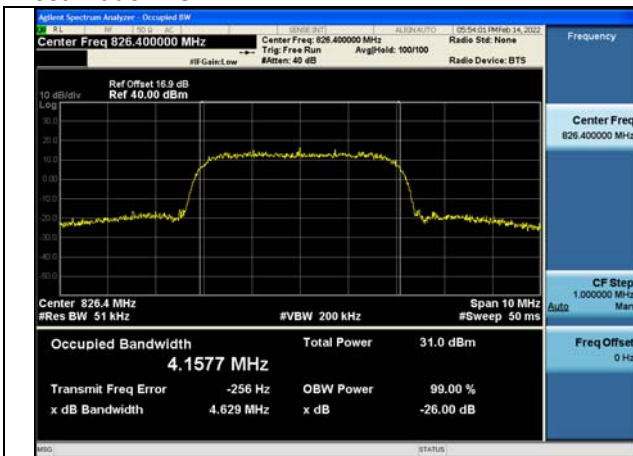
Channel 4132

Channel 4183

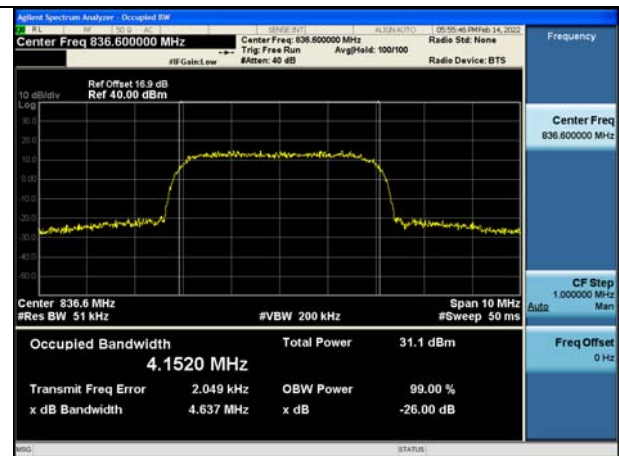


Channel 4233

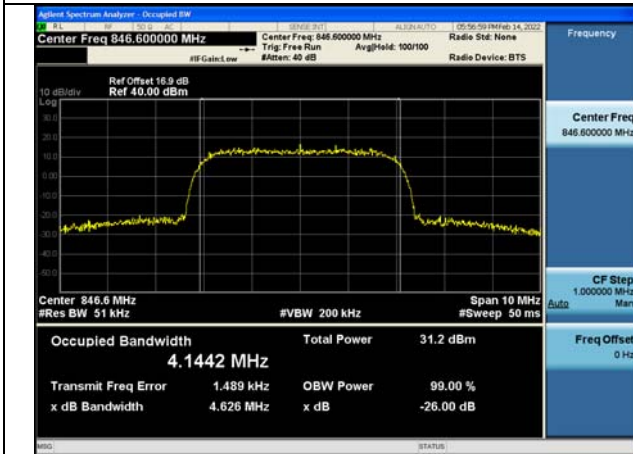
Test Mode: HSDPA



Channel 4132

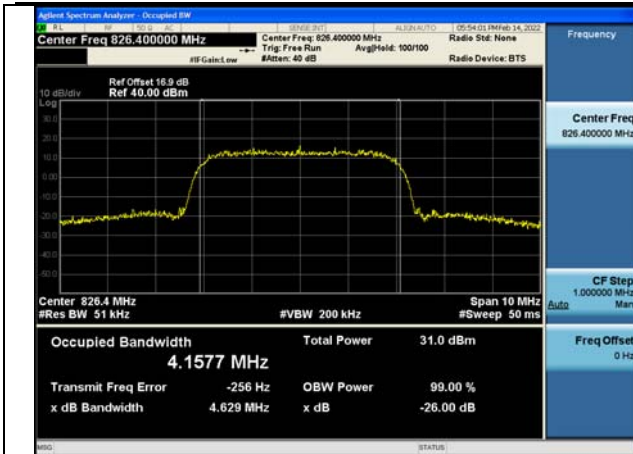


Channel 4183

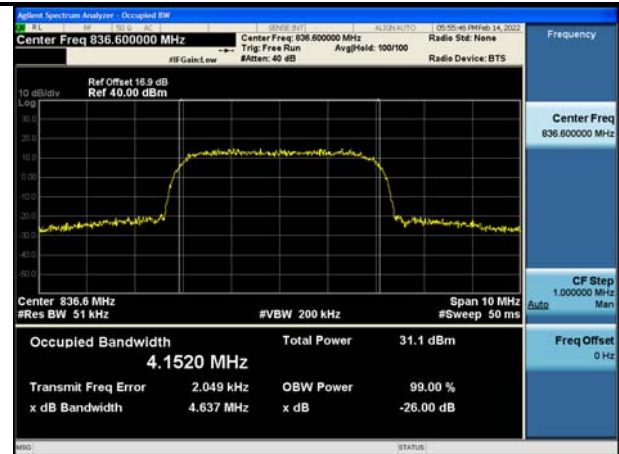


Channel 4233

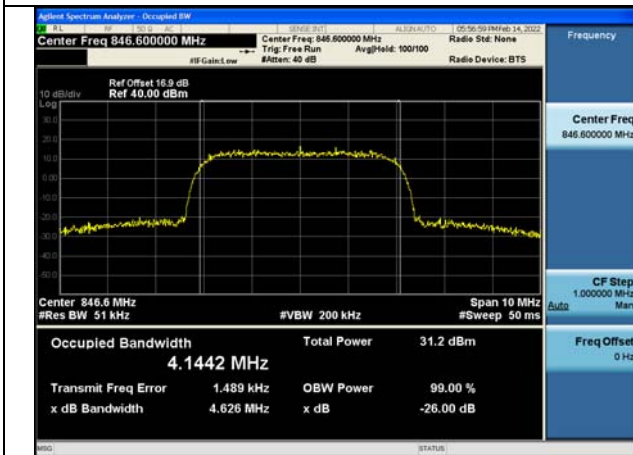
Test Mode: HSUPA



Channel 4132

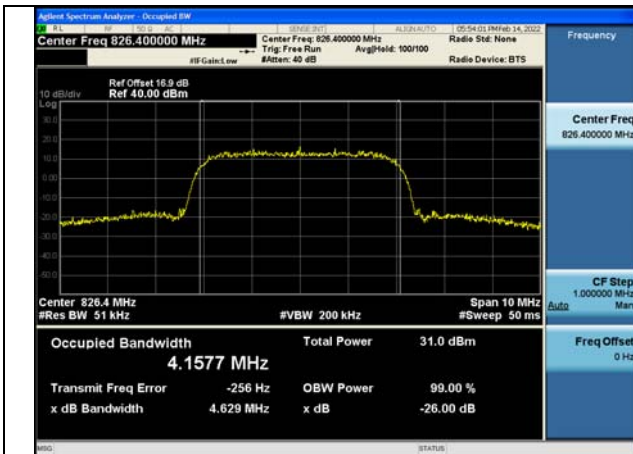


Channel 4183

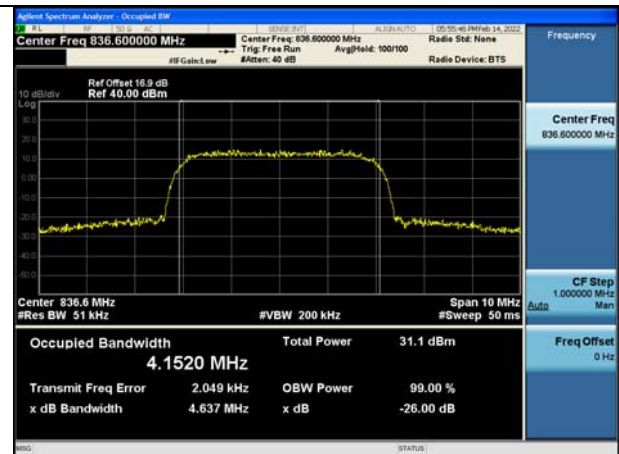


Channel 4233

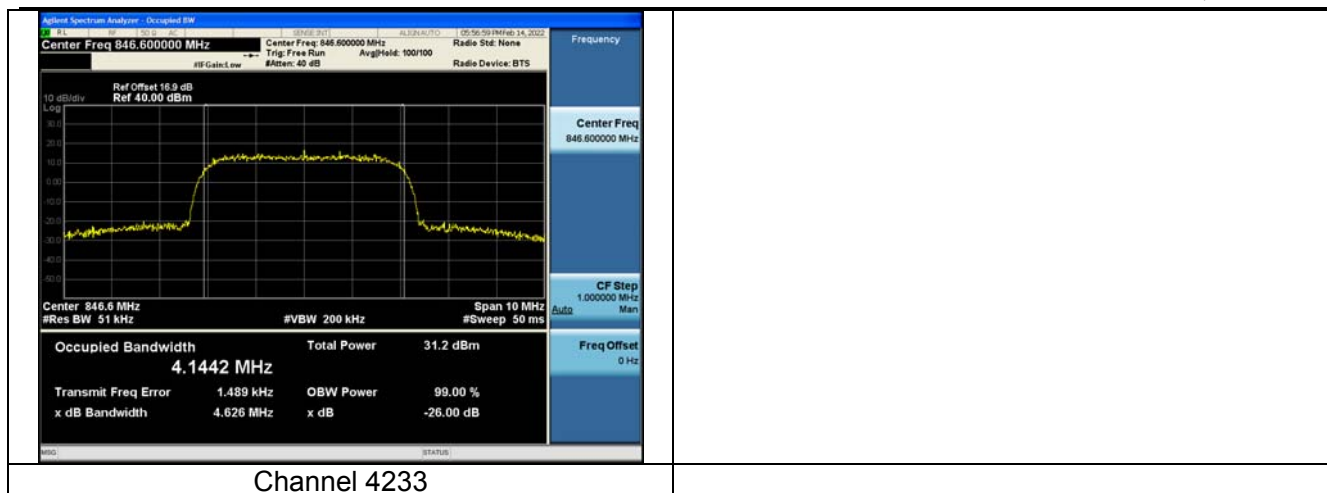
Test Mode: HSPA+



Channel 4132



Channel 4183



3. Emission Bandwidth

WCDMA band V

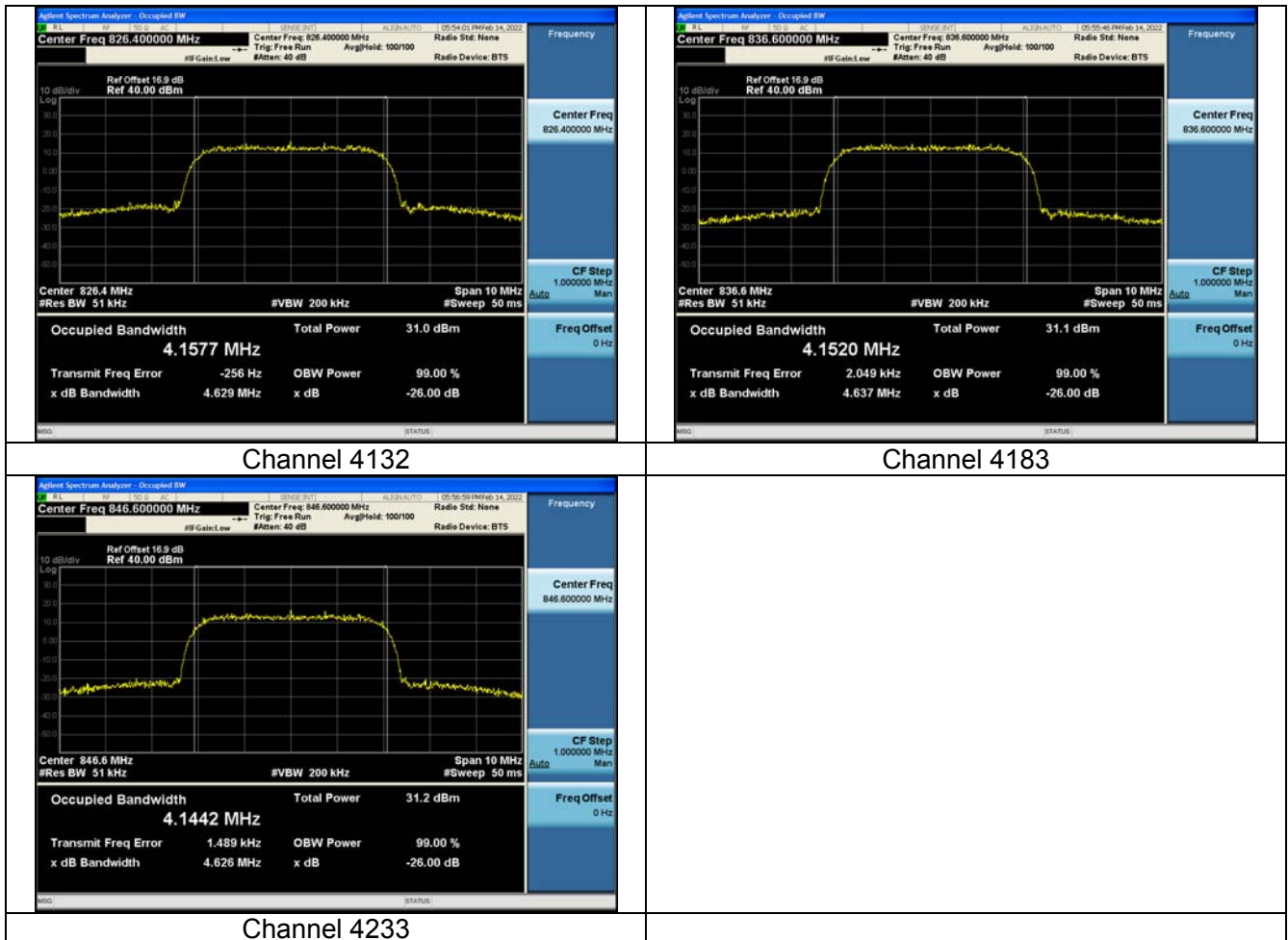
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
Release 99	826.4	4132	4.65
Release 99	836.6	4183	4.64
Release 99	846.6	4233	4.65

Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
HSDPA	826.4	4132	4.62
HSDPA	836.6	4183	4.61
HSDPA	846.6	4233	4.63

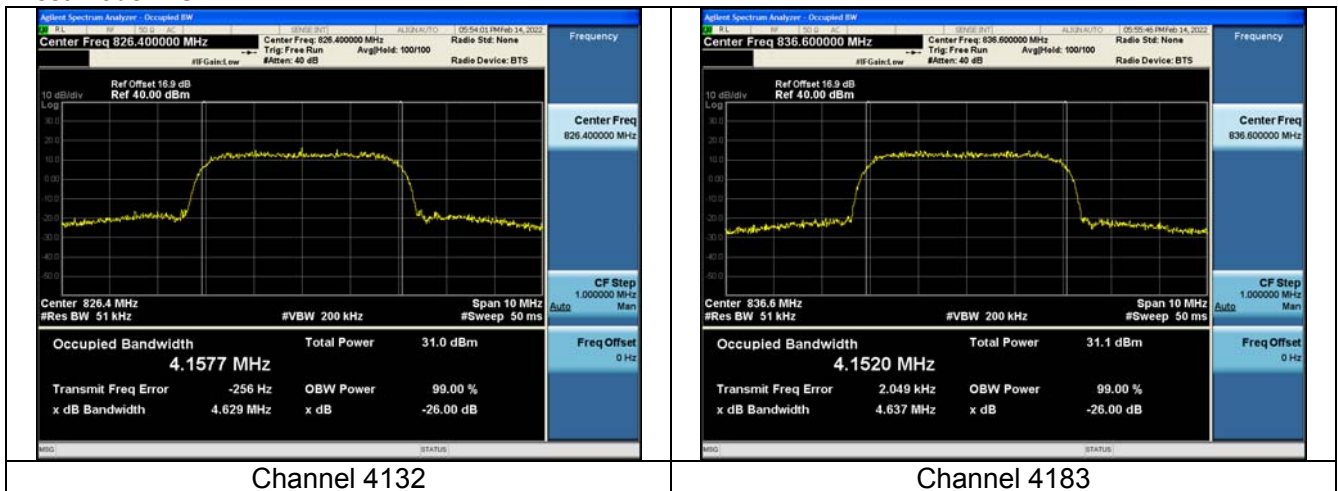
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
HSUPA	826.4	4132	4.63
HSUPA	836.6	4183	4.62
HSUPA	846.6	4233	4.61

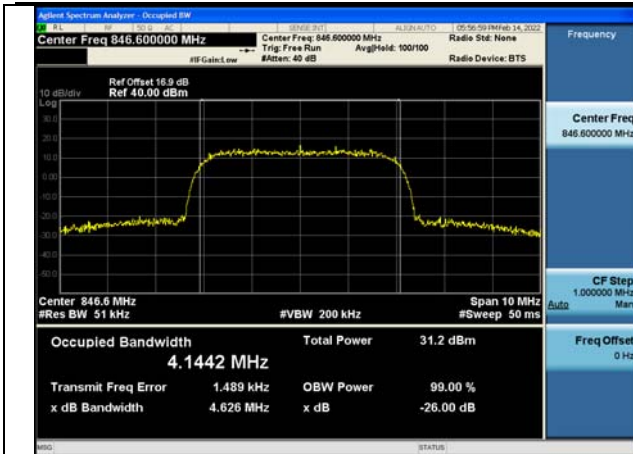
Mode	Carrier frequency (MHz)	Channel No.	Bandwidth of -26dBc Power (MHz)
HSPA+	826.4	4132	4.63
HSPA+	836.6	4183	4.64
HSPA+	846.6	4233	4.63

WCDMA band V
Test Mode: Release 99



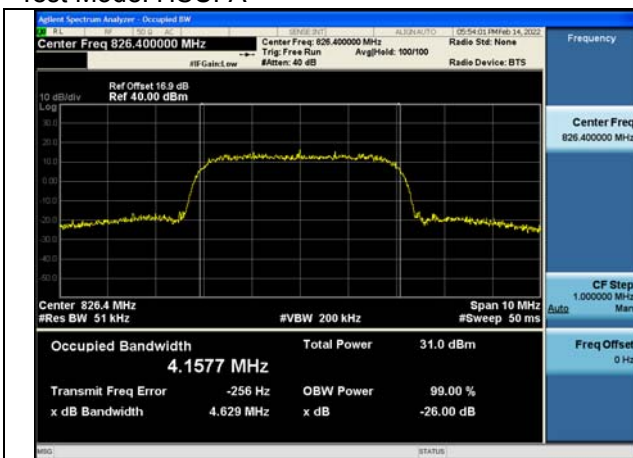
Test Mode: HSDPA



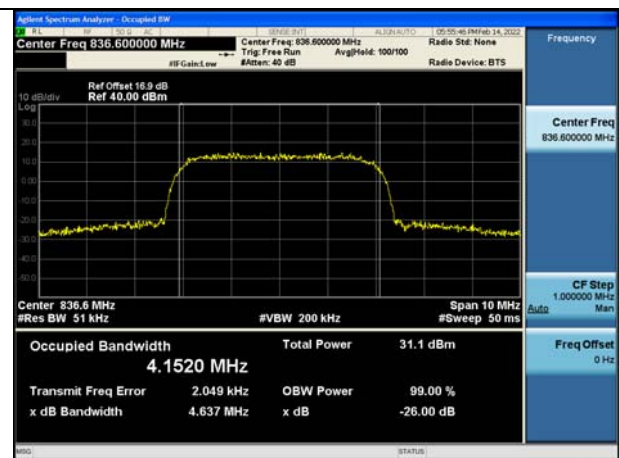


Channel 4233

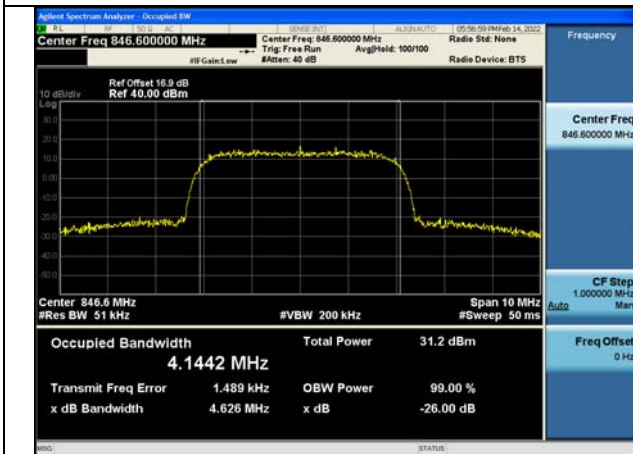
Test Mode: HSUPA



Channel 4132

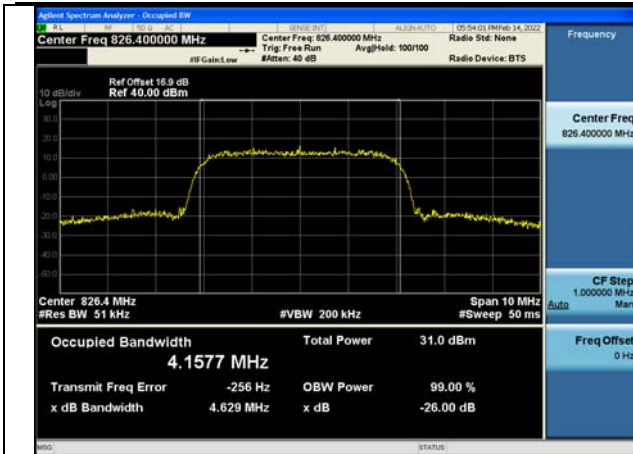


Channel 4183

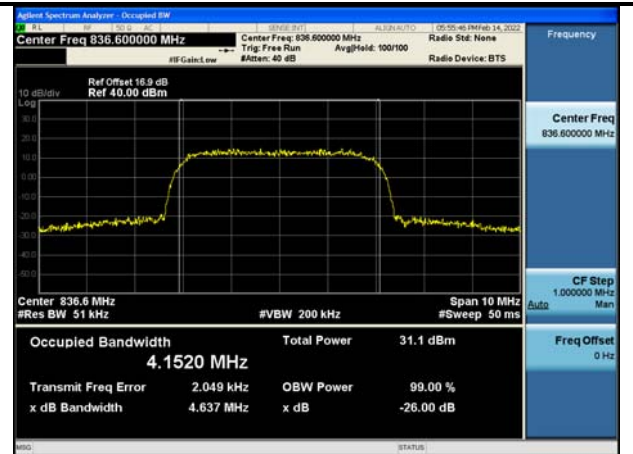


Channel 4233

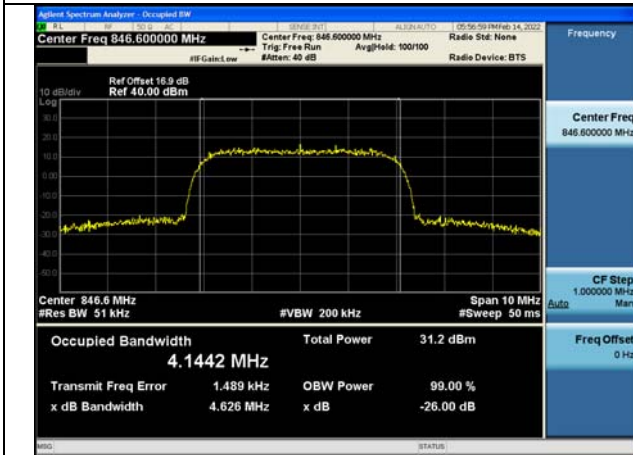
Test Mode: HSPA+



Channel 4132



Channel 4183

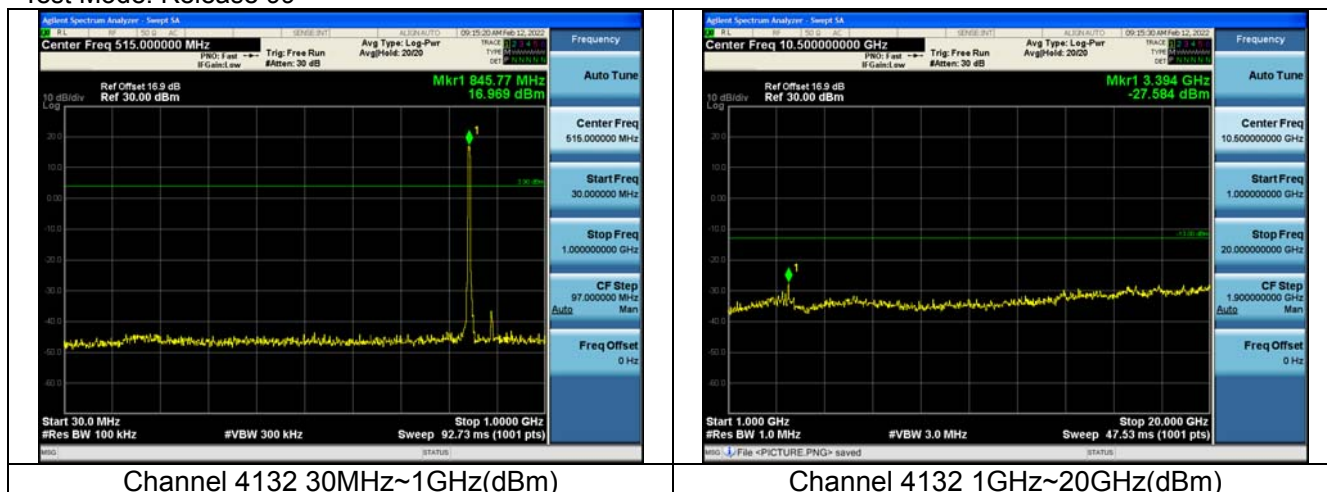


Channel 4233

4. Spurious Emissions at antenna terminal

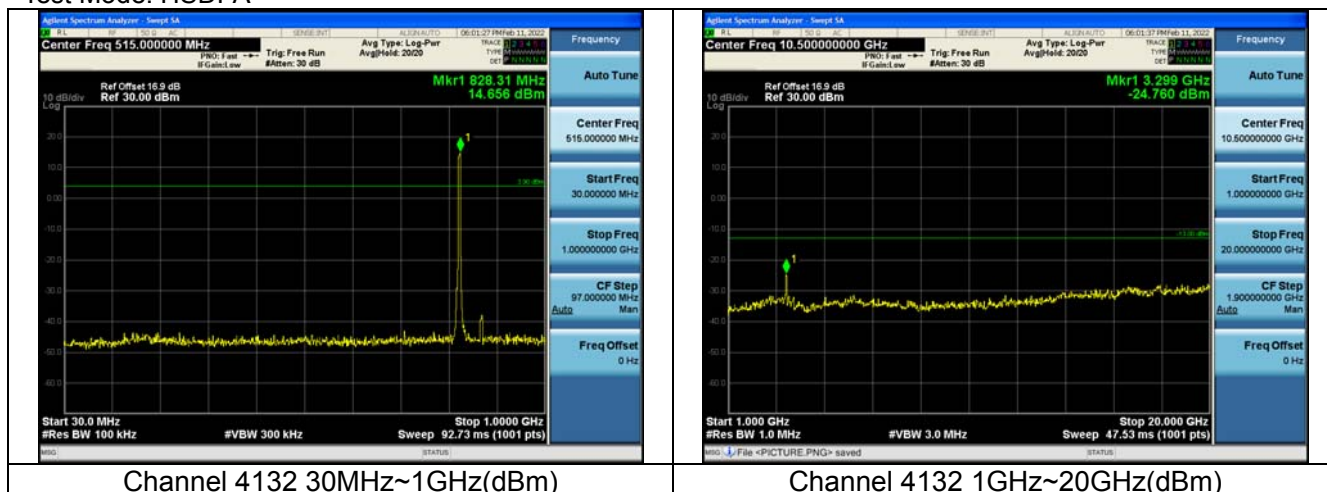
WCDMA band V

Test Mode: Release 99



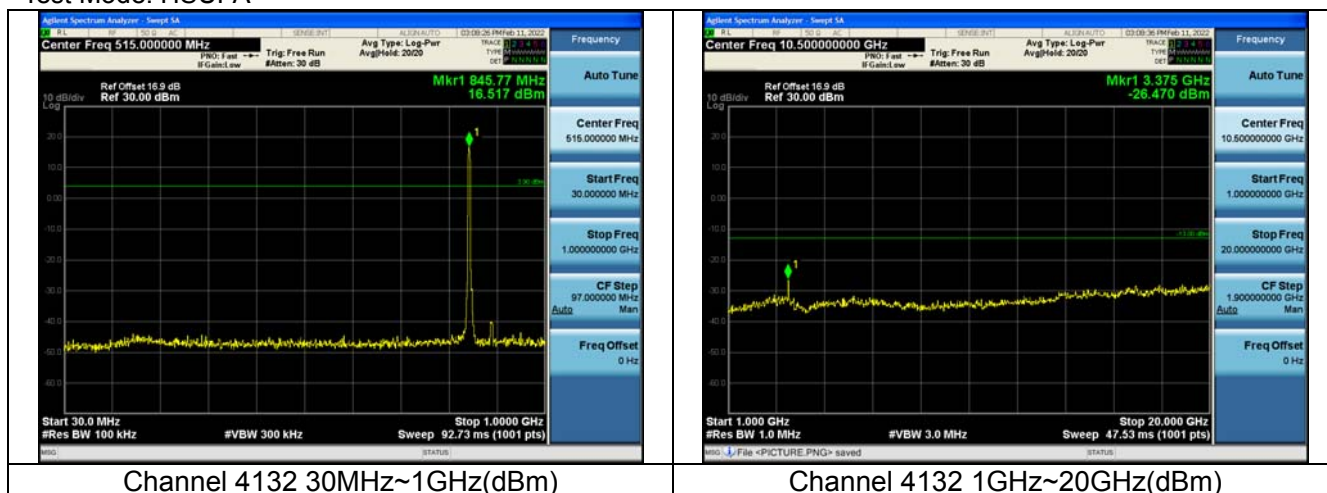
Note: The signal beyond the limit is the signal transmitted by EUT.

Test Mode: HSDPA



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

Test Mode: HSUPA

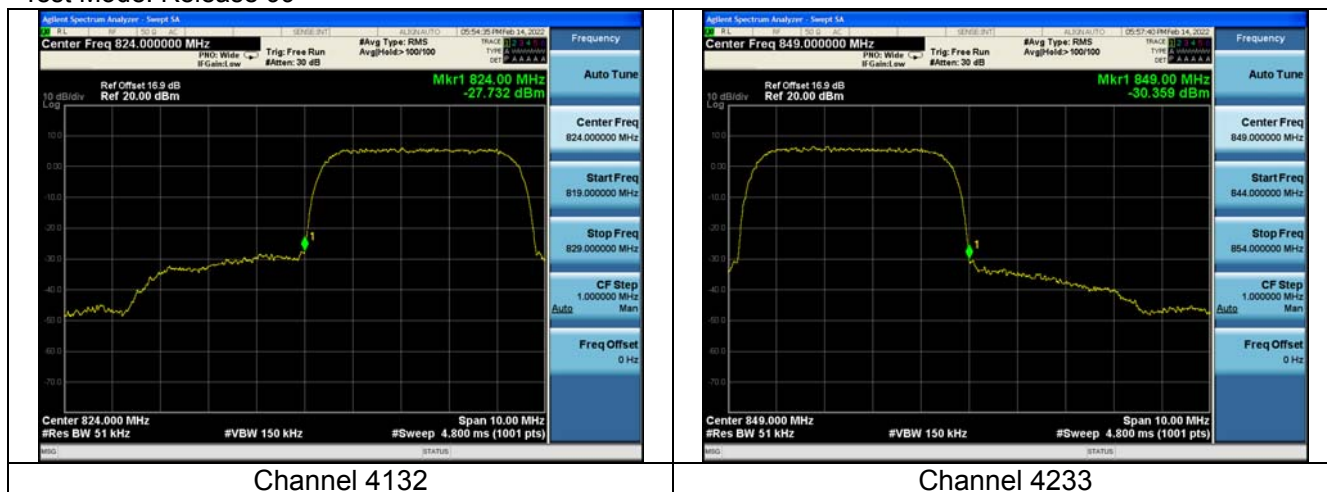


Note: The signal beyond the limit is the signal transmitted by EUT.

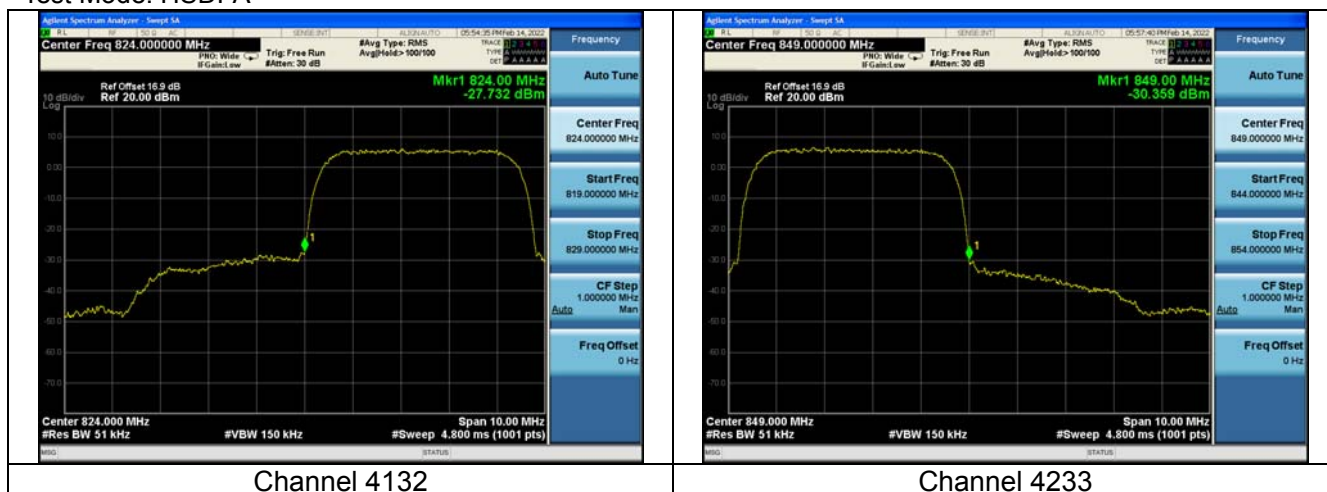
5. Band Edges Compliance

WCDMA band V

Test Mode: Release 99



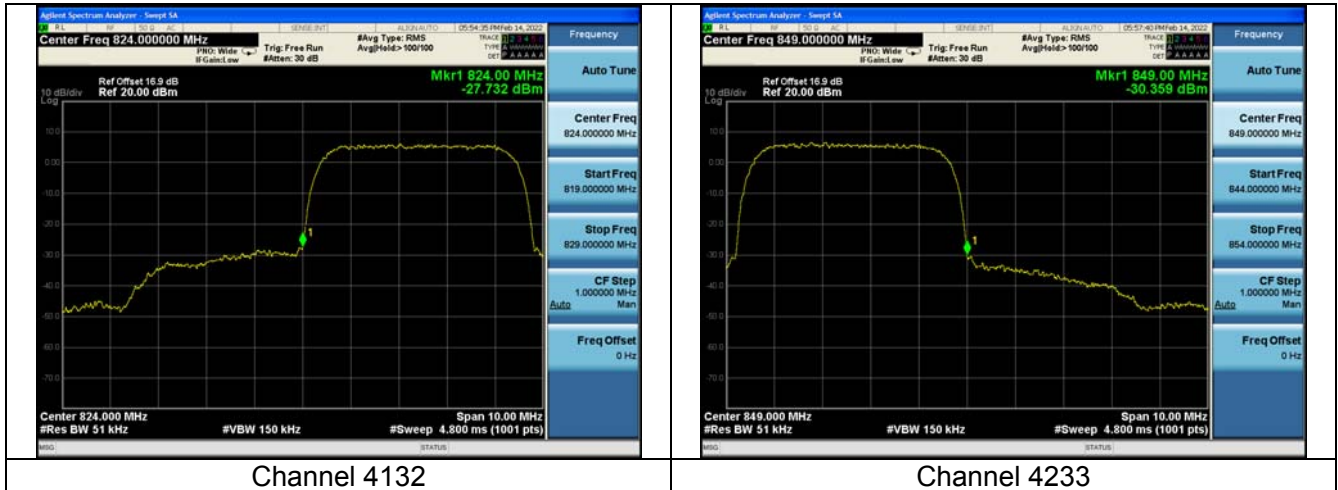
Test Mode: HSDPA



Test Mode: HSUPA



Test Mode: HSPA+



6. Frequency Stability

WCDMA band V

Mode	Temperature(°C)	Test Result (ppm)@NV		
		Channel 4132	Channel 4183	Channel 4233
Release 99	-10	0.000	0.260	0.060
Release 99	-0	-0.430	0.020	-0.260
Release 99	+10	-0.590	0.390	-0.400
Release 99	+30	-0.340	0.200	-0.570
Release 99	+40	-0.200	0.620	0.150
Release 99	+55	0.110	0.380	-0.250
Mode	Voltage	Test Result (ppm)@NT		
		Channel 4132	Channel 4183	Channel 4233
Release 99	LV	-0.350	0.040	-0.040
Release 99	HV	0.130	0.330	0.250

Mode	Temperature(°C)	Test Result (ppm)@NV		
		Channel 4132	Channel 4183	Channel 4233
HSDPA	-10	0.850	-0.370	0.000
HSDPA	-0	0.140	-0.330	0.780
HSDPA	+10	0.890	-0.420	0.120
HSDPA	+30	0.960	-0.140	0.230
HSDPA	+40	0.590	-0.490	0.460
HSDPA	+55	0.360	-0.330	0.170
Mode	Voltage	Test Result (ppm)@NT		
		Channel 4132	Channel 4183	Channel 4233
HSDPA	LV	0.890	-0.250	0.660
HSDPA	HV	1.050	-0.530	0.370

Mode	Temperature(°C)	Test Result (ppm)@NV		
		Channel 4132	Channel 4183	Channel 4233
HSUPA	-10	-0.030	0.420	-0.060
HSUPA	-0	0.140	-0.070	0.160
HSUPA	+10	0.550	0.030	0.530
HSUPA	+30	-0.100	-0.250	0.340
HSUPA	+40	0.400	-0.020	0.450
HSUPA	+55	0.540	0.100	0.470
Mode	Voltage	Test Result (ppm)@NT		
		Channel 4132	Channel 4183	Channel 4233
HSUPA	LV	0.070	-0.160	0.430
HSUPA	HV	0.070	0.500	0.620

7. Peak-Average Ratio

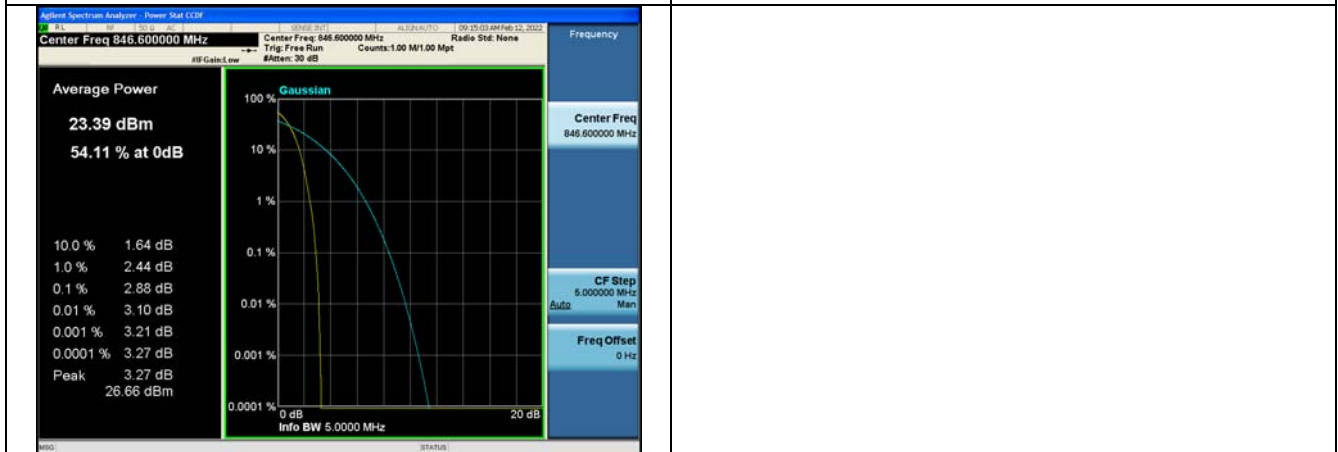
WCDMA band V

Test Mode: Release 99



Channel 4132

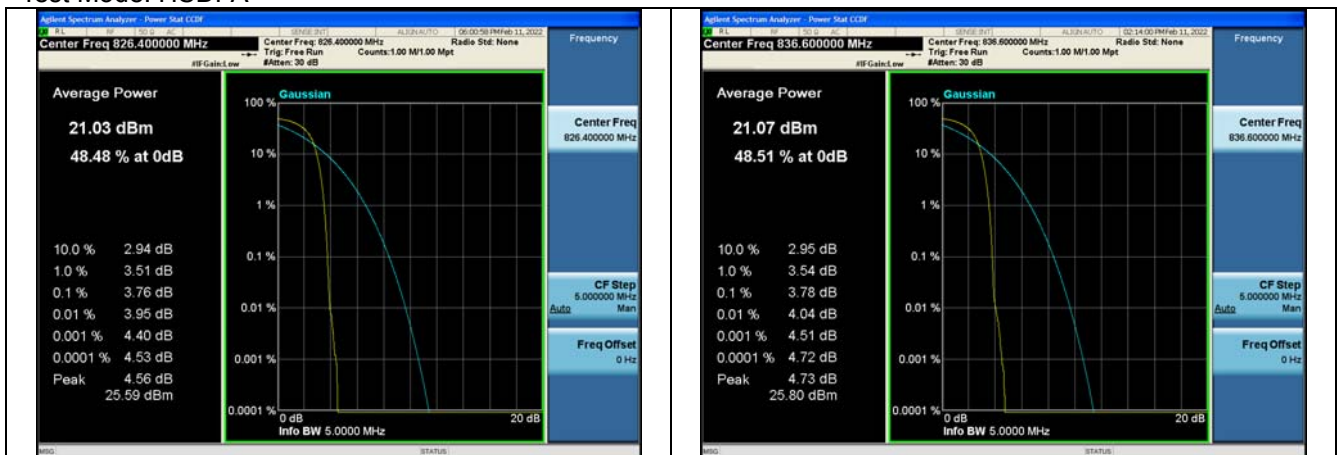
Channel 4183



Channel 4233

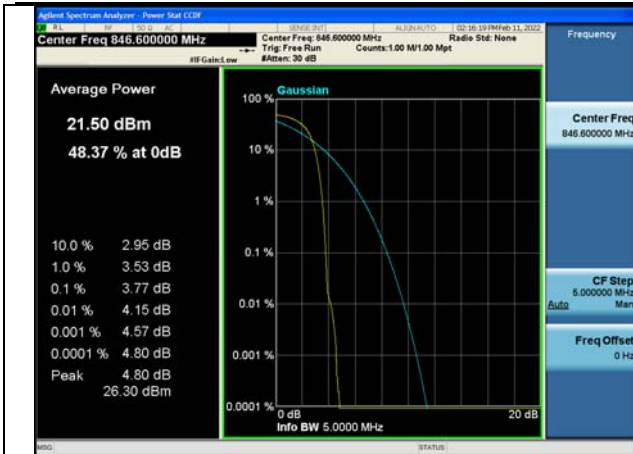
Channel 4183

Test Mode: HSDPA



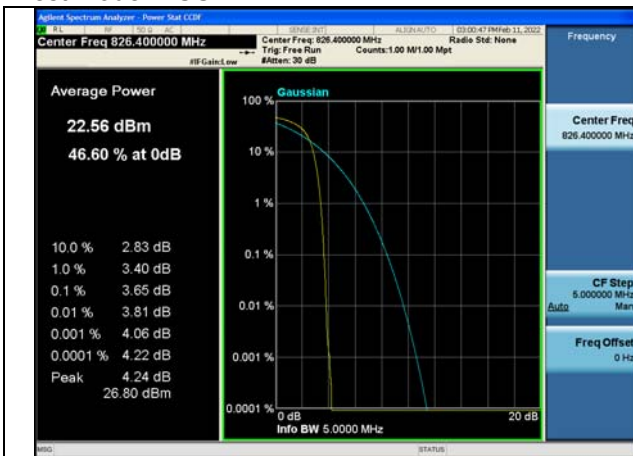
Channel 4132

Channel 4183



Channel 4233

Test Mode: HSUPA



Channel 4132



Channel 4183



Channel 4233

8. Effective Radiated Power and Effective Isotropic Radiated Power

WCDMA band V

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
Release 99	RMC, 12.2kbps	826.4	4132	23.14	19.39	0.087
Release 99	RMC, 12.2kbps	836.6	4183	23.28	19.53	0.090
Release 99	RMC, 12.2kbps	846.6	4233	23.43	19.68	0.093

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
HSDPA	Subtest1	826.4	4132	22.16	18.41	0.069
HSDPA	Subtest1	836.6	4183	22.08	18.33	0.068
HSDPA	Subtest1	846.6	4233	21.54	17.79	0.060
HSDPA	Subtest2	826.4	4132	21.81	18.06	0.064
HSDPA	Subtest2	836.6	4183	21.74	17.99	0.063
HSDPA	Subtest2	846.6	4233	21.95	18.20	0.066
HSDPA	Subtest3	826.4	4132	21.49	17.74	0.059
HSDPA	Subtest3	836.6	4183	21.4	17.65	0.058
HSDPA	Subtest3	846.6	4233	21.64	17.89	0.062
HSDPA	Subtest4	826.4	4132	21.01	17.26	0.053
HSDPA	Subtest4	836.6	4183	21.07	17.32	0.054
HSDPA	Subtest4	846.6	4233	21.45	17.70	0.059

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
HSUPA	Subtest1	826.4	4132	20.1	16.35	0.043
HSUPA	Subtest1	836.6	4183	22.14	18.39	0.069
HSUPA	Subtest1	846.6	4233	22.2	18.45	0.070
HSUPA	Subtest2	826.4	4132	20.38	16.63	0.046
HSUPA	Subtest2	836.6	4183	19.89	16.14	0.041
HSUPA	Subtest2	846.6	4233	20.27	16.52	0.045
HSUPA	Subtest3	826.4	4132	20.45	16.70	0.047
HSUPA	Subtest3	836.6	4183	20.5	16.75	0.047
HSUPA	Subtest3	846.6	4233	20.79	17.04	0.051
HSUPA	Subtest4	826.4	4132	19.85	16.10	0.041
HSUPA	Subtest4	836.6	4183	19.8	16.05	0.040
HSUPA	Subtest4	846.6	4233	20.18	16.43	0.044
HSUPA	Subtest5	826.4	4132	20.77	17.02	0.050
HSUPA	Subtest5	836.6	4183	22.34	18.59	0.072
HSUPA	Subtest5	846.6	4233	22.02	18.27	0.067

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
HSPA+	QPSK	826.4	4132	22.03	18.28	0.067
HSPA+	QPSK	836.6	4183	22.54	18.79	0.076
HSPA+	QPSK	846.6	4233	22.23	18.48	0.070
HSPA+	16QAM	826.4	4132	22.22	18.47	0.070
HSPA+	16QAM	836.6	4183	22.3	18.55	0.072
HSPA+	16QAM	846.6	4233	22.24	18.49	0.071

Mode		Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
DC-HSDPA	Subtest1	826.4	4132	21.98	18.23	0.067
DC-HSDPA	Subtest1	836.6	4183	21.16	17.41	0.055
DC-HSDPA	Subtest1	846.6	4233	21.45	17.70	0.059
DC-HSDPA	Subtest2	826.4	4132	21.82	18.07	0.064
DC-HSDPA	Subtest2	836.6	4183	21.77	18.02	0.063
DC-HSDPA	Subtest2	846.6	4233	21.95	18.20	0.066
DC-HSDPA	Subtest3	826.4	4132	21.14	17.39	0.055
DC-HSDPA	Subtest3	836.6	4183	21.24	17.49	0.056
DC-HSDPA	Subtest3	846.6	4233	21.56	17.81	0.060
DC-HSDPA	Subtest4	826.4	4132	21	17.25	0.053
DC-HSDPA	Subtest4	836.6	4183	21.14	17.39	0.055
DC-HSDPA	Subtest4	846.6	4233	21.45	17.70	0.059

APPENDIX B – TEST DATA OF RADIATED EMISSION

Radiated Spurious Emissions

Note: The worst channel results are reflected in the report.

Note: The scanned graph represents the maximum of both horizontal and vertical polarizations and is not a single horizontal or vertical polarization scan.

WCDMA band II

Test result:

WCDMA Mode:

Channel 9400

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
6088.593750	-53.11	-13	Vertical
6952.031250	-52.44	-13	Vertical
8790.000000	-53.71	-13	Vertical
11505.468750	-52.92	-13	Vertical
15020.625000	-46.81	-13	Vertical
17947.031250	-40.39	-13	Vertical

WCDMA band IV

Test result:

WCDMA Mode:

Channel 1412

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
6091.875000	-53.21	-13	Vertical
6912.187500	-52.89	-13	Vertical
10399.687500	-54.08	-13	Vertical
11505.468750	-52.80	-13	Vertical
14998.125000	-47.02	-13	Vertical
17941.406250	-40.22	-13	Vertical

WCDMA band V

Test result:

WCDMA Mode:

Channel 4183

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
3350.390625	-65.27	-13	Vertical
4291.875000	-64.97	-13	Vertical
5503.312500	-60.94	-13	Vertical
6874.296875	-56.72	-13	Vertical
7956.867188	-57.56	-13	Vertical
9465.226563	-56.21	-13	Vertical

---The end of the test report---