



RF TEST REPORT

Applicant Xiaomi Communications Co., Ltd.
FCC ID 2AFZZ119UY
Product Mobile Phone
Brand Redmi
Model 22011119UY
Report No. R2110A0907-R3
Issue Date November 25, 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.

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TABLE OF CONTENT

1	Test Laboratory	4
1.1	Notes of the Test Report	4
1.2.	Test facility	4
1.3	Testing Location	4
2	General Description of Equipment under Test	5
2.1	Applicant and Manufacturer Information	5
2.2	General information	5
3	Applied Standards	7
4	Test Configuration	8
5	Test Case Results	10
5.1	RF Power Output and Effective Isotropic Radiated Power	10
5.2	Occupied Bandwidth	26
5.3	Band Edge Compliance	66
5.4	Peak-to-Average Power Ratio (PAPR)	113
5.5	Frequency Stability	120
5.6	Spurious Emissions at Antenna Terminals	132
5.7	Radiates Spurious Emission	150
6	Main Test Instruments	169
ANNEX A: The EUT Appearance		170
ANNEX B: Test Setup Photos		171



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: October 26, 2021~ November 22, 2021
Date of Sample Received: October 26, 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.



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
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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	22011119UY		
IMEI	IMEI 1:865366050037984 IMEI 2:865366050037992		
Hardware Version	P2		
Software Version	MIUI12.5		
Antenna Type	Internal Antenna		
Antenna Gain	Band	Low Antenna	Upper Antenna
	WCDMA Band IV	-0.8dBi	-1.4dBi
	LTE Band 4	-0.8dBi	-1.4dBi
	LTE Band 7	-1.6dBi	-1.7dBi
	LTE Band 38	0dBi	-1.6dBi
	LTE Band 41	0dBi	-1.6dBi
Test Mode(s)	WCDMA Band IV; LTE Band 4/7/38/41;		
Test Modulation	(WCDMA) BPSK, QPSK, 16QAM; (LTE) QPSK, 16QAM, 64QAM;		
HSDPA UE Category	24		
HSUPA UE Category	7		
LTE Category	7		
Memory	4G+64G, 4G+128G		
Maximum E.I.R.P./ E.R.P.	WCDMA Band IV	23.44dBm	
	LTE Band 4	23.59dBm	
	LTE Band 7	23.12dBm	
	LTE Band 38	24.54dBm	
	LTE Band 41	24.60dBm	
	CA_7C	22.55dBm	
	CA_38C	21.12dBm	



Rated Power Supply Voltage	3.87V		
Operating Voltage	Minimum: 3.6V Maximum: 4.45V		
Operating Temperature	Lowest: -10°C Highest: +60°C		
Testing Temperature	Lowest: -30°C Highest: +50°C		
Operating Frequency Range(s)	Mode	Tx (MHz)	Rx (MHz)
	WCDMA Band IV	1710 ~ 1755	2110 ~ 2155
	LTE Band 4	1710 ~ 1755	2110 ~ 2155
	LTE Band 7	2500 ~ 2570	2620 ~ 2690
	LTE Band 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)

FCC CFR47 Part 2 (2020)

Reference standard:

ANSI C63.26 (2015)

KDB 971168 D01 Power Meas License Digital Systems v03r01



4 Test Configuration

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

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (Z axis, horizontal polarization) 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 HSDPA/HSUPA DC-HSDPA
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
	LTE 7	-	-	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	O	O	O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	LTE 4	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	-	-	O	O	O	O
Band Edge Compliance	LTE 4	O	O	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 7	-	-	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 38	-	-	O	O	O	O	O	O	O	-	O	O	-	O
	LTE 41	-	-	O	O	O	O	O	O	O	-	O	O	-	O
Peak-to-Average Power Ratio	LTE 4	O	O	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 7	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 38	-	-	O	O	O	O	O	O	-	-	O	O	O	O
	LTE 41	-	-	O	O	O	O	O	O	-	-	O	O	O	O
Frequency Stability	LTE 4	O	O	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 7	-	-	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 38	-	-	O	O	O	O	O	O	O	-	-	-	O	-
	LTE 41	-	-	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.

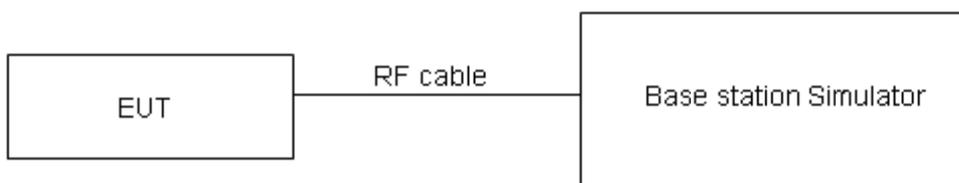
ERP can then be calculated as follows:

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

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	≤ 1 W (30 dBm)
Part 27.50(h)(2) Limit	≤ 2 W (33 dBm)

Measurement Uncertainty

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



Test Results

WCDMA Band IV		Maximum Output Power (dBm)			Low Antenna EIRP (dBm)			Upper Antenna EIRP (dBm)		
		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		24.12	24.07	24.01	23.32	23.27	23.21	22.72	22.67	22.61
HSDPA	Sub - Test 1	23.02	23.01	22.85	22.22	22.21	22.05	21.62	21.61	21.45
	Sub - Test 2	23.14	23.07	23.13	22.34	22.27	22.33	21.74	21.67	21.73
	Sub - Test 3	22.56	22.45	22.47	21.76	21.65	21.67	21.16	21.05	21.07
	Sub - Test 4	22.66	22.47	22.61	21.86	21.67	21.81	21.26	21.07	21.21
HSUPA	Sub - Test 1	22.08	22.03	21.85	21.28	21.23	21.05	20.68	20.63	20.45
	Sub - Test 2	21.06	21.13	20.87	20.26	20.33	20.07	19.66	19.73	19.47
	Sub - Test 3	22.16	22.01	22.07	21.36	21.21	21.27	20.76	20.61	20.67
	Sub - Test 4	21.18	21.15	20.87	20.38	20.35	20.07	19.78	19.75	19.47
	Sub - Test 5	23.08	22.91	22.99	22.28	22.11	22.19	21.68	21.51	21.59
DC-HSDPA	Sub - Test 1	23.26	22.95	23.01	22.46	22.15	22.21	21.86	21.55	21.61
	Sub - Test 2	23.28	22.97	23.07	22.48	22.17	22.27	21.88	21.57	21.67
	Sub - Test 3	22.46	22.59	22.35	21.66	21.79	21.55	21.06	21.19	20.95
	Sub - Test 4	22.72	22.67	22.51	21.92	21.87	21.71	21.32	21.27	21.11



LTE Band 4				Maximum Output Power(dBm)			Low Antenna EIRP (dBm)			Upper Antenna EIRP (dBm)		
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	24.24	24.20	24.20	23.44	23.40	23.40	22.84	22.80	22.80
		1	2	24.39	24.31	24.28	23.59	23.51	23.48	22.99	22.91	22.88
		1	5	24.01	23.97	24.03	23.21	23.17	23.23	22.61	22.57	22.63
		3	0	24.26	24.18	24.27	23.46	23.38	23.47	22.86	22.78	22.87
		3	2	24.23	24.26	24.23	23.43	23.46	23.43	22.83	22.86	22.83
		3	3	24.32	24.07	24.13	23.52	23.27	23.33	22.92	22.67	22.73
		6	0	23.33	23.24	23.31	22.53	22.44	22.51	21.93	21.84	21.91
	16QAM	1	0	23.70	23.62	23.42	22.90	22.82	22.62	22.30	22.22	22.02
		1	2	23.68	23.62	23.65	22.88	22.82	22.85	22.28	22.22	22.25
		1	5	23.57	23.36	23.31	22.77	22.56	22.51	22.17	21.96	21.91
		3	0	23.27	23.13	23.28	22.47	22.33	22.48	21.87	21.73	21.88
		3	2	23.31	23.22	23.20	22.51	22.42	22.40	21.91	21.82	21.80
		3	3	23.36	23.08	23.10	22.56	22.28	22.30	21.96	21.68	21.70
		6	0	22.36	22.22	22.28	21.56	21.42	21.48	20.96	20.82	20.88
	64QAM	1	0	22.40	22.35	22.28	21.60	21.55	21.48	21.00	20.95	20.88
		1	2	22.56	22.41	22.32	21.76	21.61	21.52	21.16	21.01	20.92
		1	5	22.25	22.12	22.00	21.45	21.32	21.20	20.85	20.72	20.60
		3	0	22.19	22.15	22.25	21.39	21.35	21.45	20.79	20.75	20.85
		3	2	22.30	22.23	22.21	21.50	21.43	21.41	20.90	20.83	20.81
		3	3	22.39	22.06	22.17	21.59	21.26	21.37	20.99	20.66	20.77
		6	0	21.35	21.22	21.28	20.55	20.42	20.48	19.95	19.82	19.88
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	24.26	24.24	24.23	23.46	23.44	23.43	22.86	22.84	22.83
		1	7	24.37	24.34	24.32	23.57	23.54	23.52	22.97	22.94	22.92
		1	14	24.04	24.02	24.07	23.24	23.22	23.27	22.64	22.62	22.67
		8	0	23.36	23.30	23.40	22.56	22.50	22.60	21.96	21.90	22.00
		8	4	23.35	23.36	23.35	22.55	22.56	22.55	21.95	21.96	21.95
		8	7	23.42	23.18	23.23	22.62	22.38	22.43	22.02	21.78	21.83
		15	0	23.33	23.28	23.34	22.53	22.48	22.54	21.93	21.88	21.94



	16QAM	1	0	23.73	23.64	23.45	22.93	22.84	22.65	22.33	22.24	22.05
		1	7	23.71	23.62	23.69	22.91	22.82	22.89	22.31	22.22	22.29
		1	14	23.59	23.40	23.34	22.79	22.60	22.54	22.19	22.00	21.94
		8	0	22.38	22.26	22.40	21.58	21.46	21.60	20.98	20.86	21.00
		8	4	22.42	22.35	22.32	21.62	21.55	21.52	21.02	20.95	20.92
		8	7	22.46	22.20	22.23	21.66	21.40	21.43	21.06	20.80	20.83
		15	0	22.39	22.26	22.31	21.59	21.46	21.51	20.99	20.86	20.91
	64QAM	1	0	22.43	22.37	22.31	21.63	21.57	21.51	21.03	20.97	20.91
		1	7	22.59	22.41	22.34	21.79	21.61	21.54	21.19	21.01	20.94
		1	14	22.27	22.11	22.03	21.47	21.31	21.23	20.87	20.71	20.63
		8	0	21.30	21.28	21.37	20.50	20.48	20.57	19.90	19.88	19.97
		8	4	21.41	21.36	21.33	20.61	20.56	20.53	20.01	19.96	19.93
		8	7	21.49	21.18	21.30	20.69	20.38	20.50	20.09	19.78	19.90
		15	0	21.38	21.26	21.31	20.58	20.46	20.51	19.98	19.86	19.91
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	24.23	24.22	24.19	23.43	23.42	23.39	22.83	22.82	22.79
		1	13	24.35	24.30	24.29	23.55	23.50	23.49	22.95	22.90	22.89
		1	24	24.01	23.97	24.03	23.21	23.17	23.23	22.61	22.57	22.63
		12	0	23.33	23.25	23.36	22.53	22.45	22.56	21.93	21.85	21.96
		12	6	23.33	23.32	23.30	22.53	22.52	22.50	21.93	21.92	21.90
		12	13	23.40	23.16	23.19	22.60	22.36	22.39	22.00	21.76	21.79
		25	0	23.33	23.27	23.32	22.53	22.47	22.52	21.93	21.87	21.92
	16QAM	1	0	23.70	23.60	23.42	22.90	22.80	22.62	22.30	22.20	22.02
		1	13	23.68	23.60	23.66	22.88	22.80	22.86	22.28	22.20	22.26
		1	24	23.56	23.38	23.30	22.76	22.58	22.50	22.16	21.98	21.90
		12	0	22.36	22.22	22.37	21.56	21.42	21.57	20.96	20.82	20.97
		12	6	22.39	22.30	22.28	21.59	21.50	21.48	20.99	20.90	20.88
		12	13	22.43	22.15	22.19	21.63	21.35	21.39	21.03	20.75	20.79
		25	0	22.37	22.22	22.26	21.57	21.42	21.46	20.97	20.82	20.86
	64QAM	1	0	22.40	22.37	22.28	21.60	21.57	21.48	21.00	20.97	20.88
		1	13	22.56	22.43	22.31	21.76	21.63	21.51	21.16	21.03	20.91
		1	24	22.28	22.09	21.99	21.48	21.29	21.19	20.88	20.69	20.59
		12	0	21.28	21.24	21.38	20.48	20.44	20.58	19.88	19.84	19.98
		12	6	21.38	21.31	21.29	20.58	20.51	20.49	19.98	19.91	19.89
		12	13	21.46	21.13	21.26	20.66	20.33	20.46	20.06	19.73	19.86



BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				20000/1715	20175/1732.5	20350/1750	20000/1715	20175/1732.5	20350/1750	20000/1715	20175/1732.5	20350/1750
		25	0	21.36	21.22	21.26	20.56	20.42	20.46	19.96	19.82	19.86
10MHz	QPSK	1	0	24.25	24.23	24.22	23.45	23.43	23.42	22.85	22.83	22.82
		1	25	24.38	24.35	24.33	23.58	23.55	23.53	22.98	22.95	22.93
		1	49	24.03	24.01	24.06	23.23	23.21	23.26	22.63	22.61	22.66
		25	0	23.36	23.30	23.40	22.56	22.50	22.60	21.96	21.90	22.00
		25	13	23.36	23.37	23.34	22.56	22.57	22.54	21.96	21.97	21.94
		25	25	23.42	23.20	23.24	22.62	22.40	22.44	22.02	21.80	21.84
		50	0	23.37	23.29	23.36	22.57	22.49	22.56	21.97	21.89	21.96
	16QAM	1	0	23.72	23.63	23.44	22.92	22.83	22.64	22.32	22.23	22.04
		1	25	23.71	23.64	23.69	22.91	22.84	22.89	22.31	22.24	22.29
		1	49	23.59	23.40	23.33	22.79	22.60	22.53	22.19	22.00	21.93
		25	0	22.39	22.27	22.41	21.59	21.47	21.61	20.99	20.87	21.01
		25	13	22.41	22.34	22.31	21.61	21.54	21.51	21.01	20.94	20.91
		25	25	22.46	22.20	22.23	21.66	21.40	21.43	21.06	20.80	20.83
		50	0	22.40	22.27	22.30	21.60	21.47	21.50	21.00	20.87	20.90
	64QAM	1	0	22.42	22.36	22.30	21.62	21.56	21.50	21.02	20.96	20.90
		1	25	22.59	22.43	22.34	21.79	21.63	21.54	21.19	21.03	20.94
		1	49	22.27	22.11	22.02	21.47	21.31	21.22	20.87	20.71	20.62
		25	0	21.31	21.29	21.38	20.51	20.49	20.58	19.91	19.89	19.98
		25	13	21.40	21.35	21.32	20.60	20.55	20.52	20.00	19.95	19.92
		25	25	21.49	21.18	21.30	20.69	20.38	20.50	20.09	19.78	19.90
		50	0	21.39	21.27	21.30	20.59	20.47	20.50	19.99	19.87	19.90
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	24.24	24.19	24.20	23.44	23.39	23.40	22.84	22.79	22.80
		1	38	24.36	24.34	24.30	23.56	23.54	23.50	22.96	22.94	22.90
		1	74	24.00	23.96	24.02	23.20	23.16	23.22	22.60	22.56	22.62
		36	0	23.34	23.26	23.37	22.54	22.46	22.57	21.94	21.86	21.97
		36	18	23.33	23.32	23.30	22.53	22.52	22.50	21.93	21.92	21.90
		36	39	23.39	23.17	23.20	22.59	22.37	22.40	21.99	21.77	21.80
		75	0	23.35	23.25	23.31	22.55	22.45	22.51	21.95	21.85	21.91
	16QAM	1	0	23.67	23.61	23.42	22.87	22.81	22.62	22.27	22.21	22.02
		1	38	23.69	23.61	23.67	22.89	22.81	22.87	22.29	22.21	22.27



		1	74	23.56	23.36	23.30	22.76	22.56	22.50	22.16	21.96	21.90
		36	0	22.36	22.25	22.38	21.56	21.45	21.58	20.96	20.85	20.98
		36	18	22.38	22.29	22.27	21.58	21.49	21.47	20.98	20.89	20.87
		36	39	22.44	22.16	22.20	21.64	21.36	21.40	21.04	20.76	20.80
		75	0	22.37	22.22	22.26	21.57	21.42	21.46	20.97	20.82	20.86
	64QAM	1	0	22.37	22.34	22.28	21.57	21.54	21.48	20.97	20.94	20.88
		1	38	22.57	22.40	22.32	21.77	21.60	21.52	21.17	21.00	20.92
		1	74	22.28	22.10	22.03	21.48	21.30	21.23	20.88	20.70	20.63
		36	0	21.30	21.31	21.39	20.50	20.51	20.59	19.90	19.91	19.99
		36	18	21.38	21.32	21.31	20.58	20.52	20.51	19.98	19.92	19.91
		36	39	21.47	21.14	21.27	20.67	20.34	20.47	20.07	19.74	19.87
		75	0	21.36	21.22	21.26	20.56	20.42	20.46	19.96	19.82	19.86
	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	24.21	24.15	24.17	23.41	23.35	23.37	22.81	22.75	22.77
		1	50	24.35	24.30	24.28	23.55	23.50	23.48	22.95	22.90	22.88
		1	99	23.98	23.95	23.99	23.18	23.15	23.19	22.58	22.55	22.59
		50	0	23.31	23.21	23.33	22.51	22.41	22.53	21.91	21.81	21.93
		50	25	23.31	23.28	23.27	22.51	22.48	22.47	21.91	21.88	21.87
		50	50	23.36	23.12	23.16	22.56	22.32	22.36	21.96	21.72	21.76
		100	0	23.32	23.20	23.27	22.52	22.40	22.47	21.92	21.80	21.87
	16QAM	1	0	23.47	23.57	23.37	22.67	22.77	22.57	22.07	22.17	21.97
		1	50	23.65	23.59	23.63	22.85	22.79	22.83	22.25	22.19	22.23
		1	99	23.54	23.33	23.28	22.74	22.53	22.48	22.14	21.93	21.88
		50	0	22.33	22.21	22.35	21.53	21.41	21.55	20.93	20.81	20.95
		50	25	22.35	22.27	22.24	21.55	21.47	21.44	20.95	20.87	20.84
		50	50	22.41	22.11	22.16	21.61	21.31	21.36	21.01	20.71	20.76
		100	0	22.35	22.18	22.23	21.55	21.38	21.43	20.95	20.78	20.83
	64QAM	1	0	22.35	22.30	22.23	21.55	21.50	21.43	20.95	20.90	20.83
		1	50	22.53	22.38	22.28	21.73	21.58	21.48	21.13	20.98	20.88
		1	99	22.22	22.04	21.97	21.42	21.24	21.17	20.82	20.64	20.57
		50	0	21.25	21.23	21.32	20.45	20.43	20.52	19.85	19.83	19.92
		50	25	21.34	21.28	21.25	20.54	20.48	20.45	19.94	19.88	19.85
		50	50	21.44	21.09	21.23	20.64	20.29	20.43	20.04	19.69	19.83
		100	0	21.34	21.18	21.23	20.54	20.38	20.43	19.94	19.78	19.83



LTE Band 7				Maximum Output Power(dBm)			Low Antenna EIRP (dBm)			Upper Antenna EIRP (dBm)		
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	24.51	24.49	24.37	22.91	22.89	22.77	22.81	22.79	22.67
		1	13	24.62	24.67	24.46	23.02	23.07	22.86	22.92	22.97	22.76
		1	24	24.49	24.46	24.33	22.89	22.86	22.73	22.79	22.76	22.63
		12	0	23.81	23.79	23.66	22.21	22.19	22.06	22.11	22.09	21.96
		12	6	23.74	23.72	23.59	22.14	22.12	21.99	22.04	22.02	21.89
		12	13	23.84	23.80	23.67	22.24	22.20	22.07	22.14	22.10	21.97
		25	0	23.81	23.80	23.74	22.21	22.20	22.14	22.11	22.10	22.04
	16QAM	1	0	23.81	23.89	23.79	22.21	22.29	22.19	22.11	22.19	22.09
		1	13	23.79	23.76	23.60	22.19	22.16	22.00	22.09	22.06	21.90
		1	24	23.88	23.86	23.72	22.28	22.26	22.12	22.18	22.16	22.02
		12	0	22.78	22.75	22.57	21.18	21.15	20.97	21.08	21.05	20.87
		12	6	22.74	22.70	22.58	21.14	21.10	20.98	21.04	21.00	20.88
		12	13	22.74	22.72	22.59	21.14	21.12	20.99	21.04	21.02	20.89
		25	0	22.75	22.73	22.60	21.15	21.13	21.00	21.05	21.03	20.90
	64QAM	1	0	22.62	22.57	22.51	21.02	20.97	20.91	20.92	20.87	20.81
		1	13	22.67	22.64	22.52	21.07	21.04	20.92	20.97	20.94	20.82
		1	24	22.42	22.36	22.22	20.82	20.76	20.62	20.72	20.66	20.52
		12	0	21.52	21.49	21.39	19.92	19.89	19.79	19.82	19.79	19.69
		12	6	21.70	21.66	21.54	20.10	20.06	19.94	20.00	19.96	19.84
		12	13	21.66	21.64	21.51	20.06	20.04	19.91	19.96	19.94	19.81
		25	0	21.59	21.57	21.44	19.99	19.97	19.84	19.89	19.87	19.74
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	24.53	24.50	24.40	22.93	22.90	22.80	22.83	22.80	22.70
		1	25	24.65	24.72	24.50	23.05	23.12	22.90	22.95	23.02	22.80
		1	49	24.51	24.50	24.36	22.91	22.90	22.76	22.81	22.80	22.66
		25	0	23.84	23.84	23.70	22.24	22.24	22.10	22.14	22.14	22.00
		25	13	23.77	23.77	23.63	22.17	22.17	22.03	22.07	22.07	21.93
		25	25	23.86	23.84	23.72	22.26	22.24	22.12	22.16	22.14	22.02
		50	0	23.85	23.82	23.78	22.25	22.22	22.18	22.15	22.12	22.08
	16QAM	1	0	23.83	23.92	23.81	22.23	22.32	22.21	22.13	22.22	22.11
		1	25	23.82	23.80	23.63	22.22	22.20	22.03	22.12	22.10	21.93



		1	49	23.91	23.88	23.75	22.31	22.28	22.15	22.21	22.18	22.05
		25	0	22.81	22.80	22.61	21.21	21.20	21.01	21.11	21.10	20.91
		25	13	22.76	22.74	22.61	21.16	21.14	21.01	21.06	21.04	20.91
		25	25	22.77	22.77	22.63	21.17	21.17	21.03	21.07	21.07	20.93
		50	0	22.78	22.78	22.64	21.18	21.18	21.04	21.08	21.08	20.94
	64QAM	1	0	22.64	22.56	22.53	21.04	20.96	20.93	20.94	20.86	20.83
		1	25	22.70	22.64	22.55	21.10	21.04	20.95	21.00	20.94	20.85
		1	49	22.41	22.38	22.25	20.81	20.78	20.65	20.71	20.68	20.55
		25	0	21.55	21.54	21.39	19.95	19.94	19.79	19.85	19.84	19.69
		25	13	21.72	21.70	21.57	20.12	20.10	19.97	20.02	20.00	19.87
		25	25	21.69	21.69	21.55	20.09	20.09	19.95	19.99	19.99	19.85
		50	0	21.62	21.62	21.48	20.02	20.02	19.88	19.92	19.92	19.78
	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	24.52	24.46	24.38	22.92	22.86	22.78	22.82	22.76	22.68
		1	38	24.63	24.71	24.47	23.03	23.11	22.87	22.93	23.01	22.77
		1	74	24.48	24.45	24.32	22.88	22.85	22.72	22.78	22.75	22.62
		36	0	23.82	23.80	23.67	22.22	22.20	22.07	22.12	22.10	21.97
		36	18	23.74	23.72	23.59	22.14	22.12	21.99	22.04	22.02	21.89
		36	39	23.83	23.81	23.68	22.23	22.21	22.08	22.13	22.11	21.98
		75	0	23.83	23.78	23.73	22.23	22.18	22.13	22.13	22.08	22.03
	16QAM	1	0	23.78	23.90	23.79	22.18	22.30	22.19	22.08	22.20	22.09
		1	38	23.80	23.77	23.61	22.20	22.17	22.01	22.10	22.07	21.91
		1	74	23.88	23.84	23.72	22.28	22.24	22.12	22.18	22.14	22.02
		36	0	22.78	22.78	22.58	21.18	21.18	20.98	21.08	21.08	20.88
		36	18	22.73	22.69	22.57	21.13	21.09	20.97	21.03	20.99	20.87
		36	39	22.75	22.73	22.60	21.15	21.13	21.00	21.05	21.03	20.90
		75	0	22.75	22.73	22.60	21.15	21.13	21.00	21.05	21.03	20.90
	64QAM	1	0	22.59	22.54	22.51	20.99	20.94	20.91	20.89	20.84	20.81
		1	38	22.68	22.61	22.53	21.08	21.01	20.93	20.98	20.91	20.83
		1	74	22.42	22.37	22.26	20.82	20.77	20.66	20.72	20.67	20.56
		36	0	21.54	21.56	21.40	19.94	19.96	19.80	19.84	19.86	19.70
		36	18	21.70	21.67	21.56	20.10	20.07	19.96	20.00	19.97	19.86
		36	39	21.67	21.65	21.52	20.07	20.05	19.92	19.97	19.95	19.82
		75	0	21.59	21.57	21.44	19.99	19.97	19.84	19.89	19.87	19.74



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	24.49	24.42	24.35	22.89	22.82	22.75	22.79	22.72	22.65
		1	50	24.62	24.67	24.45	23.02	23.07	22.85	22.92	22.97	22.75
		1	99	24.46	24.44	24.29	22.86	22.84	22.69	22.76	22.74	22.59
		50	0	23.79	23.75	23.63	22.19	22.15	22.03	22.09	22.05	21.93
		50	25	23.72	23.68	23.56	22.12	22.08	21.96	22.02	21.98	21.86
		50	50	23.80	23.76	23.64	22.20	22.16	22.04	22.10	22.06	21.94
		100	0	23.80	23.73	23.69	22.20	22.13	22.09	22.10	22.03	21.99
	16QAM	1	0	23.89	23.86	23.74	22.29	22.26	22.14	22.19	22.16	22.04
		1	50	23.76	23.75	23.57	22.16	22.15	21.97	22.06	22.05	21.87
		1	99	23.86	23.81	23.70	22.26	22.21	22.10	22.16	22.11	22.00
		50	0	22.75	22.74	22.55	21.15	21.14	20.95	21.05	21.04	20.85
		50	25	22.70	22.67	22.54	21.10	21.07	20.94	21.00	20.97	20.84
		50	50	22.72	22.68	22.56	21.12	21.08	20.96	21.02	20.98	20.86
		100	0	22.73	22.69	22.57	21.13	21.09	20.97	21.03	20.99	20.87
	64QAM	1	0	22.57	22.50	22.46	20.97	20.90	20.86	20.87	20.80	20.76
		1	50	22.64	22.59	22.49	21.04	20.99	20.89	20.94	20.89	20.79
		1	99	22.36	22.31	22.20	20.76	20.71	20.60	20.66	20.61	20.50
		50	0	21.49	21.48	21.33	19.89	19.88	19.73	19.79	19.78	19.63
		50	25	21.66	21.63	21.50	20.06	20.03	19.90	19.96	19.93	19.80
		50	50	21.64	21.60	21.48	20.04	20.00	19.88	19.94	19.90	19.78
		100	0	21.57	21.53	21.41	19.97	19.93	19.81	19.87	19.83	19.71

LTE Band 38				Maximum Output Power(dBm)			Low Antenna EIRP (dBm)			Upper Antenna EIRP (dBm)		
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	24.39	24.31	24.30	24.39	24.31	24.30	22.79	22.71	22.70
		1	13	24.50	24.48	24.50	24.50	24.48	24.50	22.90	22.88	22.90
		1	24	24.45	24.31	24.40	24.45	24.31	24.40	22.85	22.71	22.80
		12	0	23.56	23.46	23.50	23.56	23.46	23.50	21.96	21.86	21.90
		12	6	23.62	23.52	23.56	23.62	23.52	23.56	22.02	21.92	21.96
		12	13	23.63	23.49	23.55	23.63	23.49	23.55	22.03	21.89	21.95
		25	0	23.64	23.52	23.56	23.64	23.52	23.56	22.04	21.92	21.96
	16QAM	1	0	23.81	23.39	23.81	23.81	23.39	23.81	22.21	21.79	22.21



		1	13	23.79	23.67	23.75	23.79	23.67	23.75	22.19	22.07	22.15
		1	24	23.62	23.54	23.55	23.62	23.54	23.55	22.02	21.94	21.95
		12	0	22.60	22.50	22.56	22.60	22.50	22.56	21.00	20.90	20.96
		12	6	22.72	22.56	22.65	22.72	22.56	22.65	21.12	20.96	21.05
		12	13	22.69	22.59	22.63	22.69	22.59	22.63	21.09	20.99	21.03
		25	0	22.60	22.50	22.54	22.60	22.50	22.54	21.00	20.90	20.94
	64QAM	1	0	22.80	22.60	22.68	22.80	22.60	22.68	21.20	21.00	21.08
		1	13	22.89	22.77	22.81	22.89	22.77	22.81	21.29	21.17	21.21
		1	24	22.87	22.71	22.76	22.87	22.71	22.76	21.27	21.11	21.16
		12	0	21.65	21.47	21.61	21.65	21.47	21.61	20.05	19.87	20.01
		12	6	21.69	21.53	21.62	21.69	21.53	21.62	20.09	19.93	20.02
		12	13	21.82	21.72	21.76	21.82	21.72	21.76	20.22	20.12	20.16
		25	0	21.45	21.35	21.39	21.45	21.35	21.39	19.85	19.75	19.79
	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	24.41	24.32	24.33	24.41	24.32	24.33	22.81	22.72	22.73
		1	25	24.53	24.53	24.54	24.53	24.53	24.54	22.93	22.93	22.94
		1	49	24.47	24.35	24.43	24.47	24.35	24.43	22.87	22.75	22.83
		25	0	23.59	23.51	23.54	23.59	23.51	23.54	21.99	21.91	21.94
		25	13	23.65	23.57	23.60	23.65	23.57	23.60	22.05	21.97	22.00
		25	25	23.65	23.53	23.60	23.65	23.53	23.60	22.05	21.93	22.00
		50	0	23.68	23.54	23.60	23.68	23.54	23.60	22.08	21.94	22.00
	16QAM	1	0	23.83	23.42	23.83	23.83	23.42	23.83	22.23	21.82	22.23
		1	25	23.82	23.71	23.78	23.82	23.71	23.78	22.22	22.11	22.18
		1	49	23.65	23.56	23.58	23.65	23.56	23.58	22.05	21.96	21.98
		25	0	22.63	22.55	22.60	22.63	22.55	22.60	21.03	20.95	21.00
		25	13	22.74	22.60	22.68	22.74	22.60	22.68	21.14	21.00	21.08
		25	25	22.72	22.64	22.67	22.72	22.64	22.67	21.12	21.04	21.07
		50	0	22.63	22.55	22.58	22.63	22.55	22.58	21.03	20.95	20.98
	64QAM	1	0	22.82	22.59	22.70	22.82	22.59	22.70	21.22	20.99	21.10
		1	25	22.92	22.77	22.84	22.92	22.77	22.84	21.32	21.17	21.24
		1	49	22.86	22.73	22.79	22.86	22.73	22.79	21.26	21.13	21.19
		25	0	21.68	21.52	21.61	21.68	21.52	21.61	20.08	19.92	20.01
		25	13	21.71	21.57	21.65	21.71	21.57	21.65	20.11	19.97	20.05
		25	25	21.85	21.77	21.80	21.85	21.77	21.80	20.25	20.17	20.20
		50	0	21.48	21.40	21.43	21.48	21.40	21.43	19.88	19.80	19.83



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	24.40	24.28	24.31	24.40	24.28	24.31	22.80	22.68	22.71
		1	38	24.51	24.52	24.51	24.51	24.52	24.51	22.91	22.92	22.91
		1	74	24.44	24.30	24.39	24.44	24.30	24.39	22.84	22.70	22.79
		36	0	23.57	23.47	23.51	23.57	23.47	23.51	21.97	21.87	21.91
		36	18	23.62	23.52	23.56	23.62	23.52	23.56	22.02	21.92	21.96
		36	39	23.62	23.50	23.56	23.62	23.50	23.56	22.02	21.90	21.96
		75	0	23.66	23.50	23.55	23.66	23.50	23.55	22.06	21.90	21.95
	16QAM	1	0	23.78	23.40	23.81	23.78	23.40	23.81	22.18	21.80	22.21
		1	38	23.80	23.68	23.76	23.80	23.68	23.76	22.20	22.08	22.16
		1	74	23.62	23.52	23.55	23.62	23.52	23.55	22.02	21.92	21.95
		36	0	22.60	22.53	22.57	22.60	22.53	22.57	21.00	20.93	20.97
		36	18	22.71	22.55	22.64	22.71	22.55	22.64	21.11	20.95	21.04
		36	39	22.70	22.60	22.64	22.70	22.60	22.64	21.10	21.00	21.04
		75	0	22.60	22.50	22.54	22.60	22.50	22.54	21.00	20.90	20.94
	64QAM	1	0	22.77	22.57	22.68	22.77	22.57	22.68	21.17	20.97	21.08
		1	38	22.90	22.74	22.82	22.90	22.74	22.82	21.30	21.14	21.22
		1	74	22.87	22.72	22.80	22.87	22.72	22.80	21.27	21.12	21.20
		36	0	21.67	21.54	21.62	21.67	21.54	21.62	20.07	19.94	20.02
		36	18	21.69	21.54	21.64	21.69	21.54	21.64	20.09	19.94	20.04
		36	39	21.83	21.73	21.77	21.83	21.73	21.77	20.23	20.13	20.17
		75	0	21.45	21.35	21.39	21.45	21.35	21.39	19.85	19.75	19.79
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	24.37	24.24	24.28	24.37	24.24	24.28	22.77	22.64	22.68
		1	50	24.50	24.48	24.49	24.50	24.48	24.49	22.90	22.88	22.89
		1	99	24.42	24.29	24.36	24.42	24.29	24.36	22.82	22.69	22.76
		50	0	23.54	23.42	23.47	23.54	23.42	23.47	21.94	21.82	21.87
		50	25	23.60	23.48	23.53	23.60	23.48	23.53	22.00	21.88	21.93
		50	50	23.59	23.45	23.52	23.59	23.45	23.52	21.99	21.85	21.92
		100	0	23.63	23.45	23.51	23.63	23.45	23.51	22.03	21.85	21.91
	16QAM	1	0	23.84	23.36	23.76	23.84	23.36	23.76	22.24	21.76	22.16
		1	50	23.76	23.66	23.72	23.76	23.66	23.72	22.16	22.06	22.12
		1	99	23.60	23.49	23.53	23.60	23.49	23.53	22.00	21.89	21.93



		50	0	22.57	22.49	22.54	22.57	22.49	22.54	20.97	20.89	20.94
		50	25	22.68	22.53	22.61	22.68	22.53	22.61	21.08	20.93	21.01
		50	50	22.67	22.55	22.60	22.67	22.55	22.60	21.07	20.95	21.00
		100	0	22.58	22.46	22.51	22.58	22.46	22.51	20.98	20.86	20.91
	64QAM	1	0	22.75	22.53	22.63	22.75	22.53	22.63	21.15	20.93	21.03
		1	50	22.86	22.72	22.78	22.86	22.72	22.78	21.26	21.12	21.18
		1	99	22.81	22.66	22.74	22.81	22.66	22.74	21.21	21.06	21.14
		50	0	21.62	21.46	21.55	21.62	21.46	21.55	20.02	19.86	19.95
		50	25	21.65	21.50	21.58	21.65	21.50	21.58	20.05	19.90	19.98
		50	50	21.80	21.68	21.73	21.80	21.68	21.73	20.20	20.08	20.13
		100	0	21.43	21.31	21.36	21.43	21.31	21.36	19.83	19.71	19.76

LTE Band 41				Maximum Output Power(dBm)			Low Antenna EIRP (dBm)			Upper Antenna EIRP (dBm)		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				40065/2 537.5	40640/2 595	41215/2 652.5	40065/2 537.5	40640/2 595	41215/2 652.5	40065/2 537.5	40640/2 595	41215/2 652.5
5MHz	QPSK	1	0	24.52	24.45	24.35	24.52	24.45	24.35	22.92	22.85	22.75
		1	13	24.54	24.54	24.60	24.54	24.54	24.60	22.94	22.94	23.00
		1	24	24.45	24.43	24.51	24.45	24.43	24.51	22.85	22.83	22.91
		12	0	23.52	23.48	23.52	23.52	23.48	23.52	21.92	21.88	21.92
		12	6	23.63	23.59	23.61	23.63	23.59	23.61	22.03	21.99	22.01
		12	13	23.70	23.66	23.70	23.70	23.66	23.70	22.10	22.06	22.10
		25	0	23.79	23.72	23.70	23.79	23.72	23.70	22.19	22.12	22.10
	16QAM	1	0	23.62	23.59	23.53	23.62	23.59	23.53	22.02	21.99	21.93
		1	13	23.73	23.72	23.83	23.73	23.72	23.83	22.13	22.12	22.23
		1	24	23.69	23.64	23.71	23.69	23.64	23.71	22.09	22.04	22.11
		12	0	22.52	22.51	22.51	22.52	22.51	22.51	20.92	20.91	20.91
		12	6	22.70	22.67	22.64	22.70	22.67	22.64	21.10	21.07	21.04
		12	13	22.68	22.64	22.71	22.68	22.64	22.71	21.08	21.04	21.11
		25	0	22.67	22.63	22.66	22.67	22.63	22.66	21.07	21.03	21.06
	64QAM	1	0	22.79	22.72	22.69	22.79	22.72	22.69	21.19	21.12	21.09
		1	13	22.61	22.56	22.78	22.61	22.56	22.78	21.01	20.96	21.18
		1	24	22.62	22.57	22.87	22.62	22.57	22.87	21.02	20.97	21.27
		12	0	21.83	21.82	21.67	21.83	21.82	21.67	20.23	20.22	20.07
		12	6	21.56	21.53	21.57	21.56	21.53	21.57	19.96	19.93	19.97
		12	13	21.46	21.42	21.44	21.46	21.42	21.44	19.86	19.82	19.84



BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				40090/2	40640/2	41190/2	40090/2	40640/2	41190/2	40090/2	40640/2	41190/2
				540	595	650	540	595	650	540	595	650
		25	0	21.50	21.46	21.39	21.50	21.46	21.39	19.90	19.86	19.79
10MHz	QPSK	1	0	24.53	24.48	24.33	24.53	24.48	24.33	22.93	22.88	22.73
		1	25	24.59	24.58	24.56	24.59	24.58	24.56	22.99	22.98	22.96
		1	49	24.49	24.46	24.46	24.49	24.46	24.46	22.89	22.86	22.86
		25	0	23.57	23.52	23.47	23.57	23.52	23.47	21.97	21.92	21.87
		25	13	23.68	23.63	23.57	23.68	23.63	23.57	22.08	22.03	21.97
		25	25	23.74	23.71	23.68	23.74	23.71	23.68	22.14	22.11	22.08
		50	0	23.81	23.76	23.69	23.81	23.76	23.69	22.21	22.16	22.09
	16QAM	1	0	23.65	23.61	23.49	23.65	23.61	23.49	22.05	22.01	21.89
		1	25	23.77	23.75	23.81	23.77	23.75	23.81	22.17	22.15	22.21
		1	49	23.71	23.67	23.69	23.71	23.67	23.69	22.11	22.07	22.09
		25	0	22.57	22.55	22.47	22.57	22.55	22.47	20.97	20.95	20.87
		25	13	22.74	22.70	22.59	22.74	22.70	22.59	21.14	21.10	20.99
		25	25	22.73	22.68	22.66	22.73	22.68	22.66	21.13	21.08	21.06
		50	0	22.72	22.67	22.62	22.72	22.67	22.62	21.12	21.07	21.02
	64QAM	1	0	22.78	22.74	22.69	22.78	22.74	22.69	21.18	21.14	21.09
		1	25	22.61	22.59	22.80	22.61	22.59	22.80	21.01	20.99	21.20
		1	49	22.64	22.60	22.85	22.64	22.60	22.85	21.04	21.00	21.25
		25	0	21.88	21.82	21.63	21.88	21.82	21.63	20.28	20.22	20.03
		25	13	21.60	21.56	21.52	21.60	21.56	21.52	20.00	19.96	19.92
		25	25	21.51	21.46	21.39	21.51	21.46	21.39	19.91	19.86	19.79
		50	0	21.55	21.50	21.35	21.55	21.50	21.35	19.95	19.90	19.75
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)								
				40115/2	40640/2	41165/2	40115/2	40640/2	41165/2	40115/2	40640/2	41165/2
				542.5	595	647.5	542.5	595	647.5	542.5	595	647.5
15MHz	QPSK	1	0	24.49	24.46	24.30	24.49	24.46	24.30	22.89	22.86	22.70
		1	38	24.58	24.55	24.60	24.58	24.55	24.60	22.98	22.95	23.00
		1	74	24.44	24.42	24.45	24.44	24.42	24.45	22.84	22.82	22.85
		36	0	23.53	23.49	23.48	23.53	23.49	23.48	21.93	21.89	21.88
		36	18	23.63	23.59	23.57	23.63	23.59	23.57	22.03	21.99	21.97
		36	39	23.71	23.67	23.69	23.71	23.67	23.69	22.11	22.07	22.09
		75	0	23.77	23.71	23.67	23.77	23.71	23.67	22.17	22.11	22.07
	16QAM	1	0	23.63	23.59	23.50	23.63	23.59	23.50	22.03	21.99	21.90
		1	38	23.74	23.73	23.82	23.74	23.73	23.82	22.14	22.13	22.22



		1	74	23.67	23.64	23.67	23.67	23.64	23.67	22.07	22.04	22.07
		36	0	22.55	22.52	22.50	22.55	22.52	22.50	20.95	20.92	20.90
		36	18	22.69	22.66	22.58	22.69	22.66	22.58	21.09	21.06	20.98
		36	39	22.69	22.65	22.67	22.69	22.65	22.67	21.09	21.05	21.07
		75	0	22.67	22.63	22.62	22.67	22.63	22.62	21.07	21.03	21.02
	64QAM	1	0	22.76	22.72	22.66	22.76	22.72	22.66	21.16	21.12	21.06
		1	38	22.58	22.57	22.77	22.58	22.57	22.77	20.98	20.97	21.17
		1	74	22.63	22.61	22.86	22.63	22.61	22.86	21.03	21.01	21.26
		36	0	21.90	21.83	21.70	21.90	21.83	21.70	20.30	20.23	20.10
		36	18	21.57	21.55	21.53	21.57	21.55	21.53	19.97	19.95	19.93
		36	39	21.47	21.43	21.40	21.47	21.43	21.40	19.87	19.83	19.80
		75	0	21.50	21.46	21.35	21.50	21.46	21.35	19.90	19.86	19.75
	BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)							
40140/2 545					40640/2 595	41140/2 645	40140/2 545	40640/2 595	41140/2 645	40140/2 545	40640/2 595	41140/2 645
20MHz	QPSK	1	0	24.45	24.43	24.26	24.45	24.43	24.26	22.85	22.83	22.66
		1	50	24.54	24.53	24.56	24.54	24.53	24.56	22.94	22.93	22.96
		1	99	24.43	24.39	24.44	24.43	24.39	24.44	22.83	22.79	22.84
		50	0	23.48	23.45	23.43	23.48	23.45	23.43	21.88	21.85	21.83
		50	25	23.59	23.56	23.53	23.59	23.56	23.53	21.99	21.96	21.93
		50	50	23.66	23.63	23.64	23.66	23.63	23.64	22.06	22.03	22.04
		100	0	23.72	23.67	23.62	23.72	23.67	23.62	22.12	22.07	22.02
	16QAM	1	0	23.59	23.54	23.46	23.59	23.54	23.46	21.99	21.94	21.86
		1	50	23.72	23.69	23.80	23.72	23.69	23.80	22.12	22.09	22.20
		1	99	23.64	23.62	23.64	23.64	23.62	23.64	22.04	22.02	22.04
		50	0	22.51	22.49	22.46	22.51	22.49	22.46	20.91	20.89	20.86
		50	25	22.67	22.63	22.56	22.67	22.63	22.56	21.07	21.03	20.96
		50	50	22.64	22.61	22.62	22.64	22.61	22.62	21.04	21.01	21.02
		100	0	22.63	22.60	22.58	22.63	22.60	22.58	21.03	21.00	20.98
	64QAM	1	0	22.72	22.67	22.62	22.72	22.67	22.62	21.12	21.07	21.02
		1	50	22.56	22.53	22.75	22.56	22.53	22.75	20.96	20.93	21.15
		1	99	22.57	22.55	22.80	22.57	22.55	22.80	20.97	20.95	21.20
		50	0	21.82	21.76	21.62	21.82	21.76	21.62	20.22	20.16	20.02
		50	25	21.53	21.49	21.49	21.53	21.49	21.49	19.93	19.89	19.89
		50	50	21.42	21.39	21.35	21.42	21.39	21.35	19.82	19.79	19.75
		100	0	21.46	21.43	21.31	21.46	21.43	21.31	19.86	19.83	19.71



CA_7C	PCC	SCC	PCC RB		SCC1 RB		Maximum Output Power(dBm)			Low Antenna EIRP (dBm)			Upper Antenna EIRP (dBm)		
	Frequency (MHz)	Frequency (MHz)	Size	Offset	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10MHz+20MHz	2505.5	2519.9	1	49	1	0	24.07	23.45	22.56	22.47	21.85	20.96	22.37	21.75	20.86
			50	0	100	0	18.26	17.35	16.84	16.66	15.75	15.24	16.56	15.65	15.14
	2525.6	2540	1	49	1	0	23.95	23.13	22.47	22.35	21.53	20.87	22.25	21.43	20.77
			50	0	100	0	19.87	18.88	18.42	18.27	17.28	16.82	18.17	17.18	16.72
	2545.6	2560	1	49	1	0	23.79	22.83	22.38	22.19	21.23	20.78	22.09	21.13	20.68
			50	0	100	0	19.78	18.79	18.29	18.18	17.19	16.69	18.08	17.09	16.59
20MHz+10MHz	2510	2524.4	1	99	1	0	24.15	23.36	22.98	22.55	21.76	21.38	22.45	21.66	21.28
			100	0	50	0	19.94	18.95	18.52	18.34	17.35	16.92	18.24	17.25	16.82
	2530.1	2544.5	1	99	1	0	24.10	23.28	22.88	22.50	21.68	21.28	22.40	21.58	21.18
			100	0	50	0	19.92	18.87	18.31	18.32	17.27	16.71	18.22	17.17	16.61
	2550.1	2564.5	1	99	1	0	23.96	23.40	22.82	22.36	21.80	21.22	22.26	21.70	21.12
			100	0	50	0	20.42	19.41	19.00	18.82	17.81	17.40	18.72	17.71	17.30
15MHz+15MHz	2507.5	2522.5	1	74	1	0	23.75	23.15	22.37	22.15	21.55	20.77	22.05	21.45	20.67
			75	0	75	0	18.69	17.64	17.13	17.09	16.04	15.53	16.99	15.94	15.43
	2527.5	2542.5	1	74	1	0	23.67	22.80	22.34	22.07	21.20	20.74	21.97	21.10	20.64
			75	0	75	0	19.64	18.57	18.00	18.04	16.97	16.40	17.94	16.87	16.30
	2547.5	2562.5	1	74	1	0	23.59	22.72	22.29	21.99	21.12	20.69	21.89	21.02	20.59
			75	0	75	0	20.08	19.00	18.48	18.48	17.40	16.88	18.38	17.30	16.78
15MHz+20MHz	2507.8	2524.9	1	74	1	0	24.01	23.30	22.56	22.41	21.70	20.96	22.31	21.60	20.86
			75	0	100	0	18.73	17.78	17.32	17.13	16.18	15.72	17.03	16.08	15.62
	2525.3	2542.4	1	74	1	0	23.87	22.98	22.53	22.27	21.38	20.93	22.17	21.28	20.83
			75	0	100	0	19.84	18.74	18.33	18.24	17.14	16.73	18.14	17.04	16.63
	2542.9	2560	1	74	1	0	23.82	22.90	22.37	22.22	21.30	20.77	22.12	21.20	20.67
			75	0	100	0	19.48	18.44	17.93	17.88	16.84	16.33	17.78	16.74	16.23
20MHz+15MHz	2510	2527.1	1	99	1	0	24.15	23.44	22.95	22.55	21.84	21.35	22.45	21.74	21.25
			100	0	75	0	19.64	18.61	18.20	18.04	17.01	16.60	17.94	16.91	16.50
	2527.6	2544.7	1	99	1	0	24.05	23.38	22.74	22.45	21.78	21.14	22.35	21.68	21.04
			100	0	75	0	19.68	18.70	18.20	18.08	17.10	16.60	17.98	17.00	16.50
	2545.1	2562.2	1	99	1	0	24.01	23.28	22.72	22.41	21.68	21.12	22.31	21.58	21.02
			100	0	75	0	20.05	19.07	18.57	18.45	17.47	16.97	18.35	17.37	16.87
20MHz+20MHz	2510	2529.8	1	99	1	0	24.07	23.38	22.84	22.47	21.78	21.24	22.37	21.68	21.14
			1	0	1	99	12.33	12.84	12.36	10.73	11.24	10.76	10.63	11.14	10.66
			100	0	100	0	19.49	18.48	17.96	17.89	16.88	16.36	17.79	16.78	16.26
	2525.1	2544.9	1	99	1	0	23.97	23.31	22.78	22.37	21.71	21.18	22.27	21.61	21.08
			1	0	1	99	12.78	13.15	12.65	11.18	11.55	11.05	11.08	11.45	10.95
			100	0	100	0	19.84	18.77	18.25	18.24	17.17	16.65	18.14	17.07	16.55
	2540.2	2560	1	99	1	0	23.82	23.20	22.70	22.22	21.60	21.10	22.12	21.50	21.00
			1	0	1	99	12.55	13.03	12.45	10.95	11.43	10.85	10.85	11.33	10.75



			100	0	100	0	19.42	18.37	17.84	17.82	16.77	16.24	17.72	16.67	16.14
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CA_38C	PCC	SCC	PCC RB		SCC1 RB		Maximum Output Power(dBm)			Low Antenna EIRP (dBm)			Upper Antenna EIRP (dBm)		
	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	20.77	19.74	19.22	20.77	19.74	19.22	19.17	18.14	17.62
			75	0	75	0	19.65	18.57	18.10	19.65	18.57	18.10	18.05	16.97	16.50
	2587.5	2602.5	1	74	1	0	20.75	19.75	19.25	20.75	19.75	19.25	19.15	18.15	17.65
			75	0	75	0	19.42	18.40	17.86	19.42	18.40	17.86	17.82	16.80	16.26
	2597.5	2612.5	1	74	1	0	20.71	19.73	19.32	20.71	19.73	19.32	19.11	18.13	17.72
			75	0	75	0	19.14	18.10	17.70	19.14	18.10	17.70	17.54	16.50	16.10
20MHz+20MHz	2580	2599.8	1	99	1	0	21.03	19.91	19.50	21.03	19.91	19.50	19.43	18.31	17.90
			1	0	1	99	9.61	9.24	8.81	9.61	9.24	8.81	8.01	7.64	7.21
			100	0	100	0	19.58	18.54	18.12	19.58	18.54	18.12	17.98	16.94	16.52
	2585.1	2604.9	1	99	1	0	21.12	19.97	19.31	21.12	19.97	19.31	19.52	18.37	17.71
			1	0	1	99	9.53	9.18	8.57	9.53	9.18	8.57	7.93	7.58	6.97
			100	0	100	0	19.46	18.44	18.01	19.46	18.44	18.01	17.86	16.84	16.41
	2590.2	2610	1	99	1	0	21.00	19.88	19.40	21.00	19.88	19.40	19.40	18.28	17.80
			1	0	1	99	9.14	8.78	8.28	9.14	8.78	8.28	7.54	7.18	6.68
			100	0	100	0	19.25	18.26	17.78	19.25	18.26	17.78	17.65	16.66	16.18

5.2 Occupied Bandwidth

Ambient condition

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

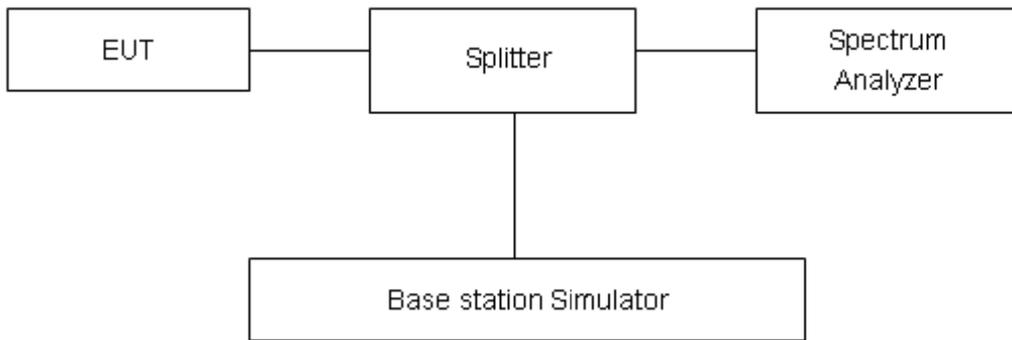
Method of Measurement

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

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

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

Test Setup



Limits

No specific occupied bandwidth requirements in part 2.1049.

Measurement Uncertainty

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



Test Result

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
WCDMA Band IV (RMC)	1312	1712.4	4.1774	4.700
	1413	1732.6	4.1696	4.658
	1513	1752.6	4.1538	4.664

LTE Band 4						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	19957	1710.7	1.094	1.275
			20175	1732.5	1.092	1.297
			20393	1754.3	1.088	1.289
		3	19965	1711.5	2.693	2.913
			20175	1732.5	2.691	2.914
			20385	1753.5	2.691	2.941
		5	19975	1712.5	4.508	4.864
			20175	1732.5	4.506	4.905
			20375	1752.5	4.502	4.873
		10	20000	1715	9.021	9.804
			20175	1732.5	8.993	9.661
			20350	1750	8.984	9.550
	15	20025	1717.5	13.515	14.665	
		20175	1732.5	13.453	14.494	
		20325	1747.5	13.453	14.595	
	20	20050	1720	17.980	19.347	
		20175	1732.5	17.924	19.050	
		20300	1745	17.942	19.274	
	16QAM	1.4	19957	1710.7	1.091	1.268
			20175	1732.5	1.098	1.304
			20393	1754.3	1.089	1.269
		3	19965	1711.5	2.699	2.906
			20175	1732.5	2.687	2.916
			20385	1753.5	2.684	2.885
5		19975	1712.5	4.506	4.900	
		20175	1732.5	4.498	4.918	
		20375	1752.5	4.504	4.895	
10		20000	1715	8.986	9.691	
		20175	1732.5	8.972	9.716	
		20350	1750	8.991	9.703	



		15	20025	1717.5	13.468	14.426
			20175	1732.5	13.480	14.549
			20325	1747.5	13.490	14.593
		20	20050	1720	17.991	19.225
			20175	1732.5	17.931	19.265
			20300	1745	17.977	19.490
	64QAM	1.4	19957	1710.7	1.092	1.276
			20175	1732.5	1.098	1.306
			20393	1754.3	1.087	1.267
		3	19965	1711.5	2.687	2.944
			20175	1732.5	2.687	2.955
			20385	1753.5	2.687	2.920
		5	19975	1712.5	4.521	4.926
			20175	1732.5	4.499	4.920
			20375	1752.5	4.499	4.940
		10	20000	1715	8.975	9.686
			20175	1732.5	8.974	9.710
			20350	1750	8.997	9.694
		15	20025	1717.5	13.478	14.535
			20175	1732.5	13.432	14.552
			20325	1747.5	13.514	14.455
		20	20050	1720	17.985	19.176
			20175	1732.5	17.912	19.366
			20300	1745	17.938	19.206

LTE Band 7						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	20775	2502.5	4.516	4.893
			21100	2535	4.521	4.897
			21425	2567.5	4.514	4.891
		10	20800	2505	8.983	9.666
			21100	2535	8.990	9.677
			21400	2565	9.020	9.768
		15	20825	2507.5	13.479	14.516
			21100	2535	13.477	14.546
			21375	2562.5	13.531	14.542
		20	20850	2510	17.941	19.369
			21100	2535	17.967	19.420
			21350	2560	17.980	19.157



	16QAM	5	20775	2502.5	4.499	4.928
			21100	2535	4.501	4.920
			21425	2567.5	4.537	4.935
		10	20800	2505	9.014	9.753
			21100	2535	8.999	9.780
			21400	2565	8.997	9.622
		15	20825	2507.5	13.441	14.499
			21100	2535	13.461	14.511
			21375	2562.5	13.544	14.585
		20	20850	2510	17.975	19.369
			21100	2535	18.024	19.408
			21350	2560	17.973	19.483
	64QAM	5	20775	2502.5	4.521	4.951
			21100	2535	4.505	4.842
			21425	2567.5	4.524	4.932
		10	20800	2505	8.972	9.685
			21100	2535	8.981	9.810
			21400	2565	9.020	9.751
		15	20825	2507.5	13.479	14.544
			21100	2535	13.492	14.458
			21375	2562.5	13.482	14.423
		20	20850	2510	17.918	19.120
			21100	2535	18.019	19.398
			21350	2560	17.994	19.506

LTE Band 38						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	37775	2572.5	4.503	4.852
			38000	2595	4.500	4.938
			38225	2617.5	4.517	4.874
		10	37800	2575	8.998	9.643
			38000	2595	8.983	9.573
			38200	2615	9.002	9.605
		15	37825	2577.5	13.472	15.098
			38000	2595	13.471	14.424
			38175	2612.5	13.445	15.651
		20	37850	2580	17.937	19.733
			38000	2595	18.002	19.225
			38150	2610	17.951	18.964



	16QAM	5	37775	2572.5	4.493	4.892
			38000	2595	4.508	4.923
			38225	2617.5	4.493	4.886
		10	37800	2575	8.991	10.329
			38000	2595	8.973	9.620
			38200	2615	9.008	9.713
		15	37825	2577.5	13.499	14.931
			38000	2595	13.512	14.362
			38175	2612.5	13.439	16.611
		20	37850	2580	17.940	19.117
			38000	2595	17.908	19.786
			38150	2610	17.955	19.005
	64QAM	5	37775	2572.5	4.501	5.020
			38000	2595	4.494	4.881
			38225	2617.5	4.495	5.080
		10	37800	2575	8.992	9.719
			38000	2595	8.974	9.655
			38200	2615	8.980	10.344
		15	37825	2577.5	13.491	14.452
			38000	2595	13.496	14.475
			38175	2612.5	13.515	14.380
		20	37850	2580	17.952	19.449
			38000	2595	17.970	19.088
			38150	2610	17.979	19.514

LTE Band 41						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	5	40065	2537.5	4.513	4.823
			40640	2595	4.503	4.861
			41215	2652.5	4.515	4.837
		10	40090	2540	8.981	9.677
			40640	2595	9.012	9.693
			41190	2650	9.011	9.627
		15	40115	2542.5	13.500	14.777
			40640	2595	13.464	14.413
			41165	2647.5	13.452	14.506
		20	40140	2545	17.938	20.511
			40640	2595	17.965	19.416



			41140	2645	17.936	19.328
16QAM	5		40065	2537.5	4.479	4.865
			40640	2595	4.490	4.907
			41215	2652.5	4.505	4.966
	10		40090	2540	8.969	9.838
			40640	2595	8.996	10.107
			41190	2650	8.985	11.145
	15		40115	2542.5	13.471	14.355
			40640	2595	13.441	16.356
			41165	2647.5	13.497	14.356
	20		40140	2545	17.943	20.197
			40640	2595	17.974	22.176
			41140	2645	17.922	19.408
64QAM	5		40065	2537.5	4.491	4.991
			40640	2595	4.514	4.840
			41215	2652.5	4.506	5.225
	10		40090	2540	9.004	9.717
			40640	2595	8.971	9.620
			41190	2650	8.981	10.868
	15		40115	2542.5	13.498	15.176
			40640	2595	13.457	14.508
			41165	2647.5	13.465	15.737
	20		40140	2545	17.977	19.525
			40640	2595	17.939	19.165
			41140	2645	17.979	19.096



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	75#0	28.29	30.25
CA_7C_10MHz+20MHz_16QAM	21006	2525.6	21150	2540	50#0	75#0	28.15	30.01
CA_7C_10MHz+20MHz_64QAM	21006	2525.6	21150	2540	50#0	75#0	28.19	30.05
CA_7C_20MHz+10MHz_QPSK	21051	2530.1	21195	2544.5	75#0	50#0	28.32	30.35
CA_7C_20MHz+10MHz_16QAM	21051	2530.1	21195	2544.5	75#0	50#0	28.35	30.28
CA_7C_20MHz+10MHz_64QAM	21051	2530.1	21195	2544.5	75#0	50#0	28.29	30.31
CA_7C_15MHz+10MHz_QPSK	21051	2530.1	21171	2542.1	75#0	75#0	23.79	36.06
CA_7C_15MHz+10MHz_16QAM	21025	2527.5	21175	2542.5	75#0	75#0	23.84	37.86
CA_7C_15MHz+10MHz_64QAM	21025	2527.5	21175	2542.5	75#0	75#0	23.89	37.34
CA_7C_15MHz+15MHz_QPSK	21025	2527.5	21175	2542.5	75#0	75#0	28.84	30.90
CA_7C_15MHz+15MHz_16QAM	21025	2527.5	21175	2542.5	75#0	75#0	28.85	30.77
CA_7C_15MHz+15MHz_64QAM	21025	2527.5	21175	2542.5	75#0	75#0	28.85	30.82
CA_7C_15MHz+20MHz_QPSK	21003	2525.3	21174	2542.4	75#0	100#0	33.08	35.12
CA_7C_15MHz+20MHz_16QAM	21003	2525.3	21174	2542.4	75#0	100#0	33.06	35.10
CA_7C_15MHz+20MHz_64QAM	21003	2525.3	21174	2542.4	75#0	100#0	33.10	35.03
CA_7C_20MHz+15MHz_QPSK	21026	2527.6	21197	2544.7	100#0	75#0	33.08	35.30
CA_7C_20MHz+15MHz_16QAM	21026	2527.6	21197	2544.7	100#0	75#0	33.09	35.12
CA_7C_20MHz+15MHz_64QAM	21026	2527.6	21197	2544.7	100#0	75#0	33.08	35.20
CA_7C_20MHz+20MHz_QPSK	21001	2525.1	21199	2544.9	100#0	100#0	37.97	40.10
CA_7C_20MHz+20MHz_16QAM	21001	2525.1	21199	2544.9	100#0	100#0	37.94	40.11
CA_7C_20MHz+20MHz_64QAM	21001	2525.1	21199	2544.9	100#0	100#0	37.95	40.04

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	28.68	32.68
CA_38C_15MHz+15MHz_16QAM	37925	2587.5	38075	2602.5	75#0	75#0	28.79	38.70
CA_38C_15MHz+15MHz_64QAM	37925	2587.5	38075	2602.5	75#0	75#0	28.77	35.91
CA_38C_20MHz+20MHz_QPSK	37901	2585.1	38099	2604.9	100#0	100#0	37.80	43.65
CA_38C_20MHz+20MHz_16QAM	37901	2585.1	38099	2604.9	100#0	100#0	37.81	40.02
CA_38C_20MHz+20MHz_64QAM	37901	2585.1	38099	2604.9	100#0	100#0	37.86	42.34



WCDMA Band IV CH-Low



WCDMA Band IV CH Middle

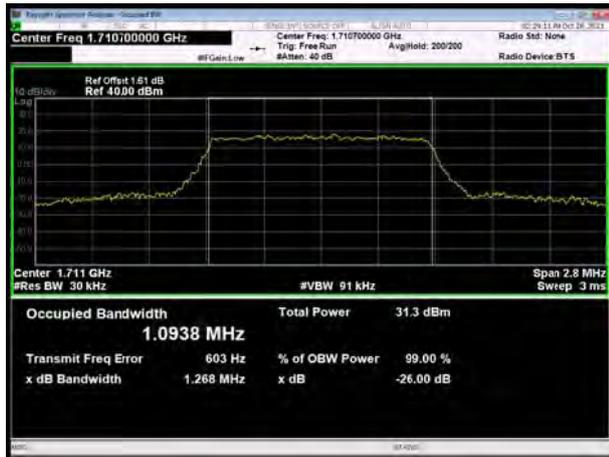


WCDMA Band IV CH High

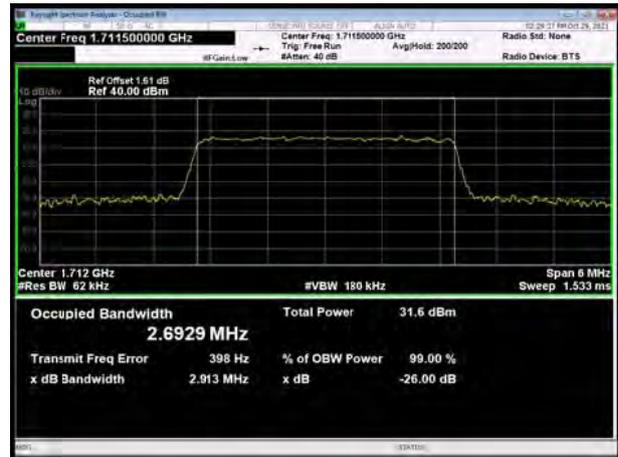




LTE Band 4 QPSK 1.4MHz CH-Low



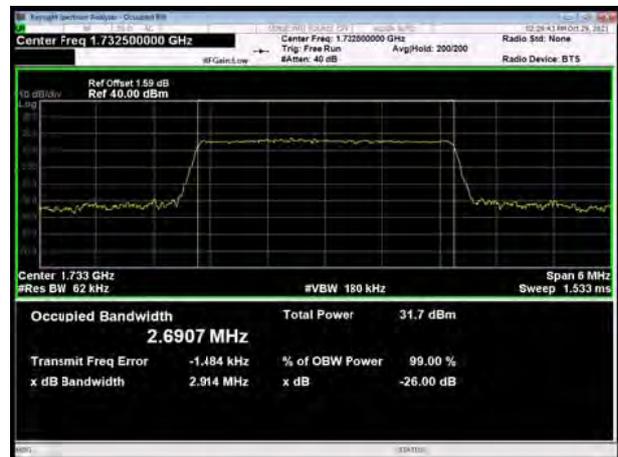
LTE Band 4 QPSK 3MHz CH-Low



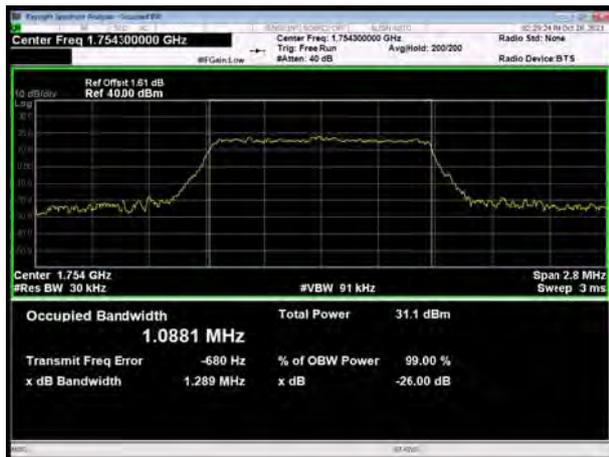
LTE Band 4 QPSK 1.4MHz CH-Middle



LTE Band 4 QPSK 3MHz CH-Middle



LTE Band 4 QPSK 1.4MHz CH-High

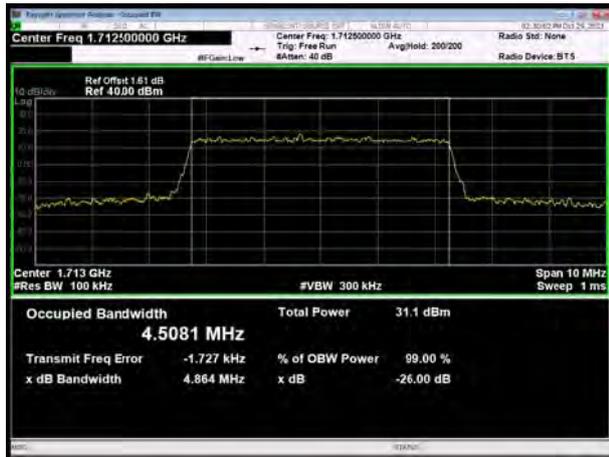


LTE Band 4 QPSK 3MHz CH-High

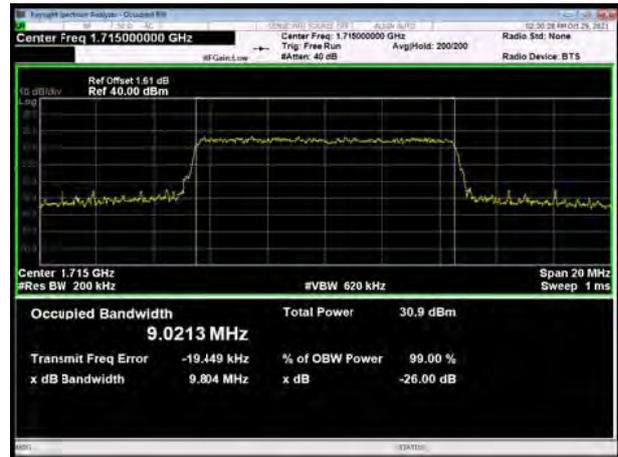




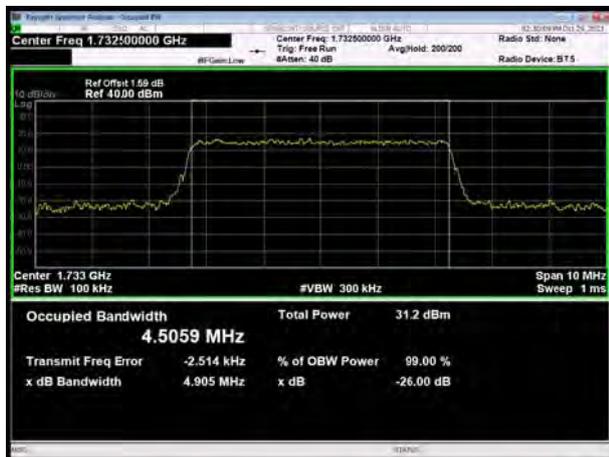
LTE Band 4 QPSK 5MHz CH-Low



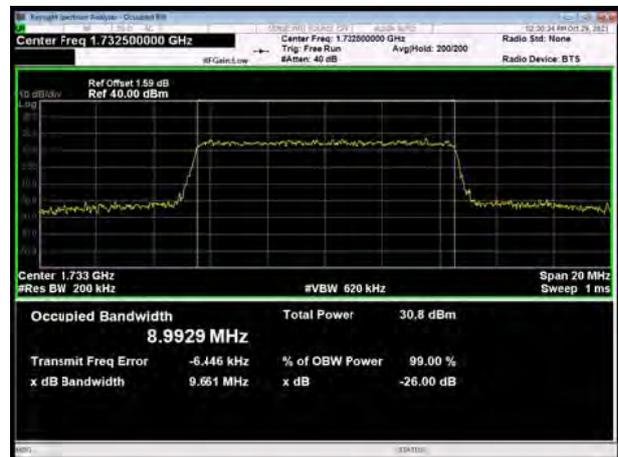
LTE Band 4 QPSK 10MHz CH-Low



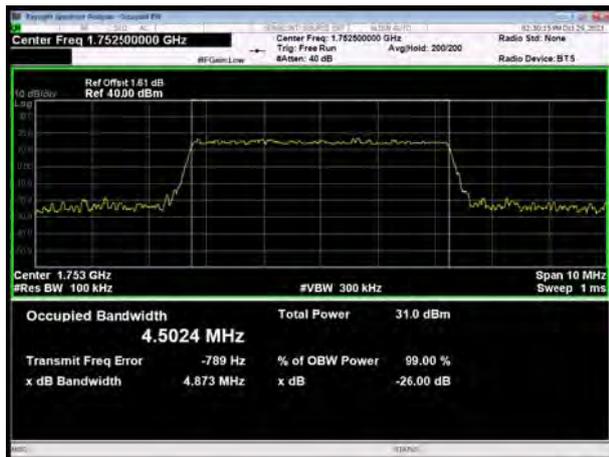
LTE Band 4 QPSK 5MHz CH-Middle



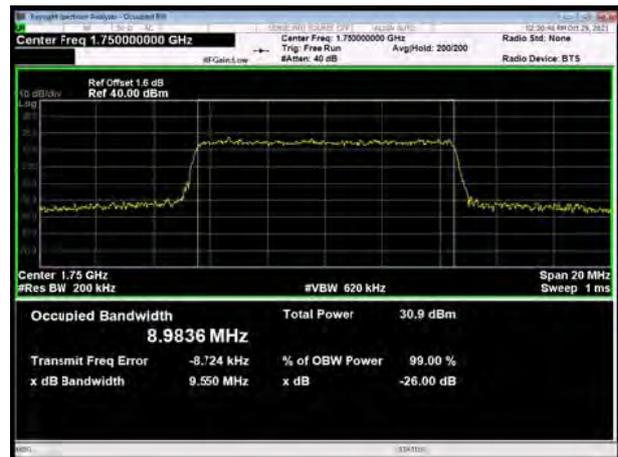
LTE Band 4 QPSK 10MHz CH-Middle



LTE Band 4 QPSK 5MHz CH-High

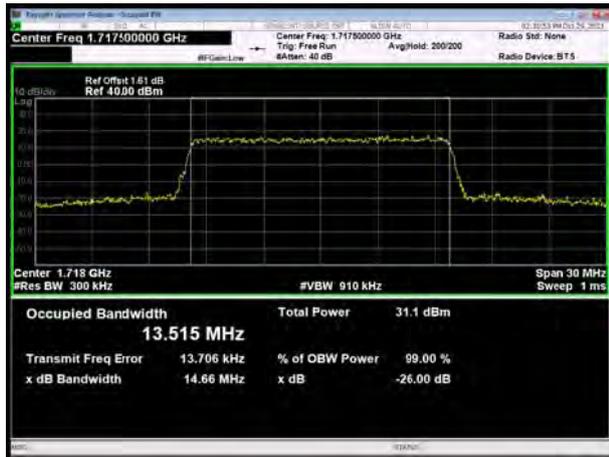


LTE Band 4 QPSK 10MHz CH-High

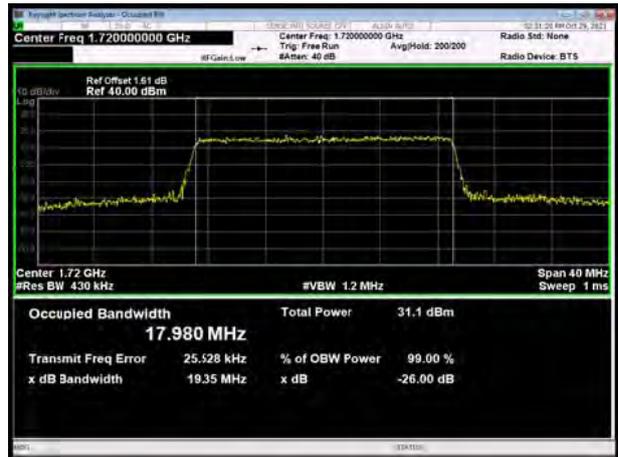




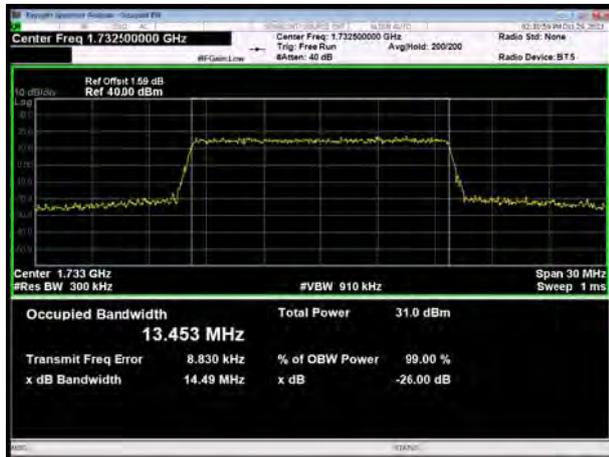
LTE Band 4 QPSK 15MHz CH-Low



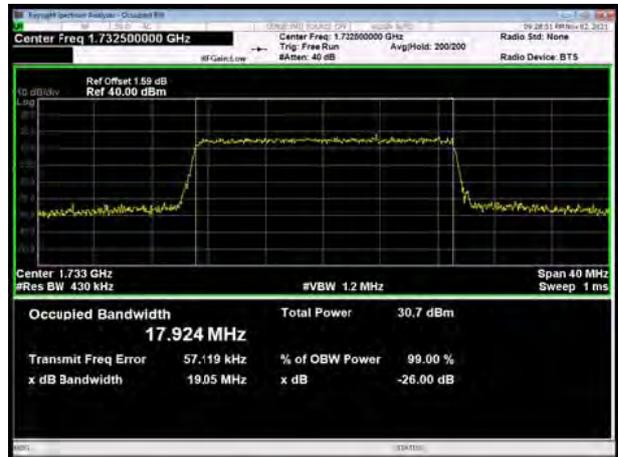
LTE Band 4 QPSK 20MHz CH-Low



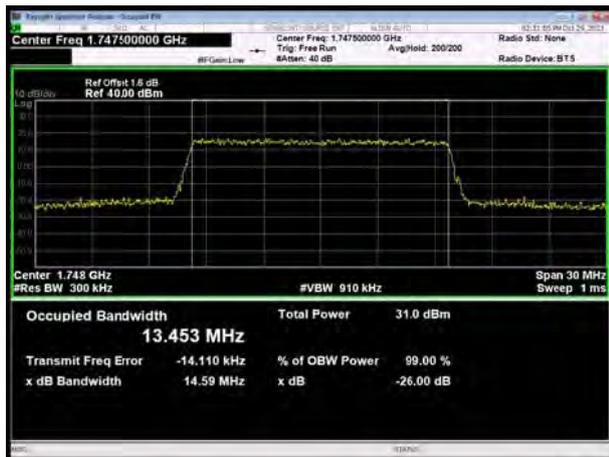
LTE Band 4 QPSK 15MHz CH-Middle



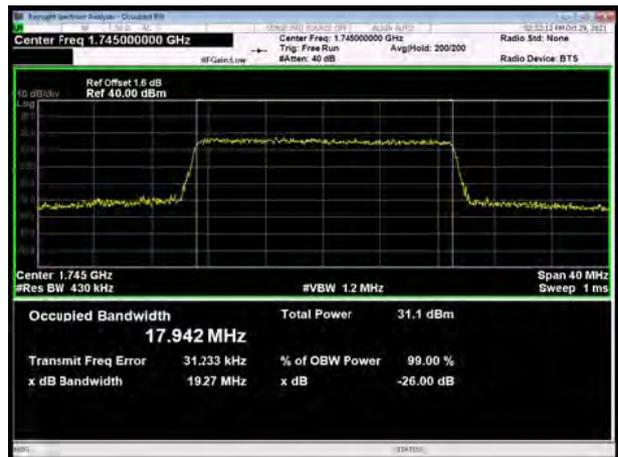
LTE Band 4 QPSK 20MHz CH-Middle



LTE Band 4 QPSK 15MHz CH-High

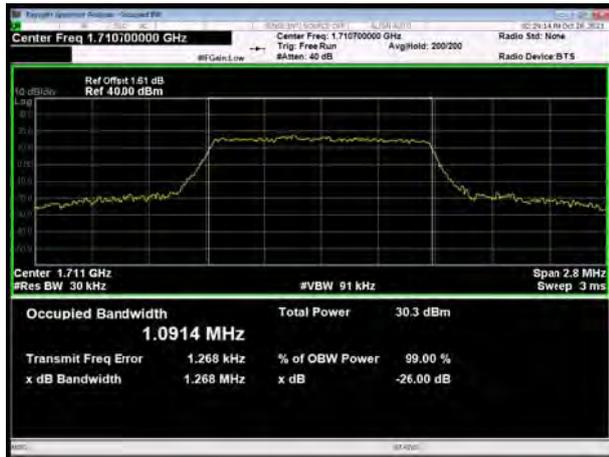


LTE Band 4 QPSK 20MHz CH-High

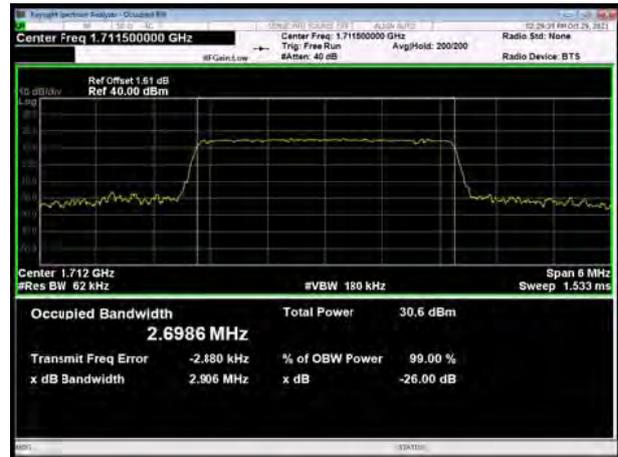




LTE Band 4 16QAM 1.4MHz CH-Low



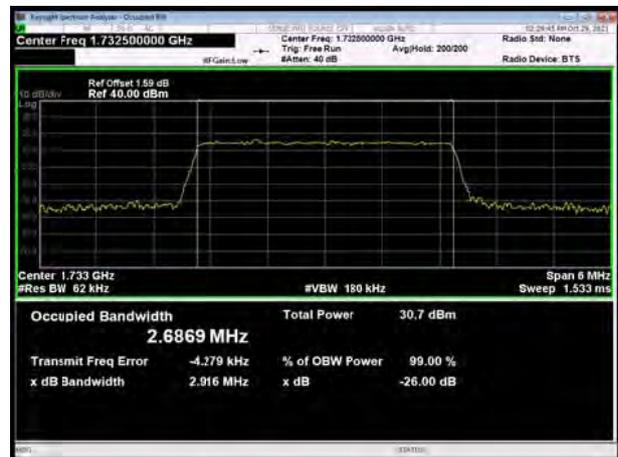
LTE Band 4 16QAM 3MHz CH-Low



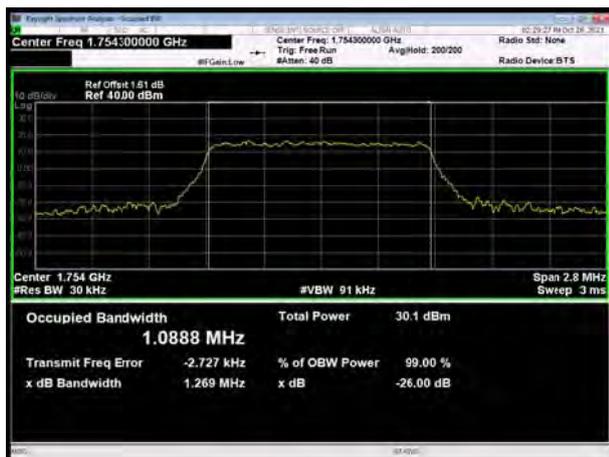
LTE Band 4 16QAM 1.4MHz CH-Middle



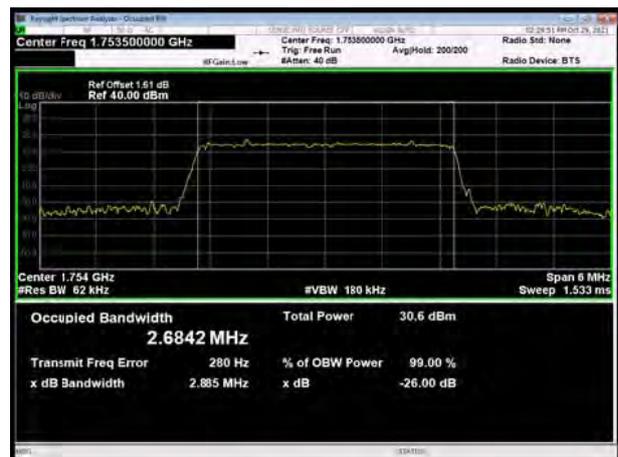
LTE Band 4 16QAM 3MHz CH-Middle



LTE Band 4 16QAM 1.4MHz CH-High

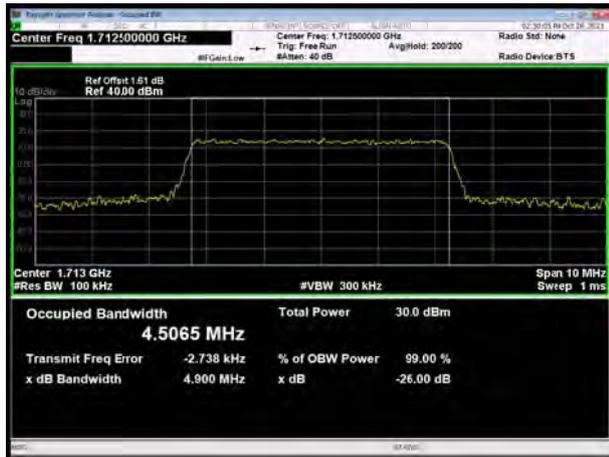


LTE Band 4 16QAM 3MHz CH-High

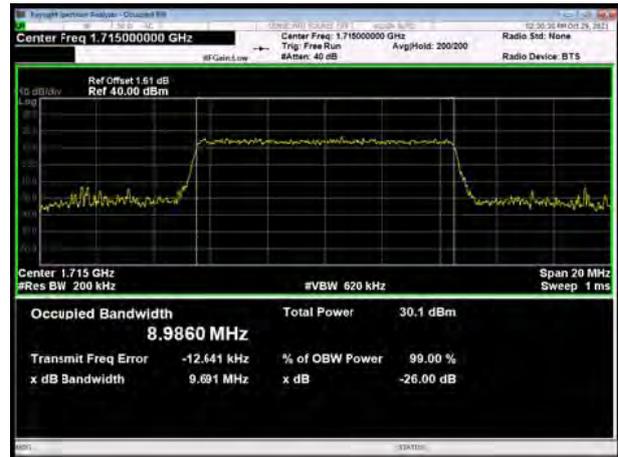




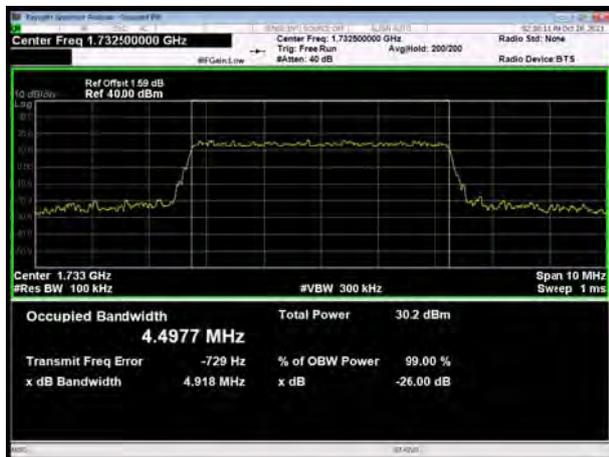
LTE Band 4 16QAM 5MHz CH-Low



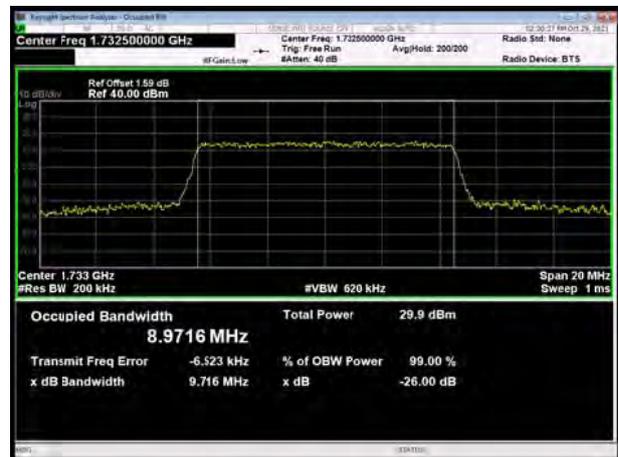
LTE Band 4 16QAM 10MHz CH-Low



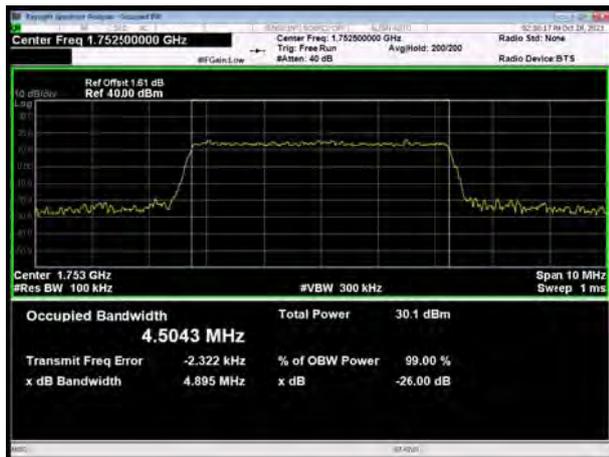
LTE Band 4 16QAM 5MHz CH-Middle



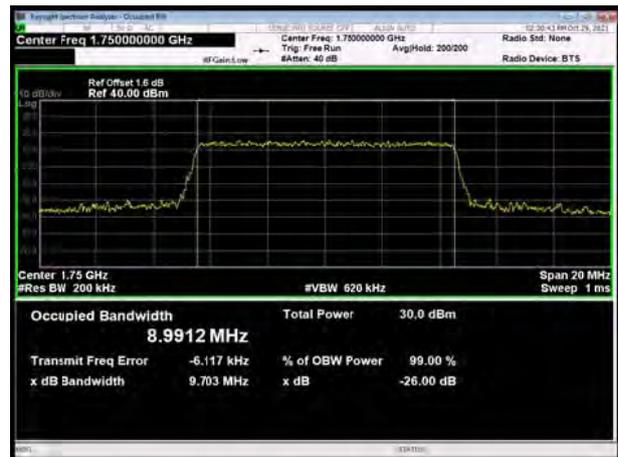
LTE Band 4 16QAM 10MHz CH-Middle



LTE Band 4 16QAM 5MHz CH-High

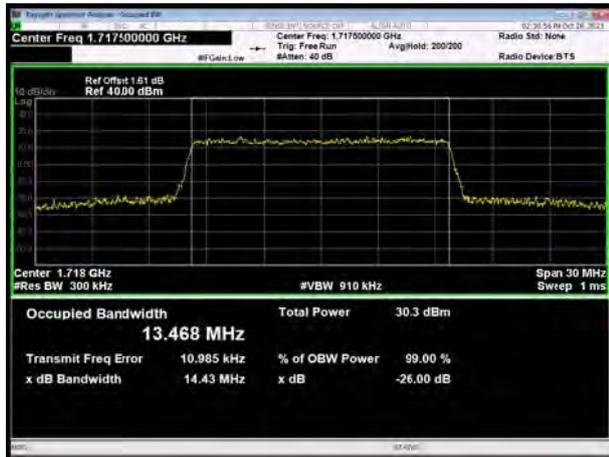


LTE Band 4 16QAM 10MHz CH-High





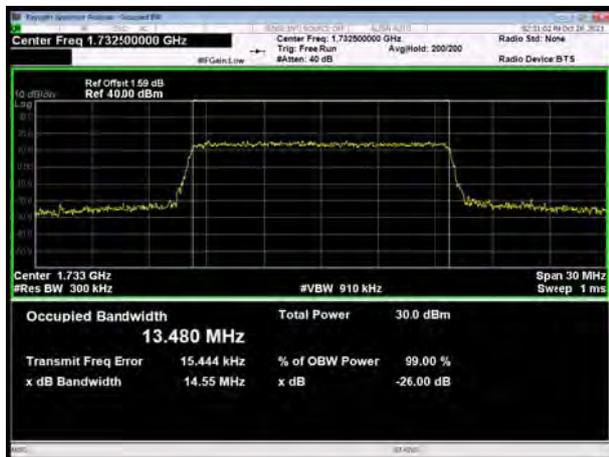
LTE Band 4 16QAM 15MHz CH-Low



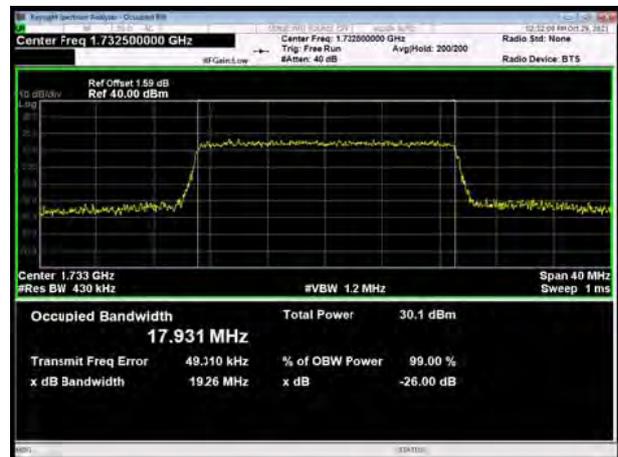
LTE Band 4 16QAM 20MHz CH-Low



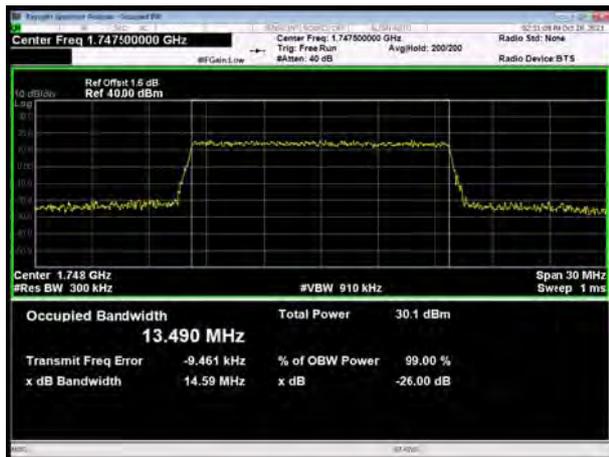
LTE Band 4 16QAM 15MHz CH-Middle



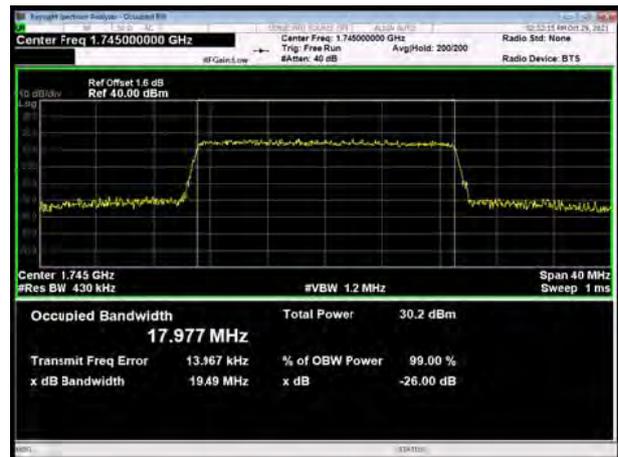
LTE Band 4 16QAM 20MHz CH-Middle



LTE Band 4 16QAM 15MHz CH-High

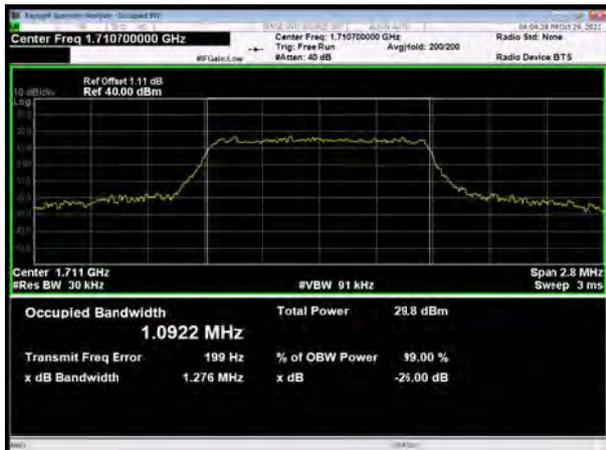


LTE Band 4 16QAM 20MHz CH-High

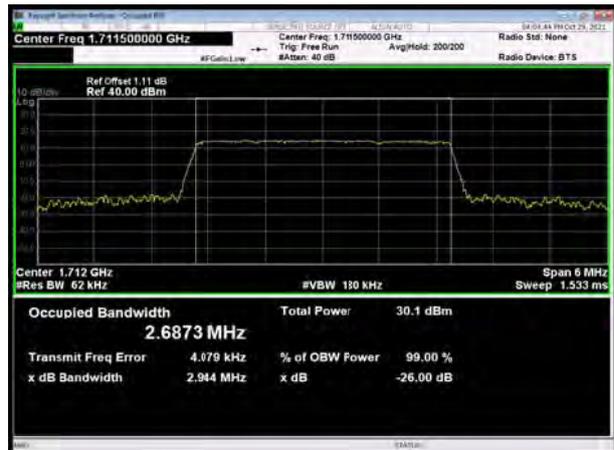




LTE Band 4 1.4MHz 64QAM CH-Low



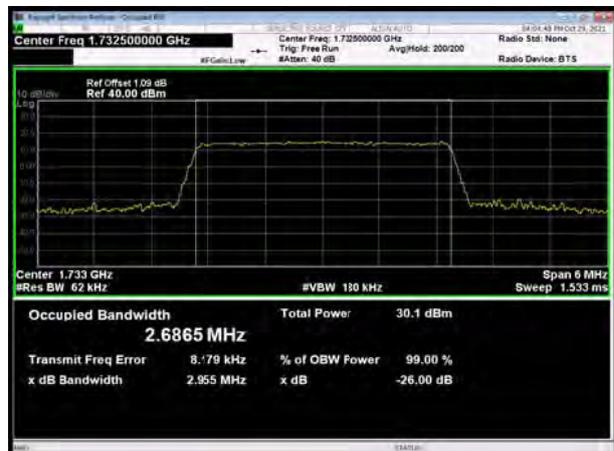
LTE Band 4 3MHz 64QAM CH-Low



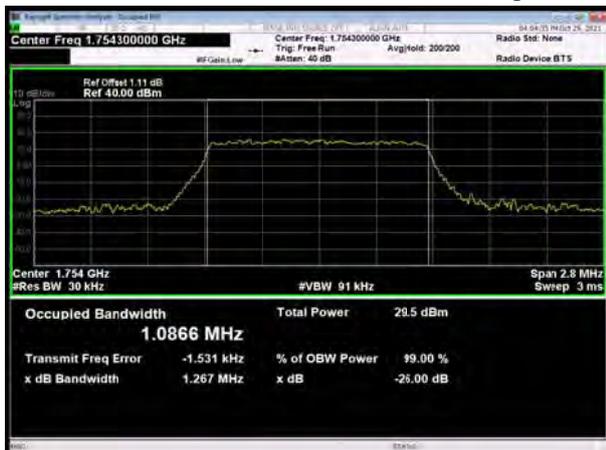
LTE Band 4 1.4MHz 64QAM CH-Middle



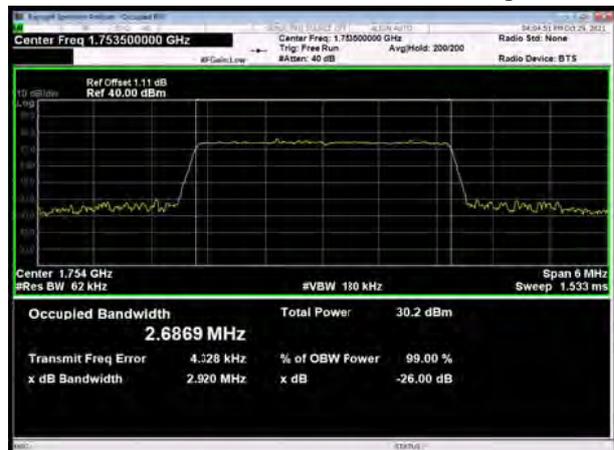
LTE Band 4 3MHz 64QAM CH-Middle



LTE Band 4 1.4MHz 64QAM CH-High

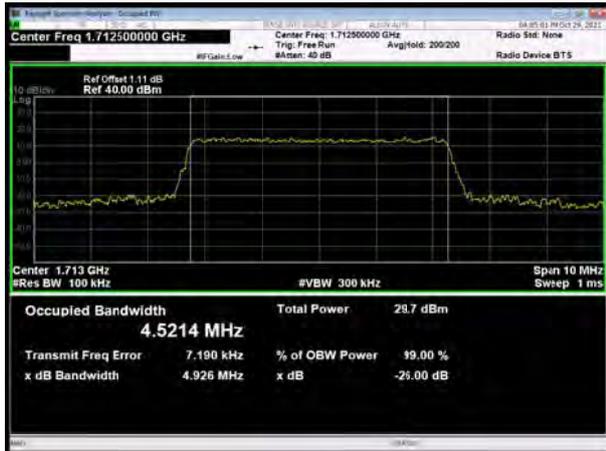


LTE Band 4 3MHz 64QAM CH-High

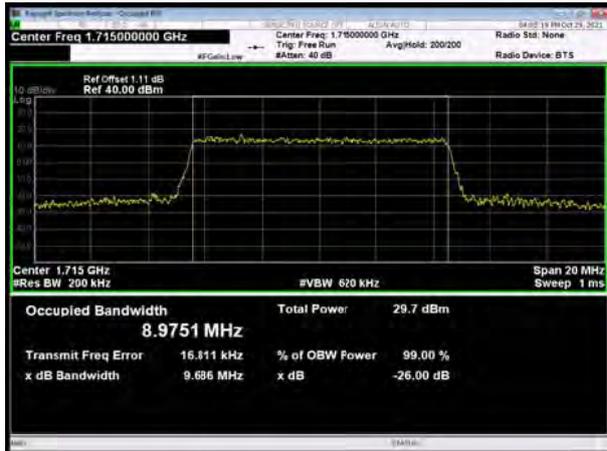




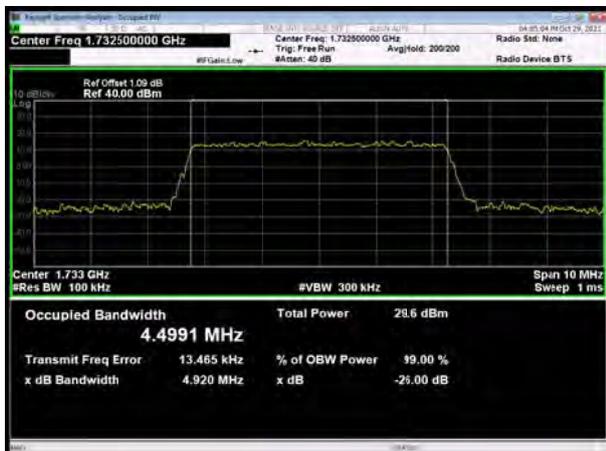
LTE Band 4 5MHz 64QAM CH-Low



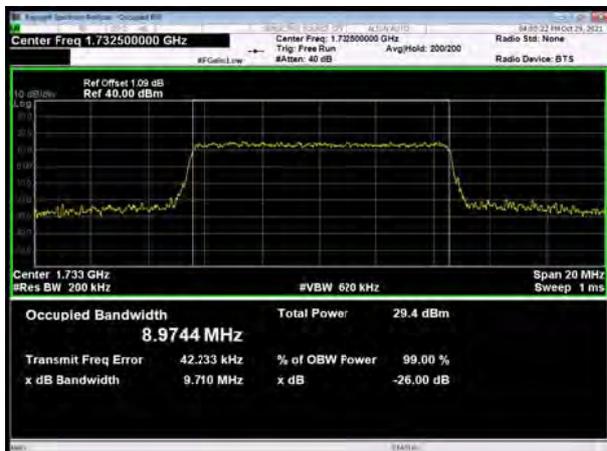
LTE Band 4 10MHz 64QAM CH-Low



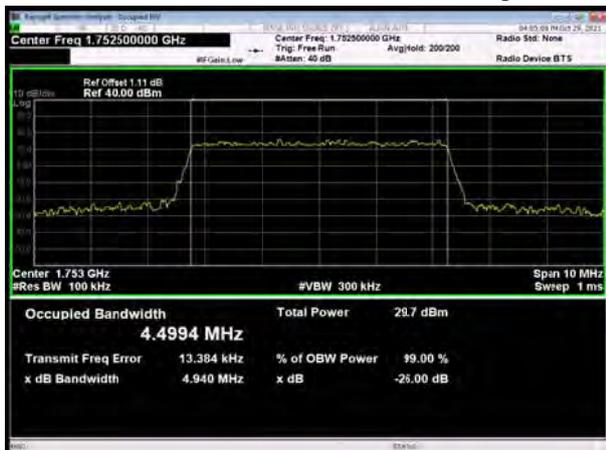
LTE Band 4 5MHz 64QAM CH-Middle



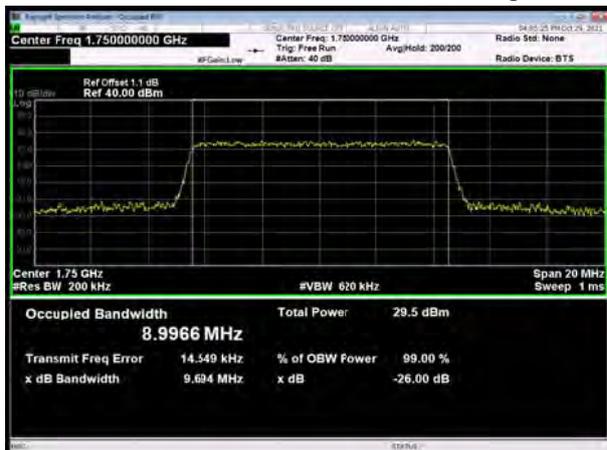
LTE Band 4 10MHz 64QAM CH-Middle



LTE Band 4 5MHz 64QAM CH-High

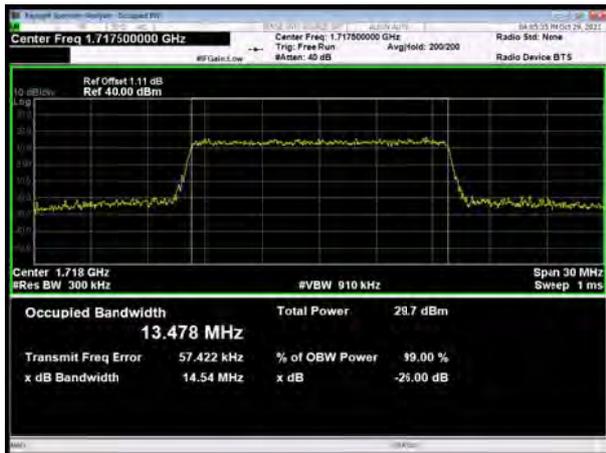


LTE Band 4 10MHz 64QAM CH-High

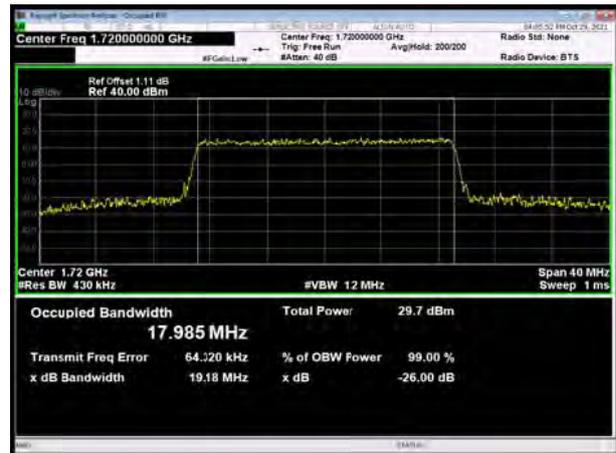




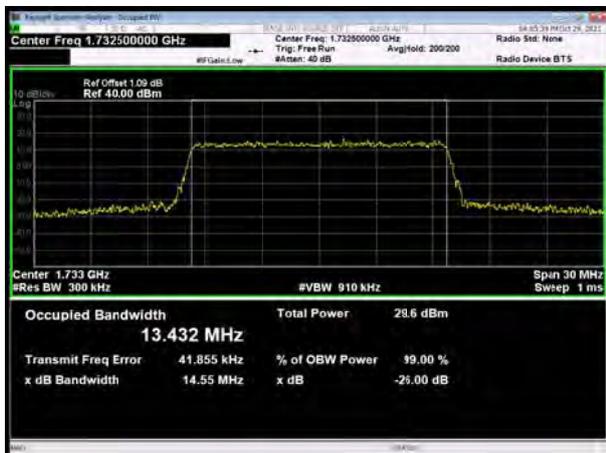
LTE Band 4 15MHz 64QAM CH-Low



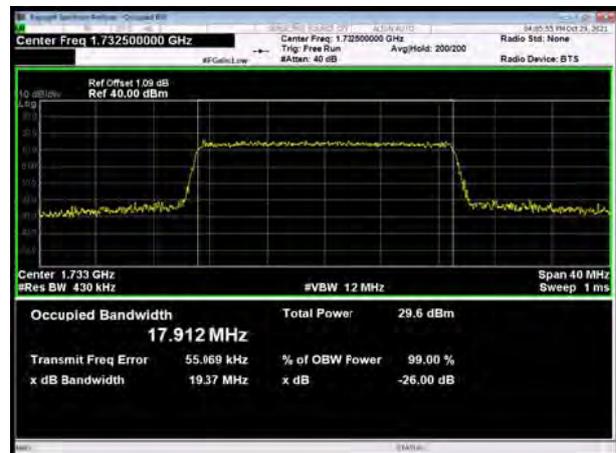
LTE Band 4 20MHz 64QAM CH-Low



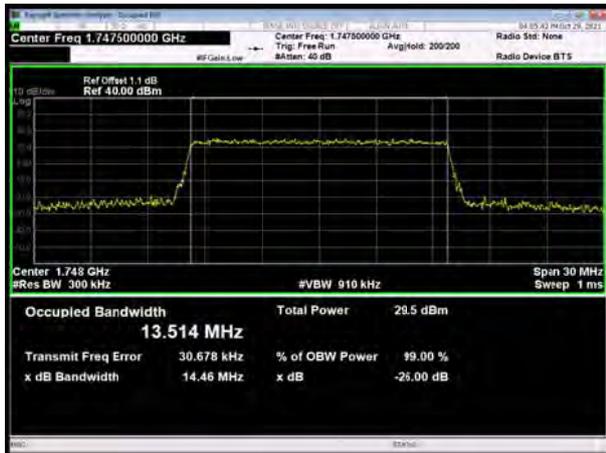
LTE Band 4 15MHz 64QAM CH-Middle



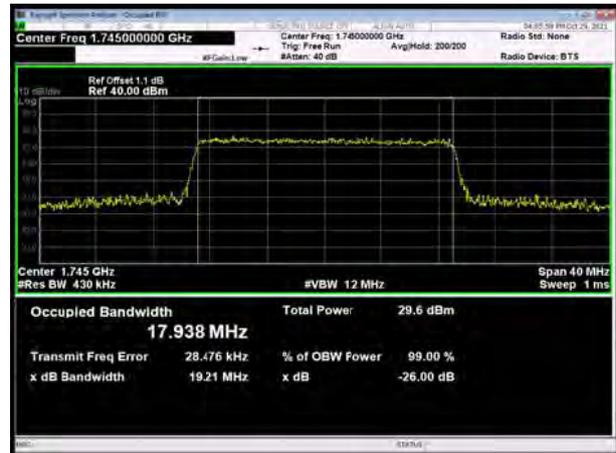
LTE Band 4 20MHz 64QAM CH-Middle



LTE Band 4 15MHz 64QAM CH-High



LTE Band 4 20MHz 64QAM CH-High

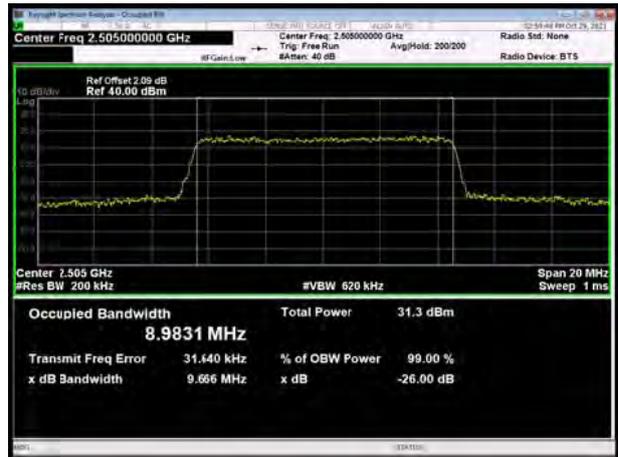




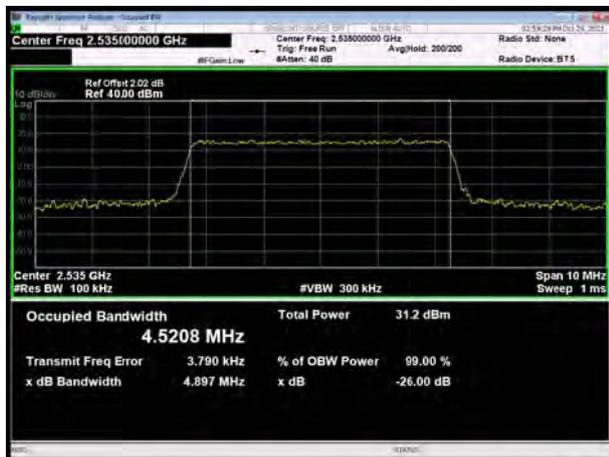
LTE Band 7 QPSK 5MHz CH-Low



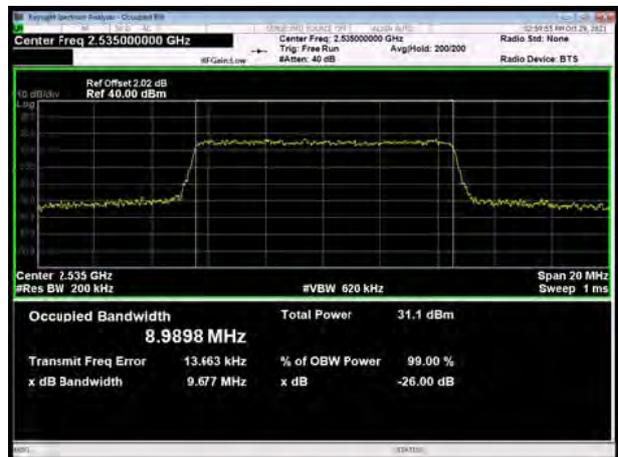
LTE Band 7 QPSK 10MHz CH-Low



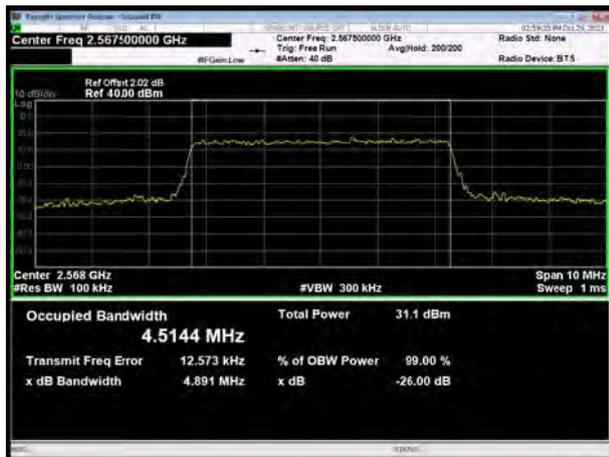
LTE Band 7 QPSK 5MHz CH-Middle



LTE Band 7 QPSK 10MHz CH-Middle



LTE Band 7 QPSK 5MHz CH-High

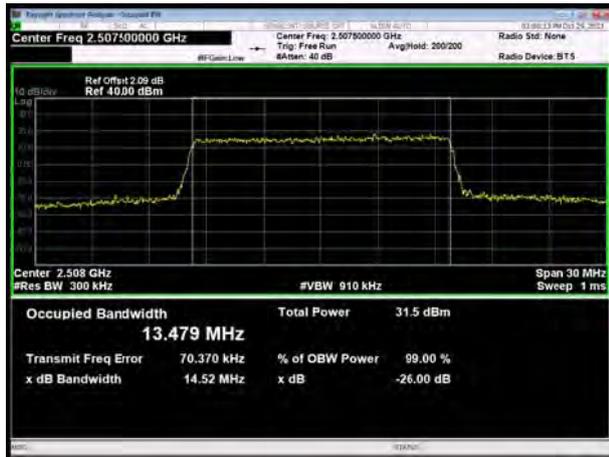


LTE Band 7 QPSK 10MHz CH-High

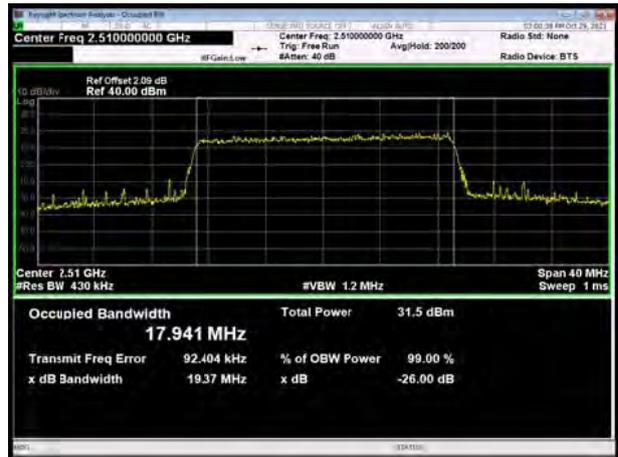




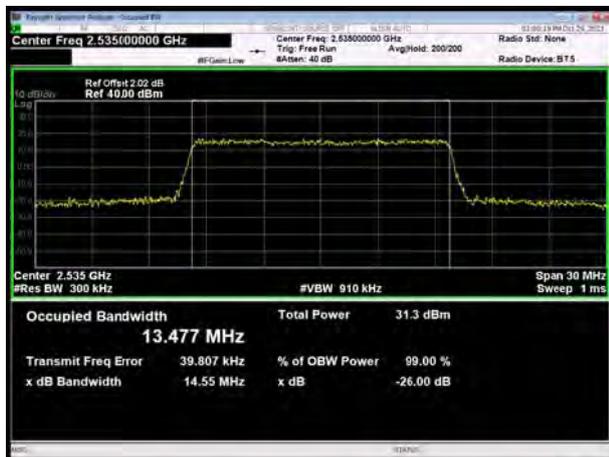
LTE Band 7 QPSK 15MHz CH-Low



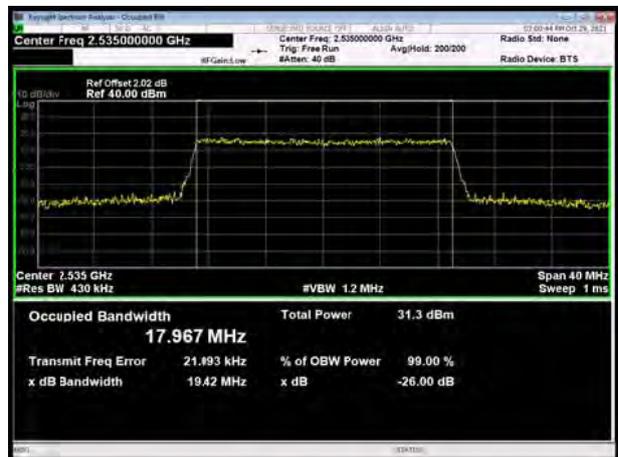
LTE Band 7 QPSK 20MHz CH-Low



LTE Band 7 QPSK 15MHz CH-Middle



LTE Band 7 QPSK 20MHz CH-Middle



LTE Band 7 QPSK 15MHz CH-High



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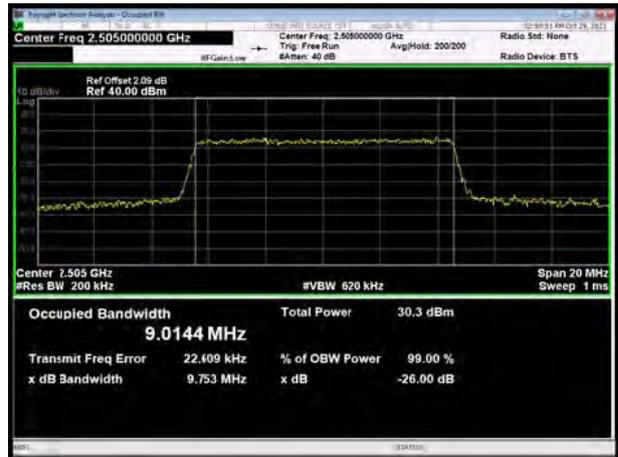




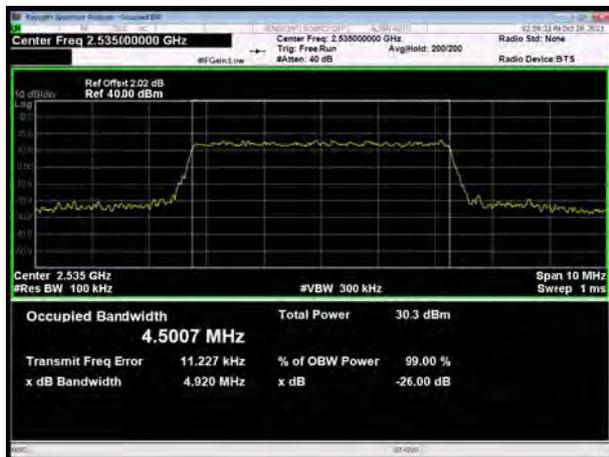
LTE Band 7 16QAM 5MHz CH-Low



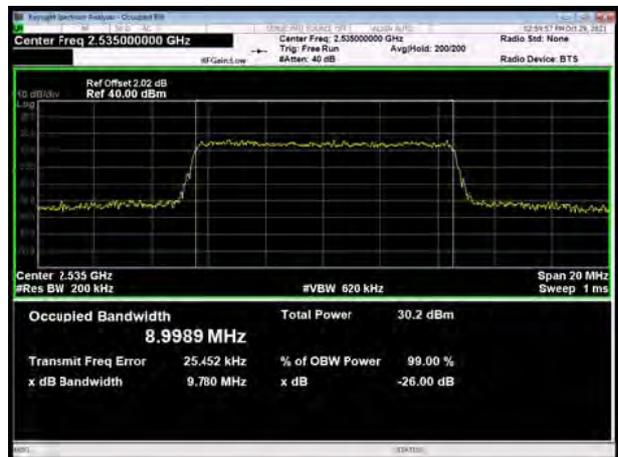
LTE Band 7 16QAM 10MHz CH-Low



LTE Band 7 16QAM 5MHz CH-Middle



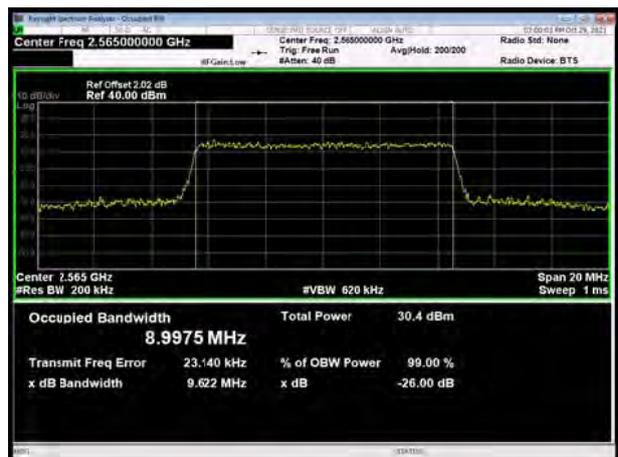
LTE Band 7 16QAM 10MHz CH-Middle



LTE Band 7 16QAM 5MHz CH-High

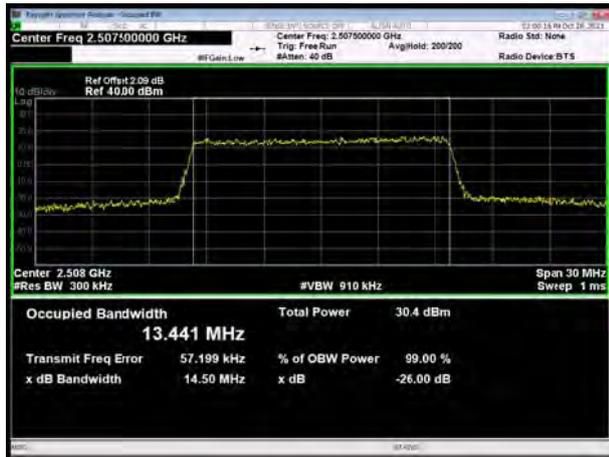


LTE Band 7 16QAM 10MHz CH-High

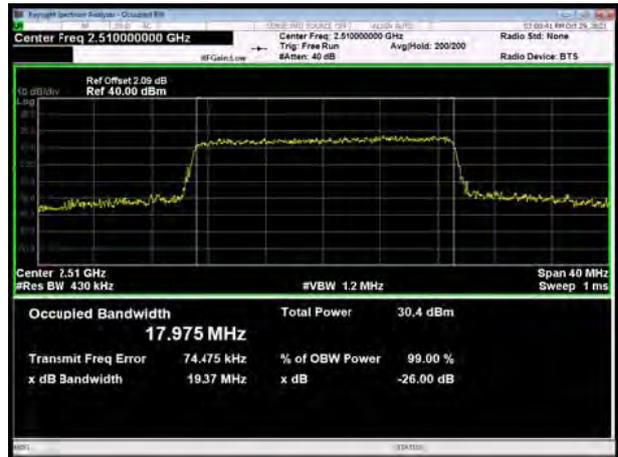




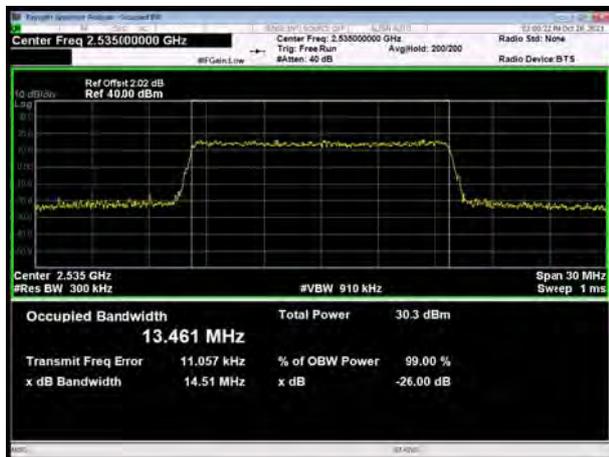
LTE Band 7 16QAM 15MHz CH-Low



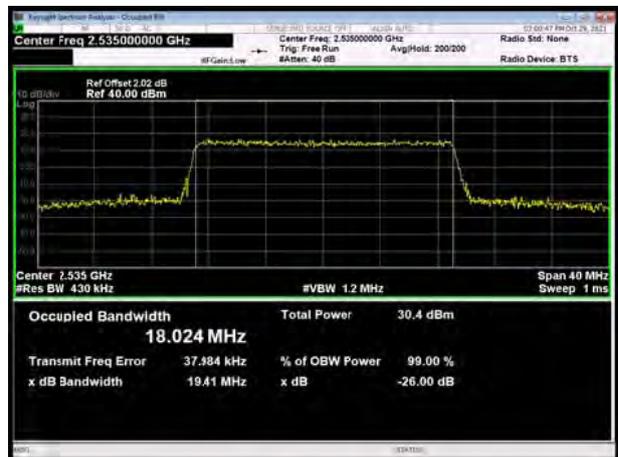
LTE Band 7 16QAM 20MHz CH-Low



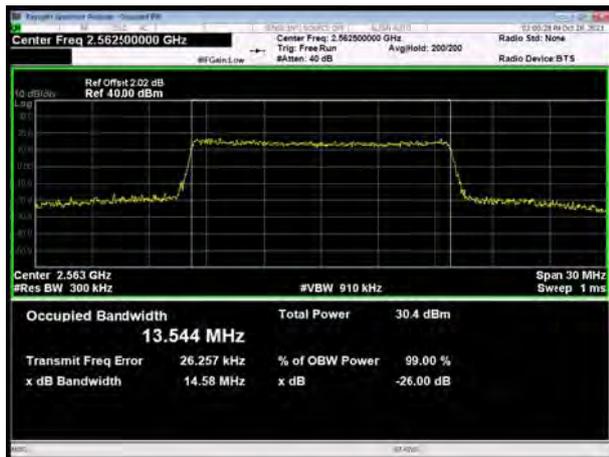
LTE Band 7 16QAM 15MHz CH-Middle



LTE Band 7 16QAM 20MHz CH-Middle



LTE Band 7 16QAM 15MHz CH-High

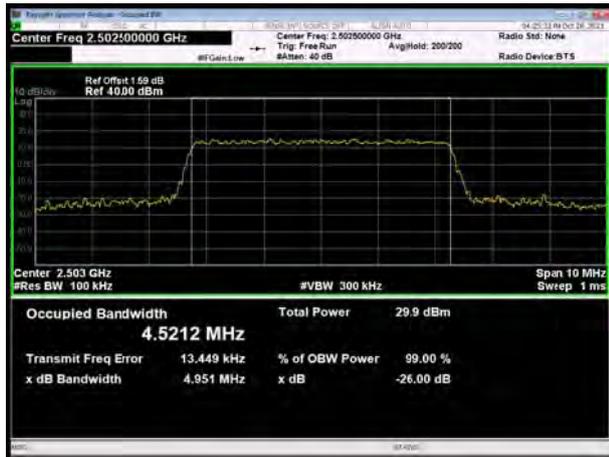


LTE Band 7 16QAM 20MHz CH-High

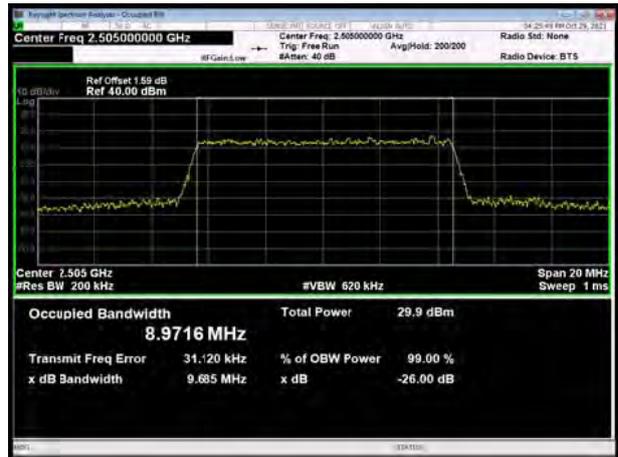




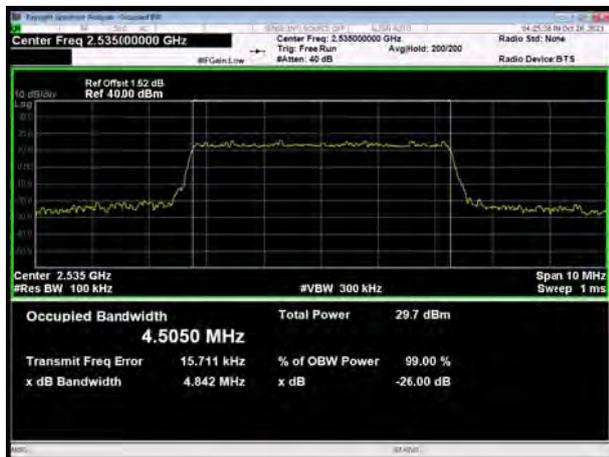
LTE Band 7 64QAM 5MHz CH-Low



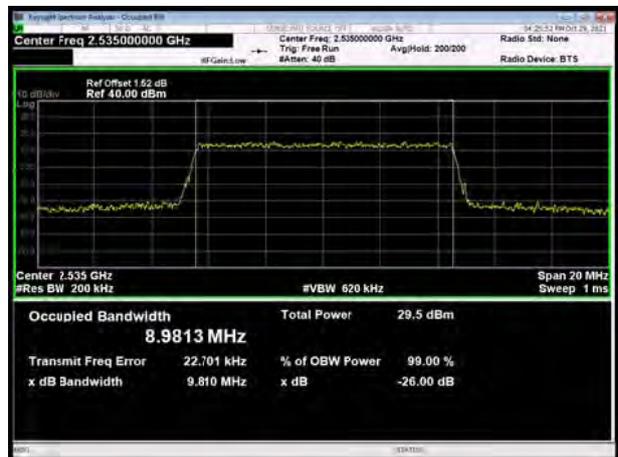
LTE Band 7 64QAM 10MHz CH-Low



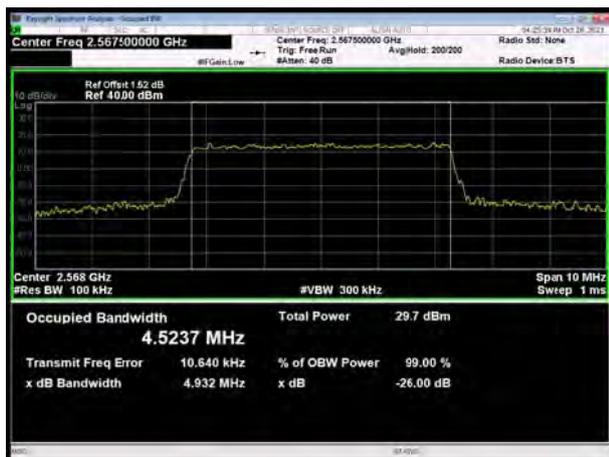
LTE Band 7 64QAM 5MHz CH-Middle



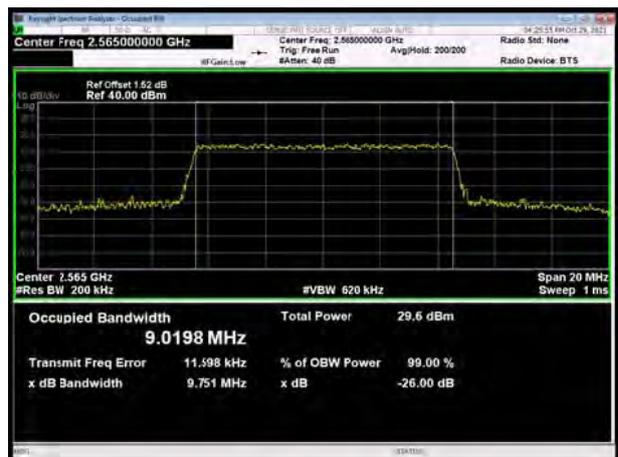
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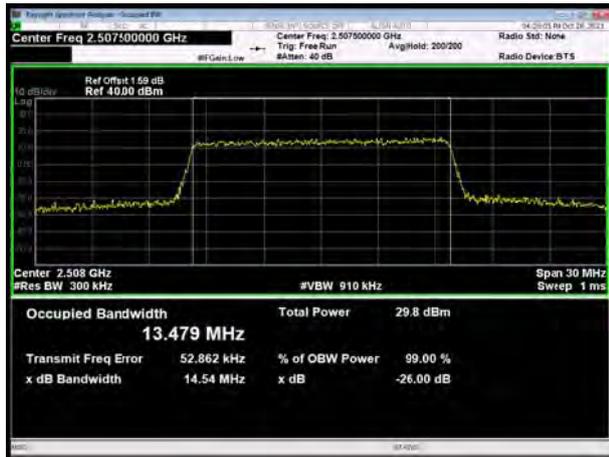


LTE Band 7 64QAM 10MHz CH-High

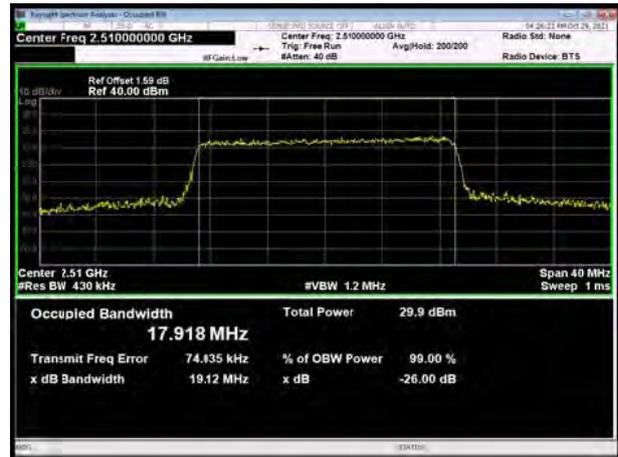




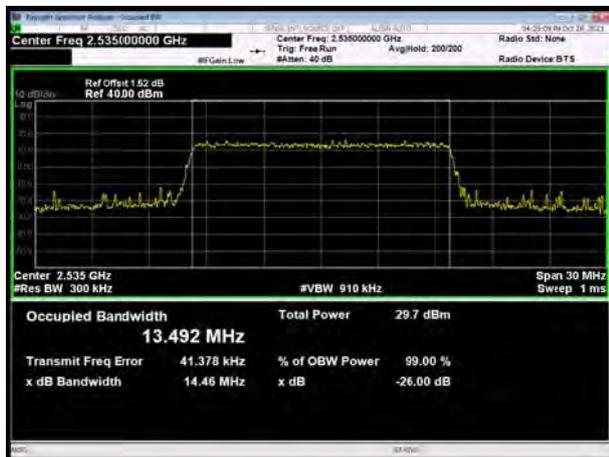
LTE Band 7 64QAM 15MHz CH-Low



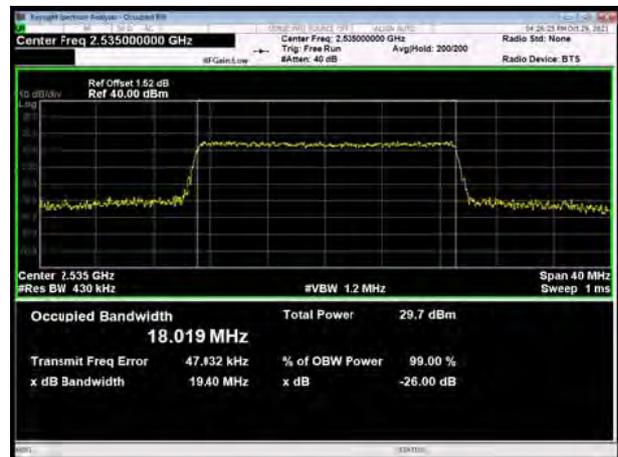
LTE Band 7 64QAM 20MHz CH-Low



LTE Band 7 64QAM 15MHz CH-Middle



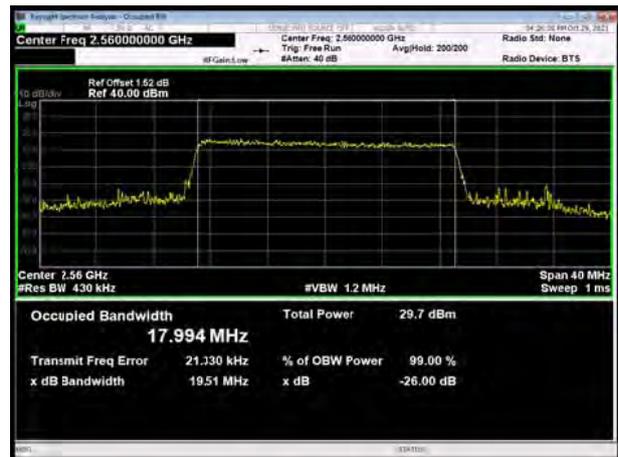
LTE Band 7 64QAM 20MHz CH-Middle



LTE Band 7 64QAM 15MHz CH-High

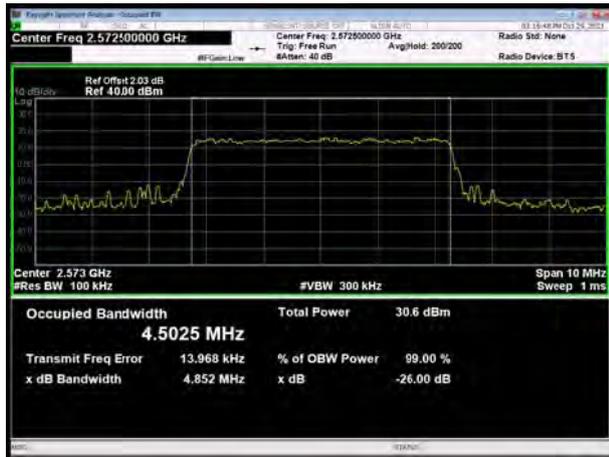


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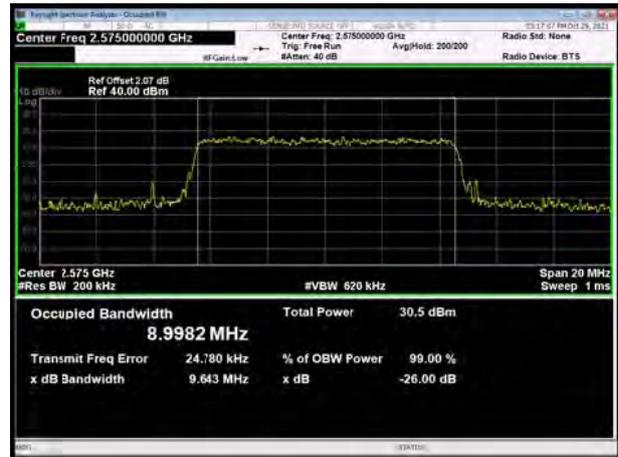




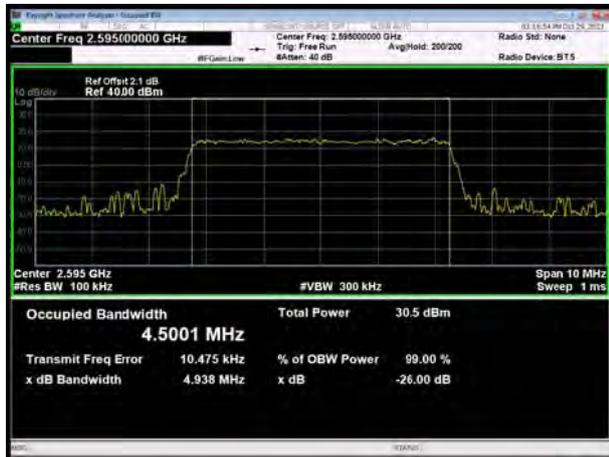
LTE Band 38 QPSK 5MHz CH-Low



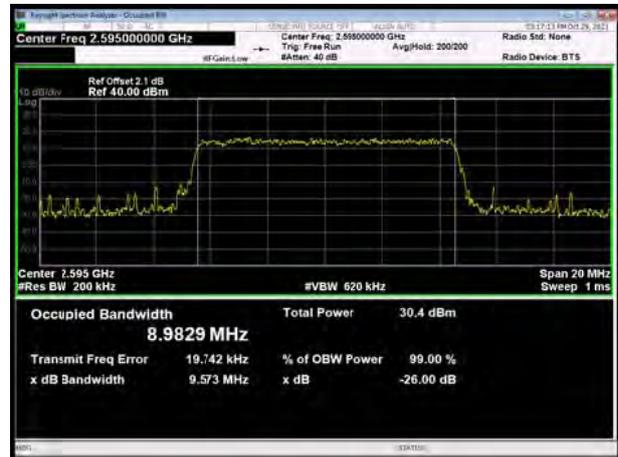
LTE Band 38 QPSK 10MHz CH-Low



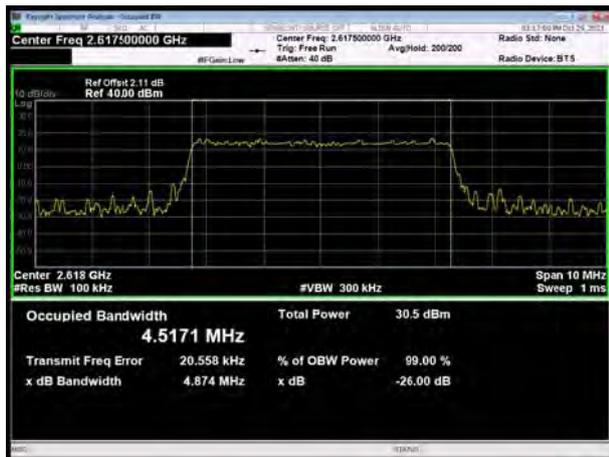
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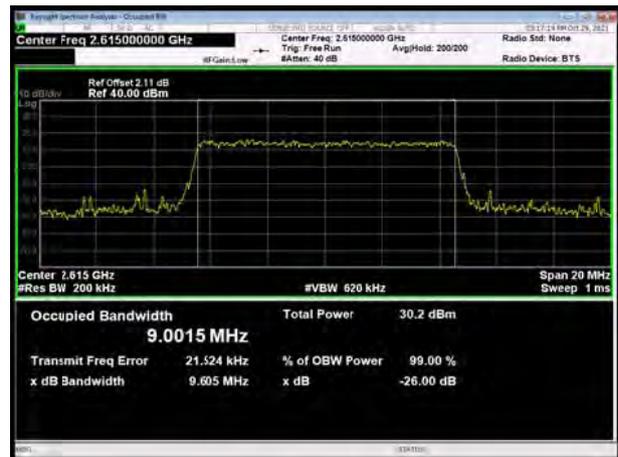
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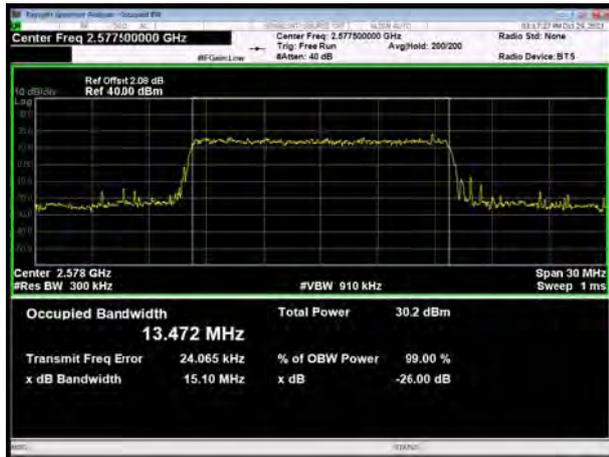


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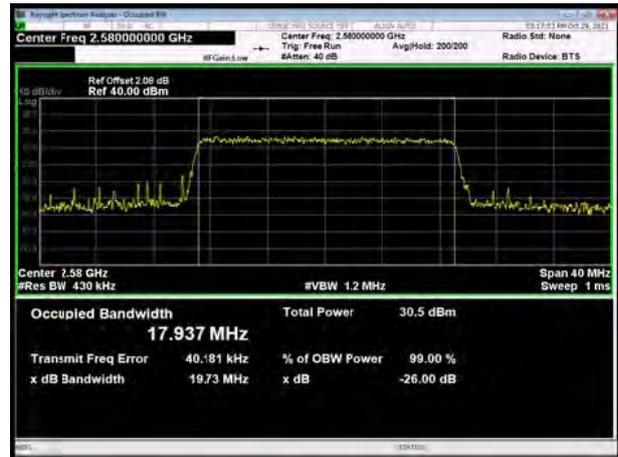




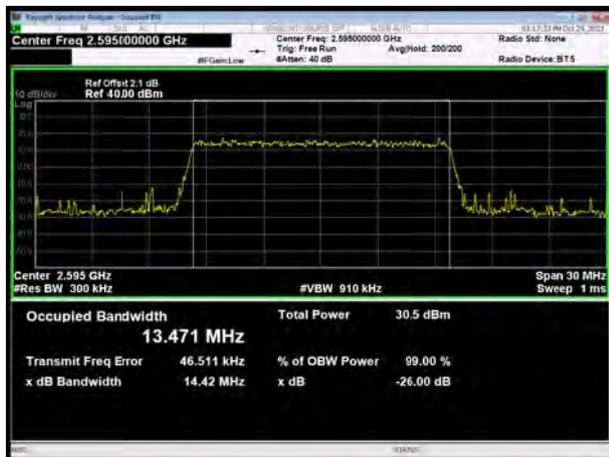
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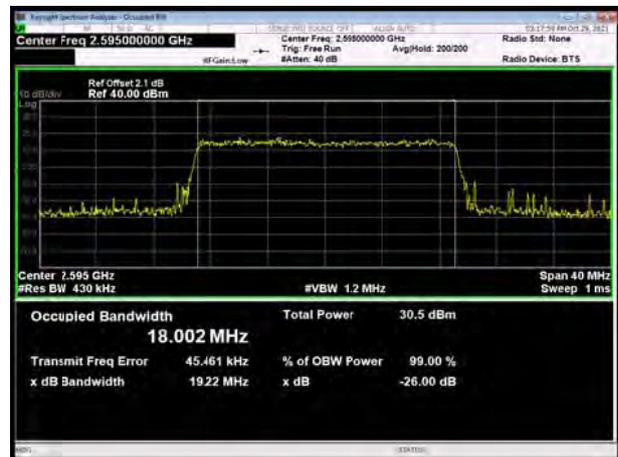
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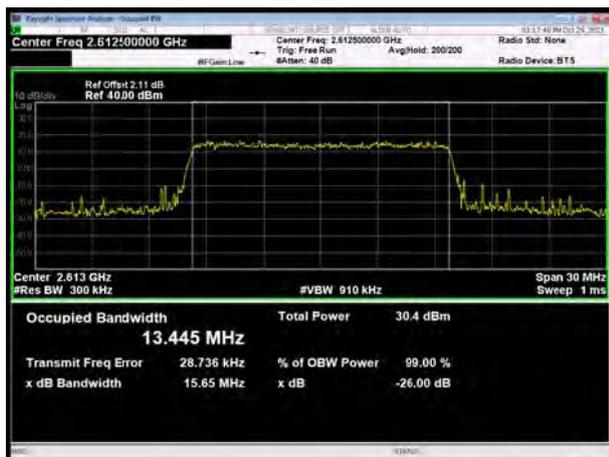
LTE Band 38 QPSK 15MHz CH-Middle



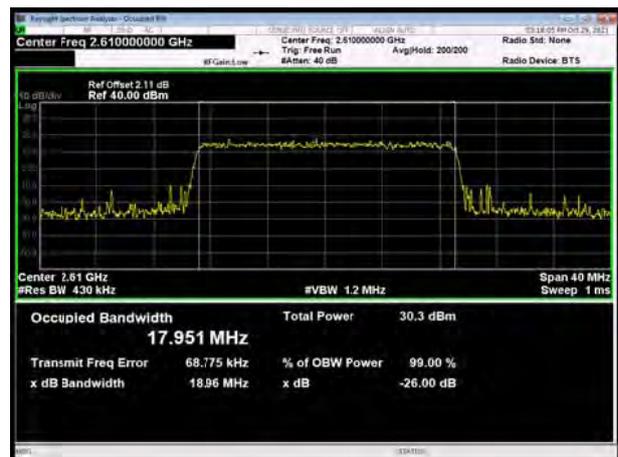
LTE Band 38 QPSK 20MHz CH-Middle



LTE Band 38 QPSK 15MHz CH-High

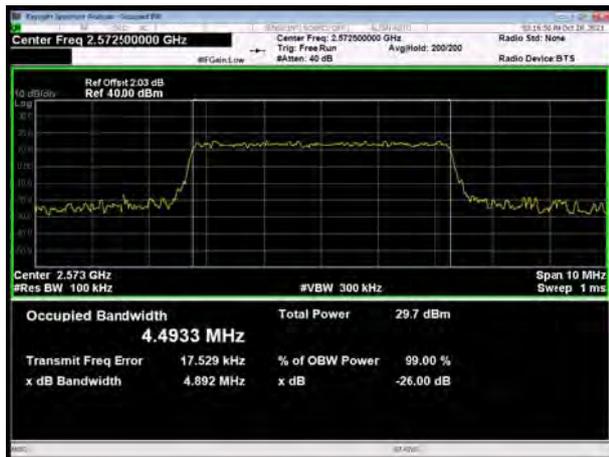


LTE Band 38 QPSK 20MHz CH-High

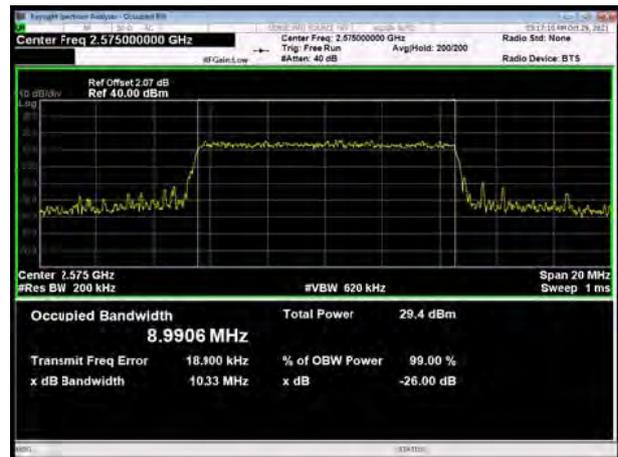




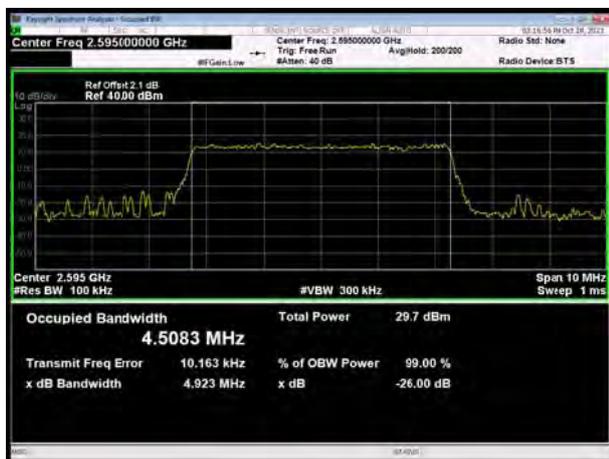
LTE Band 38 16QAM 5MHz CH-Low



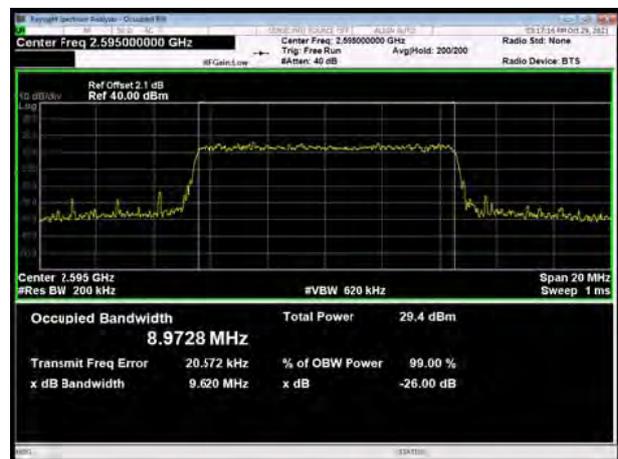
LTE Band 38 16QAM 10MHz CH-Low



LTE Band 38 16QAM 5MHz CH-Middle



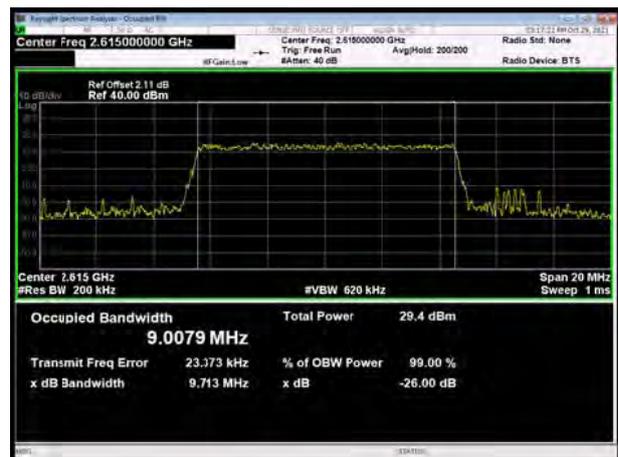
LTE Band 38 16QAM 10MHz CH-Middle



LTE Band 38 16QAM 5MHz CH-High

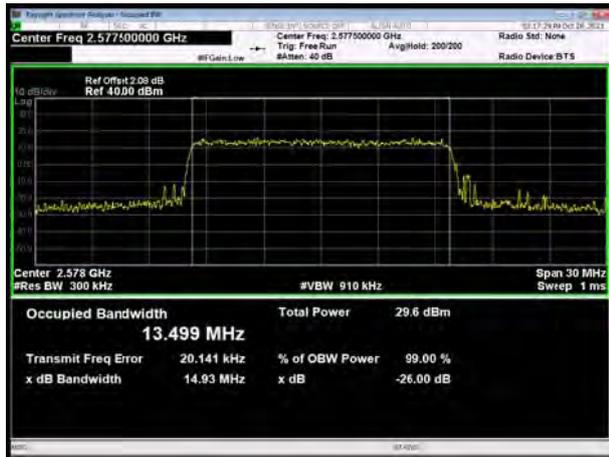


LTE Band 38 16QAM 10MHz CH-High

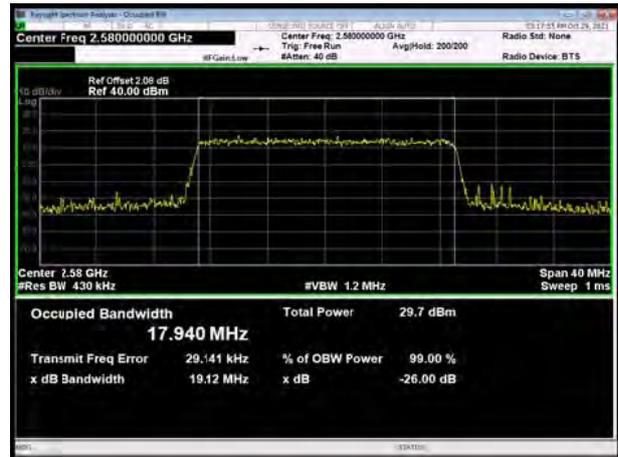




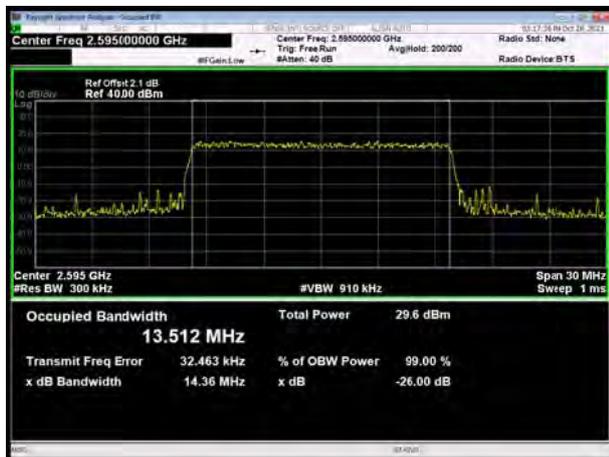
LTE Band 38 16QAM 15MHz CH-Low



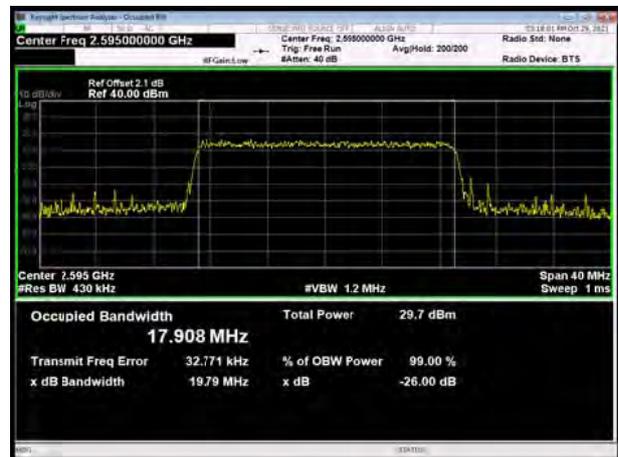
LTE Band 38 16QAM 20MHz CH-Low



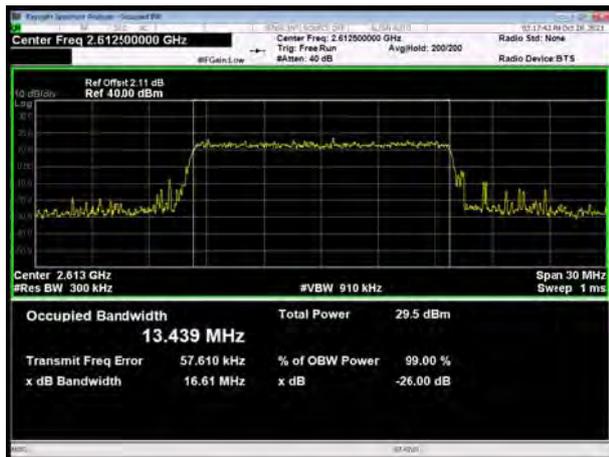
LTE Band 38 16QAM 15MHz CH-Middle



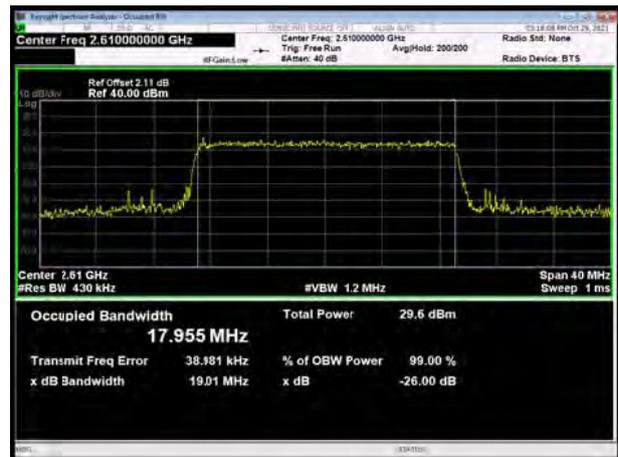
LTE Band 38 16QAM 20MHz CH-Middle



LTE Band 38 16QAM 15MHz CH-High

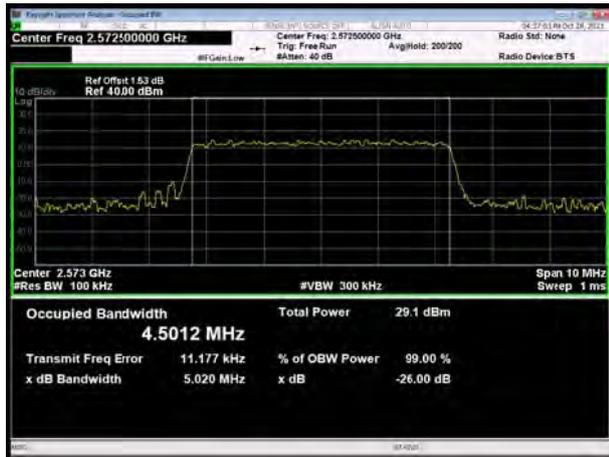


LTE Band 38 16QAM 20MHz CH-High

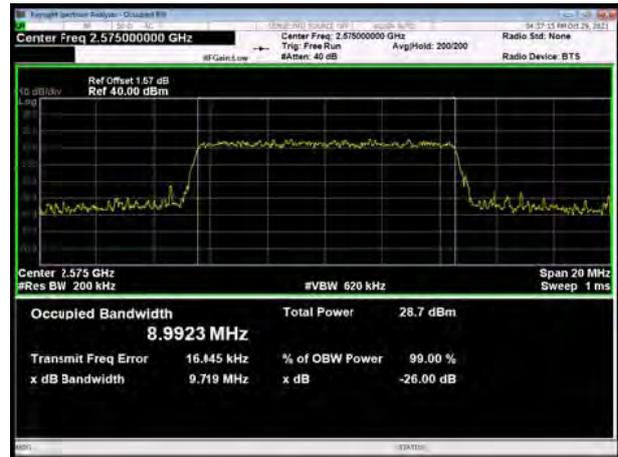




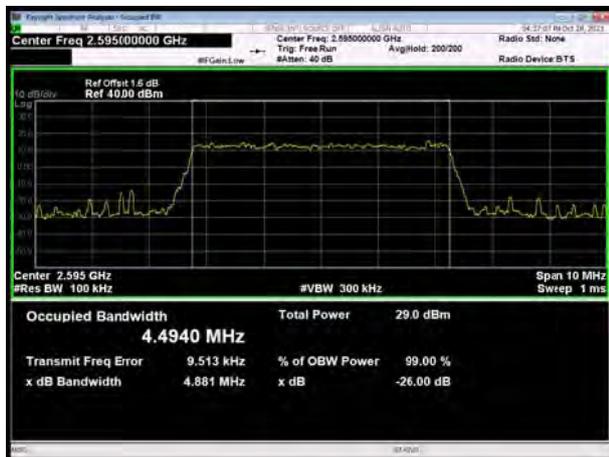
LTE Band 38 64QAM 5MHz CH-Low



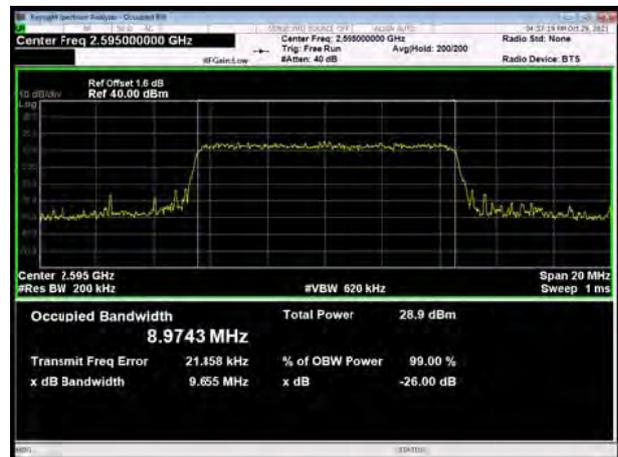
LTE Band 38 64QAM 10MHz CH-Low



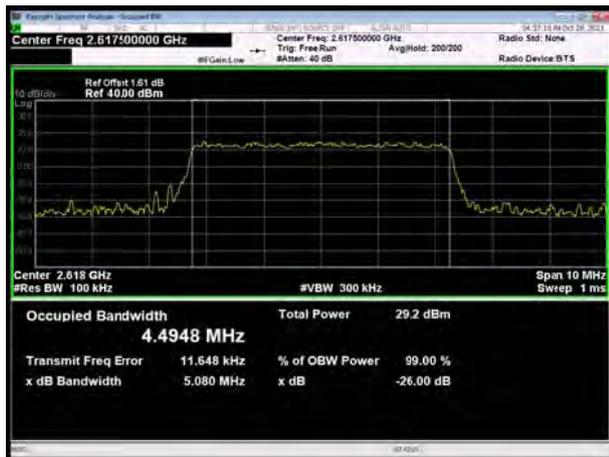
LTE Band 38 64QAM 5MHz CH-Middle



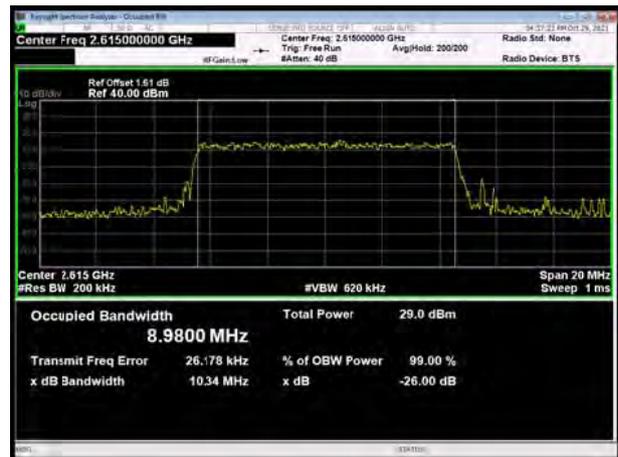
LTE Band 38 64QAM 10MHz CH-Middle



LTE Band 38 64QAM 5MHz CH-High

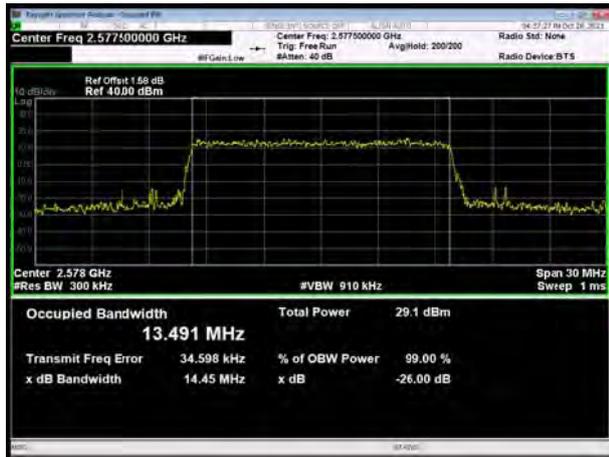


LTE Band 38 64QAM 10MHz CH-High

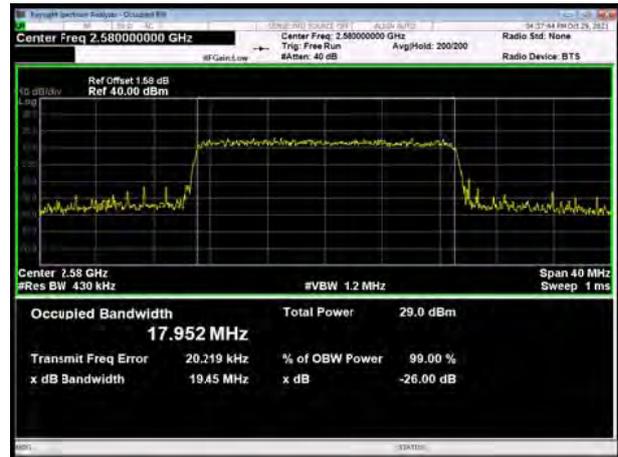




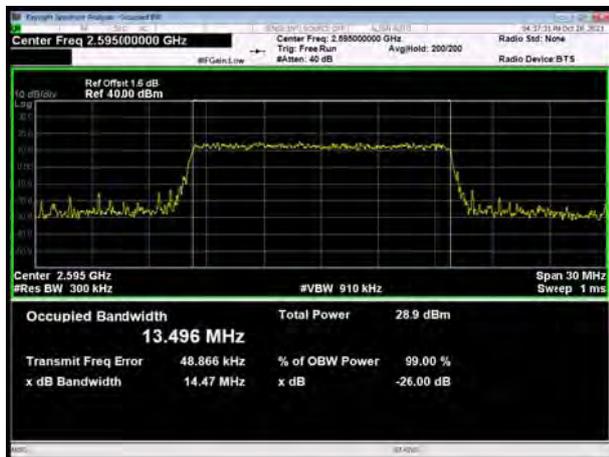
LTE Band 38 64QAM 15MHz CH-Low



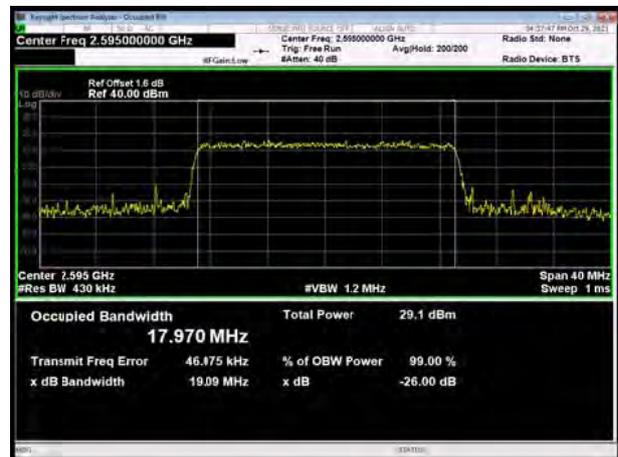
LTE Band 38 64QAM 20MHz CH-Low



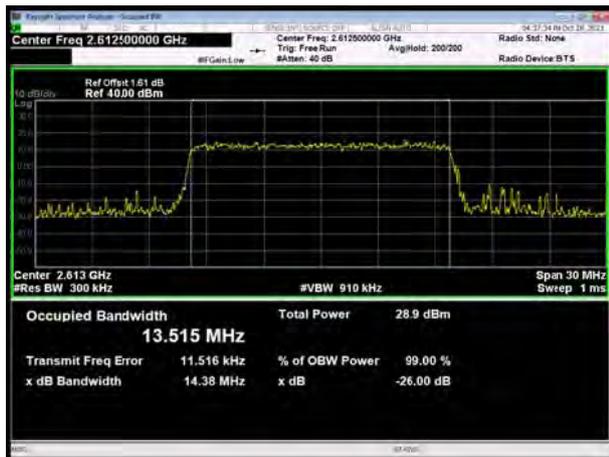
LTE Band 38 64QAM 15MHz CH-Middle



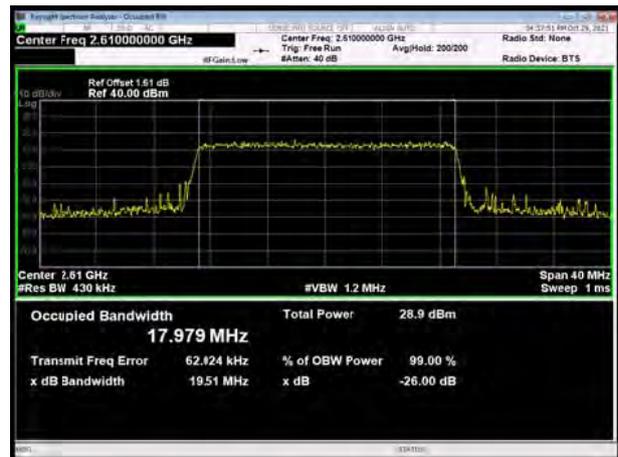
LTE Band 38 64QAM 20MHz CH-Middle



LTE Band 38 64QAM 15MHz CH-High

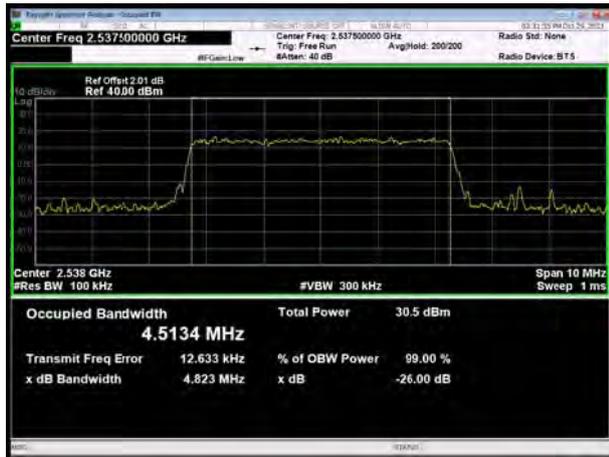


LTE Band 38 64QAM 20MHz CH-High

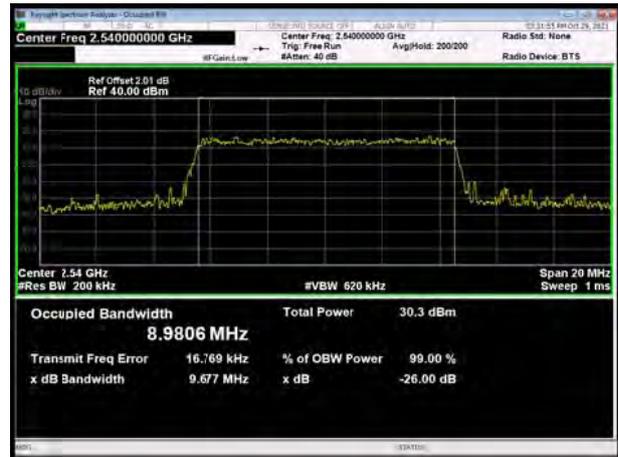




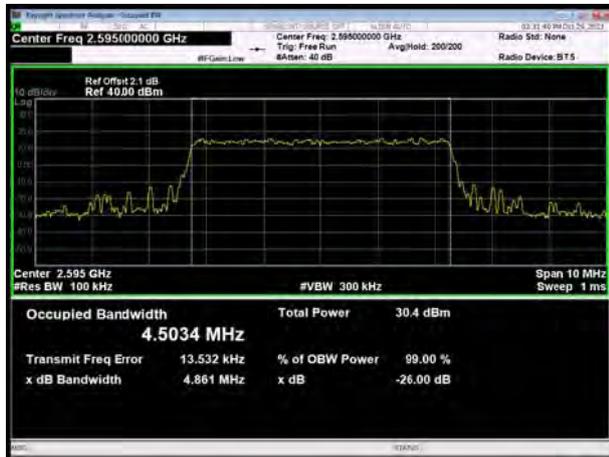
LTE Band 41 QPSK 5MHz CH-Low



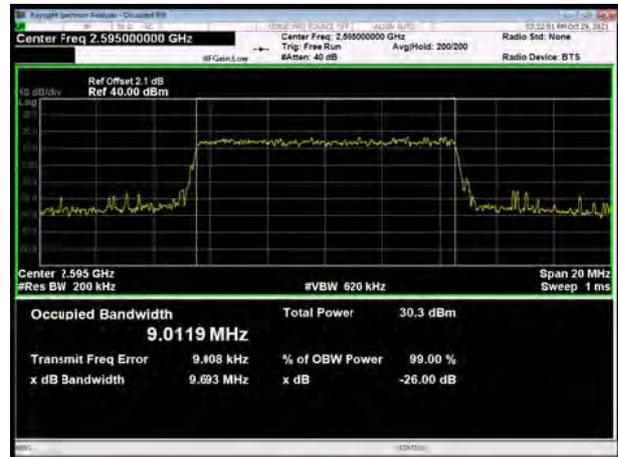
LTE Band 41 QPSK 10MHz CH-Low



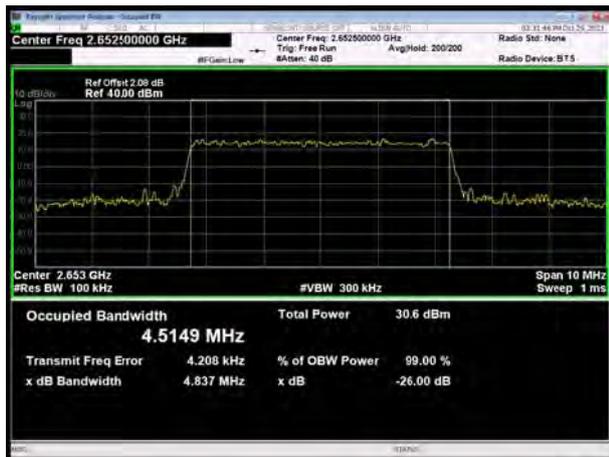
LTE Band 41 QPSK 5MHz CH-Middle



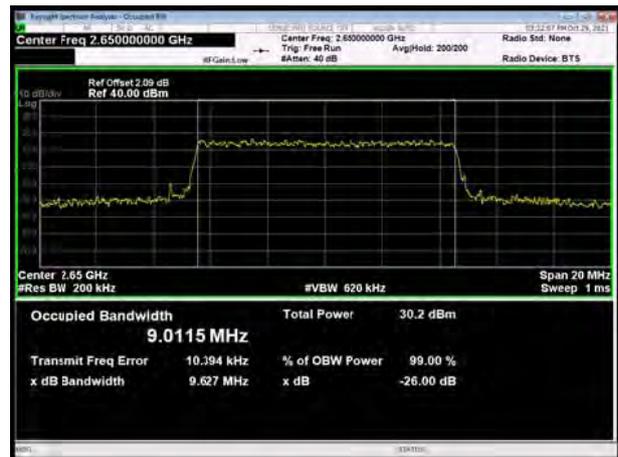
LTE Band 41 QPSK 10MHz CH-Middle



LTE Band 41 QPSK 5MHz CH-High

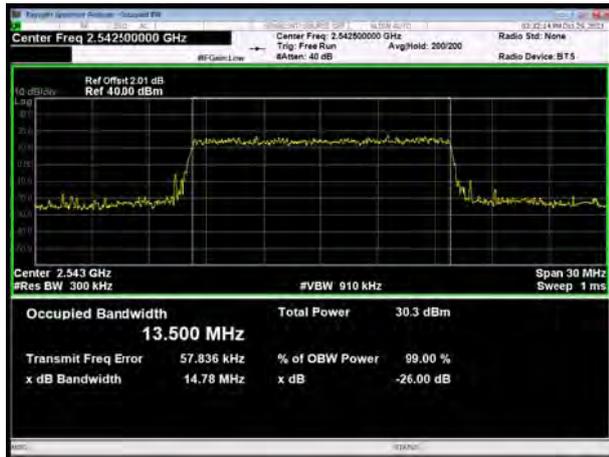


LTE Band 41 QPSK 10MHz CH-High

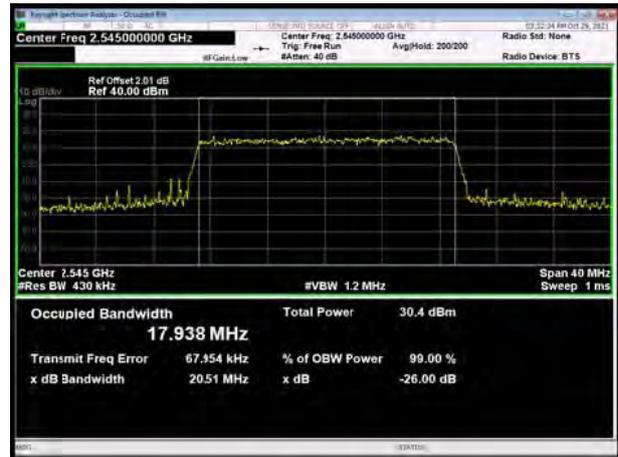




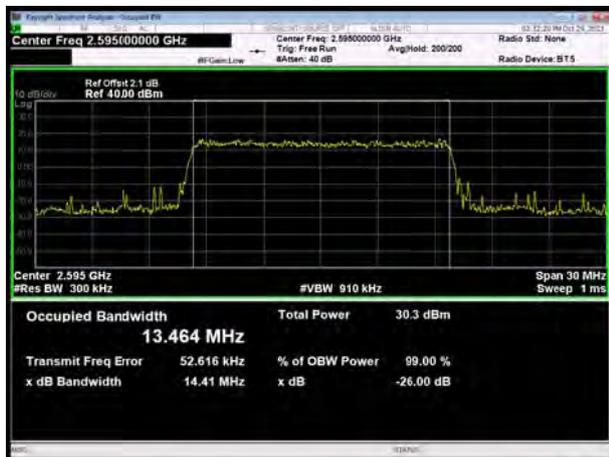
LTE Band 41 QPSK 15MHz CH-Low



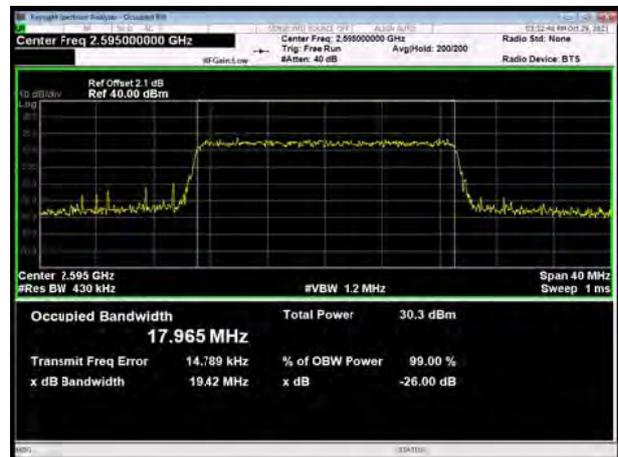
LTE Band 41 QPSK 20MHz CH-Low



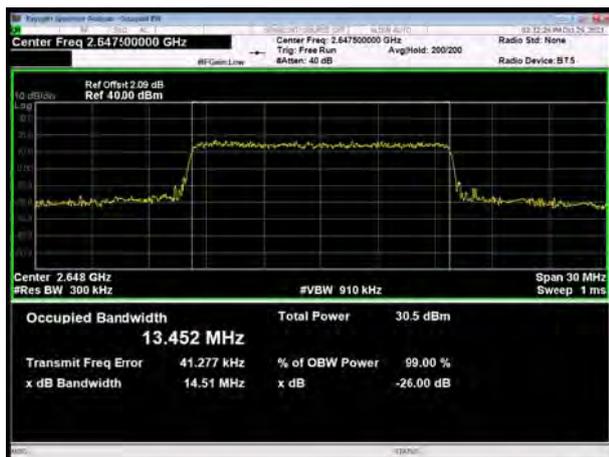
LTE Band 41 QPSK 15MHz CH-Middle



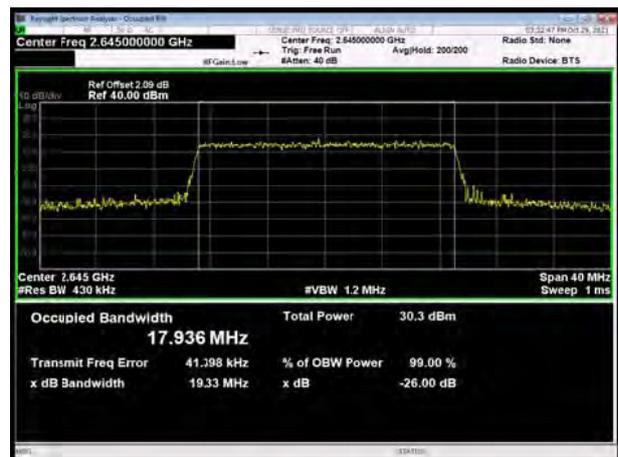
LTE Band 41 QPSK 20MHz CH-Middle



LTE Band 41 QPSK 15MHz CH-High

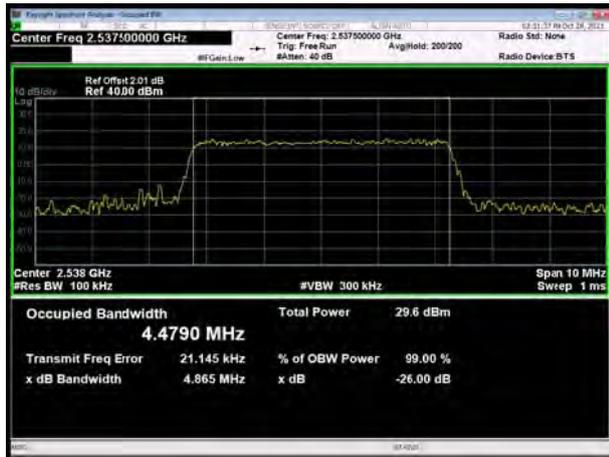


LTE Band 41 QPSK 20MHz CH-High

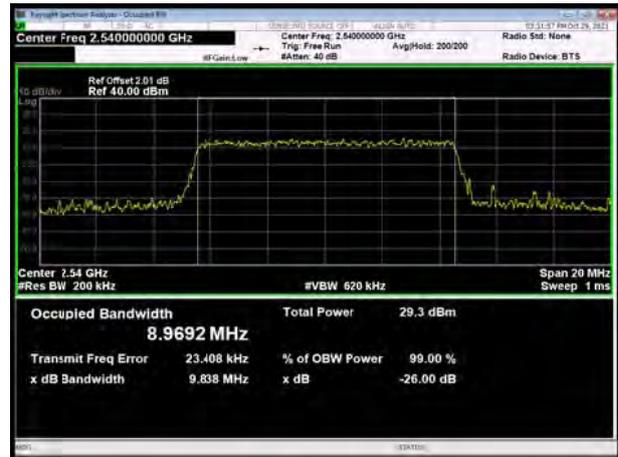




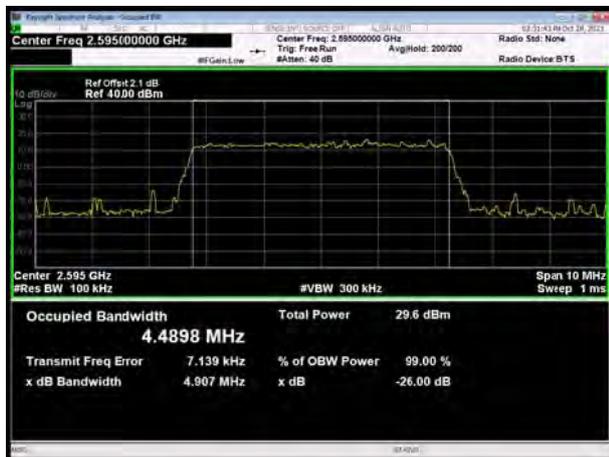
LTE Band 41 16QAM 5MHz CH-Low



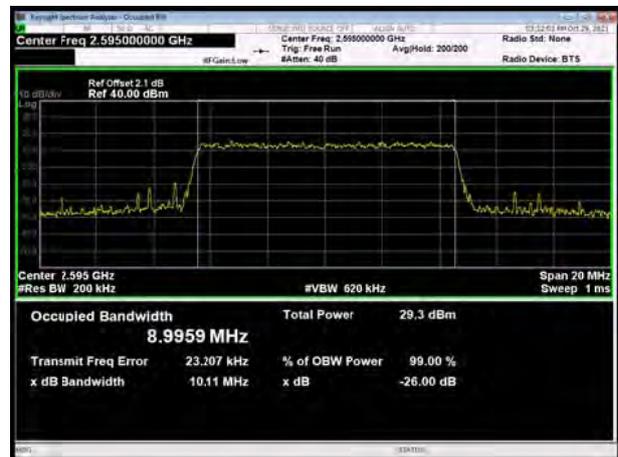
LTE Band 41 16QAM 10MHz CH-Low



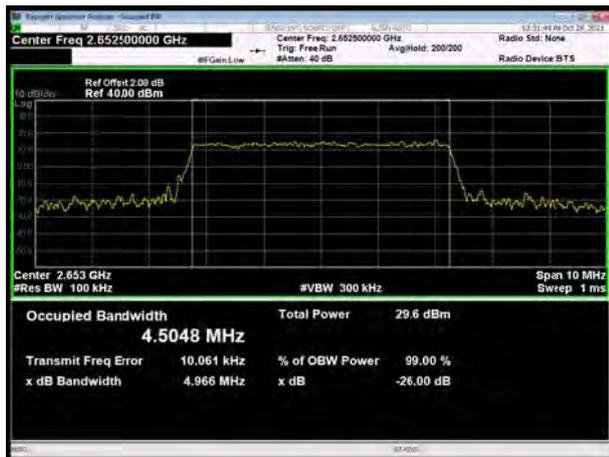
LTE Band 41 16QAM 5MHz CH-Middle



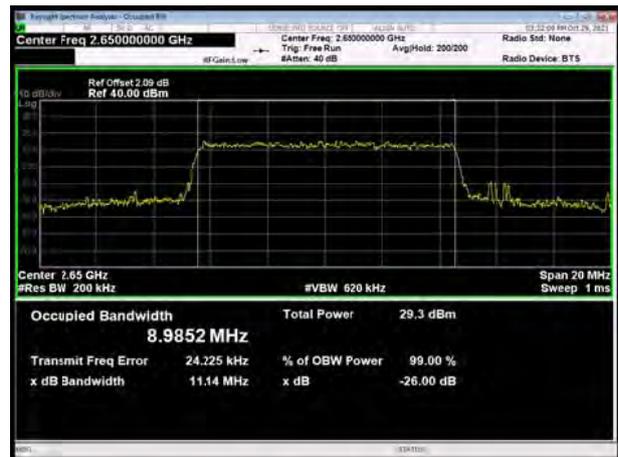
LTE Band 41 16QAM 10MHz CH-Middle



LTE Band 41 16QAM 5MHz CH-High

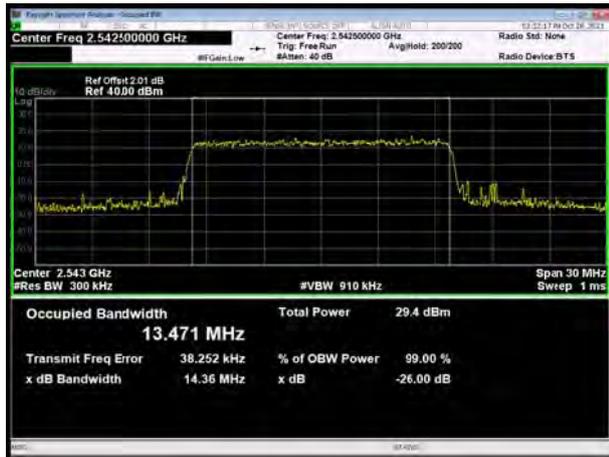


LTE Band 41 16QAM 10MHz CH-High

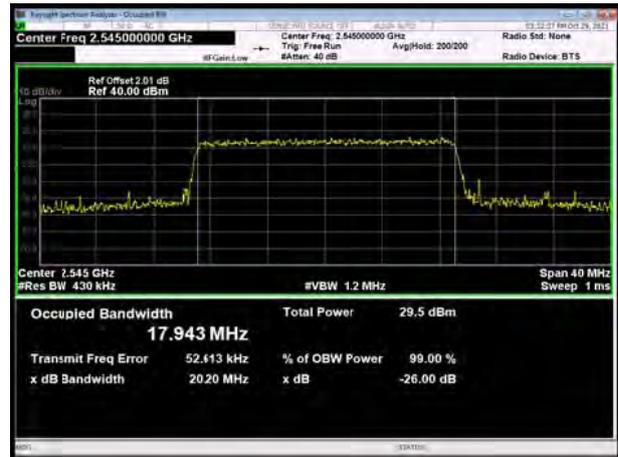




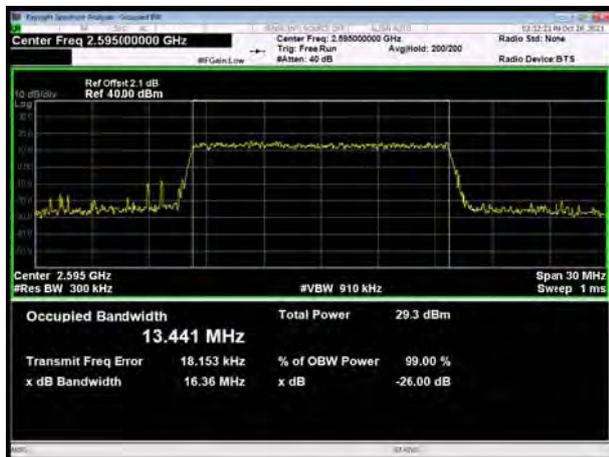
LTE Band 41 16QAM 15MHz CH-Low



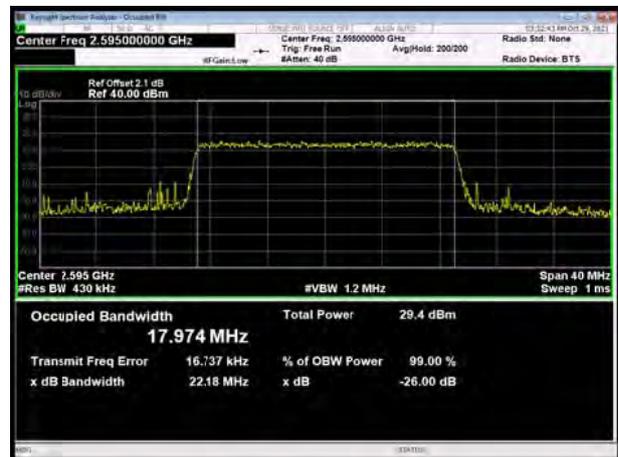
LTE Band 41 16QAM 20MHz CH-Low



LTE Band 41 16QAM 15MHz CH-Middle



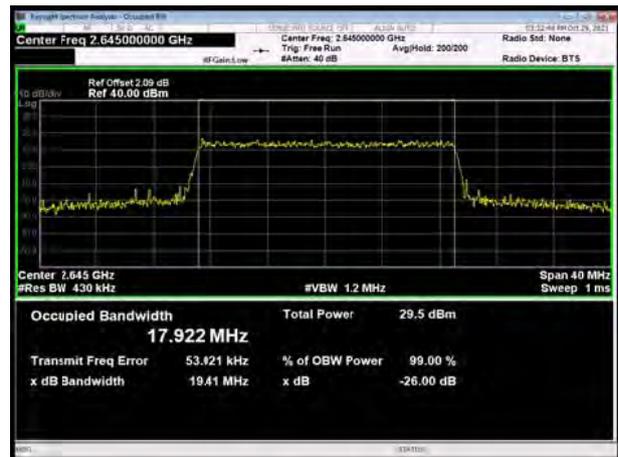
LTE Band 41 16QAM 20MHz CH-Middle



LTE Band 41 16QAM 15MHz CH-High



LTE Band 41 16QAM 20MHz CH-High

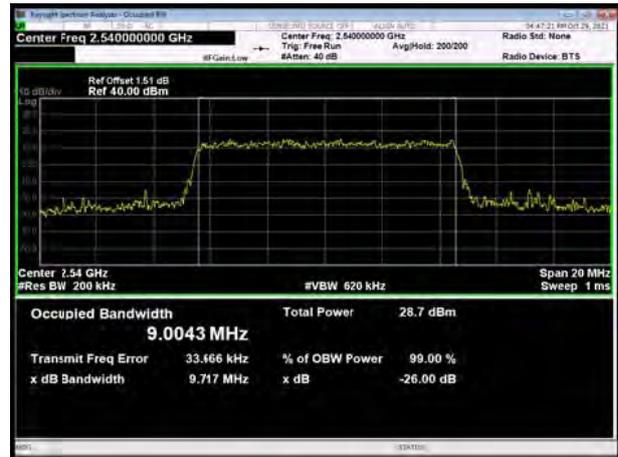




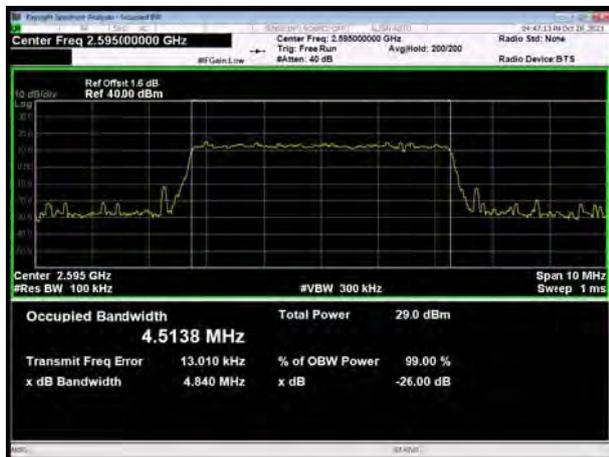
LTE Band 41 64QAM 5MHz CH-Low



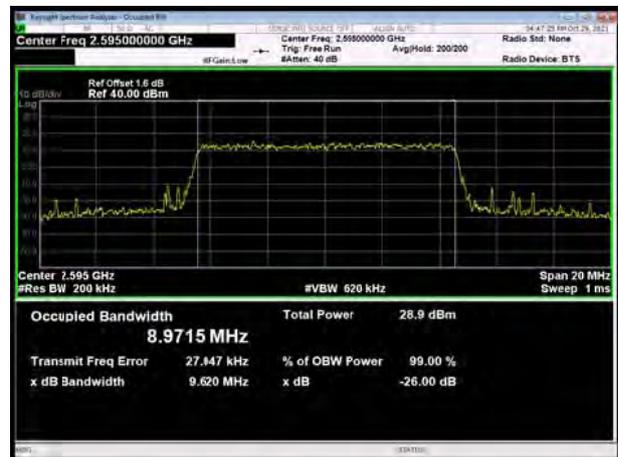
LTE Band 41 64QAM 10MHz CH-Low



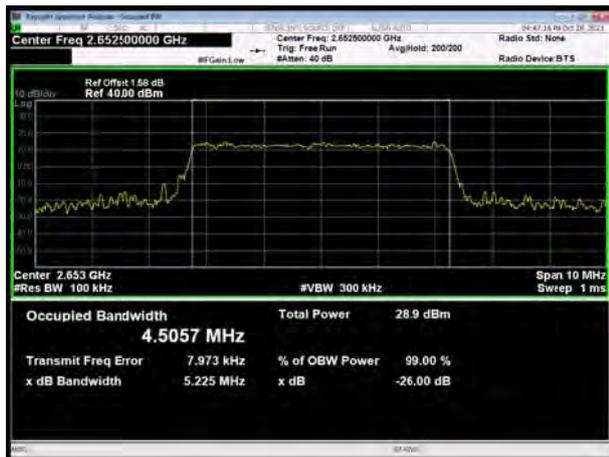
LTE Band 41 64QAM 5MHz CH-Middle



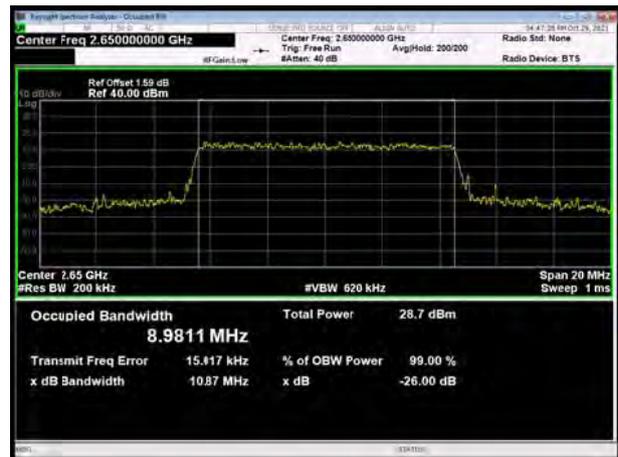
LTE Band 41 64QAM 10MHz CH-Middle



LTE Band 41 64QAM 5MHz CH-High

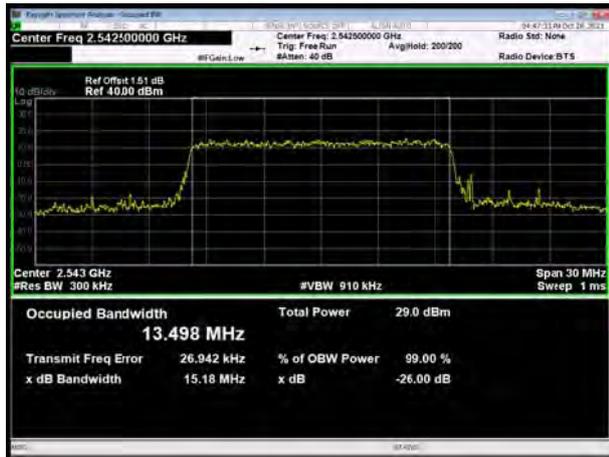


LTE Band 41 64QAM 10MHz CH-High

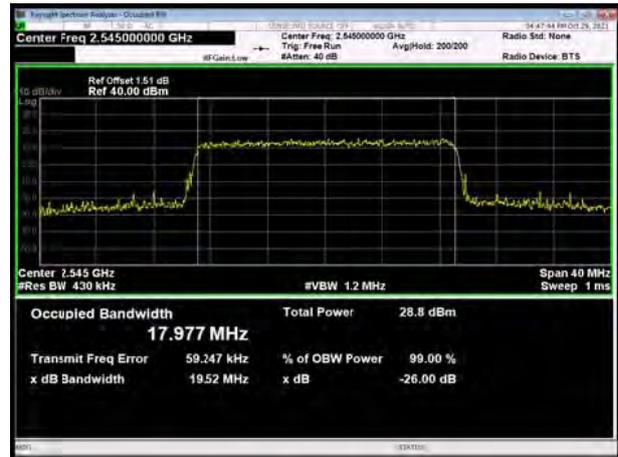




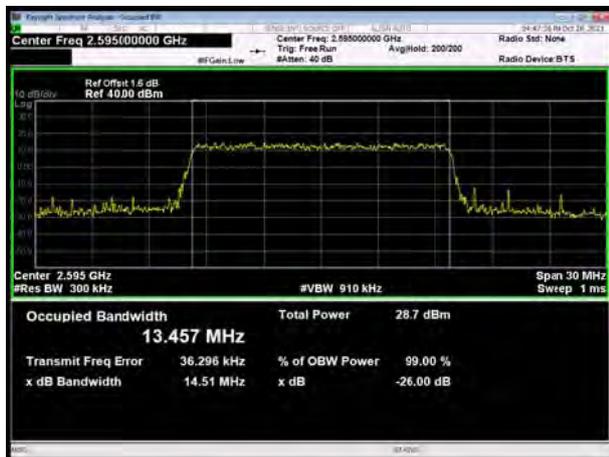
LTE Band 41 64QAM 15MHz CH-Low



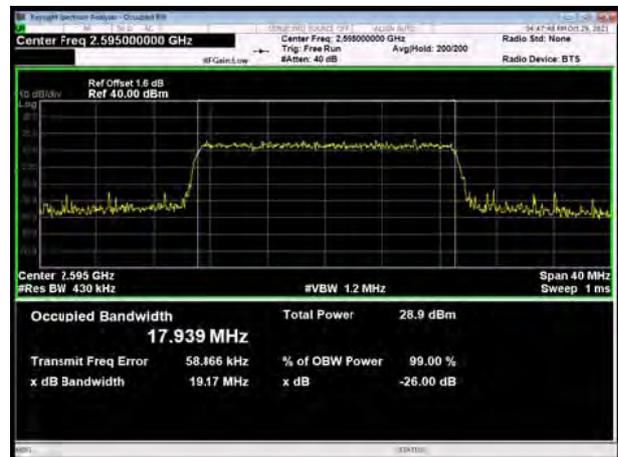
LTE Band 41 64QAM 20MHz CH-Low



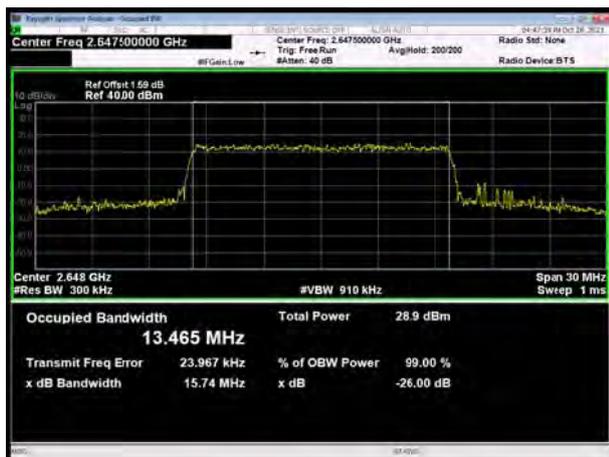
LTE Band 41 64QAM 15MHz CH-Middle



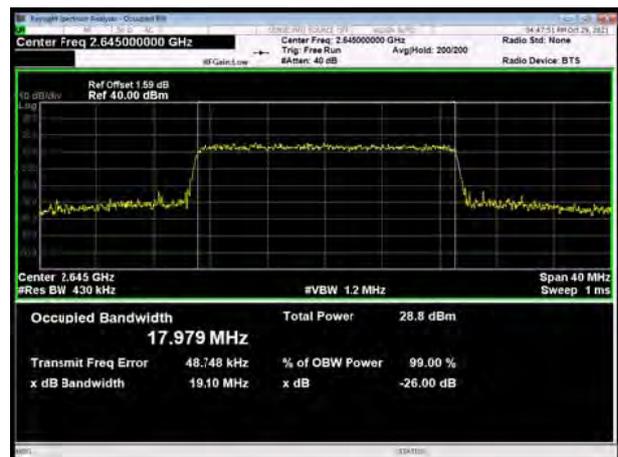
LTE Band 41 64QAM 20MHz CH-Middle



LTE Band 41 64QAM 15MHz CH-High



LTE Band 41 64QAM 20MHz CH-High



CA_7C QPSK 10MHz+20MHz



CA_7C QPSK 20MHz+10MHz



CA_7C 16QAM 10MHz+20MHz



CA_7C 16QAM 20MHz+10MHz



CA_7C 64QAM 10MHz+20MHz



CA_7C 64QAM 20MHz+10MHz





CA_7C QPSK 15MHz+10MHz



CA_7C QPSK 15MHz+15MHz



CA_7C 16QAM 15MHz+10MHz



CA_7C 16QAM 15MHz+15MHz



CA_7C 64QAM 15MHz+10MHz



CA_7C 64QAM 15MHz+15MHz





CA_7C QPSK 15MHz+20MHz



CA_7C QPSK 20MHz+15MHz



CA_7C 16QAM 15MHz+20MHz



CA_7C 16QAM 20MHz+15MHz



CA_7C 64QAM 15MHz+20MHz



CA_7C 64QAM 20MHz+15MHz





CA_7C QPSK 20MHz+20MHz



CA_7C 16QAM 20MHz+20MHz



CA_7C 64QAM 20MHz+20MHz





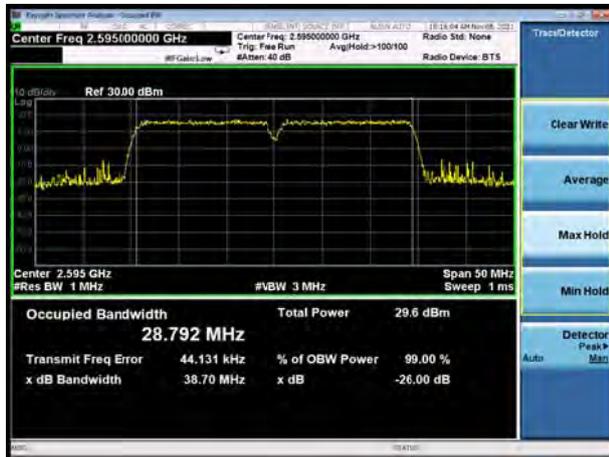
CA_38C QPSK 15MHz+15MHz



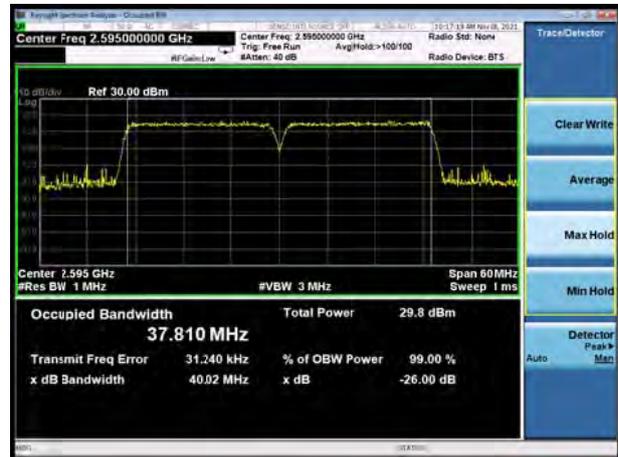
CA_38C QPSK 20MHz+20MHz



CA_38C 16QAM 15MHz+15MHz



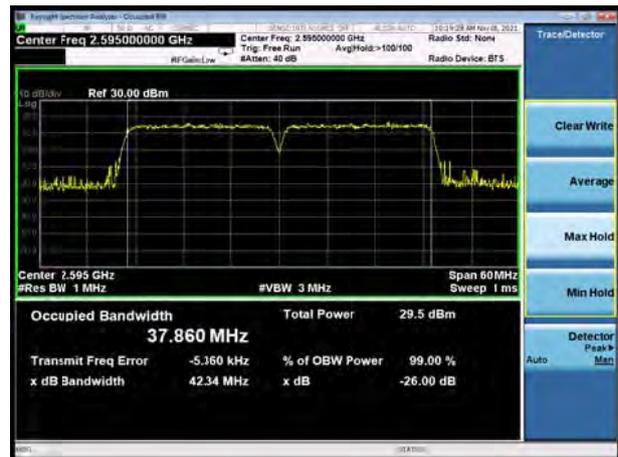
CA_38C 16QAM 20MHz+20MHz



CA_38C 64QAM 15MHz+15MHz



CA_38C 64QAM 20MHz+20MHz



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.

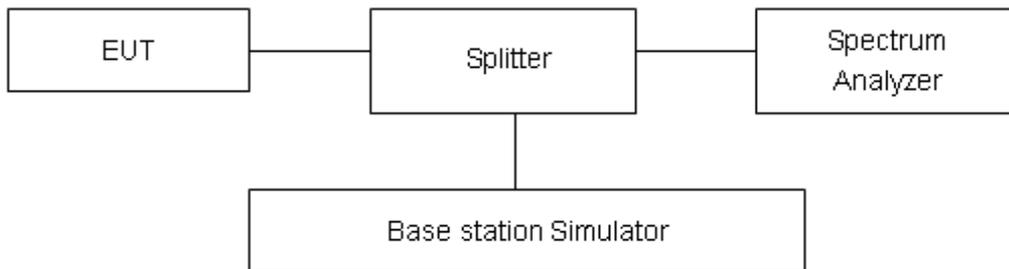
on spectrum analyzer.

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:

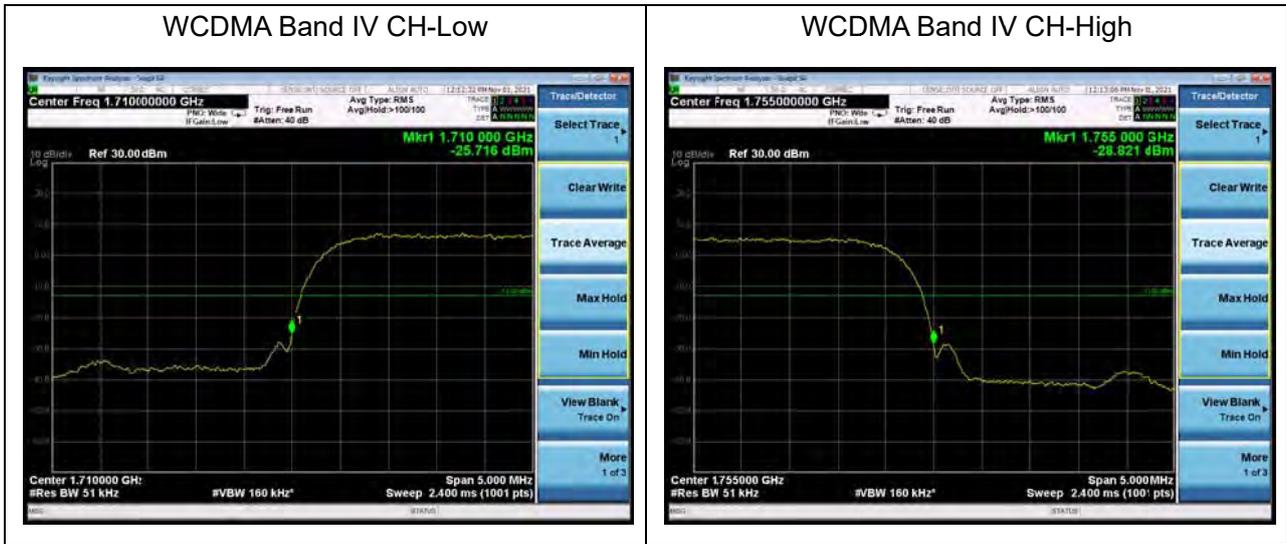
The limit line is derived from $43 + 10 \log (P)$ dB below the transmitter power P(Watts)
= P(W)- [43 + 10log(P)] (dB)
= [30 + 10log (P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.

Measurement Uncertainty

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

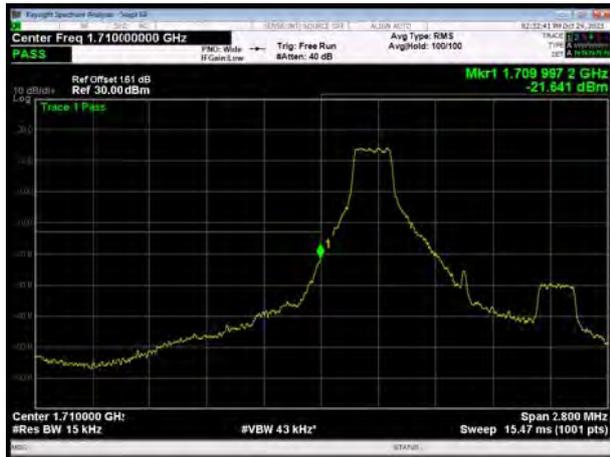
Test Result

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





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



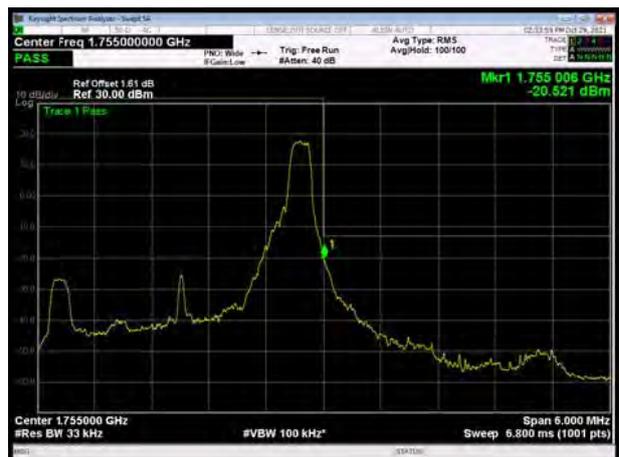
LTE Band 4 QPSK 1.4MHz CH-High, 100%RB



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

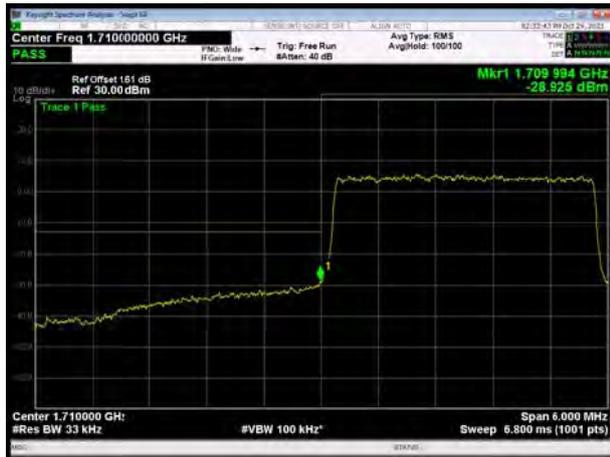


LTE Band 4 QPSK 3MHz CH-High, 1 RB





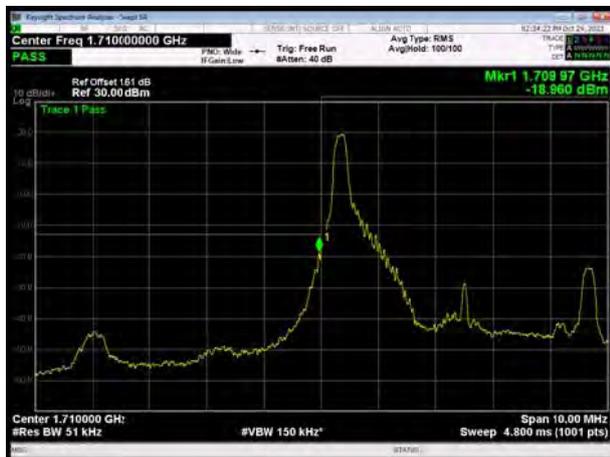
LTE Band 4 QPSK 3MHz CH-Low, 100%RB



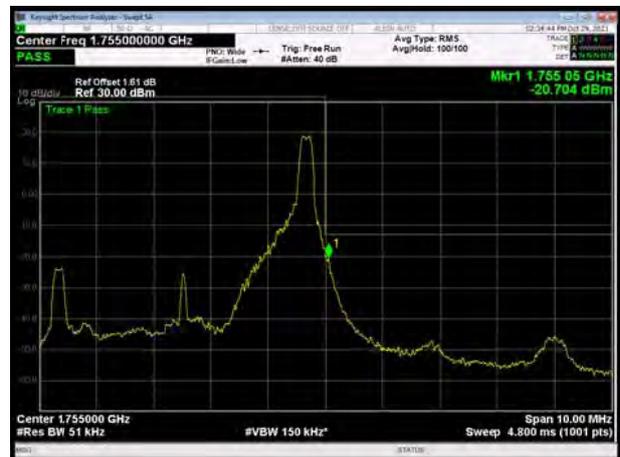
LTE Band 4 QPSK 3MHz CH-High, 100%RB



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



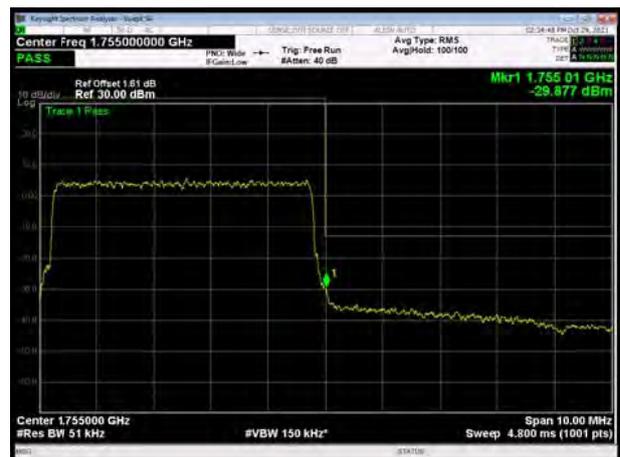
LTE Band 4 QPSK 5MHz CH-High, 1 RB



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



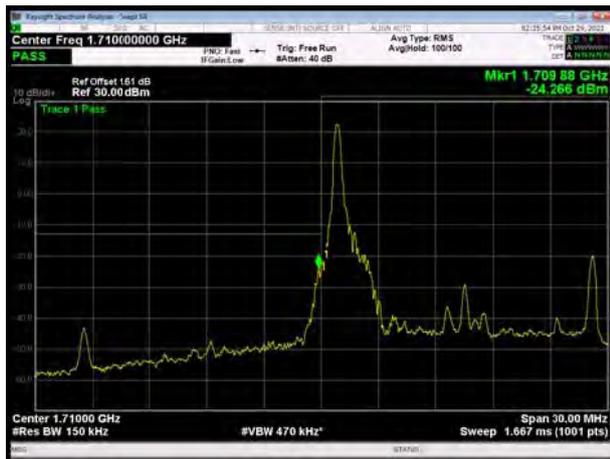
LTE Band 4 QPSK 10MHz CH-Low, 100%RB



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



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

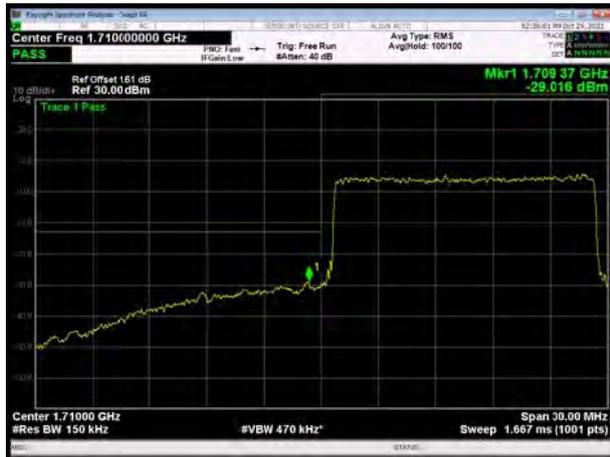


LTE Band 4 QPSK 15MHz CH-High, 1 RB





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



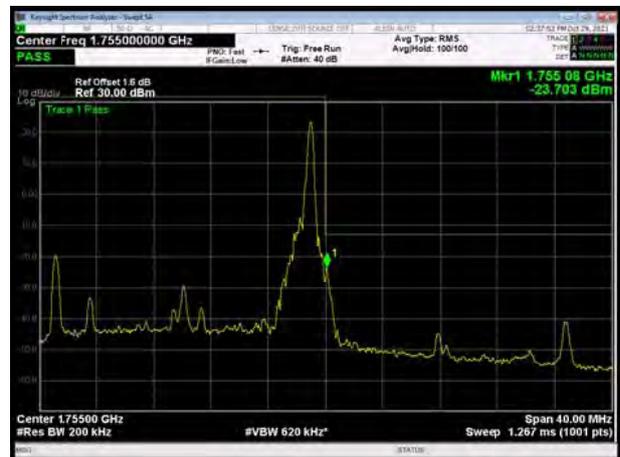
LTE Band 4 QPSK 15MHz CH-High, 100%RB



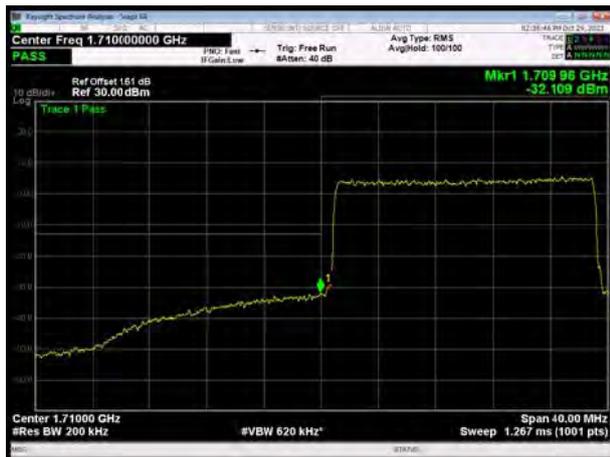
LTE Band 4 QPSK 20MHz CH-Low, 1 RB



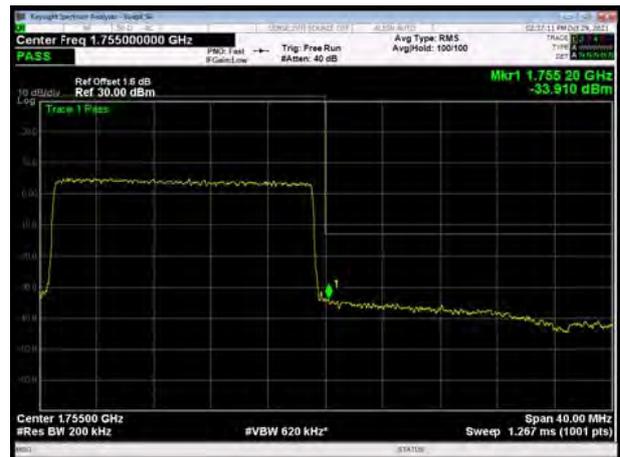
LTE Band 4 QPSK 20MHz CH-High, 1 RB



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

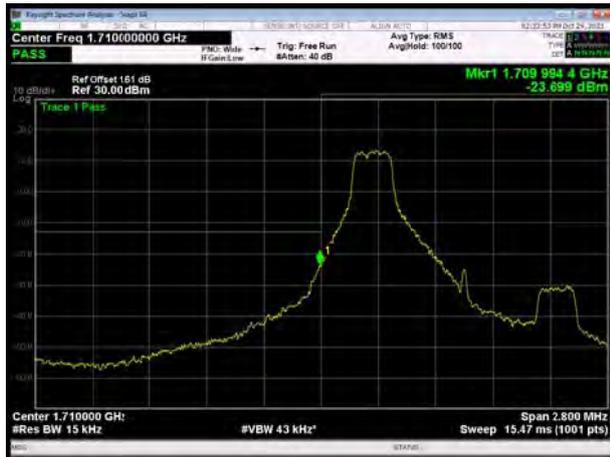


LTE Band 4 QPSK 20MHz CH-High, 100%RB

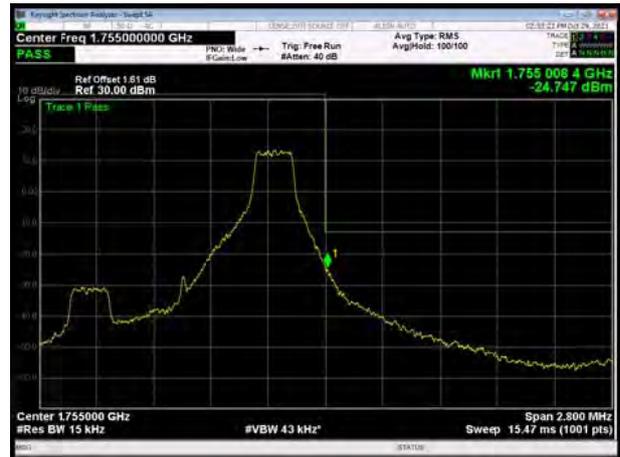




LTE Band 4 16QAM 1.4MHz CH-Low, 1 RB



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



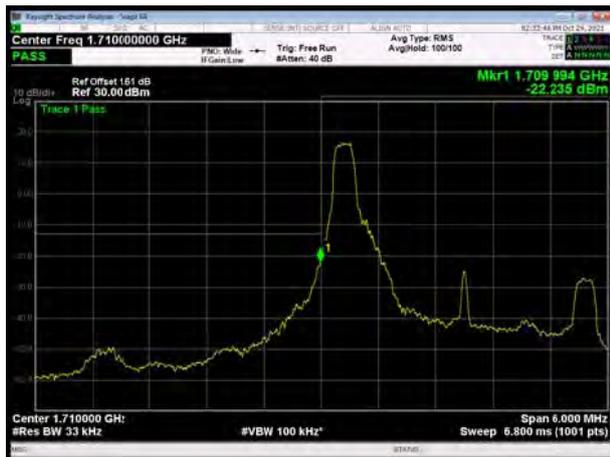
LTE Band 4 16QAM 1.4MHz CH-Low, 100%RB



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



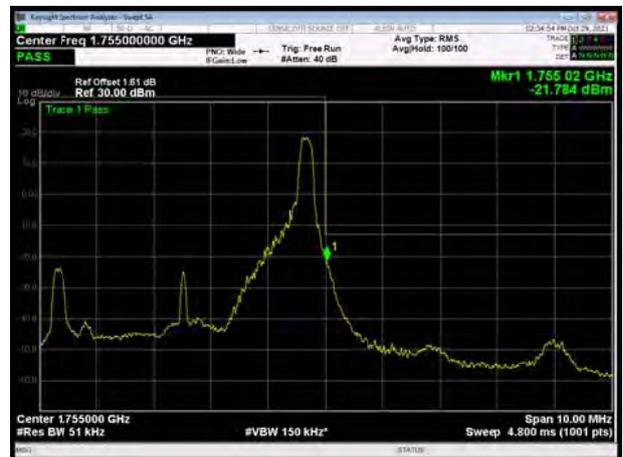
LTE Band 4 16QAM 3MHz CH-High, 100%RB



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

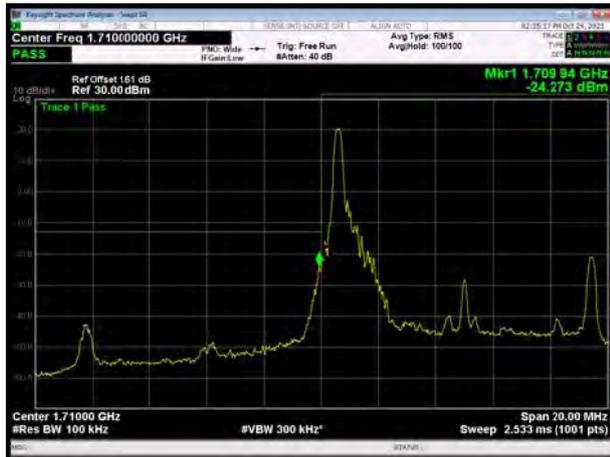


LTE Band 4 16QAM 5MHz CH-High, 100%RB





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



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



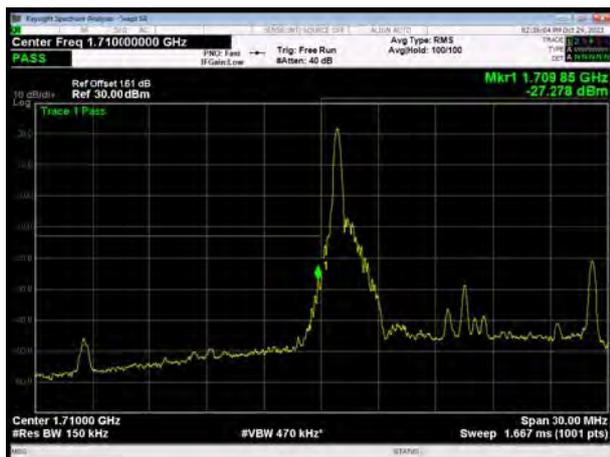
LTE Band 4 16QAM 10MHz CH-Low, 100%RB



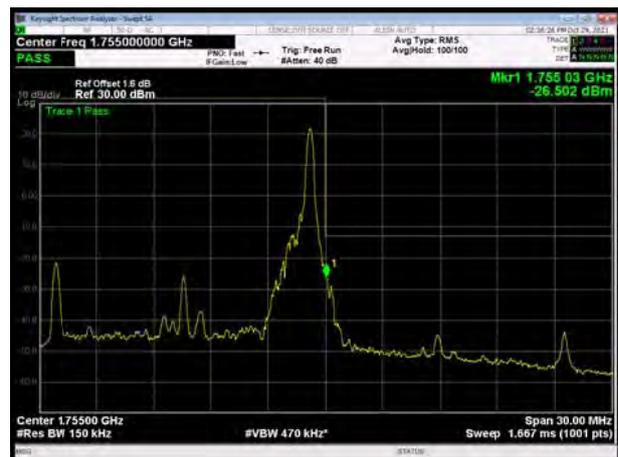
LTE Band 4 16QAM 10MHz CH-High, 100%RB



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



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





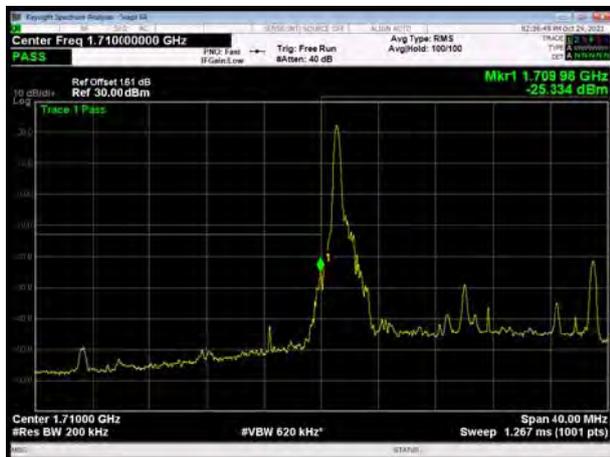
LTE Band 4 16QAM 15MHz CH-Low, 100%RB



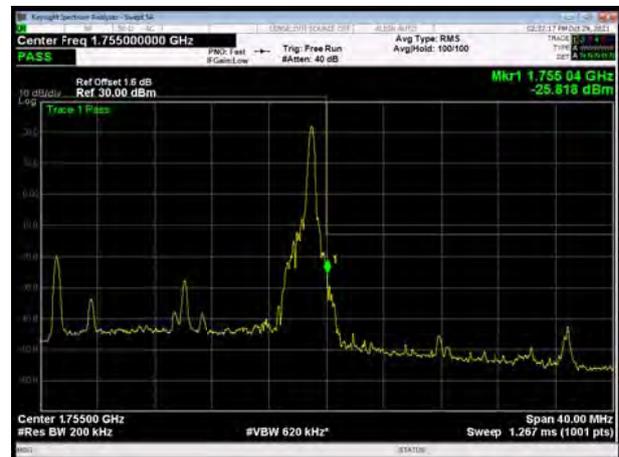
LTE Band 4 16QAM 15MHz CH-High, 100%RB



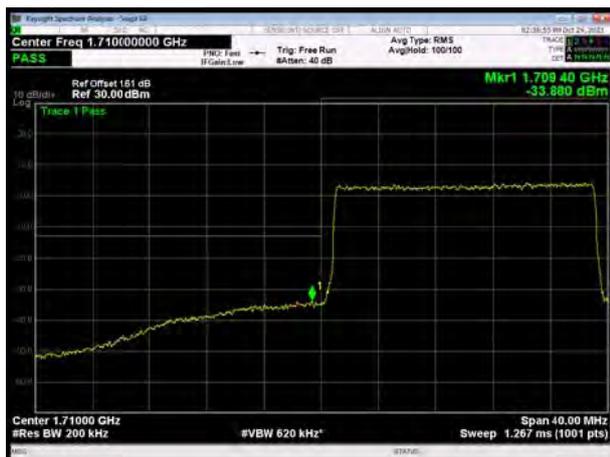
LTE Band 4 16QAM 20MHz CH-Low, 1 RB



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



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

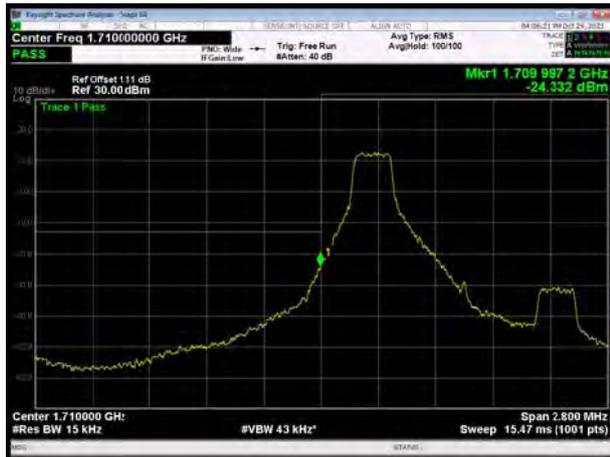


LTE Band 4 16QAM 20MHz CH-High, 100%RB





LTE Band 4 64QAM 1.4MHz CH-Low, 1 RB



LTE Band 4 64QAM 1.4MHz CH-High, 1 RB



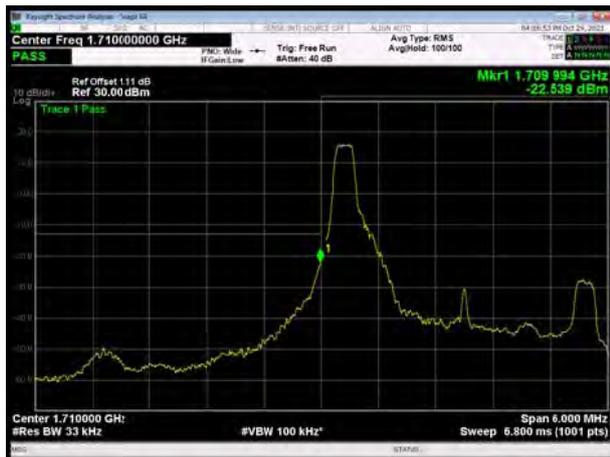
LTE Band 4 64QAM 1.4MHz CH-Low, 100%RB



LTE Band 4 64QAM 1.4MHz CH-High, 100%RB



LTE Band 4 64QAM 3MHz CH-Low, 1 RB

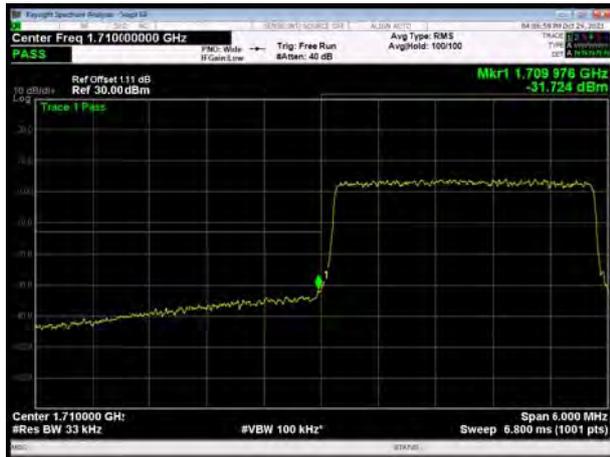


LTE Band 4 64QAM 3MHz CH-High, 1 RB

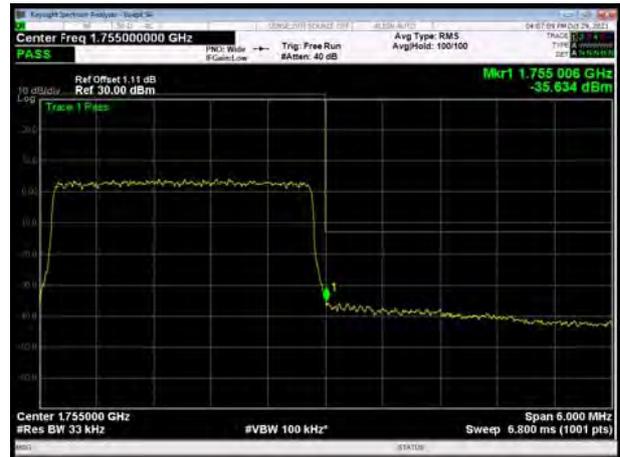




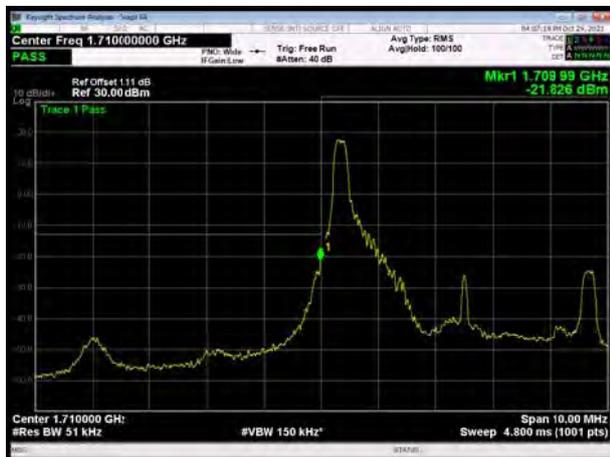
LTE Band 4 64QAM 3MHz CH-Low, 100%RB



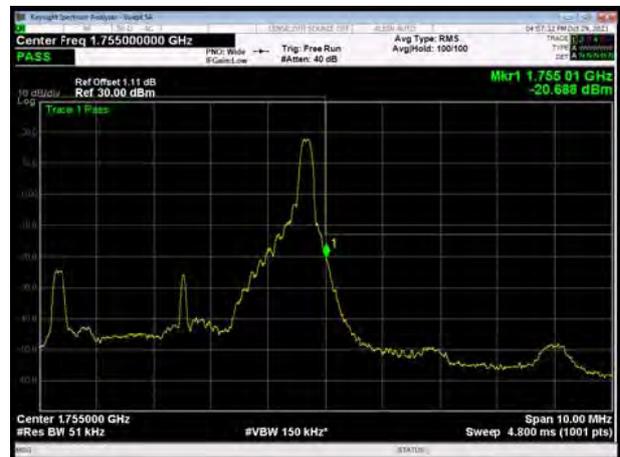
LTE Band 4 64QAM 3MHz CH-High, 100%RB



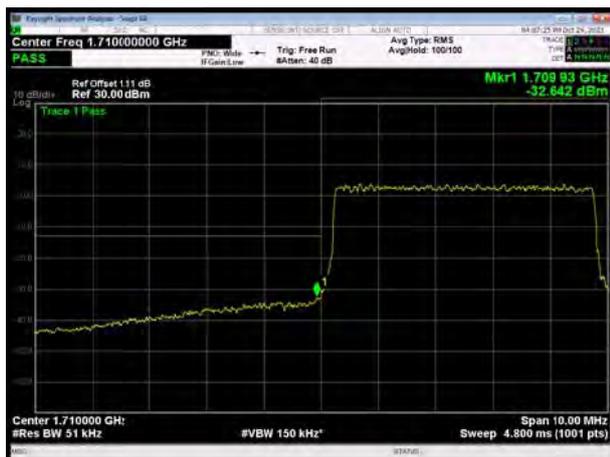
LTE Band 4 64QAM 5MHz CH-Low, 1 RB



LTE Band 4 64QAM 5MHz CH-High, 1 RB



LTE Band 4 64QAM 5MHz CH-Low, 100%RB

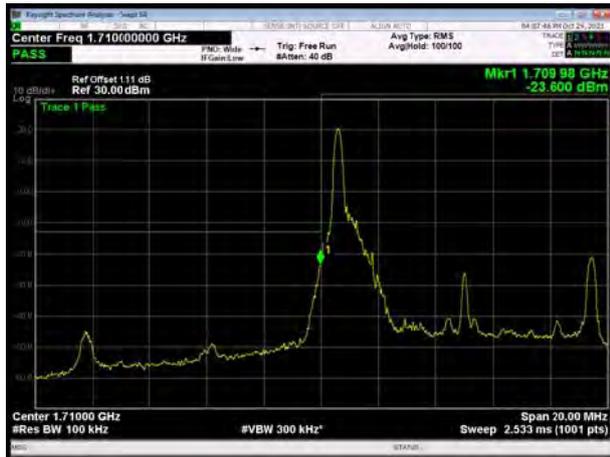


LTE Band 4 64QAM 5MHz CH-High, 100%RB

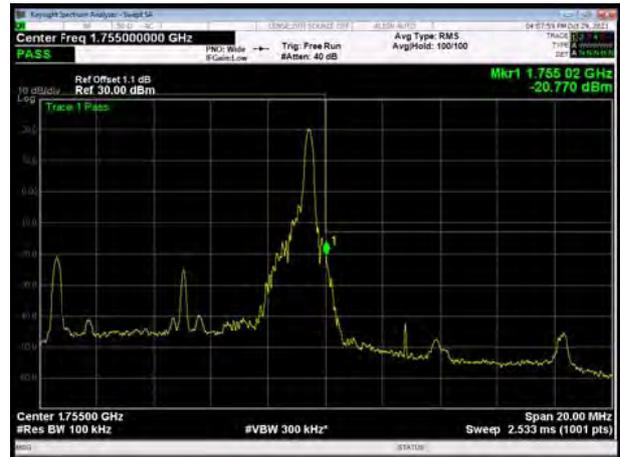




LTE Band 4 64QAM 10MHz CH-Low, 1 RB



LTE Band 4 64QAM 10MHz CH-High, 1 RB



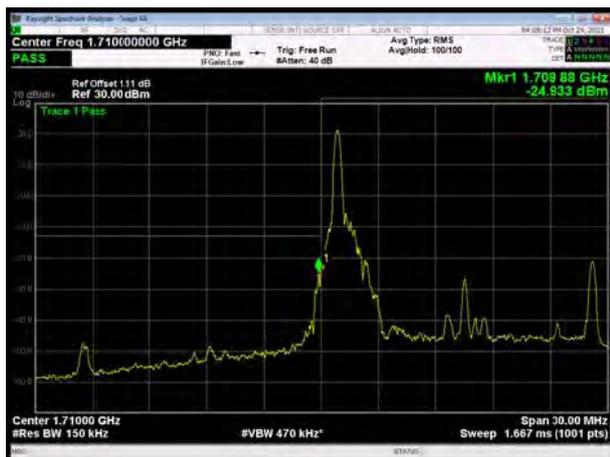
LTE Band 4 64QAM 10MHz CH-Low, 100%RB



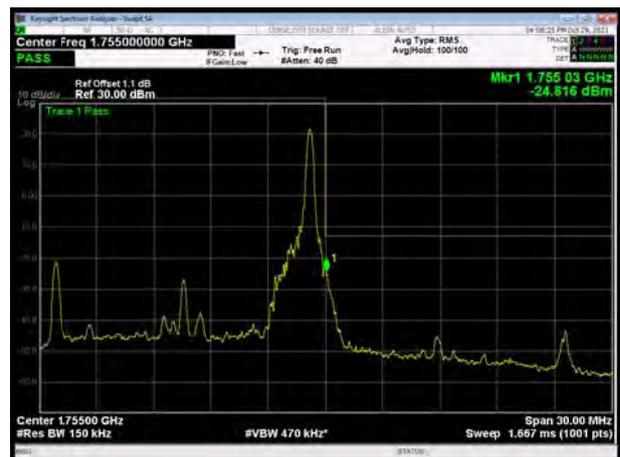
LTE Band 4 64QAM 10MHz CH-High, 100%RB



LTE Band 4 64QAM 15MHz CH-Low, 1 RB



LTE Band 4 64QAM 15MHz CH-High, 1 RB

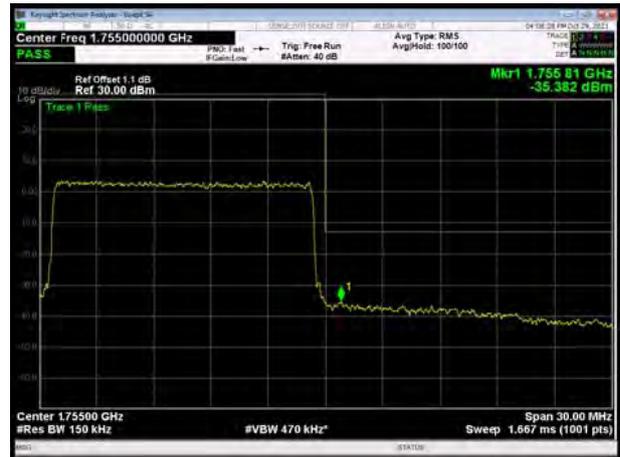




LTE Band 4 64QAM 15MHz CH-Low, 100%RB



LTE Band 4 64QAM 15MHz CH-High, 100%RB



LTE Band 4 64QAM 20MHz CH-Low, 1 RB



LTE Band 4 64QAM 20MHz CH-High, 1 RB



LTE Band 4 64QAM 20MHz CH-Low, 100%RB



LTE Band 4 64QAM 20MHz CH-High, 100%RB

