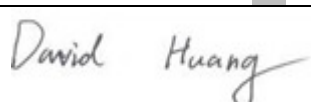


RF TEST REPORT



Report No.: 17070326-FCC-R5

Supersede Report No.: N/A

Applicant	MFOURTEL MEXICO S.A. DE C.V.	
Product Name	LTE Mobile Phone	
Model No.	M4 SS4457-R	
Serial No.	N/A	
Test Standard	FCC Part 22(H):2016, FCC Part 24(E):2016, FCC Part 27: 2016; ANSI/TIA-603-D: 2010	
Test Date	May 19 to June 07, 2017	
Issue Date	June 08, 2017	
Test Result	☒ Pass ☐ Fail	
Equipment complied with the specification	☒	
Equipment did not comply with the specification	☐	
		
Leen Yang Test Engineer	David Huang Checked By	
This test report may be reproduced in full only Test result presented in this test report is applicable to the tested sample only		

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

Zone A, Floor 1, Building 2 Wan Ye Long Technology Park

South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108

Test Report	17070326-FCC-R5
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Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety

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1. Report Revision History

Report No.	Report Version	Description	Issue Date
17070326-FCC-R5	NONE	Original	June 08, 2017

2. Customer information

Applicant Name	MFOURTEL MEXICO S.A. DE C.V.
Applicant Add	Av. Ejército Nacional 436 Piso 3 Chapultepec Morales Miguel Hidalgo Distrito Federal 11570.
Manufacturer	CK Telecom Limited
Manufacturer Add	Technology Road.High-Tech Development Zone. Heyuan, Guangdong,P.R.China.

3. Test site information

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES
Lab Address	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108
FCC Test Site No.	718246
IC Test Site No.	4842E-1
Test Software	Radiated Emission Program-To Shenzhen v2.0

4. Equipment under Test (EUT) Information

Description of EUT: LTE Mobile Phone

Main Model: M4 SS4457-R

Serial Model: N/A

Date EUT received: May 18, 2017

Test Date(s): May 19 to June 07, 2017

Equipment Category : PCE

Antenna Gain:

- GSM850: -5.0dBi
- PCS1900: -3.0dBi
- UMTS-FDD Band V: -5.0dBi
- UMTS-FDD Band II: -3.0dBi
- LTE Band II: -3.0dBi
- LTE Band IV: -3.0dBi
- LTE Band VII: -4.0dBi
- LTE Band XIII: -5.0dBi
- WIFI: -3.5dBi
- Bluetooth/BLE: -3.5dBi
- GPS: -3.0dBi

Antenna Type: PIFA antenna

Type of Modulation:

- GSM / GPRS: GMSK
- EGPRS: GMSK, 8PSK
- UMTS-FDD: QPSK
- LTE Band: QPSK, 16QAM
- 802.11b/g/n: DSSS, OFDM
- Bluetooth: GFSK, $\pi/4$ DQPSK, 8DPSK
- BLE: GFSK
- GPS: BPSK

RF Operating Frequency (ies):

- GSM850 TX: 824.2 ~ 848.8 MHz; RX: 869.2 ~ 893.8 MHz
- PCS1900 TX: 1850.2 ~ 1909.8 MHz; RX: 1930.2 ~ 1989.8 MHz

UMTS-FDD Band V TX: 826.4 ~ 846.6 MHz; RX: 871.4 ~ 891.6 MHz

UMTS-FDD Band II TX: 1852.4 ~ 1907.6 MHz;

RX: 1932.4 ~ 1987.6 MHz

LTE Band II TX: 1850.7~ 1909.3 MHz; RX : 1930.7 ~ 1989.3 MHz

LTE Band IV TX: 1710.7 ~ 1754.3 MHz; RX : 2110.7 ~ 2154.3 MHz

LTE Band VII TX: 2502.5 ~ 2567.5 MHz; RX : 2622.5 ~ 2687.5 MHz

LTE Band XIII TX: 779.5 ~ 784.5 MHz; RX : 748.5 ~ 753.5MHz

WIFI: 802.11b/g/n(20M): 2412-2462 MHz

WIFI: 802.11n(40M): 2422-2452 MHz

Bluetooth& BLE: 2402-2480 MHz

GPS: 1575.42 MHz

Maximum Conducted
AV Power to Antenna:

LTE band II: 23.33 dBm
LTE band IV: 23.43 dBm
LTE band VII: 22.47 dBm
LTE band XIII: 23.77 dBm

ERP/EIRP:

LTE band II: 20.40 dBm / EIRP
LTE band IV: 19.43 dBm / EIRP
LTE band VII: 18.50 dBm / EIRP
LTE band XIII: 16.59 dBm / ERP

Port:

USB Port, Earphone Port

Input Power:

Adapter:
Model: A8-501000
Input: AC100-240V~50/60Hz, 150mA
Output: DC 5.0V, 1000mA
Battery :
Model: M2400A
Spec: 3.7V, 8.88Wh, 2400mAh

Trade Name :

M4

GPRS/EGPRS Multi-slot class

8/10/12

FCC ID:

CLNSS4457-R

5. Test Summary

The product was tested in accordance with the following specifications.

All testing has been performed according to below product classification:

FCC Rules	Description of Test	Result
§ 1.1307; § 2.1093	RF Exposure (SAR)	Compliance
§2.1046; § 22.913(a); § 24.232(c); § 27.50(c.10); § 27.50(d.4)	RF Output Power	Compliance
§ 24.232 (d); § 27.50(d)	Peak-Average Ratio	Compliance
§ 2.1049; § 22.905; § 22.917; § 24.238; § 27.53(a.5)	99% & -26 dB Occupied Bandwidth	Compliance
§ 2.1051; § 22.917(a); § 24.238(a); § 27.53(h)	Spurious Emissions at Antenna Terminal	Compliance
§ 2.1053; § 22.917(a); § 24.238(a); § 27.53(h)	Field Strength of Spurious Radiation	Compliance
§ 22.917(a); § 24.238(a);	Out of band emission, Band Edge	Compliance
§ 27.53(m)	Band Edge 27.53(m)	Compliance
§ 2.1055; § 22.355; § 24.235; § 27.5(h); § 27.54	Frequency stability vs. temperature Frequency stability vs. voltage	Compliance

Note: Testing was performed by configuring EUT to maximum output power status, the declared output power class for different

Measurement Uncertainty

Emissions		
Test Item	Description	Uncertainty
Band Edge and Radiated Spurious Emissions	Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	+5.6dB/-4.5dB
-	-	-

6. MEASUREMENTS, EXAMINATION AND DERIVED RESULTS

6.1 RF Exposure (SAR)

Test Result: Pass

The EUT is a portable device, thus requires SAR evaluation;

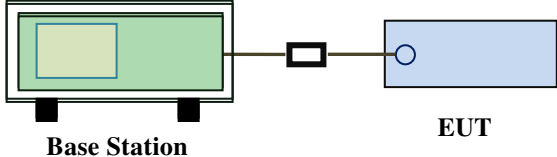
Please refer to RF Exposure Evaluation Report: 17070326-FCC-H.

6.2 RF Output Power

Temperature	23 °C
Relative Humidity	58%
Atmospheric Pressure	1006mbar
Test date :	June 06, 2017
Tested By :	Leen Yang

Requirement(s):

Spec	Item	Requirement	Applicable
§22.913 (a)	a)	ERP:38.45dBm	☒
§24.232 (c)	b)	EIRP:33dBm	☒
§27.50 (c)	c)	EIRP: 30dBm	☒

Test Setup	 Base Station EUT
------------	--

Test Procedure	For Conducted Power: - The transmitter output port was connected to base station. - Set EUT at maximum power through base station. - Select lowest, middle, and highest channels for each band and different test mode. For ERP/EIRP: - The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable. - The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis. - The frequency range up to tenth harmonic of the fundamental frequency was investigated.
----------------	---

	- Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution. - Spurious emissions in dB = $10 \log (\text{TX power in Watts}/0.001)$ – the absolute level - Spurious attenuation limit in dB = $43 + 10 \log_{10} (\text{power out in Watts})$.
Remark	
Result	☒ Pass ☐ Fail

Test Data ☒ Yes ☐ N/A

Test Plot ☐ Yes (See below) ☒ N/A

Conducted Power

LTE Band II:

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
20MHz	18700	1860.0	QPSK	1	0	0	23.27	23±1
				1	49	0	23.24	23±1
				1	99	0	23.23	23±1
				50	0	1	22.2	23±1
				50	24	1	22.17	23±1
				50	49	1	22.19	23±1
				100	0	1	22.11	23±1
			16QAM	1	0	1	22.29	21.3±1
				1	49	1	22.27	21.3±1
				1	99	1	22.28	21.3±1
				50	0	2	22.14	21.3±1
				50	24	2	22.11	21.3±1
				50	49	2	22.09	21.3±1
				100	0	2	21.15	21.3±1
	18900	1880.0	QPSK	1	0	0	22.62	22±1
				1	49	0	22.61	22±1
				1	99	0	22.61	22±1
				50	0	1	22.01	22±1
				50	24	1	22	22±1
				50	49	1	22.01	22±1
				100	0	1	22.07	22±1
			16QAM	1	0	1	22.03	21.3±1
				1	49	1	22.05	21.3±1
				1	99	1	22.03	21.3±1
				50	0	2	22.01	21.3±1
				50	24	2	22.04	21.3±1
				50	49	2	22.04	21.3±1
				100	0	2	21.11	21.3±1
	19100	1900.0	QPSK	1	0	0	23.1	22.5±1
				1	49	0	23.08	22.5±1
				1	99	0	23.1	22.5±1
				50	0	1	21.99	22.5±1
				50	24	1	21.96	22.5±1
				50	49	1	21.98	22.5±1
				100	0	1	21.98	22.5±1
			16QAM	1	0	1	22.5	22.5±1
				1	49	1	22.51	22.5±1
				1	99	1	22.48	22.5±1
				50	0	2	21.98	22.5±1
				50	24	2	22.01	22.5±1
				50	49	2	22	22.5±1
				100	0	2	20.99	22.5±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
15MHz	18675	1857.5	QPSK	1	0	0	23.29	23±1
				1	37	0	23.27	23±1
				1	74	0	23.26	23±1
				36	0	1	22.27	23±1
				36	16	1	22.3	23±1
				36	35	1	22.27	23±1
				75	0	1	22.2	23±1
			16QAM	1	0	1	22.11	21.3±1
				1	37	1	22.1	21.3±1
				1	74	1	22.13	21.3±1
				36	0	2	22.26	21.3±1
				36	16	2	22.23	21.3±1
				36	35	2	22.22	21.3±1
				75	0	2	21.18	21.3±1
	18900	1880.0	QPSK	1	0	0	22.85	22±1
				1	37	0	22.83	22±1
				1	74	0	22.81	22±1
				36	0	1	22.12	22±1
				36	16	1	22.11	22±1
				36	35	1	22.09	22±1
				75	0	1	22.1	22±1
			16QAM	1	0	1	22.24	22±1
				1	37	1	22.23	22±1
				1	74	1	22.26	22±1
				36	0	2	22.11	22±1
				36	16	2	22.12	22±1
				36	35	2	22.12	22±1
				75	0	2	21.09	22±1
	19125	1902.5	QPSK	1	0	0	22.77	22±1
				1	37	0	22.77	22±1
				1	74	0	22.75	22±1
				36	0	1	21.94	22±1
				36	16	1	21.94	22±1
				36	35	1	21.96	22±1
				75	0	1	22.01	22±1
			16QAM	1	0	1	22.46	22±1
				1	37	1	22.45	22±1
				1	74	1	22.45	22±1
				36	0	2	21.95	22±1
				36	16	2	21.97	22±1
				36	35	2	21.97	22±1
				75	0	2	21.01	22±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
10MHz	18650	1855	QPSK	1	0	0	23.26	23±1
				1	24	0	23.27	23±1
				1	49	0	23.28	23±1
				25	0	1	22.15	23±1
				25	12	1	22.12	23±1
				25	24	1	22.15	23±1
				50	0	1	22.13	23±1
			16QAM	1	0	1	22.05	21.3±1
				1	24	1	22.03	21.3±1
				1	49	1	22	21.3±1
				25	0	2	22.16	21.3±1
				25	12	2	22.15	21.3±1
				25	24	2	22.16	21.3±1
				50	0	2	21.11	21.3±1
	18900	1880.0	QPSK	1	0	0	23.1	22±1
				1	24	0	23.13	22±1
				1	49	0	23.1	22±1
				25	0	1	22.05	22±1
				25	12	1	22.02	22±1
				25	24	1	22.04	22±1
				50	0	1	22.03	22±1
			16QAM	1	0	1	22.05	21.3±1
				1	24	1	22.05	21.3±1
				1	49	1	22.07	21.3±1
				25	0	2	22.04	21.3±1
				25	12	2	22.06	21.3±1
				25	24	2	22.06	21.3±1
				50	0	2	21.08	21.3±1
	19150	1905	QPSK	1	0	0	22.68	22±1
				1	24	0	22.71	22±1
				1	49	0	22.7	22±1
				25	0	1	21.97	22±1
				25	12	1	21.95	22±1
				25	24	1	21.93	22±1
				50	0	1	21.93	22±1
			16QAM	1	0	1	22.38	21.5±1
				1	24	1	22.41	21.5±1
				1	49	1	22.43	21.5±1
				25	0	2	21.96	21.5±1
				25	12	2	21.93	21.5±1
				25	24	2	21.96	21.5±1
				50	0	2	20.97	21.5±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
5MHz	18625	1852.5	QPSK	1	0	0	23.33	23±1
				1	12	0	23.3	23±1
				1	24	0	23.31	23±1
				12	0	1	22.17	23±1
				12	6	1	22.19	23±1
				12	11	1	22.19	23±1
				25	0	1	22.1	23±1
			16QAM	1	0	1	22.17	22±1
				1	12	1	22.17	22±1
				1	24	1	22.2	22±1
				12	0	2	22.17	22±1
				12	6	2	22.18	22±1
				12	11	2	22.16	22±1
				25	0	2	21.09	22±1
	18900	1880.0	QPSK	1	0	0	23.06	23±1
				1	12	0	23.09	23±1
				1	24	0	23.09	23±1
				12	0	1	22.07	23±1
				12	6	1	22.07	23±1
				12	11	1	22.06	23±1
				25	0	1	22.02	23±1
			16QAM	1	0	1	22.3	22±1
				1	12	1	22.33	22±1
				1	24	1	22.35	22±1
				12	0	2	21.13	22±1
				12	6	2	21.14	22±1
				12	11	2	21.13	22±1
				25	0	2	22.02	22±1
	19175	1907.5	QPSK	1	0	0	23.05	22.3±1
				1	12	0	23.07	22.3±1
				1	24	0	23.08	22.3±1
				12	0	1	21.96	22.3±1
				12	6	1	21.95	22.3±1
				12	11	1	21.96	22.3±1
				25	0	1	21.89	22.3±1
			16QAM	1	0	1	22.02	21.3±1
				1	12	1	21.99	21.3±1
				1	24	1	21.97	21.3±1
				12	0	2	21.96	21.3±1
				12	6	2	21.97	21.3±1
				12	11	2	21.98	21.3±1
				25	0	2	20.9	21.3±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
3MHz	18625	1852.5	QPSK	1	0	0	23.13	23±1
				1	7	0	23.15	23±1
				1	14	0	23.14	23±1
				8	0	1	22.1	23±1
				8	4	1	22.13	23±1
				8	7	1	22.12	23±1
				15	0	1	22.1	23±1
			16QAM	1	0	1	21.95	21.3±1
				1	7	1	21.93	21.3±1
				1	14	1	21.9	21.3±1
				8	0	2	21.05	21.3±1
				8	4	2	21.06	21.3±1
				8	7	2	21.05	21.3±1
				15	0	2	21.04	21.3±1
	18900	1880.0	QPSK	1	0	0	23.02	22.5±1
				1	7	0	23.03	22.5±1
				1	14	0	23.04	22.5±1
				8	0	1	21.94	22.5±1
				8	4	1	21.94	22.5±1
				8	7	1	21.97	22.5±1
				15	0	1	21.99	22.5±1
			16QAM	1	0	1	21.96	21.3±1
				1	7	1	21.97	21.3±1
				1	14	1	21.98	21.3±1
				8	0	2	20.82	21.3±1
				8	4	2	20.81	21.3±1
				8	7	2	20.83	21.3±1
				15	0	2	21.03	21.3±1
	19175	1907.5	QPSK	1	0	0	22.8	22±1
				1	7	0	22.79	22±1
				1	14	0	22.78	22±1
				8	0	1	21.87	22±1
				8	4	1	21.89	22±1
				8	7	1	21.92	22±1
				15	0	1	21.89	22±1
			16QAM	1	0	1	22.32	21.5±1
				1	7	1	22.31	21.5±1
				1	14	1	22.33	21.5±1
				8	0	2	20.87	21.5±1
				8	4	2	20.84	21.5±1
				8	7	2	20.82	21.5±1
				15	0	2	20.96	21.5±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
1.4MHz	18607	1850.7	QPSK	1	0	0	23.04	23±1
				1	2	0	23.04	23±1
				1	5	0	23.05	23±1
				3	0	0	23.13	23±1
				3	1	0	23.15	23±1
				3	2	0	23.16	23±1
				6	0	1	22.09	23±1
			16QAM	1	0	1	21.69	22.3±1
				1	2	1	21.7	22.3±1
				1	5	1	21.68	22.3±1
				3	0	1	23.12	22.3±1
				3	1	1	23.13	22.3±1
				3	2	1	23.14	22.3±1
				6	0	2	21.06	22.3±1
	18900	1880.0	QPSK	1	0	0	23.01	23±1
				1	2	0	23.03	23±1
				1	5	0	23.01	23±1
				3	0	0	23.1	23±1
				3	1	0	23.07	23±1
				3	2	0	23.07	23±1
				6	0	1	21.96	23±1
			16QAM	1	0	1	21.86	21.3±1
				1	2	1	21.87	21.3±1
				1	5	1	21.88	21.3±1
				3	0	1	23.1	21.3±1
				3	1	1	23.07	21.3±1
				3	2	1	23.05	21.3±1
				6	0	2	20.95	21.3±1
	19193	1909.3	QPSK	1	0	0	22.93	22±1
				1	2	0	22.96	22±1
				1	5	0	22.98	22±1
				3	0	0	22.87	22±1
				3	1	0	22.87	22±1
				3	2	0	22.85	22±1
				6	0	1	21.87	22±1
			16QAM	1	0	1	21.83	21.3±1
				1	2	1	21.81	21.3±1
				1	5	1	21.78	21.3±1
				3	0	1	22.86	21.3±1
				3	1	1	22.84	21.3±1
				3	2	1	22.82	21.3±1
				6	0	2	20.7	21.3±1

LTE band IV:

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
20MHz	20050	1720.0	QPSK	1	0	0	23.43	23±1
				1	49	0	23.4	23±1
				1	99	0	23.4	23±1
				50	0	1	22.3	23±1
				50	24	1	22.32	23±1
				50	49	1	22.29	23±1
				100	0	1	22.27	23±1
			16QAM	1	0	1	22.35	22±1
				1	49	1	22.34	22±1
				1	99	1	22.32	22±1
				50	0	2	22.2	22±1
				50	24	2	22.22	22±1
				50	49	2	22.23	22±1
				100	0	2	21.28	22±1
	20175	1732.5	QPSK	1	0	0	23.16	23±1
				1	49	0	23.19	23±1
				1	99	0	23.17	23±1
				50	0	1	22.27	23±1
				50	24	1	22.3	23±1
				50	49	1	22.31	23±1
				100	0	1	22.28	23±1
			16QAM	1	0	1	22.53	22±1
				1	49	1	22.56	22±1
				1	99	1	22.57	22±1
				50	0	2	22.25	22±1
				50	24	2	22.25	22±1
				50	49	2	22.27	22±1
				100	0	2	21.26	22±1
	20300	1745.0	QPSK	1	0	0	23.37	23±1
				1	49	0	23.39	23±1
				1	99	0	23.36	23±1
				50	0	1	22.32	23±1
				50	24	1	22.32	23±1
				50	49	1	22.3	23±1
				100	0	1	22.31	23±1
			16QAM	1	0	1	22.79	22±1
				1	49	1	22.8	22±1
				1	99	1	22.77	22±1
				50	0	2	22.32	22±1
				50	24	2	22.32	22±1
				50	49	2	22.33	22±1
				100	0	2	21.33	22±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
15MHz	20025	1717.5	QPSK	1	0	0	23.34	23±1
				1	37	0	23.35	23±1
				1	74	0	23.33	23±1
				36	0	1	22.32	23±1
				36	16	1	22.34	23±1
				36	35	1	22.35	23±1
				75	0	1	22.3	23±1
			16QAM	1	0	1	22.15	22±1
				1	37	1	22.17	22±1
				1	74	1	22.18	22±1
				36	0	2	22.31	22±1
				36	16	2	22.29	22±1
				36	35	2	22.31	22±1
				75	0	2	21.32	22±1
	20175	1732.5	QPSK	1	0	0	23.24	23±1
				1	37	0	23.23	23±1
				1	74	0	23.21	23±1
				36	0	1	22.31	23±1
				36	16	1	22.33	23±1
				36	35	1	22.33	23±1
				75	0	1	22.32	23±1
			16QAM	1	0	1	22.5	22±1
				1	37	1	22.5	22±1
				1	74	1	22.53	22±1
				36	0	2	22.31	22±1
				36	16	2	22.3	22±1
				36	35	2	22.29	22±1
				75	0	2	21.28	22±1
	20325	1747.5	QPSK	1	0	0	22.98	22±1
				1	37	0	22.95	22±1
				1	74	0	22.97	22±1
				36	0	1	22.27	22±1
				36	16	1	22.24	22±1
				36	35	1	22.24	22±1
				75	0	1	22.19	22±1
			16QAM	1	0	1	22.82	22±1
				1	37	1	22.83	22±1
				1	74	1	22.86	22±1
				36	0	2	22.26	22±1
				36	16	2	22.23	22±1
				36	35	2	22.25	22±1
				75	0	2	21.39	22±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
10MHz	20000	1715.0	QPSK	1	0	0	23.17	23±1
				1	24	0	23.2	23±1
				1	49	0	23.17	23±1
				25	0	1	22.22	23±1
				25	12	1	22.19	23±1
				25	24	1	22.17	23±1
				50	0	1	22.21	23±1
			16QAM	1	0	1	22.74	22±1
				1	24	1	22.71	22±1
				1	49	1	22.72	22±1
				25	0	2	22.22	22±1
				25	12	2	22.22	22±1
				25	24	2	22.23	22±1
				50	0	2	21.23	22±1
	20175	1732.5	QPSK	1	0	0	23.31	22.5±1
				1	24	0	23.34	22.5±1
				1	49	0	23.37	22.5±1
				25	0	1	22.23	22.5±1
				25	12	1	22.21	22.5±1
				25	24	1	22.18	22.5±1
				50	0	1	21.3	22.5±1
			16QAM	1	0	1	22.11	22±1
				1	24	1	22.11	22±1
				1	49	1	22.1	22±1
				25	0	2	22.22	22±1
				25	12	2	22.24	22±1
				25	24	2	22.21	22±1
				50	0	2	22.22	22±1
	20350	1750.0	QPSK	1	0	0	22.85	22±1
				1	24	0	22.87	22±1
				1	49	0	22.84	22±1
				25	0	1	22.11	22±1
				25	12	1	22.13	22±1
				25	24	1	22.16	22±1
				50	0	1	22.16	22±1
			16QAM	1	0	1	22.02	21.3±1
				1	24	1	22	21.3±1
				1	49	1	22.03	21.3±1
				25	0	2	22.1	21.3±1
				25	12	2	22.08	21.3±1
				25	24	2	22.09	21.3±1
				50	0	2	21.28	21.3±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
5MHz	20000	1715.0	QPSK	1	0	0	23.26	23±1
				1	12	0	23.24	23±1
				1	24	0	23.21	23±1
				12	0	1	22.26	23±1
				12	6	1	22.29	23±1
				12	11	1	22.32	23±1
				25	0	1	22.21	23±1
			16QAM	1	0	1	22.28	22±1
				1	12	1	22.25	22±1
				1	24	1	22.28	22±1
				12	0	2	22.26	22±1
				12	6	2	22.25	22±1
				12	11	2	22.22	22±1
				25	0	2	21.18	22±1
	20175	1732.5	QPSK	1	0	0	23.26	23±1
				1	12	0	23.29	23±1
				1	24	0	23.3	23±1
				12	0	1	22.27	23±1
				12	6	1	22.28	23±1
				12	11	1	22.27	23±1
				25	0	1	22.22	23±1
			16QAM	1	0	1	22.56	22±1
				1	12	1	22.55	22±1
				1	24	1	22.53	22±1
				12	0	2	22.21	22±1
				12	6	2	22.19	22±1
				12	11	2	22.19	22±1
				25	0	2	21.2	22±1
	20350	1750.0	QPSK	1	0	0	23.34	23±1
				1	12	0	23.37	23±1
				1	24	0	23.35	23±1
				12	0	1	22.22	23±1
				12	6	1	22.21	23±1
				12	11	1	22.24	23±1
				25	0	1	22.28	23±1
			16QAM	1	0	1	22.29	22±1
				1	12	1	22.29	22±1
				1	24	1	22.28	22±1
				12	0	2	22.23	22±1
				12	6	2	22.22	22±1
				12	11	2	22.24	22±1
				25	0	2	21.4	22±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
3MHz	19965	1711.5	QPSK	1	0	0	23.2	23±1
				1	7	0	23.2	23±1
				1	14	0	23.22	23±1
				8	0	1	22.21	23±1
				8	4	1	22.21	23±1
				8	7	1	22.24	23±1
				15	0	1	22.2	23±1
			16QAM	1	0	1	22.02	22±1
				1	7	1	22.04	22±1
				1	14	1	22.02	22±1
				8	0	2	21.15	22±1
				8	4	2	21.13	22±1
				8	7	2	21.1	22±1
				15	0	2	21.13	22±1
	20175	1732.5	QPSK	1	0	0	23.23	23±1
				1	7	0	23.24	23±1
				1	14	0	23.22	23±1
				8	0	1	22.18	23±1
				8	4	1	22.2	23±1
				8	7	1	22.17	23±1
				15	0	1	22.21	23±1
			16QAM	1	0	1	22.17	21.3±1
				1	7	1	22.16	21.3±1
				1	14	1	22.18	21.3±1
				8	0	2	21.04	21.3±1
				8	4	2	21.02	21.3±1
				8	7	2	21.01	21.3±1
				15	0	2	21.21	21.3±1
	20385	1753.5	QPSK	1	0	0	23.12	23±1
				1	7	0	23.15	23±1
				1	14	0	23.15	23±1
				8	0	1	22.28	23±1
				8	4	1	22.31	23±1
				8	7	1	22.33	23±1
				15	0	1	22.28	23±1
			16QAM	1	0	1	22.74	22±1
				1	7	1	22.73	22±1
				1	14	1	22.76	22±1
				8	0	2	21.04	22±1
				8	4	2	21.05	22±1
				8	7	2	21.03	22±1
				15	0	2	21.21	22±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
1.4MHz	19957	1710.7	QPSK	1	0	0	23.23	23±1
				1	2	0	23.21	23±1
				1	5	0	23.21	23±1
				3	0	0	23.29	23±1
				3	1	0	23.31	23±1
				3	2	0	23.3	23±1
			16QAM	6	0	1	22.22	23±1
				1	0	1	22.04	22.5±1
				1	2	1	22.04	22.5±1
				1	5	1	22.06	22.5±1
				3	0	1	23.28	22.5±1
				3	1	1	23.29	22.5±1
				3	2	1	23.31	22.5±1
				6	0	2	21.17	22.5±1
	20175	1732.5	QPSK	1	0	0	23.15	23±1
				1	2	0	23.14	23±1
				1	5	0	23.15	23±1
				3	0	0	23.25	23±1
				3	1	0	23.27	23±1
				3	2	0	23.3	23±1
			16QAM	6	0	1	22.21	23±1
				1	0	1	21.8	22.5±1
				1	2	1	21.8	22.5±1
				1	5	1	21.83	22.5±1
				3	0	1	23.25	22.5±1
				3	1	1	23.23	22.5±1
				3	2	1	23.22	22.5±1
				6	0	2	21.1	22.5±1
	20393	1754.3	QPSK	1	0	0	23.32	23±1
				1	2	0	23.29	23±1
				1	5	0	23.27	23±1
				3	0	0	23.35	23±1
				3	1	0	23.32	23±1
				3	2	0	23.29	23±1
			16QAM	6	0	1	22.3	23±1
				1	0	1	22.14	22±1
				1	2	1	22.12	22±1
				1	5	1	22.09	22±1
				3	0	1	23.36	22±1
				3	1	1	23.34	22±1
				3	2	1	23.35	22±1
				6	0	2	21.26	22±1

LTE band VII:

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
20MHz	20850	2510	QPSK	1	0	0	22.22	22±1
				1	49	0	22.25	22±1
				1	99	0	22.24	22±1
				50	0	1	21.34	22±1
				50	24	1	21.35	22±1
				50	49	1	21.32	22±1
				100	0	1	21.31	22±1
			16QAM	1	0	1	21.24	21.3±1
				1	49	1	21.27	21.3±1
				1	99	1	21.28	21.3±1
				50	0	2	21.33	21.3±1
				50	24	2	21.34	21.3±1
				50	49	2	21.37	21.3±1
				100	0	2	20.32	21.3±1
	21100	2535	QPSK	1	0	0	21.76	21.3±1
				1	49	0	21.75	21.3±1
				1	99	0	21.73	21.3±1
				50	0	1	21.03	21.3±1
				50	24	1	21.02	21.3±1
				50	49	1	21.04	21.3±1
				100	0	1	21.17	21.3±1
			16QAM	1	0	1	21.14	21.3±1
				1	49	1	21.14	21.3±1
				1	99	1	21.13	21.3±1
				50	0	2	21.03	21.3±1
				50	24	2	21.01	21.3±1
				50	49	2	20.98	21.3±1
				100	0	2	20.32	21.3±1
	21350	2560	QPSK	1	0	0	21.93	21.3±1
				1	49	0	21.9	21.3±1
				1	99	0	21.87	21.3±1
				50	0	1	21.01	21.3±1
				50	24	1	21	21.3±1
				50	49	1	21.02	21.3±1
				100	0	1	20.97	21.3±1
			16QAM	1	0	1	21.41	21.3±1
				1	49	1	21.42	21.3±1
				1	99	1	21.45	21.3±1
				50	0	2	21.1	21.3±1
				50	24	2	21.09	21.3±1
				50	49	2	21.07	21.3±1
				100	0	2	20.34	21.3±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
15MHz	20825	1717.5	QPSK	1	0	0	22.17	22±1
				1	37	0	22.17	22±1
				1	74	0	22.17	22±1
				36	0	1	21.44	22±1
				36	16	1	21.42	22±1
				36	35	1	21.43	22±1
				75	0	1	21.4	22±1
			16QAM	1	0	1	21.09	21.3±1
				1	37	1	21.09	21.3±1
				1	74	1	21.09	21.3±1
				36	0	2	21.45	21.3±1
				36	16	2	21.48	21.3±1
				36	35	2	21.51	21.3±1
				75	0	2	20.35	21.3±1
	21100	1732.5	QPSK	1	0	0	21.74	21.3±1
				1	37	0	21.77	21.3±1
				1	74	0	21.8	21.3±1
				36	0	1	21.09	21.3±1
				36	16	1	21.12	21.3±1
				36	35	1	21.14	21.3±1
				75	0	1	21.18	21.3±1
			16QAM	1	0	1	21.16	21.3±1
				1	37	1	21.19	21.3±1
				1	74	1	21.16	21.3±1
				36	0	2	21.08	21.3±1
				36	16	2	21.06	21.3±1
				36	35	2	21.04	21.3±1
				75	0	2	20.32	21.3±1
	21375	1747.5	QPSK	1	0	0	21.71	21.3±1
				1	37	0	21.68	21.3±1
				1	74	0	21.68	21.3±1
				36	0	1	20.96	21.3±1
				36	16	1	20.95	21.3±1
				36	35	1	20.94	21.3±1
				75	0	1	20.93	21.3±1
			16QAM	1	0	1	21.38	21.3±1
				1	37	1	21.36	21.3±1
				1	74	1	21.34	21.3±1
				36	0	2	20.96	21.3±1
				36	16	2	20.97	21.3±1
				36	35	2	20.96	21.3±1
				75	0	2	20.32	21.3±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
10MHz	20800	2502	QPSK	1	0	0	22.01	22±1
				1	24	0	22.01	22±1
				1	49	0	21.98	22±1
				25	0	1	21.33	22±1
				25	12	1	21.35	22±1
				25	24	1	21.33	22±1
				50	0	1	21.32	22±1
			16QAM	1	0	1	20.91	21.3±1
				1	24	1	20.89	21.3±1
				1	49	1	20.89	21.3±1
				25	0	2	21.34	21.3±1
				25	12	2	21.32	21.3±1
				25	24	2	21.29	21.3±1
				50	0	2	20.34	21.3±1
	21100	2535	QPSK	1	0	0	21.68	21.3±1
				1	24	0	21.68	21.3±1
				1	49	0	21.71	21.3±1
				25	0	1	21.09	21.3±1
				25	12	1	21.12	21.3±1
				25	24	1	21.1	21.3±1
				50	0	1	21.15	21.3±1
			16QAM	1	0	1	20.83	21.3±1
				1	24	1	20.82	21.3±1
				1	49	1	20.8	21.3±1
				25	0	2	21.08	21.3±1
				25	12	2	21.11	21.3±1
				25	24	2	21.09	21.3±1
				50	0	2	20.31	21.3±1
	21400	2565	QPSK	1	0	0	21.57	21.3±1
				1	24	0	21.54	21.3±1
				1	49	0	21.53	21.3±1
				25	0	1	20.86	21.3±1
				25	12	1	20.86	21.3±1
				25	24	1	20.88	21.3±1
				50	0	1	20.95	21.3±1
			16QAM	1	0	1	21.23	21.3±1
				1	24	1	21.22	21.3±1
				1	49	1	21.25	21.3±1
				25	0	2	20.86	21.3±1
				25	12	2	20.84	21.3±1
				25	24	2	20.87	21.3±1
				50	0	2	20.33	21.3±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
5MHz	19975	1712.5	QPSK	1	0	0	22.47	22±1
				1	12	0	22.44	22±1
				1	24	0	22.44	22±1
				12	0	1	21.4	22±1
				12	6	1	21.42	22±1
				12	11	1	21.4	22±1
				25	0	1	21.32	22±1
			16QAM	1	0	1	21.37	21.3±1
				1	12	1	21.4	21.3±1
				1	24	1	21.38	21.3±1
				12	0	2	21.4	21.3±1
				12	6	2	21.42	21.3±1
				12	11	2	21.42	21.3±1
				25	0	2	20.32	21.3±1
	20175	1732.5	QPSK	1	0	0	22.2	22±1
				1	12	0	22.23	22±1
				1	24	0	22.22	22±1
				12	0	1	21.13	22±1
				12	6	1	21.15	22±1
				12	11	1	21.12	22±1
				25	0	1	21.14	22±1
			16QAM	1	0	1	21.44	21.3±1
				1	12	1	21.47	21.3±1
				1	24	1	21.47	21.3±1
				12	0	2	21.14	21.3±1
				12	6	2	21.14	21.3±1
				12	11	2	21.15	21.3±1
				25	0	2	20.34	21.3±1
	20375	1752.5	QPSK	1	0	0	22.14	21.5±1
				1	12	0	22.12	21.5±1
				1	24	0	22.14	21.5±1
				12	0	1	20.9	21.5±1
				12	6	1	20.89	21.5±1
				12	11	1	20.86	21.5±1
				25	0	1	20.92	21.5±1
			16QAM	1	0	1	21.1	21.3±1
				1	12	1	21.13	21.3±1
				1	24	1	21.16	21.3±1
				12	0	2	20.92	21.3±1
				12	6	2	20.93	21.3±1
				12	11	2	20.91	21.3±1
				25	0	2	20.39	21.3±1

LTE band XIII:

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	Tune up Power tolerant
5MHz	23755	706.5	QPSK	1	0	0	23.75	23±1
				1	12	0	23.74	23±1
				1	24	0	23.77	23±1
				12	0	1	22.71	23±1
				12	6	1	22.73	23±1
				12	11	1	22.72	23±1
				25	0	1	22.62	23±1
			16QAM	1	0	1	22.8	22±1
				1	12	1	22.8	22±1
				1	24	1	22.79	22±1
				12	0	2	22.72	22±1
				12	6	2	22.75	22±1
				12	11	2	22.74	22±1
				25	0	2	21.63	22±1
	23790	710.0	QPSK	1	0	0	23.61	23±1
				1	12	0	23.59	23±1
				1	24	0	23.62	23±1
				12	0	1	22.64	23±1
				12	6	1	22.67	23±1
				12	11	1	22.68	23±1
				25	0	1	22.58	23±1
			16QAM	1	0	1	23.01	22.5±1
				1	12	1	23.02	22.5±1
				1	24	1	23.03	22.5±1
				12	0	2	22.65	22.5±1
				12	6	2	22.62	22.5±1
				12	11	2	22.62	22.5±1
				25	0	2	21.58	22.5±1
	23825	713.5	QPSK	1	0	0	23.58	23±1
				1	12	0	23.6	23±1
				1	24	0	23.63	23±1
				12	0	1	22.62	23±1
				12	6	1	22.62	23±1
				12	11	1	22.62	23±1
				25	0	1	22.54	23±1
			16QAM	1	0	1	22.6	22±1
				1	12	1	22.63	22±1
				1	24	1	22.64	22±1
				12	0	2	22.61	22±1
				12	6	2	22.62	22±1
				12	11	2	22.63	22±1
				25	0	2	21.68	22±1

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	+
10MHz	23230	782	QPSK	1	0	0	23.48	23±1
				1	24	0	23.51	23±1
				1	49	0	23.53	23±1
				25	0	1	22.64	23±1
				25	12	1	22.65	23±1
				25	24	1	22.67	23±1
				50	0	1	22.59	23±1
			16QAM	1	0	1	23.25	22.5±1
				1	24	1	23.23	22.5±1
				1	49	1	23.2	22.5±1
				25	0	2	22.63	22.5±1
				25	12	2	22.64	22.5±1
				25	24	2	22.61	22.5±1
				50	0	2	21.61	22.5±1

ERP & EIRP

EIRP for LTE Band II (Part 24E)

Frequency (MHz)	BW (MHz)	Modulation	RB Size/Offset	Substituted level (dBm)	Antenna Polarization	Antenna Gain correction (dBi)	Cable Loss (dB)	Absolute Level (dBm)	Limit (dBm)
1850.7	1.4	QPSK	1/0	13.1	V	7.88	0.85	20.13	33.01
1880	1.4	QPSK	1/0	13.07	V	7.88	0.85	20.1	33.01
1909.3	1.4	QPSK	1/0	12.92	V	7.88	0.85	19.95	33.01
1850.7	1.4	QPSK	1/0	11.75	H	7.88	0.85	18.78	33.01
1880	1.4	QPSK	1/0	11.82	H	7.88	0.85	18.85	33.01
1909.3	1.4	QPSK	1/0	11.7	H	7.88	0.85	18.73	33.01
1850.7	1.4	16-QAM	1/0	13.09	V	7.88	0.85	20.12	33.01
1880	1.4	16-QAM	1/0	13.13	V	7.88	0.85	20.16	33.01
1909.3	1.4	16-QAM	1/0	12.83	V	7.88	0.85	19.86	33.01
1850.7	1.4	16-QAM	1/0	11.91	H	7.88	0.85	18.94	33.01
1880	1.4	16-QAM	1/0	11.84	H	7.88	0.85	18.87	33.01
1909.3	1.4	16-QAM	1/0	11.6	H	7.88	0.85	18.63	33.01
1851.5	3	QPSK	1/0	13.1	V	7.88	0.85	20.13	33.01
1880	3	QPSK	1/0	13.37	V	7.88	0.85	20.4	33.01
1908.5	3	QPSK	1/0	12.84	V	7.88	0.85	19.87	33.01
1851.5	3	QPSK	1/0	11.8	H	7.88	0.85	18.83	33.01
1880	3	QPSK	1/0	12.13	H	7.88	0.85	19.16	33.01
1908.5	3	QPSK	1/0	11.56	H	7.88	0.85	18.59	33.01
1851.5	3	16-QAM	1/0	11.92	V	7.88	0.85	18.95	33.01
1880	3	16-QAM	1/0	11.96	V	7.88	0.85	18.99	33.01
1908.5	3	16-QAM	1/0	12.31	V	7.88	0.85	19.34	33.01
1851.5	3	16-QAM	1/0	10.72	H	7.88	0.85	17.75	33.01
1880	3	16-QAM	1/0	10.84	H	7.88	0.85	17.87	33.01
1908.5	3	16-QAM	1/0	11	H	7.88	0.85	18.03	33.01
1852.5	5	QPSK	1/24	13.3	V	7.88	0.85	20.33	33.01
1880	5	QPSK	1/0	13.03	V	7.88	0.85	20.06	33.01
1907.5	5	QPSK	1/24	13.02	V	7.88	0.85	20.05	33.01
1852.5	5	QPSK	1/24	12.23	H	7.88	0.85	19.26	33.01
1880	5	QPSK	1/0	11.92	H	7.88	0.85	18.95	33.01
1907.5	5	QPSK	1/24	11.86	H	7.88	0.85	18.89	33.01

1852.5	5	16-QAM	1/24	12.14	V	7.88	0.85	19.17	33.01
1880	5	16-QAM	1/0	12.27	V	7.88	0.85	19.3	33.01
1907.5	5	16-QAM	1/24	12.01	V	7.88	0.85	19.04	33.01
1852.5	5	16-QAM	1/24	10.97	H	7.88	0.85	18	33.01
1880	5	16-QAM	1/0	11.09	H	7.88	0.85	18.12	33.01
1907.5	5	16-QAM	1/24	10.94	H	7.88	0.85	17.97	33.01
1855	10	QPSK	1/0	13.23	V	7.88	0.85	20.26	33.01
1880	10	QPSK	1/0	13.07	V	7.88	0.85	20.1	33.01
1905	10	QPSK	1/49	12.68	V	7.88	0.85	19.71	33.01
1855	10	QPSK	1/0	12.15	H	7.88	0.85	19.18	33.01
1880	10	QPSK	1/0	12.02	H	7.88	0.85	19.05	33.01
1905	10	QPSK	1/49	11.5	H	7.88	0.85	18.53	33.01
1855	10	16-QAM	1/0	12.13	V	7.88	0.85	19.16	33.01
1880	10	16-QAM	1/0	12.02	V	7.88	0.85	19.05	33.01
1905	10	16-QAM	1/49	12.35	V	7.88	0.85	19.38	33.01
1855	10	16-QAM	1/0	10.89	H	7.88	0.85	17.92	33.01
1880	10	16-QAM	1/0	10.85	H	7.88	0.85	17.88	33.01
1905	10	16-QAM	1/49	11.11	H	7.88	0.85	18.14	33.01
1857.5	15	QPSK	1/0	13.26	V	7.88	0.85	20.29	33.01
1880	15	QPSK	1/0	12.82	V	7.88	0.85	19.85	33.01
1902.5	15	QPSK	1/0	12.79	V	7.88	0.85	19.82	33.01
1857.5	15	QPSK	1/0	12.08	H	7.88	0.85	19.11	33.01
1880	15	QPSK	1/0	11.64	H	7.88	0.85	18.67	33.01
1902.5	15	QPSK	1/0	11.68	H	7.88	0.85	18.71	33.01
1857.5	15	16-QAM	1/0	12.25	V	7.88	0.85	19.28	33.01
1880	15	16-QAM	1/0	12.26	V	7.88	0.85	19.29	33.01
1902.5	15	16-QAM	1/0	12.43	V	7.88	0.85	19.46	33.01
1857.5	15	16-QAM	1/0	11.01	H	7.88	0.85	18.04	33.01
1880	15	16-QAM	1/0	11.13	H	7.88	0.85	18.16	33.01
1902.5	15	16-QAM	1/0	11.32	H	7.88	0.85	18.35	33.01
1860	20	QPSK	1/0	13.29	V	7.88	0.85	20.32	33.01
1880	20	QPSK	1/0	12.63	V	7.88	0.85	19.66	33.01
1900	20	QPSK	1/0	13.12	V	7.88	0.85	20.15	33.01
1860	20	QPSK	1/0	12.21	H	7.88	0.85	19.24	33.01
1880	20	QPSK	1/0	11.5	H	7.88	0.85	18.53	33.01

1900	20	QPSK	1/0	12.04	H	7.88	0.85	19.07	33.01
1860	20	16-QAM	1/0	12.2	V	7.88	0.85	19.23	33.01
1880	20	16-QAM	1/0	12.03	V	7.88	0.85	19.06	33.01
1900	20	16-QAM	1/0	12.46	V	7.88	0.85	19.49	33.01
1860	20	16-QAM	1/0	11.1	H	7.88	0.85	18.13	33.01
1880	20	16-QAM	1/0	10.92	H	7.88	0.85	17.95	33.01
1900	20	16-QAM	1/0	11.22	H	7.88	0.85	18.25	33.01

EIRP for LTE Band IV (Part 27)

Frequency (MHz)	BW (MHz)	Modulation	RB Size/Offset	Substituted level (dBm)	Antenna Polarization	Antenna Gain correction (dBi)	Cable Loss (dB)	Absolute Level (dBm)	Limit (dBm)
1710.7	1.4	QPSK	1/0	12.16	V	7.95	0.79	19.32	30
1732.5	1.4	QPSK	1/0	12.09	V	7.95	0.79	19.25	30
1754.3	1.4	QPSK	1/0	12.19	V	7.95	0.79	19.35	30
1710.7	1.4	QPSK	1/0	11.05	H	7.95	0.79	18.21	30
1732.5	1.4	QPSK	1/0	11	H	7.95	0.79	18.16	30
1754.3	1.4	QPSK	1/0	11.07	H	7.95	0.79	18.23	30
1710.7	1.4	16-QAM	1/5	12.12	V	7.95	0.79	19.28	30
1732.5	1.4	16-QAM	1/0	12.14	V	7.95	0.79	19.3	30
1754.3	1.4	16-QAM	1/0	12.21	V	7.95	0.79	19.37	30
1710.7	1.4	16-QAM	1/5	10.98	H	7.95	0.79	18.14	30
1732.5	1.4	16-QAM	1/0	11.04	H	7.95	0.79	18.2	30
1754.3	1.4	16-QAM	1/0	11.1	H	7.95	0.79	18.26	30
1711.5	3	QPSK	1/0	12.04	V	7.95	0.79	19.2	30
1732.5	3	QPSK	1/0	12.07	V	7.95	0.79	19.23	30
1753.5	3	QPSK	1/0	11.98	V	7.95	0.79	19.14	30
1711.5	3	QPSK	1/0	10.97	H	7.95	0.79	18.13	30
1732.5	3	QPSK	1/0	10.94	H	7.95	0.79	18.1	30
1753.5	3	QPSK	1/0	10.91	H	7.95	0.79	18.07	30
1711.5	3	16-QAM	1/0	10.89	V	7.95	0.79	18.05	30
1732.5	3	16-QAM	1/0	11.04	V	7.95	0.79	18.2	30
1753.5	3	16-QAM	1/0	11.6	V	7.95	0.79	18.76	30
1711.5	3	16-QAM	1/0	9.79	H	7.95	0.79	16.95	30
1732.5	3	16-QAM	1/0	10	H	7.95	0.79	17.16	30
1753.5	3	16-QAM	1/0	10.32	H	7.95	0.79	17.48	30
1712.5	5	QPSK	1/0	12.11	V	7.95	0.79	19.27	30
1732.5	5	QPSK	1/0	12.13	V	7.95	0.79	19.29	30
1752.5	5	QPSK	1/24	12.2	V	7.95	0.79	19.36	30
1712.5	5	QPSK	1/0	10.99	H	7.95	0.79	18.15	30
1732.5	5	QPSK	1/0	11.05	H	7.95	0.79	18.21	30
1752.5	5	QPSK	1/24	11.03	H	7.95	0.79	18.19	30

1712.5	5	16-QAM	1/0	11.12	V	7.95	0.79	18.28	30
1732.5	5	16-QAM	1/0	11.46	V	7.95	0.79	18.62	30
1752.5	5	16-QAM	1/24	11.14	V	7.95	0.79	18.3	30
1712.5	5	16-QAM	1/0	9.96	H	7.95	0.79	17.12	30
1732.5	5	16-QAM	1/0	10.3	H	7.95	0.79	17.46	30
1752.5	5	16-QAM	1/24	10.05	H	7.95	0.79	17.21	30
1715	10	QPSK	1/0	12.01	V	7.95	0.79	19.17	30
1732.5	10	QPSK	1/49	12.15	V	7.95	0.79	19.31	30
1750	10	QPSK	1/0	11.69	V	7.95	0.79	18.85	30
1715	10	QPSK	1/0	10.8	H	7.95	0.79	17.96	30
1732.5	10	QPSK	1/49	11.08	H	7.95	0.79	18.24	30
1750	10	QPSK	1/0	10.51	H	7.95	0.79	17.67	30
1715	10	16-QAM	1/0	11.58	V	7.95	0.79	18.74	30
1732.5	10	16-QAM	1/49	11.11	V	7.95	0.79	18.27	30
1750	10	16-QAM	1/0	10.95	V	7.95	0.79	18.11	30
1715	10	16-QAM	1/0	10.47	H	7.95	0.79	17.63	30
1732.5	10	16-QAM	1/49	9.84	H	7.95	0.79	17	30
1750	10	16-QAM	1/0	9.86	H	7.95	0.79	17.02	30
1717.5	15	QPSK	1/0	12.19	V	7.95	0.79	19.35	30
1732.5	15	QPSK	1/74	12.08	V	7.95	0.79	19.24	30
1747.5	15	QPSK	1/0	11.85	V	7.95	0.79	19.01	30
1717.5	15	QPSK	1/0	11.05	H	7.95	0.79	18.21	30
1732.5	15	QPSK	1/74	10.9	H	7.95	0.79	18.06	30
1747.5	15	QPSK	1/0	10.79	H	7.95	0.79	17.95	30
1717.5	15	16-QAM	1/0	11.15	V	7.95	0.79	18.31	30
1732.5	15	16-QAM	1/74	11.35	V	7.95	0.79	18.51	30
1747.5	15	16-QAM	1/0	11.69	V	7.95	0.79	18.85	30
1717.5	15	16-QAM	1/0	10.04	H	7.95	0.79	17.2	30
1732.5	15	16-QAM	1/74	10.23	H	7.95	0.79	17.39	30
1747.5	15	16-QAM	1/0	10.52	H	7.95	0.79	17.68	30
1720	20	QPSK	1/99	12.27	V	7.95	0.79	19.43	30
1732.5	20	QPSK	1/99	12.02	V	7.95	0.79	19.18	30
1745	20	QPSK	1/0	12.22	V	7.95	0.79	19.38	30
1720	20	QPSK	1/99	11.1	H	7.95	0.79	18.26	30
1732.5	20	QPSK	1/99	10.89	H	7.95	0.79	18.05	30

1745	20	QPSK	1/0	10.97	H	7.95	0.79	18.13	30
1720	20	16-QAM	1/99	11.15	V	7.95	0.79	18.31	30
1732.5	20	16-QAM	1/99	11.35	V	7.95	0.79	18.51	30
1745	20	16-QAM	1/0	11.18	V	7.95	0.79	18.34	30
1720	20	16-QAM	1/99	10.05	H	7.95	0.79	17.21	30
1732.5	20	16-QAM	1/99	10.3	H	7.95	0.79	17.46	30
1745	20	16-QAM	1/0	10.13	H	7.95	0.79	17.29	30

EIRP for LTE Band VII (Part 27)

Frequency (MHz)	BW (MHz)	Modulation	RB Size/Offset	Substituted level (dBm)	Antenna Polarization	Antenna Gain correction (dBi)	Cable Loss (dB)	Absolute Level (dBm)	Limit (dBm)
2502.5	5	QPSK	1/0	10.4	V	8.93	0.83	18.5	30
2535	5	QPSK	1/0	10.3	V	8.93	0.83	18.4	30
2567.5	5	QPSK	1/24	10.06	V	8.93	0.83	18.16	30
2502.5	5	QPSK	1/0	9.21	H	8.93	0.83	17.31	30
2535	5	QPSK	1/0	9.16	H	8.93	0.83	17.26	30
2567.5	5	QPSK	1/24	8.9	H	8.93	0.83	17	30
2502.5	5	16-QAM	1/0	9.3	V	8.93	0.83	17.4	30
2535	5	16-QAM	1/0	9.35	V	8.93	0.83	17.45	30
2567.5	5	16-QAM	1/24	9.03	V	8.93	0.83	17.13	30
2502.5	5	16-QAM	1/0	8.05	H	8.93	0.83	16.15	30
2535	5	16-QAM	1/0	8.18	H	8.93	0.83	16.28	30
2567.5	5	16-QAM	1/24	7.96	H	8.93	0.83	16.06	30
2505	10	QPSK	1/0	9.93	V	8.93	0.83	18.03	30
2535	10	QPSK	1/49	9.58	V	8.93	0.83	17.68	30
2565	10	QPSK	1/0	9.4	V	8.93	0.83	17.5	30
2505	10	QPSK	1/0	8.79	H	8.93	0.83	16.89	30
2535	10	QPSK	1/49	8.36	H	8.93	0.83	16.46	30
2565	10	QPSK	1/0	8.23	H	8.93	0.83	16.33	30
2505	10	16-QAM	1/0	9.24	V	8.93	0.83	17.34	30
2535	10	16-QAM	1/49	8.98	V	8.93	0.83	17.08	30
2565	10	16-QAM	1/0	9.17	V	8.93	0.83	17.27	30
2505	10	16-QAM	1/0	8.11	H	8.93	0.83	16.21	30
2535	10	16-QAM	1/49	7.87	H	8.93	0.83	15.97	30
2565	10	16-QAM	1/0	7.93	H	8.93	0.83	16.03	30
2507.5	15	QPSK	1/0	10.07	V	8.93	0.83	18.17	30
2535	15	QPSK	1/74	9.69	V	8.93	0.83	17.79	30
2562.5	15	QPSK	1/0	9.64	V	8.93	0.83	17.74	30
2507.5	15	QPSK	1/0	8.96	H	8.93	0.83	17.06	30
2535	15	QPSK	1/74	8.55	H	8.93	0.83	16.65	30
2562.5	15	QPSK	1/0	8.51	H	8.93	0.83	16.61	30

2507.5	15	16-QAM	1/0	9.35	V	8.93	0.83	17.45	30
2535	15	16-QAM	1/74	9.1	V	8.93	0.83	17.2	30
2562.5	15	16-QAM	1/0	9.28	V	8.93	0.83	17.38	30
2507.5	15	16-QAM	1/0	8.22	H	8.93	0.83	16.32	30
2535	15	16-QAM	1/74	7.94	H	8.93	0.83	16.04	30
2562.5	15	16-QAM	1/0	8.11	H	8.93	0.83	16.21	30
2510	20	QPSK	1/99	10.13	V	8.93	0.83	18.23	30
2535	20	QPSK	1/99	9.69	V	8.93	0.83	17.79	30
2560	20	QPSK	1/0	9.83	V	8.93	0.83	17.93	30
2510	20	QPSK	1/99	9.01	H	8.93	0.83	17.11	30
2535	20	QPSK	1/99	8.46	H	8.93	0.83	16.56	30
2560	20	QPSK	1/0	8.71	H	8.93	0.83	16.81	30
2510	20	16-QAM	1/99	9.29	V	8.93	0.83	17.39	30
2535	20	16-QAM	1/99	9.06	V	8.93	0.83	17.16	30
2560	20	16-QAM	1/0	9.31	V	8.93	0.83	17.41	30
2510	20	16-QAM	1/99	8.14	H	8.93	0.83	16.24	30
2535	20	16-QAM	1/99	7.98	H	8.93	0.83	16.08	30
2560	20	16-QAM	1/0	8.09	H	8.93	0.83	16.19	30

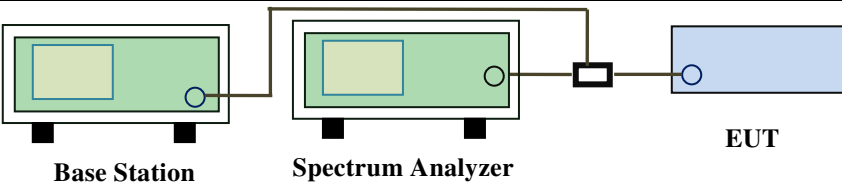
ERP for LTE Band XIII (Part 27)

Frequency (MHz)	BW (MHz)	Modulation	RB Size/Offset	Substituted level (dBm)	Antenna Polarization	Antenna Gain correction (dBi)	Cable Loss (dB)	Absolute Level (dBm)	Limit (dBm)
779.5	5	QPSK	1/24	10.63	V	6.4	0.44	16.59	34.77
782	5	QPSK	1/24	10.46	V	6.4	0.44	16.42	34.77
784.5	5	QPSK	1/24	10.39	V	6.4	0.44	16.35	34.77
779.5	5	QPSK	1/24	9.46	H	6.4	0.44	15.42	34.77
782	5	QPSK	1/24	9.42	H	6.4	0.44	15.38	34.77
784.5	5	QPSK	1/24	9.36	H	6.4	0.44	15.32	34.77
779.5	5	16-QAM	1/24	9.65	V	6.4	0.44	15.61	34.77
782	5	16-QAM	1/24	10.01	V	6.4	0.44	15.97	34.77
784.5	5	16-QAM	1/24	9.56	V	6.4	0.44	15.52	34.77
779.5	5	16-QAM	1/24	8.57	H	6.4	0.44	14.53	34.77
782	5	16-QAM	1/24	8.93	H	6.4	0.44	14.89	34.77
784.5	5	16-QAM	1/24	8.49	H	6.4	0.44	14.45	34.77
782	10	QPSK	1/49	10.51	V	6.4	0.44	16.47	34.77
782	10	QPSK	1/49	9.5	H	6.4	0.44	15.46	34.77
782	10	16-QAM	1/49	10.15	V	6.4	0.44	16.11	34.77
782	10	16-QAM	1/49	9.07	H	6.4	0.44	15.03	34.77

6.3 Peak-Average Ratio

Temperature	23 °C
Relative Humidity	58%
Atmospheric Pressure	1006mbar
Test date :	June 06, 2017
Tested By :	Leen Yang

Requirement(s):

Spec	Item	Requirement	Applicable
§24.232(d) § 27.50(d)	a)	The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.	☒
Test Setup	 Base Station Spectrum Analyzer EUT		
Test Procedure	According with KDB 971168 v02r02 5.7.2 Alternate procedure for PAPR 5.1.2 Peak power measurements with a peak power meter The total peak output power may be measured using a broadband peak RF power meter. The power meter must have a video bandwidth that is greater than or equal to the emission bandwidth and utilize a fast-responding diode detector. 5.2.3 Average power measurement with average power meter As an alternative to the use of a spectrum/signal analyzer or EMI receiver to perform a measurement of the total in-band average output power, a wideband RF average power meter with a thermocouple detector or equivalent can be used under certain conditions If the EUT can be configured to transmit continuously (i.e., the burst duty cycle $\geq 98\%$) and at all times the EUT is transmitting at its maximum output		

	power level, then a conventional wide-band RF power meter can be used. If the EUT cannot be configured to transmit continuously (i.e., the burst duty cycle < 98%), then there are two options for the use of an average power meter. First, a gated average power meter can be used to perform the measurement if the gating parameters can be adjusted such that the power is measured only over active transmission bursts at maximum output power levels. A conventional average power meter can also be used if the measured burst duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent) by performing the measurement over the on/off burst cycles and then correcting (increasing) the measured level by a factor equal to $10\log(1/\text{duty cycle})$
Remark	
Result	☒ Pass ☐ Fail

Test Data ☒ Yes ☐ N/A
Test Plot ☐ Yes (See below) ☒ N/A

LTE Band II (part 24E)

BW(MHz)	Frequency (MHz)	Mode	Modulation	Conducted Power (dBm)		Peak-Average Ratio (PAR)
				Peak	Average	
1.4	1880	RB 1/0	QPSK	25.36	23.01	2.35
			16QAM	25.36	21.86	3.5
3	1880	RB 1/0	QPSK	25.33	23.02	2.31
			16QAM	25.31	21.96	3.35
5	1880	RB 1/0	QPSK	25.32	23.06	2.26
			16QAM	24.23	22.3	1.93
10	1880	RB 1/0	QPSK	24.26	23.1	1.16
			16QAM	25.13	22.05	3.08
15	1880	RB 1/0	QPSK	24.26	22.85	1.41
			16QAM	24.21	22.24	1.97
20	1880	RB 1/0	QPSK	24.16	22.62	1.54
			16QAM	24.23	22.03	2.2

LTE Band IV (part 27)

BW(MHz)	Frequency (MHz)	Mode	Modulation	Conducted Power (dBm)		Peak-Average Ratio (PAR)
				Peak	Average	
1.4	1732.5	RB 1/0	QPSK	25.35	23.15	2.2
			16QAM	24.32	21.8	2.52
3	1732.5	RB 1/0	QPSK	24.26	23.23	1.03
			16QAM	25.13	22.17	2.96
5	1732.5	RB 1/0	QPSK	24.52	23.26	1.26
			16QAM	24.61	22.56	2.05
10	1732.5	RB 1/0	QPSK	25.36	23.31	2.05
			16QAM	25.36	22.11	3.25
15	1732.5	RB 1/0	QPSK	25.34	23.24	2.1
			16QAM	24.16	22.5	1.66
20	1732.5	RB 1/0	QPSK	24.18	23.16	1.02
			16QAM	24.39	22.53	1.86

LTE Band VII (part 27)

BW(MHz)	Frequency (MHz)	Mode	Modulation	Conducted Power (dBm)		Peak-Average Ratio (PAR)
				Peak	Average	
5	2535	RB 1/0	QPSK	25.36	22.2	3.16
			16QAM	25.34	21.44	3.9
10	2535	RB 1/0	QPSK	25.12	21.68	3.44
			16QAM	24.23	20.83	3.4
15	2535	RB 1/0	QPSK	24.25	21.74	2.51
			16QAM	24.16	21.16	3
20	2535	RB 1/0	QPSK	24.22	21.76	2.46
			16QAM	24.2	21.14	3.06

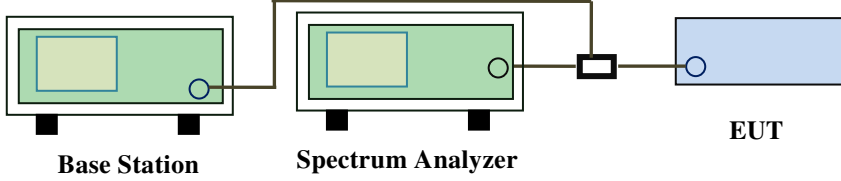
LTE Band XIII (part 27)

BW(MHz)	Frequency (MHz)	Mode	Modulation	Conducted Power (dBm)		Peak-Average Ratio (PAR)
				Peak	Average	
5	782	RB 1/0	QPSK	25.55	23.61	1.94
			16QAM	25.74	23.01	2.73
10	782	RB 1/0	QPSK	24.64	23.48	1.16
			16QAM	24.62	23.25	1.37

6.4 Occupied Bandwidth

Temperature	23 °C
Relative Humidity	58%
Atmospheric Pressure	1006mbar
Test date :	June 06, 2017
Tested By :	Leen Yang

Requirement(s):

Spec	Item	Requirement	Applicable
§2.1049, §22.917, §22.905 §24.238 §27.53(a)	a)	99% Occupied Bandwidth(kHz)	☒
	b)	26 dB Bandwidth(kHz)	☒
Test Setup			
Test Procedure	- The EUT was connected to Spectrum Analyzer and Base Station via power divider. - The 99% and 26 dB occupied bandwidth (BW) of the middle channel for the highest RF powers.		
Remark			
Result	☒ Pass ☐ Fail		

Test Data ☒ Yes ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

LTE Band II (Part 24E)

BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
1.4	18607	1850	16QAM	1.1062	1.290
			QPSK	1.1054	1.281
1.4	18900	1880	16QAM	1.1108	1.274
			QPSK	1.1128	1.277
1.4	19193	1909	16QAM	1.1030	1.290
			QPSK	1.1049	1.291
3	18615	1852	16QAM	2.7487	3.098
			QPSK	2.7408	3.089
3	18900	1880	16QAM	2.7441	3.087
			QPSK	2.7476	3.091
3	19185	1909	16QAM	2.7495	3.092
			QPSK	2.7629	3.094
5	18625	1853	16QAM	4.5332	5.085
			QPSK	4.5258	5.094
5	18900	1880	16QAM	4.5299	5.093
			QPSK	4.5389	5.091
5	19175	1908	16QAM	4.5428	5.084
			QPSK	4.5363	5.097
10	18650	1855	16QAM	9.0599	10.249
			QPSK	9.0794	10.251
10	18900	1880	16QAM	9.0849	10.247
			QPSK	9.1081	10.254
10	19150	1905	16QAM	9.0742	10.259
			QPSK	9.1030	10.252
15	18675	1858	16QAM	13.4579	15.009
			QPSK	13.4727	15.002
15	18900	1880	16QAM	13.5367	15.033
			QPSK	13.4522	15.005
15	19125	1903	16QAM	13.4972	15.007
			QPSK	13.5251	15.015

20	18700	1860	16QAM	17.8460	19.464
			QPSK	17.9064	19.519
20	18900	1880	16QAM	17.9529	19.588
			QPSK	17.9353	19.565
20	19100	1900	16QAM	17.9529	19.588
			QPSK	17.9353	19.565

LTE Band IV (Part 27)

BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
1.4	19957	1711	16QAM	1.1090	1.290
			QPSK	1.1045	1.296
1.4	20175	1733	16QAM	1.1170	1.278
			QPSK	1.1099	1.279
1.4	20393	1754	16QAM	1.1059	1.287
			QPSK	1.1034	1.285
3	19965	1712	16QAM	2.7423	3.124
			QPSK	2.7570	3.115
3	20175	1733	16QAM	2.7442	3.114
			QPSK	2.7514	3.116
3	20385	1754	16QAM	2.7474	3.124
			QPSK	2.7459	3.126
5	19975	1713	16QAM	4.5364	5.101
			QPSK	4.5372	5.092
5	20175	1733	16QAM	4.5250	5.091
			QPSK	4.5297	5.071
5	20375	1753	16QAM	4.5306	5.074
			QPSK	4.5429	5.074
10	20000	1715	16QAM	9.0435	10.315
			QPSK	9.0385	10.231
10	20175	1733	16QAM	9.0881	10.321
			QPSK	9.0815	10.249
10	20350	1750	16QAM	9.0808	10.269
			QPSK	9.0735	10.313
15	20025	1718	16QAM	13.4486	14.937
			QPSK	13.4456	15.013
15	20175	1733	16QAM	13.5034	15.091
			QPSK	13.5002	15.000
15	20325	1748	16QAM	13.4951	14.960
			QPSK	13.4999	14.998

20	20050	1720	16QAM	17.8829	19.562
			QPSK	17.9165	19.516
20	20175	1733	16QAM	17.9708	19.644
			QPSK	17.9218	19.600
20	20300	1745	16QAM	17.9341	19.513
			QPSK	17.8763	19.529

LTE Band VII (Part 27) result

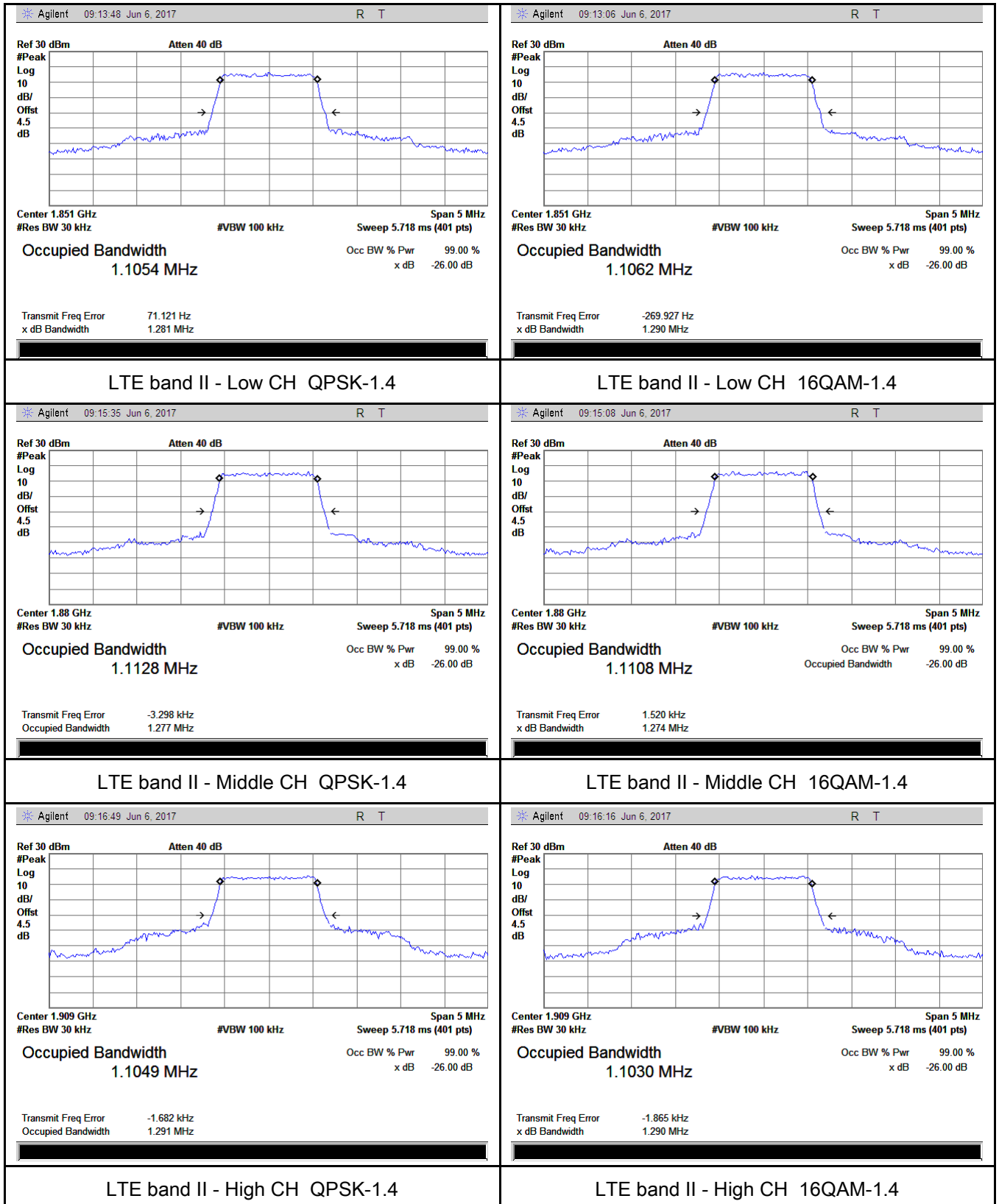
BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
5	20775	2503	16QAM	4.5385	5.106
			QPSK	4.5241	5.109
5	21100	2535	16QAM	4.5187	5.012
			QPSK	4.5331	5.097
5	21425	2568	16QAM	4.5318	5.095
			QPSK	4.5325	5.113
10	20800	2505	16QAM	9.0644	10.306
			QPSK	9.0478	10.321
10	21100	2535	16QAM	9.0699	10.217
			QPSK	9.0759	10.364
10	21400	2565	16QAM	9.0899	10.284
			QPSK	9.1030	10.296
15	20825	2508	16QAM	13.4409	14.998
			QPSK	13.4596	14.980
15	21100	2535	16QAM	13.4978	15.018
			QPSK	13.5037	15.024
15	21400	2563	16QAM	13.5018	15.008
			QPSK	13.5545	15.018
20	20850	2510	16QAM	17.8585	19.501
			QPSK	17.8925	19.563
20	21100	2535	16QAM	17.9562	19.604
			QPSK	17.9488	19.537
20	21350	2560	16QAM	17.9479	19.546
			QPSK	17.9368	19.543

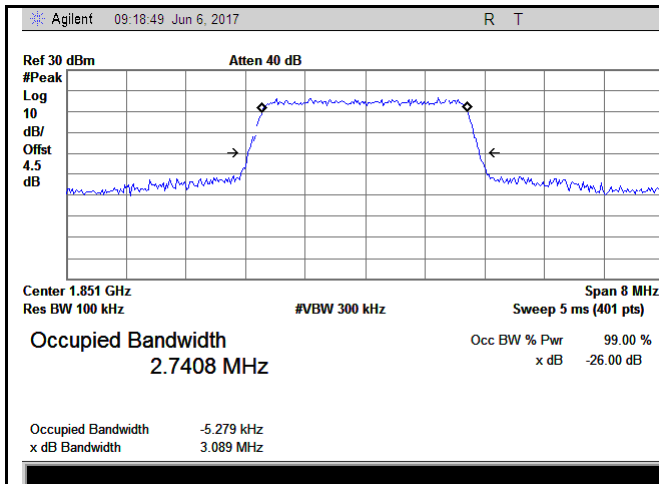
LTE Band XIII(Part 27)

BW(MHz)	Channel	Frequency (MHz)	Modulation	99% Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
5	23755	706.5	16QAM	4.5389	5.113
			QPSK	4.5206	5.112
5	23790	710	16QAM	4.5297	5.085
			QPSK	4.5368	5.083
5	23825	713.5	16QAM	4.5438	5.092
			QPSK	4.5328	5.099
10	23780	709	16QAM	9.0884	10.300
			QPSK	9.1152	10.314

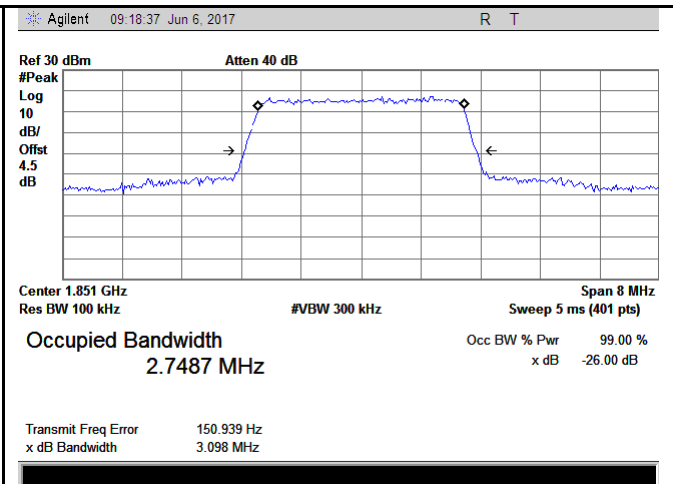
Test Plots

LTE Band II (Part 24E)

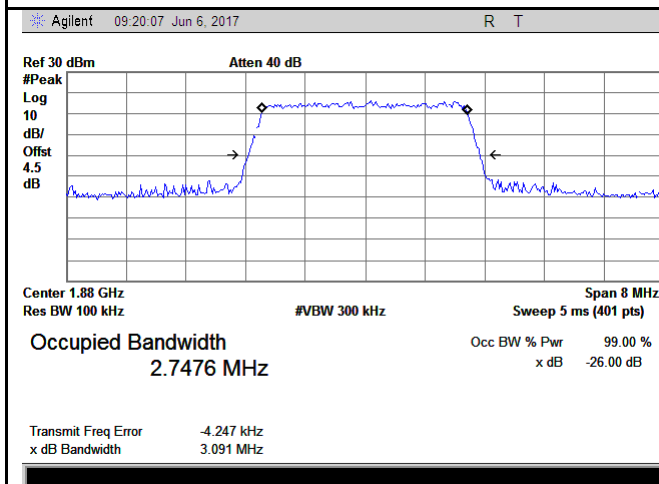




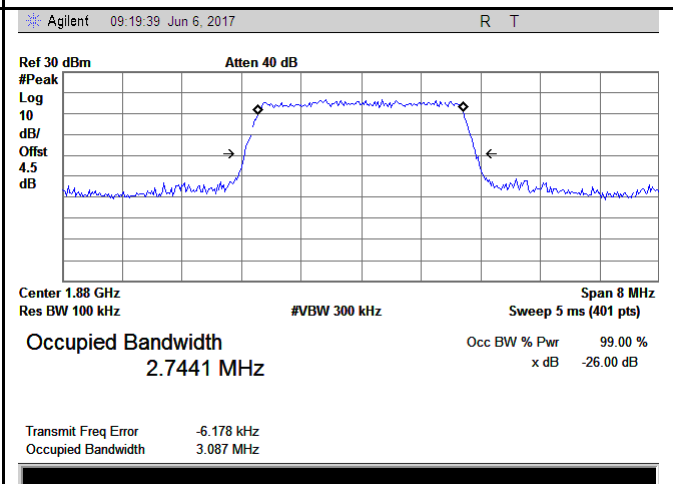
LTE band II - Low CH QPSK-3



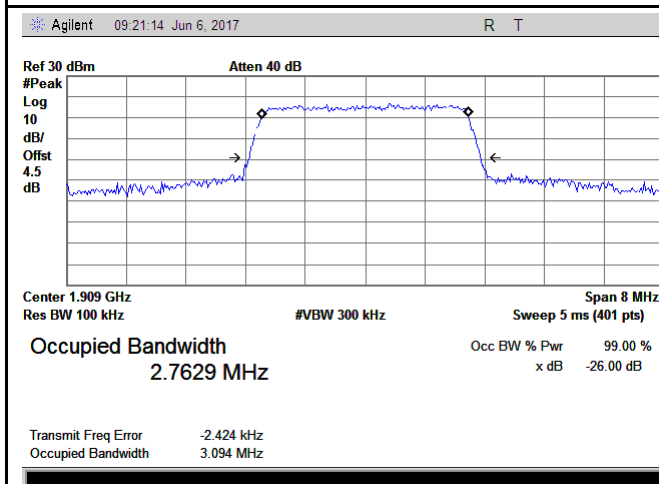
LTE band II - Low CH 16QAM-3



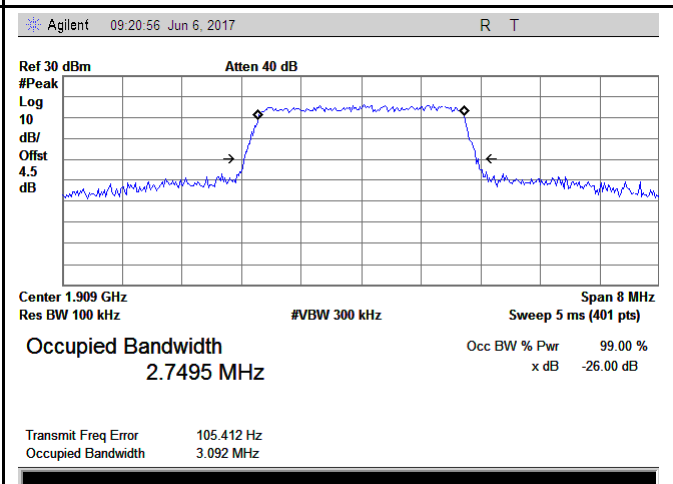
LTE band II - Middle CH QPSK-3



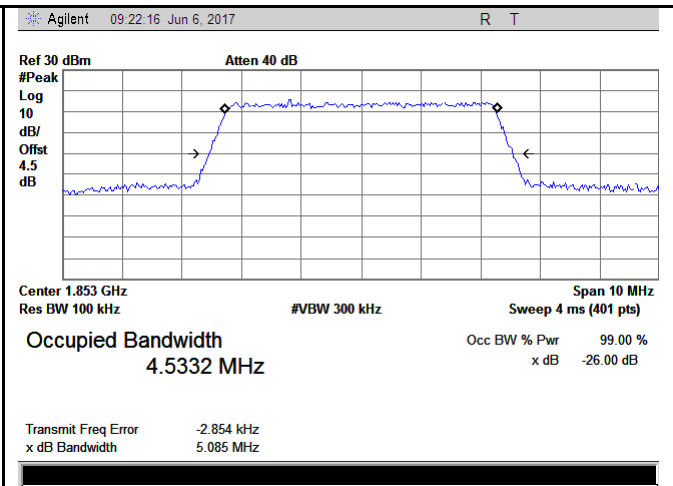
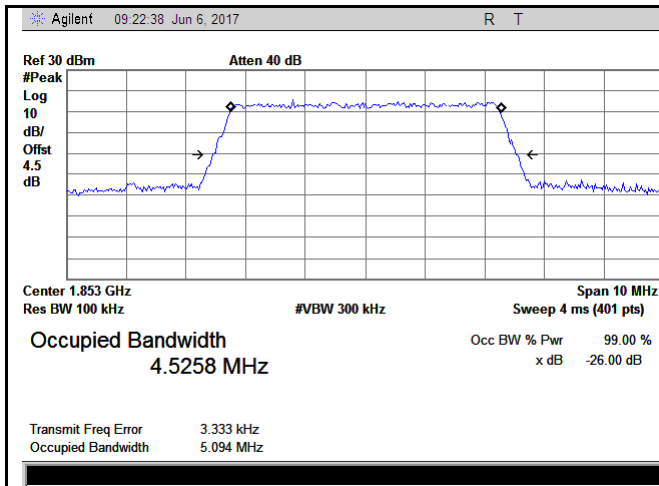
LTE band II - Middle CH 16QAM-3



LTE band II - High CH QPSK-3

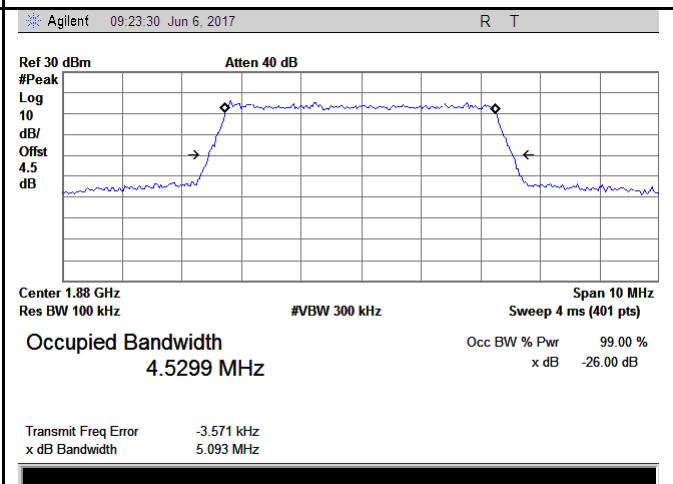
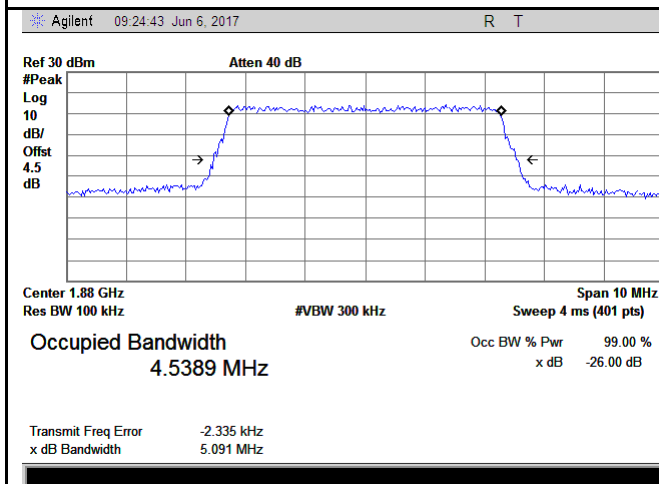


LTE band II - High CH 16QAM-3



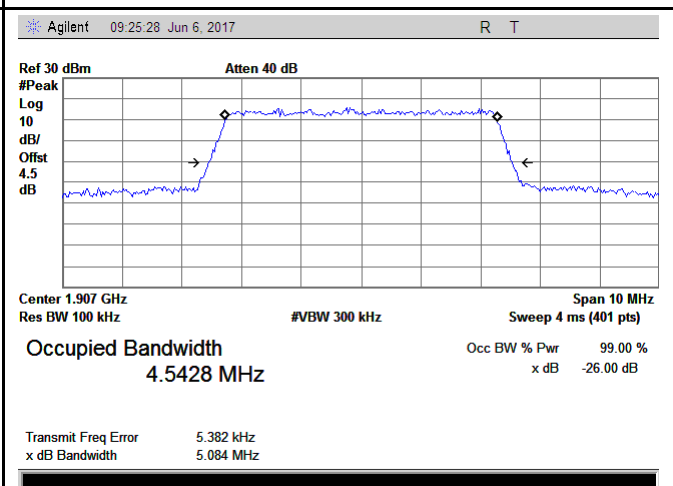
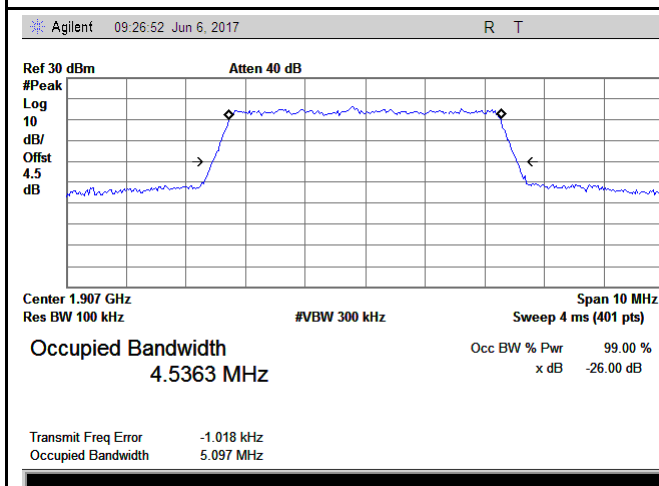
LTE band II - Low CH QPSK-5

LTE band II - Low CH 16QAM-5



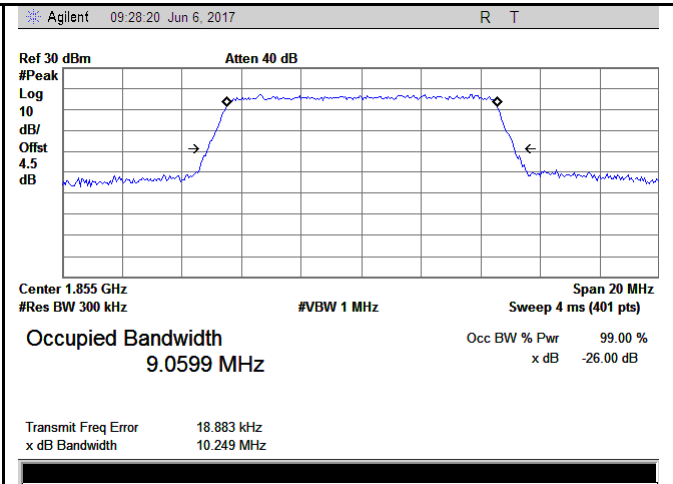
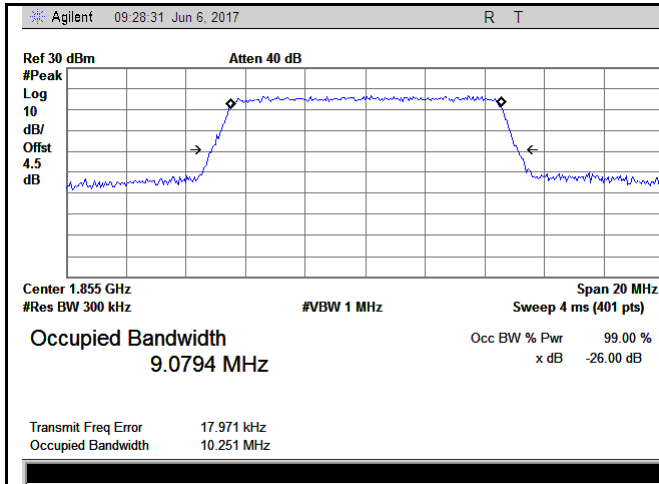
LTE band II - Middle CH QPSK-5

LTE band II - Middle CH 16QAM-5

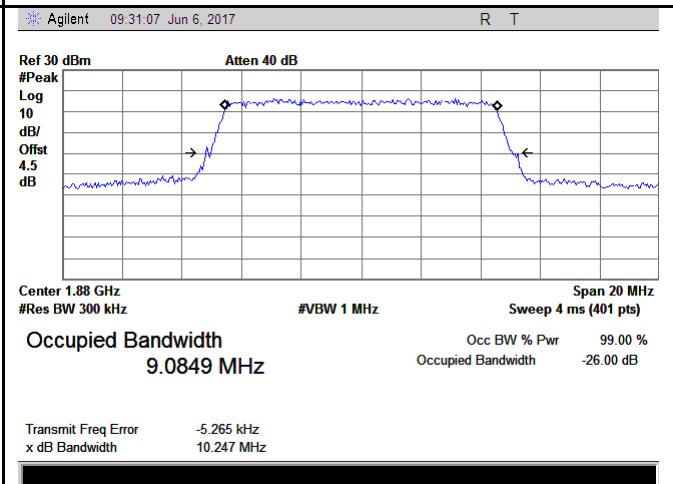
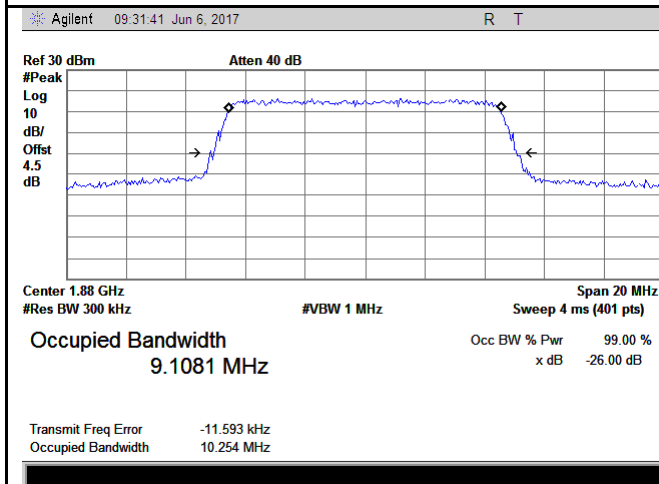


LTE band II - High CH QPSK-5

LTE band II - High CH 16QAM-5

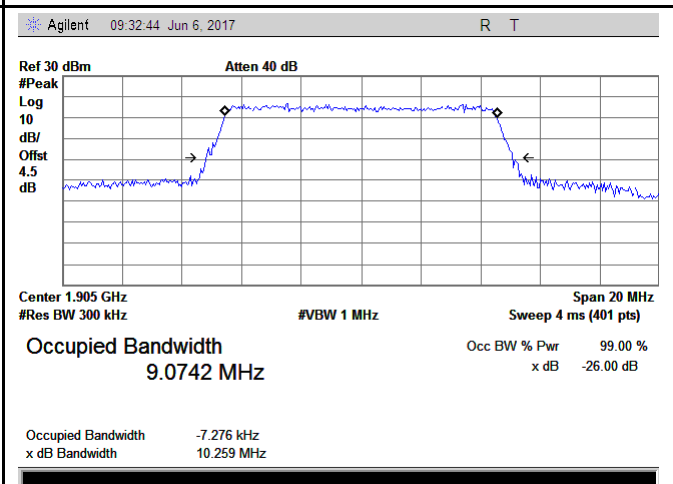
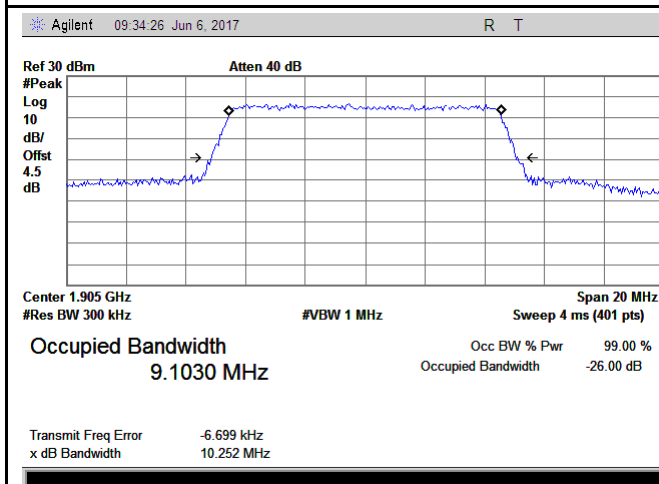


LTE band II - Low CH QPSK-10



LTE band II - Low CH 16QAM-10

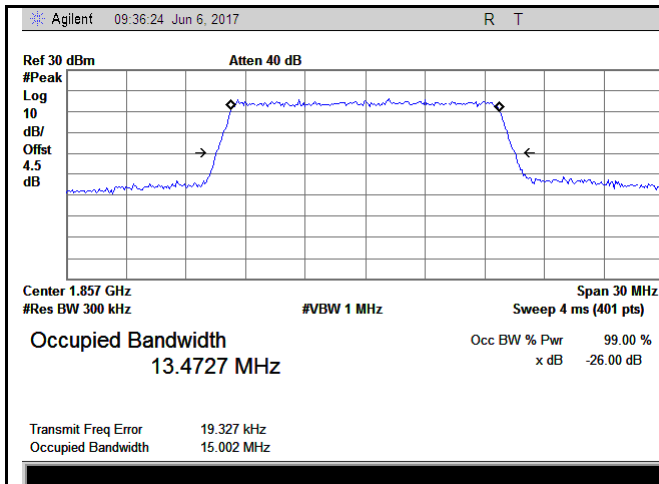
LTE band II - Middle CH QPSK-10



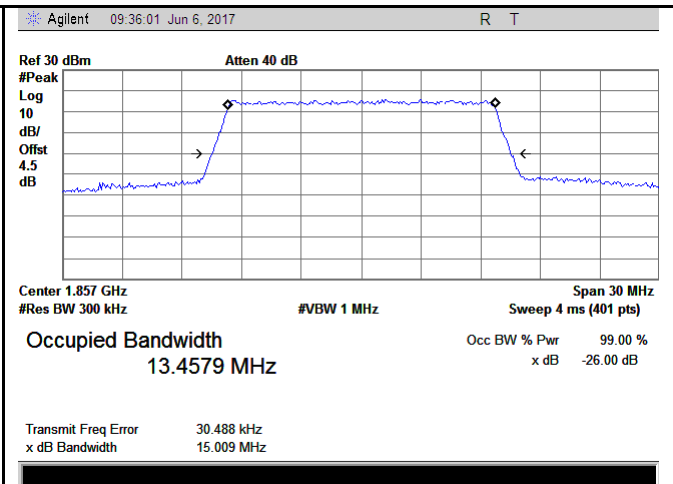
LTE band II - Middle CH 16QAM-10

LTE band II - High CH QPSK-10

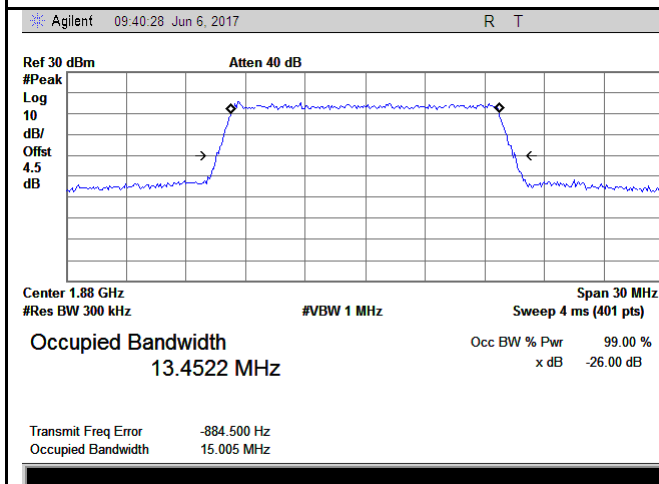
LTE band II - High CH 16QAM-10



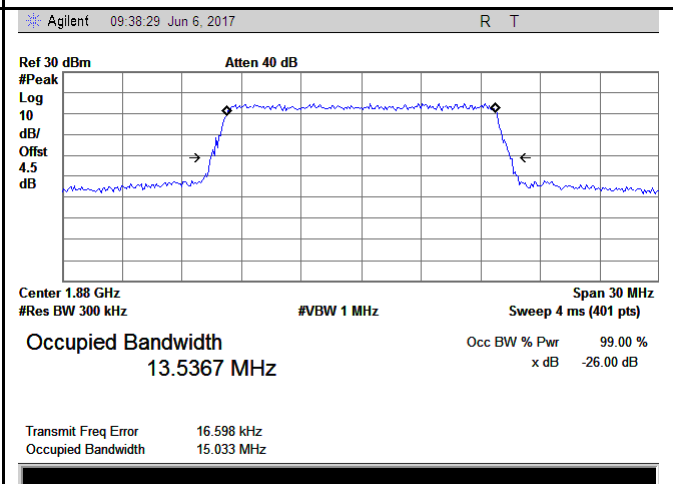
LTE band II - Low CH QPSK-15



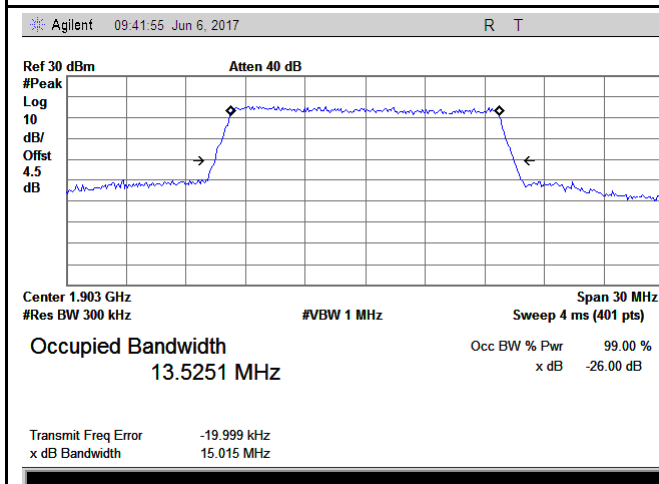
LTE band II - Low CH 16QAM-15



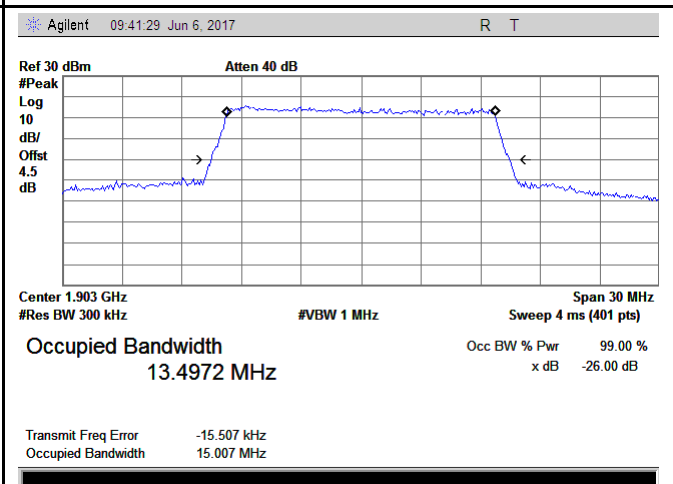
LTE band II - Middle CH QPSK-15



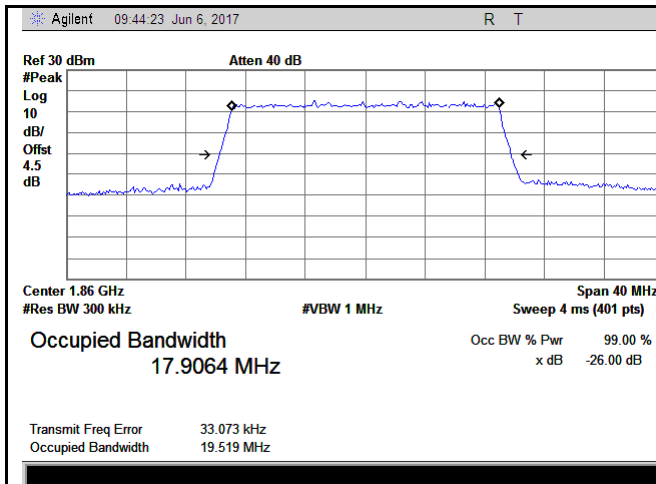
LTE band II - Middle CH 16QAM-15



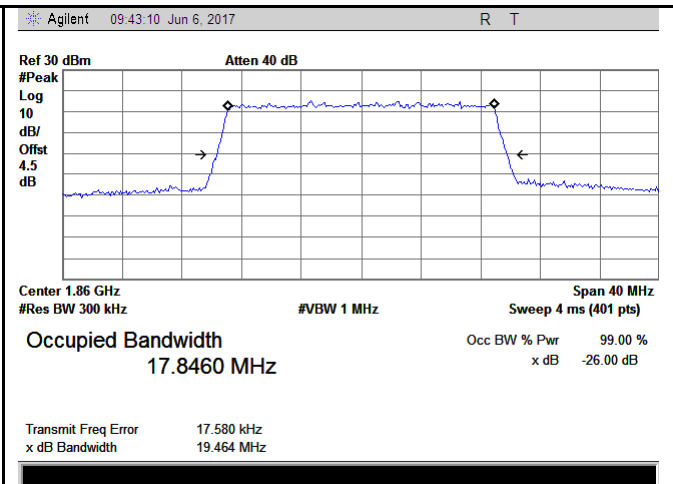
LTE band II - High CH QPSK-15



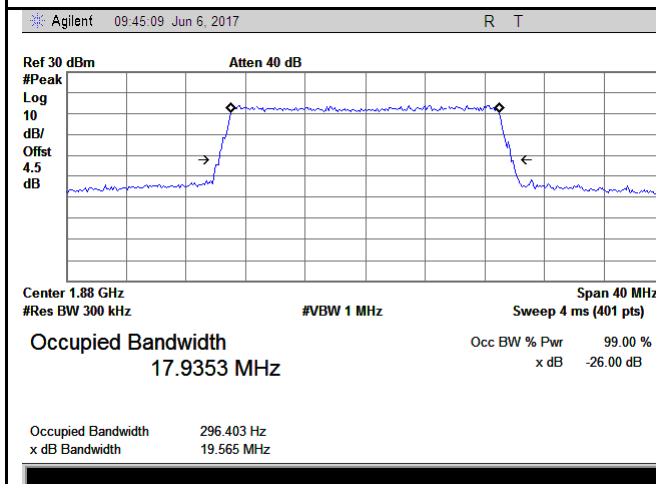
LTE band II - High CH 16QAM-15



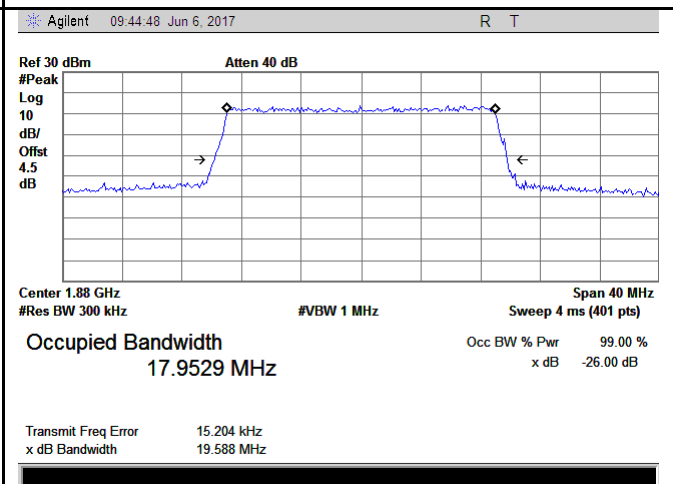
LTE band II - Low CH QPSK-20



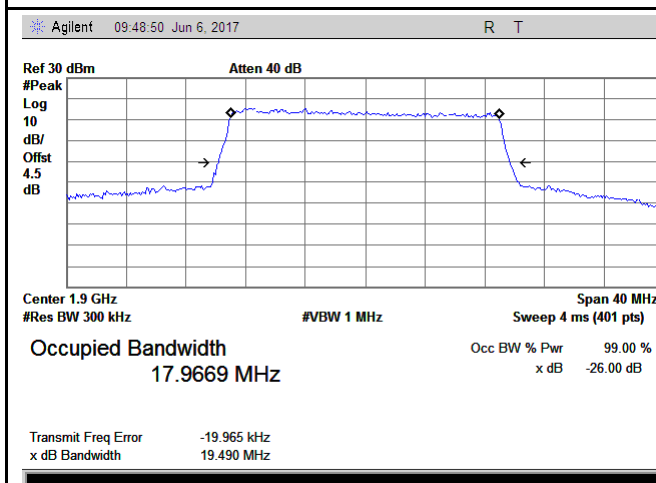
LTE band II - Low CH 16QAM-20



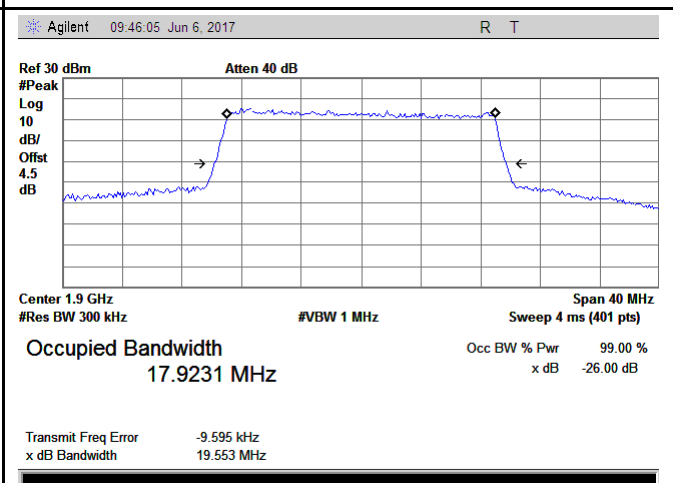
LTE band II - Middle CH QPSK-20



LTE band II - Middle CH 16QAM-20

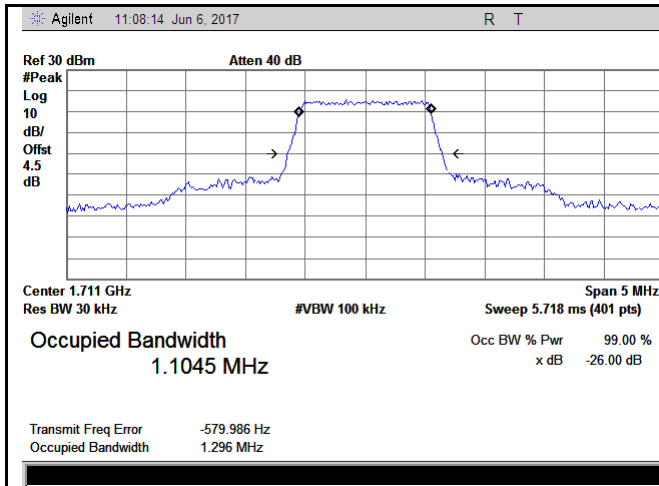


LTE band II - High CH QPSK-20

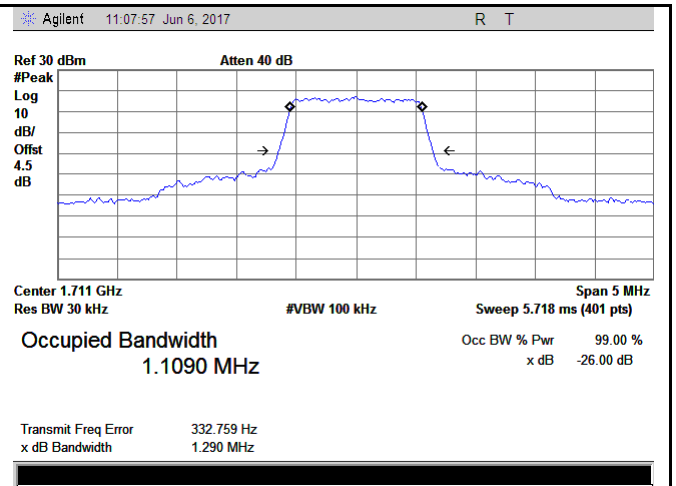


LTE band II - High CH 16QAM-20

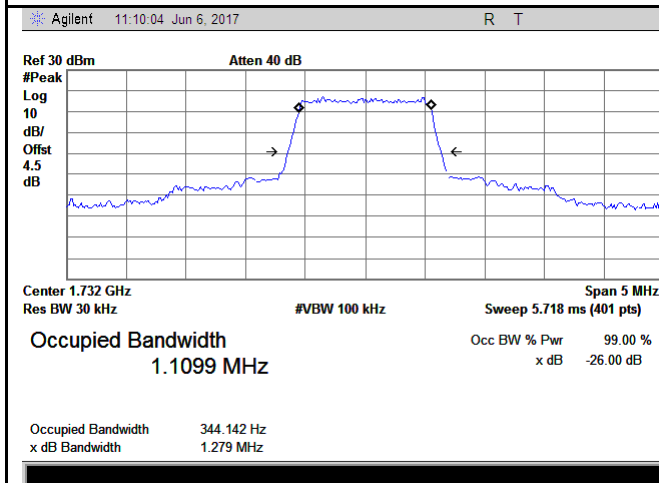
LTE band IV (Part 27)



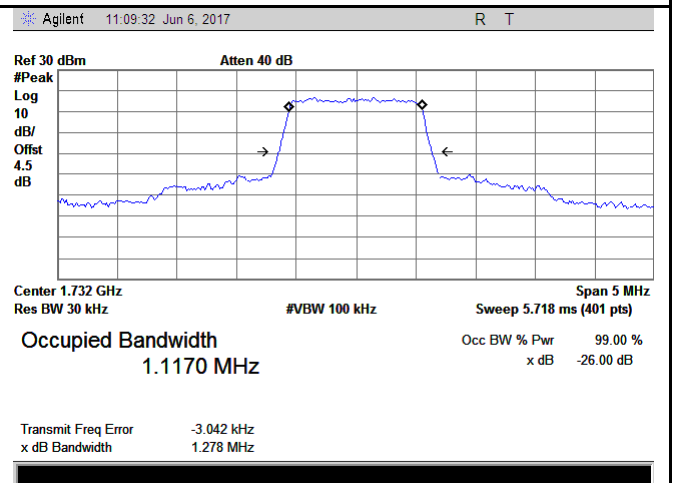
LTE band IV - Low CH QPSK-1.4



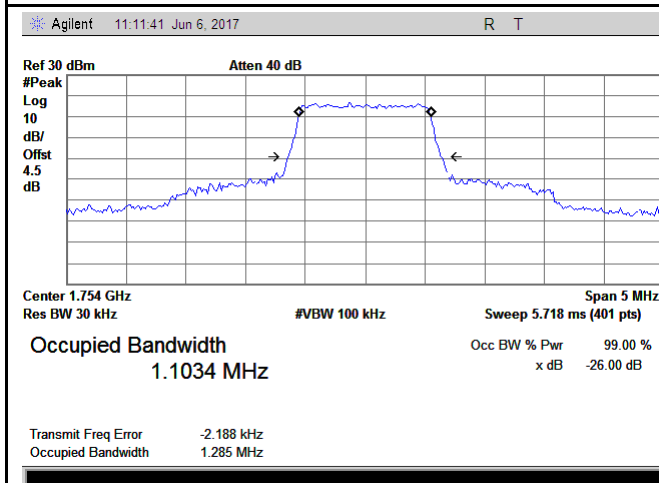
LTE band IV - Low CH 16QAM-1.4



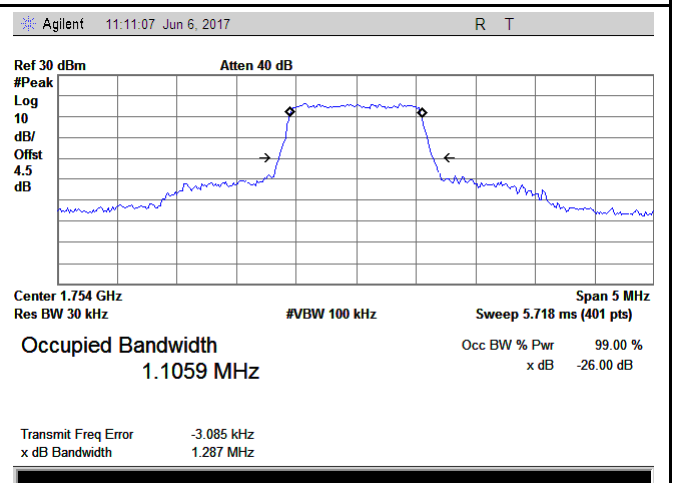
LTE band IV - Middle CH QPSK-1.4



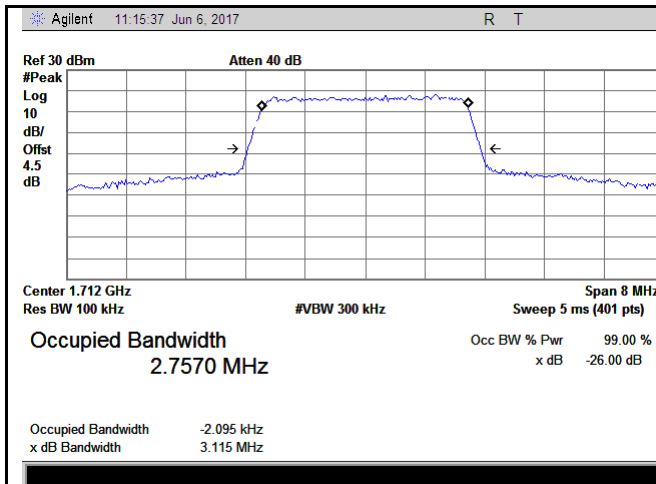
LTE band IV - Middle CH 16QAM-1.4



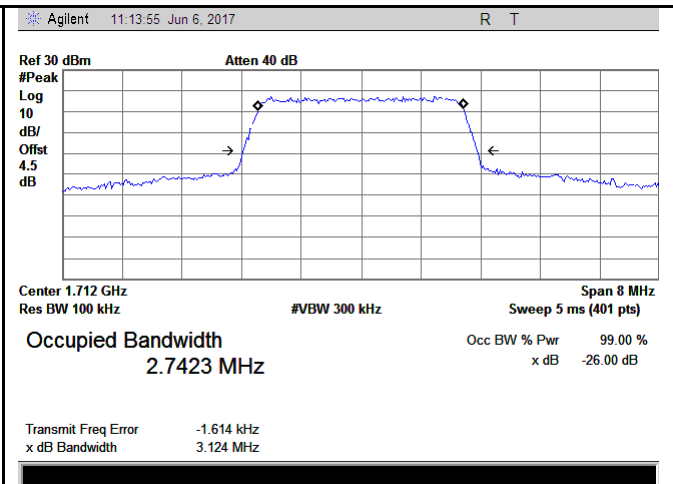
LTE band IV - High CH QPSK-1.4



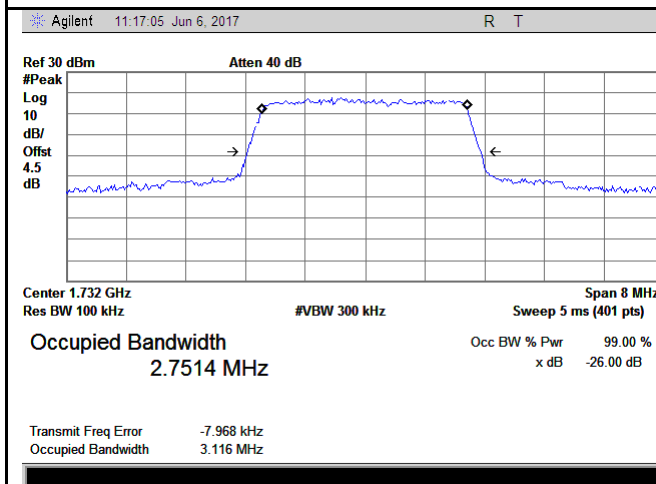
LTE band IV - High CH 16QAM-1.4



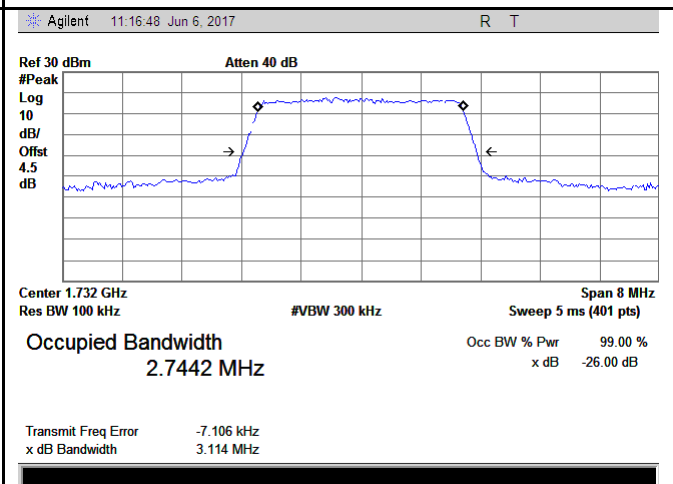
LTE band IV - Low CH QPSK-3



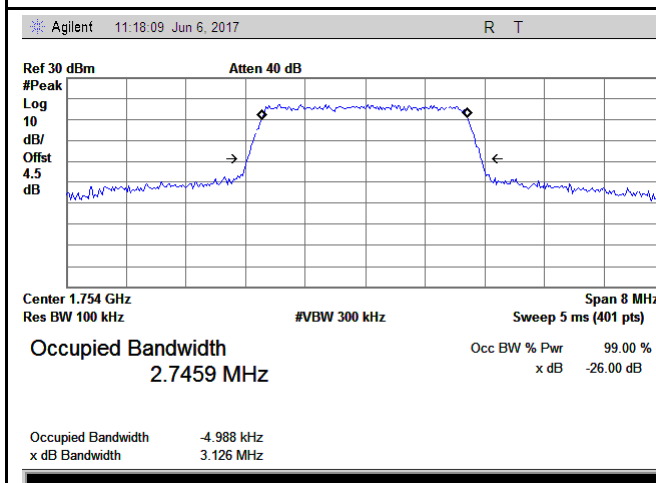
LTE band IV - Low CH 16QAM-3



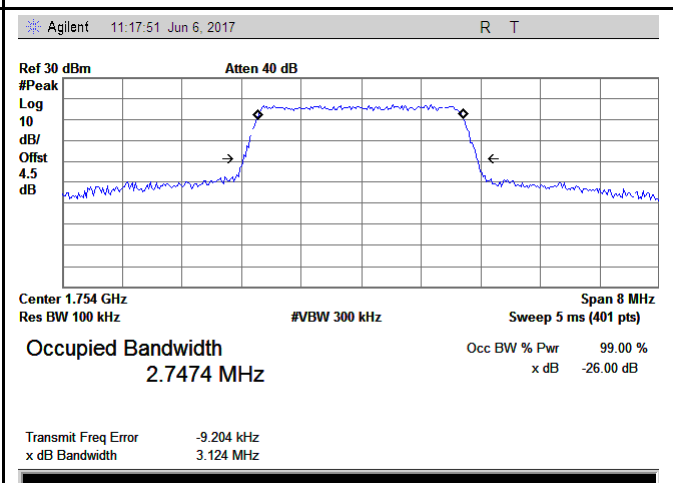
LTE band IV - Middle CH QPSK-3



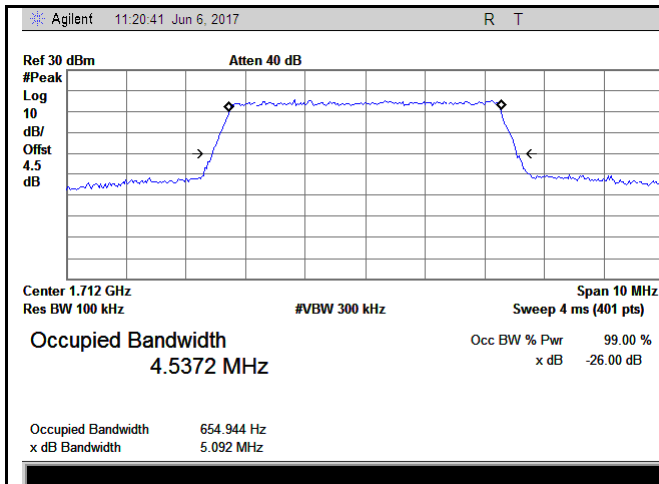
LTE band IV - Middle CH 16QAM-3



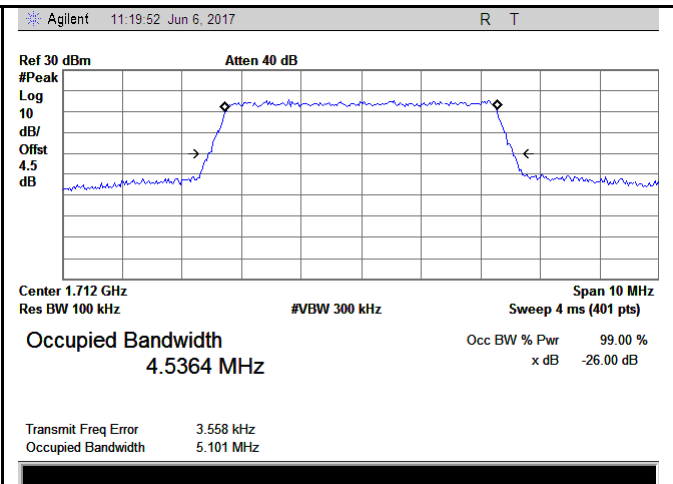
LTE band IV - High CH QPSK-3



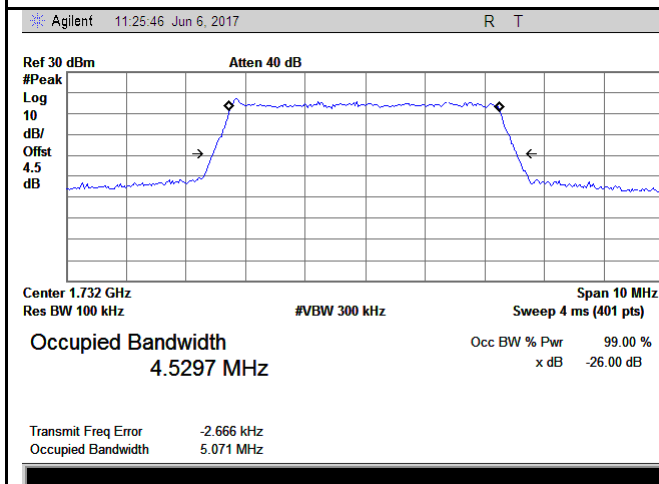
LTE band IV - High CH 16QAM-3



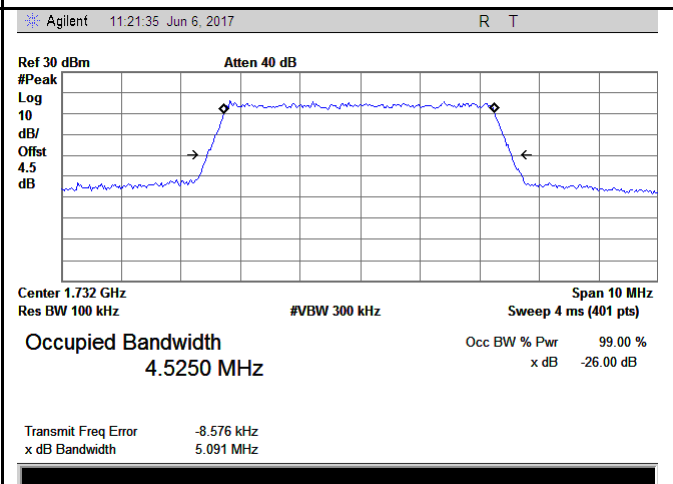
LTE band IV - Low CH QPSK-5



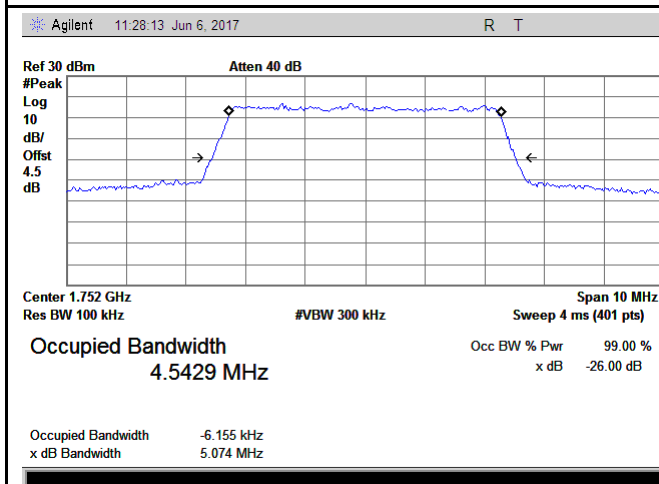
LTE band IV - Low CH 16QAM-5



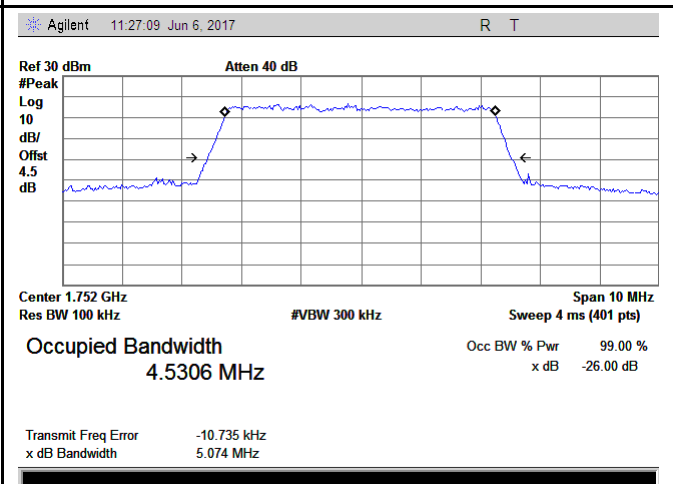
LTE band IV - Middle CH QPSK-5



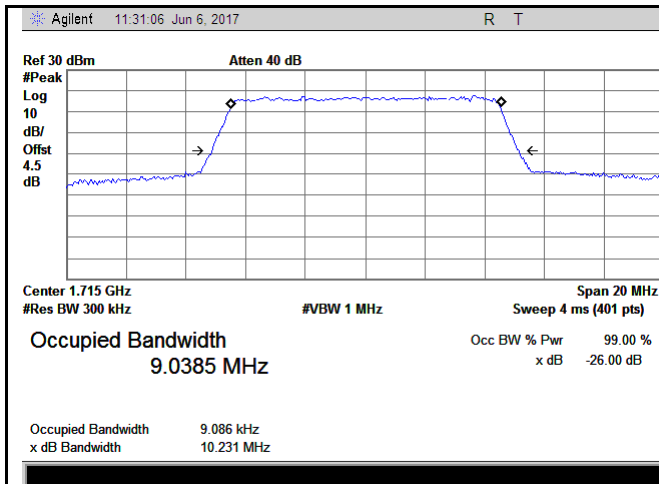
LTE band IV - Middle CH 16QAM-5



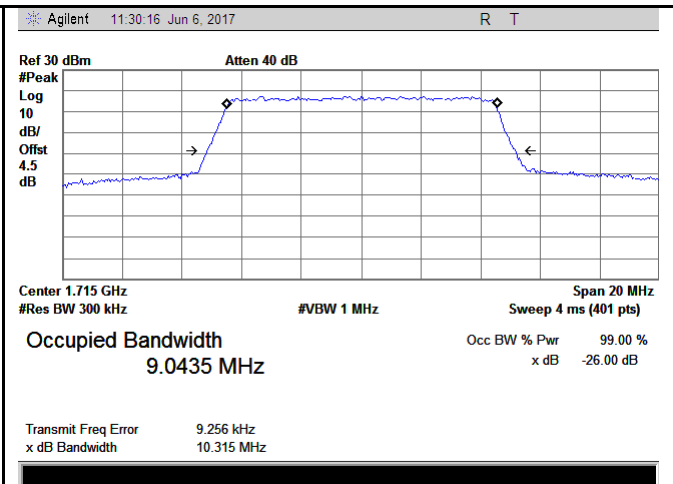
LTE band IV - High CH QPSK-5



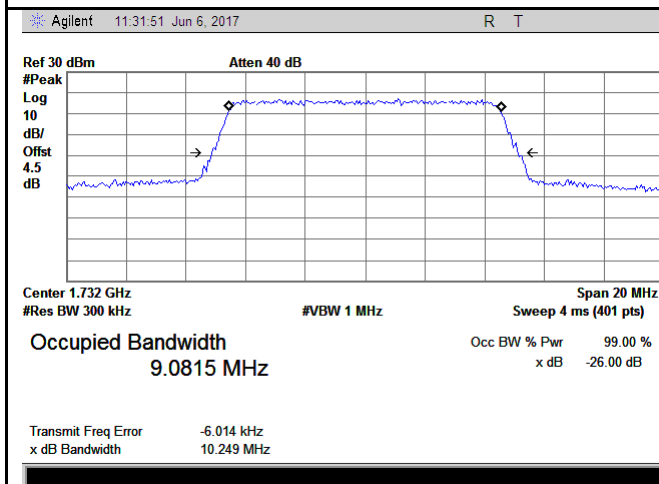
LTE band IV - High CH 16QAM-5



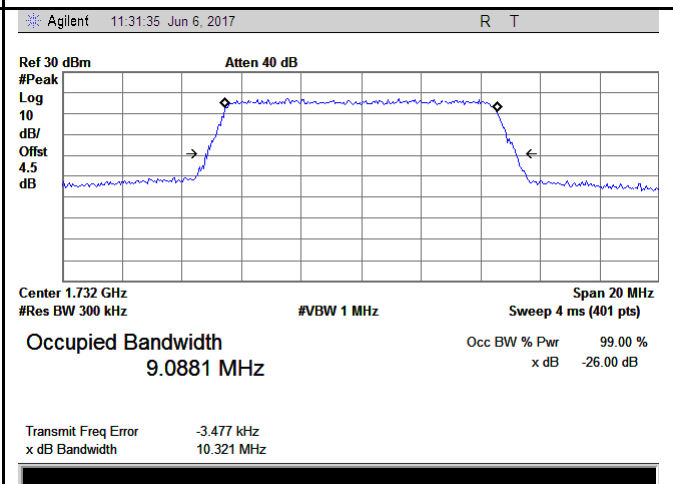
LTE band IV - Low CH QPSK-10



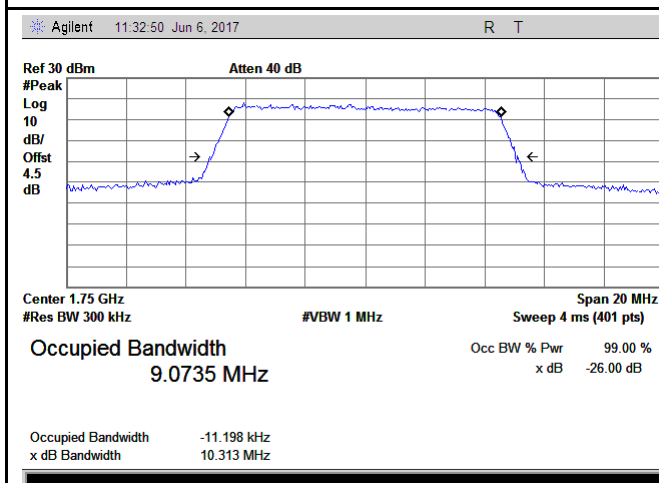
LTE band IV - Low CH 16QAM-10



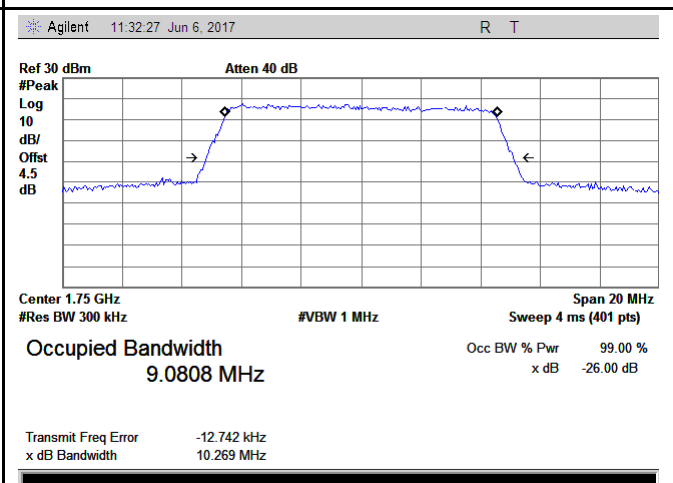
LTE band IV - Middle CH QPSK-10



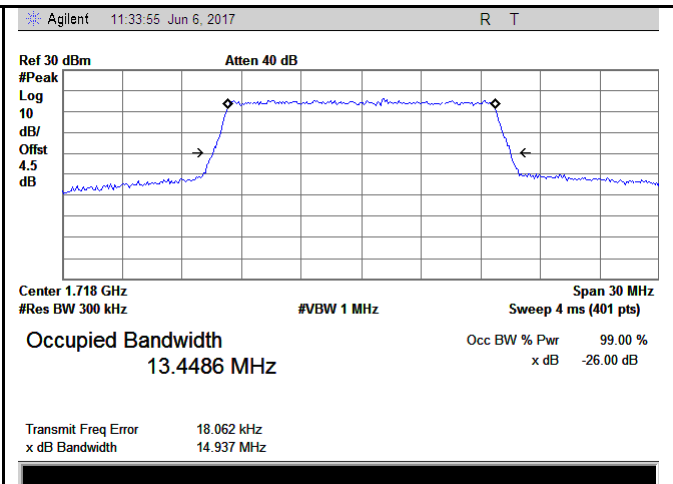
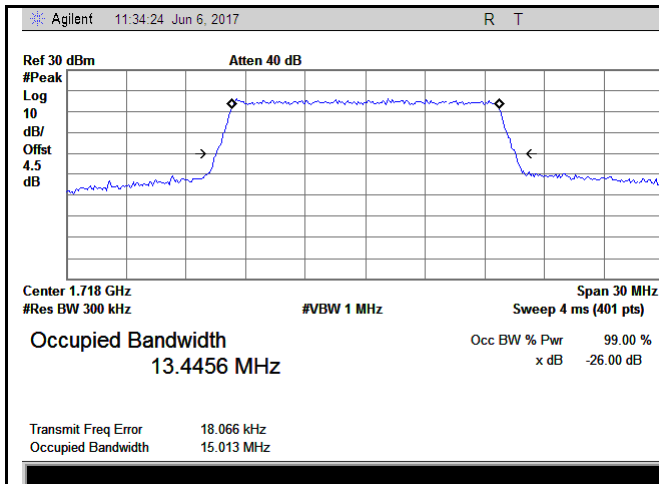
LTE band IV - Middle CH 16QAM-10



LTE band IV - High CH QPSK-10

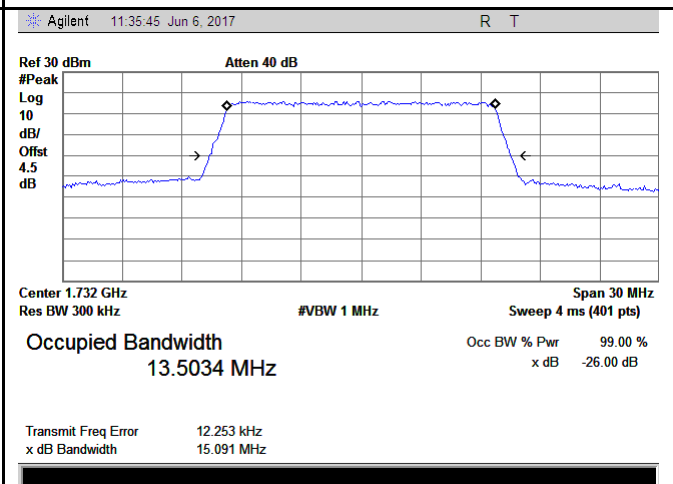
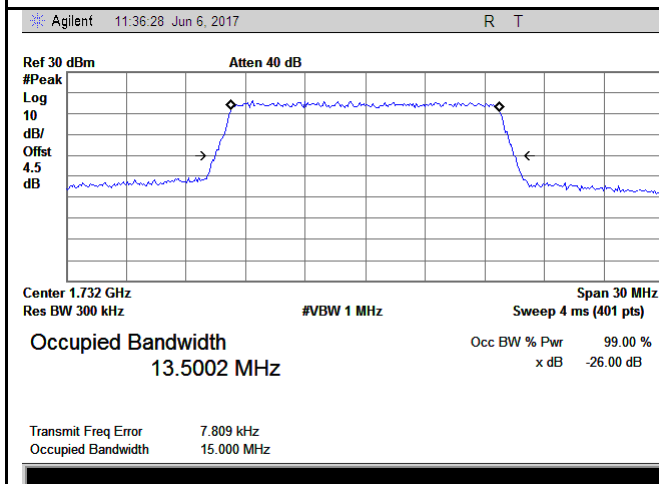


LTE band IV - High CH 16QAM-10



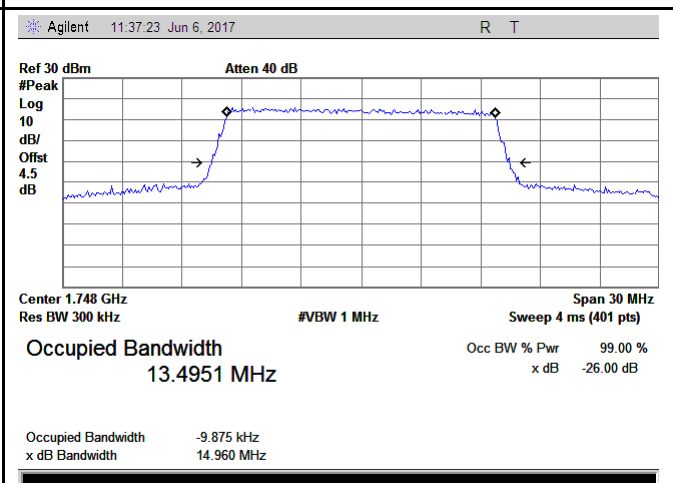
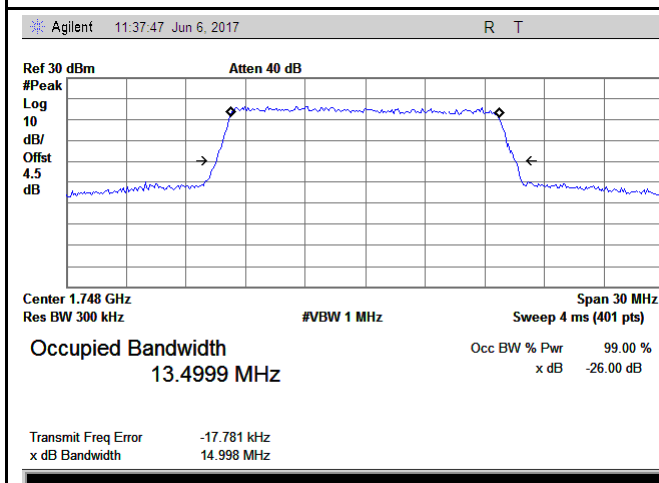
LTE band IV - Low CH QPSK-15

LTE band IV - Low CH 16QAM-15



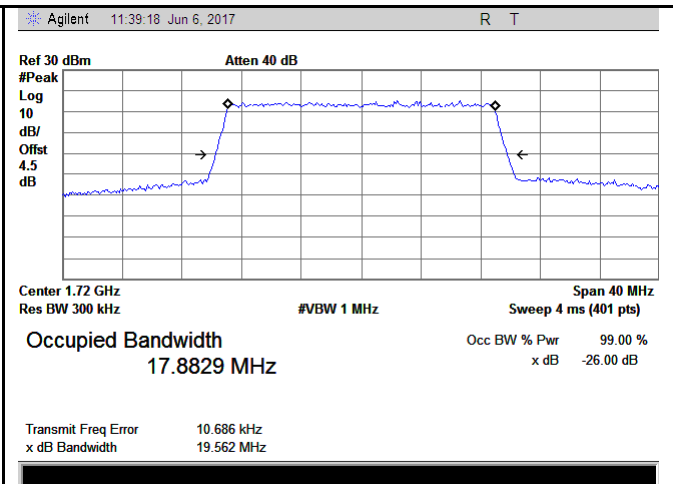
LTE band IV - Middle CH QPSK-15

LTE band IV - Middle CH 16QAM-15

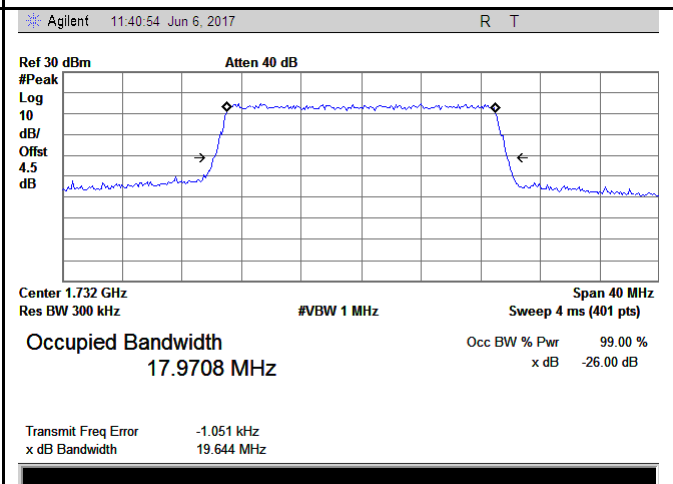


LTE band IV - High CH QPSK-15

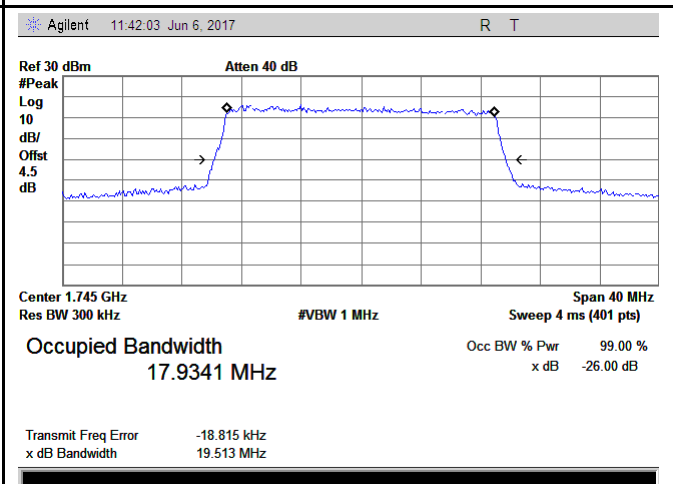
LTE band IV - High CH 16QAM-15



LTE band IV - Low CH 16QAM-20

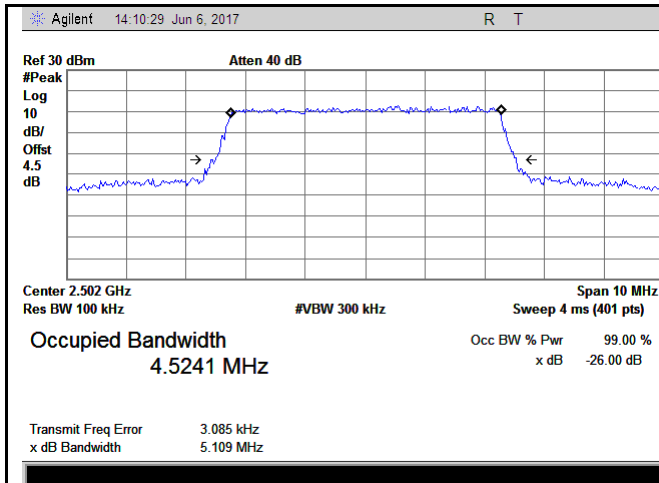


LTE band IV - Middle CH 16QAM-20

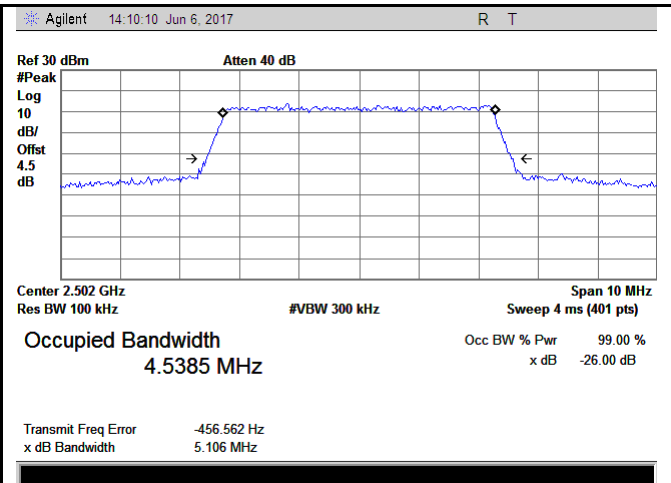


LTE band IV - High CH 16QAM-20

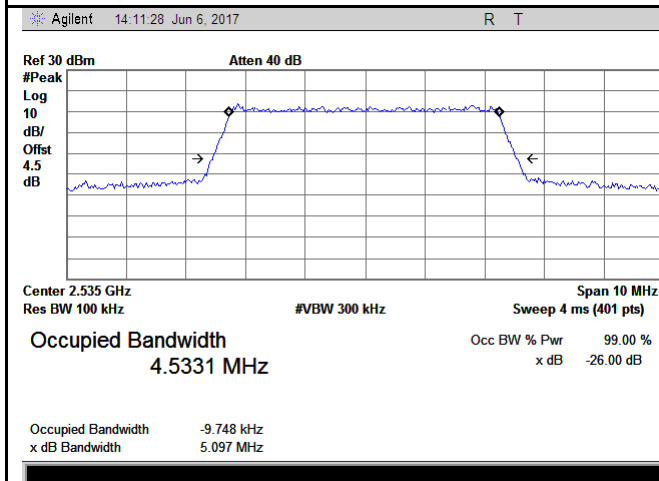
LTE band VII (Part 27)



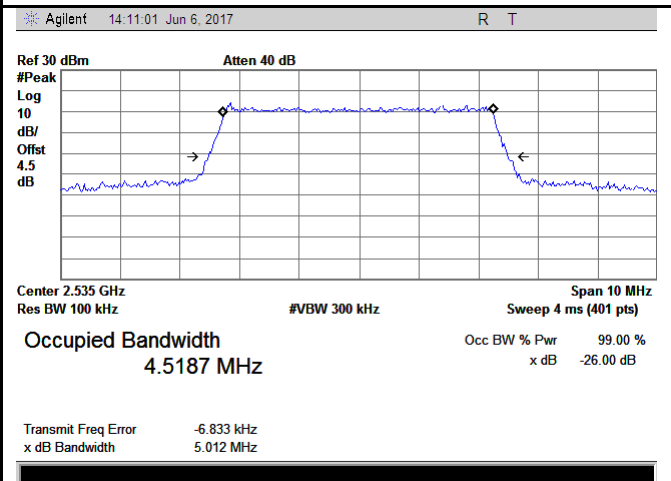
LTE band VII - Low CH QPSK-5



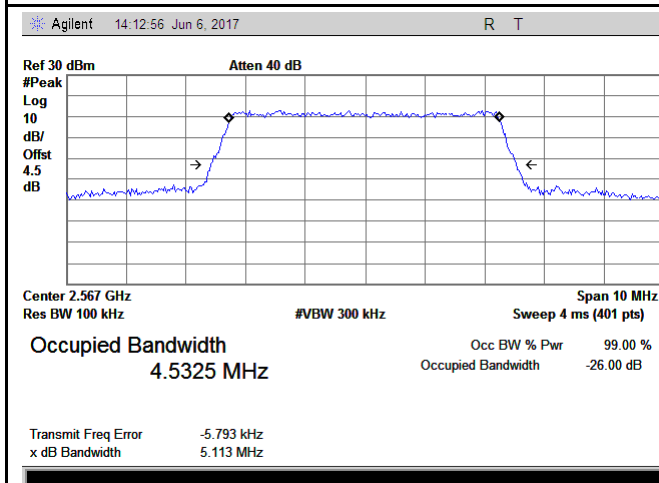
LTE band VII - Low CH 16QAM-5



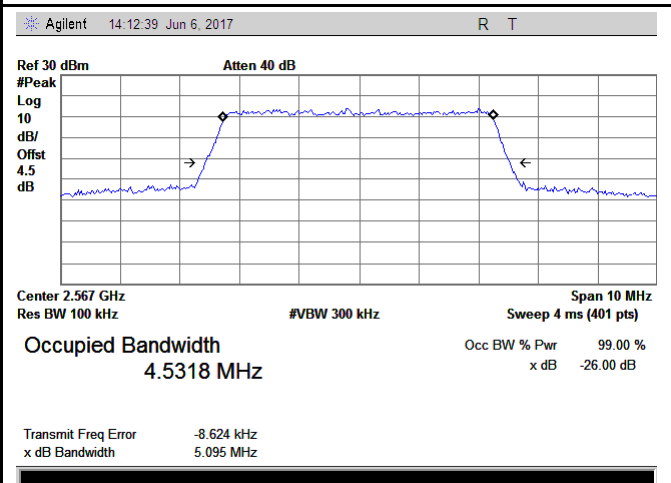
LTE band VII - Middle CH QPSK-5



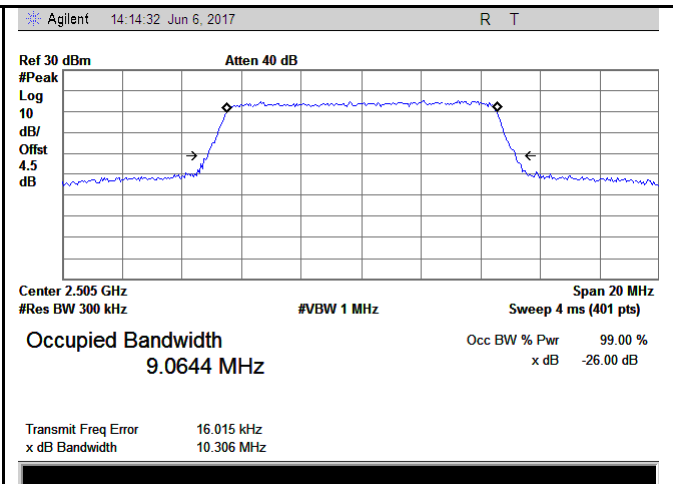
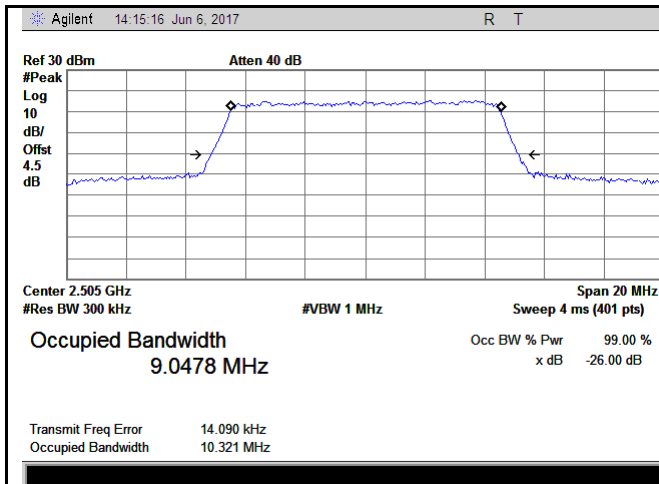
LTE band VII - Middle CH 16QAM-5



LTE band VII - High CH QPSK-5

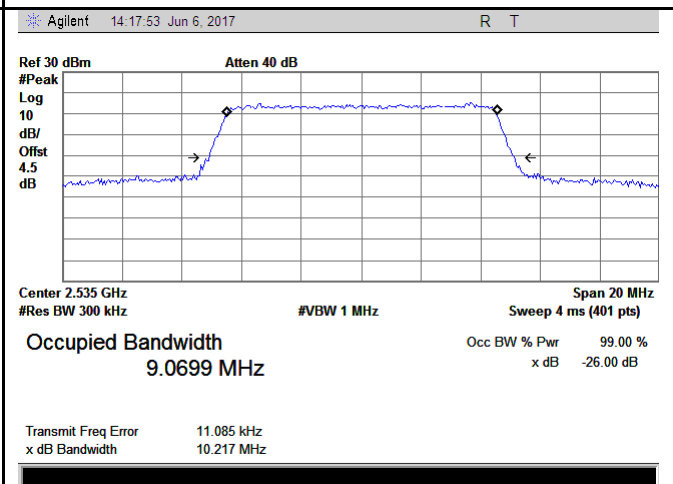
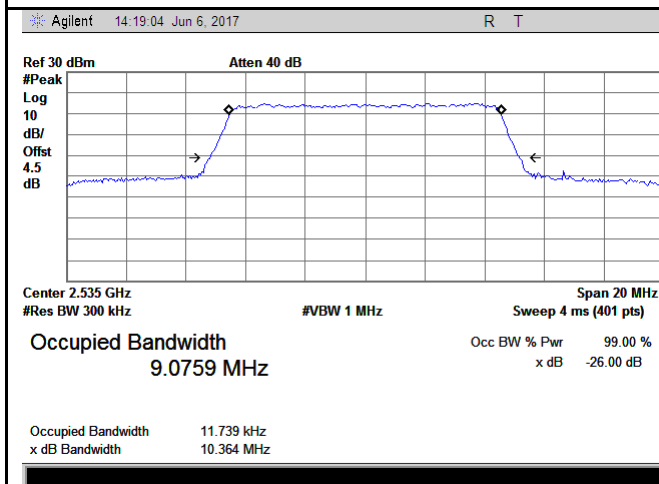


LTE band VII - High CH 16QAM-5



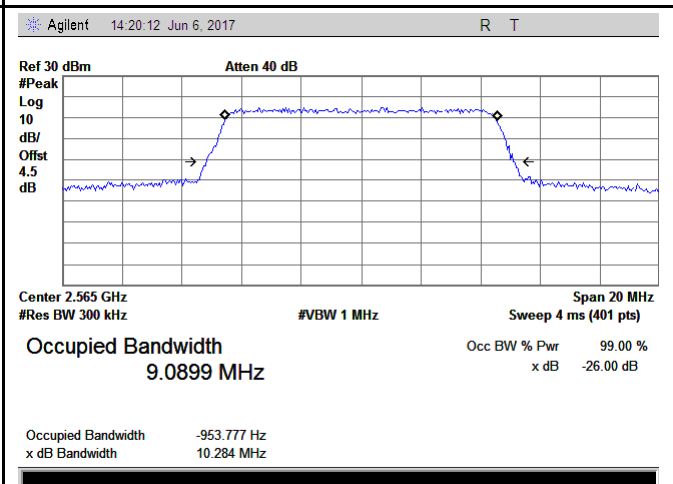
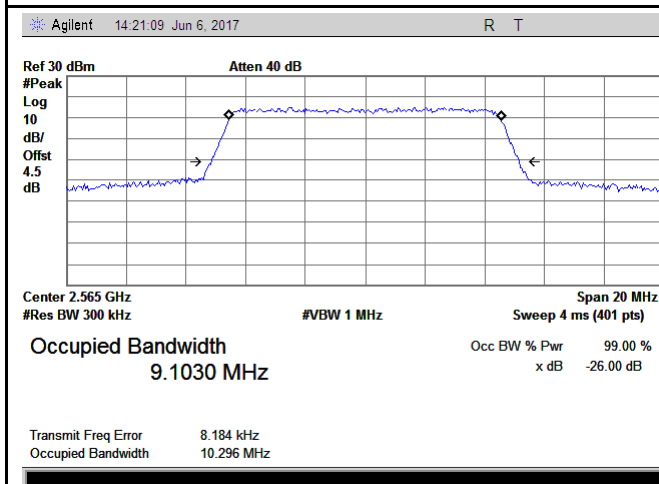
LTE band VII - Low CH QPSK-10

LTE band VII - Low CH 16QAM-10



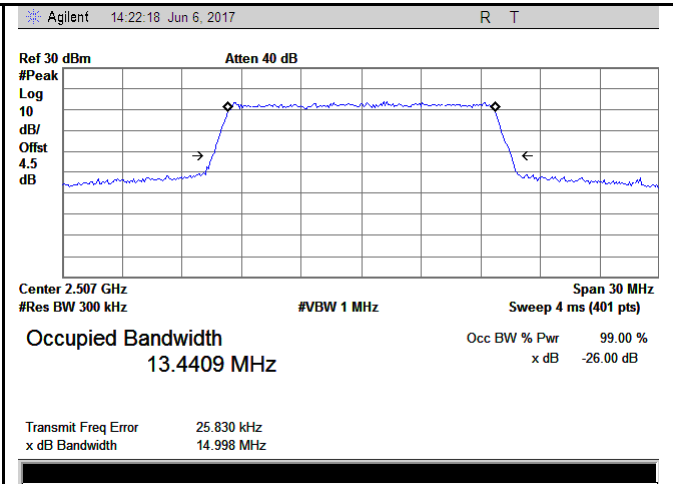
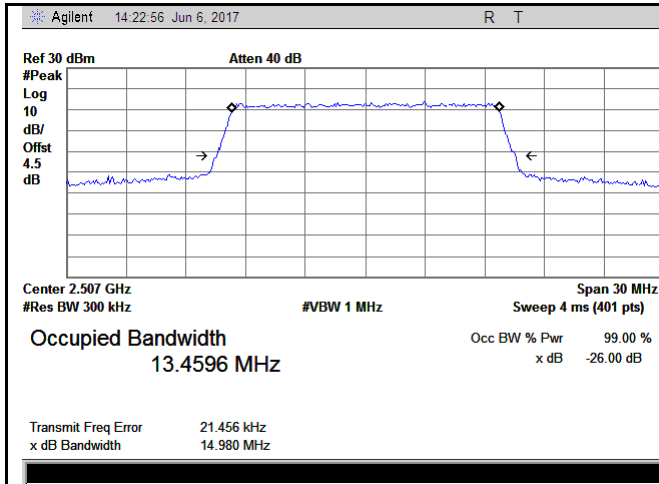
LTE band VII - Middle CH QPSK-10

LTE band VII - Middle CH 16QAM-10



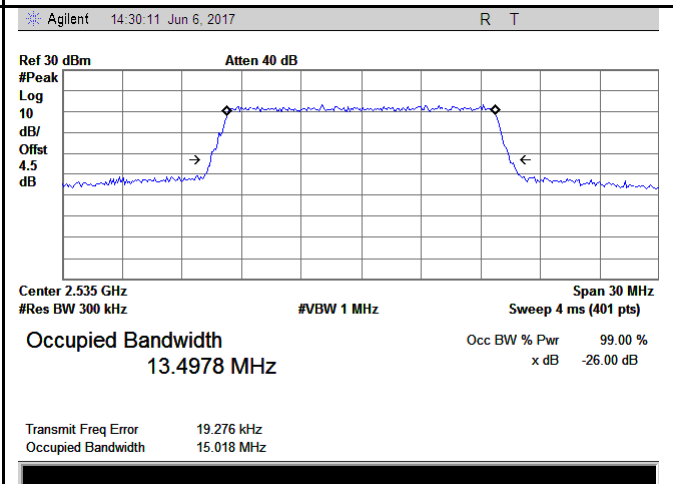
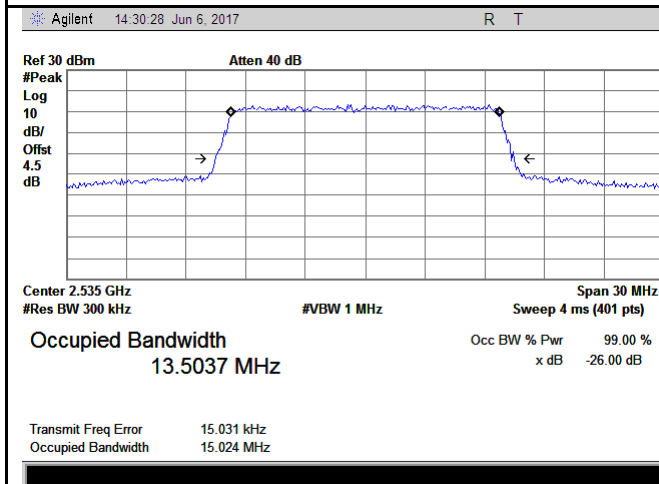
LTE band VII - High CH QPSK-10

LTE band VII - High CH 16QAM-10



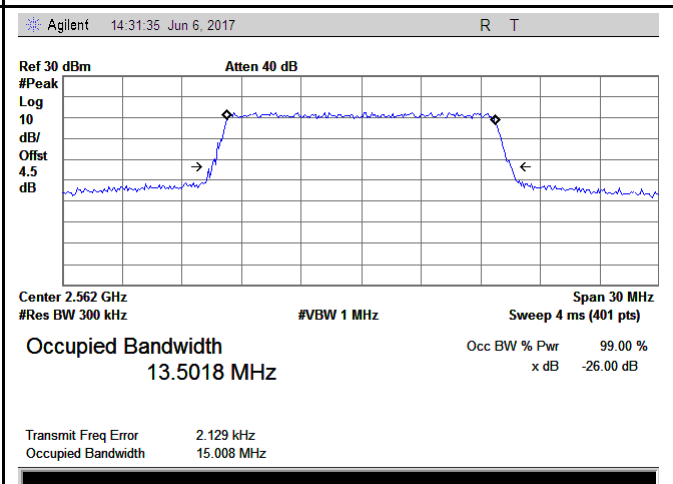
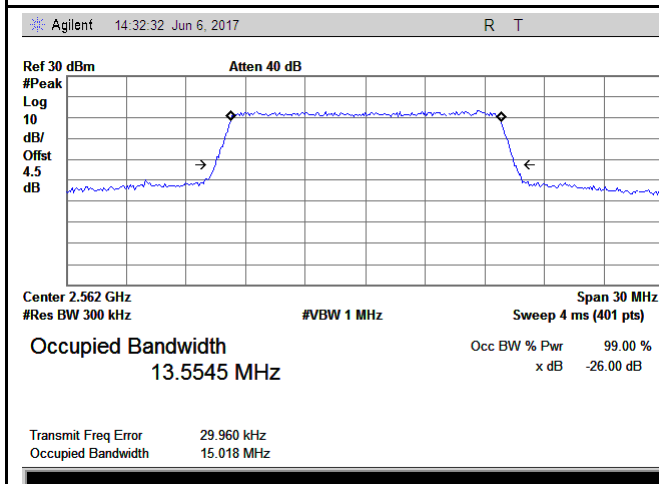
LTE band VII - Low CH QPSK-15

LTE band VII - Low CH 16QAM-15



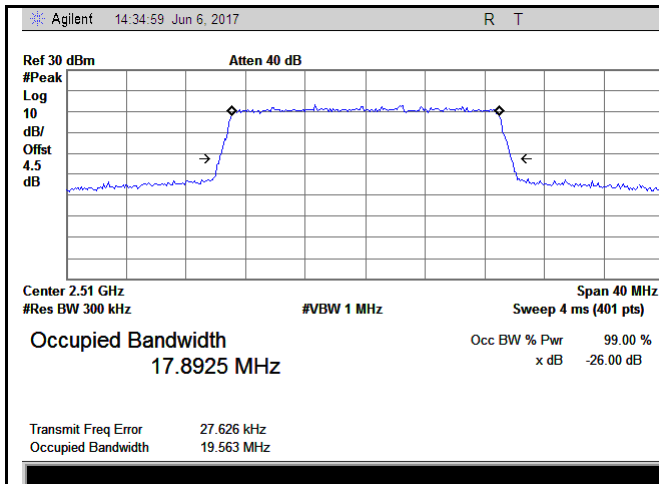
LTE band VII - Middle CH QPSK-15

LTE band VII - Middle CH 16QAM-15

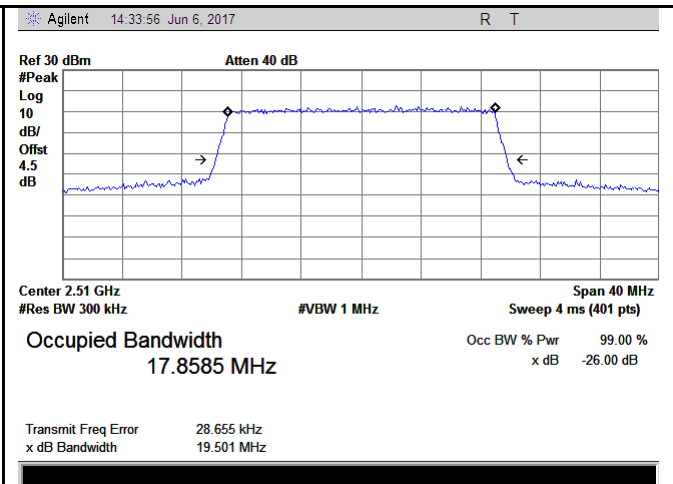


LTE band VII - High CH QPSK-15

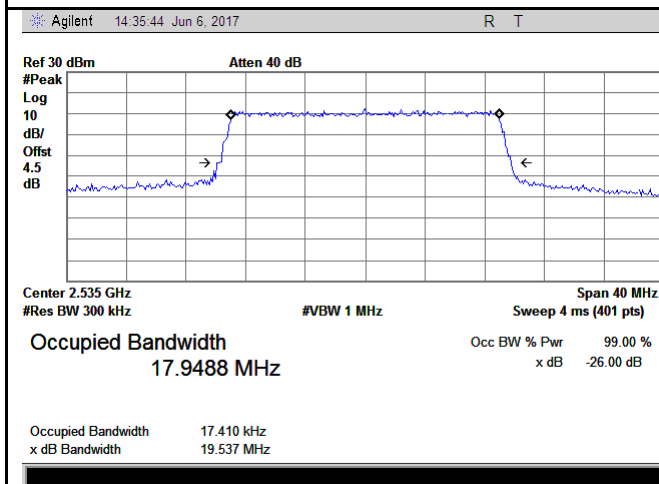
LTE band VII - High CH 16QAM-15



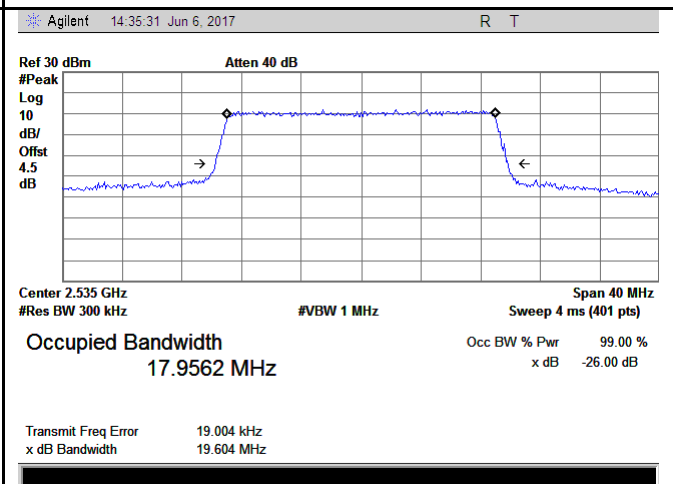
LTE band VII - Low CH QPSK-20



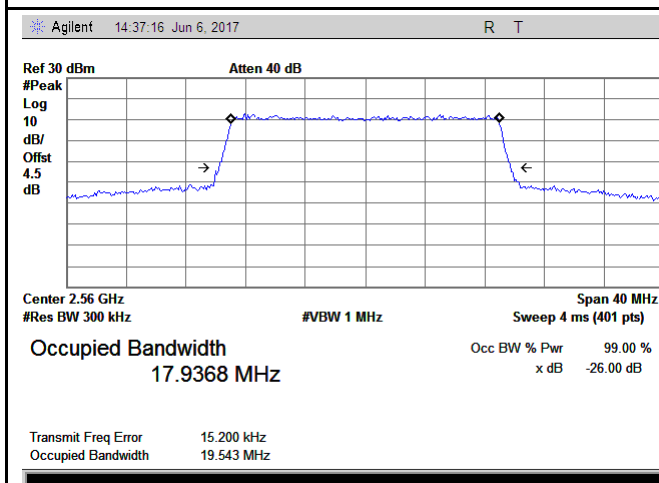
LTE band VII - Low CH 16QAM-20



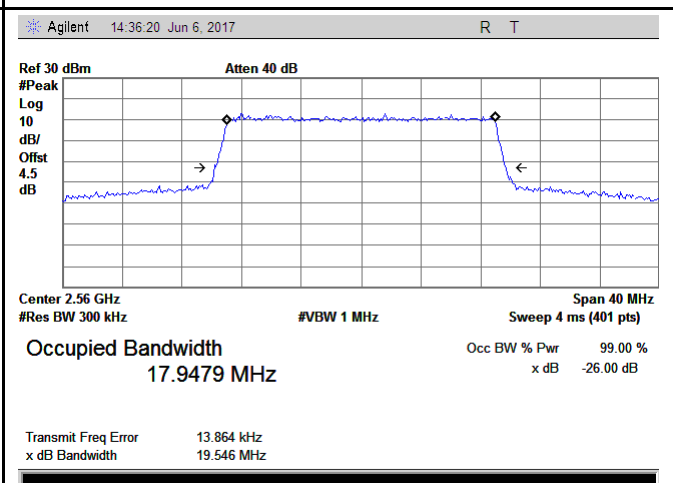
LTE band VII - Middle CH QPSK-20



LTE band VII - Middle CH 16QAM-20



LTE band VII - High CH QPSK-20



LTE band VII - High CH 16QAM-20