



TEST REPORT

No. I17N00068-LTE

for

Power Idea Technology (Shenzhen) Co., Ltd.

TD-LTE digital mobile phone

Model Name: RG730

IC: 11113A-RG730

with

Hardware Version: 1.04

Software Version: RG730_US_25_V1.01_V02W_20161205

Issued Date: 2017-03-06

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

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REPORT HISTORY

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I17N00068-LTE	Rev.0	1st edition	2017-03-06

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1. Test Laboratory

1.1. Testing Location

Company Name: CCTL ShenZhen, Telecommunication Technology Labs, Academy of
Telecommunication Research, MIIT
Address: TCL International E city No. 1001 Zhongshanyuan Road, Nanshan
District, Shenzhen, Guangdong, China
Postal Code: 518048
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1.2. Testing Environment

Normal Temperature: 15-35°C
Relative Humidity: 20-75%
Air pressure 980 - 1040 hPa

The climatic requirements above are general exclude the special requirements for dedicated test environments listed in section 5 and some specific test cases in other parts of this report.

1.3. Project data

Testing Start Date: 2017-01-18
Testing End Date: 2017-02-28

1.4. Signature

Lai Minghua
(Prepared this test report)

Yang Zi'an
(Reviewed this test report)

Zhang Bojun
Deputy Director of the laboratory
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2. Client Information

2.1. Applicant Information

Company Name: Power Idea Technology (Shenzhen) Co., Ltd.
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2.2. Manufacturer Information

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3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	TD-LTE digital mobile phone
Model Name	RG730
IC	11113A-RG730
Antenna	Integrated
RF power setting in TEST SW	RG730_US_25_V1.01_V02W_20161205
Extreme vol. Limits	3.6VDC to 4.2VDC (nominal: 3.7VDC)
Extreme temp. Tolerance	-30°C to +50°C

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of CTTL, Telecommunication Technology Labs, Academy of Telecommunication Research, MIIT

3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Sample Arrival Date
S01	867453021949725	1.04	RG730_US_25_V1.0 1_V02W_20161205	2017-01-18

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE used during the test

AE ID* Description

AE1	Battery
AE2	Charger

AE1

Model	Li-ion Rechargeable Battery
Manufacturer	Springpower Technology (Shenzhen) Co., LTD
Capacitance	3020mAh

AE2

Model	HKC0055010-2D
Manufacturer	SHENZHEN HUNTKEY ELECTRIC CO., LTD

*AE ID: is used to identify the test sample in the lab internally.

3.4. General Description

The Equipment Under Test (EUT) is a model TD-LTE mobile phone with integrated antenna. It consists of normal options: lithium battery, charger. Manual and specifications of the EUT were provided to fulfil the test.

4. Reference Documents

4.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
RSS-Gen	RSS-Gen —General Requirements for Compliance of Radio Apparatus	Issue 4
RSS-130	Mobile Broadband Services (MBS) Equipment Operating in the Frequency Bands 698-756 MHz and 777-787 MHz	Issue 1
RSS-132	Cellular Telephones Employing New Technologies Operating in the Bands 824-849 MHz and 869-894 MHz	Issue 3
RSS-133	2 GHz Personal Communications Services	Issue 6
RSS-139	Advanced Wireless Services Equipment Operating in the Bands 1710-1755 MHz and 2110-2155 MHz	Issue 3
ANSI/TIA-603-D	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards	2010
ANSI C63.4	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2014
KDB 971168 D01	Power Meas License Digital Systems	v02r02
ANSI C63.26	American National Standard of Procedures for Compliance Testing of Licensed Transmitters Used in Licensed Radio Service	2015

5. LABORATORY ENVIRONMENT

Semi-anechoic chamber SAC-1 (23 meters×17meters×10meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4Ω
Normalised site attenuation (NSA)	< ± 4 dB, 3m/10m distance, from 30 to 1000 MHz
Site voltage standing-wave ratio (S_{VSWR})	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 3000 MHz

Fully-anechoic chamber FAC-3 (9 meters×6.5 meters×4 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4 Ω
Site voltage standing-wave ratio (S_{VSWR})	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 4000 MHz

Shielded room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4 Ω

6. SUMMARY OF TEST RESULTS

6.1. Summary of test results

Abbreviations used in this clause:		
Verdict Column	P	Pass
	F	Fail
	NA	Not applicable
	NM	Not measured
Location Column	A/B/C/D	The test is performed in test location A, B, C or D which are described in section 1.1 of this report

LTE Band 2

Items	Test Name	Clause in IC rules RSS-Gen and RSS-133	Verdict
1	Output Power	6.4	P
2	Emission Limit	6.5	P
3	Frequency Stability	6.3	P
4	Occupied Bandwidth	6.6	P
5	Emission Bandwidth	6.6	P
6	Band Edge Compliance	6.5	P
7	Conducted Spurious Emission	6.13/6.5	P
8	Peak to Average Power Ratio	6.4	P

LTE Band 4

Items	Test Name	Clause in IC rules RSS-Gen and RSS-139	Verdict
1	Output Power	6.5	P
2	Emission Limit	6.6	P
3	Frequency Stability	6.4	P
4	Occupied Bandwidth	6.6	P
5	Emission Bandwidth	6.6	P
6	Band Edge Compliance	6.6	P
7	Conducted Spurious Emission	6.6	P
8	Peak to Average Power Ratio	6.5	P

LTE Band 5

Items	Test Name	Clause in IC rules RSS-Gen and RSS-132	Verdict
1	Output Power	5.4	P
2	Emission Limit	5.5	P
3	Frequency Stability	5.3	P
4	Occupied Bandwidth	6.6	P
5	Emission Bandwidth	6.6	P
6	Band Edge Compliance	5.5	P
7	Conducted Spurious Emission	6.13/5.5	P
8	Peak to Average Power Ratio	5.4	P

LTE Band 7

Items	Test Name	Clause in IC rules RSS-Gen and RSS-133	Verdict
1	Output Power	6.4	P
2	Emission Limit	6.5	P
3	Frequency Stability	6.3	P
4	Occupied Bandwidth	6.6	P
5	Emission Bandwidth	6.6	P
6	Band Edge Compliance	6.5	P
7	Conducted Spurious Emission	6.13/6.5	P
8	Peak to Average Power Ratio	6.4	P

LTE Band 12

Items	Test Name	Clause in IC rules RSS-Gen and RSS-130	Verdict
1	Output Power	4.4	P
2	Emission Limit	4.6	P
3	Frequency Stability	4.3	P
4	Occupied Bandwidth	6.6	P
5	Emission Bandwidth	6.6	P
6	Band Edge Compliance	4.6	P
7	Conducted Spurious Emission	4.6	P
8	Peak to Average Power Ratio	4.4	P

LTE Band 13

Items	Test Name	Clause in IC rules RSS-Gen and RSS- 130	Verdict
1	Output Power	4.4	P
2	Emission Limit	4.6	P
3	Frequency Stability	4.3	P
4	Occupied Bandwidth	6.6	P
5	Emission Bandwidth	6.6	P
6	Band Edge Compliance	4.6	P
7	Conducted Spurious Emission	4.6	P
8	Peak to Average Power Ratio	4.4	P

LTE Band 17

Items	Test Name	Clause in IC rules RSS-Gen and RSS- 130	Verdict
1	Output Power	4.4	P
2	Emission Limit	4.6	P
3	Frequency Stability	4.3	P
4	Occupied Bandwidth	6.6	P
5	Emission Bandwidth	6.6	P
6	Band Edge Compliance	4.6	P
7	Conducted Spurious Emission	4.6	P
8	Peak to Average Power Ratio	4.4	P

LTE Band 25

Items	Test Name	Clause in IC rules RSS-Gen and RSS- 133	Verdict
1	Output Power	6.4	P
2	Emission Limit	6.5	P
3	Frequency Stability	6.3	P
4	Occupied Bandwidth	6.6	P
5	Emission Bandwidth	6.6	P
6	Band Edge Compliance	6.5	P
7	Conducted Spurious Emission	6.13/6.5	P
8	Peak to Average Power Ratio	6.4	P

LTE Band 26

Items	Test Name	Clause in IC rules RSS-Gen and RSS-132	Verdict
1	Output Power	5.4	P
2	Emission Limit	5.5	P
3	Frequency Stability	5.3	P
4	Occupied Bandwidth	6.6	P
5	Emission Bandwidth	6.6	P
6	Band Edge Compliance	5.5	P
7	Conducted Spurious Emission	6.13/5.5	P
8	Peak to Average Power Ratio	5.4	P

LTE Band 38

Items	Test Name	Clause in IC rules RSS-Gen and RSS-133	Verdict
1	Output Power	6.4	P
2	Emission Limit	6.5	P
3	Frequency Stability	6.3	P
4	Occupied Bandwidth	6.6	P
5	Emission Bandwidth	6.6	P
6	Band Edge Compliance	6.5	P
7	Conducted Spurious Emission	6.13/6.5	P
8	Peak to Average Power Ratio	6.4	P

7. Test Equipments Utilized

NO.	Description	TYPE	Manufacture	series number	CAL DUE DATE
1	Test Receiver	ESR7	R&S	101675	2017-07-21
2	BiLog Antenna	VULB9163	Schwarzbeck	9163330	2017-04-22
3	Horn Antenna	3117	ETS-Lindgren	00066585	2019-03-05
4	Antenna	SBA 9113	814	Schwarzbeck	/
5	Antenna	SBA 9112	302	Schwarzbeck	/
6	Antenna	3160-09	LM4750/00118388	ETS-Lindgren	2018.07.14
7	preamplifier	83017A	MY39501110	Agilent	/
8	Signal Generator	SMR40	R&S	100541	2017-06-27
9	Fully Anechoic Chamber	FACT5-2.0	ETS-Lindgren	4166	2018-05-13
10	Spectrum Analyzer	FSP40	R&S	100378	2017-12-15
11	Universal Radio Communication Tester	CMU200	R&S	114544	2017-09-09
12	Universal Radio Communication Tester	CMW500	R&S	158344	2017-07-21
13	Universal Radio Communication Tester	CMU200	R&S	123210	2017-12-25
14	Spectrum Analyzer	FSU	R&S	200679	2017-12-25
15	Temperature Chamber	SH-241	ESPECs	92007516	2017-11-29
16	DC Power Supply	U3606A	Agilent Technologies	MY50450012	2017-11-22

Test software

Item	Name	Vesion
Radiated	EMC32	Version 10.01.00

ANNEX A: MEASUREMENT RESULTS

A.1 OUTPUT POWER

A.1.1 Summary

During the process of testing, the EUT was controlled via Rhode & Schwarz Digital Radio Communication tester (CMW500) to ensure max power transmission and proper modulation. This result contains peak output power and ERP/EIRP measurements for the EUT. In all cases, output power is within the specified limits.

A.1.2 Conducted

A.1.2.1 Method of Measurements

The EUT was set up for the max output power with pseudo random data modulation. These measurements were done at 3 frequencies (bottom, middle and top of operational frequency range) for each bandwidth.

A.1.2.2 Measurement result

LTE band 2

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)	
			QPSK	16QAM
1.4MHz	1 RB high	1909.3	22.26	21.60
		1880.0	22.44	21.76
		1850.7	22.29	21.47
	1 RB low	1909.3	22.27	21.60
		1880.0	22.45	21.75
		1850.7	22.29	21.44
	50% RB mid	1909.3	22.32	21.38
		1880.0	22.51	21.56
		1850.7	22.36	21.30
	100% RB	1909.3	21.39	20.50
		1880.0	21.52	20.65
		1850.7	21.41	20.42
3MHz	1 RB high	1908.5	22.23	21.58
		1880.0	22.37	21.69
		1851.5	22.26	21.48
	1 RB low	1908.5	22.25	21.60
		1880.0	22.41	21.73
		1851.5	22.26	21.44
	50% RB mid	1908.5	21.38	20.50
		1880.0	21.54	20.66
		1851.5	21.39	20.39

	100% RB	1908.5	21.41	20.47
		1880.0	21.54	20.61
		1851.5	21.44	20.40
5MHz	1 RB high	1907.5	22.22	21.56
		1880.0	22.40	21.73
		1852.5	22.25	21.52
	1 RB low	1907.5	22.31	21.63
		1880.0	22.47	21.82
		1852.5	22.33	21.51
	50% RB mid	1907.5	21.39	20.47
		1880.0	21.56	20.65
		1852.5	21.42	20.40
	100% RB	1907.5	21.37	20.42
		1880.0	21.50	20.57
		1852.5	21.41	20.38
10MHz	1 RB high	1905.0	22.25	21.61
		1880.0	22.38	21.73
		1855.0	22.36	21.67
	1 RB low	1905.0	22.34	21.65
		1880.0	22.51	21.84
		1855.0	22.36	21.52
	50% RB mid	1905.0	21.33	20.41
		1880.0	21.51	20.58
		1855.0	21.42	20.42
	100% RB	1905.0	21.38	20.45
		1880.0	21.52	20.59
		1855.0	21.43	20.45
15MHz	1 RB high	1902.5	22.32	21.67
		1880.0	22.50	21.83
		1857.5	22.37	21.67
	1 RB low	1902.5	22.35	21.69
		1880.0	22.51	21.85
		1857.5	22.38	21.56
	50% RB mid	1902.5	22.39	21.44
		1880.0	22.57	21.62
		1857.5	22.41	21.44
	100% RB	1902.5	21.39	20.46
		1880.0	21.52	20.58
		1857.5	21.44	20.44

20MHz	1 RB high	1900.0	22.21	21.60
		1880.0	22.31	21.65
		1860.0	22.39	21.76
	1 RB low	1900.0	22.37	21.73
		1880.0	22.52	21.86
		1860.0	22.39	21.55
	50% RB mid	1900.0	21.34	20.43
		1880.0	21.49	20.58
		1860.0	21.45	20.52
	100% RB	1900.0	21.34	20.39
		1880.0	21.48	20.53
		1860.0	21.45	20.48

LTE band 4

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)	
			QPSK	16QAM
1.4MHz	1 RB high	1754.3	22.61	21.81
		1732.5	22.55	21.78
		1710.7	22.54	21.74
	1 RB low	1754.3	22.61	21.83
		1732.5	22.57	21.82
		1710.7	22.55	21.75
	50% RB mid	1754.3	22.69	21.66
		1732.5	22.63	21.60
		1710.7	22.60	21.57
	100% RB	1754.3	21.71	20.73
		1732.5	21.64	20.67
		1710.7	21.64	20.66
3MHz	1 RB high	1753.5	22.55	21.80
		1732.5	22.49	21.73
		1711.5	22.49	21.69
	1 RB low	1753.5	22.57	21.80
		1732.5	22.53	21.76
		1711.5	22.52	21.73
	50% RB mid	1753.5	21.70	20.71
		1732.5	21.66	20.66
		1711.5	21.67	20.66
	100% RB	1753.5	21.70	20.67
		1732.5	21.64	20.63
		1711.5	21.66	20.63
5MHz	1 RB high	1752.5	22.55	21.80
		1732.5	22.49	21.74
		1712.5	22.50	21.71
	1 RB low	1752.5	22.61	21.85
		1732.5	22.62	21.88
		1712.5	22.60	21.80
	50% RB mid	1752.5	21.71	20.68
		1732.5	21.69	20.64
		1712.5	21.68	20.63
	100% RB	1752.5	21.69	20.65
		1732.5	21.64	20.60
		1712.5	21.64	20.59
10MHz	1 RB high	1750.0	22.60	21.80
		1732.5	22.49	21.72

	1 RB low	1715.0	22.50	21.80
		1750.0	22.53	21.74
		1732.5	22.66	21.88
		1715.0	22.62	21.82
	50% RB mid	1750.0	21.67	20.63
		1732.5	21.66	20.60
		1715.0	21.64	20.59
	100% RB	1750.0	21.67	20.64
		1732.5	21.66	20.61
		1715.0	21.69	20.64
15MHz	1 RB high	1747.5	22.54	21.74
		1732.5	22.64	21.89
		1717.5	22.64	21.85
	1 RB low	1747.5	22.57	21.78
		1732.5	22.67	21.89
		1717.5	22.66	21.84
	50% RB mid	1747.5	22.58	21.54
		1732.5	22.72	21.69
		1717.5	22.67	21.62
	100% RB	1747.5	21.61	20.56
		1732.5	21.72	20.68
		1717.5	21.68	20.62
20MHz	1 RB high	1745.0	22.59	21.83
		1732.5	22.46	21.65
		1720.0	22.62	21.82
	1 RB low	1745.0	22.65	21.86
		1732.5	22.71	21.92
		1720.0	22.69	21.84
	50% RB mid	1745.0	21.61	20.58
		1732.5	21.68	20.65
		1720.0	21.72	20.67
	100% RB	1745.0	21.64	20.59
		1732.5	21.64	20.59
		1720.0	21.69	20.64

LTE band 5

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)	
			QPSK	16QAM
1.4MHz	1 RB high	848.3	22.38	21.70
		836.5	22.31	21.66
		824.7	22.29	21.53
	1 RB low	848.3	22.36	21.67
		836.5	22.28	21.61
		824.7	22.31	21.53
	50% RB mid	848.3	22.41	21.46
		836.5	22.33	21.39
		824.7	22.35	21.34
	100% RB	848.3	21.51	20.60
		836.5	21.38	20.47
		824.7	21.36	20.40
3MHz	1 RB high	847.5	22.33	21.63
		836.5	22.30	21.64
		825.5	22.27	21.50
	1 RB low	847.5	22.33	21.61
		836.5	22.25	21.60
		825.5	22.26	21.54
	50% RB mid	847.5	21.49	20.56
		836.5	21.41	20.47
		825.5	21.39	20.41
	100% RB	847.5	21.52	20.53
		836.5	21.36	20.38
		825.5	21.38	20.34
5MHz	1 RB high	846.5	22.38	21.71
		836.5	22.32	21.66
		826.5	22.31	21.55
	1 RB low	846.5	22.35	21.58
		836.5	22.33	21.64
		826.5	22.37	21.61
	50% RB mid	846.5	21.54	20.53
		836.5	21.41	20.44
		826.5	21.42	20.39
	100% RB	846.5	21.49	20.47
		836.5	21.39	20.37
		826.5	21.38	20.35
10MHz	1 RB high	844.0	22.46	21.79
		836.5	22.35	21.63

	1 RB low	829.0	22.37	21.67
		844.0	22.43	21.72
		836.5	22.40	21.67
		829.0	22.40	21.62
	50% RB mid	844.0	21.44	20.40
		836.5	21.43	20.43
		829.0	21.43	20.40
	100% RB	844.0	21.49	20.47
		836.5	21.44	20.44
		829.0	21.45	20.43

LTE band 7

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)	
			QPSK	16QAM
5MHz	1 RB high	2567.5	22.10	21.46
		2535.0	22.69	22.08
		2502.5	22.50	21.89
	1 RB low	2567.5	22.66	22.03
		2535.0	22.99	22.38
		2502.5	22.36	21.77
	50% RB mid	2567.5	21.25	20.44
		2535.0	21.62	20.80
		2502.5	21.22	20.41
	100% RB	2567.5	21.31	20.53
		2535.0	21.70	20.87
		2502.5	21.30	20.49
10MHz	1 RB high	2565.0	21.85	21.15
		2535.0	22.24	21.63
		2505.0	22.45	21.78
	1 RB low	2565.0	23.27	22.47
		2535.0	22.88	22.23
		2505.0	21.99	21.34
	50% RB mid	2565.0	21.89	21.01
		2535.0	21.75	20.90
		2505.0	21.35	20.51
	100% RB	2565.0	21.91	21.06
		2535.0	21.79	20.96
		2505.0	21.41	20.58
15MHz	1 RB high	2562.5	23.31	22.50
		2535.0	23.06	22.26
		2507.5	22.39	21.66
	1 RB low	2562.5	23.26	22.47
		2535.0	23.54	22.72
		2507.5	22.34	21.60
	50% RB mid	2562.5	23.33	22.33
		2535.0	23.35	22.39
		2507.5	22.36	21.43
	100% RB	2562.5	22.32	21.37
		2535.0	22.45	21.50
		2507.5	21.46	20.56
20MHz	1 RB high	2560.0	23.39	22.25

		2535.0	23.51	22.45
		2510.0	23.58	22.85
	1 RB low	2560.0	23.30	22.62
		2535.0	23.49	22.76
		2510.0	22.94	22.02
	50% RB mid	2560.0	22.38	21.43
		2535.0	22.59	21.53
		2510.0	22.32	21.25
	100% RB	2560.0	22.39	21.44
		2535.0	22.56	21.58
		2510.0	22.53	21.42

LTE band 12

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)	
			QPSK	16QAM
1.4MHz	1 RB high	715.3	22.37	21.72
		707.5	22.40	21.73
		699.7	22.34	21.70
	1 RB low	715.3	22.37	21.70
		707.5	22.40	21.73
		699.7	22.33	21.70
	50% RB mid	715.3	22.45	21.49
		707.5	22.45	21.52
		699.7	22.40	21.49
	100% RB	715.3	21.47	20.59
		707.5	21.49	20.62
		699.7	21.42	20.57
3MHz	1 RB high	714.5	22.36	21.71
		707.5	22.37	21.72
		700.5	21.81	21.21
	1 RB low	714.5	22.07	21.40
		707.5	22.35	21.69
		700.5	22.30	21.66
	50% RB mid	714.5	21.48	20.61
		707.5	21.51	20.61
		700.5	21.30	20.41
	100% RB	714.5	21.43	20.50
		707.5	21.48	20.55
		700.5	21.24	20.30
5MHz	1 RB high	713.5	22.38	21.73
		707.5	22.42	21.77
		701.5	22.41	21.75
	1 RB low	713.5	22.45	21.79
		707.5	22.42	21.75
		701.5	22.38	21.75
	50% RB mid	713.5	21.39	20.45
		707.5	21.56	20.60
		701.5	21.10	20.35
	100% RB	713.5	21.42	20.46
		707.5	21.48	20.52
		701.5	21.24	20.38
10MHz	1 RB high	711.0	22.52	21.84
		707.5	22.55	21.87



	1 RB low	704.0	22.52	21.86
		711.0	22.44	21.79
		707.5	22.44	21.78
		704.0	22.39	21.72
	50% RB mid	711.0	21.52	20.54
		707.5	21.51	20.54
		704.0	21.40	20.43
	100% RB	711.0	21.53	20.56
		707.5	21.53	20.56
		704.0	21.42	20.44

LTE band 13

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)	
			QPSK	16QAM
5MHz	1 RB high	784.5	22.17	21.45
		782.0	22.38	21.75
		779.5	22.43	21.63
	1 RB low	784.5	22.43	21.69
		782.0	22.49	21.77
		779.5	22.42	21.52
	50% RB mid	784.5	21.49	20.55
		782.0	21.55	20.52
		779.5	21.62	20.63
	100% RB	784.5	21.41	20.45
		782.0	21.52	20.50
		779.5	21.53	20.53
10MHz	1 RB high	782.0	22.23	21.52
		782.0	22.22	21.53
		782.0	22.22	21.53
	1 RB low	782.0	22.45	21.64
		782.0	22.46	21.64
		782.0	22.46	21.65
	50% RB mid	782.0	21.52	20.50
		782.0	21.52	20.50
		782.0	21.52	20.50
	100% RB	782.0	21.49	20.52
		782.0	21.49	20.52
		782.0	21.49	20.51

LTE band 17

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)	
			QPSK	16QAM
5MHz	1 RB high	713.5	22.36	21.71
		710.0	22.38	21.72
		706.5	22.39	21.72
	1 RB low	713.5	22.42	21.74
		710.0	22.39	21.73
		706.5	22.39	21.73
	50% RB mid	713.5	21.50	20.56
		710.0	21.54	20.59
		706.5	21.18	20.33
	100% RB	713.5	21.46	20.51
		710.0	21.46	20.52
		706.5	21.29	20.34
10MHz	1 RB high	711.0	22.46	21.79
		710.0	22.45	21.76
		709.0	22.45	21.77
	1 RB low	711.0	21.89	21.22
		710.0	22.18	21.52
		709.0	22.39	21.75
	50% RB mid	711.0	21.49	20.54
		710.0	21.49	20.54
		709.0	21.43	20.47
	100% RB	711.0	21.48	20.52
		710.0	21.42	20.47
		709.0	21.42	20.46

LTE band 25

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)	
			QPSK	16QAM
1.4MHz	1 RB high	1914.3	22.42	21.51
		1882.5	22.47	21.70
		1850.7	22.27	21.41
	1 RB low	1914.3	22.42	21.53
		1882.5	22.48	21.73
		1850.7	22.29	21.37
	50% RB mid	1914.3	22.50	21.39
		1882.5	22.52	21.51
		1850.7	22.34	21.26
	100% RB	1914.3	21.55	20.55
		1882.5	21.56	20.66
		1850.7	21.37	20.42
3MHz	1 RB high	1913.5	22.39	21.46
		1882.5	22.41	21.66
		1851.5	22.25	21.39
	1 RB low	1913.5	22.35	21.51
		1882.5	22.45	21.69
		1851.5	22.27	21.34
	50% RB mid	1913.5	21.53	20.54
		1882.5	21.54	20.63
		1851.5	21.39	20.35
	100% RB	1913.5	21.53	20.53
		1882.5	21.56	20.60
		1851.5	21.51	20.35
5MHz	1 RB high	1912.5	22.38	21.49
		1882.5	22.42	21.68
		1852.5	22.27	21.47
	1 RB low	1912.5	22.35	21.56
		1882.5	22.52	21.77
		1852.5	22.34	21.42
	50% RB mid	1912.5	21.51	20.51
		1882.5	21.58	20.62
		1852.5	21.42	20.36
	100% RB	1912.5	21.49	20.48
		1882.5	21.55	20.58
		1852.5	21.42	20.34
10MHz	1 RB high	1910.0	22.08	21.38

		1882.5	22.44	21.68
		1855.0	22.38	21.59
		1910.0	22.35	21.62
	1 RB low	1882.5	22.56	21.83
		1855.0	22.38	21.47
		1910.0	21.41	20.43
	50% RB mid	1882.5	21.56	20.59
		1855.0	21.45	20.40
		1910.0	21.48	20.50
	100% RB	1882.5	21.61	20.63
		1855.0	21.46	20.44
15MHz	1 RB high	1907.5	22.35	21.61
		1882.5	22.57	21.83
		1857.5	22.41	21.61
	1 RB low	1907.5	22.40	21.64
		1882.5	22.57	21.86
		1857.5	22.43	21.52
	50% RB mid	1907.5	22.44	21.45
		1882.5	22.61	21.62
		1857.5	22.46	21.40
	100% RB	1907.5	21.43	20.46
		1882.5	21.65	20.66
		1857.5	21.49	20.43
20MHz	1 RB high	1905.0	22.42	21.56
		1882.5	22.37	21.64
		1860.0	22.46	21.72
	1 RB low	1905.0	22.44	21.70
		1882.5	22.58	21.86
		1860.0	22.43	21.56
	50% RB mid	1905.0	21.38	20.44
		1882.5	21.56	20.61
		1860.0	21.51	20.52
	100% RB	1905.0	21.41	20.45
		1882.5	21.56	20.60
		1860.0	21.52	20.52

LTE band 26

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)	
			QPSK	16QAM
1.4MHz	1 RB high	848.3	22.37	21.65
		831.5	22.24	21.56
		814.7	22.27	21.59
	1 RB low	848.3	22.36	21.65
		831.5	22.24	21.57
		814.7	22.31	21.58
	50% RB mid	848.3	22.42	21.43
		831.5	22.32	21.36
		814.7	22.35	21.37
	100% RB	848.3	21.49	20.58
		831.5	21.35	20.42
		814.7	21.40	20.48
3MHz	1 RB high	847.5	22.33	21.57
		831.5	22.19	21.46
		815.5	22.20	21.40
	1 RB low	847.5	22.28	21.48
		831.5	22.20	21.42
		815.5	22.25	21.37
	50% RB mid	847.5	21.45	20.52
		831.5	21.37	20.43
		815.5	21.40	20.38
	100% RB	847.5	21.45	20.48
		831.5	21.36	20.36
		815.5	21.43	20.38
5MHz	1 RB high	846.5	22.34	21.60
		831.5	22.22	21.51
		816.5	22.33	21.59
	1 RB low	846.5	22.36	21.57
		831.5	22.29	21.49
		816.5	22.34	21.55
	50% RB mid	846.5	21.49	20.49
		831.5	21.40	20.40
		816.5	21.45	20.44
	100% RB	846.5	21.45	20.43
		831.5	21.33	20.34
		816.5	21.41	20.40
10MHz	1 RB high	844.0	22.32	21.65

		831.5	22.24	21.55
		820.0	22.32	21.57
	1 RB low	844.0	22.25	21.57
		831.5	22.32	21.56
		820.0	22.35	21.59
	50% RB mid	844.0	21.41	20.37
		831.5	21.34	20.33
		820.0	21.42	20.40
	100% RB	844.0	21.42	20.41
		831.5	21.37	20.37
		820.0	21.42	20.40
15MHz	1 RB high	841.5	22.30	21.57
		831.5	22.37	21.59
		822.5	22.44	21.70
	1 RB low	841.5	22.32	21.62
		831.5	22.37	21.60
		822.5	22.38	21.63
	50% RB mid	841.5	22.34	21.37
		831.5	22.42	21.39
		822.5	22.47	21.48
	100% RB	841.5	21.32	20.31
		831.5	21.43	20.39
		822.5	21.42	20.44

LTE band 38

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)	
			QPSK	16QAM
5MHz	1 RB high	2617.5	22.22	21.52
		2595.0	22.30	21.60
		2572.5	22.22	21.40
	1 RB low	2617.5	22.20	21.58
		2595.0	22.31	21.53
		2572.5	22.21	21.38
	50% RB mid	2617.5	21.39	20.64
		2595.0	21.50	20.67
		2572.5	21.28	20.33
	100% RB	2617.5	21.33	20.49
		2595.0	21.40	20.57
		2572.5	21.26	20.30
10MHz	1 RB high	2615.0	22.20	21.53
		2595.0	22.31	21.69
		2575.0	22.25	21.43
	1 RB low	2615.0	22.22	21.60
		2595.0	22.29	21.52
		2575.0	22.20	21.38
	50% RB mid	2615.0	21.34	20.56
		2595.0	21.42	20.56
		2575.0	21.30	20.35
	100% RB	2615.0	21.37	20.58
		2595.0	21.42	20.55
		2575.0	21.31	20.35
15MHz	1 RB high	2612.5	22.16	21.61
		2595.0	22.31	21.58
		2577.5	22.25	21.43
	1 RB low	2612.5	22.24	21.64
		2595.0	22.28	21.53
		2577.5	22.20	21.40
	50% RB mid	2612.5	22.24	21.53
		2595.0	22.33	21.42
		2577.5	22.23	21.24
	100% RB	2612.5	21.31	20.54
		2595.0	21.39	20.55
		2577.5	21.27	20.33
20MHz	1 RB high	2610.0	22.20	21.54

		2595.0	22.35	21.69
		2580.0	22.31	21.53
	1 RB low	2610.0	22.21	21.55
		2595.0	22.27	21.50
		2580.0	22.19	21.37
	50% RB mid	2610.0	21.35	20.58
		2595.0	21.43	20.56
		2580.0	21.33	20.39
	100% RB	2610.0	21.35	20.49
		2595.0	21.47	20.54
		2580.0	21.34	20.37

A.1.3 Radiated

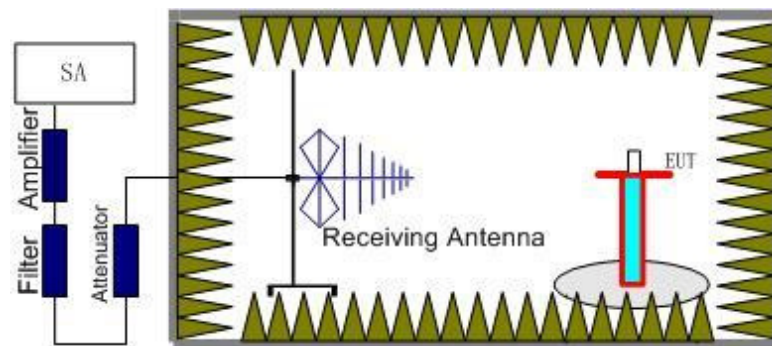
A.1.3.1 Description

This is the test for the maximum radiated power from the EUT.

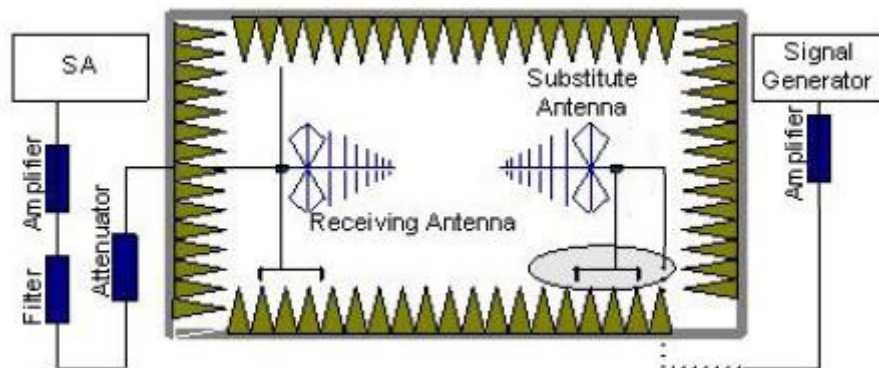
A.1.3.2 Method of Measurement

The measurements procedures in TIA-603-D-2010 are used.

1. EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.5m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.



2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (P_r).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the substitution antenna. Adjust the level of the signal generator output until the value of the receiver reaches the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. An amplifier should be connected to the Signal Source output port. And the cable should be

connected between the amplifier and the substitution antenna.

The cable loss (P_{cl}), the substitution antenna Gain (G_a) and the amplifier Gain (P_{Ag}) should be recorded after test.

The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{\text{Mea}} - P_{\text{Ag}} - P_{\text{cl}} + G_a$$

5. This value is EIRP since the measurement is calibrated using an antenna of known gain (unit dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole, $\text{ERP} = \text{EIRP} - 2.15$.

A.1.3.3 Measurement result

LTE Band 2- EIRP 24. 232(b)

Limits: $\leq 33\text{dBm}$ (2W)

LTE Band 2_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-8.45	-29.40	0.15	21.10	33.00	H
1880.00	-5.70	-29.30	0.25	23.85	33.00	H
1909.30	-7.01	-29.30	0.35	22.64	33.00	H

LTE Band 2_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-8.72	-29.40	0.15	20.83	33.00	H
1880.00	-6.43	-29.30	0.25	23.12	33.00	H
1908.50	-6.58	-29.30	0.35	23.07	33.00	H

LTE Band 2_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-8.32	-29.40	0.15	21.23	33.00	H
1880.00	-6.56	-29.30	0.25	22.99	33.00	H
1907.50	-7.09	-29.30	0.35	22.56	33.00	H

LTE Band 2_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-9.28	-29.40	0.15	20.27	33.00	H
1880.00	-7.40	-29.30	0.25	22.15	33.00	H
1905.00	-7.10	-29.30	0.35	22.55	33.00	H

LTE Band 2_15MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-9.75	-29.40	0.15	19.80	33.00	H
1880.00	-8.73	-29.30	0.25	20.82	33.00	H
1902.50	-8.82	-29.30	0.35	20.83	33.00	H

LTE Band 2_20 MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-10.54	-29.40	0.15	19.01	33.00	H
1880.00	-9.33	-29.30	0.25	20.22	33.00	H
1900.00	-9.27	-29.30	0.35	20.38	33.00	H

LTE Band 2_1.4MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-7.88	-29.40	0.15	21.67	33.00	H
1880.00	-6.45	-29.30	0.25	23.11	33.00	H
1909.30	-6.16	-29.30	0.35	23.49	33.00	H

LTE Band 2_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-7.99	-29.40	0.15	21.56	33.00	H
1880.00	-6.60	-29.30	0.25	22.95	33.00	H
1908.50	-6.26	-29.30	0.35	23.39	33.00	H

LTE Band 2_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-7.95	-29.40	0.15	21.60	33.00	H
1880.00	-6.57	-29.30	0.25	22.98	33.00	H
1907.50	-6.18	-29.30	0.35	23.47	33.00	H

LTE Band 2_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-9.05	-29.40	0.15	20.50	33.00	H
1880.00	-6.94	-29.30	0.25	22.61	33.00	H
1905.00	-6.62	-29.30	0.35	23.03	33.00	H

LTE Band 2_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-10.31	-29.40	0.15	19.24	33.00	H
1880.00	-9.19	-29.30	0.25	20.36	33.00	H
1902.50	-9.10	-29.30	0.35	20.55	33.00	H

LTE Band 2_20 MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-9.68	-29.40	0.15	19.87	33.00	H
1880.00	-9.52	-29.30	0.25	20.03	33.00	H
1900.00	-8.44	-29.30	0.35	21.21	33.00	H

Peak EIRP (dBm)=P_{Mea}(-5.70dBm)- (P_{cl}+P_{Ag}) (-29.30dB)+G_a(0.25dB) =23.85dBm

LTE Band 4- EIRP 27.50(d)

Limits: ≤30dBm (1W)

LTE Band 4_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-7.11	-29.60	0.39	22.88	30.00	H
1732.50	-5.21	-29.60	0.27	24.66	30.00	H
1754.30	-5.74	-29.50	0.17	23.93	30.00	H

LTE Band 4_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-7.39	-29.60	0.39	22.60	30.00	H
1732.50	-5.17	-29.60	0.27	24.70	30.00	H
1753.50	-5.32	-29.50	0.17	24.36	30.00	H

LTE Band 4_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-6.83	-29.60	0.39	23.16	30.00	H
1732.50	-5.56	-29.60	0.27	24.31	30.00	H
1752.50	-5.88	-29.50	0.17	23.79	30.00	H

LTE Band 4_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-7.68	-29.60	0.39	22.31	30.00	H
1732.50	-6.09	-29.60	0.27	23.79	30.00	H
1750.50	-6.32	-29.50	0.17	23.35	30.00	H

LTE Band 4_15MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-8.20	-29.60	0.39	21.79	30.00	H
1732.50	-6.40	-29.60	0.27	23.47	30.00	H
1747.50	-6.50	-29.50	0.17	23.17	30.00	H

LTE Band 4_20MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-8.70	-29.60	0.39	21.29	30.00	H
1732.50	-6.84	-29.60	0.27	23.03	30.00	H
1745.00	-6.72	-29.50	0.17	22.61	30.00	H

LTE Band 4_1.4MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-8.26	-29.60	0.39	21.73	30.00	H
1732.50	-7.50	-29.60	0.27	22.37	30.00	H
1754.30	-7.51	-29.50	0.17	22.16	30.00	H

LTE Band 4_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-7.21	-29.60	0.39	22.78	30.00	H
1732.50	-5.01	-29.60	0.27	24.86	30.00	H
1753.50	-5.20	-29.50	0.17	24.47	30.00	H

LTE Band 4_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-7.19	-29.60	0.39	22.80	30.00	H
1732.50	-5.50	-29.60	0.27	24.37	30.00	H
1752.50	-5.74	-29.50	0.17	23.93	30.00	H

LTE Band 4_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-7.83	-29.60	0.39	22.17	30.00	H
1732.50	-6.59	-29.60	0.27	23.29	30.00	H
1750.50	-6.32	-29.50	0.17	23.35	30.00	H

LTE Band 4_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-7.99	-29.60	0.39	22.00	30.00	H
1732.50	-6.96	-29.60	0.27	22.91	30.00	H
1747.50	-6.48	-29.50	0.17	23.19	30.00	H

LTE Band 4_20MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-9.20	-29.60	0.39	20.80	30.00	H
1732.50	-7.34	-29.60	0.27	22.54	30.00	H
1745.00	-6.88	-29.50	0.17	22.79	30.00	H

Peak EIRP (dBm)=P_{Mea}(-5.01dBm)- (P_{cl}+P_{Ag}) (-29.60dB)+G_a(0.27dB) =24.86dBm

LTE Band 5- ERP 22.913(a)

Limits: ≤38.45dBm (7W)

LTE Band 5_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-8.83	-33.60	0.28	2.15	22.90	38.45	H
836.50	-9.19	-33.50	0.25	2.15	22.41	38.45	H
848.30	-8.77	-33.50	0.21	2.15	22.79	38.45	H

LTE Band 5_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-9.20	-33.60	0.28	2.15	22.53	38.45	H
836.50	-8.97	-33.50	0.25	2.15	22.63	38.45	H
847.50	-8.77	-33.50	0.21	2.15	22.79	38.45	H

LTE Band 5_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-9.23	-33.60	0.28	2.15	22.50	38.45	H
836.50	-9.69	-33.50	0.25	2.15	21.91	38.45	H
846.50	-9.90	-33.50	0.21	2.15	21.66	38.45	H

LTE Band 5_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.66	-33.60	0.28	2.15	21.07	38.45	H
836.50	-10.40	-33.50	0.25	2.15	21.20	38.45	H
844.00	-9.19	-33.50	0.21	2.15	21.95	38.45	H

LTE Band 5_1.4MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-8.97	-33.60	0.28	2.15	22.76	38.45	H
836.50	-9.48	-33.50	0.25	2.15	22.12	38.45	H
848.30	-8.94	-33.50	0.21	2.15	22.62	38.45	H

LTE Band 5_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-9.91	-33.60	0.28	2.15	21.82	38.45	H
836.50	-9.42	-33.50	0.25	2.15	22.18	38.45	H
847.50	-9.05	-33.50	0.21	2.15	22.51	38.45	H

LTE Band 5_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-9.81	-33.60	0.28	2.15	21.92	38.45	H
836.50	-9.36	-33.50	0.25	2.15	22.24	38.45	H
846.50	-9.71	-33.50	0.21	2.15	21.85	38.45	H

LTE Band 5_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.30	-33.60	0.28	2.15	21.43	38.45	H
836.50	-9.84	-33.50	0.25	2.15	21.76	38.45	H
844.00	-9.46	-33.50	0.21	2.15	22.10	38.45	H

Peak ERP (dBm)=P_{Mea}(-8.83dBm)- (P_{cl}+P_{Ag}) (-33.60dB)+G_a(0.28dB) -2.15dB =22.90dBm

LTE Band 7- EIRP 27.50(h)(2)

Limits: ≤ 33 dBm (2W)

LTE Band 7_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-5.10	-28.70	0.59	24.19	33.00	H
2535.00	-4.16	-28.60	0.45	24.89	33.00	H
2567.50	-3.56	-28.60	-0.01	25.03	33.00	H

LTE Band 7_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-5.73	-28.70	0.59	23.56	33.00	H
2535.00	-4.76	-28.60	0.45	24.29	33.00	H
2565.00	-3.48	-28.60	-0.01	25.11	33.00	H

LTE Band 7_15MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-6.42	-28.70	0.59	22.87	33.00	H
2535.00	-5.68	-28.60	0.45	23.37	33.00	H
2562.50	-4.80	-28.60	-0.01	23.80	33.00	H

LTE Band 7_20MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-6.21	-28.70	0.59	23.08	33.00	H
2535.00	-5.70	-28.60	0.45	23.35	33.00	H
2560.00	-5.09	-28.60	-0.01	23.50	33.00	H

LTE Band 7_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-5.19	-28.70	0.59	24.10	33.00	H
2535.00	-3.38	-28.60	0.45	25.67	33.00	H
2567.50	-2.96	-28.60	-0.01	25.63	33.00	H

LTE Band 7_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-5.40	-28.70	0.59	23.90	33.00	H
2535.00	-4.38	-28.60	0.45	24.67	33.00	H
2565.00	-2.96	-28.60	-0.01	25.63	33.00	H

LTE Band 7_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-5.60	-28.70	0.59	23.69	33.00	H
2535.00	-5.07	-28.60	0.45	23.99	33.00	H
2562.50	-4.40	-28.60	-0.01	24.19	33.00	H

LTE Band 7_20MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-5.98	-28.70	0.59	23.32	33.00	H
2535.00	-5.18	-28.60	0.45	23.87	33.00	H
2560.00	-4.41	-28.60	-0.01	24.18	33.00	H

Peak EIRP (dBm)=P_{Mea}(-3.38dBm)- (P_{cl}+P_{Ag}) (-28.60dB)+G_a(0.45dB) -2.15dB =25.67dBm

LTE Band 12 - ERP 27.50(c)(10)

Limits: ≤34.77dBm (3W)

LTE Band 12_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-19.93	1.90	-44.66	-0.77	2.15	21.45	34.77	H
707.50	-19.96	1.91	-44.94	-0.62	2.15	21.54	34.77	H
715.30	-20.10	1.92	-45.26	-0.50	2.15	21.59	34.77	H

LTE Band 12_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-20.12	1.90	-44.68	-0.76	2.15	21.27	34.77	H
707.50	-19.97	1.91	-44.94	-0.62	2.15	21.53	34.77	H
714.50	-20.17	1.92	-45.26	-0.50	2.15	21.52	34.77	H

LTE Band 12_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-20.52	1.90	-44.81	-0.74	2.15	20.98	34.77	H
707.50	-19.97	1.91	-44.94	-0.62	2.15	21.53	34.77	H
713.50	-20.33	1.92	-45.22	-0.50	2.15	21.32	34.77	H

LTE Band 12_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-20.93	1.91	-44.93	-0.70	2.15	20.64	34.77	H
707.50	-19.97	1.91	-44.94	-0.62	2.15	21.53	34.77	H
711.00	-19.80	1.92	-45.19	-0.53	2.15	21.85	34.77	H

LTE Band 12_1.4MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-20.86	1.90	-44.66	-0.77	2.15	20.52	34.77	H
707.50	-20.80	1.91	-44.94	-0.62	2.15	20.70	34.77	H
715.30	-21.03	1.92	-45.26	-0.50	2.15	20.66	34.77	H

LTE Band 12_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-21.07	1.90	-44.68	-0.76	2.15	20.32	34.77	H
707.50	-20.65	1.91	-44.94	-0.62	2.15	20.85	34.77	H
714.50	-21.05	1.92	-45.26	-0.50	2.15	20.64	34.77	H

LTE Band 12_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-21.32	1.90	-44.81	-0.74	2.15	20.18	34.77	H
707.50	-20.77	1.91	-44.94	-0.62	2.15	20.73	34.77	H
713.50	-21.01	1.92	-45.22	-0.50	2.15	20.64	34.77	H

LTE Band 12_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-21.79	1.91	-44.93	-0.70	2.15	19.78	34.77	H
707.50	-20.69	1.91	-44.94	-0.62	2.15	20.81	34.77	H
711.00	-20.74	1.92	-45.19	-0.53	2.15	20.91	34.77	H

Peak ERP (dBm)=P_{Mea}(-19.80dBm)- Cable Loss(1.92) - (P_{cl}+P_{Ag}) (-45.19dB)-G_a(-0.53dB) -2.15dB
=21.85dBm

LTE Band 13- ERP 27.53(g)

Limits: ≤34.77dBm (3W)

LTE Band 13_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
779.50	-10.57	-34.00	0.28	2.15	21.56	34.77	H
782.00	-10.25	-34.00	0.25	2.15	21.85	34.77	H
784.50	-10.28	-34.10	0.26	2.15	21.93	34.77	H

LTE Band 13_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
782.00	-10.86	-34.00	0.25	2.15	21.25	34.77	H
782.00	-10.86	-34.00	0.25	2.15	21.25	34.77	H
782.00	-10.86	-34.00	0.25	2.15	21.25	34.77	H

LTE Band 13_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
779.50	-10.42	-34.00	0.28	2.15	21.71	34.77	H
782.00	-10.18	-34.00	0.25	2.15	21.92	34.77	H
784.50	-10.18	-34.10	0.26	2.15	22.03	34.77	H

LTE Band 13_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
782.00	-10.42	-34.00	0.25	2.15	21.68	34.77	H
782.00	-10.42	-34.00	0.25	2.15	21.68	34.77	H
782.00	-10.42	-34.00	0.25	2.15	21.68	34.77	H

Peak ERP (dBm)=P_{Mea}(-8.52dBm)- (P_{cl}+P_{Ag}) (-34.10dB)+G_a(0.26dB) -2.15dB =23.70dBm

LTE Band 17- ERP 27.53(g)

Limits: ≤34.77dBm (3W)

LTE Band 17_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
706.50	-21.13	1.91	-45.53	-0.66	2.15	21.01	34.77	H
710.00	-20.39	1.92	-45.68	-0.54	2.15	21.76	34.77	H
713.50	-20.19	1.92	-45.22	-0.50	2.15	21.46	34.77	H

LTE Band 17_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
709.00	-20.56	1.92	-45.64	-0.57	2.15	21.58	34.77	H
710.00	-20.47	1.92	-45.68	-0.54	2.15	21.68	34.77	H
711.00	-19.85	1.92	-45.19	-0.53	2.15	21.80	34.77	H

LTE Band 17_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
706.50	-21.83	1.91	-45.53	-0.66	2.15	20.31	34.77	H
710.00	-21.27	1.92	-45.68	-0.54	2.15	20.88	34.77	H
713.50	-20.85	1.92	-45.22	-0.50	2.15	20.80	34.77	H

LTE Band 17_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	Cable Loss(dB)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
709.00	-21.35	1.92	-45.64	-0.57	2.15	20.79	34.77	H
710.00	-21.21	1.92	-45.68	-0.54	2.15	20.94	34.77	H
711.00	-20.79	1.92	-45.19	-0.53	2.15	20.86	34.77	H

Peak ERP (dBm)=P_{Mea}(-19.85dBm)- Cable Loss(1.92) - (P_{cl}+P_{Ag}) (-45.19dB)-G_a(-0.53dB) -2.15dB
=21.80dBm

LTE Band 25- EIRP 24. 232(b)

Limits: ≤33dBm (2W)

LTE Band 25_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-9.37	-29.40	0.15	20.19	33.00	H
1882.50	-8.48	-29.30	0.25	21.07	33.00	H
1914.30	-8.84	-29.30	0.35	20.81	33.00	H

LTE Band 25_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-9.30	-29.40	0.15	20.25	33.00	H
1882.50	-8.11	-29.30	0.25	21.44	33.00	H
1913.50	-8.52	-29.30	0.35	21.13	33.00	H

LTE Band 25_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-9.88	-29.40	0.15	19.67	33.00	H
1882.50	-8.18	-29.30	0.25	21.37	33.00	H
1912.50	-9.94	-29.30	0.35	19.71	33.00	H

LTE Band 25_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-10.60	-29.40	0.15	18.95	33.00	H
1882.00	-9.53	-29.30	0.25	20.02	33.00	H
1910.00	-9.79	-29.30	0.35	19.86	33.00	H

LTE Band 25_15MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-11.17	-29.40	0.15	18.38	33.00	H
1882.50	-10.47	-29.30	0.25	19.08	33.00	H
1907.50	-11.35	-29.30	0.35	18.30	33.00	H

LTE Band 25_20 MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-11.46	-29.40	0.15	18.09	33.00	H
1882.50	-10.81	-29.30	0.25	18.74	33.00	H
1905.00	-11.61	-29.30	0.35	18.04	33.00	H

LTE Band 25_1.4MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-10.62	-29.40	0.15	18.94	33.00	H
1882.50	-8.80	-29.30	0.25	20.75	33.00	H
1914.30	-9.97	-29.30	0.35	19.68	33.00	H

LTE Band 25_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-10.51	-29.40	0.15	19.04	33.00	H
1882.50	-9.07	-29.30	0.25	20.48	33.00	H
1913.50	-10.08	-29.30	0.35	19.57	33.00	H

LTE Band 25_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-10.58	-29.40	0.15	18.97	33.00	H
1882.50	-8.97	-29.30	0.25	20.58	33.00	H
1912.50	-10.18	-29.30	0.35	19.47	33.00	H

LTE Band 25_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-11.08	-29.40	0.15	18.47	33.00	H
1882.00	-9.86	-29.30	0.25	19.70	33.00	H
1910.00	-10.28	-29.30	0.35	19.37	33.00	H

LTE Band 25_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-11.32	-29.40	0.15	18.23	33.00	H
1882.50	-10.52	-29.30	0.25	19.03	33.00	H
1907.50	-10.66	-29.30	0.35	18.99	33.00	H

LTE Band 25_20 MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-11.52	-29.40	0.15	18.03	33.00	H
1882.50	-10.71	-29.30	0.25	18.84	33.00	H
1905.00	-11.45	-29.30	0.35	18.20	33.00	H

Peak EIRP (dBm)=P_{Mea}(-8.11dBm)- (P_{cl}+P_{Ag}) (-29.30dB)+G_a(0.25dB) =21.44dBm

LTE Band 26- ERP 27.53(g)
Limits: ≤38.45dBm (7W)

LTE Band 26_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{Cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
814.70	-9.39	-33.60	0.28	2.15	22.34	38.45	H
831.50	-10.49	-33.50	0.25	2.15	21.11	38.45	H
848.30	-8.52	-33.50	0.21	2.15	23.04	38.45	H

LTE Band 26_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{Cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-9.40	-33.60	0.28	2.15	22.33	38.45	H
831.50	-10.27	-33.50	0.25	2.15	21.33	38.45	H
847.50	-9.17	-33.50	0.21	2.15	22.39	38.45	H

LTE Band 26_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{Cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
816.50	-9.07	-33.60	0.28	2.15	22.66	38.45	H
831.50	-10.23	-33.50	0.25	2.15	21.37	38.45	H
846.50	-9.62	-33.50	0.21	2.15	21.94	38.45	H

LTE Band 26_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{Cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
820.00	-8.94	-33.60	0.28	2.15	22.79	38.45	H
831.50	-10.54	-33.50	0.25	2.15	21.06	38.45	H
844.00	-9.33	-33.50	0.21	2.15	22.23	38.45	H

LTE Band 26_15MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{Cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
822.50	-11.32	-33.60	0.28	2.15	20.41	38.45	H
831.50	-10.48	-33.50	0.25	2.15	21.12	38.45	H
841.50	-11.18	-33.50	0.21	2.15	20.38	38.45	H

LTE Band 26_1.4MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
814.70	-9.66	-33.60	0.28	2.15	22.07	38.45	H
831.50	-10.49	-33.50	0.25	2.15	21.11	38.45	H
848.30	-8.74	-33.50	0.21	2.15	22.82	38.45	H

LTE Band 26_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-9.51	-33.60	0.28	2.15	22.22	38.45	H
831.50	-10.50	-33.50	0.25	2.15	21.10	38.45	H
847.50	-9.74	-33.50	0.21	2.15	21.82	38.45	H

LTE Band 26_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
816.50	-9.11	-33.60	0.28	2.15	22.63	38.45	H
831.50	-10.70	-33.50	0.25	2.15	20.90	38.45	H
846.50	-9.74	-33.50	0.21	2.15	21.82	38.45	H

LTE Band 26_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
820.00	-8.97	-33.60	0.28	2.15	22.76	38.45	H
831.50	-10.81	-33.50	0.25	2.15	20.79	38.45	H
844.00	-9.54	-33.50	0.21	2.15	22.02	38.45	H

LTE Band 26_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
822.50	-10.62	-33.60	0.28	2.15	21.11	38.45	H
831.50	-10.29	-33.50	0.25	2.15	21.31	38.45	H
841.50	-10.39	-33.50	0.21	2.15	21.17	38.45	H

Peak EIRP (dBm)=P_{Mea}(-8.52dBm)- (P_{cl}+P_{Ag}) (-33.50dB)+G_a(0.21dB) =23.04dBm

LTE Band 38- EIRP

Limits: ≤33dBm (2W)

LTE Band 38_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2572.50	-4.61	-28.60	0.38	24.37	33.00	H
2595.00	-3.61	-28.60	0.31	25.30	33.00	H
2617.50	-2.53	-28.60	0.30	26.37	33.00	H

LTE Band 38_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2575.00	-5.22	-28.60	0.38	23.76	33.00	H
2595.00	-4.30	-28.60	0.31	24.61	33.00	H
2615.00	-3.36	-28.60	0.30	25.54	33.00	H

LTE Band 38_15MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2577.50	-6.23	-28.60	0.38	22.75	33.00	H
2595.00	-5.11	-28.60	0.31	23.81	33.00	H
2612.50	-4.83	-28.60	0.30	24.07	33.00	H

LTE Band 38_20 MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2580.00	-6.69	-28.60	0.38	22.29	33.00	H
2595.00	-4.82	-28.60	0.31	24.09	33.00	H
2610.00	-4.58	-28.60	0.30	24.32	33.00	H

LTE Band 38_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2572.50	-4.76	-28.60	0.38	24.22	33.00	H
2595.00	-3.54	-28.60	0.31	25.37	33.00	H
2617.50	-2.57	-28.60	0.30	26.33	33.00	H

LTE Band 38_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2575.00	-4.75	-28.60	0.38	24.23	33.00	H
2595.00	-3.82	-28.60	0.31	25.09	33.00	H
2615.00	-2.74	-28.60	0.30	26.16	33.00	H

LTE Band 38_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2577.50	-6.24	-28.60	0.38	22.74	33.00	H
2595.00	-5.53	-28.60	0.31	23.38	33.00	H
2612.50	-4.09	-28.60	0.30	24.81	33.00	H

LTE Band 38_20 MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	G _a Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2580.00	-6.48	-28.60	0.38	22.50	33.00	H
2595.00	-5.10	-28.60	0.31	23.81	33.00	H
2610.00	-3.92	-28.60	0.30	24.99	33.00	H

Peak EIRP (dBm)=P_{Mea}(-2.53dBm)- (P_{cl}+P_{Ag}) (-28.60dB)+G_a(0.30dB) =26.37dBm

ANALYZER SETTINGS:

RBW = VBW = 8MHz for occupied bandwidths equal to or less than 5MHz.

RBW = VBW = 20MHz for occupied bandwidths equal to or greater than 10MHz.

Note: Expanded measurement uncertainty is $U = 0.96 \text{ dB}$, $k = 2$.

A.2 EMISSION LIMIT

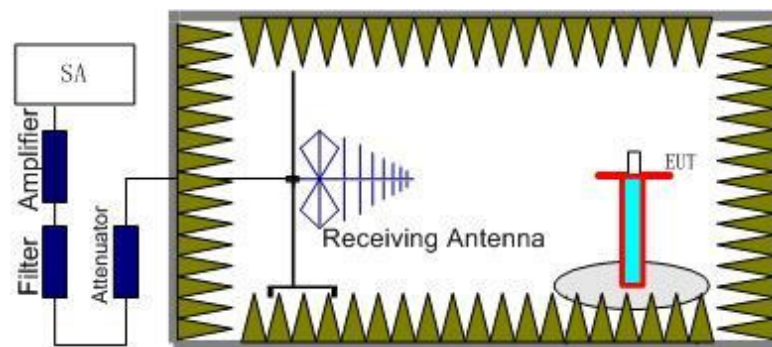
A.2.1 Measurement Method

The measurements procedures in TIA-603-D-2010 are used. This measurement is carried out in fully-anechoic chamber FAC-3.

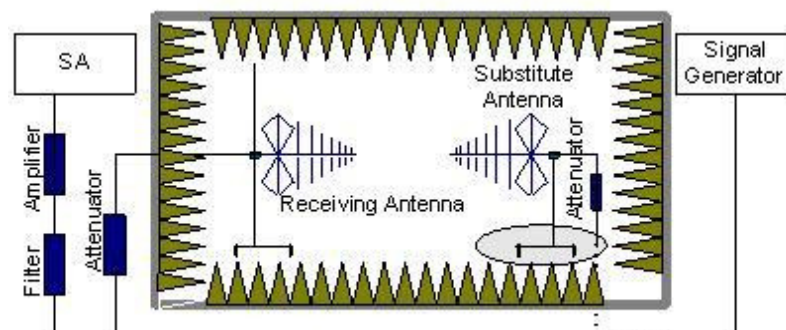
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of the LTE Bands 2, 4, 5, 7, 12, 13, 17, 25, 26, 38.

The procedure of radiated spurious emissions is as follows:

1. EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.5m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (P_r).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the

substitution antenna. Adjust the level of the signal generator output until the value of the receiver reaches the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. The Path loss (P_{pl}) between the Signal Source with the Substitution Antenna and the Substitution Antenna Gain (G_a) should be recorded after test.

An amplifier should be connected in for the test.

The Path loss (P_{pl}) is the summation of the cable loss and the gain of the amplifier.

The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{pl} + G_a$$

5. This value is EIRP since the measurement is calibrated using an antenna of known gain (unit: dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15\text{dB}$.

A.2.2 Measurement Limit

The specification that emissions shall be attenuated below the transmitter power (P) by at least $43 + 10 \log (P)$ dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

A.2.3 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of the LTE Bands 2, 4, 5, 7, 12, 13, 17, 25, 26, 38. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the LTE Bands 2, 4, 5, 7, 12, 13, 17, 25, 26, 38 into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

LTE Band 2, 1.4MHz, QPSK, Channel 18607

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5552.25	-31.50	1.30	-2.64	-35.44	-13.00	V
17196.09	-33.15	2.90	-0.79	-36.84	-13.00	H
17390.34	-33.13	2.90	-0.98	-37.01	-13.00	H
17613.47	-32.95	3.20	-1.01	-37.16	-13.00	H
17787.38	-33.46	3.20	-0.75	-37.41	-13.00	H
17920.59	-32.09	3.20	-0.64	-35.93	-13.00	H

LTE Band 2, 1.4MHz, QPSK, Channel 18900

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5640.00	-26.38	1.30	-2.54	-30.22	-13.00	V
16810.88	-34.05	2.90	-0.26	-37.21	-13.00	V
17291.25	-33.12	2.90	-1.01	-37.03	-13.00	H
17602.97	-32.67	3.20	-1.01	-36.88	-13.00	H
17837.91	-32.39	3.20	-0.84	-36.43	-13.00	H
17848.41	-32.45	3.20	-0.84	-36.49	-13.00	H

LTE Band 2, 1.4MHz, QPSK, Channel 19193

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5728.13	-26.49	1.50	-2.73	-30.72	-13.00	V
16822.03	-34.45	2.90	-0.26	-37.61	-13.00	H
17413.31	-32.57	3.20	-1.08	-36.85	-13.00	H
17608.88	-33.29	3.20	-1.01	-37.50	-13.00	H
17791.31	-33.06	3.20	-0.75	-37.01	-13.00	H
17919.28	-32.44	3.20	-0.64	-36.28	-13.00	H

LTE Band 2, 1.4MHz, 16QAM, Channel 18607

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5551.88	-32.24	1.30	-2.64	-36.18	-13.00	V
17199.38	-33.17	2.90	-0.79	-36.86	-13.00	H
17456.63	-32.91	3.20	-1.08	-37.19	-13.00	H
17628.56	-33.25	3.20	-1.01	-37.46	-13.00	H
17760.47	-33.16	3.20	-0.75	-37.11	-13.00	H
17923.22	-31.31	3.20	-0.64	-35.15	-13.00	H

LTE Band 2, 1.4MHz, 16QAM, Channel 18900

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5640.00	-27.93	1.30	-2.54	-31.77	-13.00	V
17199.38	-33.51	2.90	-0.79	-37.20	-13.00	H
17274.19	-33.22	2.90	-1.01	-37.13	-13.00	H
17405.44	-32.73	3.20	-1.08	-37.01	-13.00	H
17831.34	-33.08	3.20	-0.84	-37.12	-13.00	H
17840.53	-32.04	3.20	-0.84	-36.08	-13.00	H

LTE Band 2, 1.4MHz, 16QAM, Channel 19193

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5727.75	-27.09	1.50	-2.73	-31.32	-13.00	V
16799.06	-34.15	2.90	-0.26	-37.31	-13.00	H
17444.16	-32.56	3.20	-1.08	-36.84	-13.00	H
17608.22	-32.73	3.20	-1.01	-36.94	-13.00	H
17809.69	-32.21	3.20	-0.84	-36.25	-13.00	H
17934.38	-32.52	3.20	-0.64	-36.36	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is $U = 4.2$ dB, $k = 2$.

LTE Band 4, 1.4MHz QPSK, Channel 19957

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
17138.34	-33.64	2.90	-0.79	-37.33	-13.00	H
17219.72	-32.29	2.90	-1.01	-36.20	-13.00	H
17446.78	-32.79	3.20	-1.08	-37.07	-13.00	H
17615.44	-31.88	3.20	-1.01	-36.09	-13.00	H
17830.69	-32.68	3.20	-0.84	-36.72	-13.00	H
17928.47	-31.42	3.20	-0.64	-35.26	-13.00	H

LTE Band 4, 1.4MHz, QPSK, Channel 20175

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5197.88	-27.58	1.20	-1.95	-30.73	-13.00	V
17274.19	-31.68	2.90	-1.01	-35.59	-13.00	H
17446.78	-31.23	3.20	-1.08	-35.51	-13.00	H
17626.59	-31.82	3.20	-1.01	-36.03	-13.00	H
17776.22	-31.36	3.20	-0.75	-35.31	-13.00	H
17858.25	-30.70	3.20	-0.84	-34.74	-13.00	H

LTE Band 4, 1.4MHz, QPSK, Channel 20393

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5263.13	-23.02	1.20	-2.07	-26.29	-13.00	V
17259.75	-33.32	2.90	-1.01	-37.23	-13.00	H
17390.34	-33.08	2.90	-0.98	-36.96	-13.00	H
17623.97	-32.34	3.20	-1.01	-36.55	-13.00	H
17784.75	-32.79	3.20	-0.75	-36.74	-13.00	H
17928.47	-31.68	3.20	-0.64	-35.52	-13.00	H

LTE Band 4, 1.4MHz, 16QAM, Channel 19957

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16816.13	-33.82	2.90	-0.26	-36.98	-13.00	V
17139.00	-33.03	2.90	-0.79	-36.72	-13.00	H
17450.72	-32.42	3.20	-1.08	-36.70	-13.00	H
17600.34	-32.08	3.20	-1.01	-36.29	-13.00	H
17784.09	-32.24	3.20	-0.75	-36.19	-13.00	H
17923.22	-31.83	3.20	-0.64	-35.67	-13.00	H

LTE Band 4, 1.4MHz, 16QAM, Channel 20175

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5197.50	-24.22	1.20	-1.95	-27.37	-13.00	V
16816.78	-33.36	2.90	-0.26	-36.52	-13.00	H
17413.31	-31.23	3.20	-1.08	-35.51	-13.00	H
17606.91	-31.50	3.20	-1.01	-35.71	-13.00	H
17734.22	-31.74	3.20	-0.75	-35.69	-13.00	V
17923.88	-30.67	3.20	-0.64	-34.51	-13.00	H

LTE Band 4, 1.4MHz, 16QAM, Channel 20393

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5262.75	-23.21	1.20	-2.07	-26.48	-13.00	V
16803.66	-33.84	3.20	-0.26	-37.30	-13.00	H
17444.16	-31.45	3.20	-1.08	-35.73	-13.00	H
17605.59	-32.82	3.20	-1.01	-37.03	-13.00	H
17786.06	-32.89	3.20	-0.75	-36.84	-13.00	H
17924.53	-31.78	3.20	-0.64	-35.62	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is $U = 4.2$ dB, $k = 2$.

LTE Band 5, 1.4MHz, QPSK, Channel 20407

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
6785.50	-40.37	1.80	-2.82	-47.14	-13.00	V
7057.00	-40.80	1.80	-2.85	-47.60	-13.00	H
8065.50	-41.15	1.80	-2.18	-47.28	-13.00	V
9303.00	-42.14	2.10	-1.12	-47.51	-13.00	V
9356.50	-42.02	2.10	-1.12	-47.39	-13.00	V
9904.50	-42.73	2.20	-0.40	-47.48	-13.00	V

LTE Band 5, 1.4MHz, QPSK, Channel 20525

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7021.00	-41.14	1.80	-2.85	-47.94	-13.00	V
8162.00	-41.85	1.80	-2.15	-47.95	-13.00	H
8742.00	-41.77	2.00	-1.63	-47.55	-13.00	H
8775.50	-42.15	2.00	-1.63	-47.93	-13.00	V
9211.00	-41.89	2.10	-1.16	-47.30	-13.00	V
9367.50	-42.41	2.10	-1.12	-47.78	-13.00	H

LTE Band 5, 1.4MHz, QPSK, Channel 20643

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8573.50	-40.77	2.00	-1.77	-46.69	-13.00	H
8735.50	-41.77	2.00	-1.63	-47.55	-13.00	V
9170.00	-41.95	2.10	-1.36	-47.56	-13.00	V
9254.50	-42.32	2.10	-1.16	-47.73	-13.00	V
9415.50	-42.31	2.10	-0.86	-47.42	-13.00	V
9620.00	-42.89	2.10	-0.66	-47.80	-13.00	V

LTE Band 5, 1.4MHz, 16QAM, Channel 20407

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7587.50	-41.02	1.80	-2.57	-47.54	-13.00	V
8064.50	-41.55	1.80	-2.18	-47.68	-13.00	V
8540.00	-41.91	2.00	-1.77	-47.83	-13.00	V
8574.50	-41.26	2.00	-1.77	-47.18	-13.00	H
9175.50	-41.08	2.10	-1.36	-46.69	-13.00	V
9252.00	-41.99	2.10	-1.16	-47.40	-13.00	V

LTE Band 5, 1.4MHz, 16QAM, Channel 20525

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7062.00	-41.05	1.80	-2.85	-47.85	-13.00	V
8572.50	-42.03	2.00	-1.77	-47.95	-13.00	H
8735.50	-42.01	2.10	-1.63	-47.89	-13.00	V
9066.50	-42.14	2.10	-1.42	-47.81	-13.00	H
9115.50	-42.33	2.10	-1.36	-47.94	-13.00	V
9349.00	-42.56	2.10	-1.12	-47.93	-13.00	H

LTE Band 5, 1.4MHz, 16QAM, Channel 20643

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8065.50	-41.25	1.80	-2.18	-47.38	-13.00	H
8257.50	-41.38	1.80	-1.90	-47.23	-13.00	V
9157.00	-41.56	2.10	-1.36	-47.17	-13.00	V
9250.00	-41.49	2.10	-1.16	-46.90	-13.00	V
9320.00	-41.49	2.10	-1.12	-46.86	-13.00	V
9887.50	-42.84	2.20	-0.38	-47.57	-13.00	V

Note: The maximum value of expanded measurement uncertainty for this test item is $U = 4.2$ dB, $k = 2$.

LTE Band 7, 5 MHz, QPSK, Channel 20775

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
7506.94	-32.39	1.80	-2.57	-36.76	-13.00	V
16854.84	-33.73	2.90	-0.26	-36.89	-13.00	V
17444.81	-32.99	3.20	-1.08	-37.27	-13.00	H
17593.13	-32.80	3.20	-0.81	-36.81	-13.00	H
17837.91	-32.23	3.20	-0.84	-36.27	-13.00	H
17923.22	-30.62	3.20	-0.64	-34.46	-13.00	H

LTE Band 7, 5 MHz, QPSK, Channel 21100

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
7601.44	-32.25	1.80	-2.58	-36.63	-13.00	V
17196.09	-33.33	2.90	-0.79	-37.02	-13.00	H
17431.69	-32.56	3.20	-1.08	-36.84	-13.00	H
17528.16	-33.02	3.20	-0.81	-37.03	-13.00	H
17775.56	-31.79	3.20	-0.75	-35.74	-13.00	H
17907.47	-31.94	3.20	-0.64	-35.78	-13.00	H

LTE Band 7, 5 MHz, QPSK, Channel 21425

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16858.13	-33.21	2.90	-0.26	-36.37	-13.00	V
17146.88	-31.48	2.90	-0.79	-35.17	-13.00	H
17393.63	-31.24	2.90	-0.98	-35.12	-13.00	H
17617.41	-30.74	3.20	-1.01	-34.95	-13.00	H
17747.34	-31.23	3.20	-0.75	-35.18	-13.00	H
17926.50	-30.47	3.20	-0.64	-34.31	-13.00	H

LTE Band 7, 5 MHz, 16QAM, Channel 20775

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
7511.16	-31.40	1.80	-2.57	-35.77	-13.00	V
17295.19	-33.22	2.90	-1.01	-37.13	-13.00	H
17459.25	-32.37	3.20	-1.08	-36.65	-13.00	H
17608.22	-32.32	3.20	-1.01	-36.53	-13.00	H
17793.94	-32.15	3.20	-0.75	-36.10	-13.00	H
17929.78	-32.96	3.20	-0.64	-36.80	-13.00	H

LTE Band 7, 5 MHz, 16QAM, Channel 21100

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
7606.50	-31.24	1.80	-2.58	-35.62	-13.00	V
17191.50	-33.36	2.90	-0.79	-37.05	-13.00	H
17423.81	-32.47	3.20	-1.08	-36.75	-13.00	V
17595.75	-32.65	3.20	-0.81	-36.66	-13.00	H
17770.31	-32.17	3.20	-0.75	-36.12	-13.00	H
17921.25	-31.01	3.20	-0.64	-34.85	-13.00	H

LTE Band 7, 5 MHz, 16QAM, Channel 21425

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
17202.00	-32.27	2.90	-1.01	-36.18	-13.00	H
17286.66	-32.56	2.90	-1.01	-36.47	-13.00	H
17450.72	-31.34	3.20	-1.08	-35.62	-13.00	H
17598.38	-32.66	3.20	-0.81	-36.67	-13.00	H
17777.53	-32.63	3.20	-0.75	-36.58	-13.00	H
17925.84	-31.73	3.20	-0.64	-35.57	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is $U = 4.2$ dB, $k = 2$.

LTE Band 12, 1.4MHz, QPSK, Channel 23017

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1399.46	-33.89	3.56	-4.98	-34.62	-13.00	V
2099.39	-44.03	4.40	-4.90	-45.68	-13.00	V
2799.20	-50.41	5.04	-6.64	-50.96	-13.00	V
3498.90	-43.10	5.69	-8.20	-42.74	-13.00	H
4198.83	-46.32	6.23	-9.10	-45.60	-13.00	H
4898.22	-46.11	6.73	-9.80	-45.19	-13.00	H

LTE Band 12, 1.4MHz, QPSK, Channel 23095

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
2122.64	-39.83	4.41	-4.97	-41.42	-13.00	V
2830.09	-46.90	5.07	-6.69	-47.43	-13.00	V
3537.99	-42.03	5.75	-8.25	-41.68	-13.00	H
4245.63	-45.05	6.25	-9.15	-44.30	-13.00	V
4953.32	-46.94	6.73	-9.85	-45.97	-13.00	H
5660.70	-51.42	7.19	-10.57	-50.19	-13.00	V

LTE Band 12, 1.4MHz, QPSK, Channel 23173

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1430.78	-40.00	3.61	-5.14	-40.62	-13.00	V
2146.14	-45.60	4.41	-5.04	-47.12	-13.00	V
2861.63	-46.68	5.10	-6.75	-47.18	-13.00	V
3576.79	-44.44	5.70	-8.31	-43.98	-13.00	H
4292.21	-46.00	6.29	-9.19	-45.25	-13.00	H
5007.82	-44.70	6.78	-9.91	-43.72	-13.00	H

LTE Band 12, 1.4MHz, 16QAM, Channel 23017

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1399.64	-35.37	3.56	-4.98	-36.10	-13.00	V
2099.43	-40.19	4.40	-4.90	-41.84	-13.00	V
2799.42	-49.96	5.04	-6.64	-50.51	-13.00	V
3498.87	-43.31	5.69	-8.20	-42.95	-13.00	H
4198.75	-48.51	6.23	-9.10	-47.79	-13.00	H
4898.95	-50.29	6.74	-9.80	-49.38	-13.00	H

LTE Band 12, 1.4MHz 16QAM, Channel 23095

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
2122.70	-39.11	4.41	-4.97	-40.70	-13.00	V
2830.44	-47.74	5.07	-6.69	-48.27	-13.00	V
3537.86	-42.72	5.75	-8.25	-42.37	-13.00	H
4245.66	-44.86	6.25	-9.15	-44.11	-13.00	V
4953.27	-48.36	6.73	-9.85	-47.39	-13.00	H
5660.54	-52.81	7.19	-10.57	-51.58	-13.00	V

LTE Band 12, 1.4MHz, 16QAM, Channel 23173

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1431.05	-39.77	3.61	-5.14	-40.39	-13.00	V
2146.14	-45.68	4.41	-5.04	-47.20	-13.00	V
2861.25	-47.09	5.10	-6.75	-47.59	-13.00	V
3577.05	-44.11	5.70	-8.31	-43.65	-13.00	H
4292.29	-47.37	6.29	-9.19	-46.62	-13.00	V
5008.03	-44.98	6.78	-9.91	-44.00	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is $U = 4.2$ dB, $k = 2$.

LTE Band 13, 5 MHz, QPSK, Channel 23205

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8571.50	-41.12	2.00	-1.77	-47.04	-13.00	H
8672.00	-41.56	2.00	-1.64	-47.35	-13.00	V
9170.00	-41.50	2.10	-1.36	-47.11	-13.00	V
9206.00	-42.16	2.10	-1.16	-47.57	-13.00	V
9405.00	-41.71	2.10	-0.86	-46.82	-13.00	V
9628.50	-42.95	2.10	-0.66	-47.86	-13.00	H

LTE Band 13, 5 MHz, QPSK, Channel 23230

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
6753.50	-40.77	1.80	-2.82	-47.54	-13.00	V
7567.00	-41.37	1.80	-2.57	-47.89	-13.00	V
8587.50	-41.36	2.00	-1.77	-47.28	-13.00	V
8788.00	-42.22	2.00	-1.63	-48.00	-13.00	H
9161.00	-42.21	2.10	-1.36	-47.82	-13.00	V
9210.00	-42.27	2.10	-1.16	-47.68	-13.00	H

LTE Band 13, 5 MHz, QPSK, Channel 23255

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7021.50	-40.87	1.80	-2.85	-47.67	-13.00	V
7116.00	-40.89	1.80	-2.77	-47.61	-13.00	H
8604.50	-41.87	2.00	-1.64	-47.66	-13.00	H
9165.00	-41.81	2.10	-1.36	-47.42	-13.00	V
9211.50	-42.12	2.10	-1.16	-47.53	-13.00	V
9925.50	-42.18	2.20	-0.40	-46.93	-13.00	H

LTE Band 13, 5 MHz, 16QAM, Channel 23205

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7074.50	-40.99	1.80	-2.85	-47.79	-13.00	V
8651.50	-41.12	2.00	-1.64	-46.91	-13.00	V
8696.50	-41.44	2.00	-1.64	-47.23	-13.00	V
8873.00	-42.04	2.00	-1.48	-47.67	-13.00	V
9121.00	-41.72	2.10	-1.36	-47.33	-13.00	V
9336.00	-41.89	2.10	-1.12	-47.26	-13.00	V

LTE Band 13, 5 MHz, 16QAM, Channel 23230

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7020.50	-41.07	1.80	-2.85	-47.87	-13.00	H
8250.50	-41.81	1.80	-1.90	-47.66	-13.00	V
8624.00	-41.91	2.00	-1.64	-47.70	-13.00	V
9191.00	-41.72	2.10	-1.36	-47.33	-13.00	V
9218.00	-41.42	2.10	-1.16	-46.83	-13.00	V
9318.50	-42.36	2.10	-1.12	-47.73	-13.00	V

LTE Band 13, 5 MHz, 16QAM, Channel 23255

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7063.50	-40.71	1.80	-2.85	-47.51	-13.00	V
8673.50	-41.74	2.00	-1.64	-47.53	-13.00	V
9168.00	-42.03	2.10	-1.36	-47.64	-13.00	V
9216.00	-41.59	2.10	-1.16	-47.00	-13.00	V
9321.50	-42.13	2.10	-1.12	-47.50	-13.00	V
9829.50	-42.96	2.20	-0.38	-47.69	-13.00	V

Note: The maximum value of expanded measurement uncertainty for this test item is $U = 4.2$ dB, $k = 2$.

LTE Band 17, 5 MHz, QPSK, Channel 23755

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1413.33	-41.43	3.57	-5.05	-42.10	-13.00	V
2120.07	-42.12	4.39	-4.96	-43.70	-13.00	V
2826.63	-47.25	5.07	-6.69	-47.78	-13.00	V
3533.37	-41.86	5.74	-8.25	-41.50	-13.00	H
4239.92	-46.47	6.24	-9.14	-45.72	-13.00	H
4946.82	-48.86	6.74	-9.85	-47.90	-13.00	H

LTE Band 17, 5 MHz, QPSK, Channel 23790

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
2130.63	-42.01	4.40	-4.99	-43.57	-13.00	V
2840.57	-51.26	5.09	-6.71	-51.79	-13.00	V
3550.81	-45.01	5.71	-8.27	-44.60	-13.00	H
4260.74	-48.65	6.26	-9.16	-47.90	-13.00	H
4971.43	-50.41	6.74	-9.87	-49.43	-13.00	H
5689.37	-62.47	7.20	-10.56	-61.26	-13.00	H

LTE Band 17, 5 MHz, QPSK, Channel 23825

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1427.40	-37.46	3.59	-5.12	-38.08	-13.00	V
2141.17	-41.87	4.41	-5.02	-43.41	-13.00	V
2854.69	-44.78	5.11	-6.74	-45.30	-13.00	V
3568.41	-43.48	5.69	-8.30	-43.02	-13.00	H
4282.32	-46.35	6.29	-9.18	-45.61	-13.00	H
4995.64	-44.13	6.78	-9.90	-43.16	-13.00	H

LTE Band 17, 5 MHz, 16QAM, Channel 23755

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1413.15	-41.89	3.57	-5.05	-42.56	-13.00	V
2120.12	-40.75	4.39	-4.96	-42.33	-13.00	V
2826.71	-46.90	5.07	-6.69	-47.43	-13.00	V
3533.27	-41.61	5.74	-8.25	-41.25	-13.00	H
4239.86	-47.93	6.24	-9.14	-47.18	-13.00	H
4946.70	-48.57	6.74	-9.85	-47.61	-13.00	H

LTE Band 17, 5 MHz, 16QAM, Channel 23790

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
2130.63	-42.01	4.40	-4.99	-43.57	-13.00	V
2840.57	-51.26	5.09	-6.71	-51.79	-13.00	V
3550.81	-45.01	5.71	-8.27	-44.60	-13.00	H
4260.74	-48.65	6.26	-9.16	-47.90	-13.00	H
4971.43	-50.41	6.74	-9.87	-49.43	-13.00	H
5689.37	-62.47	7.20	-10.56	-61.26	-13.00	H

LTE Band 17, 5 MHz, 16QAM, Channel 23825

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
1427.39	-38.33	3.59	-5.12	-38.95	-13.00	V
2141.01	-41.99	4.41	-5.02	-43.53	-13.00	V
2854.78	-45.92	5.11	-6.74	-46.44	-13.00	V
3568.59	-43.80	5.69	-8.30	-43.34	-13.00	H
4281.82	-47.53	6.29	-9.18	-46.79	-13.00	H
4995.79	-47.29	6.79	-9.90	-46.33	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is $U = 4.2$ dB, $k = 2$.

LTE Band 25, 1.4MHz, QPSK, Channel 26047

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5552.25	-31.78	1.30	-2.64	-35.72	-13.00	V
17196.09	-32.69	2.90	-0.79	-36.38	-13.00	H
17446.78	-32.46	3.20	-1.08	-36.74	-13.00	H
17597.72	-32.89	3.20	-0.81	-36.90	-13.00	H
17793.94	-32.78	3.20	-0.75	-36.73	-13.00	V
17931.09	-32.47	3.20	-0.64	-36.31	-13.00	H

LTE Band 25, 1.4MHz, QPSK, Channel 26365

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5647.88	-30.08	1.30	-2.54	-33.92	-13.00	H
17154.75	-32.77	2.90	-0.79	-36.46	-13.00	H
17456.63	-32.60	3.20	-1.08	-36.88	-13.00	V
17584.59	-32.60	3.20	-0.81	-36.61	-13.00	H
17753.25	-32.62	3.20	-0.75	-36.57	-13.00	H
17924.53	-31.72	3.20	-0.64	-35.56	-13.00	H

LTE Band 25, 1.4MHz, QPSK, Channel 26683

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5743.13	-28.27	1.50	-2.73	-32.50	-13.00	V
16820.72	-33.82	2.90	-0.26	-36.98	-13.00	H
17450.06	-32.49	3.20	-1.08	-36.77	-13.00	H
17600.34	-32.62	3.20	-1.01	-36.83	-13.00	H
17796.56	-32.31	3.20	-0.75	-36.26	-13.00	H
17845.13	-32.01	3.20	-0.84	-36.05	-13.00	H

LTE Band 25, 1.4MHz, 16QAM, Channel 26047

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5551.88	-32.84	1.30	-2.64	-36.78	-13.00	V
16741.31	-34.51	2.90	-0.26	-37.67	-13.00	H
17199.38	-32.89	2.90	-0.79	-36.58	-13.00	H
17442.19	-32.60	3.20	-1.08	-36.88	-13.00	H
17766.38	-33.30	3.20	-0.75	-37.25	-13.00	H
17938.97	-32.45	3.20	-0.64	-36.29	-13.00	H

LTE Band 25, 1.4MHz, 16QAM, Channel 26365

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5647.88	-30.91	1.30	-2.54	-34.75	-13.00	V
16810.88	-33.80	2.90	-0.26	-36.96	-13.00	H
17274.19	-32.97	2.90	-1.01	-36.88	-13.00	H
17398.22	-32.89	2.90	-0.98	-36.77	-13.00	H
17764.41	-31.94	3.20	-0.75	-35.89	-13.00	H
17925.19	-31.57	3.20	-0.64	-35.41	-13.00	H

LTE Band 25, 1.4MHz, 16QAM, Channel 26683

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5742.75	-28.41	1.50	-2.73	-32.64	-13.00	V
17155.41	-32.75	2.90	-0.79	-36.44	-13.00	H
17446.78	-31.04	3.20	-1.08	-35.32	-13.00	H
17618.06	-31.47	3.20	-1.01	-35.68	-13.00	H
17799.19	-31.93	3.20	-0.75	-35.88	-13.00	H
17916.00	-31.42	3.20	-0.64	-35.26	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is $U = 4.2$ dB, $k = 2$.

LTE Band 26, 1.4MHz, QPSK, Channel 26697

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7059.00	-40.86	1.80	-2.85	-47.66	-13.00	V
7589.50	-40.80	1.80	-2.57	-47.32	-13.00	V
8530.00	-41.54	2.00	-1.77	-47.46	-13.00	V
8579.50	-41.80	2.00	-1.77	-47.72	-13.00	H
9204.00	-41.77	2.10	-1.16	-47.18	-13.00	H
9737.00	-42.42	2.20	-0.71	-47.48	-13.00	H

LTE Band 26, 1.4MHz, QPSK, Channel 26865

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8400.00	-42.20	1.80	-1.79	-47.94	-13.00	V
8597.00	-41.93	2.00	-1.77	-47.85	-13.00	H
8720.00	-41.80	2.00	-1.63	-47.58	-13.00	V
9185.50	-41.14	2.10	-1.36	-46.75	-13.00	V
9350.00	-41.89	2.10	-1.12	-47.26	-13.00	H
9456.00	-42.68	2.10	-0.86	-47.79	-13.00	V

LTE Band 26, 1.4MHz, QPSK, Channel 27033

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7027.00	-40.84	1.80	-2.85	-47.64	-13.00	V
7645.50	-41.00	1.80	-2.58	-47.53	-13.00	H
8611.50	-41.56	2.00	-1.64	-47.35	-13.00	H
9115.00	-41.94	2.10	-1.36	-47.55	-13.00	V
9194.50	-42.19	2.10	-1.36	-47.80	-13.00	V
9404.50	-42.43	2.10	-0.86	-47.54	-13.00	V

LTE Band 26, 1.4MHz, 16QAM, Channel 26697

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7021.50	-40.57	1.80	-2.85	-47.37	-13.00	V
7079.00	-40.96	1.80	-2.85	-47.76	-13.00	V
8123.50	-41.96	1.80	-2.15	-48.06	-13.00	V
8334.50	-41.53	1.80	-2.04	-47.52	-13.00	V
8634.50	-42.16	2.00	-1.64	-47.95	-13.00	V
9205.50	-42.15	2.10	-1.16	-47.56	-13.00	H

LTE Band 26, 1.4MHz, 16QAM, Channel 26865

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7017.00	-40.72	1.80	-2.85	-47.52	-13.00	V
8060.00	-41.55	1.80	-2.18	-47.68	-13.00	V
8917.50	-42.14	2.10	-1.58	-47.97	-13.00	V
9170.50	-42.09	2.10	-1.36	-47.70	-13.00	V
9221.00	-42.43	2.10	-1.16	-47.84	-13.00	H
9393.00	-41.67	2.10	-1.12	-47.04	-13.00	V

LTE Band 26, 1.4MHz, 16QAM, Channel 27033

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
4242.00	-41.06	1.20	-2.02	-46.43	-13.00	H
8024.00	-41.49	1.80	-2.18	-47.62	-13.00	V
8593.00	-42.05	2.00	-1.77	-47.97	-13.00	H
9062.00	-42.03	2.10	-1.42	-47.70	-13.00	H
9111.50	-42.08	2.10	-1.36	-47.69	-13.00	H
9739.50	-42.45	2.20	-0.71	-47.51	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is $U = 4.2$ dB, $k = 2$.

LTE Band 38, 5 MHz, QPSK, Channel 37775

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
7717.03	-32.06	1.80	-2.53	-36.39	-13.00	V
16822.03	-33.73	2.90	-0.26	-36.89	-13.00	H
17448.09	-32.52	3.20	-1.08	-36.80	-13.00	H
17595.75	-32.93	3.20	-0.81	-36.94	-13.00	H
17784.09	-32.36	3.20	-0.75	-36.31	-13.00	H
17918.63	-32.09	3.20	-0.64	-35.93	-13.00	H

LTE Band 38, 5 MHz, QPSK, Channel 38000

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
5190.38	-34.27	1.20	-1.95	-37.42	-13.00	V
7784.53	-31.06	1.80	-2.53	-35.39	-13.00	V
17194.13	-33.61	2.90	-0.79	-37.30	-13.00	H
17373.28	-33.35	2.90	-0.98	-37.23	-13.00	H
17769.66	-32.32	3.20	-0.75	-36.27	-13.00	H
17921.25	-32.72	3.20	-0.64	-36.56	-13.00	H

LTE Band 38, 5 MHz, QPSK, Channel 38225

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
16878.47	-34.13	2.90	-0.26	-37.29	-13.00	H
17209.22	-33.71	2.90	-1.01	-37.62	-13.00	H
17450.06	-32.43	3.20	-1.08	-36.71	-13.00	H
17603.63	-32.77	3.20	-1.01	-36.98	-13.00	H
17746.69	-33.34	3.20	-0.75	-37.29	-13.00	V
17900.91	-31.57	3.20	-0.64	-35.41	-13.00	H

LTE Band 38, 5 MHz, 16QAM, Channel 37775

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
7717.03	-31.85	1.80	-2.53	-36.18	-13.00	V
16751.81	-33.45	2.90	-0.26	-36.61	-13.00	H
17199.38	-32.83	2.90	-0.79	-36.52	-13.00	H
17452.69	-32.36	3.20	-1.08	-36.64	-13.00	H
17761.13	-32.72	3.20	-0.75	-36.67	-13.00	H
17923.88	-31.97	3.20	-0.64	-35.81	-13.00	H

LTE Band 38, 5 MHz, 16QAM, Channel 38000

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
7783.69	-30.86	1.80	-2.53	-35.19	-13.00	V
17202.66	-32.67	2.90	-1.01	-36.58	-13.00	H
17349.66	-32.81	2.90	-0.98	-36.69	-13.00	V
17457.94	-32.22	3.20	-1.08	-36.50	-13.00	H
17786.72	-32.81	3.20	-0.75	-36.76	-13.00	V
17921.25	-31.60	3.20	-0.64	-35.44	-13.00	H

LTE Band 38, 5 MHz, 16QAM, Channel 38225

Frequency(MHz)	P _{Mea} (dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit (dBm)	Polarization
7852.03	-32.49	1.80	-2.45	-36.74	-13.00	V
16822.03	-33.64	2.90	-0.26	-36.80	-13.00	H
17413.97	-31.70	3.20	-1.08	-35.98	-13.00	H
17595.75	-32.56	3.20	-0.81	-36.57	-13.00	H
17784.09	-31.81	3.20	-0.75	-35.76	-13.00	H
17929.13	-31.58	3.20	-0.64	-35.42	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is $U = 4.2$ dB, $k = 2$.

A.3 FREQUENCY STABILITY

A.3.1 Method of Measurement

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of R&S CMW500 DIGITAL RADIO COMMUNICATION TESTER.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30°C.
3. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on middle channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
5. Re-measure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1 Volt increments re-measuring carrier frequency at each voltage. Pause at nominal voltage for 1.5 hours unpowered, to allow any self-heating to stabilize, before continuing.
6. Subject the EUT to overnight soak at +50°C.
7. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10 °C increments from +50°C to -30°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5°C during the measurement procedure.

A.3.2 Measurement Limit

A.3.2.1 For Hand carried battery powered equipment

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of between 3.6VDC and 4.2VDC, with a nominal voltage of 3.7VDC. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress. For the purposes of measuring frequency stability these voltage limits are to be used.

A.3.2.2 For equipment powered by primary supply voltage

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

A.3.3 Measurement results

LTE Band 2, 1.4MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
3.6	6	-25	0.003	0.013
3.7	-20	6	0.011	0.003
4.2	14	-19	0.007	0.010

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
-30°	-8	35	0.004	0.019
-20°	-6	26	0.003	0.014
-10°	-12	17	0.006	0.009
0°	3	44	0.002	0.023
10°	15	59	0.008	0.031
20°	22	52	0.012	0.028
30°	36	46	0.019	0.024
40°	-6	41	0.003	0.022
50°	-11	33	0.006	0.018

LTE Band 4, 1.4MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
3.6	6	19	0.003	0.011
3.7	-3	25	0.002	0.014
4.2	19	4	0.011	0.002

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
-30°	36	6	0.021	0.003
-20°	24	14	0.014	0.008
-10°	3	26	0.002	0.015
0°	1	31	0.001	0.018
10°	-5	-5	0.003	0.003
20°	12	3	0.007	0.002
30°	16	18	0.009	0.010
40°	27	22	0.016	0.013
50°	32	35	0.018	0.020

LTE Band 5, 1.4MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
3.6	16	9	0.019	0.011
3.7	3	18	0.004	0.022
4.2	28	3	0.033	0.004

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
-30°	39	11	0.047	0.013
-20°	45	24	0.054	0.029
-10°	16	5	0.019	0.006
0°	13	31	0.016	0.037
10°	8	16	0.010	0.019
20°	6	28	0.007	0.033
30°	15	34	0.018	0.041
40°	25	8	0.030	0.010
50°	7	16	0.008	0.019

LTE Band 7, 10MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
3.6	15	-9	0.006	0.004
3.7	28	-14	0.011	0.006
4.2	11	5	0.004	0.002

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
-30°	14	-9	0.006	0.004
-20°	8	-18	0.003	0.007
-10°	17	36	0.007	0.014
0°	22	8	0.009	0.003
10°	15	14	0.006	0.006
20°	3	17	0.001	0.007
30°	19	29	0.007	0.011
40°	27	33	0.011	0.013
50°	33	40	0.013	0.016

LTE Band 12, 1.4MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
3.6	-9	-3	0.013	0.004
3.7	11	16	0.016	0.023
4.2	-24	-17	0.034	0.024

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
-30°	-20	9	0.028	0.013
-20°	14	25	0.020	0.035
-10°	26	18	0.037	0.025
0°	-3	26	0.004	0.037
10°	18	-3	0.025	0.004
20°	-9	-19	0.013	0.027
30°	-6	-47	0.008	0.066
40°	17	-34	0.024	0.048
50°	36	15	0.051	0.021

LTE Band 13, 10MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
3.6	22	16	0.028	0.020
3.7	6	-5	0.008	0.006
4.2	14	3	0.018	0.004

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
-30°	16	14	0.020	0.018
-20°	2	6	0.003	0.008
-10°	10	8	0.013	0.010
0°	1	11	0.001	0.014
10°	14	9	0.018	0.012
20°	-3	-1	0.004	0.001
30°	25	2	0.032	0.003
40°	24	3	0.031	0.004
50°	38	14	0.049	0.018

LTE Band 17, 10MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
3.6	13	18	0.018	0.025
3.7	-6	26	0.008	0.037
4.2	-2	9	0.003	0.013

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
-30°	22	11	0.031	0.015
-20°	14	4	0.020	0.006
-10°	15	-3	0.021	0.004
0°	41	-15	0.058	0.021
10°	38	-11	0.054	0.015
20°	55	-8	0.077	0.011
30°	29	2	0.041	0.003
40°	8	-6	0.011	0.008
50°	13	12	0.018	0.017

LTE Band 25, 10MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
3.6	26	-8	0.014	0.004
3.7	3	5	0.002	0.003
4.2	28	11	0.015	0.006

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
-30°	-9	22	0.005	0.012
-20°	-1	5	0.001	0.003
-10°	12	14	0.006	0.007
0°	-6	8	0.003	0.004
10°	25	3	0.013	0.002
20°	13	16	0.007	0.008
30°	27	22	0.014	0.012
40°	38	9	0.020	0.005
50°	45	1	0.024	0.001

LTE Band 26, 10MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
3.6	19	12	0.023	0.014
3.7	25	19	0.030	0.023
4.2	8	25	0.010	0.030

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
-30°	12	22	0.014	0.026
-20°	-5	36	0.006	0.043
-10°	14	17	0.017	0.020
0°	-9	24	0.011	0.029
10°	-26	18	0.031	0.022
20°	-17	-8	0.020	0.010
30°	15	3	0.018	0.004
40°	33	11	0.040	0.013
50°	25	25	0.030	0.030

LTE Band 38, 10MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
3.6	-13	24	0.005	0.009
3.7	8	-20	0.003	0.008
4.2	-26	-15	0.010	0.006

Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)	
	QPSK	16QAM	QPSK	16QAM
-30°	22	-25	0.008	0.010
-20°	9	-26	0.003	0.010
-10°	18	-9	0.007	0.003
0°	6	-18	0.002	0.007
10°	17	-27	0.007	0.010
20°	22	-33	0.008	0.013
30°	35	-8	0.013	0.003
40°	19	5	0.007	0.002
50°	24	-26	0.009	0.010

Expanded measurement uncertainty for this test item is 10 Hz, $k = 2$.

A.4 OCCUPIED BANDWIDTH

A.4.1 Occupied Bandwidth Results

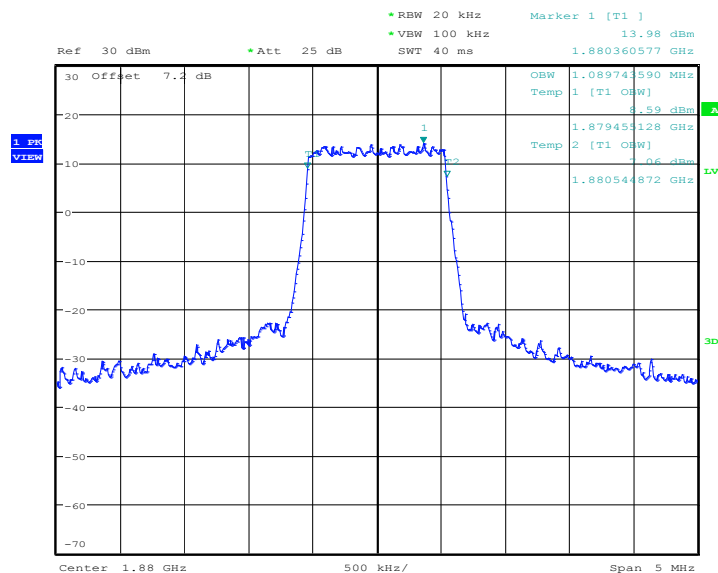
Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of the US Cellular/PCS frequency bands. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.

The transmitter shall be operated at its maximum carrier power measured under normal test conditions. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sampling detector shall be used given that a peak or peak hold may produce a wider bandwidth than actual. The trace data points are recovered and directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is recorded. The span between the two recorded frequencies is the occupied bandwidth.

LTE band 2, 1.4MHz (99%)

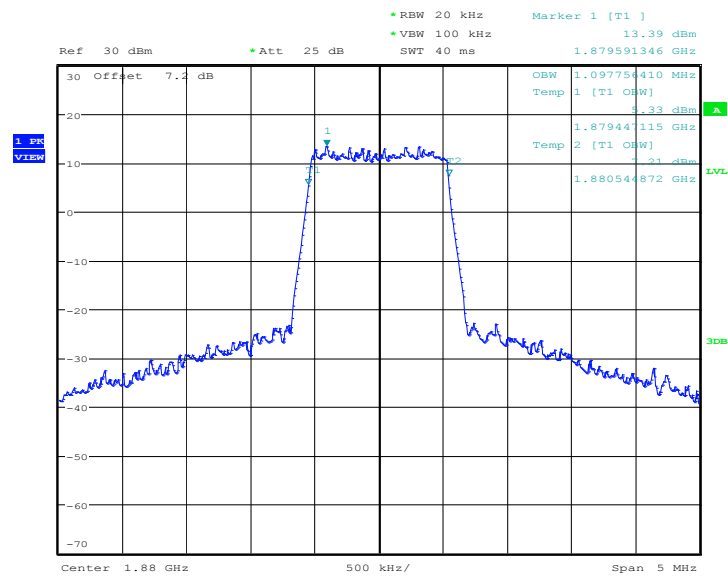
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	1089.74	1097.76

LTE band 2, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 16.FEB.2017 23:38:38

LTE band 2, 1.4MHz Bandwidth, 16QAM (99% BW)

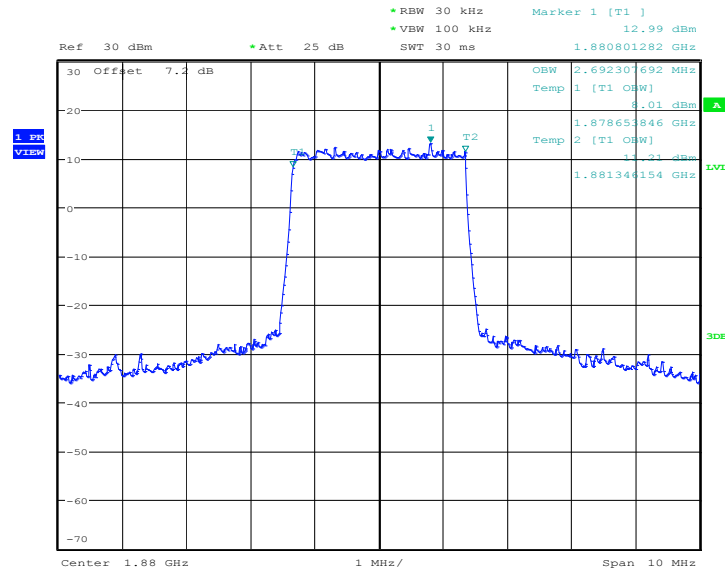


Date: 16.FEB.2017 23:39:38

LTE band 2, 3MHz (99%)

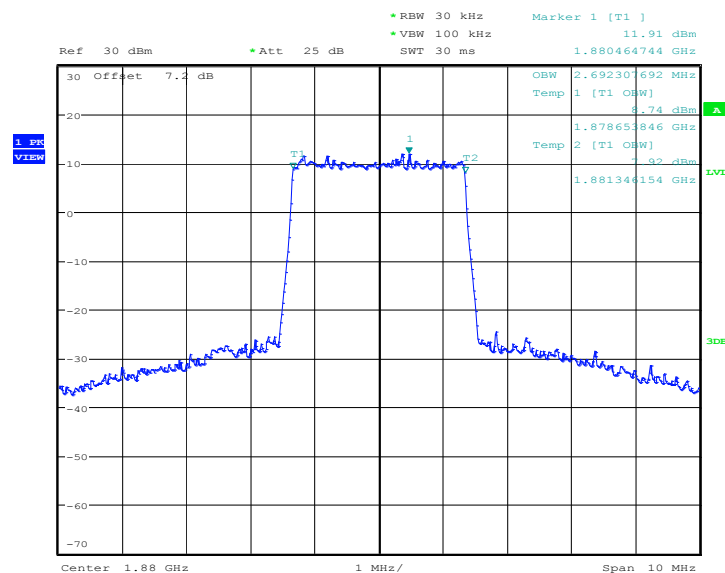
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	2692.31	2692.31

LTE band 2, 3MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 00:53:36

LTE band 2, 3MHz Bandwidth, 16QAM (99% BW)

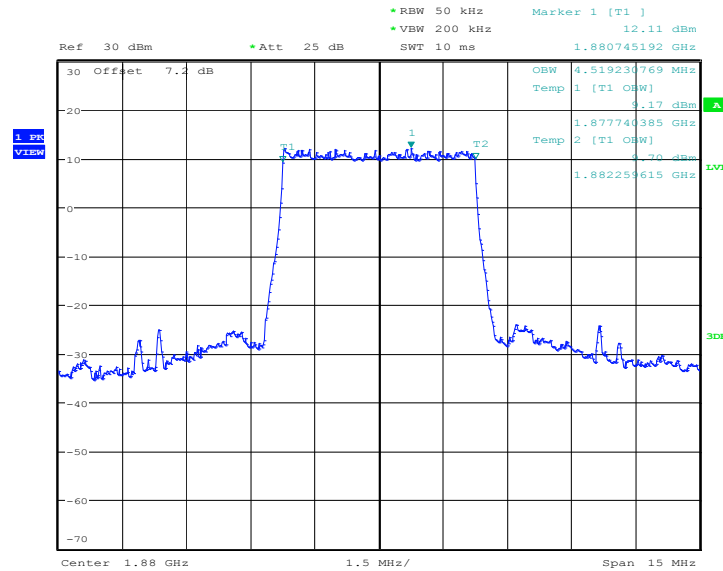


Date: 17.FEB.2017 00:51:03

LTE band 2, 5MHz (99%)

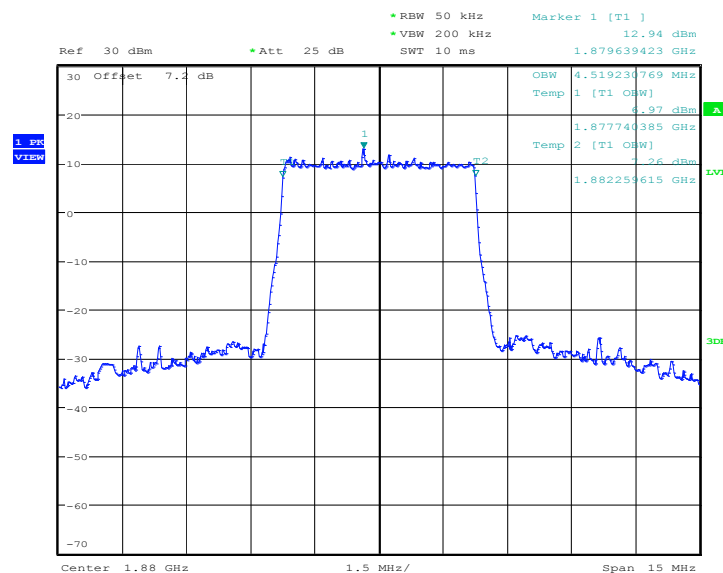
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	4519.23	4519.23

LTE band 2, 5MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 00:55:50

LTE band 2, 5MHz Bandwidth, 16QAM (99% BW)

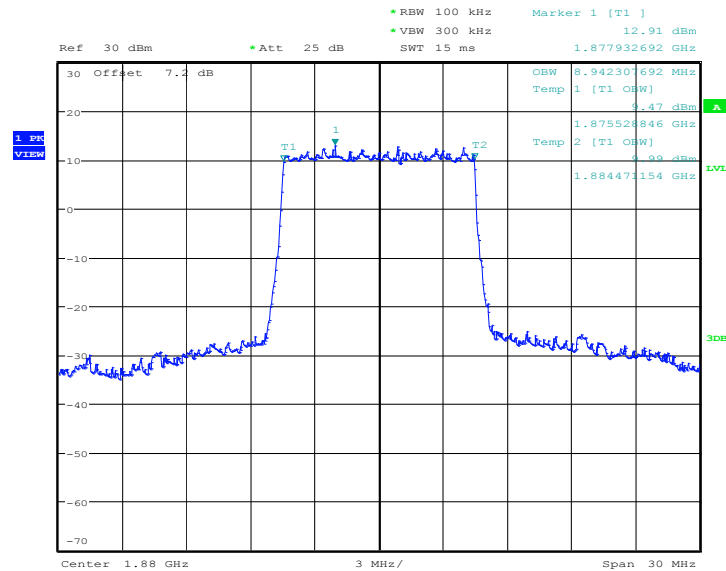


Date: 17.FEB.2017 00:56:51

LTE band 2, 10MHz (99%)

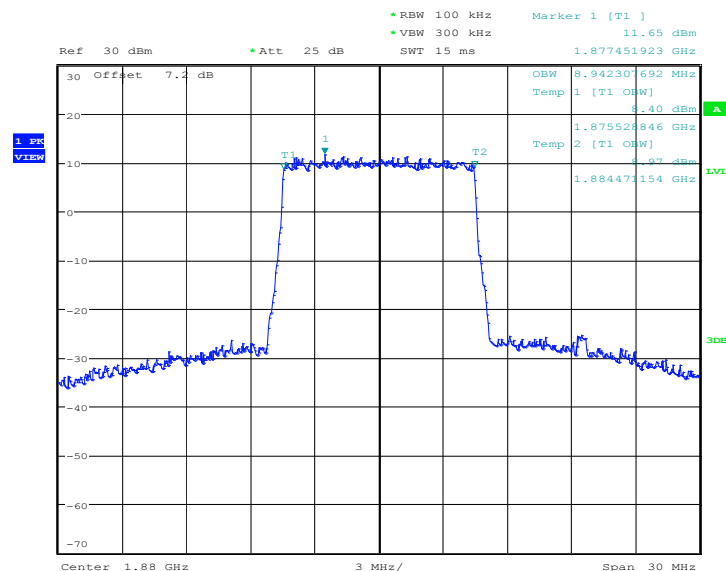
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	8942.31	8942.31

LTE band 2, 10MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 02:10:37

LTE band 2, 10MHz Bandwidth, 16QAM (99% BW)

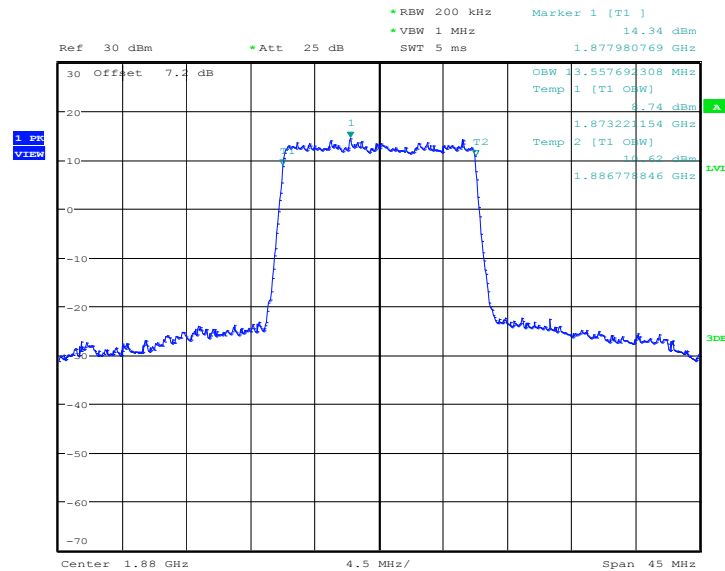


Date: 17.FEB.2017 02:10:05

LTE band 2, 15MHz (99%)

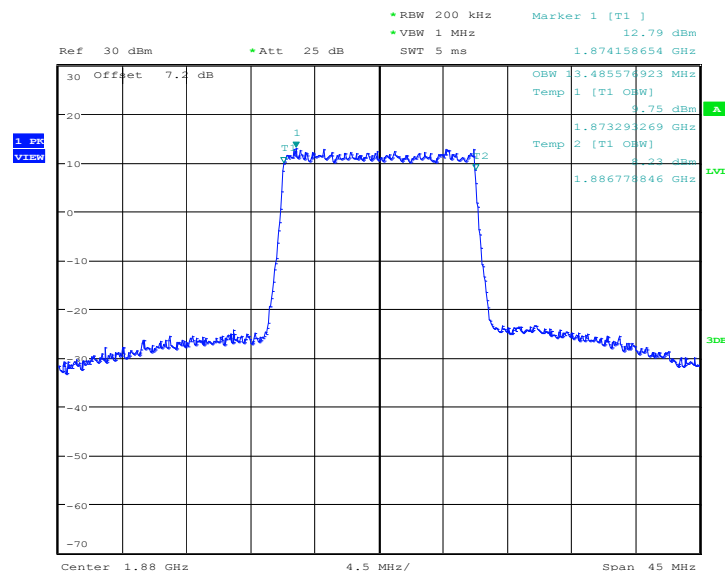
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	13557.69	13485.58

LTE band 2, 15MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 02:12:14

LTE band 2, 15MHz Bandwidth, 16QAM (99% BW)

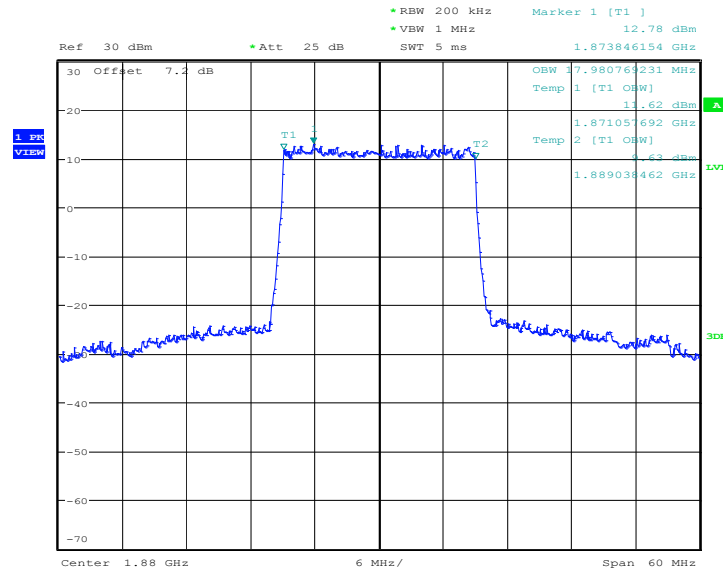


Date: 17.FEB.2017 02:12:43

LTE band 2, 20MHz (99%)

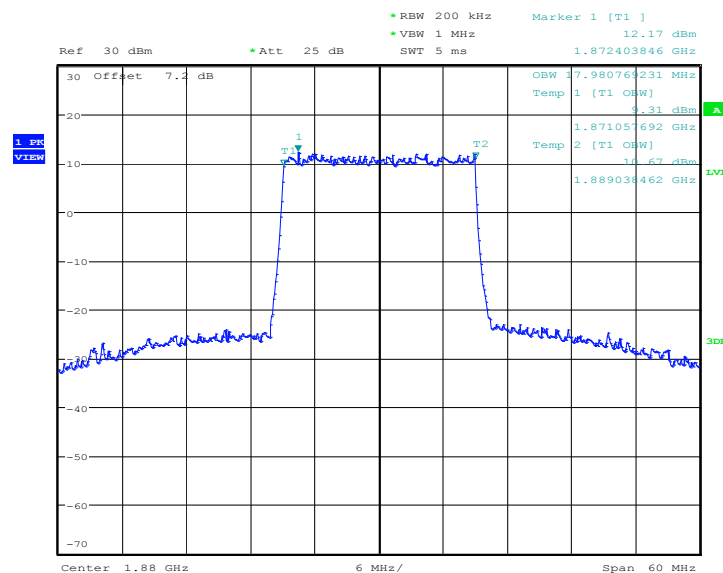
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	17980.77	17980.77

LTE band 2, 20MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 02:47:09

LTE band 2, 20MHz Bandwidth, 16QAM (99% BW)

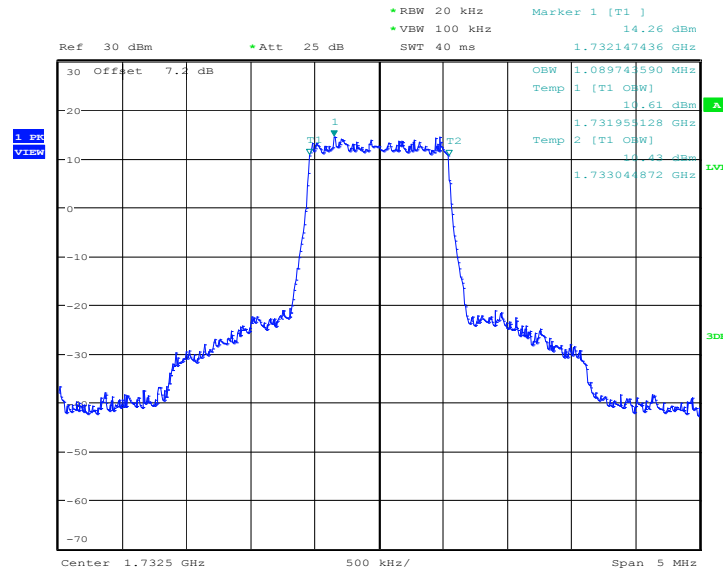


Date: 17.FEB.2017 02:49:09

LTE band 4, 1.4MHz (99%)

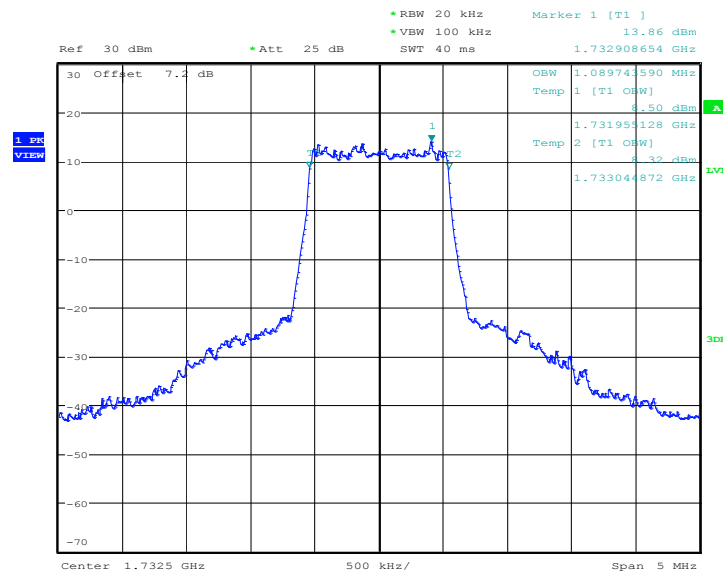
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	1089.74	1089.74

LTE band 4, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 16.FEB.2017 23:49:05

LTE band 4, 1.4MHz Bandwidth, 16QAM (99% BW)

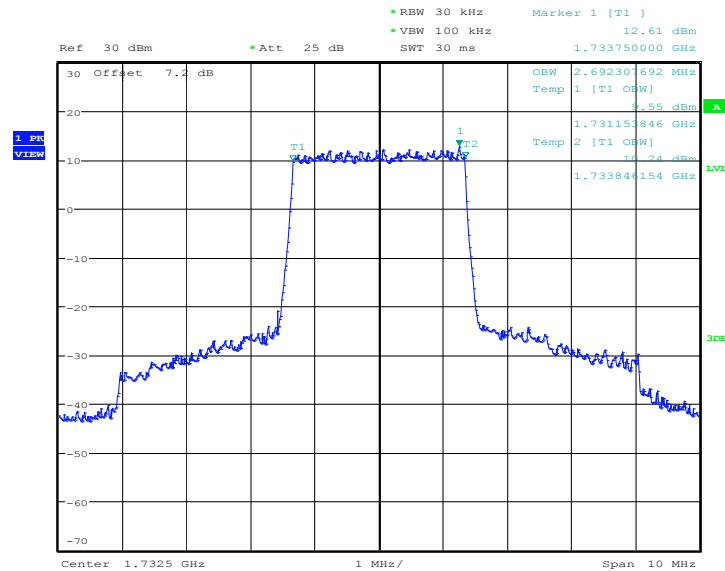


Date: 16.FEB.2017 23:48:16

LTE band 4, 3MHz (99%)

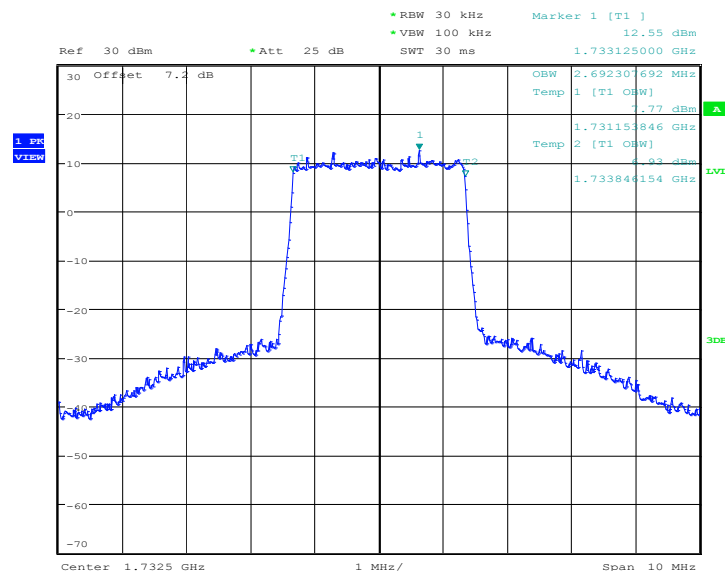
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	2692.31	2692.31

LTE band 4, 3MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 00:43:42

LTE band 4, 3MHz Bandwidth, 16QAM (99% BW)

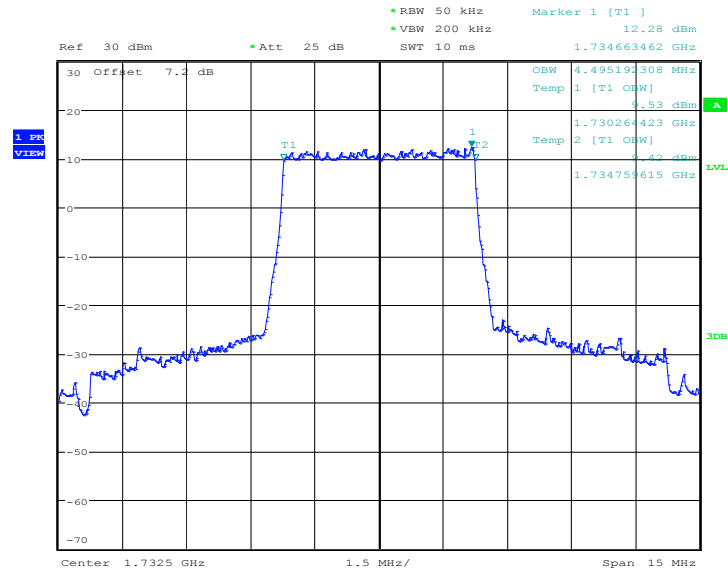


Date: 17.FEB.2017 00:44:24

LTE band 4, 5MHz (99%)

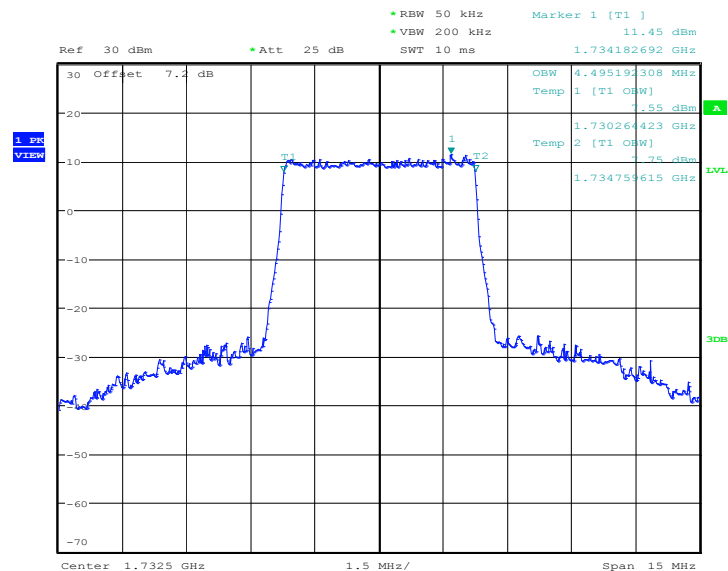
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	4495.19	4495.19

LTE band 4, 5MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 01:03:21

LTE band 4, 5MHz Bandwidth, 16QAM (99% BW)

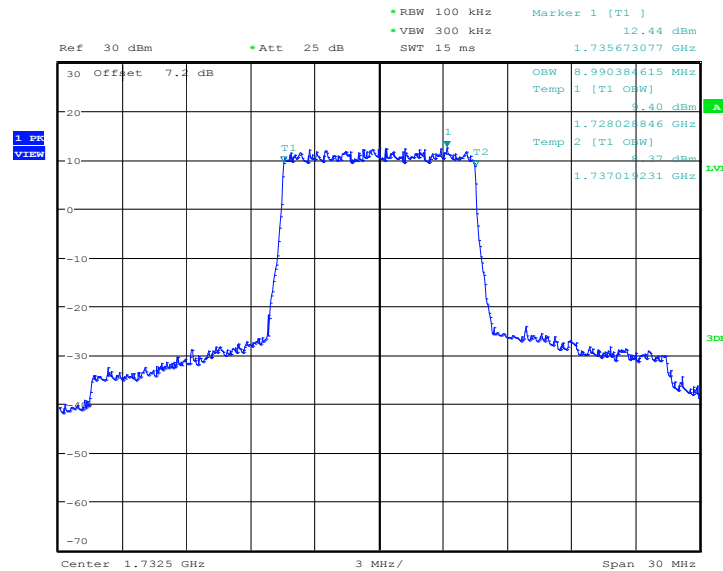


Date: 17.FEB.2017 01:02:24

LTE band 4, 10MHz (99%)

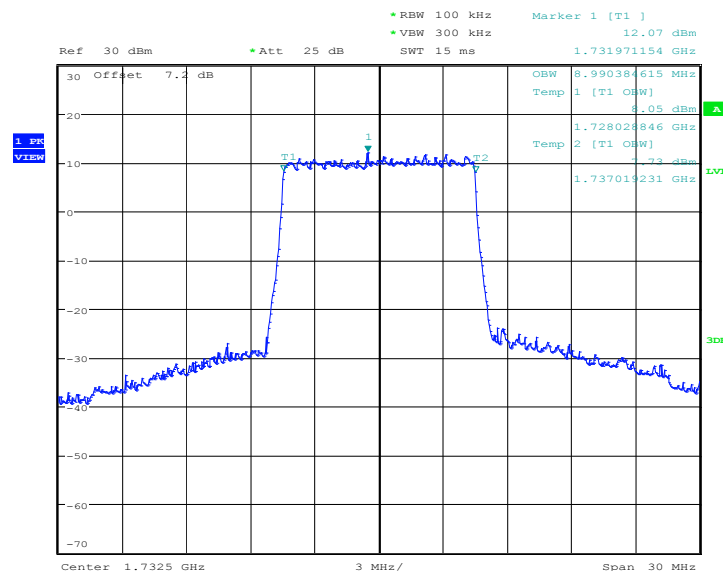
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	8990.38	8990.38

LTE band 4, 10MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 02:05:29

LTE band 4, 10MHz Bandwidth, 16QAM (99% BW)

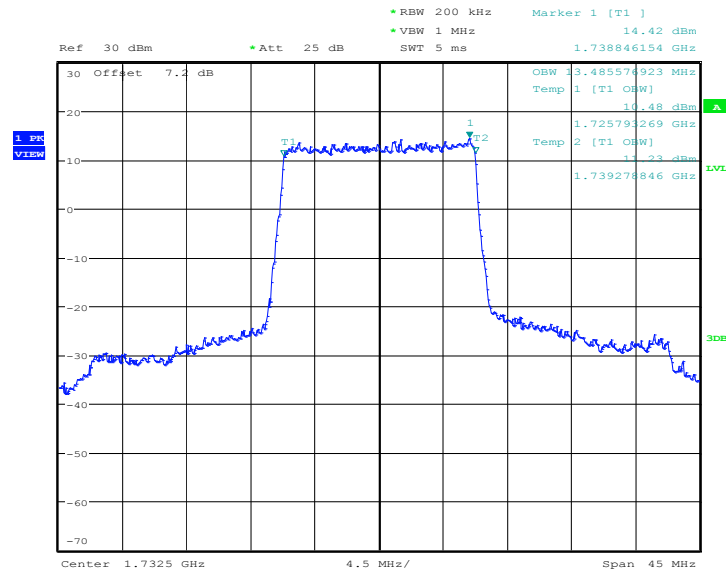


Date: 17.FEB.2017 02:06:33

LTE band 4, 15MHz (99%)

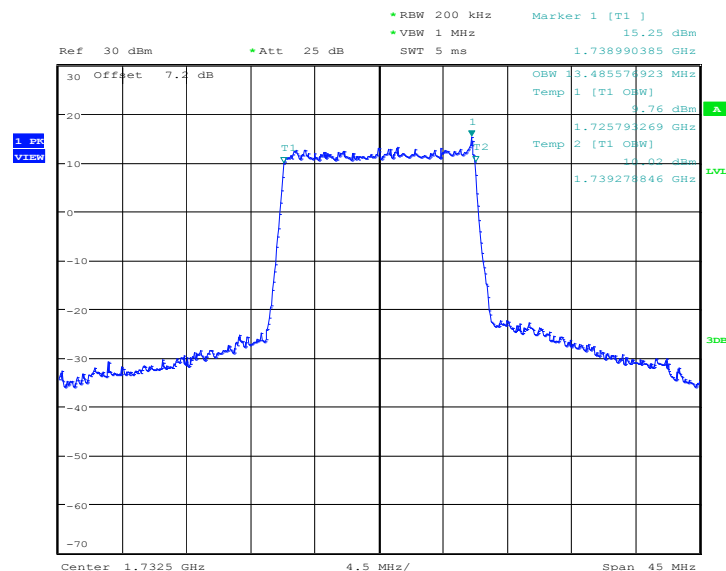
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	13485.58	13485.58

LTE band 4, 15MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 02:18:41

LTE band 4, 15MHz Bandwidth, 16QAM (99% BW)

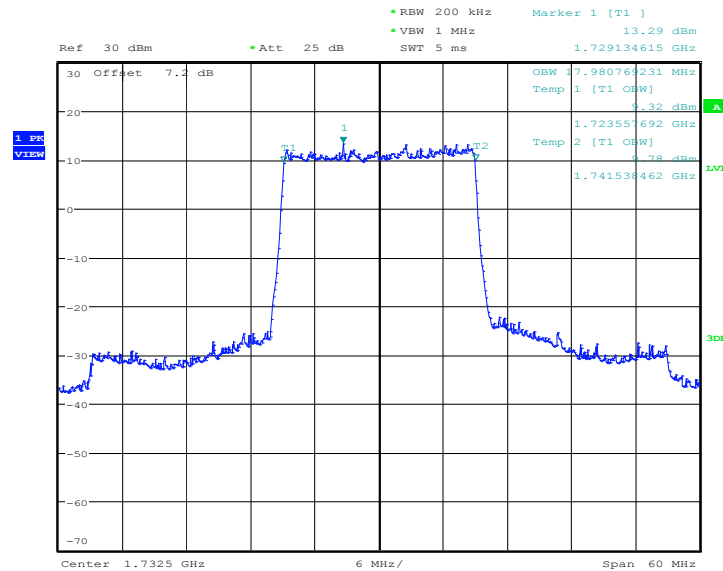


Date: 17.FEB.2017 02:17:54

LTE band 4, 20MHz (99%)

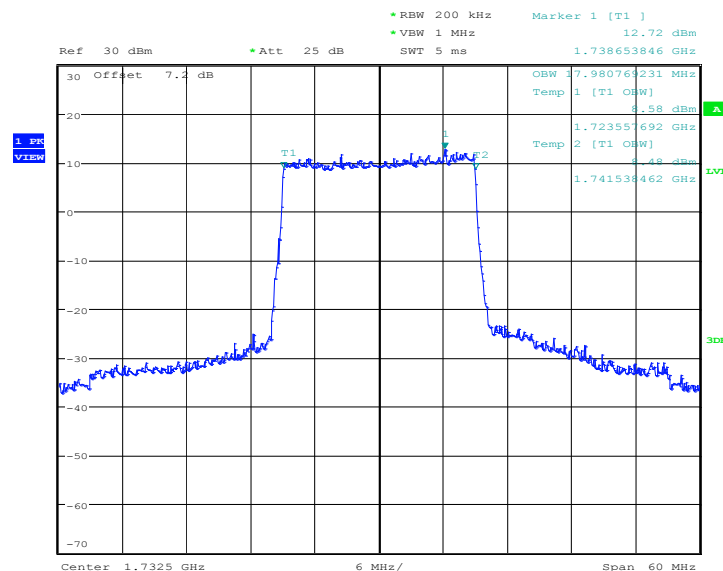
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	17980.77	17980.77

LTE band 4, 20MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 02:45:14

LTE band 4, 20MHz Bandwidth, 16QAM (99% BW)

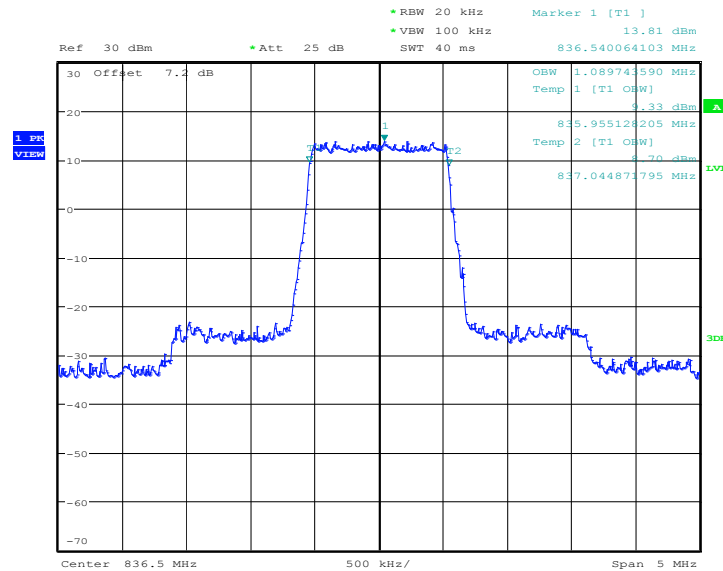


Date: 17.FEB.2017 02:44:42

LTE band 5, 1.4MHz (99%)

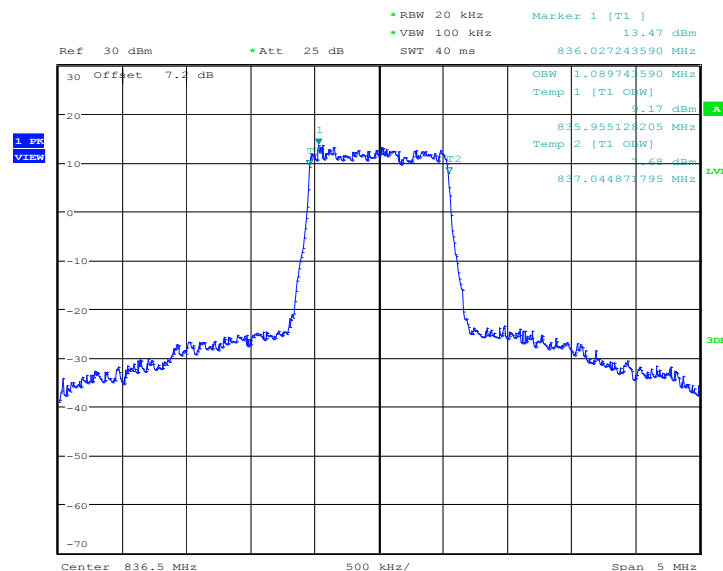
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	1089.74	1089.74

LTE band 5, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 16.FEB.2017 23:49:50

LTE band 5, 1.4MHz Bandwidth, 16QAM (99% BW)

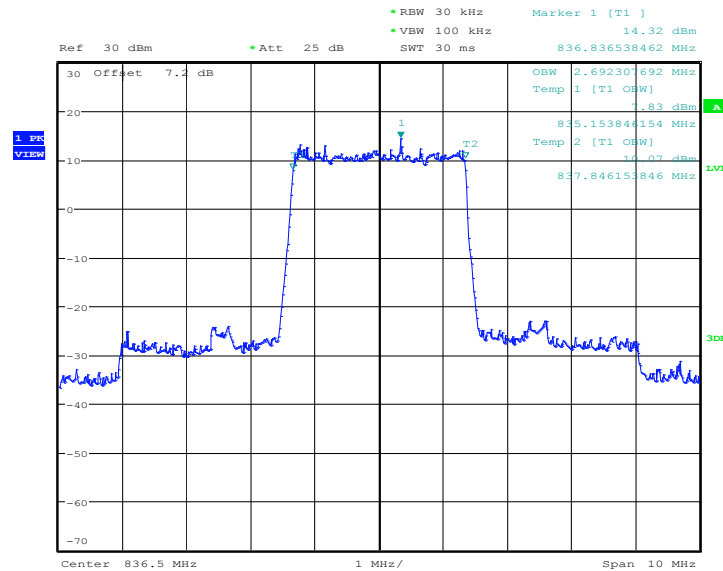


Date: 16.FEB.2017 23:50:18

LTE band 5, 3MHz (99%)

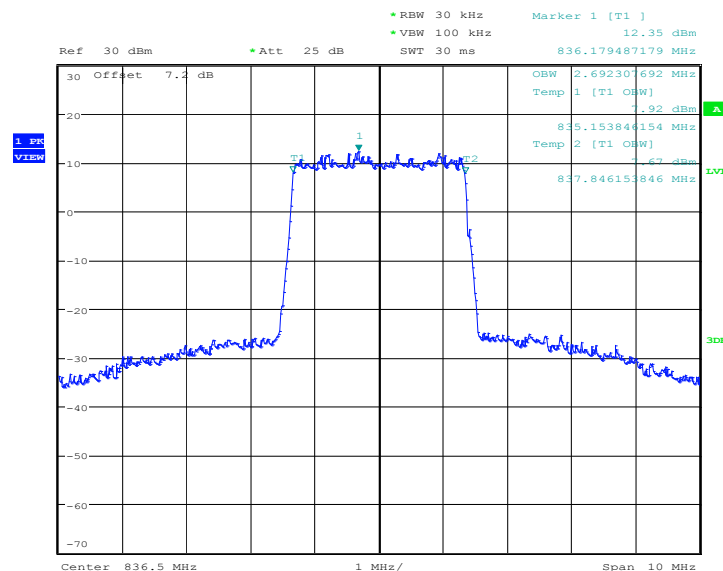
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	2692.31	2692.31

LTE band 5, 3MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 00:42:50

LTE band 5, 3MHz Bandwidth, 16QAM (99% BW)

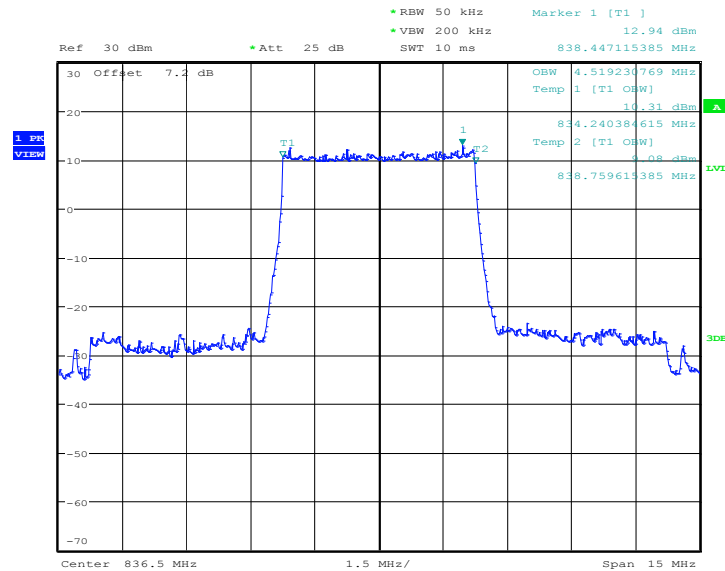


Date: 17.FEB.2017 00:41:51

LTE band 5, 5MHz (99%)

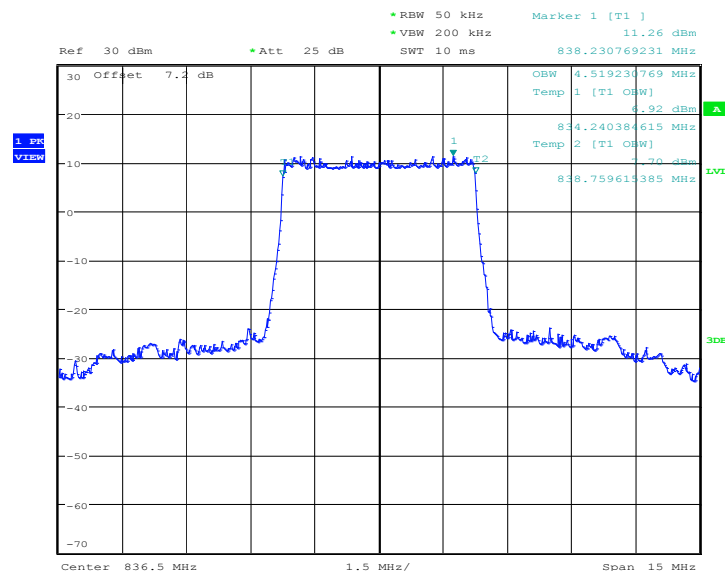
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	4519.23	4519.23

LTE band 5, 5MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 01:04:35

LTE band 5, 5MHz Bandwidth,16QAM (99% BW)

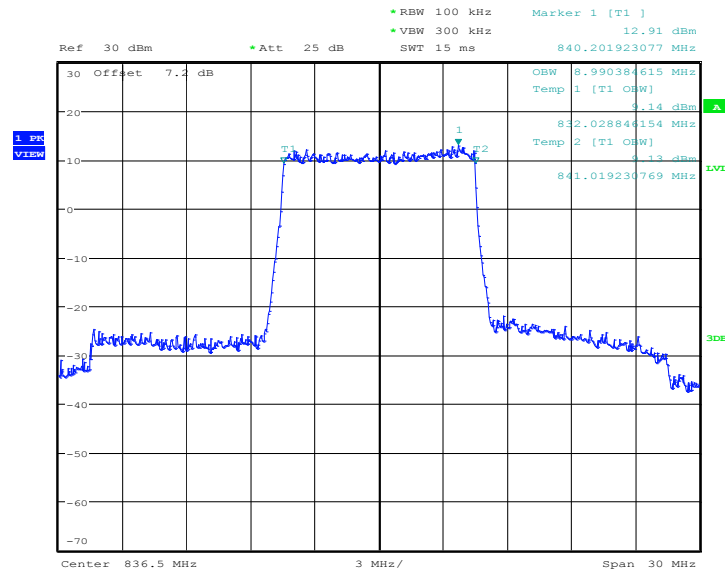


Date: 17.FEB.2017 01:05:47

LTE band 5, 10MHz (99%)

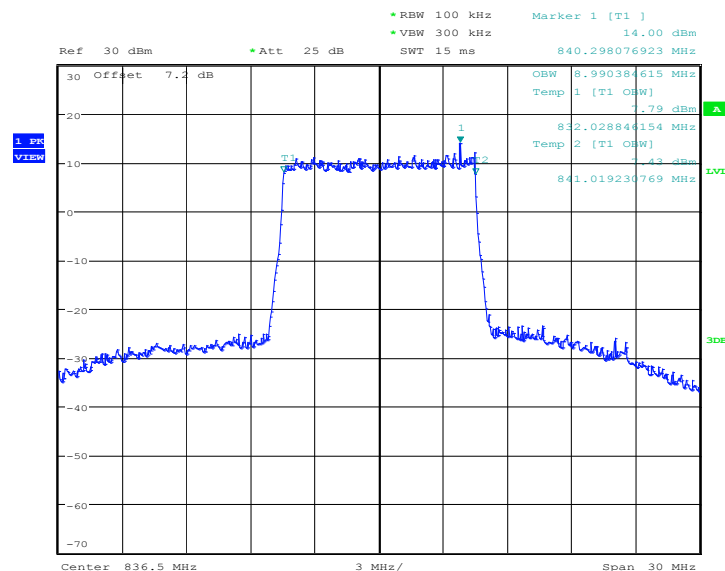
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	8990.38	8990.38

LTE band 5, 10MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 02:04:39

LTE band 5, 10MHz Bandwidth, 16QAM (99% BW)

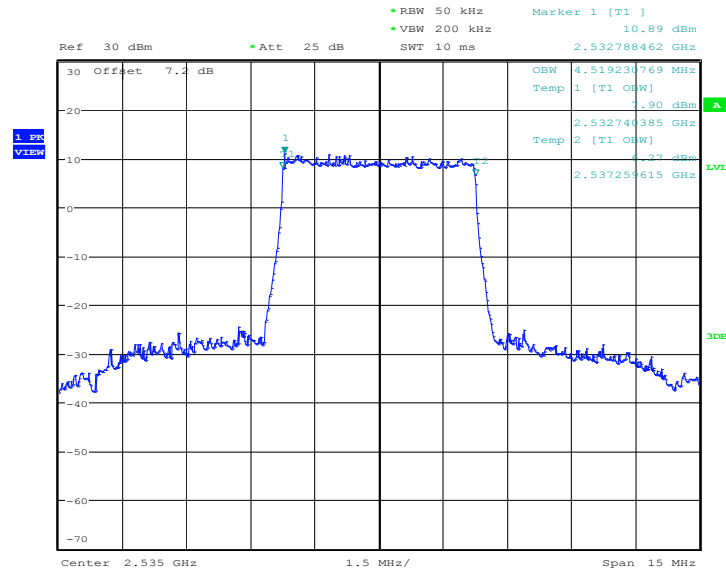


Date: 17.FEB.2017 02:04:00

LTE band 7, 5MHz (99%)

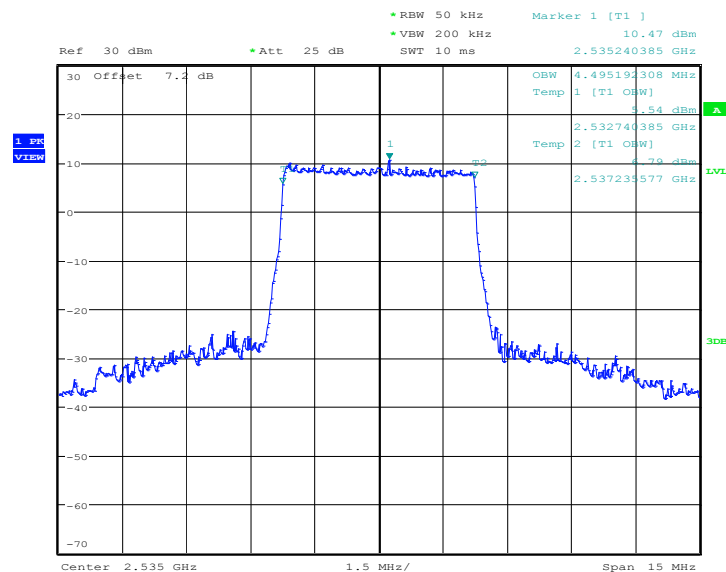
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	4519.23	4519.23

LTE band 7, 5MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 01:13:10

LTE band 7, 5MHz Bandwidth, 16QAM (99% BW)

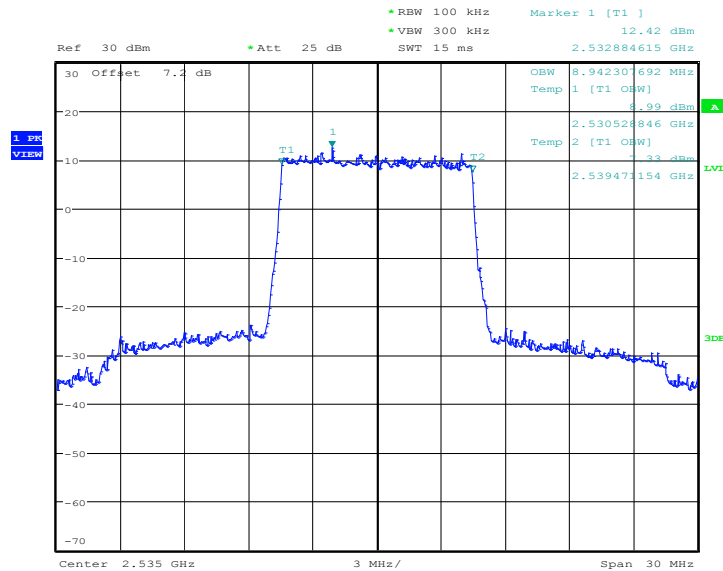


Date: 17.FEB.2017 01:12:36

LTE band 7, 10MHz (99%)

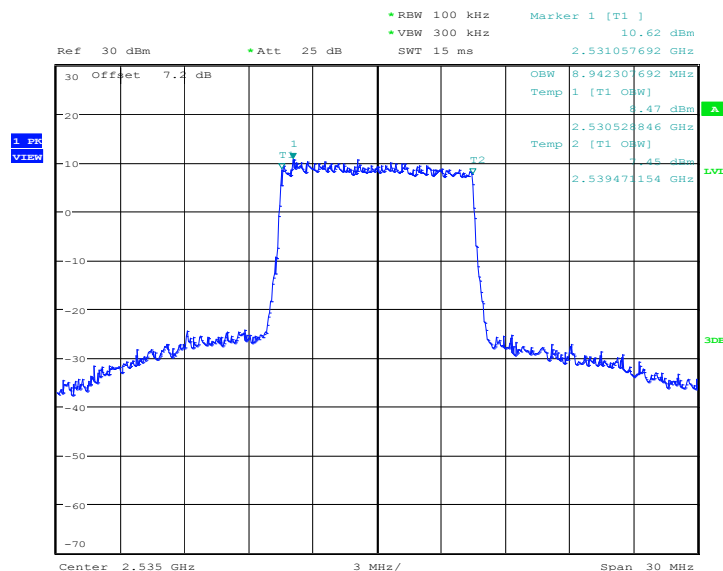
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	8942.31	8942.31

LTE band 7, 10MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 01:59:23

LTE band 7, 10MHz Bandwidth, 16QAM (99% BW)

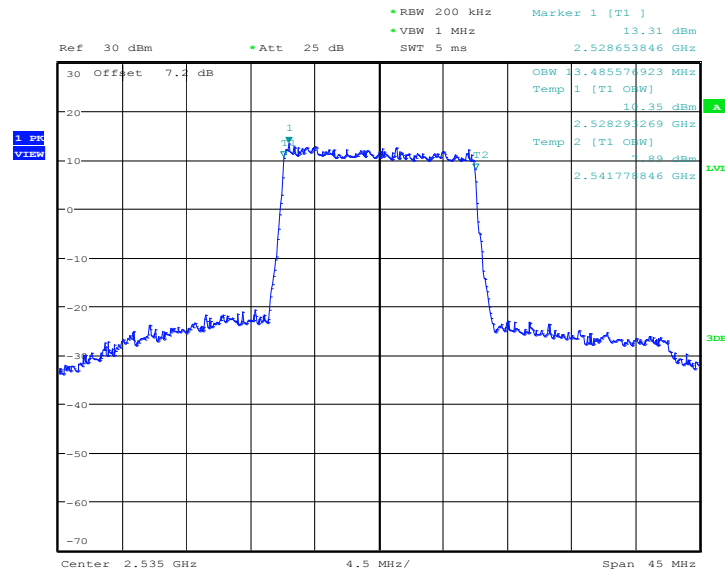


Date: 17.FEB.2017 02:00:02

LTE band 7, 15MHz (99%)

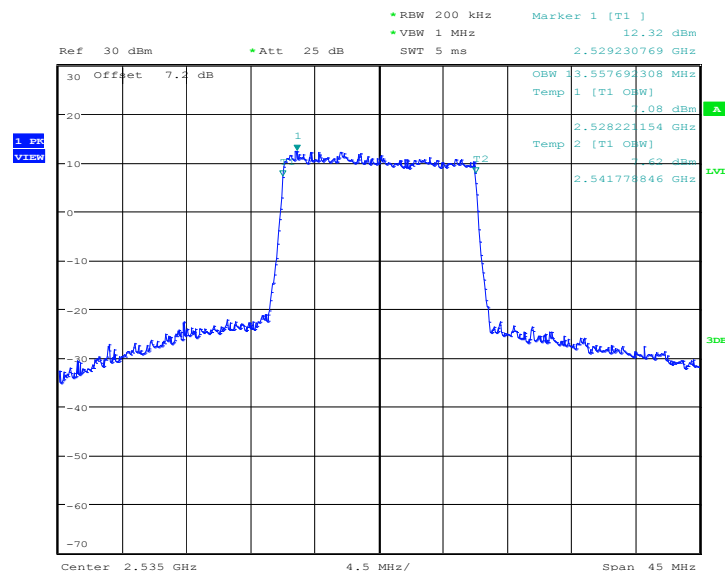
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	13485.58	13557.69

LTE band 7, 15MHz Bandwidth, QPSK (99% BW)

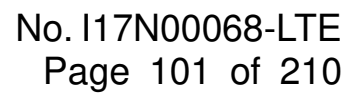


Date: 17.FEB.2017 02:19:45

LTE band 7, 15MHz Bandwidth, 16QAM (99% BW)



Date: 17.FEB.2017 02:20:25



Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	17980.77	17980.77

The screenshot displays a spectrum analyzer interface with the following details:

- Parameters:**
 - Ref: 30 dBm
 - Att: 25 dB
 - RBW: 200 kHz
 - VBW: 1 MHz
 - SWT: 5 ms
 - Marker 1 [T1]: 12.28 dBm
 - Marker 2 [T2]: 2.528365385 GHz
- Plot:** A frequency spectrum plot with a blue trace. The x-axis represents frequency, and the y-axis represents power in dBm. The trace shows a signal that rises from approximately -30 dBm at 2.5 GHz to about -10 dBm at 2.528 GHz, then drops back to -30 dBm.
- Markers:**
 - T1:** Located at approximately 2.528 GHz and -10 dBm. Associated values include:
 - Offset: 7.2 dB
 - CBW: 17.980764231 MHz
 - Temp 1 [T1 BW]: 9.55 dBm
 - T2:** Located at approximately 2.528 GHz and -10 dBm. Associated values include:
 - Temp 2 [T1 BW]: 2.526051692 GHz
 - Temp 2 [T1 BW]: 2.32 dBm
 - Temp 2 [T1 BW]: 2.544038462 GHz
- Interface Elements:**
 - A button labeled "1. F5 VIEW" is on the left.
 - Labels "LVL" and "30B" are on the right side of the plot area.
 - At the bottom, the following values are displayed:
 - Center: 2.535 GHz
 - 6 MHz/
 - Span: 60 MHz

The screenshot displays a spectrum analyzer interface with a blue trace showing a signal. The signal has a low-level noise floor around -35 dBm, a rising edge, a flat top section between two markers, and a falling edge back to the noise floor. The top of the screen shows measurement parameters: RBW 200 kHz, VBW 1 MHz, and SWT 5 ms. The center frequency is 2.535 GHz, and the span is 60 MHz. The right side of the screen shows marker data for T1 and T2, including frequency, power (11.90 dBm), and temperature. The bottom of the screen shows the center frequency, span, and a 6 MHz/div scale.

Ref 30 dBm • Att 25 dB • RBW 200 kHz Marker 1 [T1] 11.90 dBm
 • VBW 1 MHz 2.526346154 GHz 2.54038462 GHz

30 Offset 7.2 dB

1 0V
 1V/div

1 17.980764231 MHz
 Temp 1 [T1 BW] 11.90 dBm
 2 2.526057692 GHz
 Temp 2 [T1 BW] 11.90 dBm
 2.544038462 GHz

1

T2

10V

30dB

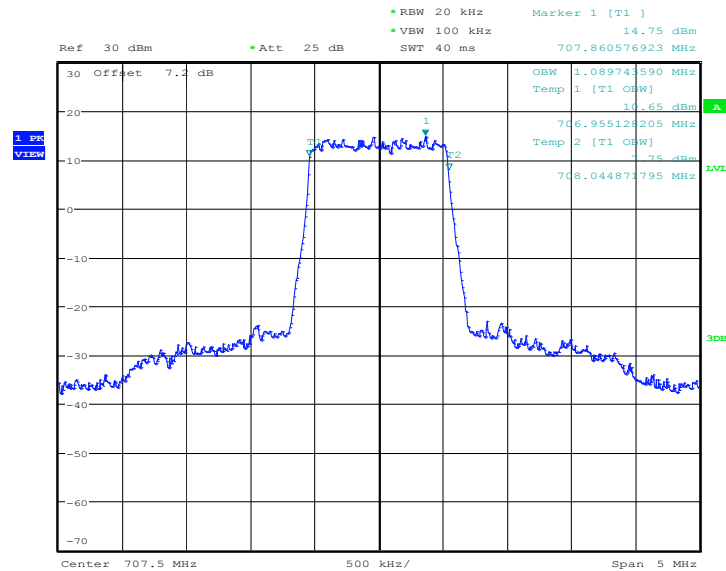
Center 2.535 GHz 6 MHz/ Span 60 MHz

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LTE band 12, 1.4MHz (99%)

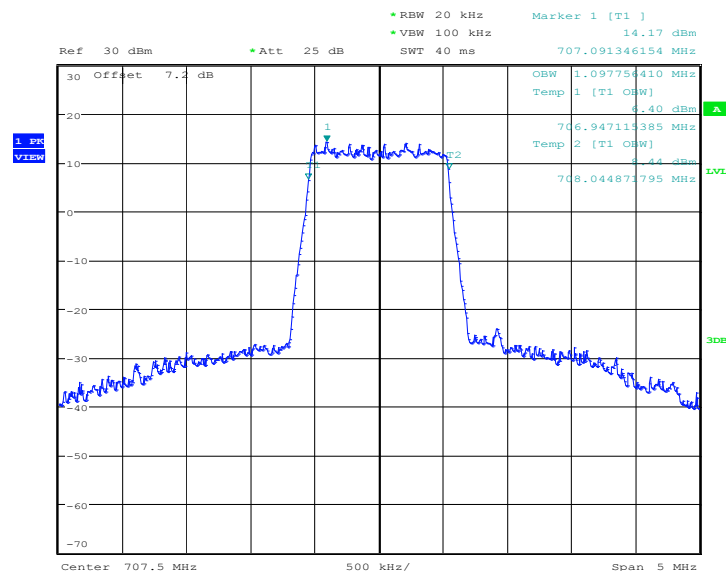
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	1089.74	1097.76

LTE band 12, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 16.FEB.2017 23:56:13

LTE band 12, 1.4MHz Bandwidth, 16QAM (99% BW)

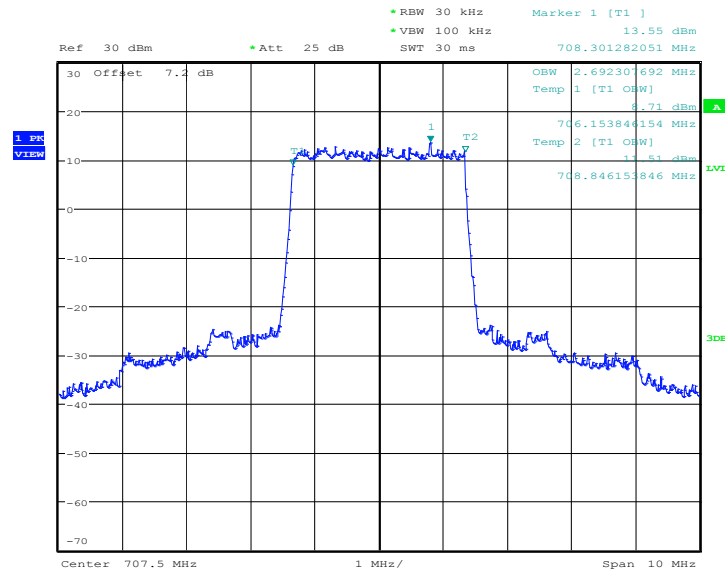


Date: 16.FEB.2017 23:55:37

LTE band 12, 3MHz (99%)

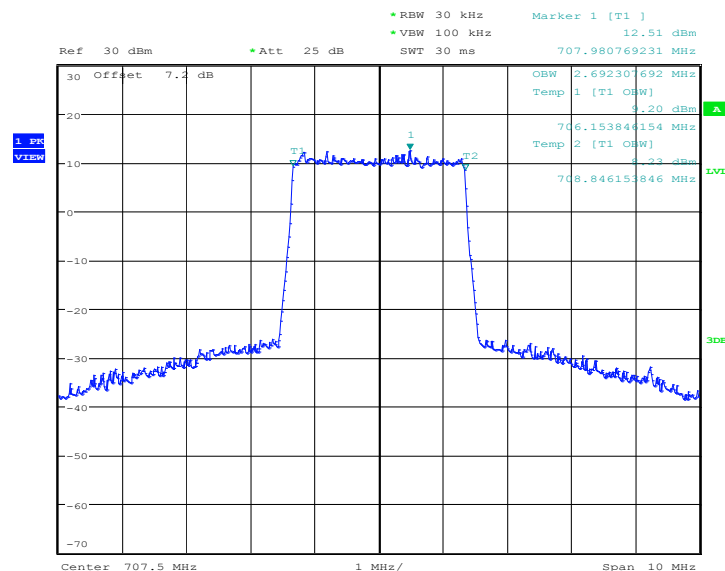
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	2692.31	2692.31

LTE band 12, 3MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 00:36:02

LTE band 12, 3MHz Bandwidth, 16QAM (99% BW)

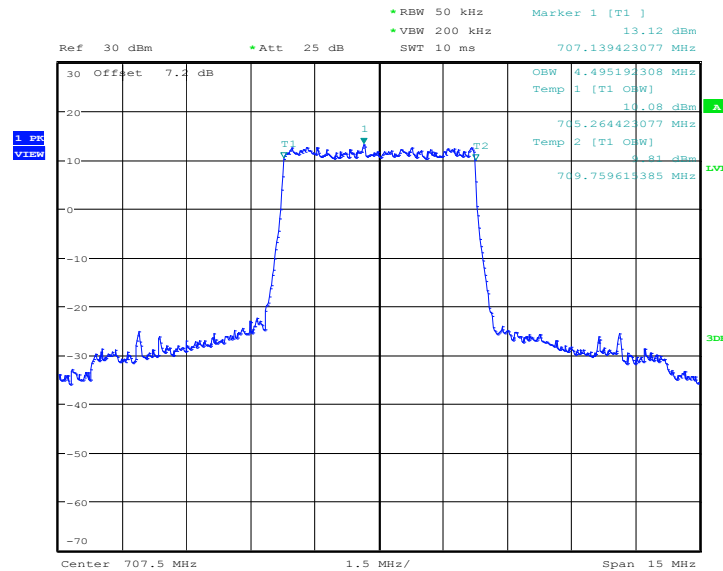


Date: 17.FEB.2017 00:36:47

LTE band 12, 5MHz (99%)

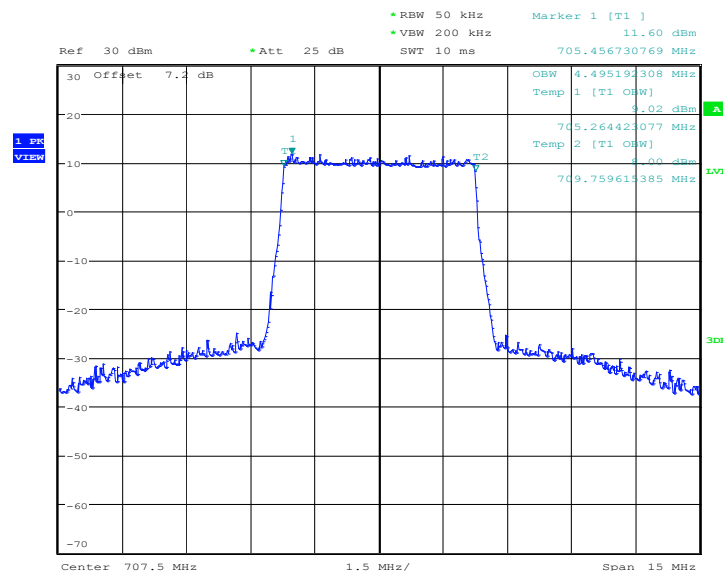
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	4495.19	4495.19

LTE band 12, 5MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 01:14:52

LTE band 12, 5MHz Bandwidth, 16QAM (99% BW)

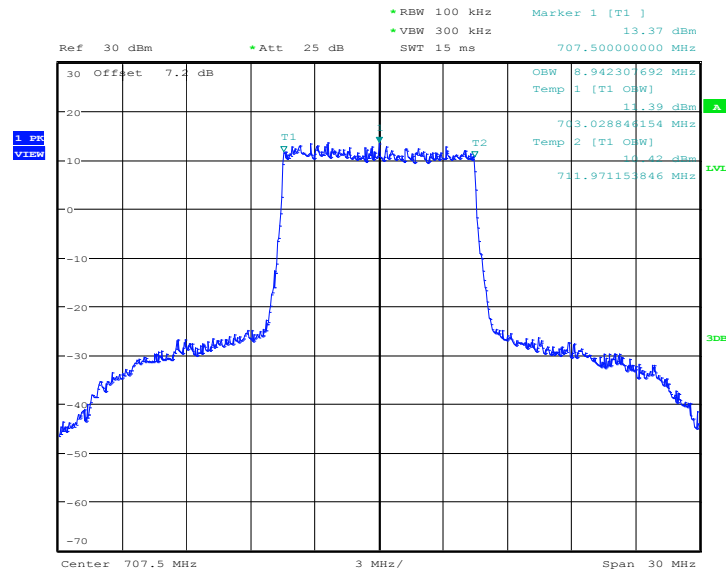


Date: 17.FEB.2017 01:15:27

LTE band 12, 10MHz (99%)

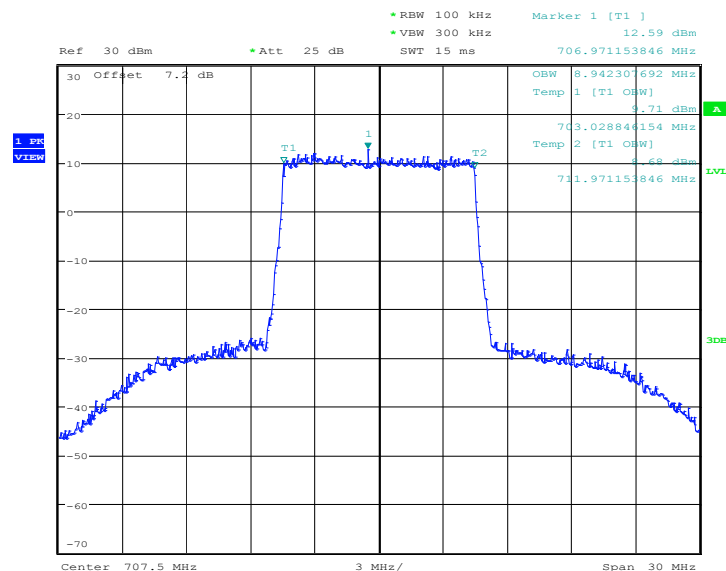
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	8942.31	8942.31

LTE band 12, 10MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 01:58:19

LTE band 12, 10MHz Bandwidth, 16QAM (99% BW)

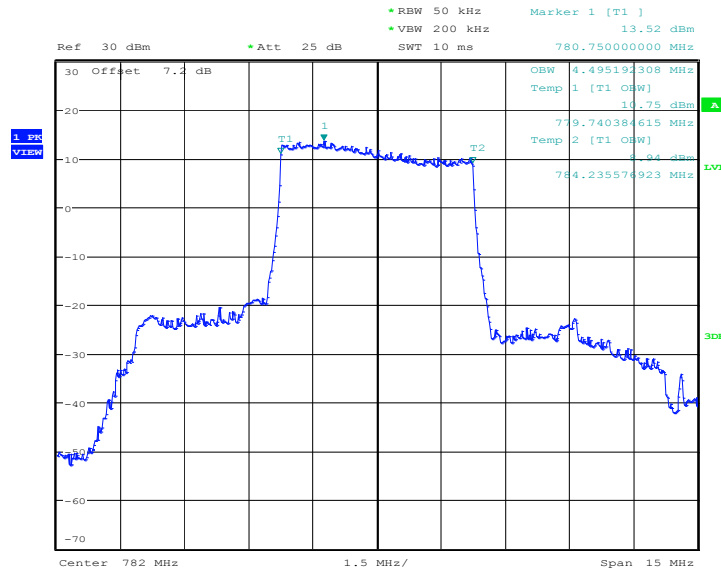


Date: 17.FEB.2017 01:57:53

LTE band 13, 5MHz (99%)

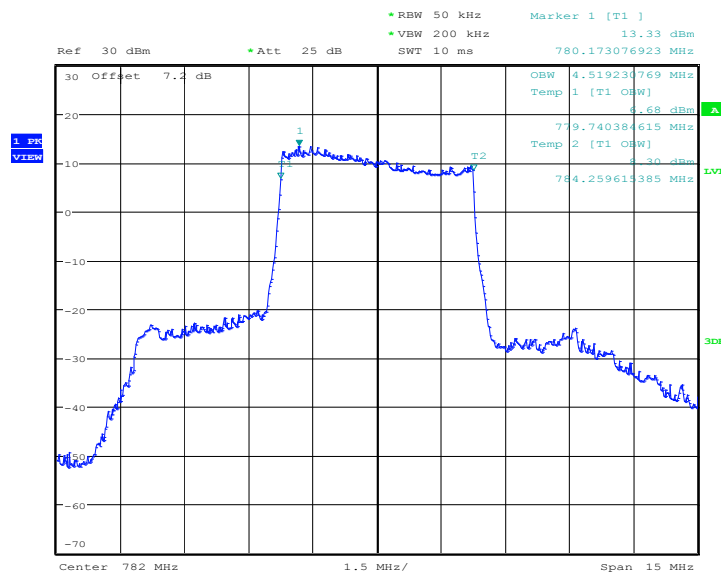
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
782.0	QPSK	16QAM
	4495.19	4519.23

LTE band 13, 5MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 01:20:29

LTE band 13, 5MHz Bandwidth, 16QAM (99% BW)

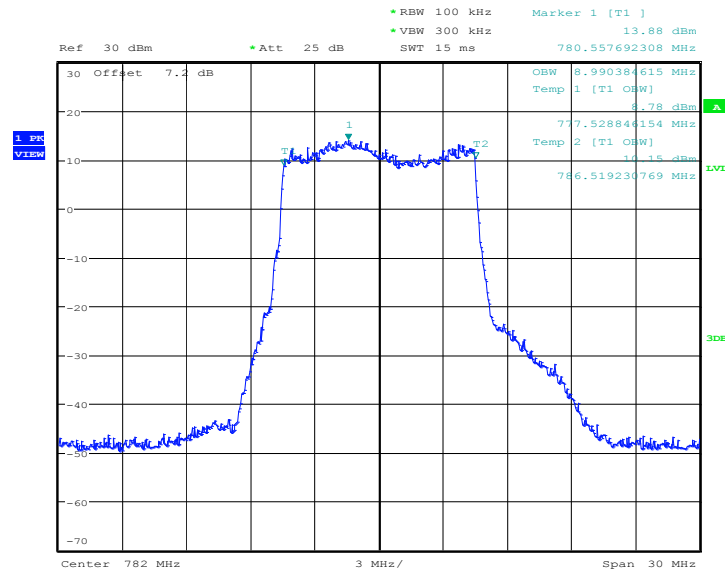


Date: 17.FEB.2017 01:19:53

LTE band 13, 10MHz (99%)

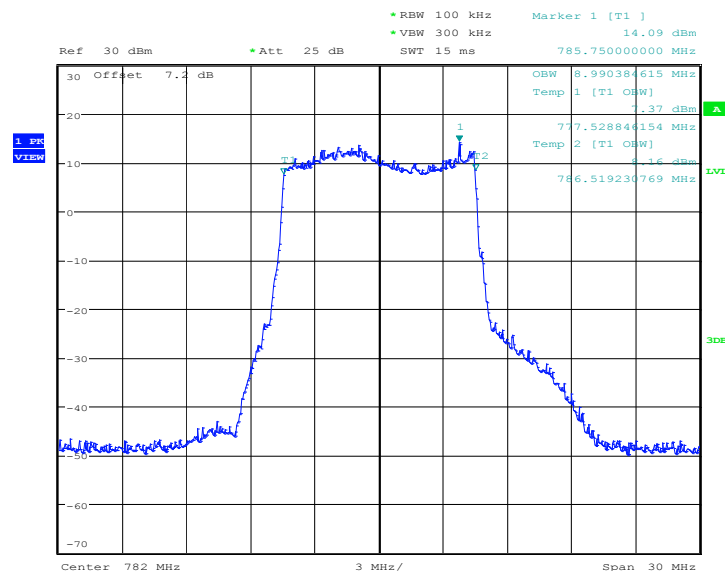
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
782.0	QPSK	16QAM
	8990.38	8990.38

LTE band 13, 10MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 01:54:03

LTE band 13, 10MHz Bandwidth, 16QAM (99% BW)

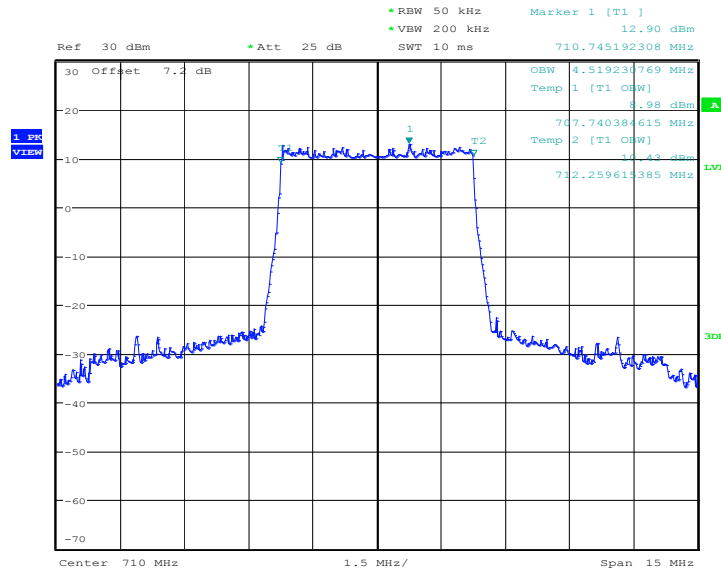


Date: 17.FEB.2017 01:54:34

LTE band 17, 5MHz (99%)

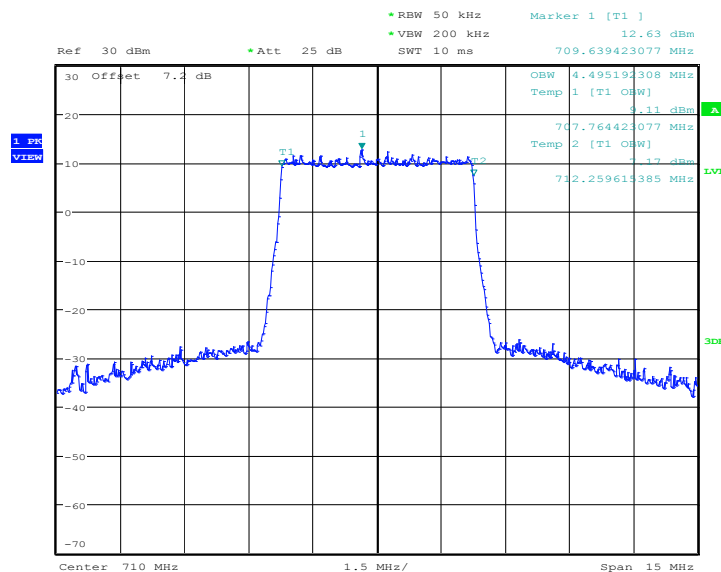
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
710.0	QPSK	16QAM
	4519.23	4495.19

LTE band 17, 5MHz Bandwidth, QPSK (99% BW)

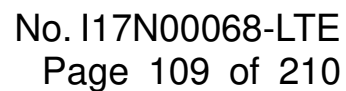


Date: 17.FEB.2017 01:21:23

LTE band 17, 5MHz Bandwidth, 16QAM (99% BW)



Date: 17.FEB.2017 01:22:08



Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
710.0	QPSK	16QAM
	8942.31	8990.38

The screenshot displays a spectrum analyzer interface. The main plot shows a signal with two markers, T1 and T2, indicating a specific frequency range. The y-axis represents power in dBm, ranging from -70 to 30. The x-axis represents frequency in MHz, with a center frequency of 710 MHz and a span of 30 MHz. The signal is characterized by a flat top between T1 and T2, with a slight dip in the center. The signal level is approximately 10 dBm. The noise floor is around -30 dBm. The plot is overlaid with a grid. The top of the screen shows various measurement parameters: Ref 30 dBm, Att 25 dB, RBW 100 kHz, VBW 300 kHz, and SWT 15 ms. The marker 1 [T1] is at 710.865384615 MHz with a power of 13.18 dBm. The marker 2 [T2] is at 714.471153846 MHz with a power of 10.22 dBm. The plot is labeled with '1 MHz' and 'VZBW' on the left side. The right side of the screen shows additional parameters: OBW 8.942307692 MHz, Temp 1 [T1 OBW] 10.20 dBm, and Temp 2 [T2 OBW] 10.22 dBm. The plot is also labeled with 'A' and '30dB' on the right side.

Ref 30 dBm • Att 25 dB • RBW 100 kHz • VBW 300 kHz Marker 1 [T1] 13.18 dBm

SWT 15 ms 710.865384615 MHz

30 Offset 7.2 dB

1 MHz
VZBW

T1 1 T2

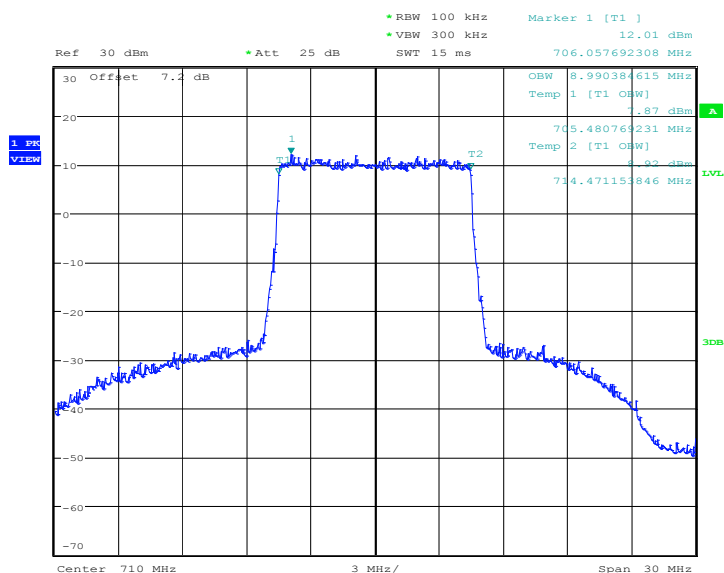
OBW 8.942307692 MHz
Temp 1 [T1 OBW] 10.20 dBm
705.528846154 MHz
Temp 2 [T2 OBW] 10.22 dBm
714.471153846 MHz

A

30dB

Center 710 MHz 3 MHz/ Span 30 MHz

LTE band 17, 10MHz Bandwidth, 16QAM (99% BW)

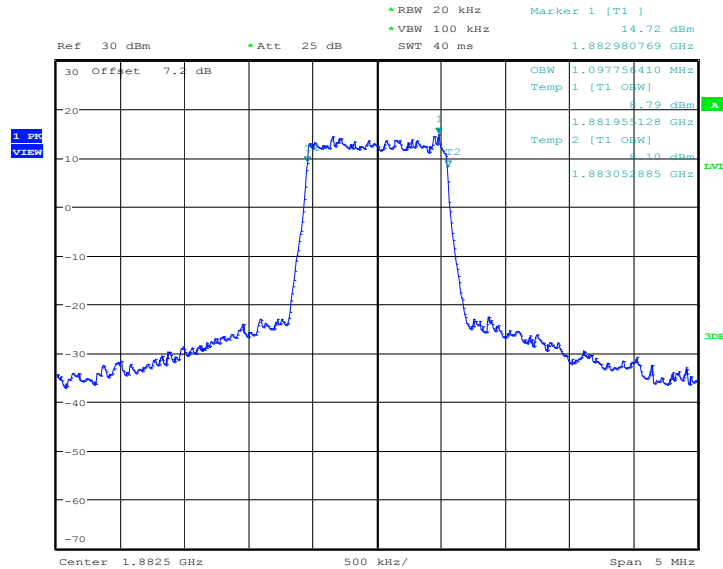


Date: 17.FEB.2017 01:52:41

LTE band 25, 1.4MHz (99%)

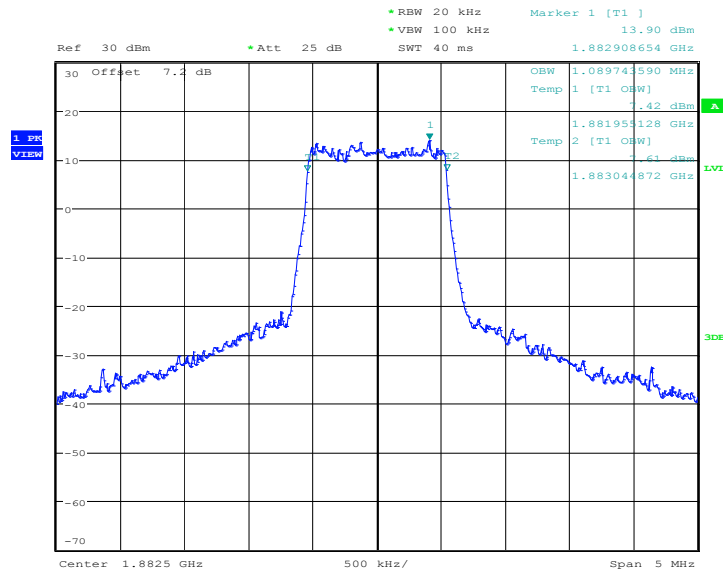
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	1097.76	1089.74

LTE band 25, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 00:16:53

LTE band 25, 1.4MHz Bandwidth, 16QAM (99% BW)

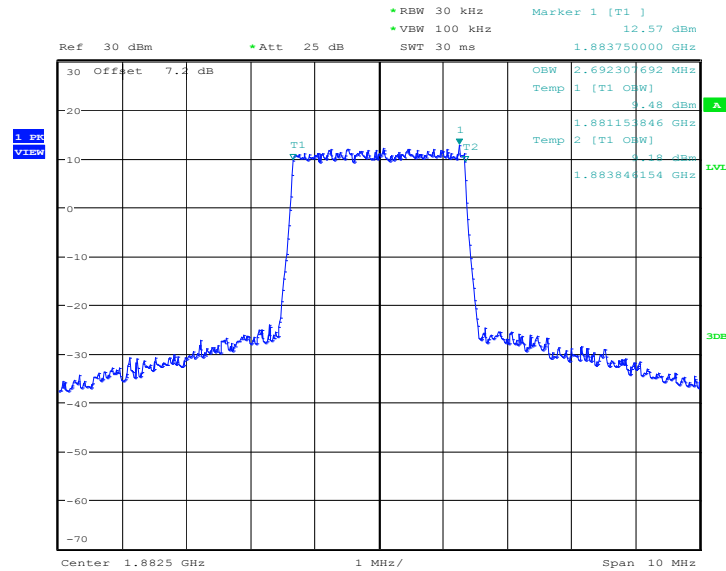


Date: 17.FEB.2017 00:17:27

LTE band25, 3MHz (99%)

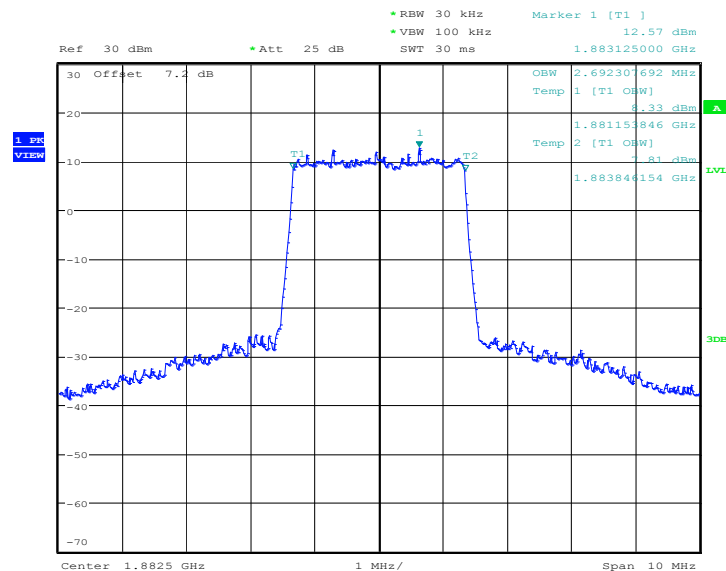
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	2692.31	2692.31

LTE band 25, 3MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 00:34:59

LTE band 25, 3MHz Bandwidth, 16QAM (99% BW)

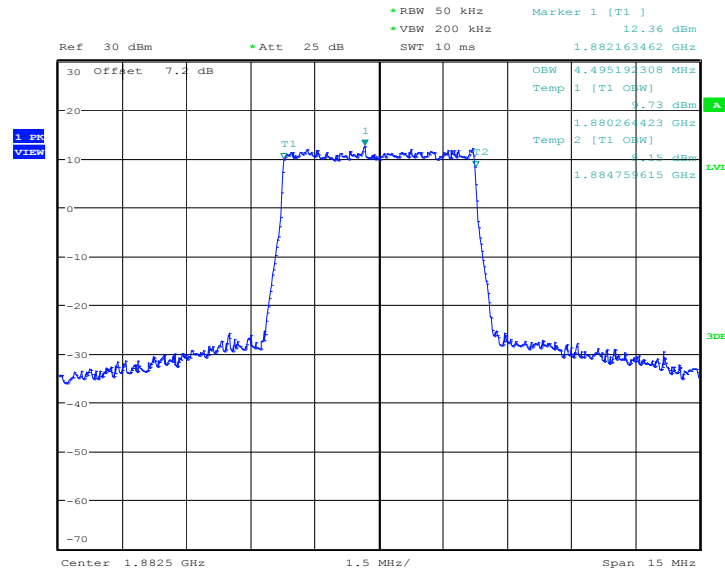


Date: 17.FEB.2017 00:33:45

LTE band 25, 5MHz (99%)

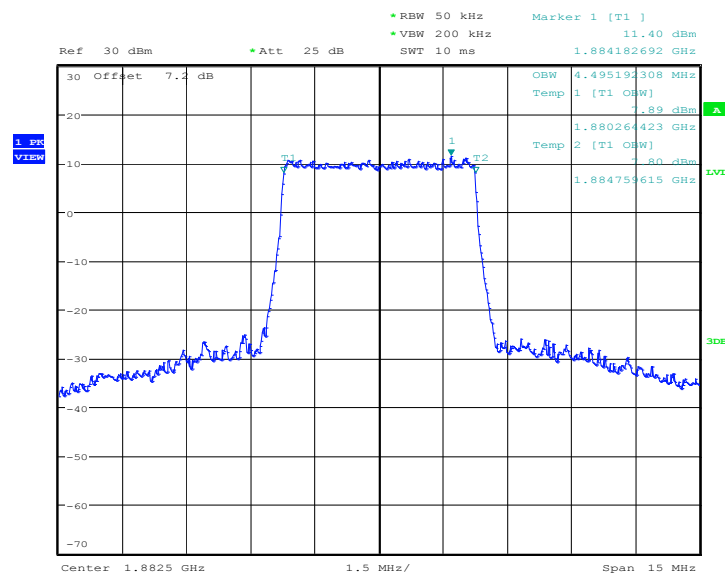
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	4495.19	4495.19

LTE band 25, 5MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 01:27:14

LTE band 25, 5MHz Bandwidth, 16QAM (99% BW)

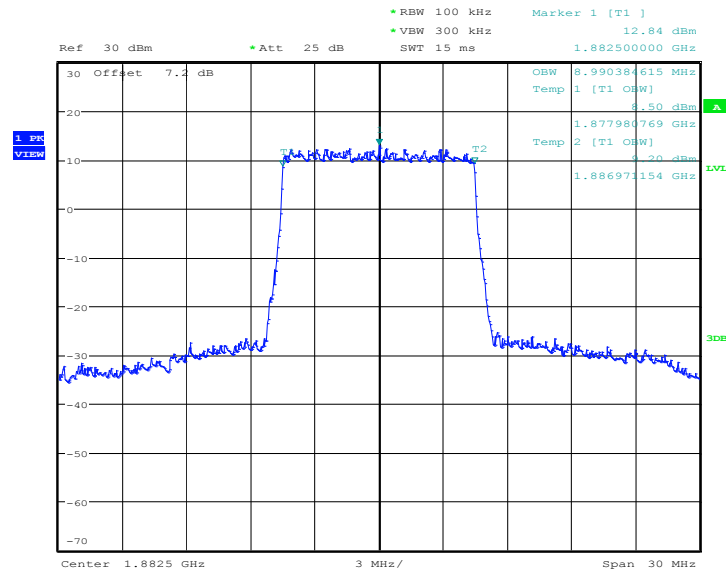


Date: 17.FEB.2017 01:26:25

LTE band 25, 10MHz (99%)

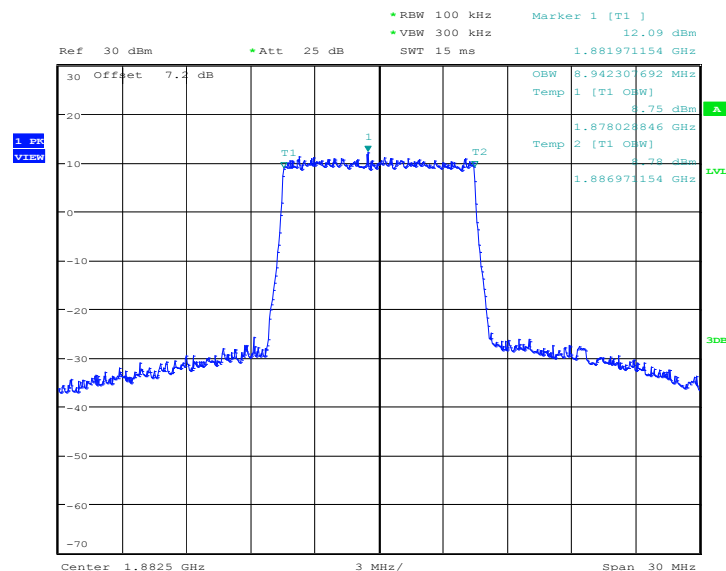
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	8990.38	8942.31

LTE band 25, 10MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 01:47:35

LTE band 25, 10MHz Bandwidth, 16QAM (99% BW)

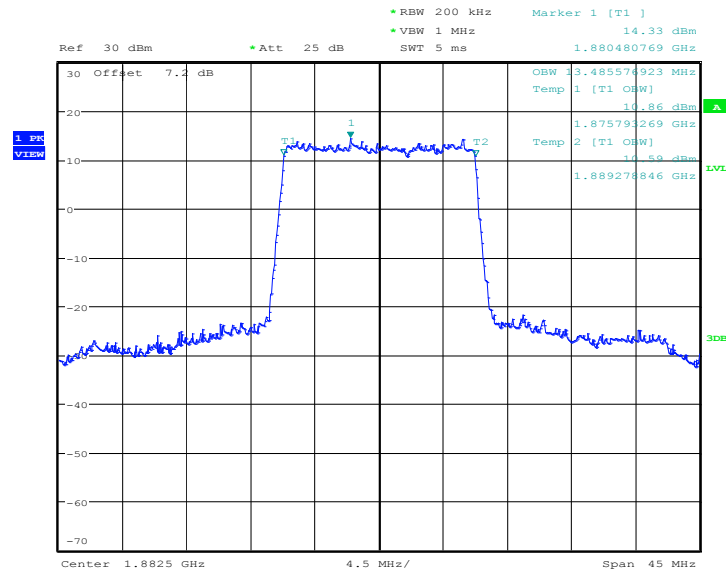


Date: 17.FEB.2017 01:48:05

LTE band 25, 15MHz (99%)

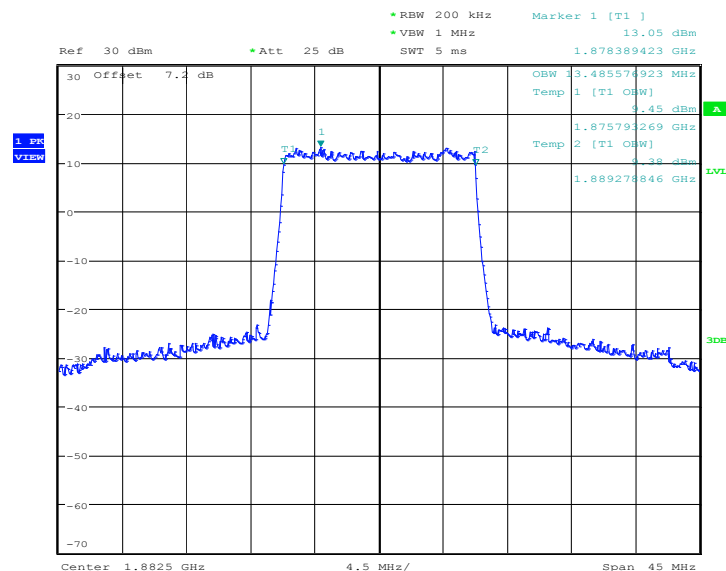
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	13485.58	13485.58

LTE band 25, 15MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 02:24:11

LTE band 25, 15MHz Bandwidth, 16QAM (99% BW)

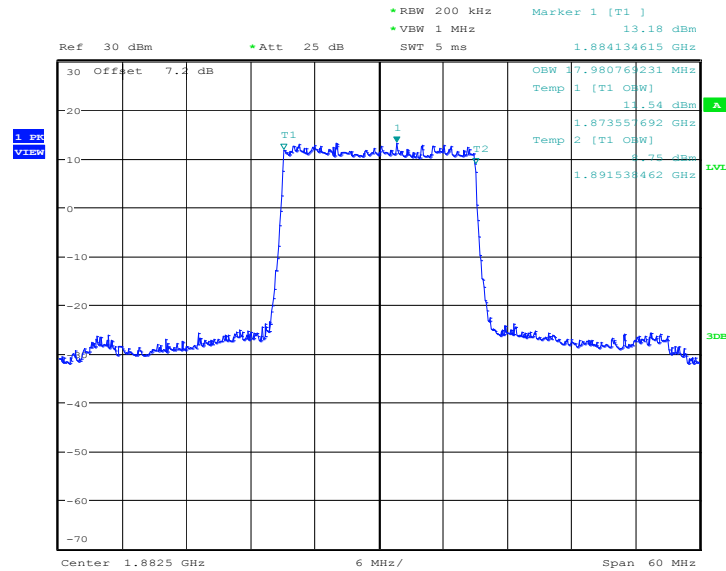


Date: 17.FEB.2017 02:23:31

LTE band 25, 20MHz (99%)

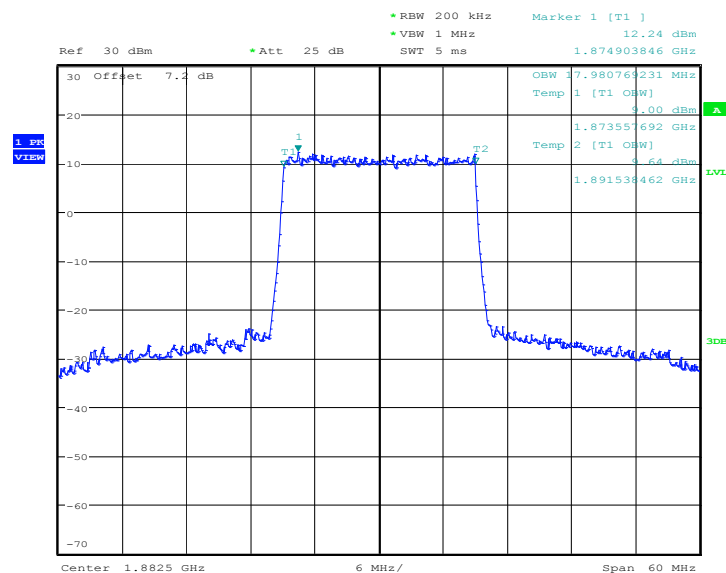
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1882.5	QPSK	16QAM
	17980.77	17980.77

LTE band 25, 20MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 02:36:50

LTE band 25, 20MHz Bandwidth, 16QAM (99% BW)

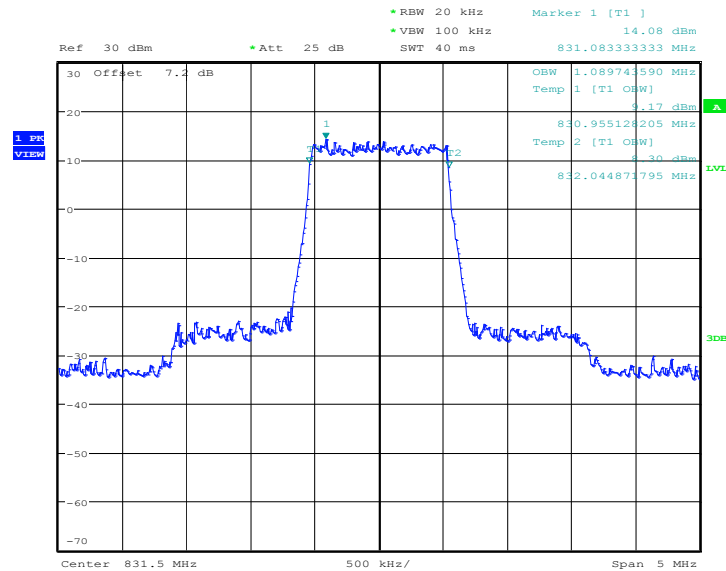


Date: 17.FEB.2017 02:36:01

LTE band 26, 1.4MHz (99%)

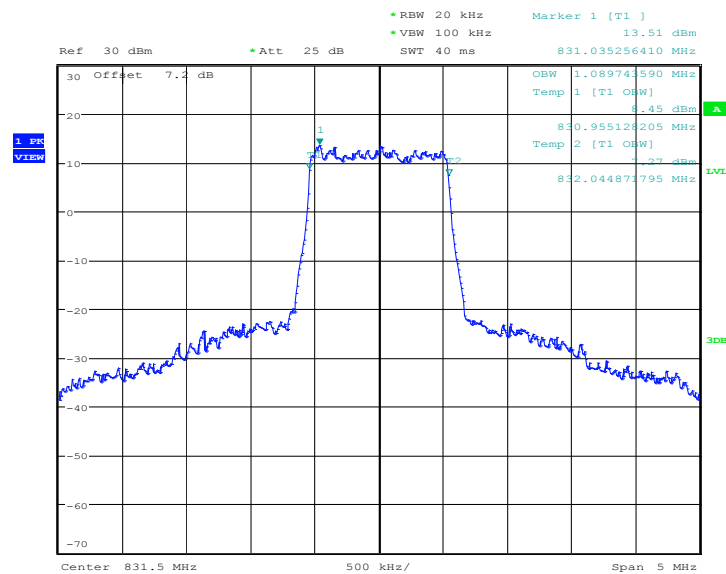
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
831.5	QPSK	16QAM
	1089.74	1089.74

LTE band 26, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 00:27:24

LTE band 26, 1.4MHz Bandwidth, 16QAM (99% BW)

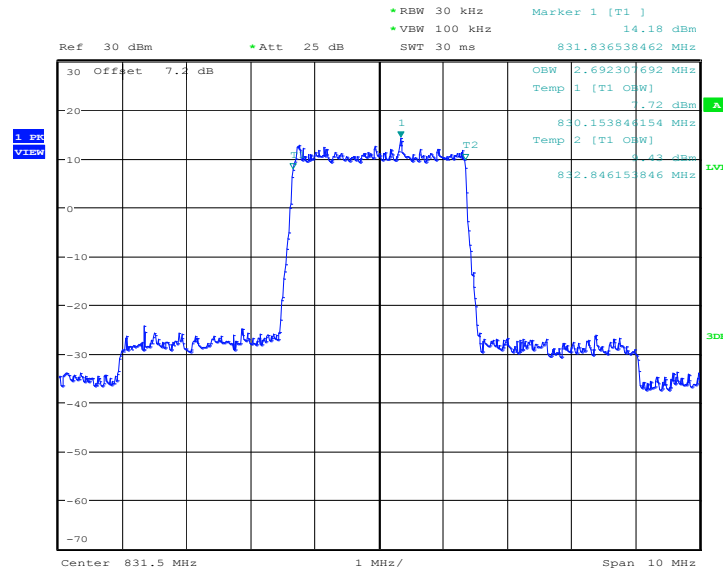


Date: 17.FEB.2017 00:26:58

LTE band26, 3MHz (99%)

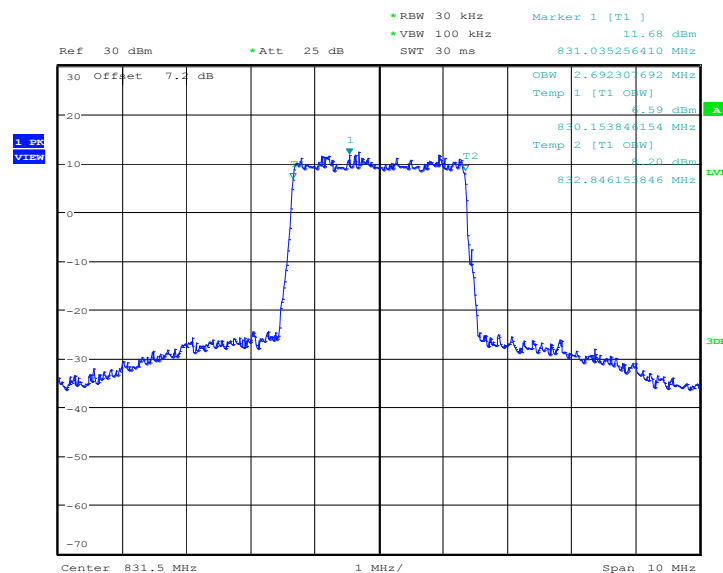
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
831.5	QPSK	16QAM
	2692.31	2692.31

LTE band 26, 3MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 00:28:32

LTE band 26, 3MHz Bandwidth, 16QAM (99% BW)

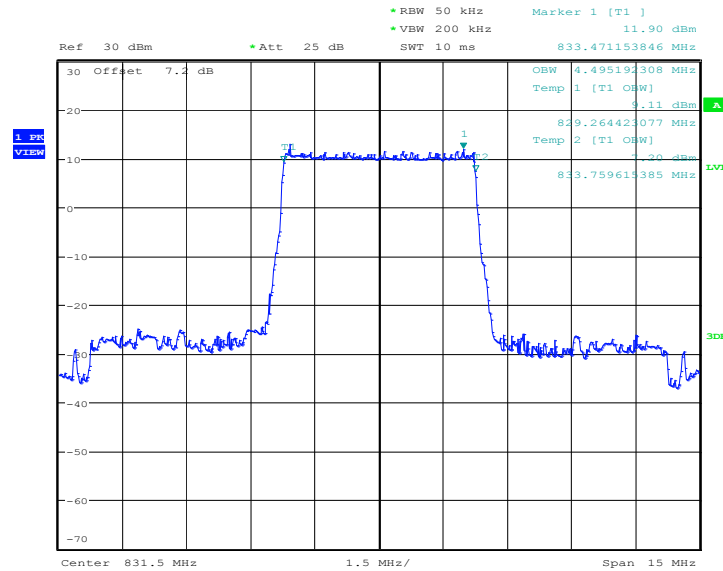


Date: 17.FEB.2017 00:29:05

LTE band 26, 5MHz (99%)

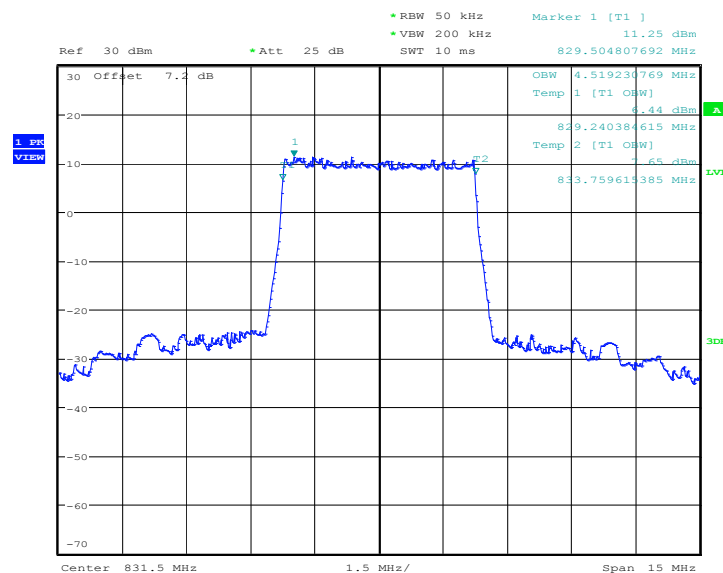
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
831.5	QPSK	16QAM
	4495.19	4519.23

LTE band 26, 5MHz Bandwidth, QPSK (99% BW)

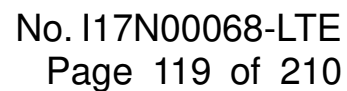


Date: 17.FEB.2017 01:28:09

LTE band 26, 5MHz Bandwidth, 16QAM (99% BW)



Date: 17.FEB.2017 01:29:29

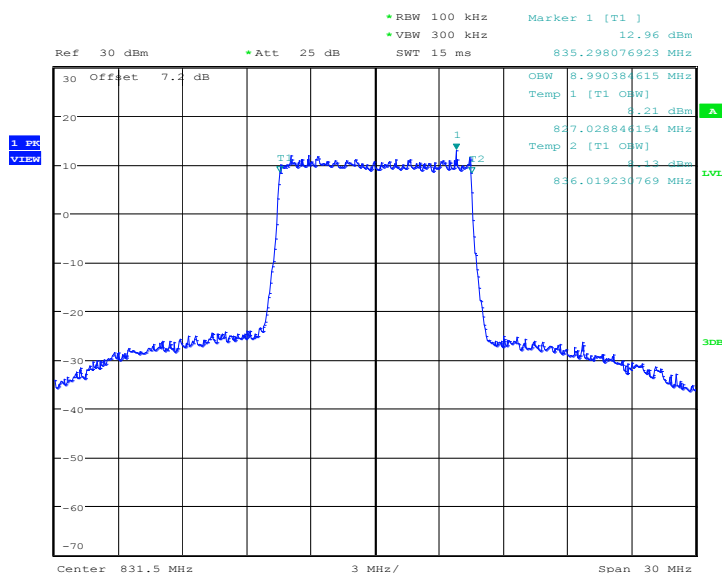


Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
831.5	QPSK	16QAM
	9038.46	8990.38

The screenshot displays a spectrum analyzer interface with a blue trace showing a signal. The signal has a flat top between two points labeled T1 and T2. The y-axis represents power in dBm, ranging from -70 to 30. The x-axis represents frequency in MHz, with a center frequency of 831.5 MHz and a span of 30 MHz. The resolution bandwidth (RBW) is 100 kHz, and the video bandwidth (VBW) is 300 kHz. The sweep time (SWT) is 15 ms. The reference level (Ref) is 30 dBm, and the attenuation (Att) is 25 dB. The offset is 7.2 dB. The marker 1 [T1] is at 826.980769231 MHz with a power of -6.0 dBm. The marker 2 [T2] is at 826.019230769 MHz with a power of -6.18 dBm. The center frequency is 831.5 MHz, and the span is 30 MHz.

Parameter	Value
Ref	30 dBm
Att	25 dB
RBW	100 kHz
VBW	300 kHz
SWT	15 ms
Marker 1 [T1]	826.980769231 MHz
Marker 1 Power	-6.0 dBm
Marker 2 [T2]	826.019230769 MHz
Marker 2 Power	-6.18 dBm
Center	831.5 MHz
Span	30 MHz

LTE band 26, 10MHz Bandwidth, 16QAM (99% BW)

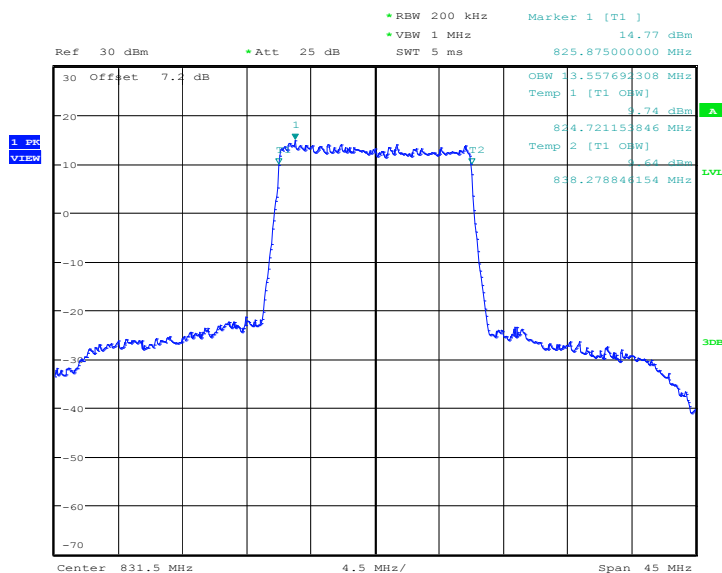


Date: 17.FEB.2017 01:35:45

LTE band 26, 15MHz (99%)

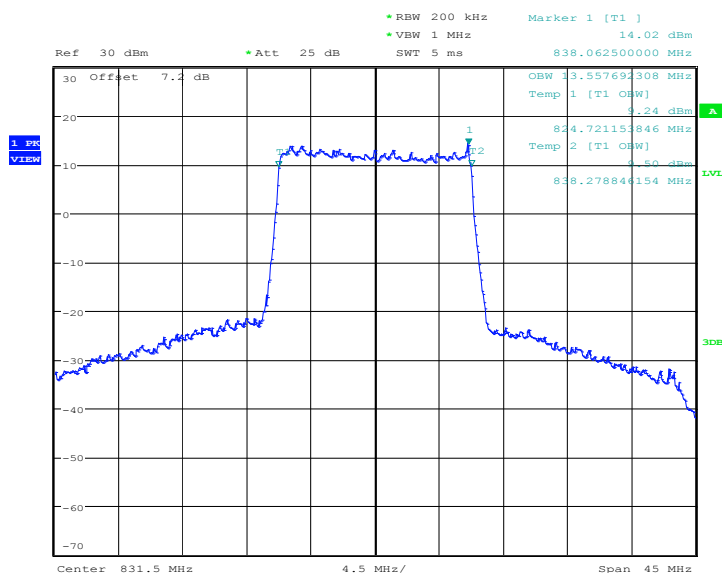
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
831.5	QPSK	16QAM
	13557.69	13557.69

LTE band 26, 15MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 02:25:36

LTE band 26, 15MHz Bandwidth, 16QAM (99% BW)

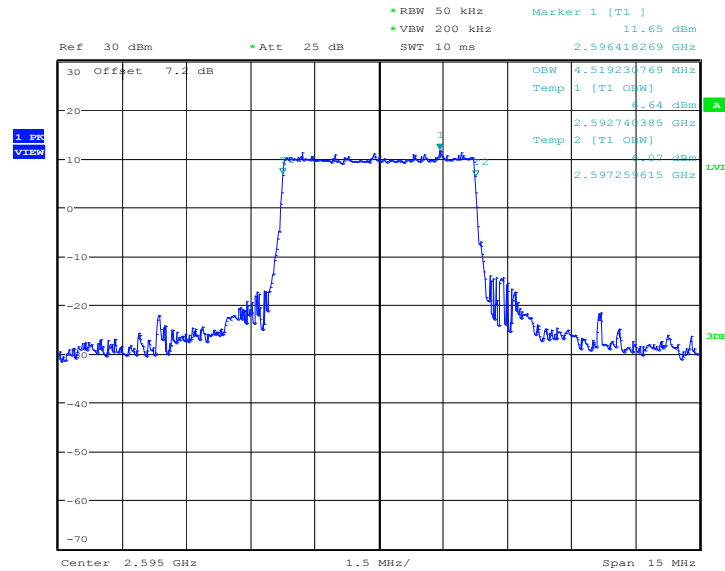


Date: 17.FEB.2017 02:26:32

LTE band 38, 5MHz (99%)

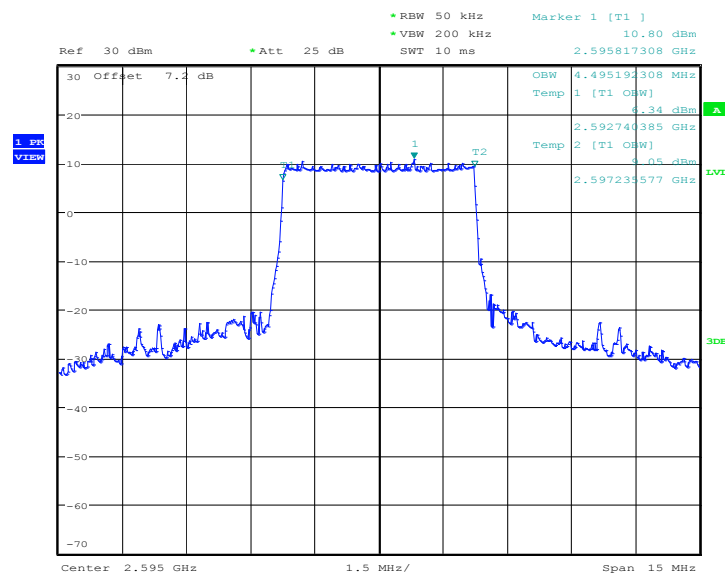
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2595.0	QPSK	16QAM
	4519.23	4495.19

LTE band 38, 5MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 03:20:20

LTE band 38, 5MHz Bandwidth, 16QAM (99% BW)

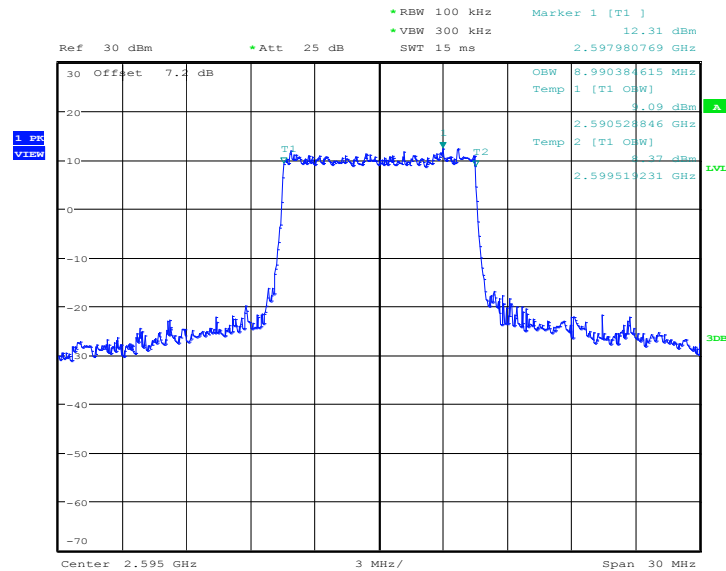


Date: 17.FEB.2017 03:21:07

LTE band 38, 10MHz (99%)

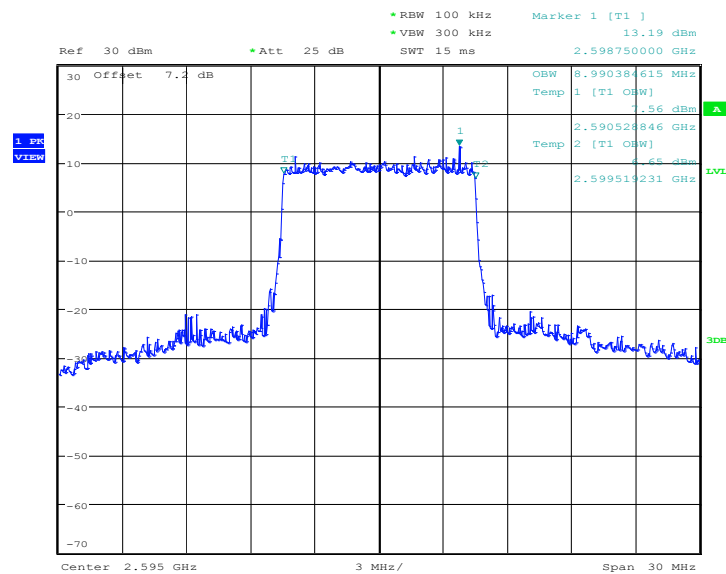
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2595.0	QPSK	16QAM
	8990.38	8990.38

LTE band 38, 10MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 03:19:18

LTE band 38, 10MHz Bandwidth, 16QAM (99% BW)

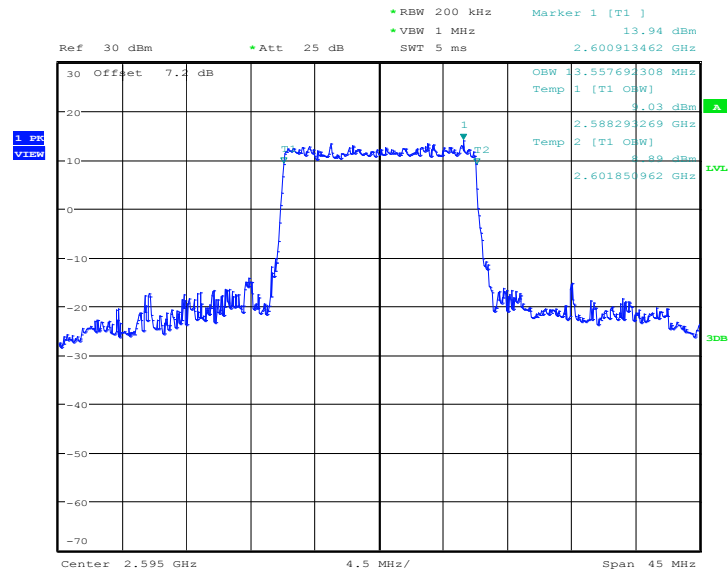


Date: 17.FEB.2017 03:18:33

LTE band 38, 15MHz (99%)

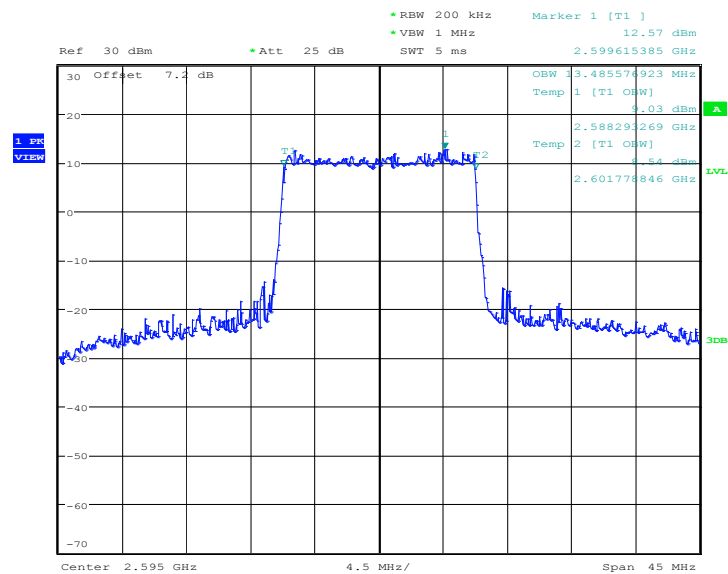
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2595.0	QPSK	16QAM
	13557.69	134485.58

LTE band 38, 15MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 03:14:29

LTE band 38, 15MHz Bandwidth, 16QAM (99% BW)

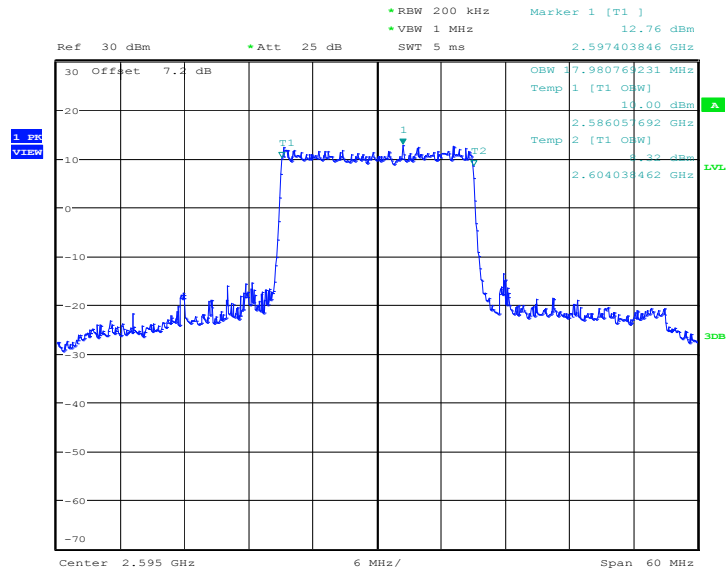


Date: 17.FEB.2017 03:15:14

LTE band 38, 20MHz (99%)

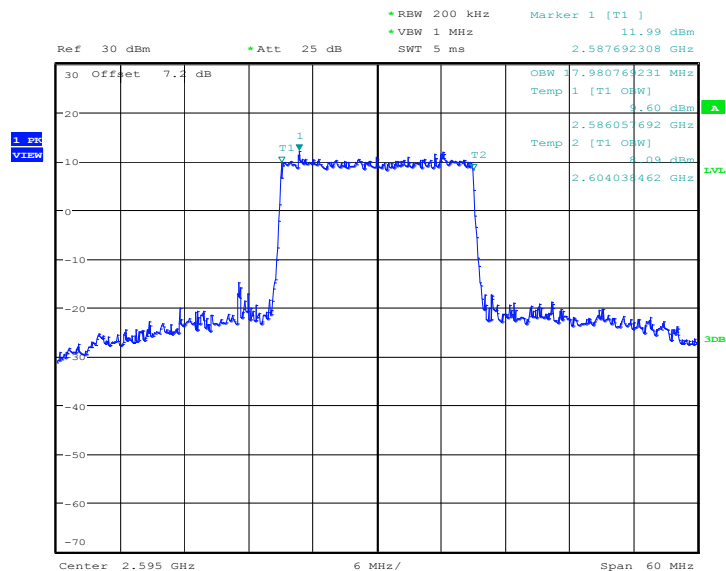
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2595.0	QPSK	16QAM
	17980.77	17980.77

LTE band 38, 20MHz Bandwidth, QPSK (99% BW)



Date: 17.FEB.2017 03:13:35

LTE band 38, 20MHz Bandwidth, 16QAM (99% BW)



Date: 17.FEB.2017 03:12:55

A.5 EMISSION BANDWIDTH

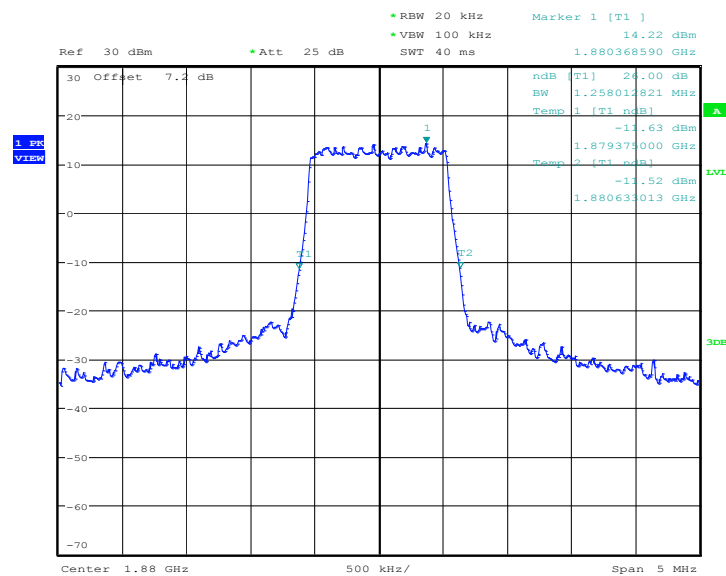
A.5.1 Emission Bandwidth Results

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. Table below lists the measured -26dBc BW. Spectrum analyzer plots are included on the following pages.

LTE band 2, 1.4MHz (-26dBc)

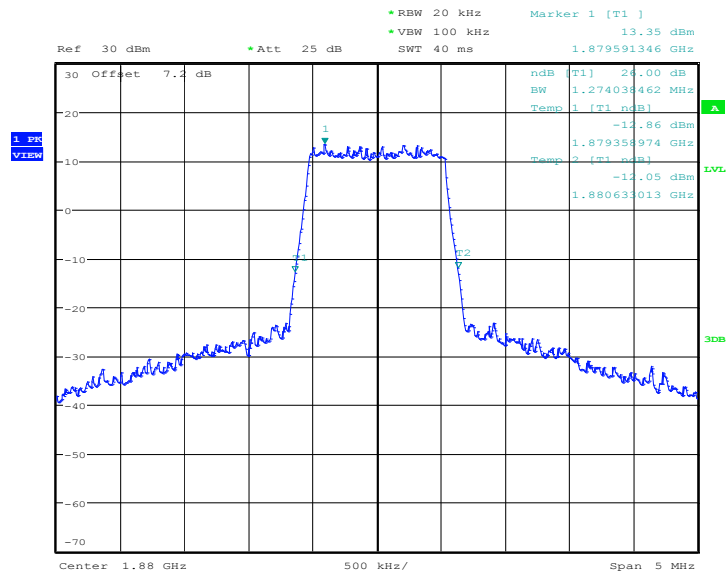
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	1258.01	1274.04

LTE band 2, 1.4MHz Bandwidth, QPSK (-26dBc BW)



Date: 16.FEB.2017 23:41:32

LTE band 2, 1.4MHz Bandwidth, 16QAM (-26dBc BW)

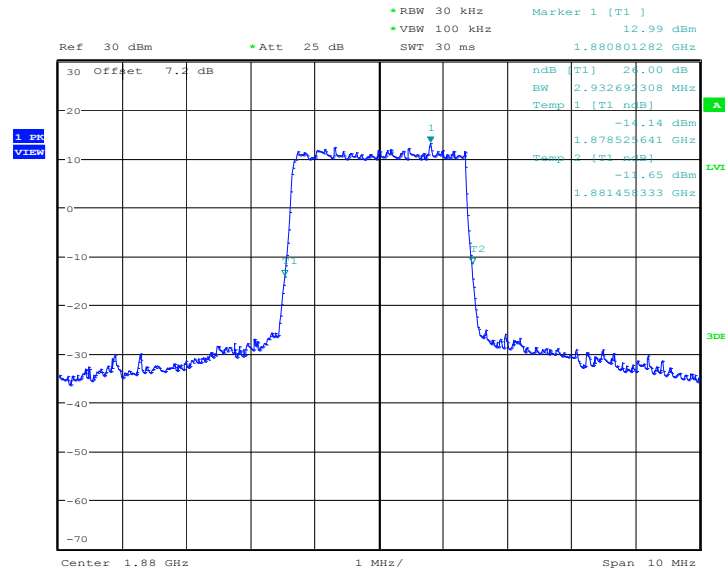


Date: 16.FEB.2017 23:40:18

LTE band 2, 3MHz (-26dBc)

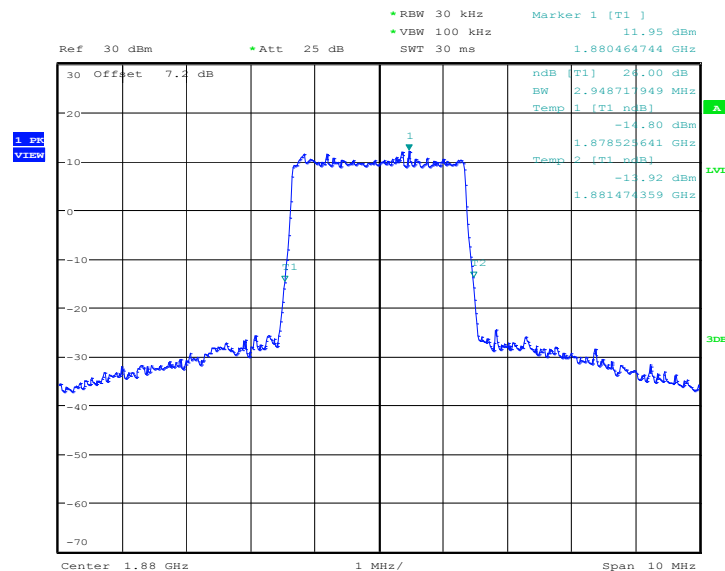
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	2932.69	2948.72

LTE band 2, 3MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 00:47:34

LTE band 2, 3MHz Bandwidth, 16QAM (-26dBc BW)

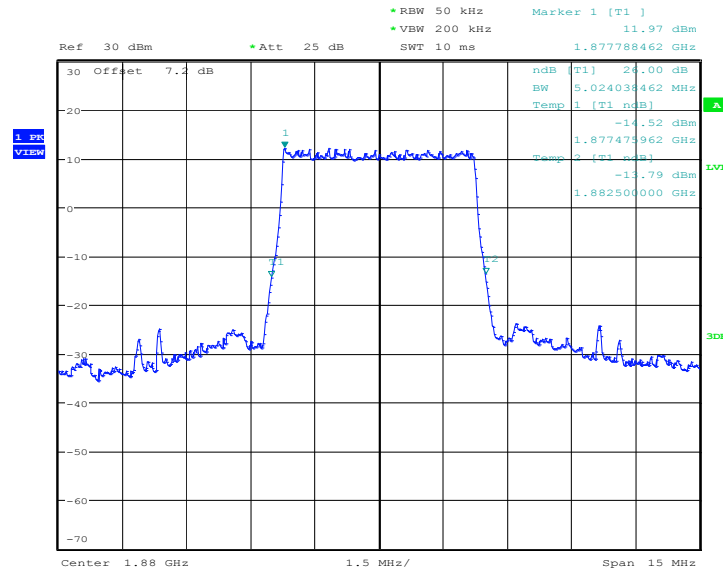


Date: 17.FEB.2017 00:49:18

LTE band 2, 5MHz (-26dBc)

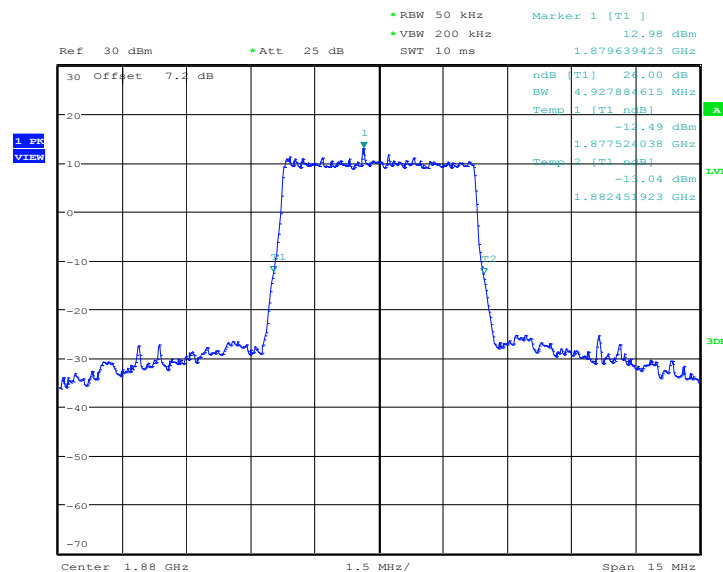
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	5024.04	4927.88

LTE band 2, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 00:59:38

LTE band 2, 5MHz Bandwidth, 16QAM (-26dBc BW)

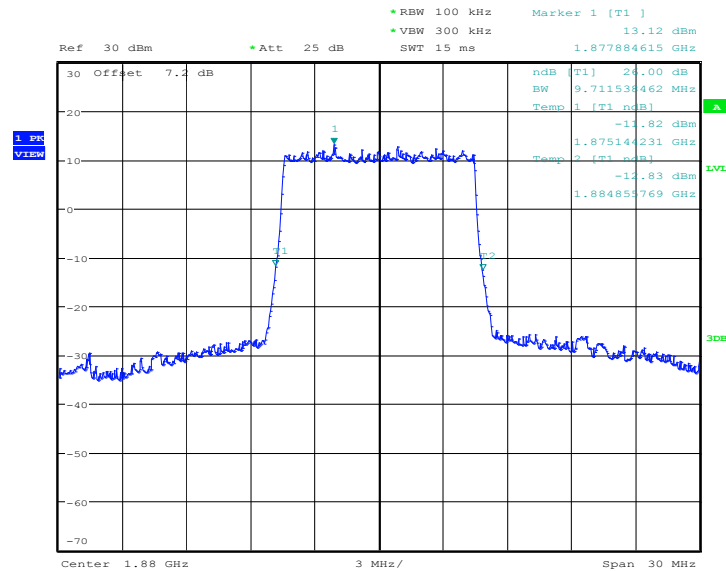


Date: 17.FEB.2017 00:58:29

LTE band 2, 10MHz (-26dBc)

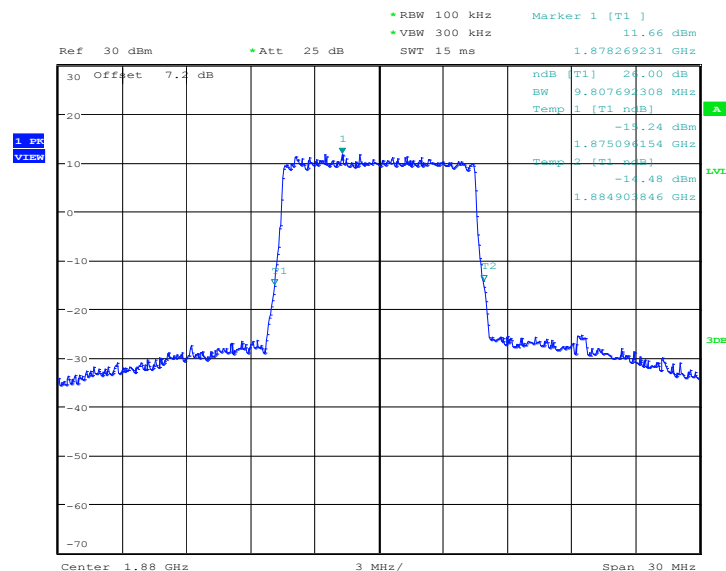
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	9711.54	9807.69

LTE band 2, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 02:08:57

LTE band 2, 10MHz Bandwidth, 16QAM (-26dBc BW)

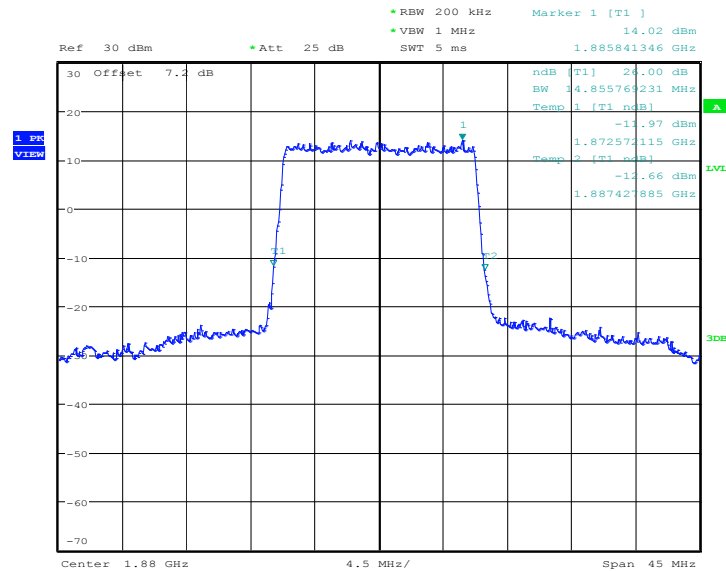


Date: 17.FEB.2017 02:09:37

LTE band 2, 15MHz (-26dBc)

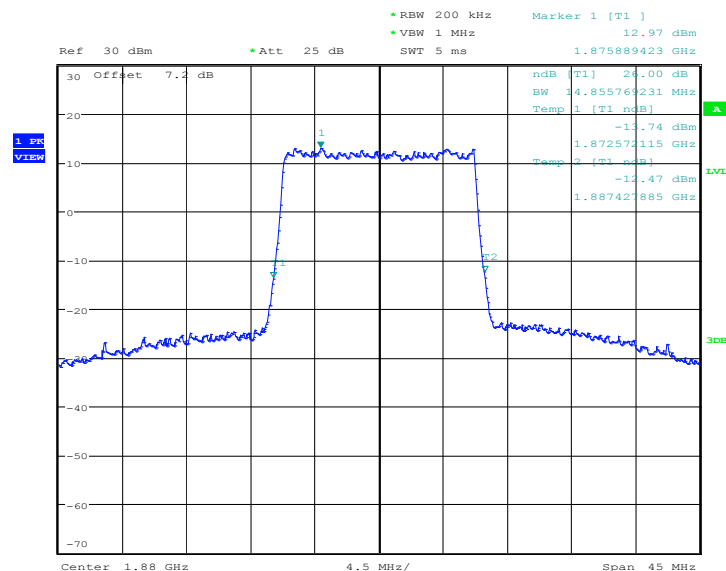
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	14855.77	14855.77

LTE band 2, 15MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 02:15:11

LTE band 2, 15MHz Bandwidth, 16QAM (-26dBc BW)

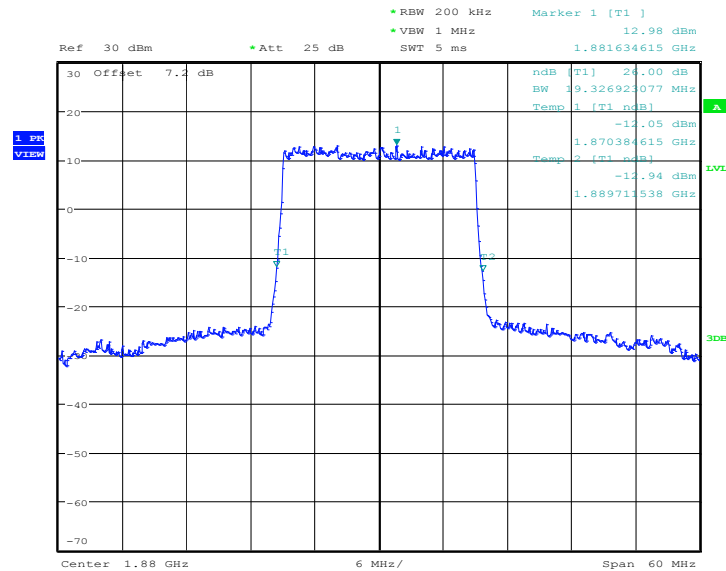


Date: 17.FEB.2017 02:14:32

LTE band 2, 20MHz (-26dBc)

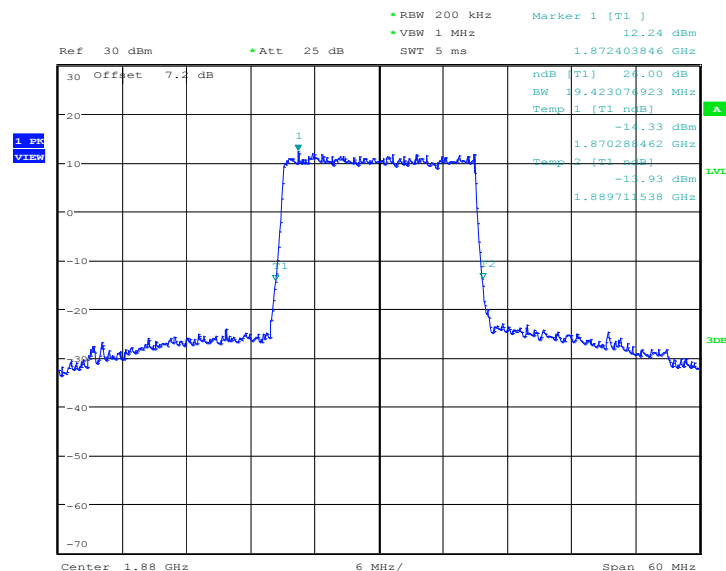
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	19326.92	19423.08

LTE band 2, 20MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 02:50:39

LTE band 2, 20MHz Bandwidth, 16QAM (-26dBc BW)

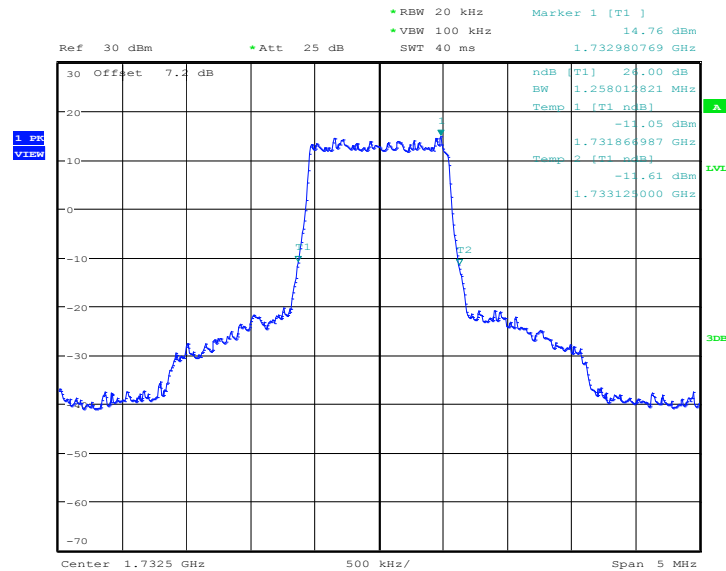


Date: 17.FEB.2017 02:49:52

LTE band 4, 1.4MHz (-26dBc)

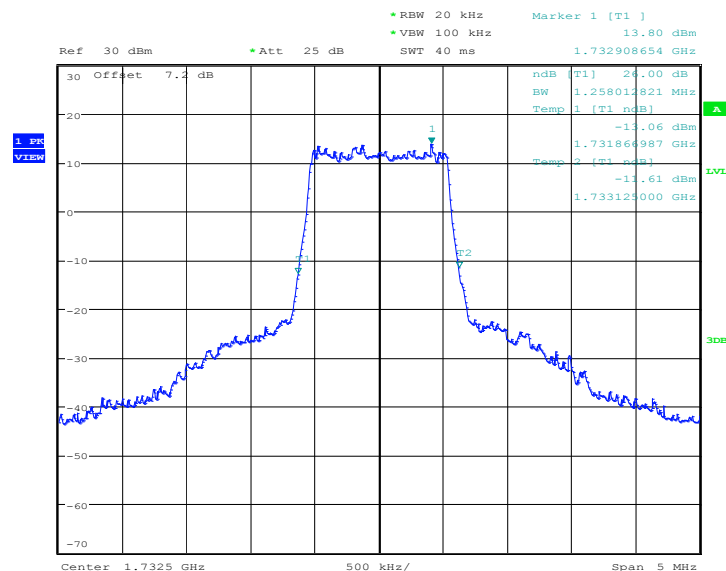
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1732.5	QPSK	16QAM
	1258.01	1258.01

LTE band 4, 1.4MHz Bandwidth, QPSK (-26dBc BW)



Date: 16.FEB.2017 23:44:40

LTE band 4, 1.4MHz Bandwidth, 16QAM (-26dBc BW)

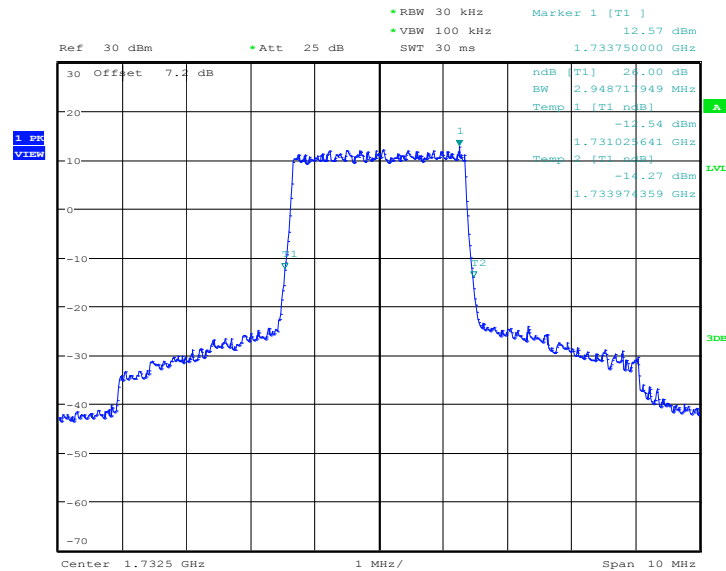


Date: 16.FEB.2017 23:45:43

LTE band 4, 3MHz (-26dBc)

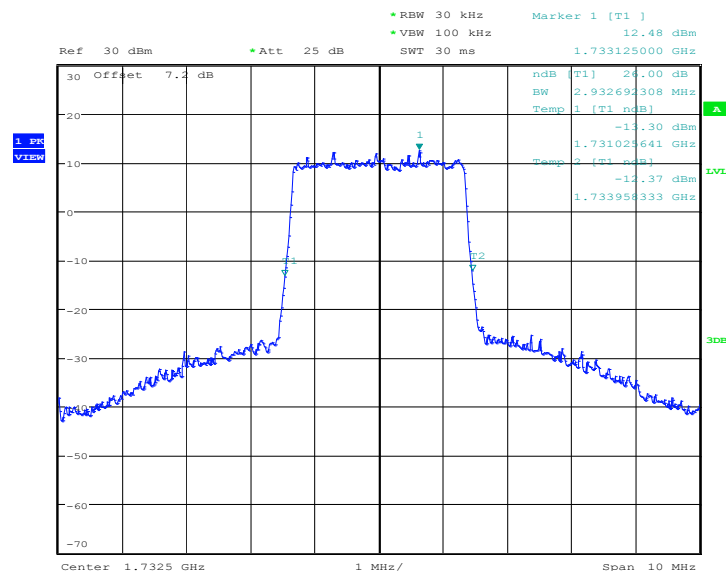
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1732.5	QPSK	16QAM
	2948.72	2932.69

LTE band 4, 3MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 00:46:15

LTE band 4, 3MHz Bandwidth, 16QAM (-26dBc BW)

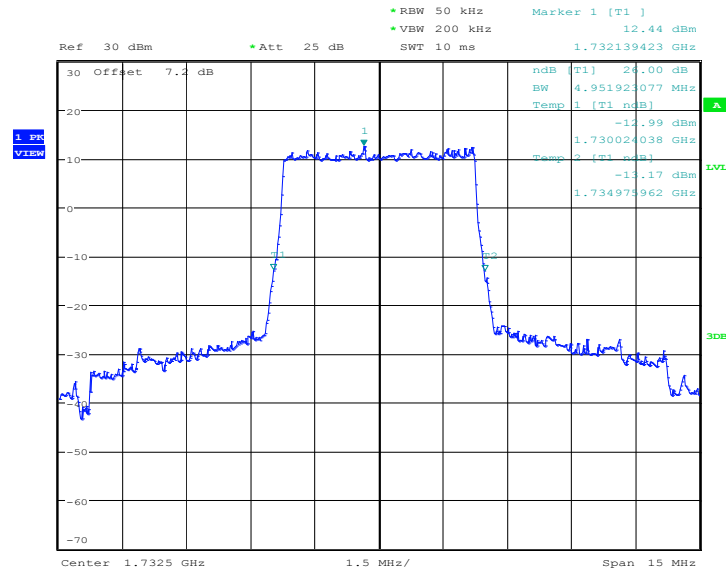


Date: 17.FEB.2017 00:45:34

LTE band 4, 5MHz (-26dBc)

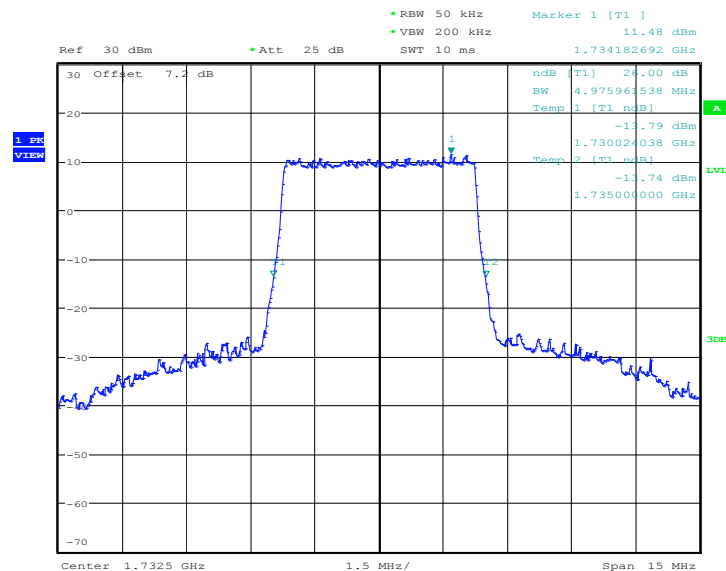
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1732.5	QPSK	16QAM
	4951.92	4975.96

LTE band 4, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 01:00:38

LTE band 4, 5MHz Bandwidth, 16QAM (-26dBc BW)

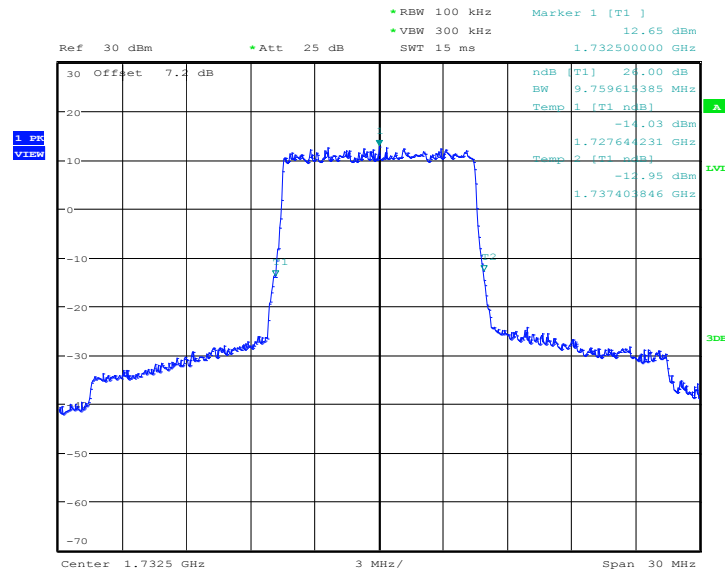


Date: 17.FEB.2017 01:01:43

LTE band 4, 10MHz (-26dBc)

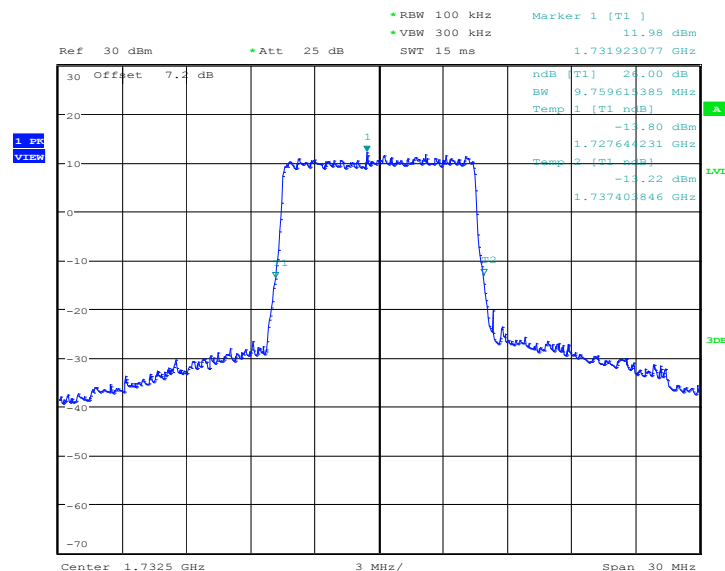
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1732.5	QPSK	16QAM
	9759.62	9759.62

LTE band 4, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 02:08:18

LTE band 4, 10MHz Bandwidth, 16QAM (-26dBc BW)

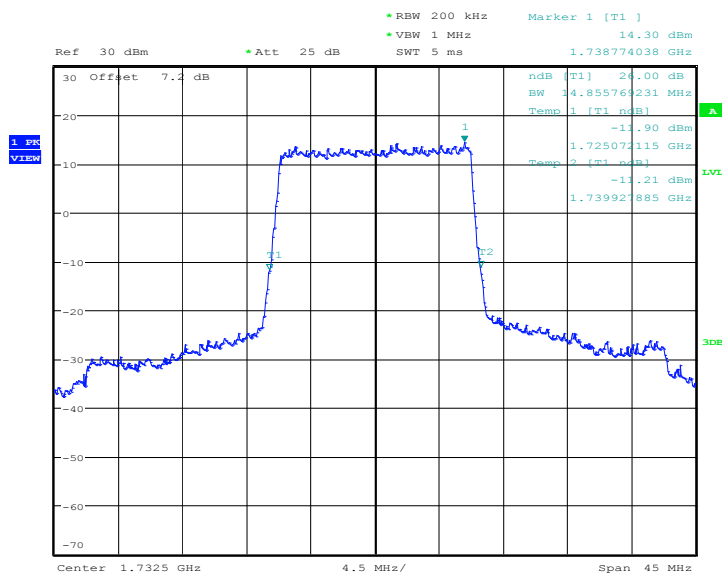


Date: 17.FEB.2017 02:07:43

LTE band 4, 15MHz (-26dBc)

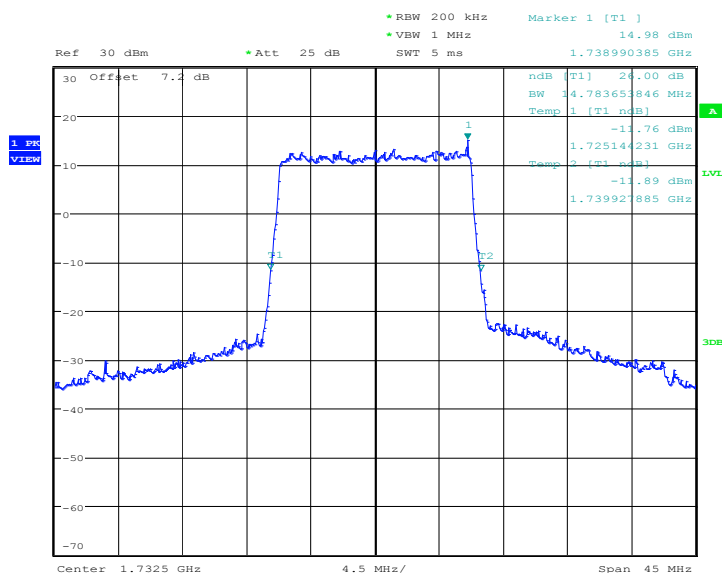
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1732.5	QPSK	16QAM
	14855.77	14783.65

LTE band 4, 15MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 02:16:13

LTE band 4, 15MHz Bandwidth, 16QAM (-26dBc BW)

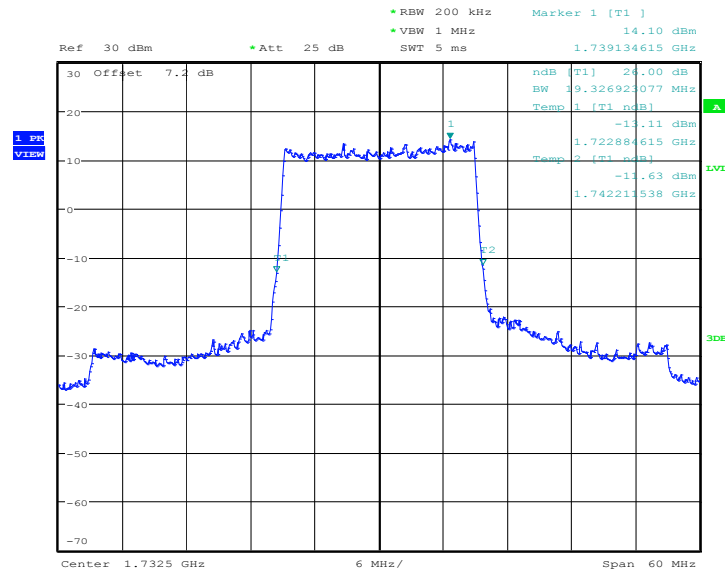


Date: 17.FEB.2017 02:16:53

LTE band 4, 20MHz (-26dBc)

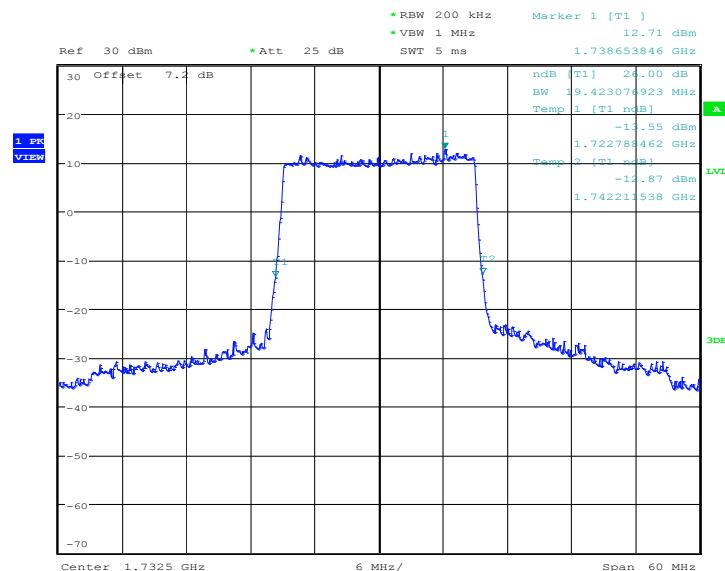
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
1732.5	QPSK	16QAM
	19326.92	19423.08

LTE band 4, 20MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 02:43:15

LTE band 4, 20MHz Bandwidth, 16QAM (-26dBc BW)

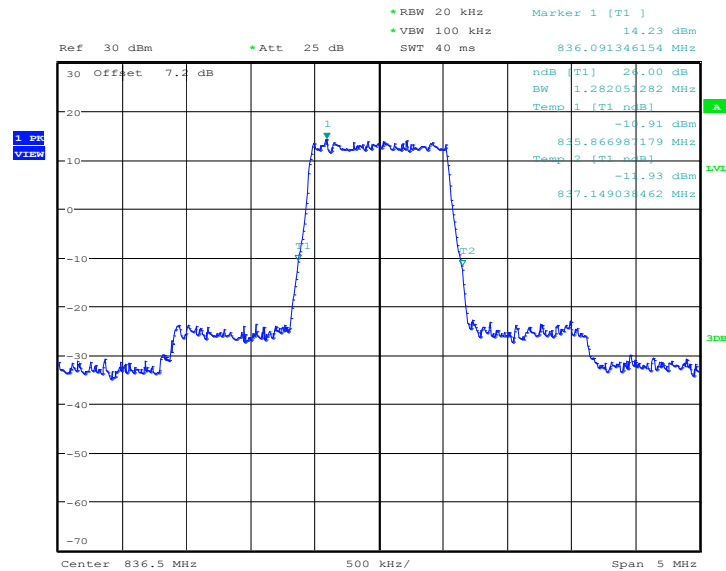


Date: 17.FEB.2017 02:44:07

LTE band 5, 1.4MHz (-26dBc)

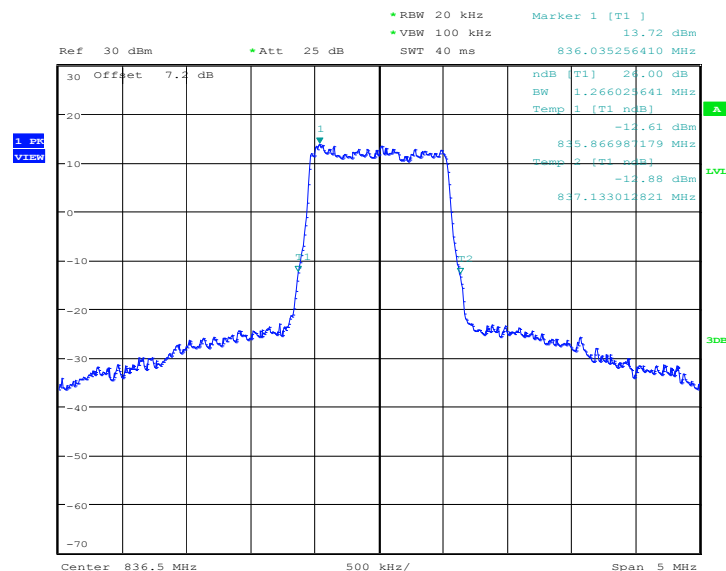
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
836.5	QPSK	16QAM
	1282.05	1266.03

LTE band 5, 1.4MHz Bandwidth, QPSK (-26dBc BW)



Date: 16.FEB.2017 23:52:33

LTE band 5, 1.4MHz Bandwidth, 16QAM (-26dBc BW)

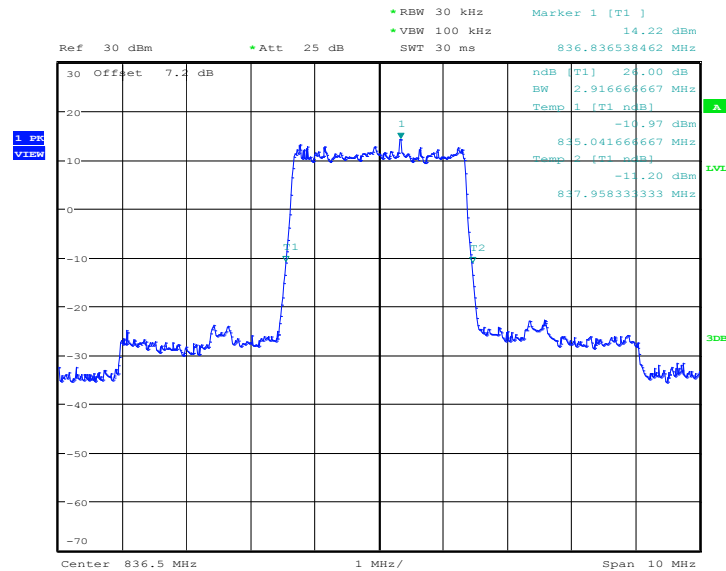


Date: 16.FEB.2017 23:51:50

LTE band 5, 3MHz (-26dBc)

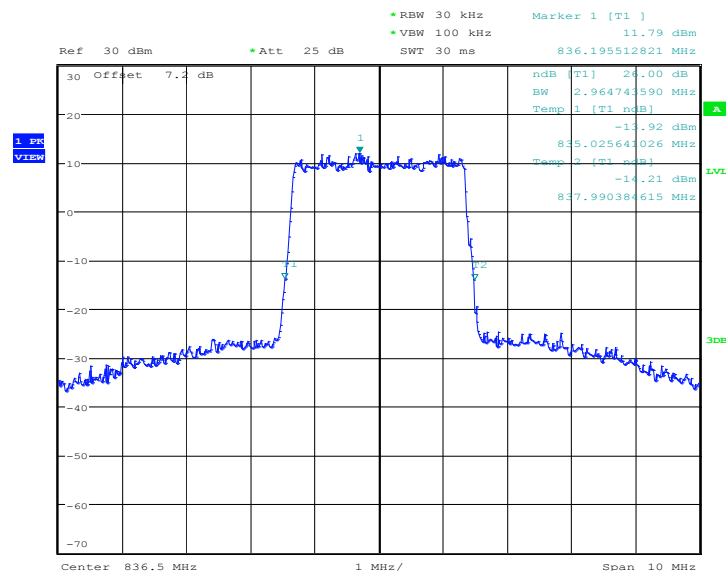
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
836.5	QPSK	16QAM
	2916.67	2964.74

LTE band 5, 3MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 00:40:26

LTE band 5, 3MHz Bandwidth, 16QAM (-26dBc BW)

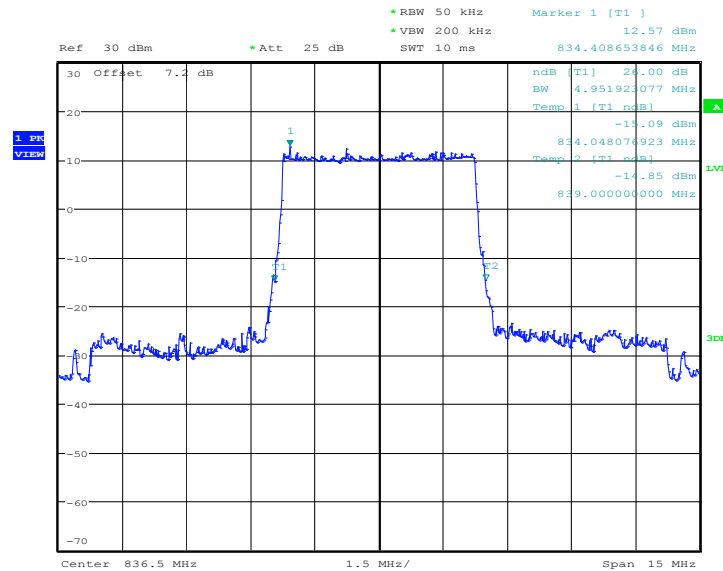


Date: 17.FEB.2017 00:41:02

LTE band 5, 5MHz (-26dBc)

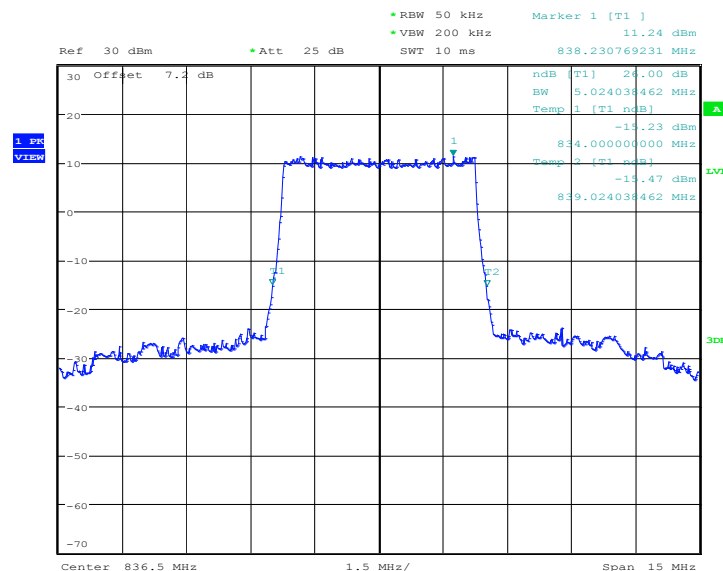
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
836.5	QPSK	16QAM
	4951.92	5024.04

LTE band 5, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 01:07:48

LTE band 5, 5MHz Bandwidth,16QAM (-26dBc BW)

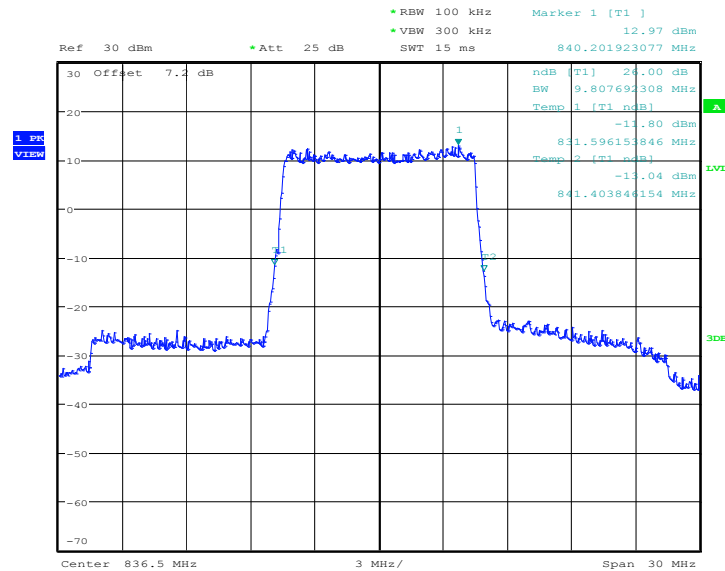


Date: 17.FEB.2017 01:07:13

LTE band 5, 10MHz (-26dBc)

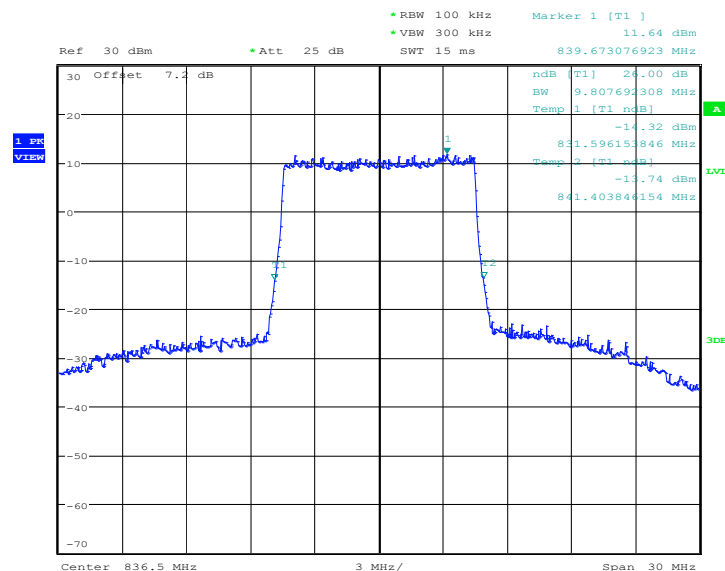
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
836.5	QPSK	16QAM
	9807.69	9807.69

LTE band 5, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 02:02:43

LTE band 5, 10MHz Bandwidth, 16QAM (-26dBc BW)

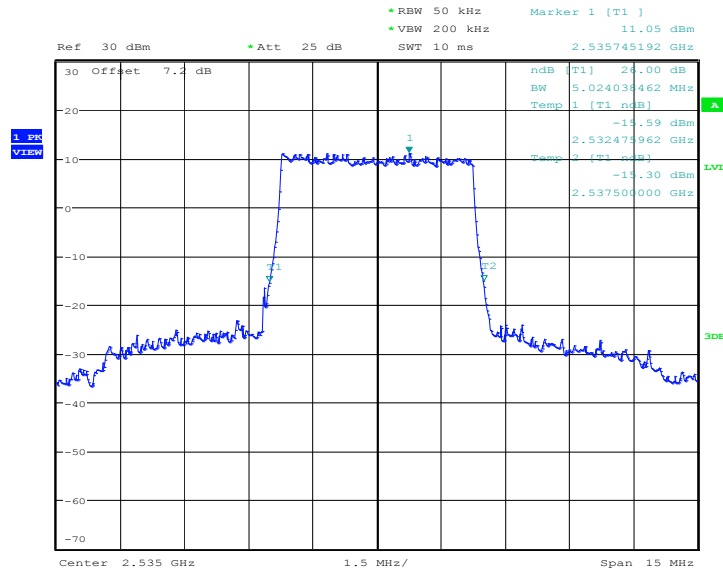


Date: 17.FEB.2017 02:03:29

LTE band 7, 5MHz (-26dBc)

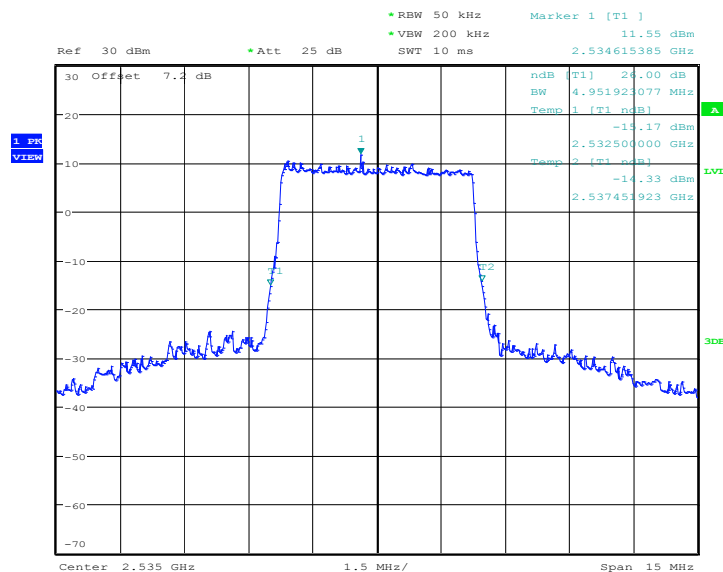
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
2535.0	QPSK	16QAM
	5024.04	4951.92

LTE band 7, 5MHz Bandwidth, QPSK (-26dB BW)



Date: 17.FEB.2017 01:10:57

LTE band 7, 5MHz Bandwidth, 16QAM (-26dB BW)

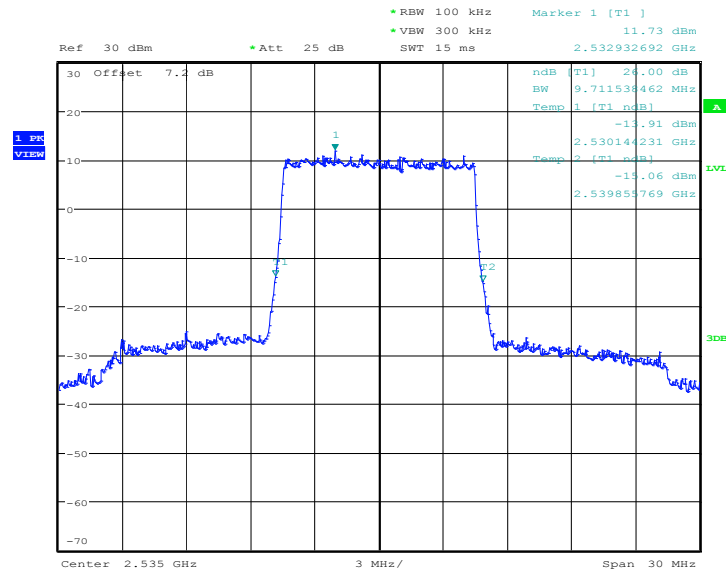


Date: 17.FEB.2017 01:11:59

LTE band 7, 10MHz (-26dBc)

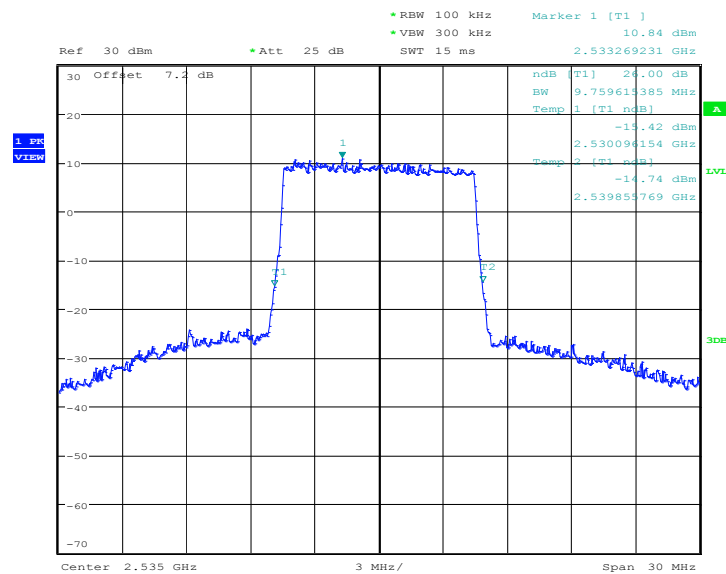
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
2535.0	QPSK	16QAM
	9711.54	9759.62

LTE band 7, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 02:01:47

LTE band 7, 10MHz Bandwidth, 16QAM (-26dBc BW)

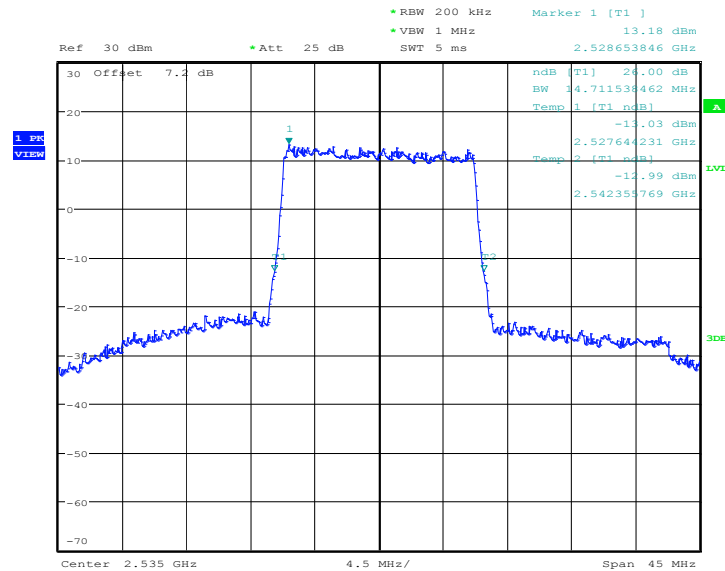


Date: 17.FEB.2017 02:01:08

LTE band 7, 15MHz (-26dBc)

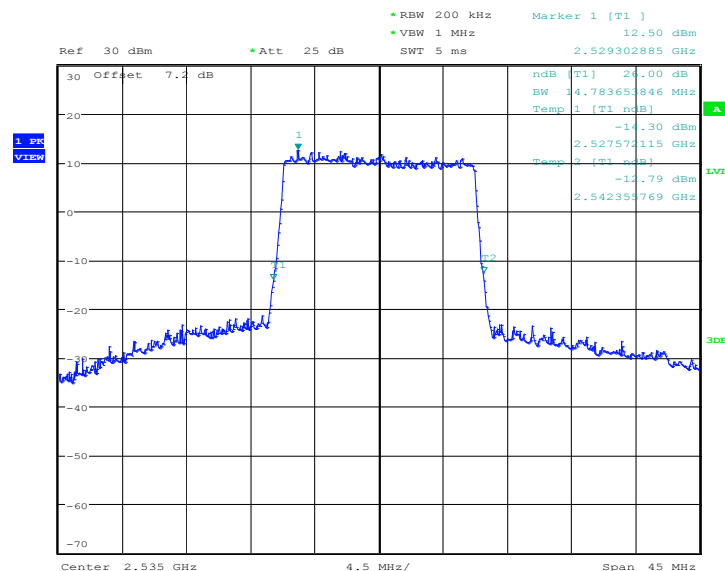
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
2535.0	QPSK	16QAM
	14711.54	14783.65

LTE band 7, 15MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 02:21:23

LTE band 7, 15MHz Bandwidth, 16QAM (-26dBc BW)

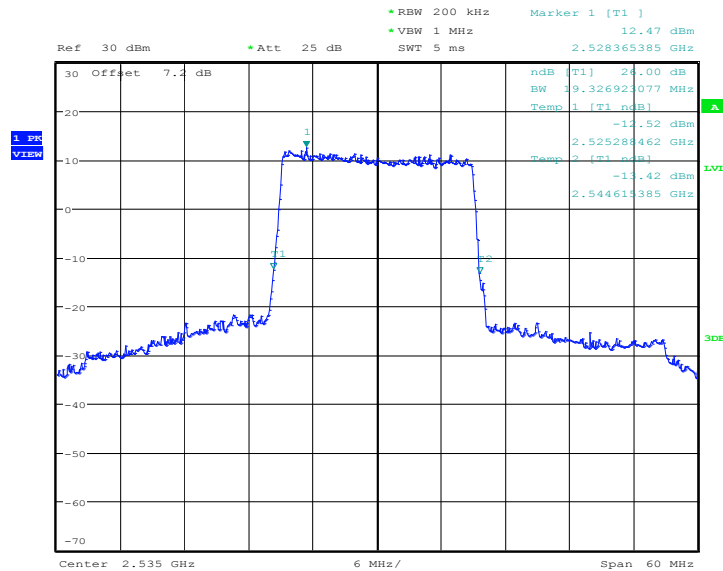


Date: 17.FEB.2017 02:20:52

LTE band 7, 20MHz (-26dBc)

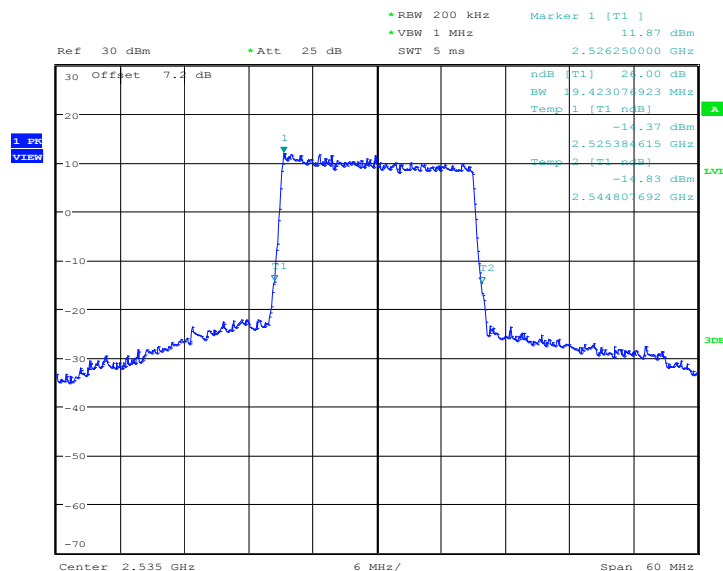
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
2535.0	QPSK	16QAM
	19326.92	19423.08

LTE band 7, 20MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 02:41:11

LTE band 7, 20MHz Bandwidth, 16QAM (-26dBc BW)

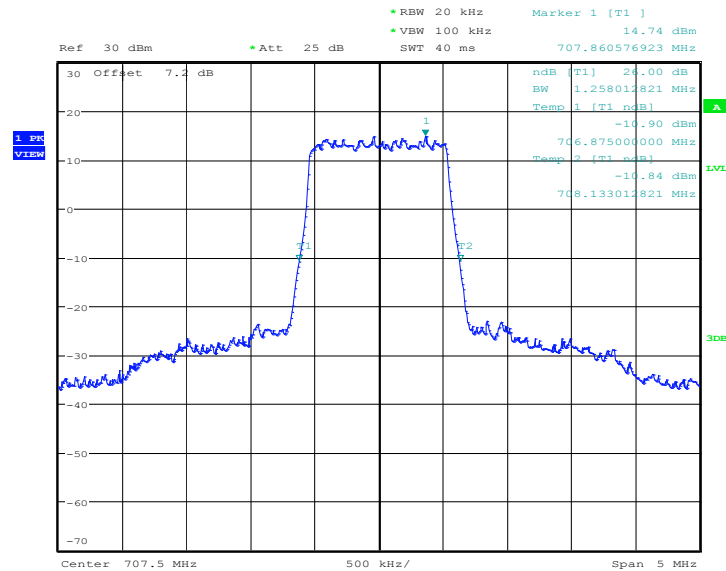


Date: 17.FEB.2017 02:40:27

LTE band 12, 1.4MHz (-26dBc)

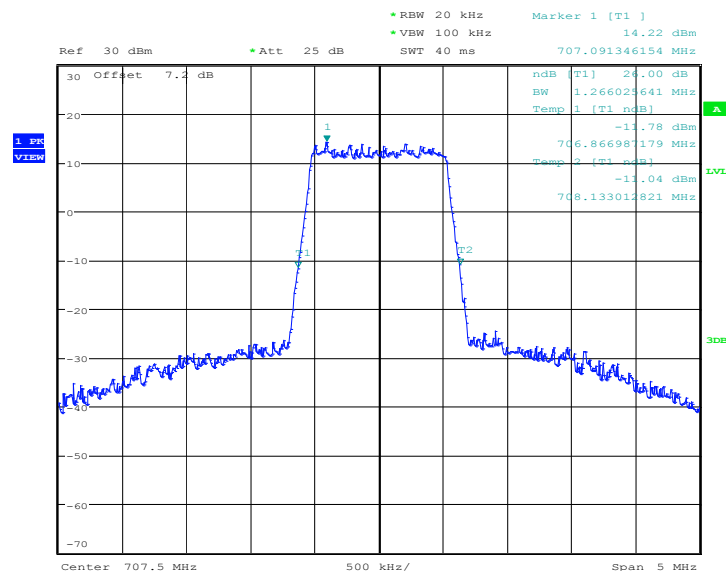
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
707.5	QPSK	16QAM
	1258.01	1266.03

LTE band 12, 1.4MHz Bandwidth, QPSK (-26dBc BW)



Date: 16.FEB.2017 23:54:33

LTE band 12, 1.4MHz Bandwidth, 16QAM (-26dBc BW)

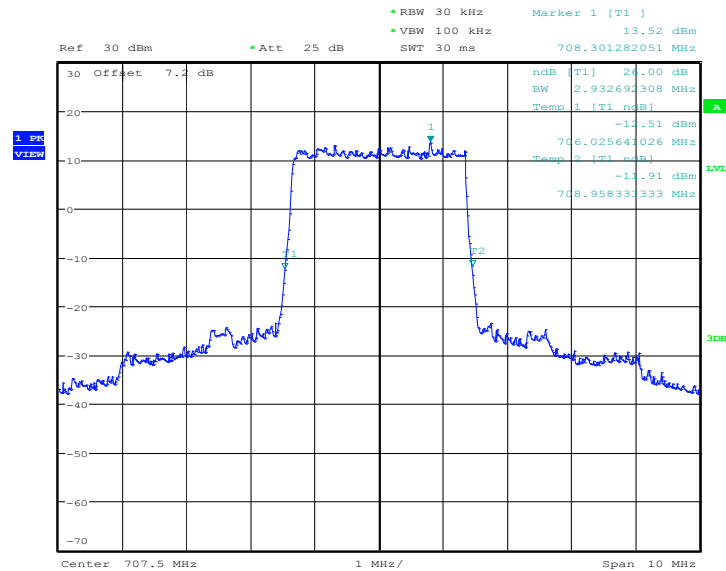


Date: 16.FEB.2017 23:55:01

LTE band 12, 3MHz (-26dBc)

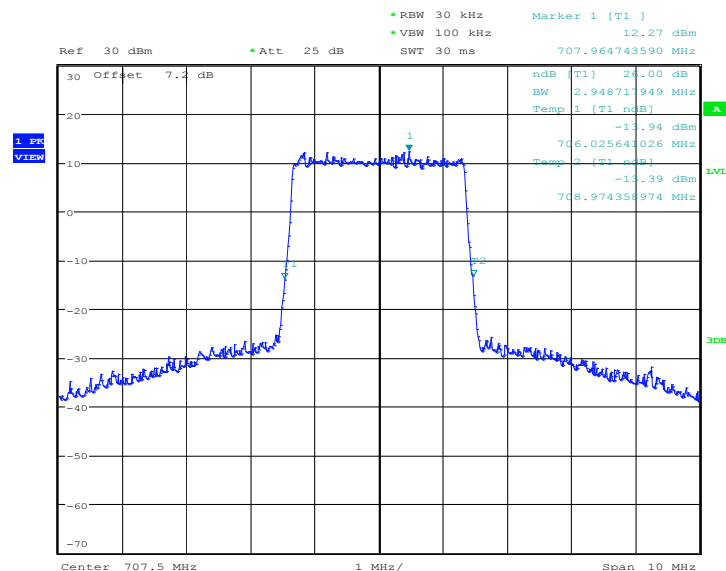
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
707.5	QPSK	16QAM
	2932.69	2948.72

LTE band 12, 3MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 00:38:51

LTE band 12, 3MHz Bandwidth, 16QAM (-26dBc BW)

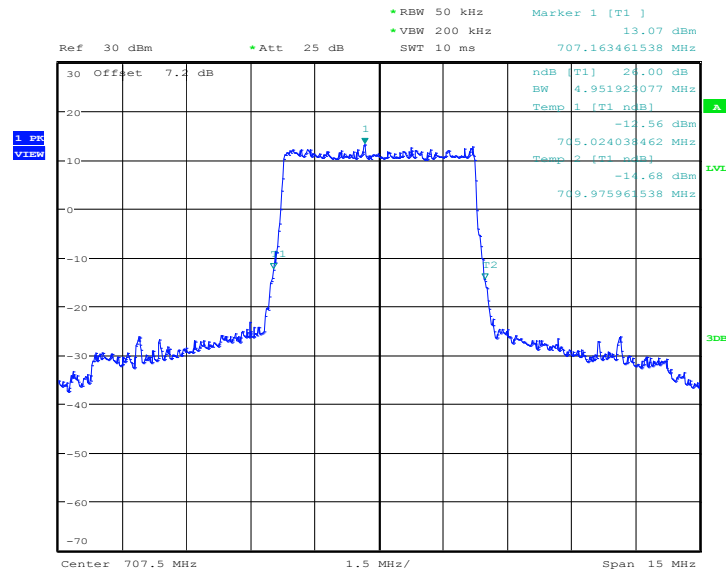


Date: 17.FEB.2017 00:37:25

LTE band 12, 5MHz (-26dBc)

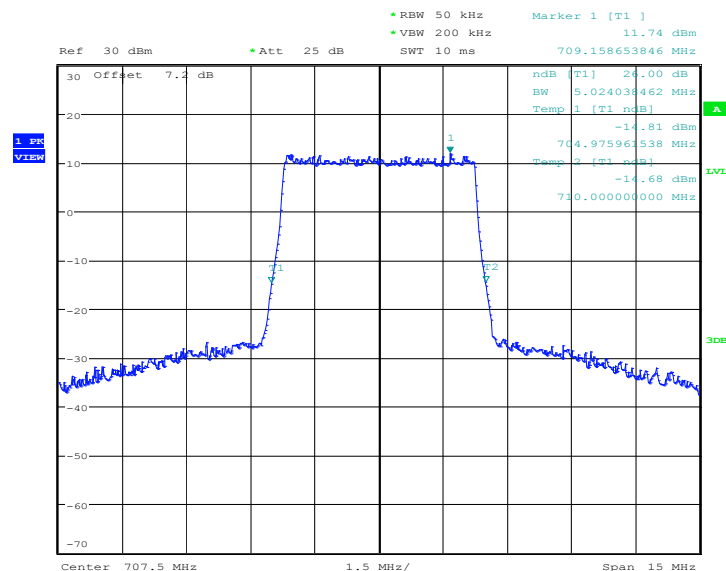
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
707.5	QPSK	16QAM
	4951.92	5024.04

LTE band 12, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 01:17:09

LTE band 12, 5MHz Bandwidth, 16QAM (-26dBc BW)

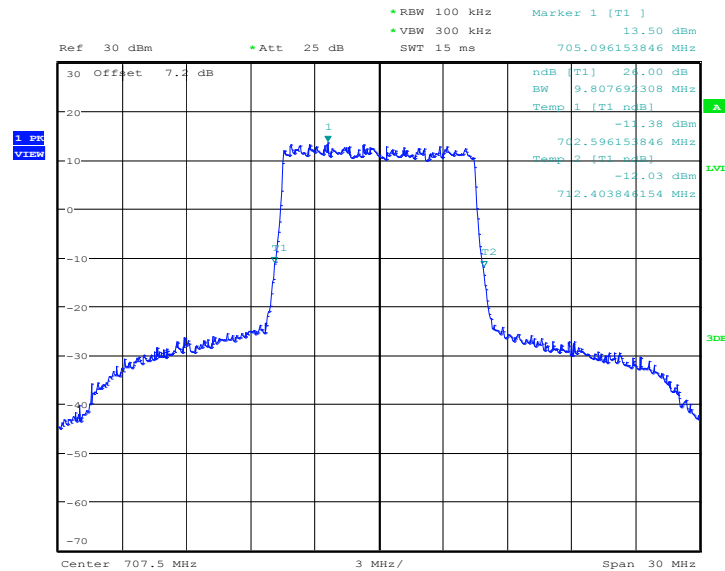


Date: 17.FEB.2017 01:16:30

LTE band 12, 10MHz (-26dBc)

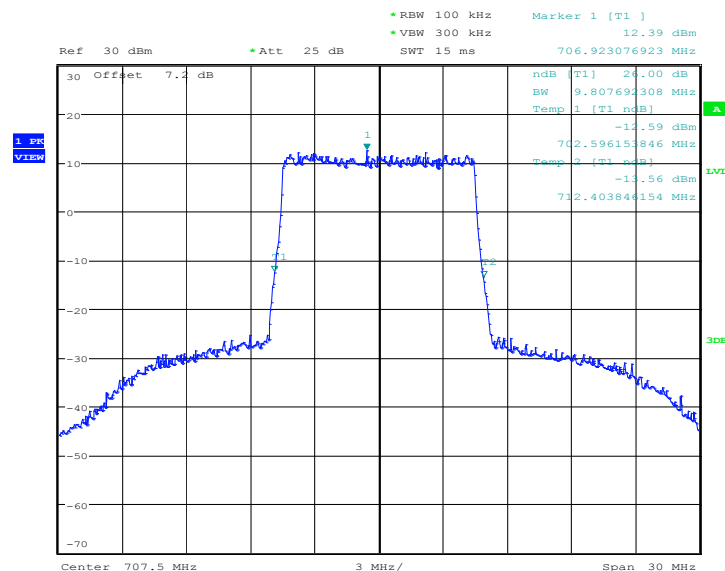
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
707.5	QPSK	16QAM
	9807.69	9807.69

LTE band 12, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 01:56:44

LTE band 12, 10MHz Bandwidth, 16QAM (-26dBc BW)

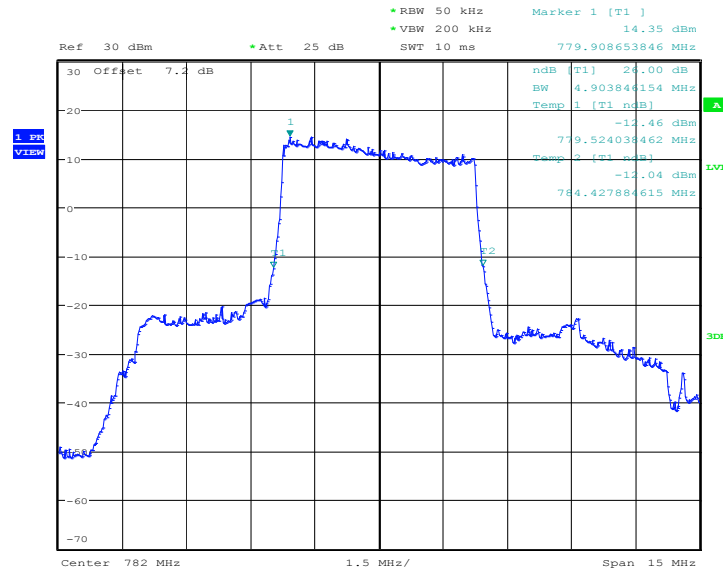


Date: 17.FEB.2017 01:57:26

LTE band 13, 5MHz (-26dBc)

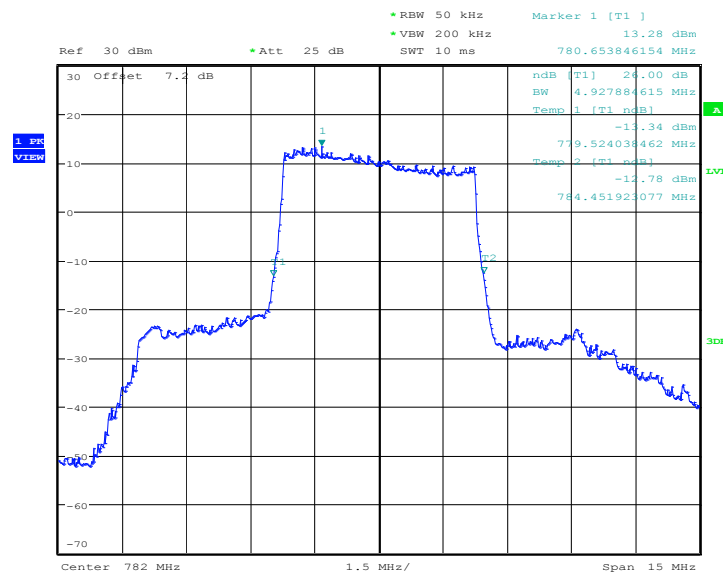
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
782.0	QPSK	16QAM
	4903.85	4927.88

LTE band 13, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 01:18:39

LTE band 13, 5MHz Bandwidth, 16QAM (-26dBc BW)

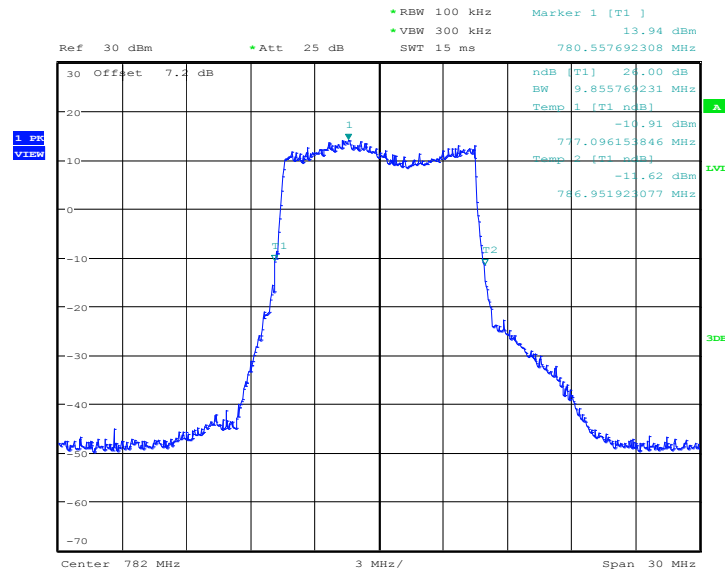


Date: 17.FEB.2017 01:19:17

LTE band 13, 10MHz (-26dBc)

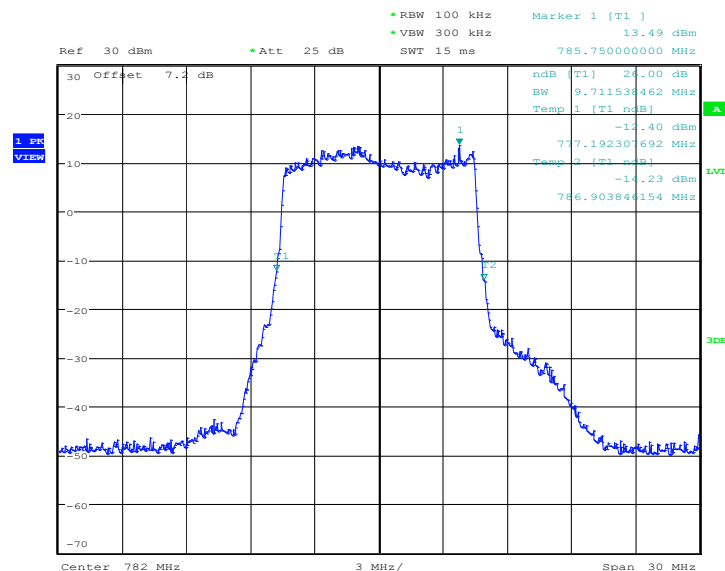
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
782.0	QPSK	16QAM
	9855.77	9711.54

LTE band 13, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 01:55:33

LTE band 13, 10MHz Bandwidth, 16QAM (-26dBc BW)

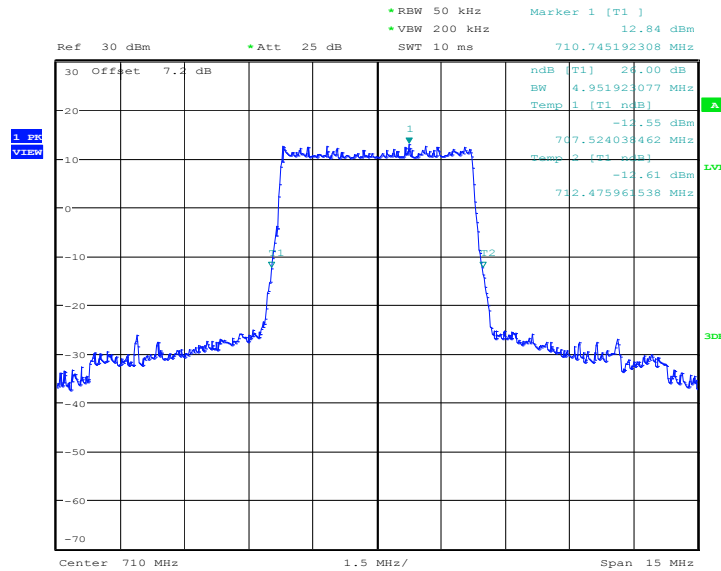


Date: 17.FEB.2017 01:55:00

LTE band 17, 5MHz (-26dBc)

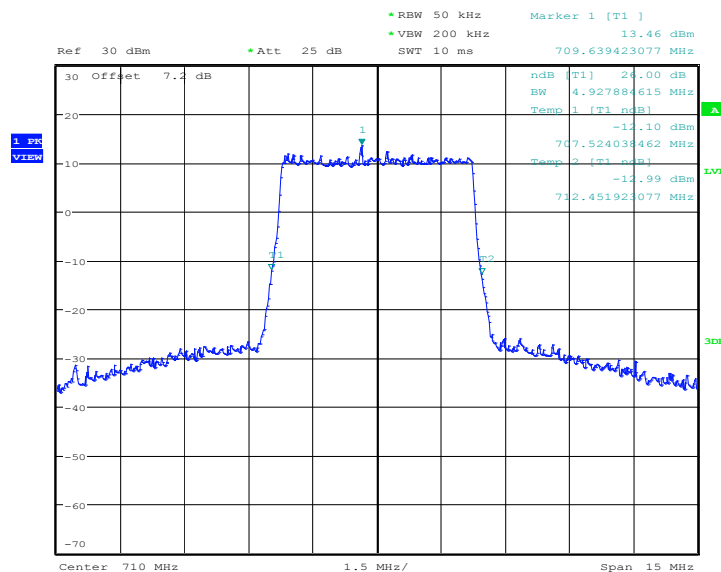
Frequency(MHz)	Occupied Bandwidth (-26dBc)(kHz)	
710.0	QPSK	16QAM
	4951.92	4927.88

LTE band 17, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 17.FEB.2017 01:23:47

LTE band 17, 5MHz Bandwidth, 16QAM (-26dBc BW)



Date: 17.FEB.2017 01:23:18