RF TEST REPORT

Applicant	MeiG Smart Technology Co., Ltd
FCC ID	2APJ4-MT579
Product	4G Mobile WiFi
Brand	MEIGLink
Model	MT579
Report No.	R2402A0143-R3
Issue Date	July 1, 2024

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2023)/ FCC CFR47 Part 27C (2023)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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TABLE OF CONTENT

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(h)(2) /27.50(a)(3)	PASS
2	Occupied Bandwidth	2.1049	PASS
3	Band Edge Compliance	27.53(h) /27.53(m) /27.53(a) (3)	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(m) /27.53(a) (3)	PASS
7	Radiated Spurious Emission	2.1053 /27.53(h) /27.53(m) /27.53(a) (3)	PASS
Date of Testing: February 22, 2024 ~ May 9, 2024 Date of Sample Received: February 22, 2024			
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.			

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.
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2 General Description of Equipment under Test

2.1 Applicant and Manufacturer Information

Applicant	MeiG Smart Technology Co., Ltd
Applicant address	2nd Floor, Office Building, No.5 Lingxia Road, Fenghuang, Fuyong Street, Bao'an District, Shenzhen, China
Manufacturer	MeiG Smart Technology Co., Ltd
Manufacturer address	2nd Floor, Office Building, No.5 Lingxia Road, Fenghuang, Fuyong Street, Bao'an District, Shenzhen, China

2.2 General information

EUT Description		
Model	MT579	
Lab internal SN	R2402A0143/S01	
Hardware Version	MT579_PCB_V1.00	
Software Version	MT579-SA_4.0.2_EQ100	
Power Supply	Battery / AC adapter	
Antenna Type	Internal Antenna	
Antenna Gain	WCDMA Band IV	-0.60 dBi
	LTE Band 4	-0.60 dBi
	LTE Band 7	2.00 dBi
	LTE Band 40 Subset 1	0.61 dBi
	LTE Band 40 Subset 2	1.35 dBi
	LTE Band 41	2.00 dBi
	LTE Band 66	-0.60 dBi
Test Mode(s)	WCDMA Band IV; LTE Band 4/7/40/41/66	
Test Modulation	(WCDMA) BPSK, QPSK; (LTE) QPSK, 16QAM;	
HSDPA UE Category	14	
HSUPA UE Category	6	
HSPA+ UE Category	14	
LTE Category	4	
Maximum E.I.R.P./ E.R.P.	WCDMA Band IV	20.20 dBm
	LTE Band 7	25.70 dBm
	LTE Band 40 Subset 1	14.424 mW/MHz
		40.031 mW/5MHz
	LTE Band 40 Subset 2	11.858 mW/MHz
		39.039 mW/5MHz

	LTE Band 41	26.64 dBm	
	LTE Band 66	23.38 dBm	
Rated Power Supply Voltage	3.8V		
Operating Voltage	Minimum: 3.5V Maximum: 4.25V		
Operating Temperature	Lowest: 0°C Highest: +35°C		
Testing Temperature	Lowest: -30°C Highest: +50°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 7	2500 ~ 2570	2620 ~ 2690
	LTE Band 40 Subset 1	2305 ~ 2315	2305 ~ 2315
	LTE Band 40 Subset 2	2350 ~ 2360	2350 ~ 2360
	LTE Band 41	2496 ~ 2690	2496 ~ 2690
	LTE Band 66	1710 ~ 1780	2110 ~ 2180
EUT Accessory			
Adapter	Manufacturer: Dongguan Sunun Power Co., Ltd Model: SA68-050100U		
Battery 1	Manufacturer: Shenzhen Aerospace Electronic Co., Ltd. Model: MG584463		
Battery 2	Manufacturer: Zhongshan Tianmao Battery Co.. Ltd Model: MG584463		
USB Cable	Manufacturer: Shenzhen Gaohangda Technology Co., LTD Model: /		

Note:

1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.
   Radio equipment in band 40 is only allowed to operate from 2305 MHz to 2315 MHz for Subset 1; 2350 MHz to 2360 MHz for Subset 2 for the transmitter and receiver.
2. According to TCB workshop October, 2014 RF Exposure Procedures Update (Overlapping LTE Bands): Main Antenna LTE Band 4 (Frequency range 1710-1755 MHz) is covered by LTE Band 66 (Frequency range: 1710-1780 MHz) due to similar frequency range, same maximum tune up limit and same channel bandwidth.

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 (2023)

FCC CFR47 Part 2 (2023)

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 (X axis, horizontal polarization for WCDMA Band and Z axis, vertical polarization for LTE Band) 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 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 Band7/40/41/66:

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 and Effective Isotropic Radiated Power	LTE 7	-	-	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 40	-	-	O	O	-	-	O	O	O	O	O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 66 (LTE 4)	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	LTE 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 40	-	-	O	O	-	-	O	O			O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 66 (LTE 4)	O	O	O	O	O	O	O	O	-	-	O	O	O	O
Band Edge Compliance	LTE 7	-	-	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 40	-	-	O	O	-	-	O	O	O	-	O	O	-	O

	LTE 41	-	-	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 66 (LTE 4)	O	O	O	O	O	O	O	O	O	-	O	O	-	O
Peak-to-Average Power Ratio	LTE 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 40	-	-	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 66 (LTE 4)	O	O	O	O	O	O	O	O	-	-	O	O	O	O
Frequency Stability	LTE 7	-	-	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 40	-	-	O	O	-	-	O	O	O	-	-	-	O	-
	LTE 41	-	-	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 66 (LTE 4)	O	O	O	O	O	O	O	O	O	-	-	-	O	-
Spurious Emissions at Antenna Terminals	LTE 7	-	-	O	O	O	O	O	-	O	-	-	O	O	O
	LTE 40	-	-	O	O	-	-	O	-	O	-	-	O	O	O
	LTE 41	-	-	O	O	O	O	O	-	O	-	-	O	O	O
	LTE 66 (LTE 4)	O	O	O	O	O	O	O	-	O	-	-	O	O	O
Radiated Spurious Emission	LTE 7	-	-	O	-	-	O	O	-	O	-	-	-	O	-
	LTE 44	-	-	O	O	-	-	O	-	O	-	-	-	O	-
	LTE 41	-	-	O	-	-	O	O	-	O	-	-	-	O	-
	LTE 66 (LTE 4)	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

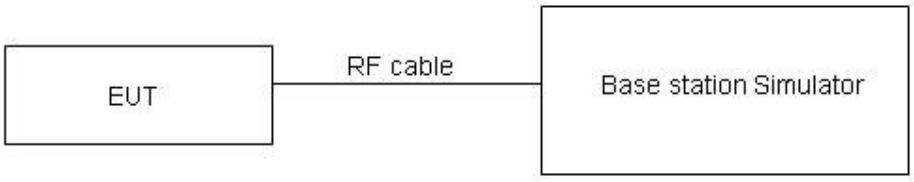
Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

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 (dBm) = Output Power (dBm) + Antenna Gain (dBi)
EIRP (dBm) = ERP (dBm) + 2.15 (dB.)

Test Setup



Limits

No specific RF power output requirements in part 2.1046.

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”
Rule Part 27.50(h) (2) specifies that “Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.”
Rule Part 27.50(a) (3) specifies that “(i) For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. ”

Part 27.50(a)(3) Limit	⩽ 250 mW/5MHz ⩽ 50 mW/1MHz
Part 27.50(d)(4) Limit	⩽ 1 W (30 dBm)
Part 27.50(h)(2) Limit	⩽ 2 W (33 dBm)

For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 meaahertz of authorized bandwidth butmay exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cyclemust not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

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

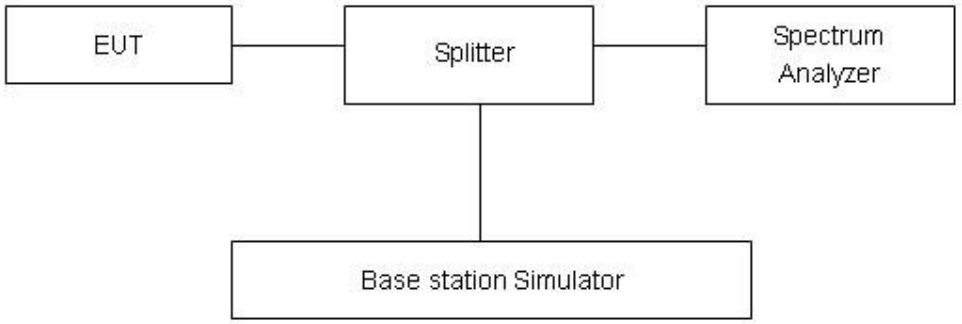
Ambient condition

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 ≥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=624Hz.

Test Results

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

5.3 Band Edge Compliance

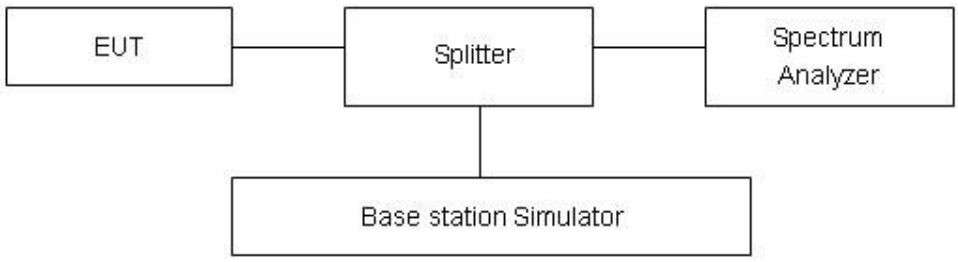
Ambient condition

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.
For LTE Band 7/38 set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
For LTE Band 41 the middle channel, high channel set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge. Beyond the 1 MHz band from the band edge, RBW=1MHz was used; Low channel set RBW >= 2% EBW in the 1MHz band immediately outside and adjacent to the band edge. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
For LTE Band 40 the Low channel Middle channel, High channel set RBW >= 1% EBW in the 1MHz bandimmediately outside and adjacent to the band edge. Beyond the 1 MHz band from the band edge.RBW=1MHz was used,2320 MHz - 2321 MHz RBW ≥1%EBW，2344MHz-2345MHz RBW≥1%EBW.RBW is set to ≥1%EBW, VBW is set to 3x RBW.
RBW is set to ≥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(i) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz.
Rule Part 27.53(a) (4) specifies that “By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside

the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337 MHz; ”
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(m) (4) specifies that “for BRS and EBS stations. For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(4) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.
Example:
The limit line is derived from 43 + 10log (P) dB below the transmitter power P(Watts)
= P(W)- [43 + 10log(P)] (dB)
= [30 + 10log (P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.

Measurement Uncertainty

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

Test Results

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

5.4 Peak-to-Average Power Ratio (PAPR)

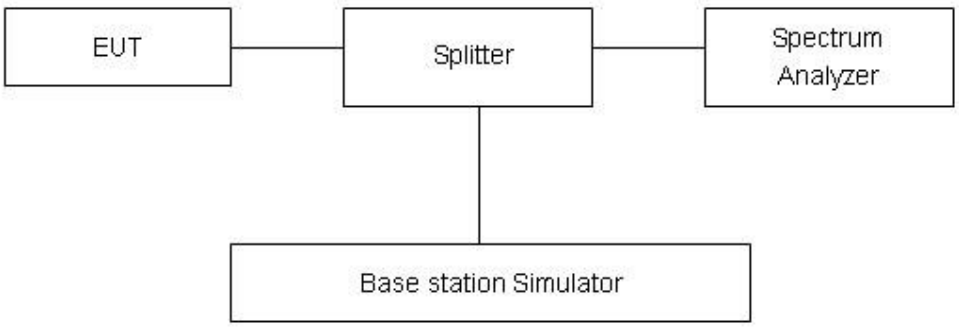
Ambient condition

Temperature	Relative humidity	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:
PAPR (dB) = PPk (dBm) - 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 thenormal 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 -10°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.

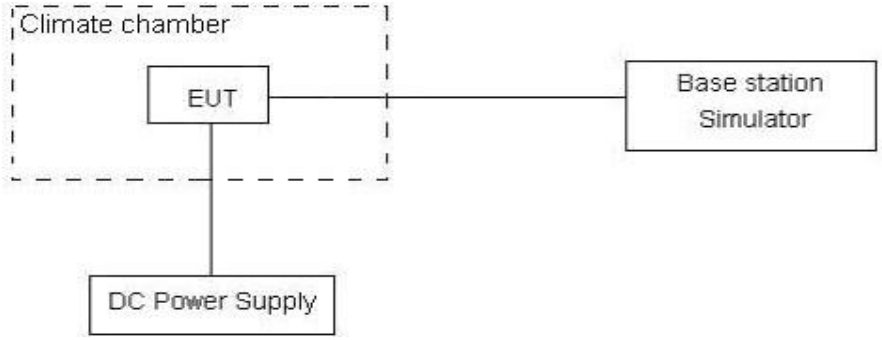
Frequency Stability (Voltage Variation)

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 3.5 V and 4.25 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=0.01ppm.

Test Results

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

5.6 Spurious Emissions at Antenna Terminals

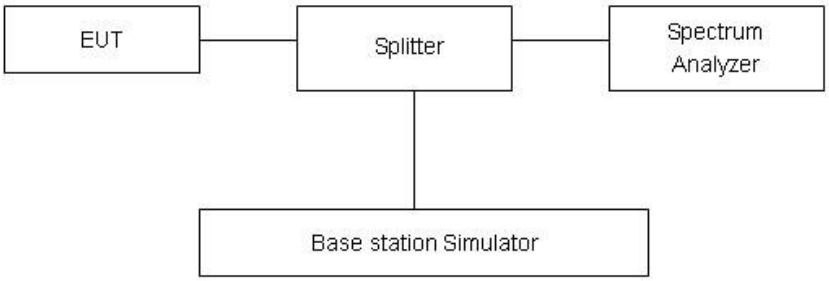
Ambient condition

Temperature	Relative humidity	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 log10 (P) dB..”
Rule Part 27.53(m) 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(4) of this section.
Rule Part 27.53(a) (4) specifies that “ (ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300 MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz;
(iii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz,

and not less than 70 + 10 log (P) dB above 2365 MHz."

Part 27.53(h)/(g) Limit	-13 dBm
Part 27.53(a) Limit	-40 dBm
Part 27.53(m) Limit	-25 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-30GHz	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

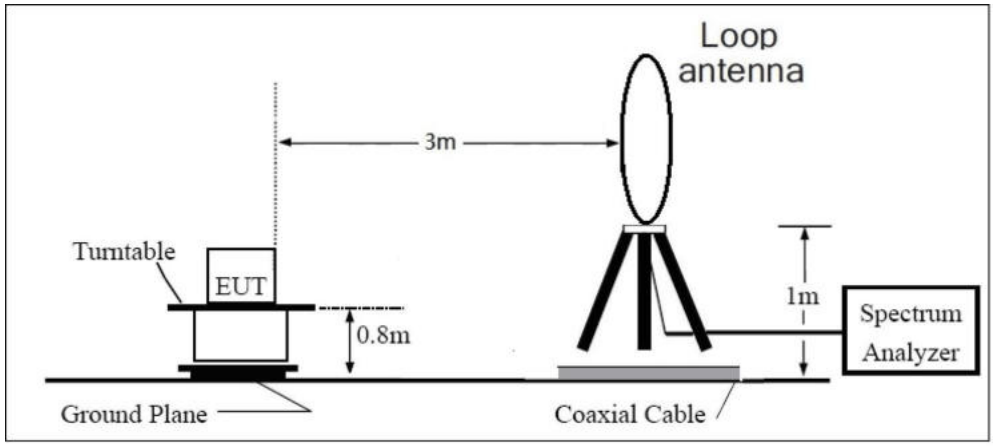
Method of Measurement

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:
Power(EIRP)=PMea- PAg - Pcl + Ga
The measurement results are amend as described below:
Power(EIRP)=PMea- Pcl + 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, ERP = EIRP-2.15dB.

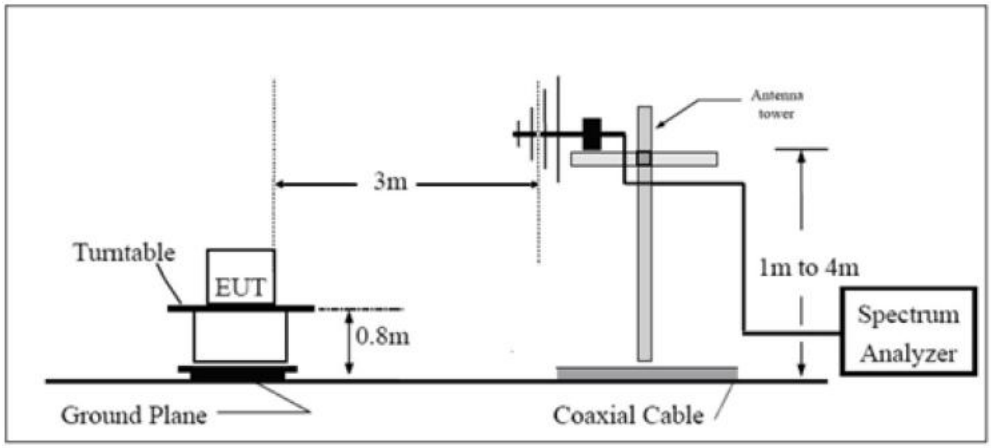
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

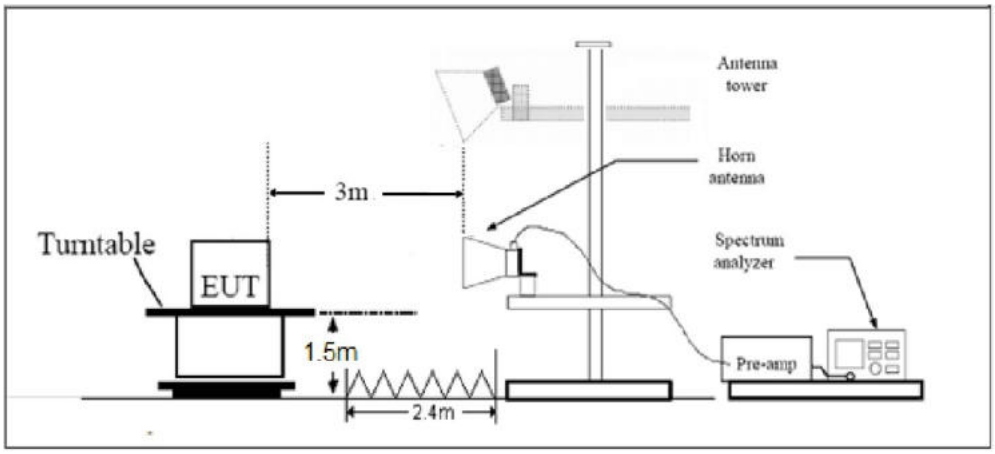
9KHz~ 30MHz



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 log10 (P) dB.”
Rule Part 27.53(m) 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(4) of this section.
Rule Part 27.53(a) (4) specifies that “(i) By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337 MHz; (ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300 MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz;
(iii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.”

Part 27.53 (h)/(g) Limit		-13 dBm
Part 27.53(a) Limit	Limit out of the band 2288-2360 MHz	-40 dBm
	2288-2292 MHz	-37 dBm
	2292-2296 MHz	-31 dBm
	2296-2300 MHz	-25 dBm
	2300-2305 MHz	-13 dBm
	2305-2315 MHz	NA
	2315-2320 MHz	-13 dBm
	2320-2324 MHz	-25 dBm
	2324-2328 MHz	-31 dBm
	2328-2337 MHz	-37 dBm
	2337--2341 MHz	-31 dBm
	2341-2345 MHz	-25 dBm
	2345-2350 MHz	-13 dBm
	2350-2360 MHz	NA
Part 27.53(m) Limit		-25 dBm

Measurement Uncertainty

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

Test Results

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

6 Test Results

6.1 RF Power Output and Effective 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		20.55	20.10	20.80	19.95	19.50	20.20
HSDPA	Sub - Test 1	19.97	19.52	20.22	19.37	18.92	19.62
	Sub - Test 2	19.96	19.51	20.21	19.36	18.91	19.61
	Sub - Test 3	19.45	19.00	19.70	18.85	18.40	19.10
	Sub - Test 4	19.44	18.99	19.69	18.84	18.39	19.09
HSUPA	Sub - Test 1	18.93	18.48	19.18	18.33	17.88	18.58
	Sub - Test 2	16.92	16.47	17.17	16.32	15.87	16.57
	Sub - Test 3	17.90	17.46	18.16	17.30	16.86	17.56
	Sub - Test 4	16.89	16.45	17.15	16.29	15.85	16.55
	Sub - Test 5	20.38	19.94	20.64	19.78	19.34	20.04
HSPA+	16QAM	18.04	17.61	18.31	17.44	17.01	17.71

LTE Band 7						
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)
5	20775	1	#0	QPSK	23.33	25.33
5	20775	1	#Mid	QPSK	23.30	25.30
5	20775	1	#Max	QPSK	23.20	25.20
5	20775	12	#0	QPSK	22.36	24.36
5	20775	12	#Mid	QPSK	22.36	24.36
5	20775	12	#Max	QPSK	22.31	24.31
5	20775	25	#0	QPSK	22.32	24.32
5	20775	1	#0	16QAM	22.63	24.63
5	20775	1	#Mid	16QAM	22.72	24.72
5	20775	1	#Max	16QAM	22.60	24.60
5	20775	12	#0	16QAM	21.40	23.40
5	20775	12	#Mid	16QAM	21.41	23.41
5	20775	12	#Max	16QAM	21.41	23.41
5	20775	25	#0	16QAM	21.43	23.43
5	21100	1	#0	QPSK	23.22	25.22
5	21100	1	#Mid	QPSK	23.50	25.50
5	21100	1	#Max	QPSK	23.42	25.42
5	21100	12	#0	QPSK	22.39	24.39
5	21100	12	#Mid	QPSK	22.39	24.39
5	21100	12	#Max	QPSK	22.57	24.57
5	21100	25	#0	QPSK	22.50	24.50
5	21100	1	#0	16QAM	22.58	24.58
5	21100	1	#Mid	16QAM	22.86	24.86
5	21100	1	#Max	16QAM	22.77	24.77
5	21100	12	#0	16QAM	21.34	23.34
5	21100	12	#Mid	16QAM	21.35	23.35
5	21100	12	#Max	16QAM	21.47	23.47
5	21100	25	#0	16QAM	21.49	23.49
5	21425	1	#0	QPSK	23.14	25.14
5	21425	1	#Mid	QPSK	23.20	25.20
5	21425	1	#Max	QPSK	23.05	25.05
5	21425	12	#0	QPSK	22.17	24.17
5	21425	12	#Mid	QPSK	22.17	24.17
5	21425	12	#Max	QPSK	22.15	24.15
5	21425	25	#0	QPSK	22.15	24.15
5	21425	1	#0	16QAM	22.31	24.31
5	21425	1	#Mid	16QAM	22.41	24.41
5	21425	1	#Max	16QAM	22.32	24.32
5	21425	12	#0	16QAM	21.18	23.18

5	21425	12	#Mid	16QAM	21.19	23.19
5	21425	12	#Max	16QAM	21.18	23.18
5	21425	25	#0	16QAM	21.20	23.20
10	20800	1	#0	QPSK	23.21	25.21
10	20800	1	#Mid	QPSK	23.33	25.33
10	20800	1	#Max	QPSK	22.91	24.91
10	20800	25	#0	QPSK	22.26	24.26
10	20800	25	#Mid	QPSK	22.26	24.26
10	20800	25	#Max	QPSK	22.21	24.21
10	20800	50	#0	QPSK	22.21	24.21
10	20800	1	#0	16QAM	22.51	24.51
10	20800	1	#Mid	16QAM	22.66	24.66
10	20800	1	#Max	16QAM	22.21	24.21
10	20800	25	#0	16QAM	21.37	23.37
10	20800	25	#Mid	16QAM	21.38	23.38
10	20800	25	#Max	16QAM	21.29	23.29
10	20800	50	#0	16QAM	21.28	23.28
10	21100	1	#0	QPSK	23.09	25.09
10	21100	1	#Mid	QPSK	23.48	25.48
10	21100	1	#Max	QPSK	23.26	25.26
10	21100	25	#0	QPSK	22.24	24.24
10	21100	25	#Mid	QPSK	22.23	24.23
10	21100	25	#Max	QPSK	22.38	24.38
10	21100	50	#0	QPSK	22.35	24.35
10	21100	1	#0	16QAM	22.27	24.27
10	21100	1	#Mid	16QAM	22.68	24.68
10	21100	1	#Max	16QAM	22.45	24.45
10	21100	25	#0	16QAM	21.27	23.27
10	21100	25	#Mid	16QAM	21.28	23.28
10	21100	25	#Max	16QAM	21.38	23.38
10	21100	50	#0	16QAM	21.30	23.30
10	21400	1	#0	QPSK	22.85	24.85
10	21400	1	#Mid	QPSK	23.24	25.24
10	21400	1	#Max	QPSK	23.00	25.00
10	21400	25	#0	QPSK	22.03	24.03
10	21400	25	#Mid	QPSK	22.04	24.04
10	21400	25	#Max	QPSK	22.11	24.11
10	21400	50	#0	QPSK	22.10	24.10
10	21400	1	#0	16QAM	21.76	23.76
10	21400	1	#Mid	16QAM	22.15	24.15
10	21400	1	#Max	16QAM	21.97	23.97
10	21400	25	#0	16QAM	20.98	22.98
10	21400	25	#Mid	16QAM	21.00	23.00

10	21400	25	#Max	16QAM	21.18	23.18
10	21400	50	#0	16QAM	21.08	23.08
15	20825	1	#0	QPSK	23.26	25.26
15	20825	1	#Mid	QPSK	23.25	25.25
15	20825	1	#Max	QPSK	23.13	25.13
15	20825	36	#0	QPSK	22.40	24.40
15	20825	36	#Mid	QPSK	22.40	24.40
15	20825	36	#Max	QPSK	22.18	24.18
15	20825	75	#0	QPSK	22.27	24.27
15	20825	1	#0	16QAM	22.64	24.64
15	20825	1	#Mid	16QAM	22.65	24.65
15	20825	1	#Max	16QAM	22.50	24.50
15	20825	36	#0	16QAM	21.45	23.45
15	20825	36	#Mid	16QAM	21.46	23.46
15	20825	36	#Max	16QAM	21.28	23.28
15	20825	75	#0	16QAM	21.32	23.32
15	21100	1	#0	QPSK	23.11	25.11
15	21100	1	#Mid	QPSK	23.56	25.56
15	21100	1	#Max	QPSK	23.34	25.34
15	21100	36	#0	QPSK	22.40	24.40
15	21100	36	#Mid	QPSK	22.39	24.39
15	21100	36	#Max	QPSK	22.54	24.54
15	21100	75	#0	QPSK	22.47	24.47
15	21100	1	#0	16QAM	22.28	24.28
15	21100	1	#Mid	16QAM	22.87	24.87
15	21100	1	#Max	16QAM	22.65	24.65
15	21100	36	#0	16QAM	21.38	23.38
15	21100	36	#Mid	16QAM	21.42	23.42
15	21100	36	#Max	16QAM	21.51	23.51
15	21100	75	#0	16QAM	21.45	23.45
15	21375	1	#0	QPSK	22.95	24.95
15	21375	1	#Mid	QPSK	23.31	25.31
15	21375	1	#Max	QPSK	23.24	25.24
15	21375	36	#0	QPSK	22.03	24.03
15	21375	36	#Mid	QPSK	22.05	24.05
15	21375	36	#Max	QPSK	22.31	24.31
15	21375	75	#0	QPSK	22.22	24.22
15	21375	1	#0	16QAM	21.95	23.95
15	21375	1	#Mid	16QAM	22.35	24.35
15	21375	1	#Max	16QAM	22.34	24.34
15	21375	36	#0	16QAM	21.04	23.04
15	21375	36	#Mid	16QAM	21.06	23.06
15	21375	36	#Max	16QAM	21.39	23.39

15	21375	75	#0	16QAM	21.24	23.24
20	20850	1	#0	QPSK	23.30	25.30
20	20850	1	#Mid	QPSK	23.17	25.17
20	20850	1	#Max	QPSK	23.14	25.14
20	20850	50	#0	QPSK	22.29	24.29
20	20850	50	#Mid	QPSK	22.29	24.29
20	20850	50	#Max	QPSK	22.20	24.20
20	20850	100	#0	QPSK	22.05	24.05
20	20850	1	#0	16QAM	22.45	24.45
20	20850	1	#Mid	16QAM	22.43	24.43
20	20850	1	#Max	16QAM	22.44	24.44
20	20850	50	#0	16QAM	21.34	23.34
20	20850	50	#Mid	16QAM	21.35	23.35
20	20850	50	#Max	16QAM	21.21	23.21
20	20850	100	#0	16QAM	21.09	23.09
20	21100	1	#0	QPSK	23.11	25.11
20	21100	1	#Mid	QPSK	23.71	25.71
20	21100	1	#Max	QPSK	23.51	25.51
20	21100	50	#0	QPSK	22.38	24.38
20	21100	50	#Mid	QPSK	22.29	24.29
20	21100	50	#Max	QPSK	22.36	24.36
20	21100	100	#0	QPSK	22.44	24.44
20	21100	1	#0	16QAM	22.02	24.02
20	21100	1	#Mid	16QAM	22.61	24.61
20	21100	1	#Max	16QAM	22.38	24.38
20	21100	50	#0	16QAM	21.30	23.30
20	21100	50	#Mid	16QAM	21.30	23.30
20	21100	50	#Max	16QAM	21.33	23.33
20	21100	100	#0	16QAM	21.45	23.45
20	21350	1	#0	QPSK	22.92	24.92
20	21350	1	#Mid	QPSK	23.13	25.13
20	21350	1	#Max	QPSK	23.13	25.13
20	21350	50	#0	QPSK	21.93	23.93
20	21350	50	#Mid	QPSK	21.95	23.95
20	21350	50	#Max	QPSK	22.22	24.22
20	21350	100	#0	QPSK	22.06	24.06
20	21350	1	#0	16QAM	21.70	23.70
20	21350	1	#Mid	16QAM	21.96	23.96
20	21350	1	#Max	16QAM	22.07	24.07
20	21350	50	#0	16QAM	20.98	22.98
20	21350	50	#Mid	16QAM	21.00	23.00
20	21350	50	#Max	16QAM	21.27	23.27
20	21350	100	#0	16QAM	21.06	23.06

LTE Band 41						
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)
5	39675	1	#0	QPSK	24.61	26.61
5	39675	1	#Mid	QPSK	24.50	26.50
5	39675	1	#Max	QPSK	24.28	26.28
5	39675	12	#0	QPSK	23.60	25.60
5	39675	12	#Mid	QPSK	23.64	25.64
5	39675	12	#Max	QPSK	23.45	25.45
5	39675	25	#0	QPSK	23.49	25.49
5	39675	1	#0	16QAM	23.90	25.90
5	39675	1	#Mid	16QAM	23.79	25.79
5	39675	1	#Max	16QAM	23.60	25.60
5	39675	12	#0	16QAM	22.72	24.72
5	39675	12	#Mid	16QAM	22.73	24.73
5	39675	12	#Max	16QAM	22.59	24.59
5	39675	25	#0	16QAM	22.59	24.59
5	40620	1	#0	QPSK	23.28	25.28
5	40620	1	#Mid	QPSK	23.37	25.37
5	40620	1	#Max	QPSK	23.30	25.30
5	40620	12	#0	QPSK	22.30	24.30
5	40620	12	#Mid	QPSK	22.31	24.31
5	40620	12	#Max	QPSK	22.38	24.38
5	40620	25	#0	QPSK	22.26	24.26
5	40620	1	#0	16QAM	22.56	24.56
5	40620	1	#Mid	16QAM	22.75	24.75
5	40620	1	#Max	16QAM	22.61	24.61
5	40620	12	#0	16QAM	21.31	23.31
5	40620	12	#Mid	16QAM	21.32	23.32
5	40620	12	#Max	16QAM	21.34	23.34
5	40620	25	#0	16QAM	21.36	23.36
5	41565	1	#0	QPSK	23.00	25.00
5	41565	1	#Mid	QPSK	23.04	25.04
5	41565	1	#Max	QPSK	22.81	24.81
5	41565	12	#0	QPSK	22.03	24.03
5	41565	12	#Mid	QPSK	22.00	24.00
5	41565	12	#Max	QPSK	21.91	23.91
5	41565	25	#0	QPSK	21.95	23.95
5	41565	1	#0	16QAM	22.18	24.18
5	41565	1	#Mid	16QAM	22.21	24.21
5	41565	1	#Max	16QAM	22.00	24.00
5	41565	12	#0	16QAM	21.01	23.01

5	41565	12	#Mid	16QAM	21.02	23.02
5	41565	12	#Max	16QAM	20.93	22.93
5	41565	25	#0	16QAM	20.96	22.96
10	39700	1	#0	QPSK	24.64	26.64
10	39700	1	#Mid	QPSK	24.49	26.49
10	39700	1	#Max	QPSK	24.10	26.10
10	39700	25	#0	QPSK	23.49	25.49
10	39700	25	#Mid	QPSK	23.48	25.48
10	39700	25	#Max	QPSK	23.24	25.24
10	39700	50	#0	QPSK	23.38	25.38
10	39700	1	#0	16QAM	23.91	25.91
10	39700	1	#Mid	16QAM	23.78	25.78
10	39700	1	#Max	16QAM	23.42	25.42
10	39700	25	#0	16QAM	22.59	24.59
10	39700	25	#Mid	16QAM	22.60	24.60
10	39700	25	#Max	16QAM	22.32	24.32
10	39700	50	#0	16QAM	22.39	24.39
10	40620	1	#0	QPSK	23.21	25.21
10	40620	1	#Mid	QPSK	23.45	25.45
10	40620	1	#Max	QPSK	23.24	25.24
10	40620	25	#0	QPSK	22.25	24.25
10	40620	25	#Mid	QPSK	22.26	24.26
10	40620	25	#Max	QPSK	22.29	24.29
10	40620	50	#0	QPSK	22.29	24.29
10	40620	1	#0	16QAM	22.26	24.26
10	40620	1	#Mid	16QAM	22.51	24.51
10	40620	1	#Max	16QAM	22.30	24.30
10	40620	25	#0	16QAM	21.36	23.36
10	40620	25	#Mid	16QAM	21.37	23.37
10	40620	25	#Max	16QAM	21.40	23.40
10	40620	50	#0	16QAM	21.34	23.34
10	41540	1	#0	QPSK	23.14	25.14
10	41540	1	#Mid	QPSK	23.18	25.18
10	41540	1	#Max	QPSK	22.81	24.81
10	41540	25	#0	QPSK	22.09	24.09
10	41540	25	#Mid	QPSK	22.10	24.10
10	41540	25	#Max	QPSK	21.96	23.96
10	41540	50	#0	QPSK	22.04	24.04
10	41540	1	#0	16QAM	22.03	24.03
10	41540	1	#Mid	16QAM	22.11	24.11
10	41540	1	#Max	16QAM	21.75	23.75
10	41540	25	#0	16QAM	21.11	23.11
10	41540	25	#Mid	16QAM	21.11	23.11

10	41540	25	#Max	16QAM	20.99	22.99
10	41540	50	#0	16QAM	21.07	23.07
15	39725	1	#0	QPSK	24.64	26.64
15	39725	1	#Mid	QPSK	24.26	26.26
15	39725	1	#Max	QPSK	23.97	25.97
15	39725	36	#0	QPSK	23.46	25.46
15	39725	36	#Mid	QPSK	23.46	25.46
15	39725	36	#Max	QPSK	23.15	25.15
15	39725	75	#0	QPSK	23.34	25.34
15	39725	1	#0	16QAM	23.94	25.94
15	39725	1	#Mid	16QAM	23.70	25.70
15	39725	1	#Max	16QAM	23.36	25.36
15	39725	36	#0	16QAM	22.53	24.53
15	39725	36	#Mid	16QAM	22.53	24.53
15	39725	36	#Max	16QAM	22.21	24.21
15	39725	75	#0	16QAM	22.36	24.36
15	40620	1	#0	QPSK	23.31	25.31
15	40620	1	#Mid	QPSK	23.42	25.42
15	40620	1	#Max	QPSK	23.38	25.38
15	40620	36	#0	QPSK	22.33	24.33
15	40620	36	#Mid	QPSK	22.34	24.34
15	40620	36	#Max	QPSK	22.37	24.37
15	40620	75	#0	QPSK	22.32	24.32
15	40620	1	#0	16QAM	22.34	24.34
15	40620	1	#Mid	16QAM	22.46	24.46
15	40620	1	#Max	16QAM	22.43	24.43
15	40620	36	#0	16QAM	21.42	23.42
15	40620	36	#Mid	16QAM	21.42	23.42
15	40620	36	#Max	16QAM	21.46	23.46
15	40620	75	#0	16QAM	21.40	23.40
15	41515	1	#0	QPSK	23.21	25.21
15	41515	1	#Mid	QPSK	23.31	25.31
15	41515	1	#Max	QPSK	22.95	24.95
15	41515	36	#0	QPSK	22.23	24.23
15	41515	36	#Mid	QPSK	22.23	24.23
15	41515	36	#Max	QPSK	22.11	24.11
15	41515	75	#0	QPSK	22.16	24.16
15	41515	1	#0	16QAM	22.21	24.21
15	41515	1	#Mid	16QAM	22.35	24.35
15	41515	1	#Max	16QAM	21.99	23.99
15	41515	36	#0	16QAM	21.25	23.25
15	41515	36	#Mid	16QAM	21.26	23.26
15	41515	36	#Max	16QAM	21.16	23.16

15	41515	75	#0	16QAM	21.23	23.23
20	39750	1	#0	QPSK	24.58	26.58
20	39750	1	#Mid	QPSK	24.11	26.11
20	39750	1	#Max	QPSK	23.88	25.88
20	39750	50	#0	QPSK	23.28	25.28
20	39750	50	#Mid	QPSK	23.28	25.28
20	39750	50	#Max	QPSK	22.96	24.96
20	39750	100	#0	QPSK	23.13	25.13
20	39750	1	#0	16QAM	23.71	25.71
20	39750	1	#Mid	16QAM	23.36	25.36
20	39750	1	#Max	16QAM	23.10	25.10
20	39750	50	#0	16QAM	22.34	24.34
20	39750	50	#Mid	16QAM	22.34	24.34
20	39750	50	#Max	16QAM	21.98	23.98
20	39750	100	#0	16QAM	22.17	24.17
20	40620	1	#0	QPSK	23.20	25.20
20	40620	1	#Mid	QPSK	23.46	25.46
20	40620	1	#Max	QPSK	23.38	25.38
20	40620	50	#0	QPSK	22.25	24.25
20	40620	50	#Mid	QPSK	22.26	24.26
20	40620	50	#Max	QPSK	22.31	24.31
20	40620	100	#0	QPSK	22.29	24.29
20	40620	1	#0	16QAM	22.16	24.16
20	40620	1	#Mid	16QAM	22.42	24.42
20	40620	1	#Max	16QAM	22.35	24.35
20	40620	50	#0	16QAM	21.31	23.31
20	40620	50	#Mid	16QAM	21.31	23.31
20	40620	50	#Max	16QAM	21.36	23.36
20	40620	100	#0	16QAM	21.37	23.37
20	41490	1	#0	QPSK	23.16	25.16
20	41490	1	#Mid	QPSK	23.34	25.34
20	41490	1	#Max	QPSK	22.89	24.89
20	41490	50	#0	QPSK	22.12	24.12
20	41490	50	#Mid	QPSK	22.12	24.12
20	41490	50	#Max	QPSK	22.09	24.09
20	41490	100	#0	QPSK	22.11	24.11
20	41490	1	#0	16QAM	21.83	23.83
20	41490	1	#Mid	16QAM	22.04	24.04
20	41490	1	#Max	16QAM	21.59	23.59
20	41490	50	#0	16QAM	21.25	23.25
20	41490	50	#Mid	16QAM	21.25	23.25
20	41490	50	#Max	16QAM	21.20	23.20
20	41490	100	#0	16QAM	21.16	23.16

LTE Band 66						
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	EIRP (dBm)
1.4	131979	1	#0	QPSK	23.69	23.09
1.4	131979	1	#Mid	QPSK	23.42	22.82
1.4	131979	1	#Max	QPSK	23.47	22.87
1.4	131979	3	#0	QPSK	23.50	22.90
1.4	131979	3	#Mid	QPSK	23.50	22.90
1.4	131979	3	#Max	QPSK	23.31	22.71
1.4	131979	6	#0	QPSK	22.45	21.85
1.4	131979	1	#0	16QAM	22.76	22.16
1.4	131979	1	#Mid	16QAM	22.53	21.93
1.4	131979	1	#Max	16QAM	22.51	21.91
1.4	131979	3	#0	16QAM	22.73	22.13
1.4	131979	3	#Mid	16QAM	22.73	22.13
1.4	131979	3	#Max	16QAM	22.57	21.97
1.4	131979	6	#0	16QAM	21.67	21.07
1.4	132322	1	#0	QPSK	23.92	23.32
1.4	132322	1	#Mid	QPSK	23.89	23.29
1.4	132322	1	#Max	QPSK	23.92	23.32
1.4	132322	3	#0	QPSK	23.84	23.24
1.4	132322	3	#Mid	QPSK	23.84	23.24
1.4	132322	3	#Max	QPSK	23.85	23.25
1.4	132322	6	#0	QPSK	22.91	22.31
1.4	132322	1	#0	16QAM	23.13	22.53
1.4	132322	1	#Mid	16QAM	23.14	22.54
1.4	132322	1	#Max	16QAM	23.19	22.59
1.4	132322	3	#0	16QAM	22.99	22.39
1.4	132322	3	#Mid	16QAM	22.99	22.39
1.4	132322	3	#Max	16QAM	23.01	22.41
1.4	132322	6	#0	16QAM	21.99	21.39
1.4	132665	1	#0	QPSK	23.78	23.18
1.4	132665	1	#Mid	QPSK	23.65	23.05
1.4	132665	1	#Max	QPSK	23.77	23.17
1.4	132665	3	#0	QPSK	23.70	23.10
1.4	132665	3	#Mid	QPSK	23.69	23.09
1.4	132665	3	#Max	QPSK	23.58	22.98
1.4	132665	6	#0	QPSK	22.75	22.15
1.4	132665	1	#0	16QAM	22.80	22.20
1.4	132665	1	#Mid	16QAM	22.64	22.04
1.4	132665	1	#Max	16QAM	22.78	22.18
1.4	132665	3	#0	16QAM	22.75	22.15

1.4	132665	3	#Mid	16QAM	22.76	22.16
1.4	132665	3	#Max	16QAM	22.69	22.09
1.4	132665	6	#0	16QAM	21.88	21.28
3	131987	1	#0	QPSK	23.47	22.87
3	131987	1	#Mid	QPSK	23.32	22.72
3	131987	1	#Max	QPSK	23.37	22.77
3	131987	8	#0	QPSK	22.39	21.79
3	131987	8	#Mid	QPSK	22.38	21.78
3	131987	8	#Max	QPSK	22.37	21.77
3	131987	15	#0	QPSK	22.40	21.80
3	131987	1	#0	16QAM	22.77	22.17
3	131987	1	#Mid	16QAM	22.65	22.05
3	131987	1	#Max	16QAM	22.71	22.11
3	131987	8	#0	16QAM	21.58	20.98
3	131987	8	#Mid	16QAM	21.59	20.99
3	131987	8	#Max	16QAM	21.51	20.91
3	131987	15	#0	16QAM	21.53	20.93
3	132322	1	#0	QPSK	23.84	23.24
3	132322	1	#Mid	QPSK	23.90	23.30
3	132322	1	#Max	QPSK	23.81	23.21
3	132322	8	#0	QPSK	22.92	22.32
3	132322	8	#Mid	QPSK	22.93	22.33
3	132322	8	#Max	QPSK	22.91	22.31
3	132322	15	#0	QPSK	22.92	22.32
3	132322	1	#0	16QAM	23.11	22.51
3	132322	1	#Mid	16QAM	23.15	22.55
3	132322	1	#Max	16QAM	23.09	22.49
3	132322	8	#0	16QAM	22.08	21.48
3	132322	8	#Mid	16QAM	22.09	21.49
3	132322	8	#Max	16QAM	22.02	21.42
3	132322	15	#0	16QAM	21.98	21.38
3	132657	1	#0	QPSK	23.69	23.09
3	132657	1	#Mid	QPSK	23.73	23.13
3	132657	1	#Max	QPSK	23.59	22.99
3	132657	8	#0	QPSK	22.77	22.17
3	132657	8	#Mid	QPSK	22.76	22.16
3	132657	8	#Max	QPSK	22.74	22.14
3	132657	15	#0	QPSK	22.72	22.12
3	132657	1	#0	16QAM	22.62	22.02
3	132657	1	#Mid	16QAM	22.67	22.07
3	132657	1	#Max	16QAM	22.54	21.94
3	132657	8	#0	16QAM	21.89	21.29
3	132657	8	#Mid	16QAM	21.90	21.30

3	132657	8	#Max	16QAM	21.89	21.29
3	132657	15	#0	16QAM	21.87	21.27
5	131997	1	#0	QPSK	23.45	22.85
5	131997	1	#Mid	QPSK	23.47	22.87
5	131997	1	#Max	QPSK	23.37	22.77
5	131997	12	#0	QPSK	22.37	21.77
5	131997	12	#Mid	QPSK	22.38	21.78
5	131997	12	#Max	QPSK	22.39	21.79
5	131997	25	#0	QPSK	22.36	21.76
5	131997	1	#0	16QAM	22.83	22.23
5	131997	1	#Mid	16QAM	22.85	22.25
5	131997	1	#Max	16QAM	22.72	22.12
5	131997	12	#0	16QAM	21.48	20.88
5	131997	12	#Mid	16QAM	21.48	20.88
5	131997	12	#Max	16QAM	21.49	20.89
5	131997	25	#0	16QAM	21.56	20.96
5	132322	1	#0	QPSK	23.79	23.19
5	132322	1	#Mid	QPSK	23.94	23.34
5	132322	1	#Max	QPSK	23.81	23.21
5	132322	12	#0	QPSK	22.93	22.33
5	132322	12	#Mid	QPSK	22.94	22.34
5	132322	12	#Max	QPSK	22.90	22.30
5	132322	25	#0	QPSK	22.94	22.34
5	132322	1	#0	16QAM	23.04	22.44
5	132322	1	#Mid	16QAM	23.24	22.64
5	132322	1	#Max	16QAM	23.09	22.49
5	132322	12	#0	16QAM	22.01	21.41
5	132322	12	#Mid	16QAM	22.02	21.42
5	132322	12	#Max	16QAM	22.03	21.43
5	132322	25	#0	16QAM	22.05	21.45
5	132647	1	#0	QPSK	23.58	22.98
5	132647	1	#Mid	QPSK	23.72	23.12
5	132647	1	#Max	QPSK	23.56	22.96
5	132647	12	#0	QPSK	22.79	22.19
5	132647	12	#Mid	QPSK	22.79	22.19
5	132647	12	#Max	QPSK	22.79	22.19
5	132647	25	#0	QPSK	22.79	22.19
5	132647	1	#0	16QAM	22.97	22.37
5	132647	1	#Mid	16QAM	23.11	22.51
5	132647	1	#Max	16QAM	22.95	22.35
5	132647	12	#0	16QAM	21.96	21.36
5	132647	12	#Mid	16QAM	21.93	21.33
5	132647	12	#Max	16QAM	21.93	21.33

5	132647	25	#0	16QAM	21.94	21.34
10	132022	1	#0	QPSK	23.30	22.70
10	132022	1	#Mid	QPSK	23.56	22.96
10	132022	1	#Max	QPSK	23.22	22.62
10	132022	25	#0	QPSK	22.30	21.70
10	132022	25	#Mid	QPSK	22.29	21.69
10	132022	25	#Max	QPSK	22.32	21.72
10	132022	50	#0	QPSK	22.30	21.70
10	132022	1	#0	16QAM	22.66	22.06
10	132022	1	#Mid	16QAM	22.87	22.27
10	132022	1	#Max	16QAM	22.58	21.98
10	132022	25	#0	16QAM	21.47	20.87
10	132022	25	#Mid	16QAM	21.47	20.87
10	132022	25	#Max	16QAM	21.55	20.95
10	132022	50	#0	16QAM	21.42	20.82
10	132322	1	#0	QPSK	23.71	23.11
10	132322	1	#Mid	QPSK	23.93	23.33
10	132322	1	#Max	QPSK	23.67	23.07
10	132322	25	#0	QPSK	22.76	22.16
10	132322	25	#Mid	QPSK	22.76	22.16
10	132322	25	#Max	QPSK	22.82	22.22
10	132322	50	#0	QPSK	22.81	22.21
10	132322	1	#0	16QAM	22.93	22.33
10	132322	1	#Mid	16QAM	23.18	22.58
10	132322	1	#Max	16QAM	22.92	22.32
10	132322	25	#0	16QAM	21.92	21.32
10	132322	25	#Mid	16QAM	21.92	21.32
10	132322	25	#Max	16QAM	21.98	21.38
10	132322	50	#0	16QAM	21.93	21.33
10	132622	1	#0	QPSK	23.54	22.94
10	132622	1	#Mid	QPSK	23.70	23.10
10	132622	1	#Max	QPSK	23.44	22.84
10	132622	25	#0	QPSK	22.60	22.00
10	132622	25	#Mid	QPSK	22.60	22.00
10	132622	25	#Max	QPSK	22.59	21.99
10	132622	50	#0	QPSK	22.57	21.97
10	132622	1	#0	16QAM	22.50	21.90
10	132622	1	#Mid	16QAM	22.68	22.08
10	132622	1	#Max	16QAM	22.39	21.79
10	132622	25	#0	16QAM	21.71	21.11
10	132622	25	#Mid	16QAM	21.72	21.12
10	132622	25	#Max	16QAM	21.73	21.13
10	132622	50	#0	16QAM	21.72	21.12

15	132047	1	#0	QPSK	23.27	22.67
15	132047	1	#Mid	QPSK	23.50	22.90
15	132047	1	#Max	QPSK	23.68	23.08
15	132047	36	#0	QPSK	22.40	21.80
15	132047	36	#Mid	QPSK	22.40	21.80
15	132047	36	#Max	QPSK	22.60	22.00
15	132047	75	#0	QPSK	22.43	21.83
15	132047	1	#0	16QAM	22.60	22.00
15	132047	1	#Mid	16QAM	22.82	22.22
15	132047	1	#Max	16QAM	23.04	22.44
15	132047	36	#0	16QAM	21.56	20.96
15	132047	36	#Mid	16QAM	21.57	20.97
15	132047	36	#Max	16QAM	21.72	21.12
15	132047	75	#0	16QAM	21.61	21.01
15	132322	1	#0	QPSK	23.74	23.14
15	132322	1	#Mid	QPSK	23.94	23.34
15	132322	1	#Max	QPSK	23.86	23.26
15	132322	36	#0	QPSK	22.90	22.30
15	132322	36	#Mid	QPSK	22.90	22.30
15	132322	36	#Max	QPSK	22.86	22.26
15	132322	75	#0	QPSK	22.90	22.30
15	132322	1	#0	16QAM	23.00	22.40
15	132322	1	#Mid	16QAM	23.19	22.59
15	132322	1	#Max	16QAM	23.12	22.52
15	132322	36	#0	16QAM	22.07	21.47
15	132322	36	#Mid	16QAM	22.08	21.48
15	132322	36	#Max	16QAM	22.04	21.44
15	132322	75	#0	16QAM	22.03	21.43
15	132597	1	#0	QPSK	23.52	22.92
15	132597	1	#Mid	QPSK	23.78	23.18
15	132597	1	#Max	QPSK	23.60	23.00
15	132597	36	#0	QPSK	22.69	22.09
15	132597	36	#Mid	QPSK	22.69	22.09
15	132597	36	#Max	QPSK	22.71	22.11
15	132597	75	#0	QPSK	22.72	22.12
15	132597	1	#0	16QAM	22.63	22.03
15	132597	1	#Mid	16QAM	22.87	22.27
15	132597	1	#Max	16QAM	22.69	22.09
15	132597	36	#0	16QAM	21.79	21.19
15	132597	36	#Mid	16QAM	21.80	21.20
15	132597	36	#Max	16QAM	21.84	21.24
15	132597	75	#0	16QAM	21.87	21.27
20	132072	1	#0	QPSK	23.09	22.49

20	132072	1	#Mid	QPSK	23.52	22.92
20	132072	1	#Max	QPSK	23.60	23.00
20	132072	50	#0	QPSK	22.31	21.71
20	132072	50	#Mid	QPSK	22.31	21.71
20	132072	50	#Max	QPSK	22.61	22.01
20	132072	100	#0	QPSK	22.35	21.75
20	132072	1	#0	16QAM	22.36	21.76
20	132072	1	#Mid	16QAM	22.82	22.22
20	132072	1	#Max	16QAM	22.92	22.32
20	132072	50	#0	16QAM	21.45	20.85
20	132072	50	#Mid	16QAM	21.46	20.86
20	132072	50	#Max	16QAM	21.76	21.16
20	132072	100	#0	16QAM	21.48	20.88
20	132322	1	#0	QPSK	23.71	23.11
20	132322	1	#Mid	QPSK	23.98	23.38
20	132322	1	#Max	QPSK	23.67	23.07
20	132322	50	#0	QPSK	22.78	22.18
20	132322	50	#Mid	QPSK	22.78	22.18
20	132322	50	#Max	QPSK	22.77	22.17
20	132322	100	#0	QPSK	22.83	22.23
20	132322	1	#0	16QAM	22.69	22.09
20	132322	1	#Mid	16QAM	22.88	22.28
20	132322	1	#Max	16QAM	22.62	22.02
20	132322	50	#0	16QAM	21.98	21.38
20	132322	50	#Mid	16QAM	21.95	21.35
20	132322	50	#Max	16QAM	21.92	21.32
20	132322	100	#0	16QAM	21.98	21.38
20	132572	1	#0	QPSK	23.38	22.78
20	132572	1	#Mid	QPSK	23.74	23.14
20	132572	1	#Max	QPSK	23.45	22.85
20	132572	50	#0	QPSK	22.52	21.92
20	132572	50	#Mid	QPSK	22.52	21.92
20	132572	50	#Max	QPSK	22.60	22.00
20	132572	100	#0	QPSK	22.67	22.07
20	132572	1	#0	16QAM	22.31	21.71
20	132572	1	#Mid	16QAM	22.61	22.01
20	132572	1	#Max	16QAM	22.47	21.87
20	132572	50	#0	16QAM	21.70	21.10
20	132572	50	#Mid	16QAM	21.70	21.10
20	132572	50	#Max	16QAM	21.80	21.20
20	132572	100	#0	16QAM	21.83	21.23

EIRP and Duty Cycle for 3GPP LTE Band 40

Band	RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Duty Cycle	Limit
LTE Band 40 Subset 1	100%	QPSK	5	38725	2307.5	30.78%	⩽ 38%
				38750	2310	30.77%	⩽ 38%
				38775	2312.5	30.77%	⩽ 38%
			10	38750	2310	30.83%	⩽ 38%
		16QAM	5	38725	2307.5	30.78%	⩽ 38%
				38750	2310	30.83%	⩽ 38%
				38775	2312.5	30.77%	⩽ 38%
			10	38750	2310	30.77%	⩽ 38%

Band	RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	Duty Cycle	Limit
LTE Band 40 Subset 2	100%	QPSK	5	39175	2352.5	30.83%	⩽ 38%
				39200	2355	30.83%	⩽ 38%
				39225	2357.5	30.78%	⩽ 38%
			10	39200	2355	30.84%	⩽ 38%
		16QAM	5	39175	2352.5	30.77%	⩽ 38%
				39200	2355	30.77%	⩽ 38%
				39225	2357.5	30.77%	⩽ 38%
			10	39200	2355	30.78%	⩽ 38%

LTE Band 40 Subset 1				Power Spectral Density (dBm/MHz)			EIRP (dBm/MHz)			EIRP (mW/MHz)			Limit (mW /MHz)
BW	Mddulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			
				38725/ 2307.5	38750/ 2310	38775/ 2312.5	38725/ 2307.5	38750/ 2310	38775/ 2312.5	38725/ 2307.5	38750/ 2310	38775/ 2312.5	
5MHz	QPSK	25	0	10.981	10.223	10.257	11.591	10.833	10.867	14.424	12.114	12.210	50
	16QAM	25	0	9.339	9.384	9.627	9.949	9.994	10.237	9.883	9.986	10.561	50
BW	Mddulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			Limit (mW /MHz)
				38750/2310			38750/2310			38750/2310			
10MHz	QPSK	50	0	7.687			8.297			6.756			50
	16QAM	50	0	6.650			7.260			5.321			50

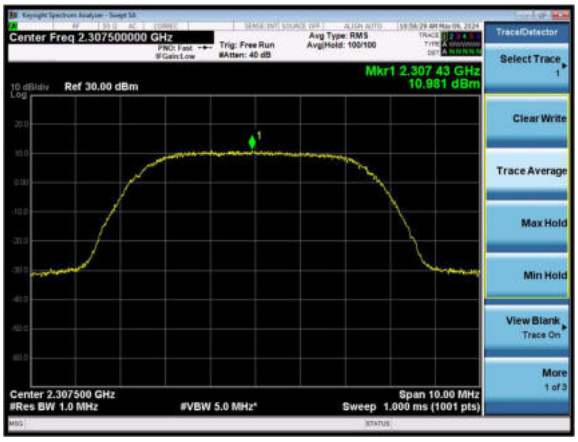
LTE Band 40 Subset 1				Power Spectral Density (dBm/5MHz)			EIRP (dBm/5MHz)			EIRP (mW/5MHz)			Limit (mW /5MHz)
BW	Mddulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			
				38725/ 2307.5	38750/ 2310	38775/ 2312.5	38725/ 2307.5	38750/ 2310	38775/ 2312.5	38725/ 2307.5	38750/ 2310	38775/ 2312.5	
5MHz	QPSK	25	0	15.251	14.534	14.311	15.861	15.144	14.921	38.557	32.689	31.053	250
	16QAM	25	0	15.414	14.483	14.896	16.024	15.093	15.506	40.031	32.307	35.530	250
BW	Mddulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			Limit (mW /5MHz)
				38750/2310			38750/2310			38750/2310			
10MHz	QPSK	50	0	13.552			14.162			26.074			250
	16QAM	50	0	13.094			13.704			23.464			250

LTE Band 40 Subset 2				Power Spectral Density (dBm/MHz)			EIRP (dBm/MHz)			EIRP (mW/MHz)			Limit (mW /MHz)
BW	Mddulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			
				39175/ 2352.5	39200/ 2355	39225/ 2357.5	39175/ 2352.5	39200/ 2355	39225/ 2357.5	39175/ 2352.5	39200/ 2355	39225/ 2357.5	
5MHz	QPSK	25	0	9.244	9.227	9.390	10.594	10.577	10.740	11.466	11.421	11.858	50
	16QAM	25	0	8.611	8.552	8.696	9.961	9.902	10.046	9.911	9.777	10.106	50
BW	Mddulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			Limit (mW /MHz)
				39200/2355			39200/2355			39200/2355			
10MHz	QPSK	50	0	6.233			7.583			5.732			50
	16QAM	50	0	5.062			6.412			4.377			50

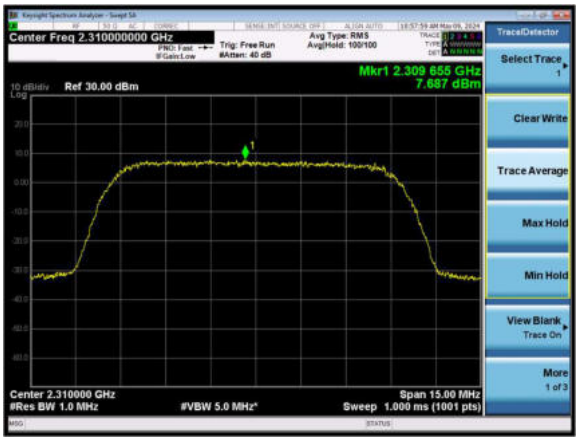
LTE Band 40 Subset 2				Power Spectral Density (dBm/5MHz)			EIRP (dBm/5MHz)			EIRP (mW/5MHz)			Limit (mW /5MHz)
BW	Mddulation	RB	RB	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			
		size	offset	39175/ 2352.5	39200/ 2355	39225/ 2357.5	39175/ 2352.5	39200/ 2355	39225/ 2357.5	39175/ 2352.5	39200/ 2355	39225/ 2357.5	
5MHz	QPSK	25	0	13.908	14.565	13.605	15.258	15.915	14.955	33.558	39.039	31.297	250
	16QAM	25	0	12.346	13.300	13.294	13.696	14.650	14.644	23.421	29.174	29.134	250
BW	Mddulation	RB size	RB offset	Channel/Frequency (MHz)			Channel/Frequency (MHz)			Channel/Frequency (MHz)			Limit (mW /5MHz)
				39200/2355			39200/2355			39200/2355			
10MHz	QPSK	50	0	12.147			13.497			22.372			250
	16QAM	50	0	11.985			13.335			21.553			250

EIRP (dBm/MHz)

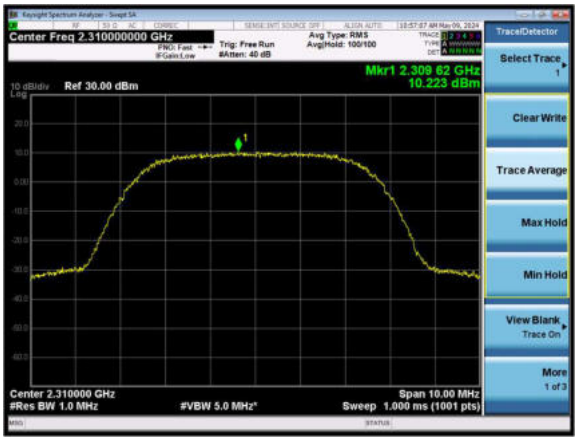
LTE Band 40 Subset 1 QPSK 5MHz CH-Low



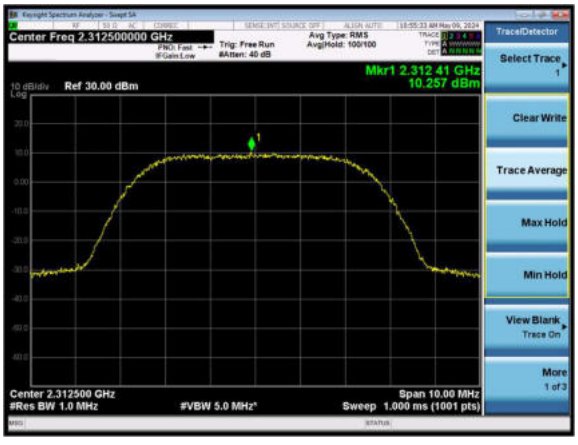
LTE Band 40 Subset 1 QPSK 10MHz



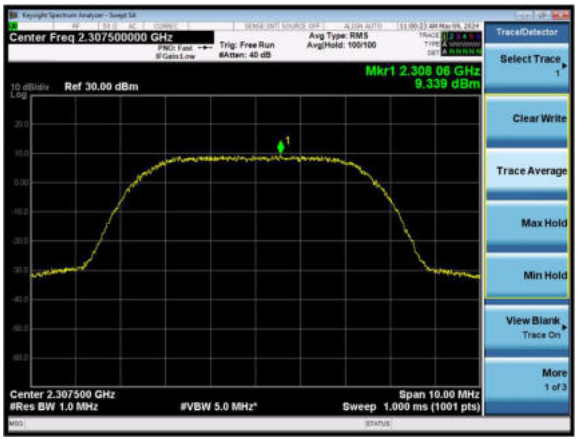
LTE Band 40 Subset 1 QPSK 5MHz CH-Middle



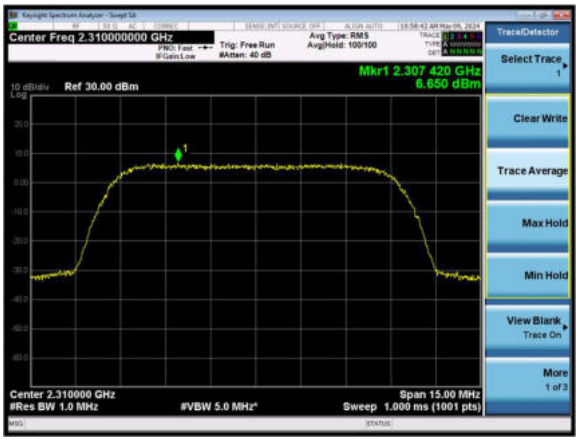
LTE Band 40 Subset 1 QPSK 5MHz CH-High



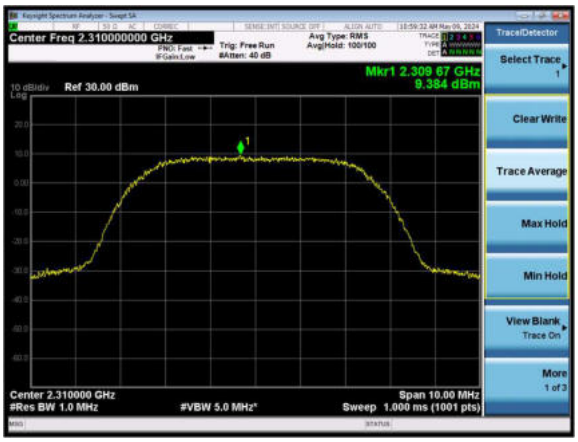
LTE Band 40 Subset 1 16QAM 5MHz CH-Low



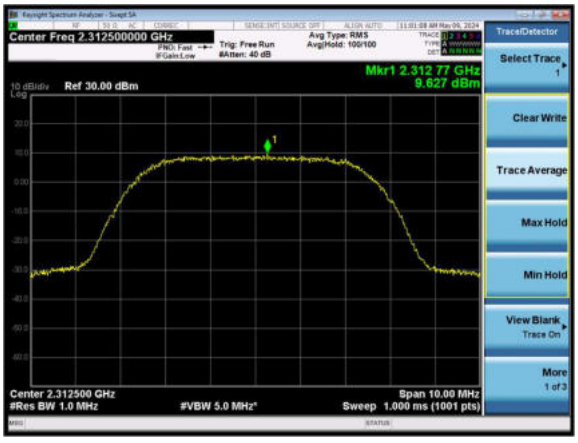
LTE Band 40 Subset 1 16QAM 10MHz



LTE Band 40 Subset 1 16QAM 5MHz CH-Middle

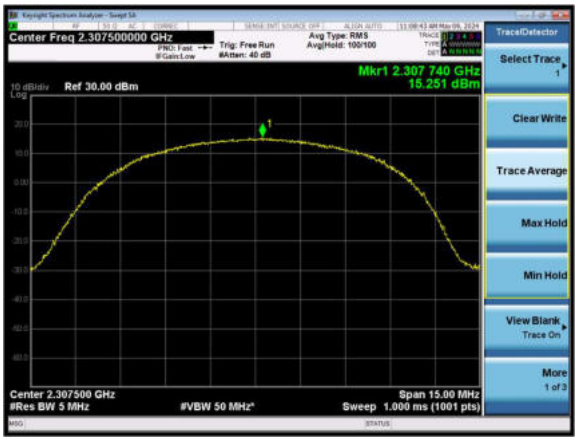


LTE Band 40 Subset 1 16QAM 5MHz CH-High

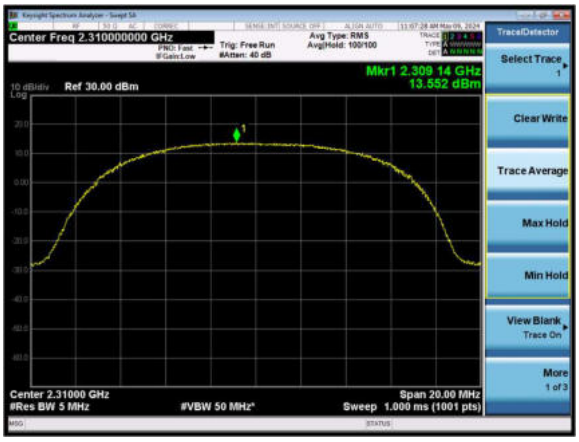


EIRP (dBm/5MHz)

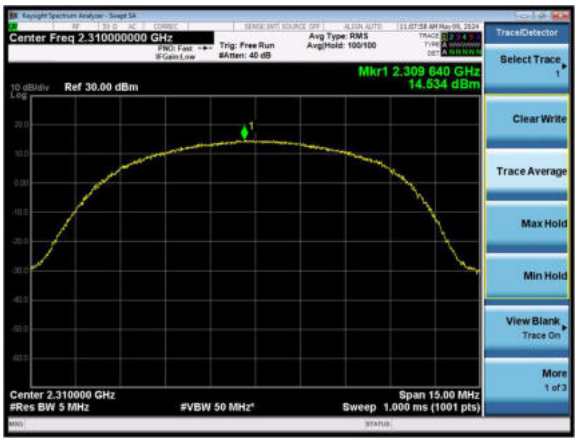
LTE Band 40 Subset 1 QPSK 5MHz CH-Low



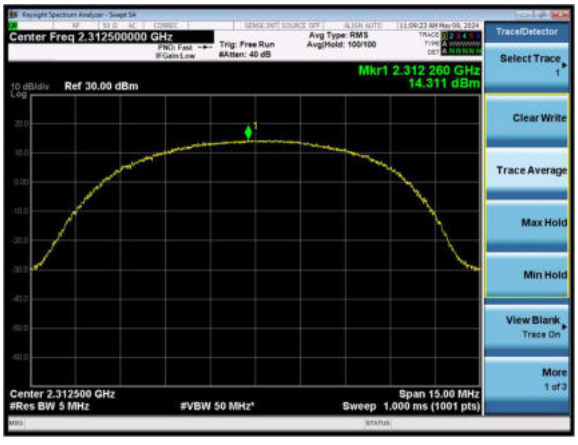
LTE Band 40 Subset 1 QPSK 10MHz



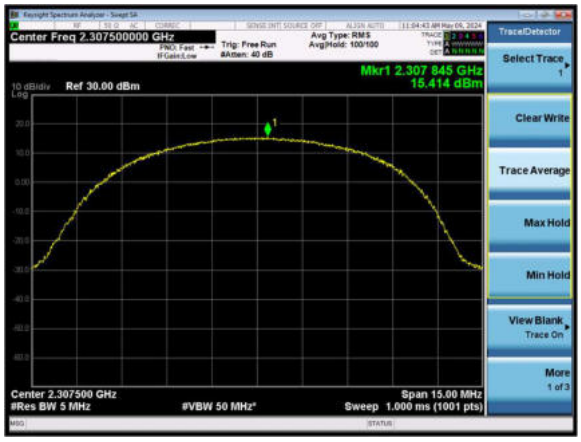
LTE Band 40 Subset 1 QPSK 5MHz CH-Middle



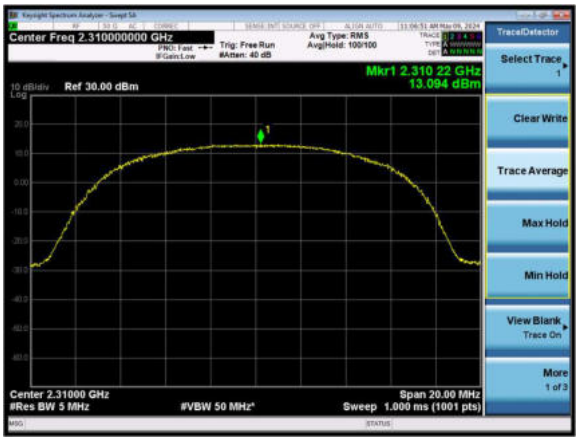
LTE Band 40 Subset 1 QPSK 5MHz CH-High



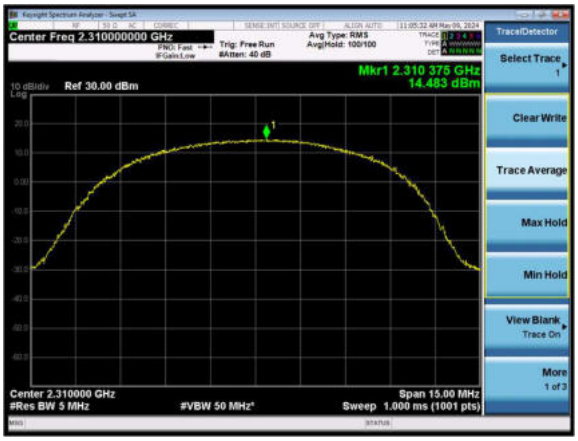
LTE Band 40 Subset 1 16QAM 5MHz CH-Low



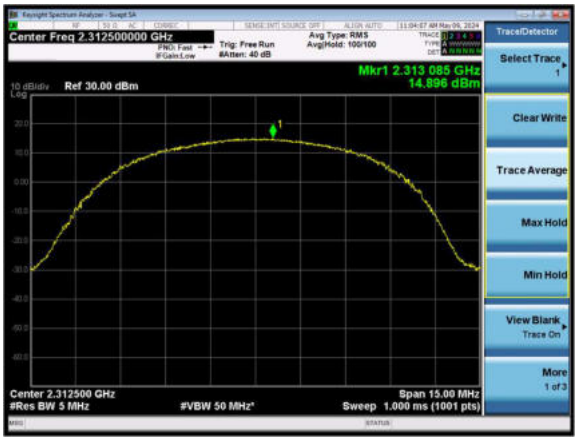
LTE Band 40 Subset 1 16QAM 10MHz



LTE Band 40 Subset 1 16QAM 5MHz CH-Middle

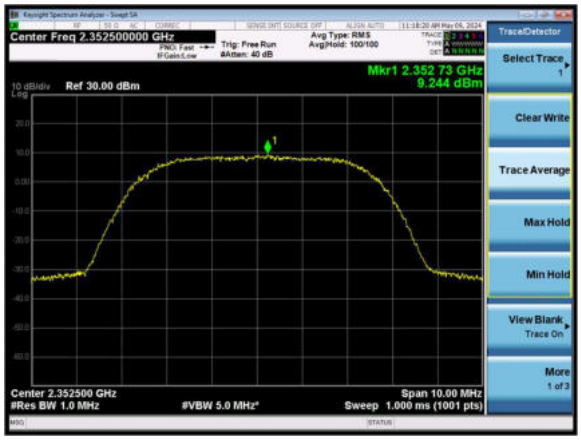


LTE Band 40 Subset 1 16QAM 5MHz CH-High

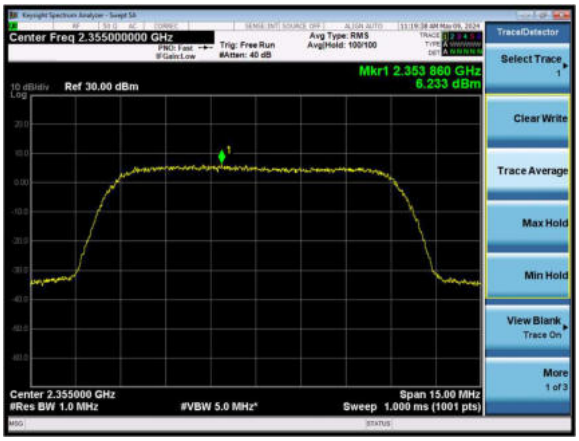


EIRP (dBm/MHz)

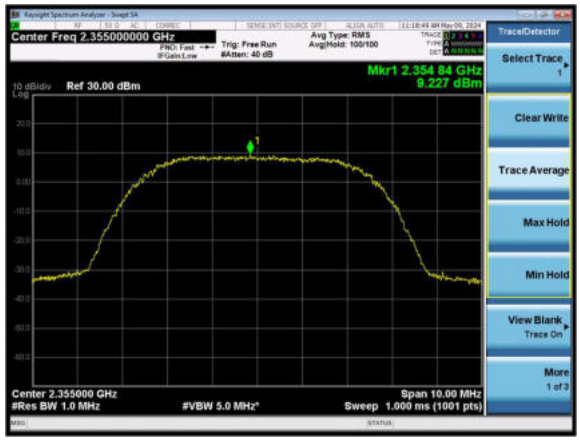
LTE Band 40 Subset 2 QPSK 5MHz CH-Low



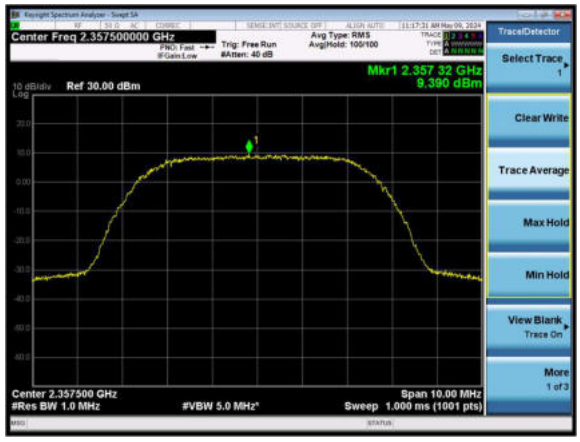
LTE Band 40 Subset 2 QPSK 10MHz



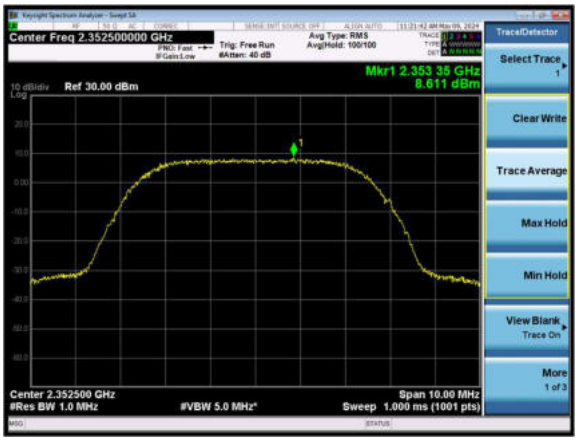
LTE Band 40 Subset 2 QPSK 5MHz CH-Middle



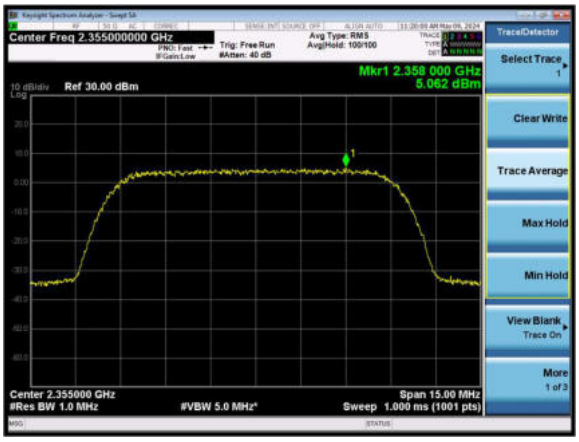
LTE Band 40 Subset 2 QPSK 5MHz CH-High



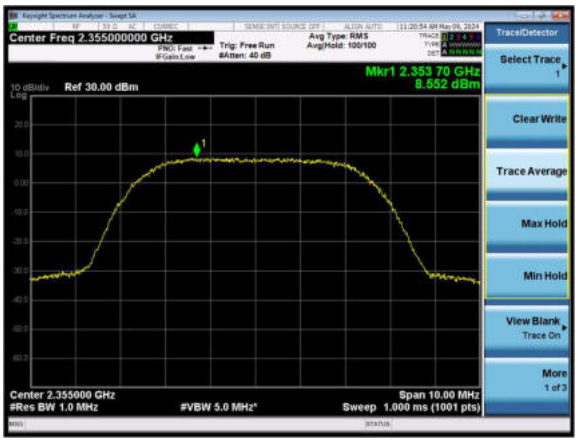
LTE Band 40 Subset 2 16QAM 5MHz CH-Low



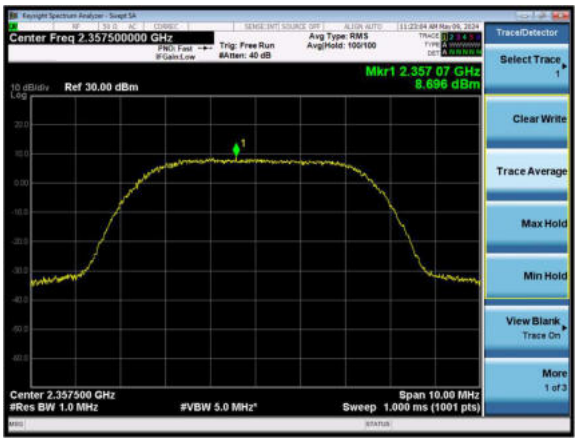
LTE Band 40 Subset 2 16QAM 10MHz



LTE Band 40 Subset 2 16QAM 5MHz CH-Middle

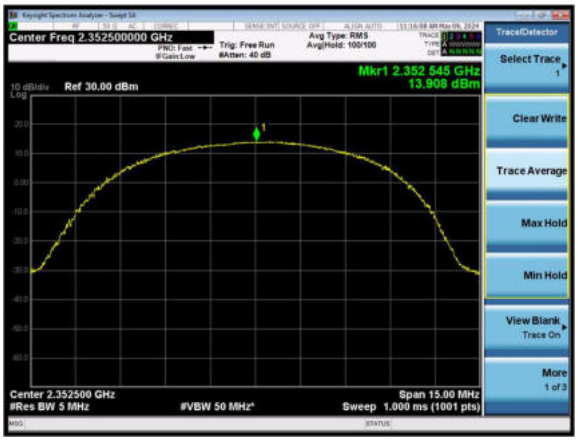


LTE Band 40 Subset 2 16QAM 5MHz CH-High

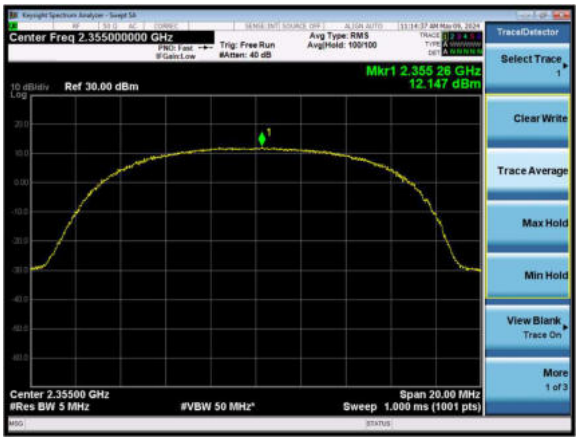


EIRP (dBm/5MHz)

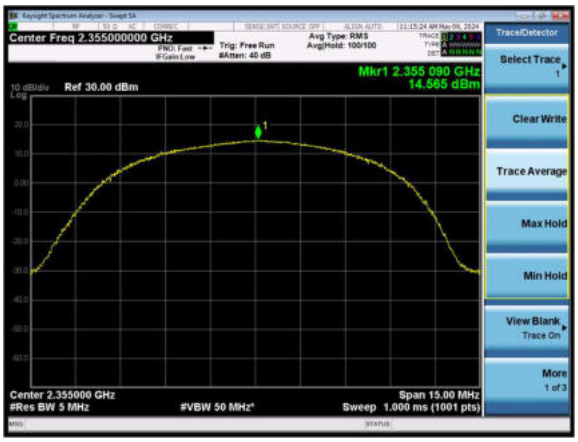
LTE Band 40 Subset 2 QPSK 5MHz CH-Low



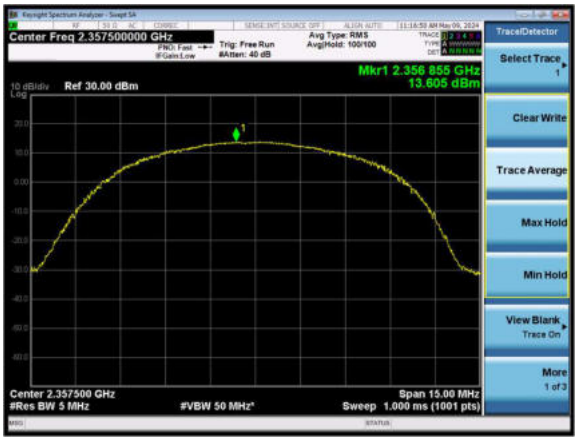
LTE Band 40 Subset 2 QPSK 10MHz



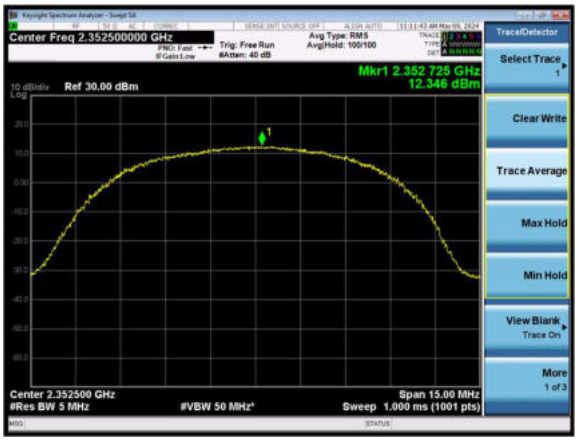
LTE Band 40 Subset 2 QPSK 5MHz CH-Middle



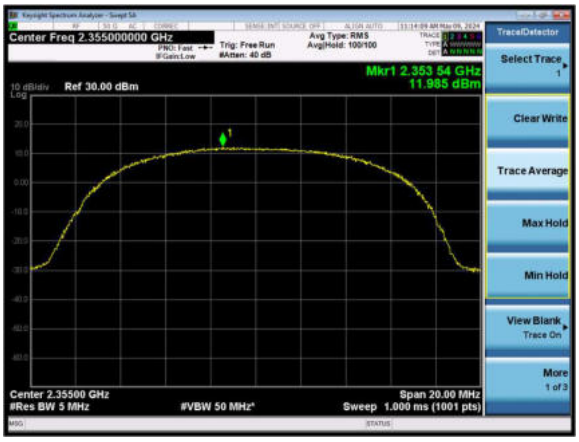
LTE Band 40 Subset 2 QPSK 5MHz CH-High



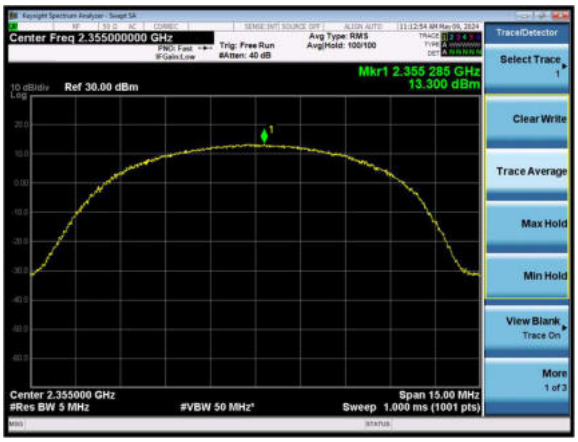
LTE Band 40 Subset 2 16QAM 5MHz CH-Low



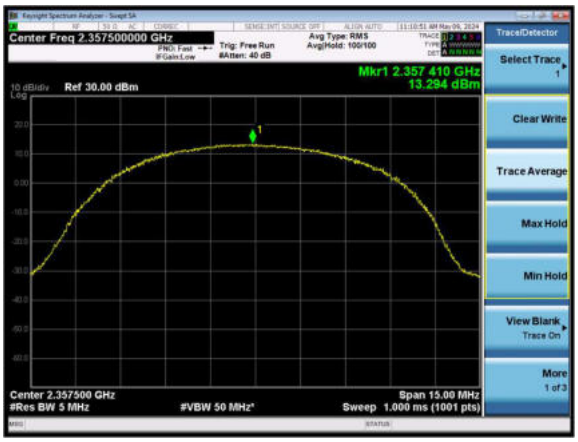
LTE Band 40 Subset 2 16QAM 10MHz



LTE Band 40 Subset 2 16QAM 5MHz CH-Middle



LTE Band 40 Subset 2 16QAM 5MHz CH-High



6.2 Occupied Bandwidth

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth (MHz)
WCDMA Band IV (RMC)	1312	1712.4	4.15	4.68
	1413	1732.6	4.15	4.70
	1513	1752.6	4.15	4.66

LTE Band 7						
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% Power Bandwidth (MHz)	-26dBc Bandwidth (MHz)
5	20775	25	#0	QPSK	4.53	4.89
5	20775	25	#0	16QAM	4.50	4.88
5	21100	25	#0	QPSK	4.51	4.84
5	21100	25	#0	16QAM	4.52	4.85
5	21425	25	#0	QPSK	4.50	4.81
5	21425	25	#0	16QAM	4.50	4.84
10	20800	50	#0	QPSK	8.99	9.61
10	20800	50	#0	16QAM	8.97	9.63
10	21100	50	#0	QPSK	8.96	9.64
10	21100	50	#0	16QAM	8.97	9.61
10	21400	50	#0	QPSK	8.95	9.57
10	21400	50	#0	16QAM	8.99	9.62
15	20825	75	#0	QPSK	13.47	14.44
15	20825	75	#0	16QAM	13.44	14.45
15	21100	75	#0	QPSK	13.42	14.39
15	21100	75	#0	16QAM	13.44	14.49
15	21375	75	#0	QPSK	13.44	14.36
15	21375	75	#0	16QAM	13.45	14.40
20	20850	100	#0	QPSK	17.93	19.43
20	20850	100	#0	16QAM	17.91	19.47
20	21100	100	#0	QPSK	17.88	19.31
20	21100	100	#0	16QAM	17.87	19.37
20	21350	100	#0	QPSK	17.91	19.53
20	21350	100	#0	16QAM	17.89	19.54

LTE Band 40 Subset 1						
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% Power Bandwidth (MHz)	-26dBc Bandwidth (MHz)
5	38725	25	#0	QPSK	4.52	4.85
5	38725	25	#0	16QAM	4.51	4.84
5	38750	25	#0	QPSK	4.51	4.84

5	38750	25	#0	16QAM	4.53	4.87
5	38775	25	#0	QPSK	4.50	4.88
5	38775	25	#0	16QAM	4.50	4.84
10	38750	50	#0	QPSK	8.96	9.53
10	38750	50	#0	16QAM	8.96	9.62

LTE Band 40 Subset 2						
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% Power Bandwidth (MHz)	-26dBc Bandwidth (MHz)
5	39175	25	#0	QPSK	4.50	4.83
5	39175	25	#0	16QAM	4.50	4.85
5	39200	25	#0	QPSK	4.50	4.82
5	39200	25	#0	16QAM	4.49	4.87
5	39225	25	#0	QPSK	4.51	4.85
5	39225	25	#0	16QAM	4.50	4.85
10	39200	50	#0	QPSK	8.99	9.65
10	39200	50	#0	16QAM	8.98	9.66

LTE Band 41						
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% Power Bandwidth (MHz)	-26dBc Bandwidth (MHz)
5	39675	25	#0	QPSK	4.51	4.84
5	39675	25	#0	16QAM	4.51	4.85
5	40620	25	#0	QPSK	4.50	4.84
5	40620	25	#0	16QAM	4.50	4.86
5	41565	25	#0	QPSK	4.52	4.81
5	41565	25	#0	16QAM	4.49	4.85
10	39700	50	#0	QPSK	8.98	9.53
10	39700	50	#0	16QAM	8.97	9.62
10	40620	50	#0	QPSK	8.96	9.63
10	40620	50	#0	16QAM	8.97	9.53
10	41540	50	#0	QPSK	8.97	9.52
10	41540	50	#0	16QAM	8.96	9.56
15	39725	75	#0	QPSK	13.44	14.24
15	39725	75	#0	16QAM	13.47	14.31
15	40620	75	#0	QPSK	13.47	14.28
15	40620	75	#0	16QAM	13.46	14.37
15	41515	75	#0	QPSK	13.44	14.36
15	41515	75	#0	16QAM	13.44	14.37
20	39750	100	#0	QPSK	17.92	19.41
20	39750	100	#0	16QAM	17.92	19.49
20	40620	100	#0	QPSK	17.96	19.33
20	40620	100	#0	16QAM	17.88	19.17

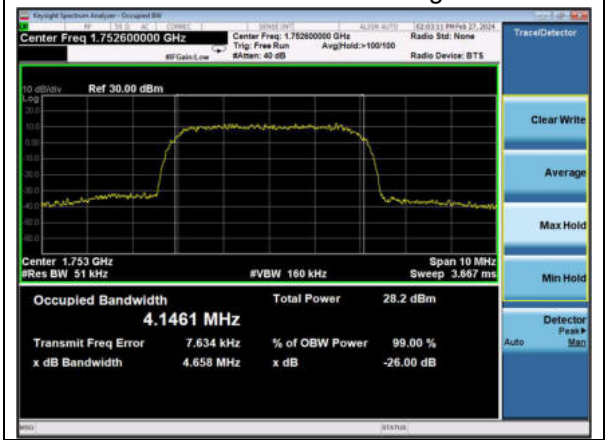
20	41490	100	#0	QPSK	17.88	19.22
20	41490	100	#0	16QAM	17.90	19.53

LTE Band 66						
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% Power Bandwidth (MHz)	-26dBc Bandwidth (MHz)
1.4	131979	6	#0	QPSK	1.10	1.28
1.4	131979	6	#0	16QAM	1.11	1.29
1.4	132322	6	#0	QPSK	1.10	1.27
1.4	132322	6	#0	16QAM	1.10	1.27
1.4	132665	6	#0	QPSK	1.10	1.26
1.4	132665	6	#0	16QAM	1.10	1.26
3	131987	15	#0	QPSK	2.70	2.93
3	131987	15	#0	16QAM	2.70	2.94
3	132322	15	#0	QPSK	2.70	2.92
3	132322	15	#0	16QAM	2.71	2.93
3	132657	15	#0	QPSK	2.71	2.93
3	132657	15	#0	16QAM	2.69	2.93
5	131997	25	#0	QPSK	4.50	4.86
5	131997	25	#0	16QAM	4.52	4.85
5	132322	25	#0	QPSK	4.50	4.87
5	132322	25	#0	16QAM	4.50	4.88
5	132647	25	#0	QPSK	4.50	4.87
5	132647	25	#0	16QAM	4.51	4.84
10	132022	50	#0	QPSK	8.99	9.69
10	132022	50	#0	16QAM	8.97	9.60
10	132322	50	#0	QPSK	8.97	9.61
10	132322	50	#0	16QAM	8.99	9.62
10	132622	50	#0	QPSK	8.96	9.63
10	132622	50	#0	16QAM	9.00	9.63
15	132047	75	#0	QPSK	13.47	14.39
15	132047	75	#0	16QAM	13.46	14.37
15	132322	75	#0	QPSK	13.45	14.39
15	132322	75	#0	16QAM	13.46	14.40
15	132597	75	#0	QPSK	13.47	14.48
15	132597	75	#0	16QAM	13.46	14.39
20	132072	100	#0	QPSK	17.98	19.39
20	132072	100	#0	16QAM	17.97	19.56
20	132322	100	#0	QPSK	17.94	19.39
20	132322	100	#0	16QAM	17.99	19.51
20	132572	100	#0	QPSK	17.95	19.31
20	132572	100	#0	16QAM	17.94	19.44

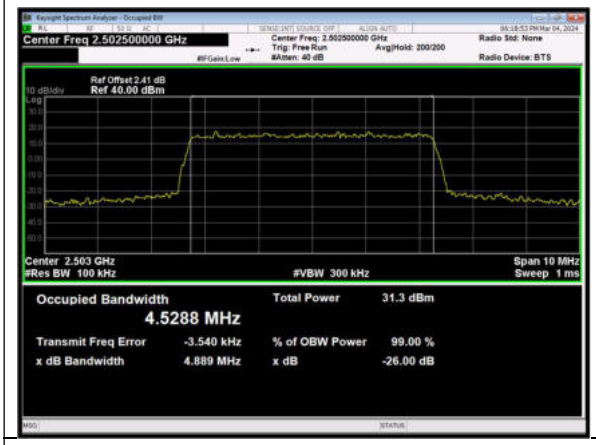
WCDMA Band IV CH-Low

WCDMA Band IV CH Middle

WCDMA Band IV CH High



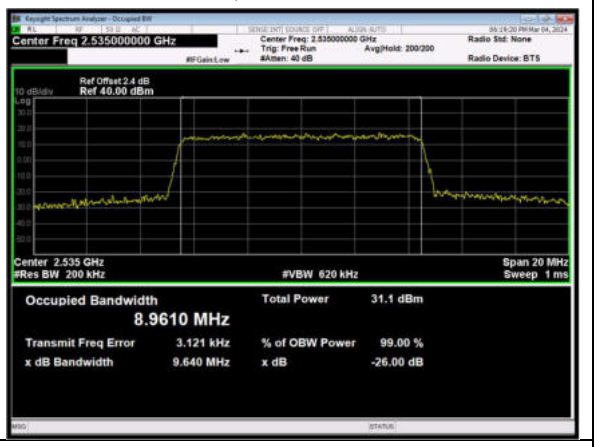
LTE Band 7 QPSK 5MHz CH-Low



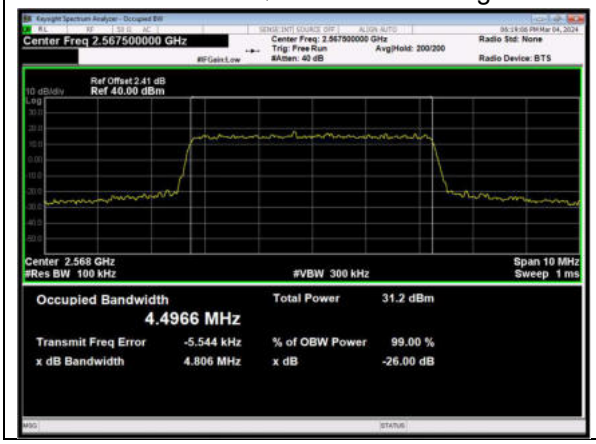
LTE Band 7 QPSK 10MHz CH-Low

LTE Band 7 QPSK 5MHz CH-Middle

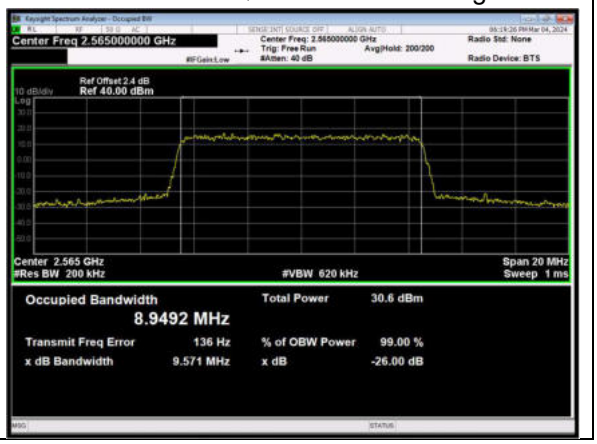
LTE Band 7 QPSK 10MHz CH-Middle



LTE Band 7 QPSK 5MHz CH-High

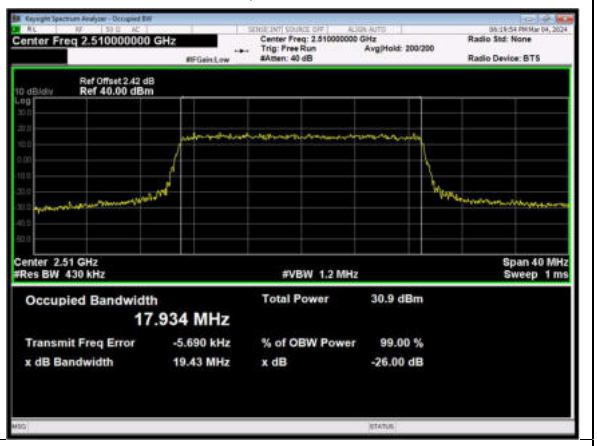


LTE Band 7 QPSK 10MHz CH-High

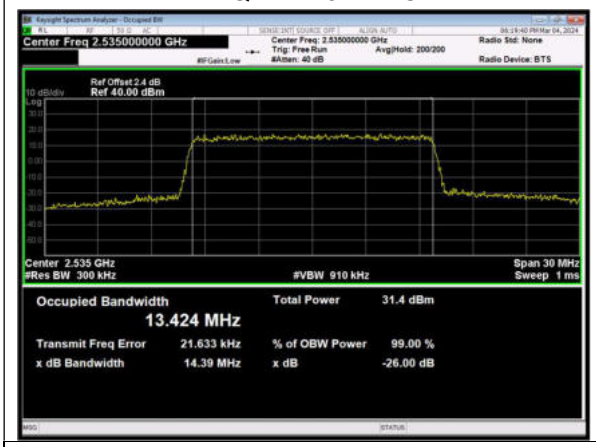


LTE Band 7 QPSK 15MHz CH-Low

LTE Band 7 QPSK 20MHz CH-Low

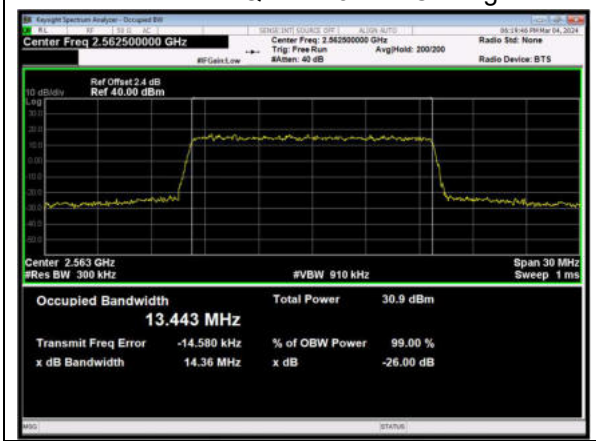


LTE Band 7 QPSK 15MHz CH-Middle



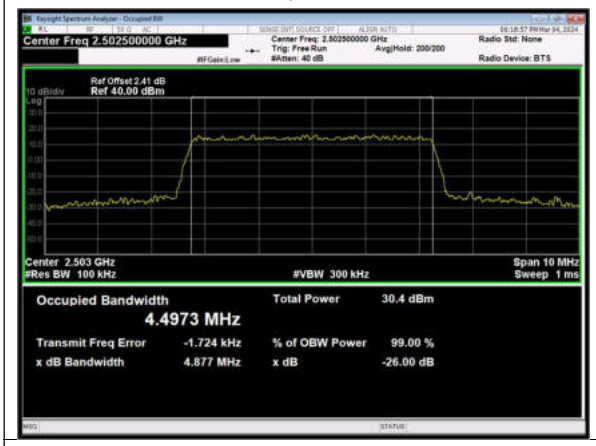
LTE Band 7 QPSK 20MHz CH-Middle

LTE Band 7 QPSK 15MHz CH-High

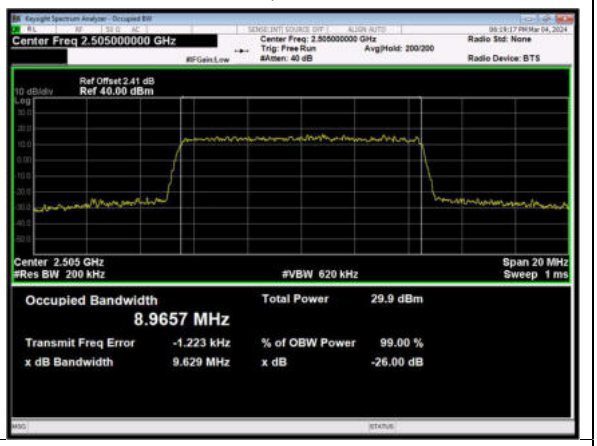


LTE Band 7 QPSK 20MHz CH-High

LTE Band 7 16QAM 5MHz CH-Low

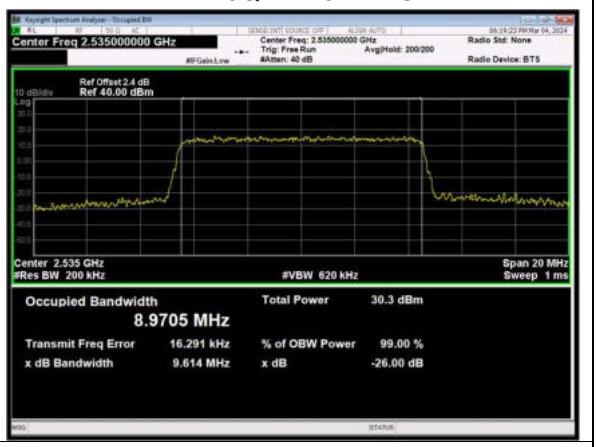


LTE Band 7 16QAM 10MHz CH-Low

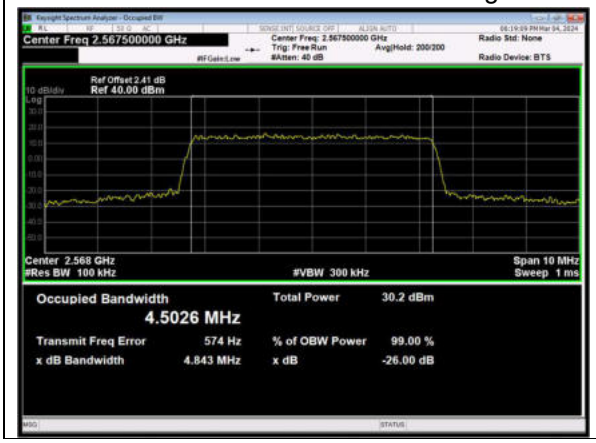


LTE Band 7 16QAM 5MHz CH-Middle

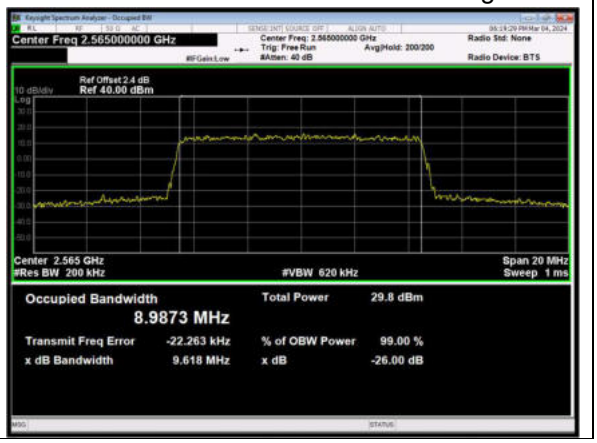
LTE Band 7 16QAM 10MHz CH-Middle



LTE Band 7 16QAM 5MHz CH-High

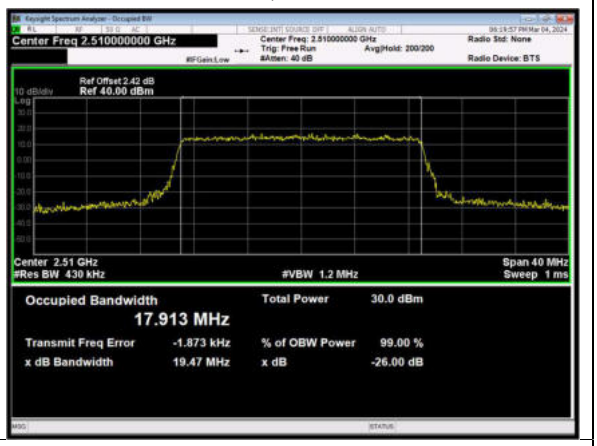


LTE Band 7 16QAM 10MHz CH-High



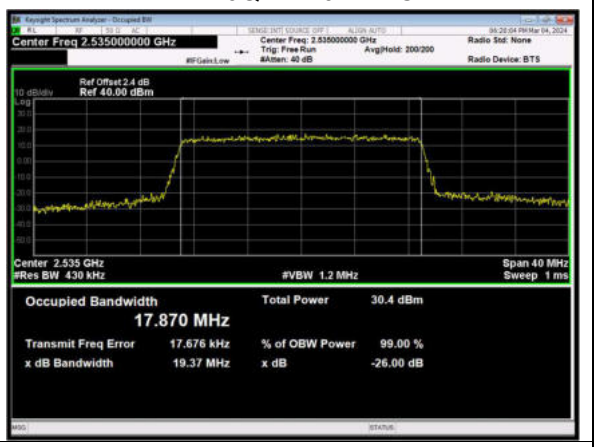
LTE Band 7 16QAM 15MHz CH-Low

LTE Band 7 16QAM 20MHz CH-Low

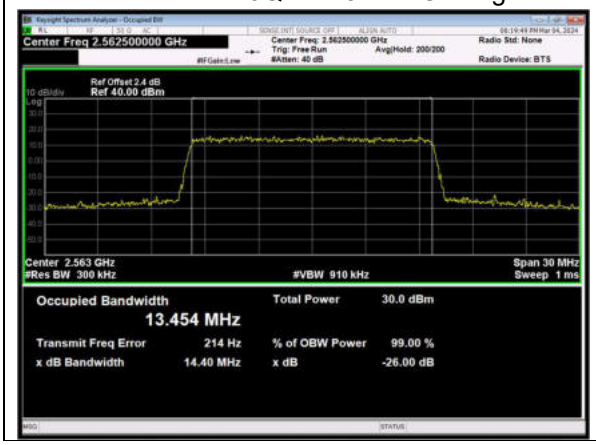


LTE Band 7 16QAM 15MHz CH-Middle

LTE Band 7 16QAM 20MHz CH-Middle

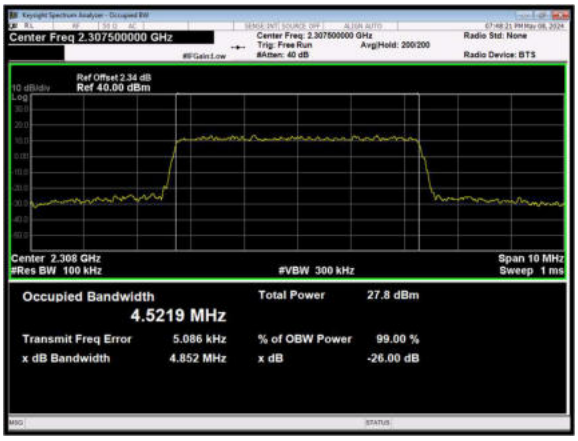


LTE Band 7 16QAM 15MHz CH-High

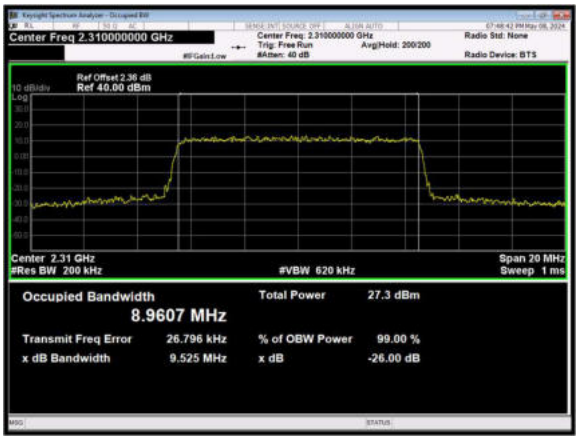


LTE Band 7 16QAM 20MHz CH-High

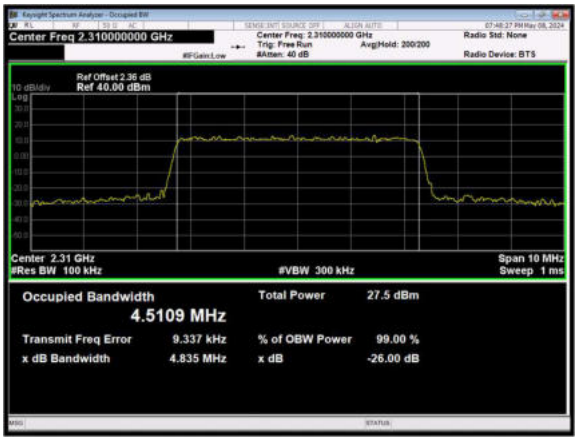
LTE Band 40 Subset 1 QPSK 5MHz CH-Low



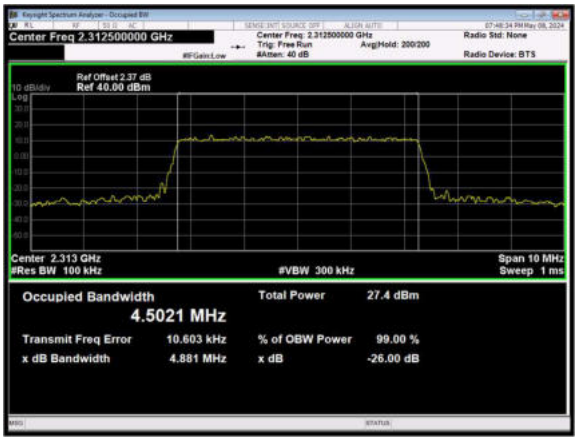
LTE Band 40 Subset 1 QPSK 10MHz



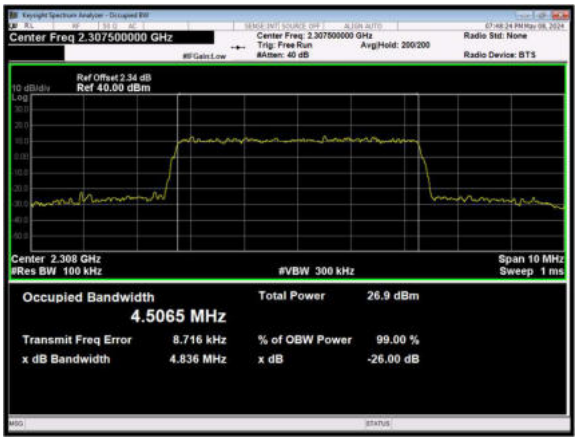
LTE Band 40 Subset 1 QPSK 5MHz CH-Middle



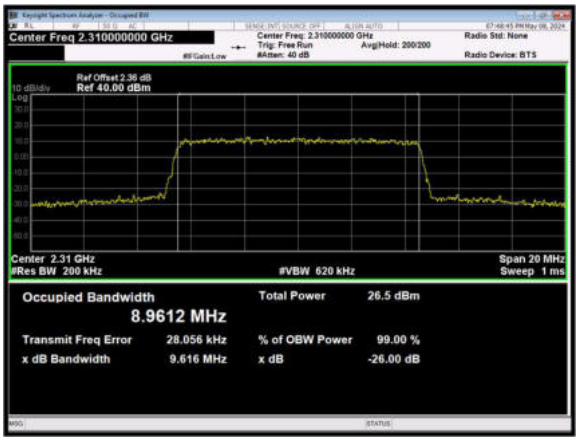
LTE Band 40 Subset 1 QPSK 5MHz CH-High



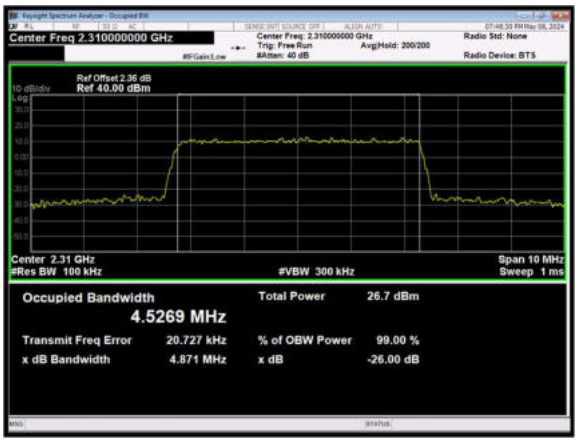
LTE Band 40 Subset 1 16QAM 5MHz CH-Low



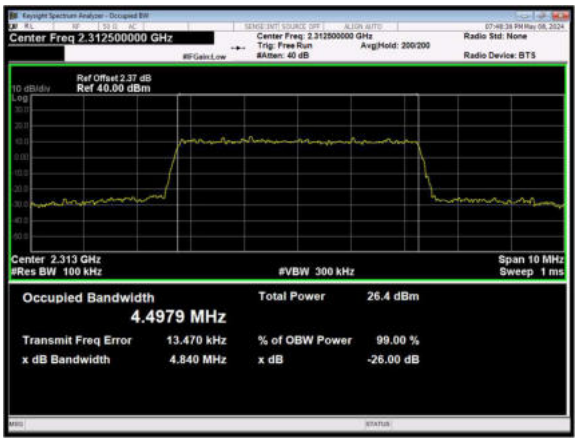
LTE Band 40 Subset 1 16QAM 10MHz



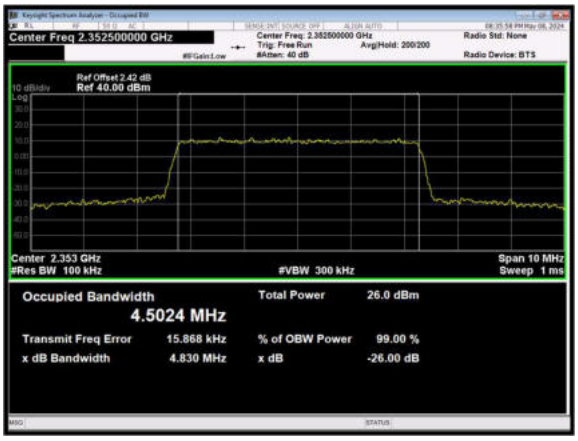
LTE Band 40 Subset 1 16QAM 5MHz CH-Middle



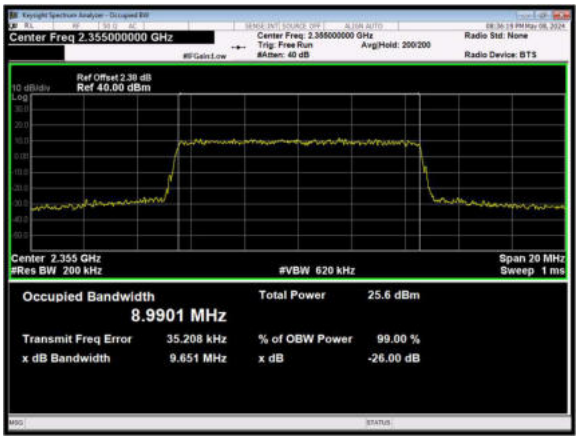
LTE Band 40 Subset 1 16QAM 5MHz CH-High



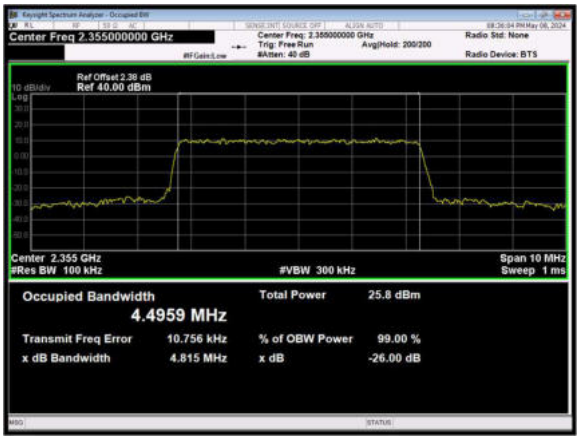
LTE Band 40 Subset 2 QPSK 5MHz CH-Low



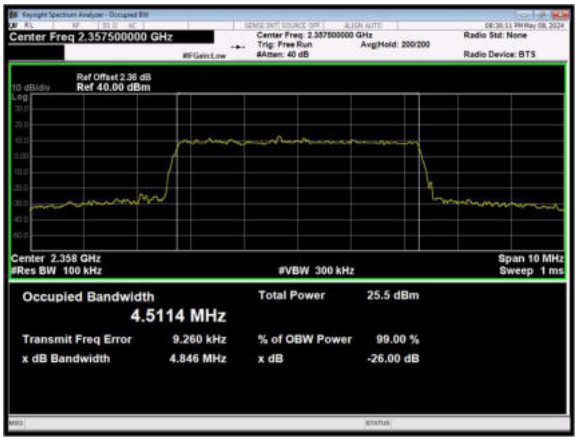
LTE Band 40 Subset 2 QPSK 10MHz



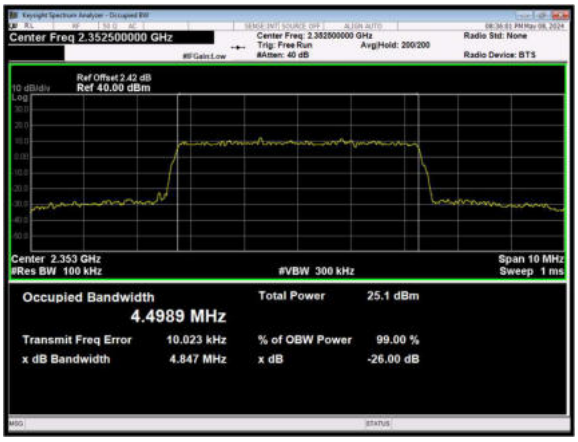
LTE Band 40 Subset 2 QPSK 5MHz CH-Middle



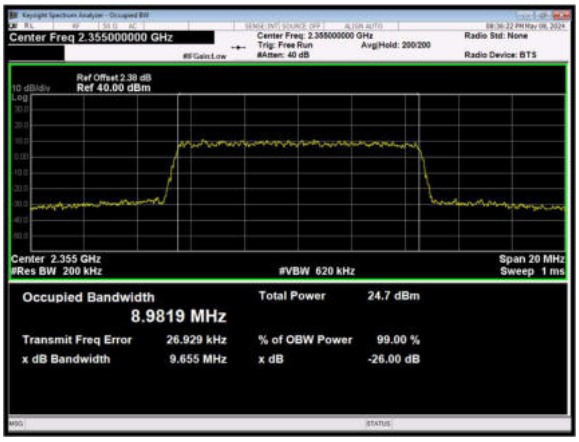
LTE Band 40 Subset 2 QPSK 5MHz CH-High



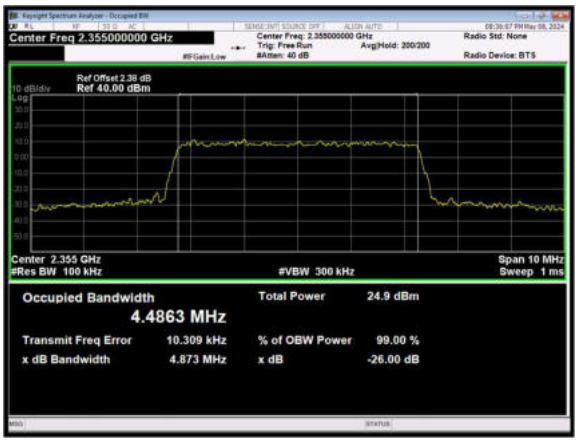
LTE Band 40 Subset 2 16QAM 5MHz CH-Low



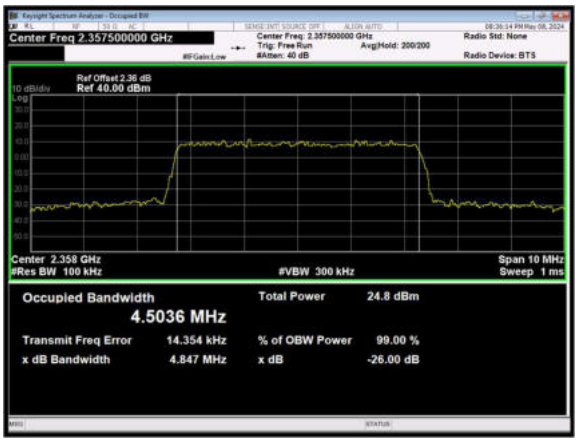
LTE Band 40 Subset 2 16QAM 10MHz



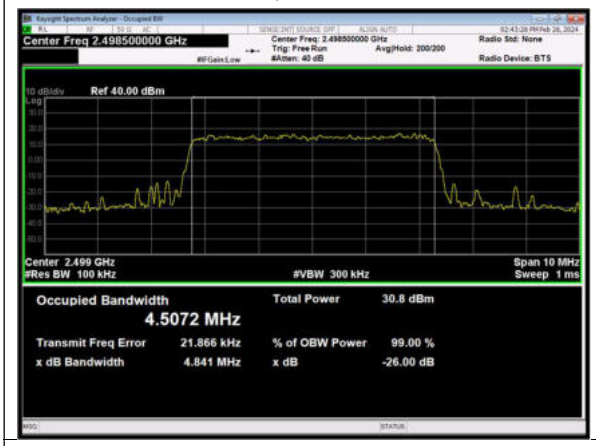
LTE Band 40 Subset 2 16QAM 5MHz CH-Middle



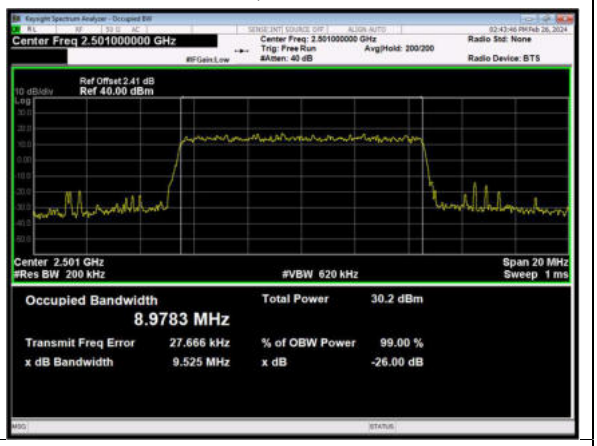
LTE Band 40 Subset 2 16QAM 5MHz CH-High



LTE Band 41 QPSK 5MHz CH-Low

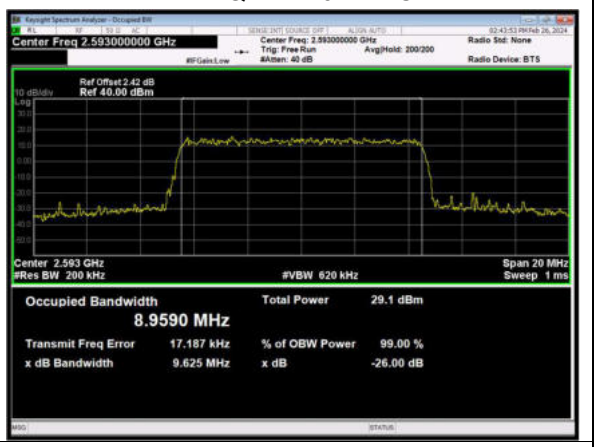


LTE Band 41 QPSK 10MHz CH-Low

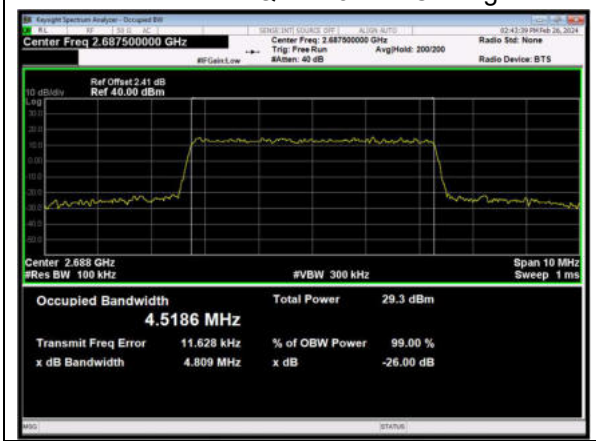


LTE Band 41 QPSK 5MHz CH-Middle

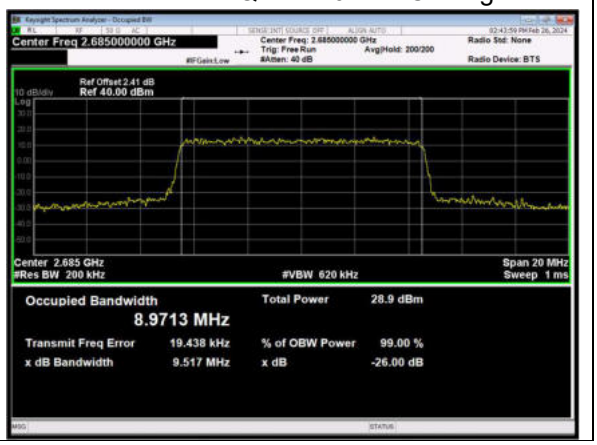
LTE Band 41 QPSK 10MHz CH-Middle



LTE Band 41 QPSK 5MHz CH-High

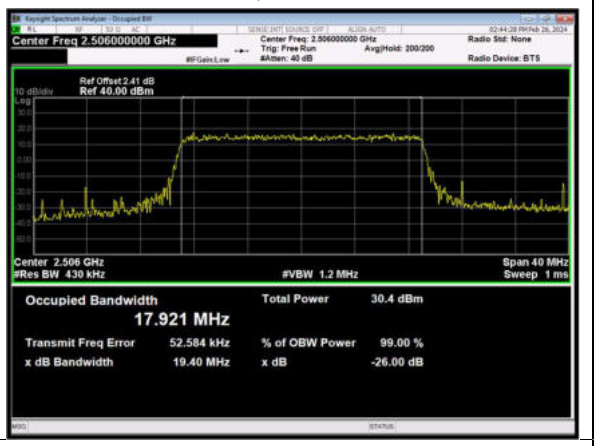


LTE Band 41 QPSK 10MHz CH-High

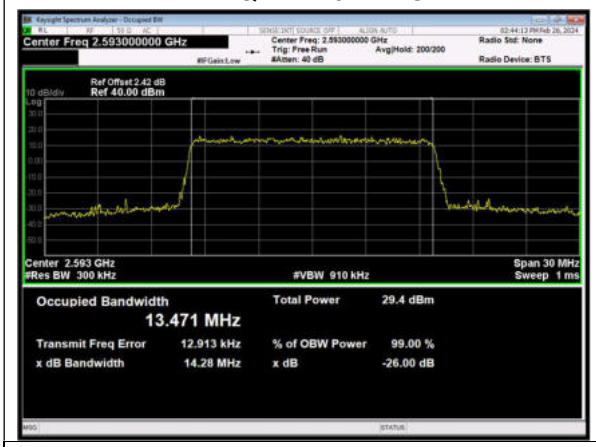


LTE Band 41 QPSK 15MHz CH-Low

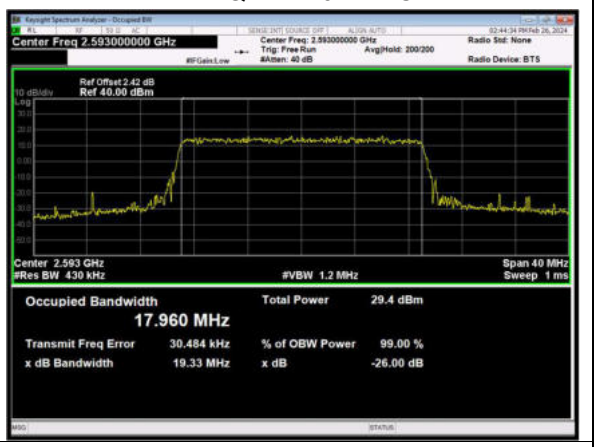
LTE Band 41 QPSK 20MHz CH-Low



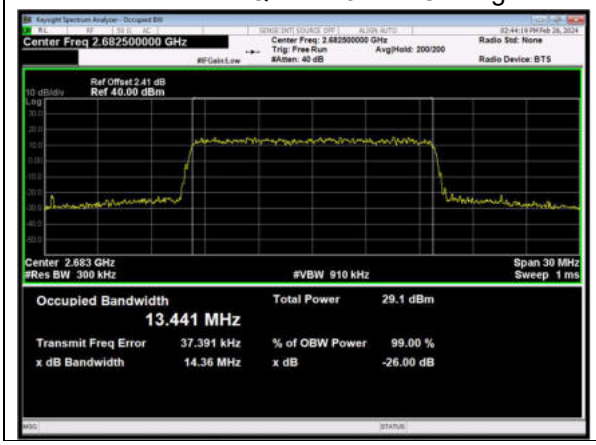
LTE Band 41 QPSK 15MHz CH-Middle



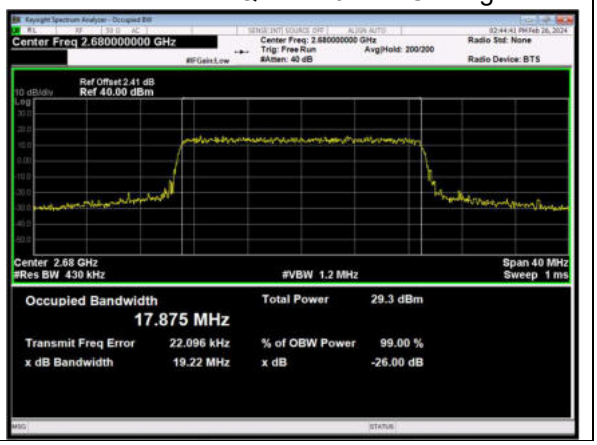
LTE Band 41 QPSK 20MHz CH-Middle



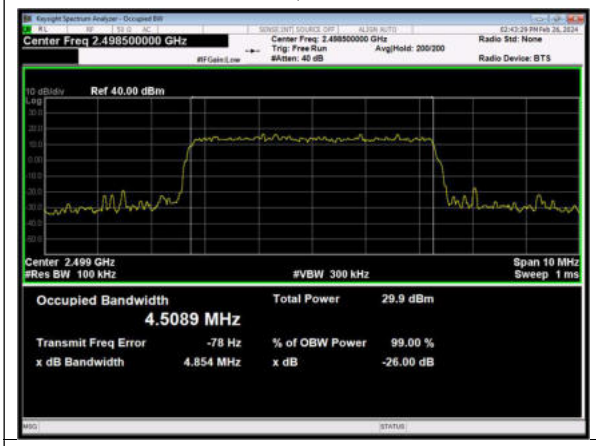
LTE Band 41 QPSK 15MHz CH-High



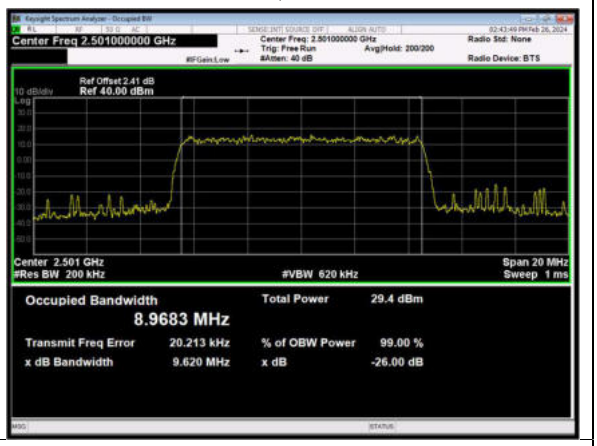
LTE Band 41 QPSK 20MHz CH-High



LTE Band 41 16QAM 5MHz CH-Low

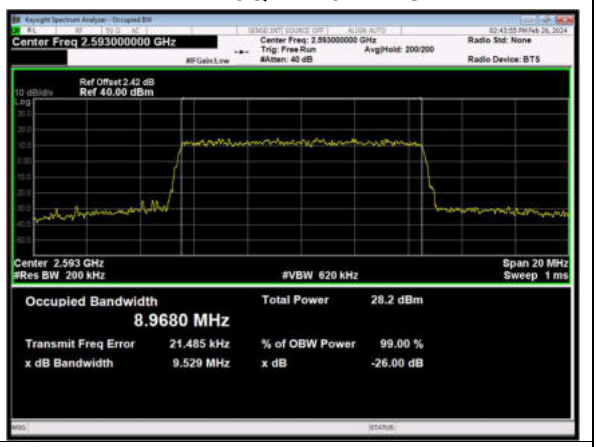


LTE Band 41 16QAM 10MHz CH-Low

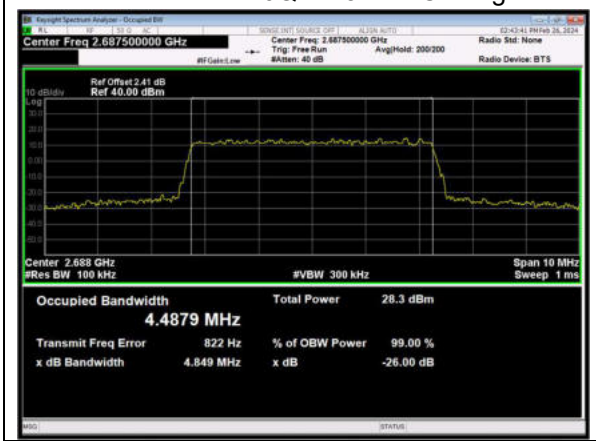


LTE Band 41 16QAM 5MHz CH-Middle

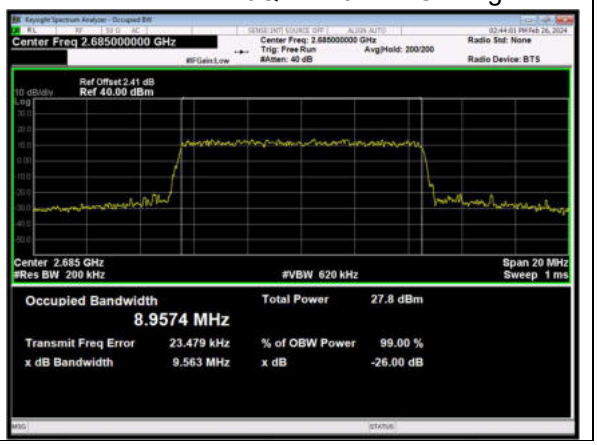
LTE Band 41 16QAM 10MHz CH-Middle



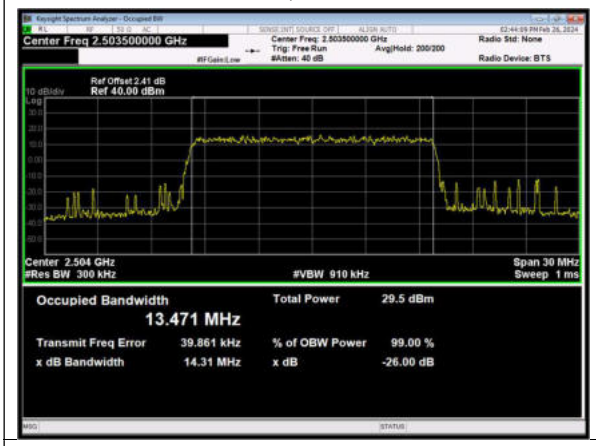
LTE Band 41 16QAM 5MHz CH-High



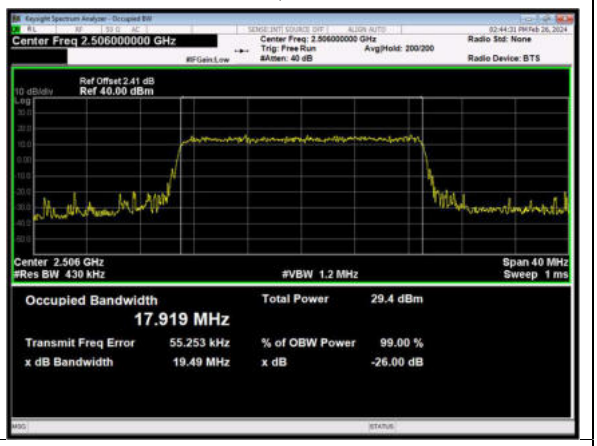
LTE Band 41 16QAM 10MHz CH-High



LTE Band 41 16QAM 15MHz CH-Low



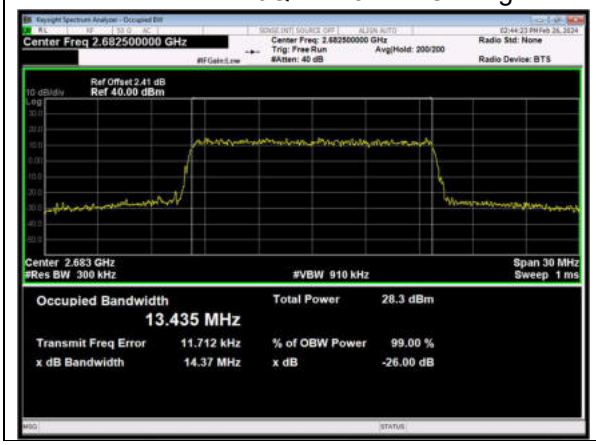
LTE Band 41 16QAM 20MHz CH-Low



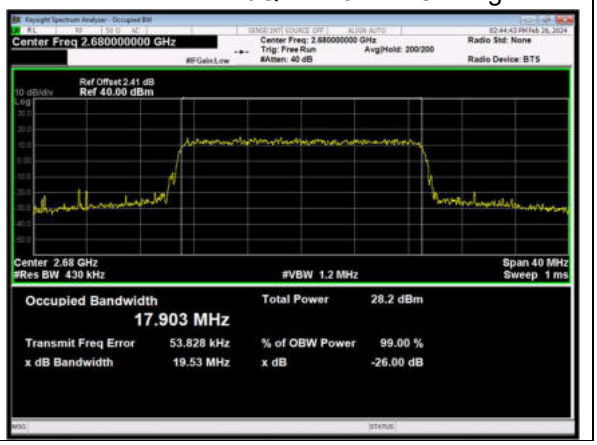
LTE Band 41 16QAM 15MHz CH-Middle

LTE Band 41 16QAM 20MHz CH-Middle

LTE Band 41 16QAM 15MHz CH-High

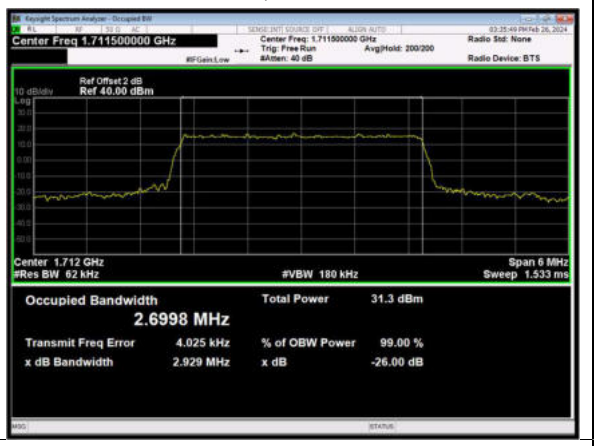


LTE Band 41 16QAM 20MHz CH-High



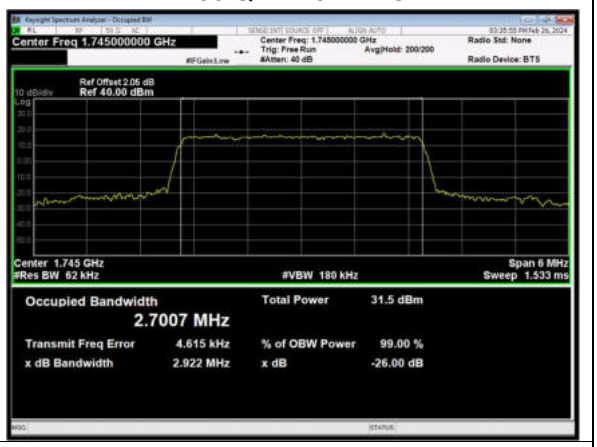
LTE Band 66 QPSK 1.4MHz CH-Low

LTE Band 66 QPSK 3MHz CH-Low

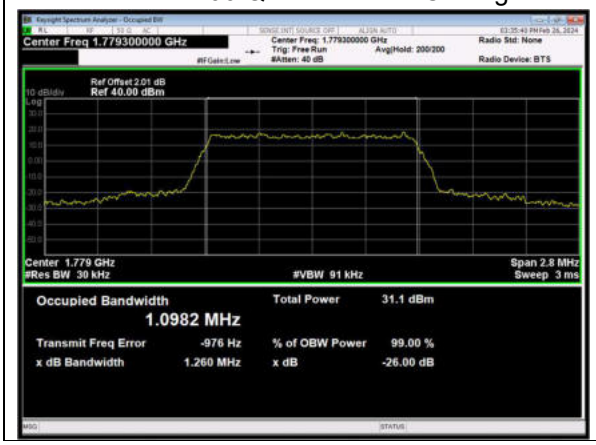


LTE Band 66 QPSK 1.4MHz CH-Middle

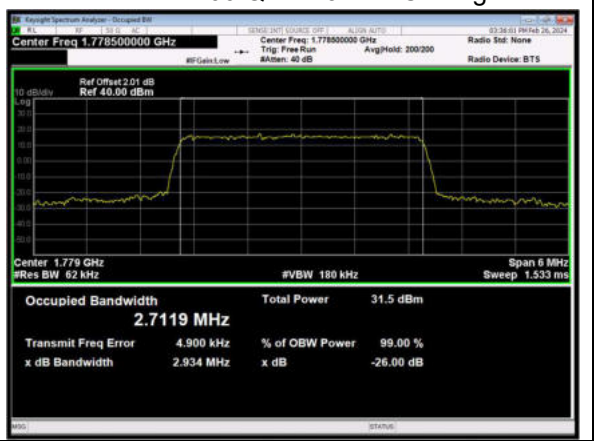
LTE Band 66 QPSK 3MHz CH-Middle



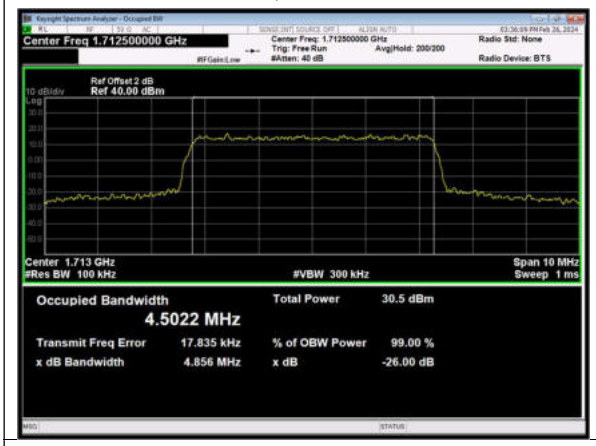
LTE Band 66 QPSK 1.4MHz CH-High



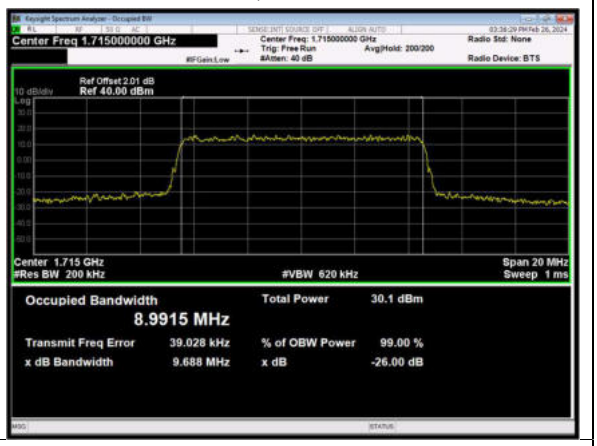
LTE Band 66 QPSK 3MHz CH-High



LTE Band 66 QPSK 5MHz CH-Low

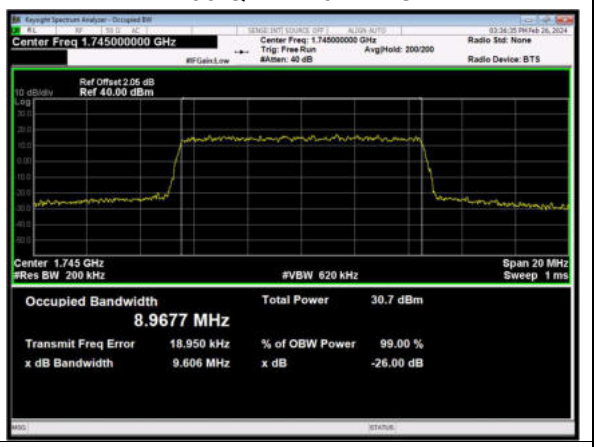


LTE Band 66 QPSK 10MHz CH-Low

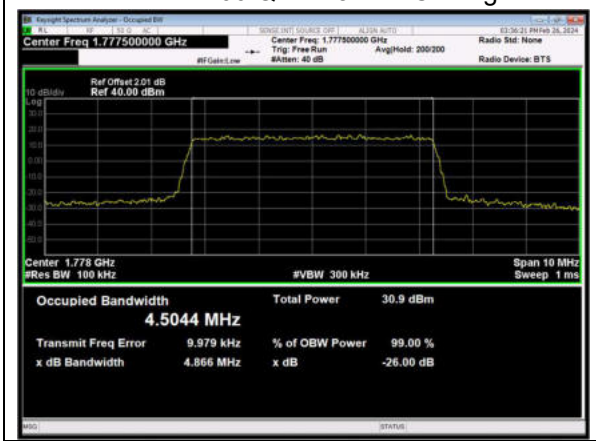


LTE Band 66 QPSK 5MHz CH-Middle

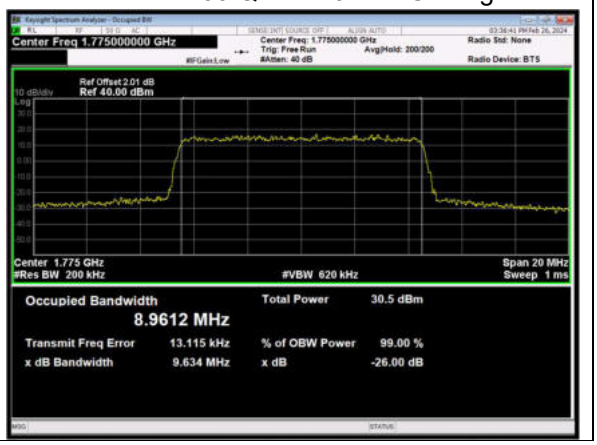
LTE Band 66 QPSK 10MHz CH-Middle



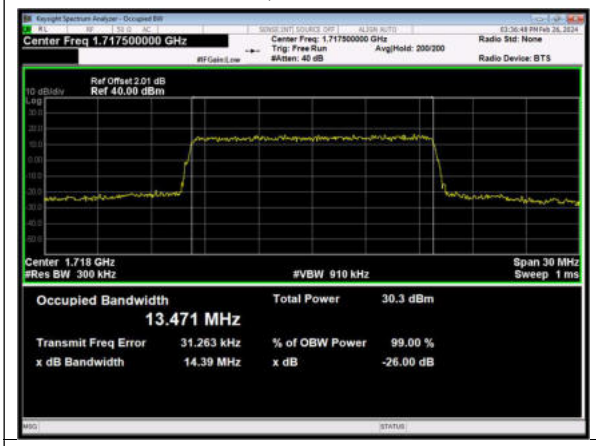
LTE Band 66 QPSK 5MHz CH-High



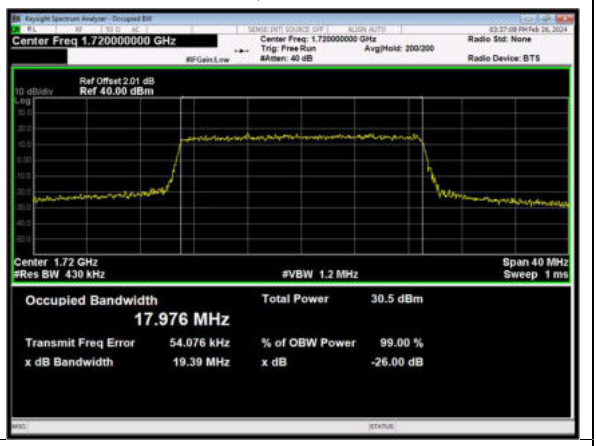
LTE Band 66 QPSK 10MHz CH-High



LTE Band 66 QPSK 15MHz CH-Low



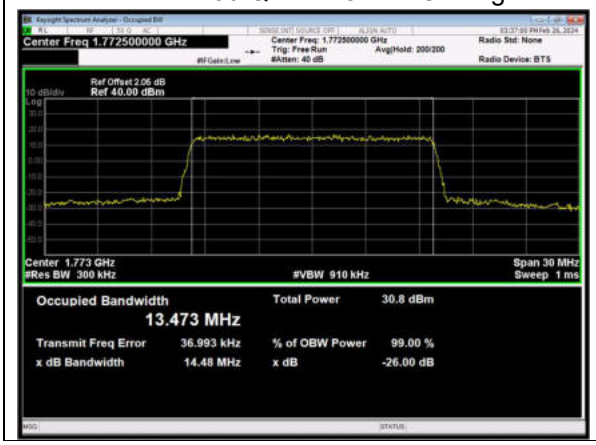
LTE Band 66 QPSK 20MHz CH-Low



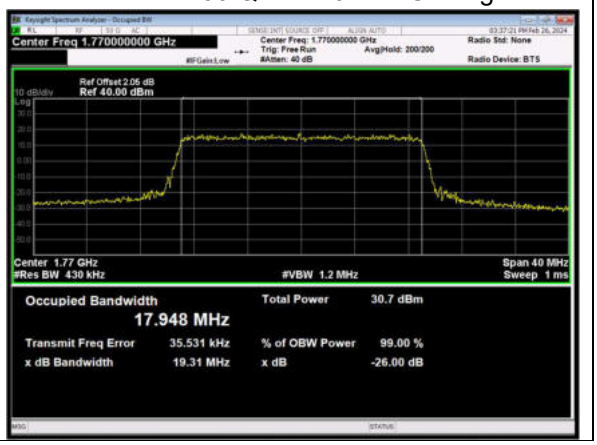
LTE Band 66 QPSK 15MHz CH-Middle

LTE Band 66 QPSK 20MHz CH-Middle

LTE Band 66 QPSK 15MHz CH-High

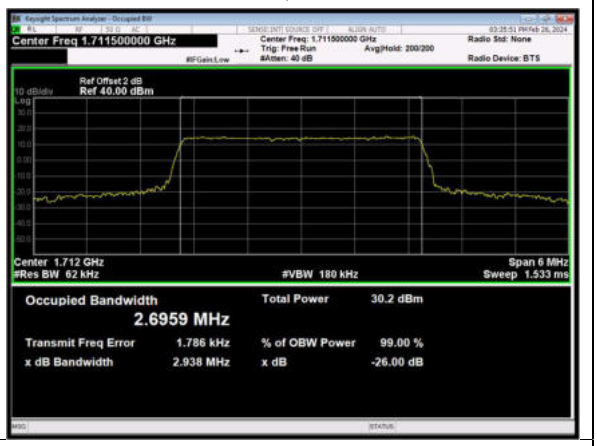


LTE Band 66 QPSK 20MHz CH-High

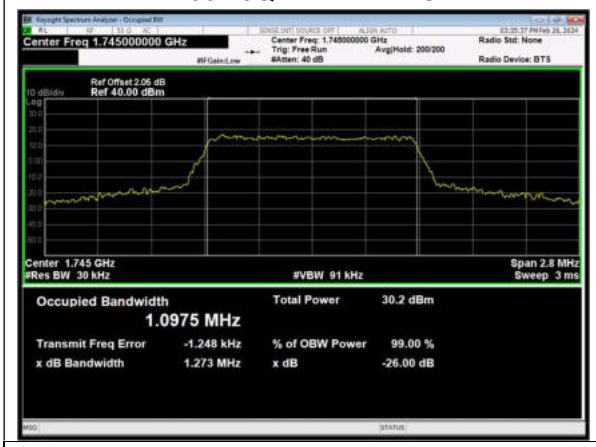


LTE Band 66 16QAM 1.4MHz CH-Low

LTE Band 66 16QAM 3MHz CH-Low

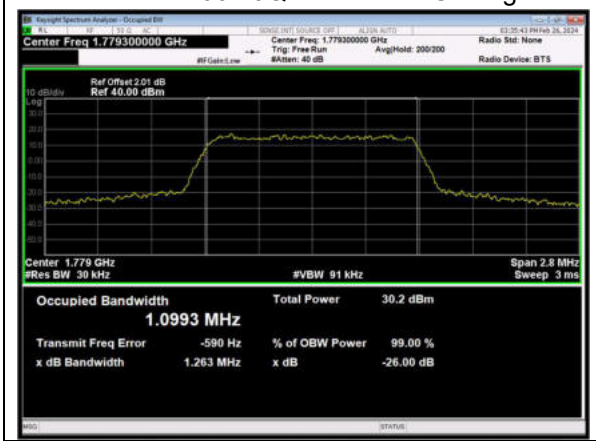


LTE Band 66 16QAM 1.4MHz CH-Middle

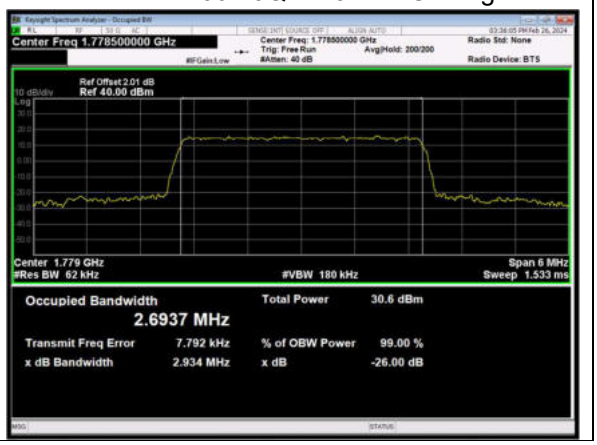


LTE Band 66 16QAM 3MHz CH-Middle

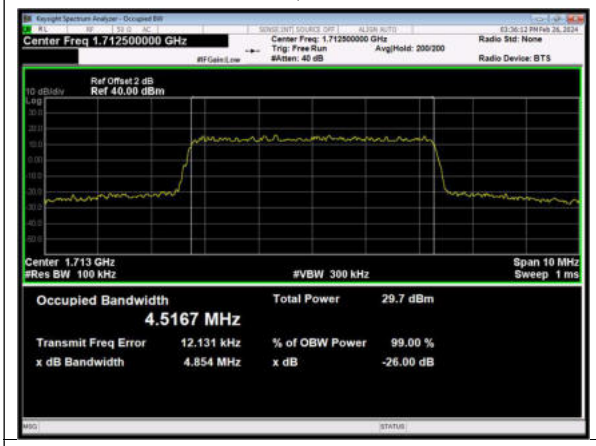
LTE Band 66 16QAM 1.4MHz CH-High



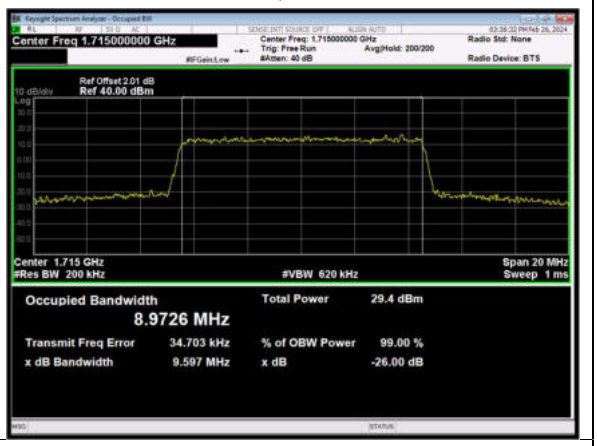
LTE Band 66 16QAM 3MHz CH-High



LTE Band 66 16QAM 5MHz CH-Low

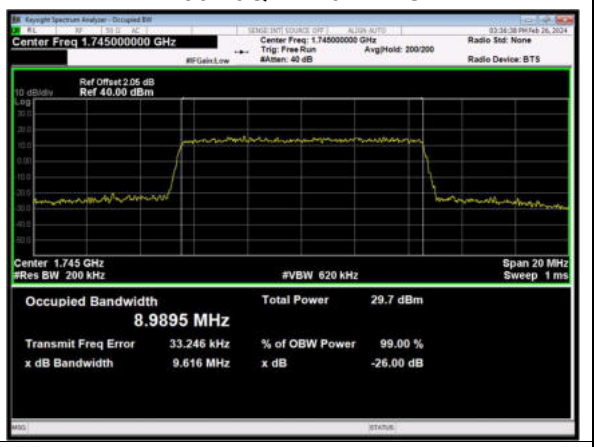


LTE Band 66 16QAM 10MHz CH-Low

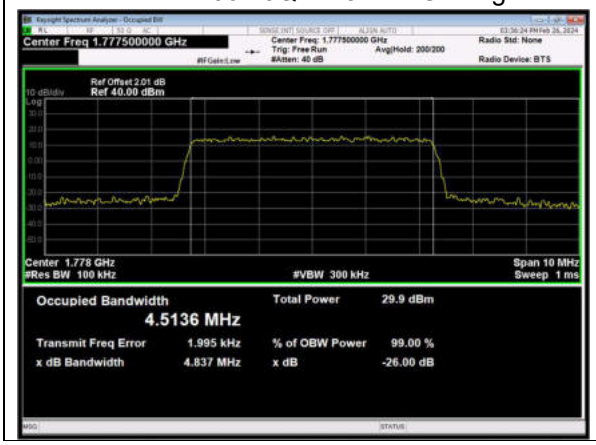


LTE Band 66 16QAM 5MHz CH-Middle

LTE Band 66 16QAM 10MHz CH-Middle



LTE Band 66 16QAM 5MHz CH-High



LTE Band 66 16QAM 10MHz CH-High