



RF TEST REPORT

Applicant ZTE Corporation
FCC ID SRQ-A2023PG
Product 5G NR Multi model smart phone
Model ZTE A2023PG
Report No. R2205A0428-R3
Issue Date June 10, 2022

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2021)/ FCC CFR47 Part 27C (2021)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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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(c)(10) /27.50(h)(2)/ 27.50(a)(3)/ 27.53(m) (4)	PASS
2	Occupied Bandwidth	2.1049	PASS
3	Band Edge Compliance	27.53(h) /27.53(g) /27.53(m) / 27.53(i) / 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(g) /27.53(m) / 27.53(a)	PASS
7	Radiates Spurious Emission	2.1053 /27.53(h) /27.53(g) /27.53(m) / 27.53(a)	PASS

Date of Testing: March 18, 2022 and May 13, 2022

Date of Sample Received: March 17, 2022

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

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

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



1 Test Laboratory

1.1 Notes of the Test Report

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

1.2. Test facility

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

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

A2LA (Certificate Number: 3857.01)

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

1.3 Testing Location

Company:	TA Technology (Shanghai) Co., Ltd.
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2 General Description of Equipment under Test

2.1 Applicant and Manufacturer Information

Applicant	ZTE Corporation
Applicant address	ZTE Plaza, #55 Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, China
Manufacturer	ZTE Corporation
Manufacturer address	ZTE Plaza, #55 Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, China

2.2 General information

EUT Description			
Model	ZTE A2023PG		
SN	327324440042		
Hardware Version	ZTE A2023PGHW1.0		
Software Version	MyOS12.0.2_A2023PG_GLB		
Power Supply	Battery / AC adapter		
Antenna Type	Internal Antenna		
Antenna Gain	Band	Antenna	Gain
	LTE Band 4	Antenna 2	-0.20dBi
		Antenna 4	-8.30dBi
	LTE Band 7	Antenna 2	-0.10dBi
		Antenna 4	-1.60dBi
	LTE Band 12	Antenna 1	-7.50dBi
		Antenna 6	-8.80dBi
	LTE Band 38	Antenna 2	-0.10dBi
		Antenna 4	-1.60dBi
LTE Band 66	Antenna 3	-2.90dBi	
NR n66	Antenna 3	-2.90dBi	
Test Mode(s)	LTE Band	LTE Band 4/7/12/38/66	
	CA Band	CA_7C	
	SA Band	NR n66	
	NSA Band	DC_2A-n66A/DC_5A-n66A	
Test Modulation	(LTE) QPSK, 16QAM, 64QAM; (NR) CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM; DFT-s OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM		
Maximum E.I.R.P./ E.R.P.	LTE Band 4	24.28dBm	
	LTE Band 7	23.66dBm	



	LTE Band 12	15.60dBm	
	LTE Band 38	24.39dBm	
	LTE Band 66	21.78dBm	
	CA_7C	24.43dBm	
	NR n66	20.77dBm	
	DC_5A-n66A	24.03dBm	
Rated Power Supply Voltage	3.89V		
Operating Voltage	Minimum: 3.70V Maximum: 4.45V		
Operating Temperature	Lowest: -10°C Highest: +40°C		
Testing Temperature	Lowest: -30°C Highest: +50°C		
Operating Frequency Range(s)	Mode	Tx (MHz)	Rx (MHz)
	LTE Band 4	1710 ~ 1755	2110 ~ 2155
	LTE Band 7	2500 ~ 2570	2620 ~ 2690
	LTE Band 12	699 ~ 716	729 ~ 746
	LTE Band 38	2570 ~ 2620	2570 ~ 2620
	LTE Band 66	1710 ~ 1780	2110 ~ 2180
	NR n66	1710~1780	2110 ~ 2180
EUT Accessory			
Adapter	Manufacturer: ShenZhen KunXing Technology Co., Ltd. Model: STC-A59152050AC-Z		
Battery	Manufacturer: Zhuhai Cosmx Battery Co., Ltd. Model: Li3949T44P8h806459		
Earphone 1	Manufacturer: JUWEI ELECTRONICS CO.,LTD Model: JWEP1092-Z01		
Earphone 2	Manufacturer: ShenZhen FDC Electronic Co.,Ltd Model: DEM-9A		
USB Cable 1	Manufacturer: King Power Electronics Co., Ltd Model: TC20-TC20-W-100-M-6A-HSF		
USB Cable 2	Manufacturer: Luxshare-ICT Co., Ltd Model: TC20-TC20-W-100-M-6A-HSF		
Type-C to 3.5 mm Headphone Jack Adapter	Manufacturer: HUIZHOU JUWEI ELECTRONICS CO. ,LTD Model: HMZ24		
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant. 2. There is more than one USB cable/ Earphone, each one should be applied throughout the compliance test respectively, and however, only the worst case (USB cable 1) will be recorded in this report.			



3 Applied Standards

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

Test standards:

FCC CFR47 Part 27C (2021)

FCC CFR47 Part 2 (2021)

Reference standard:

ANSI C63.26-2015

KDB 971168 D01 Power Meas License Digital Systems v03r01

4 Test Configuration

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

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (Z axis, horizontal polarization for ENDC, X axis, vertical polarization for LTE/CA, X axis, horizontal polarization for NR) 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 LTE/NR is set based on the maximum RF Output Power.

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

Test modes are chosen to be reported as the worst case configuration below for LTE Band 4/7/12/38/66:

Test items	Modes	Bandwidth (MHz)						Modulation		RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM/64QAM	1	50%	100%	L	M	H
RF Power Output and Effective Isotropic Radiated Power	LTE 4	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 7	-	-	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 38	-	-	O	O	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
Occupied Bandwidth	LTE 4	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 12	O	O	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 66	O	O	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 7	-	-	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 12	O	O	O	O	-	-	O	O	O	-	O	O	-	O
	LTE 38	-	-	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 66	O	O	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 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 12	O	O	O	O	-	-	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 66	O	O	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 7	-	-	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 12	O	O	O	O	-	-	O	O	O	-	-	-	O	-
	LTE 38	-	-	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 66	O	O	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 7	-	-	O	O	O	O	O	-	O	-	-	O	O	O
	LTE 12	O	O	O	O	-	-	O	-	O	-	-	O	O	O
	LTE 38	-	-	O	O	O	O	O	-	O	-	-	O	O	O
	LTE 66	O	O	O	O	O	O	O	-	O	-	-	O	O	O
Radiates Spurious Emission	LTE 4	O	-	O	-	-	O	O	-	O	-	-	-	O	-
	LTE 7	-	-	O	-	-	O	O	-	O	-	-	-	O	-
	LTE 12	O	-	O	O	-	-	O	-	O	-	-	-	O	-
	LTE 38	-	-	O	-	-	O	O	-	O	-	-	-	O	-
	LTE 66	-	-	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.														

Test modes are chosen to be reported as the worst case configuration below for NR n66/
DC_2A-n66A/ DC_5A-n66A

Test items	Mode	Bandwidth (MHz)										Modulation					RB			Test Channel		
		5	10	15	20	25	30	40	60	80	100	PI/2 BPSK	QPSK	16 QAM	64 QAM	256 QAM	1	50%	100%	L	M	H
RF Power Output and Effective Isotropic Radiated Power	NR n66	O	O	O	O	-	-	-	-	-	-	O	O	O	O	O	O	O	O	O	O	O
	DC_2A-n66A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DC_5A_n66A	O	O	O	O	-	-	-	-	-	-	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	NR n66	-	-	-	O	-	-	-	-	-	-	O	O	O	O	O	O	-	O	O	O	O
	DC_2A-n66A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DC_5A_n66A	-	-	-	O	-	-	-	-	-	-	O	O	O	O	O	O	-	O	O	O	O
Band Edge Compliance	NR n66	-	-	-	O	-	-	-	-	-	-	O	O	O	O	O	O	-	O	O	O	O
	DC_2A-n66A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DC_5A_n66A	-	-	-	O	-	-	-	-	-	-	O	O	O	O	O	O	-	O	O	O	O
Peak-to- Average Power Ratio	NR n66	-	-	-	O	-	-	-	-	-	-	O	O	O	O	O	-	-	O	O	O	O
	DC_2A-n66A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DC_5A_n66A	-	-	-	O	-	-	-	-	-	-	O	O	O	O	O	-	-	O	O	O	O
Frequency Stability	NR n66	O	O	O	O	-	-	-	-	-	-	O	O	O	O	O	O	-	-	-	O	-
	DC_2A-n66A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DC_5A_n66A	O	O	O	O	-	-	-	-	-	-	O	O	O	O	O	O	-	-	-	O	-
Spurious Emissions at Antenna	NR n66	-	-	-	O	-	-	-	-	-	-	O	O	O	O	-	O	-	-	-	O	-
	DC_2A-n66A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	DC_5A_n66A	-	-	-	O	-	-	-	-	-	-	O	O	O	O	-	O	-	-	-	O	-



Terminals																						
Radiates	NR n66	O	-	-	O	-	-	-	-	-	-	-	-	-	-	O	-	-	-	-	O	-
Spurious	DC_2A-n66A	O	-	O	-	-	O	-	-	-	-	-	-	-	-	O	-	-	-	-	O	-
Emission	DC_5A_n66A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: 1. The mark "O" means that this configuration is chosen for testing.

2. The mark "-" means that this configuration is not testing.

3. Sub 6GHz operates using 15kHz Subcarrier Spacing with both CP-OFDM and DFT-s OFDM waveforms. The band supports PI/2 BPSK ,QPSK, 16QAM, 64QAM, and 256QAM modulation. The test data provided in this report represents the worst case configurations.

5 Test Case

5.1 RF Power Output and Effective Isotropic Radiated Power

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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.

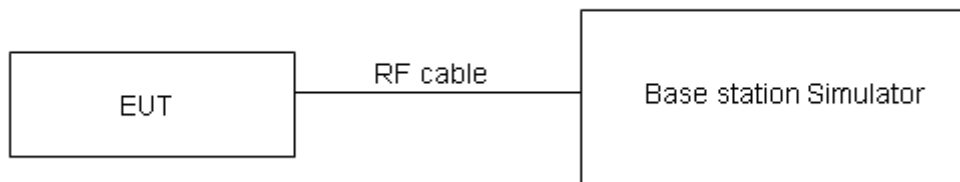
ERP can then be calculated as follows:

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

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

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

Test Setup



Limits

No specific RF power output requirements in part 2.1046.

Rule Part 27.50(a)(3) Mobile and portable stations. (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. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must 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.

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 than $43 + 10 \log (P)$ 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.

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”

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.”

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)
Part 27.50(h)(2) Limit	$\leq 2 \text{ W}$ (33 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
23°C ~25°C	45%~50%	101.5kPa

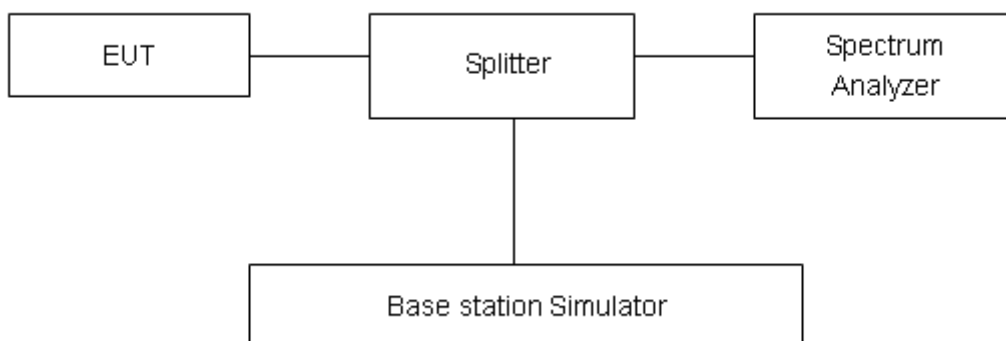
Method of Measurement

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
23°C ~25°C	45%~50%	101.5kPa

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 $\geq 1\%$ 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.

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

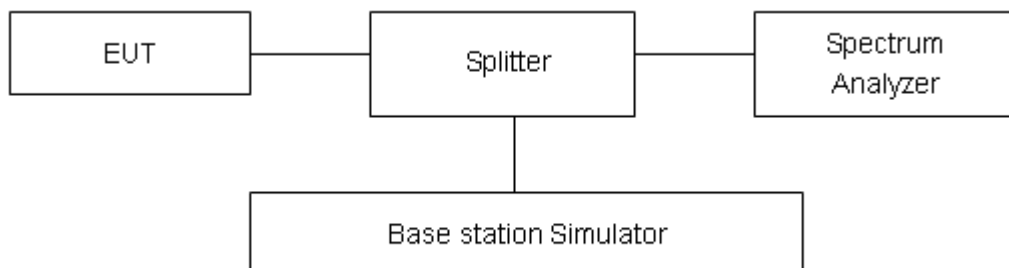
on spectrum analyzer.

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(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) (3) For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands: (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 47 CFR Part 27 -- Miscellaneous Wireless Communications Services 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. (5) Measurement procedure.

Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e., 1 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one 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.

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(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 than $43 + 10 \log (P)$ 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 $43 + 10 \log (P)$ dB below the transmitter power P(Watts)

= $P(W) - [43 + 10 \log(P)]$ (dB)

= $[30 + 10 \log (P)]$ (dBm) - $[43 + 10 \log(P)]$ (dB) = -13dBm.



Measurement Uncertainty

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

Test Results

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

5.4 Peak-to-Average Power Ratio (PAPR)

Ambient condition

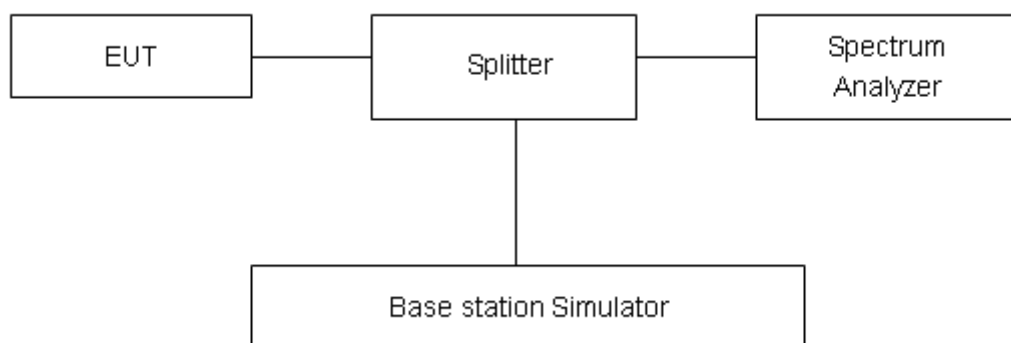
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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
23°C ~25°C	45%~50%	101.5kPa

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.

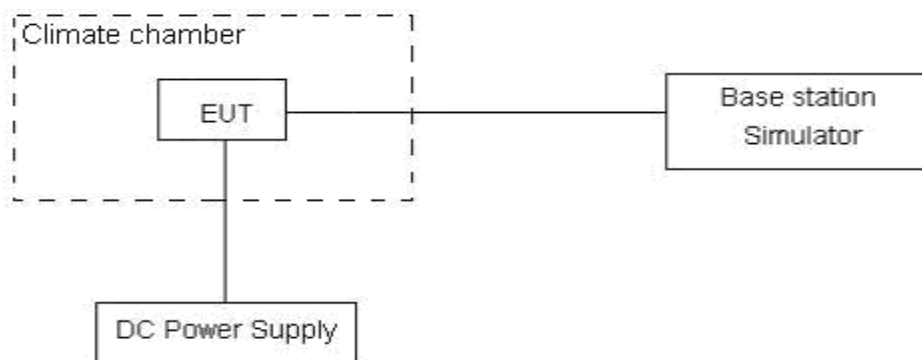
(3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements. Frequency Stability (Voltage Variation)

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 3.70 V and 4.45 V, with a nominal voltage of 3.89V.

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
23°C ~25°C	45%~50%	101.5kPa

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 100kHz, VBW is set to 300kHz for 30MHz~1GHz

RBW is set to 1MHz, VBW is set to 3MHz for above 1GHz, Sweep is set to ATUO.

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

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

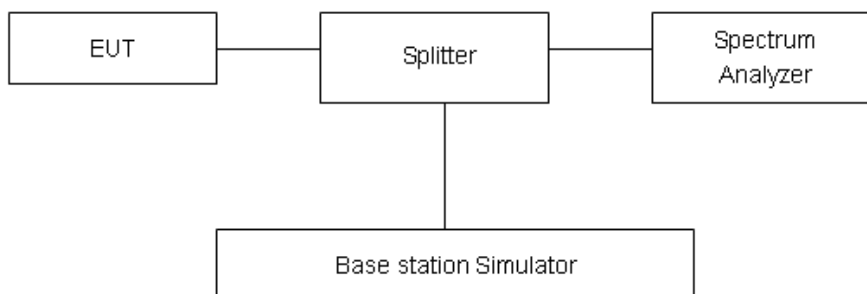
RBW is set to 100 kHz (30MHz~1000 MHz)

RBW is set to 1000 kHz (above 1000MHz)

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(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)(i) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz.

Part 27.53(a)/(h)/(g) Limit	-13 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-40GHz	1.407 dB

Test Results

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

5.7 Radiates Spurious Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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:

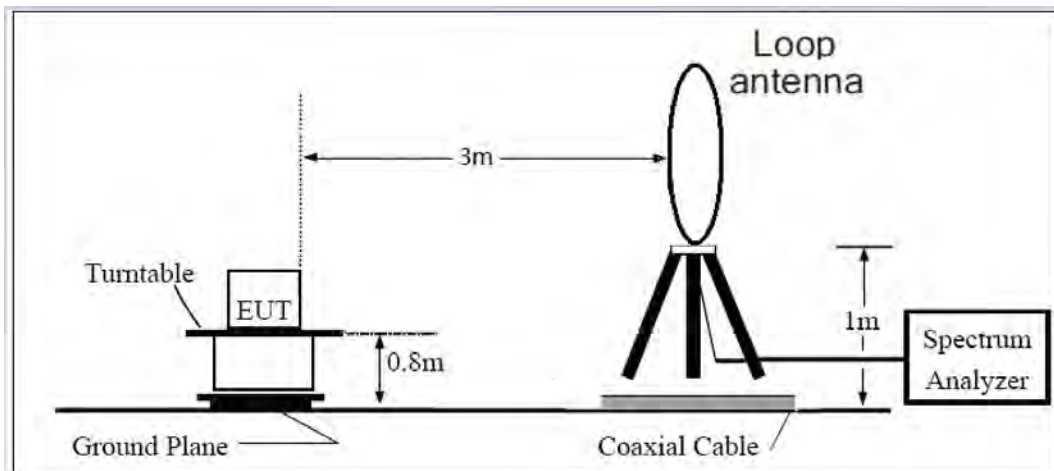
$$\text{Power(EIRP)} = \text{PMea} - \text{PAG} - \text{Pcl} + \text{Ga}$$
The measurement results are amend as described below:

$$\text{Power(EIRP)} = \text{PMea} - \text{Pcl} + \text{Ga}$$
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, $\text{ERP} = \text{EIRP} - 2.15\text{dB}$.

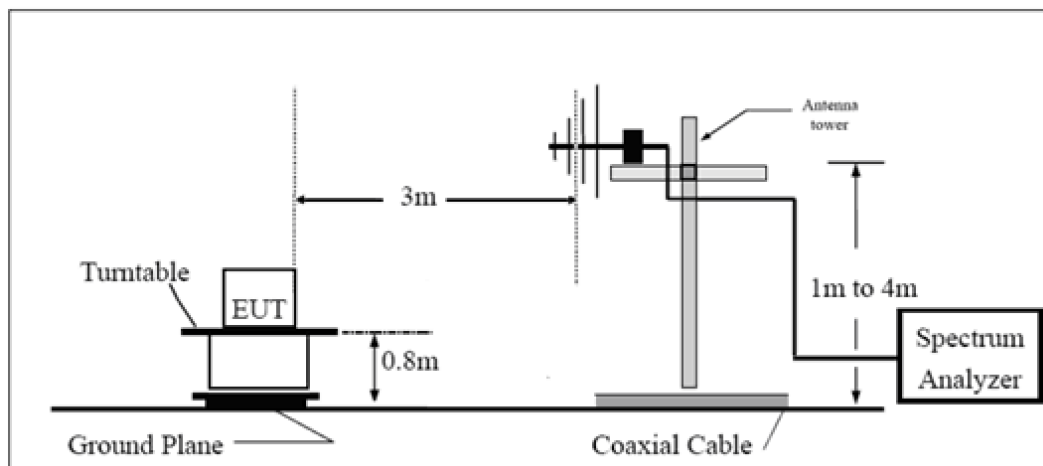
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

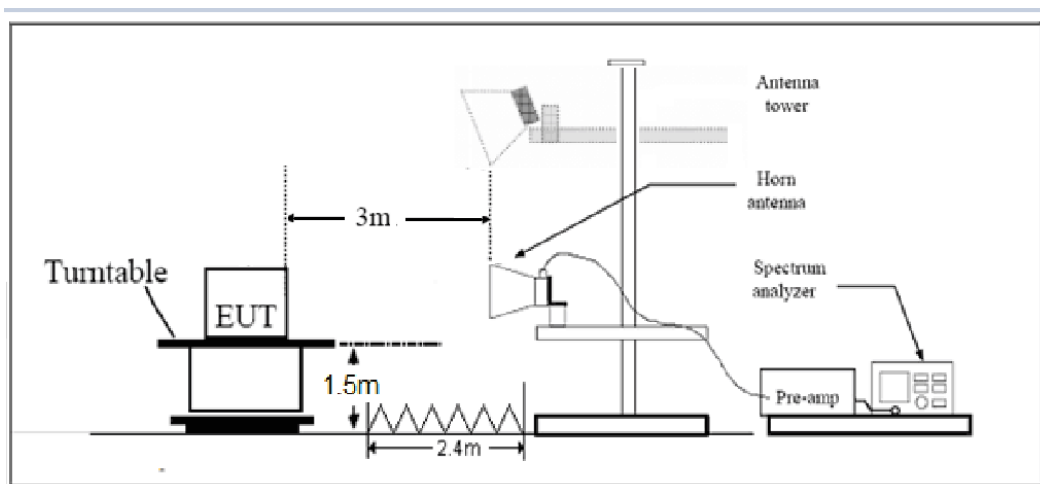
9KHz ~ 30MHz



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(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)(i) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz.

Part 27.53(a)/(h)/(g) Limit	-13 dBm
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 $k = \pm 1.96$, $U = \pm 3.55$ 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

LTE Band 4				Maximum Output Power (dBm)			Antenna 2 EIRP (dBm)			Antenna 4 EIRP (dBm)		
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				19957/1710.7	20175/1732.5	20393/1754.3	19957/1710.7	20175/1732.5	20393/1754.3	19957/1710.7	20175/1732.5	20393/1754.3
1.4MHz	QPSK	1	0	24.30	24.37	24.40	24.10	24.17	24.20	16.00	16.07	16.10
		1	2	24.40	24.44	24.39	24.20	24.24	24.19	16.10	16.14	16.09
		1	5	24.34	24.42	24.33	24.14	24.22	24.13	16.04	16.12	16.03
		3	0	24.21	24.31	24.32	24.01	24.11	24.12	15.91	16.01	16.02
		3	2	24.21	24.27	24.36	24.01	24.07	24.16	15.91	15.97	16.06
		3	3	24.21	24.24	24.32	24.01	24.04	24.12	15.91	15.94	16.02
		6	0	23.30	23.33	23.39	23.10	23.13	23.19	15.00	15.03	15.09
	16QAM	1	0	23.68	23.69	23.69	23.48	23.49	23.49	15.38	15.39	15.39
		1	2	23.62	23.75	23.67	23.42	23.55	23.47	15.32	15.45	15.37
		1	5	23.48	23.42	23.43	23.28	23.22	23.23	15.18	15.12	15.13
		3	0	23.23	23.26	23.31	23.03	23.06	23.11	14.93	14.96	15.01
		3	2	23.29	23.27	23.38	23.09	23.07	23.18	14.99	14.97	15.08
		3	3	23.21	23.26	23.26	23.01	23.06	23.06	14.91	14.96	14.96
		6	0	22.29	22.32	22.43	22.09	22.12	22.23	13.99	14.02	14.13
	64QAM	1	0	22.51	22.49	22.65	22.31	22.29	22.45	14.21	14.19	14.35
		1	2	22.49	22.52	22.49	22.29	22.32	22.29	14.19	14.22	14.19
		1	5	22.45	22.56	22.37	22.25	22.36	22.17	14.15	14.26	14.07
		3	0	22.17	22.23	22.27	21.97	22.03	22.07	13.87	13.93	13.97
		3	2	22.26	22.26	22.34	22.06	22.06	22.14	13.96	13.96	14.04
		3	3	22.18	22.26	22.23	21.98	22.06	22.03	13.88	13.96	13.93
		6	0	21.28	21.30	21.41	21.08	21.10	21.21	12.98	13.00	13.11
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5	19965/1711.5	20175/1732.5	20385/1753.5	19965/1711.5	20175/1732.5	20385/1753.5
3MHz	QPSK	1	0	24.32	24.41	24.43	24.12	24.21	24.23	16.02	16.11	16.13
		1	7	24.38	24.47	24.43	24.18	24.27	24.23	16.08	16.17	16.13
		1	14	24.37	24.47	24.37	24.17	24.27	24.17	16.07	16.17	16.07
		8	0	23.31	23.43	23.45	23.11	23.23	23.25	15.01	15.13	15.15
		8	4	23.33	23.37	23.48	23.13	23.17	23.28	15.03	15.07	15.18
		8	7	23.31	23.35	23.42	23.11	23.15	23.22	15.01	15.05	15.12
		15	0	23.30	23.37	23.42	23.10	23.17	23.22	15.00	15.07	15.12
	16QAM	1	0	23.68	23.71	23.72	23.48	23.51	23.52	15.38	15.41	15.42
		1	7	23.62	23.75	23.71	23.42	23.55	23.51	15.32	15.45	15.41



		1	14	23.50	23.46	23.46	23.30	23.26	23.26	15.20	15.16	15.16
		8	0	22.34	22.39	22.43	22.14	22.19	22.23	14.04	14.09	14.13
		8	4	22.40	22.40	22.50	22.20	22.20	22.30	14.10	14.10	14.20
		8	7	22.31	22.38	22.39	22.11	22.18	22.19	14.01	14.08	14.09
		15	0	22.32	22.36	22.46	22.12	22.16	22.26	14.02	14.06	14.16
	64QAM	1	0	22.54	22.51	22.68	22.34	22.31	22.48	14.24	14.21	14.38
		1	7	22.52	22.52	22.51	22.32	22.32	22.31	14.22	14.22	14.21
		1	14	22.47	22.55	22.40	22.27	22.35	22.20	14.17	14.25	14.10
		8	0	21.28	21.36	21.39	21.08	21.16	21.19	12.98	13.06	13.09
		8	4	21.37	21.39	21.46	21.17	21.19	21.26	13.07	13.09	13.16
		8	7	21.28	21.38	21.36	21.08	21.18	21.16	12.98	13.08	13.06
		15	0	21.31	21.34	21.44	21.11	21.14	21.24	13.01	13.04	13.14
Bandwidth	Modulation	RB alloca tion	offs et	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				19975/ 1712.5	20175/ 1732.5	20375/ 1752.5	19975/ 1712.5	20175/ 1732.5	20375/ 1752.5	19975/ 1712.5	20175/ 1732.5	20375/ 1752.5
5MHz	QPSK	1	0	24.29	24.39	24.39	24.09	24.19	24.19	15.99	16.09	16.09
		1	13	24.36	24.43	24.40	24.16	24.23	24.20	16.06	16.13	16.10
		1	24	24.34	24.42	24.33	24.14	24.22	24.13	16.04	16.12	16.03
		12	0	23.28	23.38	23.41	23.08	23.18	23.21	14.98	15.08	15.11
		12	6	23.31	23.33	23.43	23.11	23.13	23.23	15.01	15.03	15.13
		12	13	23.29	23.33	23.38	23.09	23.13	23.18	14.99	15.03	15.08
		25	0	23.30	23.36	23.40	23.10	23.16	23.20	15.00	15.06	15.10
	16QAM	1	0	23.68	23.67	23.69	23.48	23.47	23.49	15.38	15.37	15.39
		1	13	23.62	23.73	23.68	23.42	23.53	23.48	15.32	15.43	15.38
		1	24	23.47	23.44	23.42	23.27	23.24	23.22	15.17	15.14	15.12
		12	0	22.32	22.35	22.40	22.12	22.15	22.20	14.02	14.05	14.10
		12	6	22.37	22.35	22.46	22.17	22.15	22.26	14.07	14.05	14.16
		12	13	22.28	22.33	22.35	22.08	22.13	22.15	13.98	14.03	14.05
		25	0	22.30	22.32	22.41	22.10	22.12	22.21	14.00	14.02	14.11
	64QAM	1	0	22.51	22.51	22.65	22.31	22.31	22.45	14.21	14.21	14.35
		1	13	22.49	22.54	22.48	22.29	22.34	22.28	14.19	14.24	14.18
		1	24	22.48	22.53	22.36	22.28	22.33	22.16	14.18	14.23	14.06
		12	0	21.26	21.32	21.40	21.06	21.12	21.20	12.96	13.02	13.10
		12	6	21.34	21.34	21.42	21.14	21.14	21.22	13.04	13.04	13.12
		12	13	21.25	21.33	21.32	21.05	21.13	21.12	12.95	13.03	13.02
		25	0	21.29	21.30	21.39	21.09	21.10	21.19	12.99	13.00	13.09
Bandwidth	Modulation	RB alloca tion	offs et	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				20000/ 1715	20175/ 1732.5	20350/ 1750	20000/ 1715	20175/ 1732.5	20350/ 1750	20375/ 1752.5	20375/ 1752.5	20375/ 1752.5
10MHz	QPSK	1	0	24.31	24.40	24.42	24.11	24.20	24.22	16.01	16.10	16.12
		1	25	24.39	24.48	24.44	24.19	24.28	24.24	16.09	16.18	16.14
		1	49	24.36	24.46	24.36	24.16	24.26	24.16	16.06	16.16	16.06
		25	0	23.31	23.43	23.45	23.11	23.23	23.25	15.01	15.13	15.15



		25	13	23.34	23.38	23.47	23.14	23.18	23.27	15.04	15.08	15.17
		25	25	23.31	23.37	23.43	23.11	23.17	23.23	15.01	15.07	15.13
		50	0	23.34	23.38	23.44	23.14	23.18	23.24	15.04	15.08	15.14
	16QAM	1	0	23.72	23.70	23.71	23.52	23.50	23.51	15.42	15.40	15.41
		1	25	23.66	23.77	23.71	23.46	23.57	23.51	15.36	15.47	15.41
		1	49	23.50	23.46	23.45	23.30	23.26	23.25	15.20	15.16	15.15
		25	0	22.35	22.40	22.44	22.15	22.20	22.24	14.05	14.10	14.14
		25	13	22.39	22.39	22.49	22.19	22.19	22.29	14.09	14.09	14.19
		25	25	22.31	22.38	22.39	22.11	22.18	22.19	14.01	14.08	14.09
		50	0	22.33	22.37	22.45	22.13	22.17	22.25	14.03	14.07	14.15
		1	0	22.53	22.50	22.67	22.33	22.30	22.47	14.23	14.20	14.37
	64QAM	1	25	22.52	22.54	22.51	22.32	22.34	22.31	14.22	14.24	14.21
		1	49	22.47	22.55	22.39	22.27	22.35	22.19	14.17	14.25	14.09
		25	0	21.29	21.37	21.40	21.09	21.17	21.20	12.99	13.07	13.10
		25	13	21.36	21.38	21.45	21.16	21.18	21.25	13.06	13.08	13.15
		25	25	21.28	21.38	21.36	21.08	21.18	21.16	12.98	13.08	13.06
		50	0	21.32	21.35	21.43	21.12	21.15	21.23	13.02	13.05	13.13
		1	0	22.53	22.50	22.67	22.33	22.30	22.47	14.23	14.20	14.37
		1	25	22.52	22.54	22.51	22.32	22.34	22.31	14.22	14.24	14.21
		1	49	22.47	22.55	22.39	22.27	22.35	22.19	14.17	14.25	14.09
		25	0	21.29	21.37	21.40	21.09	21.17	21.20	12.99	13.07	13.10
		25	13	21.36	21.38	21.45	21.16	21.18	21.25	13.06	13.08	13.15
		25	25	21.28	21.38	21.36	21.08	21.18	21.16	12.98	13.08	13.06
		50	0	21.32	21.35	21.43	21.12	21.15	21.23	13.02	13.05	13.13
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5	20025/1717.5	20175/1732.5	20325/1747.5	20025/1717.5	20175/1732.5	20325/1747.5
15MHz	QPSK	1	0	24.30	24.36	24.40	24.10	24.16	24.20	16.00	16.06	16.10
		1	38	24.37	24.47	24.41	24.17	24.27	24.21	16.07	16.17	16.11
		1	74	24.33	24.41	24.32	24.13	24.21	24.12	16.03	16.11	16.02
		36	0	23.29	23.39	23.42	23.09	23.19	23.22	14.99	15.09	15.12
		36	18	23.31	23.33	23.43	23.11	23.13	23.23	15.01	15.03	15.13
		36	39	23.28	23.34	23.39	23.08	23.14	23.19	14.98	15.04	15.09
		75	0	23.32	23.34	23.39	23.12	23.14	23.19	15.02	15.04	15.09
	16QAM	1	0	23.70	23.68	23.69	23.50	23.48	23.49	15.40	15.38	15.39
		1	38	23.64	23.74	23.69	23.44	23.54	23.49	15.34	15.44	15.39
		1	74	23.48	23.42	23.42	23.28	23.22	23.22	15.18	15.12	15.12
		36	0	22.32	22.38	22.41	22.12	22.18	22.21	14.02	14.08	14.11
		36	18	22.36	22.34	22.45	22.16	22.14	22.25	14.06	14.04	14.15
		36	39	22.29	22.34	22.36	22.09	22.14	22.16	13.99	14.04	14.06
		75	0	22.30	22.32	22.41	22.10	22.12	22.21	14.00	14.02	14.11
	64QAM	1	0	22.48	22.48	22.65	22.28	22.28	22.45	14.18	14.18	14.35
		1	38	22.50	22.51	22.49	22.30	22.31	22.29	14.20	14.21	14.19
		1	74	22.48	22.54	22.40	22.28	22.34	22.20	14.18	14.24	14.10
		36	0	21.28	21.39	21.41	21.08	21.19	21.21	12.98	13.09	13.11
		36	18	21.34	21.35	21.44	21.14	21.15	21.24	13.04	13.05	13.14
		36	39	21.26	21.34	21.33	21.06	21.14	21.13	12.96	13.04	13.03
		75	0	21.29	21.30	21.39	21.09	21.10	21.19	12.99	13.00	13.09



Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				20050/ 1720	20175 /1732.5	20300/ 1745	20050/ 1720	20175 /1732.5	20300/ 1745	20050/ 1720	20175 /1732.5	20300/ 1745
20MHz	QPSK	1	0	24.27	24.32	24.37	24.07	24.12	24.17	15.97	16.02	16.07
		1	50	24.36	24.43	24.39	24.16	24.23	24.19	16.06	16.13	16.09
		1	99	24.31	24.40	24.29	24.11	24.20	24.09	16.01	16.10	15.99
		50	0	23.26	23.34	23.38	23.06	23.14	23.18	14.96	15.04	15.08
		50	25	23.29	23.29	23.40	23.09	23.09	23.20	14.99	14.99	15.10
		50	50	23.25	23.29	23.35	23.05	23.09	23.15	14.95	14.99	15.05
		100	0	23.29	23.29	23.35	23.09	23.09	23.15	14.99	14.99	15.05
	16QAM	1	0	23.67	23.64	23.64	23.47	23.44	23.44	15.37	15.34	15.34
		1	50	23.61	23.72	23.65	23.41	23.52	23.45	15.31	15.42	15.35
		1	99	23.45	23.39	23.40	23.25	23.19	23.20	15.15	15.09	15.10
		50	0	22.29	22.34	22.38	22.09	22.14	22.18	13.99	14.04	14.08
		50	25	22.33	22.32	22.42	22.13	22.12	22.22	14.03	14.02	14.12
		50	50	22.26	22.29	22.32	22.06	22.09	22.12	13.96	13.99	14.02
		100	0	22.28	22.28	22.38	22.08	22.08	22.18	13.98	13.98	14.08
	64QAM	1	0	22.46	22.44	22.60	22.26	22.24	22.40	14.16	14.14	14.30
		1	50	22.46	22.49	22.45	22.26	22.29	22.25	14.16	14.19	14.15
		1	99	22.42	22.48	22.34	22.22	22.28	22.14	14.12	14.18	14.04
		50	0	21.23	21.31	21.34	21.03	21.11	21.14	12.93	13.01	13.04
		50	25	21.30	21.31	21.38	21.10	21.11	21.18	13.00	13.01	13.08
		50	50	21.23	21.29	21.29	21.03	21.09	21.09	12.93	12.99	12.99
		100	0	21.27	21.26	21.36	21.07	21.06	21.16	12.97	12.96	13.06

LTE Band 7				Maximum Output Power (dBm)			Antenna 2 EIRP (dBm)			Antenna 4 EIRP (dBm)		
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				20775/ 2502.5	21100 /2535	21425/ 2567.5	20775/ 2502.5	21100 /2535	21425/ 2567.5	20775/ 2502.5	21100 /2535	21425/ 2567.5
5MHz	QPSK	1	0	23.30	23.45	23.52	23.20	23.35	23.42	21.70	21.85	21.92
		1	13	23.34	23.65	23.71	23.24	23.55	23.61	21.74	22.05	22.11
		1	24	23.46	23.65	23.73	23.36	23.55	23.63	21.86	22.05	22.13
		12	0	22.43	22.48	22.55	22.33	22.38	22.45	20.83	20.88	20.95
		12	6	22.52	22.53	22.67	22.42	22.43	22.57	20.92	20.93	21.07
		12	13	22.49	22.61	22.68	22.39	22.51	22.58	20.89	21.01	21.08
		25	0	22.49	22.55	22.60	22.39	22.45	22.50	20.89	20.95	21.00
	16QAM	1	0	22.58	22.60	22.63	22.48	22.50	22.53	20.98	21.00	21.03
		1	13	22.91	22.81	22.88	22.81	22.71	22.78	21.31	21.21	21.28
		1	24	22.65	22.70	22.82	22.55	22.60	22.72	21.05	21.10	21.22
		12	0	21.45	21.45	21.52	21.35	21.35	21.42	19.85	19.85	19.92
		12	6	21.52	21.50	21.69	21.42	21.40	21.59	19.92	19.90	20.09



		12	13	21.48	21.62	21.70	21.38	21.52	21.60	19.88	20.02	20.10
		25	0	21.52	21.52	21.56	21.42	21.42	21.46	19.92	19.92	19.96
	64QAM	1	0	21.65	21.67	21.58	21.55	21.57	21.48	20.05	20.07	19.98
		1	13	21.62	21.76	21.85	21.52	21.66	21.75	20.02	20.16	20.25
		1	24	21.73	21.86	21.79	21.63	21.76	21.69	20.13	20.26	20.19
		12	0	20.54	20.61	20.70	20.44	20.51	20.60	18.94	19.01	19.10
		12	6	20.68	20.65	20.82	20.58	20.55	20.72	19.08	19.05	19.22
		12	13	20.64	20.76	20.83	20.54	20.66	20.73	19.04	19.16	19.23
		25	0	20.65	20.67	20.69	20.55	20.57	20.59	19.05	19.07	19.09
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				20800/ 2505	21100 /2535	21400/ 2565	20800/ 2505	21100 /2535	21400/ 2565	20800/ 2505	21100 /2535	21400/ 2565
10MHz	QPSK	1	0	23.32	23.46	23.55	23.22	23.36	23.45	21.72	21.86	21.95
		1	25	23.37	23.70	23.75	23.27	23.60	23.65	21.77	22.10	22.15
		1	49	23.48	23.69	23.76	23.38	23.59	23.66	21.88	22.09	22.16
		25	0	22.46	22.53	22.59	22.36	22.43	22.49	20.86	20.93	20.99
		25	13	22.55	22.58	22.71	22.45	22.48	22.61	20.95	20.98	21.11
		25	25	22.51	22.65	22.73	22.41	22.55	22.63	20.91	21.05	21.13
		50	0	22.53	22.57	22.64	22.43	22.47	22.54	20.93	20.97	21.04
	16QAM	1	0	22.62	22.63	22.65	22.52	22.53	22.55	21.02	21.03	21.05
		1	25	22.95	22.85	22.91	22.85	22.75	22.81	21.35	21.25	21.31
		1	49	22.68	22.72	22.85	22.58	22.62	22.75	21.08	21.12	21.25
		25	0	21.48	21.50	21.56	21.38	21.40	21.46	19.88	19.90	19.96
		25	13	21.54	21.54	21.72	21.44	21.44	21.62	19.94	19.94	20.12
		25	25	21.51	21.67	21.74	21.41	21.57	21.64	19.91	20.07	20.14
		50	0	21.55	21.57	21.60	21.45	21.47	21.50	19.95	19.97	20.00
	64QAM	1	0	21.67	21.66	21.60	21.57	21.56	21.50	20.07	20.06	20.00
		1	25	21.65	21.76	21.88	21.55	21.66	21.78	20.05	20.16	20.28
		1	49	21.72	21.88	21.82	21.62	21.78	21.72	20.12	20.28	20.22
		25	0	20.57	20.66	20.70	20.47	20.56	20.60	18.97	19.06	19.10
		25	13	20.70	20.69	20.85	20.60	20.59	20.75	19.10	19.09	19.25
		25	25	20.67	20.81	20.87	20.57	20.71	20.77	19.07	19.21	19.27
		50	0	20.68	20.72	20.73	20.58	20.62	20.63	19.08	19.12	19.13
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				20825/ 2507.5	21100 /2535	21375/ 2562.5	20825/ 2507.5	21100 /2535	21375/ 2562.5	20825/ 2507.5	21100 /2535	21375/ 2562.5
15MHz	QPSK	1	0	23.31	23.42	23.53	23.21	23.32	23.43	21.71	21.82	21.93
		1	38	23.35	23.69	23.72	23.25	23.59	23.62	21.75	22.09	22.12
		1	74	23.45	23.64	23.72	23.35	23.54	23.62	21.85	22.04	22.12
		36	0	22.44	22.49	22.56	22.34	22.39	22.46	20.84	20.89	20.96
		36	18	22.52	22.53	22.67	22.42	22.43	22.57	20.92	20.93	21.07
		36	39	22.48	22.62	22.69	22.38	22.52	22.59	20.88	21.02	21.09
		75	0	22.51	22.53	22.59	22.41	22.43	22.49	20.91	20.93	20.99



	16QAM	1	0	22.60	22.61	22.63	22.50	22.51	22.53	21.00	21.01	21.03
		1	38	22.93	22.82	22.89	22.83	22.72	22.79	21.33	21.22	21.29
		1	74	22.66	22.68	22.82	22.56	22.58	22.72	21.06	21.08	21.22
		36	0	21.45	21.48	21.53	21.35	21.38	21.43	19.85	19.88	19.93
		36	18	21.51	21.49	21.68	21.41	21.39	21.58	19.91	19.89	20.08
		36	39	21.49	21.63	21.71	21.39	21.53	21.61	19.89	20.03	20.11
		75	0	21.52	21.52	21.56	21.42	21.42	21.46	19.92	19.92	19.96
	64QAM	1	0	21.62	21.64	21.58	21.52	21.54	21.48	20.02	20.04	19.98
		1	38	21.63	21.73	21.86	21.53	21.63	21.76	20.03	20.13	20.26
		1	74	21.73	21.87	21.83	21.63	21.77	21.73	20.13	20.27	20.23
		36	0	20.56	20.68	20.71	20.46	20.58	20.61	18.96	19.08	19.11
		36	18	20.68	20.66	20.84	20.58	20.56	20.74	19.08	19.06	19.24
		36	39	20.65	20.77	20.84	20.55	20.67	20.74	19.05	19.17	19.24
		75	0	20.65	20.67	20.69	20.55	20.57	20.59	19.05	19.07	19.09
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				20850/ 2510	21100 /2535	21350/ 2560	20850/ 2510	21100 /2535	21350/ 2560	20850/ 2510	21100 /2535	21350/ 2560
20MHz	QPSK	1	0	23.28	23.38	23.50	23.18	23.28	23.40	21.68	21.78	21.90
		1	50	23.34	23.65	23.70	23.24	23.55	23.60	21.74	22.05	22.10
		1	99	23.43	23.66	23.71	23.33	23.56	23.61	21.83	22.06	22.11
		50	0	22.41	22.44	22.52	22.31	22.34	22.42	20.81	20.84	20.92
		50	25	22.50	22.49	22.65	22.40	22.39	22.55	20.90	20.89	21.05
		50	50	22.45	22.57	22.65	22.35	22.47	22.55	20.85	20.97	21.05
		100	0	22.48	22.48	22.55	22.38	22.38	22.45	20.88	20.88	20.95
	16QAM	1	0	22.57	22.57	22.58	22.47	22.47	22.48	20.97	20.97	20.98
		1	50	22.90	22.80	22.85	22.80	22.70	22.75	21.30	21.20	21.25
		1	99	22.63	22.65	22.80	22.53	22.55	22.70	21.03	21.05	21.20
		50	0	21.42	21.44	21.50	21.32	21.34	21.40	19.82	19.84	19.90
		50	25	21.48	21.47	21.65	21.38	21.37	21.55	19.88	19.87	20.05
		50	50	21.46	21.58	21.67	21.36	21.48	21.57	19.86	19.98	20.07
		100	0	21.50	21.48	21.53	21.40	21.38	21.43	19.90	19.88	19.93
	64QAM	1	0	21.60	21.60	21.53	21.50	21.50	21.43	20.00	20.00	19.93
		1	50	21.59	21.71	21.82	21.49	21.61	21.72	19.99	20.11	20.22
		1	99	21.67	21.81	21.77	21.57	21.71	21.67	20.07	20.21	20.17
		50	0	20.51	20.60	20.64	20.41	20.50	20.54	18.91	19.00	19.04
		50	25	20.64	20.62	20.78	20.54	20.52	20.68	19.04	19.02	19.18
		50	50	20.62	20.72	20.80	20.52	20.62	20.70	19.02	19.12	19.20
		100	0	20.63	20.63	20.66	20.53	20.53	20.56	19.03	19.03	19.06



LTE Band 12				Maximum Output Power (dBm)			Antenna 1 ERP (dBm)			Antenna 6 ERP (dBm)		
Bandwidth	Modulation	RB allocat ion	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				23017/ 699.7	23095/ 707.5	23173/ 715.3	23017/ 699.7	23095/ 707.5	23173/ 715.3	23017/ 699.7	23095/ 707.5	23173/ 715.3
1.4MHz	QPSK	1	0	25.11	25.22	25.17	15.46	15.57	15.52	14.16	14.27	14.22
		1	2	25.16	25.11	25.09	15.51	15.46	15.44	14.21	14.16	14.14
		1	5	25.07	25.11	25.07	15.42	15.46	15.42	14.12	14.16	14.12
		3	0	24.98	25.00	24.98	15.33	15.35	15.33	14.03	14.05	14.03
		3	2	25.06	25.06	25.11	15.41	15.41	15.46	14.11	14.11	14.16
		3	3	25.08	25.05	25.08	15.43	15.40	15.43	14.13	14.10	14.13
		6	0	24.10	24.07	24.16	14.45	14.42	14.51	13.15	13.12	13.21
	16QAM	1	0	24.53	24.52	24.66	14.88	14.87	15.01	13.58	13.57	13.71
		1	2	24.43	24.40	24.48	14.78	14.75	14.83	13.48	13.45	13.53
		1	5	24.42	24.37	24.49	14.77	14.72	14.84	13.47	13.42	13.54
		3	0	24.09	24.01	24.17	14.44	14.36	14.52	13.14	13.06	13.22
		3	2	24.10	24.03	24.18	14.45	14.38	14.53	13.15	13.08	13.23
		3	3	24.12	24.09	24.17	14.47	14.44	14.52	13.17	13.14	13.22
		6	0	23.09	23.07	23.21	13.44	13.42	13.56	12.14	12.12	12.26
	64QAM	1	0	23.39	23.32	23.46	13.74	13.67	13.81	12.44	12.37	12.51
		1	2	23.31	23.25	23.35	13.66	13.60	13.70	12.36	12.30	12.40
		1	5	23.40	23.40	23.47	13.75	13.75	13.82	12.45	12.45	12.52
		3	0	23.04	22.96	23.08	13.39	13.31	13.43	12.09	12.01	12.13
		3	2	23.11	23.04	23.19	13.46	13.39	13.54	12.16	12.09	12.24
		3	3	23.08	23.05	23.16	13.43	13.40	13.51	12.13	12.10	12.21
		6	0	22.09	22.07	22.21	12.44	12.42	12.56	11.14	11.12	11.26
Bandwidth	Modulation	RB allocat ion	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				23025/ 700.5	23095/ 707.5	23165/ 714.5	23025/ 700.5	23095/ 707.5	23165/ 714.5	23025/ 700.5	23095/ 707.5	23165/ 714.5
3MHz	QPSK	1	0	25.12	25.25	25.19	15.47	15.60	15.54	14.17	14.30	14.24
		1	7	25.15	25.15	25.14	15.50	15.50	15.49	14.20	14.20	14.19
		1	14	25.09	25.15	25.10	15.44	15.50	15.45	14.14	14.20	14.15
		8	0	24.08	24.12	24.11	14.43	14.47	14.46	13.13	13.17	13.16
		8	4	24.19	24.17	24.22	14.54	14.52	14.57	13.24	13.22	13.27
		8	7	24.18	24.18	24.19	14.53	14.53	14.54	13.23	13.23	13.24
		15	0	24.14	24.12	24.21	14.49	14.47	14.56	13.19	13.17	13.26
	16QAM	1	0	24.57	24.53	24.68	14.92	14.88	15.03	13.62	13.58	13.73
		1	7	24.47	24.42	24.52	14.82	14.77	14.87	13.52	13.47	13.57
		1	14	24.44	24.41	24.51	14.79	14.76	14.86	13.49	13.46	13.56
		8	0	23.21	23.15	23.30	13.56	13.50	13.65	12.26	12.20	12.35
		8	4	23.20	23.15	23.29	13.55	13.50	13.64	12.25	12.20	12.34
		8	7	23.22	23.21	23.30	13.57	13.56	13.65	12.27	12.26	12.35



	64QAM	15	0	23.13	23.12	23.23	13.48	13.47	13.58	12.18	12.17	12.28
		1	0	23.41	23.33	23.48	13.76	13.68	13.83	12.46	12.38	12.53
		1	7	23.34	23.27	23.37	13.69	13.62	13.72	12.39	12.32	12.42
		1	14	23.42	23.39	23.49	13.77	13.74	13.84	12.47	12.44	12.54
		8	0	22.16	22.10	22.21	12.51	12.45	12.56	11.21	11.15	11.26
		8	4	22.21	22.16	22.30	12.56	12.51	12.65	11.26	11.21	11.35
		8	7	22.18	22.17	22.29	12.53	12.52	12.64	11.23	11.22	11.34
		15	0	22.13	22.12	22.23	12.48	12.47	12.58	11.18	11.17	11.28
		15	0	22.13	22.12	22.23	12.48	12.47	12.58	11.18	11.17	11.28
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				23035/701.5	23095/707.5	23155/713.5	23035/701.5	23095/707.5	23155/713.5	23035/701.5	23095/707.5	23155/713.5
5MHz	QPSK	1	0	25.11	25.21	25.17	15.46	15.56	15.52	14.16	14.26	14.22
		1	13	25.13	25.14	25.11	15.48	15.49	15.46	14.18	14.19	14.16
		1	24	25.06	25.10	25.06	15.41	15.45	15.41	14.11	14.15	14.11
		12	0	24.06	24.08	24.08	14.41	14.43	14.43	13.11	13.13	13.13
		12	6	24.16	24.12	24.18	14.51	14.47	14.53	13.21	13.17	13.23
		12	13	24.15	24.15	24.15	14.50	14.50	14.50	13.20	13.20	13.20
		25	0	24.12	24.08	24.16	14.47	14.43	14.51	13.17	13.13	13.21
	16QAM	1	0	24.55	24.51	24.66	14.90	14.86	15.01	13.60	13.56	13.71
		1	13	24.45	24.39	24.50	14.80	14.74	14.85	13.50	13.44	13.55
		1	24	24.42	24.37	24.48	14.77	14.72	14.83	13.47	13.42	13.53
		12	0	23.18	23.13	23.27	13.53	13.48	13.62	12.23	12.18	12.32
		12	6	23.17	23.10	23.25	13.52	13.45	13.60	12.22	12.15	12.30
		12	13	23.20	23.17	23.27	13.55	13.52	13.62	12.25	12.22	12.32
		25	0	23.10	23.07	23.19	13.45	13.42	13.54	12.15	12.12	12.24
	64QAM	1	0	23.36	23.31	23.46	13.71	13.66	13.81	12.41	12.36	12.51
		1	13	23.32	23.24	23.35	13.67	13.59	13.70	12.37	12.29	12.40
		1	24	23.43	23.38	23.50	13.78	13.73	13.85	12.48	12.43	12.55
		12	0	22.15	22.12	22.22	12.50	12.47	12.57	11.20	11.17	11.27
		12	6	22.19	22.13	22.29	12.54	12.48	12.64	11.24	11.18	11.34
		12	13	22.16	22.13	22.26	12.51	12.48	12.61	11.21	11.18	11.31
		25	0	22.10	22.07	22.19	12.45	12.42	12.54	11.15	11.12	11.24
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				23060/704	23095/707.5	23130/711	23060/704	23095/707.5	23130/711	23060/704	23095/707.5	23130/711
10MHz	QPSK	1	0	25.08	25.17	25.14	15.43	15.52	15.49	14.13	14.22	14.19
		1	25	25.12	25.10	25.09	15.47	15.45	15.44	14.17	14.15	14.14
		1	49	25.04	25.09	25.03	15.39	15.44	15.38	14.09	14.14	14.08
		25	0	24.03	24.03	24.04	14.38	14.38	14.39	13.08	13.08	13.09
		25	13	24.14	24.08	24.15	14.49	14.43	14.50	13.19	13.13	13.20
		25	25	24.12	24.10	24.11	14.47	14.45	14.46	13.17	13.15	13.16
		50	0	24.09	24.03	24.12	14.44	14.38	14.47	13.14	13.08	13.17
	16QAM	1	0	24.52	24.47	24.61	14.87	14.82	14.96	13.57	13.52	13.66



		1	25	24.42	24.37	24.46	14.77	14.72	14.81	13.47	13.42	13.51
		1	49	24.39	24.34	24.46	14.74	14.69	14.81	13.44	13.39	13.51
		25	0	23.15	23.09	23.24	13.50	13.44	13.59	12.20	12.14	12.29
		25	13	23.14	23.08	23.22	13.49	13.43	13.57	12.19	12.13	12.27
		25	25	23.17	23.12	23.23	13.52	13.47	13.58	12.22	12.17	12.28
		50	0	23.08	23.03	23.16	13.43	13.38	13.51	12.13	12.08	12.21
	64QAM	1	0	23.34	23.27	23.41	13.69	13.62	13.76	12.39	12.32	12.46
		1	25	23.28	23.22	23.31	13.63	13.57	13.66	12.33	12.27	12.36
		1	49	23.37	23.32	23.44	13.72	13.67	13.79	12.42	12.37	12.49
		25	0	22.10	22.04	22.15	12.45	12.39	12.50	11.15	11.09	11.20
		25	13	22.15	22.09	22.23	12.50	12.44	12.58	11.20	11.14	11.28
		25	25	22.13	22.08	22.22	12.48	12.43	12.57	11.18	11.13	11.27
		50	0	22.08	22.03	22.16	12.43	12.38	12.51	11.13	11.08	11.21

LTE Band 38				Maximum Output Power (dBm)			Antenna 2 EIRP (dBm)			Antenna 4 EIRP (dBm)		
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				37775/ 2572.5	38000 /2595	38225/ 2617.5	37775/ 2572.5	38000 /2595	38225/ 2617.5	37775/ 2572.5	38000 /2595	38225/ 2617.5
5MHz	QPSK	1	0	24.10	24.28	24.23	24.00	24.18	24.13	22.50	22.68	22.63
		1	13	24.03	24.21	24.33	23.93	24.11	24.23	22.43	22.61	22.73
		1	24	24.47	24.21	24.39	24.37	24.11	24.29	22.87	22.61	22.79
		12	0	23.05	23.01	23.01	22.95	22.91	22.91	21.45	21.41	21.41
		12	6	23.19	23.11	23.14	23.09	23.01	23.04	21.59	21.51	21.54
		12	13	23.16	23.10	23.09	23.06	23.00	22.99	21.56	21.50	21.49
		25	0	23.13	23.11	23.11	23.03	23.01	23.01	21.53	21.51	21.51
	16QAM	1	0	23.23	23.37	23.33	23.13	23.27	23.23	21.63	21.77	21.73
		1	13	23.40	23.30	23.35	23.30	23.20	23.25	21.80	21.70	21.75
		1	24	23.49	23.39	23.32	23.39	23.29	23.22	21.89	21.79	21.72
		12	0	22.12	21.98	21.99	22.02	21.88	21.89	20.52	20.38	20.39
		12	6	22.25	22.13	22.14	22.15	22.03	22.04	20.65	20.53	20.54
		12	13	22.16	22.07	22.14	22.06	21.97	22.04	20.56	20.47	20.54
		25	0	22.12	22.07	22.05	22.02	21.97	21.95	20.52	20.47	20.45
	64QAM	1	0	22.28	22.18	22.30	22.18	22.08	22.20	20.68	20.58	20.70
		1	13	22.46	22.34	22.29	22.36	22.24	22.19	20.86	20.74	20.69
		1	24	22.37	22.25	22.35	22.27	22.15	22.25	20.77	20.65	20.75
		12	0	21.07	20.99	21.08	20.97	20.89	20.98	19.47	19.39	19.48
		12	6	21.22	21.08	21.16	21.12	20.98	21.06	19.62	19.48	19.56
		12	13	21.16	21.06	21.13	21.06	20.96	21.03	19.56	19.46	19.53
		25	0	21.11	21.06	21.08	21.01	20.96	20.98	19.51	19.46	19.48



Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				37800/ 2575	38000 /2595	38200/ 2615	37800/ 2575	38000 /2595	38200/ 2615	37800/ 2575	38000 /2595	38200/ 2615
10MHz	QPSK	1	0	24.12	24.29	24.26	24.02	24.19	24.16	22.52	22.69	22.66
		1	25	24.06	24.26	24.37	23.96	24.16	24.27	22.46	22.66	22.77
		1	49	24.49	24.25	24.42	24.39	24.15	24.32	22.89	22.65	22.82
		25	0	23.08	23.06	23.05	22.98	22.96	22.95	21.48	21.46	21.45
		25	13	23.22	23.16	23.18	23.12	23.06	23.08	21.62	21.56	21.58
		25	25	23.18	23.14	23.14	23.08	23.04	23.04	21.58	21.54	21.54
		50	0	23.17	23.13	23.15	23.07	23.03	23.05	21.57	21.53	21.55
	16QAM	1	0	23.27	23.40	23.35	23.17	23.30	23.25	21.67	21.80	21.75
		1	25	23.44	23.34	23.38	23.34	23.24	23.28	21.84	21.74	21.78
		1	49	23.52	23.41	23.35	23.42	23.31	23.25	21.92	21.81	21.75
		25	0	22.15	22.03	22.03	22.05	21.93	21.93	20.55	20.43	20.43
		25	13	22.27	22.17	22.17	22.17	22.07	22.07	20.67	20.57	20.57
		25	25	22.19	22.12	22.18	22.09	22.02	22.08	20.59	20.52	20.58
		50	0	22.15	22.12	22.09	22.05	22.02	21.99	20.55	20.52	20.49
	64QAM	1	0	22.30	22.17	22.32	22.20	22.07	22.22	20.70	20.57	20.72
		1	25	22.49	22.34	22.32	22.39	22.24	22.22	20.89	20.74	20.72
		1	49	22.36	22.27	22.38	22.26	22.17	22.28	20.76	20.67	20.78
		25	0	21.10	21.04	21.08	21.00	20.94	20.98	19.50	19.44	19.48
		25	13	21.24	21.12	21.19	21.14	21.02	21.09	19.64	19.52	19.59
		25	25	21.19	21.11	21.17	21.09	21.01	21.07	19.59	19.51	19.57
		50	0	21.14	21.11	21.12	21.04	21.01	21.02	19.54	19.51	19.52
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				37825/ 2577.5	38000 /2595	38175/ 2612.5	37825/ 2577.5	38000 /2595	38175/ 2612.5	37825/ 2577.5	38000 /2595	38175/ 2612.5
15MHz	QPSK	1	0	24.11	24.25	24.24	24.01	24.15	24.14	22.51	22.65	22.64
		1	38	24.04	24.25	24.34	23.94	24.15	24.24	22.44	22.65	22.74
		1	74	24.46	24.20	24.38	24.36	24.10	24.28	22.86	22.60	22.78
		36	0	23.06	23.02	23.02	22.96	22.92	22.92	21.46	21.42	21.42
		36	18	23.19	23.11	23.14	23.09	23.01	23.04	21.59	21.51	21.54
		36	39	23.15	23.11	23.10	23.05	23.01	23.00	21.55	21.51	21.50
		75	0	23.15	23.09	23.10	23.05	22.99	23.00	21.55	21.49	21.50
	16QAM	1	0	23.25	23.38	23.33	23.15	23.28	23.23	21.65	21.78	21.73
		1	38	23.42	23.31	23.36	23.32	23.21	23.26	21.82	21.71	21.76
		1	74	23.50	23.37	23.32	23.40	23.27	23.22	21.90	21.77	21.72
		36	0	22.12	22.01	22.00	22.02	21.91	21.90	20.52	20.41	20.40
		36	18	22.24	22.12	22.13	22.14	22.02	22.03	20.64	20.52	20.53
		36	39	22.17	22.08	22.15	22.07	21.98	22.05	20.57	20.48	20.55
		75	0	22.12	22.07	22.05	22.02	21.97	21.95	20.52	20.47	20.45
	64QAM	1	0	22.25	22.15	22.30	22.15	22.05	22.20	20.65	20.55	20.70
		1	38	22.47	22.31	22.30	22.37	22.21	22.20	20.87	20.71	20.70



		1	74	22.37	22.26	22.39	22.27	22.16	22.29	20.77	20.66	20.79
		36	0	21.09	21.06	21.09	20.99	20.96	20.99	19.49	19.46	19.49
		36	18	21.22	21.09	21.18	21.12	20.99	21.08	19.62	19.49	19.58
		36	39	21.17	21.07	21.14	21.07	20.97	21.04	19.57	19.47	19.54
		75	0	21.11	21.06	21.08	21.01	20.96	20.98	19.51	19.46	19.48
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				37850/2580	38000/2595	38150/2610	37850/2580	38000/2595	38150/2610	37850/2580	38000/2595	38150/2610
20MHz	QPSK	1	0	24.08	24.21	24.21	23.98	24.11	24.11	22.48	22.61	22.61
		1	50	24.03	24.21	24.32	23.93	24.11	24.22	22.43	22.61	22.72
		1	99	24.44	24.23	24.35	24.34	24.13	24.25	22.84	22.63	22.75
		50	0	23.03	22.97	22.98	22.93	22.87	22.88	21.43	21.37	21.38
		50	25	23.05	23.07	23.11	22.95	22.97	23.01	21.45	21.47	21.51
		50	50	23.06	23.06	23.06	22.96	22.96	22.96	21.46	21.46	21.46
		100	0	23.12	23.04	23.06	23.02	22.94	22.96	21.52	21.44	21.46
	16QAM	1	0	23.22	23.34	23.28	23.12	23.24	23.18	21.62	21.74	21.68
		1	50	23.39	23.29	23.32	23.29	23.19	23.22	21.79	21.69	21.72
		1	99	23.47	23.34	23.30	23.37	23.24	23.20	21.87	21.74	21.70
		50	0	22.09	21.97	21.97	21.99	21.87	21.87	20.49	20.37	20.37
		50	25	22.21	22.10	22.10	22.11	22.00	22.00	20.61	20.50	20.50
		50	50	22.14	22.03	22.11	22.04	21.93	22.01	20.54	20.43	20.51
		100	0	22.10	22.03	22.02	22.00	21.93	21.92	20.50	20.43	20.42
	64QAM	1	0	22.23	22.11	22.25	22.13	22.01	22.15	20.63	20.51	20.65
		1	50	22.43	22.29	22.26	22.33	22.19	22.16	20.83	20.69	20.66
		1	99	22.31	22.20	22.33	22.21	22.10	22.23	20.71	20.60	20.73
		50	0	21.04	20.98	21.02	20.94	20.88	20.92	19.44	19.38	19.42
		50	25	21.18	21.05	21.12	21.08	20.95	21.02	19.58	19.45	19.52
		50	50	21.14	21.02	21.10	21.04	20.92	21.00	19.54	19.42	19.50
		100	0	21.09	21.02	21.05	20.99	20.92	20.95	19.49	19.42	19.45

LTE Band 66				Maximum Output Power (dBm)			Antenna 3 EIRP (dBm)		
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				131979/1710.7	132322/1745	132665/1779.3	131979/1710.7	132322/1745	132665/1779.3
1.4MHz	QPSK	1	0	24.14	24.35	23.94	21.24	21.45	21.04
		1	2	24.49	24.22	24.41	21.59	21.32	21.51
		1	5	24.41	24.63	24.41	21.51	21.73	21.51
		3	0	23.95	24.27	24.01	21.05	21.37	21.11
		3	2	24.12	24.23	24.11	21.22	21.33	21.21
		3	3	24.07	24.29	24.06	21.17	21.39	21.16
		6	0	23.17	23.30	23.19	20.27	20.40	20.29
	16QAM	1	0	23.40	23.36	23.30	20.50	20.46	20.40
		1	2	23.64	23.65	23.60	20.74	20.75	20.70



		1	5	23.30	23.26	23.18	20.40	20.36	20.28
		3	0	23.23	23.14	23.08	20.33	20.24	20.18
		3	2	23.20	23.11	23.04	20.30	20.21	20.14
		3	3	23.08	23.04	22.94	20.18	20.14	20.04
		6	0	22.33	22.27	22.21	19.43	19.37	19.31
	64QAM	1	0	22.38	22.30	22.22	19.48	19.40	19.32
		1	2	22.25	22.21	22.16	19.35	19.31	19.26
		1	5	22.39	22.33	22.22	19.49	19.43	19.32
		3	0	22.03	21.97	21.93	19.13	19.07	19.03
		3	2	22.20	22.12	22.05	19.30	19.22	19.15
		3	3	22.19	22.15	22.05	19.29	19.25	19.15
		6	0	21.22	21.19	21.12	18.32	18.29	18.22
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				131987/ 1711.5	132322/ 1745	132657/ 1778.5	131987/ 1711.5	132322/ 1745	132657/ 1778.5
3MHz	QPSK	1	0	24.16	24.39	23.97	21.26	21.49	21.07
		1	7	24.47	24.25	24.45	21.57	21.35	21.55
		1	14	24.44	24.68	24.45	21.54	21.78	21.55
		8	0	23.05	23.39	23.14	20.15	20.49	20.24
		8	4	23.24	23.33	23.23	20.34	20.43	20.33
		8	7	23.17	23.40	23.16	20.27	20.50	20.26
		15	0	23.17	23.34	23.22	20.27	20.44	20.32
	16QAM	1	0	23.40	23.38	23.33	20.50	20.48	20.43
		1	7	23.64	23.65	23.64	20.74	20.75	20.74
		1	14	23.32	23.30	23.21	20.42	20.40	20.31
		8	0	22.34	22.27	22.20	19.44	19.37	19.30
		8	4	22.31	22.24	22.16	19.41	19.34	19.26
		8	7	22.18	22.16	22.07	19.28	19.26	19.17
		15	0	22.36	22.31	22.24	19.46	19.41	19.34
	64QAM	1	0	22.41	22.32	22.25	19.51	19.42	19.35
		1	7	22.28	22.21	22.18	19.38	19.31	19.28
		1	14	22.41	22.32	22.25	19.51	19.42	19.35
		8	0	21.14	21.10	21.05	18.24	18.20	18.15
		8	4	21.31	21.25	21.17	18.41	18.35	18.27
		8	7	21.29	21.27	21.18	18.39	18.37	18.28
		15	0	21.25	21.23	21.15	18.35	18.33	18.25
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				131997/ 1712.5	132322/ 1745	132647/ 1777.5	131997/ 1712.5	132322/ 1745	132647/ 1777.5
5MHz	QPSK	1	0	24.13	24.37	23.93	21.23	21.47	21.03
		1	13	24.45	24.21	24.42	21.55	21.31	21.52
		1	24	24.41	24.63	24.41	21.51	21.73	21.51
		12	0	23.02	23.34	23.10	20.12	20.44	20.20



	16QAM	12	6	23.22	23.29	23.18	20.32	20.39	20.28
		12	13	23.15	23.38	23.12	20.25	20.48	20.22
		25	0	23.17	23.33	23.20	20.27	20.43	20.30
		1	0	23.40	23.34	23.30	20.50	20.44	20.40
		1	13	23.64	23.63	23.61	20.74	20.73	20.71
		1	24	23.29	23.28	23.17	20.39	20.38	20.27
		12	0	22.32	22.23	22.17	19.42	19.33	19.27
		12	6	22.28	22.19	22.12	19.38	19.29	19.22
		12	13	22.15	22.11	22.03	19.25	19.21	19.13
		25	0	22.34	22.27	22.19	19.44	19.37	19.29
	64QAM	1	0	22.38	22.32	22.22	19.48	19.42	19.32
		1	13	22.25	22.23	22.15	19.35	19.33	19.25
		1	24	22.42	22.30	22.21	19.52	19.40	19.31
		12	0	21.12	21.06	21.06	18.22	18.16	18.16
		12	6	21.28	21.20	21.13	18.38	18.30	18.23
		12	13	21.26	21.22	21.14	18.36	18.32	18.24
		25	0	21.23	21.19	21.10	18.33	18.29	18.20
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				132022/ 1715	132322/ 1745	132622/ 1775	132022/ 1715	132322/ 1745	132622/ 1775
10MHz	QPSK	1	0	24.15	24.38	23.96	21.25	21.48	21.06
		1	25	24.48	24.26	24.46	21.58	21.36	21.56
		1	49	24.43	24.67	24.44	21.53	21.77	21.54
		25	0	23.05	23.39	23.14	20.15	20.49	20.24
		25	13	23.25	23.34	23.22	20.35	20.44	20.32
		25	25	23.17	23.42	23.17	20.27	20.52	20.27
		50	0	23.21	23.35	23.24	20.31	20.45	20.34
	16QAM	1	0	23.44	23.37	23.32	20.54	20.47	20.42
		1	25	23.68	23.67	23.64	20.78	20.77	20.74
		1	49	23.32	23.30	23.20	20.42	20.40	20.30
		25	0	22.35	22.28	22.21	19.45	19.38	19.31
		25	13	22.30	22.23	22.15	19.40	19.33	19.25
		25	25	22.18	22.16	22.07	19.28	19.26	19.17
		50	0	22.37	22.32	22.23	19.47	19.42	19.33
	64QAM	1	0	22.40	22.31	22.24	19.50	19.41	19.34
		1	25	22.28	22.23	22.18	19.38	19.33	19.28
		1	49	22.41	22.32	22.24	19.51	19.42	19.34
		25	0	21.15	21.11	21.06	18.25	18.21	18.16
		25	13	21.30	21.24	21.16	18.40	18.34	18.26
		25	25	21.29	21.27	21.18	18.39	18.37	18.28
		50	0	21.26	21.24	21.14	18.36	18.34	18.24



Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				132047/ 1717.5	132322/ 1745	132597/ 1772.5	132047/ 1717.5	132322/ 1745	132597/ 1772.5
15MHz	QPSK	1	0	24.14	24.34	23.94	21.24	21.44	21.04
		1	38	24.46	24.25	24.43	21.56	21.35	21.53
		1	74	24.40	24.62	24.40	21.50	21.72	21.50
		36	0	23.03	23.35	23.11	20.13	20.45	20.21
		36	18	23.22	23.29	23.18	20.32	20.39	20.28
		36	39	23.14	23.39	23.13	20.24	20.49	20.23
		75	0	23.19	23.31	23.19	20.29	20.41	20.29
	16QAM	1	0	23.42	23.35	23.30	20.52	20.45	20.40
		1	38	23.66	23.64	23.62	20.76	20.74	20.72
		1	74	23.30	23.26	23.17	20.40	20.36	20.27
		36	0	22.32	22.26	22.18	19.42	19.36	19.28
		36	18	22.27	22.18	22.11	19.37	19.28	19.21
		36	39	22.16	22.12	22.04	19.26	19.22	19.14
		75	0	22.34	22.27	22.19	19.44	19.37	19.29
	64QAM	1	0	22.35	22.29	22.22	19.45	19.39	19.32
		1	38	22.26	22.20	22.16	19.36	19.30	19.26
		1	74	22.42	22.31	22.25	19.52	19.41	19.35
		36	0	21.14	21.13	21.07	18.24	18.23	18.17
		36	18	21.28	21.21	21.15	18.38	18.31	18.25
		36	39	21.27	21.23	21.15	18.37	18.33	18.25
		75	0	21.23	21.19	21.10	18.33	18.29	18.20
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
				132072/ 1720	132322/ 1745	132572/ 1770	132072/ 1720	132322/ 1745	132572/ 1770
20MHz	QPSK	1	0	24.11	24.30	23.91	21.21	21.40	21.01
		1	50	24.45	24.21	24.41	21.55	21.31	21.51
		1	99	24.38	24.61	24.37	21.48	21.71	21.47
		50	0	23.00	23.30	23.07	20.10	20.40	20.17
		50	25	23.20	23.25	23.15	20.30	20.35	20.25
		50	50	23.11	23.34	23.09	20.21	20.44	20.19
		100	0	23.16	23.26	23.15	20.26	20.36	20.25
	16QAM	1	0	23.39	23.31	23.25	20.49	20.41	20.35
		1	50	23.63	23.62	23.58	20.73	20.72	20.68
		1	99	23.27	23.23	23.15	20.37	20.33	20.25
		50	0	22.29	22.22	22.15	19.39	19.32	19.25
		50	25	22.24	22.16	22.08	19.34	19.26	19.18
		50	50	22.13	22.07	22.00	19.23	19.17	19.10
		100	0	22.32	22.23	22.16	19.42	19.33	19.26
	64QAM	1	0	22.33	22.25	22.17	19.43	19.35	19.27
		1	50	22.22	22.18	22.12	19.32	19.28	19.22



		1	99	22.36	22.25	22.19	19.46	19.35	19.29
		50	0	21.09	21.05	21.00	18.19	18.15	18.10
		50	25	21.24	21.17	21.09	18.34	18.27	18.19
		50	50	21.24	21.18	21.11	18.34	18.28	18.21
		100	0	21.21	21.15	21.07	18.31	18.25	18.17

CA_7C	PCC	SCC	PCC RB		SCC1 RB		Max mum output power (dBm)			Antenna 2 EIRP (dBm)			Antenna 4 EIRP (dBm)		
	Frequency (MHz)	Frequency (MHz)	Size	Offset	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10MHz+ 20MHz	2505.5	2519.9	1	49	1	0	24.02	23.35	23.28	23.92	23.25	23.18	22.42	21.75	21.68
			50	0	100	0	21.34	20.41	20.20	21.24	20.31	20.10	19.74	18.81	18.60
	2525.6	2540	1	49	1	0	24.05	23.30	22.81	23.95	23.20	22.71	22.45	21.70	21.21
			50	0	100	0	21.24	20.35	19.76	21.14	20.25	19.66	19.64	18.75	18.16
	2545.6	2560	1	49	1	0	24.32	23.38	22.92	24.22	23.28	22.82	22.72	21.78	21.32
			50	0	100	0	21.64	20.73	19.88	21.54	20.63	19.78	20.04	19.13	18.28
20MHz+ 10MHz	2510	2524.4	1	99	1	0	23.9	23.25	22.67	23.80	23.15	22.57	22.30	21.65	21.07
			100	0	50	0	21.37	20.73	20.10	21.27	20.63	20.00	19.77	19.13	18.50
	2530.1	2544.5	1	99	1	0	24.53	23.59	22.75	24.43	23.49	22.65	22.93	21.99	21.15
			100	0	50	0	21.70	20.73	20.05	21.60	20.63	19.95	20.10	19.13	18.45
	2550.1	2564.5	1	99	1	0	24.03	23.32	22.56	23.93	23.22	22.46	22.43	21.72	20.96
			100	0	50	0	21.82	20.81	20.03	21.72	20.71	19.93	20.22	19.21	18.43
15MHz+ 15MHz	2507.5	2522.5	1	74	1	0	23.70	23.11	22.75	23.60	23.01	22.65	22.10	21.51	21.15
			75	0	75	0	21.27	20.46	19.86	21.17	20.36	19.76	19.67	18.86	18.26
	2527.5	2542.5	1	74	1	0	24.18	23.50	22.78	24.08	23.40	22.68	22.58	21.90	21.18
			75	0	75	0	21.37	20.41	19.65	21.27	20.31	19.55	19.77	18.81	18.05
	2547.5	2562.5	1	74	1	0	24.13	23.44	22.76	24.03	23.34	22.66	22.53	21.84	21.16
			75	0	75	0	21.56	20.64	19.89	21.46	20.54	19.79	19.96	19.04	18.29
15MHz+ 20MHz	2507.8	2524.9	1	74	1	0	23.63	22.89	22.10	23.53	22.79	22.00	22.03	21.29	20.50
			75	0	100	0	21.35	21.36	19.65	21.25	21.26	19.55	19.75	19.76	18.05
	2525.3	2542.4	1	74	1	0	23.92	23.18	22.76	23.82	23.08	22.66	22.32	21.58	21.16
			75	0	100	0	21.35	20.37	19.55	21.25	20.27	19.45	19.75	18.77	17.95
	2542.9	2560	1	74	1	0	24.17	23.49	22.82	24.07	23.39	22.72	22.57	21.89	21.22
			75	0	100	0	21.67	20.72	19.91	21.57	20.62	19.81	20.07	19.12	18.31
20MHz+ 15MHz	2510	2527.1	1	99	1	0	23.82	23.13	22.61	23.72	23.03	22.51	22.22	21.53	21.01
			100	0	75	0	21.40	20.52	19.72	21.30	20.42	19.62	19.80	18.92	18.12
	2527.6	2544.7	1	99	1	0	24.40	23.56	22.79	24.30	23.46	22.69	22.80	21.96	21.19
			100	0	75	0	21.52	20.52	19.58	21.42	20.42	19.48	19.92	18.92	17.98
	2545.1	2562.2	1	99	1	0	24.34	23.58	22.93	24.24	23.48	22.83	22.74	21.98	21.33
			100	0	75	0	21.70	20.78	19.91	21.60	20.68	19.81	20.10	19.18	18.31
20MHz+ 20MHz	2510	2529.8	1	99	1	0	23.90	23.17	22.54	23.80	23.07	22.44	22.30	21.57	20.94
			1	0	1	99	14.83	15.02	14.93	14.73	14.92	14.83	13.23	13.42	13.33



			100	0	100	0	21.37	20.48	19.62	21.27	20.38	19.52	19.77	18.88	18.02
	2525.1	2544.9	1	99	1	0	24.36	23.59	22.94	24.26	23.49	22.84	22.76	21.99	21.34
			1	0	1	99	14.94	15.36	15.16	14.84	15.26	15.06	13.34	13.76	13.56
			100	0	100	0	21.44	20.45	19.55	21.34	20.35	19.45	19.84	18.85	17.95
	2540.2	2560	1	99	1	0	24.17	23.46	22.88	24.07	23.36	22.78	22.57	21.86	21.28
			1	0	1	99	15.00	15.33	15.37	14.90	15.23	15.27	13.40	13.73	13.77
			100	0	100	0	21.66	20.81	19.97	21.56	20.71	19.87	20.06	19.21	18.37

NR n66										
Bandwidth (MHz)	Modulation	SCS (KHz)	RB Allocation	RB Offset	Maximum Output Power(dBm)			Antenna 3 EIRP (dBm)		
					342500	349000	355500	342500	349000	355500
					1712.5	1745	1777.5	1712.5	1745	1777.5
5	PI/2 BPSK	15	1	0	21.87	21.51	21.48	18.97	18.61	18.58
			1	1	22.37	22.52	22.5	19.47	19.62	19.6
			12	6	21.76	22.48	22.54	18.86	19.58	19.64
			25	0	21.21	21.44	21.52	18.31	18.54	18.62
	QPSK		1	0	20.74	21.36	21.53	17.84	18.46	18.63
			1	1	21.72	22.51	22.74	18.82	19.61	19.84
			12	6	21.75	22.39	22.54	18.85	19.49	19.64
			25	0	20.98	21.44	21.55	18.08	18.54	18.65
	16QAM		1	0	19.68	20.23	20.64	16.78	17.33	17.74
			1	1	20.74	21.4	21.78	17.84	18.5	18.88
			12	6	20.75	21.39	21.37	17.85	18.49	18.47
			25	0	19.76	20.42	20.59	16.86	17.52	17.69
	64QAM		1	0	19.63	19.66	19.41	16.73	16.76	16.51
			1	1	20.69	19.69	19.44	17.79	16.79	16.54
			12	6	20.73	19.93	20.08	17.83	17.03	17.18
			25	0	19.95	19.92	20.07	17.05	17.02	17.17
	256QAM		1	0	19	17.77	17.67	16.1	14.87	14.77
			1	1	19.03	17.75	17.89	16.13	14.85	14.99
			12	6	19.51	17.91	17.97	16.61	15.01	15.07
			25	0	19.44	17.82	17.98	16.54	14.92	15.08
Bandwidth (MHz)	Modulation	SCS (KHz)	RB Allocation	RB Offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
					343000	349000	355000	343000	349000	355000
					1715	1745	1775	1715	1745	1775
10	PI/2 BPSK	15	1	0	22.83	22.43	22.39	19.93	19.53	19.49
			1	1	23.43	23.55	23.54	20.53	20.65	20.64
			25	12	23.03	23.37	23.55	20.13	20.47	20.65
			50	0	22.34	22.5	22.53	19.44	19.6	19.63
	QPSK		1	0	22.24	22.4	22.35	19.34	19.5	19.45
			1	1	22.78	23.49	23.53	19.88	20.59	20.63



			25	12	22.9	23.45	23.49	20	20.55	20.59
			50	0	22.18	22.51	22.58	19.28	18.68	19.68
	16QAM		1	0	21.42	21.42	21.34	18.52	18.52	18.44
			1	1	22.09	22.51	22.42	19.19	19.61	19.52
			25	12	21.9	22.37	22.51	19	19.47	19.61
			50	0	21.15	21.36	21.51	18.25	18.46	18.61
			1	0	21.34	20.68	20.39	18.44	17.78	17.49
			1	1	21.87	20.72	20.79	18.97	17.82	17.89
	64QAM		25	12	21.79	20.91	20.99	18.89	18.01	18.09
			50	0	21.15	20.96	21.05	18.25	18.06	18.15
			1	0	20.53	18.8	18.83	17.63	15.9	15.93
			1	1	20.58	18.84	18.88	17.68	15.94	15.98
			25	12	20.46	18.83	18.9	17.56	15.93	16
			50	0	20.68	18.93	18.98	17.78	16.03	16.08
	256QAM									
Bandwidth (MHz)	Modulation	SCS (KHz)	RB Allocation	RB Offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
					343500	349000	354500	343500	349000	354500
					1717.5	1745	1772.5	1717.5	1745	1772.5
15	PI/2 BPSK	15	1	0	22.18	22.47	22.5	19.28	19.57	19.6
			1	1	22.7	23.66	23.58	19.8	20.76	20.68
			36	18	22.93	23.59	23.55	20.03	20.69	20.65
			75	0	22.58	22.54	22.55	19.68	19.64	19.65
	QPSK		1	0	22.54	22.47	22.32	19.64	19.57	19.42
			1	1	23.46	23.52	23.48	20.56	20.62	20.58
			36	18	23.19	23.55	23.55	20.29	20.65	20.65
			75	0	22.46	22.56	22.6	19.56	19.66	19.7
	16QAM		1	0	21.55	21.58	21.41	18.65	18.68	18.51
			1	1	22.5	22.52	22.57	19.6	19.62	19.67
			36	18	22.26	22.53	22.56	19.36	19.63	19.66
			75	0	21.64	21.53	21.53	18.74	18.63	18.63
	64QAM		1	0	20.43	20.26	20.3	17.53	17.36	17.4
			1	1	20.39	20.32	20.37	17.49	17.42	17.47
			36	18	20.6	20.92	20.94	17.7	18.02	18.04
			75	0	21.02	21.01	21.08	18.12	18.11	18.18
	256QAM		1	0	18.84	18.83	18.65	15.94	15.93	15.75
			1	1	18.89	18.88	18.72	15.99	15.98	15.82
			36	18	18.94	18.94	18.94	16.04	16.04	16.04
			75	0	19.06	19.05	19	16.16	16.15	16.1
Bandwidth (MHz)	Modulation	SCS (KHz)	RB Allocation	RB Offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)		
					344000	349000	354000	344000	349000	354000
					1720	1745	1770	1720	1745	1770
20	PI/2 BPSK	15	1	0	22.8	22.89	22.52	19.9	19.99	19.62
			1	1	23.35	23.48	23.45	20.45	20.58	20.55
			50	25	23.58	23.59	23.58	20.68	20.69	20.68



Report			Report for Resource 125 Hz							
			100	0	23.14	23.03	22.56	20.24	20.13	19.66
	QPSK		1	0	22.56	22.54	22.41	19.66	19.64	19.51
			1	1	23.64	23.61	23.5	20.74	20.71	20.6
			50	25	23.67	23.62	23.66	20.77	20.72	20.76
			100	0	22.6	22.54	22.52	19.7	19.64	19.62
	16QAM		1	0	21.66	21.6	21.27	18.76	18.7	18.37
			1	1	22.47	22.66	22.36	19.57	19.76	19.46
			50	25	22.58	22.49	22.56	19.68	19.59	19.66
			100	0	21.48	21.56	21.55	18.58	18.66	18.65
	64QAM		1	0	21.54	21.58	20.71	18.64	18.68	17.81
			1	1	22.57	22.57	20.75	19.67	19.67	17.85
			50	25	22.56	22.53	21.03	19.66	19.63	18.13
			100	0	21.55	21.52	21.06	18.65	18.62	18.16
	256QAM		1	0	20.63	20.57	18.65	17.73	17.67	15.75
			1	1	20.67	20.61	18.68	17.77	17.71	15.78
			50	25	21.14	21.05	19.02	18.24	18.15	16.12
			100	0	21.1	20.97	19.06	18.2	18.07	16.16

DC_5A-n66A														
Bandwidth h(MHz)	Modulation	Modulation (LTE)	SCS (KHz)	RB Allocation	RB Offset	Maximum Output			Antenna 2 EIRP			Antenna 3 EIRP		
						Power(dBm)			(dBm)			(dBm)		
						342500	349000	355500	342500	349000	355500	342500	349000	355500
						1712.5	1745	1777.5	1712.5	1745	1777.5	1712.5	1745	1777.5
5	PI/2 BPSK	Band5-10MHz- 836.5MHz- QPSK-1#0	15	1	0	22.60	22.71	22.54	22.40	22.51	22.34	19.70	19.81	19.64
				1	1	23.61	23.83	23.71	23.41	23.63	23.51	20.71	20.93	20.81
				12	6	23.40	23.72	23.71	23.20	23.52	23.51	20.50	20.82	20.81
				25	0	22.55	22.73	22.68	22.35	22.53	22.48	19.65	19.83	19.78
	QPSK			1	0	22.18	22.63	22.67	21.98	22.43	22.47	19.28	19.73	19.77
				1	1	23.17	23.66	23.39	22.97	23.46	23.19	20.27	20.76	20.49
				12	6	23.17	23.68	23.69	22.97	23.48	23.49	20.27	20.78	20.79
				25	0	22.50	22.73	22.72	22.30	22.53	22.52	19.60	19.83	19.82
	16QAM			1	0	21.47	21.53	21.78	21.27	21.33	21.58	18.57	18.63	18.88
				1	1	22.51	22.59	22.82	22.31	22.39	22.62	19.61	19.69	19.92
				12	6	22.38	22.70	22.70	22.18	22.50	22.50	19.48	19.80	19.80
				25	0	21.63	21.72	21.73	21.43	21.52	21.53	18.73	18.82	18.83
	64QAM			1	0	20.26	20.54	20.91	20.06	20.34	20.71	17.36	17.64	18.01
				1	1	20.28	20.66	20.92	20.08	20.46	20.72	17.38	17.76	18.02
				12	6	20.83	21.15	21.16	20.63	20.95	20.96	17.93	18.25	18.26
				25	0	21.17	21.24	21.25	20.97	21.04	21.05	18.27	18.34	18.35
	256QA M			1	0	19.14	19.19	19.11	18.94	18.99	18.91	16.24	16.29	16.21
				1	1	19.18	19.21	19.23	18.98	19.01	19.03	16.28	16.31	16.33
				12	6	19.18	19.08	19.15	18.98	18.88	18.95	16.28	16.18	16.25
				25	0	19.19	19.13	19.15	18.99	18.93	18.95	16.29	16.23	16.25



Bandwidth h(MHz)	Modulation	Modulation (LTE)	SCS (KHz)	RB Allocation	RB Offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
						343000	349000	355000	343000	349000	355000	343000	349000	355000
						1715	1745	1775	1715	1745	1775	1715	1745	1775
10	PI/2 BPSK	Band5-10MHz- 836.5MHz- QPSK-1#0	15	1	0	22.81	22.62	22.60	22.61	22.42	22.40	19.91	19.72	19.70
				1	1	23.95	23.53	23.50	23.75	23.33	23.30	21.05	20.63	20.60
				25	12	23.60	23.57	23.50	23.40	23.37	23.30	20.70	20.67	20.60
				50	0	22.68	22.70	22.65	22.48	22.50	22.45	19.78	19.80	19.75
	QPSK			1	0	22.64	22.58	22.71	22.44	22.38	22.51	19.74	19.68	19.81
				1	1	23.49	23.49	23.48	23.29	23.29	23.28	20.59	20.59	20.58
				25	12	23.50	23.53	23.50	23.30	23.33	23.30	20.60	20.63	20.60
				50	0	22.68	22.70	22.73	22.48	22.50	22.53	19.78	19.80	19.83
	16QAM			1	0	22.73	22.61	21.90	22.53	22.41	21.70	19.83	19.71	19.00
				1	1	23.47	23.50	22.75	23.27	23.30	22.55	20.57	20.60	19.85
				25	12	23.53	23.53	22.46	23.33	23.33	22.26	20.63	20.63	19.56
				50	0	22.77	22.74	21.82	22.57	22.54	21.62	19.87	19.84	18.92
	64QAM			1	0	21.90	22.72	21.01	21.70	22.52	20.81	19.00	19.82	18.11
				1	1	22.67	23.50	20.79	22.47	23.30	20.59	19.77	20.60	17.89
				25	12	22.48	23.50	21.07	22.28	23.30	20.87	19.58	20.60	18.17
				50	0	21.71	22.82	21.35	21.51	22.62	21.15	18.81	19.92	18.45
256QAM	1	0	21.62	22.72	19.28	21.42	22.52	19.08	18.72	19.82	16.38			
	1	1	21.16	23.58	19.32	20.96	23.38	19.12	18.26	20.68	16.42			
	25	12	21.09	23.46	19.14	20.89	23.26	18.94	18.19	20.56	16.24			
	50	0	21.32	22.76	19.21	21.12	22.56	19.01	18.42	19.86	16.31			
Bandwidth h(MHz)	Modulation	Modulation (LTE)	SCS (KHz)	RB Allocation	RB Offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
						343500	349000	354500	343500	349000	354500	343500	349000	354500
						1717.5	1745	1772.5	1717.5	1745	1772.5	1717.5	1745	1772.5
15	PI/2 BPSK	Band5-10MHz- 836.5MHz- QPSK-1#0	15	1	0	22.62	22.78	22.68	22.42	22.58	22.48	19.72	19.88	19.78
				1	1	23.50	23.67	23.67	23.30	23.47	23.47	20.60	20.77	20.77
				36	18	23.59	23.52	23.56	23.39	23.32	23.36	20.69	20.62	20.66
				75	0	23.01	23.08	23.09	22.81	22.88	22.89	20.11	20.18	20.19
	QPSK			1	0	22.68	22.74	22.74	22.48	22.54	22.54	19.78	19.84	19.84
				1	1	23.83	23.90	23.91	23.63	23.70	23.71	20.93	21.00	21.01
				36	18	23.72	23.71	23.70	23.52	23.51	23.50	20.82	20.81	20.80
				75	0	23.03	23.01	23.06	22.83	22.81	22.86	20.13	20.11	20.16
	16QAM			1	0	21.89	21.68	21.76	21.69	21.48	21.56	18.99	18.78	18.86
				1	1	22.96	22.75	22.72	22.76	22.55	22.52	20.06	19.85	19.82
				36	18	22.68	22.76	22.74	22.48	22.56	22.54	19.78	19.86	19.84
				75	0	22.00	22.02	21.96	21.80	21.82	21.76	19.10	19.12	19.06
	64QAM			1	0	20.67	21.92	20.75	20.47	21.72	20.55	17.77	19.02	17.85
				1	1	20.72	22.88	20.81	20.52	22.68	20.61	17.82	19.98	17.91
				36	18	21.23	22.74	21.23	21.03	22.54	21.03	18.33	19.84	18.33
				75	0	21.54	22.00	21.51	21.34	21.80	21.31	18.64	19.10	18.61
256QA M	1	0	18.89	19.21	19.11	18.69	19.01	18.91	15.99	16.31	16.21			



				Report for Resource 120 Hz										
	M			1	1	18.94	19.27	19.16	18.74	19.07	18.96	16.04	16.37	16.26
				36	18	19.41	19.41	19.47	19.21	19.21	19.27	16.51	16.51	16.57
				75	0	19.52	19.49	19.49	19.32	19.29	19.29	16.62	16.59	16.59
Bandwidth(MHz)	Modulation	Modulation (LTE)	SCS (KHz)	RB Allocation	RB Offset	Channel/Frequency(MHz)			Channel/Frequency(MHz)			Channel/Frequency(MHz)		
						344000	349000	354000	344000	349000	354000	344000	349000	354000
						1720	1745	1770	1720	1745	1770	1720	1745	1770
20	PI/2 BPSK	Band5-10MHz-836.5MHz-QPSK-1#0	15	1	0	22.70	22.76	22.73	22.50	22.56	22.53	19.80	19.86	19.83
				1	1	23.88	23.93	23.91	23.68	23.73	23.71	20.98	21.03	21.01
				50	25	24.06	24.07	24.03	23.86	23.87	23.83	21.16	21.17	21.13
				100	0	22.99	23.01	22.97	22.79	22.81	22.77	20.09	20.11	20.07
	QPSK			1	0	22.79	22.79	22.77	22.59	22.59	22.57	19.89	19.89	19.87
				1	1	23.83	23.83	23.81	23.63	23.63	23.61	20.93	20.93	20.91
				50	25	24.11	24.12	24.23	23.91	23.92	24.03	21.21	21.22	21.33
				100	0	23.01	23.04	23.02	22.81	22.84	22.82	20.11	20.14	20.12
	16QAM			1	0	21.77	21.74	21.73	21.57	21.54	21.53	18.87	18.84	18.83
				1	1	22.80	22.69	22.77	22.60	22.49	22.57	19.90	19.79	19.87
				50	25	22.98	22.99	22.97	22.78	22.79	22.77	20.08	20.09	20.07
				100	0	22.05	22.05	22.03	21.85	21.85	21.83	19.15	19.15	19.13
	64QAM			1	0	21.14	20.77	20.78	20.94	20.57	20.58	18.24	17.87	17.88
				1	1	21.17	20.83	20.83	20.97	20.63	20.63	18.27	17.93	17.93
				50	25	21.53	21.41	21.54	21.33	21.21	21.34	18.63	18.51	18.64
				100	0	21.50	21.50	21.47	21.30	21.30	21.27	18.60	18.60	18.57
	256QAM			1	0	19.05	19.14	19.25	18.85	18.94	19.05	16.15	16.24	16.35
				1	1	19.08	19.10	19.30	18.88	18.90	19.10	16.18	16.20	16.40
				50	25	19.50	19.52	19.51	19.30	19.32	19.31	16.60	16.62	16.61
				100	0	19.52	19.50	19.51	19.32	19.30	19.31	16.62	16.60	16.61

6.2 Occupied Bandwidth

LTE Band 4						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	19957	1710.7	1.1060	1.379
			20175	1732.5	1.0970	1.367
			20393	1754.3	1.1050	1.370
		3	19965	1711.5	2.7060	3.064
			20175	1732.5	2.7180	3.070
			20385	1753.5	2.7150	3.065
		5	19975	1712.5	4.5350	5.100
			20175	1732.5	4.5300	5.148
			20375	1752.5	4.5290	5.104
		10	20000	1715	8.9760	9.959
			20175	1732.5	9.0110	9.737
			20350	1750	9.0220	9.895
		15	20025	1717.5	13.4930	14.856
			20175	1732.5	13.4770	14.855
			20325	1747.5	13.4750	14.704
		20	20050	1720	17.9570	19.457
			20175	1732.5	18.0150	19.640
			20300	1745	18.0040	19.767
	16QAM	1.4	19957	1710.7	1.1030	1.389
			20175	1732.5	1.0990	1.377
			20393	1754.3	1.1130	1.421
		3	19965	1711.5	2.7030	3.030
			20175	1732.5	2.7060	3.090
			20385	1753.5	2.7020	3.083
		5	19975	1712.5	4.5230	5.143
			20175	1732.5	4.5340	5.102
			20375	1752.5	4.5250	5.058
		10	20000	1715	9.0100	9.953
			20175	1732.5	9.0380	10.179
			20350	1750	8.9960	10.030
		15	20025	1717.5	13.4670	14.744
			20175	1732.5	13.4550	14.652
			20325	1747.5	13.4830	14.806
		20	20050	1720	17.9930	19.448



	64QAM		20175	1732.5	18.0500	20.892
			20300	1745	17.9950	19.628
		1.4	19957	1710.7	1.1130	1.402
			20175	1732.5	1.1080	1.381
			20393	1754.3	1.1080	1.368
		3	19965	1711.5	2.7150	3.074
			20175	1732.5	2.7090	3.043
			20385	1753.5	2.7110	3.075
		5	19975	1712.5	4.5200	5.144
			20175	1732.5	4.5350	5.197
			20375	1752.5	4.5210	5.121
		10	20000	1715	9.0210	9.995
			20175	1732.5	9.0130	9.889
			20350	1750	9.0300	10.057
		15	20025	1717.5	13.5250	14.711
			20175	1732.5	13.5050	14.814
			20325	1747.5	13.4860	15.025
		20	20050	1720	17.9460	19.670
			20175	1732.5	18.0580	21.948
			20300	1745	18.0050	19.570

LTE Band 7						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	20775	2502.5	4.5170	5.068
			21100	2535	4.5290	5.056
			21425	2567.5	4.5410	5.150
		10	20800	2505	9.0080	10.010
			21100	2535	9.0070	9.951
			21400	2565	8.9960	9.988
		15	20825	2507.5	13.4570	14.889
			21100	2535	13.4870	14.940
			21375	2562.5	13.4920	14.716
		20	20850	2510	17.9360	19.880
			21100	2535	17.9910	19.557
			21350	2560	17.9620	19.691
	16QAM	5	20775	2502.5	4.5230	5.109
			21100	2535	4.5150	5.141
			21425	2567.5	4.5250	5.000
		10	20800	2505	9.0110	9.942



			21100	2535	9.0120	10.062
			21400	2565	8.9800	9.891
		15	20825	2507.5	13.4780	14.795
			21100	2535	13.4870	14.644
			21375	2562.5	13.5160	15.008
		20	20850	2510	18.0010	19.746
			21100	2535	17.9790	19.813
			21350	2560	17.9290	19.636
	64QAM	5	20775	2502.5	4.5250	5.112
			21100	2535	4.5210	5.053
			21425	2567.5	4.5280	5.076
		10	20800	2505	9.0030	9.971
			21100	2535	9.0460	9.879
			21400	2565	8.9890	9.912
		15	20825	2507.5	13.4830	14.842
			21100	2535	13.4940	14.597
			21375	2562.5	13.4450	14.626
		20	20850	2510	17.9470	19.478
			21100	2535	18.0230	19.776
			21350	2560	17.9560	19.001

LTE Band 12						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	23017	699.7	1.0970	1.368
			23095	707.5	1.1100	1.344
			23173	715.3	1.1020	1.327
		3	23025	700.5	2.7160	3.085
			23095	707.5	2.7060	3.081
			23165	714.5	2.7000	3.069
		5	23035	701.5	4.5260	5.151
			23095	707.5	4.5280	5.173
			23155	713.5	4.5290	5.073
		10	23060	704	9.0280	9.954
			23095	707.5	9.0030	9.912
			23130	711	8.9800	9.890
	16QAM	1.4	23017	699.7	1.1030	1.332
			23095	707.5	1.1020	1.367
			23173	715.3	1.1010	1.349
		3	23025	700.5	2.7050	3.030



			23095	707.5	2.7080	3.058
			23165	714.5	2.7050	3.029
		5	23035	701.5	4.5240	5.050
			23095	707.5	4.5340	5.219
			23155	713.5	4.5280	4.946
		10	23060	704	9.0290	9.794
			23095	707.5	8.9780	10.012
			23130	711	8.9880	9.928
	64QAM	1.4	23017	699.7	1.1090	1.394
			23095	707.5	1.1050	1.338
			23173	715.3	1.1000	1.328
		3	23025	700.5	2.7010	3.078
			23095	707.5	2.7070	3.065
			23165	714.5	2.7040	3.070
		5	23035	701.5	4.5100	5.092
			23095	707.5	4.5300	5.105
			23155	713.5	4.5160	5.055
		10	23060	704	8.9890	9.871
			23095	707.5	9.0090	9.912
			23130	711	9.0270	9.878

LTE Band 38						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	37775	2572.5	4.5170	5.148
			38000	2595	4.5150	5.157
			38225	2617.5	4.5110	5.027
		10	37800	2575	8.9840	9.751
			38000	2595	9.0100	9.698
			38200	2615	9.0100	10.023
		15	37825	2577.5	13.4470	14.902
			38000	2595	13.4550	14.597
			38175	2612.5	13.5000	14.675
		20	37850	2580	17.9900	19.287
			38000	2595	17.9800	19.797
			38150	2610	18.0010	21.261
	16QAM	5	37775	2572.5	4.5110	5.119
			38000	2595	4.5140	5.050
			38225	2617.5	4.5100	5.027
		10	37800	2575	8.9900	10.056



			38000	2595	9.0290	9.897
			38200	2615	9.0120	9.806
		15	37825	2577.5	13.4770	15.417
			38000	2595	13.4540	14.633
			38175	2612.5	13.4860	14.793
		20	37850	2580	17.9910	20.394
			38000	2595	17.9550	19.203
			38150	2610	17.9810	20.291
	64QAM	5	37775	2572.5	4.5280	5.220
			38000	2595	4.5090	5.032
			38225	2617.5	4.5110	5.027
		10	37800	2575	8.9800	9.915
			38000	2595	8.9930	9.897
			38200	2615	9.0070	10.544
		15	37825	2577.5	13.4730	14.598
			38000	2595	13.5120	14.603
			38175	2612.5	13.5410	15.245
		20	37850	2580	17.9650	20.125
			38000	2595	17.9340	19.839
			38150	2610	17.9970	20.910

LTE Band 66						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	131979	1710.7	1.1090	1.344
			132322	1745	1.1030	1.350
			132665	1779.3	1.1030	1.371
		3	131987	1711.5	2.7040	3.063
			132322	1745	2.7070	3.060
			132657	1778.5	2.6970	3.015
		5	131997	1712.5	4.5120	5.074
			132322	1745	4.5220	5.133
			132647	1777.5	4.5070	5.002
		10	132022	1715	9.0180	9.801
			132322	1745	9.0180	10.018
			132622	1775	9.0130	9.941
		15	132047	1717.5	13.4580	14.844
			132322	1745	13.4970	14.809
			132597	1772.5	13.4940	14.587
		20	132072	1720	17.9580	19.364



			132322	1745	18.0050	19.718
			132572	1770	18.0110	19.678
	16QAM	1.4	131979	1710.7	1.1000	1.346
			132322	1745	1.1060	1.376
			132665	1779.3	1.1070	1.338
		3	131987	1711.5	2.7120	3.034
			132322	1745	2.7060	3.029
			132657	1778.5	2.7120	3.025
		5	131997	1712.5	4.5350	5.107
			132322	1745	4.5290	5.064
			132647	1777.5	4.5180	5.118
		10	132022	1715	9.0160	9.729
			132322	1745	9.0020	10.003
			132622	1775	9.0080	10.049
		15	132047	1717.5	13.5300	14.729
			132322	1745	13.4910	14.933
			132597	1772.5	13.4990	14.810
		20	132072	1720	18.0320	19.782
			132322	1745	17.9650	19.482
			132572	1770	18.0220	20.308
	64QAM	1.4	131979	1710.7	1.1040	1.360
			132322	1745	1.1030	1.347
			132665	1779.3	1.1060	1.343
		3	131987	1711.5	2.7150	3.065
			132322	1745	2.7050	3.026
			132657	1778.5	2.7090	3.051
		5	131997	1712.5	4.5420	5.143
			132322	1745	4.5240	5.038
			132647	1777.5	4.5300	5.150
		10	132022	1715	9.0120	9.894
			132322	1745	9.0280	9.969
			132622	1775	9.0240	10.008
		15	132047	1717.5	13.4590	14.925
			132322	1745	13.4890	14.718
			132597	1772.5	13.4760	14.446
		20	132072	1720	18.0300	19.668
			132322	1745	18.0160	19.687
			132572	1770	17.9850	19.494



CA_7C	PCC		SCC1		PCC RB	SCC1 RB	Bandwidth(MHz)	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)			99% Power Bandwidth (MHz)	-26dBc Bandwidth (MHz)
CA_7C_10MHz+20MHz_QPSK	21006	2525.6	21150	2540	50#0	100#0	28.16	30.34
CA_7C_10MHz+20MHz_16QAM	21006	2525.6	21150	2540	50#0	100#0	28.13	30.24
CA_7C_10MHz+20MHz_64QAM	21006	2525.6	21150	2540	50#0	100#0	28.11	30.25
CA_7C_20MHz+10MHz_QPSK	21051	2530.1	21195	2544.5	100#0	50#0	28.13	30.05
CA_7C_20MHz+10MHz_16QAM	21051	2530.1	21195	2544.5	100#0	50#0	28.15	30.10
CA_7C_20MHz+10MHz_64QAM	21051	2530.1	21195	2544.5	100#0	50#0	28.13	30.18
CA_7C_15MHz+15MHz_QPSK	21025	2527.5	21175	2542.5	75#0	75#0	28.77	31.06
CA_7C_15MHz+15MHz_16QAM	21025	2527.5	21175	2542.5	75#0	75#0	28.74	30.94
CA_7C_15MHz+15MHz_64QAM	21025	2527.5	21175	2542.5	75#0	75#0	28.69	30.94
CA_7C_15MHz+20MHz_QPSK	21003	2525.3	21174	2542.4	75#0	100#0	32.99	35.31
CA_7C_15MHz+20MHz_16QAM	21003	2525.3	21174	2542.4	75#0	100#0	32.93	35.34
CA_7C_15MHz+20MHz_64QAM	21003	2525.3	21174	2542.4	75#0	100#0	32.93	35.43
CA_7C_20MHz+15MHz_QPSK	21026	2527.6	21197	2544.7	100#0	75#0	32.95	35.43
CA_7C_20MHz+15MHz_16QAM	21026	2527.6	21197	2544.7	100#0	75#0	32.89	35.15
CA_7C_20MHz+15MHz_64QAM	21026	2527.6	21197	2544.7	100#0	75#0	32.95	35.20
CA_7C_20MHz+20MHz_QPSK	21001	2525.1	21199	2544.9	100#0	100#0	37.82	40.36
CA_7C_20MHz+20MHz_16QAM	21001	2525.1	21199	2544.9	100#0	100#0	37.75	40.20
CA_7C_20MHz+20MHz_64QAM	21001	2525.1	21199	2544.9	100#0	100#0	37.84	40.15

NR n66						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	BPSK	20	344000	1720	18.3430	20.140
			349000	1745	18.3730	20.320
			354000	1770	18.4050	20.330
	QPSK	20	344000	1720	18.3120	20.200
			349000	1745	18.3580	20.220
			354000	1770	18.3660	20.190
	16QAM	20	344000	1720	18.3250	20.110
			349000	1745	18.3140	20.560
			354000	1770	18.3770	20.80
	64QAM	20	344000	1720	18.3300	20.180
			349000	1745	18.2940	20.130
			354000	1770	18.3370	20.140
	256QAM	20	344000	1720	18.330	20.250
			349000	1745	18.3570	20.320
			354000	1770	18.3560	20.240
1	BPSK	20	344000	1720	2.1676	2.843



			349000	1745	2.1683	2.884
			354000	1770	2.1316	2.805
	QPSK	20	344000	1720	2.1466	2.816
			349000	1745	2.1592	2.852
			354000	1770	2.1541	2.832
	16QAM	20	344000	1720	2.1962	2.817
			349000	1745	2.1653	2.859
			354000	1770	2.129	2.821
	64QAM	20	344000	1720	2.1458	2.818
			349000	1745	2.1574	2.773
			354000	1770	2.1198	2.811
	256QAM	20	344000	1720	2.1408	2.801
			349000	1745	2.1865	2.939
			354000	1770	2.1560	2.886

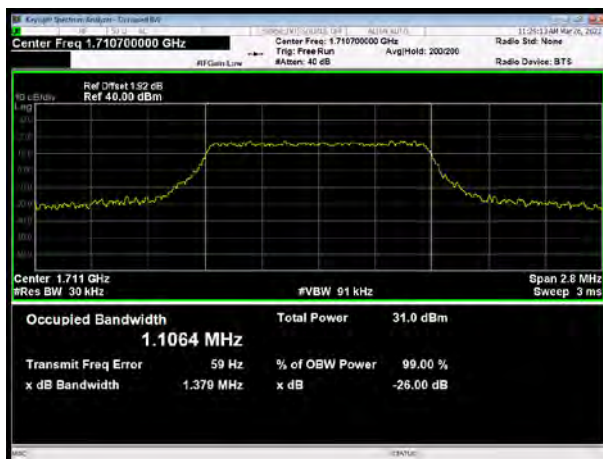
DC_5A-n66A						
RB	Modulation	Bandwidth	Channel	Frequency (MHz)	99% Power	-26dBc Bandwidth(MHz)
		(MHz)			Bandwidth(MHz)	
100%	BPSK	20	344000	1720	18.3350	20.190
			349000	1745	18.450	20.290
			354000	1770	18.3850	20.210
	QPSK	20	344000	1720	18.3610	20.180
			349000	1745	18.3690	20.200
			354000	1770	18.4480	20.260
	16QAM	20	344000	1720	18.2740	20.190
			349000	1745	18.3650	21.590
			354000	1770	18.3670	22.480
	64QAM	20	344000	1720	18.3460	20.130
			349000	1745	18.3220	20.100
			354000	1770	18.3770	20.220
	256QAM	20	344000	1720	18.3540	20.310
			349000	1745	18.3820	20.290
			354000	1770	18.3590	20.180
1	BPSK	20	344000	1720	2.1796	2.910
			349000	1745	2.1806	2.915
			354000	1770	2.1777	2.931
	QPSK	20	344000	1720	2.1719	2.849
			349000	1745	2.1774	2.922
			354000	1770	2.147	2.828
	16QAM	20	344000	1720	2.1607	2.763
			349000	1745	2.1843	2.846



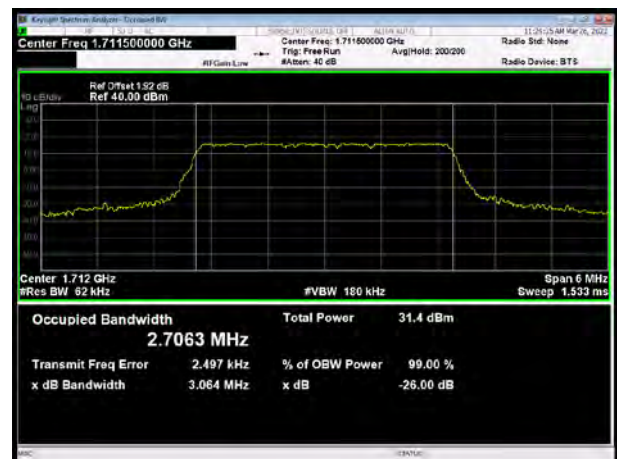
	64QAM	20	354000	1770	2.1455	2.806
			344000	1720	2.1472	2.884
			349000	1745	2.1899	2.738
			354000	1770	2.1335	2.844
	256QAM	20	344000	1720	2.1071	2.821
			349000	1745	2.1352	2.878
			354000	1770	2.1623	2.861



LTE Band 4 QPSK 1.4MHz CH-Low



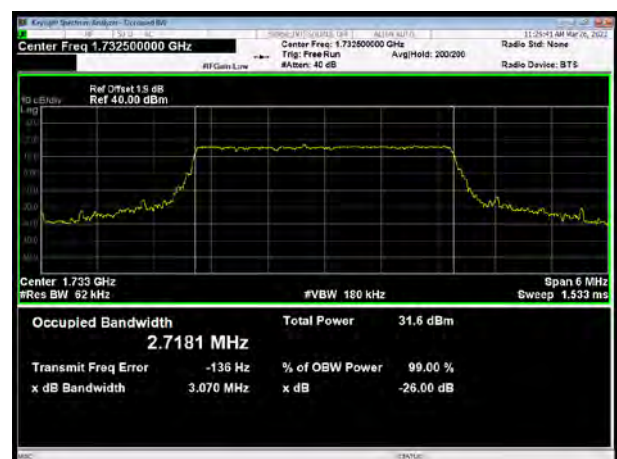
LTE Band 4 QPSK 3MHz CH-Low



LTE Band 4 QPSK 1.4MHz CH-Middle



LTE Band 4 QPSK 3MHz CH-Middle



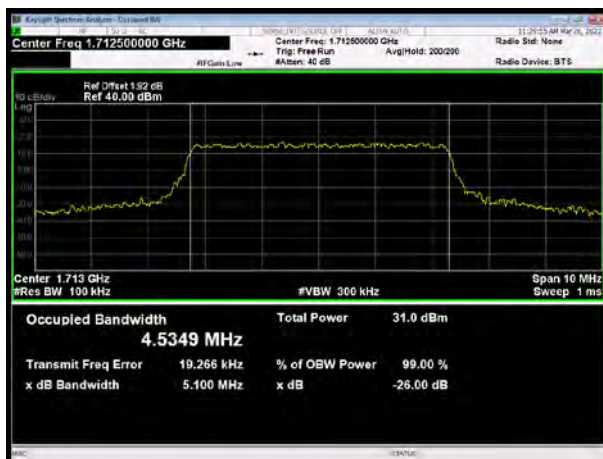
LTE Band 4 QPSK 1.4MHz CH-High



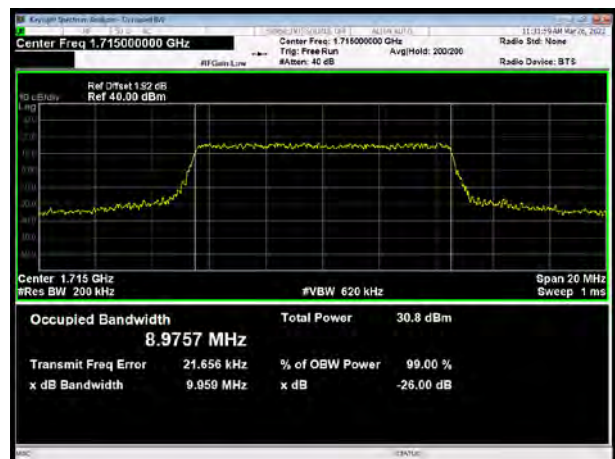
LTE Band 4 QPSK 3MHz CH-High



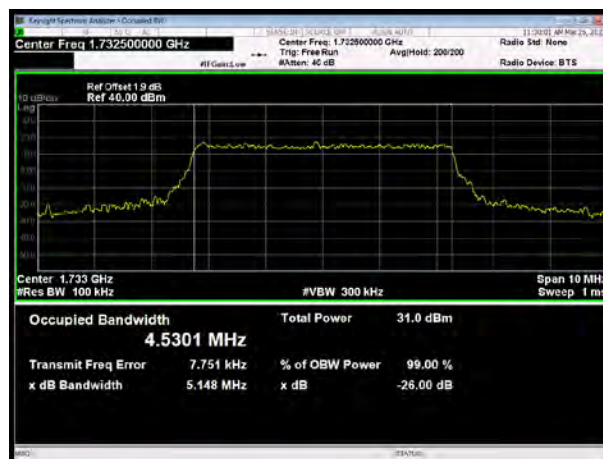
LTE Band 4 QPSK 5MHz CH-Low



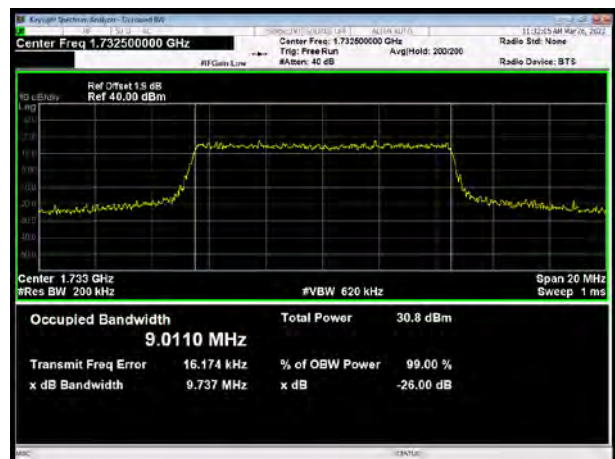
LTE Band 4 QPSK 10MHz CH-Low



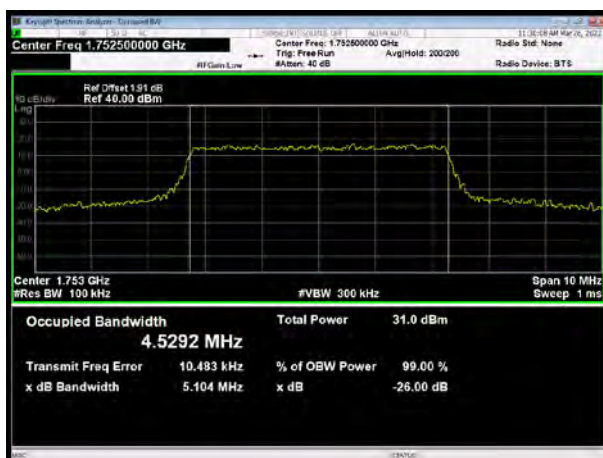
LTE Band 4 QPSK 5MHz CH-Middle



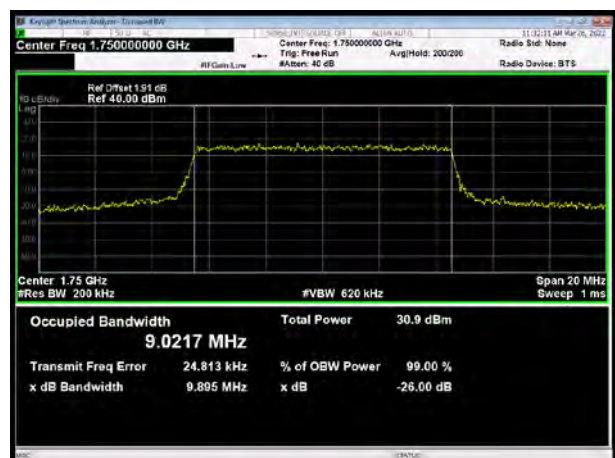
LTE Band 4 QPSK 10MHz CH-Middle



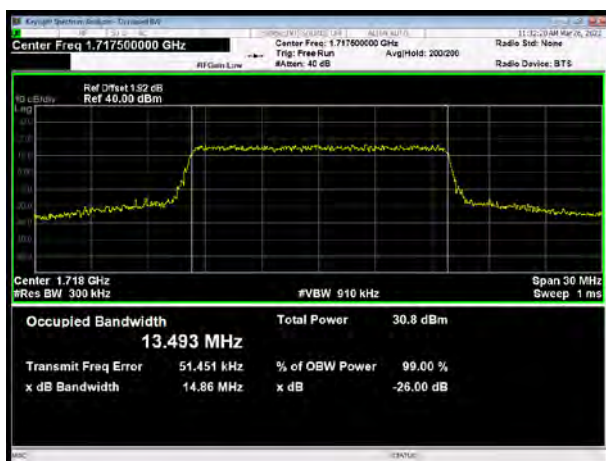
LTE Band 4 QPSK 5MHz CH-High



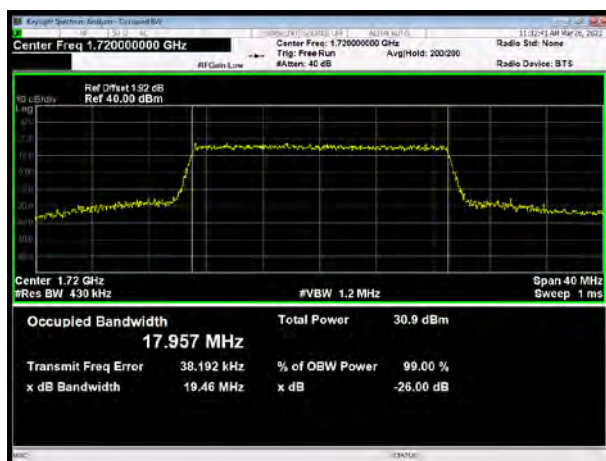
LTE Band 4 QPSK 10MHz CH-High



LTE Band 4 QPSK 15MHz CH-Low



LTE Band 4 QPSK 20MHz CH-Low



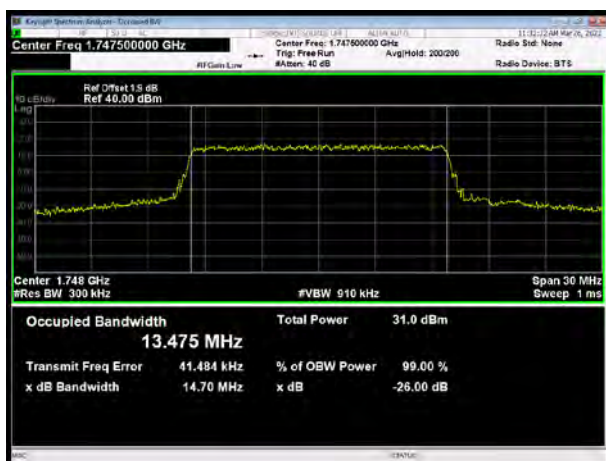
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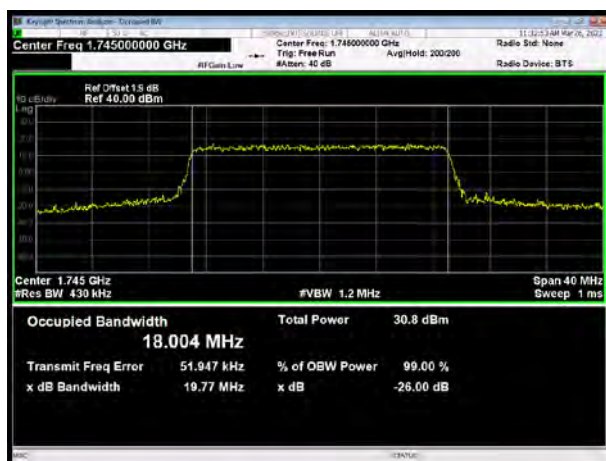
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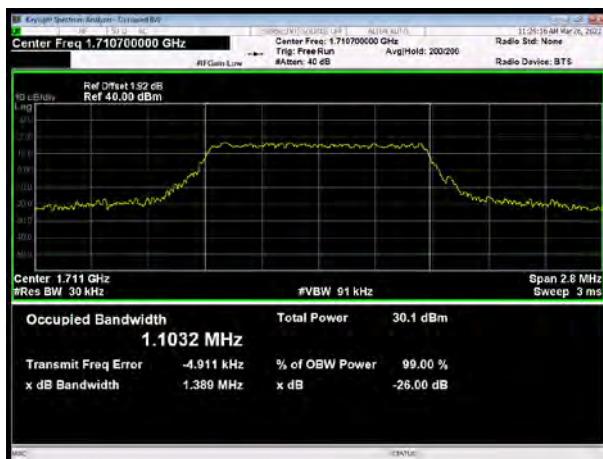
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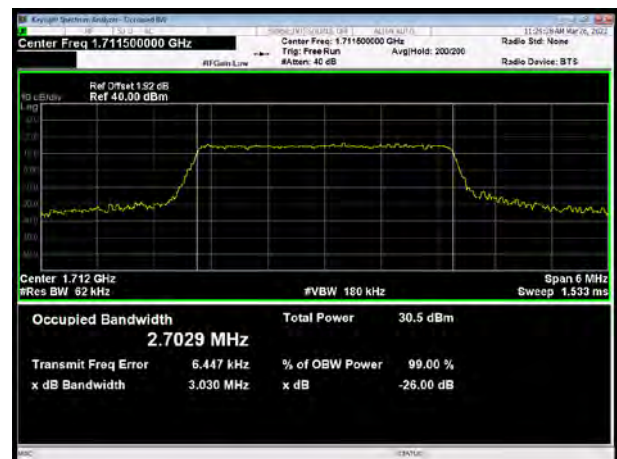
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LTE Band 4 16QAM 1.4MHz CH-Low



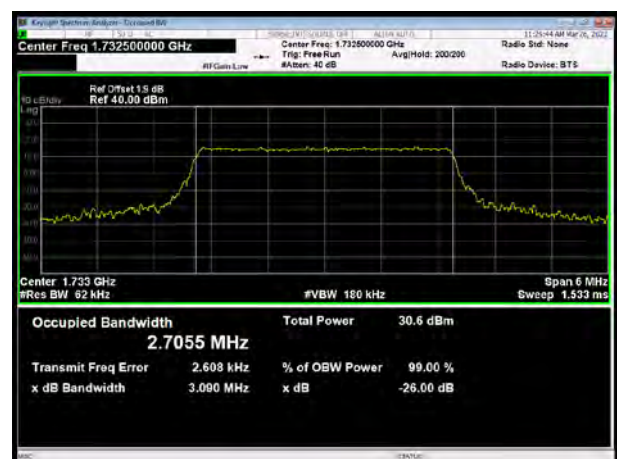
LTE Band 4 16QAM 3MHz CH-Low



LTE Band 4 16QAM 1.4MHz CH-Middle



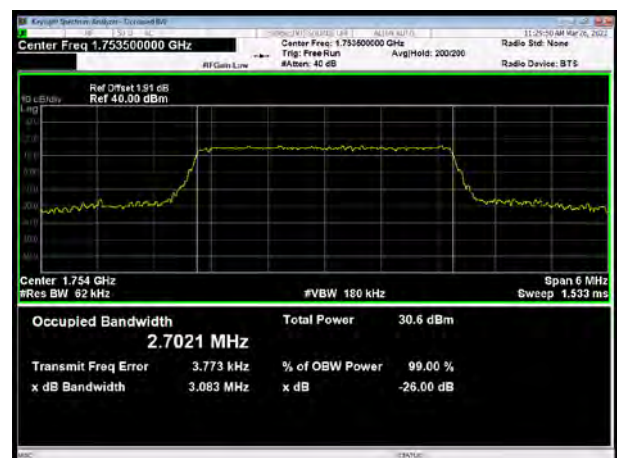
LTE Band 4 16QAM 3MHz CH-Middle



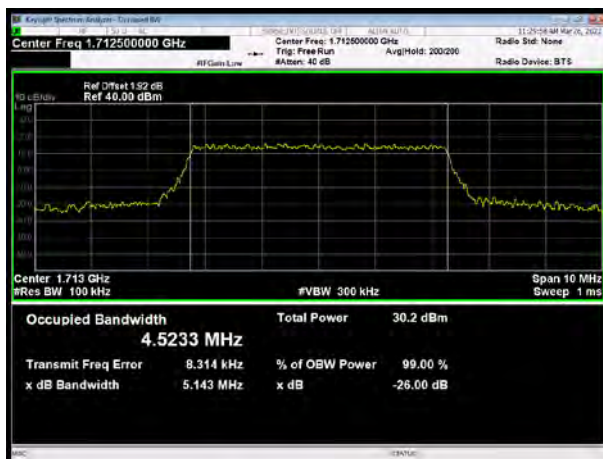
LTE Band 4 16QAM 1.4MHz CH-High



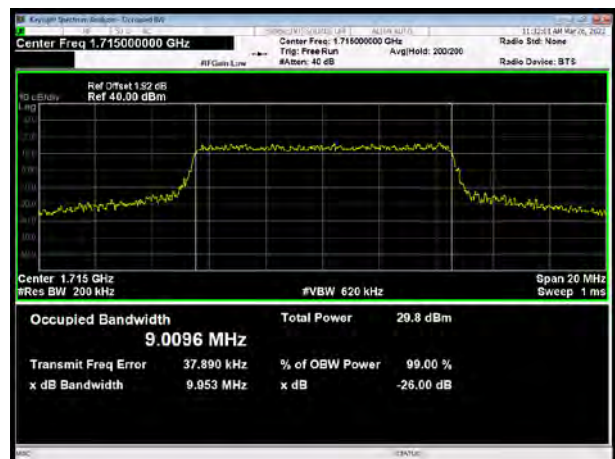
LTE Band 4 16QAM 3MHz CH-High



LTE Band 4 16QAM 5MHz CH-Low



LTE Band 4 16QAM 10MHz CH-Low



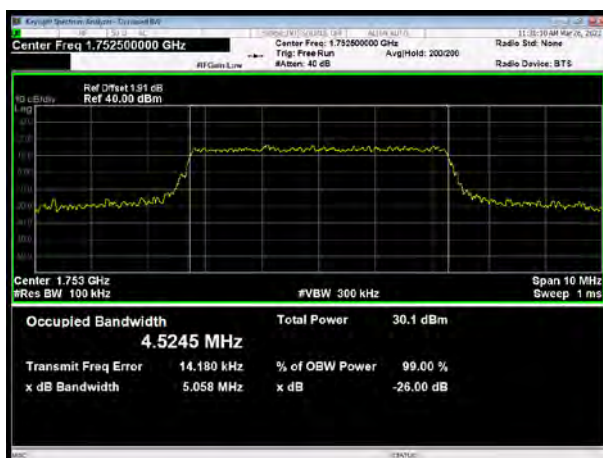
LTE Band 4 16QAM 5MHz CH-Middle



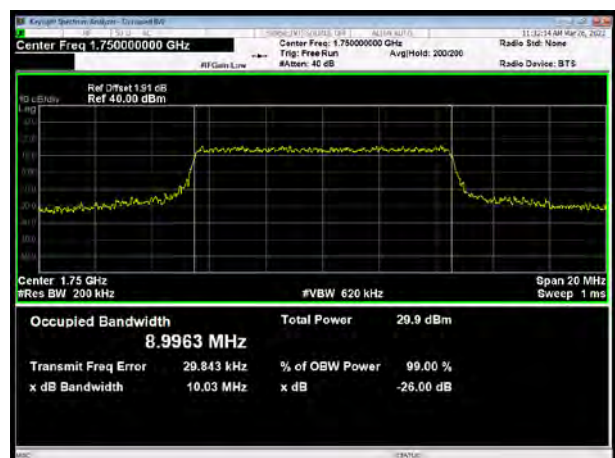
LTE Band 4 16QAM 10MHz CH-Middle



LTE Band 4 16QAM 5MHz CH-High

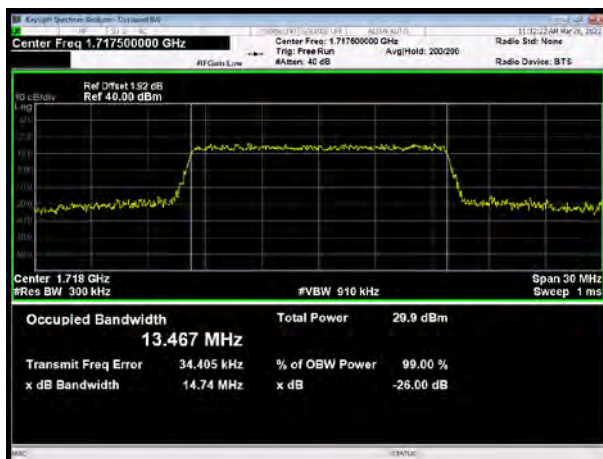


LTE Band 4 16QAM 10MHz CH-High

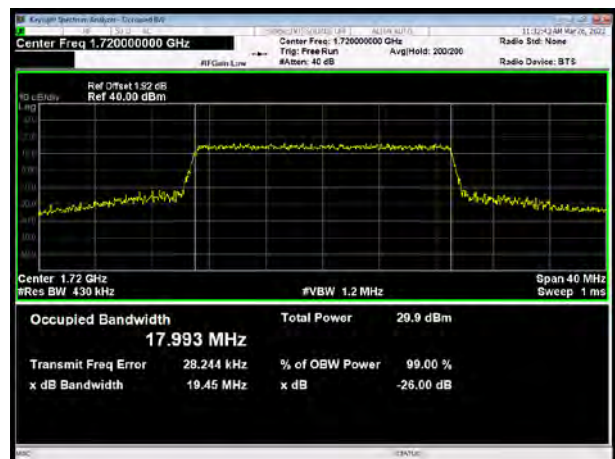




LTE Band 4 16QAM 15MHz CH-Low



LTE Band 4 16QAM 20MHz CH-Low



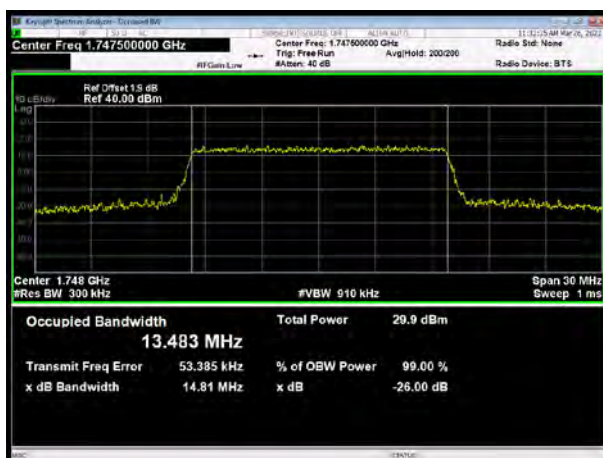
LTE Band 4 16QAM 15MHz CH-Middle



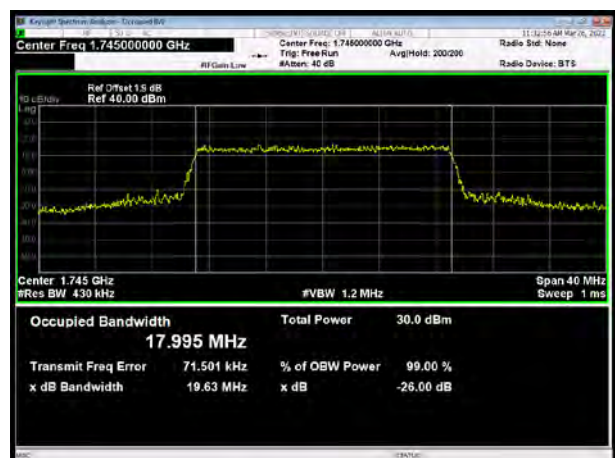
LTE Band 4 16QAM 20MHz CH-Middle



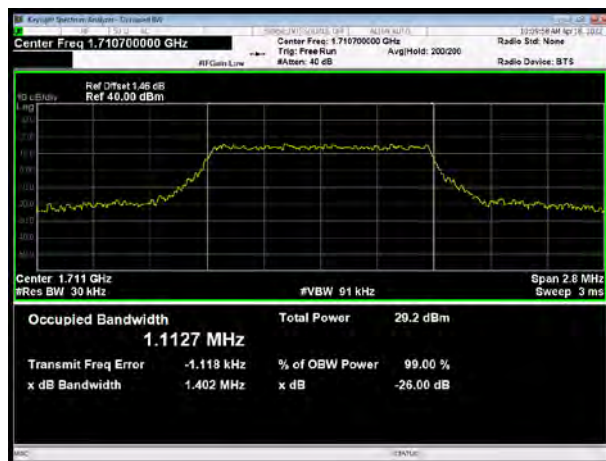
LTE Band 4 16QAM 15MHz CH-High



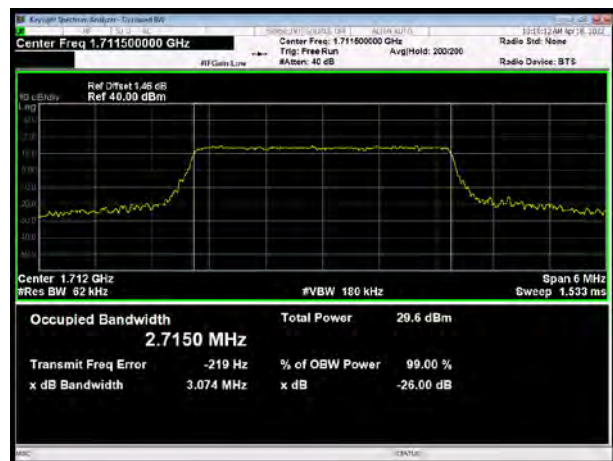
LTE Band 4 16QAM 20MHz CH-High



LTE Band 4 1.4MHz 64QAM CH-Low



LTE Band 4 3MHz 64QAM CH-Low



LTE Band 4 1.4MHz 64QAM CH-Middle



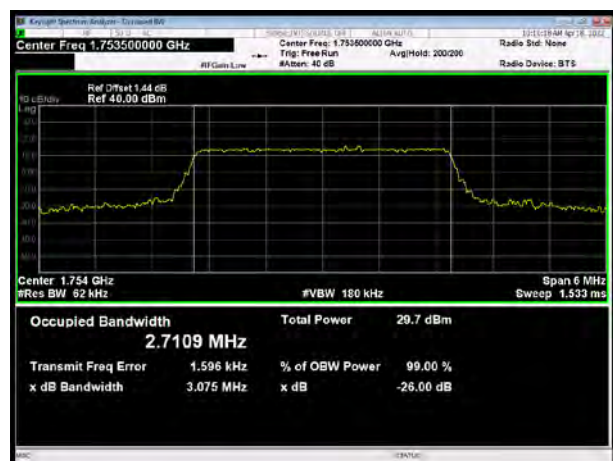
LTE Band 4 3MHz 64QAM CH-Middle



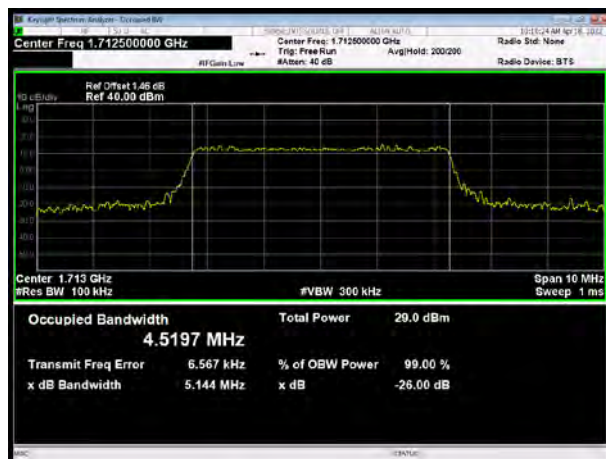
LTE Band 4 1.4MHz 64QAM CH-High



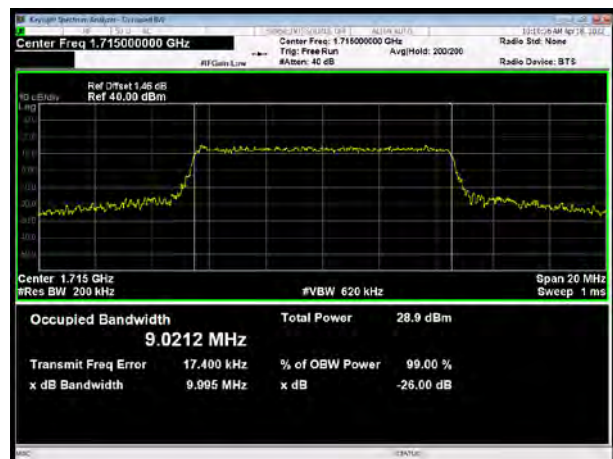
LTE Band 4 3MHz 64QAM CH-High



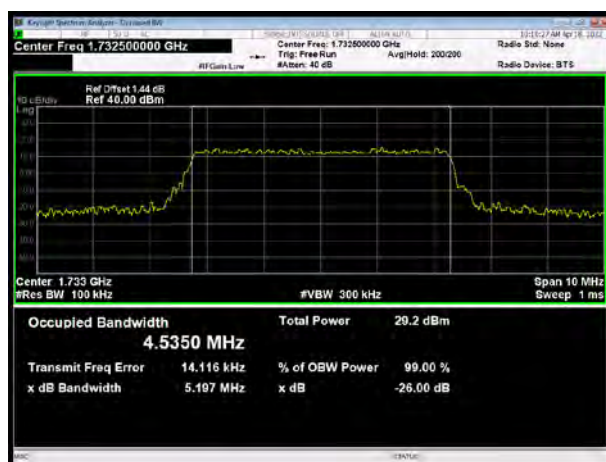
LTE Band 4 5MHz 64QAM CH-Low



LTE Band 4 10MHz 64QAM CH-Low



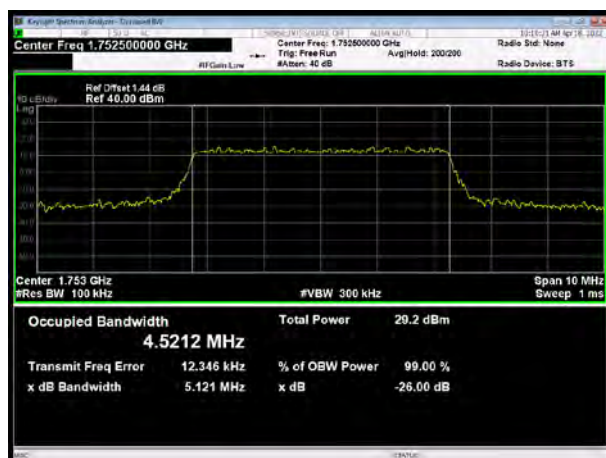
LTE Band 4 5MHz 64QAM CH-Middle



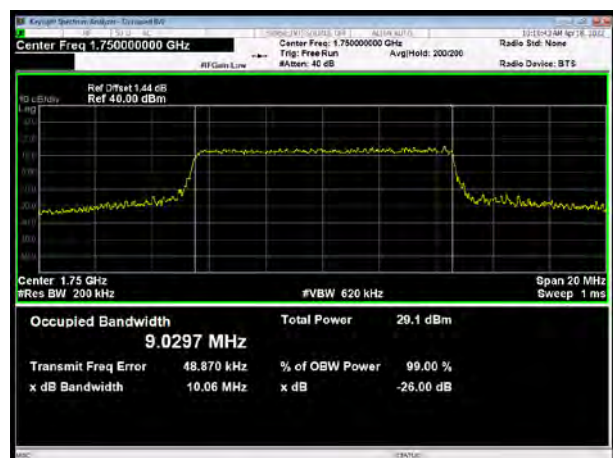
LTE Band 4 10MHz 64QAM CH-Middle



LTE Band 4 5MHz 64QAM CH-High

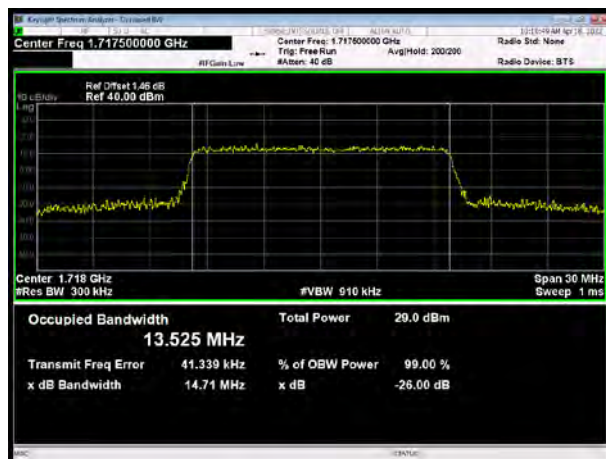


LTE Band 4 10MHz 64QAM CH-High

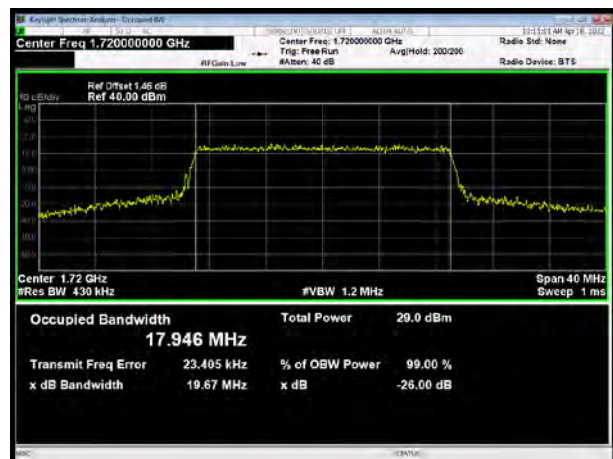




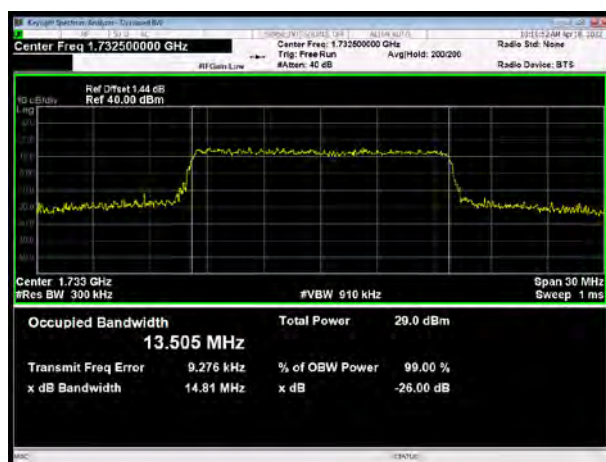
LTE Band 4 15MHz 64QAM CH-Low



LTE Band 4 20MHz 64QAM CH-Low



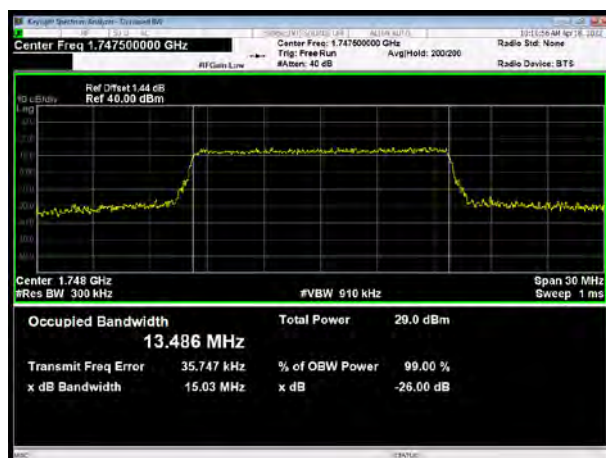
LTE Band 4 15MHz 64QAM CH-Middle



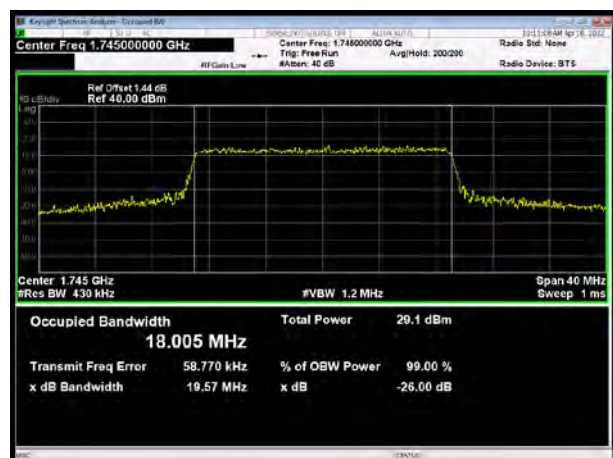
LTE Band 4 20MHz 64QAM CH-Middle



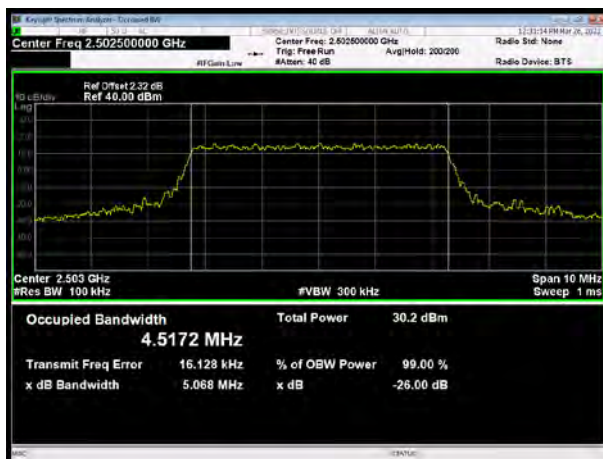
LTE Band 4 15MHz 64QAM CH-High



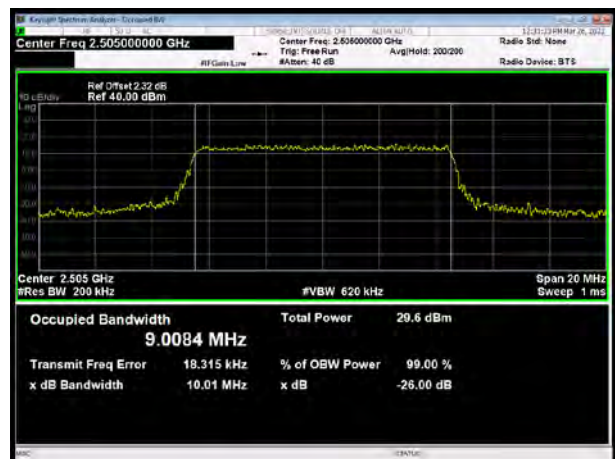
LTE Band 4 20MHz 64QAM CH-High



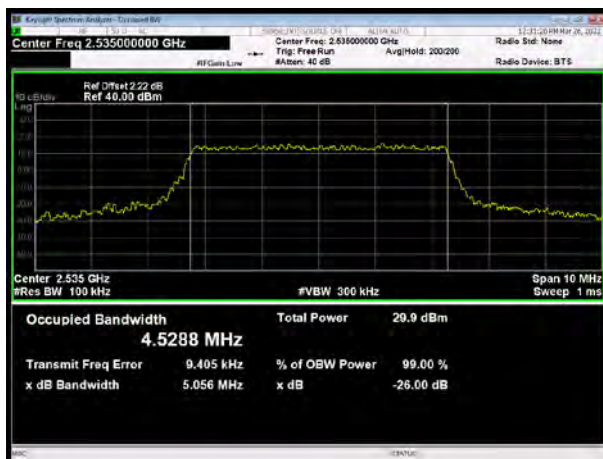
LTE Band 7 QPSK 5MHz CH-Low



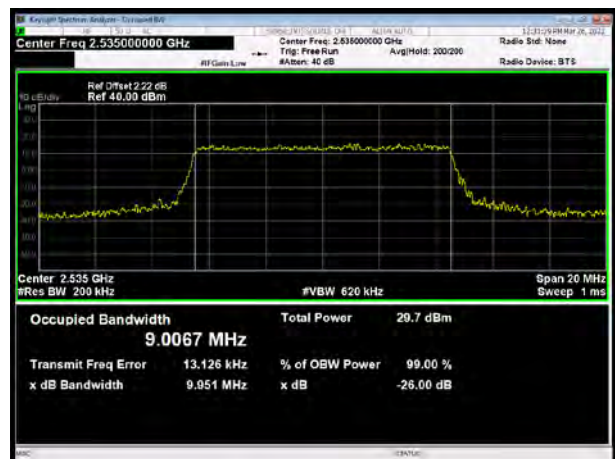
LTE Band 7 QPSK 10MHz CH-Low



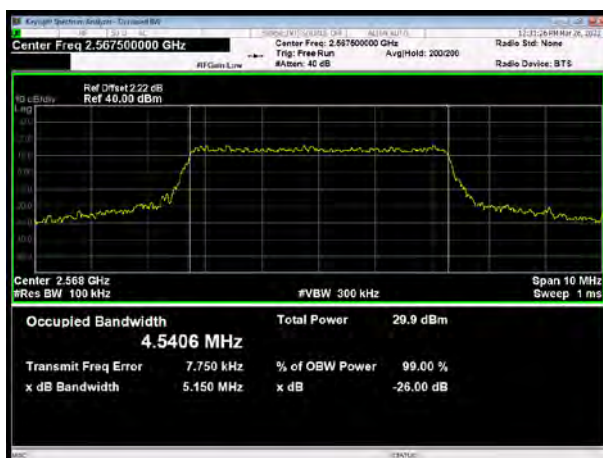
LTE Band 7 QPSK 5MHz CH-Middle



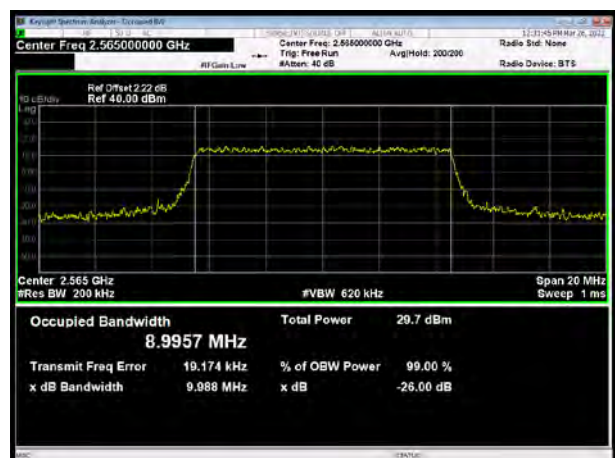
LTE Band 7 QPSK 10MHz CH-Middle



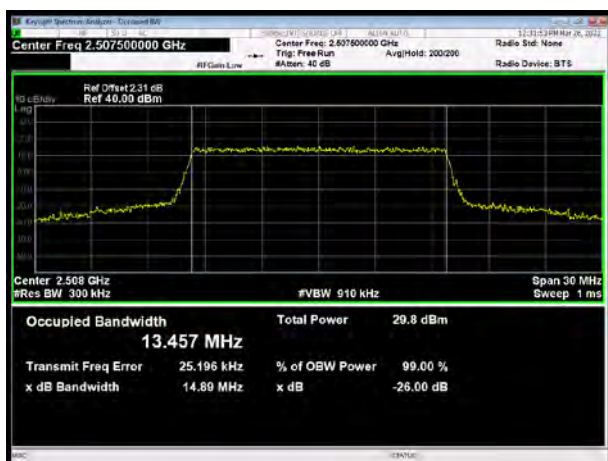
LTE Band 7 QPSK 5MHz CH-High



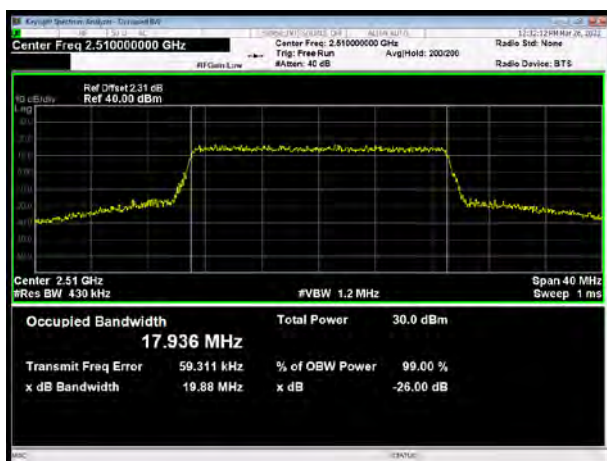
LTE Band 7 QPSK 10MHz CH-High



LTE Band 7 QPSK 15MHz CH-Low



LTE Band 7 QPSK 20MHz CH-Low



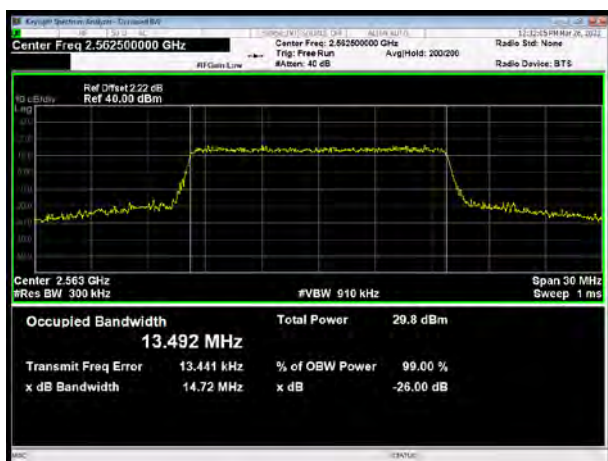
LTE Band 7 QPSK 15MHz CH-Middle



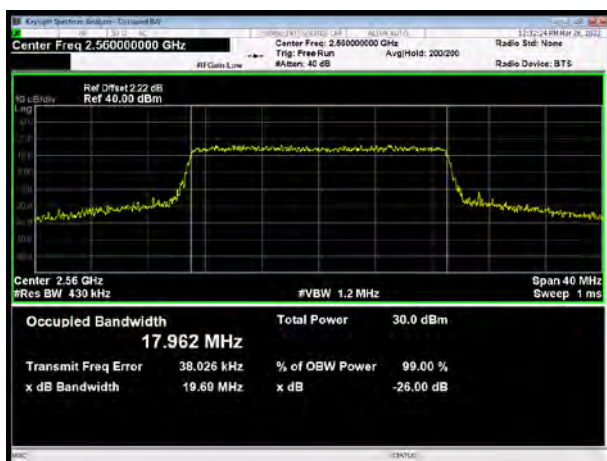
LTE Band 7 QPSK 20MHz CH-Middle



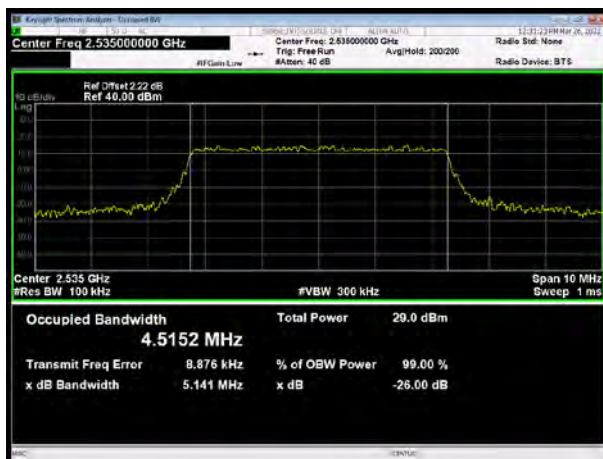
LTE Band 7 QPSK 15MHz CH-High



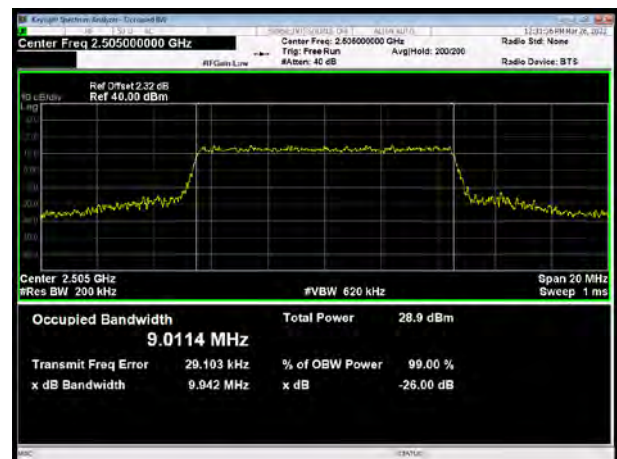
LTE Band 7 QPSK 20MHz CH-High



LTE Band 7 16QAM 5MHz CH-Low



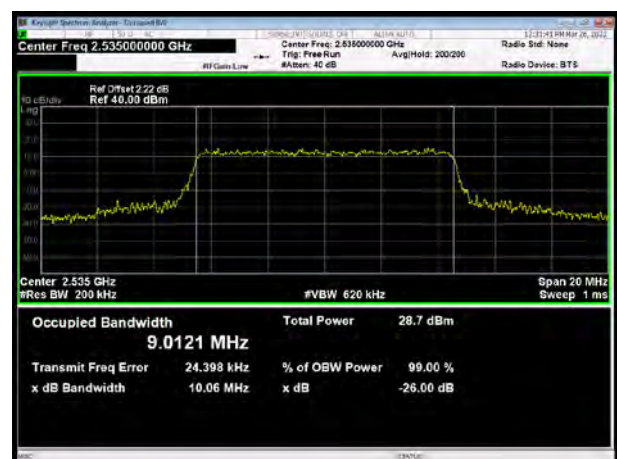
LTE Band 7 16QAM 10MHz CH-Low



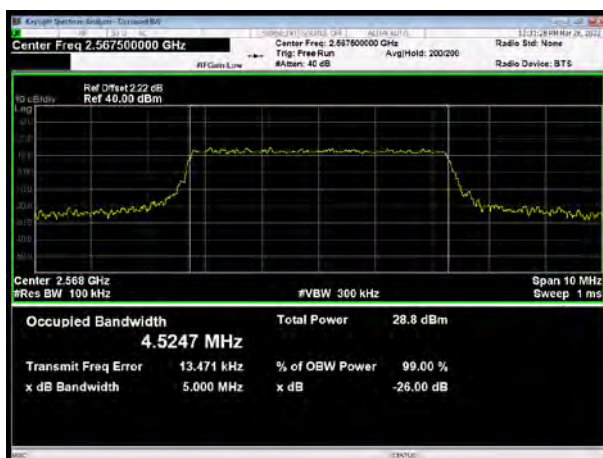
LTE Band 7 16QAM 5MHz CH-Middle



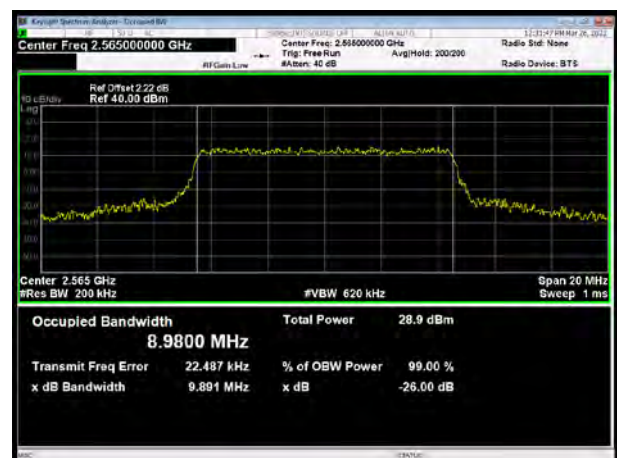
LTE Band 7 16QAM 10MHz CH-Middle



LTE Band 7 16QAM 5MHz CH-High

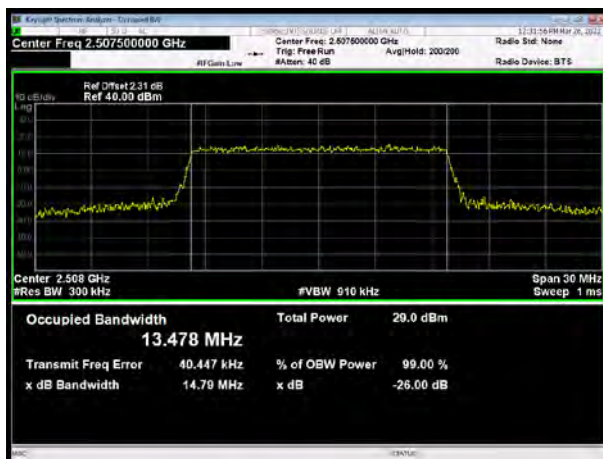


LTE Band 7 16QAM 10MHz CH-High

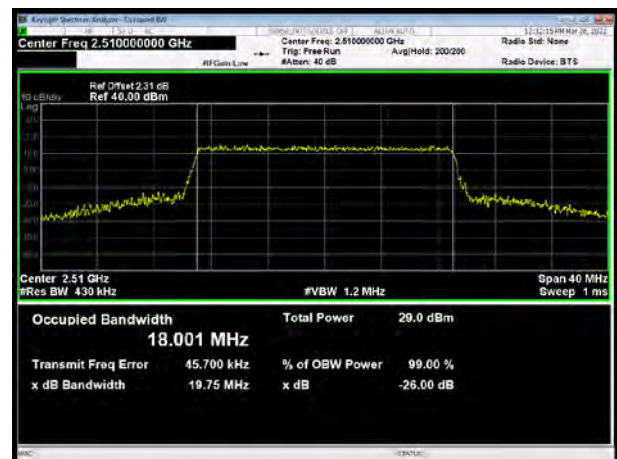




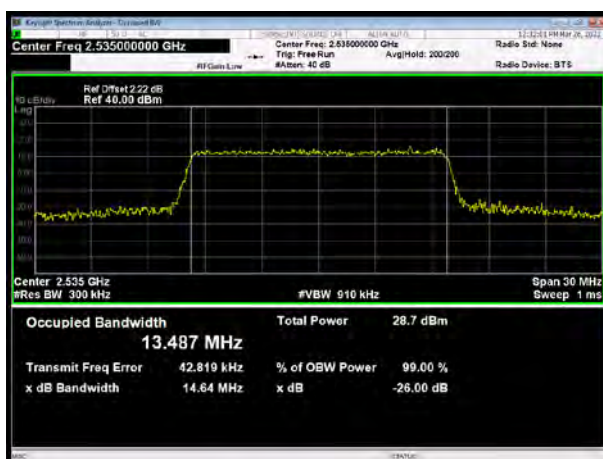
LTE Band 7 16QAM 15MHz CH-Low



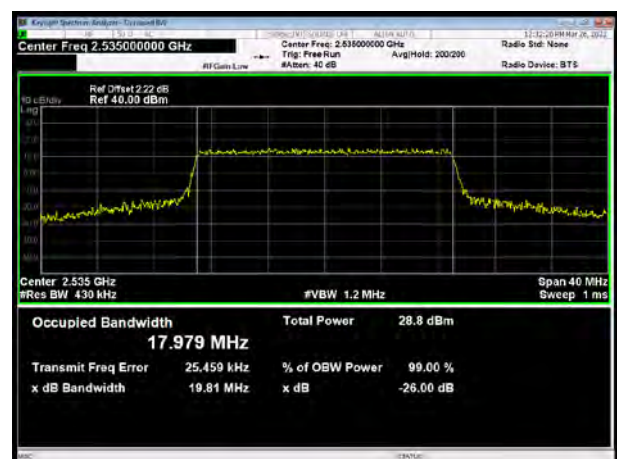
LTE Band 7 16QAM 20MHz CH-Low



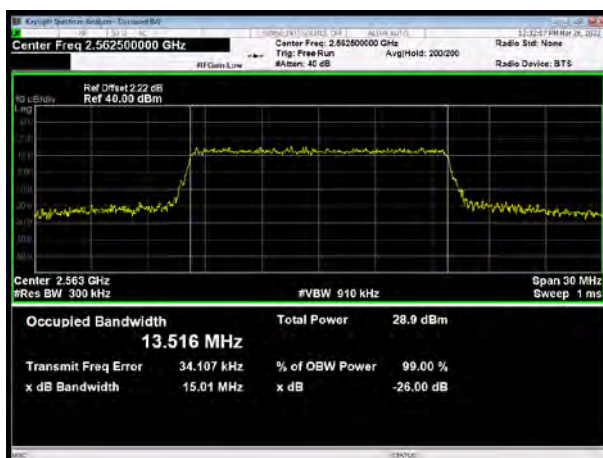
LTE Band 7 16QAM 15MHz CH-Middle



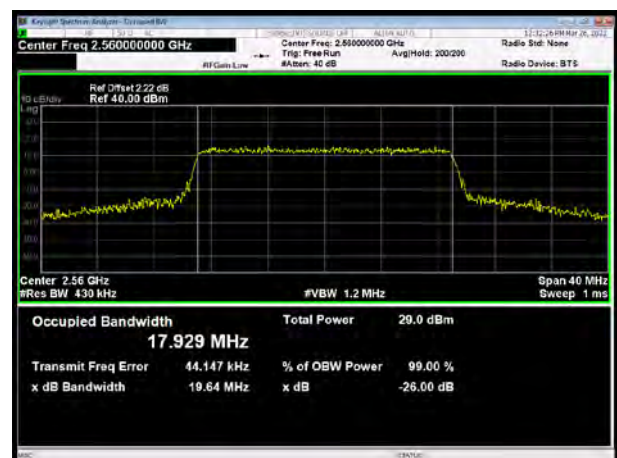
LTE Band 7 16QAM 20MHz CH-Middle



LTE Band 7 16QAM 15MHz CH-High

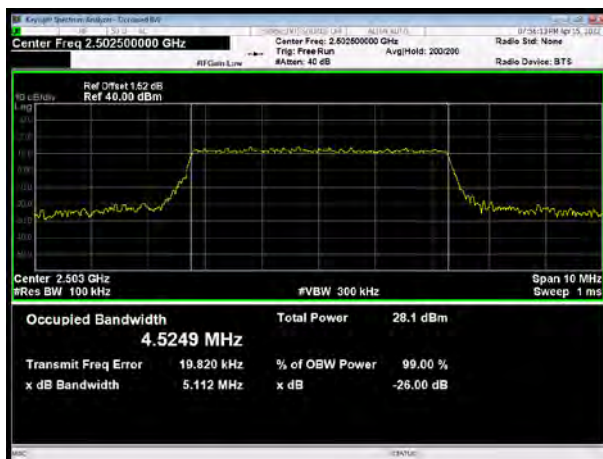


LTE Band 7 16QAM 20MHz CH-High

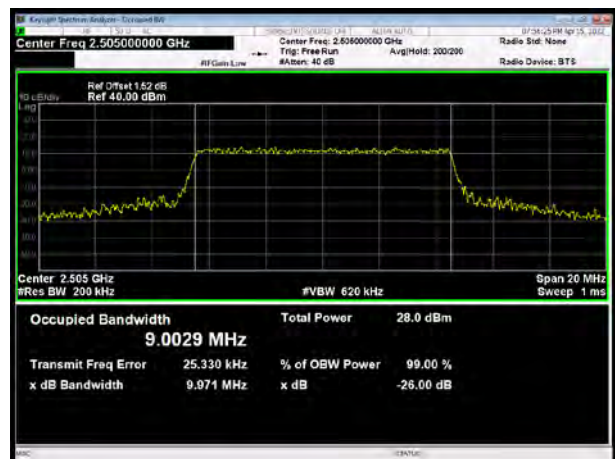




LTE Band 7 64QAM 5MHz CH-Low



LTE Band 7 64QAM 10MHz CH-Low



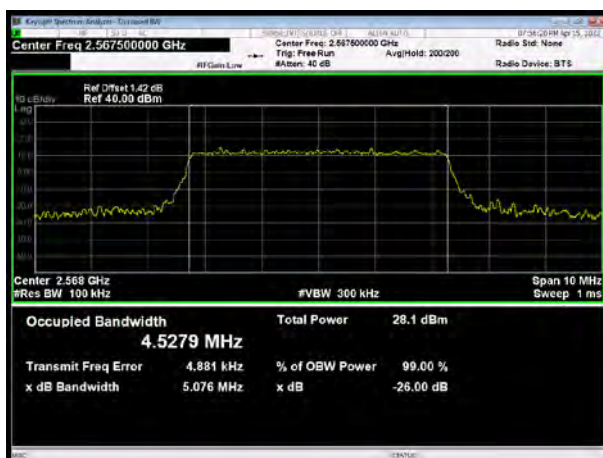
LTE Band 7 64QAM 5MHz CH-Middle



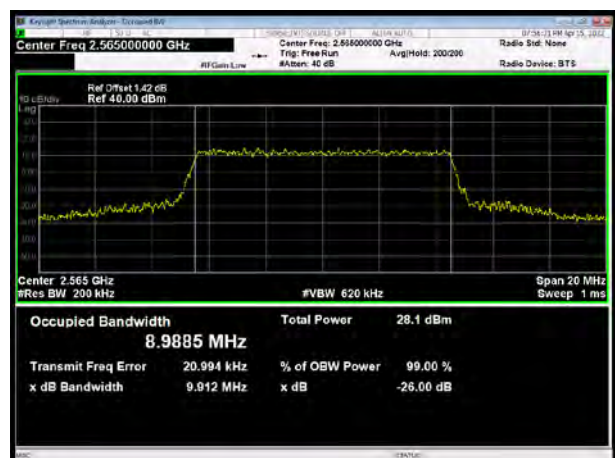
LTE Band 7 64QAM 10MHz CH-Middle



LTE Band 7 64QAM 5MHz CH-High

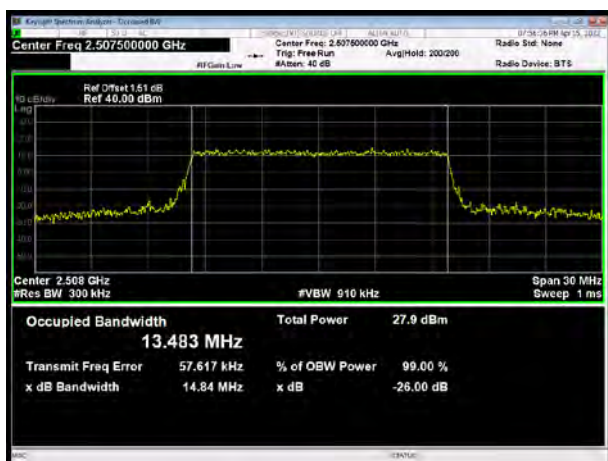


LTE Band 7 64QAM 10MHz CH-High





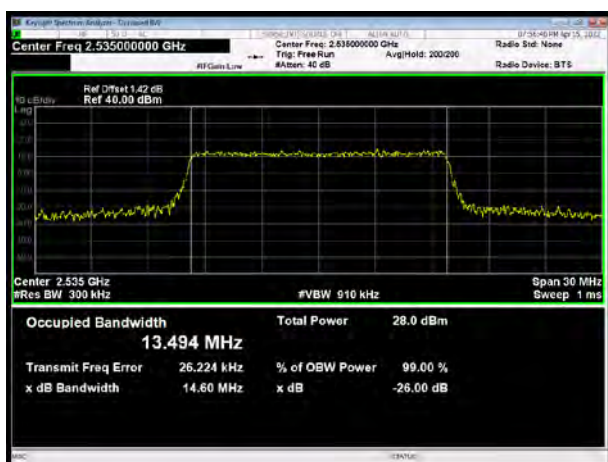
LTE Band 7 64QAM 15MHz CH-Low



LTE Band 7 64QAM 20MHz CH-Low



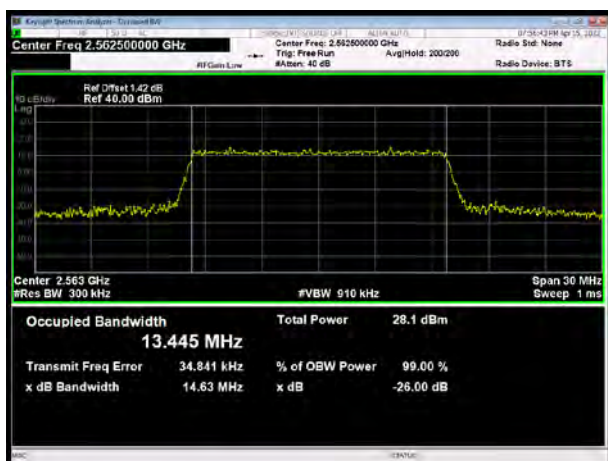
LTE Band 7 64QAM 15MHz CH-Middle



LTE Band 7 64QAM 20MHz CH-Middle



LTE Band 7 64QAM 15MHz CH-High



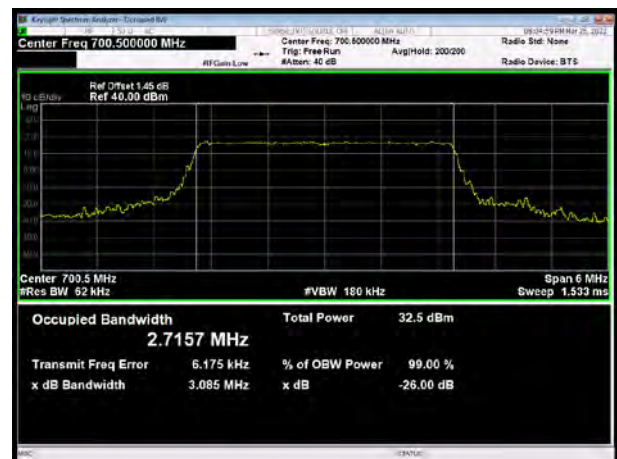
LTE Band 7 64QAM 20MHz CH-High



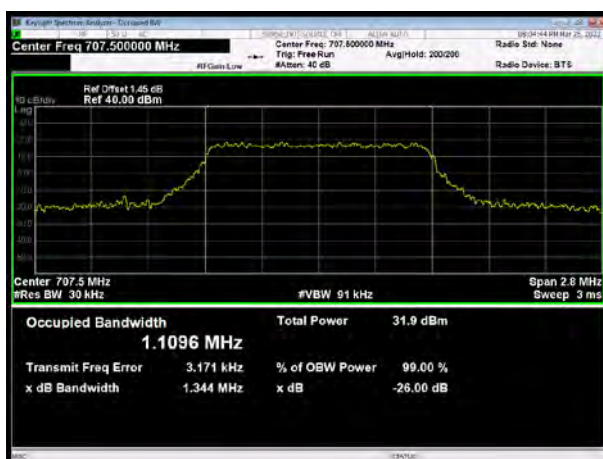
LTE Band 12 QPSK 1.4MHz CH-Low



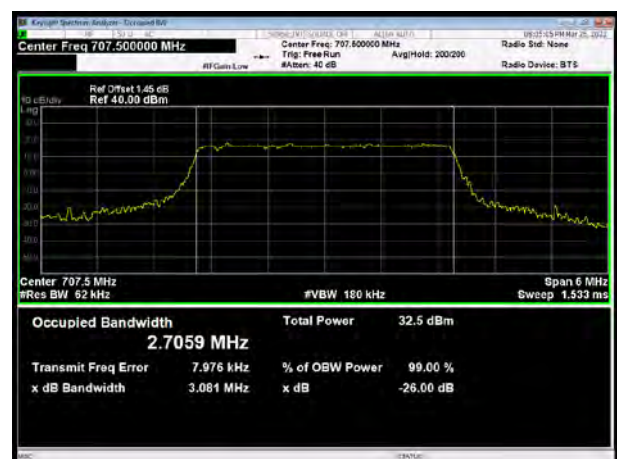
LTE Band 12 QPSK 3MHz CH-Low



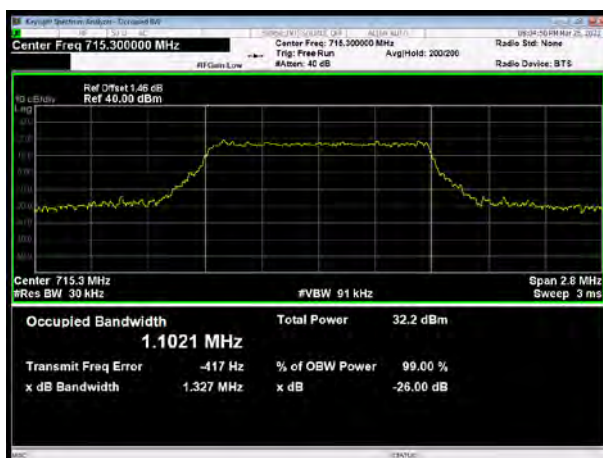
LTE Band 12 QPSK 1.4MHz CH-Middle



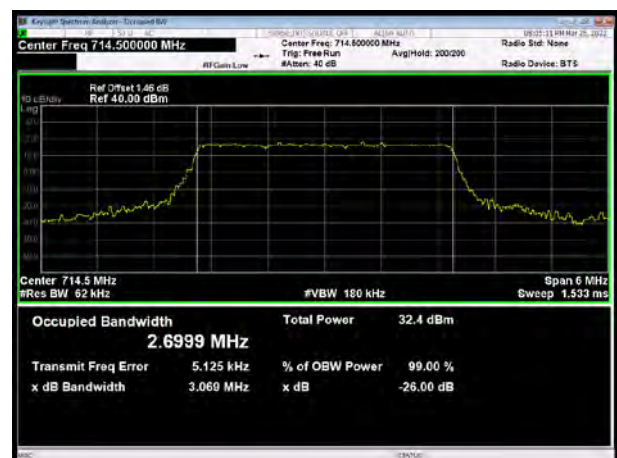
LTE Band 12 QPSK 3MHz CH-Middle



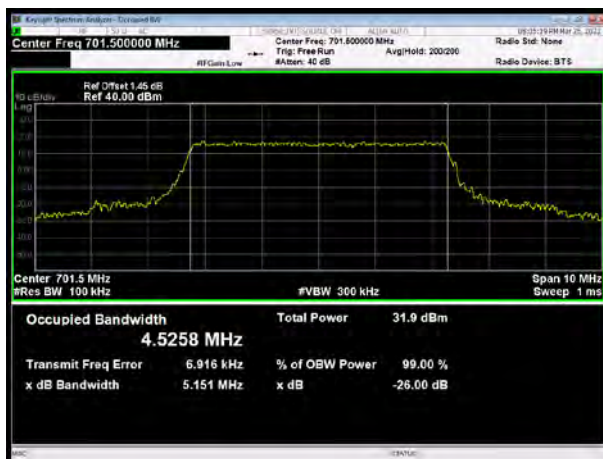
LTE Band 12 QPSK 1.4MHz CH-High



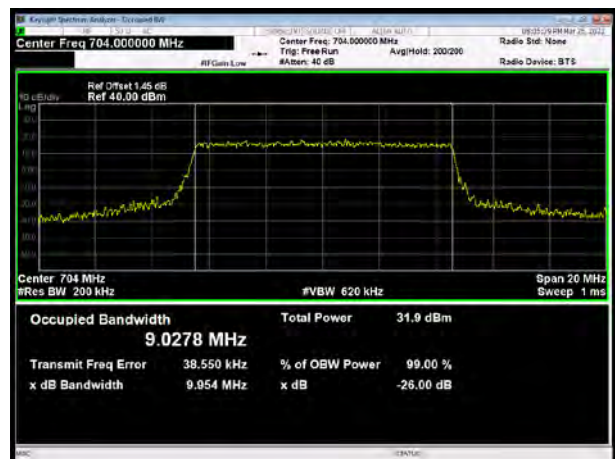
LTE Band 12 QPSK 3MHz CH-High



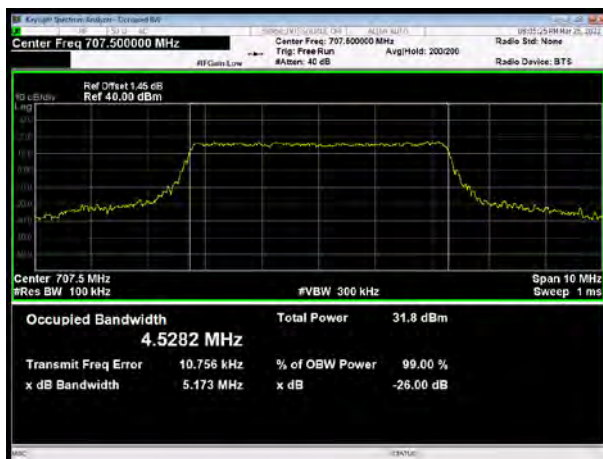
LTE Band 12 QPSK 5MHz CH-Low



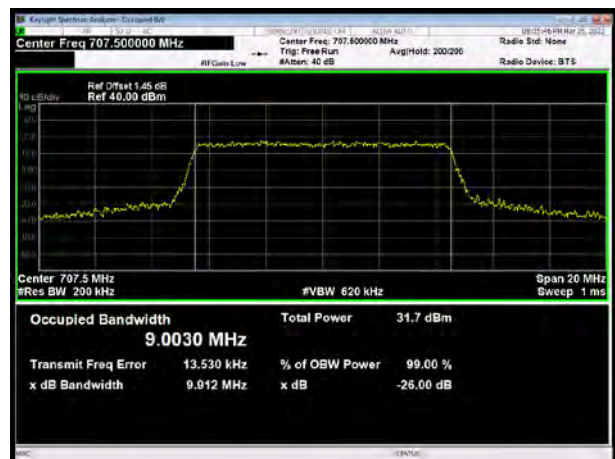
LTE Band 12 QPSK 10MHz CH-Low



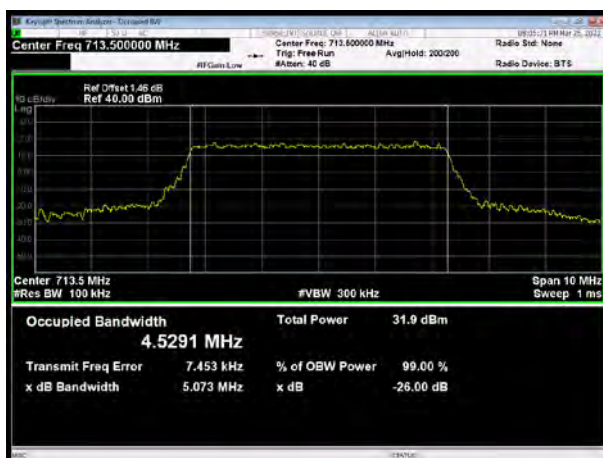
LTE Band 12 QPSK 5MHz CH-Middle



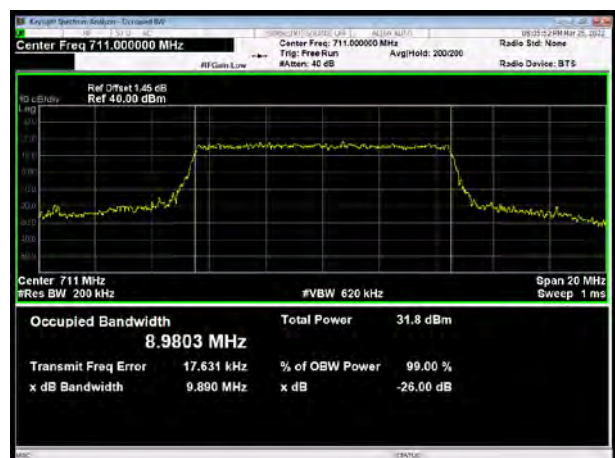
LTE Band 12 QPSK 10MHz CH-Middle



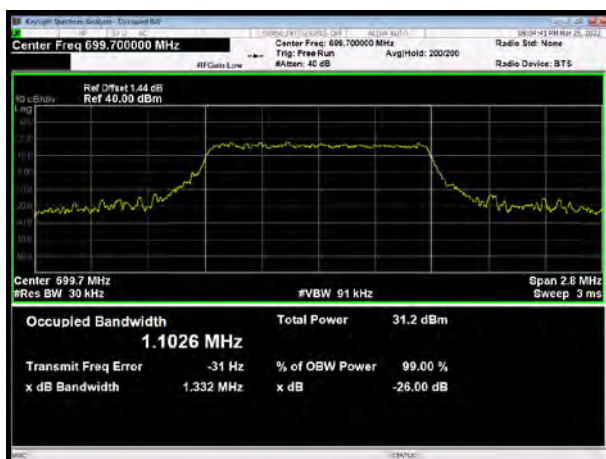
LTE Band 12 QPSK 5MHz CH-High



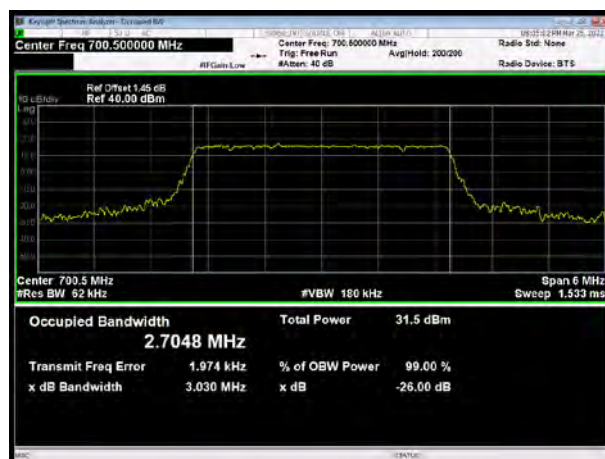
LTE Band 12 QPSK 10MHz CH-High



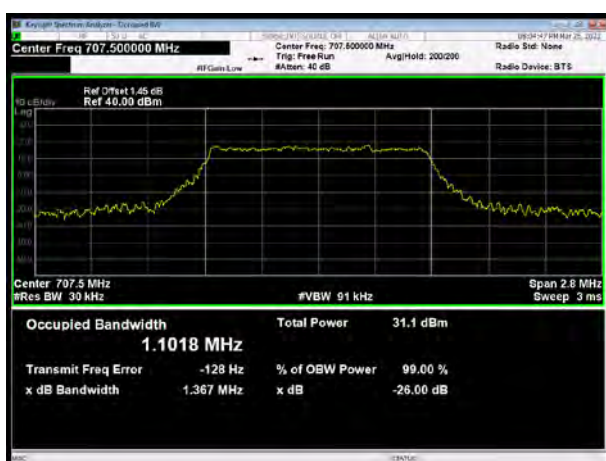
LTE Band 12 16QAM 1.4MHz CH-Low



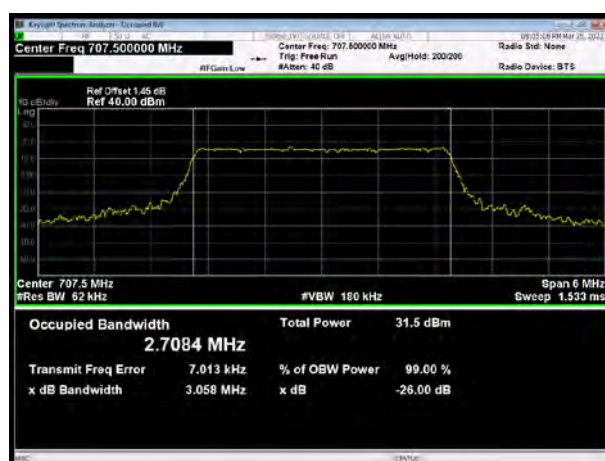
LTE Band 12 16QAM 3MHz CH-Low



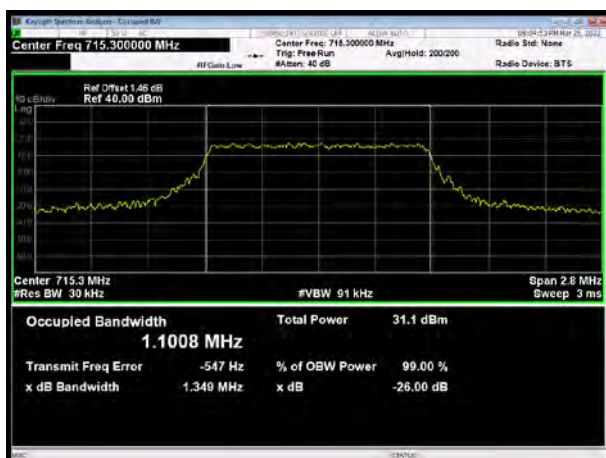
LTE Band 12 16QAM 1.4MHz CH-Middle



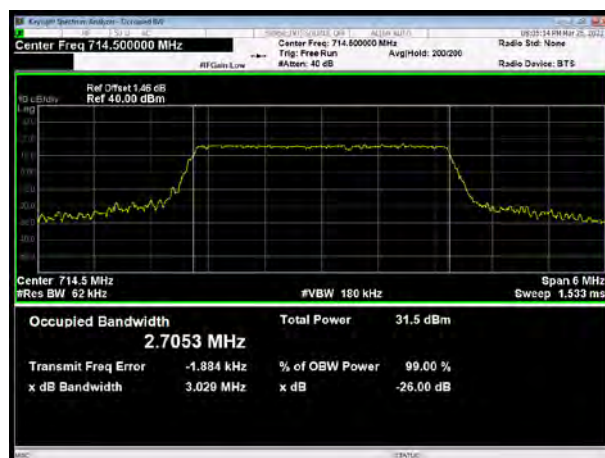
LTE Band 12 16QAM 3MHz CH-Middle



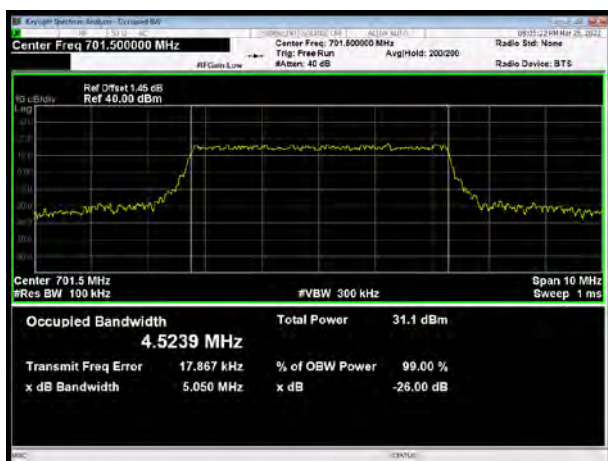
LTE Band 12 16QAM 1.4MHz CH-High



LTE Band 12 16QAM 3MHz CH-High



LTE Band 12 16QAM 5MHz CH-Low



LTE Band 12 16QAM 10MHz CH-Low



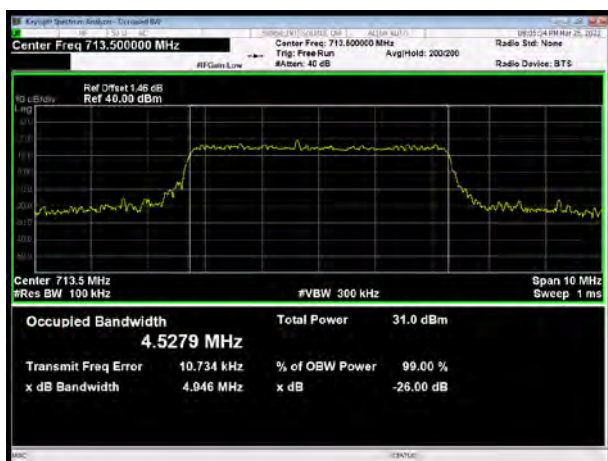
LTE Band 12 16QAM 5MHz CH-Middle



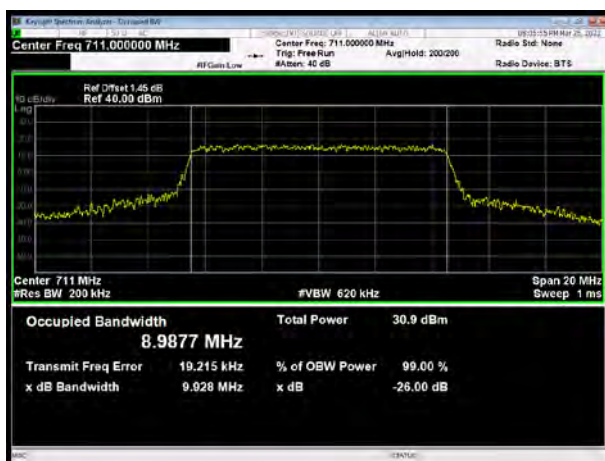
LTE Band 12 16QAM 10MHz CH-Middle



LTE Band 12 16QAM 5MHz CH-High

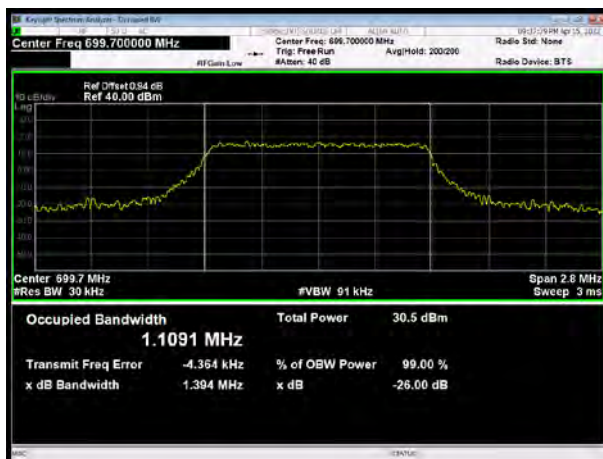


LTE Band 12 16QAM 10MHz CH-High

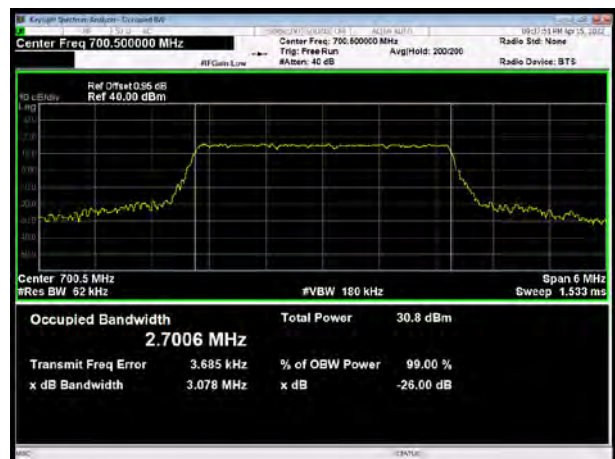




LTE Band 12 64QAM 1.4MHz CH-Low



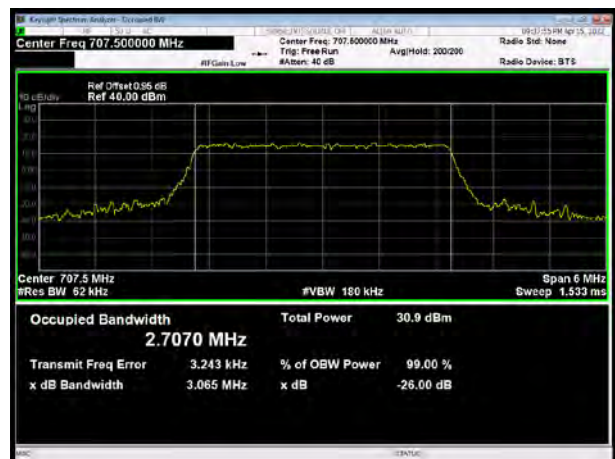
LTE Band 12 64QAM 3MHz CH-Low



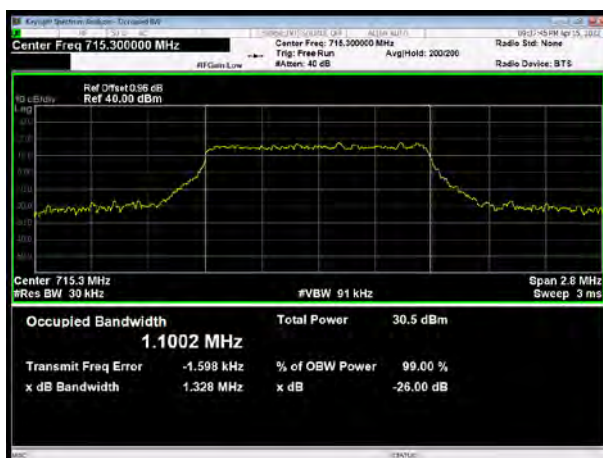
LTE Band 12 64QAM 1.4MHz CH-Middle



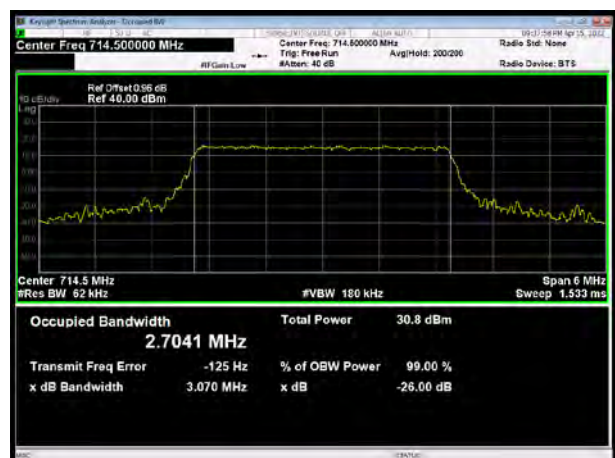
LTE Band 12 64QAM 3MHz CH-Middle



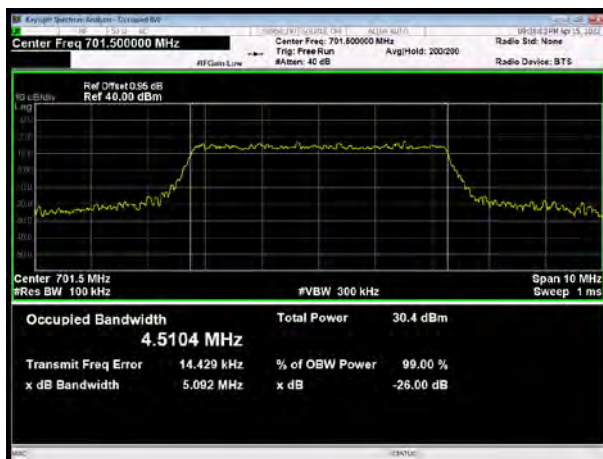
LTE Band 12 64QAM 1.4MHz CH-High



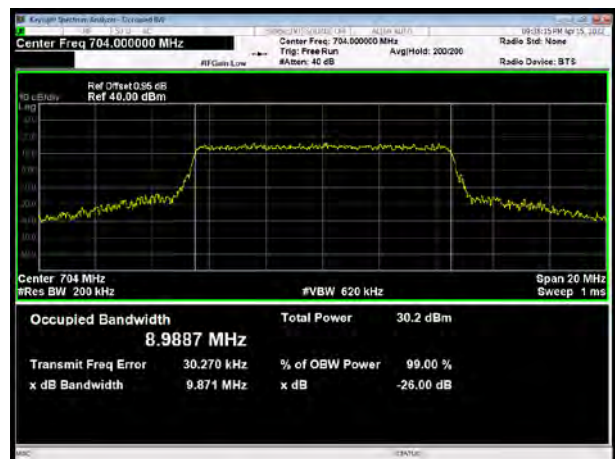
LTE Band 12 64QAM 3MHz CH-High



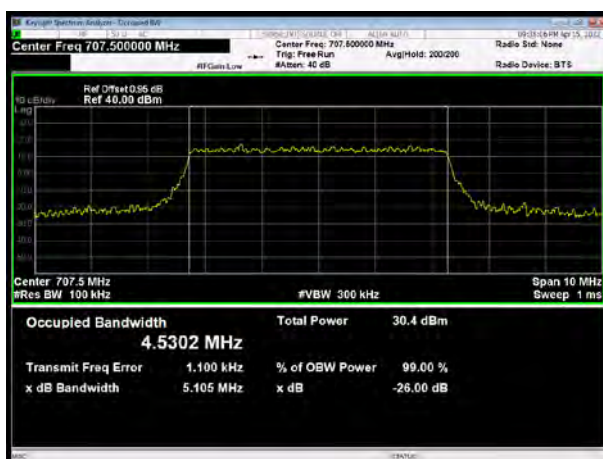
LTE Band 12 64QAM 5MHz CH-Low



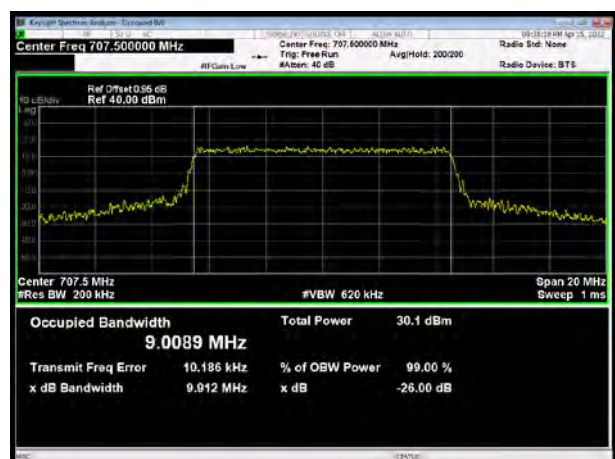
LTE Band 12 64QAM 10MHz CH-Low



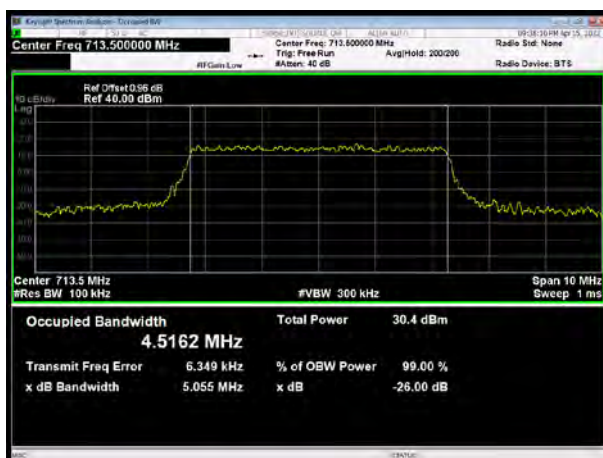
LTE Band 12 64QAM 5MHz CH-Middle



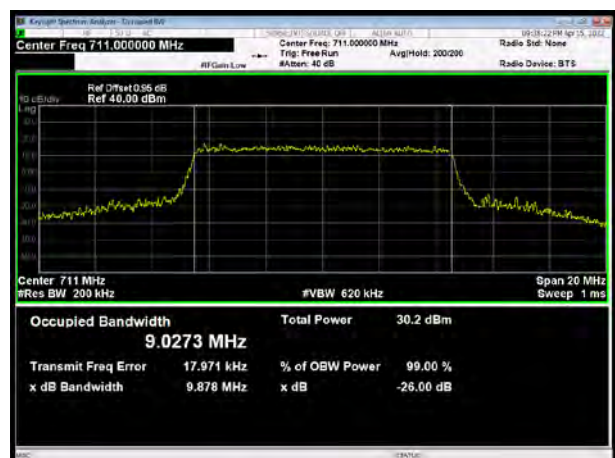
LTE Band 12 64QAM 10MHz CH-Middle



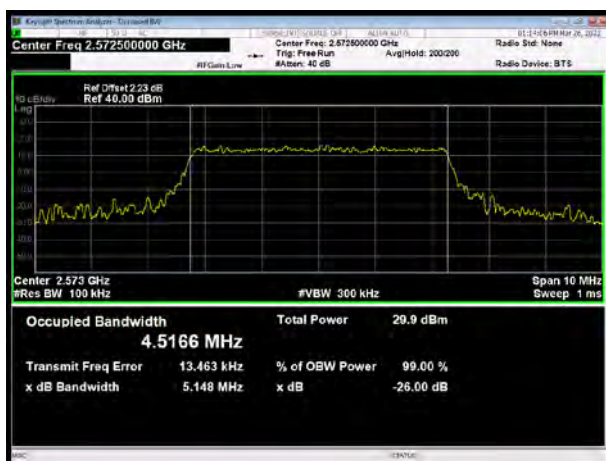
LTE Band 12 64QAM 5MHz CH-High



LTE Band 12 64QAM 10MHz CH-High



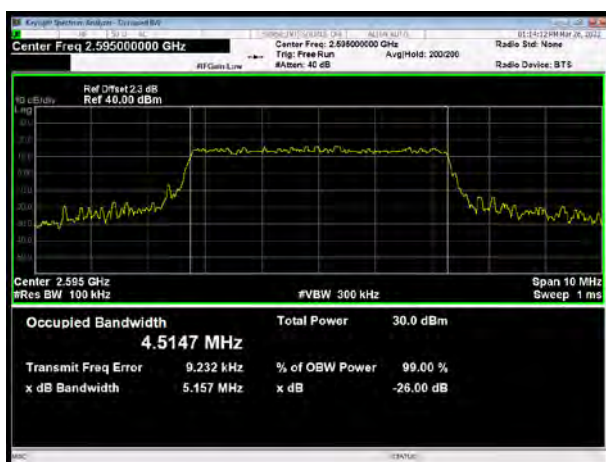
LTE Band 38 QPSK 5MHz CH-Low



LTE Band 38 QPSK 10MHz CH-Low



LTE Band 38 QPSK 5MHz CH-Middle



LTE Band 38 QPSK 10MHz CH-Middle



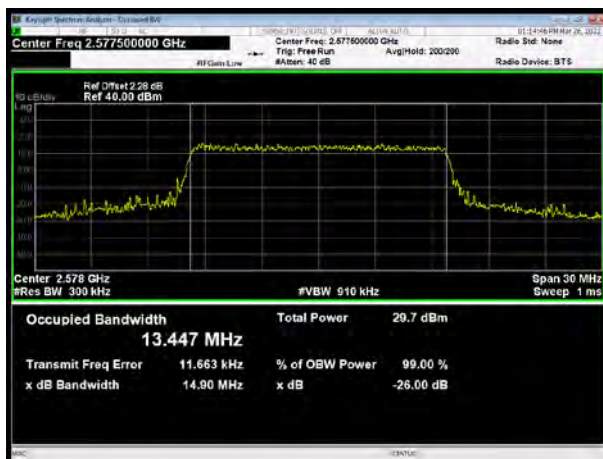
LTE Band 38 QPSK 5MHz CH-High



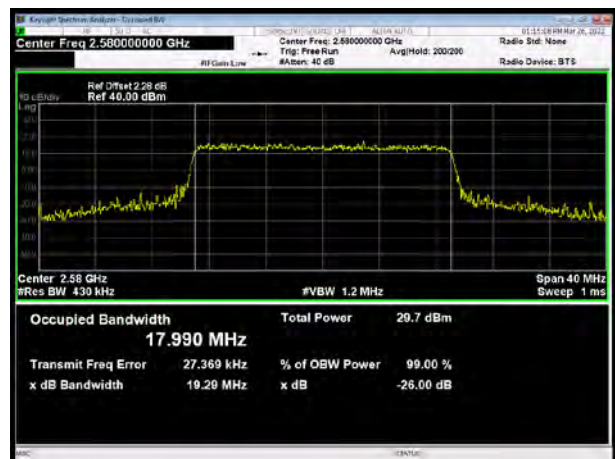
LTE Band 38 QPSK 10MHz CH-High



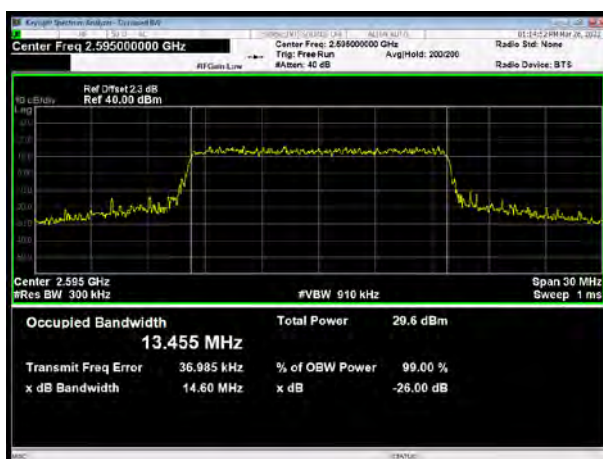
LTE Band 38 QPSK 15MHz CH-Low



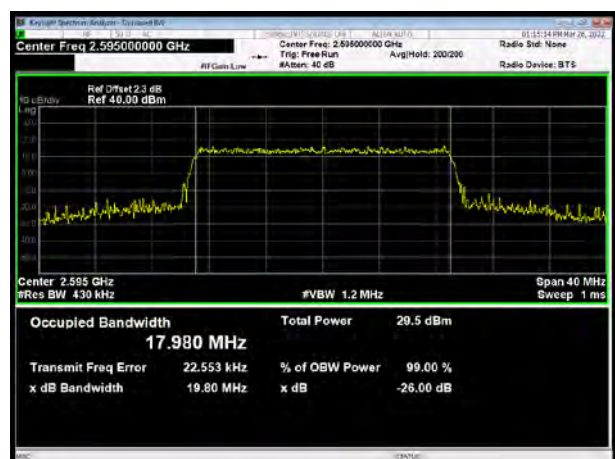
LTE Band 38 QPSK 20MHz CH-Low



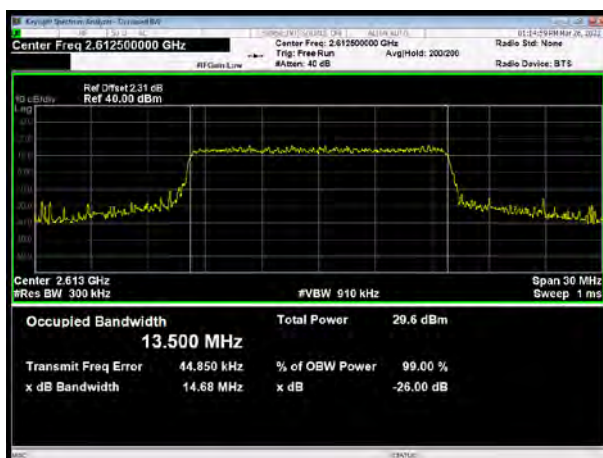
LTE Band 38 QPSK 15MHz CH-Middle



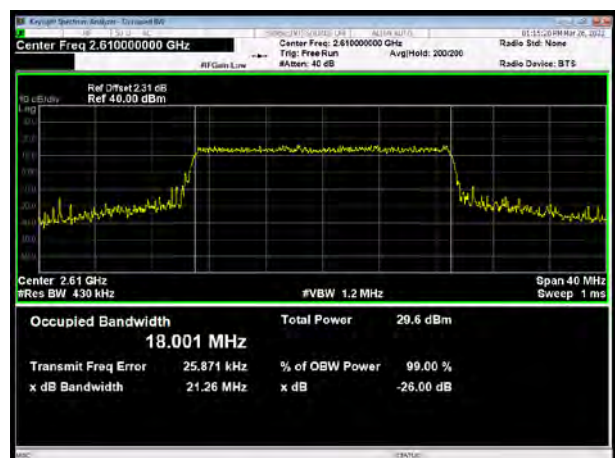
LTE Band 38 QPSK 20MHz CH-Middle



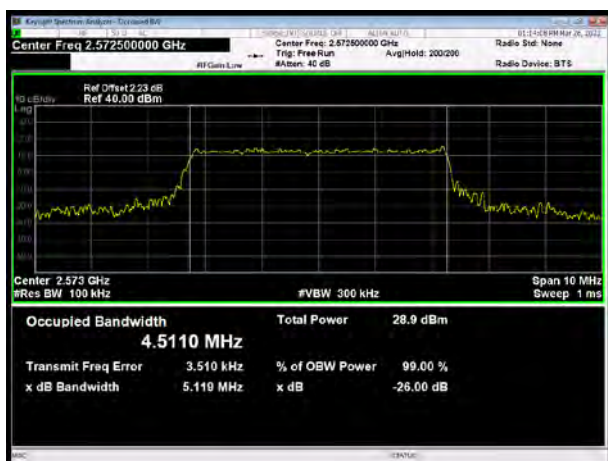
LTE Band 38 QPSK 15MHz CH-High



LTE Band 38 QPSK 20MHz CH-High



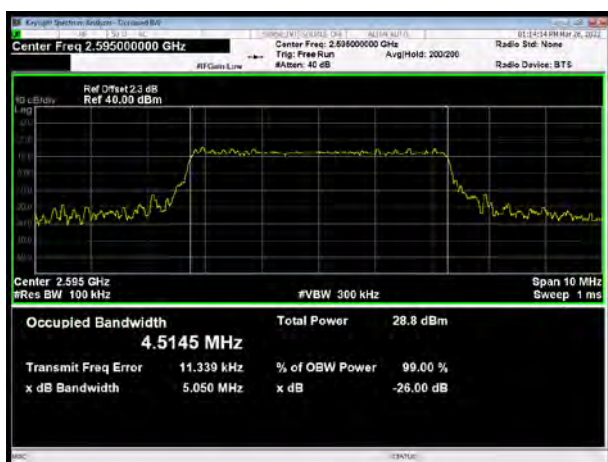
LTE Band 38 16QAM 5MHz CH-Low



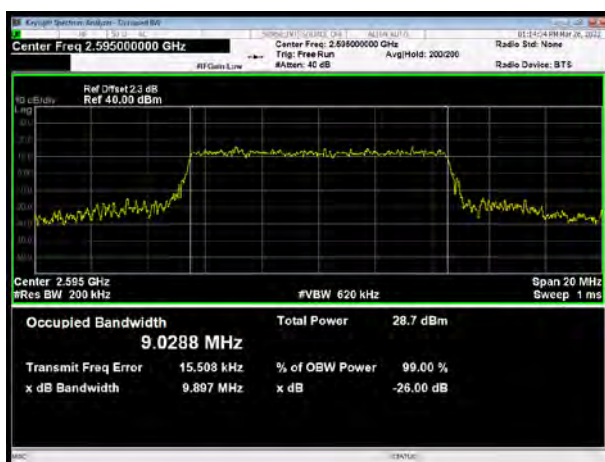
LTE Band 38 16QAM 10MHz CH-Low



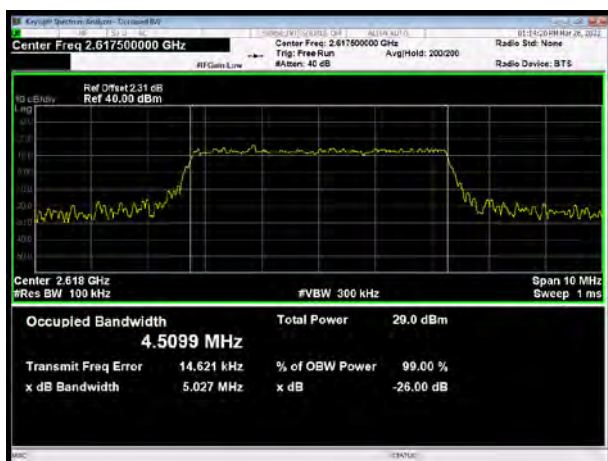
LTE Band 38 16QAM 5MHz CH-Middle



LTE Band 38 16QAM 10MHz CH-Middle



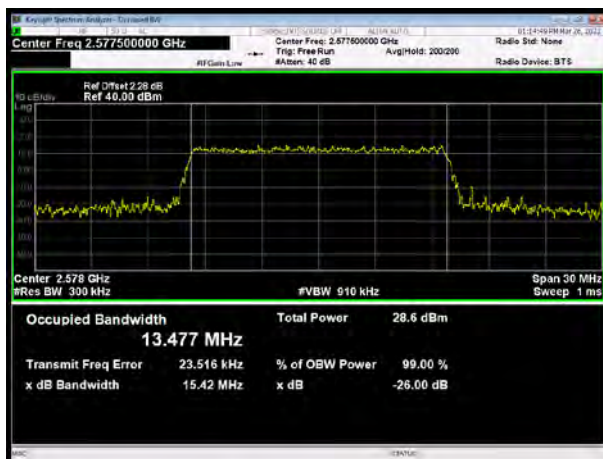
LTE Band 38 16QAM 5MHz CH-High



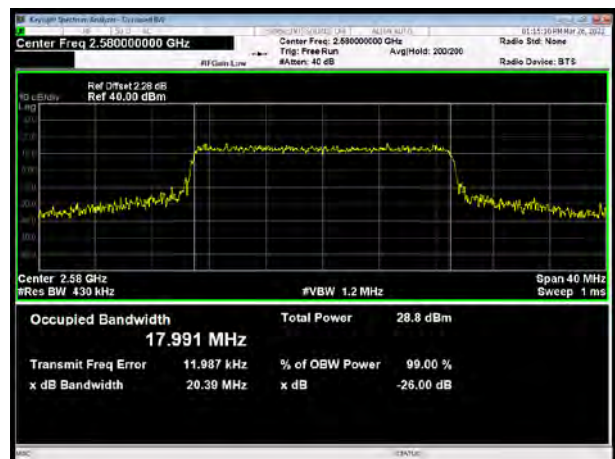
LTE Band 38 16QAM 10MHz CH-High



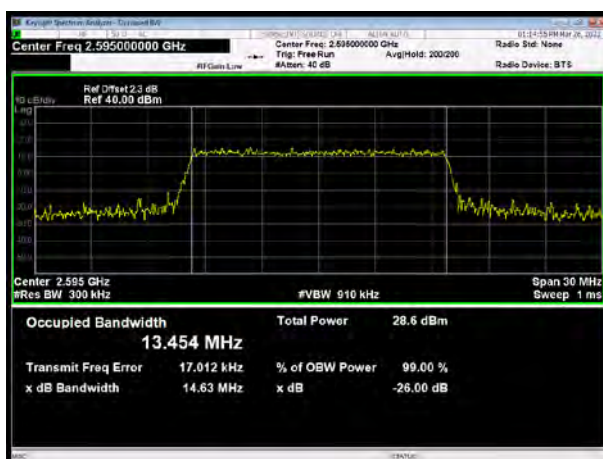
LTE Band 38 16QAM 15MHz CH-Low



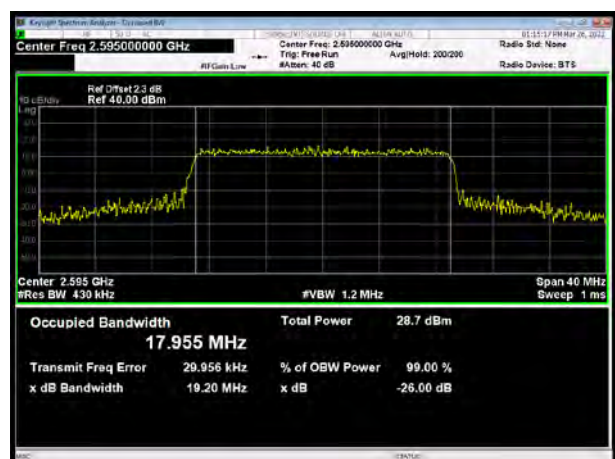
LTE Band 38 16QAM 20MHz CH-Low



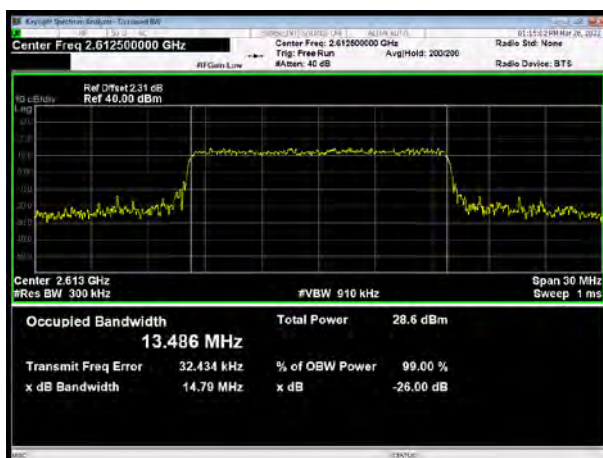
LTE Band 38 16QAM 15MHz CH-Middle



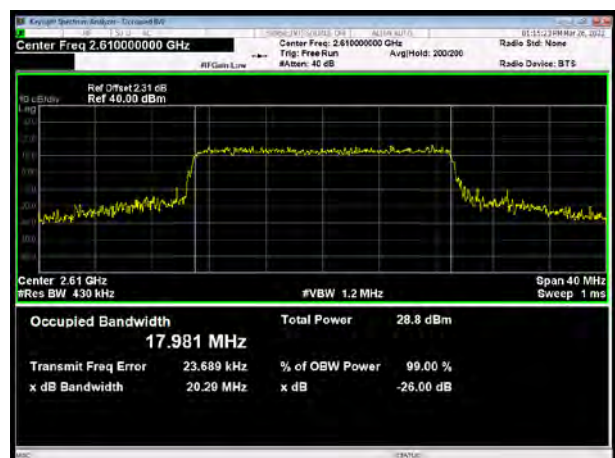
LTE Band 38 16QAM 20MHz CH-Middle



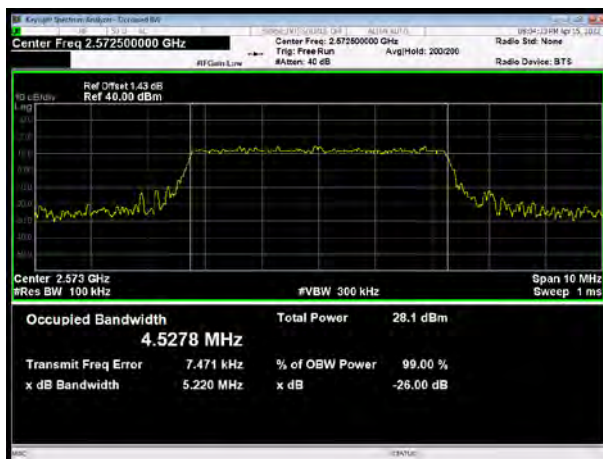
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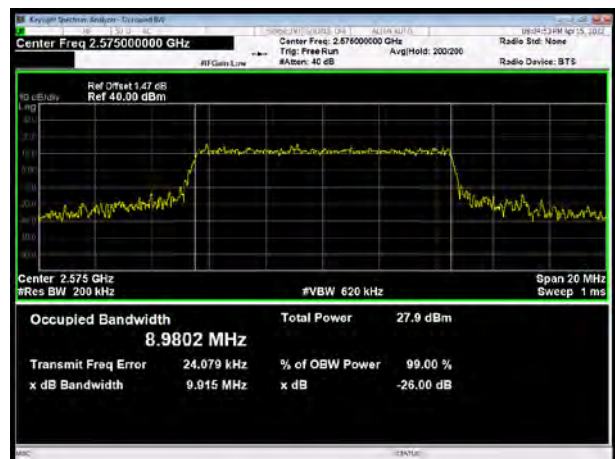
LTE Band 38 16QAM 20MHz CH-High



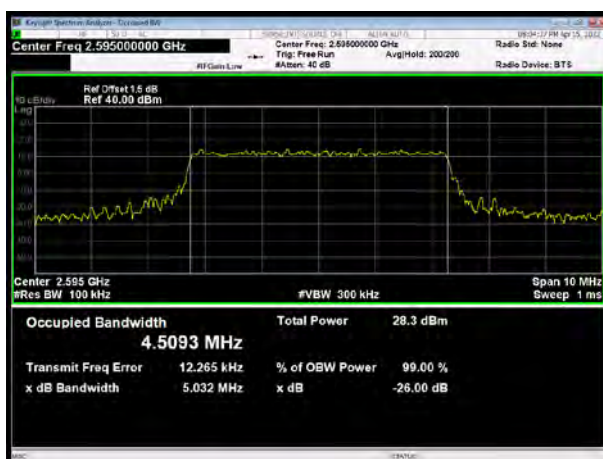
LTE Band 38 64QAM 5MHz CH-Low



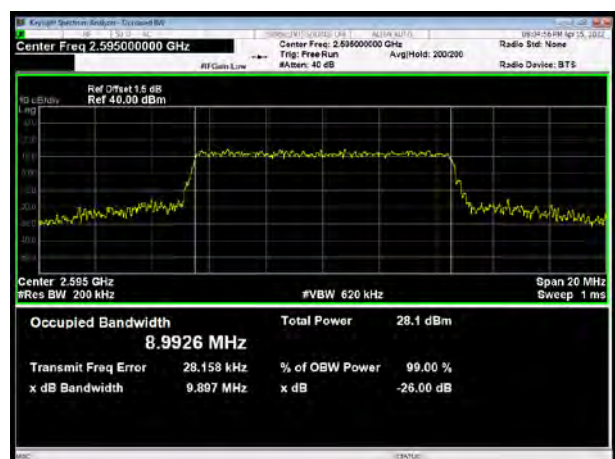
LTE Band 38 64QAM 10MHz CH-Low



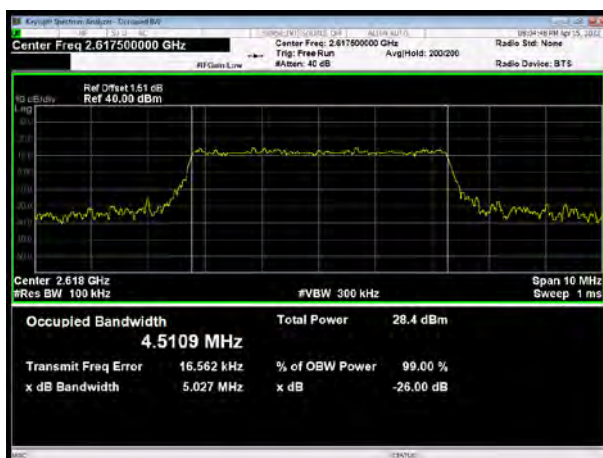
LTE Band 38 64QAM 5MHz CH-Middle



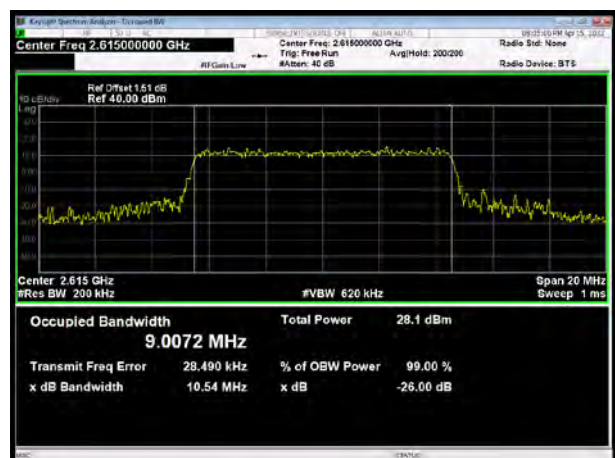
LTE Band 38 64QAM 10MHz CH-Middle



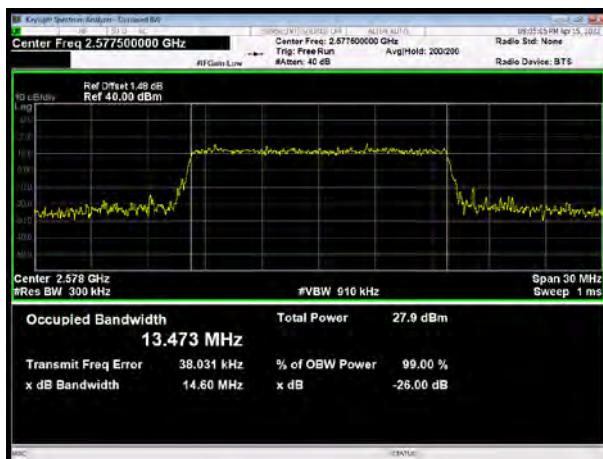
LTE Band 38 64QAM 5MHz CH-High



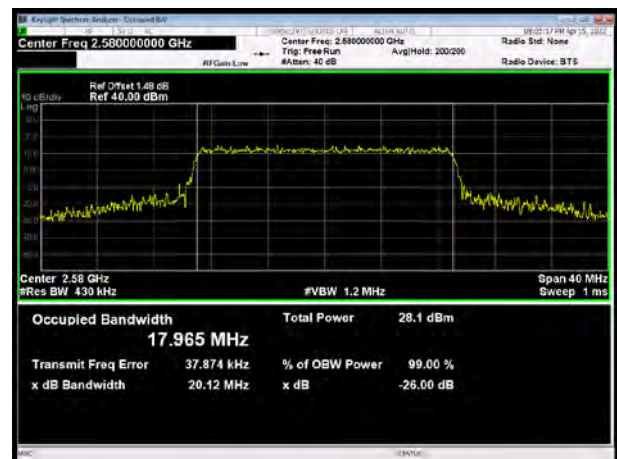
LTE Band 38 64QAM 10MHz CH-High



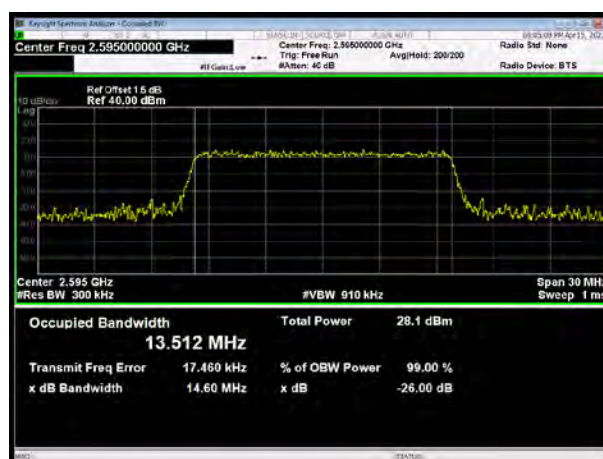
LTE Band 38 64QAM 15MHz CH-Low



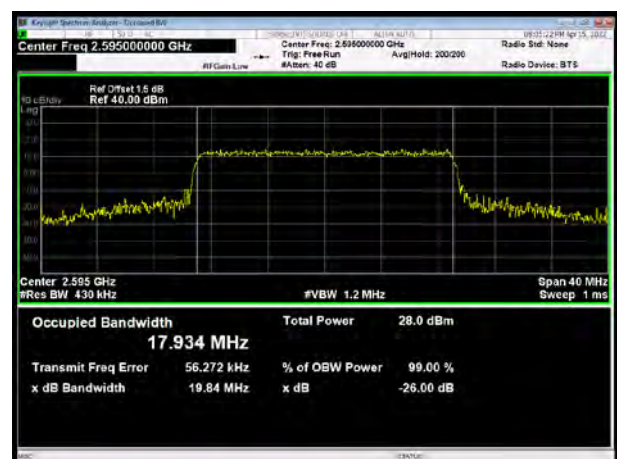
LTE Band 38 64QAM 20MHz CH-Low



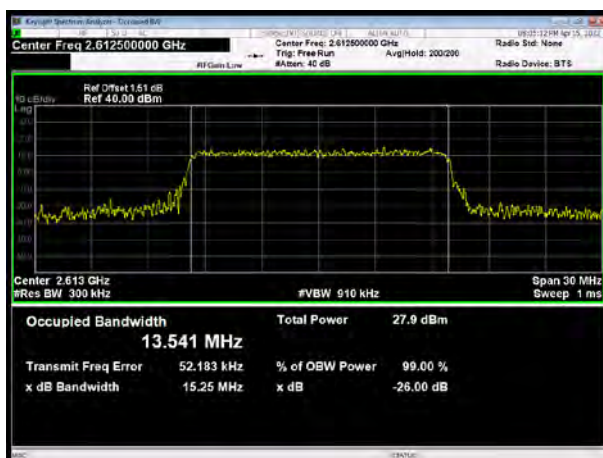
LTE Band 38 64QAM 15MHz CH-Middle



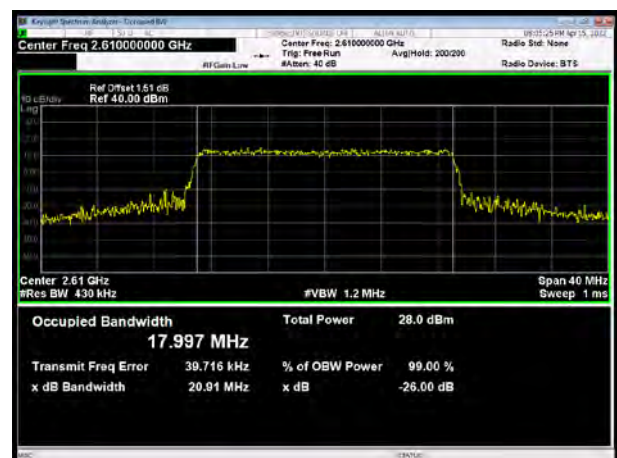
LTE Band 38 64QAM 20MHz CH-Middle



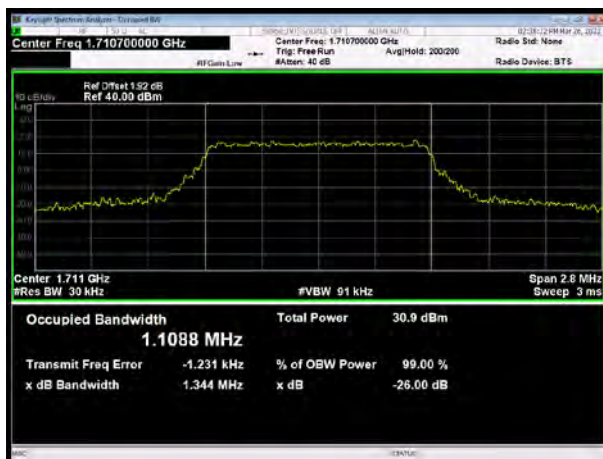
LTE Band 38 64QAM 15MHz CH-High



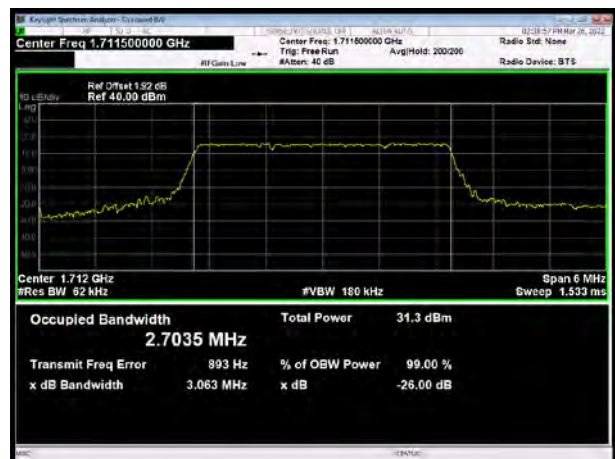
LTE Band 38 64QAM 20MHz CH-High



LTE Band 66 QPSK 1.4MHz CH-Low



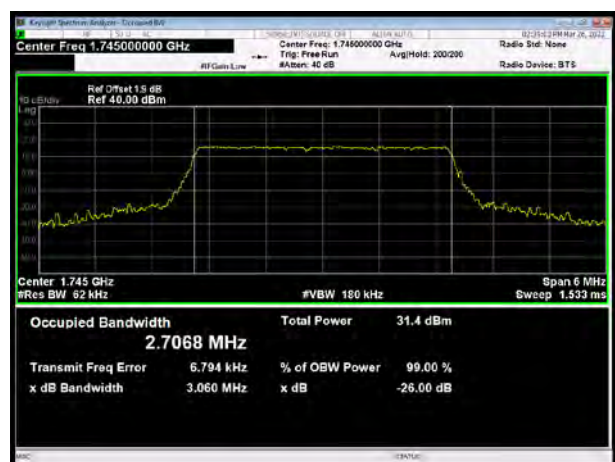
LTE Band 66 QPSK 3MHz CH-Low



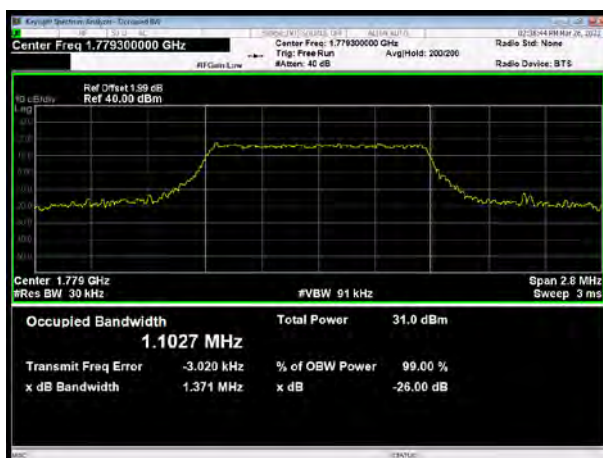
LTE Band 66 QPSK 1.4MHz CH-Middle



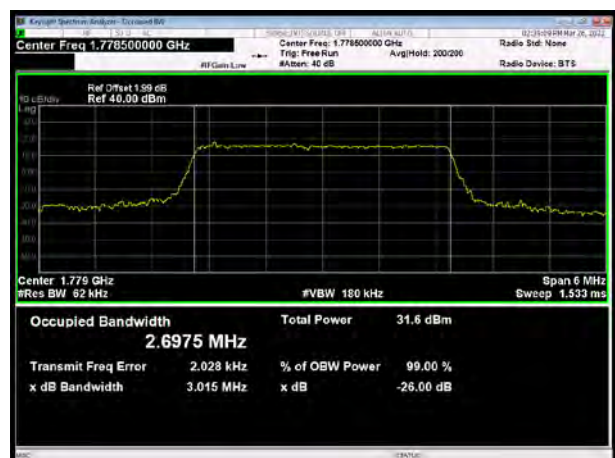
LTE Band 66 QPSK 3MHz CH-Middle



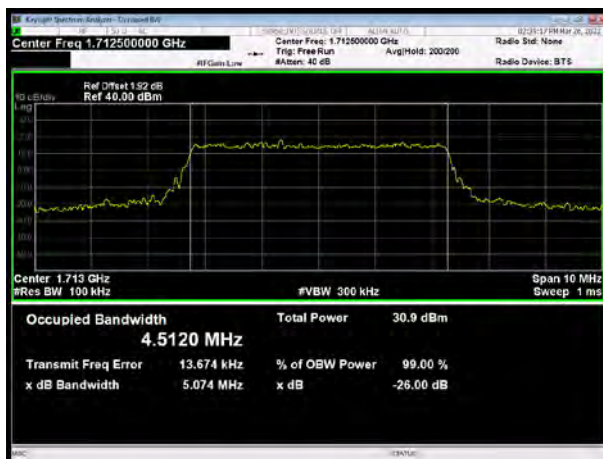
LTE Band 66 QPSK 1.4MHz CH-High



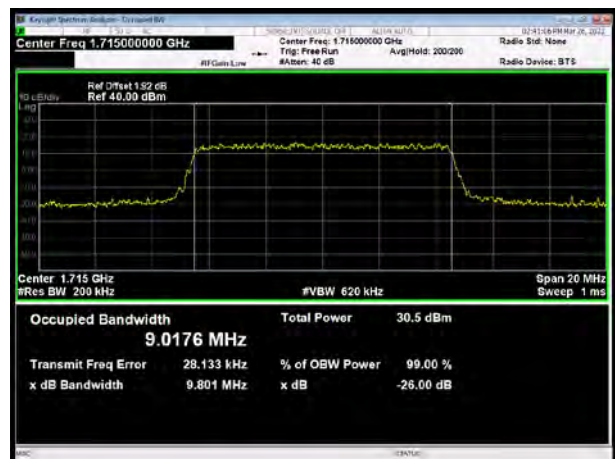
LTE Band 66 QPSK 3MHz CH-High



LTE Band 66 QPSK 5MHz CH-Low



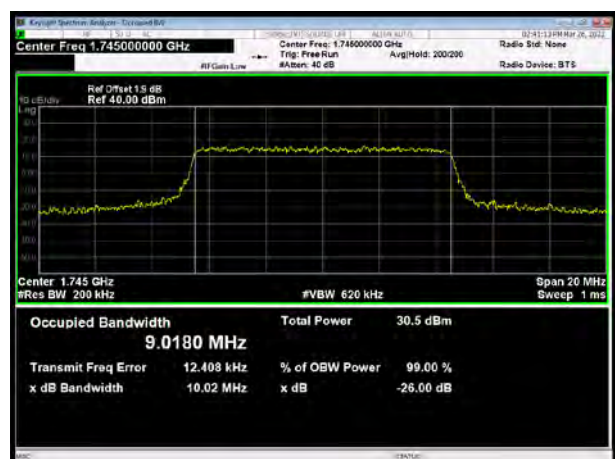
LTE Band 66 QPSK 10MHz CH-Low



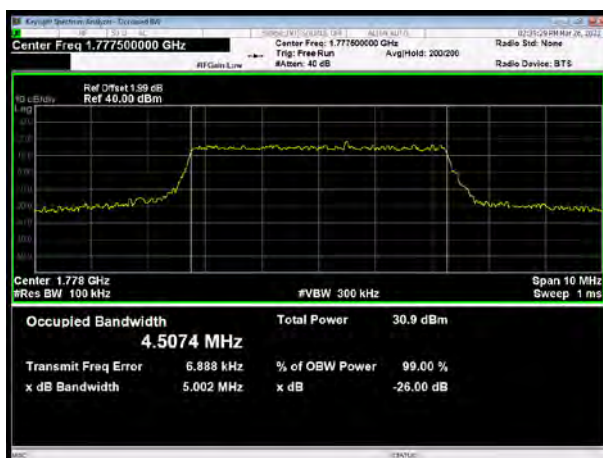
LTE Band 66 QPSK 5MHz CH-Middle



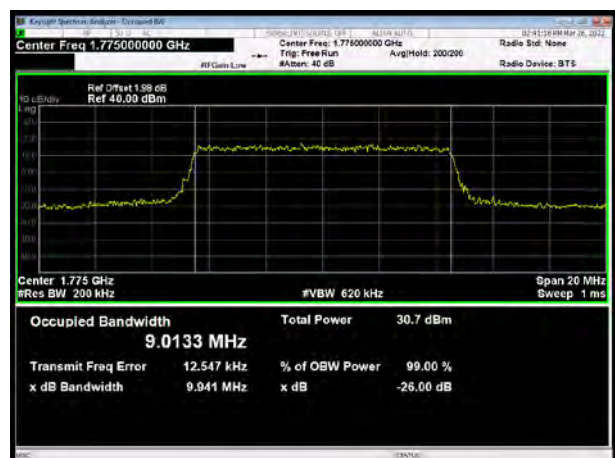
LTE Band 66 QPSK 10MHz CH-Middle



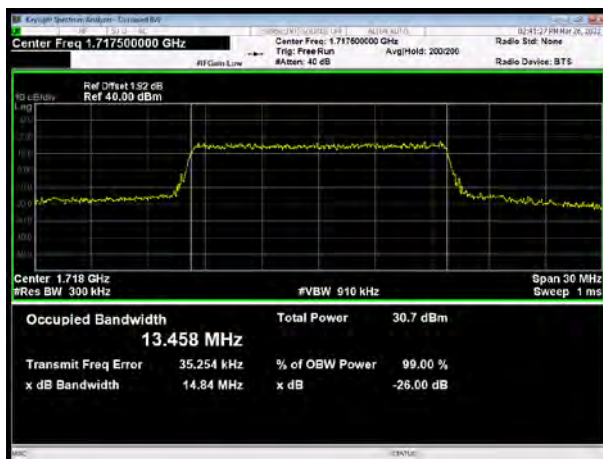
LTE Band 66 QPSK 5MHz CH-High



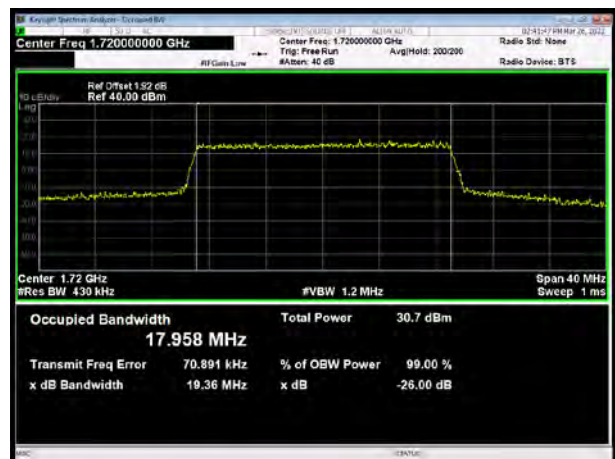
LTE Band 66 QPSK 10MHz CH-High



LTE Band 66 QPSK 15MHz CH-Low



LTE Band 66 QPSK 20MHz CH-Low



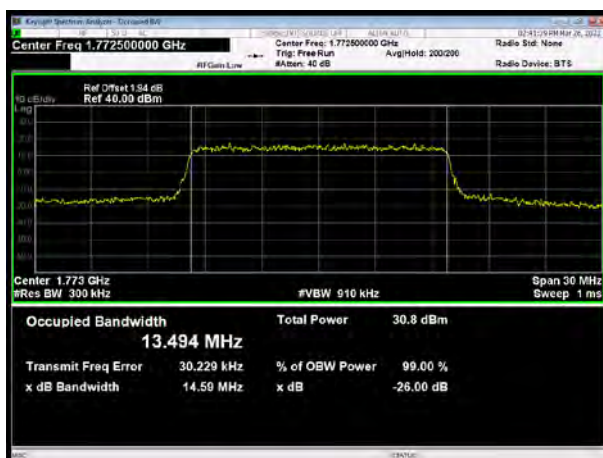
LTE Band 66 QPSK 15MHz CH-Middle



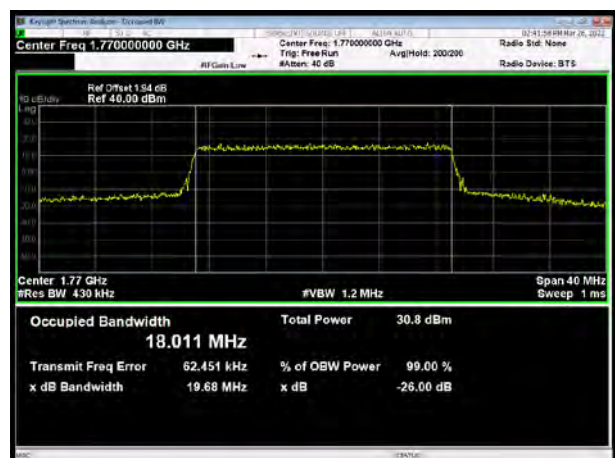
LTE Band 66 QPSK 20MHz CH-Middle



LTE Band 66 QPSK 15MHz CH-High



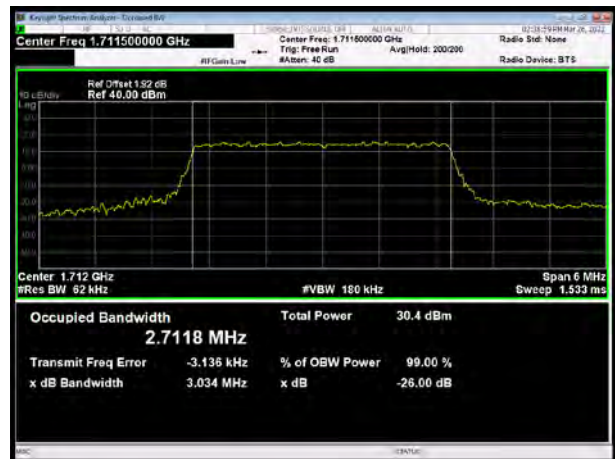
LTE Band 66 QPSK 20MHz CH-High



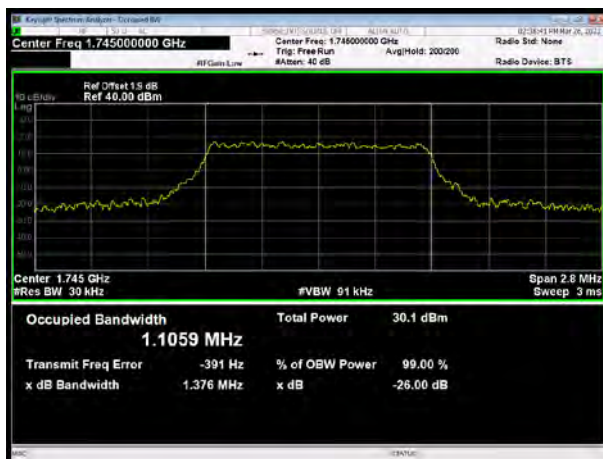
LTE Band 66 16QAM 1.4MHz CH-Low



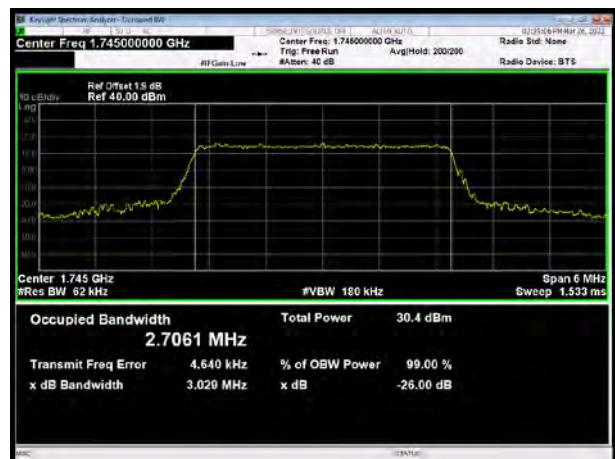
LTE Band 66 16QAM 3MHz CH-Low



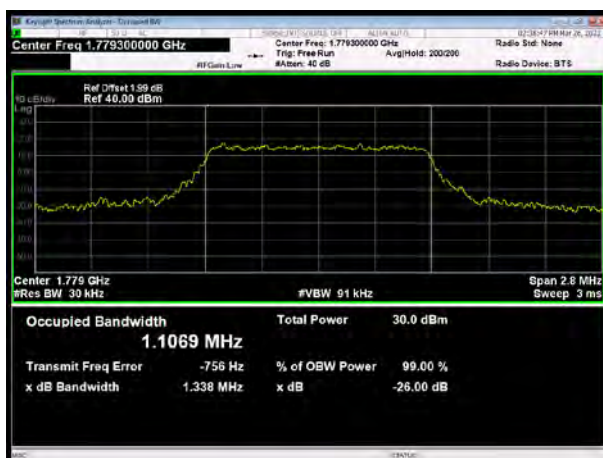
LTE Band 66 16QAM 1.4MHz CH-Middle



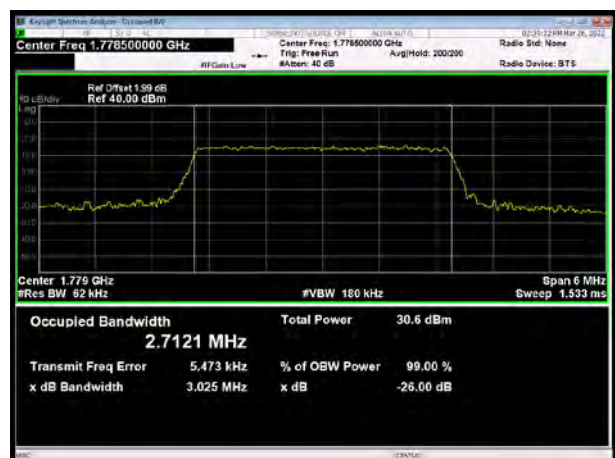
LTE Band 66 16QAM 3MHz CH-Middle



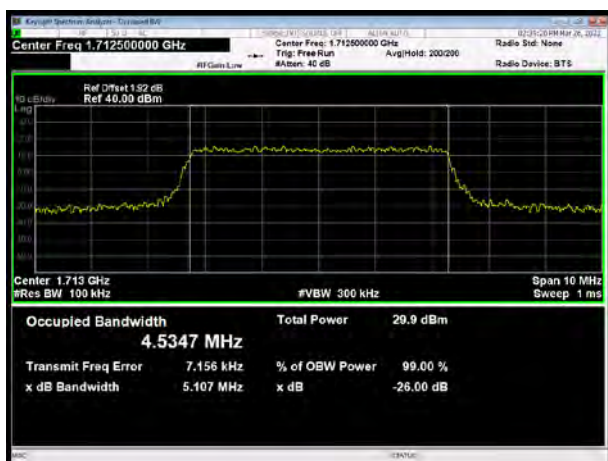
LTE Band 66 16QAM 1.4MHz CH-High



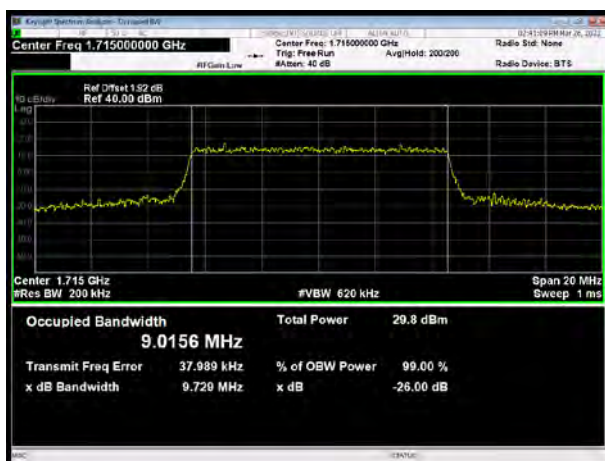
LTE Band 66 16QAM 3MHz CH-High



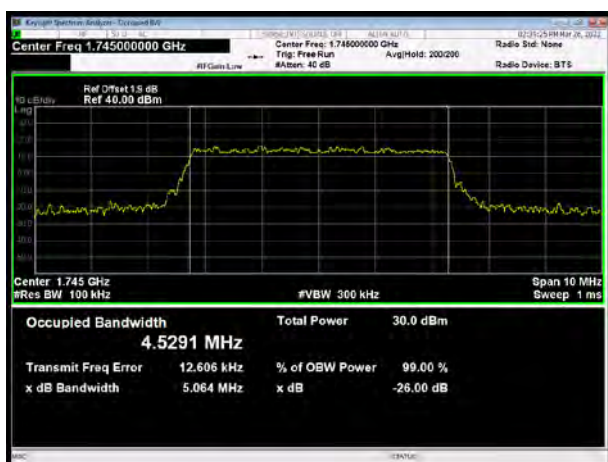
LTE Band 66 16QAM 5MHz CH-Low



LTE Band 66 16QAM 10MHz CH-Low



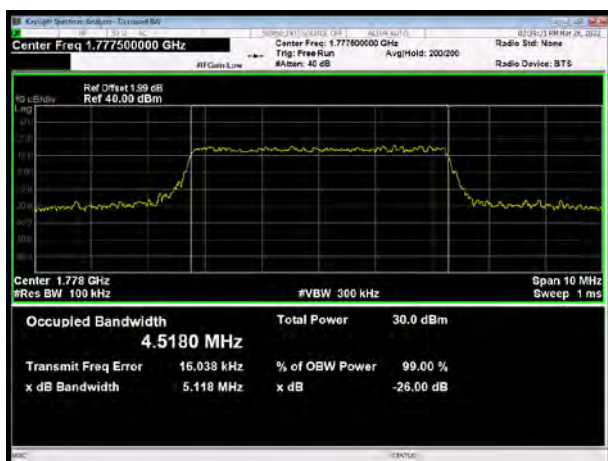
LTE Band 66 16QAM 5MHz CH-Middle



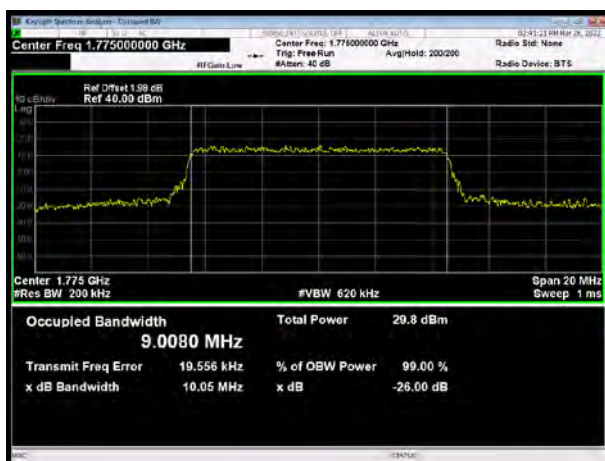
LTE Band 66 16QAM 10MHz CH-Middle



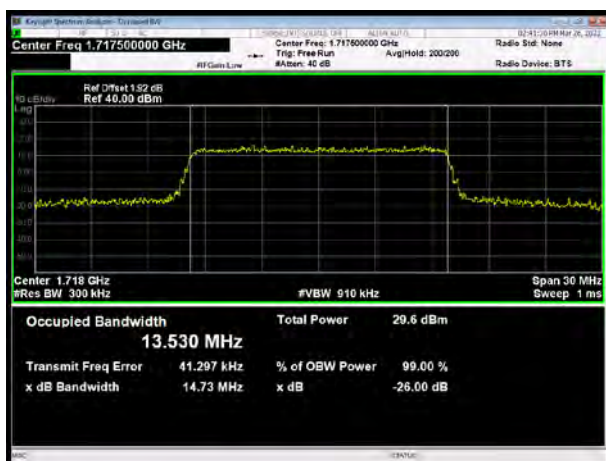
LTE Band 66 16QAM 5MHz CH-High



LTE Band 66 16QAM 10MHz CH-High



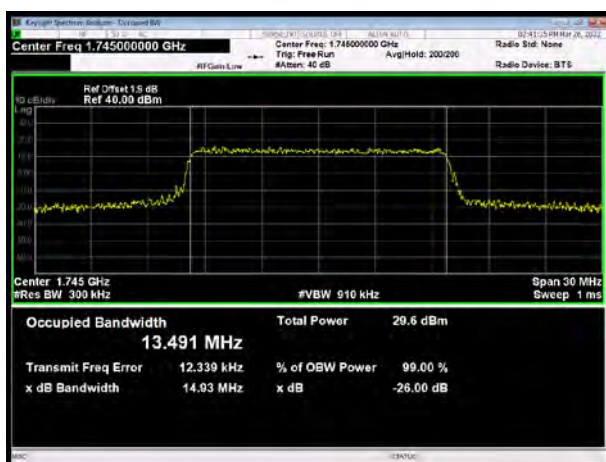
LTE Band 66 16QAM 15MHz CH-Low



LTE Band 66 16QAM 20MHz CH-Low



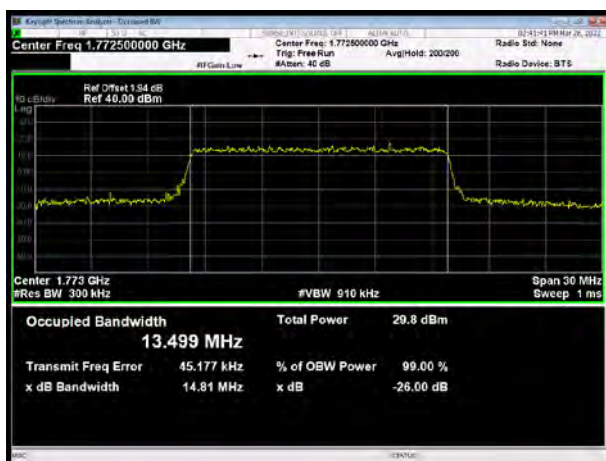
LTE Band 66 16QAM 15MHz CH-Middle



LTE Band 66 16QAM 20MHz CH-Middle



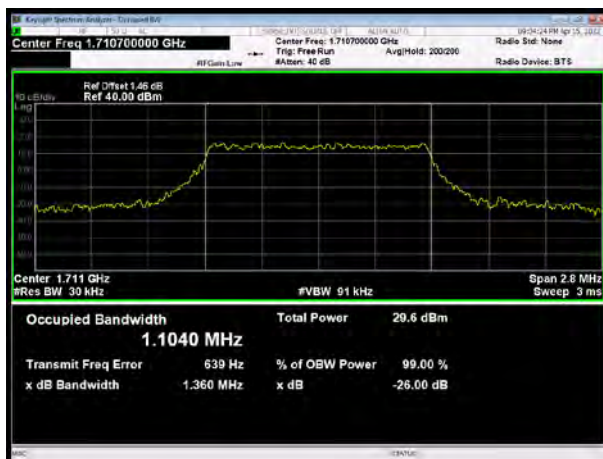
LTE Band 66 16QAM 15MHz CH-High



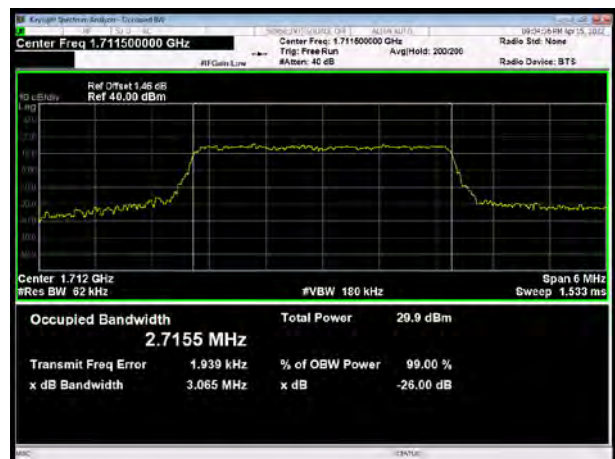
LTE Band 66 16QAM 20MHz CH-High



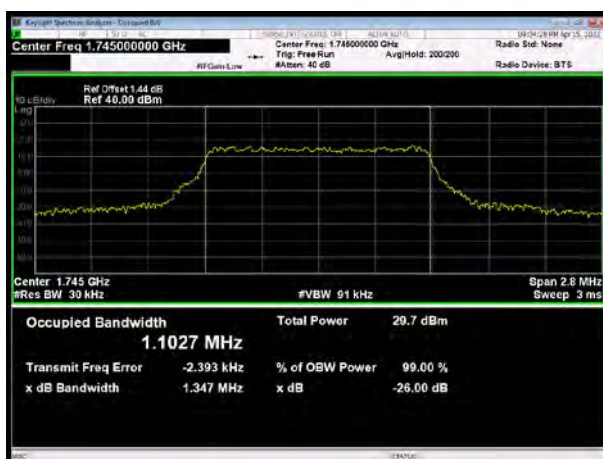
LTE Band 66 64QAM 1.4MHz CH-Low



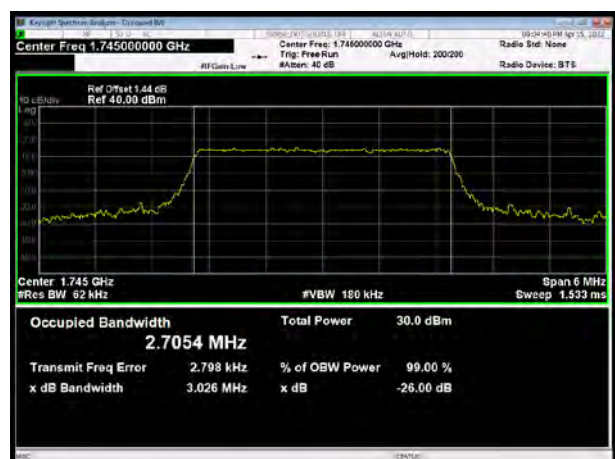
LTE Band 66 64QAM 3MHz CH-Low



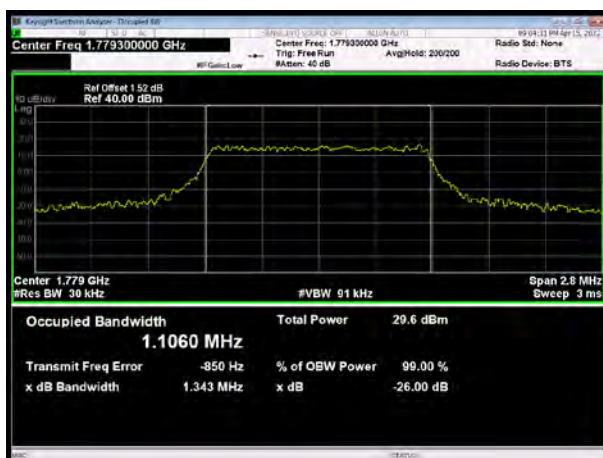
LTE Band 66 64QAM 1.4MHz CH-Middle



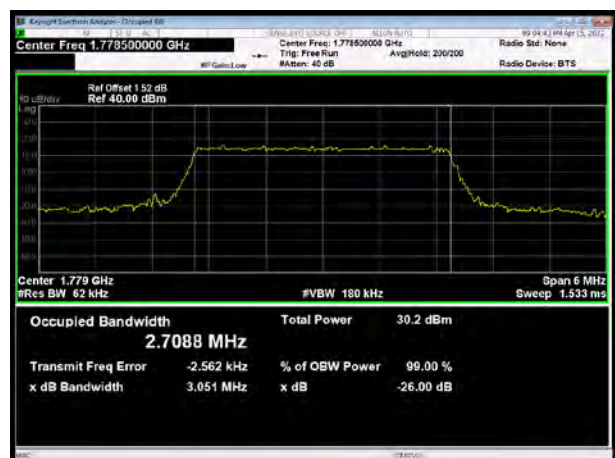
LTE Band 66 64QAM 3MHz CH-Middle



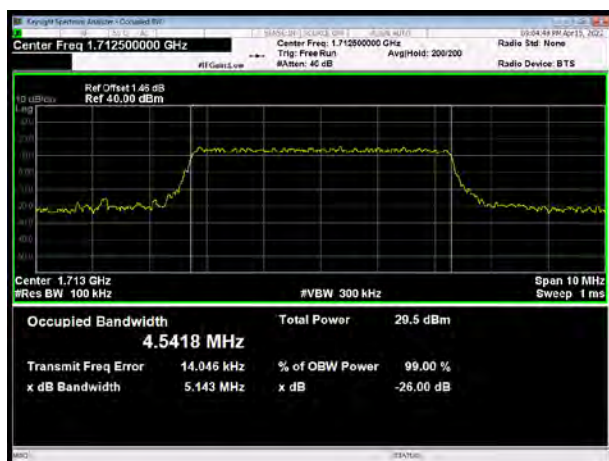
LTE Band 66 64QAM 1.4MHz CH-High



LTE Band 66 64QAM 3MHz CH-High



LTE Band 66 64QAM 5MHz CH-Low



LTE Band 66 64QAM 10MHz CH-Low



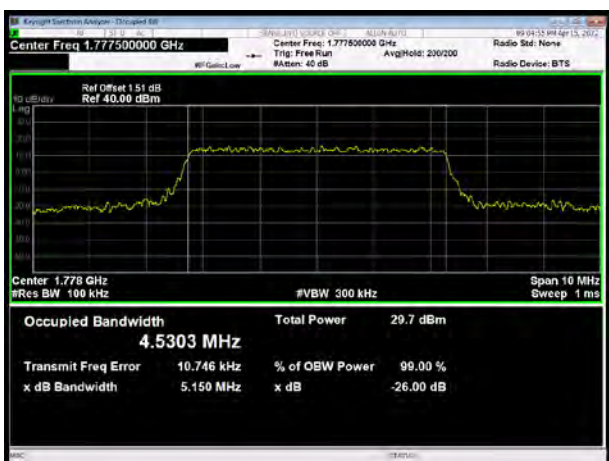
LTE Band 66 64QAM 5MHz CH-Middle



LTE Band 66 64QAM 10MHz CH-Middle



LTE Band 66 64QAM 5MHz CH-High



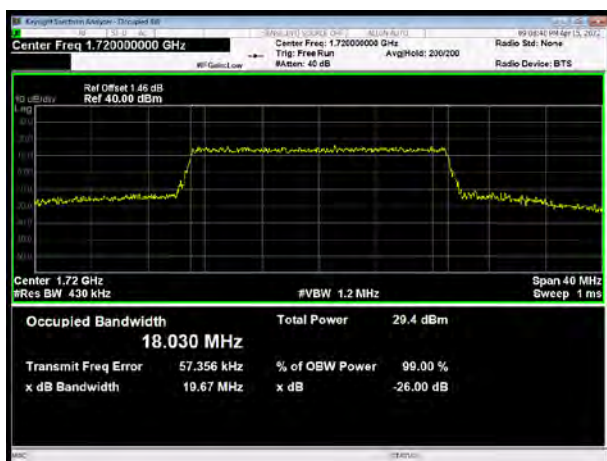
LTE Band 66 64QAM 10MHz CH-High



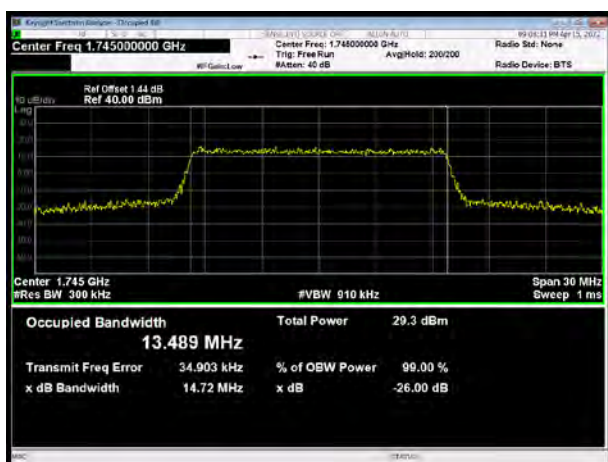
LTE Band 66 64QAM 15MHz CH-Low



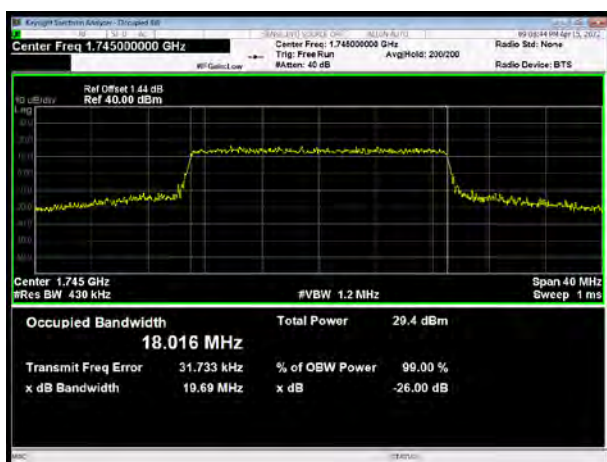
LTE Band 66 64QAM 20MHz CH-Low



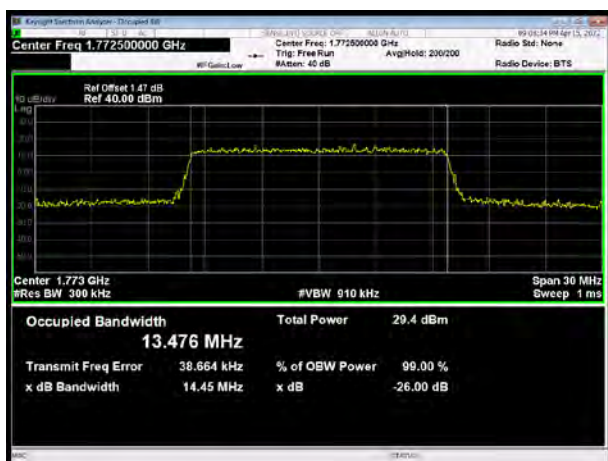
LTE Band 66 64QAM 15MHz CH-Middle



LTE Band 66 64QAM 20MHz CH-Middle



LTE Band 66 64QAM 15MHz CH-High

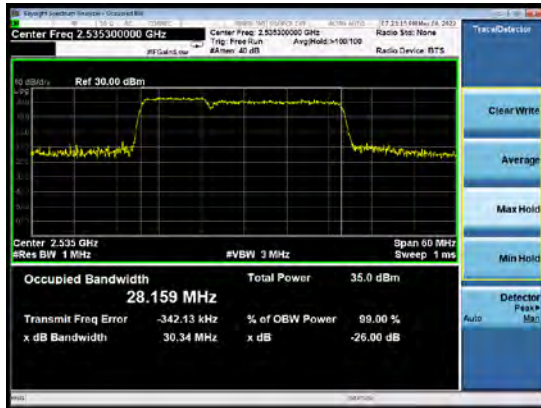


LTE Band 66 64QAM 20MHz CH-High





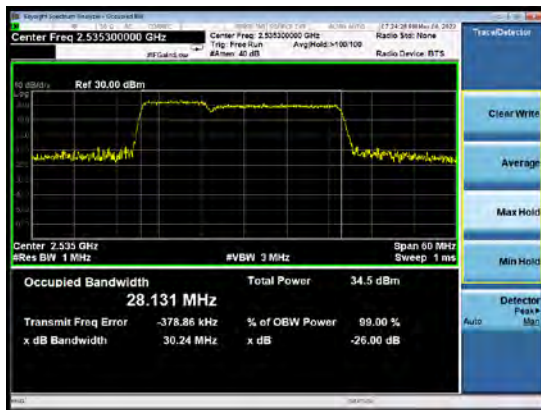
CA_7C QPSK 10MHz +20MHz



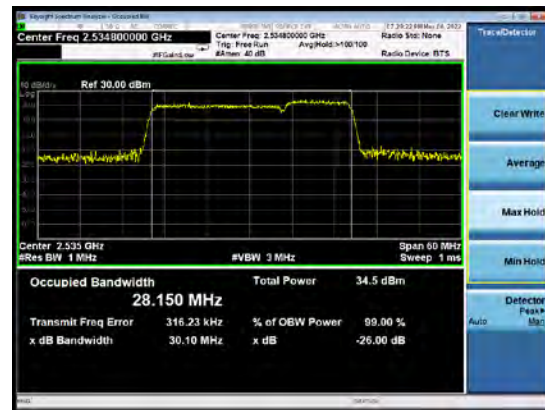
CA_7C QPSK 20MHz +10MHz



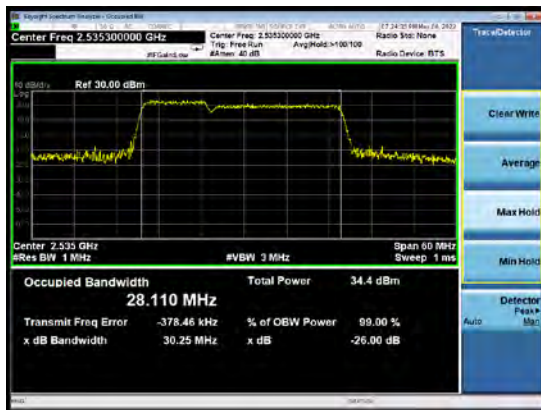
CA_7C 16QAM 10MHz +20MHz



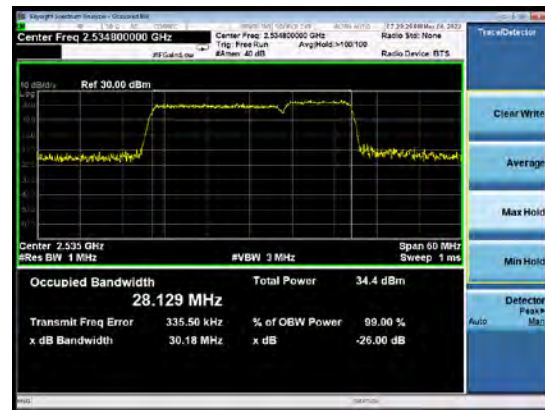
CA_7C 16QAM 20MHz +10MHz



CA_7C 64QAM 10MHz +20MHz

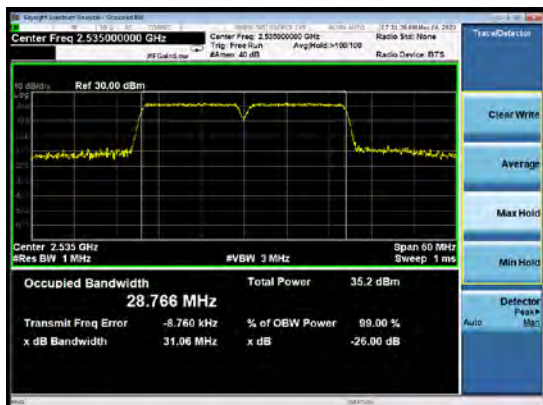


CA_7C 64QAM 20MHz +10MHz





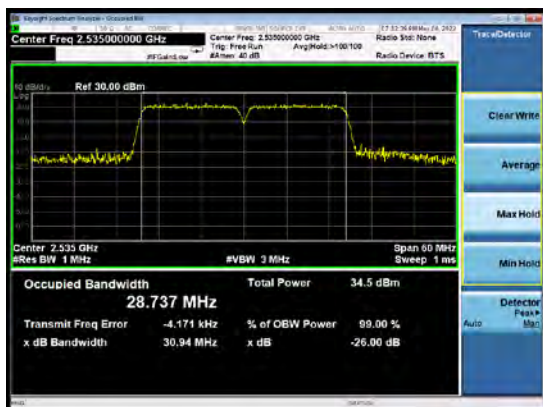
CA_7C QPSK 15MHz +15MHz



CA_7C QPSK 15MHz +20MHz



CA_7C 16QAM 15MHz +15MHz



CA_7C 16QAM 15MHz +20MHz



CA_7C 64QAM 15MHz +15MHz

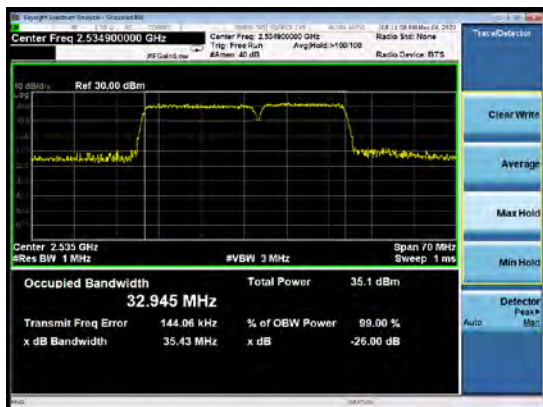


CA_7C 64QAM 15MHz +20MHz





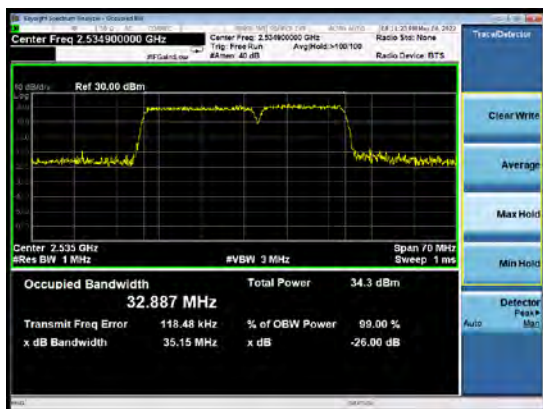
CA_7C QPSK 20MHz +15MHz



CA_7C QPSK 20MHz +20MHz



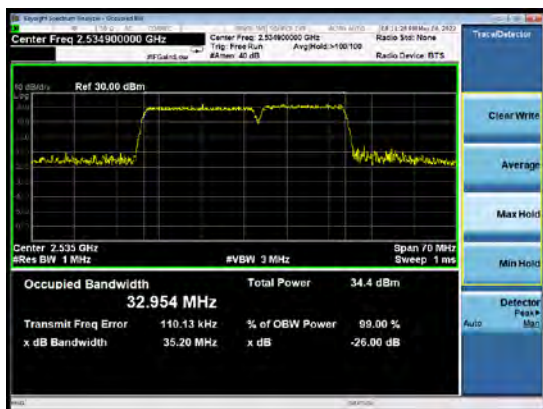
CA_7C 16QAM 20MHz +15MHz



CA_7C 16QAM 20MHz +20MHz



CA_7C 64QAM 20MHz +15MHz

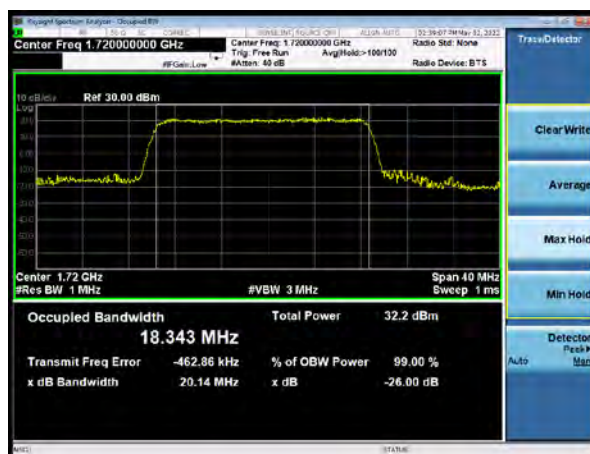


CA_7C 64QAM 20MHz +20MHz

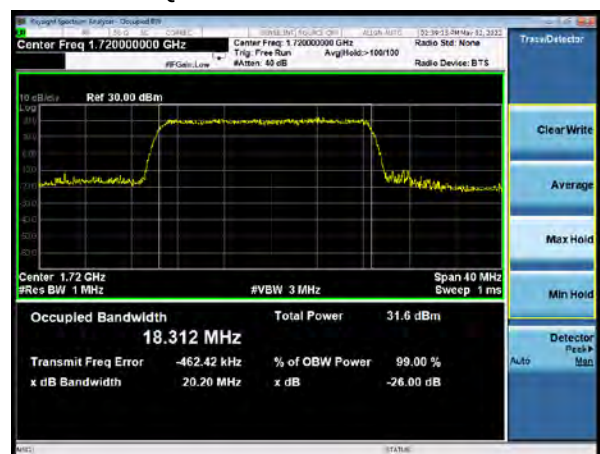
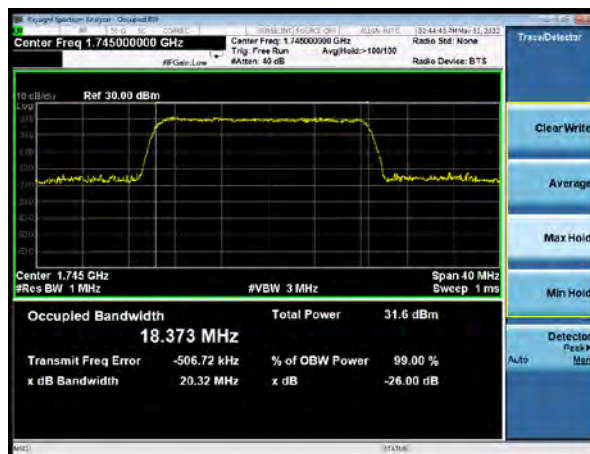




NR n66 P1/2 BPSK 100%RB 20MHz CH-Low



NR n66 QPSK 100%RB 20MHz CH-Low

NR n66 P1/2 BPSK 100%RB 20MHz
CH-Middle

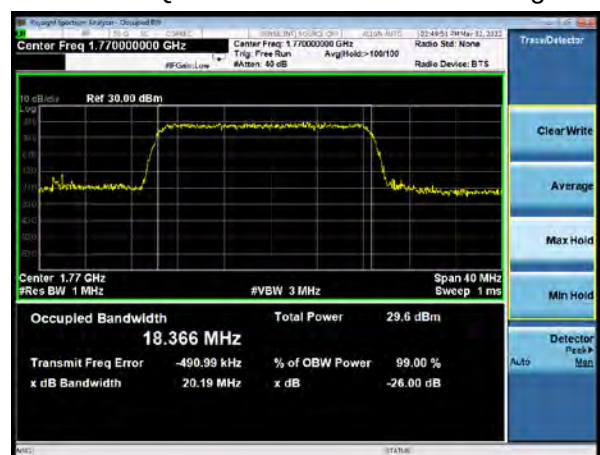
NR n66 QPSK 100%RB 20MHz CH-Middle



NR n66 P1/2 BPSK 100%RB 20MHz CH-High

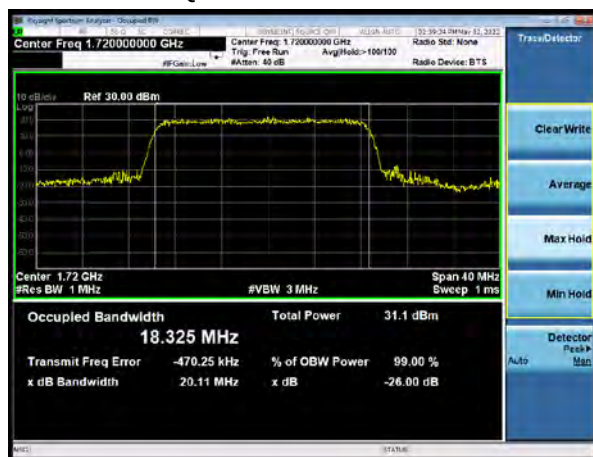


NR n66 QPSK 100%RB 20MHz CH-High





NR n66 16QAM 100%RB 20MHz CH-Low



NR n66 64QAM 100%RB 20MHz CH-Low



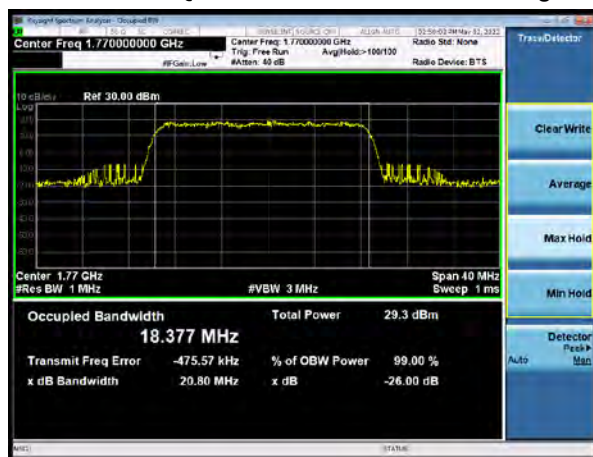
NR n66 16QAM 100%RB 20MHz CH-Middle



NR n66 64QAM 100%RB 20MHz CH-Middle



NR n66 16QAM 100%RB 20MHz CH-High



NR n66 64QAM 100%RB 20MHz CH-High



NR n66 256QAM 100%RB 20MHz CH-Low



NR n66 256QAM 100%RB 20MHz CH-Middle



NR n66 256QAM 100%RB 20MHz CH-High



NR n66 P1/2 BPSK 1RB 20MHz CH-Low



NR n66 QPSK 1RB 20MHz CH-Low



NR n66 P1/2 BPSK 1RB 20MHz CH-Middle



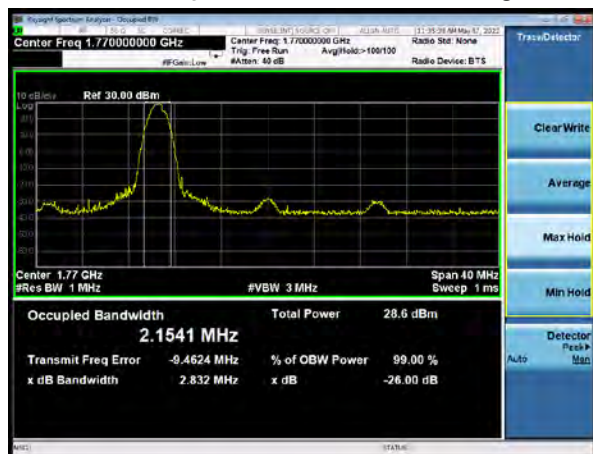
NR n66 QPSK 1RB 20MHz CH-Middle



NR n66 P1/2 BPSK 1RB 20MHz CH-High

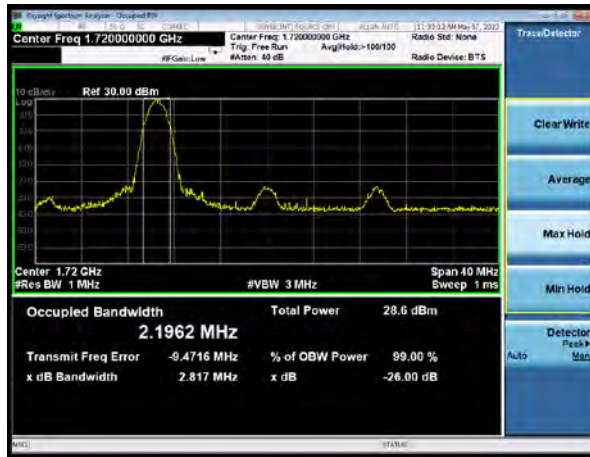


NR n66 QPSK 1RB 20MHz CH-High





NR n66 16QAM 1RB 20MHz CH-Low



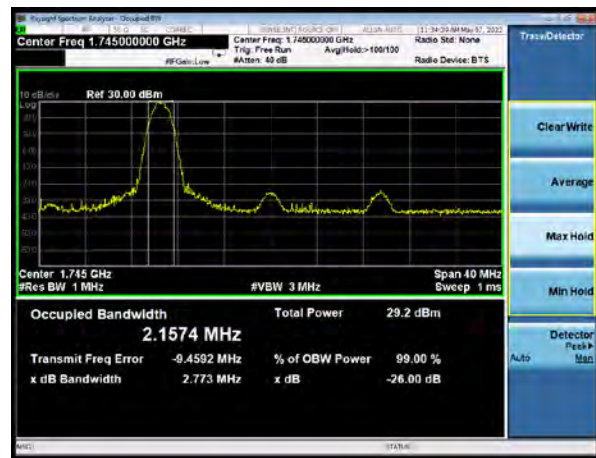
NR n66 64QAM 1RB 20MHz CH-Low



NR n66 16QAM 1RB 20MHz CH-Middle



NR n66 64QAM 1RB 20MHz CH-Middle



NR n66 16QAM 1RB 20MHz CH-High



NR n66 64QAM 1RB 20MHz CH-High



NR n66 256QAM 1RB 20MHz CH-Low

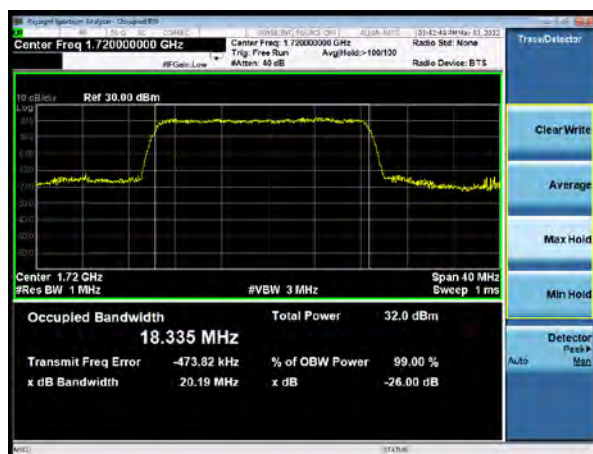


NR n66 256QAM 1RB 20MHz CH-Middle

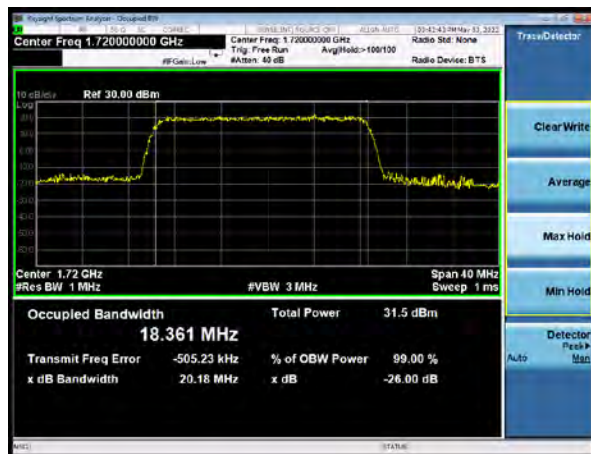


NR n66 256QAM 1RB 20MHz CH-High

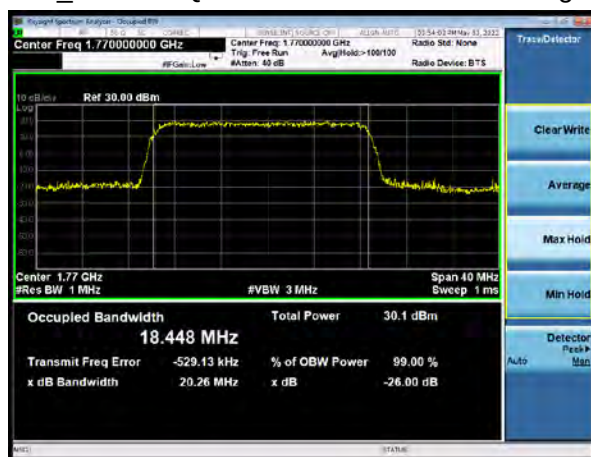


DC_5A-n66AP1/2 BPSK 100%RB 20MHz
CH-Low

DC_5A-n66AQPSK 100%RB 20MHz CH-Low

DC_5A-n66AP1/2 BPSK 100%RB 20MHz
CH-MiddleDC_5A-n66AQPSK 100%RB 20MHz
CH-MiddleDC_5A-n66AP1/2 BPSK 100%RB 20MHz
CH-High

DC_5A-n66AQPSK 100%RB 20MHz CH-High

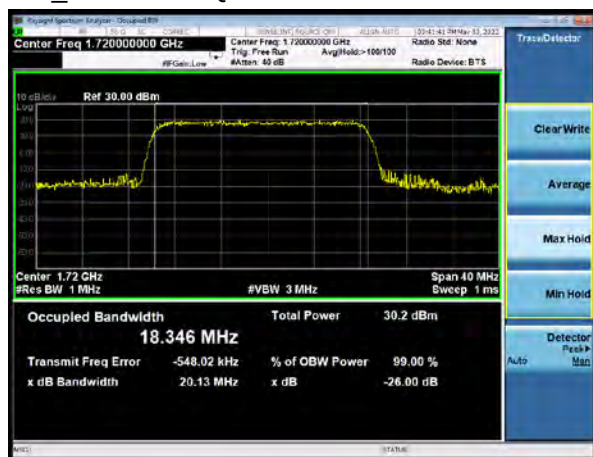
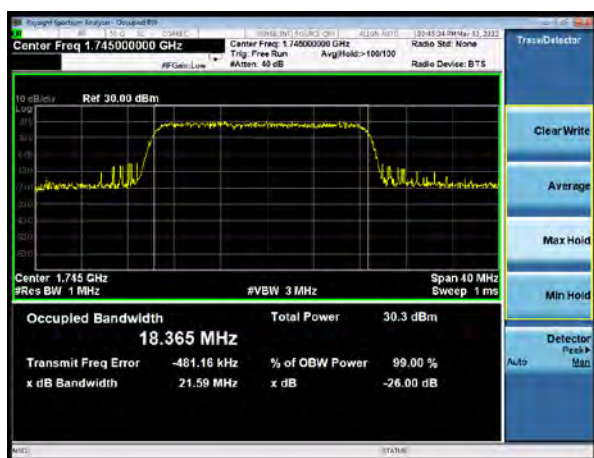
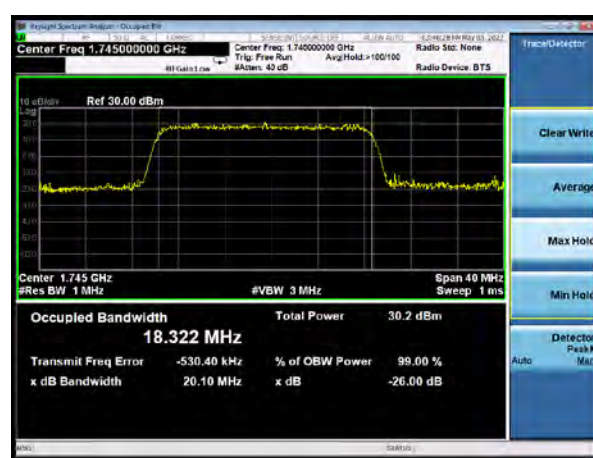




DC_5A-n66A16QAM 100%RB 20MHz CH-Low



DC_5A-n66A64QAM 100%RB 20MHz CH-Low

DC_5A-n66A16QAM 100%RB 20MHz
CH-MiddleDC_5A-n66A64QAM 100%RB 20MHz
CH-Middle

DC_5A-n66A16QAM 100%RB 20MHz CH-High



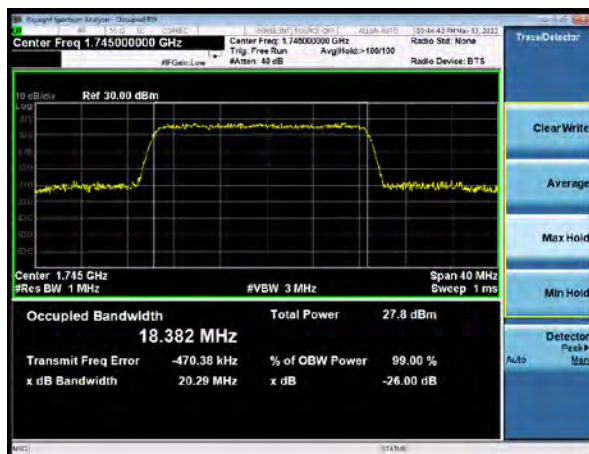
DC_5A-n66A64QAM 100%RB 20MHz CH-High



DC_5A-n66A256QAM 100%RB 20MHz
CH-Low



DC_5A-n66A256QAM 100%RB 20MHz
CH-Middle



DC_5A-n66A256QAM 100%RB 20MHz
CH-High

