



RF TEST REPORT

Applicant Xiaomi Communications Co., Ltd.

FCC ID 2AFZZ1119AL

Product Mobile Phone

Model 21061119AL

Report No. R2105A0397-R8V1

Issue Date July 9, 2021

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2020)/ FCC CFR47 Part 27C (2020)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Prepared by: Peng Tao

Approved by: Kai Xu

TA Technology (Shanghai) Co., Ltd.

No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China

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

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



TABLE OF CONTENT

1	Test Laboratory	5
1.1	Notes of the Test Report	5
1.2.	Test facility	5
1.3	Testing Location	5
2	General Description of Equipment under Test	6
2.1	Applicant and Manufacturer Information	6
2.2	General information	6
3	Applied Standards	8
4	Test Configuration	9
5	Test Case Results	11
5.1	RF Power Output and Effective Isotropic Radiated Power Ambient condition	11
5.2	Occupied Bandwidth	27
5.3	Band Edge Compliance	67
5.4	Peak-to-Average Power Ratio (PAPR)	105
5.5	Frequency Stability	112
5.6	Spurious Emissions at Antenna Terminals	125
5.7	Radiates Spurious Emission	142
6	Main Test Instruments	161
ANNEX A: The EUT Appearance		162
ANNEX B: Test Setup Photos		163



Version	Revision description	Issue Date
Rev.0	Initial issue of report.	July 1, 2021
Rev.1	Update information in Page 7 Update Frequency Stability in Page113 to Page 122	July 9, 2021
Note: This revised report (Report No. R2105A0397-R8V1) supersedes and replaces the previously issued report (Report No. R2105A0397- R8). Please discard or destroy the previously issued report and dispose of it accordingly.		



Summary of Measurement Results

Number	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective Isotropic Radiated Power	2.1046/27.50(d)(4)/27.50(h)(2)	PASS
2	Occupied Bandwidth	2.1049	PASS
3	Band Edge Compliance	27.53(h) /27.53(m)	PASS
4	Peak-to-Average Power Ratio	27.50(d)/KDB971168 D01(5.7)	PASS
5	Frequency Stability	2.1055 / 27.54	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 /27.53(h)/27.53(m)	PASS
7	Radiates Spurious Emission	2.1053 /27.53(h) /27.53(m)	PASS

Date of Testing: June 1, 2021 ~ June 17, 2021 and July 9, 2021

Date of Sample Received: May 27, 2021

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.

This report only changed the Model of product. All test values duplicated from the original report (Report No.: R2105A0395-R3V2).



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.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China
City: Shanghai
Post code: 201201
Country: P. R. China
Contact: Xu Kai
Telephone: +86-021-50791141/2/3
Fax: +86-021-50791141/2/3-8000
Website: <http://www.ta-shanghai.com>
E-mail: xukai@ta-shanghai.com

2 General Description of Equipment under Test

2.1 Applicant and Manufacturer Information

Applicant	Xiaomi Communications Co., Ltd.
Applicant address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer	Xiaomi Communications Co., Ltd.
Manufacturer address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

2.2 General information

EUT Description			
Model	21061119AL		
IMEI	Original	IMEI 1: 863461050011766 IMEI 2: 863461050011774	
Hardware Version	P1.1		
Software Version	MIUI12.5		
Power Supply	Battery / AC adapter		
Antenna Type	PIFA Antenna		
Antenna Gain	Mode	Main Antenna (dBi)	Second Antenna (dBi)
	WCDMA Band IV	-0.8	-1.4
	LTE Band 4:	-0.8	-1.4
	LTE Band 7:	1.6	-1.7
	LTE Band 38:	0	-1.6
	LTE Band 41:	0	-1.6
Test Mode(s)	WCDMA Band IV; LTE Band 4/7/38/41; CA_38C/CA_7C		
Test Modulation	(WCDMA) BPSK, QPSK, 16QAM; (LTE) QPSK, 16QAM, 64QAM;		
HSDPA UE Category	24		
HSUPA UE Category	7		
LTE Category	7		
Maximum E.I.R.P.	WCDMA Band IV:	23.57dBm	
	LTE Band 4:	24.03dBm	
	LTE Band 7:	25.6dBm	
	LTE Band 38:	24.66dBm	
	LTE Band 41:	24.83dBm	
	CA_7C	25.42dBm	
	CA_38C	24.26dBm	



Rated Power Supply Voltage	3.8V		
Operating Voltage	Minimum: 3.6V Maximum: 4.45V		
Operating Temperature	Lowest: -10°C Highest: +60°C		
Extreme Temperature	Lowest: -30°C Highest: +60°C		
Operating Frequency Range(s)	Mode	Tx (MHz)	Rx (MHz)
	WCDMA Band IV	1710 ~ 1755	2110 ~ 2155
	LTE Band 4	1710 ~ 1755	2110 ~ 2155
	LTE Band 7	2500 ~ 2570	2620 ~ 2690
	LTE Band 38	2570 ~ 2620	2570 ~ 2620
	LTE Band 41	2535 ~ 2655	2535 ~ 2655
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.			



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 (2020)

ANSI C63.26 (2015)

Reference standard:

FCC CFR47 Part 2 (2020)

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

(X axis, horizontal polarization for GSM;

X axis, horizontal polarization for WCDMA (Main Antenna);

Z axis, vertical polarization for WCDMA (Second Antenna);

Z axis, vertical polarization for LTE (Main Antenna);

X axis, horizontal polarization for LTE (Second Antenna);) and the worst case was recorded.

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

Subsequently, only the worst case emissions are reported.

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

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

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

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



Test modes are chosen to be reported as the worst case configuration below for LTE Band 4/7/38/41:

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	O
	LTE 7	-	-	O	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	O
	LTE 41	-	-	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	O
	LTE 7	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 41	-	-	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	-	O
	LTE 7	-	-	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 38	-	-	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 41	-	-	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	O
	LTE 7	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 41	-	-	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	-	-	-	O	-
	LTE 7	-	-	O	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 38	-	-	O	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 41	-	-	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 38	-	-	O	O	O	O	O	-	-	O	-	-	O	O	O
	LTE 41	-	-	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 38	-	-	O	-	-	O	O	-	-	O	-	-	-	O	-
	LTE 41	-	-	O	-	-	O	O	-	-	O	-	-	-	O	-
Note	1. The mark "O" means that this configuration is chosen for testing. 2. The mark "-" means that this configuration is not testing.															

5 Test Case Results

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.

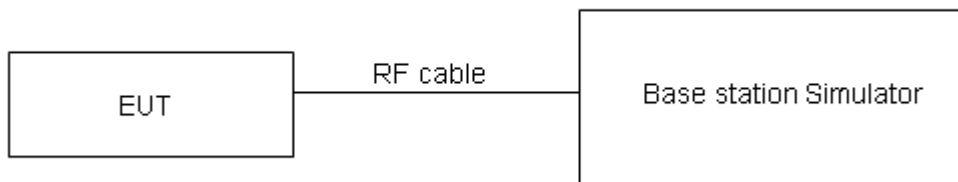
ERP can then be calculated as follows:

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

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

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

Test Setup



Limits

No specific RF power output requirements in part 2.1046.

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

Rule Part 27.50(h) (2) specifies that “Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.”

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 $k = 2$, $U=0.4 \text{ dB}$ for RF power output, $k = 2$, $U= 1.19 \text{ dB}$ for ERP/EIRP.



Test Results

WCDMA Band IV		Maximum Output Power (dBm)			ERP (dBm) (Main antenna)			ERP (dBm) (Second antenna)		
		Channel 1312	Channel 1413	Channel 1513	Channel 1312	Channel 1413	Channel 1513	Channel 1312	Channel 1413	Channel 1513
		1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)	1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)	1712.4 (MHz)	1732.6 (MHz)	1752.6 (MHz)
RMC		24.31	24.27	24.25	23.51	23.47	23.45	22.91	22.87	22.85
AMR		24.37	24.23	24.09	23.57	23.43	23.29	22.97	22.83	22.69
HSDPA	Sub - Test 1	23.93	23.79	23.79	23.13	22.99	22.99	22.53	22.39	22.39
	Sub - Test 2	23.81	23.69	23.83	23.01	22.89	23.03	22.41	22.29	22.43
	Sub - Test 3	23.17	23.31	23.23	22.37	22.51	22.43	21.77	21.91	21.83
	Sub - Test 4	23.31	23.35	23.39	22.51	22.55	22.59	21.91	21.95	21.99
HSUPA	Sub - Test 1	23.79	23.63	23.73	22.99	22.83	22.93	22.39	22.23	22.33
	Sub - Test 2	22.81	22.75	22.89	22.01	21.95	22.09	21.41	21.35	21.49
	Sub - Test 3	23.39	23.17	23.39	22.59	22.37	22.59	21.99	21.77	21.99
	Sub - Test 4	22.89	22.81	22.67	22.09	22.01	21.87	21.49	21.41	21.27
	Sub - Test 5	23.81	23.77	23.89	23.01	22.97	23.09	22.41	22.37	22.49
DC-HSDPA	Sub - Test 1	23.71	23.71	23.91	22.91	22.91	23.11	22.31	22.31	22.51
	Sub - Test 2	23.95	23.69	23.89	23.15	22.89	23.09	22.55	22.29	22.49
	Sub - Test 3	23.27	23.25	23.33	22.47	22.45	22.53	21.87	21.85	21.93
	Sub - Test 4	23.29	23.35	23.11	22.49	22.55	22.31	21.89	21.95	21.71
HSPA+	16QAM	23.67	23.53	23.39	22.87	22.73	22.59	22.27	22.13	21.99



LTE Band 4				Maximum Output Power(dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
BW	Modulation	RB size	RB offset	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	24.03	24.04	23.98	23.23	23.24	23.18	24.03	22.64	22.58
		1	2	24.20	24.14	24.09	23.40	23.34	23.29	22.80	22.74	22.69
		1	5	23.85	23.87	23.82	23.05	23.07	23.02	22.45	22.47	22.42
		3	0	24.16	24.11	24.08	23.36	23.31	23.28	22.76	22.71	22.68
		3	2	24.09	24.12	24.13	23.29	23.32	23.33	22.69	22.72	22.73
		3	3	24.06	24.04	24.02	23.26	23.24	23.22	22.66	22.64	22.62
		6	0	23.16	23.13	23.13	22.36	22.33	22.33	21.76	21.73	21.73
	16QAM	1	0	23.45	23.29	23.25	22.65	22.49	22.45	22.05	21.89	21.85
		1	2	23.43	23.41	23.39	22.63	22.61	22.59	22.03	22.01	21.99
		1	5	23.11	23.11	23.07	22.31	22.31	22.27	21.71	21.71	21.67
		3	0	23.14	23.05	23.05	22.34	22.25	22.25	21.74	21.65	21.65
		3	2	23.12	23.08	23.10	22.32	22.28	22.30	21.72	21.68	21.70
		3	3	23.04	23.07	23.00	22.24	22.27	22.20	21.64	21.67	21.60
		6	0	22.15	22.12	22.12	21.35	21.32	21.32	20.75	20.72	20.72
	64QAM	1	0	22.28	22.24	22.22	21.48	21.44	21.42	20.88	20.84	20.82
		1	2	22.27	22.25	22.23	21.47	21.45	21.43	20.87	20.85	20.83
		1	5	22.33	22.31	22.30	21.53	21.51	21.50	20.93	20.91	20.90
		3	0	22.04	21.99	22.04	21.24	21.19	21.24	20.64	20.59	20.64
		3	2	22.14	22.05	22.15	21.34	21.25	21.35	20.74	20.65	20.75
		3	3	22.08	22.21	22.07	21.28	21.41	21.27	20.68	20.81	20.67
		6	0	21.18	21.20	21.20	20.38	20.40	20.40	19.78	19.80	19.80
BW	Modulation	RB size	RB offset	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	24.05	24.08	24.01	23.25	23.28	23.21	22.65	22.68	22.61
		1	7	24.18	24.17	24.13	23.38	23.37	23.33	22.78	22.77	22.73
		1	14	23.88	23.92	23.86	23.08	23.12	23.06	22.48	22.52	22.46
		8	0	23.26	23.23	23.21	22.46	22.43	22.41	21.86	21.83	21.81
		8	4	23.21	23.22	23.25	22.41	22.42	22.45	21.81	21.82	21.85
		8	7	23.16	23.15	23.12	22.36	22.35	22.32	21.76	21.75	21.72
		15	0	23.16	23.17	23.16	22.36	22.37	22.36	21.76	21.77	21.76
	16QAM	1	0	23.48	23.31	23.28	22.68	22.51	22.48	22.08	21.91	21.88
		1	7	23.46	23.41	23.43	22.66	22.61	22.63	22.06	22.01	22.03



		1	14	23.13	23.15	23.10	22.33	22.35	22.30	21.73	21.75	21.70
		8	0	22.25	22.18	22.17	21.45	21.38	21.37	20.85	20.78	20.77
		8	4	22.23	22.21	22.22	21.43	21.41	21.42	20.83	20.81	20.82
		8	7	22.14	22.19	22.13	21.34	21.39	21.33	20.74	20.79	20.73
		15	0	22.18	22.16	22.15	21.38	21.36	21.35	20.78	20.76	20.75
	64QAM	1	0	22.31	22.26	22.25	21.51	21.46	21.45	20.91	20.86	20.85
		1	7	22.30	22.25	22.25	21.50	21.45	21.45	20.90	20.85	20.85
		1	14	22.35	22.30	22.33	21.55	21.50	21.53	20.95	20.90	20.93
		8	0	21.15	21.12	21.16	20.35	20.32	20.36	19.75	19.72	19.76
		8	4	21.25	21.18	21.27	20.45	20.38	20.47	19.85	19.78	19.87
		8	7	21.18	21.33	21.20	20.38	20.53	20.40	19.78	19.93	19.80
		15	0	21.21	21.24	21.23	20.41	20.44	20.43	19.81	19.84	19.83
BW	Modulation	RB size	RB offset	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	24.02	24.06	23.97	23.22	23.26	23.17	22.62	22.66	22.57
		1	13	24.16	24.13	24.10	23.36	23.33	23.30	22.76	22.73	22.70
		1	24	23.85	23.87	23.82	23.05	23.07	23.02	22.45	22.47	22.42
		12	0	23.23	23.18	23.17	22.43	22.38	22.37	21.83	21.78	21.77
		12	6	23.19	23.18	23.20	22.39	22.38	22.40	21.79	21.78	21.80
		12	13	23.14	23.13	23.08	22.34	22.33	22.28	21.74	21.73	21.68
		25	0	23.16	23.16	23.14	22.36	22.36	22.34	21.76	21.76	21.74
	16QAM	1	0	23.45	23.27	23.25	22.65	22.47	22.45	22.05	21.87	21.85
		1	13	23.43	23.39	23.40	22.63	22.59	22.60	22.03	21.99	22.00
		1	24	23.10	23.13	23.06	22.30	22.33	22.26	21.70	21.73	21.66
		12	0	22.23	22.14	22.14	21.43	21.34	21.34	20.83	20.74	20.74
		12	6	22.20	22.16	22.18	21.40	21.36	21.38	20.80	20.76	20.78
		12	13	22.11	22.14	22.09	21.31	21.34	21.29	20.71	20.74	20.69
		25	0	22.16	22.12	22.10	21.36	21.32	21.30	20.76	20.72	20.70
	64QAM	1	0	22.28	22.26	22.22	21.48	21.46	21.42	20.88	20.86	20.82
		1	13	22.27	22.27	22.22	21.47	21.47	21.42	20.87	20.87	20.82
		1	24	22.36	22.28	22.29	21.56	21.48	21.49	20.96	20.88	20.89
		12	0	21.13	21.08	21.17	20.33	20.28	20.37	19.73	19.68	19.77
		12	6	21.22	21.13	21.23	20.42	20.33	20.43	19.82	19.73	19.83
		12	13	21.15	21.28	21.16	20.35	20.48	20.36	19.75	19.88	19.76
		25	0	21.19	21.20	21.18	20.39	20.40	20.38	19.79	19.80	19.78
BW	Modulation	RB size	RB	Channel/Frequency(MHz)								



	on		offset	20000/ 1715	20175/ 1732.5	20350/ 1750	20000/ 1715	20175/ 1732.5	20350/ 1750	20000/ 1715	20175/ 1732.5	20350/ 1750
10MHz	QPSK	1	0	24.04	24.07	24.00	23.24	23.27	23.20	22.64	22.67	22.60
		1	25	24.19	24.18	24.14	23.39	23.38	23.34	22.79	22.78	22.74
		1	49	23.87	23.91	23.85	23.07	23.11	23.05	22.47	22.51	22.45
		25	0	23.26	23.23	23.21	22.46	22.43	22.41	21.86	21.83	21.81
		25	13	23.22	23.23	23.24	22.42	22.43	22.44	21.82	21.83	21.84
		25	25	23.16	23.17	23.13	22.36	22.37	22.33	21.76	21.77	21.73
		50	0	23.20	23.18	23.18	22.40	22.38	22.38	21.80	21.78	21.78
	16QAM	1	0	23.47	23.30	23.27	22.67	22.50	22.47	22.07	21.90	21.87
		1	25	23.46	23.43	23.43	22.66	22.63	22.63	22.06	22.03	22.03
		1	49	23.13	23.15	23.09	22.33	22.35	22.29	21.73	21.75	21.69
		25	0	22.26	22.19	22.18	21.46	21.39	21.38	20.86	20.79	20.78
		25	13	22.22	22.20	22.21	21.42	21.40	21.41	20.82	20.80	20.81
		25	25	22.14	22.19	22.13	21.34	21.39	21.33	20.74	20.79	20.73
		50	0	22.19	22.17	22.14	21.39	21.37	21.34	20.79	20.77	20.74
	64QAM	1	0	22.30	22.25	22.24	21.50	21.45	21.44	20.90	20.85	20.84
		1	25	22.30	22.27	22.25	21.50	21.47	21.45	20.90	20.87	20.85
		1	49	22.35	22.30	22.32	21.55	21.50	21.52	20.95	20.90	20.92
		25	0	21.16	21.13	21.17	20.36	20.33	20.37	19.76	19.73	19.77
		25	13	21.24	21.17	21.26	20.44	20.37	20.46	19.84	19.77	19.86
		25	25	21.18	21.33	21.20	20.38	20.53	20.40	19.78	19.93	19.80
		50	0	21.22	21.25	21.22	20.42	20.45	20.42	19.82	19.85	19.82
BW	Modulation	RB size	RB offset	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	24.03	24.03	23.98	23.23	23.23	23.18	22.63	22.63	22.58
		1	38	24.17	24.17	24.11	23.37	23.37	23.31	22.77	22.77	22.71
		1	74	23.84	23.86	23.81	23.04	23.06	23.01	22.44	22.46	22.41
		36	0	23.24	23.19	23.18	22.44	22.39	22.38	21.84	21.79	21.78
		36	18	23.19	23.18	23.20	22.39	22.38	22.40	21.79	21.78	21.80
		36	39	23.13	23.14	23.09	22.33	22.34	22.29	21.73	21.74	21.69
		75	0	23.18	23.14	23.13	22.38	22.34	22.33	21.78	21.74	21.73
	16QAM	1	0	23.42	23.28	23.25	22.62	22.48	22.45	22.02	21.88	21.85
		1	38	23.44	23.40	23.41	22.64	22.60	22.61	22.04	22.00	22.01
		1	74	23.10	23.11	23.06	22.30	22.31	22.26	21.70	21.71	21.66
		36	0	22.23	22.17	22.15	21.43	21.37	21.35	20.83	20.77	20.75



		36	18	22.19	22.15	22.17	21.39	21.35	21.37	20.79	20.75	20.77
		36	39	22.12	22.15	22.10	21.32	21.35	21.30	20.72	20.75	20.70
		75	0	22.16	22.12	22.10	21.36	21.32	21.30	20.76	20.72	20.70
	64QAM	1	0	22.25	22.23	22.22	21.45	21.43	21.42	20.85	20.83	20.82
		1	38	22.28	22.24	22.23	21.48	21.44	21.43	20.88	20.84	20.83
		1	74	22.36	22.29	22.33	21.56	21.49	21.53	20.96	20.89	20.93
		36	0	21.15	21.15	21.18	20.35	20.35	20.38	19.75	19.75	19.78
		36	18	21.22	21.14	21.25	20.42	20.34	20.45	19.82	19.74	19.85
		36	39	21.16	21.29	21.17	20.36	20.49	20.37	19.76	19.89	19.77
		75	0	21.19	21.20	21.18	20.39	20.40	20.38	19.79	19.80	19.78
BW	Modulation	RB size	RB offset	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	24.00	23.99	23.95	23.20	23.19	23.15	22.60	22.59	22.55
		1	50	24.16	24.13	24.09	23.36	23.33	23.29	22.76	22.73	22.69
		1	99	23.82	23.85	23.78	23.02	23.05	22.98	22.42	22.45	22.38
		50	0	23.21	23.14	23.14	22.41	22.34	22.34	21.81	21.74	21.74
		50	25	23.17	23.14	23.17	22.37	22.34	22.37	21.77	21.74	21.77
		50	50	23.10	23.09	23.05	22.30	22.29	22.25	21.70	21.69	21.65
		100	0	23.15	23.09	23.09	22.35	22.29	22.29	21.75	21.69	21.69
	16QAM	1	0	23.22	23.24	23.20	22.42	22.44	22.40	21.82	21.84	21.80
		1	50	23.40	23.38	23.37	22.60	22.58	22.57	22.00	21.98	21.97
		1	99	23.08	23.08	23.04	22.28	22.28	22.24	21.68	21.68	21.64
		50	0	22.20	22.13	22.12	21.40	21.33	21.32	20.80	20.73	20.72
		50	25	22.16	22.13	22.14	21.36	21.33	21.34	20.76	20.73	20.74
		50	50	22.09	22.10	22.06	21.29	21.30	21.26	20.69	20.70	20.66
		100	0	22.14	22.08	22.07	21.34	21.28	21.27	20.74	20.68	20.67
	64QAM	1	0	22.23	22.19	22.17	21.43	21.39	21.37	20.83	20.79	20.77
		1	50	22.24	22.22	22.19	21.44	21.42	21.39	20.84	20.82	20.79
		1	99	22.30	22.23	22.27	21.50	21.43	21.47	20.90	20.83	20.87
		50	0	21.10	21.07	21.11	20.30	20.27	20.31	19.70	19.67	19.71
		50	25	21.18	21.10	21.19	20.38	20.30	20.39	19.78	19.70	19.79
		50	50	21.13	21.24	21.13	20.33	20.44	20.33	19.73	19.84	19.73
		100	0	21.17	21.16	21.15	20.37	20.36	20.35	19.77	19.76	19.75



LTE Band 7				Maximum Output Power(dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
BW	Modulation	RB size	RB offset	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	23.75	23.73	23.62	25.35	25.33	25.22	22.05	22.03	21.92
		1	13	23.97	23.91	23.87	25.57	25.51	25.47	22.27	22.21	22.17
		1	24	23.75	23.67	23.65	25.35	25.27	25.25	22.05	21.97	21.95
		12	0	22.94	22.93	22.89	24.54	24.53	24.49	21.24	21.23	21.19
		12	6	23.02	23.02	22.98	24.62	24.62	24.58	21.32	21.32	21.28
		12	13	23.01	22.96	22.88	24.61	24.56	24.48	21.31	21.26	21.18
		25	0	22.94	22.99	22.91	24.54	24.59	24.51	21.24	21.29	21.21
	16QAM	1	0	23.21	22.91	22.85	24.81	24.51	24.45	21.51	21.21	21.15
		1	13	23.19	23.13	23.05	24.79	24.73	24.65	21.49	21.43	21.35
		1	24	22.95	22.90	22.77	24.55	24.50	24.37	21.25	21.20	21.07
		12	0	21.93	21.87	21.83	23.53	23.47	23.43	20.23	20.17	20.13
		12	6	22.03	21.98	21.92	23.63	23.58	23.52	20.33	20.28	20.22
		12	13	21.97	21.95	21.82	23.57	23.55	23.42	20.27	20.25	20.12
		25	0	21.92	21.92	21.82	23.52	23.52	23.42	20.22	20.22	20.12
	64QAM	1	0	21.84	21.87	21.90	23.44	23.47	23.50	20.14	20.17	20.20
		1	13	21.95	21.99	22.10	23.55	23.59	23.70	20.25	20.29	20.40
		1	24	22.14	22.10	22.22	23.74	23.70	23.82	20.44	20.40	20.52
		12	0	20.60	20.63	20.75	22.20	22.23	22.35	18.90	18.93	19.05
		12	6	20.56	20.61	20.74	22.16	22.21	22.34	18.86	18.91	19.04
		12	13	20.71	20.71	20.86	22.31	22.31	22.46	19.01	19.01	19.16
		25	0	20.51	20.68	20.79	22.11	22.28	22.39	18.81	18.98	19.09
BW	Modulation	RB size	RB offset	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	23.77	23.74	23.65	25.37	25.34	25.25	22.07	22.04	21.95
		1	25	24.00	23.96	23.91	25.60	25.56	25.51	22.30	22.26	22.21
		1	49	23.77	23.71	23.68	25.37	25.31	25.28	22.07	22.01	21.98
		25	0	22.97	22.98	22.93	24.57	24.58	24.53	21.27	21.28	21.23
		25	13	23.05	23.07	23.02	24.65	24.67	24.62	21.35	21.37	21.32
		25	25	23.03	23.00	22.93	24.63	24.60	24.53	21.33	21.30	21.23
		50	0	22.98	23.01	22.95	24.58	24.61	24.55	21.28	21.31	21.25
	16QAM	1	0	23.23	22.94	22.87	24.83	24.54	24.47	21.53	21.24	21.17



		1	25	23.22	23.17	23.08	24.82	24.77	24.68	21.52	21.47	21.38
		1	49	22.98	22.92	22.80	24.58	24.52	24.40	21.28	21.22	21.10
		25	0	21.96	21.92	21.87	23.56	23.52	23.47	20.26	20.22	20.17
		25	13	22.05	22.02	21.95	23.65	23.62	23.55	20.35	20.32	20.25
		25	25	22.00	22.00	21.86	23.60	23.60	23.46	20.30	20.30	20.16
		50	0	21.95	21.97	21.86	23.55	23.57	23.46	20.25	20.27	20.16
		1	0	21.86	21.86	21.92	23.46	23.46	23.52	20.16	20.16	20.22
	64QAM	1	25	21.98	21.99	22.13	23.58	23.59	23.73	20.28	20.29	20.43
		1	49	22.13	22.12	22.25	23.73	23.72	23.85	20.43	20.42	20.55
		25	0	20.63	20.68	20.75	22.23	22.28	22.35	18.93	18.98	19.05
		25	13	20.58	20.65	20.77	22.18	22.25	22.37	18.88	18.95	19.07
		25	25	20.74	20.76	20.90	22.34	22.36	22.50	19.04	19.06	19.20
		50	0	20.54	20.73	20.83	22.14	22.33	22.43	18.84	19.03	19.13
BW	Modulation	RB size	RB offset	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	23.76	23.70	23.63	25.36	25.30	25.23	22.06	22.00	21.93
		1	38	23.98	23.95	23.88	25.58	25.55	25.48	22.28	22.25	22.18
		1	74	23.74	23.66	23.64	25.34	25.26	25.24	22.04	21.96	21.94
		36	0	22.95	22.94	22.90	24.55	24.54	24.50	21.25	21.24	21.20
		36	18	23.02	23.02	22.98	24.62	24.62	24.58	21.32	21.32	21.28
		36	39	23.00	22.97	22.89	24.60	24.57	24.49	21.30	21.27	21.19
		75	0	22.96	22.97	22.90	24.56	24.57	24.50	21.26	21.27	21.20
	16QAM	1	0	23.18	22.92	22.85	24.78	24.52	24.45	21.48	21.22	21.15
		1	38	23.20	23.14	23.06	24.80	24.74	24.66	21.50	21.44	21.36
		1	74	22.95	22.88	22.77	24.55	24.48	24.37	21.25	21.18	21.07
		36	0	21.93	21.90	21.84	23.53	23.50	23.44	20.23	20.20	20.14
		36	18	22.02	21.97	21.91	23.62	23.57	23.51	20.32	20.27	20.21
		36	39	21.98	21.96	21.83	23.58	23.56	23.43	20.28	20.26	20.13
		75	0	21.92	21.92	21.82	23.52	23.52	23.42	20.22	20.22	20.12
	64QAM	1	0	21.81	21.84	21.90	23.41	23.44	23.50	20.11	20.14	20.20
		1	38	21.96	21.96	22.11	23.56	23.56	23.71	20.26	20.26	20.41
		1	74	22.14	22.11	22.26	23.74	23.71	23.86	20.44	20.41	20.56
		36	0	20.62	20.70	20.76	22.22	22.30	22.36	18.92	19.00	19.06
		36	18	20.56	20.62	20.76	22.16	22.22	22.36	18.86	18.92	19.06
		36	39	20.72	20.72	20.87	22.32	22.32	22.47	19.02	19.02	19.17
		75	0	20.51	20.68	20.79	22.11	22.28	22.39	18.81	18.98	19.09



BW	Modulation	RB size	RB offset	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	23.73	23.66	23.60	25.33	25.26	25.20	22.03	21.96	21.90
		1	50	23.97	23.91	23.86	25.57	25.51	25.46	22.27	22.21	22.16
		1	99	23.72	23.65	23.61	25.32	25.25	25.21	22.02	21.95	21.91
		50	0	22.92	22.89	22.86	24.52	24.49	24.46	21.22	21.19	21.16
		50	25	23.00	22.98	22.95	24.60	24.58	24.55	21.30	21.28	21.25
		50	50	22.97	22.92	22.85	24.57	24.52	24.45	21.27	21.22	21.15
		100	0	22.93	22.92	22.86	24.53	24.52	24.46	21.23	21.22	21.16
	16QAM	1	0	22.94	22.88	22.80	24.54	24.48	24.40	21.24	21.18	21.10
		1	50	23.16	23.12	23.02	24.76	24.72	24.62	21.46	21.42	21.32
		1	99	22.93	22.85	22.75	24.53	24.45	24.35	21.23	21.15	21.05
		50	0	21.90	21.86	21.81	23.50	23.46	23.41	20.20	20.16	20.11
		50	25	21.99	21.95	21.88	23.59	23.55	23.48	20.29	20.25	20.18
		50	50	21.95	21.91	21.79	23.55	23.51	23.39	20.25	20.21	20.09
		100	0	21.90	21.88	21.79	23.50	23.48	23.39	20.20	20.18	20.09
	64QAM	1	0	21.79	21.80	21.85	23.39	23.40	23.45	20.09	20.10	20.15
		1	50	21.92	21.94	22.07	23.52	23.54	23.67	20.22	20.24	20.37
		1	99	22.08	22.05	22.20	23.68	23.65	23.80	20.38	20.35	20.50
		50	0	20.57	20.62	20.69	22.17	22.22	22.29	18.87	18.92	18.99
		50	25	20.52	20.58	20.70	22.12	22.18	22.30	18.82	18.88	19.00
		50	50	20.69	20.67	20.83	22.29	22.27	22.43	18.99	18.97	19.13
		100	0	20.49	20.64	20.76	22.09	22.24	22.36	18.79	18.94	19.06

LTE Band 38				Maximum Output Power(dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
BW	Modulation	RB size	RB offset	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	24.13	24.13	24.13	24.13	24.13	24.13	22.53	22.53	22.53
		1	13	24.39	24.38	24.47	24.39	24.38	24.47	22.79	22.78	22.87
		1	24	24.13	24.23	24.32	24.13	24.23	24.32	22.53	22.63	22.72
		12	0	23.36	23.33	23.37	23.36	23.33	23.37	21.76	21.73	21.77
		12	6	23.37	23.38	23.48	23.37	23.38	23.48	21.77	21.78	21.88
		12	13	23.31	23.40	23.47	23.31	23.40	23.47	21.71	21.80	21.87
		25	0	23.34	23.42	23.47	23.34	23.42	23.47	21.74	21.82	21.87



	16QAM	1	0	23.59	23.26	23.33	23.59	23.26	23.33	21.99	21.66	21.73
		1	13	23.57	23.59	23.65	23.57	23.59	23.65	21.97	21.99	22.05
		1	24	23.30	23.42	23.56	23.30	23.42	23.56	21.70	21.82	21.96
		12	0	22.39	22.33	22.39	22.39	22.33	22.39	20.79	20.73	20.79
		12	6	22.40	22.39	22.49	22.40	22.39	22.49	20.80	20.79	20.89
		12	13	22.32	22.42	22.50	22.32	22.42	22.50	20.72	20.82	20.90
		25	0	22.36	22.40	22.47	22.36	22.40	22.47	20.76	20.80	20.87
	64QAM	1	0	22.12	22.08	22.10	22.12	22.08	22.10	20.52	20.48	20.50
		1	13	22.24	22.22	22.16	22.24	22.22	22.16	20.64	20.62	20.56
		1	24	22.11	22.03	22.04	22.11	22.03	22.04	20.51	20.43	20.44
		12	0	21.19	21.19	21.26	21.19	21.19	21.26	19.59	19.59	19.66
		12	6	21.27	21.22	21.29	21.27	21.22	21.29	19.67	19.62	19.69
		12	13	21.12	21.16	21.20	21.12	21.16	21.20	19.52	19.56	19.60
		25	0	21.21	21.25	21.19	21.21	21.25	21.19	19.61	19.65	19.59
BW	Modulation	RB size	RB offset	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	24.15	24.14	24.16	24.15	24.14	24.16	22.55	22.54	22.56
		1	25	24.42	24.43	24.51	24.42	24.43	24.51	22.82	22.83	22.91
		1	49	24.15	24.27	24.35	24.15	24.27	24.35	22.55	22.67	22.75
		25	0	23.39	23.38	23.41	23.39	23.38	23.41	21.79	21.78	21.81
		25	13	23.40	23.43	23.52	23.40	23.43	23.52	21.80	21.83	21.92
		25	25	23.33	23.44	23.52	23.33	23.44	23.52	21.73	21.84	21.92
		50	0	23.38	23.44	23.51	23.38	23.44	23.51	21.78	21.84	21.91
	16QAM	1	0	23.61	23.29	23.35	23.61	23.29	23.35	22.01	21.69	21.75
		1	25	23.60	23.63	23.68	23.60	23.63	23.68	22.00	22.03	22.08
		1	49	23.33	23.44	23.59	23.33	23.44	23.59	21.73	21.84	21.99
		25	0	22.42	22.38	22.43	22.42	22.38	22.43	20.82	20.78	20.83
		25	13	22.42	22.43	22.52	22.42	22.43	22.52	20.82	20.83	20.92
		25	25	22.35	22.47	22.54	22.35	22.47	22.54	20.75	20.87	20.94
		50	0	22.39	22.45	22.51	22.39	22.45	22.51	20.79	20.85	20.91
	64QAM	1	0	22.14	22.07	22.12	22.14	22.07	22.12	20.54	20.47	20.52
		1	25	22.27	22.22	22.19	22.27	22.22	22.19	20.67	20.62	20.59
		1	49	22.10	22.05	22.07	22.10	22.05	22.07	20.50	20.45	20.47
		25	0	21.22	21.24	21.26	21.22	21.24	21.26	19.62	19.64	19.66
		25	13	21.29	21.26	21.32	21.29	21.26	21.32	19.69	19.66	19.72
		25	25	21.15	21.21	21.24	21.15	21.21	21.24	19.55	19.61	19.64



		50	0	21.24	21.30	21.23	21.24	21.30	21.23	19.64	19.70	19.63
BW	Modulation	RB size	RB offset	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	24.14	24.10	24.14	24.14	24.10	24.14	22.54	22.50	22.54
		1	38	24.40	24.42	24.48	24.40	24.42	24.48	22.80	22.82	22.88
		1	74	24.12	24.22	24.31	24.12	24.22	24.31	22.52	22.62	22.71
		36	0	23.37	23.34	23.38	23.37	23.34	23.38	21.77	21.74	21.78
		36	18	23.37	23.38	23.48	23.37	23.38	23.48	21.77	21.78	21.88
		36	39	23.30	23.41	23.48	23.30	23.41	23.48	21.70	21.81	21.88
		75	0	23.36	23.40	23.46	23.36	23.40	23.46	21.76	21.80	21.86
	16QAM	1	0	23.56	23.27	23.33	23.56	23.27	23.33	21.96	21.67	21.73
		1	38	23.58	23.60	23.66	23.58	23.60	23.66	21.98	22.00	22.06
		1	74	23.30	23.40	23.56	23.30	23.40	23.56	21.70	21.80	21.96
		36	0	22.39	22.36	22.40	22.39	22.36	22.40	20.79	20.76	20.80
		36	18	22.39	22.38	22.48	22.39	22.38	22.48	20.79	20.78	20.88
		36	39	22.33	22.43	22.51	22.33	22.43	22.51	20.73	20.83	20.91
		75	0	22.36	22.40	22.47	22.36	22.40	22.47	20.76	20.80	20.87
	64QAM	1	0	22.09	22.05	22.10	22.09	22.05	22.10	20.49	20.45	20.50
		1	38	22.25	22.19	22.17	22.25	22.19	22.17	20.65	20.59	20.57
		1	74	22.11	22.04	22.08	22.11	22.04	22.08	20.51	20.44	20.48
		36	0	21.21	21.26	21.27	21.21	21.26	21.27	19.61	19.66	19.67
		36	18	21.27	21.23	21.31	21.27	21.23	21.31	19.67	19.63	19.71
		36	39	21.13	21.17	21.21	21.13	21.17	21.21	19.53	19.57	19.61
		75	0	21.21	21.25	21.19	21.21	21.25	21.19	19.61	19.65	19.59
BW	Modulation	RB size	RB offset	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	24.11	24.06	24.11	24.11	24.06	24.11	22.51	22.46	22.51
		1	50	24.39	24.52	24.66	24.39	24.52	24.66	22.79	22.92	23.06
		1	99	24.10	24.21	24.28	24.10	24.21	24.28	22.50	22.61	22.68
		50	0	23.34	23.29	23.34	23.34	23.29	23.34	21.74	21.69	21.74
		50	25	23.35	23.34	23.45	23.35	23.34	23.45	21.75	21.74	21.85
		50	50	23.27	23.36	23.44	23.27	23.36	23.44	21.67	21.76	21.84
		100	0	23.33	23.35	23.42	23.33	23.35	23.42	21.73	21.75	21.82
	16QAM	1	0	23.28	23.23	23.28	23.28	23.23	23.28	21.68	21.63	21.68
		1	50	23.54	23.58	23.62	23.54	23.58	23.62	21.94	21.98	22.02



		1	99	23.28	23.37	23.54	23.28	23.37	23.54	21.68	21.77	21.94
		50	0	22.36	22.32	22.37	22.36	22.32	22.37	20.76	20.72	20.77
		50	25	22.36	22.36	22.45	22.36	22.36	22.45	20.76	20.76	20.85
		50	50	22.30	22.38	22.47	22.30	22.38	22.47	20.70	20.78	20.87
		100	0	22.34	22.36	22.44	22.34	22.36	22.44	20.74	20.76	20.84
	64QAM	1	0	22.07	22.01	22.05	22.07	22.01	22.05	20.47	20.41	20.45
		1	50	22.21	22.17	22.13	22.21	22.17	22.13	20.61	20.57	20.53
		1	99	22.05	21.98	22.02	22.05	21.98	22.02	20.45	20.38	20.42
		50	0	21.16	21.18	21.20	21.16	21.18	21.20	19.56	19.58	19.60
		50	25	21.23	21.19	21.25	21.23	21.19	21.25	19.63	19.59	19.65
		50	50	21.10	21.12	21.17	21.10	21.12	21.17	19.50	19.52	19.57
		100	0	21.19	21.21	21.16	21.19	21.21	21.16	19.59	19.61	19.56

LTE Band 41				Maximum Output Power(dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				39675/ 2498.5	40620/ 2593	41565/ 2687.5	39675/ 2498.5	40620/ 2593	41565/ 2687.5	39675/ 2498.5	40620/ 2593	41565/ 2687.5
5MHz	QPSK	1	0	24.53	24.45	24.37	24.53	24.45	24.37	22.93	22.85	22.77
		1	13	24.80	24.64	24.66	24.80	24.64	24.66	23.20	23.04	23.06
		1	24	24.45	24.34	24.39	24.45	24.34	24.39	22.85	22.74	22.79
		12	0	23.57	23.48	23.45	23.57	23.48	23.45	21.97	21.88	21.85
		12	6	23.53	23.45	23.46	23.53	23.45	23.46	21.93	21.85	21.86
		12	13	23.56	23.42	23.47	23.56	23.42	23.47	21.96	21.82	21.87
		25	0	23.50	23.51	23.49	23.50	23.51	23.49	21.90	21.91	21.89
	16QAM	1	0	23.12	23.32	23.03	23.12	23.32	23.03	21.52	21.72	21.43
		1	13	23.38	23.53	23.29	23.38	23.53	23.29	21.78	21.93	21.69
		1	24	23.07	23.27	22.99	23.07	23.27	22.99	21.47	21.67	21.39
		12	0	22.61	22.43	22.52	22.61	22.43	22.52	21.01	20.83	20.92
		12	6	22.60	22.42	22.51	22.60	22.42	22.51	21.00	20.82	20.91
		12	13	22.57	22.42	22.51	22.57	22.42	22.51	20.97	20.82	20.91
		25	0	22.53	22.48	22.47	22.53	22.48	22.47	20.93	20.88	20.87
	64QAM	1	0	22.53	22.45	22.46	22.53	22.45	22.46	20.93	20.85	20.86
		1	13	22.47	22.44	22.42	22.47	22.44	22.42	20.87	20.84	20.82
		1	24	22.37	22.43	22.44	22.37	22.43	22.44	20.77	20.83	20.84
		12	0	21.67	21.67	21.66	21.67	21.67	21.66	20.07	20.07	20.06
		12	6	21.65	21.62	21.65	21.65	21.62	21.65	20.05	20.02	20.05



		12	13	21.60	21.60	21.59	21.60	21.60	21.59	20.00	20.00	19.99
		25	0	21.62	21.68	21.65	21.62	21.68	21.65	20.02	20.08	20.05
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				39700/ 2501	40620/ 2593	41540/ 2685	39700/ 2501	40620/ 2593	41540/ 2685	39700/ 2501	40620/ 2593	41540/ 2685
10MHz	QPSK	1	0	24.55	24.46	24.40	24.55	24.46	24.40	22.95	22.86	22.80
		1	25	24.83	24.69	24.70	24.83	24.69	24.70	23.23	23.09	23.10
		1	49	24.47	24.38	24.42	24.47	24.38	24.42	22.87	22.78	22.82
		25	0	23.60	23.53	23.49	23.60	23.53	23.49	22.00	21.93	21.89
		25	13	23.56	23.50	23.50	23.56	23.50	23.50	21.96	21.90	21.90
		25	25	23.58	23.46	23.52	23.58	23.46	23.52	21.98	21.86	21.92
		50	0	23.58	23.53	23.53	23.58	23.53	23.53	21.98	21.93	21.93
	16QAM	1	0	23.14	23.35	23.05	23.14	23.35	23.05	21.54	21.75	21.45
		1	25	23.41	23.57	23.32	23.41	23.57	23.32	21.81	21.97	21.72
		1	49	23.10	23.29	23.02	23.10	23.29	23.02	21.50	21.69	21.42
		25	0	22.64	22.48	22.56	22.64	22.48	22.56	21.04	20.88	20.96
		25	13	22.62	22.46	22.54	22.62	22.46	22.54	21.02	20.86	20.94
		25	25	22.60	22.47	22.55	22.60	22.47	22.55	21.00	20.87	20.95
		50	0	22.56	22.53	22.51	22.56	22.53	22.51	20.96	20.93	20.91
	64QAM	1	0	22.55	22.48	22.48	22.55	22.48	22.48	20.95	20.88	20.88
		1	25	22.50	22.48	22.45	22.50	22.48	22.45	20.90	20.88	20.85
		1	49	22.40	22.45	22.47	22.40	22.45	22.47	20.80	20.85	20.87
		25	0	21.70	21.72	21.70	21.70	21.72	21.70	20.10	20.12	20.10
		25	13	21.67	21.66	21.68	21.67	21.66	21.68	20.07	20.06	20.08
		25	25	21.63	21.65	21.63	21.63	21.65	21.63	20.03	20.05	20.03
		50	0	21.65	21.73	21.69	21.65	21.73	21.69	20.05	20.13	20.09
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				39725/ 2503.5	40620/ 2593	41515/ 2682.5	39725/ 2503.5	40620/ 2593	41515/ 2682.5	39725/ 2503.5	40620/ 2593	41515/ 2682.5
15MHz	QPSK	1	0	24.54	24.42	24.38	24.54	24.42	24.38	22.94	22.82	22.78
		1	38	24.81	24.68	24.67	24.81	24.68	24.67	23.21	23.08	23.07
		1	74	24.44	24.33	24.38	24.44	24.33	24.38	22.84	22.73	22.78
		36	0	23.58	23.49	23.46	23.58	23.49	23.46	21.98	21.89	21.86
		36	18	23.53	23.45	23.46	23.53	23.45	23.46	21.93	21.85	21.86
		36	39	23.55	23.43	23.48	23.55	23.43	23.48	21.95	21.83	21.88
		75	0	23.56	23.49	23.48	23.56	23.49	23.48	21.96	21.89	21.88
	16QAM	1	0	23.09	23.33	23.03	23.09	23.33	23.03	21.49	21.73	21.43



		1	38	23.39	23.54	23.30	23.39	23.54	23.30	21.79	21.94	21.70
		1	74	23.07	23.25	22.99	23.07	23.25	22.99	21.47	21.65	21.39
		36	0	22.61	22.46	22.53	22.61	22.46	22.53	21.01	20.86	20.93
		36	18	22.59	22.41	22.50	22.59	22.41	22.50	20.99	20.81	20.90
		36	39	22.58	22.43	22.52	22.58	22.43	22.52	20.98	20.83	20.92
		75	0	22.53	22.48	22.47	22.53	22.48	22.47	20.93	20.88	20.87
		1	0	22.50	22.46	22.46	22.50	22.46	22.46	20.90	20.86	20.86
	64QAM	1	38	22.48	22.45	22.43	22.48	22.45	22.43	20.88	20.85	20.83
		1	74	22.37	22.41	22.44	22.37	22.41	22.44	20.77	20.81	20.84
		36	0	21.67	21.70	21.67	21.67	21.70	21.67	20.07	20.10	20.07
		36	18	21.64	21.61	21.64	21.64	21.61	21.64	20.04	20.01	20.04
		36	39	21.61	21.61	21.60	21.61	21.61	21.60	20.01	20.01	20.00
		75	0	21.62	21.68	21.65	21.62	21.68	21.65	20.02	20.08	20.05
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				39750/ 2506	40620/ 2593	41490/ 2680	39750/ 2506	40620/ 2593	41490/ 2680	39750/ 2506	40620/ 2593	41490/ 2680
20MHz	QPSK	1	0	24.51	24.38	24.35	24.51	24.38	24.35	22.91	22.78	22.75
		1	50	24.80	24.64	24.65	24.80	24.64	24.65	23.20	23.04	23.05
		1	99	24.42	24.32	24.35	24.42	24.32	24.35	22.82	22.72	22.75
		50	0	23.55	23.44	23.42	23.55	23.44	23.42	21.95	21.84	21.82
		50	25	23.51	23.41	23.43	23.51	23.41	23.43	21.91	21.81	21.83
		50	50	23.52	23.38	23.44	23.52	23.38	23.44	21.92	21.78	21.84
		100	0	23.53	23.44	23.44	23.53	23.44	23.44	21.93	21.84	21.84
	16QAM	1	0	23.07	23.29	22.98	23.07	23.29	22.98	21.47	21.69	21.38
		1	50	23.35	23.52	23.26	23.35	23.52	23.26	21.75	21.92	21.66
		1	99	23.05	23.22	22.97	23.05	23.22	22.97	21.45	21.62	21.37
		50	0	22.58	22.42	22.50	22.58	22.42	22.50	20.98	20.82	20.90
		50	25	22.56	22.39	22.47	22.56	22.39	22.47	20.96	20.79	20.87
		50	50	22.55	22.38	22.48	22.55	22.38	22.48	20.95	20.78	20.88
		100	0	22.51	22.44	22.44	22.51	22.44	22.44	20.91	20.84	20.84
	64QAM	1	0	22.48	22.42	22.41	22.48	22.42	22.41	20.88	20.82	20.81
		1	50	22.44	22.43	22.39	22.44	22.43	22.39	20.84	20.83	20.79
		1	99	22.35	22.38	22.42	22.35	22.38	22.42	20.75	20.78	20.82
		50	0	21.64	21.66	21.64	21.64	21.66	21.64	20.04	20.06	20.04
		50	25	21.61	21.59	21.61	21.61	21.59	21.61	20.01	19.99	20.01
		50	50	21.58	21.56	21.56	21.58	21.56	21.56	19.98	19.96	19.96
		100	0	21.60	21.64	21.62	21.60	21.64	21.62	20.00	20.04	20.02



CA_7C	PCC	SCC	PCC RB		SCC1 RB		Conducted Power (dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
	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	23.56	22.85	21.15	25.16	24.45	22.75	21.86	21.15	19.45
			50	0	100	0	21.78	20.79	20.68	23.38	22.39	22.28	20.08	19.09	18.98
	2525.6	2540	1	49	1	0	23.57	23.42	21.07	25.17	25.02	22.67	21.87	21.72	19.37
			50	0	100	0	21.75	20.63	20.63	23.35	22.23	22.23	20.05	18.93	18.93
	2545.6	2560	1	49	1	0	23.79	23.30	21.03	25.39	24.9	22.63	22.09	21.6	19.33
			50	0	100	0	21.86	20.60	20.67	23.46	22.2	22.27	20.16	18.9	18.97
20MHz+ 10MHz	2510	2524.4	1	99	1	0	23.53	22.60	23.60	25.13	24.2	25.2	21.83	20.9	21.9
			100	0	50	0	21.76	20.59	20.73	23.36	22.19	22.33	20.06	18.89	19.03
	2530.1	2544.5	1	99	1	0	23.70	23.63	23.74	25.3	25.23	25.34	22	21.93	22.04
			100	0	50	0	21.66	20.76	21.64	23.26	22.36	23.24	19.96	19.06	19.94
	2550.1	2564.5	1	99	1	0	23.64	22.48	20.71	25.24	24.08	22.31	21.94	20.78	19.01
			100	0	50	0	21.85	20.73	20.43	23.45	22.33	22.03	20.15	19.03	18.73
15MHz+ 15MHz	2507.5	2522.5	1	74	1	0	23.67	22.92	20.94	25.27	24.52	22.54	21.97	21.22	19.24
			75	0	75	0	21.89	20.80	20.60	23.49	22.4	22.2	20.19	19.1	18.9
	2527.5	2542.5	1	74	1	0	23.57	22.94	20.72	25.17	24.54	22.32	21.87	21.24	19.02
			75	0	75	0	21.74	20.60	20.72	23.34	22.2	22.32	20.04	18.9	19.02
	2547.5	2562.5	1	74	1	0	23.80	23.16	20.77	25.4	24.76	22.37	22.1	21.46	19.07
			75	0	75	0	21.82	20.60	20.99	23.42	22.2	22.59	20.12	18.9	19.29
15MHz+ 20MHz	2507.8	2524.9	1	74	1	0	23.76	22.29	20.98	25.36	23.89	22.58	22.06	20.59	19.28
			75	0	100	0	21.41	20.77	20.33	23.01	22.37	21.93	19.71	19.07	18.63
	2525.3	2542.4	1	74	1	0	23.38	22.46	21.19	24.98	24.06	22.79	21.68	20.76	19.49
			75	0	100	0	21.73	20.80	20.71	23.33	22.4	22.31	20.03	19.1	19.01
	2542.9	2560	1	74	1	0	23.72	23.21	21.06	25.32	24.81	22.66	22.02	21.51	19.36
			75	0	100	0	21.82	20.94	20.30	23.42	22.54	21.9	20.12	19.24	18.6
20MHz+ 15MHz	2510	2527.1	1	99	1	0	23.62	23.42	21.29	25.22	25.02	22.89	21.92	21.72	19.59
			100	0	75	0	21.95	20.82	20.28	23.55	22.42	21.88	20.25	19.12	18.58
	2527.6	2544.7	1	99	1	0	23.44	23.03	21.02	25.04	24.63	22.62	21.74	21.33	19.32
			100	0	75	0	21.86	20.80	20.75	23.46	22.4	22.35	20.16	19.1	19.05
	2545.1	2562.2	1	99	1	0	23.82	23.05	21.08	25.42	24.65	22.68	22.12	21.35	19.38
			100	0	75	0	21.86	20.88	20.74	23.46	22.48	22.34	20.16	19.18	19.04
20MHz+ 20MHz	2510	2529.8	1	99	1	0	23.75	23.11	20.78	25.35	24.71	22.38	22.05	21.41	19.08
			1	0	1	99	14.86	15.98	15.21	16.46	17.58	16.81	13.16	14.28	13.51
			100	0	100	0	21.97	20.88	20.36	23.57	22.48	21.96	20.27	19.18	18.66
	2525.1	2544.9	1	99	1	0	23.26	23.21	20.99	24.86	24.81	22.59	21.56	21.51	19.29
			1	0	1	99	15.19	15.93	15.29	16.79	17.53	16.89	13.49	14.23	13.59



			100	0	100	0	21.82	20.77	20.71	23.42	22.37	22.31	20.12	19.07	19.01
	2540.2	2560	1	99	1	0	23.49	23.08	20.88	25.09	24.68	22.48	21.79	21.38	19.18
			1	0	1	99	15.20	15.47	15.29	16.8	17.07	16.89	13.5	13.77	13.59
			100	0	100	0	21.96	20.72	20.68	23.56	22.32	22.28	20.26	19.02	18.98

CA_38C	PCC	SCC	PCC RB		SCC1 RB		Conducted Power (dBm)			EIRP (dBm) (Main antenna)			EIRP (dBm) (Second antenna)		
	Frequency (MHz)	Frequency (MHz)	Size	Offset	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
15MHz+ 15MHz	2577.5	2592.5	1	74	1	0	24.26	23.73	21.42	24.26	23.73	21.42	22.66	22.13	19.82
			75	0	75	0	22.27	21.26	21.26	22.27	21.26	21.26	20.67	19.66	19.66
	2587.5	2602.5	1	74	1	0	24.14	23.66	21.42	24.14	23.66	21.42	22.54	22.06	19.82
			75	0	75	0	22.32	21.26	21.30	22.32	21.26	21.30	20.72	19.66	19.7
	2597.5	2612.5	1	74	1	0	24.24	23.73	21.55	24.24	23.73	21.55	22.64	22.13	19.95
			75	0	75	0	22.31	21.31	21.30	22.31	21.31	21.30	20.71	19.71	19.7
20MHz+ 20MHz	2580	2599.8	1	99	1	0	24.24	23.75	21.47	24.24	23.75	21.47	22.64	22.15	19.87
			1	0	1	99	15.77	16.38	16.08	15.77	16.38	16.08	14.17	14.78	14.48
			100	0	100	0	22.32	21.27	21.27	22.32	21.27	21.27	20.72	19.67	19.67
	2585.1	2604.9	1	99	1	0	24.19	23.80	21.35	24.19	23.80	21.35	22.59	22.2	19.75
			1	0	1	99	15.77	16.37	16.06	15.77	16.37	16.06	14.17	14.77	14.46
			100	0	100	0	22.37	21.35	21.33	22.37	21.35	21.33	20.77	19.75	19.73
	2590.2	2610	1	99	1	0	24.24	23.69	21.64	24.24	23.69	21.64	22.64	22.09	20.04
			1	0	1	99	15.81	16.40	16.11	15.81	16.40	16.11	14.21	14.8	14.51
			100	0	100	0	22.41	21.38	21.42	22.41	21.38	21.42	20.81	19.78	19.82

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 51 kHz, VBW is set to 160 kHz for WCDMA Band IV.

RBW is set to 30 kHz, VBW is set to 91 kHz for LTE Band 4/(1.4MHz).

RBW is set to 62 kHz, VBW is set to 180 kHz for LTE Band 4/(3MHz).

RBW is set to 100 kHz, VBW is set to 300 kHz for LTE Band 4/7/38/41 (5MHz).

RBW is set to 200 kHz, VBW is set to 620 kHz for LTE Band 4/7/38/41 (10MHz).

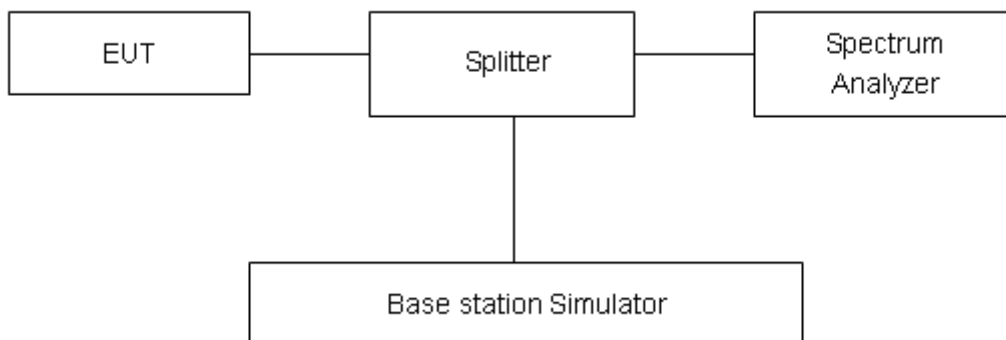
RBW is set to 300 kHz, VBW is set to 910 kHz for LTE Band 4/7/38/41 (15MHz).

RBW is set to 430 kHz, VBW is set to 1.2 MHz for LTE Band 4/7/38/41 (20MHz).

RBW is set to 1 MHz, VBW is set to 3 MHz for CA_7C/CA_38C

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 Result

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
WCDMA Band IV (RMC)	1312	1712.4	4.1551	4.663
	1413	1732.6	4.1658	4.661
	1513	1752.6	4.1626	4.678

LTE Band 4						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	19957	1710.7	1.0975	1.2690
			20175	1732.5	1.0946	1.2890
			20393	1754.3	1.0923	1.2810
		3	19965	1711.5	2.6928	2.9240
			20175	1732.5	2.6888	2.9210
			20385	1753.5	2.6950	2.9230
		5	19975	1712.5	4.5221	4.9330
			20175	1732.5	4.5195	4.8860
			20375	1752.5	4.5043	4.9020
		10	20000	1715	9.0047	9.7380
			20175	1732.5	8.9867	9.7410
			20350	1750	8.9789	9.6910
		15	20025	1717.5	13.4530	14.5800
			20175	1732.5	13.4570	14.5500
			20325	1747.5	13.5000	14.4490
		20	20050	1720	17.9490	19.2900
			20175	1732.5	18.0180	19.1700
			20300	1745	17.9120	19.2600
	16QAM	1.4	19957	1710.7	1.0977	1.2920
			20175	1732.5	1.0986	1.3080
			20393	1754.3	1.0961	1.2780
		3	19965	1711.5	2.6853	2.9540
			20175	1732.5	2.6907	2.9180
			20385	1753.5	2.6818	2.9330
		5	19975	1712.5	4.5069	4.8870
			20175	1732.5	4.5179	4.9050
			20375	1752.5	4.5015	4.9150
		10	20000	1715	8.9846	9.6900
			20175	1732.5	8.9837	9.6950
			20350	1750	8.9877	9.7020



		15	20025	1717.5	13.4760	14.5200
			20175	1732.5	13.4640	14.4200
			20325	1747.5	13.4610	14.4500
		20	20050	1720	17.9290	19.2400
			20175	1732.5	17.9350	19.1900
			20300	1745	17.9590	19.3000
	64QAM	1.4	19957	1710.7	1.0958	1.3000
			20175	1732.5	1.0920	1.2690
			20393	1754.3	1.0943	1.2630
		3	19965	1711.5	2.6859	2.9170
			20175	1732.5	2.6978	2.9280
			20385	1753.5	2.6789	2.9350
		5	19975	1712.5	4.4984	4.8960
			20175	1732.5	4.5236	4.9270
			20375	1752.5	4.4996	4.9030
		10	20000	1715	9.0028	9.6850
			20175	1732.5	8.9923	9.6920
			20350	1750	8.9961	9.6350
		15	20025	1717.5	13.4940	14.5200
			20175	1732.5	13.4680	14.6100
			20325	1747.5	13.4520	14.5500
		20	20050	1720	17.9430	19.3000
			20175	1732.5	17.8990	19.2400
			20300	1745	18.0120	19.3200

LTE Band 7						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	20775	2502.5	4.5198	4.9450
			21100	2535	4.5002	4.9430
			21425	2567.5	4.5107	4.9310
		10	20800	2505	8.9917	9.6980
			21100	2535	8.9949	9.7310
			21400	2565	9.0189	9.8470
		15	20825	2507.5	13.4860	14.5200
			21100	2535	13.4670	14.4500
			21375	2562.5	13.4770	14.6000
		20	20850	2510	17.9790	19.5200
			21100	2535	17.9570	19.3700
			21350	2560	17.9410	19.2900



	16QAM	5	20775	2502.5	4.4948	4.8590
			21100	2535	4.5058	4.9450
			21425	2567.5	4.5032	4.8970
		10	20800	2505	8.9816	9.5970
			21100	2535	8.9895	9.7080
			21400	2565	8.9981	9.7230
		15	20825	2507.5	13.4640	14.3800
			21100	2535	13.4520	14.4900
			21375	2562.5	13.4420	14.5300
		20	20850	2510	17.9440	19.3700
			21100	2535	18.0640	19.1300
			21350	2560	17.9410	19.2600
	64QAM	5	20775	2502.5	4.5190	4.8890
			21100	2535	4.5136	4.9610
			21425	2567.5	4.5067	4.8710
		10	20800	2505	8.9859	9.6120
			21100	2535	9.0004	9.7210
			21400	2565	8.9978	9.7250
		15	20825	2507.5	13.4590	14.5400
			21100	2535	13.5120	14.4000
			21375	2562.5	13.4880	14.6300
		20	20850	2510	17.9300	19.2800
			21100	2535	17.9800	19.3100
			21350	2560	17.9740	19.4400

LTE Band 38						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	37775	2572.5	4.5099	5.0700
			38000	2595	4.5196	4.8590
			38225	2617.5	4.5005	4.8790
		10	37800	2575	9.0100	9.7460
			38000	2595	8.9990	9.6730
			38200	2615	9.0026	9.7720
		15	37825	2577.5	13.4450	14.3500
			38000	2595	13.4630	15.0000
			38175	2612.5	13.4400	14.6600
		20	37850	2580	17.9270	19.1600
			38000	2595	17.9710	19.1100
			38150	2610	17.9350	19.9000



	16QAM	5	37775	2572.5	4.4954	5.1970
			38000	2595	4.4987	4.8950
			38225	2617.5	4.4982	4.8820
		10	37800	2575	9.0084	9.7360
			38000	2595	8.9738	10.0600
			38200	2615	8.9963	10.2500
		15	37825	2577.5	13.4660	14.5100
			38000	2595	13.5310	15.0300
			38175	2612.5	13.4660	14.7900
		20	37850	2580	17.9370	19.0700
			38000	2595	17.9310	19.1600
			38150	2610	17.9540	19.0800
	64QAM	5	37775	2572.5	4.4976	4.8780
			38000	2595	4.5092	4.8200
			38225	2617.5	4.5105	4.8930
		10	37800	2575	9.0119	9.6330
			38000	2595	8.9770	10.1800
			38200	2615	9.0110	11.0400
		15	37825	2577.5	13.4760	14.4800
			38000	2595	13.4750	14.4600
			38175	2612.5	13.4460	14.9700
		20	37850	2580	17.9510	19.2300
			38000	2595	17.9850	19.8700
			38150	2610	17.9170	19.2100

LTE Band 41						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	39675	2498.5	4.5057	5.0520
			40620	2593	4.5008	4.9310
			41565	2687.5	4.5200	5.0560
		10	39700	2501	8.9936	9.8170
			40620	2593	9.0030	10.2000
			41540	2685	8.9775	9.8000
		15	39725	2503.5	13.4850	15.1200
			40620	2593	13.4520	15.1500
			41515	2682.5	13.4400	15.4000
		20	39750	2506	17.9570	19.8300
			40620	2593	17.9310	20.2200
			41490	2680	17.9630	20.0100



	16QAM	5	39675	2498.5	4.5154	4.9520
			40620	2593	4.5026	5.1550
			41565	2687.5	4.5101	5.0610
		10	39700	2501	8.9948	9.9010
			40620	2593	9.0006	9.8910
			41540	2685	8.9788	9.8040
		15	39725	2503.5	13.4970	15.0600
			40620	2593	13.5080	14.8000
			41515	2682.5	13.5200	16.1600
		20	39750	2506	17.9610	19.5000
			40620	2593	17.9810	20.4100
			41490	2680	17.9570	19.8000
	64QAM	5	40065	2537.5	4.5065	4.9380
			40640	2595	4.5074	5.0480
			41215	2652.5	4.4995	4.9710
		10	40090	2540	8.9871	10.1300
			40640	2595	8.9862	9.7520
			41190	2650	8.9784	9.9840
		15	40115	2542.5	13.5060	15.4400
			40640	2595	13.5000	15.6800
			41165	2647.5	13.5130	16.6300
		20	40140	2545	17.9740	19.6400
			40640	2595	17.9830	20.5400
			41140	2645	17.9400	19.5900



CA_7C	PCC		SCC1		PCC RB	SCC1 RB	Bandwidth (MHz)	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)			99% Power	-26dBc
CA_7C_10MHz+20MHz_QPSK	21006	2525.6	21150	2540	50#0	100#0	28.03	32.67
CA_7C_10MHz+20MHz_16QAM	21006	2525.6	21150	2540	50#0	100#0	27.98	32.21
CA_7C_10MHz+20MHz_64QAM	21006	2525.6	21150	2540	50#0	100#0	27.89	31.01
CA_7C_20MHz+10MHz_QPSK	21051	2530.1	21195	2544.5	100#0	50#0	28.09	31.57
CA_7C_20MHz+10MHz_16QAM	21051	2530.1	21195	2544.5	100#0	50#0	28.04	31.40
CA_7C_20MHz+10MHz_64QAM	21051	2530.1	21195	2544.5	100#0	50#0	27.97	31.22
CA_7C_15MHz+10MHz_QPSK	21051	2530.1	21171	2542.1	75#0	50#0	23.61	27.46
CA_7C_15MHz+10MHz_16QAM	21025	2530.1	21175	2542.1	75#0	50#0	23.57	30.51
CA_7C_15MHz+10MHz_64QAM	21025	2530.1	21175	2542.1	75#0	50#0	23.58	38.02
CA_7C_15MHz+15MHz_QPSK	21025	2527.5	21175	2542.5	75#0	75#0	27.73	21.47
CA_7C_15MHz+15MHz_16QAM	21025	2527.5	21175	2542.5	75#0	75#0	28.58	30.65
CA_7C_15MHz+15MHz_64QAM	21025	2527.5	21175	2542.5	75#0	75#0	28.51	30.64
CA_7C_15MHz+20MHz_QPSK	21003	2525.3	21174	2542.4	75#0	100#0	32.84	35.71
CA_7C_15MHz+20MHz_16QAM	21003	2525.3	21174	2542.4	75#0	100#0	32.79	34.98
CA_7C_15MHz+20MHz_64QAM	21003	2525.3	21174	2542.4	75#0	100#0	32.72	34.94
CA_7C_20MHz+15MHz_QPSK	21026	2527.6	21197	2544.7	100#0	75#0	32.95	35.12
CA_7C_20MHz+15MHz_16QAM	21026	2527.6	21197	2544.7	100#0	75#0	32.91	36.78
CA_7C_20MHz+15MHz_64QAM	21026	2527.6	21197	2544.7	100#0	75#0	32.72	37.55
CA_7C_20MHz+20MHz_QPSK	21001	2525.1	21199	2544.9	100#0	100#0	37.66	42.55
CA_7C_20MHz+20MHz_16QAM	21001	2525.1	21199	2544.9	100#0	100#0	37.70	40.01
CA_7C_20MHz+20MHz_64QAM	21001	2525.1	21199	2544.9	100#0	100#0	37.56	40.00

CA_38C	PCC		SCC1		PCC RB	SCC1 RB	Bandwidth (MHz)	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)			99% Power	-26dBc
CA_38C_15MHz+15MHz_QPSK	37925	2587.5	38075	2602.5	75#0	75#0	28.59	31.93
CA_38C_15MHz+15MHz_16QAM	37925	2587.5	38075	2602.5	75#0	75#0	28.60	31.19
CA_38C_15MHz+15MHz_64QAM	37925	2587.5	38075	2602.5	75#0	75#0	28.55	31.86
CA_38C_20MHz+20MHz_QPSK	37901	2585.1	38099	2604.9	100#0	100#0	37.63	41.80
CA_38C_20MHz+20MHz_16QAM	37901	2585.1	38099	2604.9	100#0	100#0	37.68	39.83
CA_38C_20MHz+20MHz_64QAM	37901	2585.1	38099	2604.9	100#0	100#0	37.62	40.31



WCDMA Band IV CH-Low



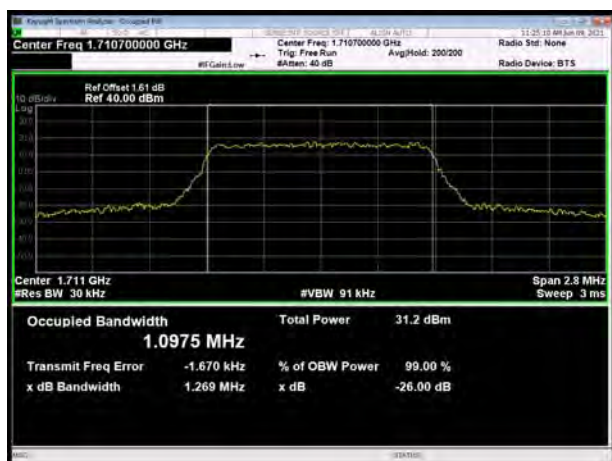
WCDMA Band IV CH Middle



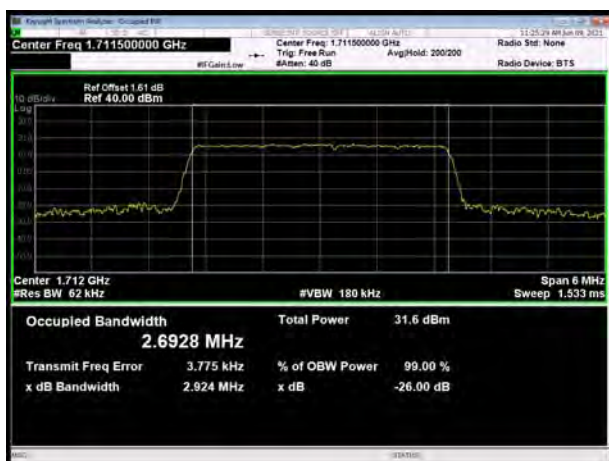
WCDMA Band IV CH High



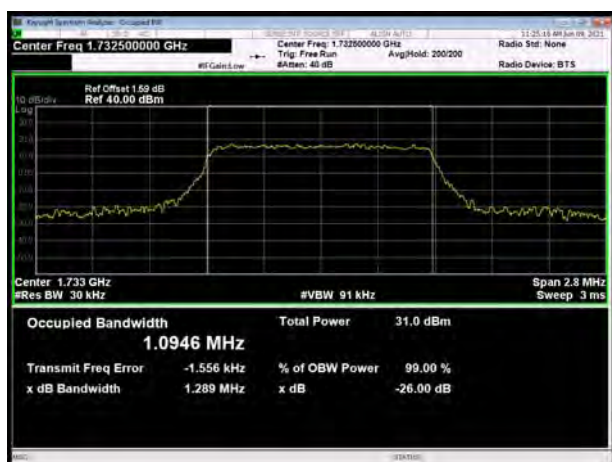
LTE Band 4 QPSK 1.4MHz CH-Low



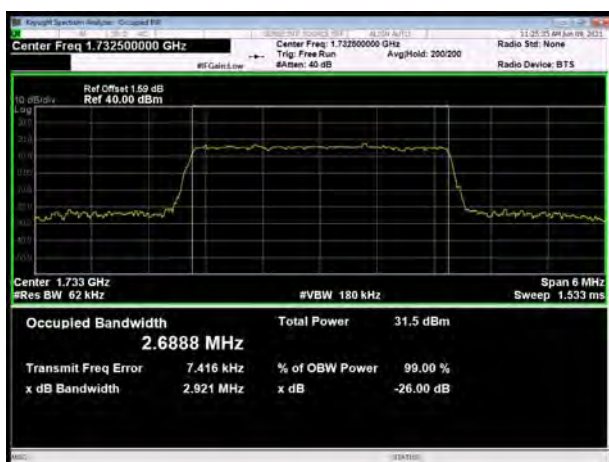
LTE Band 4 QPSK 3MHz CH-Low



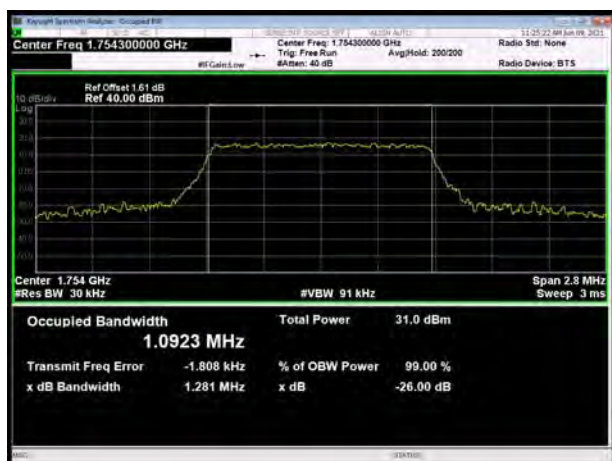
LTE Band 4 QPSK 1.4MHz CH-Middle



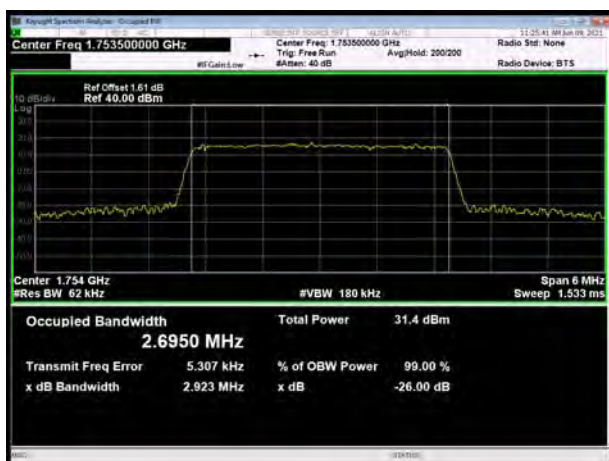
LTE Band 4 QPSK 3MHz CH-Middle



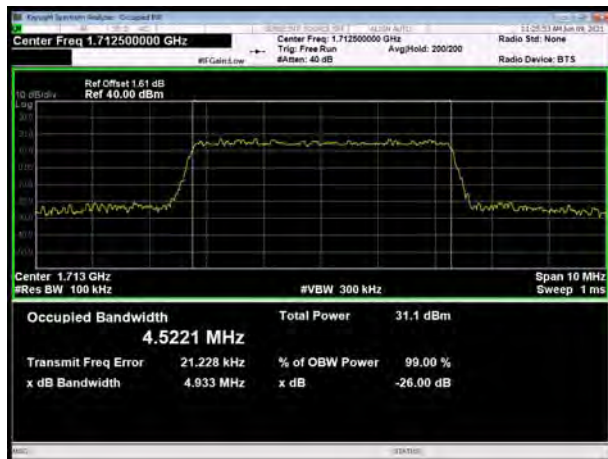
LTE Band 4 QPSK 1.4MHz CH-High



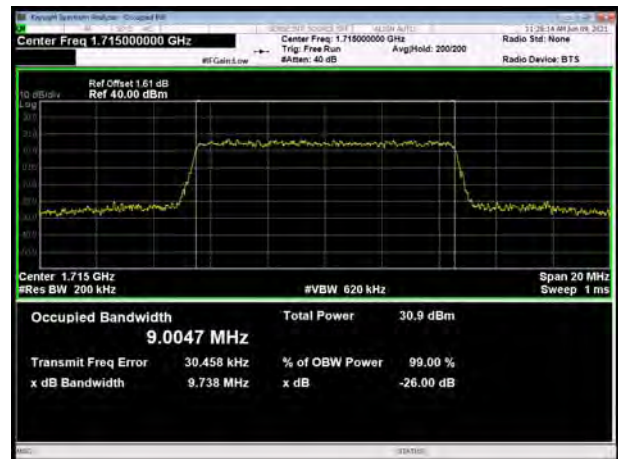
LTE Band 4 QPSK 3MHz CH-High



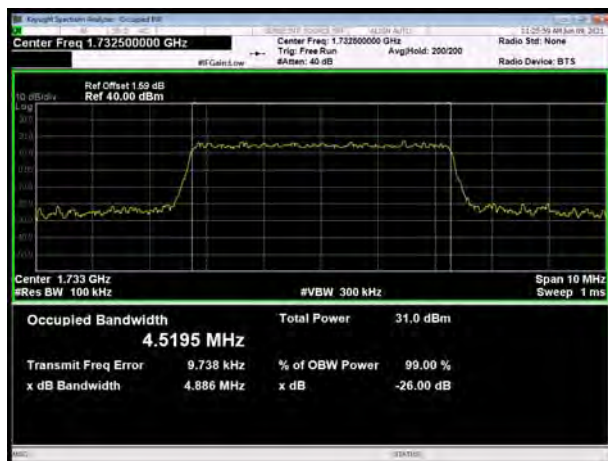
LTE Band 4 QPSK 5MHz CH-Low



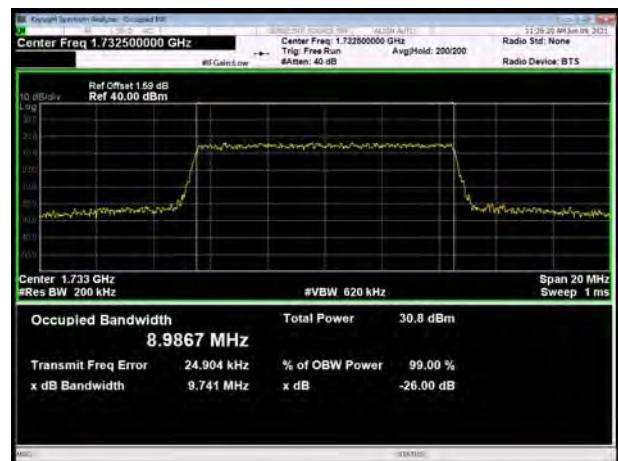
LTE Band 4 QPSK 10MHz CH-Low



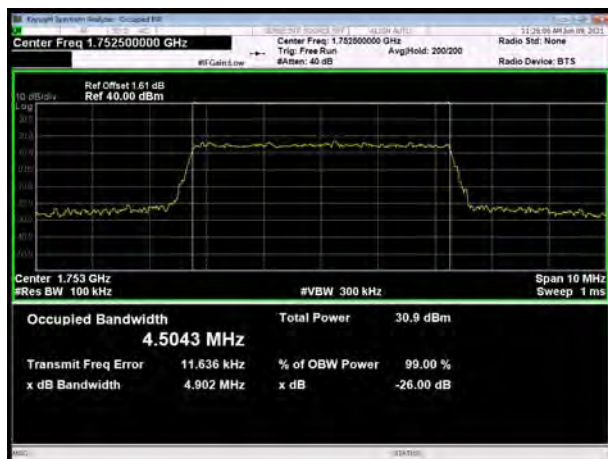
LTE Band 4 QPSK 5MHz CH-Middle



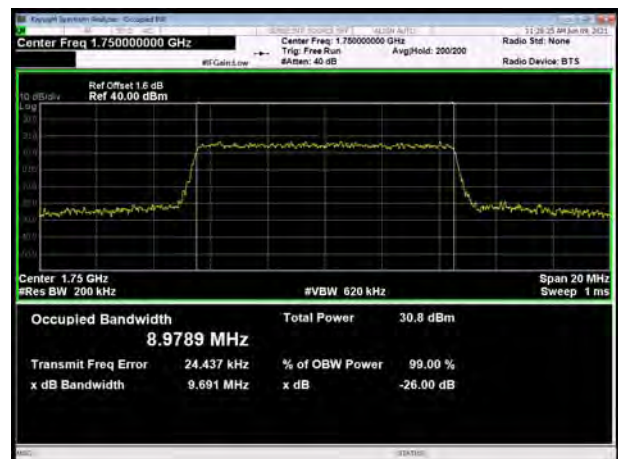
LTE Band 4 QPSK 10MHz CH-Middle



LTE Band 4 QPSK 5MHz CH-High

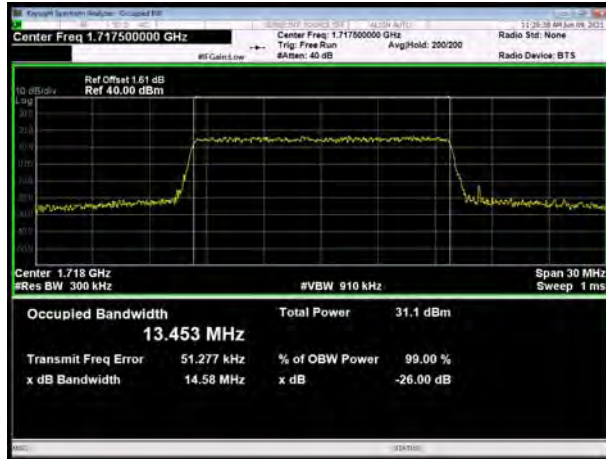


LTE Band 4 QPSK 10MHz CH-High

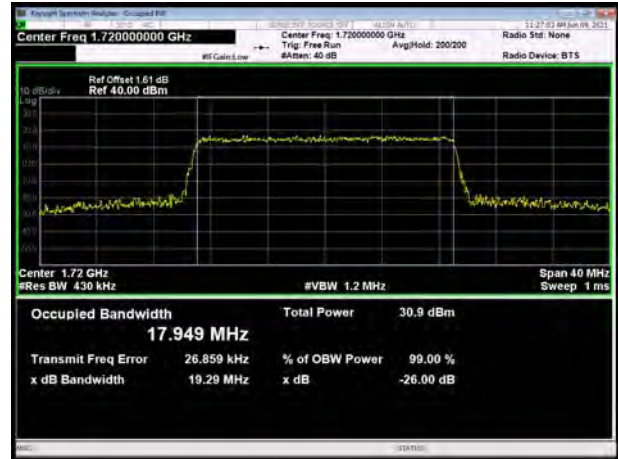




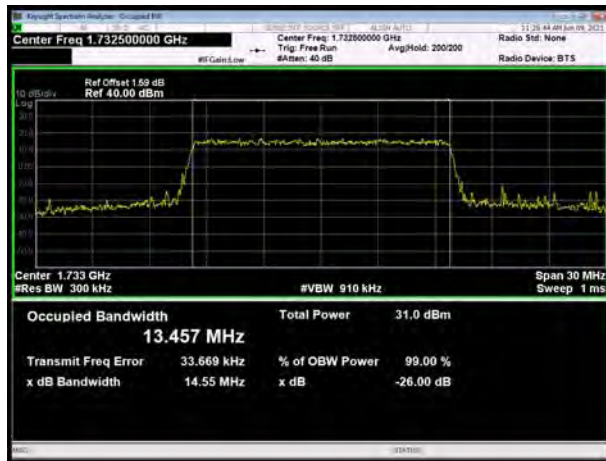
LTE Band 4 QPSK 15MHz CH-Low



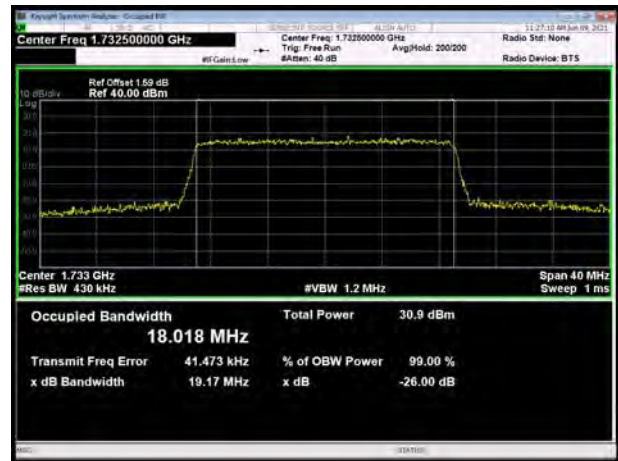
LTE Band 4 QPSK 20MHz CH-Low



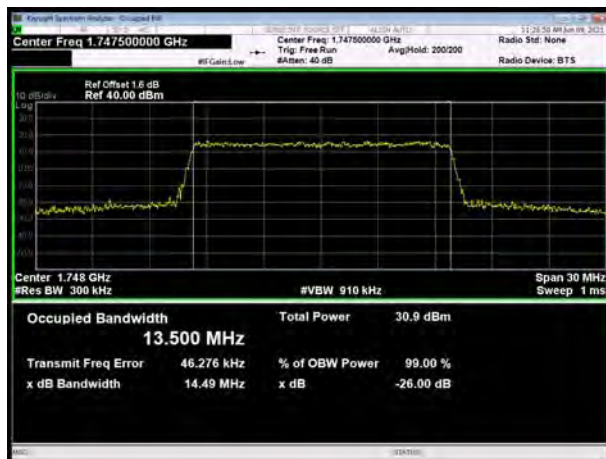
LTE Band 4 QPSK 15MHz CH-Middle



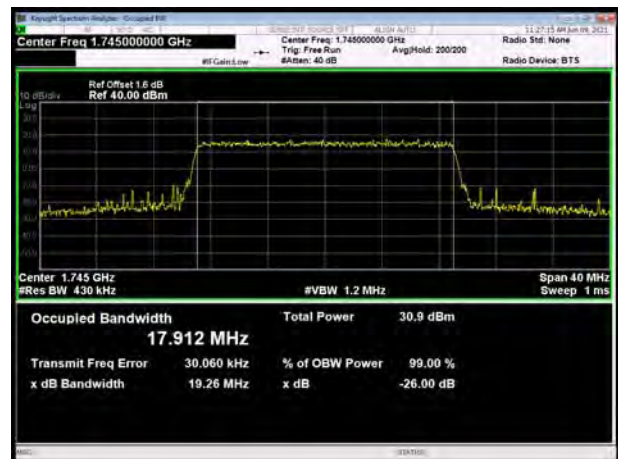
LTE Band 4 QPSK 20MHz CH-Middle



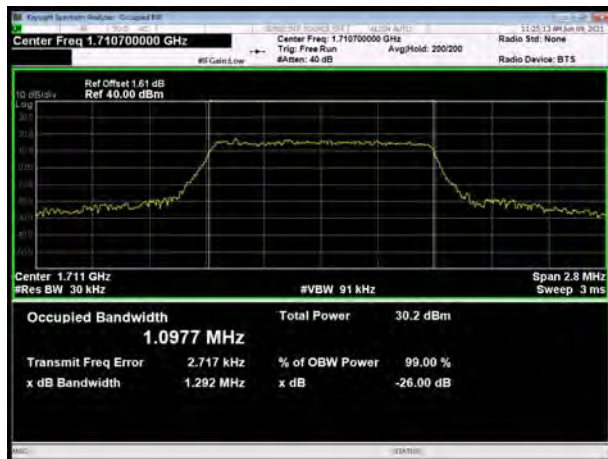
LTE Band 4 QPSK 15MHz CH-High



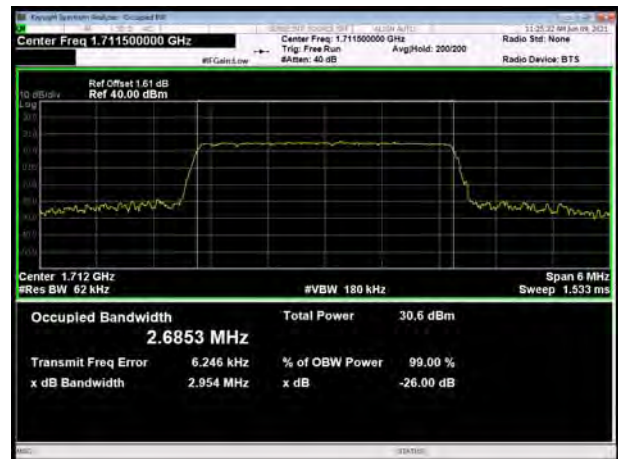
LTE Band 4 QPSK 20MHz CH-High



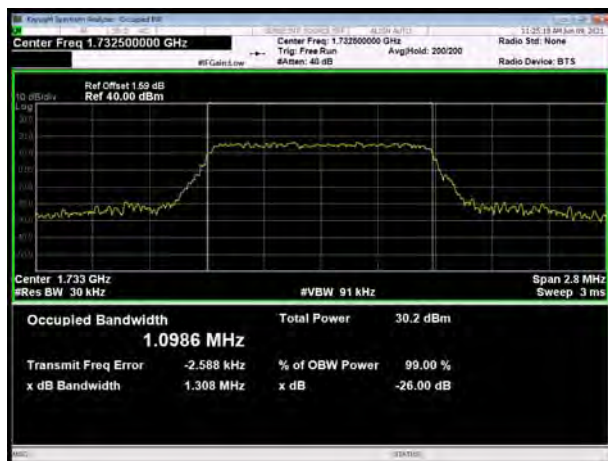
LTE Band 4 16QAM 1.4MHz CH-Low



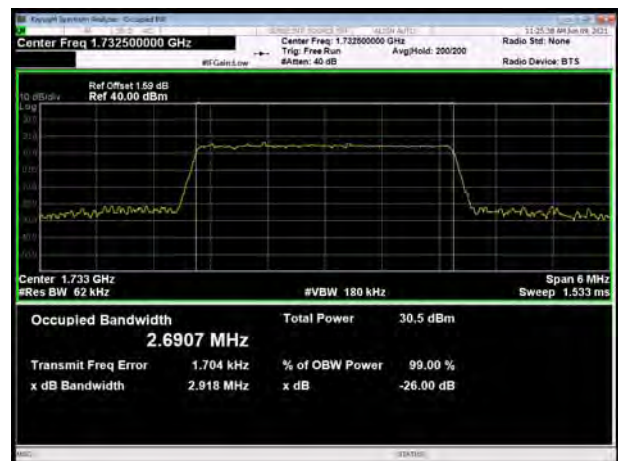
LTE Band 4 16QAM 3MHz CH-Low



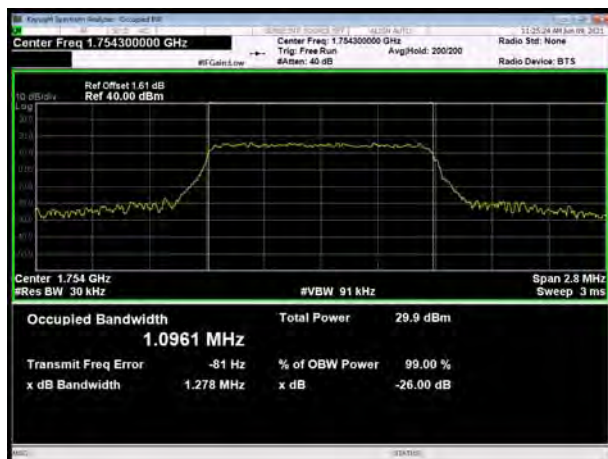
LTE Band 4 16QAM 1.4MHz CH-Middle



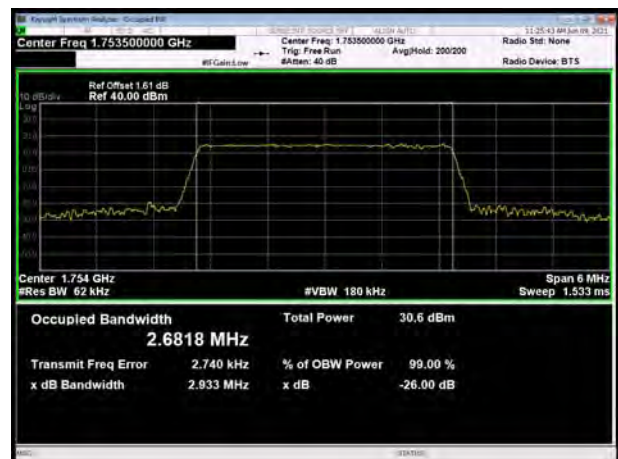
LTE Band 4 16QAM 3MHz CH-Middle



LTE Band 4 16QAM 1.4MHz CH-High

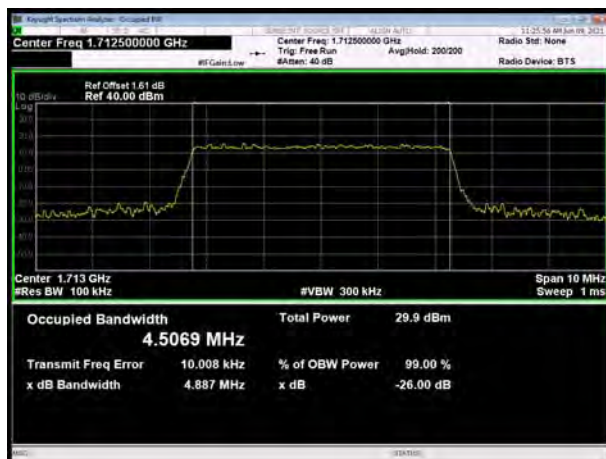


LTE Band 4 16QAM 3MHz CH-High

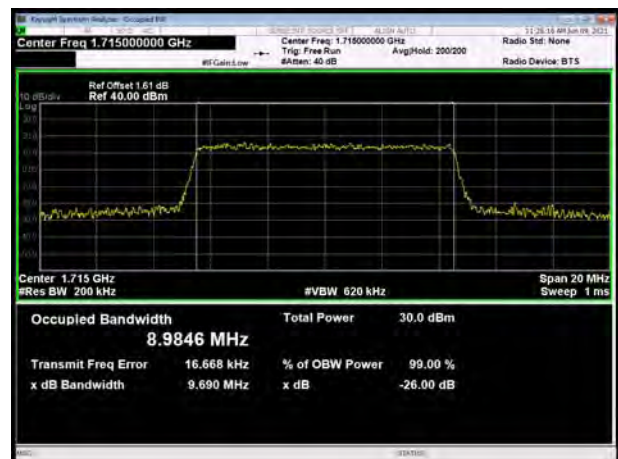




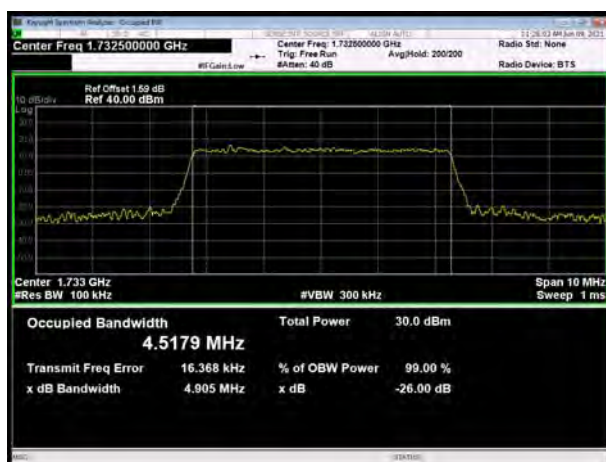
LTE Band 4 16QAM 5MHz CH-Low



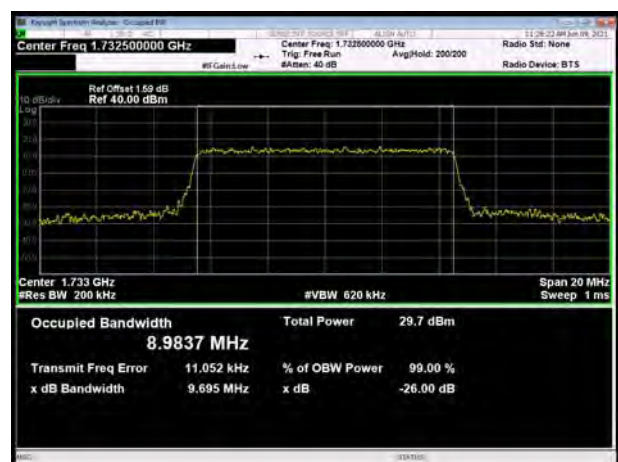
LTE Band 4 16QAM 10MHz CH-Low



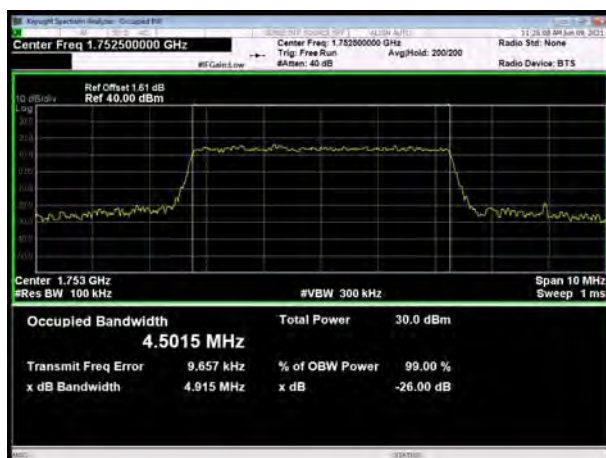
LTE Band 4 16QAM 5MHz CH-Middle



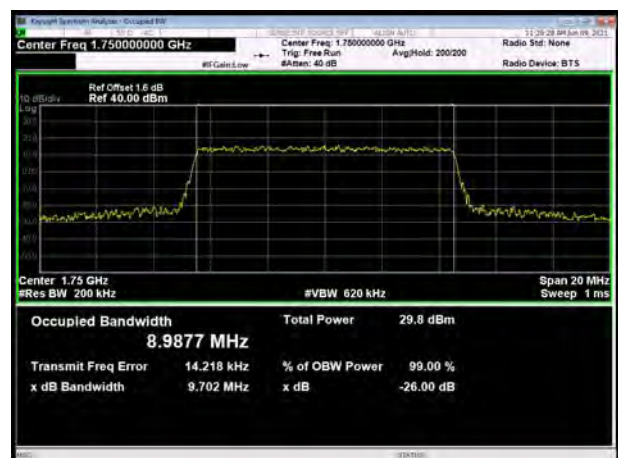
LTE Band 4 16QAM 10MHz CH-Middle



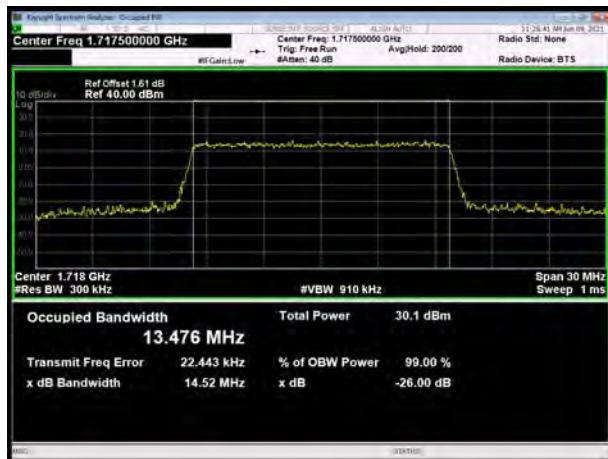
LTE Band 4 16QAM 5MHz CH-High



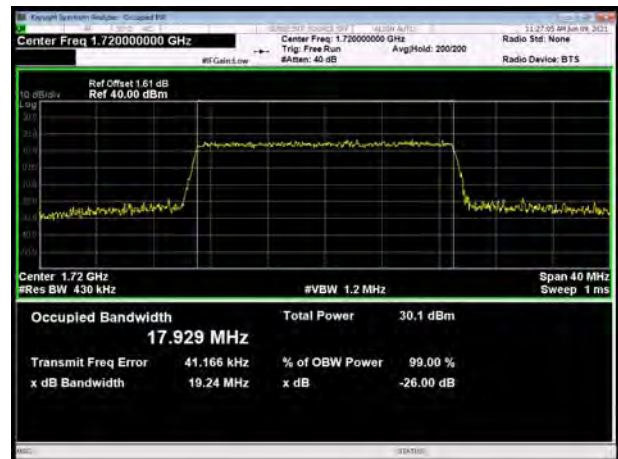
LTE Band 4 16QAM 10MHz CH-High



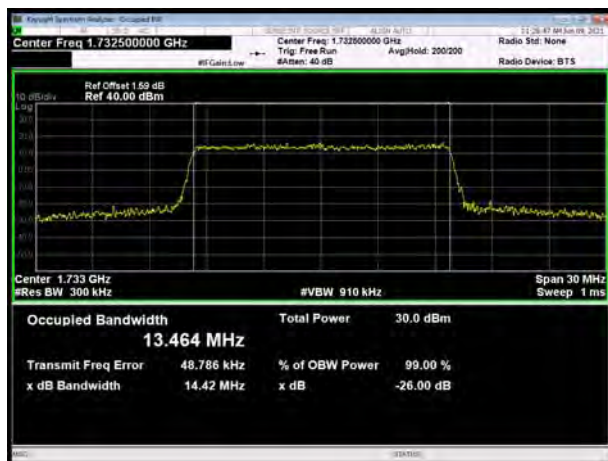
LTE Band 4 16QAM 15MHz CH-Low



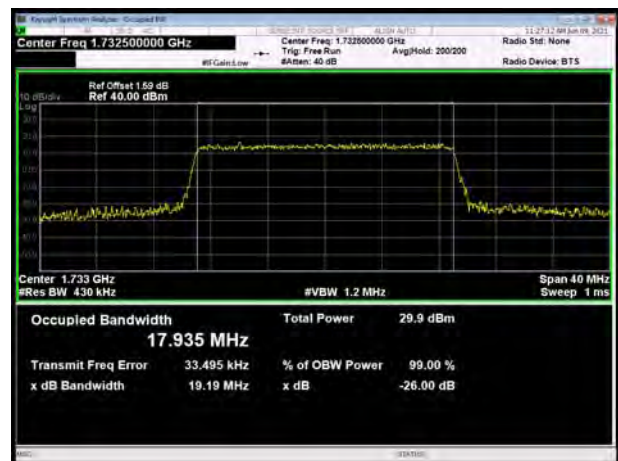
LTE Band 4 16QAM 20MHz CH-Low



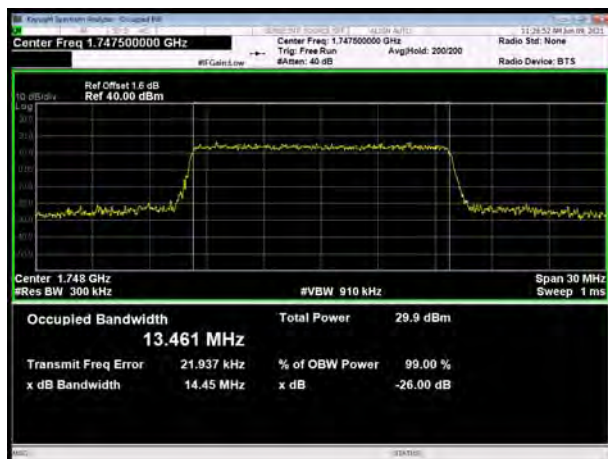
LTE Band 4 16QAM 15MHz CH-Middle



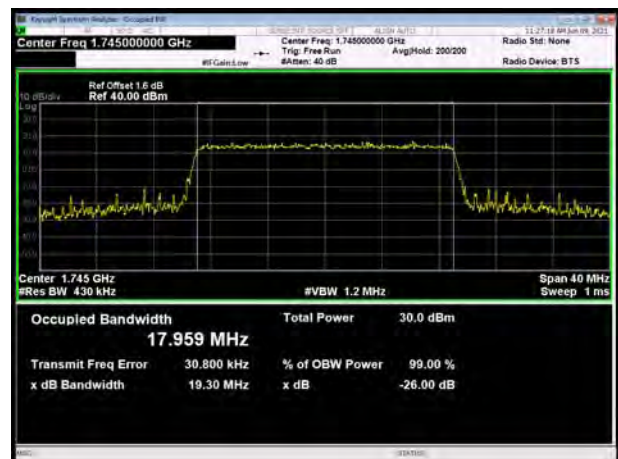
LTE Band 4 16QAM 20MHz CH-Middle



LTE Band 4 16QAM 15MHz CH-High

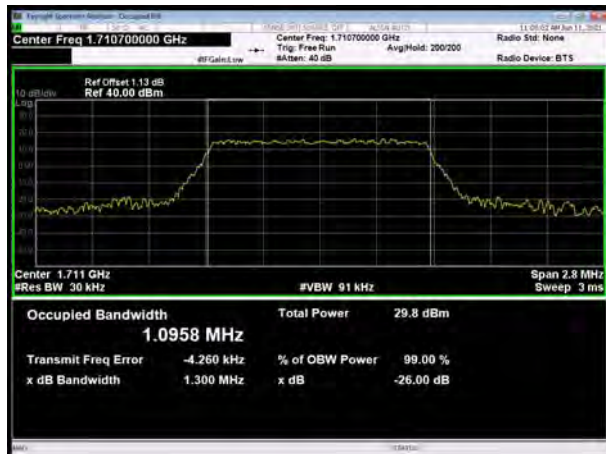


LTE Band 4 16QAM 20MHz CH-High

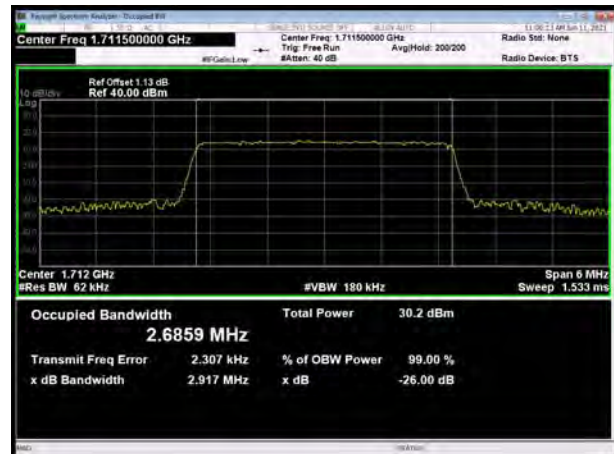




LTE Band 4 1.4MHz 64QAM CH-Low



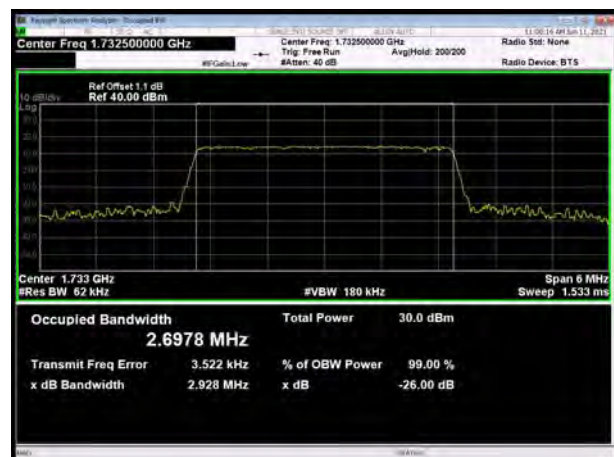
LTE Band 4 3MHz 64QAM CH-Low



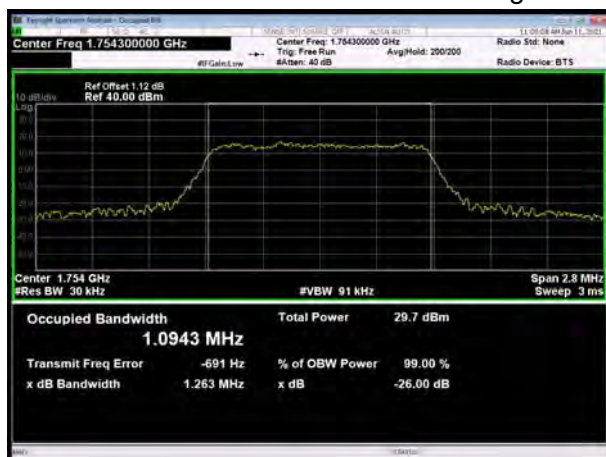
LTE Band 4 1.4MHz 64QAM CH-Middle



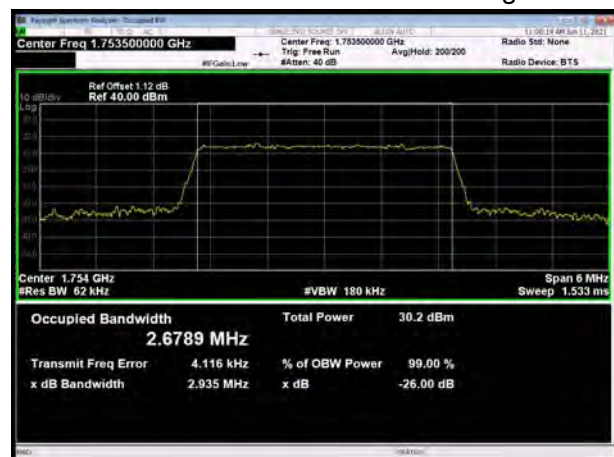
LTE Band 4 3MHz 64QAM CH-Middle



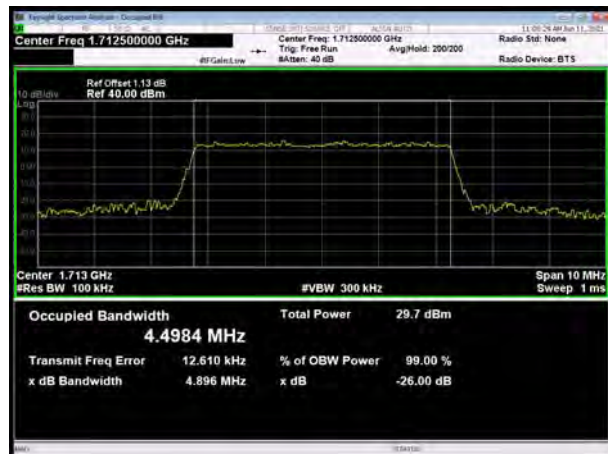
LTE Band 4 1.4MHz 64QAM CH-High



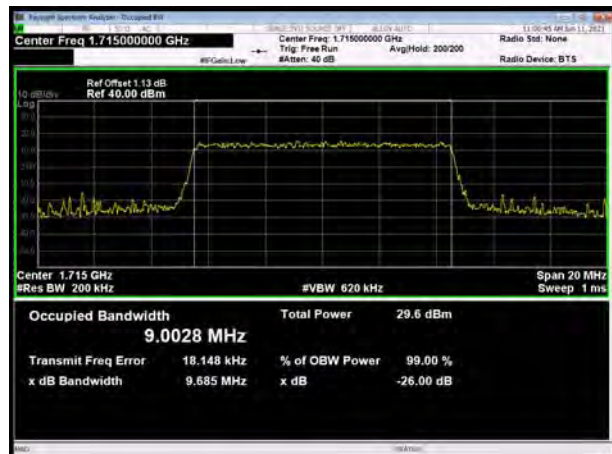
LTE Band 4 3MHz 64QAM CH-High



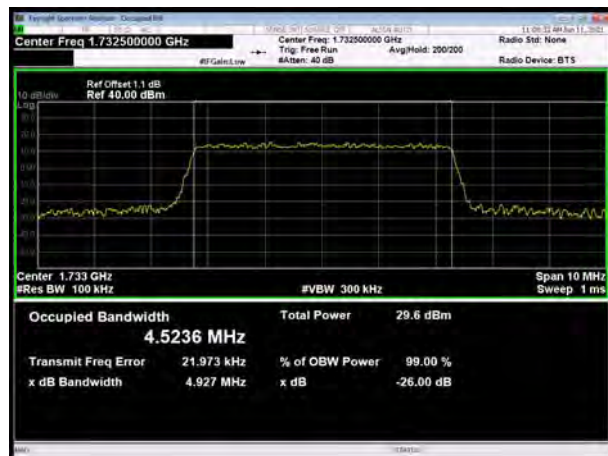
LTE Band 4 5MHz 64QAM CH-Low



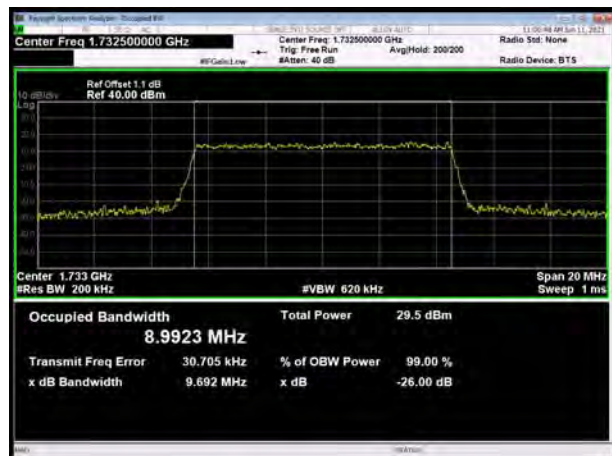
LTE Band 4 10MHz 64QAM CH-Low



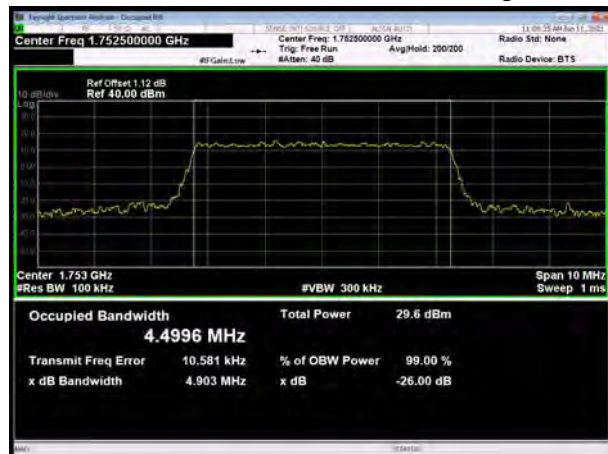
LTE Band 4 5MHz 64QAM CH-Middle



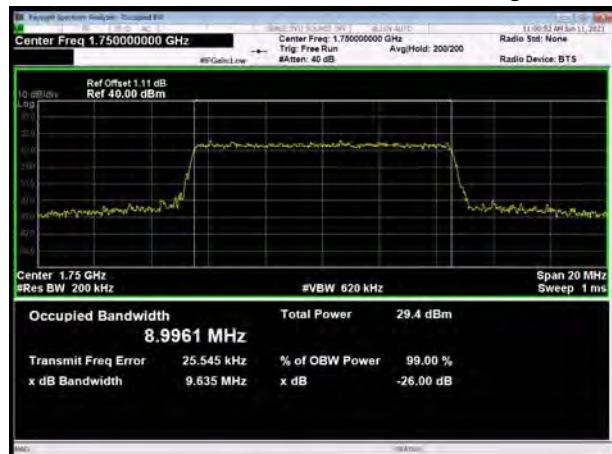
LTE Band 4 10MHz 64QAM CH-Middle



LTE Band 4 5MHz 64QAM CH-High

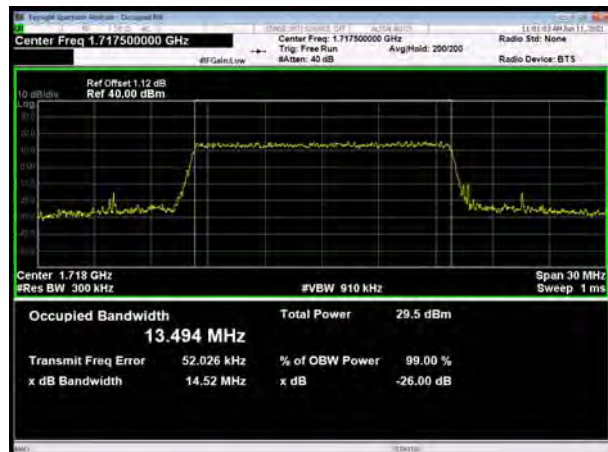


LTE Band 4 10MHz 64QAM CH-High

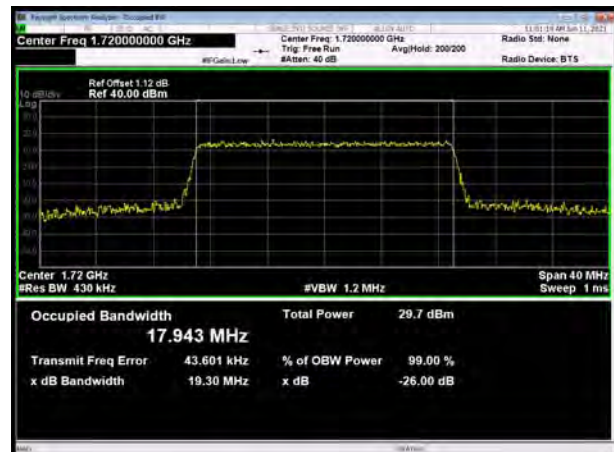




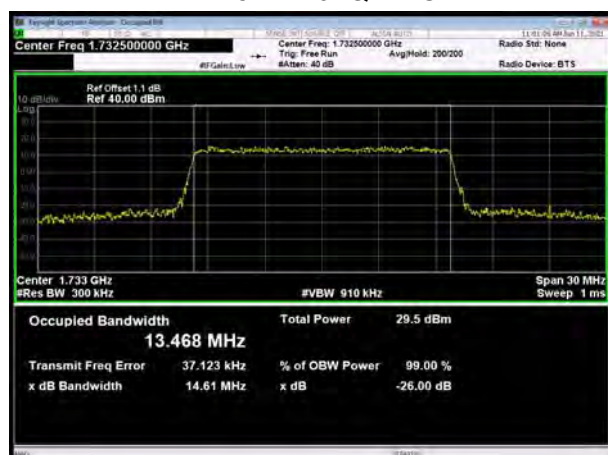
LTE Band 4 15MHz 64QAM CH-Low



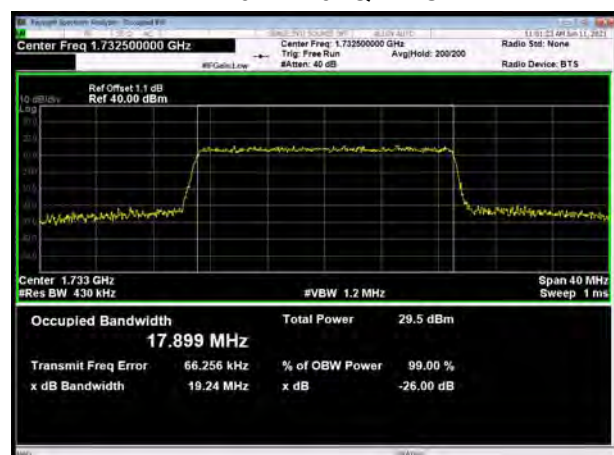
LTE Band 4 20MHz 64QAM CH-Low



LTE Band 4 15MHz 64QAM CH-Middle



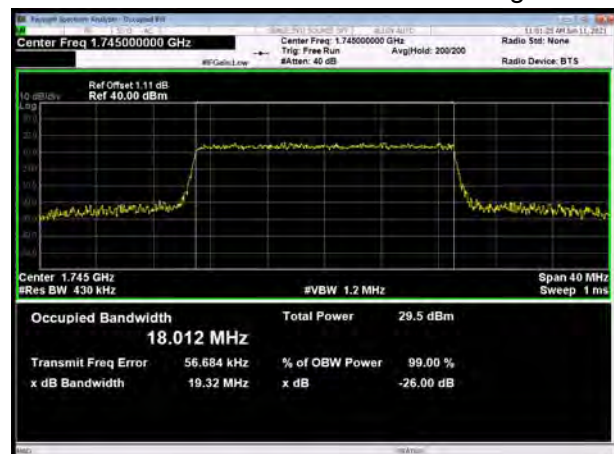
LTE Band 4 20MHz 64QAM CH-Middle



LTE Band 4 15MHz 64QAM CH-High

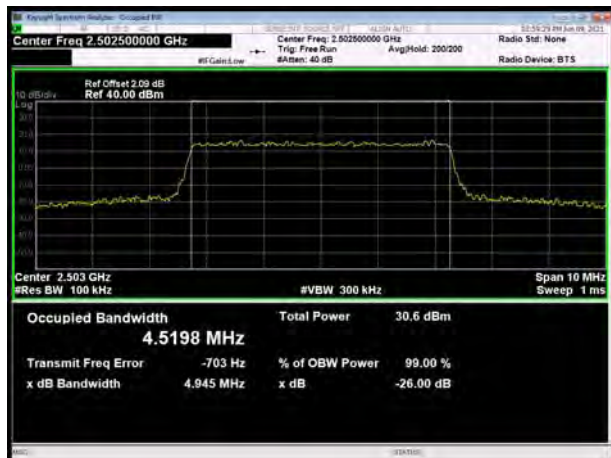


LTE Band 4 20MHz 64QAM CH-High

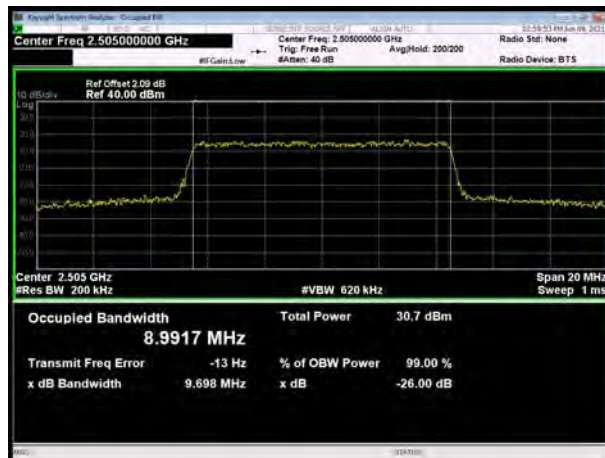




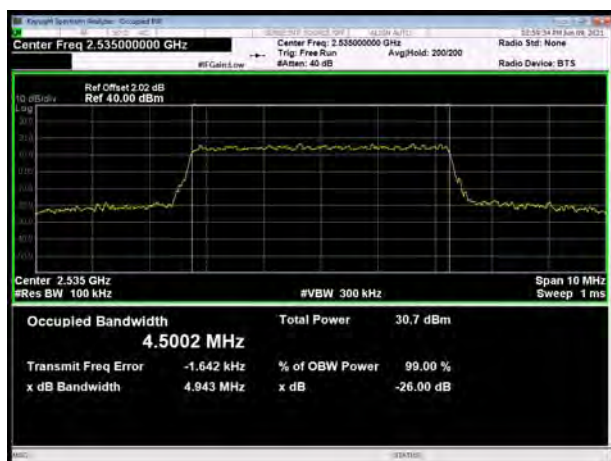
LTE Band 7 QPSK 5MHz CH-Low



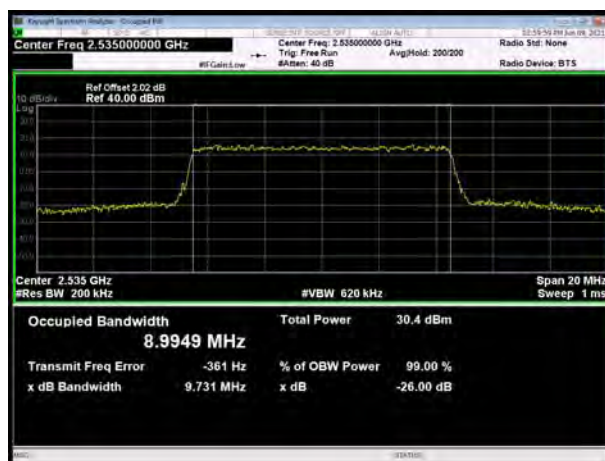
LTE Band 7 QPSK 10MHz CH-Low



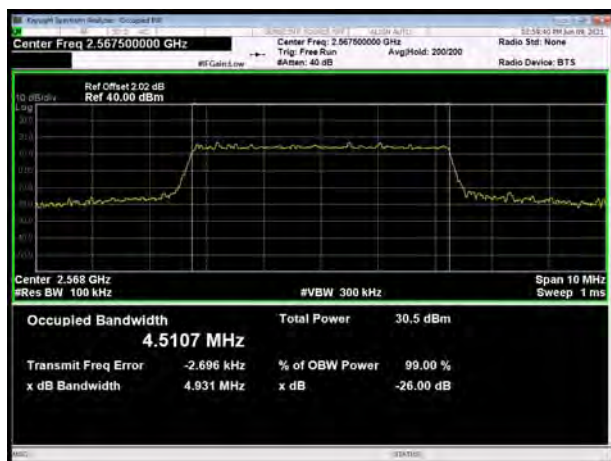
LTE Band 7 QPSK 5MHz CH-Middle



LTE Band 7 QPSK 10MHz CH-Middle



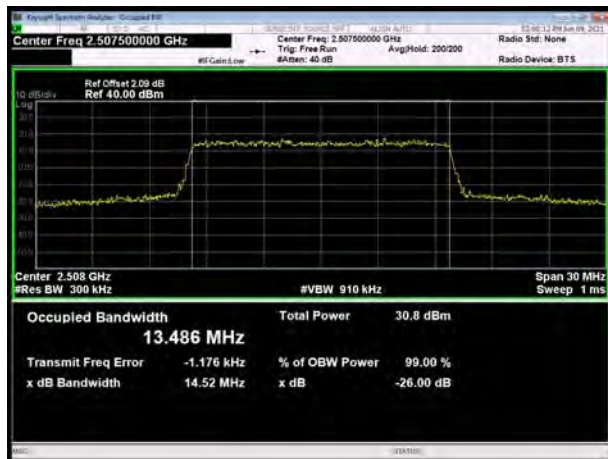
LTE Band 7 QPSK 5MHz CH-High



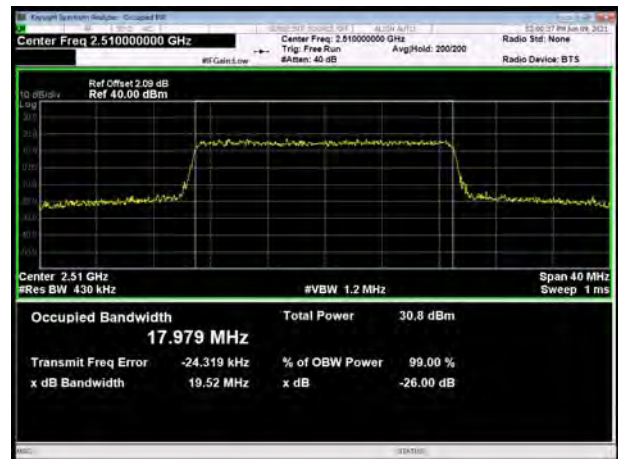
LTE Band 7 QPSK 10MHz CH-High



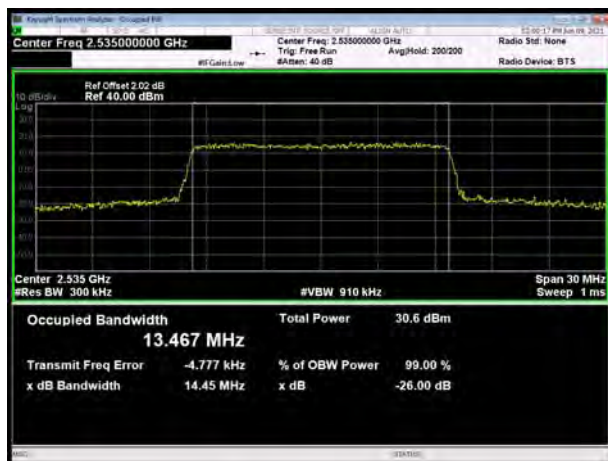
LTE Band 7 QPSK 15MHz CH-Low



LTE Band 7 QPSK 20MHz CH-Low



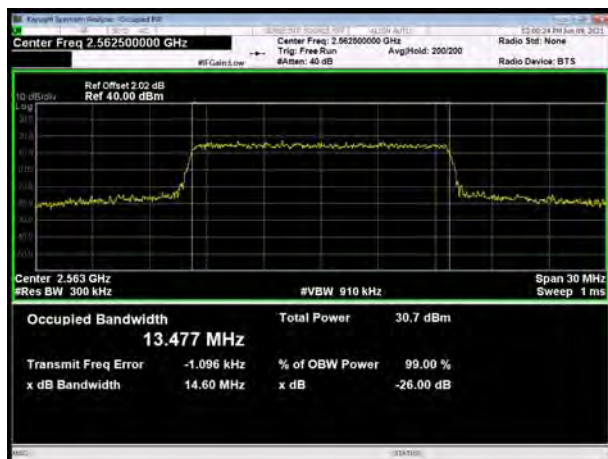
LTE Band 7 QPSK 15MHz CH-Middle



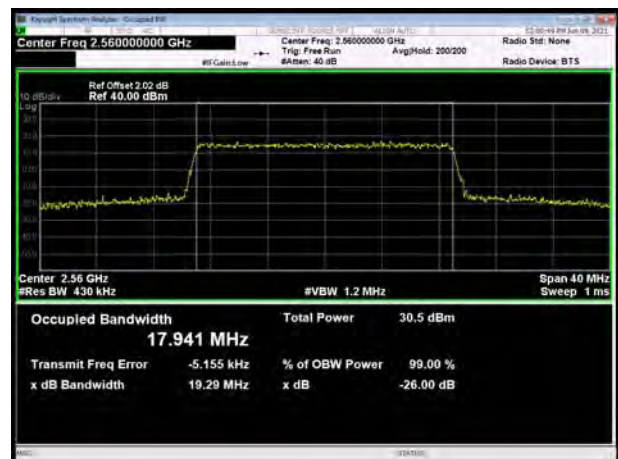
LTE Band 7 QPSK 20MHz CH-Middle



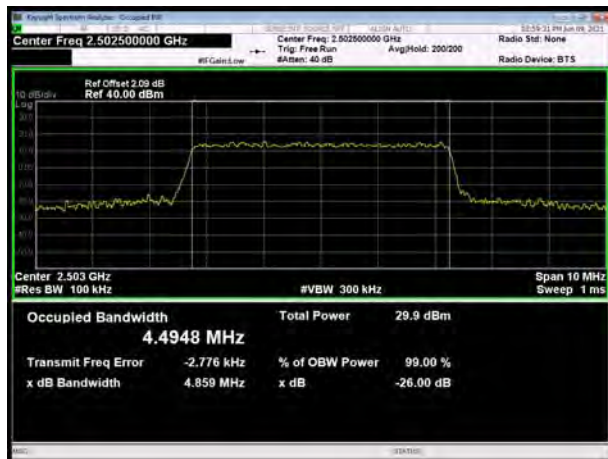
LTE Band 7 QPSK 15MHz CH-High



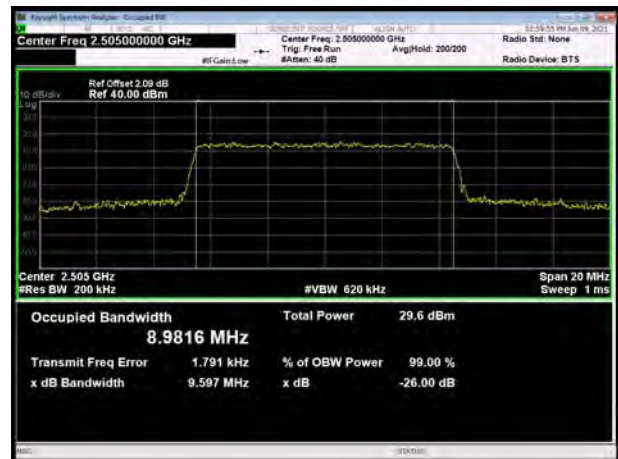
LTE Band 7 QPSK 20MHz CH-High



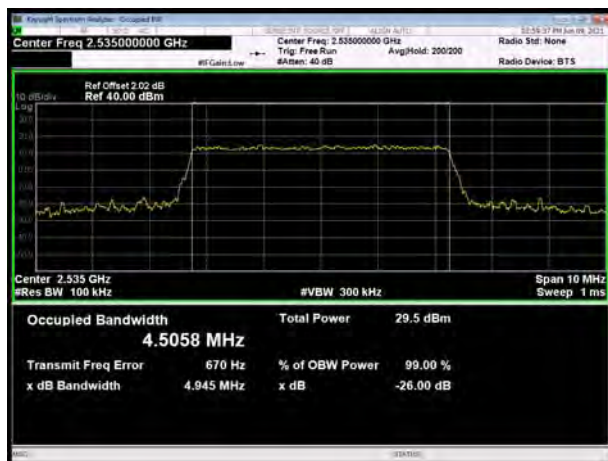
LTE Band 7 16QAM 5MHz CH-Low



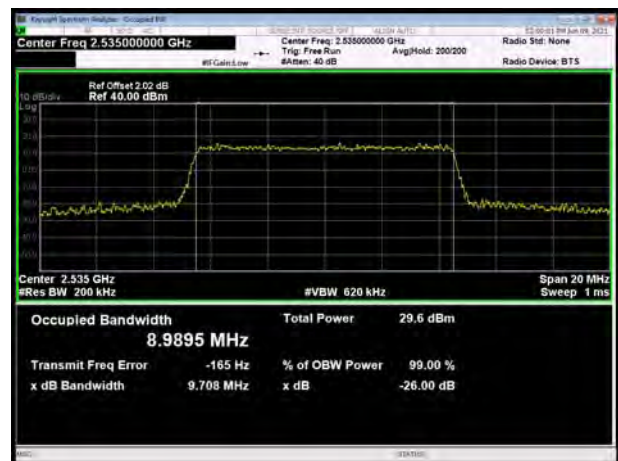
LTE Band 7 16QAM 10MHz CH-Low



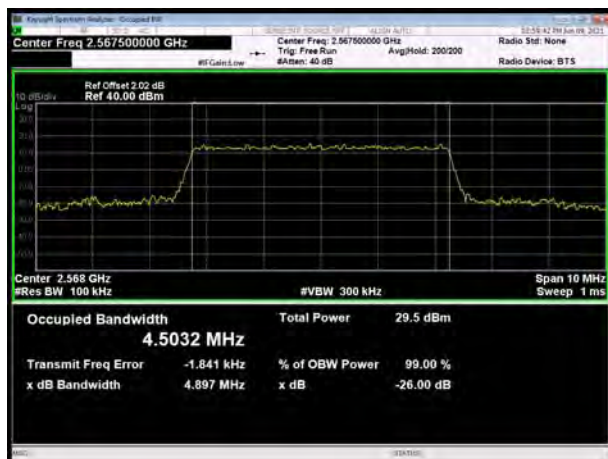
LTE Band 7 16QAM 5MHz CH-Middle



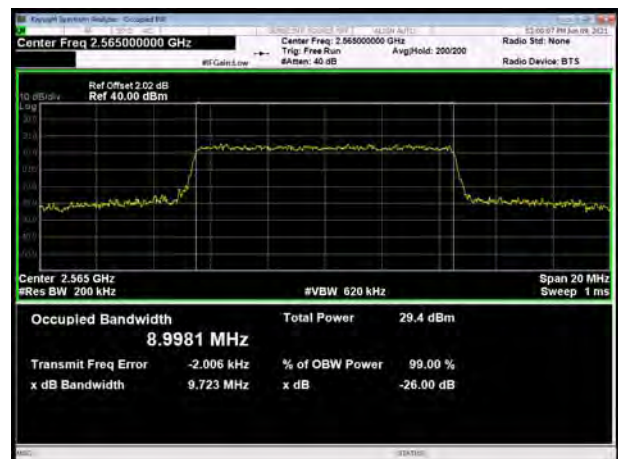
LTE Band 7 16QAM 10MHz CH-Middle



LTE Band 7 16QAM 5MHz CH-High

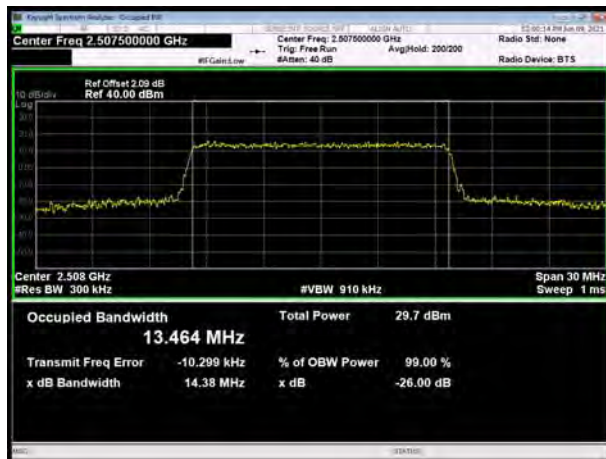


LTE Band 7 16QAM 10MHz CH-High





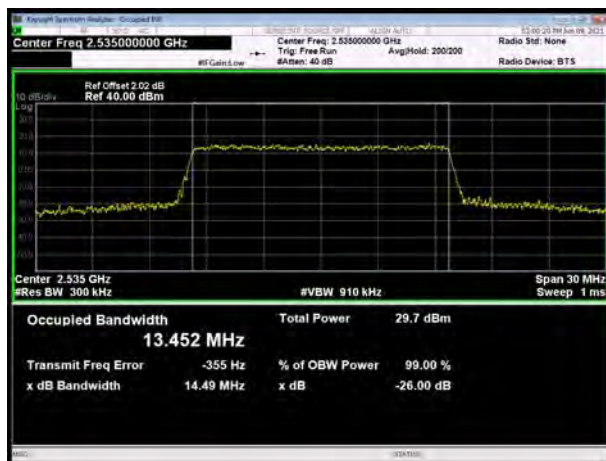
LTE Band 7 16QAM 15MHz CH-Low



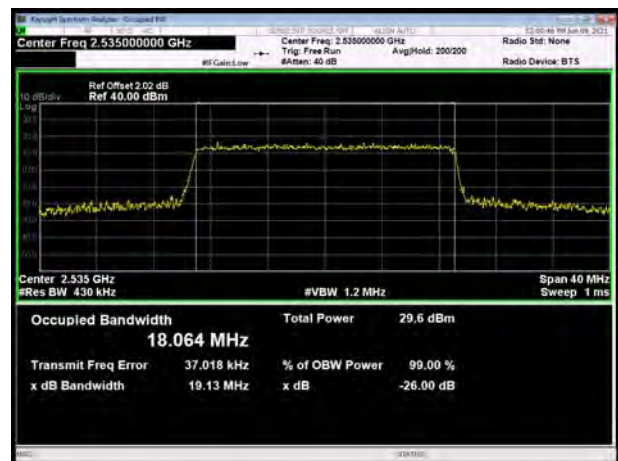
LTE Band 7 16QAM 20MHz CH-Low



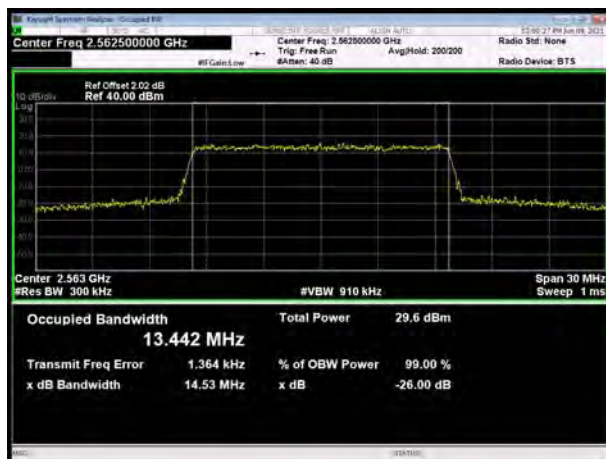
LTE Band 7 16QAM 15MHz CH-Middle



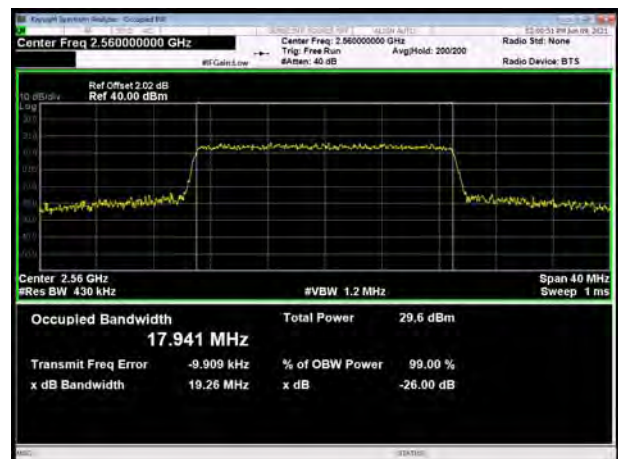
LTE Band 7 16QAM 20MHz CH-Middle



LTE Band 7 16QAM 15MHz CH-High

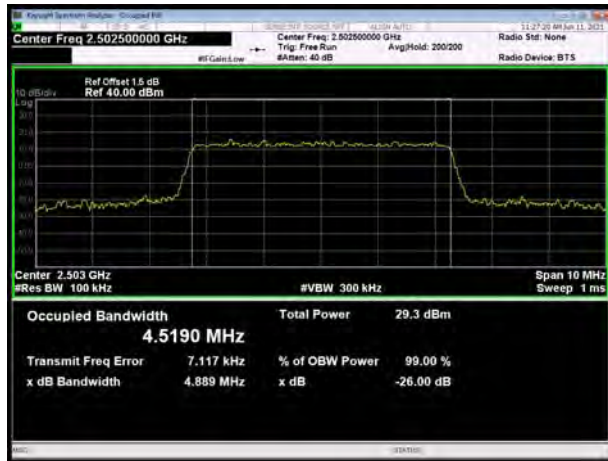


LTE Band 7 16QAM 20MHz CH-High

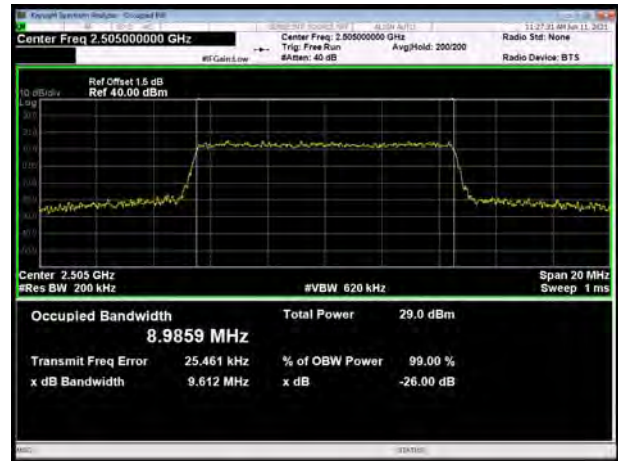




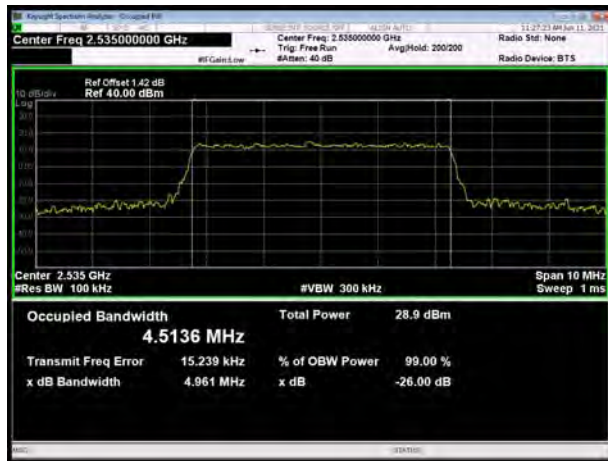
LTE Band 7 64QAM 5MHz CH-Low



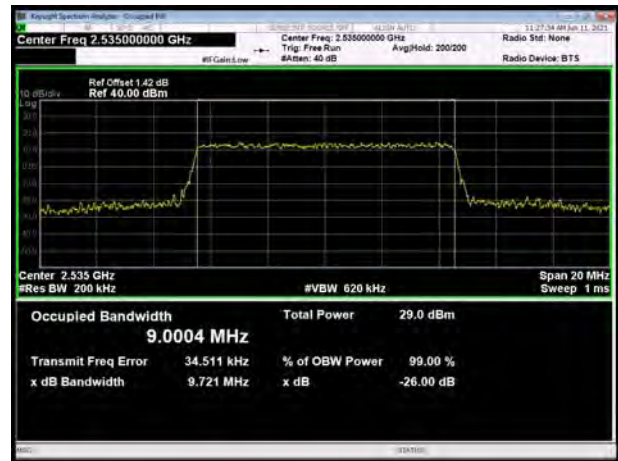
LTE Band 7 64QAM 10MHz CH-Low



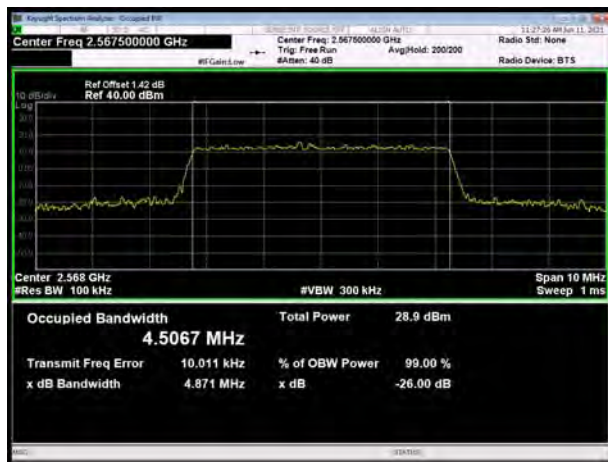
LTE Band 7 64QAM 5MHz CH-Middle



LTE Band 7 64QAM 10MHz CH-Middle



LTE Band 7 64QAM 5MHz CH-High

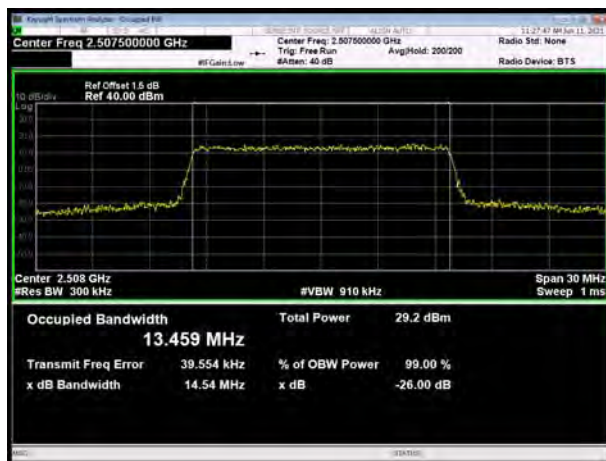


LTE Band 7 64QAM 10MHz CH-High

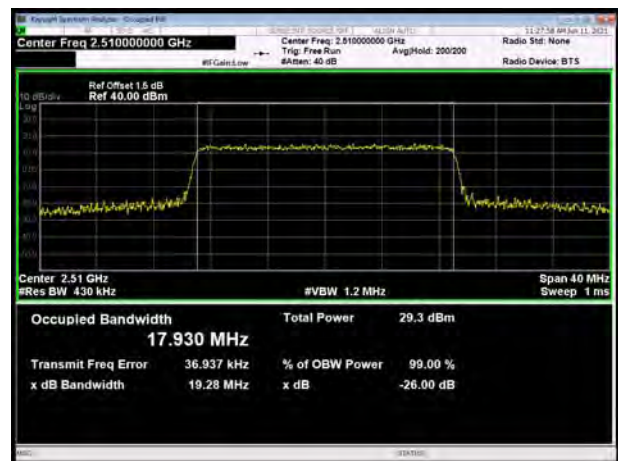




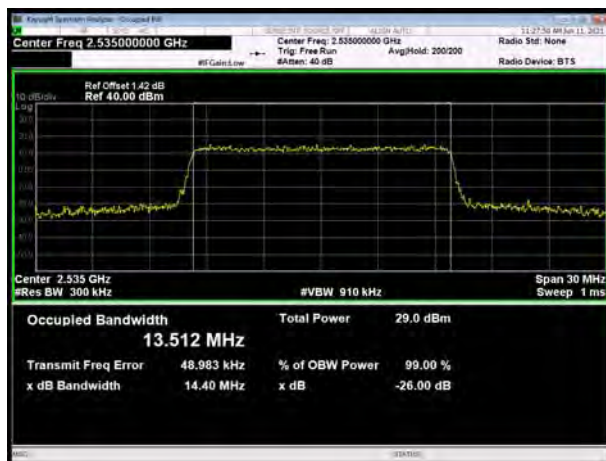
LTE Band 7 64QAM 15MHz CH-Low



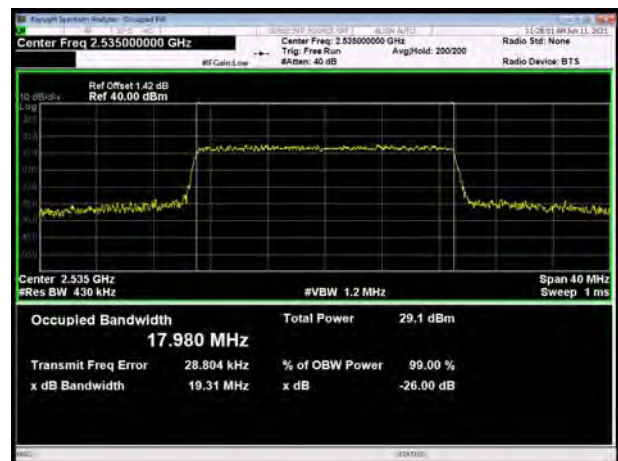
LTE Band 7 64QAM 20MHz CH-Low



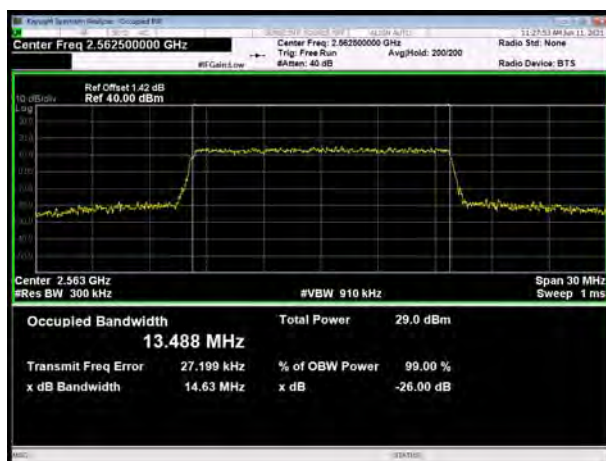
LTE Band 7 64QAM 15MHz CH-Middle



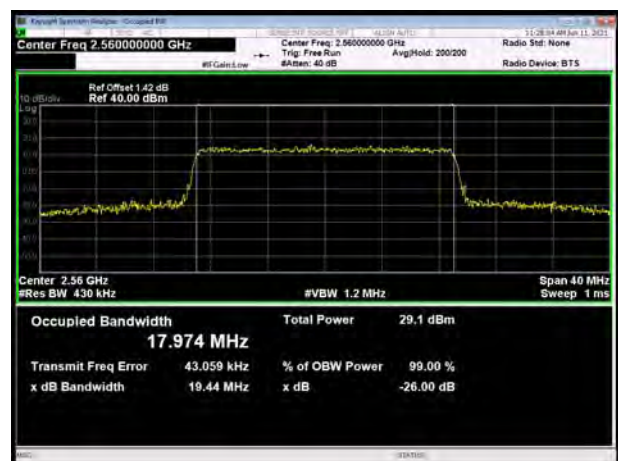
LTE Band 7 64QAM 20MHz CH-Middle



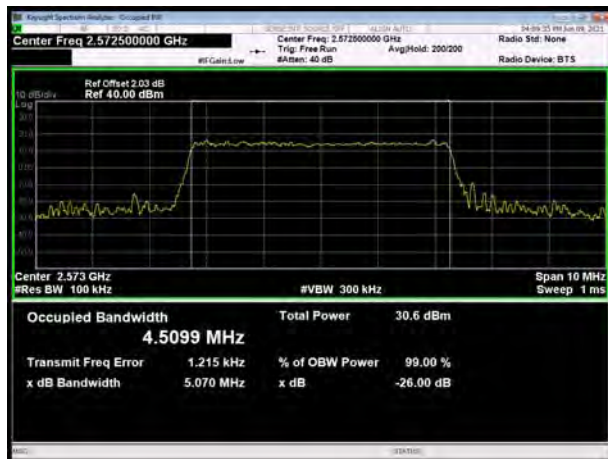
LTE Band 7 64QAM 15MHz CH-High



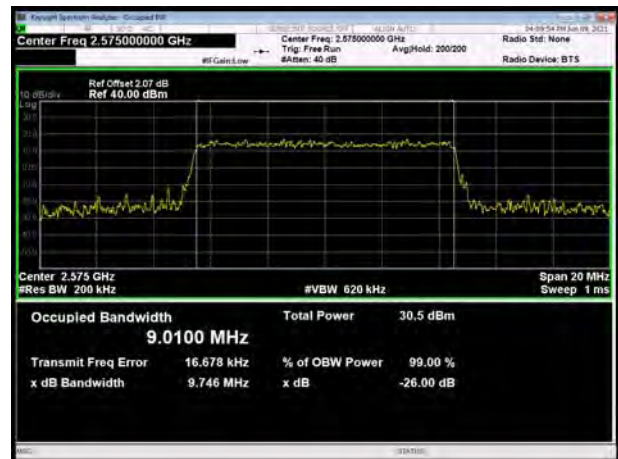
LTE Band 7 64QAM 20MHz CH-High



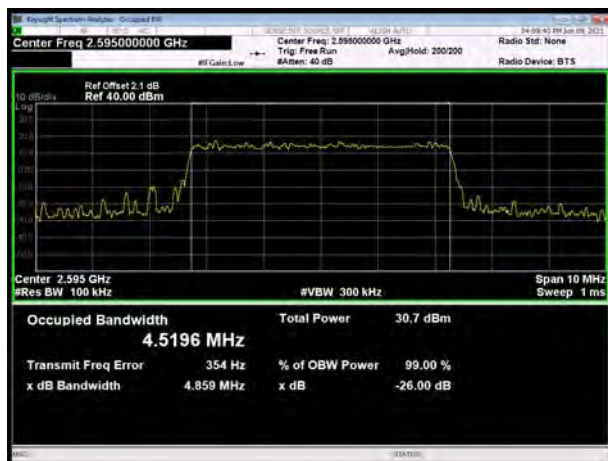
LTE Band 38 QPSK 5MHz CH-Low



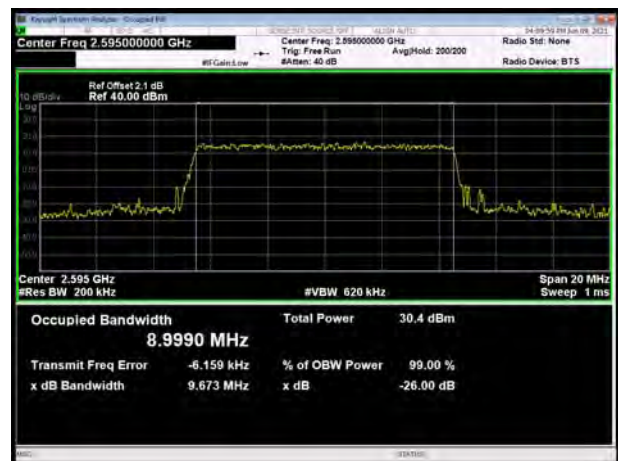
LTE Band 38 QPSK 10MHz CH-Low



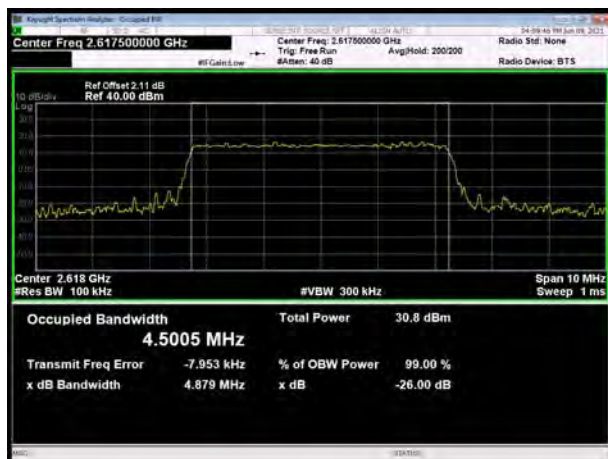
LTE Band 38 QPSK 5MHz CH-Middle



LTE Band 38 QPSK 10MHz CH-Middle



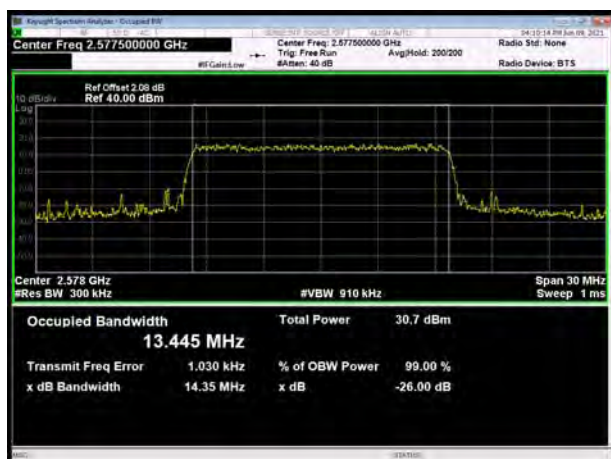
LTE Band 38 QPSK 5MHz CH-High



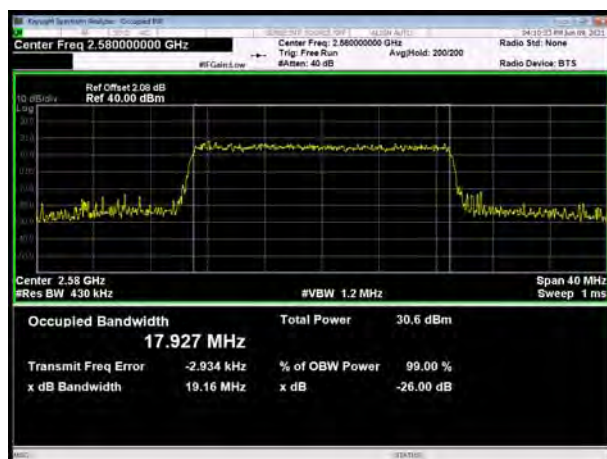
LTE Band 38 QPSK 10MHz CH-High



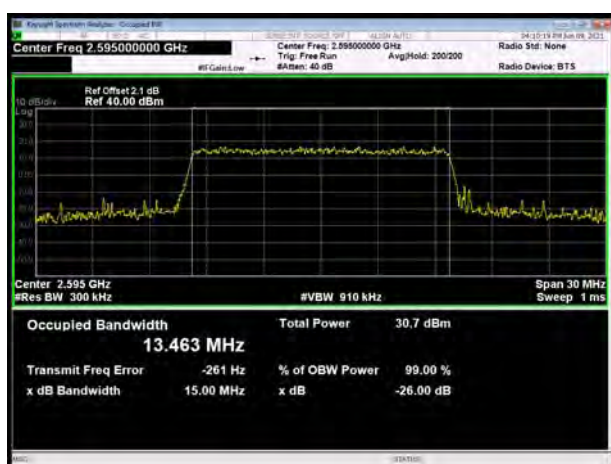
LTE Band 38 QPSK 15MHz CH-Low



LTE Band 38 QPSK 20MHz CH-Low



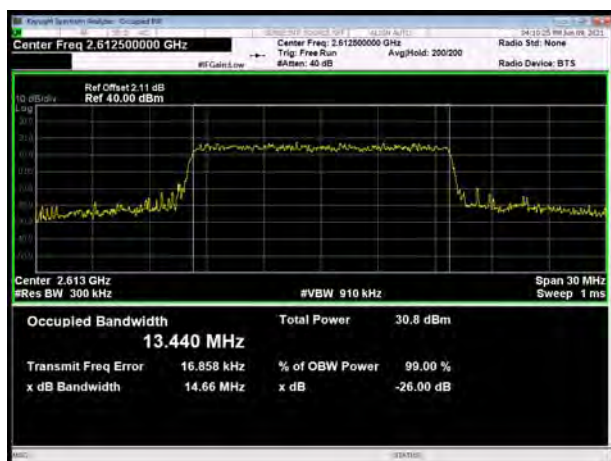
LTE Band 38 QPSK 15MHz CH-Middle



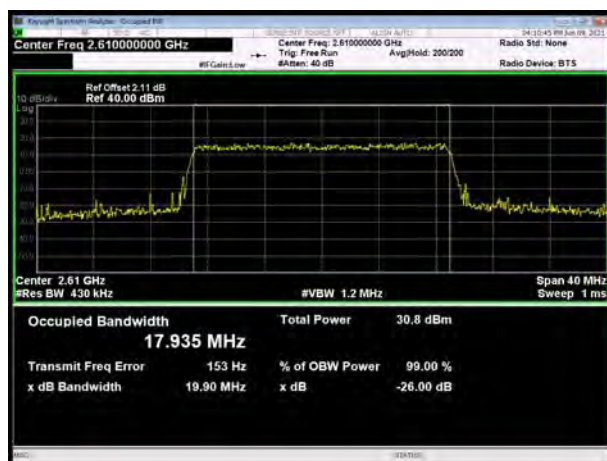
LTE Band 38 QPSK 20MHz CH-Middle



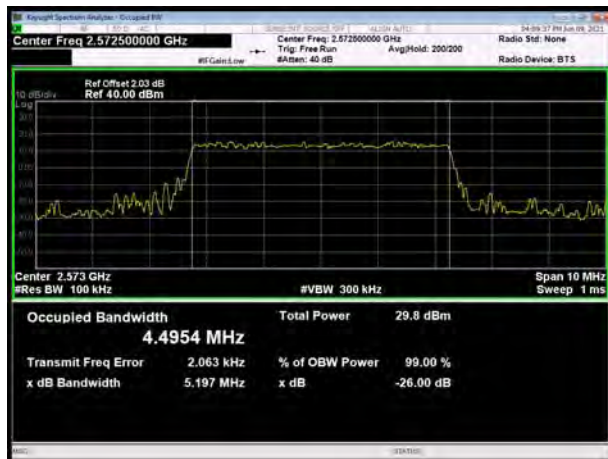
LTE Band 38 QPSK 15MHz CH-High



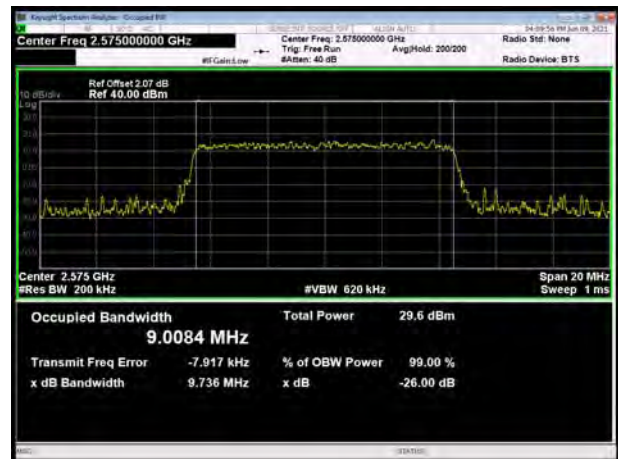
LTE Band 38 QPSK 20MHz CH-High



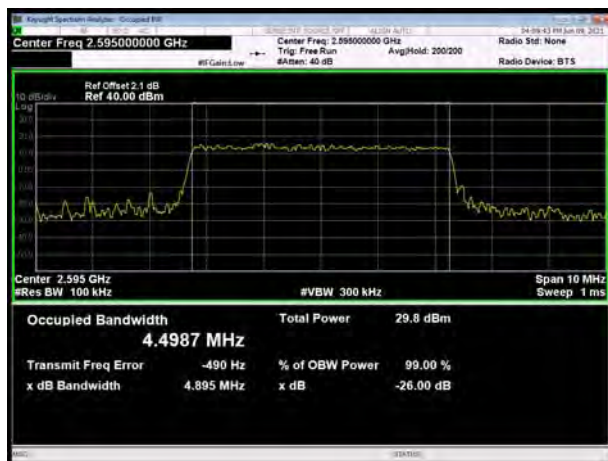
LTE Band 38 16QAM 5MHz CH-Low



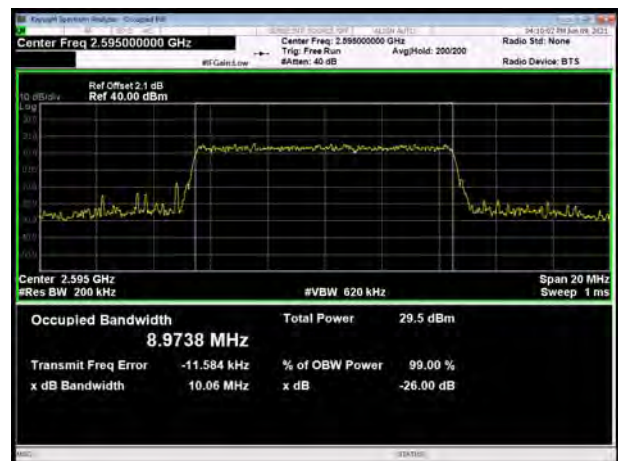
LTE Band 38 16QAM 10MHz CH-Low



LTE Band 38 16QAM 5MHz CH-Middle



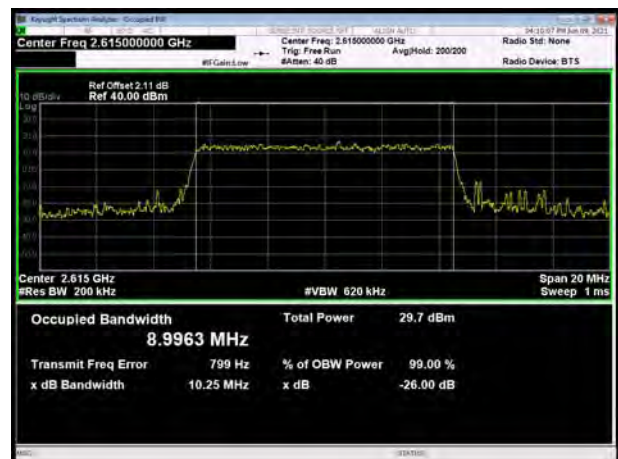
LTE Band 38 16QAM 10MHz CH-Middle



LTE Band 38 16QAM 5MHz CH-High



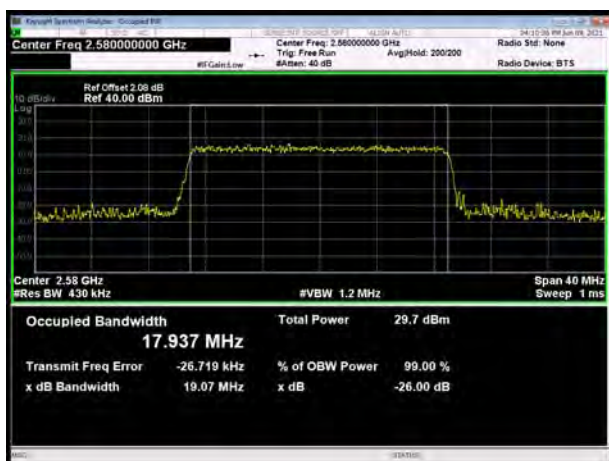
LTE Band 38 16QAM 10MHz CH-High



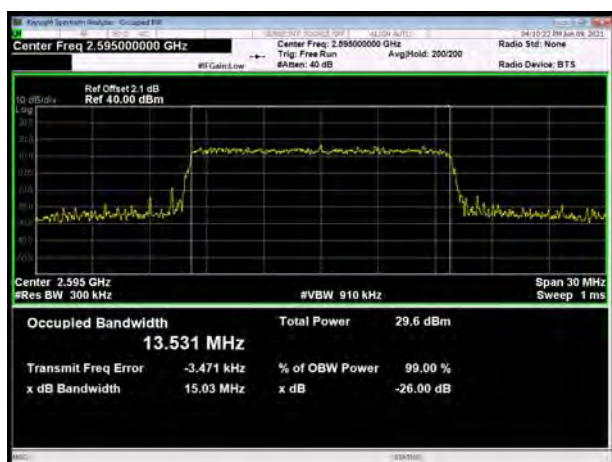
LTE Band 38 16QAM 15MHz CH-Low



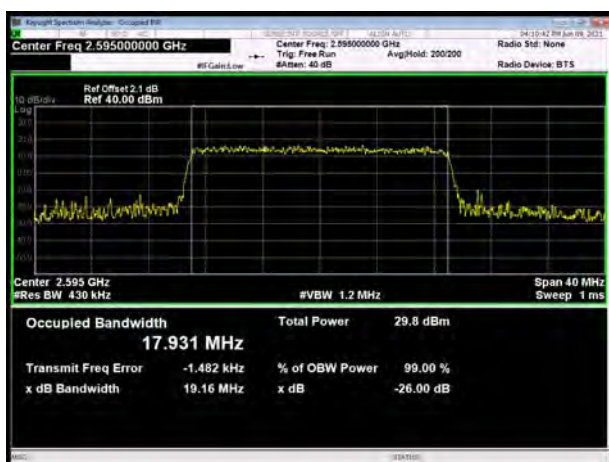
LTE Band 38 16QAM 20MHz CH-Low



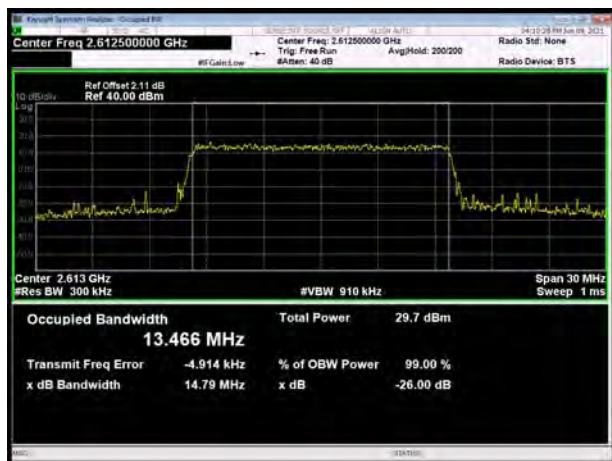
LTE Band 38 16QAM 15MHz CH-Middle



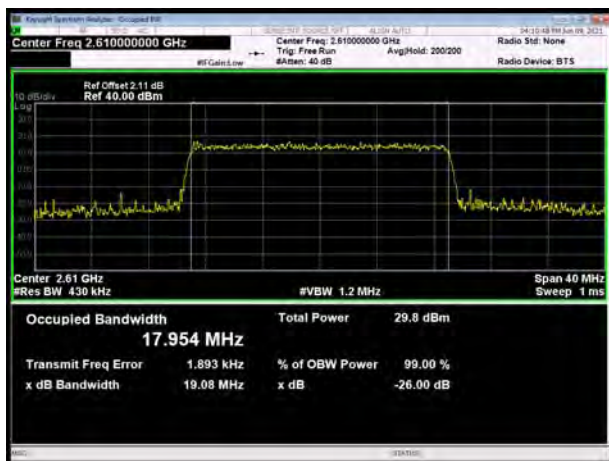
LTE Band 38 16QAM 20MHz CH-Middle



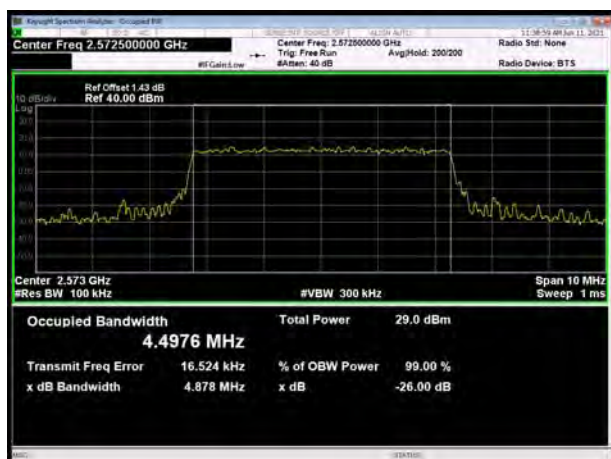
LTE Band 38 16QAM 15MHz CH-High



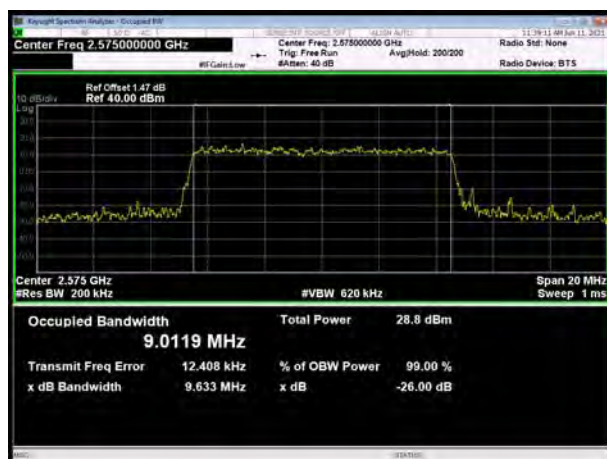
LTE Band 38 16QAM 20MHz CH-High



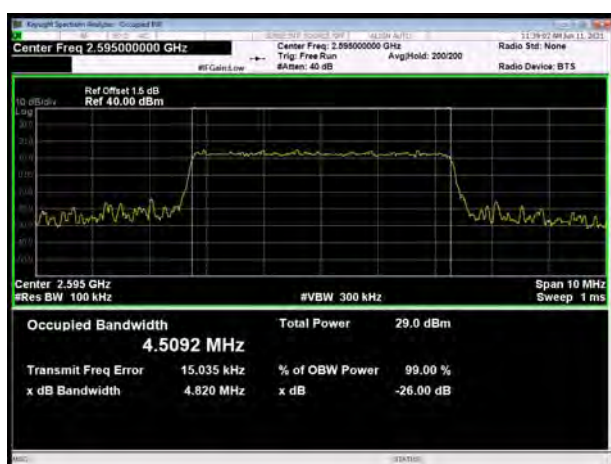
LTE Band 38 64QAM 5MHz CH-Low



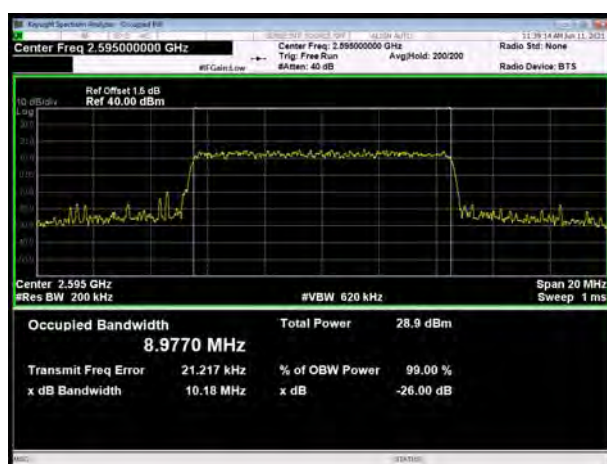
LTE Band 38 64QAM 10MHz CH-Low



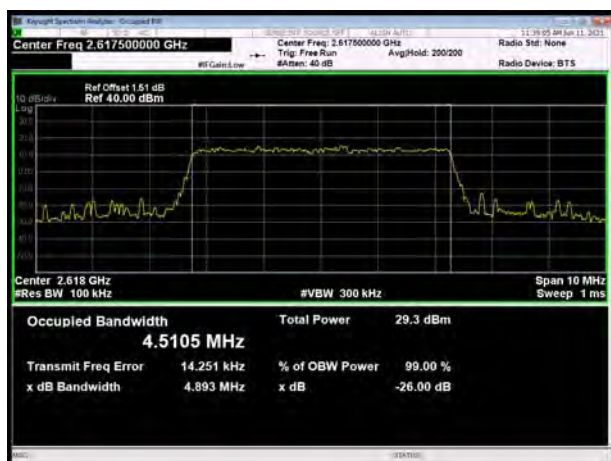
LTE Band 38 64QAM 5MHz CH-Middle



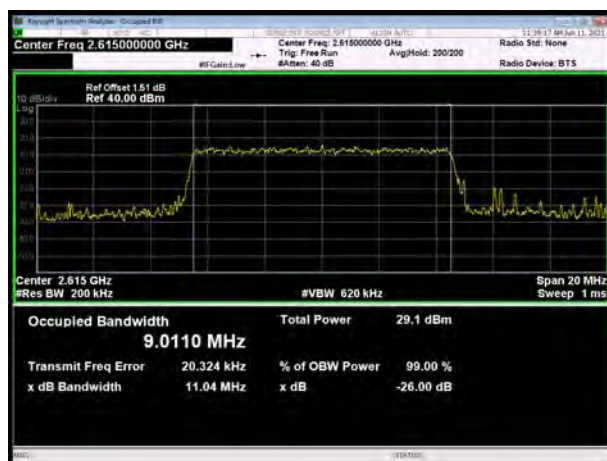
LTE Band 38 64QAM 10MHz CH-Middle



LTE Band 38 64QAM 5MHz CH-High

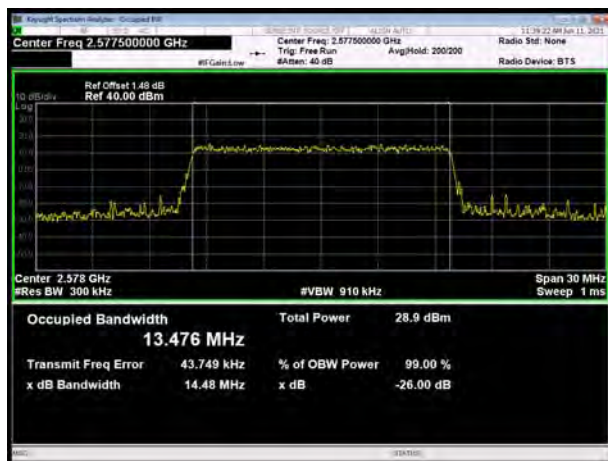


LTE Band 38 64QAM 10MHz CH-High

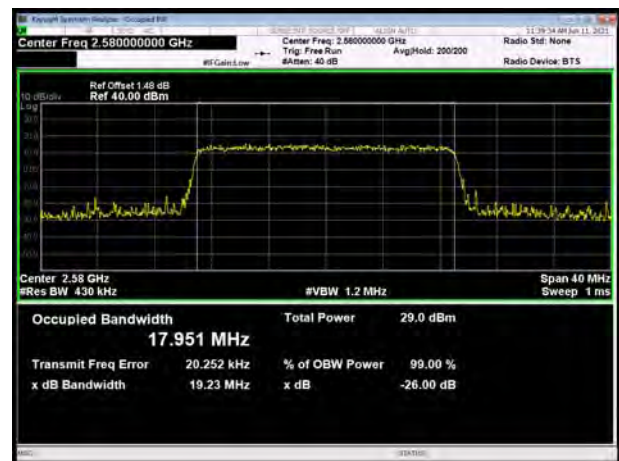




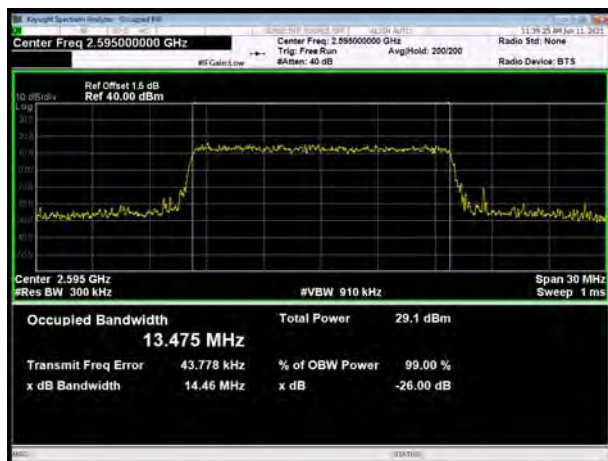
LTE Band 38 64QAM 15MHz CH-Low



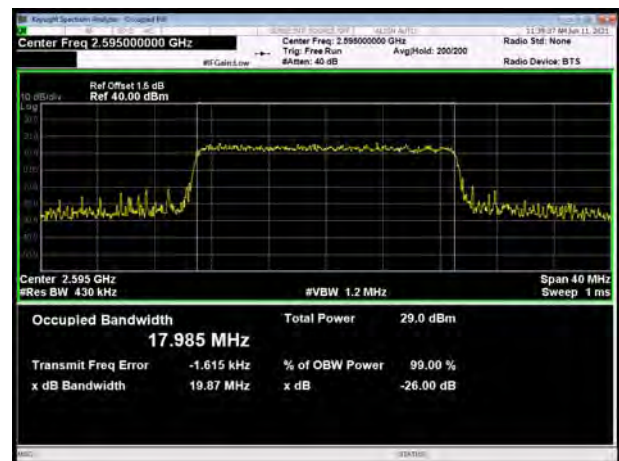
LTE Band 38 64QAM 20MHz CH-Low



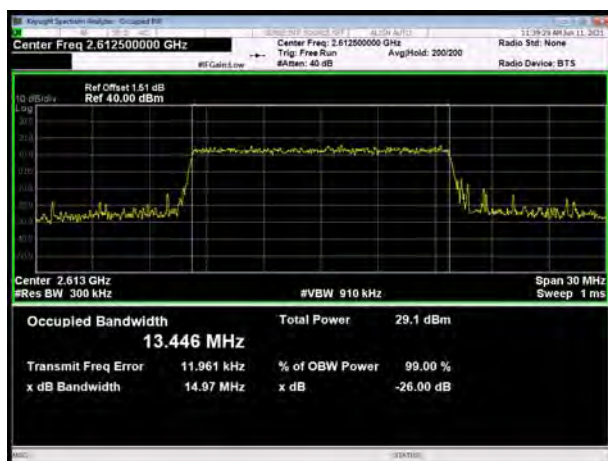
LTE Band 38 64QAM 15MHz CH-Middle



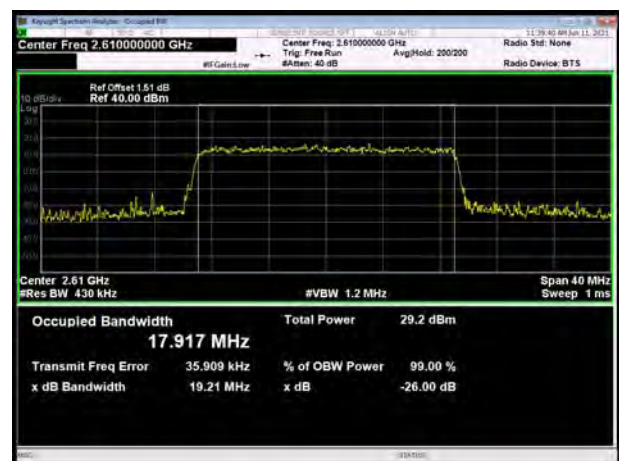
LTE Band 38 64QAM 20MHz CH-Middle



LTE Band 38 64QAM 15MHz CH-High



LTE Band 38 64QAM 20MHz CH-High





LTE Band 41 QPSK 5MHz CH-Low



LTE Band 41 QPSK 10MHz CH-Low



LTE Band 41 QPSK 5MHz CH-Middle



LTE Band 41 QPSK 10MHz CH-Middle



LTE Band 41 QPSK 5MHz CH-High



LTE Band 41 QPSK 10MHz CH-High





LTE Band 41 QPSK 15MHz CH-Low



LTE Band 41 QPSK 20MHz CH-Low



LTE Band 41 QPSK 15MHz CH-Middle



LTE Band 41 QPSK 20MHz CH-Middle



LTE Band 41 QPSK 15MHz CH-High

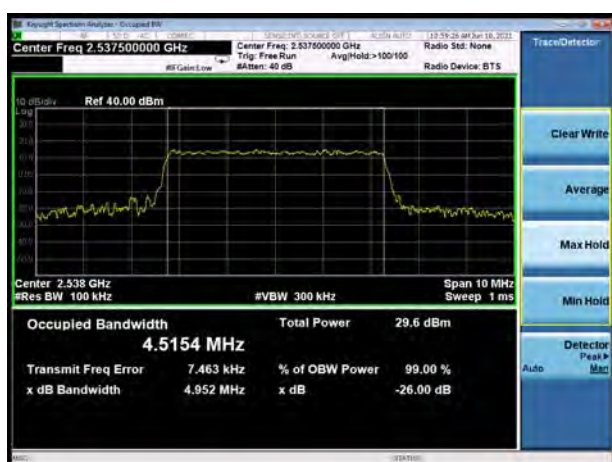


LTE Band 41 QPSK 20MHz CH-High

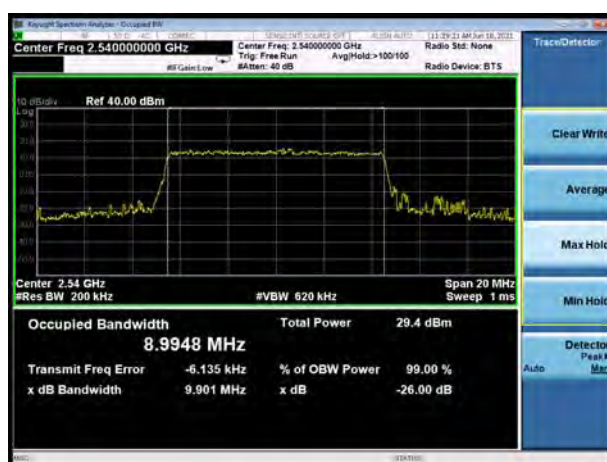




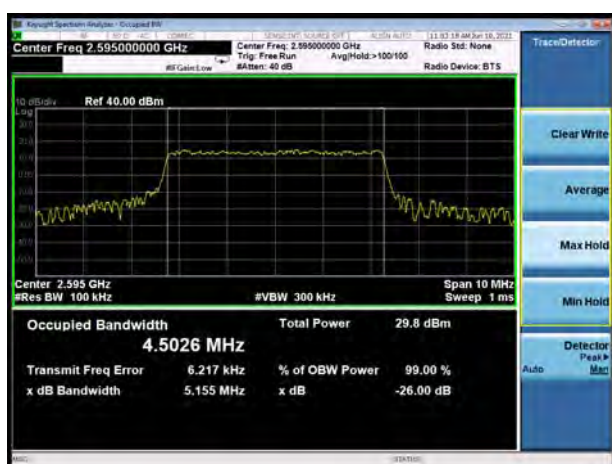
LTE Band 41 16QAM 5MHz CH-Low



LTE Band 41 16QAM 10MHz CH-Low



LTE Band 41 16QAM 5MHz CH-Middle



LTE Band 41 16QAM 10MHz CH-Middle



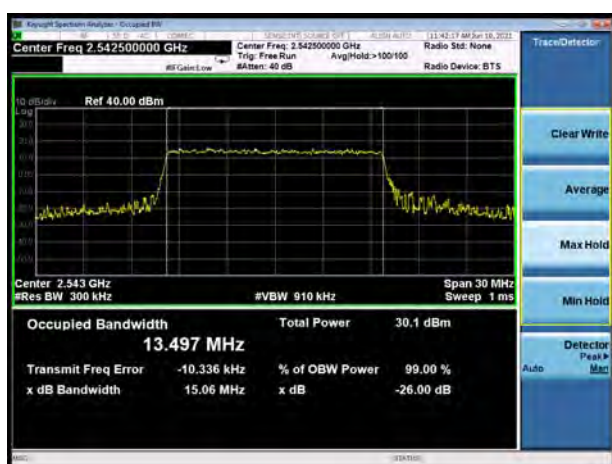
LTE Band 41 16QAM 5MHz CH-High



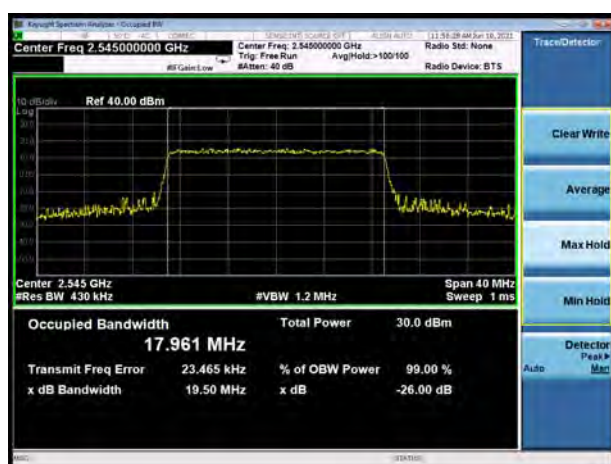
LTE Band 41 16QAM 10MHz CH-High



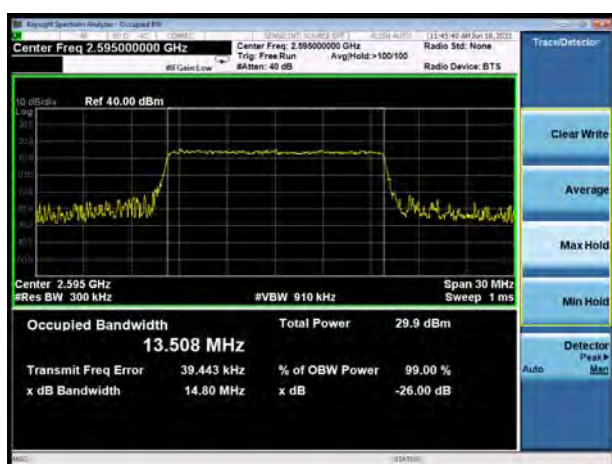
LTE Band 41 16QAM 15MHz CH-Low



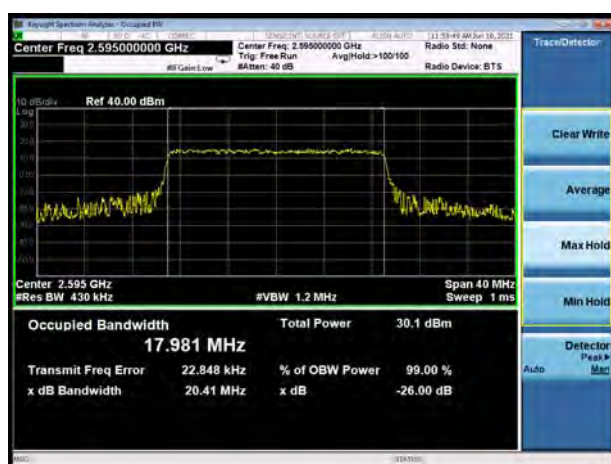
LTE Band 41 16QAM 20MHz CH-Low



LTE Band 41 16QAM 15MHz CH-Middle



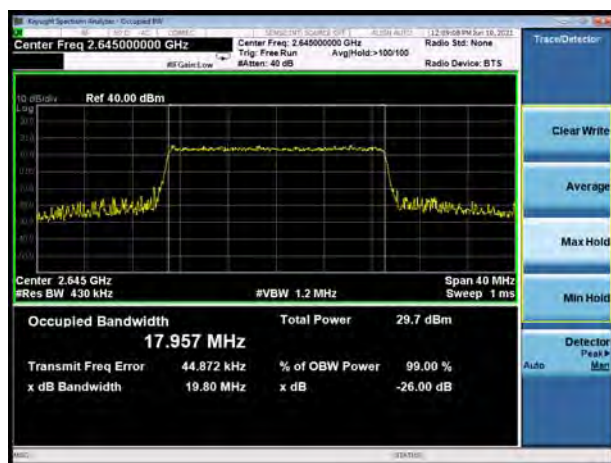
LTE Band 41 16QAM 20MHz CH-Middle



LTE Band 41 16QAM 15MHz CH-High



LTE Band 41 16QAM 20MHz CH-High



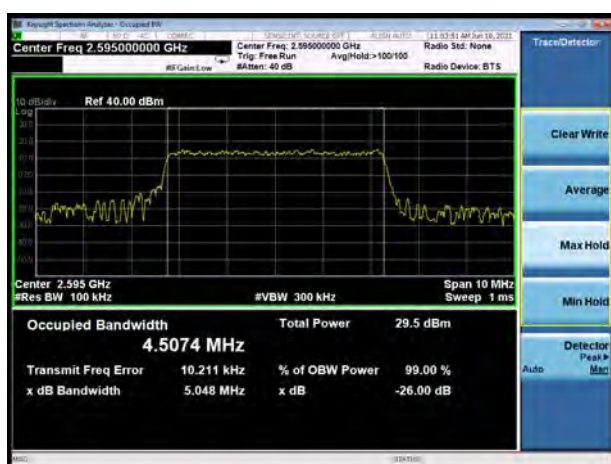
LTE Band 41 64QAM 5MHz CH-Low



LTE Band 41 64QAM 10MHz CH-Low



LTE Band 41 64QAM 5MHz CH-Middle



LTE Band 41 64QAM 10MHz CH-Middle



LTE Band 41 64QAM 5MHz CH-High



LTE Band 41 64QAM 10MHz CH-High





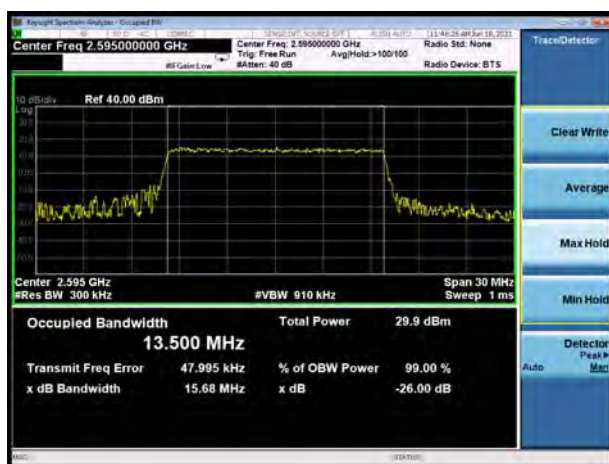
LTE Band 41 64QAM 15MHz CH-Low



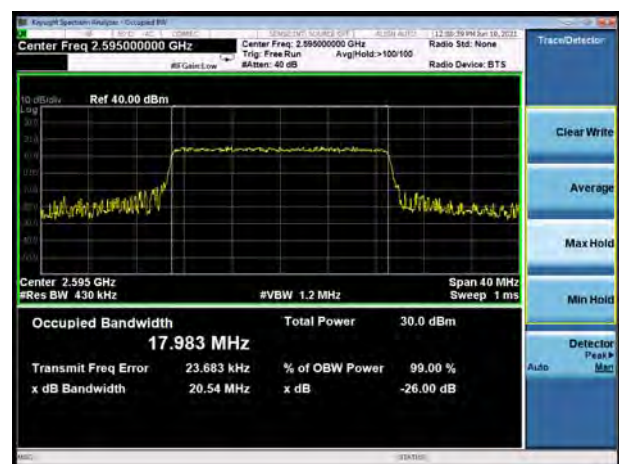
LTE Band 41 64QAM 20MHz CH-Low



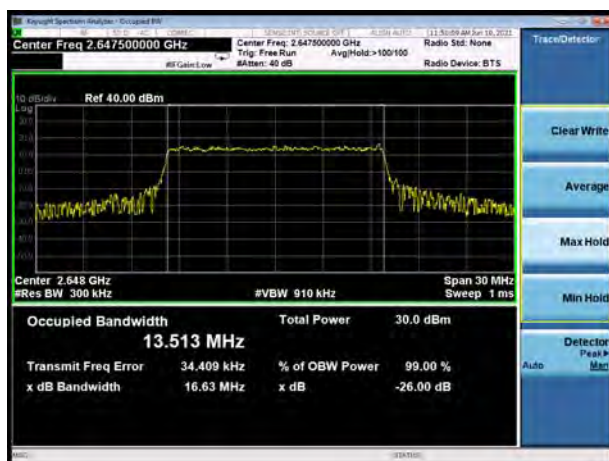
LTE Band 41 64QAM 15MHz CH-Middle



LTE Band 41 64QAM 20MHz CH-Middle



LTE Band 41 64QAM 15MHz CH-High



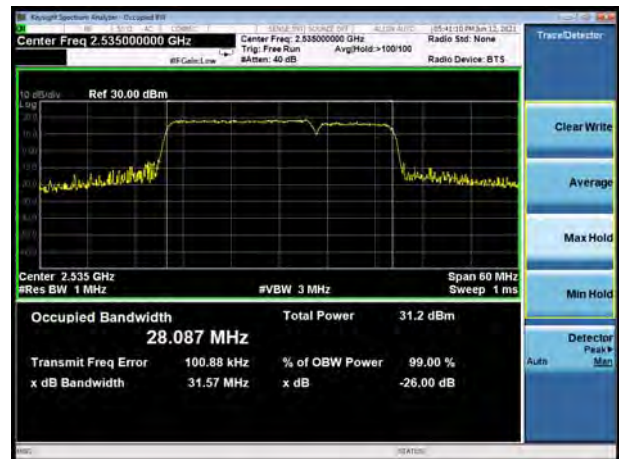
LTE Band 41 64QAM 20MHz CH-High



CA_7C_10MHz+20MHz QPSK



CA_7C_20MHz+10MHz QPSK



CA_7C_10MHz+20MHz 16QAM



CA_7C_20MHz+10MHz 16QAM



CA_7C_10MHz+20MHz 64QAM



CA_7C_20MHz+10MHz 64QAM





CA_7C_15MHz+10MHz QPSK



CA_7C_15MHz+15MHz QPSK



CA_7C_15MHz+10MHz 16QAM



CA_7C_15MHz+15MHz 16QAM



CA_7C_15MHz+10MHz 64QAM



CA_7C_15MHz+15MHz 64QAM



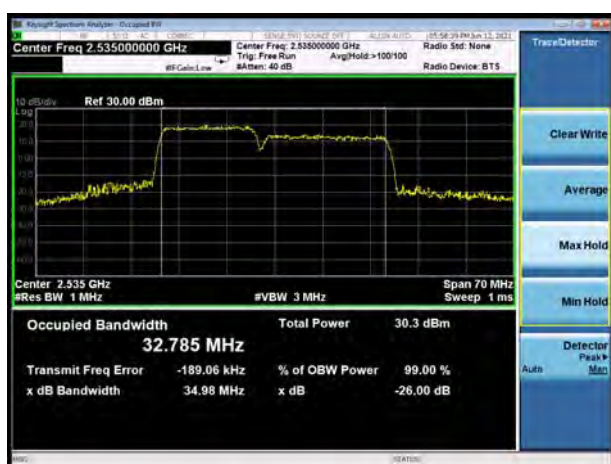
CA_7C_15MHz+20MHz QPSK



CA_7C_20MHz+15MHz QPSK



CA_7C_15MHz+20MHz 16QAM



CA_7C_20MHz+15MHz 16QAM



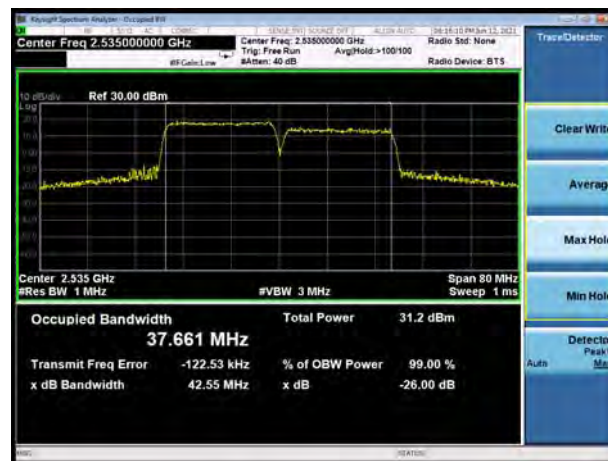
CA_7C_15MHz+20MHz 64QAM



CA_7C_20MHz+15MHz 64QAM



CA_7C_20MHz+20MHz QPSK



CA_7C_20MHz+20MHz 16QAM



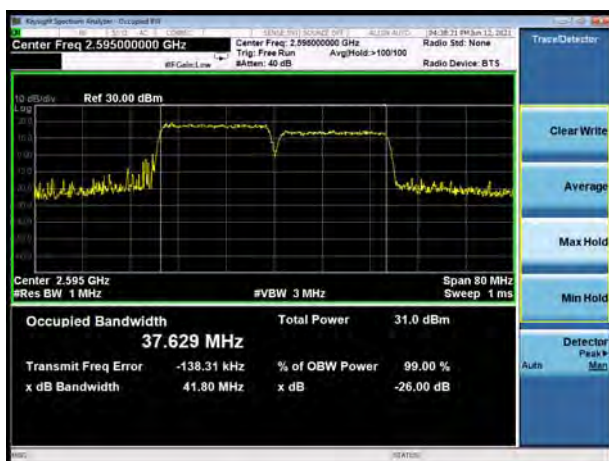
CA_7C_20MHz+20MHz 64QAM



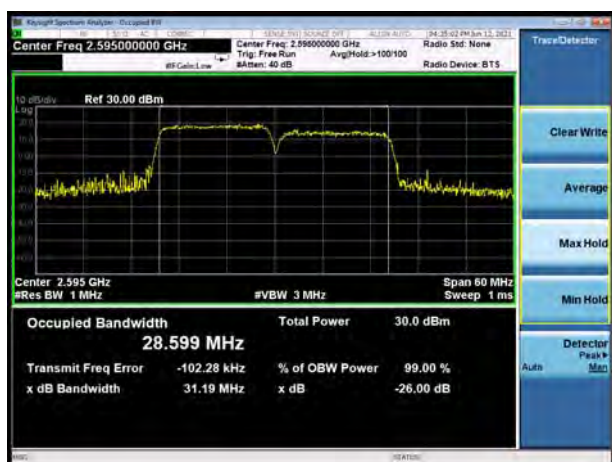
CA_38C_15MHz+15MHz QPSK



CA_38C_20MHz+20MHz QPSK



CA_38C_15MHz+15MHz 16QAM



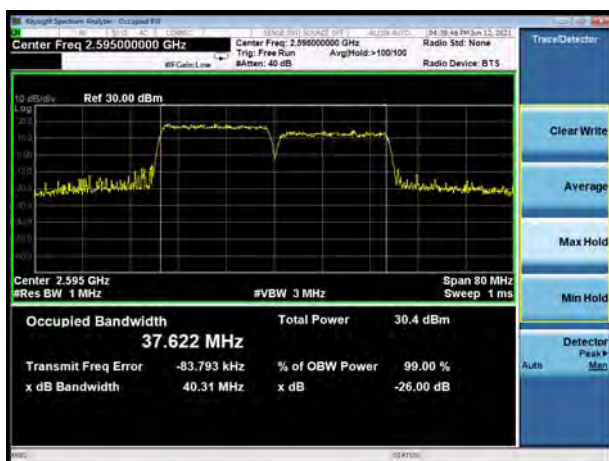
CA_38C_20MHz+20MHz 16QAM



CA_38C_15MHz+15MHz 64QAM



CA_38C_20MHz+20MHz 64QAM



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.

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

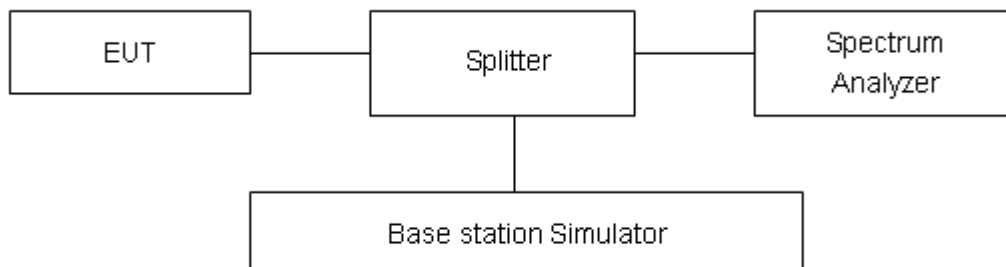
on spectrum analyzer.

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

Rule Part 27.53(m) (4)/ specifies that “for BRS and EBS stations. For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more



than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(4) of this section. In addition, the attenuation factor shall not be less 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 $k = 1.96$, $U=0.684$ dB.



Test Result

All the test traces in the plots shows the test results clearly.

WCDMA Band IV CH-Low

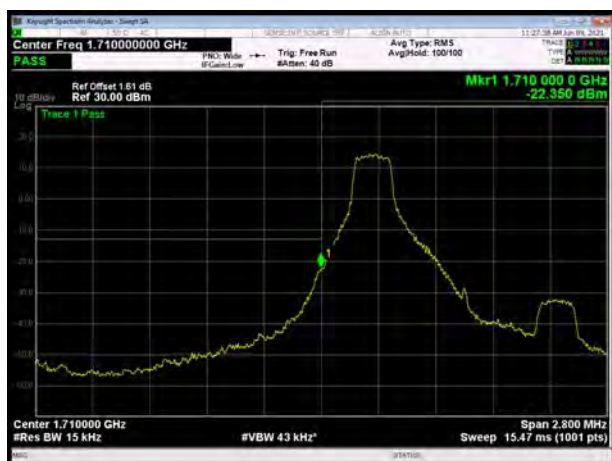


WCDMA Band IV CH-High

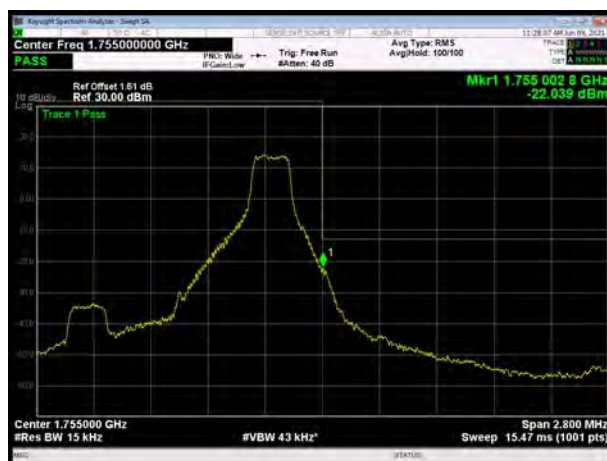




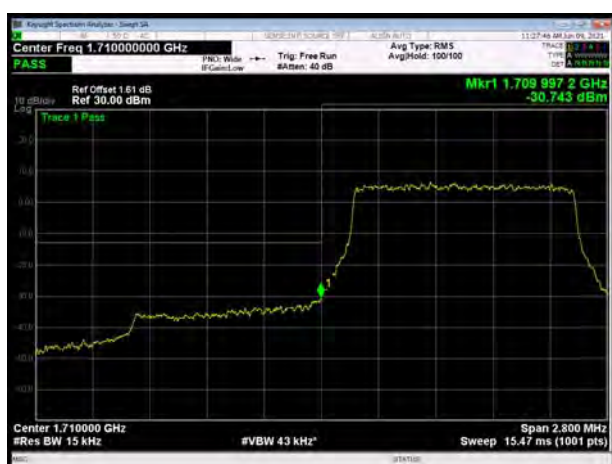
LTE Band 4 QPSK 1.4MHz CH-Low, 1 RB



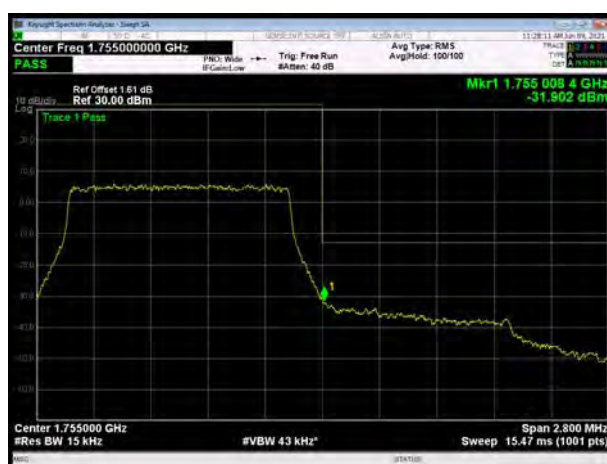
LTE Band 4 QPSK 1.4MHz CH-High, 1 RB



LTE Band 4 QPSK 1.4MHz CH-Low, 100%RB



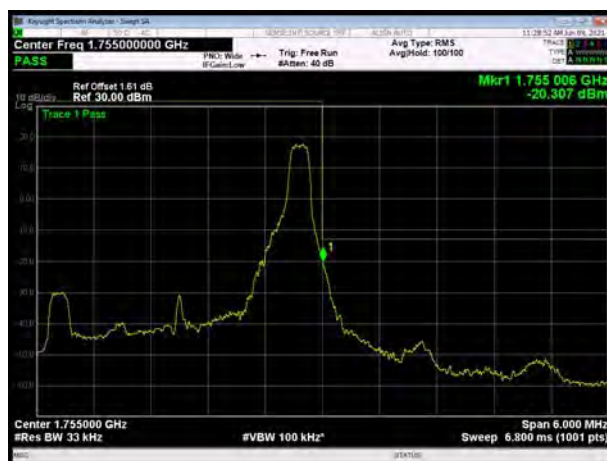
LTE Band 4 QPSK 1.4MHz CH-High, 100%RB



LTE Band 4 QPSK 3MHz CH-Low, 1 RB



LTE Band 4 QPSK 3MHz CH-High, 1 RB





LTE Band 4 QPSK 3MHz CH-Low, 100%RB



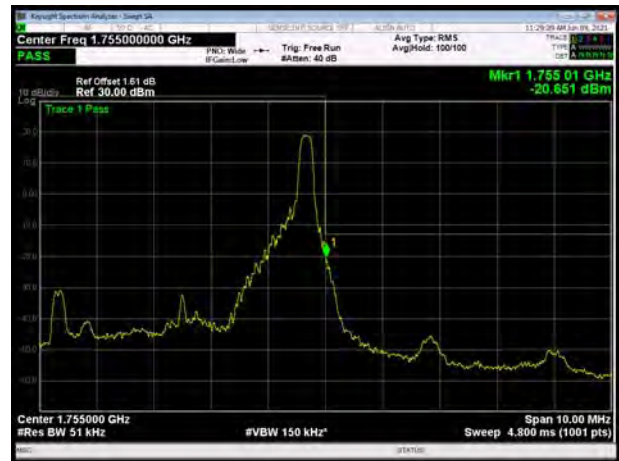
LTE Band 4 QPSK 3MHz CH-High, 100%RB



LTE Band 4 QPSK 5MHz CH-Low, 1 RB



LTE Band 4 QPSK 5MHz CH-High, 1 RB



LTE Band 4 QPSK 5MHz CH-Low, 100%RB

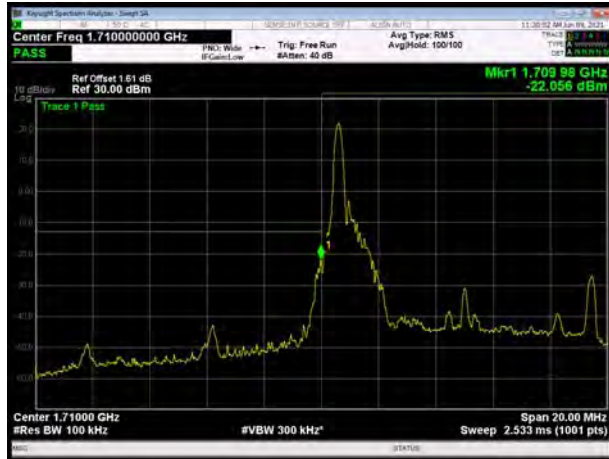


LTE Band 4 QPSK 5MHz CH-High, 100%RB





LTE Band 4 QPSK 10MHz CH-Low, 1 RB



LTE Band 4 QPSK 10MHz CH-High, 1 RB



LTE Band 4 QPSK 10MHz CH-Low, 100%RB



LTE Band 4 QPSK 10MHz CH-High, 100%RB



LTE Band 4 QPSK 15MHz CH-Low, 1 RB



LTE Band 4 QPSK 15MHz CH-High, 1 RB





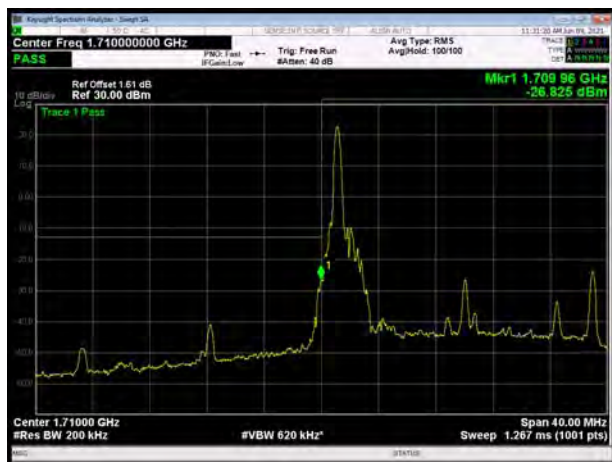
LTE Band 4 QPSK 15MHz CH-Low, 100%RB



LTE Band 4 QPSK 15MHz CH-High, 100%RB



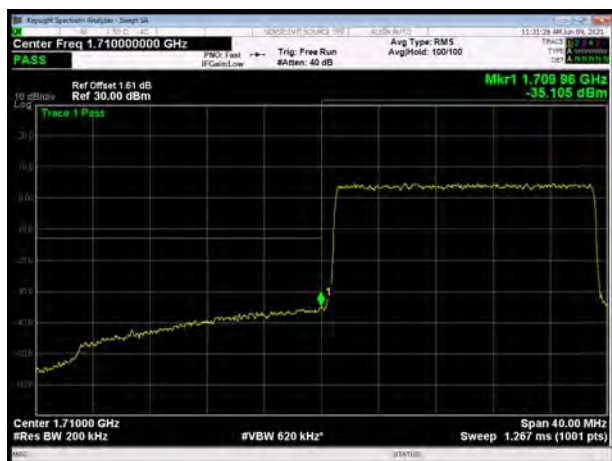
LTE Band 4 QPSK 20MHz CH-Low, 1 RB



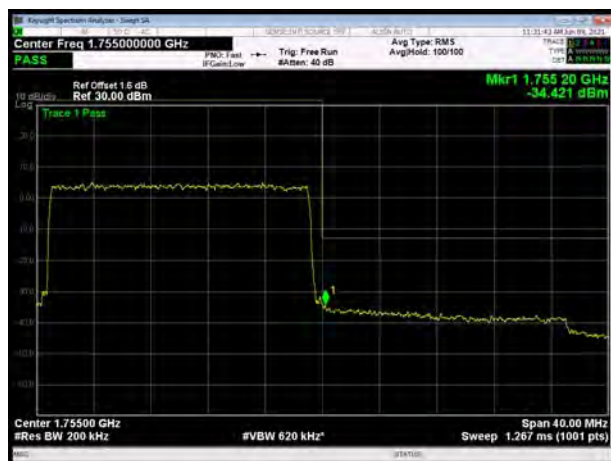
LTE Band 4 QPSK 20MHz CH-High, 1 RB



LTE Band 4 QPSK 20MHz CH-Low, 100%RB

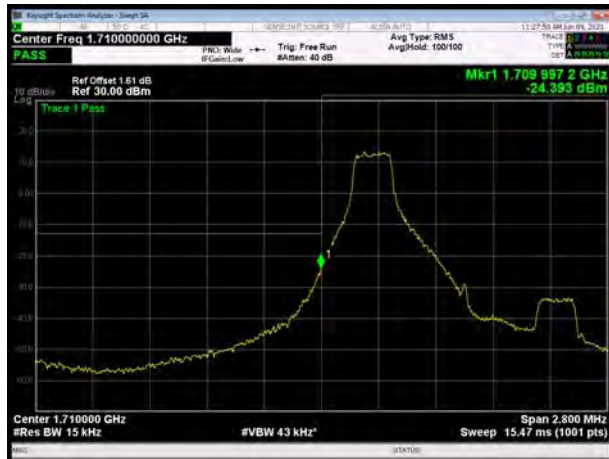


LTE Band 4 QPSK 20MHz CH-High, 100%RB

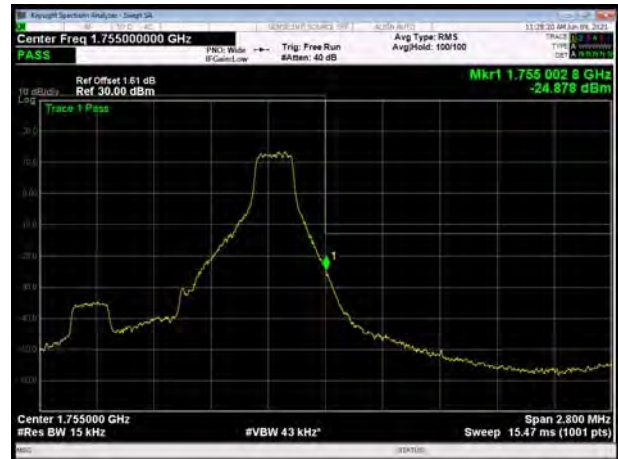




LTE Band 4 16QAM 1.4MHz CH-Low, 1 RB



LTE Band 4 16QAM 1.4MHz CH-High, 1 RB



LTE Band 4 16QAM 1.4MHz CH-Low, 100%RB



LTE Band 4 16QAM 1.4MHz CH-High, 100%RB



LTE Band 4 16QAM 3MHz CH-Low, 1 RB



LTE Band 4 16QAM 3MHz CH-High, 1 RB





LTE Band 4 16QAM 3MHz CH-Low, 100%RB



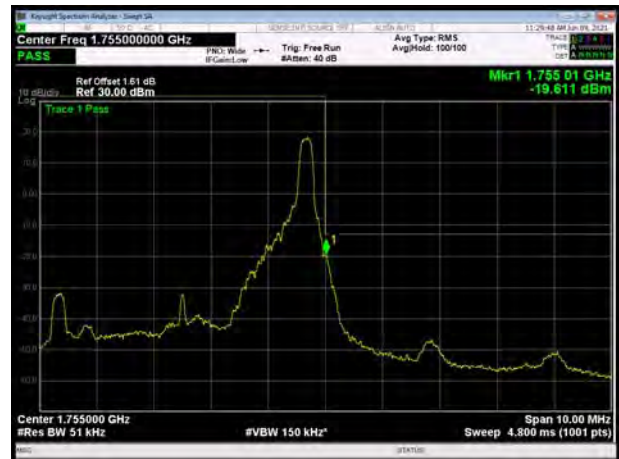
LTE Band 4 16QAM 3MHz CH-High, 100%RB



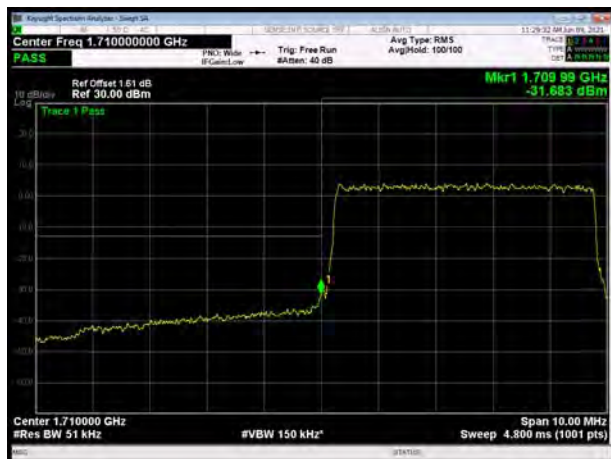
LTE Band 4 16QAM 5MHz CH-Low, 1 RB



LTE Band 4 16QAM 5MHz CH-High, 1 RB



LTE Band 4 16QAM 5MHz CH-Low, 100%RB



LTE Band 4 16QAM 5MHz CH-High, 100%RB

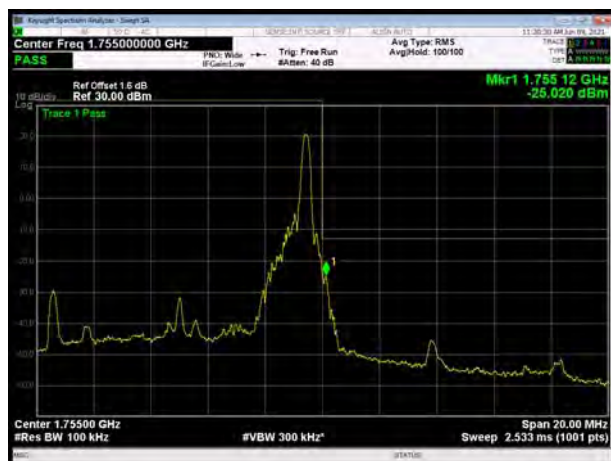




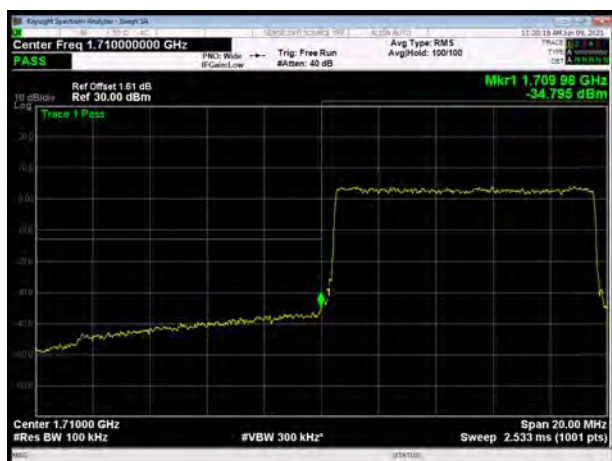
LTE Band 4 16QAM 10MHz CH-Low, 1 RB



LTE Band 4 16QAM 10MHz CH-High, 1 RB



LTE Band 4 16QAM 10MHz CH-Low, 100%RB



LTE Band 4 16QAM 10MHz CH-High, 100%RB



LTE Band 4 16QAM 15MHz CH-Low, 1 RB

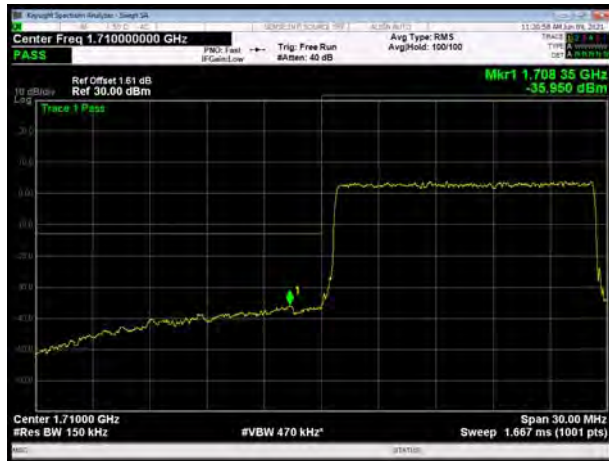


LTE Band 4 16QAM 15MHz CH-High, 1 RB





LTE Band 4 16QAM 15MHz CH-Low, 100%RB



LTE Band 4 16QAM 15MHz CH-High, 100%RB



LTE Band 4 16QAM 20MHz CH-Low, 1 RB



LTE Band 4 16QAM 20MHz CH-High, 1 RB



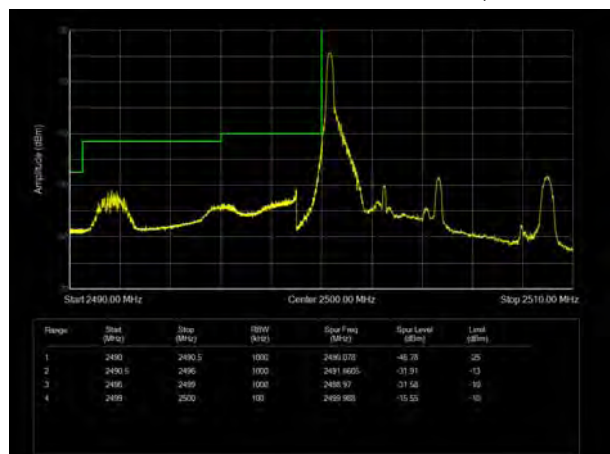
LTE Band 4 16QAM 20MHz CH-Low, 100%RB



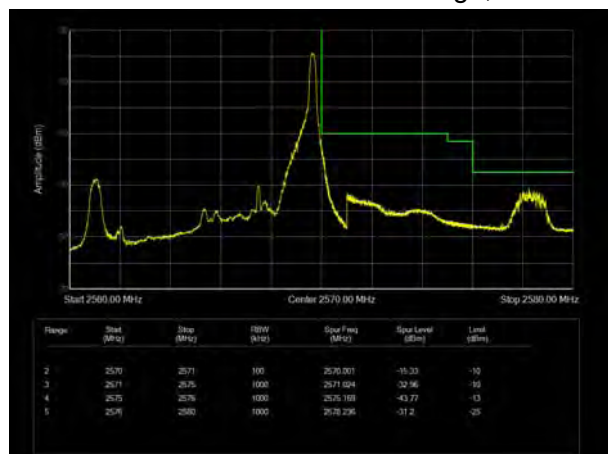
LTE Band 4 16QAM 20MHz CH-High, 100%RB



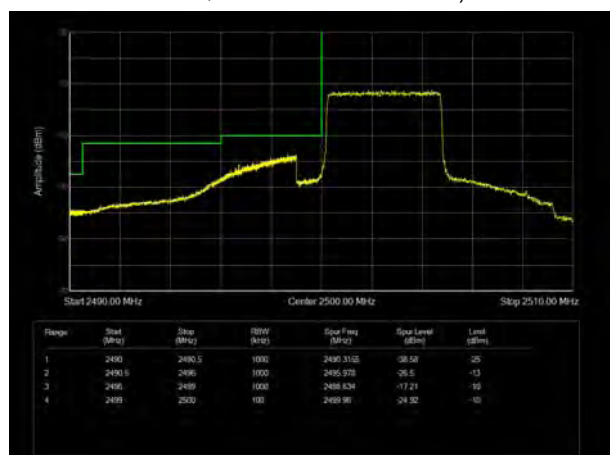
LTE Band 7 QPSK 5MHz CH-Low, 1 RB



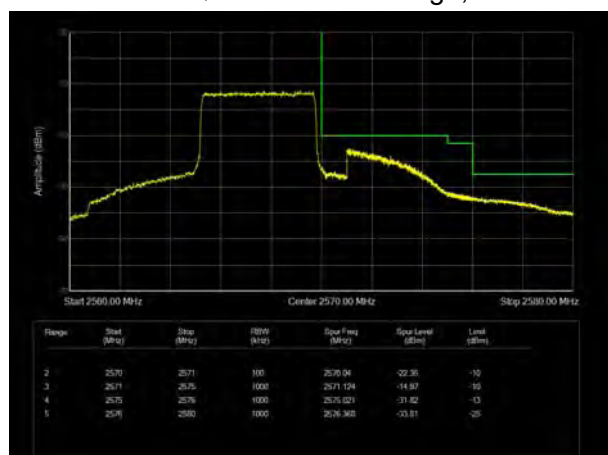
LTE Band 7 QPSK 5MHz CH-High, 1 RB



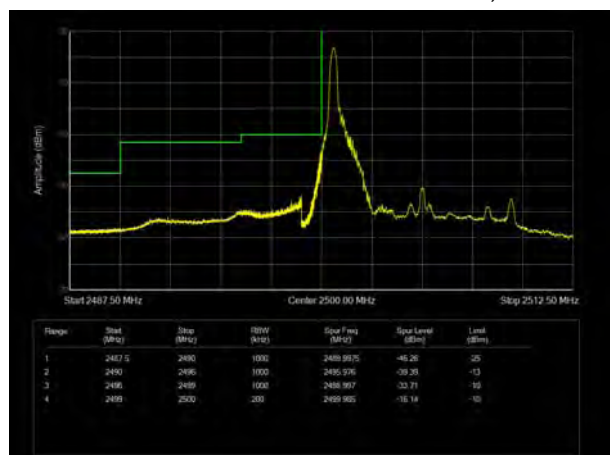
LTE Band 7 QPSK 5MHz CH-Low, 100%RB



LTE Band 7 QPSK 5MHz CH-High, 100%RB



LTE Band 7 QPSK 10MHz CH-Low, 1 RB

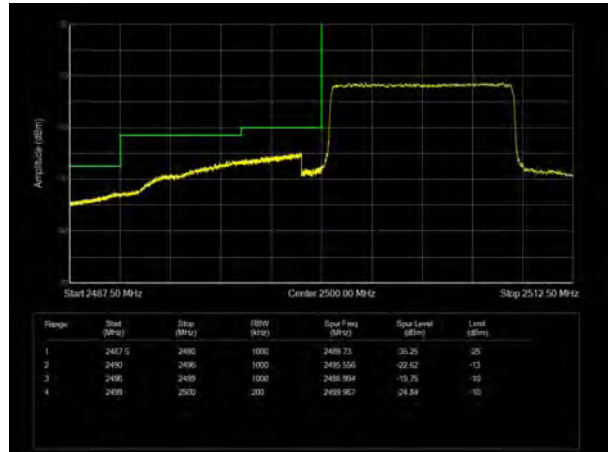


LTE Band 7 QPSK 10MHz CH-High, 1 RB





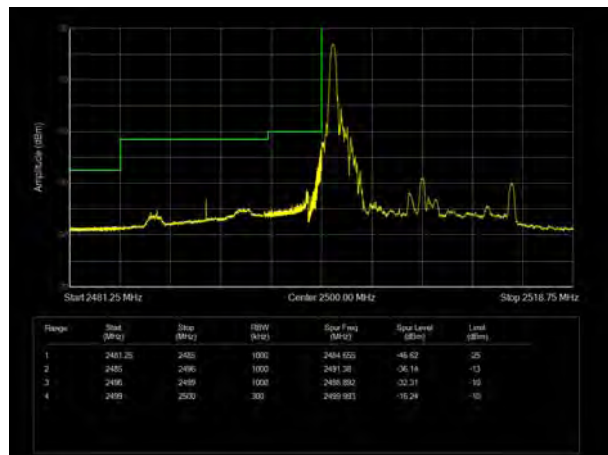
LTE Band 7 QPSK 10MHz CH-Low, 100%RB



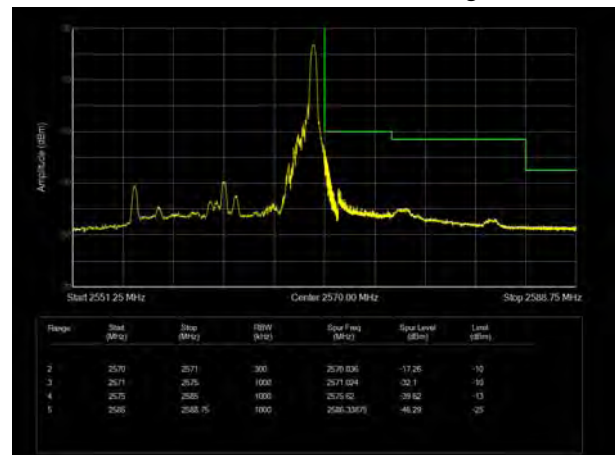
LTE Band 7 QPSK 10MHz CH-High, 100%RB



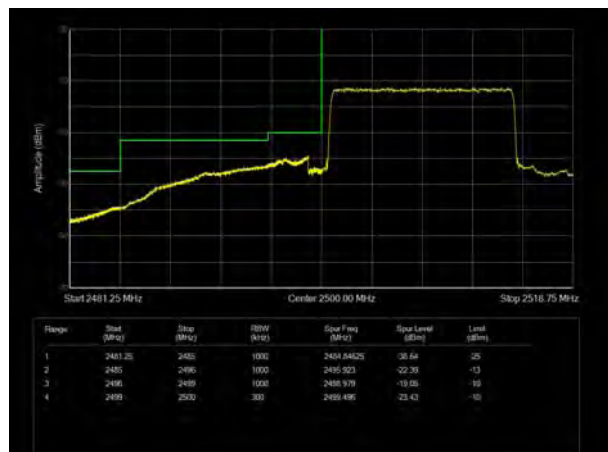
LTE Band 7 QPSK 15MHz CH-Low, 1 RB



LTE Band 7 QPSK 15MHz CH-High, 1 RB



LTE Band 7 QPSK 15MHz CH-Low, 100%RB

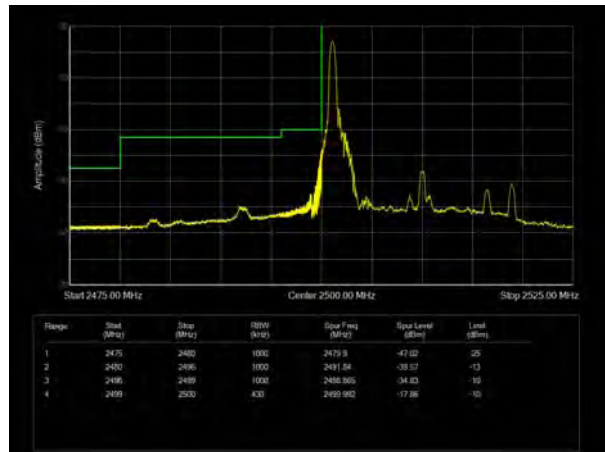


LTE Band 7 QPSK 15MHz CH-High, 100%RB

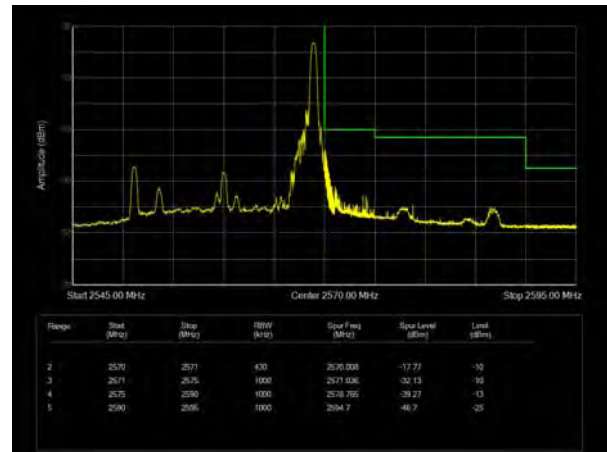




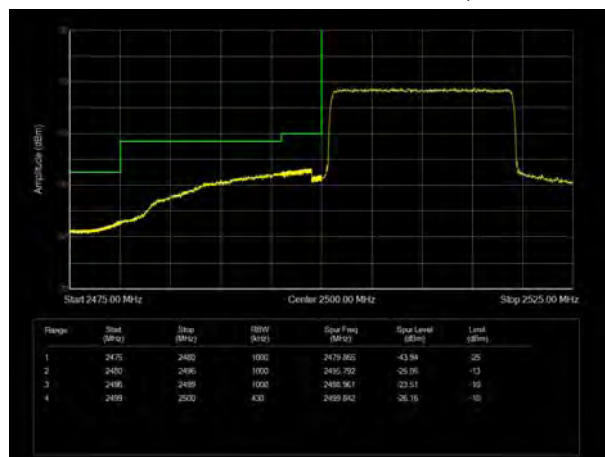
LTE Band 7 QPSK 20MHz CH-Low, 1 RB



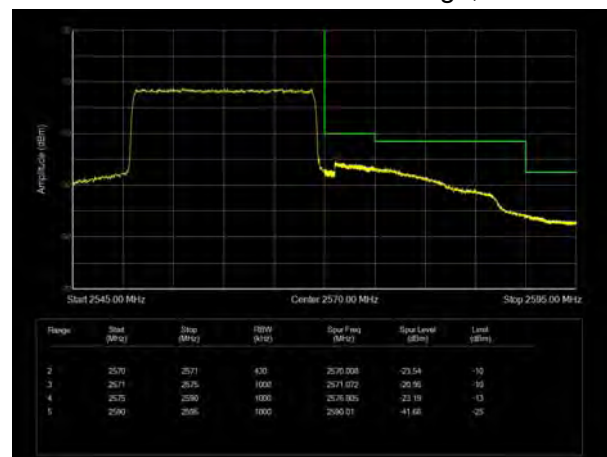
LTE Band 7 QPSK 20MHz CH-High, 1 RB



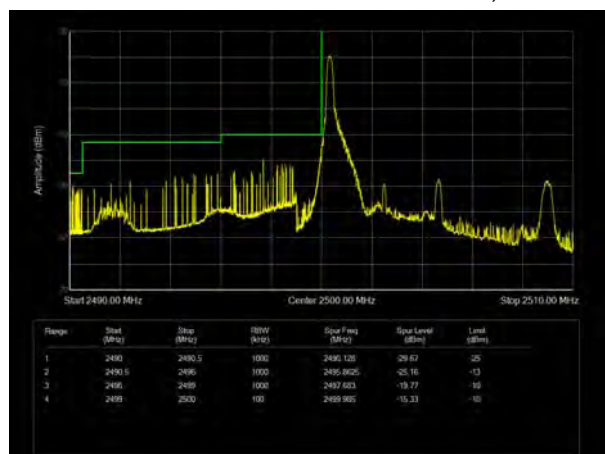
LTE Band 7 QPSK 20MHz CH-Low, 100%RB



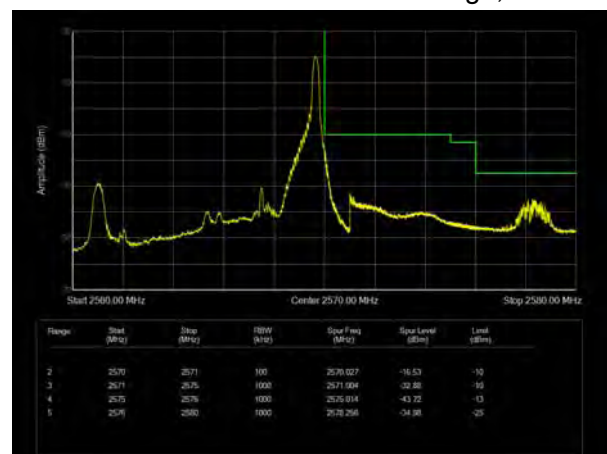
LTE Band 7 QPSK 20MHz CH-High, 100%RB



LTE Band 7 16QAM 5MHz CH-Low, 1 RB

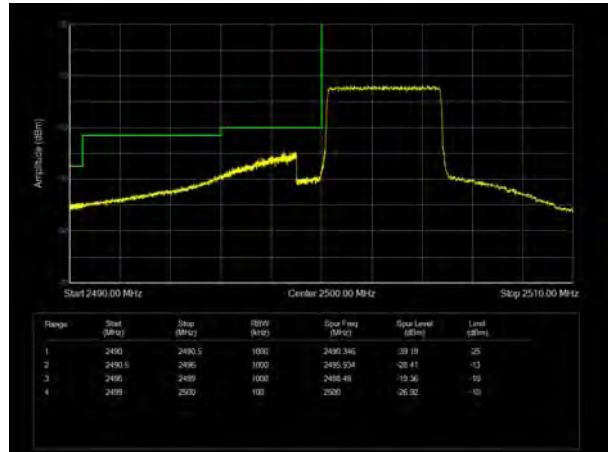


LTE Band 7 16QAM 5MHz CH-High, 1 RB

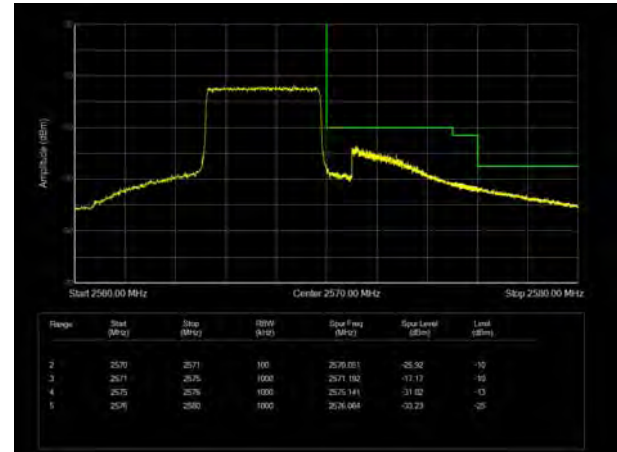




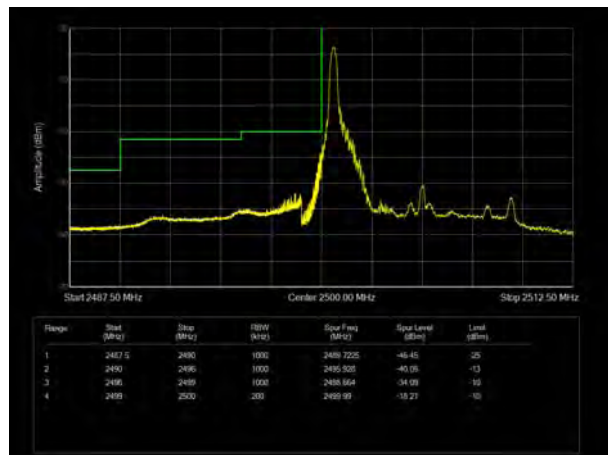
LTE Band 7 16QAM 5MHz CH-Low, 100%RB



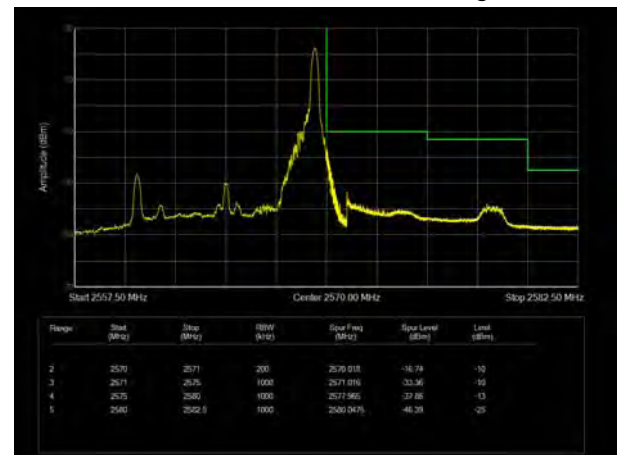
LTE Band 7 16QAM 5MHz CH-High, 100%RB



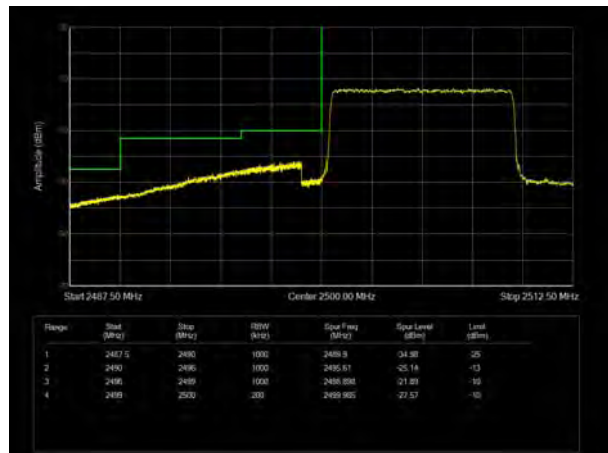
LTE Band 7 16QAM 10MHz CH-Low, 1 RB



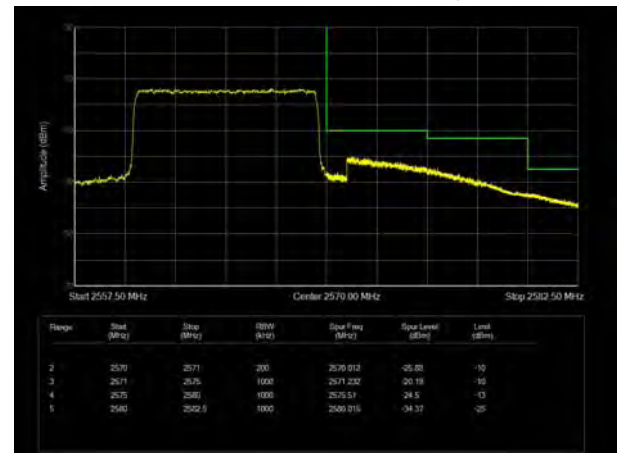
LTE Band 7 16QAM 10MHz CH-High, 1 RB



LTE Band 7 16QAM 10MHz CH-Low, 100%RB

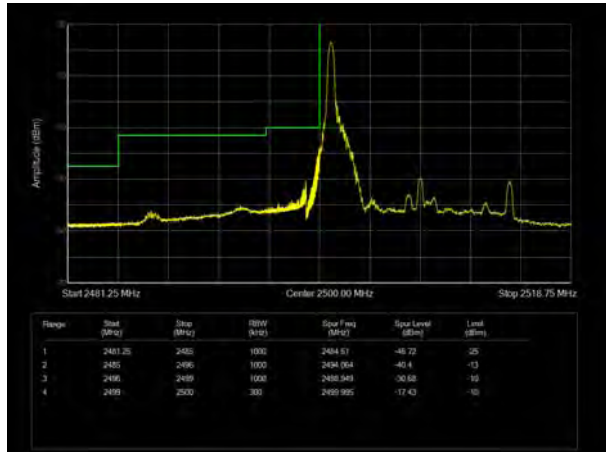


LTE Band 7 16QAM 10MHz CH-High, 100%RB

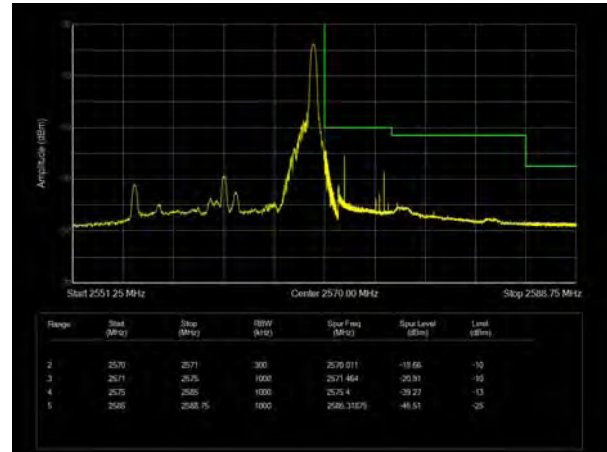




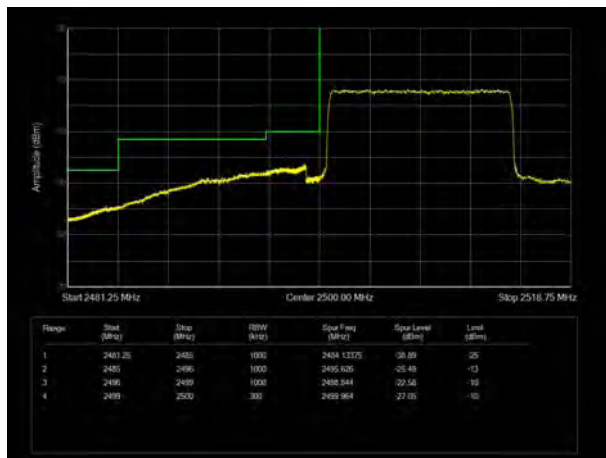
LTE Band 7 16QAM 15MHz CH-Low, 1 RB



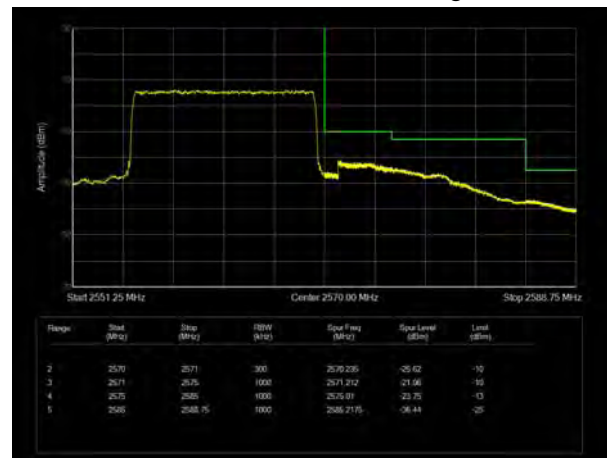
LTE Band 7 16QAM 15MHz CH-High, 1 RB



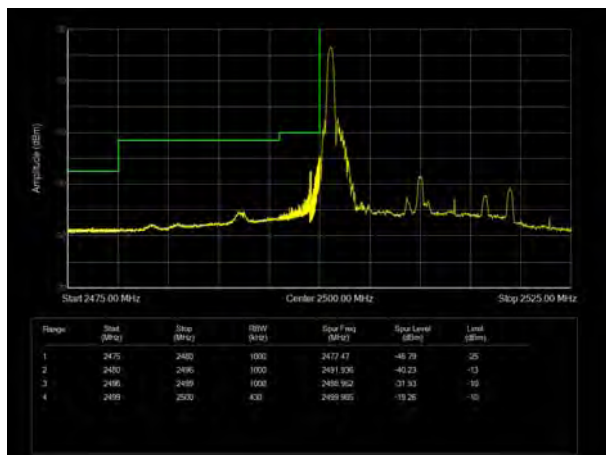
LTE Band 7 16QAM 15MHz CH-Low, 100%RB



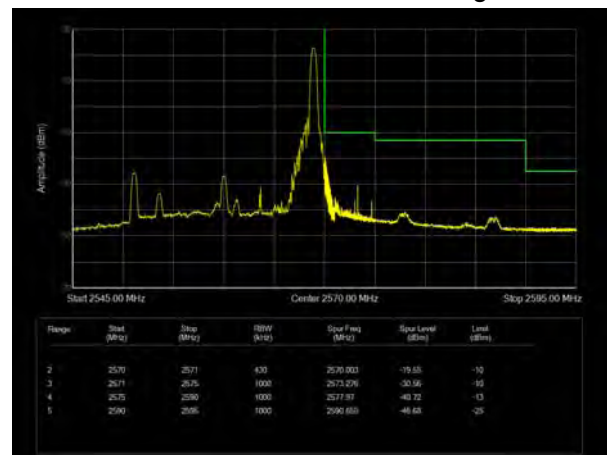
LTE Band 7 16QAM 15MHz CH-High, 100%RB



LTE Band 7 16QAM 20MHz CH-Low, 1 RB

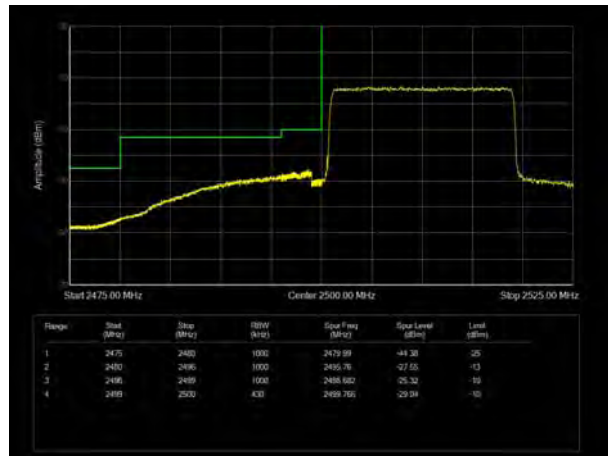


LTE Band 7 16QAM 20MHz CH-High, 1 RB

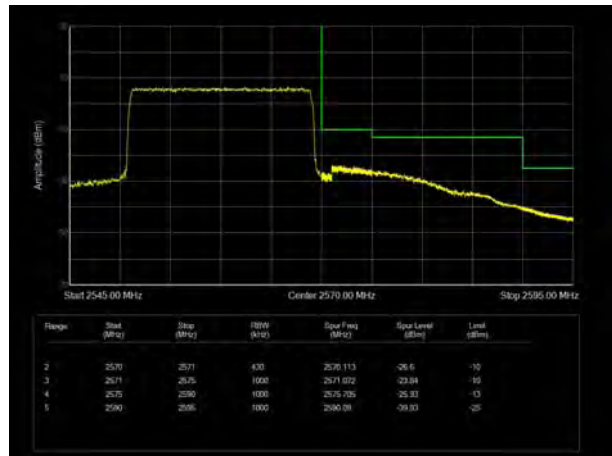




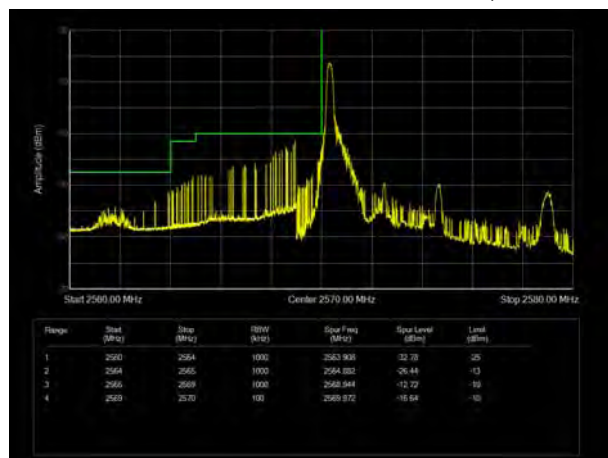
LTE Band 7 16QAM 20MHz CH-Low, 100%RB



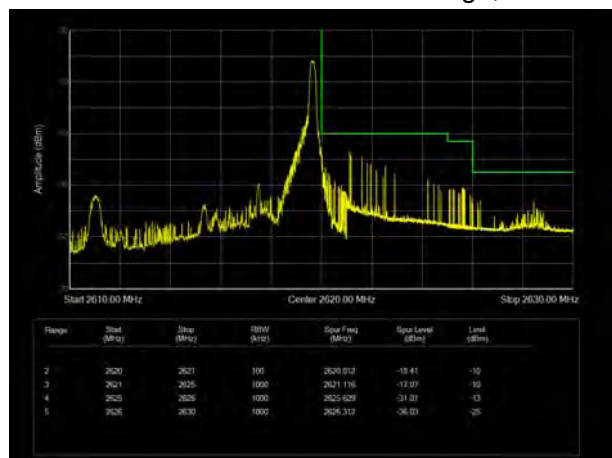
LTE Band 7 16QAM 20MHz CH-High, 100%RB



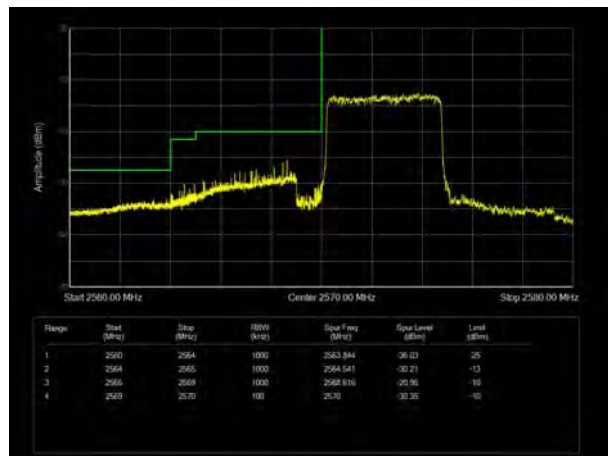
LTE Band 38 QPSK 5MHz CH-Low, 1 RB



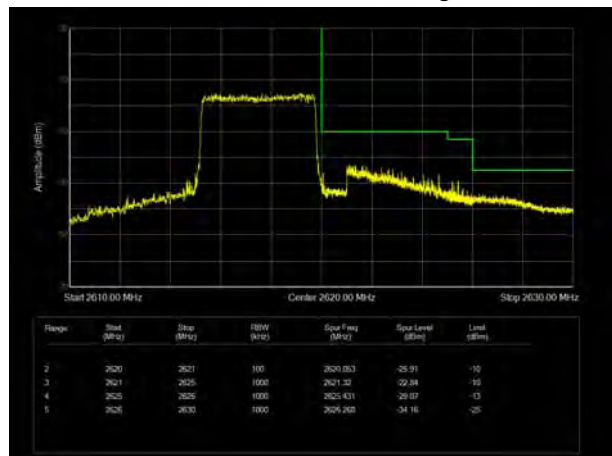
LTE Band 38 QPSK 5MHz CH-High, 1 RB



LTE Band 38 QPSK 5MHz CH-Low, 100%RB

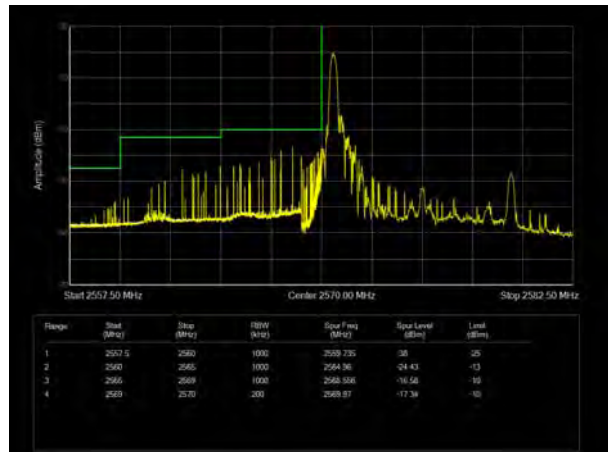


LTE Band 38 QPSK 5MHz CH-High, 100%RB

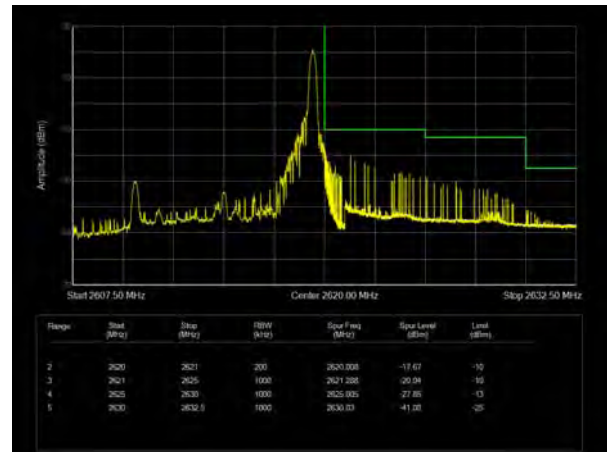




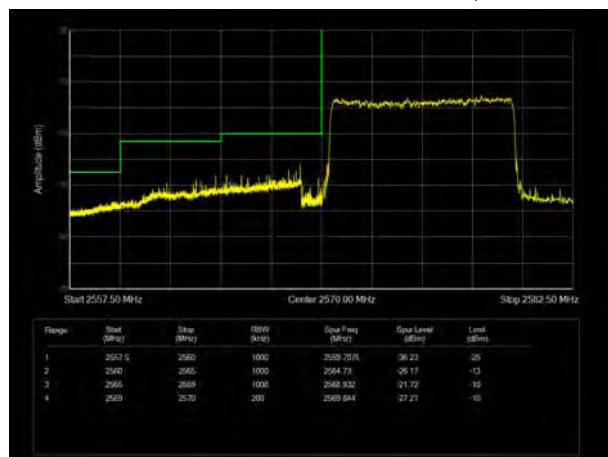
LTE Band 38 QPSK 10MHz CH-Low, 1 RB



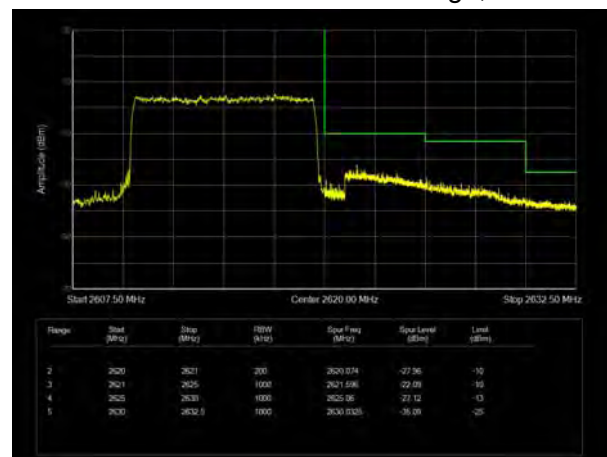
LTE Band 38 QPSK 10MHz CH-High, 1 RB



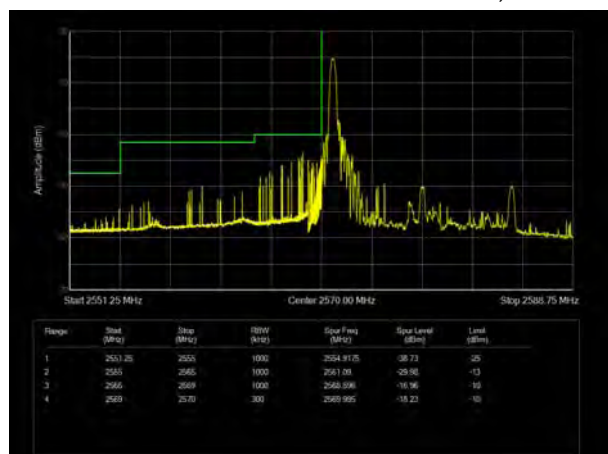
LTE Band 38 QPSK 10MHz CH-Low, 100%RB



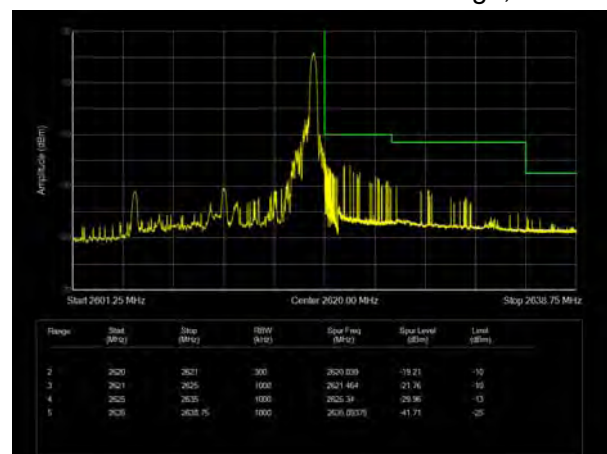
LTE Band 38 QPSK 10MHz CH-High, 100%RB



LTE Band 38 QPSK 15MHz CH-Low, 1 RB

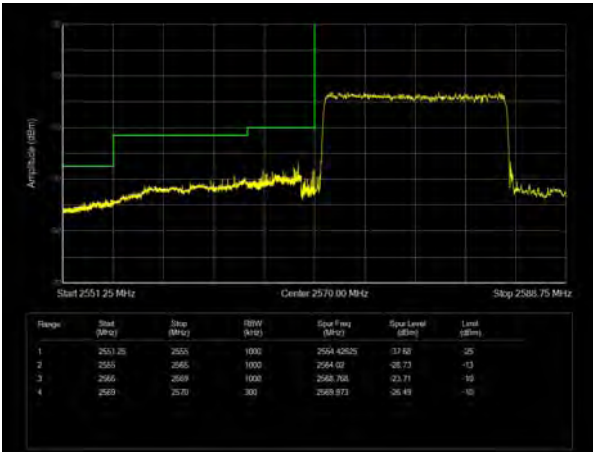


LTE Band 38 QPSK 15MHz CH-High, 1 RB





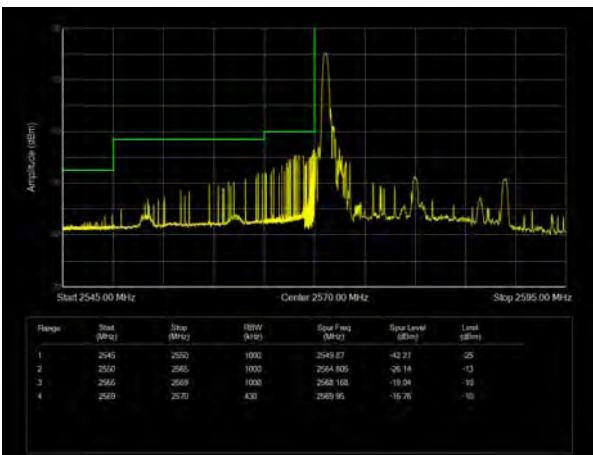
LTE Band 38 QPSK 15MHz CH-Low, 100%RB



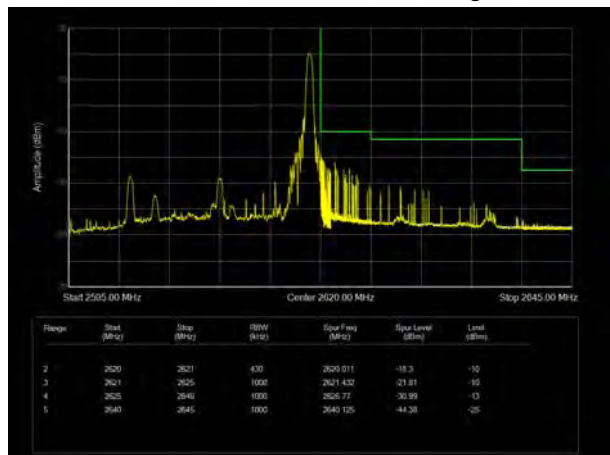
LTE Band 38 QPSK 15MHz CH-High, 100%RB



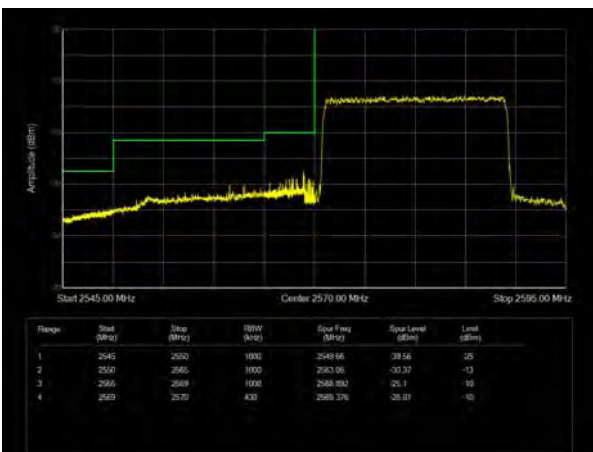
LTE Band 38 QPSK 20MHz CH-Low, 1 RB



LTE Band 38 QPSK 20MHz CH-High, 1 RB



LTE Band 38 QPSK 20MHz CH-Low, 100%RB

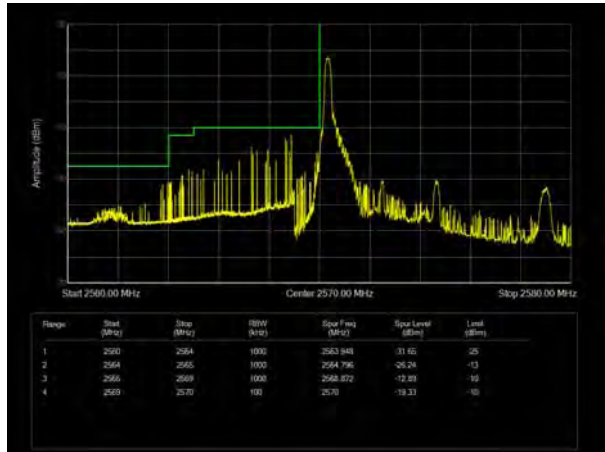


LTE Band 38 QPSK 20MHz CH-High, 100%RB

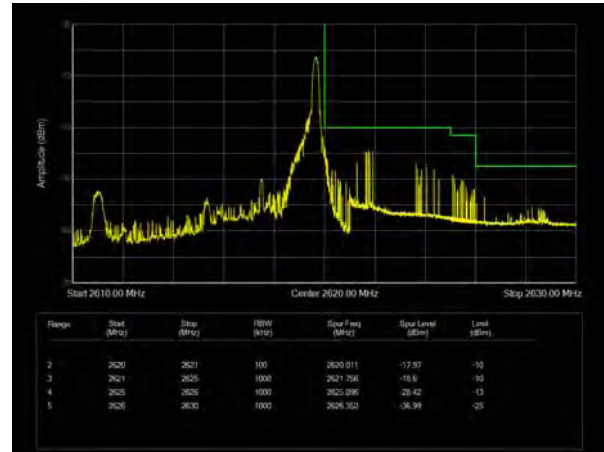




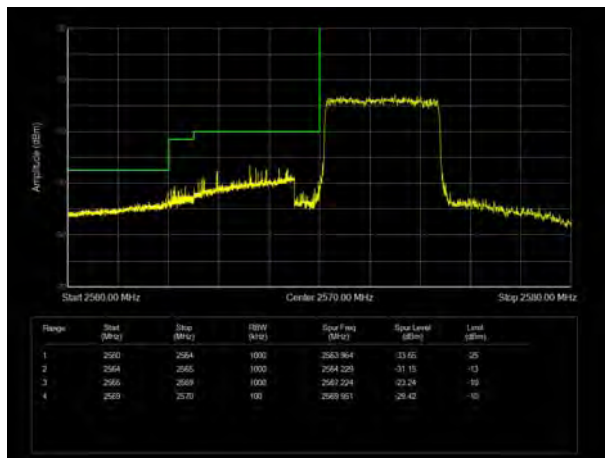
LTE Band 38 16QAM 5MHz CH-Low, 1 RB



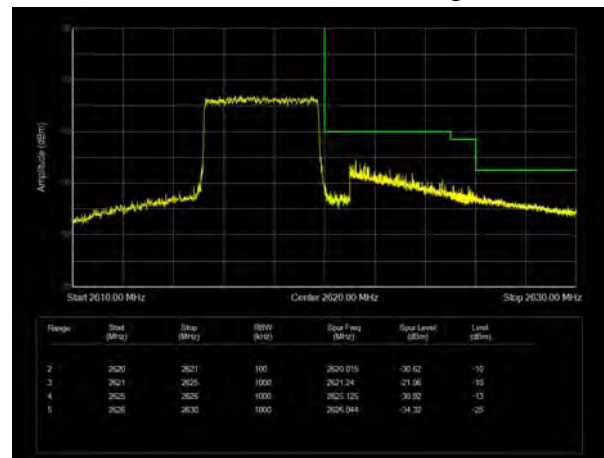
LTE Band 38 16QAM 5MHz CH-High, 1 RB



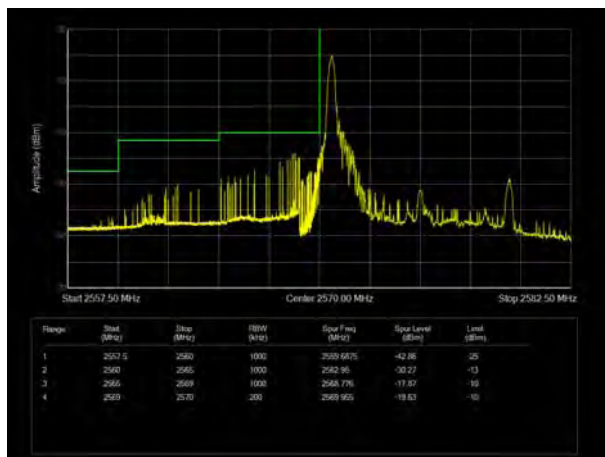
LTE Band 38 16QAM 5MHz CH-Low, 100%RB



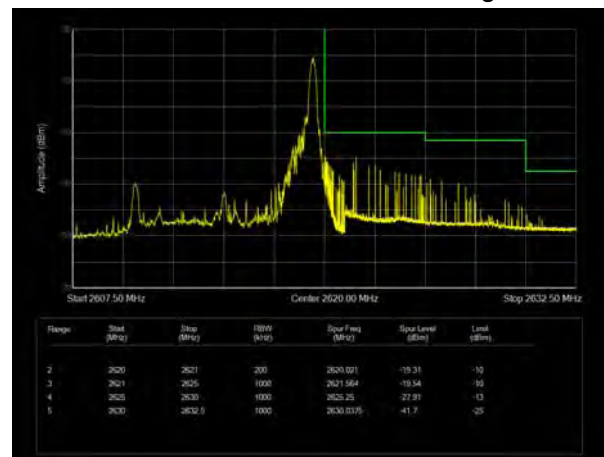
LTE Band 38 16QAM 5MHz CH-High, 100%RB



LTE Band 38 16QAM 10MHz CH-Low, 1 RB

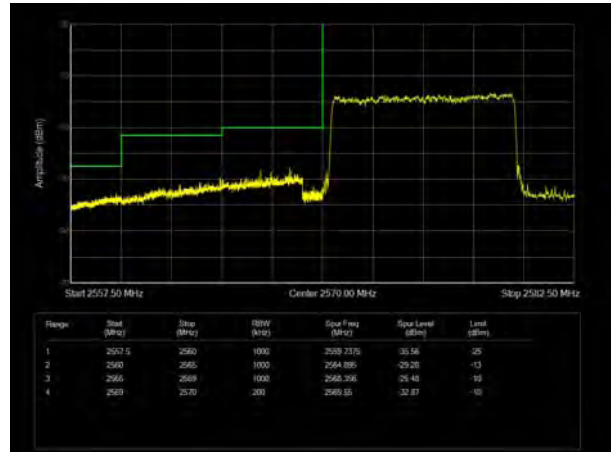


LTE Band 38 16QAM 10MHz CH-High, 1 RB

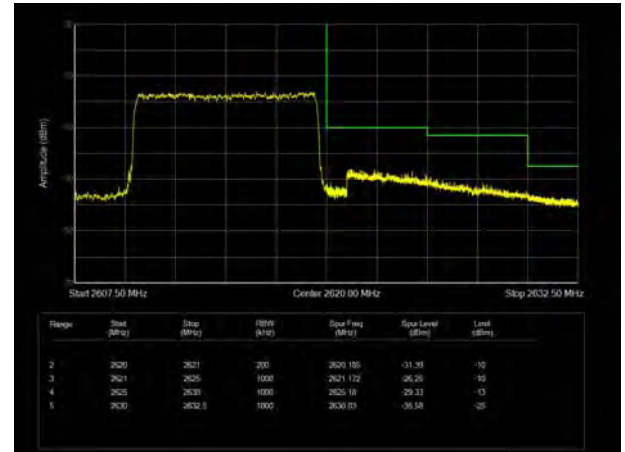




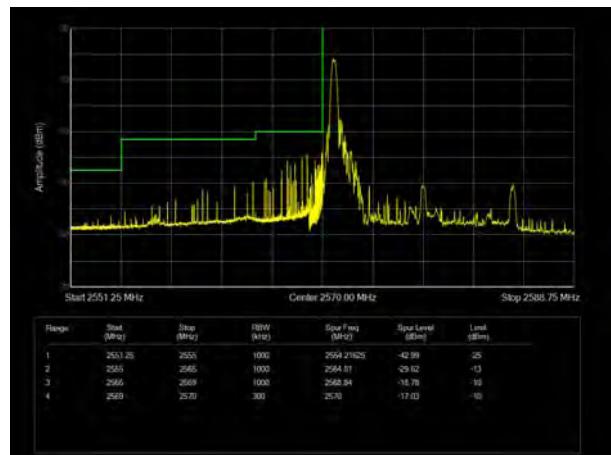
LTE Band 38 16QAM 10MHz CH-Low, 100%RB



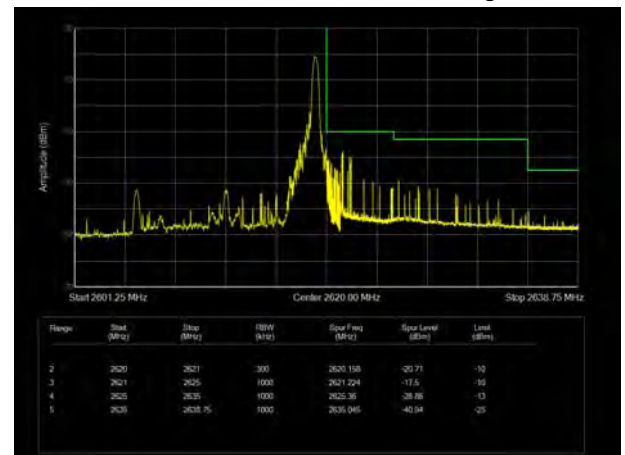
LTE Band 38 16QAM 10MHz CH-High, 100%RB



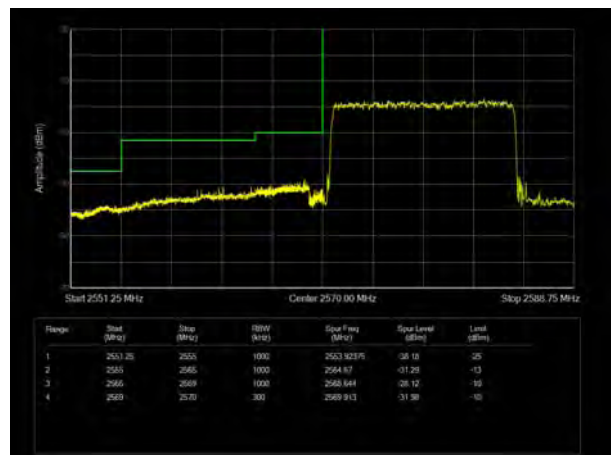
LTE Band 38 16QAM 15MHz CH-Low, 1 RB



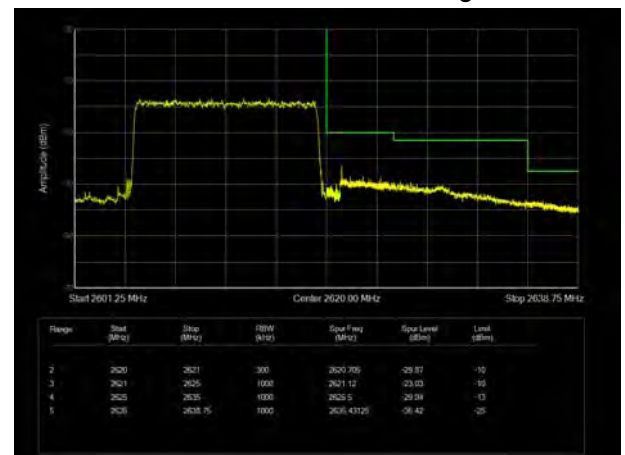
LTE Band 38 16QAM 15MHz CH-High, 1 RB



LTE Band 38 16QAM 15MHz CH-Low, 100%RB

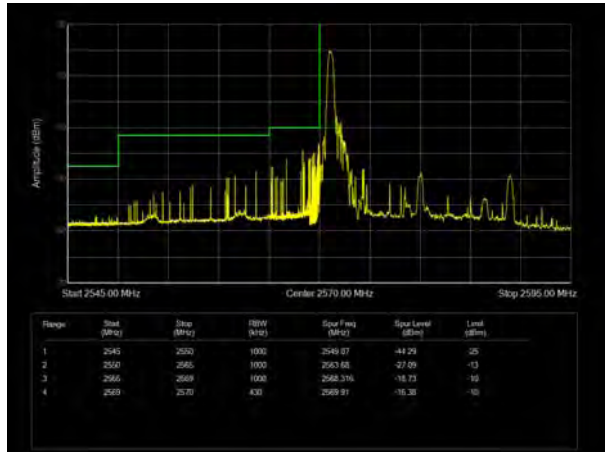


LTE Band 38 16QAM 15MHz CH-High, 100%RB

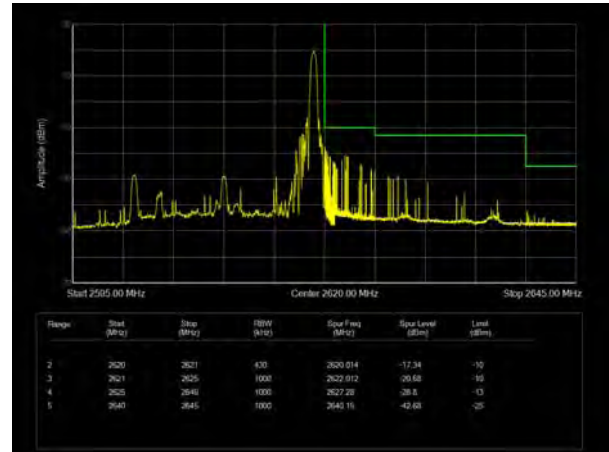




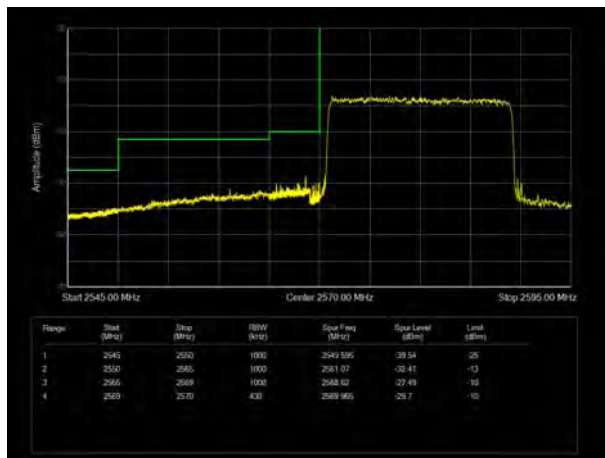
LTE Band 38 16QAM 20MHz CH-Low, 1 RB



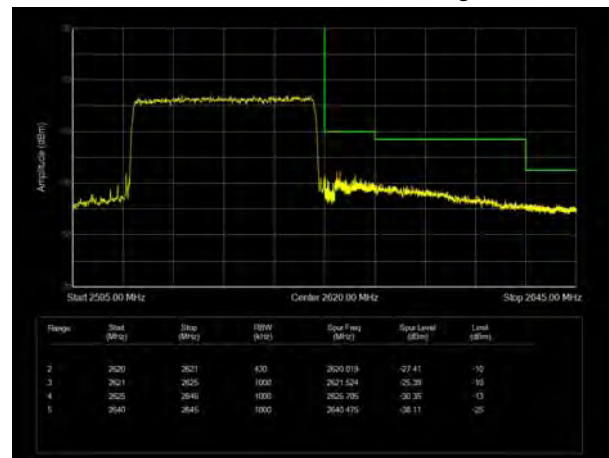
LTE Band 38 16QAM 20MHz CH-High, 1 RB



LTE Band 38 16QAM 20MHz CH-Low, 100%RB



LTE Band 38 16QAM 20MHz CH-High, 100%RB



LTE Band 41 QPSK 5MHz CH-Low, 1 RB



LTE Band 41 QPSK 5MHz CH-High, 1 RB





LTE Band 41 QPSK 5MHz CH-Low, 100%RB



LTE Band 41 QPSK 5MHz CH-High, 100%RB



LTE Band 41 QPSK 10MHz CH-Low, 1 RB



LTE Band 41 QPSK 10MHz CH-High, 1 RB



LTE Band 41 QPSK 10MHz CH-Low, 100%RB

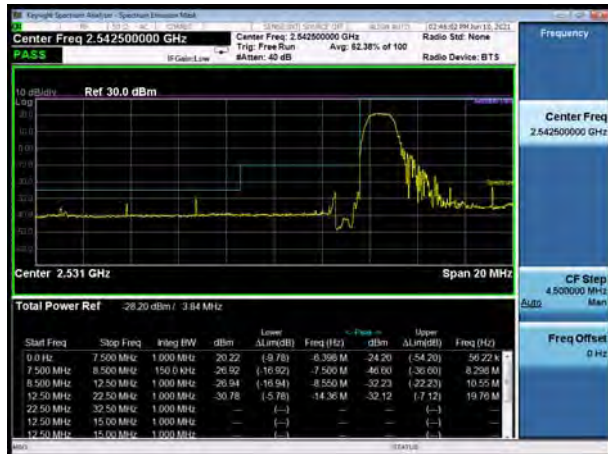


LTE Band 41 QPSK 10MHz CH-High, 100%RB





LTE Band 41 QPSK 15MHz CH-Low, 1 RB



LTE Band 41 QPSK 15MHz CH-High, 1 RB



LTE Band 41 QPSK 15MHz CH-Low, 100%RB



LTE Band 41 QPSK 15MHz CH-High, 100%RB



LTE Band 41 QPSK 20MHz CH-Low, 1 RB



LTE Band 41 QPSK 20MHz CH-High, 1 RB

