

RF TEST REPORT

Applicant Quectel Wireless Solutions Company
Limited

FCC ID XMR202008EC25AFXD

Product LTE Module

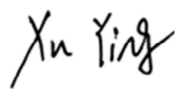
Brand Quectel

Model EC25-AFXD; EC25-AFXD MINIPCIE

Report No. EFTA25080400-IE-02-R19

Issue Date October 14, 2025

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2024)/ FCC CFR47 Part 27C (2024)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.



Prepared by: Xu Ying



Approved by: Xu Kai

Eurofins TA Technology (Shanghai) Co., Ltd.

Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China

TEL: +86-021-50791141/2/3

FAX: +86-021-50791141/2/3-8000

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Summary of Measurement Results

Number	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective Isotropic Radiated Power	2.1046 /27.50(d)(4) /27.50(b)(10) /27.50(c)(10)	PASS
2	Occupied Bandwidth	2.1049	PASS
3	Band Edge Compliance	27.53(h) /27.53(g) /27.53(f) /27.53(c)	PASS
4	Peak-to-Average Power Ratio	27.50(d)/KDB971168 D01(5.7)	PASS
5	Frequency Stability	2.1055 / 27.54	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 /27.53(h) /27.53(g) /27.53(f) /27.53(c)	PASS
7	Radiated Spurious Emission	2.1053 /27.53(h) /27.53(g) /27.53(f) /27.53(c)	PASS
Date of Testing: (Original) June 29, 2018~ July 16, 2018 and July 30, 2018~ July 31, 2018 and August 3, 2019~ August 13, 2019 (Variant) September 3, 2025 ~ September 29, 2025 Date of Sample Received: (Variant) August 28, 2025			
Note: PASS: The EUT complies with the essential requirements in the standard. FAIL: The EUT does not comply with the essential requirements in the standard. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

EC25-AFXD; EC25-AFXD MINIPCIE (Report No.: EFTA25080400-IE-02-R19) is a variant model of EC25-AFXD; EC25-AFXD MINIPCIE (Report No.: R2203A0238-R3).

The detailed product change description please refers to following table:

The new version and original version both use Qualcomm 9x07 chipset, share the same chipset baseline, software and hardware design, the difference is just some RF components.

Module	Chipset	Frequency
EC25-AFXD, EC25-AFXD MINIPCIE (Original)	MDM9207	LTE Cat 4: B2/4/5/12/13/14/66/71
EC25-AFXD, EC25-AFXD MINIPCIE (New)		WCDMA: B2/4/5 *GPS/GLONASS/BDS/Galileo/QZSS

Tested Cases refer to the following table:

Test Cases	Original	Variant
RF Power Output and Effective Radiated Power	PASS	PASS
Occupied Bandwidth	PASS	-
Band Edge Compliance	PASS	PASS
Peak-to-Average Power Ratio	PASS	-
Frequency Stability	PASS	PASS
Spurious Emissions at Antenna Terminals	PASS	-
Radiated Spurious Emission	PASS	-

The detailed product change description please refers to the *Difference Declaration Letter*.

1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

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

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3 Testing Location

Company:	Eurofins TA Technology (Shanghai) Co., Ltd.
Address:	Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City:	Shanghai
Post code:	201201
Country:	P. R. China
Contact:	Xu Kai
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	https://www.eurofins.com/electrical-and-electronics
E-mail:	Kain.Xu@cpt.eurofinscn.com

2 General Description of Equipment under Test

2.1 Applicant and Manufacturer Information

Applicant	Quectel Wireless Solutions Company Limited
Applicant address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233
Manufacturer	Quectel Wireless Solutions Company Limited
Manufacturer address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233

2.2 General information

EUT Description		
Model	EC25-AFXD; EC25-AFXD MINIPCIE	
IMEI	Original	863010031218428
	Variant	862044077764758
Hardware Version	R1.0	
Software Version	EC25AFXD GAR07A02M1G	
Power Supply	External power supply/	
Antenna Type	The EUT don't have standard Antenna, The Antenna used for testing in this report is the after-market accessory (Dipole Antenna)	
Antenna Gain	WCDMA Band IV	2.00 dBi
	LTE Band 4	2.00 dBi
	LTE Band 12	3.95 dBi
	LTE Band 13	4.45 dBi
	LTE Band 66	2.00 dBi
	LTE Band 71	1.66 dBi
Test Mode(s)	WCDMA Band IV; LTE Band 4/12/13/66/71	
Test Modulation	(WCDMA) QPSK, 16QAM; (LTE) QPSK, 16QAM;	
HSDPA UE Category	24	
HSUPA UE Category	6	
LTE Category	4	
Maximum E.I.R.P./ E.R.P.	WCDMA Band IV	25.60 dBm
	LTE Band 4	24.87 dBm
	LTE Band 12	24.80 dBm
	LTE Band 13	25.45 dBm
	LTE Band 66	25.04 dBm
	LTE Band 71	22.54 dBm

Rated Power Supply Voltage	3.8VDC		
Operating Voltage	Minimum: 3.3VDC Maximum: 4.3VDC		
Operating Temperature	Lowest: -40°C Highest: +85°C		
Testing Temperature	Lowest: -40°C Highest: +85°C		
Operating Frequency Range(s)	Mode	Tx (MHz)	Rx (MHz)
	WCDMA Band IV	1710 ~ 1755	2110 ~ 2155
	LTE Band 4	1710 ~ 1755	2110 ~ 2155
	LTE Band 12	699 ~ 716	729 ~ 746
	LTE Band 13	777 ~ 787	746 ~ 756
	LTE Band 66	1710 ~ 1780	2110 ~ 2180
	LTE Band 71	663 ~ 698	617 ~ 652
Note: 1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.			

Accessory equipment	
Evaluation Board	RF Cable
RS232-to-USB Cable	Antenna: Dipole Antenna
Headset	DC 5V Adaptor

EC25-AFXD and EC25-AFXD MINIPCIE are all LTE modules. They support the same frequency bands, use the same chipset and share the same software & hardware design. The main difference is on the carrier board.

EC25-AFXD MINIPCIE makes up of EC25-AFXD module and PCIe transferred board.

The transferred board switches EC25-AFXD module to follow PCI Express Mini Card 1.2 standard connector protocol. No any other internal changes in EC25-AFXD module.

Two models are identical in interior structure and components, and just connector interface is different for the marketing requirement.

3 Applied Standards

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

Test standards:

FCC CFR47 Part 27C (2024)

FCC CFR47 Part 2 (2024)

Reference standard:

ANSI C63.26-2015

KDB 971168 D01 Power Meas License Digital Systems v03r01

4 Test Configuration

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

All mode and data rates and positions and RB size and modulations were investigated.

Subsequently, only the worst case emissions are reported.

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

The following testing in different Bandwidth is set to detailin the following table:

Test modes are chosen to be reported as the worst case configuration below:

Test items	Modes/Modulation
	WCDMA Band IV
RF Power Output and Effective Isotropic Radiated Power	RMC HSDPA/HSUPA DC-HSDPA/HSPA+
Occupied Bandwidth	RMC
Band Edge Compliance	RMC
Peak-to-Average Power Ratio	RMC
Frequency Stability	RMC
Spurious Emissions at Antenna Terminals	RMC
Radiated Spurious Emission	RMC

Test modes are chosen to be reported as the worst case configuration below for LTE Band

4/12/13/66/71:

Test items	Modes	Bandwidth (MHz)						Modulation		RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	50%	100%	L	M	H
RF power output	LTE 4	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 12	O	O	O	O	-	-	O	O	O	O	O	O	O	O
	LTE 13	-	-	O	O	-	-	O	O	O	O	O	O	O	O
	LTE 66	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 71	-	-	O	O	O	O	O	O	O	O	O	O	O	O
Effective Isotropic Radiated power	LTE 4	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 12	O	O	O	O	-	-	O	O	O	O	O	O	O	O
	LTE 13	-	-	O	O	-	-	O	O	O	O	O	O	O	O
	LTE 66	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 71	-	-	O	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	LTE 4	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 12	O	O	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 13	-	-	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 66	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 71	-	-	O	O	O	O	O	O	-	-	O	O	O	O
Band Edge Compliance	LTE 4	O	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 12	O	O	O	O	-	-	O	O	O	-	O	O	-	O
	LTE 13	-	-	O	O	-	-	O	O	O	-	O	O	-	O
	LTE 66	O	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 71	-	-	O	O	O	O	O	O	O	-	O	O	-	O
Peak-to-Average Power Ratio	LTE 4	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 12	O	O	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 13	-	-	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 66	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 71	-	-	O	O	O	O	O	O	-	-	O	O	O	O
Frequency Stability	LTE 4	O	O	O	O	O	O	O	-	-	-	O	O	-	O
	LTE 12	O	O	O	O	-	-	O	-	-	-	O	O	-	O
	LTE 13	-	-	O	O	-	-	O	-	-	-	O	O	-	O
	LTE 66	O	O	O	O	O	O	O	-	-	-	O	O	-	O
	LTE 71	-	-	O	O	O	O	O	-	-	-	O	O	-	O
Spurious Emissions at Antenna Terminals	LTE 4	O	O	O	O	O	O	O	-	O	-	-	O	O	O
	LTE 12	O	O	O	O	-	-	O	-	O	-	-	O	O	O
	LTE 13	-	-	O	O	-	-	O	-	O	-	-	O	O	O
	LTE 66	O	O	O	O	O	O	O	-	O	-	-	O	O	O
	LTE 71	-	-	O	O	O	O	O	-	O	-	-	O	O	O
Radiates	LTE 4	-	-	O	-	-	-	O	-	O	-	-	O	O	O

Spurious Emission	LTE 12	-	-	O	-	-	-	O	-	O	-	-	O	O	O
	LTE 13	-	-	O	-	-	-	O	-	O	-	-	O	O	O
	LTE 66	-	-	O	-	-	-	O	-	O	-	-	O	O	O
	LTE 71	-	-	O	-	-	-	O	-	O	-	-	O	O	O
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing.														

5 Test Case

5.1 RF Power Output and Effective Isotropic Radiated Power

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Methods of Measurement

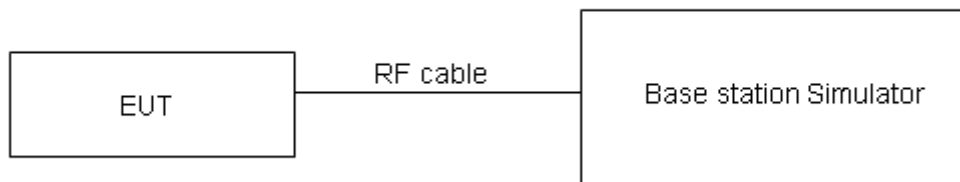
During the process of the testing, The EUT was connected to the Base Station Simulator with a known loss. The EUT is controlled by the Base Station Simulator test set to ensure max power transmission with proper modulation.

ERP can then be calculated as follows:

$EIRP \text{ (dBm)} = \text{Output Power (dBm)} + \text{Antenna Gain (dBi)}$

$EIRP \text{ (dBm)} = ERP \text{ (dBm)} + 2.15 \text{ (dB.)}$

Test Setup



Limits

No specific RF power output requirements in part 2.1046.

Rule Part 27.50(b) (10) specifies that “Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP”

Rule Part 27.50(c) (10) specifies that “Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP”

Rule Part 27.50(d) (4) specifies that “Fixed, mobile and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP”

Part 27.50(b)(10)Limit	$\leq 3 \text{ W}$ (34.77 dBm)
Part 27.50(c)(10)Limit	$\leq 3 \text{ W}$ (34.77 dBm)
Part 27.50(d)(4)Limit	$\leq 1 \text{ W}$ (30 dBm)

Measurement Uncertainty

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

Test Results

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

5.2 Occupied Bandwidth

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

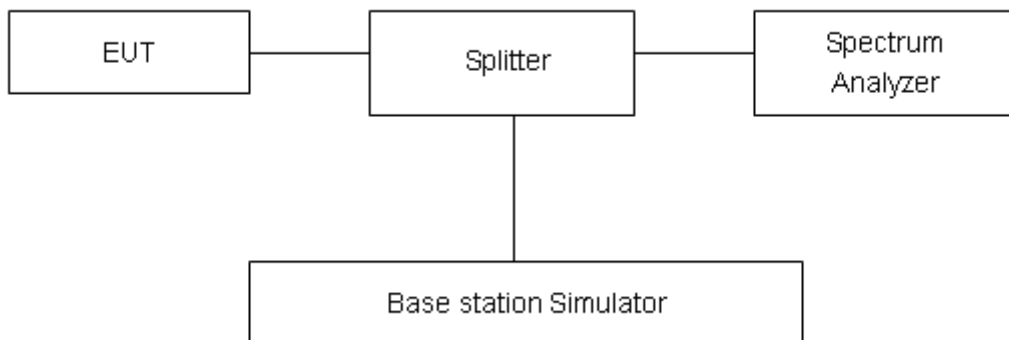
Method of Measurement

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

RBW is set to $\geq 1\%EBW$, VBW is set to 3x RBW.

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

Test Setup



Limits

No specific occupied bandwidth requirements in part 2.1049.

Measurement Uncertainty

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

Test Results

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

5.3 Band Edge Compliance

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The band edge of the lowest and highest channels were measured.

The testing follows KDB 971168 D01 v03r01 Section 6.0

The EUT was connected to spectrum analyzer and system simulator via a power divider.

The band edges of low and high channels for the highest RF powers were measured.

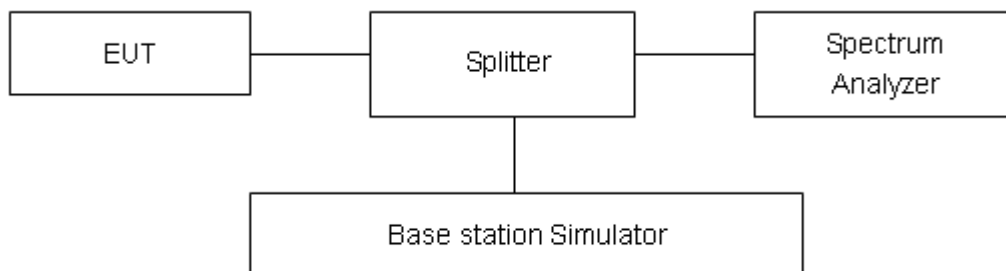
RBW is set to $\geq 1\%EBW$, VBW is set to 3x RBW on spectrum analyzer.

Set spectrum analyzer with RMS detector.

The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

Checked that all the results comply with the emission limit line.

Test Setup



Limits

Rule Part 27.53(h) specifies that “for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB”

Rule Part 27.53(g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Rule Part 27.53(f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

Rule Part 27.53 (c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

Measurement Uncertainty

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

Test Results

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

5.4 Peak-to-Average Power Ratio (PAPR)

Ambient condition

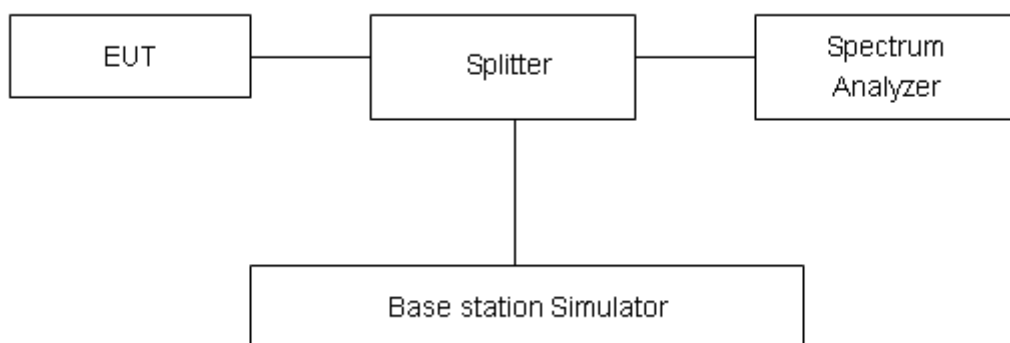
Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Methods of Measurement

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

$$\text{PAPR (dB)} = \text{PPk (dBm)} - \text{PAvg (dBm)}.$$

Test Setup



Limits

Rule Part 27.50(d)(5) Equipment employed must be authorized in accordance with the provisions of 24.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

Measurement Uncertainty

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

Test Results

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

5.5 Frequency Stability

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Method of Measurement

Frequency Stability (Temperature Variation)

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

(1) With all power removed, the temperature was decreased to 0°C and permitted to stabilize for three hours.

(2) Measure the carrier frequency with the test equipment in a “call mode”. These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.

(3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements.

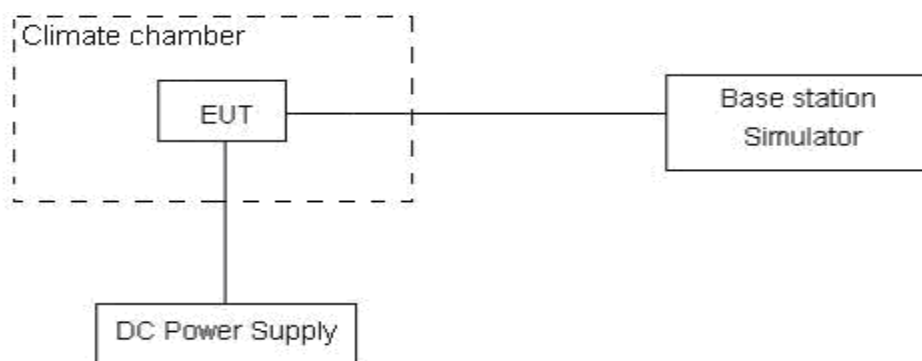
Frequency Stability (Voltage Variation)

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

Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

This transceiver is specified to operate with an input voltage of between 3.3 V and 4.3 V, with a nominal voltage of 3.8V.

Test setup



Limits

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

Measurement Uncertainty

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

Test Results

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

5.6 Spurious Emissions at Antenna Terminals

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The measurement is carried out using a spectrum analyzer. The spectrum analyzer scans from 9kHz to the 10th harmonic of the carrier. The peak detector is used.

RBW is set to 1 kHz (0.009MHz~ 0.15 MHz),

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

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

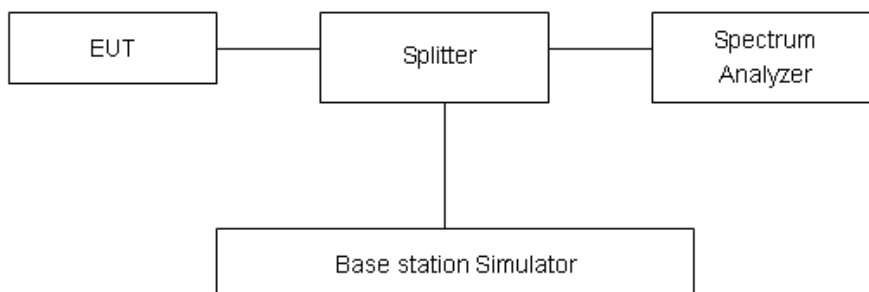
RBW is set to 1000 kHz (above 1000MHz)

Sweep is set to AUTO.

Of those disturbances below (limit – 20 dB), the mark is not required for the EUT.

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

Test setup



Limits

Rule Part 27.53(h) specifies that “for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.”

Rule Part 27.53 (g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Rule Part 27.53(f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands,

emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation. Part 27.53 (c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

Part 27.53(h)/(g) Limit		-13 dBm
Part 27.53(f) Limit	Limit out of the band 1559-1610 MHz	-13 dBm
	Limit in the band 1559-1610 MHz	-40 dBm

Measurement Uncertainty

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

Frequency	Uncertainty
9kHz-1GHz	0.684 dB
1GHz-27GHz	1.407 dB

Test Results

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

5.7 Radiated Spurious Emission

Ambient condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Method of Measurement

1. The testing follows FCC KDB 971168 D01 v03r01 Section 5.8 and ANSI C63.26-2015.
2. Below 1GHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H). Above 1GHz: (Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.) The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).
3. A loop antenna, A log-periodic antenna or horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
4. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=100kHz, VBW=300kHz for 30MHz to 1GHz and RBW=1MHz, VBW=3MHz for above 1GHz, and the maximum value of the receiver should be recorded as (Pr).
5. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
6. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAG) should be recorded after test.
7. The measurement results are obtained as described below:

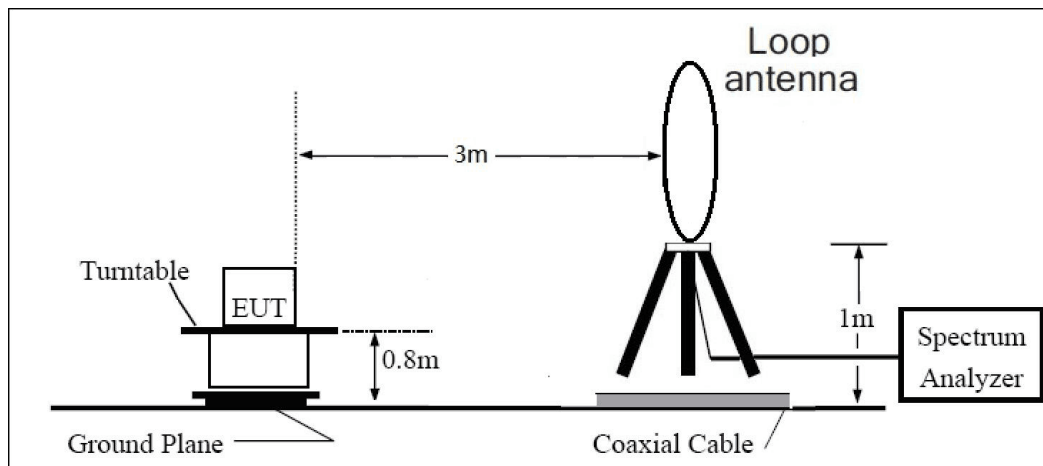
$$\text{Power(EIRP)} = \text{PMea} - \text{PAG} - \text{Pcl} + \text{Ga}$$
 The measurement results are amend as described below:

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

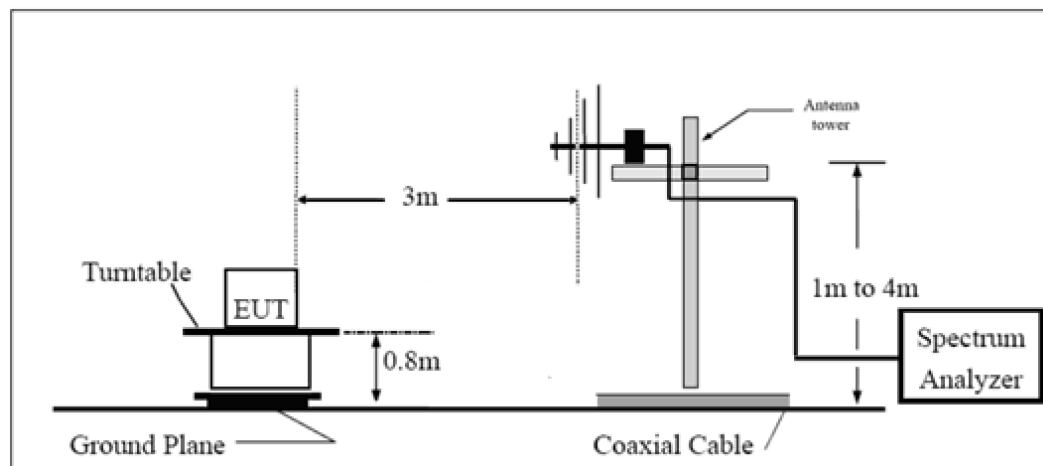
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

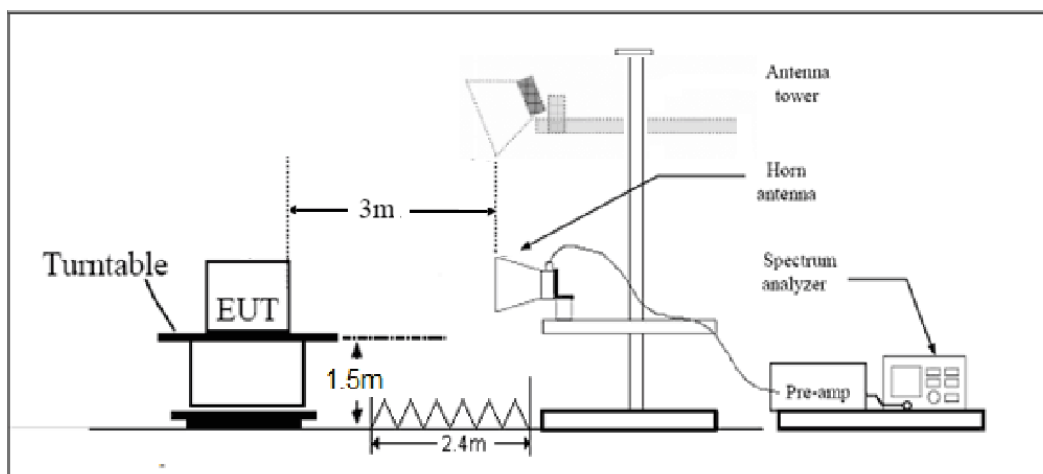
9KHz~ 30MHz



30MHz~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

Rule Part 27.53(h) specifies that “for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.”

Rule Part 27.53 (g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Rule Part 27.53(f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

Part 27.53 (c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

Part 27.53 (h)/(g) Limit		-13 dBm
Part 27.53(f) Limit	Limit out of the band 1559-1610 MHz	-13 dBm
	Limit in the band 1559-1610 MHz	-40 dBm

Measurement Uncertainty

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

Test Results

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

6 Test Results

6.1 RF Power Output and Effective Isotropic Radiated Power

WCDMA Band IV		Maximum Output Power (dBm)			EIRP (dBm)		
		Channel 1312	Channel 1413	Channel 1513	Channel 1312	Channel 1413	Channel 1513
		1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)	1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)
RMC		23.49	23.60	23.50	25.49	25.60	25.50
HSDPA	Sub - Test 1	22.95	23.02	22.94	24.95	25.02	24.94
	Sub - Test 2	22.94	23.04	22.91	24.94	25.04	24.91
	Sub - Test 3	22.41	22.54	22.43	24.41	24.54	24.43
	Sub - Test 4	22.42	22.55	22.41	24.42	24.55	24.41
HSUPA	Sub - Test 1	22.91	23.01	22.89	24.91	25.01	24.89
	Sub - Test 2	21.90	21.99	21.88	23.90	23.99	23.88
	Sub - Test 3	22.37	22.47	22.37	24.37	24.47	24.37
	Sub - Test 4	21.83	21.96	21.85	23.83	23.96	23.85
	Sub - Test 5	22.84	22.94	22.83	24.84	24.94	24.83
DC-HSDPA	Sub - Test 1	22.83	22.96	22.84	24.83	24.96	24.84
	Sub - Test 2	22.82	22.95	22.83	24.82	24.95	24.83
	Sub - Test 3	22.40	22.44	22.34	24.40	24.44	24.34
	Sub - Test 4	22.39	22.43	22.33	24.39	24.43	24.33
HSPA+	16QAM	22.38	22.51	22.40	24.38	24.51	24.40

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)
Band4	1.4	19957	1	#0	QPSK	22.41	24.41
Band4	1.4	19957	1	#Mid	QPSK	22.42	24.42
Band4	1.4	19957	1	#Max	QPSK	22.32	24.32
Band4	1.4	19957	3	#0	QPSK	22.43	24.43
Band4	1.4	19957	3	#Mid	QPSK	22.45	24.45
Band4	1.4	19957	3	#Max	QPSK	22.55	24.55
Band4	1.4	19957	6	#0	QPSK	21.68	23.68
Band4	1.4	19957	1	#0	16QAM	21.56	23.56
Band4	1.4	19957	1	#Mid	16QAM	21.64	23.64
Band4	1.4	19957	1	#Max	16QAM	21.51	23.51
Band4	1.4	19957	3	#0	16QAM	21.28	23.28
Band4	1.4	19957	3	#Mid	16QAM	21.44	23.44
Band4	1.4	19957	3	#Max	16QAM	21.43	23.43
Band4	1.4	19957	6	#0	16QAM	20.45	22.45
Band4	1.4	20175	1	#0	QPSK	22.58	24.58
Band4	1.4	20175	1	#Mid	QPSK	22.72	24.72
Band4	1.4	20175	1	#Max	QPSK	22.57	24.57
Band4	1.4	20175	3	#0	QPSK	22.72	24.72
Band4	1.4	20175	3	#Mid	QPSK	22.68	24.68
Band4	1.4	20175	3	#Max	QPSK	22.64	24.64
Band4	1.4	20175	6	#0	QPSK	21.76	23.76
Band4	1.4	20175	1	#0	16QAM	21.53	23.53
Band4	1.4	20175	1	#Mid	16QAM	21.59	23.59
Band4	1.4	20175	1	#Max	16QAM	21.52	23.52
Band4	1.4	20175	3	#0	16QAM	21.45	23.45
Band4	1.4	20175	3	#Mid	16QAM	21.6	23.6
Band4	1.4	20175	3	#Max	16QAM	21.5	23.5
Band4	1.4	20175	6	#0	16QAM	20.49	22.49
Band4	1.4	20393	1	#0	QPSK	22.79	24.79
Band4	1.4	20393	1	#Mid	QPSK	22.87	24.87
Band4	1.4	20393	1	#Max	QPSK	22.8	24.8
Band4	1.4	20393	3	#0	QPSK	22.84	24.84
Band4	1.4	20393	3	#Mid	QPSK	22.83	24.83
Band4	1.4	20393	3	#Max	QPSK	22.76	24.76
Band4	1.4	20393	6	#0	QPSK	21.8	23.8
Band4	1.4	20393	1	#0	16QAM	21.81	23.81
Band4	1.4	20393	1	#Mid	16QAM	21.98	23.98
Band4	1.4	20393	1	#Max	16QAM	21.65	23.65
Band4	1.4	20393	3	#0	16QAM	21.71	23.71
Band4	1.4	20393	3	#Mid	16QAM	21.61	23.61
Band4	1.4	20393	3	#Max	16QAM	21.6	23.6

Band4	1.4	20393	6	#0	16QAM	20.66	22.66
Band4	3	19965	1	#0	QPSK	22.63	24.63
Band4	3	19965	1	#Mid	QPSK	22.53	24.53
Band4	3	19965	1	#Max	QPSK	22.59	24.59
Band4	3	19965	8	#0	QPSK	21.65	23.65
Band4	3	19965	8	#Mid	QPSK	21.66	23.66
Band4	3	19965	8	#Max	QPSK	21.65	23.65
Band4	3	19965	15	#0	QPSK	21.62	23.62
Band4	3	19965	1	#0	16QAM	21.55	23.55
Band4	3	19965	1	#Mid	16QAM	21.49	23.49
Band4	3	19965	1	#Max	16QAM	21.6	23.6
Band4	3	19965	8	#0	16QAM	20.45	22.45
Band4	3	19965	8	#Mid	16QAM	20.43	22.43
Band4	3	19965	8	#Max	16QAM	20.42	22.42
Band4	3	19965	15	#0	16QAM	20.51	22.51
Band4	3	20175	1	#0	QPSK	22.75	24.75
Band4	3	20175	1	#Mid	QPSK	22.81	24.81
Band4	3	20175	1	#Max	QPSK	22.84	24.84
Band4	3	20175	8	#0	QPSK	21.74	23.74
Band4	3	20175	8	#Mid	QPSK	21.81	23.81
Band4	3	20175	8	#Max	QPSK	21.71	23.71
Band4	3	20175	15	#0	QPSK	21.77	23.77
Band4	3	20175	1	#0	16QAM	21.38	23.38
Band4	3	20175	1	#Mid	16QAM	21.29	23.29
Band4	3	20175	1	#Max	16QAM	21.5	23.5
Band4	3	20175	8	#0	16QAM	20.39	22.39
Band4	3	20175	8	#Mid	16QAM	20.46	22.46
Band4	3	20175	8	#Max	16QAM	20.37	22.37
Band4	3	20175	15	#0	16QAM	20.57	22.57
Band4	3	20385	1	#0	QPSK	22.64	24.64
Band4	3	20385	1	#Mid	QPSK	22.71	24.71
Band4	3	20385	1	#Max	QPSK	22.67	24.67
Band4	3	20385	8	#0	QPSK	21.78	23.78
Band4	3	20385	8	#Mid	QPSK	21.88	23.88
Band4	3	20385	8	#Max	QPSK	21.73	23.73
Band4	3	20385	15	#0	QPSK	21.84	23.84
Band4	3	20385	1	#0	16QAM	21.5	23.5
Band4	3	20385	1	#Mid	16QAM	21.45	23.45
Band4	3	20385	1	#Max	16QAM	21.49	23.49
Band4	3	20385	8	#0	16QAM	20.6	22.6
Band4	3	20385	8	#Mid	16QAM	20.86	22.86
Band4	3	20385	8	#Max	16QAM	20.87	22.87
Band4	3	20385	15	#0	16QAM	20.67	22.67
Band4	5	19975	1	#0	QPSK	22.56	24.56

Band4	5	19975	1	#Mid	QPSK	22.42	24.42
Band4	5	19975	1	#Max	QPSK	22.41	24.41
Band4	5	19975	12	#0	QPSK	21.51	23.51
Band4	5	19975	12	#Mid	QPSK	21.53	23.53
Band4	5	19975	12	#Max	QPSK	21.47	23.47
Band4	5	19975	25	#0	QPSK	21.53	23.53
Band4	5	19975	1	#0	16QAM	21.34	23.34
Band4	5	19975	1	#Mid	16QAM	21.23	23.23
Band4	5	19975	1	#Max	16QAM	21.44	23.44
Band4	5	19975	12	#0	16QAM	20.36	22.36
Band4	5	19975	12	#Mid	16QAM	20.37	22.37
Band4	5	19975	12	#Max	16QAM	20.41	22.41
Band4	5	19975	25	#0	16QAM	20.55	22.55
Band4	5	20175	1	#0	QPSK	22.66	24.66
Band4	5	20175	1	#Mid	QPSK	22.57	24.57
Band4	5	20175	1	#Max	QPSK	22.67	24.67
Band4	5	20175	12	#0	QPSK	21.58	23.58
Band4	5	20175	12	#Mid	QPSK	21.58	23.58
Band4	5	20175	12	#Max	QPSK	21.61	23.61
Band4	5	20175	25	#0	QPSK	21.64	23.64
Band4	5	20175	1	#0	16QAM	21.43	23.43
Band4	5	20175	1	#Mid	16QAM	21.28	23.28
Band4	5	20175	1	#Max	16QAM	21.48	23.48
Band4	5	20175	12	#0	16QAM	20.39	22.39
Band4	5	20175	12	#Mid	16QAM	20.47	22.47
Band4	5	20175	12	#Max	16QAM	20.5	22.5
Band4	5	20175	25	#0	16QAM	20.65	22.65
Band4	5	20375	1	#0	QPSK	22.71	24.71
Band4	5	20375	1	#Mid	QPSK	22.7	24.7
Band4	5	20375	1	#Max	QPSK	22.77	24.77
Band4	5	20375	12	#0	QPSK	21.86	23.86
Band4	5	20375	12	#Mid	QPSK	21.77	23.77
Band4	5	20375	12	#Max	QPSK	21.83	23.83
Band4	5	20375	25	#0	QPSK	21.81	23.81
Band4	5	20375	1	#0	16QAM	21.86	23.86
Band4	5	20375	1	#Mid	16QAM	21.83	23.83
Band4	5	20375	1	#Max	16QAM	21.71	23.71
Band4	5	20375	12	#0	16QAM	20.82	22.82
Band4	5	20375	12	#Mid	16QAM	20.81	22.81
Band4	5	20375	12	#Max	16QAM	20.86	22.86
Band4	5	20375	25	#0	16QAM	20.78	22.78
Band4	10	20000	1	#0	QPSK	22.54	24.54
Band4	10	20000	1	#Mid	QPSK	22.67	24.67
Band4	10	20000	1	#Max	QPSK	22.62	24.62

Band4	10	20000	25	#0	QPSK	21.61	23.61
Band4	10	20000	25	#Mid	QPSK	21.63	23.63
Band4	10	20000	25	#Max	QPSK	21.48	23.48
Band4	10	20000	50	#0	QPSK	21.64	23.64
Band4	10	20000	1	#0	16QAM	21.37	23.37
Band4	10	20000	1	#Mid	16QAM	21.52	23.52
Band4	10	20000	1	#Max	16QAM	21.41	23.41
Band4	10	20000	25	#0	16QAM	20.61	22.61
Band4	10	20000	25	#Mid	16QAM	20.65	22.65
Band4	10	20000	25	#Max	16QAM	20.59	22.59
Band4	10	20000	50	#0	16QAM	20.65	22.65
Band4	10	20175	1	#0	QPSK	22.61	24.61
Band4	10	20175	1	#Mid	QPSK	22.84	24.84
Band4	10	20175	1	#Max	QPSK	22.7	24.7
Band4	10	20175	25	#0	QPSK	21.64	23.64
Band4	10	20175	25	#Mid	QPSK	21.75	23.75
Band4	10	20175	25	#Max	QPSK	21.68	23.68
Band4	10	20175	50	#0	QPSK	21.66	23.66
Band4	10	20175	1	#0	16QAM	21.2	23.2
Band4	10	20175	1	#Mid	16QAM	21.58	23.58
Band4	10	20175	1	#Max	16QAM	21.38	23.38
Band4	10	20175	25	#0	16QAM	20.55	22.55
Band4	10	20175	25	#Mid	16QAM	20.57	22.57
Band4	10	20175	25	#Max	16QAM	20.48	22.48
Band4	10	20175	50	#0	16QAM	20.46	22.46
Band4	10	20350	1	#0	QPSK	22.69	24.69
Band4	10	20350	1	#Mid	QPSK	22.84	24.84
Band4	10	20350	1	#Max	QPSK	22.84	24.84
Band4	10	20350	25	#0	QPSK	21.61	23.61
Band4	10	20350	25	#Mid	QPSK	21.73	23.73
Band4	10	20350	25	#Max	QPSK	21.62	23.62
Band4	10	20350	50	#0	QPSK	21.61	23.61
Band4	10	20350	1	#0	16QAM	21.4	23.4
Band4	10	20350	1	#Mid	16QAM	21.65	23.65
Band4	10	20350	1	#Max	16QAM	21.62	23.62
Band4	10	20350	25	#0	16QAM	20.54	22.54
Band4	10	20350	25	#Mid	16QAM	20.59	22.59
Band4	10	20350	25	#Max	16QAM	20.65	22.65
Band4	10	20350	50	#0	16QAM	20.63	22.63
Band4	15	20025	1	#0	QPSK	22.59	24.59
Band4	15	20025	1	#Mid	QPSK	22.47	24.47
Band4	15	20025	1	#Max	QPSK	22.62	24.62
Band4	15	20025	36	#0	QPSK	21.54	23.54
Band4	15	20025	36	#Mid	QPSK	21.51	23.51

Band4	15	20025	36	#Max	QPSK	21.43	23.43
Band4	15	20025	75	#0	QPSK	21.42	23.42
Band4	15	20025	1	#0	16QAM	21.27	23.27
Band4	15	20025	1	#Mid	16QAM	21.23	23.23
Band4	15	20025	1	#Max	16QAM	21.38	23.38
Band4	15	20025	36	#0	16QAM	20.55	22.55
Band4	15	20025	36	#Mid	16QAM	20.6	22.6
Band4	15	20025	36	#Max	16QAM	20.53	22.53
Band4	15	20025	75	#0	16QAM	20.51	22.51
Band4	15	20175	1	#0	QPSK	22.5	24.5
Band4	15	20175	1	#Mid	QPSK	22.68	24.68
Band4	15	20175	1	#Max	QPSK	22.66	24.66
Band4	15	20175	36	#0	QPSK	21.56	23.56
Band4	15	20175	36	#Mid	QPSK	21.55	23.55
Band4	15	20175	36	#Max	QPSK	21.53	23.53
Band4	15	20175	75	#0	QPSK	21.57	23.57
Band4	15	20175	1	#0	16QAM	21.48	23.48
Band4	15	20175	1	#Mid	16QAM	21.25	23.25
Band4	15	20175	1	#Max	16QAM	21.36	23.36
Band4	15	20175	36	#0	16QAM	20.36	22.36
Band4	15	20175	36	#Mid	16QAM	20.53	22.53
Band4	15	20175	36	#Max	16QAM	20.51	22.51
Band4	15	20175	75	#0	16QAM	20.45	22.45
Band4	15	20325	1	#0	QPSK	22.69	24.69
Band4	15	20325	1	#Mid	QPSK	22.66	24.66
Band4	15	20325	1	#Max	QPSK	22.67	24.67
Band4	15	20325	36	#0	QPSK	21.59	23.59
Band4	15	20325	36	#Mid	QPSK	21.52	23.52
Band4	15	20325	36	#Max	QPSK	21.65	23.65
Band4	15	20325	75	#0	QPSK	21.59	23.59
Band4	15	20325	1	#0	16QAM	21.52	23.52
Band4	15	20325	1	#Mid	16QAM	21.47	23.47
Band4	15	20325	1	#Max	16QAM	21.47	23.47
Band4	15	20325	36	#0	16QAM	20.55	22.55
Band4	15	20325	36	#Mid	16QAM	20.6	22.6
Band4	15	20325	36	#Max	16QAM	20.59	22.59
Band4	15	20325	75	#0	16QAM	20.69	22.69
Band4	20	20050	1	#0	QPSK	22.47	24.47
Band4	20	20050	1	#Mid	QPSK	22.52	24.52
Band4	20	20050	1	#Max	QPSK	22.53	24.53
Band4	20	20050	50	#0	QPSK	21.45	23.45
Band4	20	20050	50	#Mid	QPSK	21.44	23.44
Band4	20	20050	50	#Max	QPSK	21.41	23.41
Band4	20	20050	100	#0	QPSK	21.45	23.45

Band4	20	20050	1	#0	16QAM	21.31	23.31
Band4	20	20050	1	#Mid	16QAM	21.41	23.41
Band4	20	20050	1	#Max	16QAM	21.2	23.2
Band4	20	20050	50	#0	16QAM	20.38	22.38
Band4	20	20050	50	#Mid	16QAM	20.54	22.54
Band4	20	20050	50	#Max	16QAM	20.62	22.62
Band4	20	20050	100	#0	16QAM	20.65	22.65
Band4	20	20175	1	#0	QPSK	22.5	24.5
Band4	20	20175	1	#Mid	QPSK	22.74	24.74
Band4	20	20175	1	#Max	QPSK	22.74	24.74
Band4	20	20175	50	#0	QPSK	21.55	23.55
Band4	20	20175	50	#Mid	QPSK	21.5	23.5
Band4	20	20175	50	#Max	QPSK	21.45	23.45
Band4	20	20175	100	#0	QPSK	21.43	23.43
Band4	20	20175	1	#0	16QAM	21.31	23.31
Band4	20	20175	1	#Mid	16QAM	21.5	23.5
Band4	20	20175	1	#Max	16QAM	21.31	23.31
Band4	20	20175	50	#0	16QAM	20.41	22.41
Band4	20	20175	50	#Mid	16QAM	20.59	22.59
Band4	20	20175	50	#Max	16QAM	20.55	22.55
Band4	20	20175	100	#0	16QAM	20.5	22.5
Band4	20	20300	1	#0	QPSK	22.71	24.71
Band4	20	20300	1	#Mid	QPSK	22.79	24.79
Band4	20	20300	1	#Max	QPSK	22.77	24.77
Band4	20	20300	50	#0	QPSK	21.69	23.69
Band4	20	20300	50	#Mid	QPSK	21.59	23.59
Band4	20	20300	50	#Max	QPSK	21.42	23.42
Band4	20	20300	100	#0	QPSK	21.59	23.59
Band4	20	20300	1	#0	16QAM	21.51	23.51
Band4	20	20300	1	#Mid	16QAM	21.41	23.41
Band4	20	20300	1	#Max	16QAM	21.4	23.4
Band4	20	20300	50	#0	16QAM	20.6	22.6
Band4	20	20300	50	#Mid	16QAM	20.69	22.69
Band4	20	20300	50	#Max	16QAM	20.52	22.52
Band4	20	20300	100	#0	16QAM	20.58	22.58

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	ERP (dBm)
Band12	1.4	23017	1	#0	QPSK	22.44	24.24
Band12	1.4	23017	1	#Mid	QPSK	22.94	24.74
Band12	1.4	23017	1	#Max	QPSK	22.91	24.71
Band12	1.4	23017	3	#0	QPSK	22.37	24.17
Band12	1.4	23017	3	#Mid	QPSK	22.45	24.25
Band12	1.4	23017	3	#Max	QPSK	22.55	24.35
Band12	1.4	23017	6	#0	QPSK	21.35	23.15
Band12	1.4	23017	1	#0	16QAM	21.27	23.07
Band12	1.4	23017	1	#Mid	16QAM	21.56	23.36
Band12	1.4	23017	1	#Max	16QAM	21.47	23.27
Band12	1.4	23017	3	#0	16QAM	21.33	23.13
Band12	1.4	23017	3	#Mid	16QAM	21.52	23.32
Band12	1.4	23017	3	#Max	16QAM	21.35	23.15
Band12	1.4	23017	6	#0	16QAM	20.46	22.26
Band12	1.4	23095	1	#0	QPSK	22.28	24.08
Band12	1.4	23095	1	#Mid	QPSK	22.52	24.32
Band12	1.4	23095	1	#Max	QPSK	22.69	24.49
Band12	1.4	23095	3	#0	QPSK	22.64	24.44
Band12	1.4	23095	3	#Mid	QPSK	22.65	24.45
Band12	1.4	23095	3	#Max	QPSK	22.71	24.51
Band12	1.4	23095	6	#0	QPSK	21.74	23.54
Band12	1.4	23095	1	#0	16QAM	21.55	23.35
Band12	1.4	23095	1	#Mid	16QAM	21.76	23.56
Band12	1.4	23095	1	#Max	16QAM	21.75	23.55
Band12	1.4	23095	3	#0	16QAM	21.57	23.37
Band12	1.4	23095	3	#Mid	16QAM	21.68	23.48
Band12	1.4	23095	3	#Max	16QAM	21.6	23.4
Band12	1.4	23095	6	#0	16QAM	20.66	22.46
Band12	1.4	23173	1	#0	QPSK	22.59	24.39
Band12	1.4	23173	1	#Mid	QPSK	22.85	24.65
Band12	1.4	23173	1	#Max	QPSK	22.72	24.52
Band12	1.4	23173	3	#0	QPSK	22.63	24.43
Band12	1.4	23173	3	#Mid	QPSK	22.52	24.32
Band12	1.4	23173	3	#Max	QPSK	22.59	24.39
Band12	1.4	23173	6	#0	QPSK	21.62	23.42
Band12	1.4	23173	1	#0	16QAM	21.63	23.43
Band12	1.4	23173	1	#Mid	16QAM	21.69	23.49
Band12	1.4	23173	1	#Max	16QAM	21.49	23.29
Band12	1.4	23173	3	#0	16QAM	21.48	23.28
Band12	1.4	23173	3	#Mid	16QAM	21.56	23.36
Band12	1.4	23173	3	#Max	16QAM	21.46	23.26

Band12	1.4	23173	6	#0	16QAM	20.56	22.36
Band12	3	23025	1	#0	QPSK	22.54	24.34
Band12	3	23025	1	#Mid	QPSK	22.69	24.49
Band12	3	23025	1	#Max	QPSK	22.68	24.48
Band12	3	23025	8	#0	QPSK	21.49	23.29
Band12	3	23025	8	#Mid	QPSK	21.57	23.37
Band12	3	23025	8	#Max	QPSK	21.62	23.42
Band12	3	23025	15	#0	QPSK	21.47	23.27
Band12	3	23025	1	#0	16QAM	21.34	23.14
Band12	3	23025	1	#Mid	16QAM	21.07	22.87
Band12	3	23025	1	#Max	16QAM	21.41	23.21
Band12	3	23025	8	#0	16QAM	20.39	22.19
Band12	3	23025	8	#Mid	16QAM	20.62	22.42
Band12	3	23025	8	#Max	16QAM	20.59	22.39
Band12	3	23025	15	#0	16QAM	20.88	22.68
Band12	3	23095	1	#0	QPSK	22.83	24.63
Band12	3	23095	1	#Mid	QPSK	22.82	24.62
Band12	3	23095	1	#Max	QPSK	22.82	24.62
Band12	3	23095	8	#0	QPSK	21.7	23.5
Band12	3	23095	8	#Mid	QPSK	21.79	23.59
Band12	3	23095	8	#Max	QPSK	21.85	23.65
Band12	3	23095	15	#0	QPSK	21.97	23.77
Band12	3	23095	1	#0	16QAM	22.18	23.98
Band12	3	23095	1	#Mid	16QAM	21.72	23.52
Band12	3	23095	1	#Max	16QAM	21.62	23.42
Band12	3	23095	8	#0	16QAM	20.93	22.73
Band12	3	23095	8	#Mid	16QAM	20.91	22.71
Band12	3	23095	8	#Max	16QAM	20.76	22.56
Band12	3	23095	15	#0	16QAM	20.88	22.68
Band12	3	23165	1	#0	QPSK	22.88	24.68
Band12	3	23165	1	#Mid	QPSK	22.71	24.51
Band12	3	23165	1	#Max	QPSK	22.95	24.75
Band12	3	23165	8	#0	QPSK	21.9	23.7
Band12	3	23165	8	#Mid	QPSK	21.93	23.73
Band12	3	23165	8	#Max	QPSK	21.8	23.6
Band12	3	23165	15	#0	QPSK	21.89	23.69
Band12	3	23165	1	#0	16QAM	21.61	23.41
Band12	3	23165	1	#Mid	16QAM	21.56	23.36
Band12	3	23165	1	#Max	16QAM	21.81	23.61
Band12	3	23165	8	#0	16QAM	20.64	22.44
Band12	3	23165	8	#Mid	16QAM	20.66	22.46
Band12	3	23165	8	#Max	16QAM	20.75	22.55
Band12	3	23165	15	#0	16QAM	20.87	22.67
Band12	5	23035	1	#0	QPSK	22.71	24.51

Band12	5	23035	1	#Mid	QPSK	22.8	24.6
Band12	5	23035	1	#Max	QPSK	22.76	24.56
Band12	5	23035	12	#0	QPSK	21.8	23.6
Band12	5	23035	12	#Mid	QPSK	21.8	23.6
Band12	5	23035	12	#Max	QPSK	21.79	23.59
Band12	5	23035	25	#0	QPSK	21.76	23.56
Band12	5	23035	1	#0	16QAM	22.16	23.96
Band12	5	23035	1	#Mid	16QAM	21.77	23.57
Band12	5	23035	1	#Max	16QAM	21.6	23.4
Band12	5	23035	12	#0	16QAM	20.84	22.64
Band12	5	23035	12	#Mid	16QAM	20.72	22.52
Band12	5	23035	12	#Max	16QAM	20.82	22.62
Band12	5	23035	25	#0	16QAM	20.98	22.78
Band12	5	23095	1	#0	QPSK	22.99	24.79
Band12	5	23095	1	#Mid	QPSK	22.84	24.64
Band12	5	23095	1	#Max	QPSK	22.89	24.69
Band12	5	23095	12	#0	QPSK	21.9	23.7
Band12	5	23095	12	#Mid	QPSK	21.83	23.63
Band12	5	23095	12	#Max	QPSK	21.8	23.6
Band12	5	23095	25	#0	QPSK	21.93	23.73
Band12	5	23095	1	#0	16QAM	21.7	23.5
Band12	5	23095	1	#Mid	16QAM	21.68	23.48
Band12	5	23095	1	#Max	16QAM	21.4	23.2
Band12	5	23095	12	#0	16QAM	20.86	22.66
Band12	5	23095	12	#Mid	16QAM	20.95	22.75
Band12	5	23095	12	#Max	16QAM	20.88	22.68
Band12	5	23095	25	#0	16QAM	20.77	22.57
Band12	5	23155	1	#0	QPSK	22.85	24.65
Band12	5	23155	1	#Mid	QPSK	22.81	24.61
Band12	5	23155	1	#Max	QPSK	22.88	24.68
Band12	5	23155	12	#0	QPSK	21.99	23.79
Band12	5	23155	12	#Mid	QPSK	21.78	23.58
Band12	5	23155	12	#Max	QPSK	21.72	23.52
Band12	5	23155	25	#0	QPSK	21.78	23.58
Band12	5	23155	1	#0	16QAM	21.65	23.45
Band12	5	23155	1	#Mid	16QAM	21.44	23.24
Band12	5	23155	1	#Max	16QAM	21.55	23.35
Band12	5	23155	12	#0	16QAM	20.87	22.67
Band12	5	23155	12	#Mid	16QAM	20.77	22.57
Band12	5	23155	12	#Max	16QAM	20.72	22.52
Band12	5	23155	25	#0	16QAM	20.78	22.58
Band12	10	23060	1	#0	QPSK	22.71	24.51
Band12	10	23060	1	#Mid	QPSK	22.95	24.75
Band12	10	23060	1	#Max	QPSK	22.79	24.59

Band12	10	23060	25	#0	QPSK	21.89	23.69
Band12	10	23060	25	#Mid	QPSK	21.84	23.64
Band12	10	23060	25	#Max	QPSK	21.8	23.6
Band12	10	23060	50	#0	QPSK	21.88	23.68
Band12	10	23060	1	#0	16QAM	21.64	23.44
Band12	10	23060	1	#Mid	16QAM	21.89	23.69
Band12	10	23060	1	#Max	16QAM	21.58	23.38
Band12	10	23060	25	#0	16QAM	20.81	22.61
Band12	10	23060	25	#Mid	16QAM	20.92	22.72
Band12	10	23060	25	#Max	16QAM	20.94	22.74
Band12	10	23060	50	#0	16QAM	20.81	22.61
Band12	10	23095	1	#0	QPSK	22.77	24.57
Band12	10	23095	1	#Mid	QPSK	22.89	24.69
Band12	10	23095	1	#Max	QPSK	22.91	24.71
Band12	10	23095	25	#0	QPSK	21.9	23.7
Band12	10	23095	25	#Mid	QPSK	21.81	23.61
Band12	10	23095	25	#Max	QPSK	21.77	23.57
Band12	10	23095	50	#0	QPSK	21.9	23.7
Band12	10	23095	1	#0	16QAM	21.8	23.6
Band12	10	23095	1	#Mid	16QAM	21.9	23.7
Band12	10	23095	1	#Max	16QAM	21.52	23.32
Band12	10	23095	25	#0	16QAM	20.78	22.58
Band12	10	23095	25	#Mid	16QAM	20.8	22.6
Band12	10	23095	25	#Max	16QAM	20.72	22.52
Band12	10	23095	50	#0	16QAM	21.03	22.83
Band12	10	23130	1	#0	QPSK	22.84	24.64
Band12	10	23130	1	#Mid	QPSK	23	24.8
Band12	10	23130	1	#Max	QPSK	22.7	24.5
Band12	10	23130	25	#0	QPSK	21.99	23.79
Band12	10	23130	25	#Mid	QPSK	21.83	23.63
Band12	10	23130	25	#Max	QPSK	21.75	23.55
Band12	10	23130	50	#0	QPSK	21.81	23.61
Band12	10	23130	1	#0	16QAM	22.04	23.84
Band12	10	23130	1	#Mid	16QAM	22.17	23.97
Band12	10	23130	1	#Max	16QAM	21.99	23.79
Band12	10	23130	25	#0	16QAM	20.75	22.55
Band12	10	23130	25	#Mid	16QAM	20.71	22.51
Band12	10	23130	25	#Max	16QAM	20.69	22.49
Band12	10	23130	50	#0	16QAM	20.54	22.34

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	ERP (dBm)
Band13	5	23205	1	#0	QPSK	22.71	25.01
Band13	5	23205	1	#Mid	QPSK	22.97	25.27
Band13	5	23205	1	#Max	QPSK	22.78	25.08
Band13	5	23205	12	#0	QPSK	21.95	24.25
Band13	5	23205	12	#Mid	QPSK	21.97	24.27
Band13	5	23205	12	#Max	QPSK	21.87	24.17
Band13	5	23205	25	#0	QPSK	21.95	24.25
Band13	5	23205	1	#0	16QAM	21.58	23.88
Band13	5	23205	1	#Mid	16QAM	21.47	23.77
Band13	5	23205	1	#Max	16QAM	21.45	23.75
Band13	5	23205	12	#0	16QAM	20.75	23.05
Band13	5	23205	12	#Mid	16QAM	20.75	23.05
Band13	5	23205	12	#Max	16QAM	20.67	22.97
Band13	5	23205	25	#0	16QAM	21.13	23.43
Band13	5	23230	1	#0	QPSK	22.8	25.1
Band13	5	23230	1	#Mid	QPSK	23.01	25.31
Band13	5	23230	1	#Max	QPSK	22.9	25.2
Band13	5	23230	12	#0	QPSK	21.86	24.16
Band13	5	23230	12	#Mid	QPSK	21.96	24.26
Band13	5	23230	12	#Max	QPSK	21.9	24.2
Band13	5	23230	25	#0	QPSK	21.89	24.19
Band13	5	23230	1	#0	16QAM	21.81	24.11
Band13	5	23230	1	#Mid	16QAM	21.6	23.9
Band13	5	23230	1	#Max	16QAM	21.49	23.79
Band13	5	23230	12	#0	16QAM	20.62	22.92
Band13	5	23230	12	#Mid	16QAM	20.7	23
Band13	5	23230	12	#Max	16QAM	20.63	22.93
Band13	5	23230	25	#0	16QAM	20.78	23.08
Band13	5	23255	1	#0	QPSK	22.85	25.15
Band13	5	23255	1	#Mid	QPSK	23.02	25.32
Band13	5	23255	1	#Max	QPSK	22.92	25.22
Band13	5	23255	12	#0	QPSK	21.79	24.09
Band13	5	23255	12	#Mid	QPSK	21.93	24.23
Band13	5	23255	12	#Max	QPSK	21.87	24.17
Band13	5	23255	25	#0	QPSK	21.82	24.12
Band13	5	23255	1	#0	16QAM	21.59	23.89
Band13	5	23255	1	#Mid	16QAM	21.7	24
Band13	5	23255	1	#Max	16QAM	21.5	23.8
Band13	5	23255	12	#0	16QAM	20.68	22.98
Band13	5	23255	12	#Mid	16QAM	20.73	23.03
Band13	5	23255	12	#Max	16QAM	20.66	22.96

Band13	5	23255	25	#0	16QAM	20.71	23.01
Band13	10	23230	1	#0	QPSK	22.91	25.21
Band13	10	23230	1	#Mid	QPSK	23.15	25.45
Band13	10	23230	1	#Max	QPSK	22.75	25.05
Band13	10	23230	25	#0	QPSK	21.91	24.21
Band13	10	23230	25	#Mid	QPSK	22.02	24.32
Band13	10	23230	25	#Max	QPSK	21.85	24.15
Band13	10	23230	50	#0	QPSK	21.83	24.13
Band13	10	23230	1	#0	16QAM	21.88	24.18
Band13	10	23230	1	#Mid	16QAM	21.87	24.17
Band13	10	23230	1	#Max	16QAM	21.53	23.83
Band13	10	23230	25	#0	16QAM	20.97	23.27
Band13	10	23230	25	#Mid	16QAM	20.99	23.29
Band13	10	23230	25	#Max	16QAM	20.83	23.13
Band13	10	23230	50	#0	16QAM	20.9	23.2

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)
Band66	1.4	131979	1	#0	QPSK	22.56	24.56
Band66	1.4	131979	1	#Mid	QPSK	22.73	24.73
Band66	1.4	131979	1	#Max	QPSK	22.61	24.61
Band66	1.4	131979	3	#0	QPSK	22.55	24.55
Band66	1.4	131979	3	#Mid	QPSK	22.61	24.61
Band66	1.4	131979	3	#Max	QPSK	22.69	24.69
Band66	1.4	131979	6	#0	QPSK	21.61	23.61
Band66	1.4	131979	1	#0	16QAM	21.46	23.46
Band66	1.4	131979	1	#Mid	16QAM	21.68	23.68
Band66	1.4	131979	1	#Max	16QAM	21.5	23.5
Band66	1.4	131979	3	#0	16QAM	21.34	23.34
Band66	1.4	131979	3	#Mid	16QAM	21.44	23.44
Band66	1.4	131979	3	#Max	16QAM	21.45	23.45
Band66	1.4	131979	6	#0	16QAM	20.48	22.48
Band66	1.4	132322	1	#0	QPSK	22.7	24.7
Band66	1.4	132322	1	#Mid	QPSK	22.88	24.88
Band66	1.4	132322	1	#Max	QPSK	22.74	24.74
Band66	1.4	132322	3	#0	QPSK	22.78	24.78
Band66	1.4	132322	3	#Mid	QPSK	22.85	24.85
Band66	1.4	132322	3	#Max	QPSK	22.73	24.73
Band66	1.4	132322	6	#0	QPSK	21.87	23.87
Band66	1.4	132322	1	#0	16QAM	21.74	23.74
Band66	1.4	132322	1	#Mid	16QAM	22	24
Band66	1.4	132322	1	#Max	16QAM	21.69	23.69
Band66	1.4	132322	3	#0	16QAM	21.6	23.6
Band66	1.4	132322	3	#Mid	16QAM	21.64	23.64

Band66	1.4	132322	3	#Max	16QAM	21.62	23.62
Band66	1.4	132322	6	#0	16QAM	20.77	22.77
Band66	1.4	132665	1	#0	QPSK	22.59	24.59
Band66	1.4	132665	1	#Mid	QPSK	22.75	24.75
Band66	1.4	132665	1	#Max	QPSK	22.6	24.6
Band66	1.4	132665	3	#0	QPSK	22.62	24.62
Band66	1.4	132665	3	#Mid	QPSK	22.58	24.58
Band66	1.4	132665	3	#Max	QPSK	22.66	24.66
Band66	1.4	132665	6	#0	QPSK	21.78	23.78
Band66	1.4	132665	1	#0	16QAM	21.63	23.63
Band66	1.4	132665	1	#Mid	16QAM	21.78	23.78
Band66	1.4	132665	1	#Max	16QAM	21.47	23.47
Band66	1.4	132665	3	#0	16QAM	21.69	23.69
Band66	1.4	132665	3	#Mid	16QAM	21.52	23.52
Band66	1.4	132665	3	#Max	16QAM	21.88	23.88
Band66	1.4	132665	6	#0	16QAM	20.91	22.91
Band66	3	131987	1	#0	QPSK	22.64	24.64
Band66	3	131987	1	#Mid	QPSK	22.68	24.68
Band66	3	131987	1	#Max	QPSK	22.71	24.71
Band66	3	131987	8	#0	QPSK	21.64	23.64
Band66	3	131987	8	#Mid	QPSK	21.62	23.62
Band66	3	131987	8	#Max	QPSK	21.61	23.61
Band66	3	131987	15	#0	QPSK	21.59	23.59
Band66	3	131987	1	#0	16QAM	21.83	23.83
Band66	3	131987	1	#Mid	16QAM	21.92	23.92
Band66	3	131987	1	#Max	16QAM	21.89	23.89
Band66	3	131987	8	#0	16QAM	20.78	22.78
Band66	3	131987	8	#Mid	16QAM	20.78	22.78
Band66	3	131987	8	#Max	16QAM	20.76	22.76
Band66	3	131987	15	#0	16QAM	20.7	22.7
Band66	3	132322	1	#0	QPSK	22.81	24.81
Band66	3	132322	1	#Mid	QPSK	22.78	24.78
Band66	3	132322	1	#Max	QPSK	22.67	24.67
Band66	3	132322	8	#0	QPSK	21.82	23.82
Band66	3	132322	8	#Mid	QPSK	21.84	23.84
Band66	3	132322	8	#Max	QPSK	21.75	23.75
Band66	3	132322	15	#0	QPSK	21.79	23.79
Band66	3	132322	1	#0	16QAM	21.77	23.77
Band66	3	132322	1	#Mid	16QAM	21.72	23.72
Band66	3	132322	1	#Max	16QAM	21.67	23.67
Band66	3	132322	8	#0	16QAM	20.62	22.62
Band66	3	132322	8	#Mid	16QAM	20.74	22.74
Band66	3	132322	8	#Max	16QAM	20.79	22.79
Band66	3	132322	15	#0	16QAM	20.89	22.89

Band66	3	132657	1	#0	QPSK	22.85	24.85
Band66	3	132657	1	#Mid	QPSK	22.6	24.6
Band66	3	132657	1	#Max	QPSK	22.61	24.61
Band66	3	132657	8	#0	QPSK	21.87	23.87
Band66	3	132657	8	#Mid	QPSK	21.73	23.73
Band66	3	132657	8	#Max	QPSK	21.68	23.68
Band66	3	132657	15	#0	QPSK	21.79	23.79
Band66	3	132657	1	#0	16QAM	21.58	23.58
Band66	3	132657	1	#Mid	16QAM	21.43	23.43
Band66	3	132657	1	#Max	16QAM	21.5	23.5
Band66	3	132657	8	#0	16QAM	20.97	22.97
Band66	3	132657	8	#Mid	16QAM	20.83	22.83
Band66	3	132657	8	#Max	16QAM	20.89	22.89
Band66	3	132657	15	#0	16QAM	20.85	22.85
Band66	5	131997	1	#0	QPSK	22.53	24.53
Band66	5	131997	1	#Mid	QPSK	22.67	24.67
Band66	5	131997	1	#Max	QPSK	22.6	24.6
Band66	5	131997	12	#0	QPSK	21.65	23.65
Band66	5	131997	12	#Mid	QPSK	21.65	23.65
Band66	5	131997	12	#Max	QPSK	21.57	23.57
Band66	5	131997	25	#0	QPSK	21.56	23.56
Band66	5	131997	1	#0	16QAM	21.41	23.41
Band66	5	131997	1	#Mid	16QAM	21.7	23.7
Band66	5	131997	1	#Max	16QAM	21.3	23.3
Band66	5	131997	12	#0	16QAM	20.51	22.51
Band66	5	131997	12	#Mid	16QAM	20.57	22.57
Band66	5	131997	12	#Max	16QAM	20.6	22.6
Band66	5	131997	25	#0	16QAM	20.58	22.58
Band66	5	132322	1	#0	QPSK	22.85	24.85
Band66	5	132322	1	#Mid	QPSK	22.81	24.81
Band66	5	132322	1	#Max	QPSK	22.76	24.76
Band66	5	132322	12	#0	QPSK	21.85	23.85
Band66	5	132322	12	#Mid	QPSK	21.84	23.84
Band66	5	132322	12	#Max	QPSK	21.68	23.68
Band66	5	132322	25	#0	QPSK	21.68	23.68
Band66	5	132322	1	#0	16QAM	21.73	23.73
Band66	5	132322	1	#Mid	16QAM	22.01	24.01
Band66	5	132322	1	#Max	16QAM	21.83	23.83
Band66	5	132322	12	#0	16QAM	20.75	22.75
Band66	5	132322	12	#Mid	16QAM	20.75	22.75
Band66	5	132322	12	#Max	16QAM	20.7	22.7
Band66	5	132322	25	#0	16QAM	20.67	22.67
Band66	5	132647	1	#0	QPSK	22.78	24.78
Band66	5	132647	1	#Mid	QPSK	22.78	24.78

Band66	5	132647	1	#Max	QPSK	22.7	24.7
Band66	5	132647	12	#0	QPSK	21.88	23.88
Band66	5	132647	12	#Mid	QPSK	21.85	23.85
Band66	5	132647	12	#Max	QPSK	21.76	23.76
Band66	5	132647	25	#0	QPSK	21.82	23.82
Band66	5	132647	1	#0	16QAM	22.05	24.05
Band66	5	132647	1	#Mid	16QAM	21.55	23.55
Band66	5	132647	1	#Max	16QAM	21.39	23.39
Band66	5	132647	12	#0	16QAM	20.72	22.72
Band66	5	132647	12	#Mid	16QAM	20.74	22.74
Band66	5	132647	12	#Max	16QAM	20.75	22.75
Band66	5	132647	25	#0	16QAM	20.85	22.85
Band66	10	132022	1	#0	QPSK	22.7	24.7
Band66	10	132022	1	#Mid	QPSK	22.88	24.88
Band66	10	132022	1	#Max	QPSK	22.65	24.65
Band66	10	132022	25	#0	QPSK	21.76	23.76
Band66	10	132022	25	#Mid	QPSK	21.7	23.7
Band66	10	132022	25	#Max	QPSK	21.72	23.72
Band66	10	132022	50	#0	QPSK	21.7	23.7
Band66	10	132022	1	#0	16QAM	21.45	23.45
Band66	10	132022	1	#Mid	16QAM	21.72	23.72
Band66	10	132022	1	#Max	16QAM	21.32	23.32
Band66	10	132022	25	#0	16QAM	20.68	22.68
Band66	10	132022	25	#Mid	16QAM	20.72	22.72
Band66	10	132022	25	#Max	16QAM	20.73	22.73
Band66	10	132022	50	#0	16QAM	20.81	22.81
Band66	10	132322	1	#0	QPSK	23.04	25.04
Band66	10	132322	1	#Mid	QPSK	23.04	25.04
Band66	10	132322	1	#Max	QPSK	22.84	24.84
Band66	10	132322	25	#0	QPSK	21.93	23.93
Band66	10	132322	25	#Mid	QPSK	21.83	23.83
Band66	10	132322	25	#Max	QPSK	21.67	23.67
Band66	10	132322	50	#0	QPSK	21.76	23.76
Band66	10	132322	1	#0	16QAM	21.76	23.76
Band66	10	132322	1	#Mid	16QAM	21.65	23.65
Band66	10	132322	1	#Max	16QAM	21.54	23.54
Band66	10	132322	25	#0	16QAM	21.02	23.02
Band66	10	132322	25	#Mid	16QAM	20.84	22.84
Band66	10	132322	25	#Max	16QAM	20.68	22.68
Band66	10	132322	50	#0	16QAM	20.85	22.85
Band66	10	132622	1	#0	QPSK	22.65	24.65
Band66	10	132622	1	#Mid	QPSK	22.89	24.89
Band66	10	132622	1	#Max	QPSK	22.67	24.67
Band66	10	132622	25	#0	QPSK	21.68	23.68

Band66	10	132622	25	#Mid	QPSK	21.8	23.8
Band66	10	132622	25	#Max	QPSK	21.76	23.76
Band66	10	132622	50	#0	QPSK	21.74	23.74
Band66	10	132622	1	#0	16QAM	21.55	23.55
Band66	10	132622	1	#Mid	16QAM	21.78	23.78
Band66	10	132622	1	#Max	16QAM	21.34	23.34
Band66	10	132622	25	#0	16QAM	20.74	22.74
Band66	10	132622	25	#Mid	16QAM	20.78	22.78
Band66	10	132622	25	#Max	16QAM	20.88	22.88
Band66	10	132622	50	#0	16QAM	20.83	22.83
Band66	15	132047	1	#0	QPSK	22.68	24.68
Band66	15	132047	1	#Mid	QPSK	22.64	24.64
Band66	15	132047	1	#Max	QPSK	22.78	24.78
Band66	15	132047	36	#0	QPSK	21.8	23.8
Band66	15	132047	36	#Mid	QPSK	21.69	23.69
Band66	15	132047	36	#Max	QPSK	21.62	23.62
Band66	15	132047	75	#0	QPSK	21.61	23.61
Band66	15	132047	1	#0	16QAM	21.58	23.58
Band66	15	132047	1	#Mid	16QAM	21.4	23.4
Band66	15	132047	1	#Max	16QAM	21.4	23.4
Band66	15	132047	36	#0	16QAM	20.64	22.64
Band66	15	132047	36	#Mid	16QAM	20.8	22.8
Band66	15	132047	36	#Max	16QAM	20.71	22.71
Band66	15	132047	75	#0	16QAM	20.7	22.7
Band66	15	132322	1	#0	QPSK	22.95	24.95
Band66	15	132322	1	#Mid	QPSK	22.97	24.97
Band66	15	132322	1	#Max	QPSK	22.79	24.79
Band66	15	132322	36	#0	QPSK	22.01	24.01
Band66	15	132322	36	#Mid	QPSK	21.91	23.91
Band66	15	132322	36	#Max	QPSK	21.76	23.76
Band66	15	132322	75	#0	QPSK	21.79	23.79
Band66	15	132322	1	#0	16QAM	21.8	23.8
Band66	15	132322	1	#Mid	16QAM	21.61	23.61
Band66	15	132322	1	#Max	16QAM	21.54	23.54
Band66	15	132322	36	#0	16QAM	20.91	22.91
Band66	15	132322	36	#Mid	16QAM	20.89	22.89
Band66	15	132322	36	#Max	16QAM	20.86	22.86
Band66	15	132322	75	#0	16QAM	20.87	22.87
Band66	15	132597	1	#0	QPSK	22.74	24.74
Band66	15	132597	1	#Mid	QPSK	22.69	24.69
Band66	15	132597	1	#Max	QPSK	22.57	24.57
Band66	15	132597	36	#0	QPSK	21.56	23.56
Band66	15	132597	36	#Mid	QPSK	21.66	23.66
Band66	15	132597	36	#Max	QPSK	21.72	23.72

Band66	15	132597	75	#0	QPSK	21.69	23.69
Band66	15	132597	1	#0	16QAM	21.39	23.39
Band66	15	132597	1	#Mid	16QAM	21.32	23.32
Band66	15	132597	1	#Max	16QAM	21.5	23.5
Band66	15	132597	36	#0	16QAM	20.5	22.5
Band66	15	132597	36	#Mid	16QAM	20.73	22.73
Band66	15	132597	36	#Max	16QAM	20.69	22.69
Band66	15	132597	75	#0	16QAM	20.76	22.76
Band66	20	132072	1	#0	QPSK	22.65	24.65
Band66	20	132072	1	#Mid	QPSK	22.73	24.73
Band66	20	132072	1	#Max	QPSK	22.47	24.47
Band66	20	132072	50	#0	QPSK	21.64	23.64
Band66	20	132072	50	#Mid	QPSK	21.63	23.63
Band66	20	132072	50	#Max	QPSK	21.52	23.52
Band66	20	132072	100	#0	QPSK	21.66	23.66
Band66	20	132072	1	#0	16QAM	21.41	23.41
Band66	20	132072	1	#Mid	16QAM	21.5	23.5
Band66	20	132072	1	#Max	16QAM	21.15	23.15
Band66	20	132072	50	#0	16QAM	20.49	22.49
Band66	20	132072	50	#Mid	16QAM	20.73	22.73
Band66	20	132072	50	#Max	16QAM	20.64	22.64
Band66	20	132072	100	#0	16QAM	20.56	22.56
Band66	20	132322	1	#0	QPSK	22.95	24.95
Band66	20	132322	1	#Mid	QPSK	22.95	24.95
Band66	20	132322	1	#Max	QPSK	22.84	24.84
Band66	20	132322	50	#0	QPSK	21.92	23.92
Band66	20	132322	50	#Mid	QPSK	21.72	23.72
Band66	20	132322	50	#Max	QPSK	21.66	23.66
Band66	20	132322	100	#0	QPSK	21.82	23.82
Band66	20	132322	1	#0	16QAM	21.63	23.63
Band66	20	132322	1	#Mid	16QAM	21.88	23.88
Band66	20	132322	1	#Max	16QAM	21.32	23.32
Band66	20	132322	50	#0	16QAM	20.73	22.73
Band66	20	132322	50	#Mid	16QAM	20.72	22.72
Band66	20	132322	50	#Max	16QAM	20.67	22.67
Band66	20	132322	100	#0	16QAM	20.71	22.71
Band66	20	132572	1	#0	QPSK	22.73	24.73
Band66	20	132572	1	#Mid	QPSK	22.83	24.83
Band66	20	132572	1	#Max	QPSK	22.65	24.65
Band66	20	132572	50	#0	QPSK	21.62	23.62
Band66	20	132572	50	#Mid	QPSK	21.7	23.7
Band66	20	132572	50	#Max	QPSK	21.62	23.62
Band66	20	132572	100	#0	QPSK	21.58	23.58
Band66	20	132572	1	#0	16QAM	21.55	23.55

Band66	20	132572	1	#Mid	16QAM	21.55	23.55
Band66	20	132572	1	#Max	16QAM	21.36	23.36
Band66	20	132572	50	#0	16QAM	20.63	22.63
Band66	20	132572	50	#Mid	16QAM	20.7	22.7
Band66	20	132572	50	#Max	16QAM	20.71	22.71
Band66	20	132572	100	#0	16QAM	20.48	22.48

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	ERP (dBm)
Band71	5	133147	1	#0	QPSK	22.59	22.1
Band71	5	133147	1	#Mid	QPSK	22.69	22.2
Band71	5	133147	1	#Max	QPSK	22.59	22.1
Band71	5	133147	12	#0	QPSK	21.54	21.05
Band71	5	133147	12	#Mid	QPSK	21.6	21.11
Band71	5	133147	12	#Max	QPSK	21.47	20.98
Band71	5	133147	25	#0	QPSK	21.38	20.89
Band71	5	133147	1	#0	16QAM	21.37	20.88
Band71	5	133147	1	#Mid	16QAM	21.48	20.99
Band71	5	133147	1	#Max	16QAM	21.13	20.64
Band71	5	133147	12	#0	16QAM	20.46	19.97
Band71	5	133147	12	#Mid	16QAM	20.63	20.14
Band71	5	133147	12	#Max	16QAM	20.64	20.15
Band71	5	133147	25	#0	16QAM	20.58	20.09
Band71	5	133297	1	#0	QPSK	22.42	21.93
Band71	5	133297	1	#Mid	QPSK	22.6	22.11
Band71	5	133297	1	#Max	QPSK	22.52	22.03
Band71	5	133297	12	#0	QPSK	21.49	21
Band71	5	133297	12	#Mid	QPSK	21.55	21.06
Band71	5	133297	12	#Max	QPSK	21.67	21.18
Band71	5	133297	25	#0	QPSK	21.64	21.15
Band71	5	133297	1	#0	16QAM	21.38	20.89
Band71	5	133297	1	#Mid	16QAM	21.56	21.07
Band71	5	133297	1	#Max	16QAM	21.67	21.18
Band71	5	133297	12	#0	16QAM	20.5	20.01
Band71	5	133297	12	#Mid	16QAM	20.53	20.04
Band71	5	133297	12	#Max	16QAM	20.67	20.18
Band71	5	133297	25	#0	16QAM	20.63	20.14
Band71	5	133447	1	#0	QPSK	22.64	22.15
Band71	5	133447	1	#Mid	QPSK	22.59	22.1
Band71	5	133447	1	#Max	QPSK	22.72	22.23
Band71	5	133447	12	#0	QPSK	21.65	21.16
Band71	5	133447	12	#Mid	QPSK	21.71	21.22
Band71	5	133447	12	#Max	QPSK	21.77	21.28
Band71	5	133447	25	#0	QPSK	21.67	21.18

Band71	5	133447	1	#0	16QAM	21.36	20.87
Band71	5	133447	1	#Mid	16QAM	21.44	20.95
Band71	5	133447	1	#Max	16QAM	21.56	21.07
Band71	5	133447	12	#0	16QAM	20.46	19.97
Band71	5	133447	12	#Mid	16QAM	20.49	20
Band71	5	133447	12	#Max	16QAM	20.56	20.07
Band71	5	133447	25	#0	16QAM	20.67	20.18
Band71	10	133172	1	#0	QPSK	22.71	22.22
Band71	10	133172	1	#Mid	QPSK	22.73	22.24
Band71	10	133172	1	#Max	QPSK	22.75	22.26
Band71	10	133172	25	#0	QPSK	21.61	21.12
Band71	10	133172	25	#Mid	QPSK	21.57	21.08
Band71	10	133172	25	#Max	QPSK	21.6	21.11
Band71	10	133172	50	#0	QPSK	21.72	21.23
Band71	10	133172	1	#0	16QAM	21.54	21.05
Band71	10	133172	1	#Mid	16QAM	21.49	21
Band71	10	133172	1	#Max	16QAM	21.29	20.8
Band71	10	133172	25	#0	16QAM	20.41	19.92
Band71	10	133172	25	#Mid	16QAM	20.51	20.02
Band71	10	133172	25	#Max	16QAM	20.52	20.03
Band71	10	133172	50	#0	16QAM	20.69	20.2
Band71	10	133297	1	#0	QPSK	22.58	22.09
Band71	10	133297	1	#Mid	QPSK	22.8	22.31
Band71	10	133297	1	#Max	QPSK	22.65	22.16
Band71	10	133297	25	#0	QPSK	21.65	21.16
Band71	10	133297	25	#Mid	QPSK	21.6	21.11
Band71	10	133297	25	#Max	QPSK	21.64	21.15
Band71	10	133297	50	#0	QPSK	21.65	21.16
Band71	10	133297	1	#0	16QAM	21.36	20.87
Band71	10	133297	1	#Mid	16QAM	21.64	21.15
Band71	10	133297	1	#Max	16QAM	21.43	20.94
Band71	10	133297	25	#0	16QAM	20.74	20.25
Band71	10	133297	25	#Mid	16QAM	20.77	20.28
Band71	10	133297	25	#Max	16QAM	20.71	20.22
Band71	10	133297	50	#0	16QAM	20.62	20.13
Band71	10	133422	1	#0	QPSK	22.5	22.01
Band71	10	133422	1	#Mid	QPSK	22.53	22.04
Band71	10	133422	1	#Max	QPSK	22.56	22.07
Band71	10	133422	25	#0	QPSK	21.74	21.25
Band71	10	133422	25	#Mid	QPSK	21.67	21.18
Band71	10	133422	25	#Max	QPSK	21.74	21.25
Band71	10	133422	50	#0	QPSK	21.64	21.15
Band71	10	133422	1	#0	16QAM	21.43	20.94
Band71	10	133422	1	#Mid	16QAM	21.59	21.1

Band71	10	133422	1	#Max	16QAM	21.52	21.03
Band71	10	133422	25	#0	16QAM	20.74	20.25
Band71	10	133422	25	#Mid	16QAM	20.74	20.25
Band71	10	133422	25	#Max	16QAM	20.82	20.33
Band71	10	133422	50	#0	16QAM	20.72	20.23
Band71	15	133197	1	#0	QPSK	22.7	22.21
Band71	15	133197	1	#Mid	QPSK	22.81	22.32
Band71	15	133197	1	#Max	QPSK	22.92	22.43
Band71	15	133197	36	#0	QPSK	21.61	21.12
Band71	15	133197	36	#Mid	QPSK	21.6	21.11
Band71	15	133197	36	#Max	QPSK	21.66	21.17
Band71	15	133197	75	#0	QPSK	21.58	21.09
Band71	15	133197	1	#0	16QAM	21.56	21.07
Band71	15	133197	1	#Mid	16QAM	21.68	21.19
Band71	15	133197	1	#Max	16QAM	21.62	21.13
Band71	15	133197	36	#0	16QAM	20.56	20.07
Band71	15	133197	36	#Mid	16QAM	20.66	20.17
Band71	15	133197	36	#Max	16QAM	20.73	20.24
Band71	15	133197	75	#0	16QAM	20.65	20.16
Band71	15	133297	1	#0	QPSK	22.66	22.17
Band71	15	133297	1	#Mid	QPSK	22.71	22.22
Band71	15	133297	1	#Max	QPSK	22.69	22.2
Band71	15	133297	36	#0	QPSK	21.68	21.19
Band71	15	133297	36	#Mid	QPSK	21.64	21.15
Band71	15	133297	36	#Max	QPSK	21.64	21.15
Band71	15	133297	75	#0	QPSK	21.61	21.12
Band71	15	133297	1	#0	16QAM	21.37	20.88
Band71	15	133297	1	#Mid	16QAM	21.41	20.92
Band71	15	133297	1	#Max	16QAM	21.61	21.12
Band71	15	133297	36	#0	16QAM	20.54	20.05
Band71	15	133297	36	#Mid	16QAM	20.51	20.02
Band71	15	133297	36	#Max	16QAM	20.5	20.01
Band71	15	133297	75	#0	16QAM	20.67	20.18
Band71	15	133397	1	#0	QPSK	22.71	22.22
Band71	15	133397	1	#Mid	QPSK	22.84	22.35
Band71	15	133397	1	#Max	QPSK	22.84	22.35
Band71	15	133397	36	#0	QPSK	21.68	21.19
Band71	15	133397	36	#Mid	QPSK	21.67	21.18
Band71	15	133397	36	#Max	QPSK	21.71	21.22
Band71	15	133397	75	#0	QPSK	21.68	21.19
Band71	15	133397	1	#0	16QAM	21.41	20.92
Band71	15	133397	1	#Mid	16QAM	21.49	21
Band71	15	133397	1	#Max	16QAM	21.67	21.18
Band71	15	133397	36	#0	16QAM	20.63	20.14

Band71	15	133397	36	#Mid	16QAM	20.64	20.15
Band71	15	133397	36	#Max	16QAM	20.68	20.19
Band71	15	133397	75	#0	16QAM	20.63	20.14
Band71	20	133222	1	#0	QPSK	22.58	22.09
Band71	20	133222	1	#Mid	QPSK	23.03	22.54
Band71	20	133222	1	#Max	QPSK	22.68	22.19
Band71	20	133222	50	#0	QPSK	21.78	21.29
Band71	20	133222	50	#Mid	QPSK	21.76	21.27
Band71	20	133222	50	#Max	QPSK	21.82	21.33
Band71	20	133222	100	#0	QPSK	21.8	21.31
Band71	20	133222	1	#0	16QAM	21.39	20.9
Band71	20	133222	1	#Mid	16QAM	21.78	21.29
Band71	20	133222	1	#Max	16QAM	21.43	20.94
Band71	20	133222	50	#0	16QAM	20.66	20.17
Band71	20	133222	50	#Mid	16QAM	20.72	20.23
Band71	20	133222	50	#Max	16QAM	20.79	20.3
Band71	20	133222	100	#0	16QAM	20.78	20.29
Band71	20	133297	1	#0	QPSK	22.53	22.04
Band71	20	133297	1	#Mid	QPSK	22.88	22.39
Band71	20	133297	1	#Max	QPSK	22.48	21.99
Band71	20	133297	50	#0	QPSK	21.69	21.2
Band71	20	133297	50	#Mid	QPSK	21.69	21.2
Band71	20	133297	50	#Max	QPSK	21.57	21.08
Band71	20	133297	100	#0	QPSK	21.62	21.13
Band71	20	133297	1	#0	16QAM	21.46	20.97
Band71	20	133297	1	#Mid	16QAM	21.43	20.94
Band71	20	133297	1	#Max	16QAM	21.29	20.8
Band71	20	133297	50	#0	16QAM	20.76	20.27
Band71	20	133297	50	#Mid	16QAM	20.66	20.17
Band71	20	133297	50	#Max	16QAM	20.56	20.07
Band71	20	133297	100	#0	16QAM	20.49	20
Band71	20	133372	1	#0	QPSK	22.6	22.11
Band71	20	133372	1	#Mid	QPSK	22.83	22.34
Band71	20	133372	1	#Max	QPSK	22.6	22.11
Band71	20	133372	50	#0	QPSK	21.71	21.22
Band71	20	133372	50	#Mid	QPSK	21.71	21.22
Band71	20	133372	50	#Max	QPSK	21.61	21.12
Band71	20	133372	100	#0	QPSK	21.62	21.13
Band71	20	133372	1	#0	16QAM	21.51	21.02
Band71	20	133372	1	#Mid	16QAM	21.57	21.08
Band71	20	133372	1	#Max	16QAM	21.32	20.83
Band71	20	133372	50	#0	16QAM	20.57	20.08
Band71	20	133372	50	#Mid	16QAM	20.7	20.21
Band71	20	133372	50	#Max	16QAM	20.59	20.1

Band71	20	133372	100	#0	16QAM	20.58	20.09
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6.2 Occupied Bandwidth

EC25-AFX

Mode	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
WCDMA Band IV (RMC)	1312	1712.4	4.1288	4.696
	1413	1732.6	4.1217	4.714
	1513	1752.6	4.1281	4.715

LTE Band 4						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	19957	1710.7	1.1282	1.366
			20175	1732.5	1.1272	1.362
			20393	1754.3	1.1412	1.369
		3	19965	1711.5	2.7521	3.075
			20175	1732.5	2.7431	3.075
			20385	1753.5	2.7428	3.085
		5	19975	1712.5	4.5161	5.049
			20175	1732.5	4.5341	5.033
			20375	1752.5	4.5121	5.057
		10	20000	1715	9.0083	10.070
			20175	1732.5	9.0383	10.210
			20350	1750	9.0426	10.080
		15	20025	1717.5	13.4140	14.650
			20175	1732.5	13.4770	14.810
			20325	1747.5	13.4540	14.740
		20	20050	1720	17.8660	19.240
			20175	1732.5	17.8520	19.150
			20300	1745	17.8910	19.490
	16QAM	1.4	19957	1710.7	1.1249	1.334
			20175	1732.5	1.1305	1.353
			20393	1754.3	1.1225	1.377
		3	19965	1711.5	2.7348	3.064
			20175	1732.5	2.7630	3.089
			20385	1753.5	2.7407	3.079
		5	19975	1712.5	4.5356	5.040
			20175	1732.5	4.5138	5.037
			20375	1752.5	4.5368	5.045
		10	20000	1715	9.0158	10.050

			20175	1732.5	9.0392	10.000
			20350	1750	9.0281	10.090
			20025	1717.5	13.4620	14.740
		15	20175	1732.5	13.4740	14.730
			20325	1747.5	13.4740	14.810
			20050	1720	17.8840	19.410
		20	20175	1732.5	17.9000	19.320
			20300	1745	17.8550	19.320

LTE Band 12						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	23017	699.7	1.1276	1.362
			23095	707.5	1.1259	1.353
			23173	715.3	1.1378	1.342
		3	23025	700.5	2.7511	3.064
			23095	707.5	2.7413	3.074
			23165	714.5	2.7441	3.073
		5	23035	701.5	4.5181	5.050
			23095	707.5	4.5262	5.043
			23155	713.5	4.5110	4.989
		10	23060	704	9.0089	10.040
			23095	707.5	9.0229	10.090
			23130	711	9.0466	10.080
	16QAM	1.4	23017	699.7	1.1233	1.328
			23095	707.5	1.1305	1.335
			23173	715.3	1.1214	1.358
		3	23025	700.5	2.7342	3.065
			23095	707.5	2.7584	3.075
			23165	714.5	2.7401	3.068
		5	23035	701.5	4.5272	5.035
			23095	707.5	4.5071	5.026
			23155	713.5	4.5361	5.063
		10	23060	704	9.0130	10.070
			23095	707.5	9.0272	9.989
			23130	711	9.0403	10.110

LTE Band 13						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	23205	779.5	4.5103	5.025

			23230	782	4.5307	5.036
			23255	784.5	4.4991	5.010
		10	23230	782	9.0332	10.120
	16QAM	5	23205	779.5	4.5294	5.034
			23230	782	4.5129	5.021
			23255	784.5	4.5367	5.032
		10	23230	782	9.0348	10.010

LTE Band 66						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	131979	1710.7	1.1295	1.385
			132322	1745	1.1286	1.364
			132665	1779.3	1.1383	1.350
		3	131987	1711.5	2.7481	3.070
			132322	1745	2.7435	3.077
			132657	1778.5	2.7434	3.068
		5	131997	1712.5	4.5159	5.042
			132322	1745	4.5347	5.042
			132647	1777.5	4.5042	5.037
		10	132022	1715	9.0110	10.110
			132322	1745	9.0427	10.200
			132622	1775	9.0373	10.050
		15	132047	1717.5	13.4110	14.730
			132322	1745	13.4790	14.730
			132597	1772.5	13.4530	14.720
		20	132072	1720	17.8570	19.260
			132322	1745	17.8840	19.310
			132572	1770	17.8970	19.500
	16QAM	1.4	131979	1710.7	1.1247	1.332
			132322	1745	1.1301	1.350
			132665	1779.3	1.1222	1.360
		3	131987	1711.5	2.7340	3.056
			132322	1745	2.7701	3.094
			132657	1778.5	2.7384	3.072
		5	131997	1712.5	4.5369	5.046
			132322	1745	4.5175	5.046
			132647	1777.5	4.5340	5.043
		10	132022	1715	9.0146	10.060
			132322	1745	9.0407	10.040

		15	132622	1775	9.0275	10.080
			132047	1717.5	13.4620	14.740
			132322	1745	13.4870	14.740
			132597	1772.5	13.4630	14.850
		20	132072	1720	17.8850	19.500
			132322	1745	17.8840	19.410
			132572	1770	17.8600	19.290

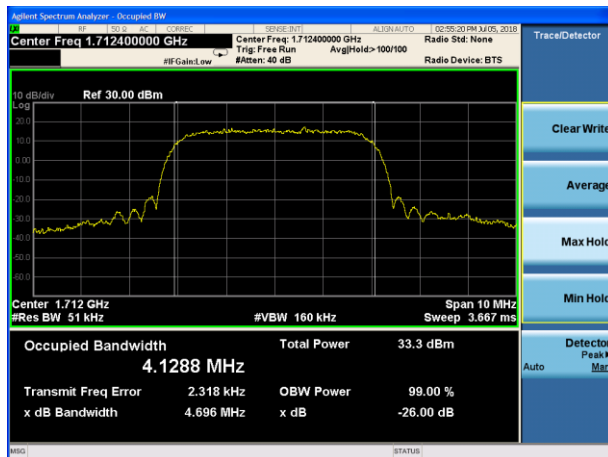
LTE Band 71						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
		5	133147	665.5	4.5101	5.025
			133297	680.5	4.5218	5.037
			133447	695.5	4.5052	5.012
		10	133172	668	9.0070	10.120
			133297	680.5	9.0348	10.180
			133422	693	9.0305	10.040
		15	133197	670.5	13.4130	14.720
			133297	680.5	13.4490	14.760
			133397	690.5	13.4690	14.790
		20	133222	673	17.8330	19.240
			133322	683	17.8680	19.250
			133372	688	17.9120	19.430
		5	133147	665.5	4.5289	5.040
			133297	680.5	4.5090	5.016
			133447	695.5	4.5335	5.047
		10	133172	668	9.0112	10.050
			133297	680.5	9.0370	10.030
			133422	693	9.0266	10.070
		15	133197	670.5	13.4550	14.740
			133297	680.5	13.4680	14.730
			133397	690.5	13.4770	14.790
		20	133222	673	17.8350	19.430
			133322	683	17.8930	19.330
			133372	688	17.8710	19.360

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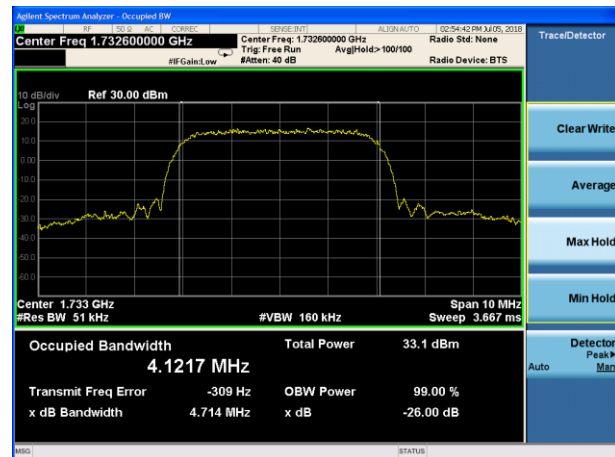
LTE Band 12						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	23095	707.5	1.1254	1.353
		3	23095	707.5	2.7455	3.081
		5	23095	707.5	4.5253	5.016
		10	23095	707.5	9.0398	10.140
	16QAM	1.4	23095	707.5	1.1285	1.334
		3	23095	707.5	2.7583	3.074
		5	23095	707.5	4.5101	5.022
		10	23095	707.5	9.0209	10.030

EC25-AFX

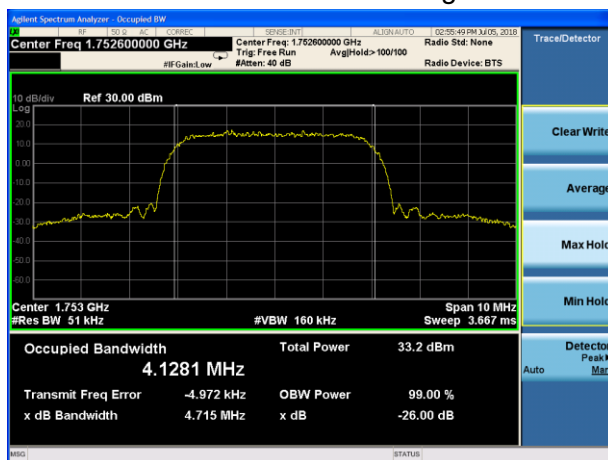
WCDMA Band IV CH-Low



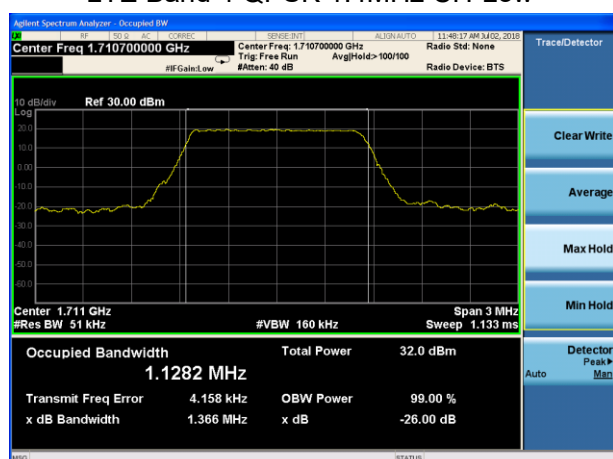
WCDMA Band IV CH Middle



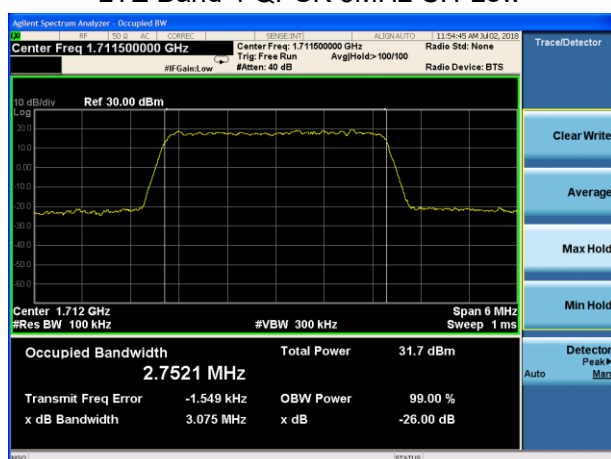
WCDMA Band IV CH High



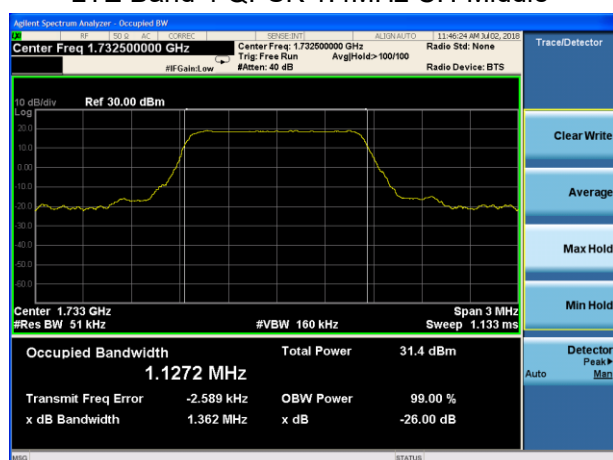
LTE Band 4 QPSK 1.4MHz CH-Low



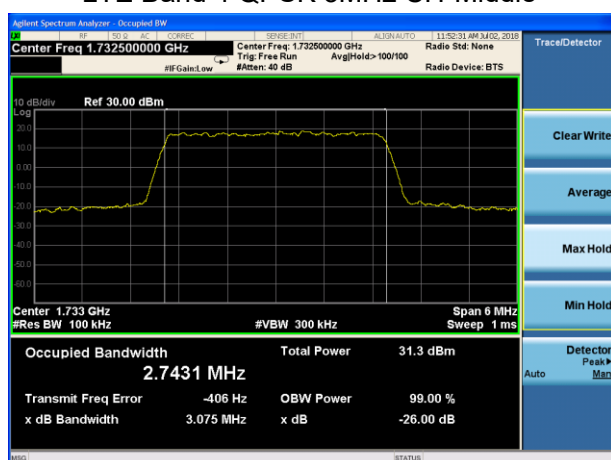
LTE Band 4 QPSK 3MHz CH-Low



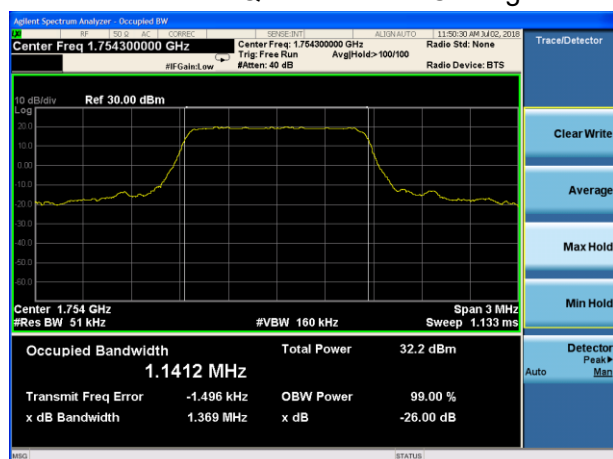
LTE Band 4 QPSK 1.4MHz CH-Middle



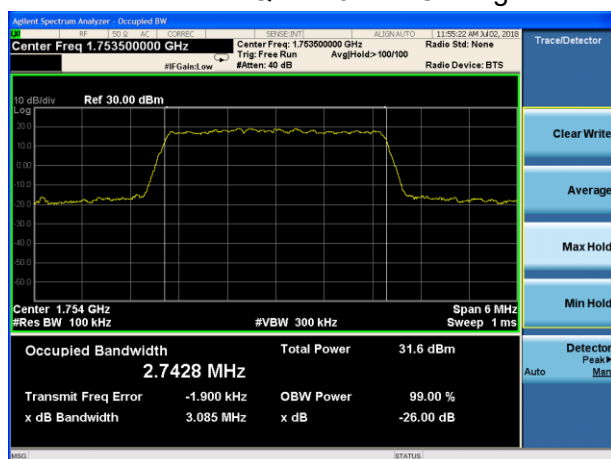
LTE Band 4 QPSK 3MHz CH-Middle



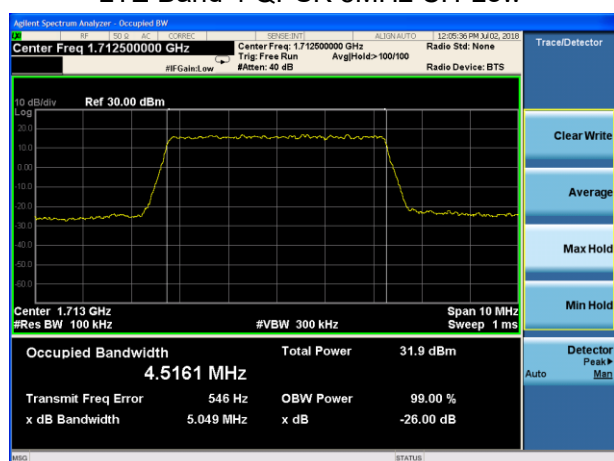
LTE Band 4 QPSK 1.4MHz CH-High



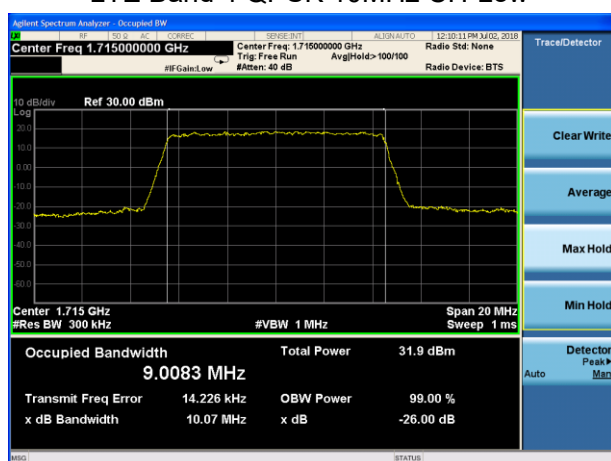
LTE Band 4 QPSK 3MHz CH-High



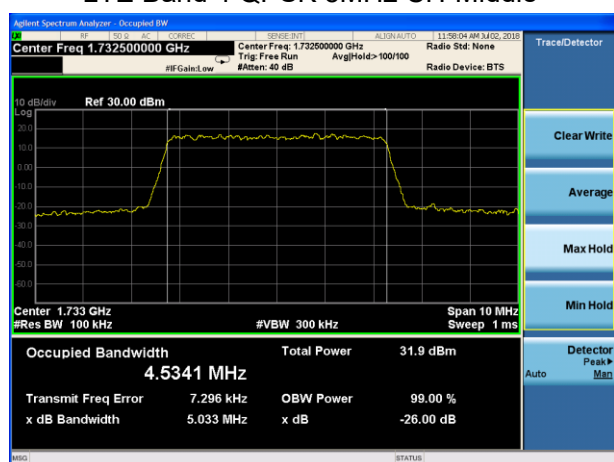
LTE Band 4 QPSK 5MHz CH-Low



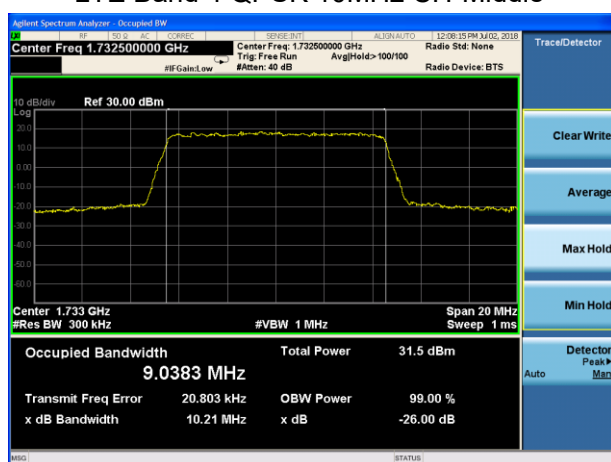
LTE Band 4 QPSK 10MHz CH-Low



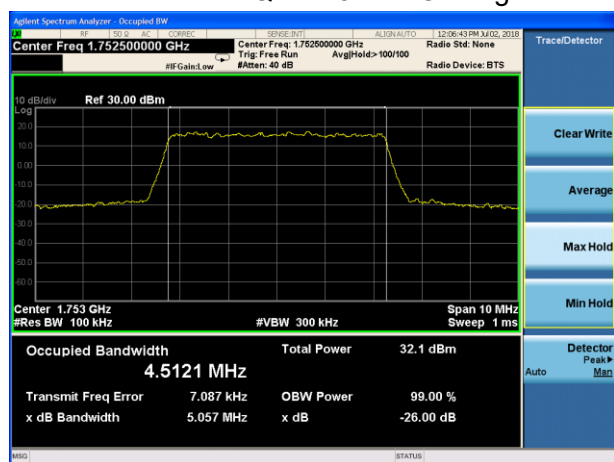
LTE Band 4 QPSK 5MHz CH-Middle



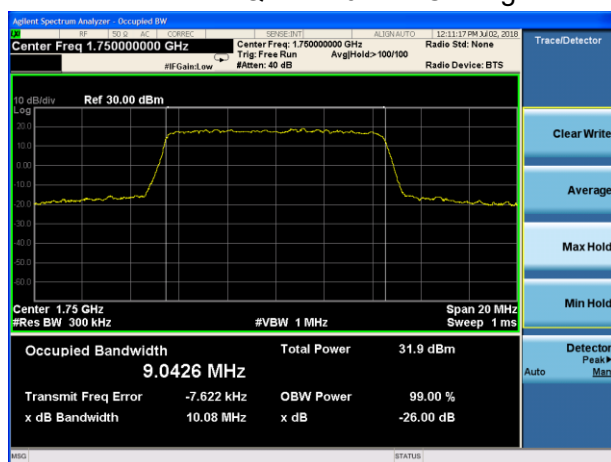
LTE Band 4 QPSK 10MHz CH-Middle

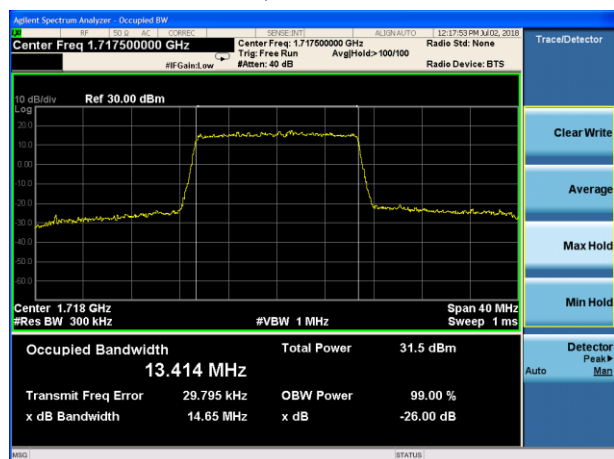
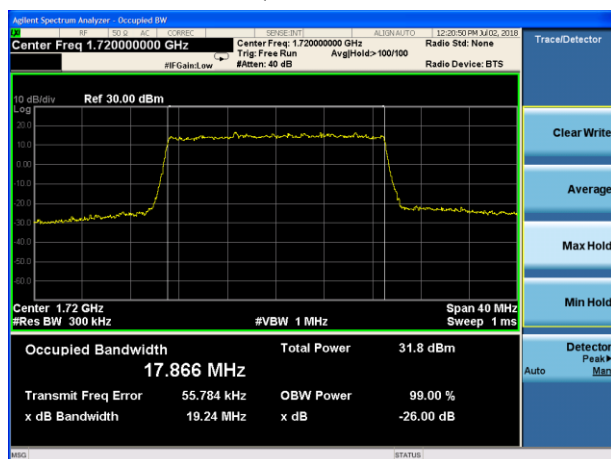
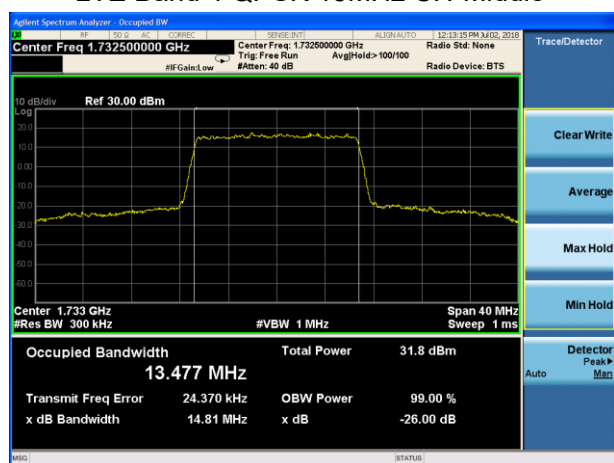
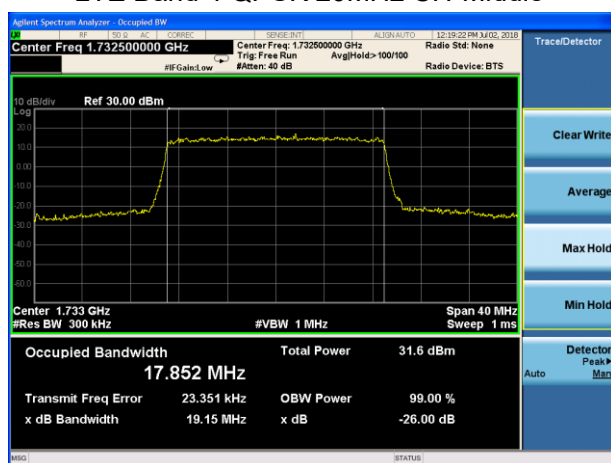
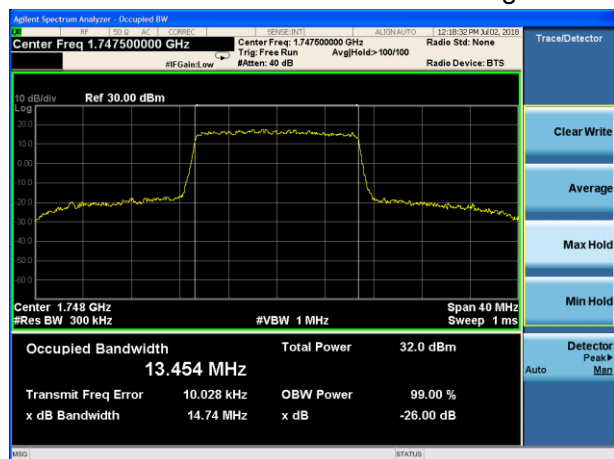
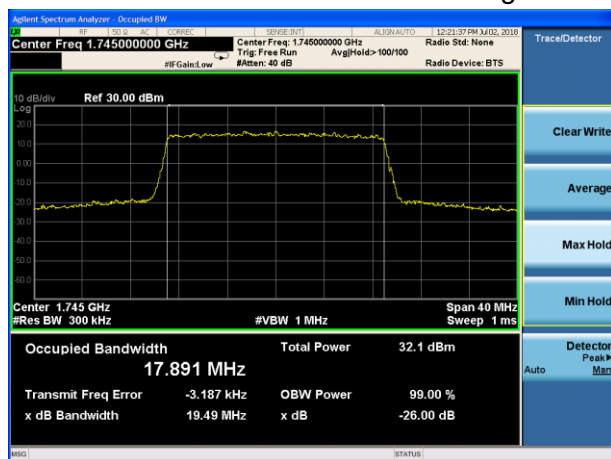


LTE Band 4 QPSK 5MHz CH-High

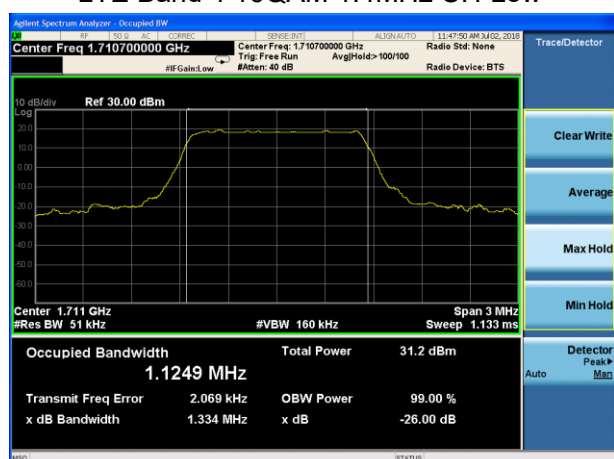


LTE Band 4 QPSK 10MHz CH-High

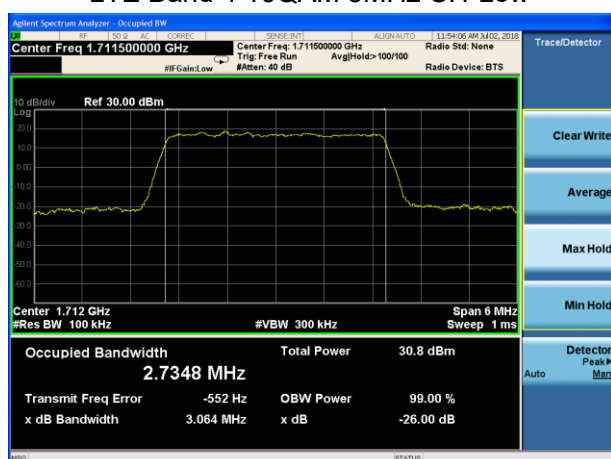


LTE Band 4 QPSK 15MHz CH-Low

LTE Band 4 QPSK 20MHz CH-Low

LTE Band 4 QPSK 15MHz CH-Middle

LTE Band 4 QPSK 20MHz CH-Middle

LTE Band 4 QPSK 15MHz CH-High

LTE Band 4 QPSK 20MHz CH-High


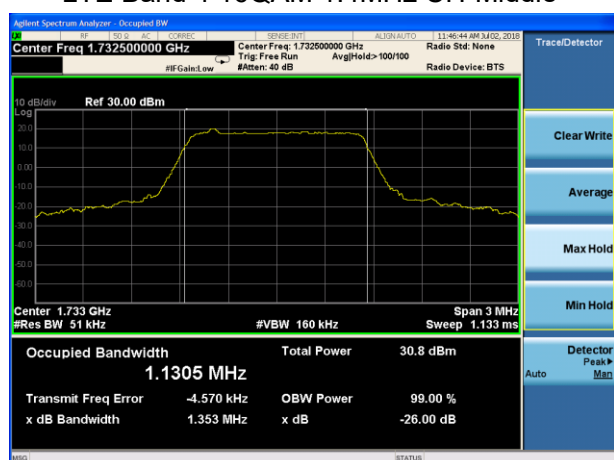
LTE Band 4 16QAM 1.4MHz CH-Low



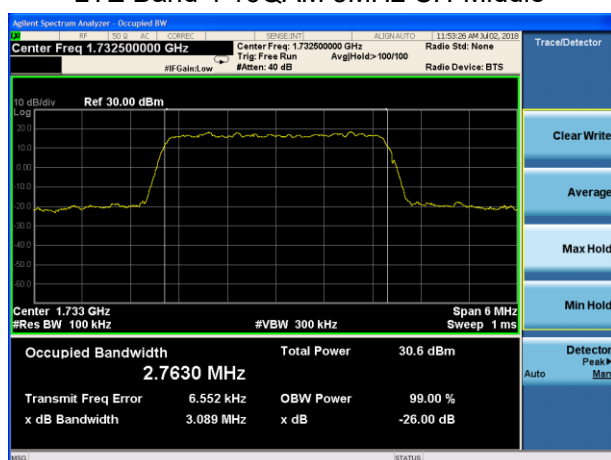
LTE Band 4 16QAM 3MHz CH-Low



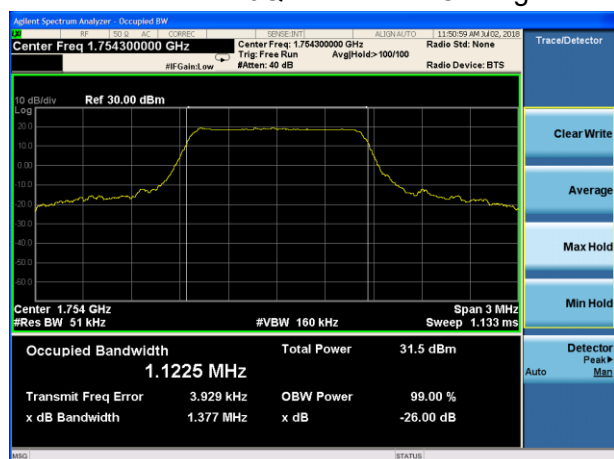
LTE Band 4 16QAM 1.4MHz CH-Middle



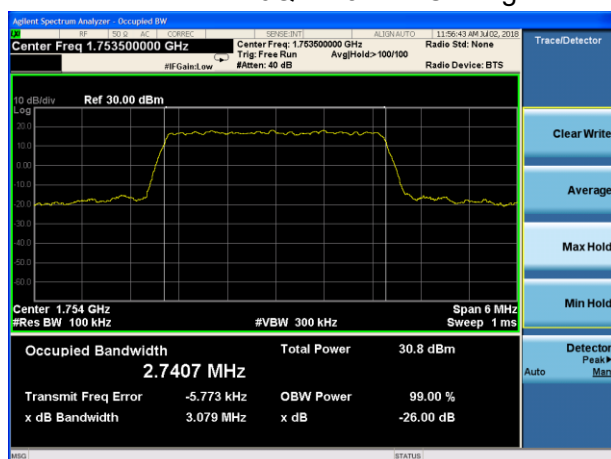
LTE Band 4 16QAM 3MHz CH-Middle



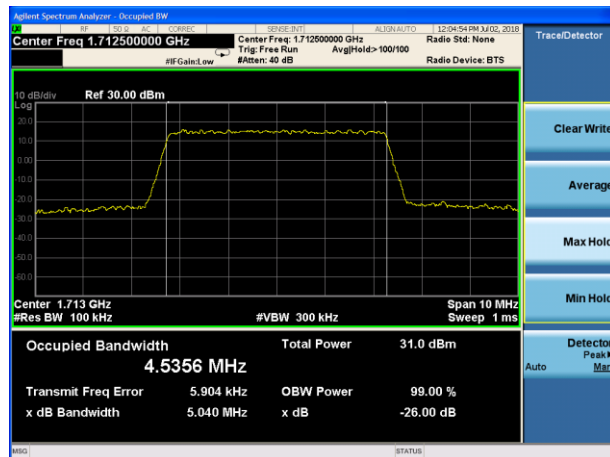
LTE Band 4 16QAM 1.4MHz CH-High



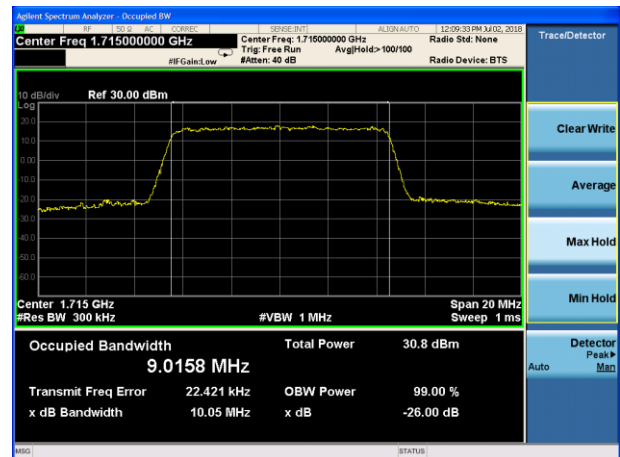
LTE Band 4 16QAM 3MHz CH-High



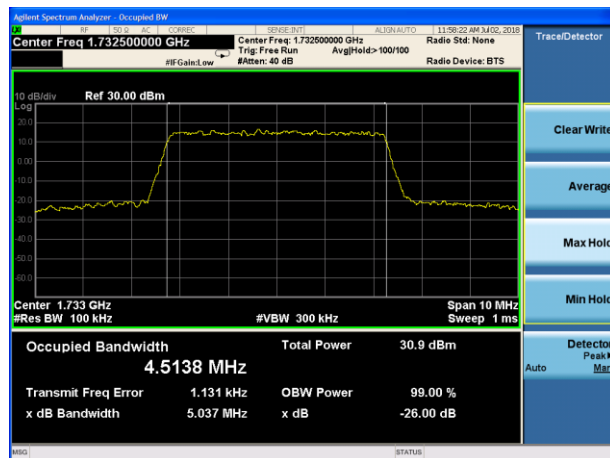
LTE Band 4 16QAM 5MHz CH-Low



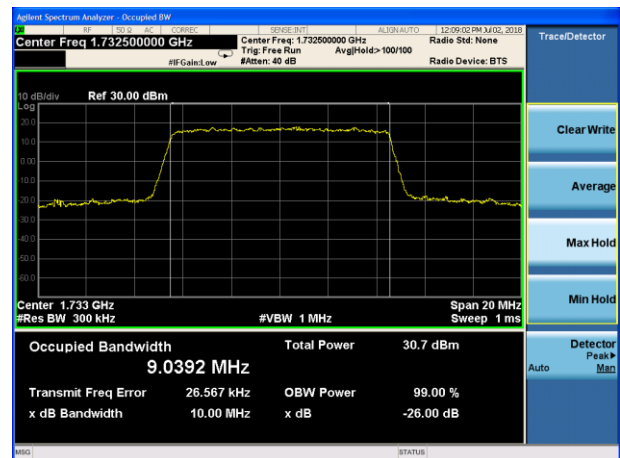
LTE Band 4 16QAM 10MHz CH-Low



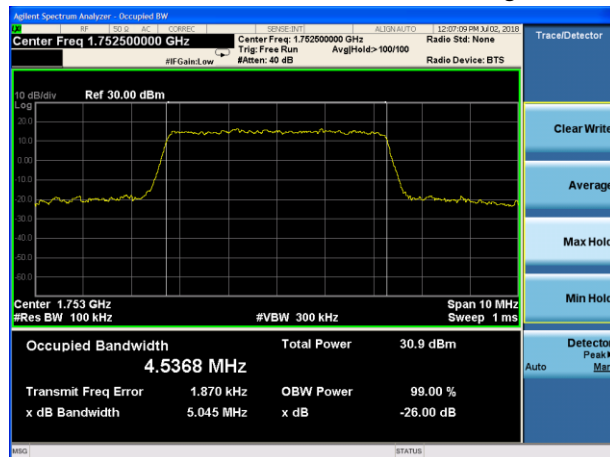
LTE Band 4 16QAM 5MHz CH-Middle



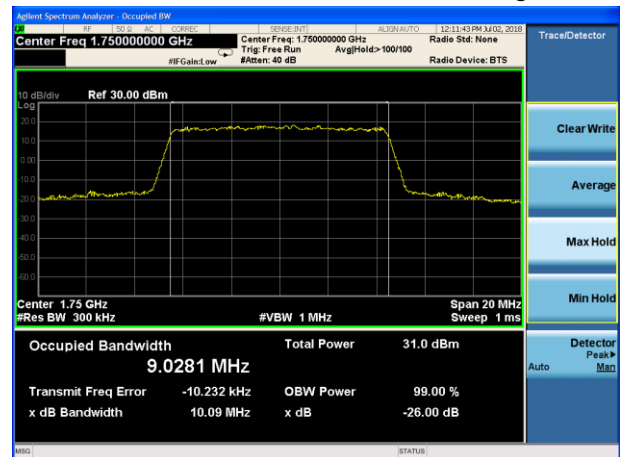
LTE Band 4 16QAM 10MHz CH-Middle



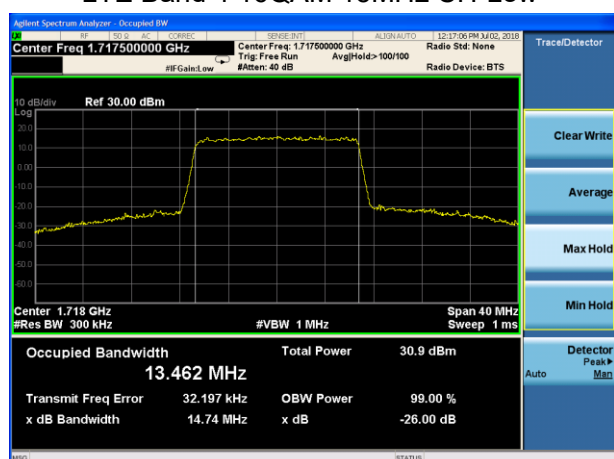
LTE Band 4 16QAM 5MHz CH-High



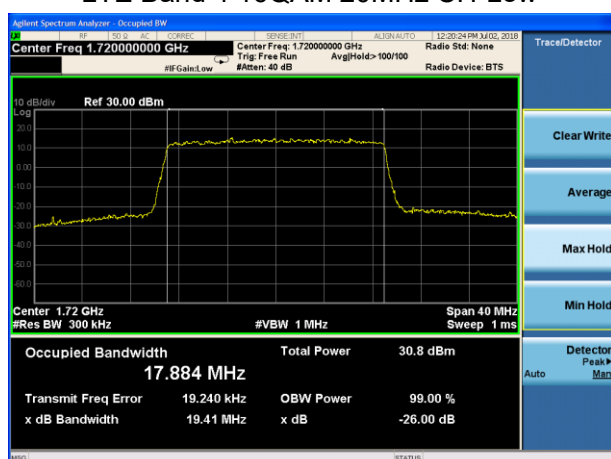
LTE Band 4 16QAM 10MHz CH-High



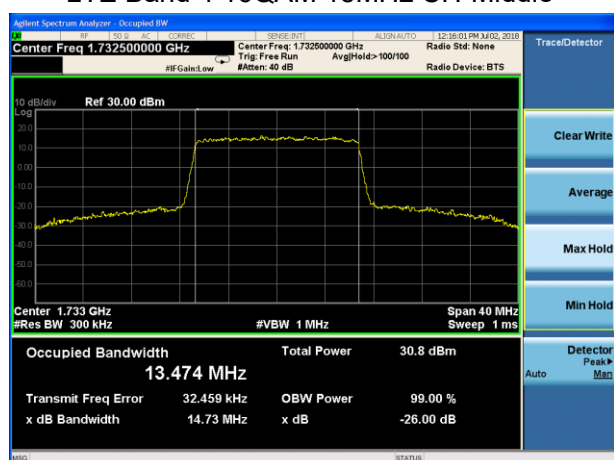
LTE Band 4 16QAM 15MHz CH-Low



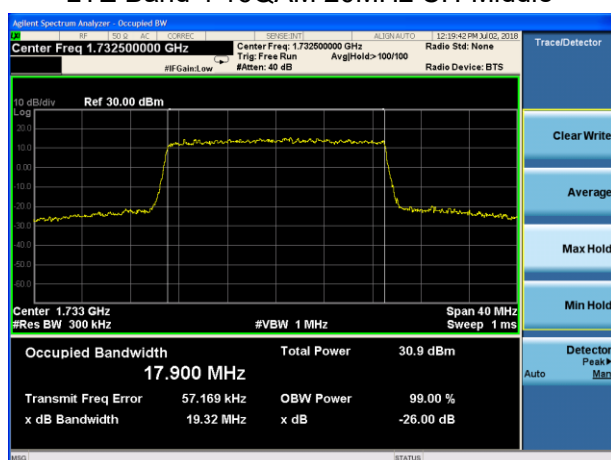
LTE Band 4 16QAM 20MHz CH-Low



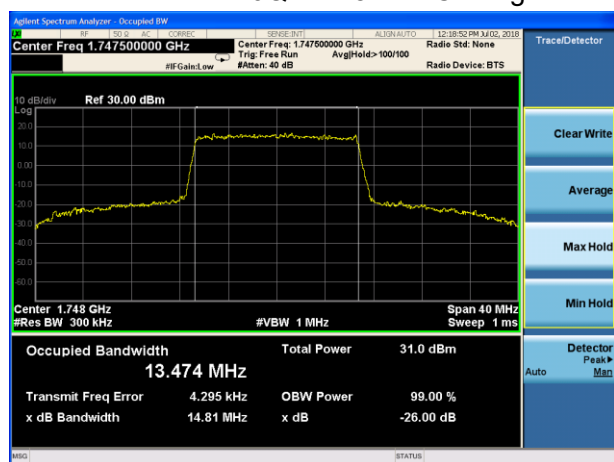
LTE Band 4 16QAM 15MHz CH-Middle



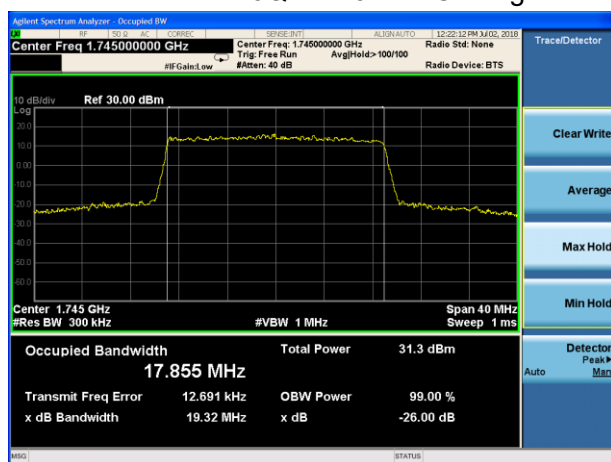
LTE Band 4 16QAM 20MHz CH-Middle



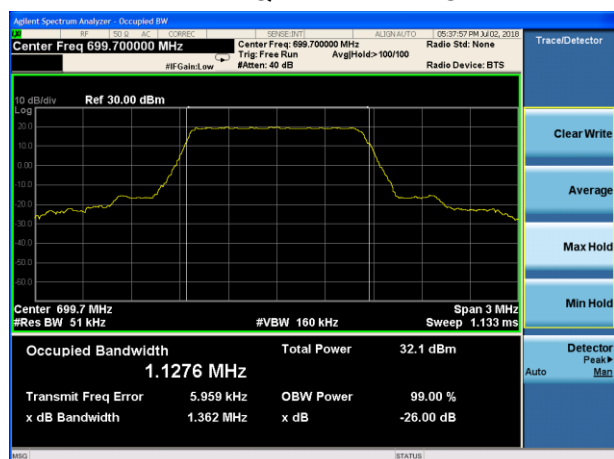
LTE Band 4 16QAM 15MHz CH-High



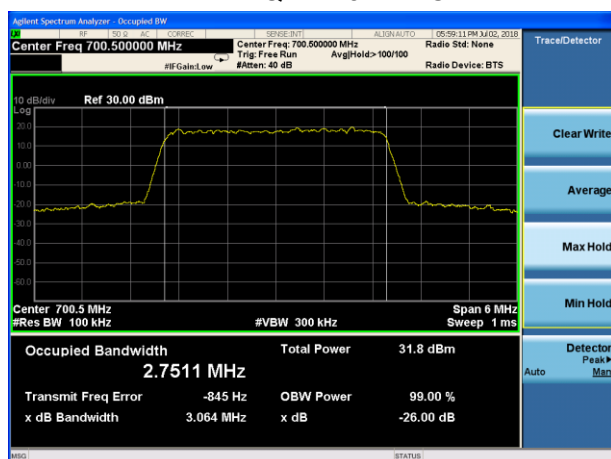
LTE Band 4 16QAM 20MHz CH-High



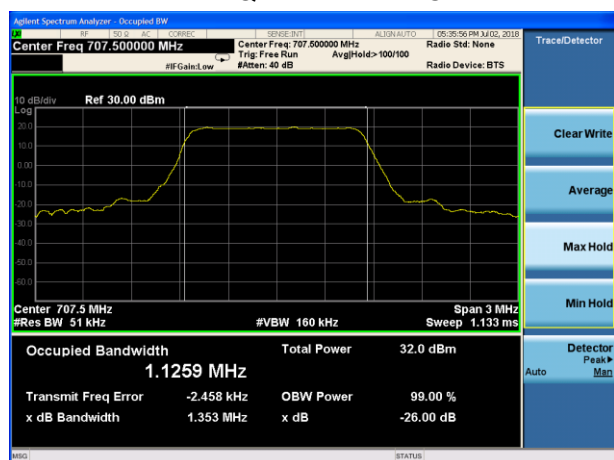
LTE Band 12 QPSK 1.4MHz CH-Low



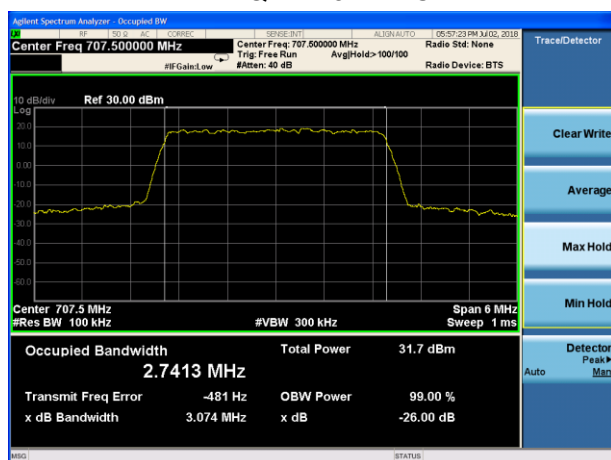
LTE Band 12 QPSK 3MHz CH-Low



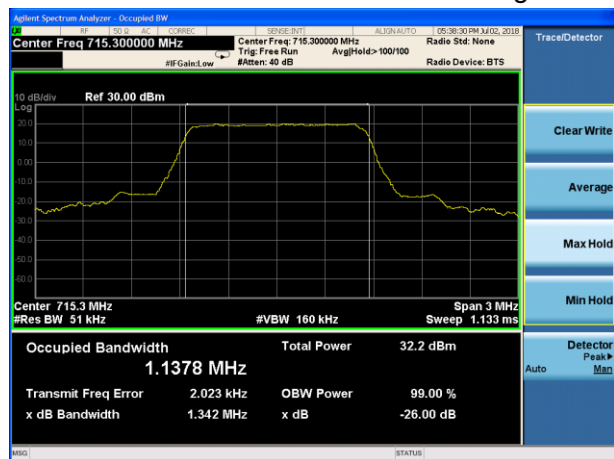
LTE Band 12 QPSK 1.4MHz CH-Middle



LTE Band 12 QPSK 3MHz CH-Middle



LTE Band 12 QPSK 1.4MHz CH-High



LTE Band 12 QPSK 3MHz CH-High

