FCC Part 22H&24E&27 F&L&M Test Report

Product Name	:	Module
Trade Name	:	AirPrime
Model No.	:	AR7582
FCC ID	:	N7NAR7582
IC	:	2417C-AR7582

Applicant	:	Sierra Wireless Inc.
Address	:	13811 Wireless Way, Richmond, BC, V6V 3A4 Canada

Date of Receipt	:	Mar. 23, 2018
Issued Date	:	May 02 , 2018
Report No.	:	1830369R-HPUSP50V00
Report Version	:	V1.0

Testing Laboratory
3024

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Test Report Certification

Issued Date : May 02 , 2018
Report No. : 1830369R-HPUSP50V00

Product Name	:	Module
Applicant	:	Sierra Wireless Inc.
Address	:	13811 Wireless Way, Richmond, BC, V6V 3A4 Canada
Manufacturer	:	Sierra Wireless Inc.
Address	:	13811 Wireless Way, Richmond, BC, V6V 3A4 Canada
Model No.	:	AR7582
FCC ID	:	N7NAR7582
IC	:	2417C-AR7582
EUT Voltage	:	DC 3.7V
Testing Voltage	:	DC 3.7V
Trade Name	:	AirPrime
Applicable Standard	:	FCC CFR Title 47 Part 2, TIA/EIA 603-C FCC Part22 Subpart H FCC Part24 Subpart E FCC CFR Title 47 Part 27 L&F&M Industry Canada RSS-GEN, Issue 4 Industry Canada RSS-132, Issue 3 Industry Canada RSS-133, Issue 6 Industry Canada RSS-139, Issue 3 Industry Canada RSS-130, Issue 1 Industry Canada RSS-199, Issue 2
Laboratory Name	:	Hsin Chu Laboratory
Address	:	No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan, R.O.C. TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result	:	Complied

Documented By : Lyla Yang

(Lyla Yang / Engineering Adm. Specialist)

Tested By : Max Chang

(Max Chang / Engineer)

Approved By : Roy Wang

(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1720509R-HP-US-P07V01	V1.0	Initial issue of report	Apr. 10, 2017
1830369R-HPUSP50V00	V1.0	This device change the PCB layout small adjustment to improve performance for LTE B13 ,BOM small adjustment to improve performance for LTE B13 and Shield frame small change to improve performance for LTE B13, verify all of test item for B13 and spurious emission test item for other band.	May 02 , 2018

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1. General Information

1.1. EUT Description

Product Name	Module
Model No.	AR7582
Trade Name	AirPrime
Support Band	LTE Band 2/4/5/7/12/13/17
Uplink	Band 2: 1850~1910 MHz Band 4: 1710~1755 MHz Band 5: 824~849 MHz Band 7: 2500~2570 MHz Band 12: 699~716 MHz Band 13: 777~787 MHz Band 17: 704~716 MHz
Downlink	Band 2: 1930~1900 MHz Band 4: 2110~2155 MHz Band 5: 869~894 MHz Band 7: 2620~2690 MHz Band 12: 729~746 MHz Band 13: 746~756 MHz Band 17: 734~746 MHz
Type of Modulation	QPSK, 16QAM
HW Version	V1.0
SW Version	SWI9X28A_00.04.03.00.
IMEI No.	35872907

Antenna Information	
Product Name/Model No.	Pulse Electronics, Inc./SPDA24700/2700
Antenna Type	Dipole Antenna
Antenna Gain	2 dBi

Note:

1. This Module included GSM 850, DCS 1900, WCDMA Band 2, WCDMA Band 4, WCDMA Band 5 and LTE Band 2, 4, 5, 7, 12, 13, 17 function.
2. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

1.2. Mode of Operation

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: LTE Band 2
Mode 2: LTE Band 4
Mode 3: LTE Band 5
Mode 4: LTE Band 7
Mode 5: LTE Band 12
Mode 6: LTE Band 13
Mode 7: LTE Band 17

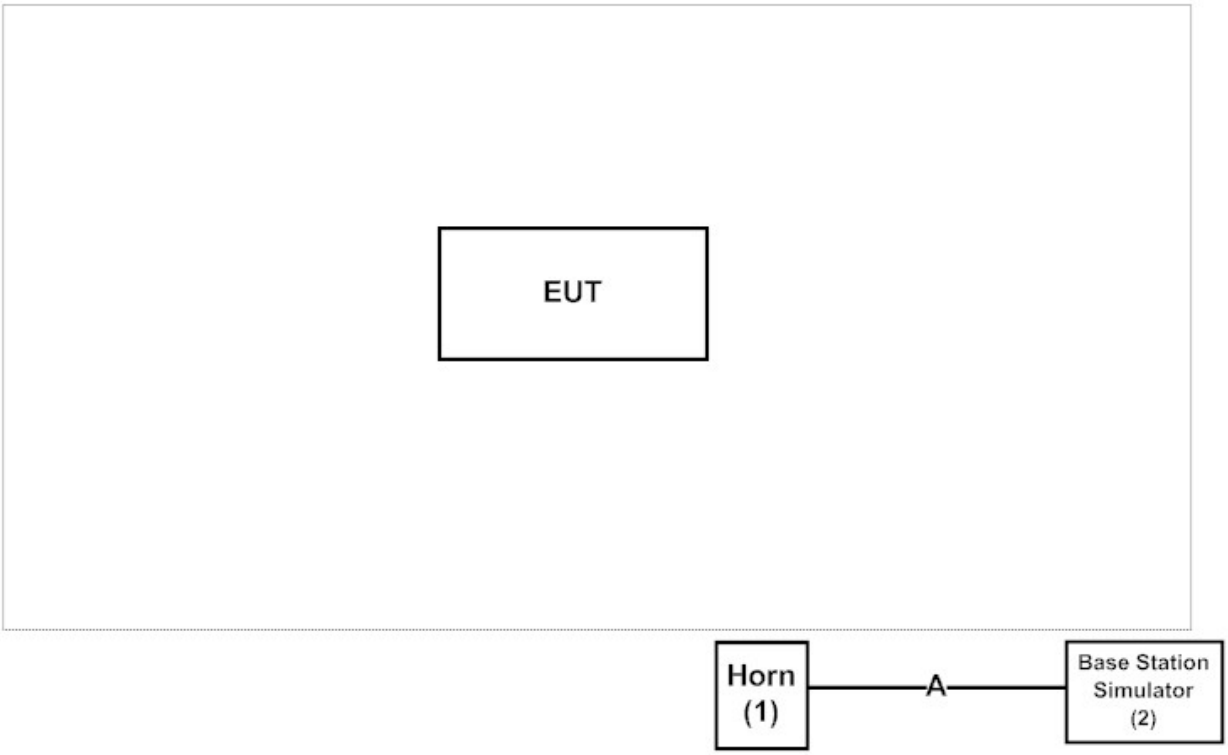
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Horn Antenna	ELECTRO METRICS	EM-6961	103326	--
2	Base Station Simulator	JRC	NJZ-2000	ET00477	--

1.4. Configuration of Tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	RF Cable	Shielded, 2m.

1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.4.
2	Turn on the power of all equipment. Horn link with base station.
3	The EUT link with base station and it will continue receive the signal.
4	Repeat the above procedure.

2. Technical Test

2.1. Summary of Test Result

☒ No deviations from the test standards

☐ Deviations from the test standards as below description:

LTE Band 2					
FCC Part 24 Subpart E					
Industry Canada RSS-133, Issue 6, Industry Canada RSS-GEN					
Test Item	FCC Reference section	FCC Limit	IC Reference section	IC Limit	Result
Maximum Output Power	§2.1033 §2.1046 §24.232	< 2 Watts	§6.4	< 2 Watts	Pass
Equivalent Isotropic Radiated Power	§24.232	< 2 Watts	§6,4	< 2 Watts	Pass
Peak-to-average power ratio	§24.232	< 13dB	§6.4	< 13dB	Pass
Occupied Bandwidth	§2.1049	N/A	RSS-GEN §4.2	N/A	Pass
Conducted Band EdgeEmissions	§27.238	<-13dBm	§6.5	<-13dBm	Pass
Spurious Radiation	§2.1053 §24.238	<-13dBm	§6.5	<-13dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §24.235	< 2.5 ppm	§6.3	< 2.5 ppm	Pass

LTE Band 4					
FCC Part 27 Subpart L					
Industry Canada RSS-139, Issue 3, Industry Canada RSS-GEN					
Test Item	FCC Reference section	FCC Limit	IC Reference section	IC Limit	Result
Maximum Output Power	§2.1033 §2.1046 §27.50	<1 Watts	§6.5	<1 Watts	Pass
Equivalent Isotropic Radiated Power	§27.50	<1 Watts	§6,5	<1 Watts	Pass
Peak-to-average power ratio	§27.50	< 13dB	§6.5	< 13dB	Pass
Occupied Bandwidth	§2.1049	N/A	RSS-GEN §4.2	N/A	Pass
Conducted Band EdgeEmissions	§27.53	<-13dBm	§6.6	<-13dBm	Pass
Spurious Radiation	§2.1053 §27.53	<-13dBm	§6.6	<-13dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §27.54	<2.5 ppm	§6.4	within the frequency range	Pass

LTE Band 5					
FCC Part 22 Subpart H					
Industry Canada RSS-132, Issue 3, Industry Canada RSS-GEN					
Test Item	FCC Reference section	FCC Limit	IC Reference section	IC Limit	Result
Maximum Output Power	§2.1033 §2.1046 §22.913	<7 Watts	§5.4	<7 Watts	Pass
Equivalent Isotropic Radiated Power	§22.913	<7 Watts	§5.4	<11.5 Watts	Pass
Occupied Bandwidth	§2.1049	N/A	RSS-GEN §4.2	N/A	Pass
Conducted Band EdgeEmissions	§22.917	<-13dBm	§5.5	<-13dBm	Pass
Spurious Radiation	§2.1053 §§22.917	<-13dBm	§5.5	<-13dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §22.335	< 2.5 ppm	§5.3	< 2.5 ppm	Pass

LTE Band 7					
FCC Part 27 SubpartM					
Industry Canada RSS-199, Issue 2, Industry Canada RSS-GEN					
Test Item	FCC Reference section	Limit	IC Reference section	Limit	Result
Maximum Output Power	§2.1033 §2.1046 §27.50	Output Power < 2 Watts	§5.4	Output Power < 2 Watts	Pass
Equivalent Isotropic Radiated Power	§27.50	< 33 dBW + 10 log(X/Y)dBW + 10 log(360/beamwidth) dBW	§5.4	< 33 dBW + 10 log(X/Y)dBW + 10 log(360/beamwidth) dBW	Pass
Occupied Bandwidth	§2.1049	N/A	RSS-GEN §4.2	N/A	Pass
Conducted Band EdgeEmissions	§27.53	< 5MHz: -10dBm 5MHz-X MHz:-13dBm >X MHz:-25dBm	§5.5	< 5MHz: -10dBm 5MHz-X MHz:-13dBm >X MHz:-25dBm	Pass
Spurious Radiation	§2.1053 §27.53	-25 dBm	§5.5	-25 dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §27.54	2.5 ppm	§5.3	2.5 ppm	Pass

LTE Band 12					
FCC Part 27 Subpart F					
Industry Canada RSS-130,Issue 1,Industry Canada RSS-GEN					
Test Item	FCC Reference section	FCC Limit	IC Reference section	IC Limit	Result
Maximum Output Power	§2.1033 §2.1046 §27.50	<3 Watts	§4.4	<5 Watts	Pass
Equivalent Isotropic Radiated Power	§27.50	<3 Watts	§4.4	<5 Watts	Pass
Occupied Bandwidth	§2.1049	N/A	RSS-GEN	N/A	Pass
Conducted Band EdgeEmissions	§27.53	<-13dBm	§4.6	<-13dBm	Pass
Spurious Radiation	§2.1053 §27.53	<-13dBm	§4.6	<-13dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §27.54	< 2.5 ppm	§4.3	within the frequency range	Pass

LTE Band 13					
FCC Part 27 Subpart F					
Industry Canada RSS-130,Issue 1,Industry Canada RSS-GEN					
Test Item	FCC Reference section	FCC Limit	IC Reference section	IC Limit	Result
Maximum Output Power	§2.1033 §2.1046 §27.50	<3 Watts	§4.4	<5 Watts	Pass
Equivalent Isotropic Radiated Power	§27.50	<3 Watts	§4.4	<5 Watts	Pass
Occupied Bandwidth	§2.1049	N/A	RSS-GEN	N/A	Pass
Conducted Band EdgeEmissions	§27.53	<-13dBm	§4.6	<-13dBm	Pass
Spurious Radiation	§2.1053 §27.53	<-13dBm	§4.6	<-13dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §27.54	< 2.5 ppm	§4.3	within the frequency range	Pass

LTE Band 17					
FCC Part 27 Subpart F					
Industry Canada RSS-130,Issue 1,Industry Canada RSS-GEN					
Test Item	FCC Reference section	FCC Limit	IC Reference section	IC Limit	Result
Maximum Output Power	§2.1033 §2.1046 §27.50	<3 Watts	§4.4	<5 Watts	Pass
Equivalent Isotropic Radiated Power	§27.50	<3 Watts	§4.4	<5 Watts	Pass
Occupied Bandwidth	§2.1049	N/A	RSS-GEN	N/A	Pass
Conducted Band EdgeEmissions	§27.53	<-13dBm	§4.6	<-13dBm	Pass
Spurious Radiation	§2.1053 §27.53	<-13dBm	§4.6	<-13dBm	Pass
Frequency Stability Under Temperature & Voltage Variations	§2.1055 §27.54	< 2.5 ppm	§4.3	within the frequency range	Pass

2.2. Test Environment

Items	Test Item	Required (IEC 68-1)	Actual	Test Site
Temperature (°C)	RF Output Power	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Occupied Bandwidth	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Peak To Average Ratio	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Conducted Spurious Emission	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Radiated Spurious Emission	15-35	23	2
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Spurious Emissions at Antenna Terminals	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	
Temperature (°C)	Frequency Stability	15-35	23	3
Humidity (%RH)		25-75	52	
Barometric pressure (mbar)		860-1060	950-1000	

Note: Test Site information refers to Laboratory Information.

Laboratory Information

USA	**:**	**FCC Registration Number: TW3024**
Canada	**:**	**IC Registration Number: 22397-1 / 22397-2 / 22397-3**

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site :
http://www.dekra.com.tw/english/about/certificates.aspx?bval=5
The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site : http://www.dekra.com.tw/index_en.aspx

If you have any comments, Please don't hesitate to contact us. Our test sites as below:

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TEL: +886-3-582-8001 / FAX: +886-3-582-8958 E-Mail : info.tw@dekra.com

2.3. Test Equipment

RF Output Power / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	2018/01/02	2019/01/01
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04

Occupied Bandwidth / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04

Peak To Average Ratio / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04

Conducted Spurious Emission / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04

Radiated Spurious Emission / CB4-H					
Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/10	2019/01/09
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04
Bilog Antenna	Teseq	CBL6112D	23191	2017/06/28	2018/06/27
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2017/06/14	2018/06/13
Horn Antenna	Schwarzbeck	BBHA 9170	202	2018/01/31	2019/01/30
Pre-Amplifier	Dekra	AP-025C	201801236	2018/02/26	2019/02/25
Pre-Amplifier	EMCI	EMC11830I	980366	2018/01/08	2019/01/07
Pre-Amplifier	Dekra	AP-400C	201801231	2017/12/13	2018/12/12
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29

Spurious Emissions at Antenna Terminals / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04

Frequency Stability / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Wideband Radio Communication Tester	R&S	CMW500	150246	2018/03/30	2019/03/29
Directional Coupler	Agilent	778D	20402	2017/09/25	2018/09/24
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04

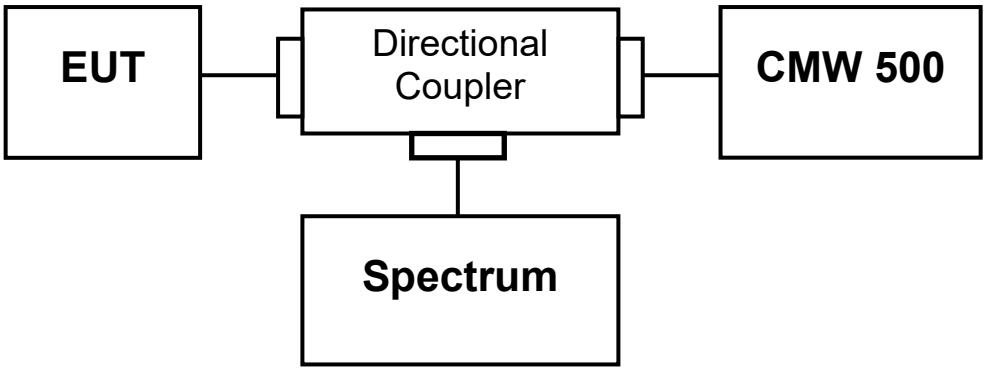
2.4. Uncertainty

Test Item	Uncertainty
RF Output Power	±1.27dB.
Occupied Bandwidth	± 10 Hz
Peak To Average Ratio	not exceed 13 dB.
Spurious Emission	± 1.27 dB for Conducted Measurement. ± 3.2 dB for Radiated Measurement.
Spurious Emissions at Antenna Terminals	± 3.2 dB
Frequency Stability	± 10 Hz

3. RF Power Output

3.1. Test Setup

Conducted



3.2. Test Procedure

a) The RF output of the transmitter was connected to base station simulator.
b) The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement..
c) Set EUT at maximum average power by base station simulator.
d) Measure lowest, middle, and highest channels for each bandwidth and different modulation.

Effective Isotropic Radiated Power = Conducted Power(dBm) + Antenna Gain(dBi)

Effective Radiated Power = Conducted Power(dBm) + Antenna Gain(dBi) - 2.15dB

3.3. Test Result

Product	Module		
Test Item	RF Output Power		
Test Mode	Mode 6: LTE Band 13 (5M)		
Date of Test	2018/04/10	Test Site	SR10-H

Ch	Freq (MHz)	Modulation	RB No.	RB offset	MPR	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
23205	779.5	QPSK	1	0	0	23.00	0.193	3
				12		23.09	0.197	3
				24		23.06	0.195	3
			12	0	1	23.16	0.200	3
				6		22.11	0.157	3
				11		22.04	0.155	3
			25	0		22.03	0.154	3
		16-QAM	1	0	1	22.26	0.163	3
				12		22.59	0.175	3
				24		22.57	0.175	3
			12	0	2	21.56	0.138	3
				6		21.63	0.141	3
				11		21.52	0.137	3
			25	0		21.53	0.137	3
23230	782	QPSK	1	0	0	23.04	0.195	3
				12		23.19	0.201	3
				24		23.12	0.198	3
			12	0	1	22.03	0.154	3
				6		22.12	0.157	3
				11		22.17	0.159	3
			25	0		22.06	0.155	3
		16-QAM	1	0	1	22.21	0.161	3
				12		22.13	0.158	3
				24		22.25	0.162	3
			12	0	2	21.41	0.134	3
				6		21.42	0.134	3
				11		21.48	0.136	3
			25	0		21.73	0.144	3

Ch	Freq (MHz)	Modulation	RB No.	RB offset	MPR	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
23255	784.5	QPSK	1	0	0	23.21	0.202	3
				12		23.22	0.203	3
				24		22.82	0.185	3
			12	0	1	22.23	0.161	3
				6		22.26	0.163	3
				11		22.24	0.162	3
			25	0		22.32	0.165	3
		16-QAM	1	0	1	22.59	0.175	3
				12		22.78	0.183	3
				24		22.68	0.179	3
			12	0	2	21.59	0.139	3
				6		21.49	0.136	3
				11		21.64	0.141	3
			25	0		21.72	0.144	3

Note:

1. RF Output Power (W) ERP = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15dB
2. The usable maximum antenna gain is 2 dBi.

Product	Module		
Test Item	RF Output Power		
Test Mode	Mode 6: LTE Band 13 (10M)		
Date of Test	2018/04/10	Test Site	SR10-H

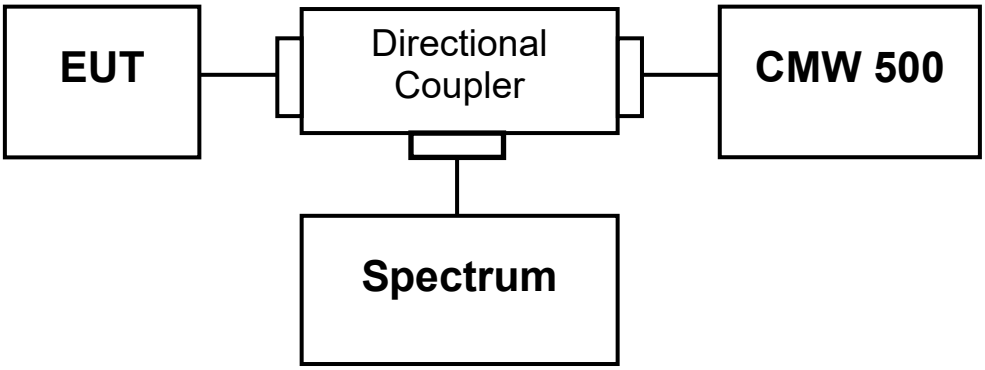
Ch	Freq (MHz)	Modulation	RB No.	RB offset	MPR	Conducted Output Power (dBm)	RF Output Power (W) ERP	Limit (W) ERP
23230	782	QPSK	1	0	0	23.04	0.195	3
				12		23.93	0.239	3
				24		23.36	0.209	3
			12	0	1	22.14	0.158	3
				6		22.21	0.161	3
				11		22.22	0.161	3
			25	0		22.05	0.155	3
		16-QAM	1	0	1	22.85	0.186	3
				12		22.25	0.162	3
				24		23.17	0.200	3
			12	0	2	22.18	0.160	3
				6		22.19	0.160	3
				11		22.11	0.157	3
			25	0		22.14	0.158	3

Note:

1. RF Output Power (W) ERP = Conducted Output Power (dBm) + Antenna Gain (dBi) - 2.15dB
2. The usable maximum antenna gain is 2 dBi.

4. Occupied Bandwidth

4.1. Test Setup



4.2. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The 99% occupied bandwidth and 26 dB bandwidth of the low & middle & high channel for the highest RF powers were measured.

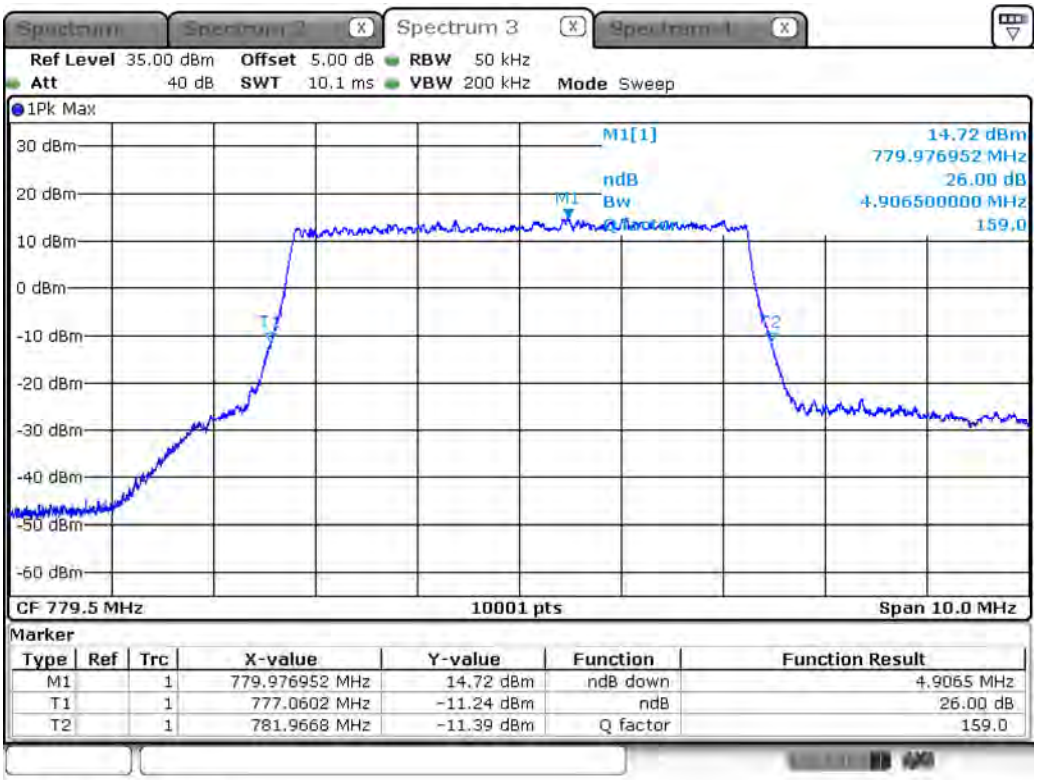
4.3. Test Result

Product	Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 6: LTE Band 13		
Date of Test	2018/03/31	Test Site	SR10-H

LTE Band 13_5M_QPSK

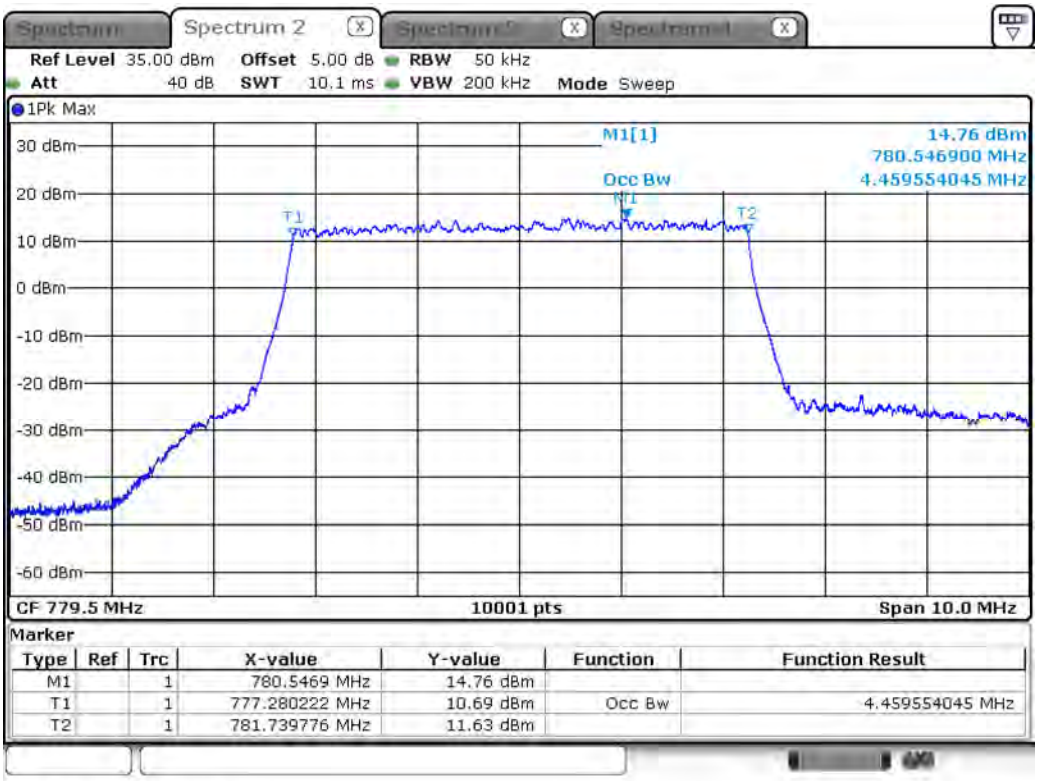
Frequency (MHz)	-26dB BW Measure Level (MHz)	99% BW Measure Level (MHz)	Limit (MHz)
779.5	4.907	4.460	N/A
782	4.874	4.476	N/A
784.5	4.974	4.498	N/A

Figure 779.5MHz (-26dB BW)



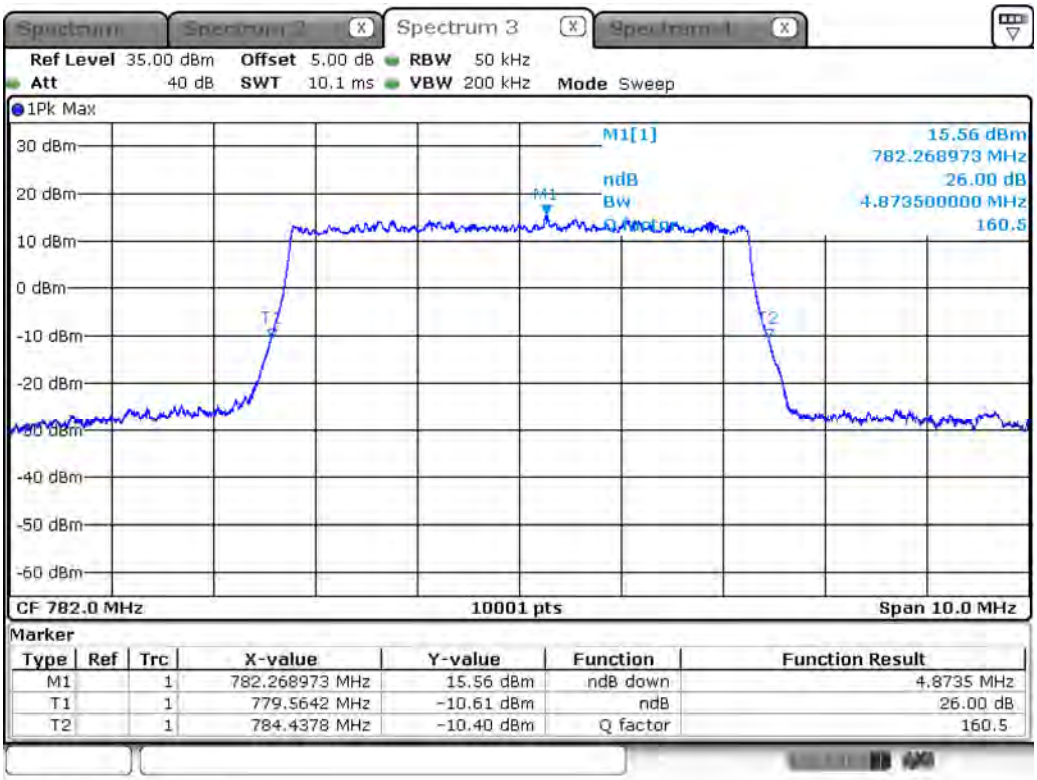
Date: 31.MAR.2018 17:00:44

Figure 779.5MHz (99% BW)



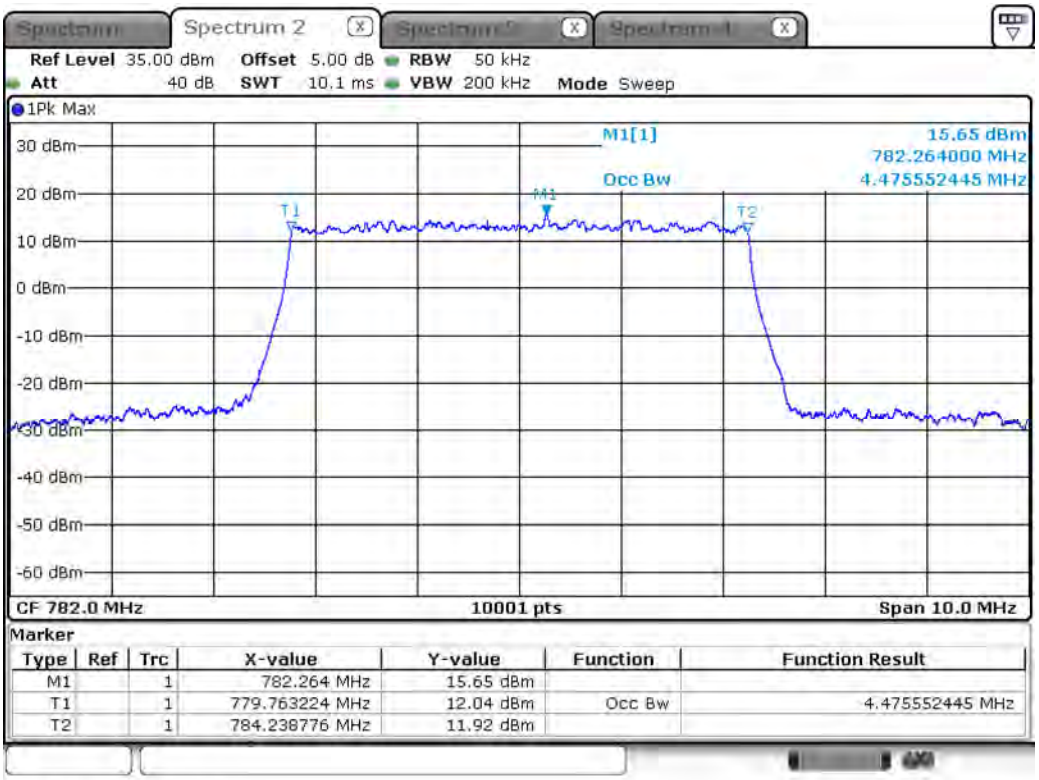
Date: 31.MAR.2018 16:59:04

Figure 782MHz (-26dB BW)



Date: 31.MAR.2018 17:02:40

Figure 782MHz (99% BW)



Date: 31.MAR.2018 17:14:16

Figure 784.5MHz (-26dB BW)

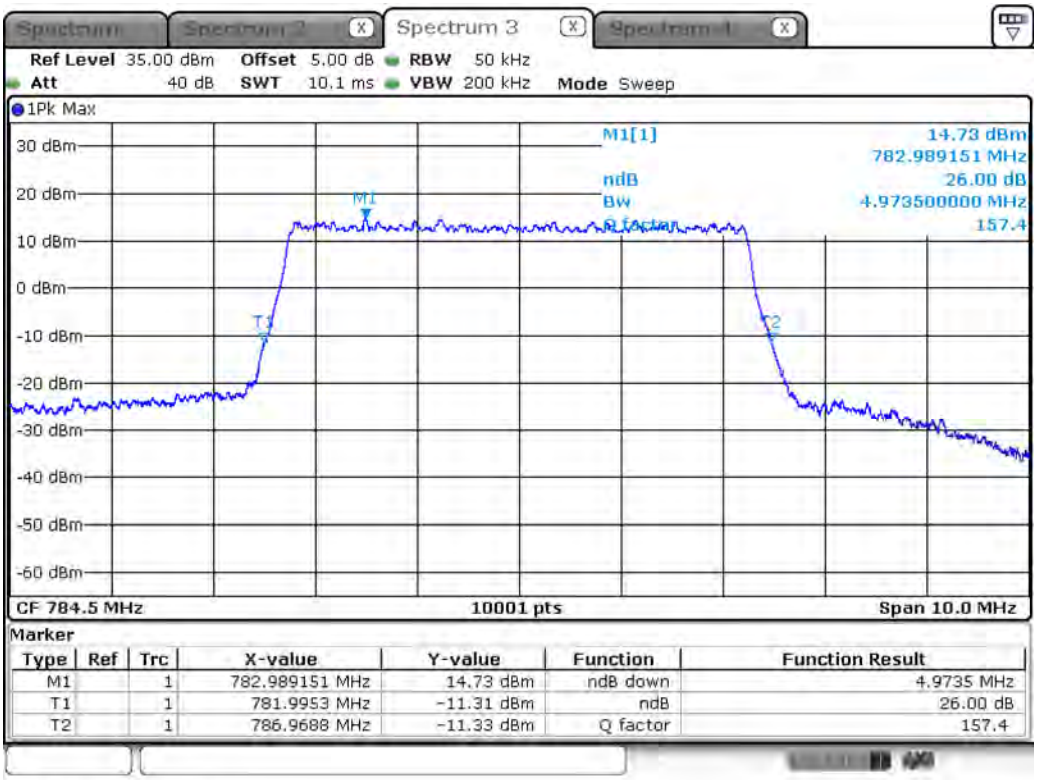


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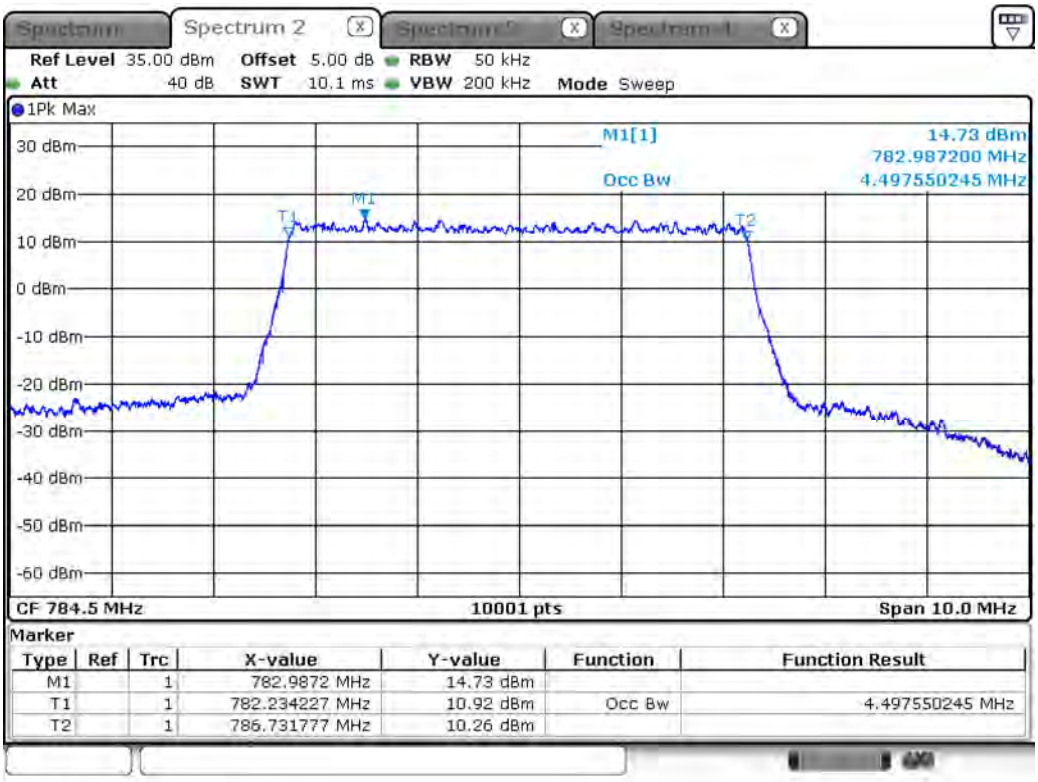
Figure 784.5MHz (99% BW)



Date: 31.MAR.2018 17:16:24

Product	Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 6: LTE Band 13		
Date of Test	2018/03/31	Test Site	SR10-H

LTE Band 13_5M_16-QAM

Frequency (MHz)	-26dB BW Measure Level (MHz)	99% BW Measure Level (MHz)	Limit (MHz)
779.5	4.850	4.463	N/A
782	4.891	4.466	N/A
784.5	4.933	4.483	N/A

Figure 779.5MHz (-26dB BW)

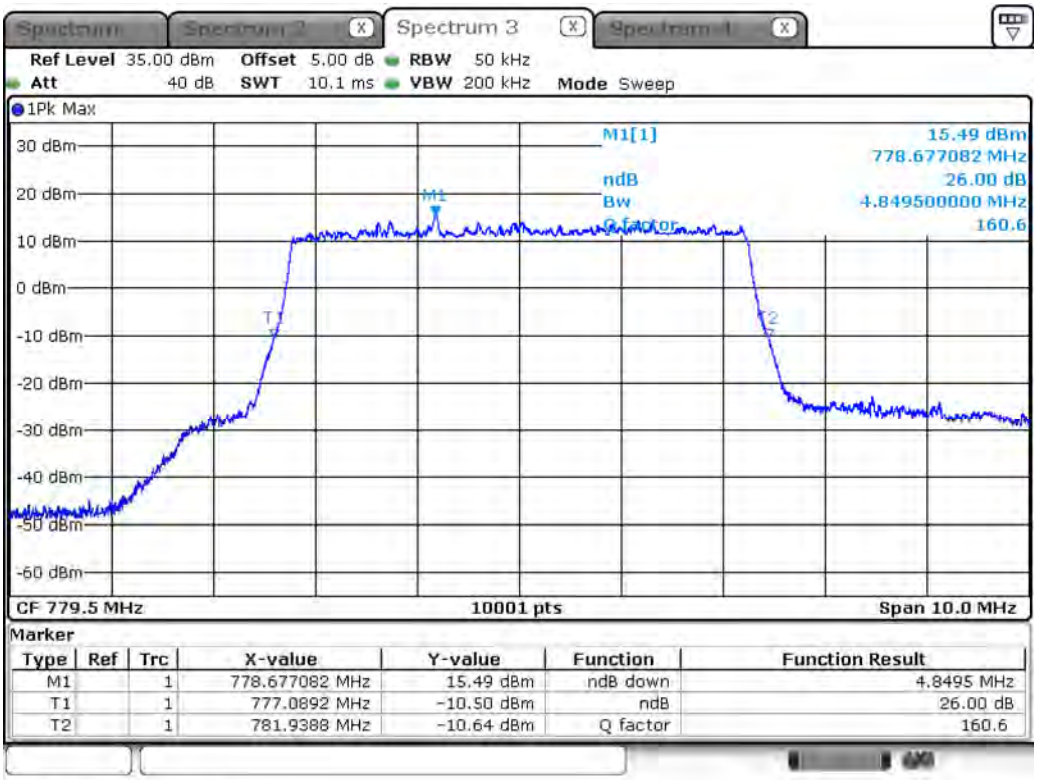


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Figure 779.5MHz (99% BW)

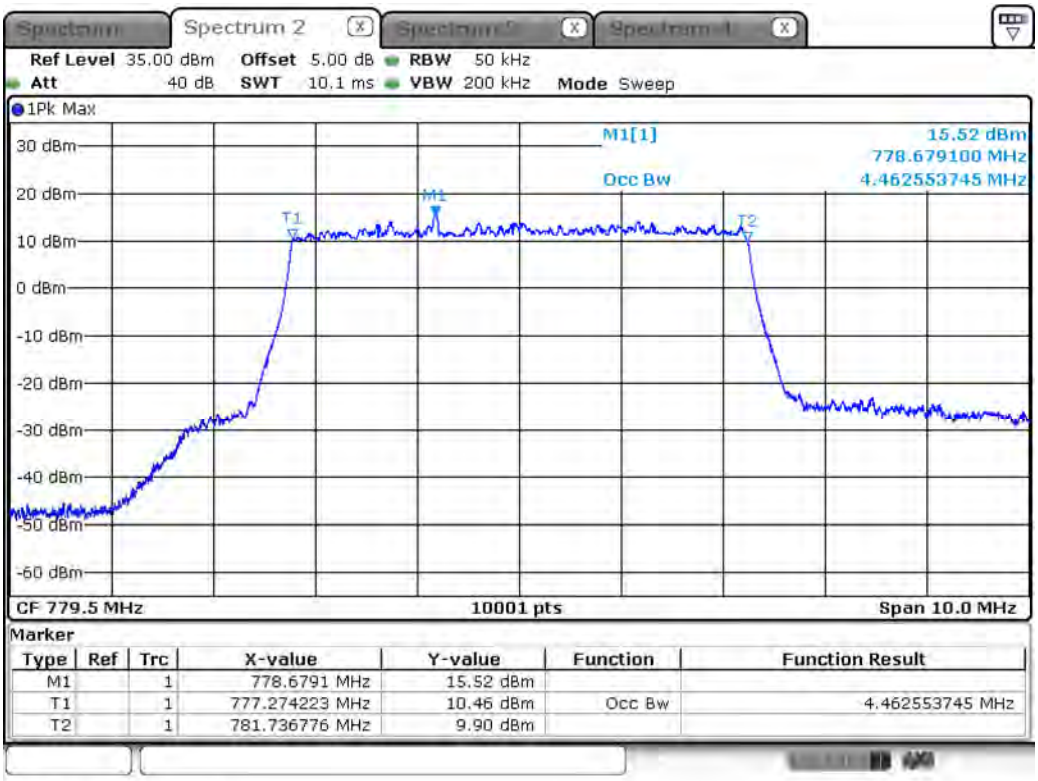

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Figure 782MHz (-26dB BW)

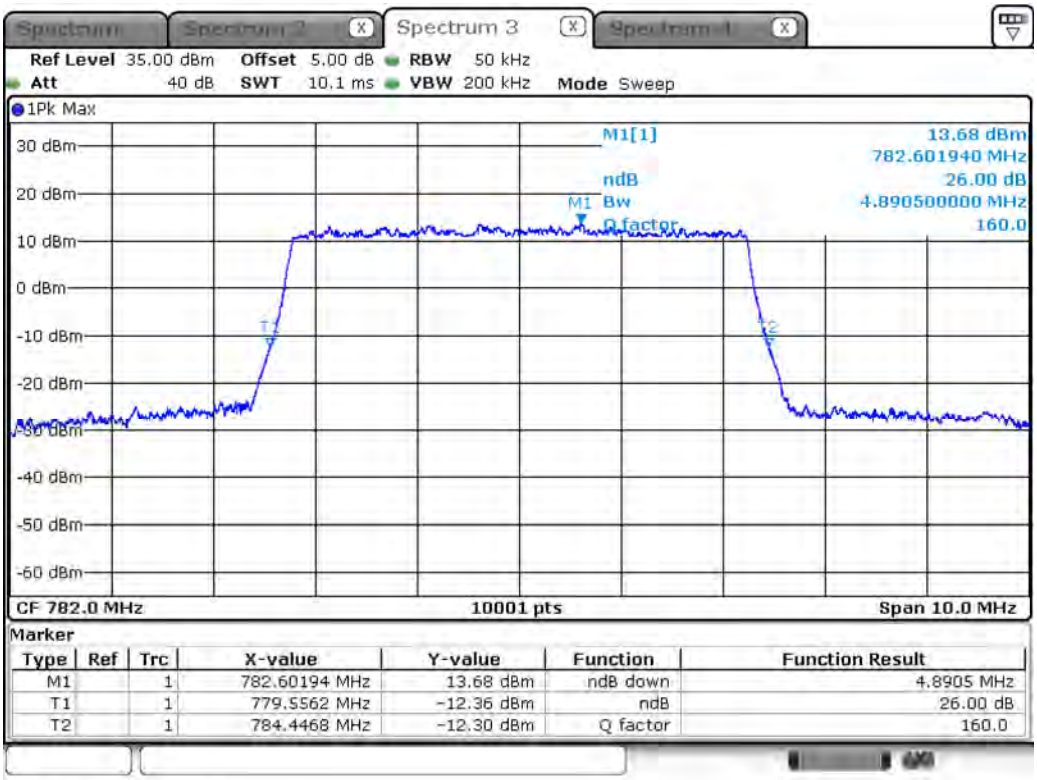

Figure 782MHz (99% BW)

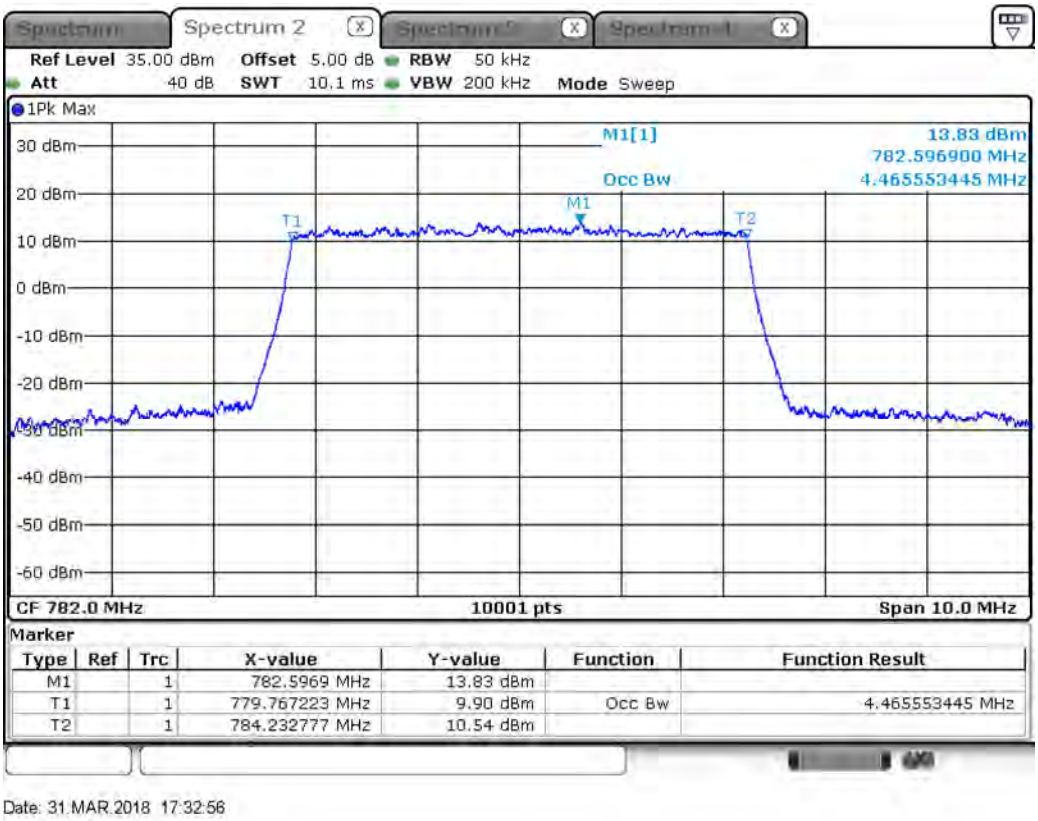

Figure 784.5MHz (-26dB BW)

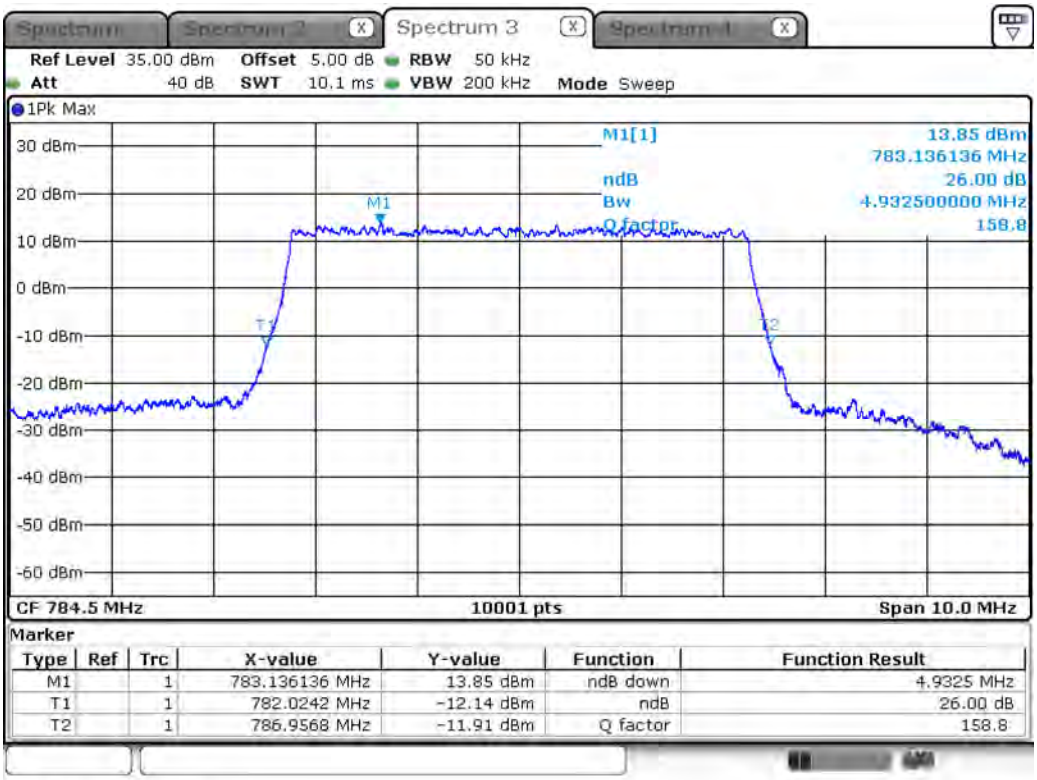

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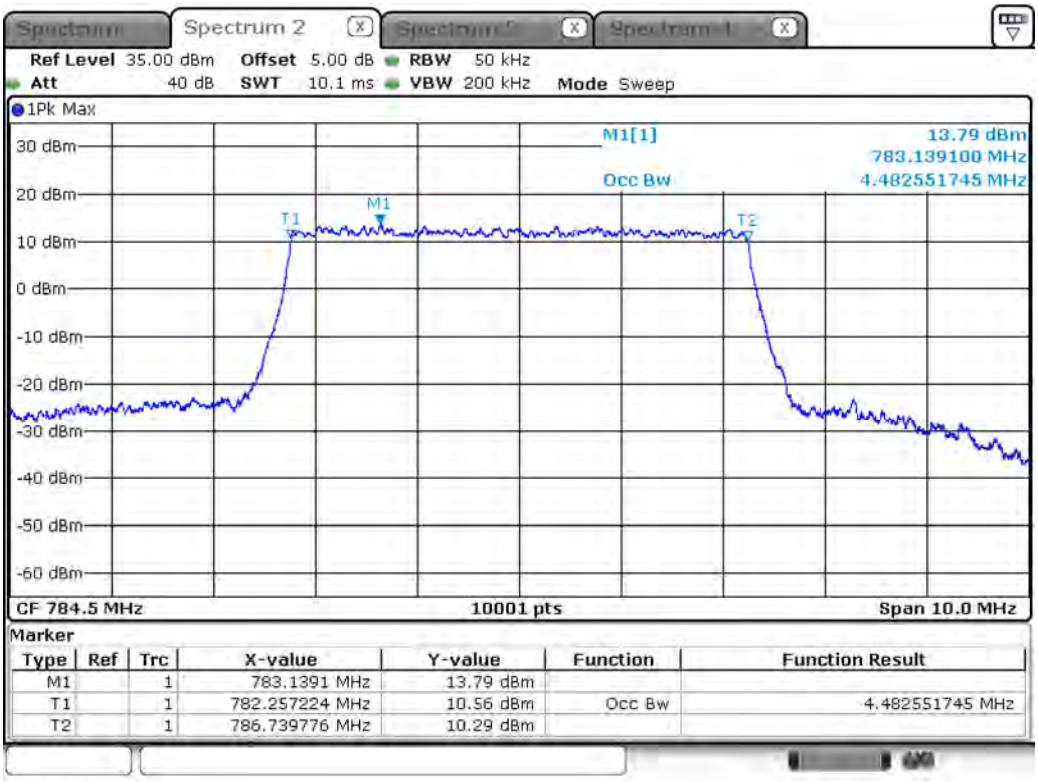
Figure 784.5MHz (99% BW)



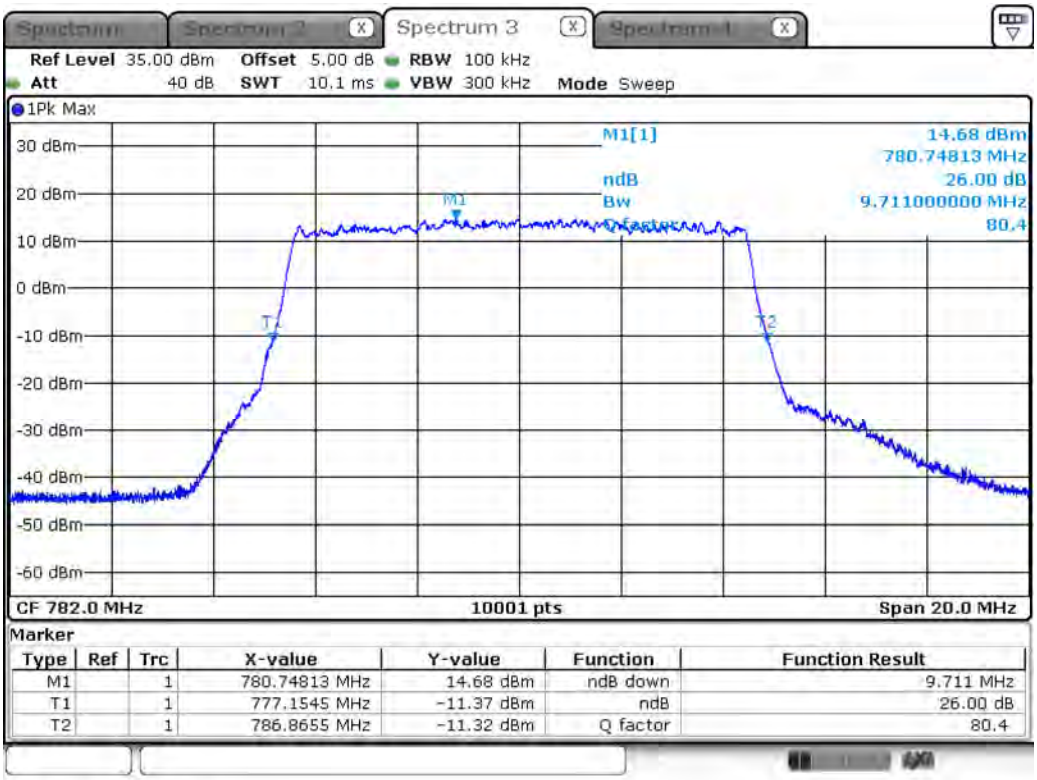
Date: 31.MAR.2018 17:30:51

Product	Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 6: LTE Band 13		
Date of Test	2018/03/31	Test Site	SR10-H

LTE Band 13_10M_QPSK

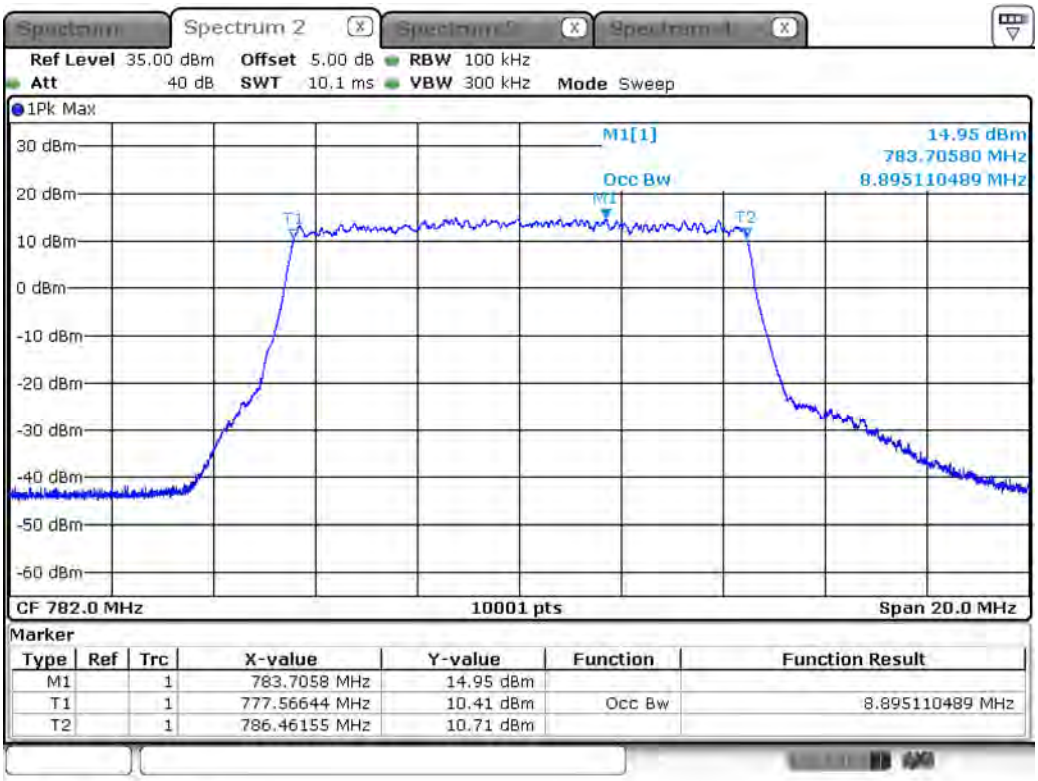
Frequency (MHz)	-26dB BW Measure Level (MHz)	99% BW Measure Level (MHz)	Limit (MHz)
782	9.711	8.895	N/A

Figure 782MHz (-26dB BW)



Date: 10.APR.2018 16:54:29

Figure 782MHz (99% BW)



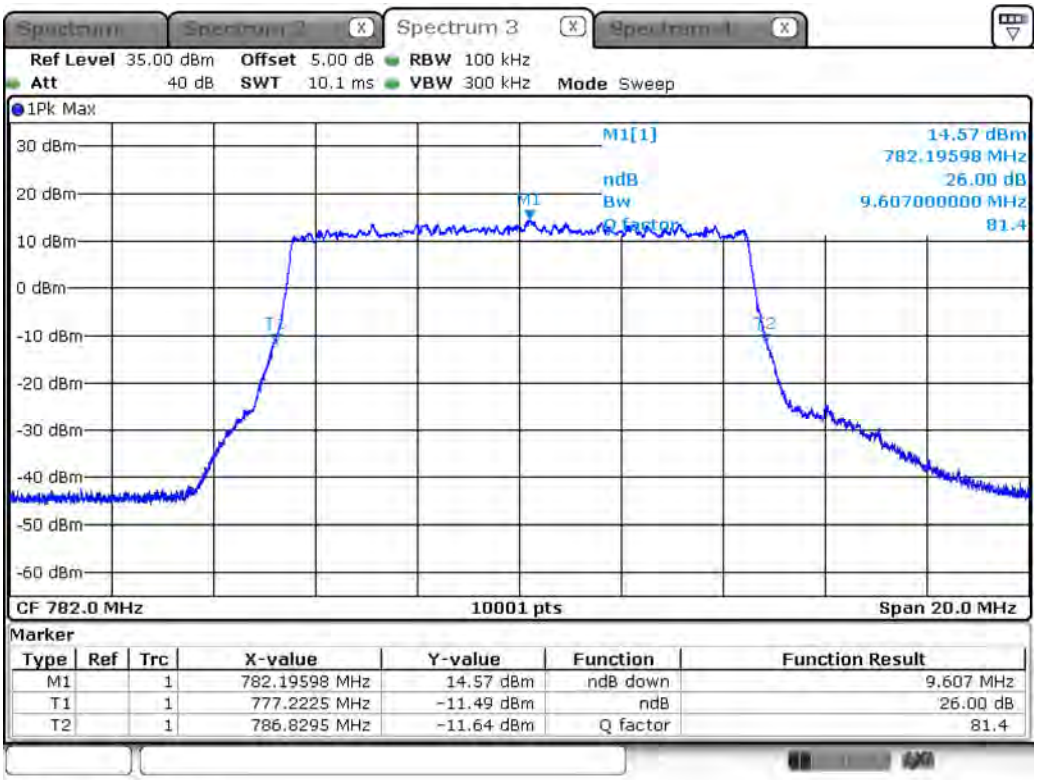
Date: 10.APR.2018 16:50:25

Product	Module		
Test Item	Occupied Bandwidth		
Test Mode	Mode 6: LTE Band 13		
Date of Test	2018/03/31	Test Site	SR10-H

LTE Band 13_10M_16-QAM

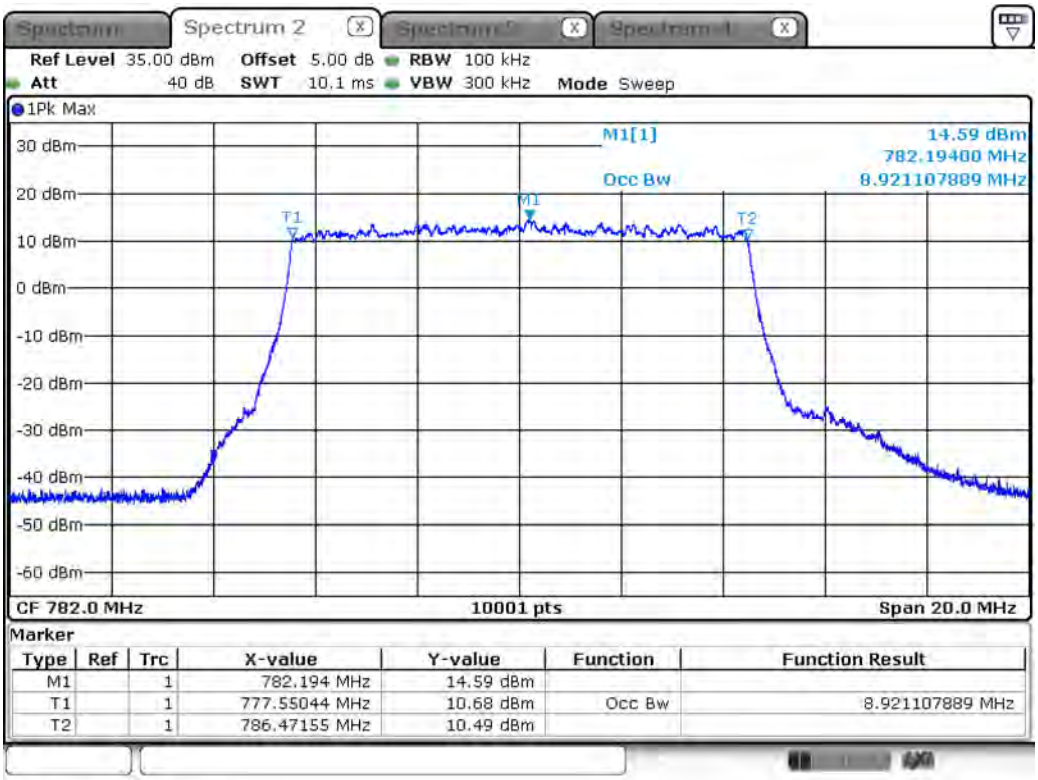
Frequency (MHz)	-26dB BW Measure Level (MHz)	99% BW Measure Level (MHz)	Limit (MHz)
782	9.607	8.921	N/A

Figure 782MHz (-26dB BW)



Date: 10.APR.2018 16:57:19

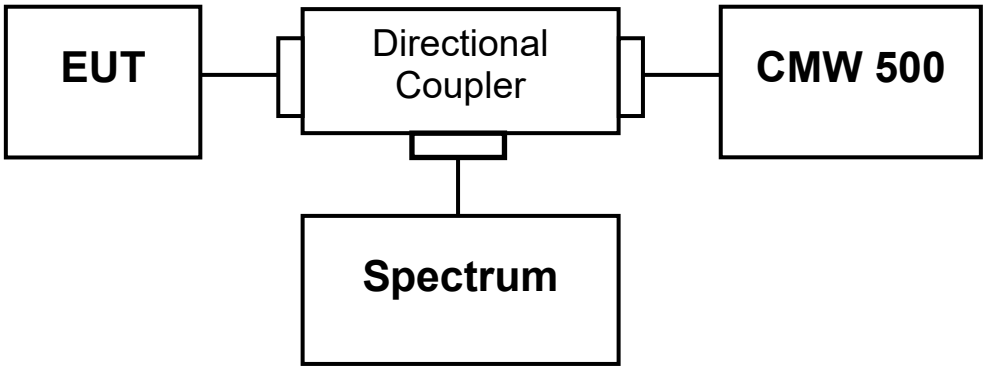
Figure 782MHz (99% BW)



Date: 10.APR.2018 17:00:51

5. Peak To Average Ratio

5.1. Test Setup



5.2. Test Procedure

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth.
2. Set the number of counts to a value that stabilizes the measured CCDF curve.
3. Record the maximum PAPR level associated with a probability of 0.1 %.

5.3. Test Result

Product	Module		
Test Item	Peak To Average Ratio		
Test Mode	Mode 6: LTE Band 13		
Date of Test	2018/03/31	Test Site	SR10-H

LTE Band 13_5M_QPSK

Channel No.	Frequency (MHz)	Peak To Average Ratio (dB)
23205	779.5	4.38
23230	782	4.20
23255	784.5	4.12

Figure 779.5MHz

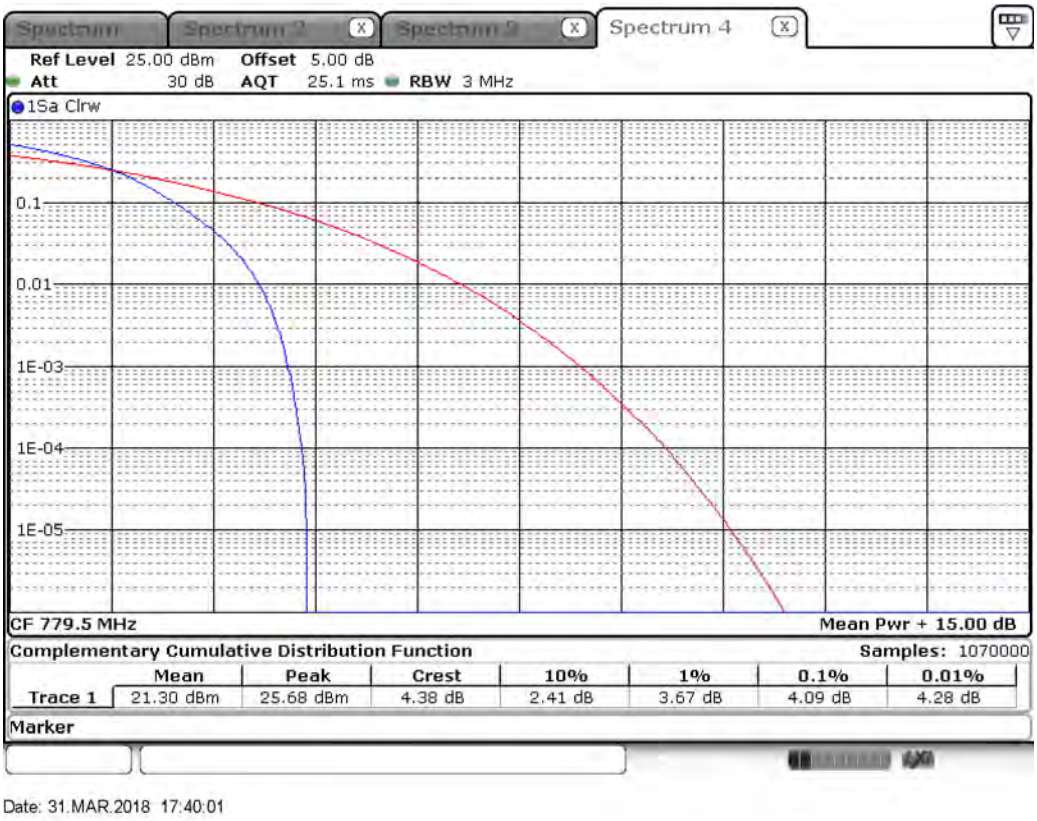
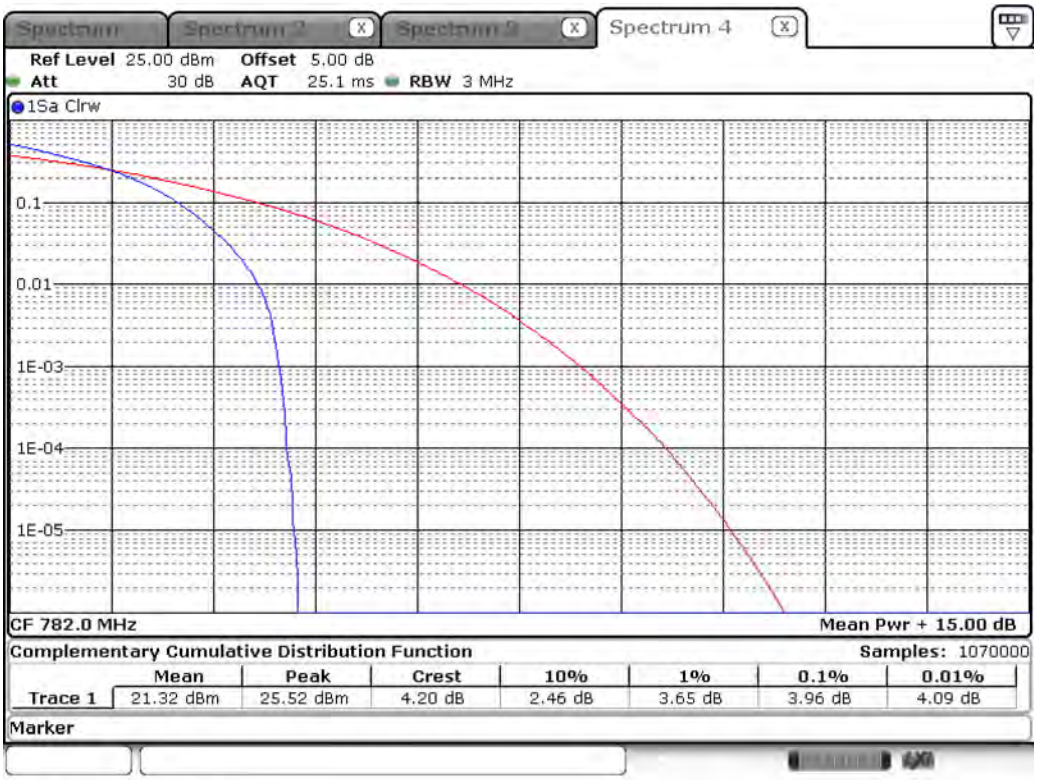
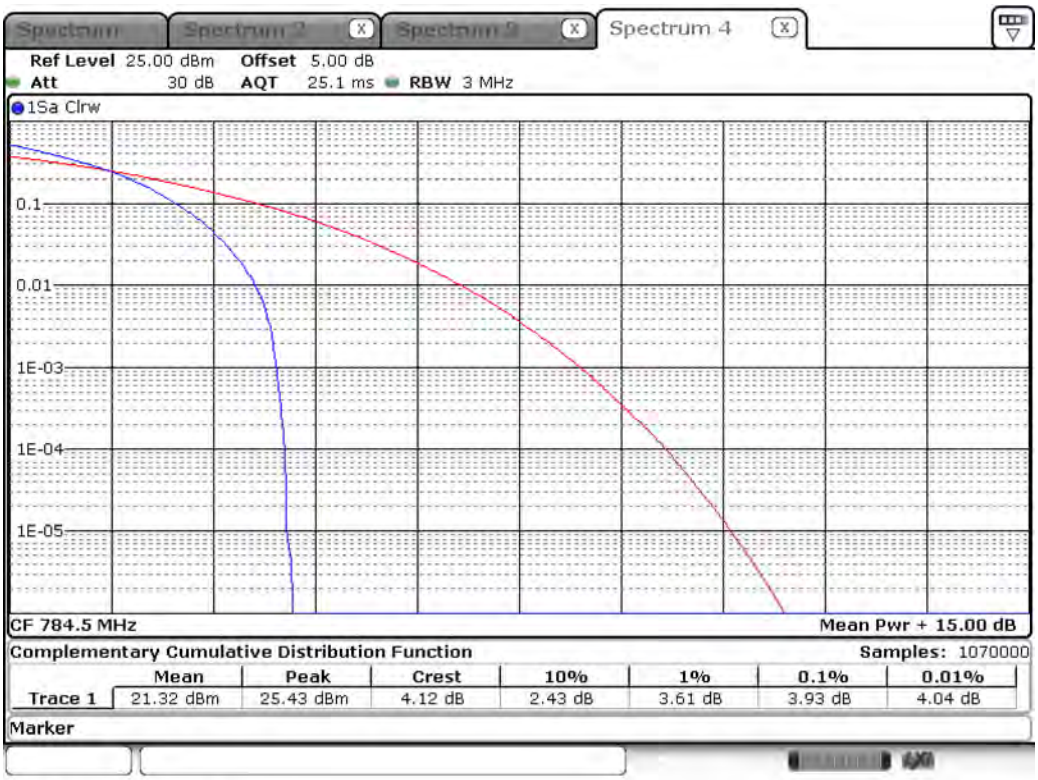


Figure 782MHz



Date: 31.MAR.2018 17:40:40

Figure 784.5MHz



Date: 31.MAR.2018 17:42:19

Product	Module		
Test Item	Peak To Average Ratio		
Test Mode	Mode 6: LTE Band 13		
Date of Test	2018/03/31	Test Site	SR10-H

LTE Band 13_5M_16-QAM

Channel No.	Frequency (MHz)	Peak To Average Ratio (dB)
23205	779.5	6.05
23230	782	4.20
23255	784.5	5.72

Figure 779.5MHz

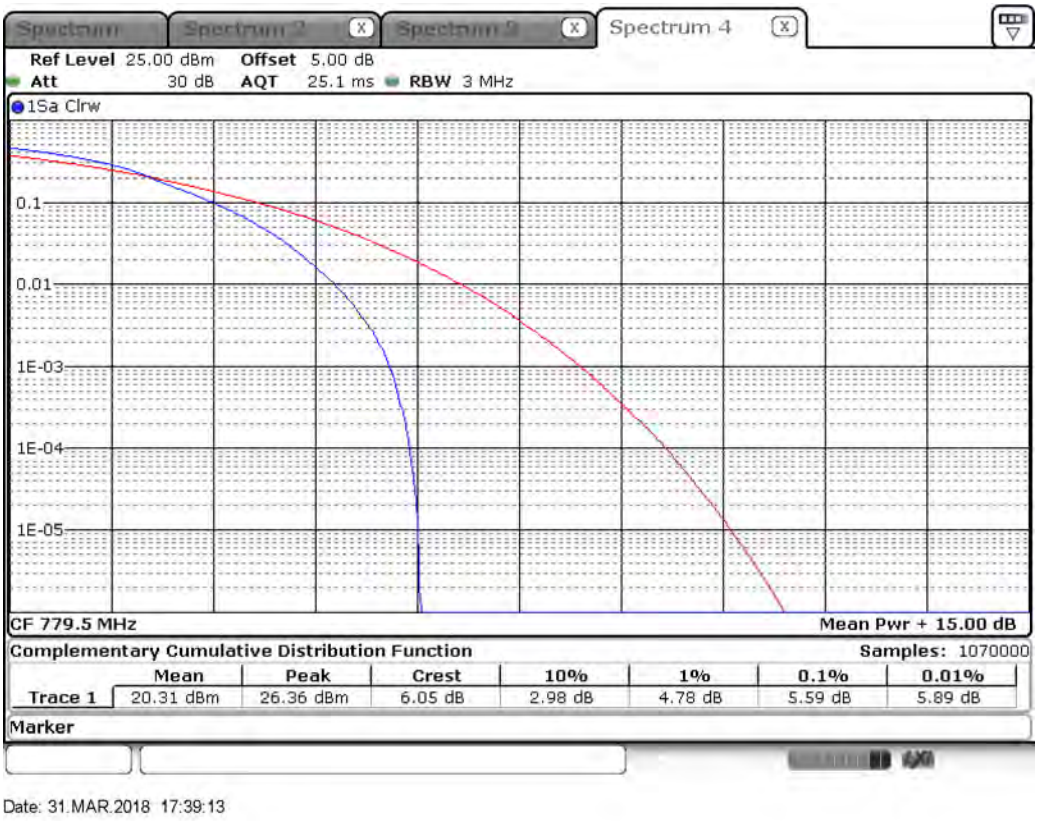


Figure 782MHz

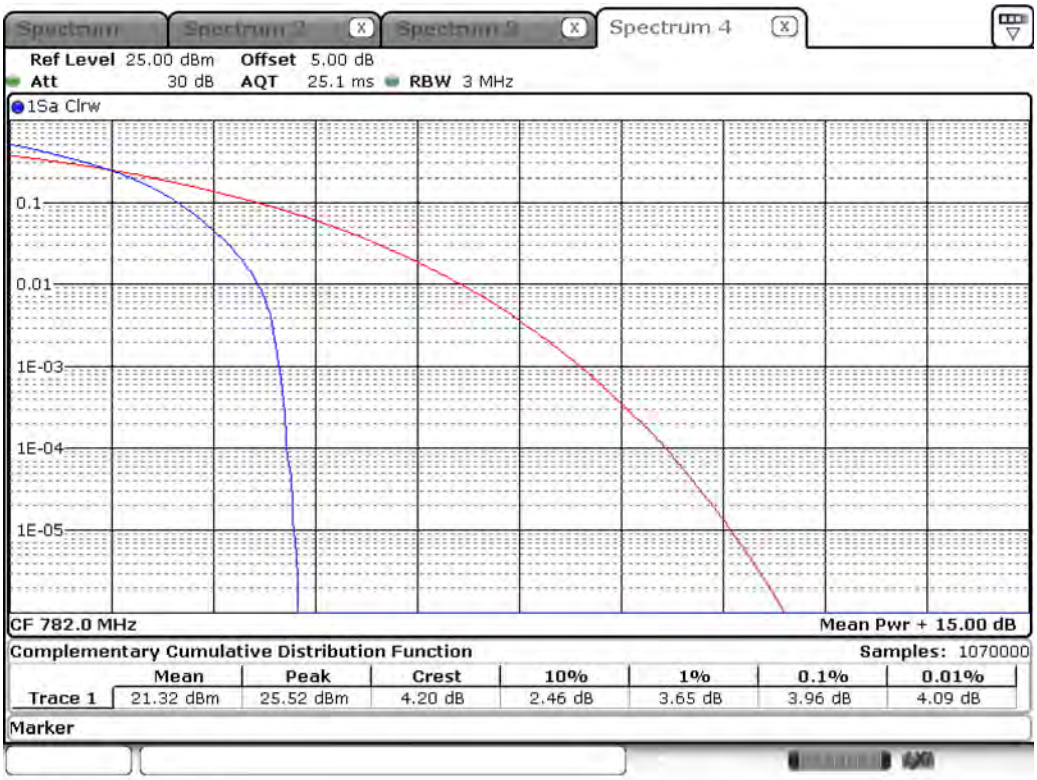


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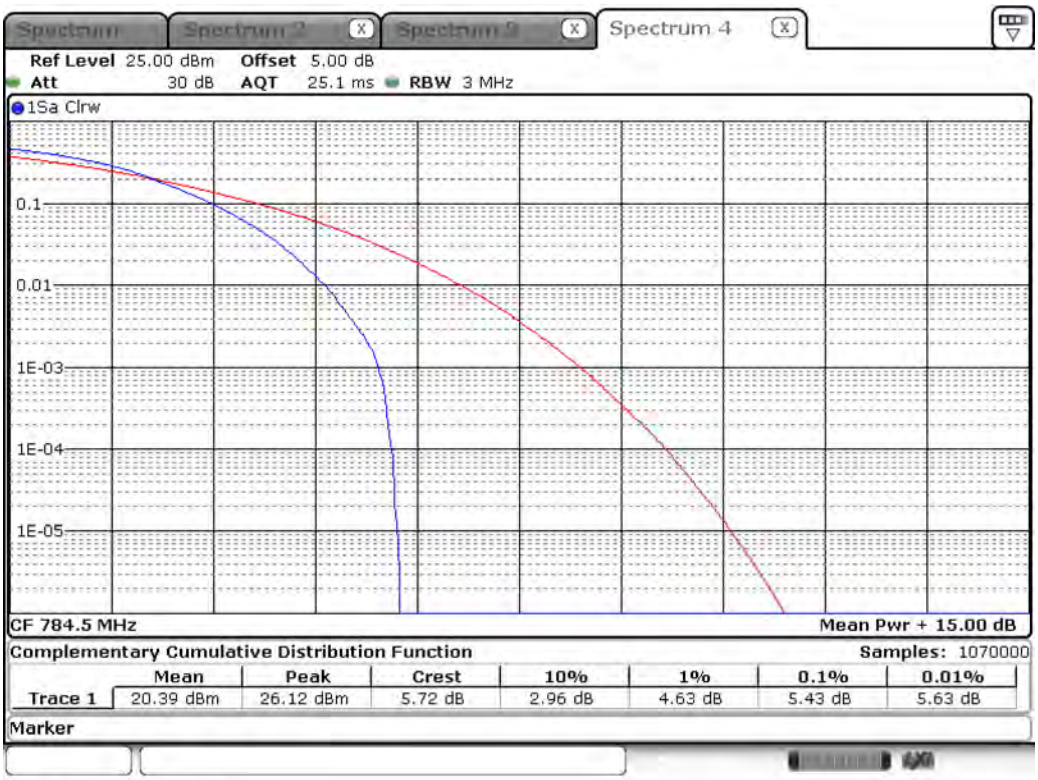
Figure 784.5MHz



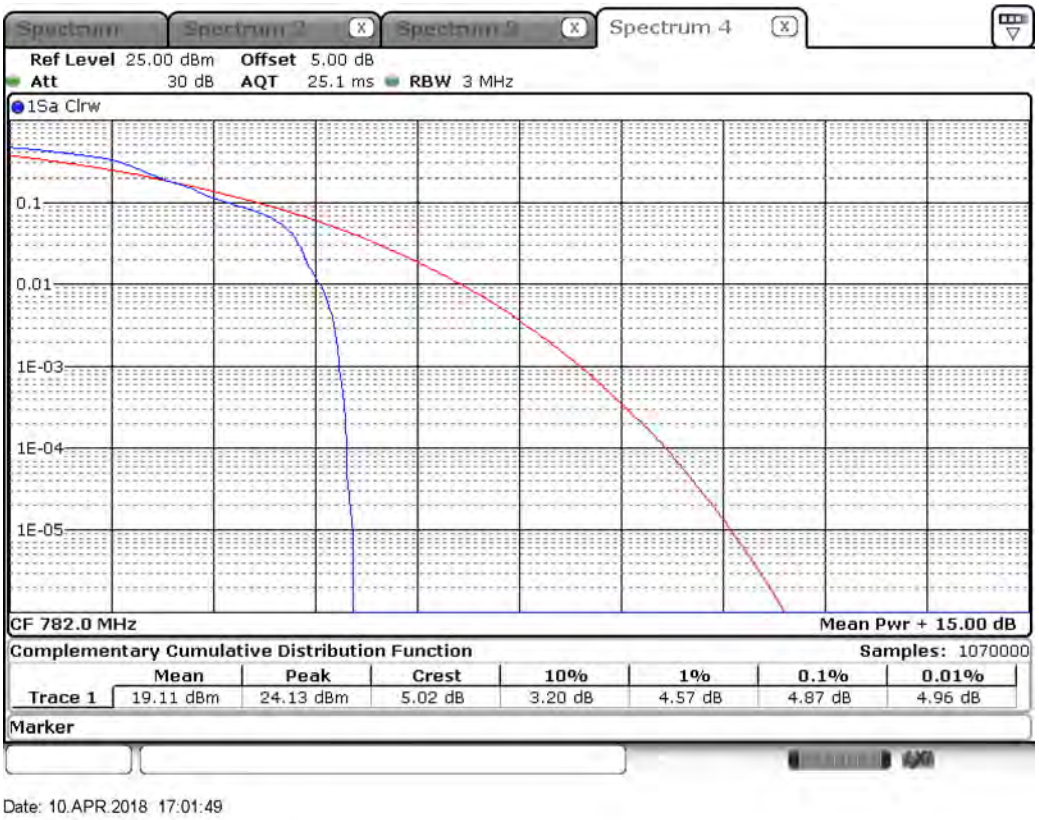
Date: 31.MAR.2018 17:41:49

Product	Module		
Test Item	Peak To Average Ratio		
Test Mode	Mode 6: LTE Band 13		
Date of Test	2018/04/10	Test Site	SR10-H

LTE Band 13_10M_QPSK

Channel No.	Frequency (MHz)	Peak To Average Ratio (dB)
23230	782	5.02

Figure 782MHz

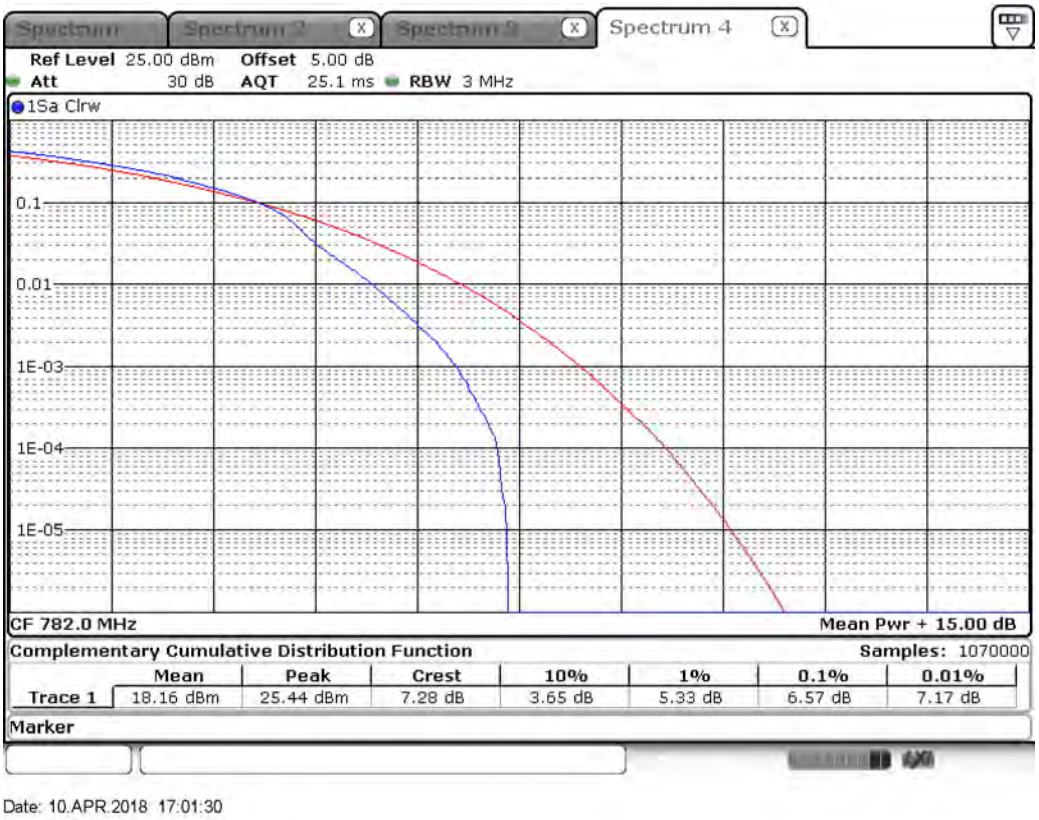


Product	Module		
Test Item	Peak To Average Ratio		
Test Mode	Mode 6: LTE Band 13		
Date of Test	2018/04/10	Test Site	SR10-H

LTE Band 13_10M_16-QAM

Channel No.	Frequency (MHz)	Peak To Average Ratio (dB)
23230	782	7.28

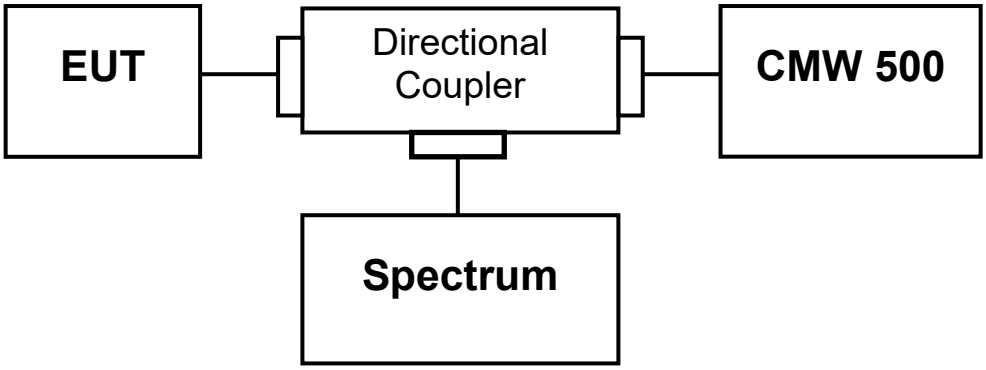
Figure 782MHz



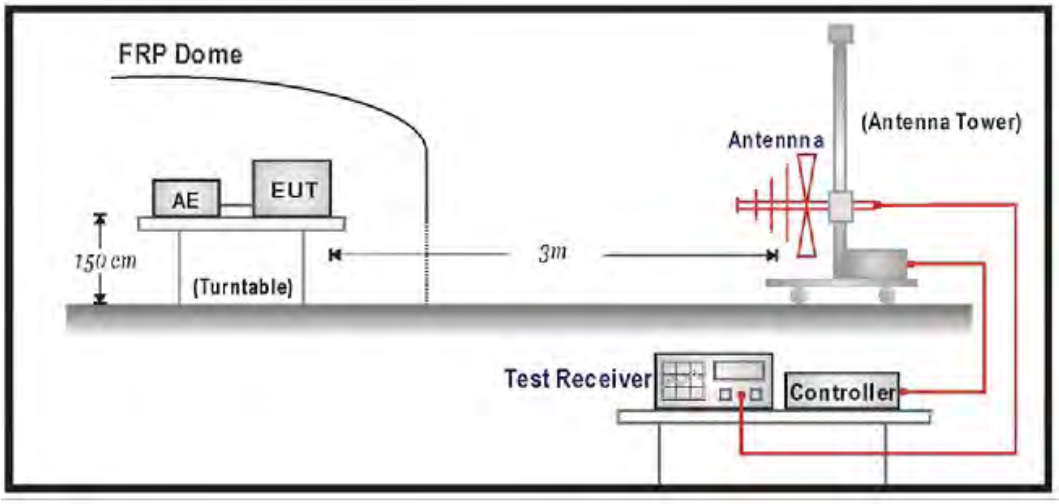
6. Spurious Emission

6.1. Test Setup

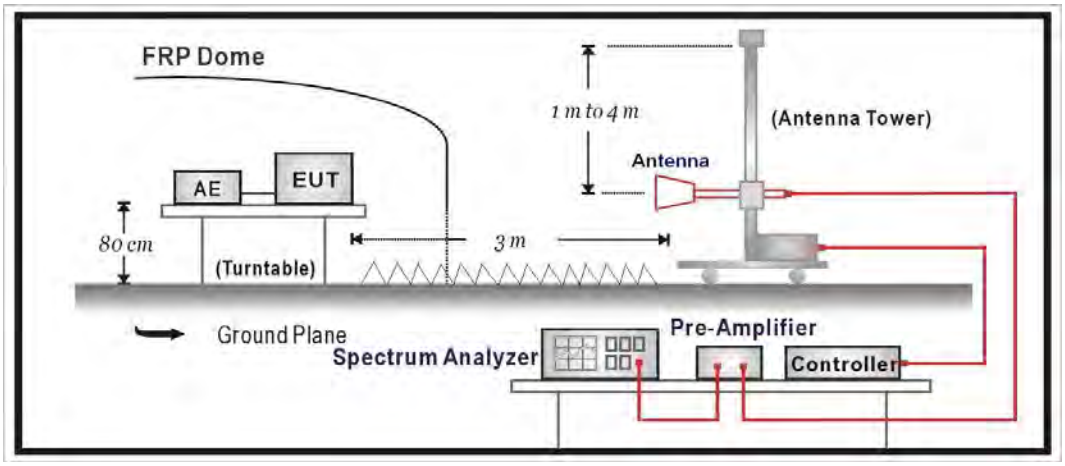
Conducted Spurious Measurement (below 1GHz)



Radiated Spurious Measurement (below 1GHz)



Radiated Spurious Measurement (above 1GHz)



6.2. Test Procedure

Conducted Spurious Measurement:

a) Place the EUT on a bench and set it in transmitting mode.
b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Couple.
c) EUT Communicate with CMU200, then select a channel for testing.
d) Add a correction factor to the display of spectrum, and then test.
e) The resolution bandwidth of the spectrum analyzer was set at 1 MHz, sufficient scans were taken to show the out of band Emission if any up to 10th harmonic.

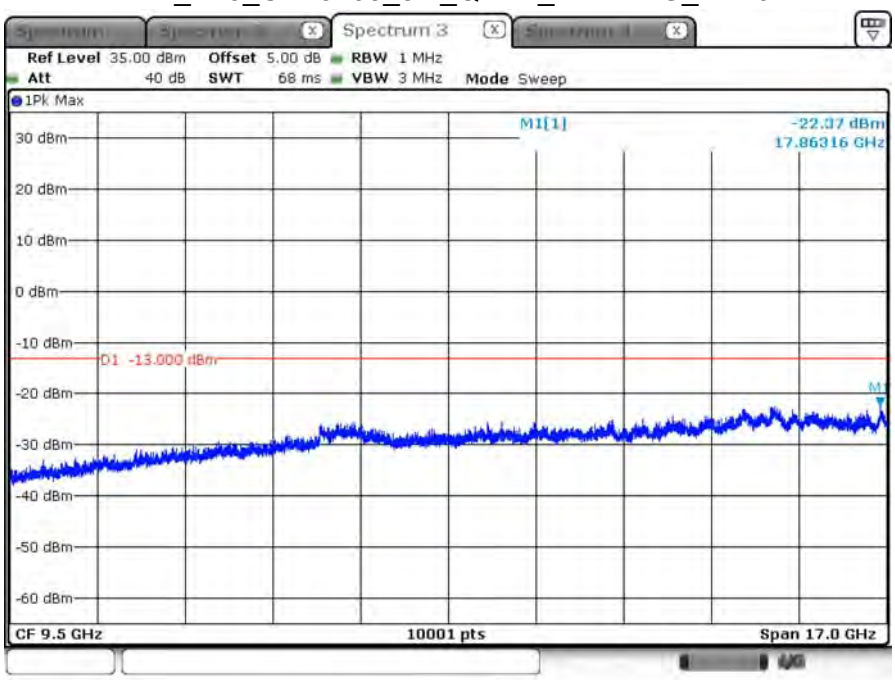
Radiated Spurious Measurement:

a) The EUT was placed on a rotatable wooden table with 1.5 meter above ground.
b) The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
c) The table was rotated 360 degrees to determine the position of the highest spurious emission.
d) The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
e) Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 1MHz, Sweep 500ms, Taking the record of maximum spurious emission.
f) A horn antenna was substituted in place of the EUT and was driven by a signal generator.
g) Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
h) Taking the record of output power at antenna port
i) Repeat step 7 to step 8 for another polarization.
j) EIRP = SG - Cable loss + Antenna Gain

6.3. Test Result

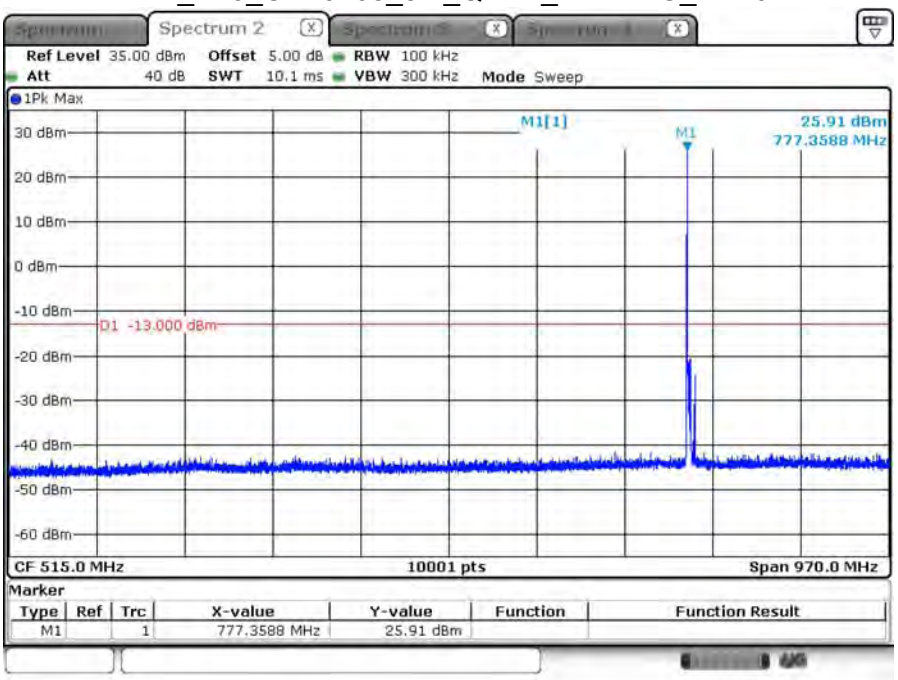
Product	Module		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 6: LTE Band 13		
Date of Test	2018/04/01	Test Site	SR10-H

LTE_B13_CH23205_5M_QPSK_above 1G_1RB0



Date: 1.APR.2018 09:21:29

LTE_B13_CH23205_5M_QPSK_under 1G_1RB0



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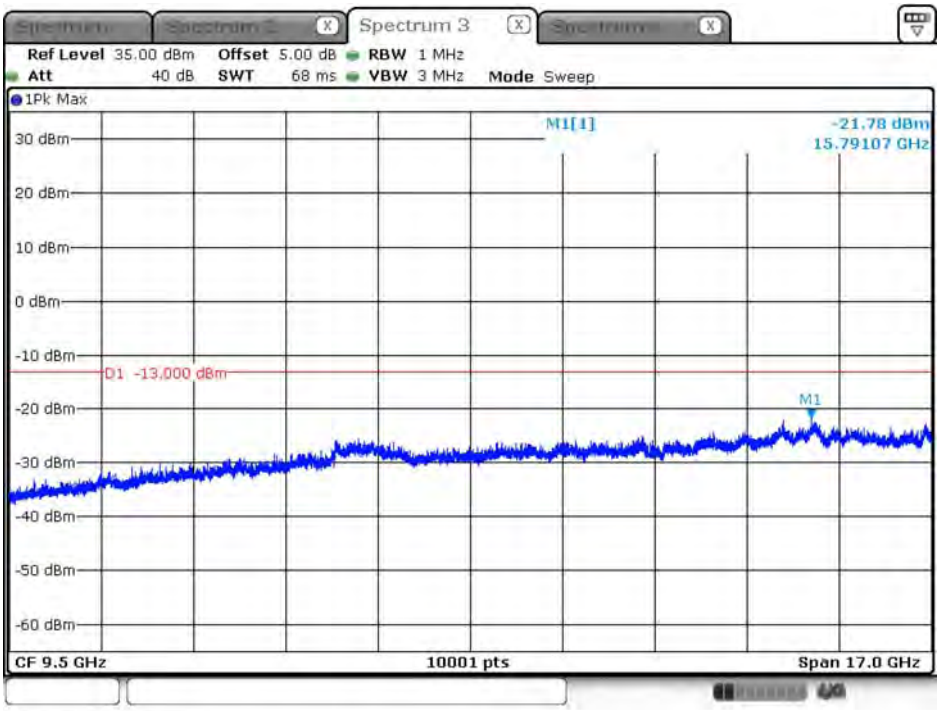
LTE_B13_CH23205_5M_QPSK_above 1G_1RB12



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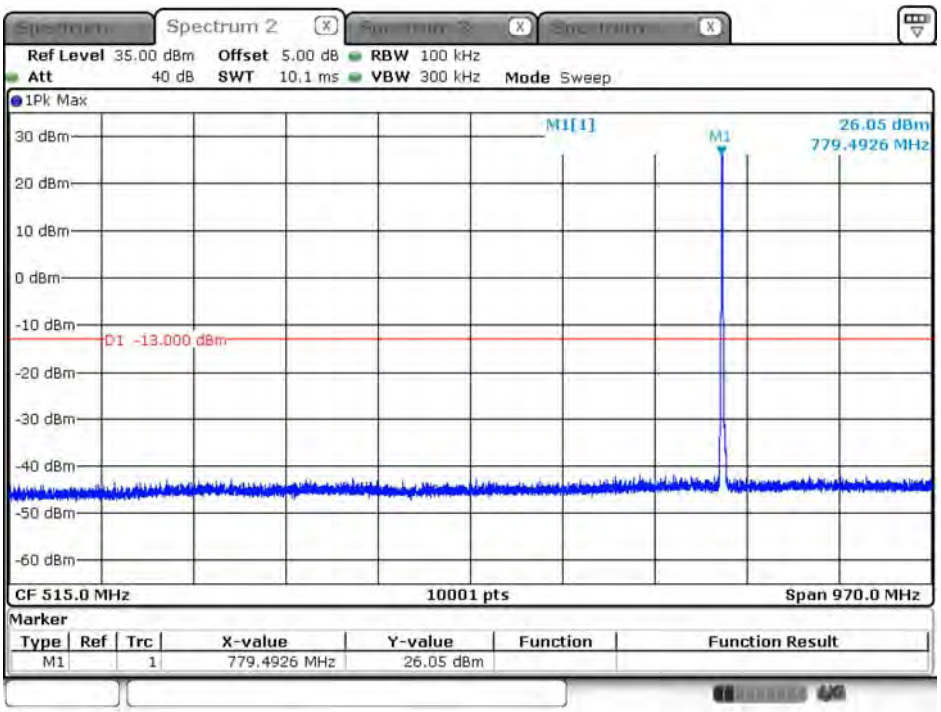
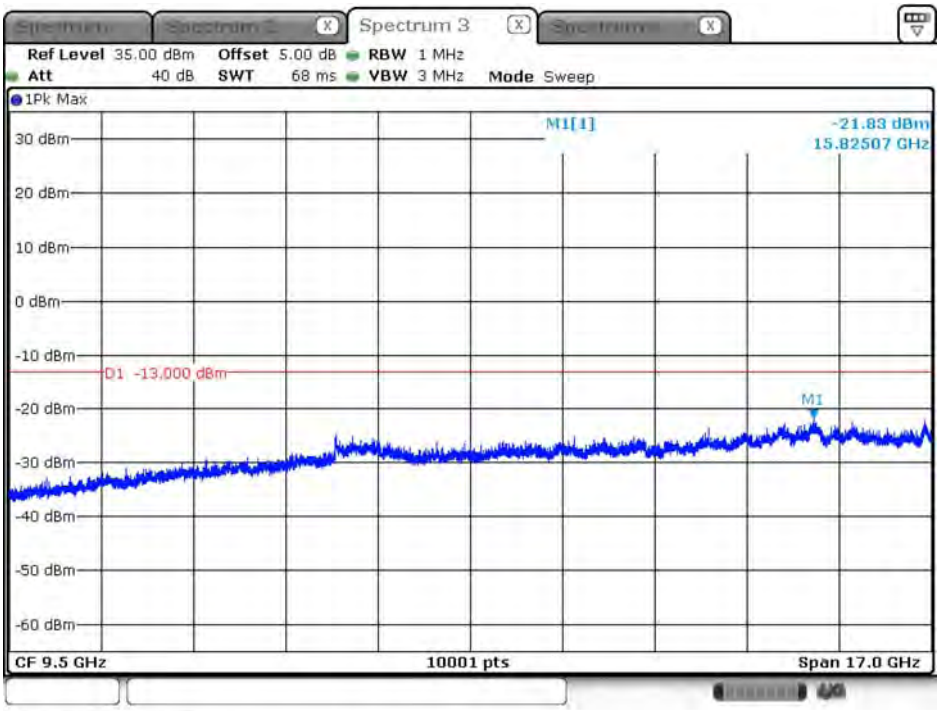
LTE_B13_CH23205_5M_QPSK_under 1G_1RB12



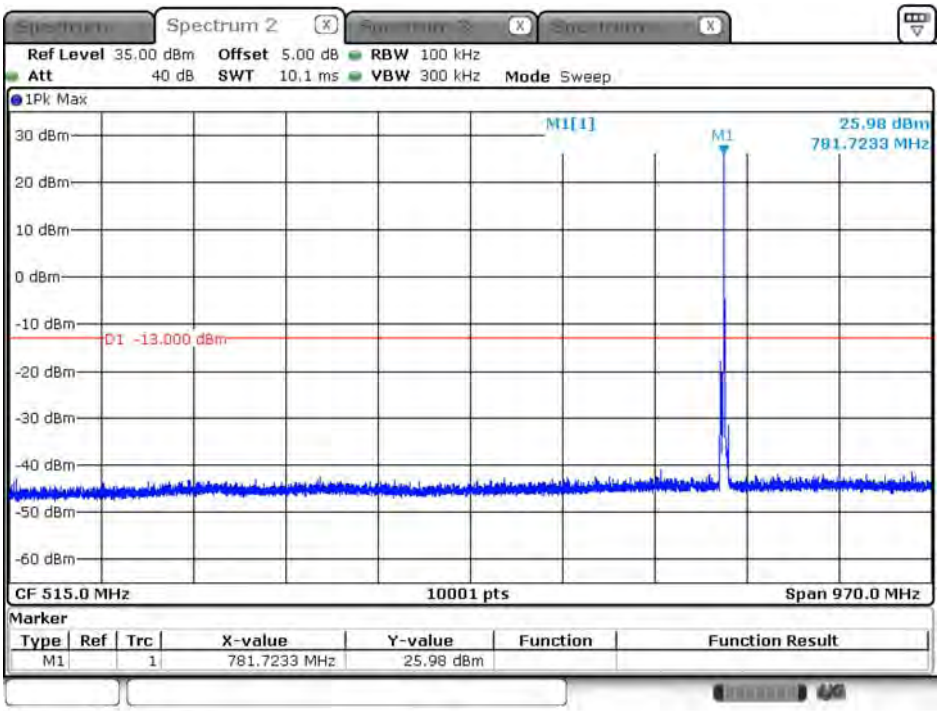
Date: 1.APR.2018 09:36:52

LTE_B13_CH23205_5M_QPSK_above 1G_1RB24



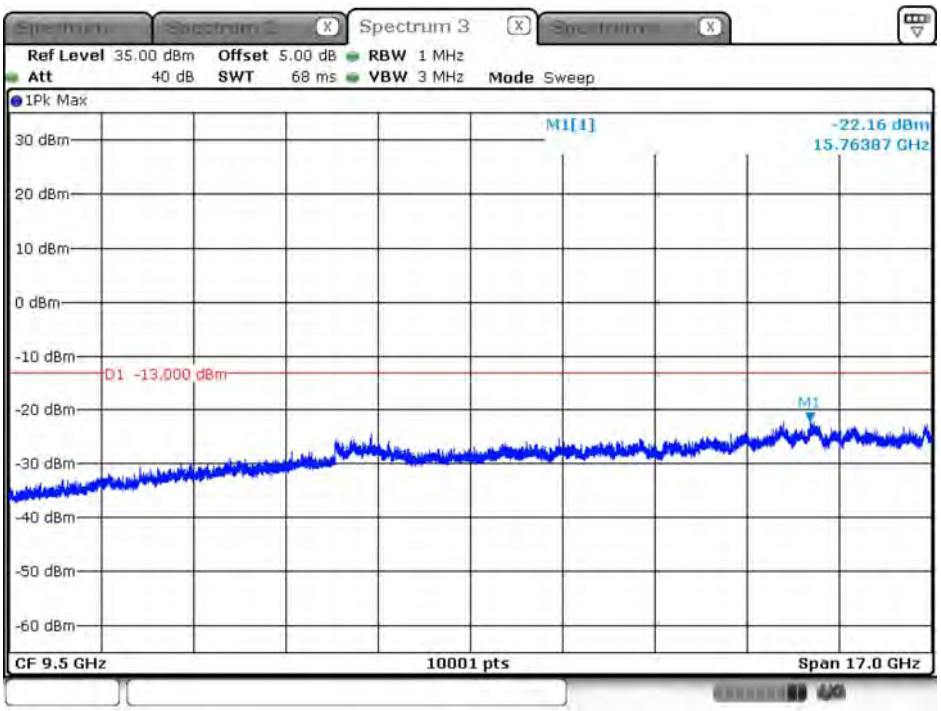
Date: 1.APR.2018 09:51:36

LTE_B13_CH23205_5M_QPSK_under 1G_1RB24



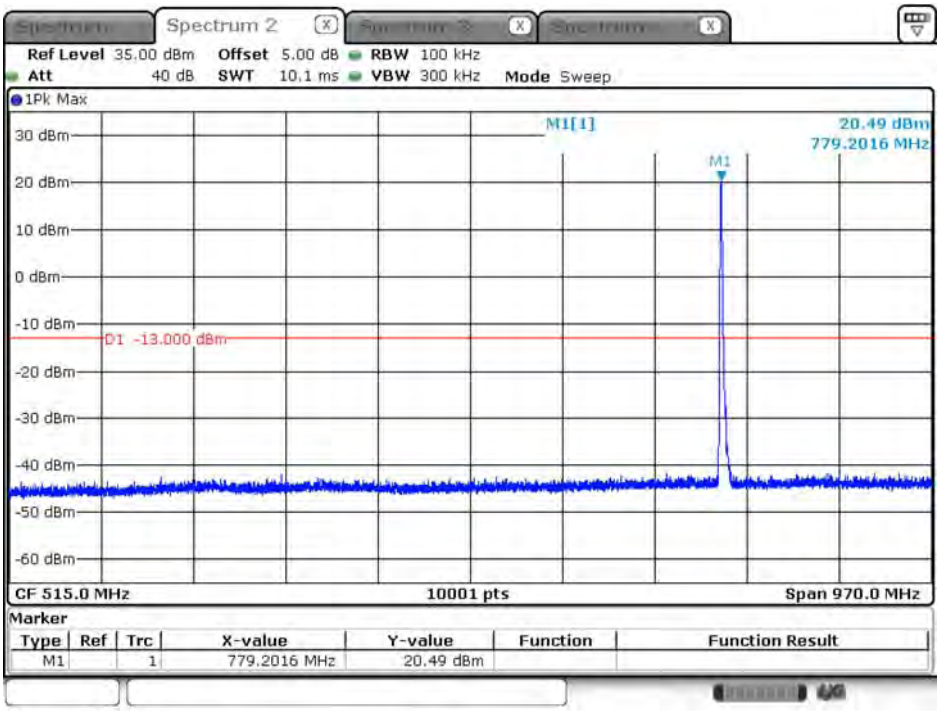
Date: 1.APR.2018 09:53:28

LTE_B13_CH23205_5M_QPSK_above 1G_12RB0



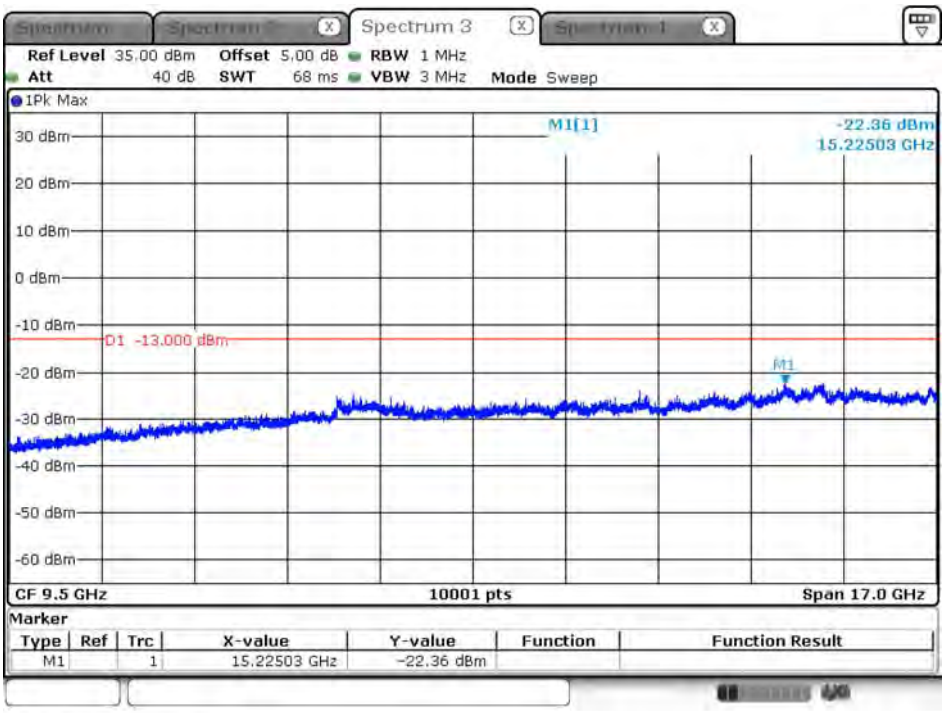
Date: 1.APR.2018 10:00:34

LTE_B13_CH23205_5M_QPSK_under 1G_12RB0



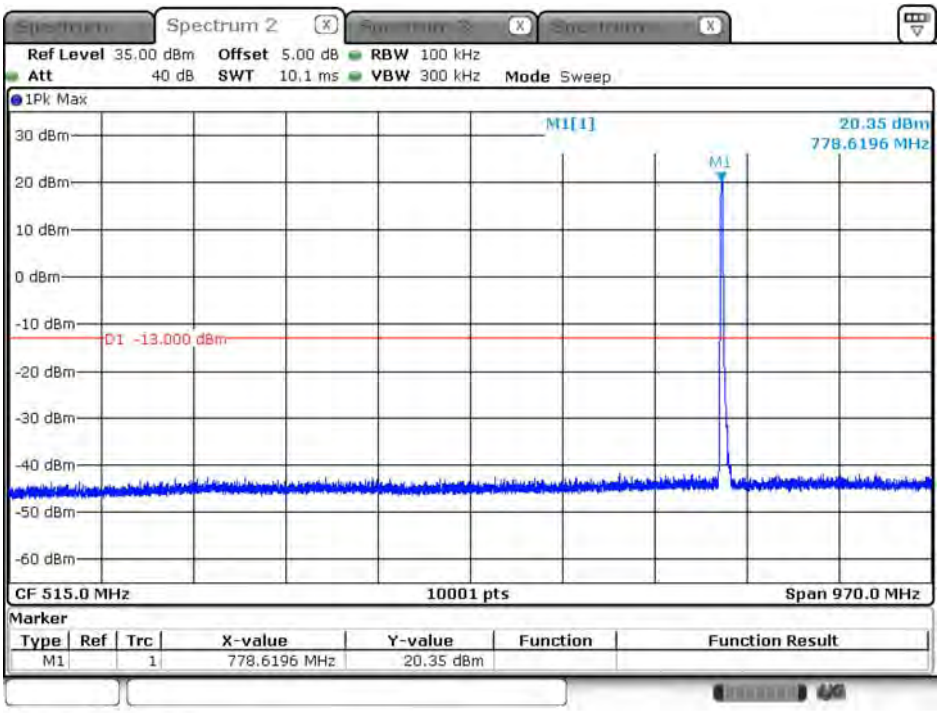
Date: 1.APR.2018 09:58:22

LTE_B13_CH23205_5M_QPSK_above 1G_12RB6



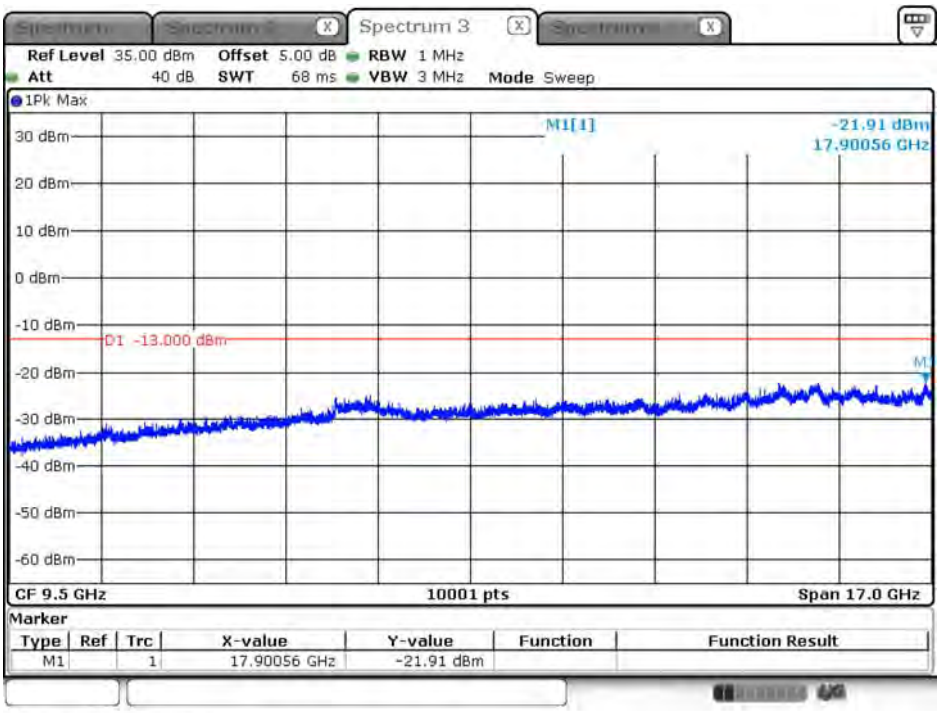
Date: 1.APR.2018 10:14:27

LTE_B13_CH23205_5M_QPSK_under 1G_12RB6



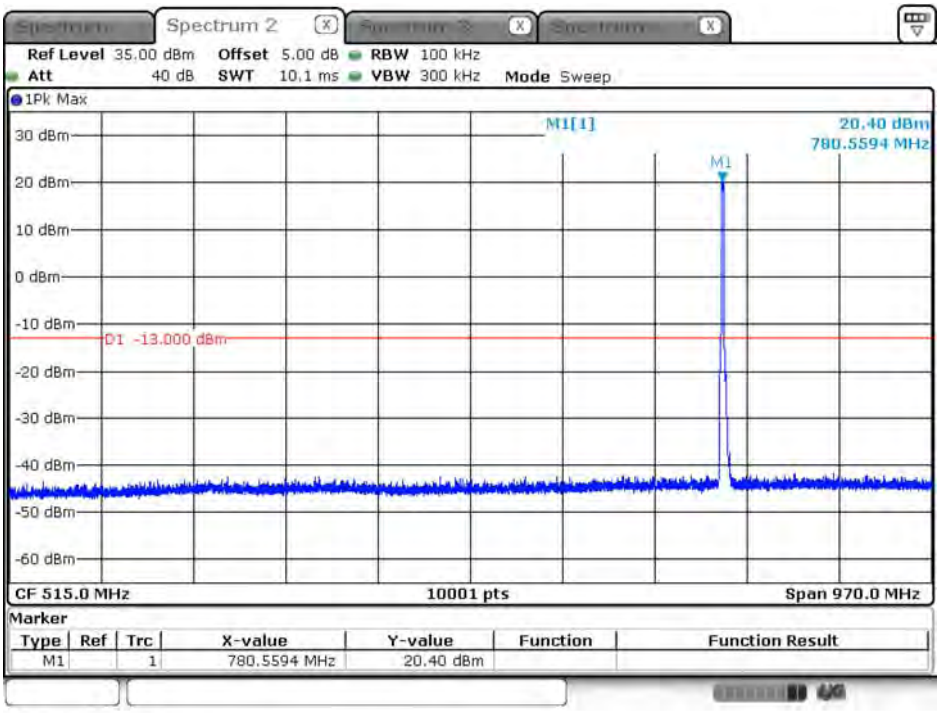
Date: 1.APR.2018 10:17:32

LTE_B13_CH23205_5M_QPSK_above 1G_12RB11



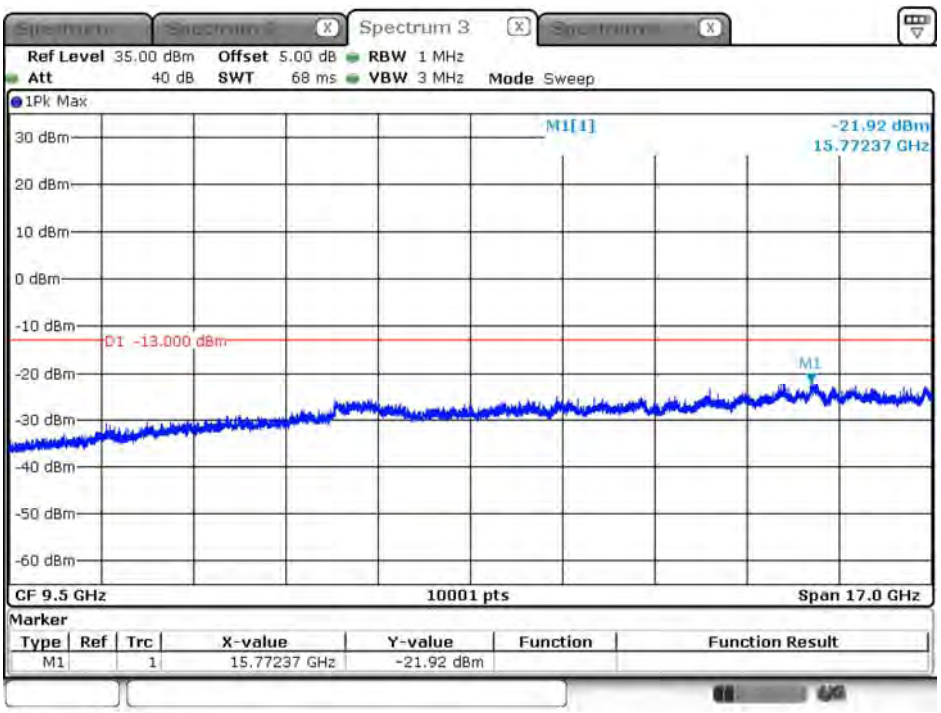
Date: 1.APR.2018 10:23:49

LTE_B13_CH23205_5M_QPSK_under 1G_12RB11



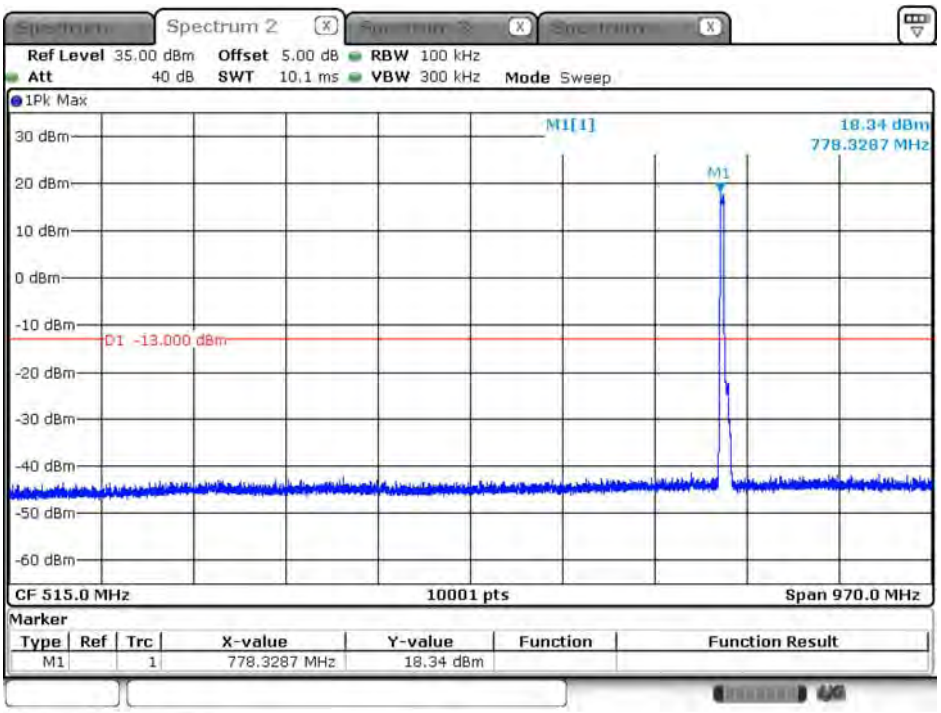
Date: 1.APR.2018 10:22:02

LTE_B13_CH23205_5M_QPSK_above 1G_25RB0



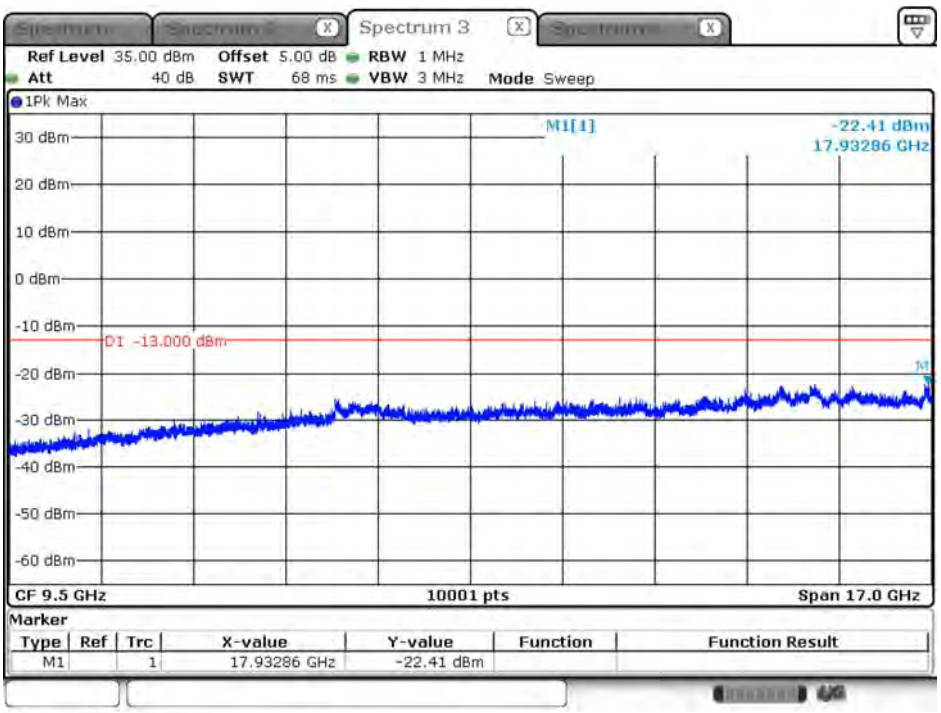
Date: 1.APR.2018 10:49:02

LTE_B13_CH23205_5M_QPSK_under 1G_25RB0



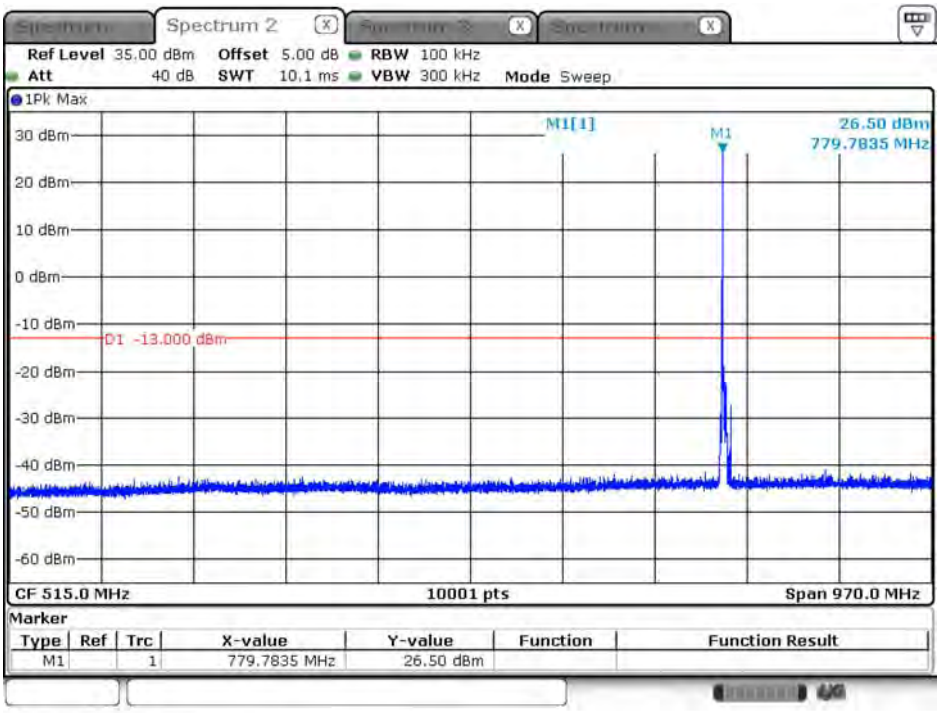
Date: 1.APR.2018 10:52:28

LTE_B13_CH23230_5M_QPSK_above 1G_1RB0



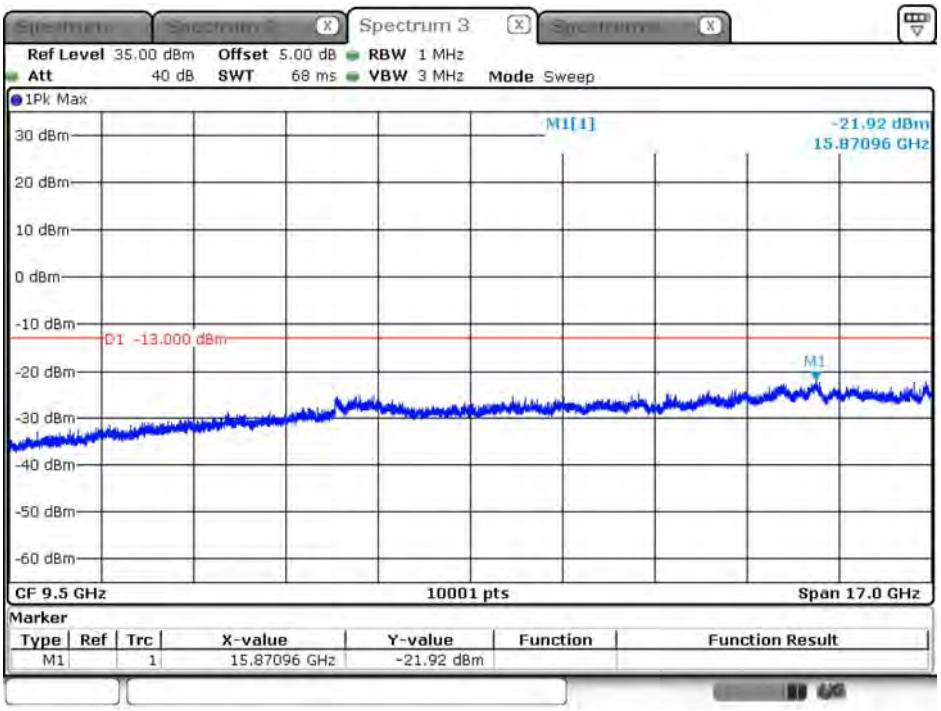
Date: 1.APR.2018 10:46:18

LTE_B13_CH23230_5M_QPSK_under 1G_1RB0



Date: 31.MAR.2018 17:50:55

LTE_B13_CH23230_5M_QPSK_above 1G_1RB12



Date: 1.APR.2018 10:58:31

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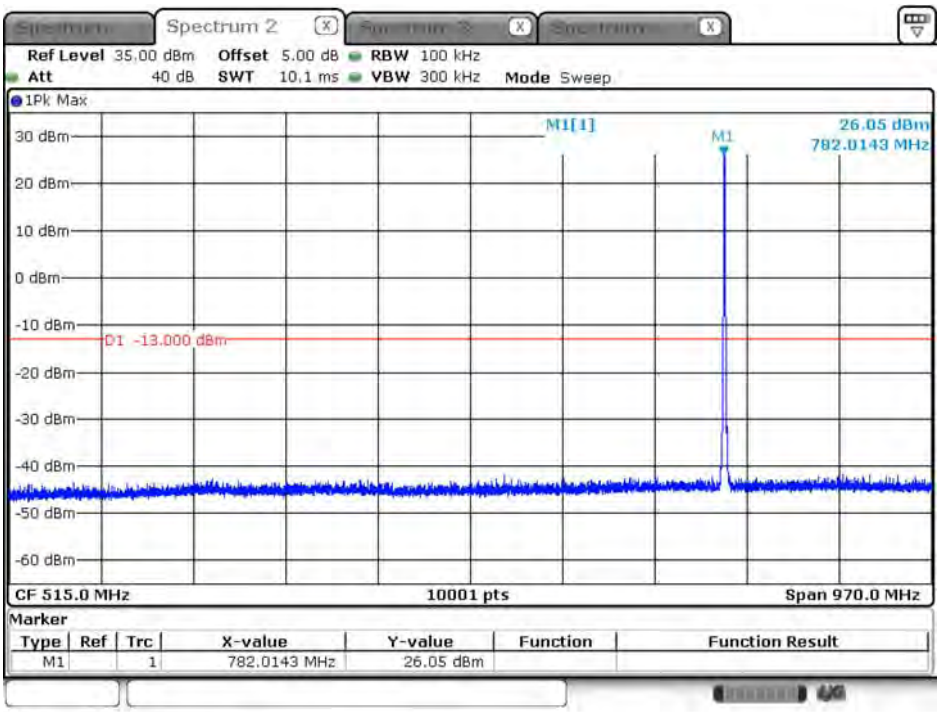
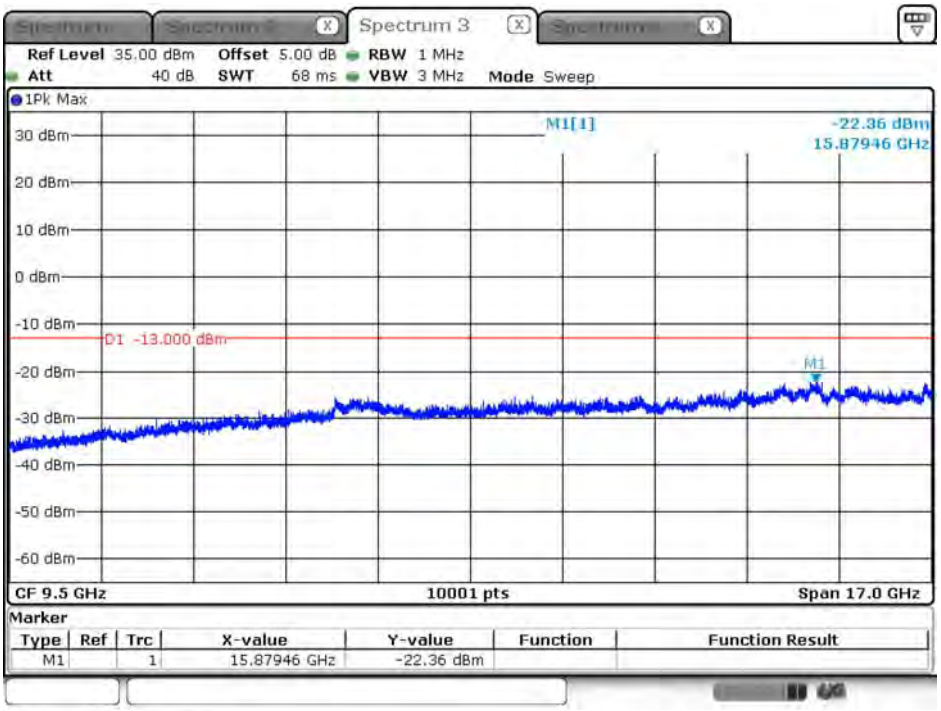


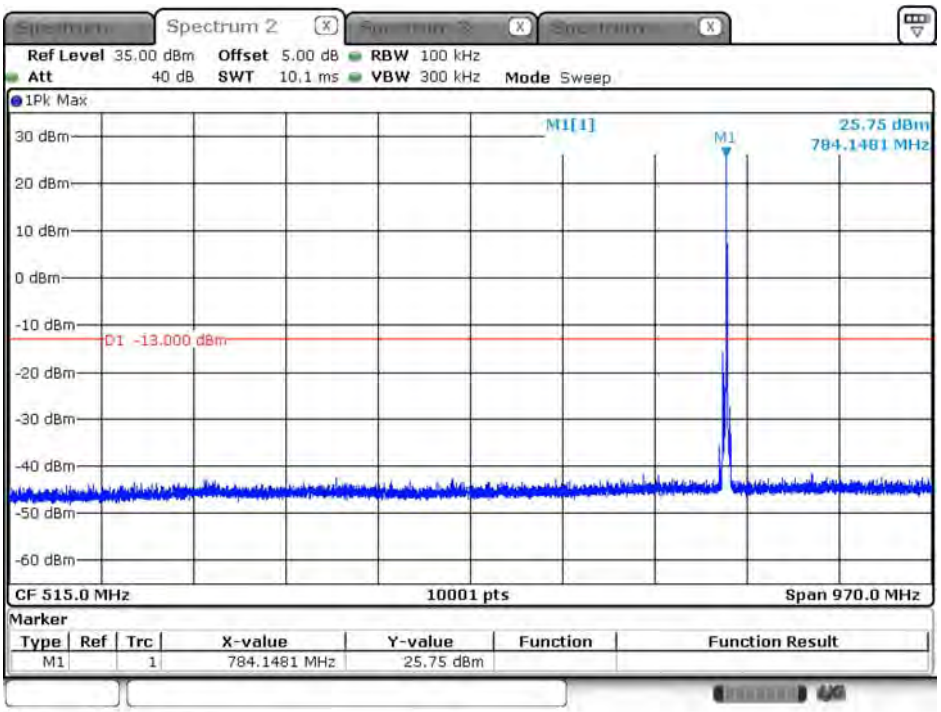
Date: 1.APR.2018 10:55:44

LTE_B13_CH23230_5M_QPSK_above 1G_1RB24



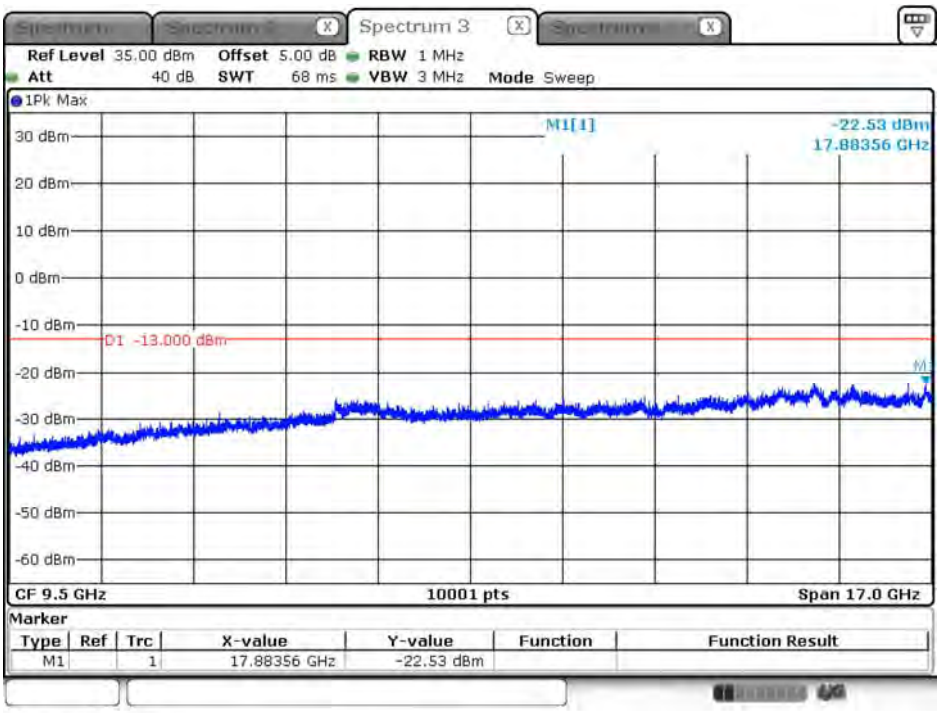
Date: 1.APR.2018 11:10:49

LTE_B13_CH23230_5M_QPSK_under 1G_1RB24



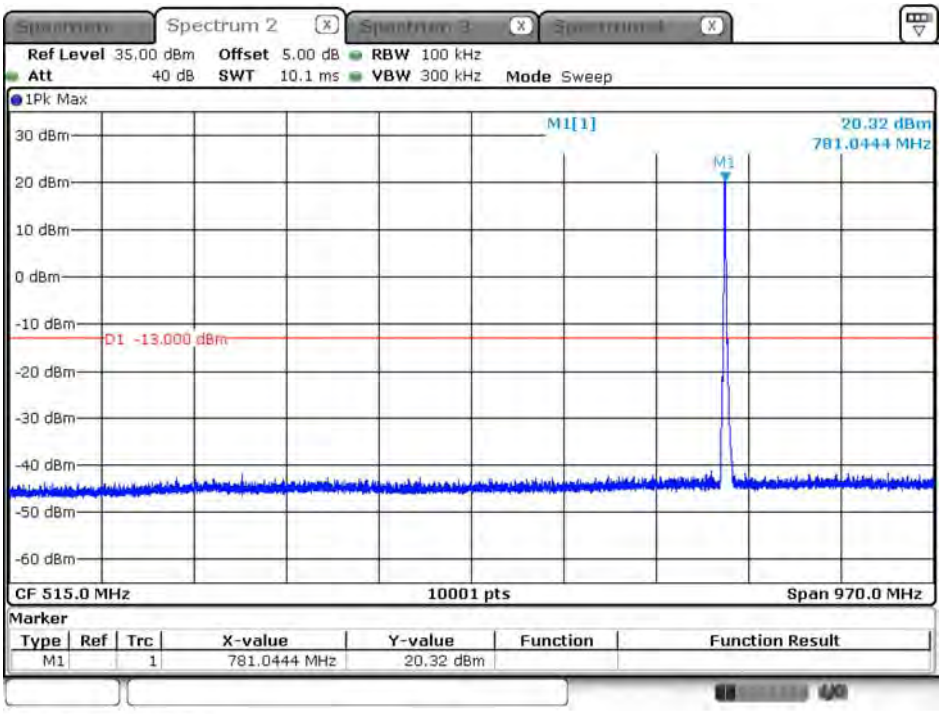
Date: 1.APR.2018 11:11:56

LTE_B13_CH23230_5M_QPSK_above 1G_12RB0



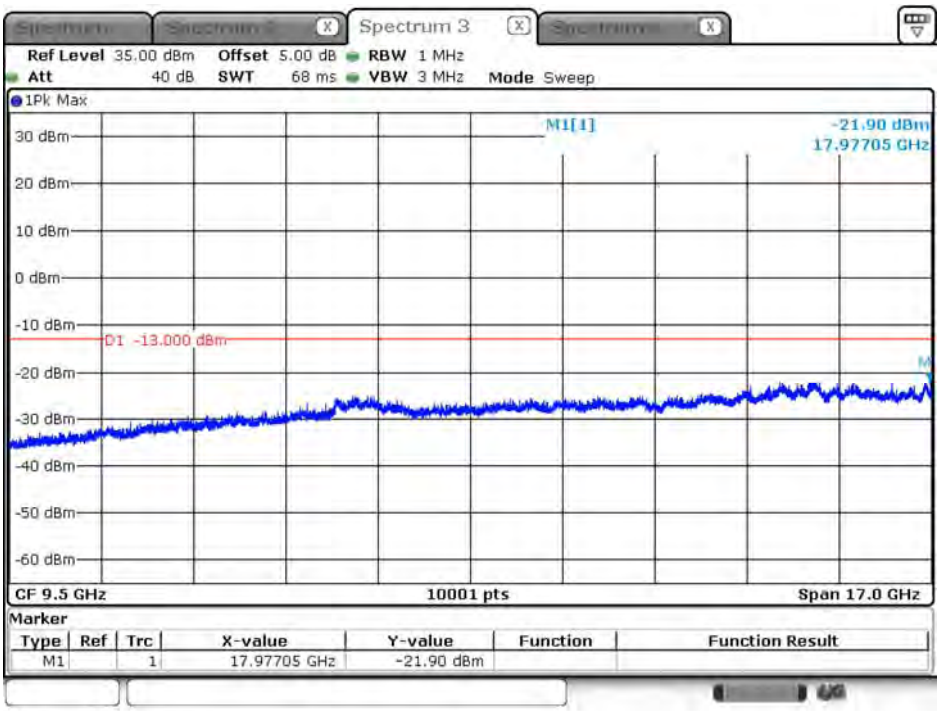
Date: 1.APR.2018 11:16:55

LTE_B13_CH23230_5M_QPSK_under 1G_12RB0



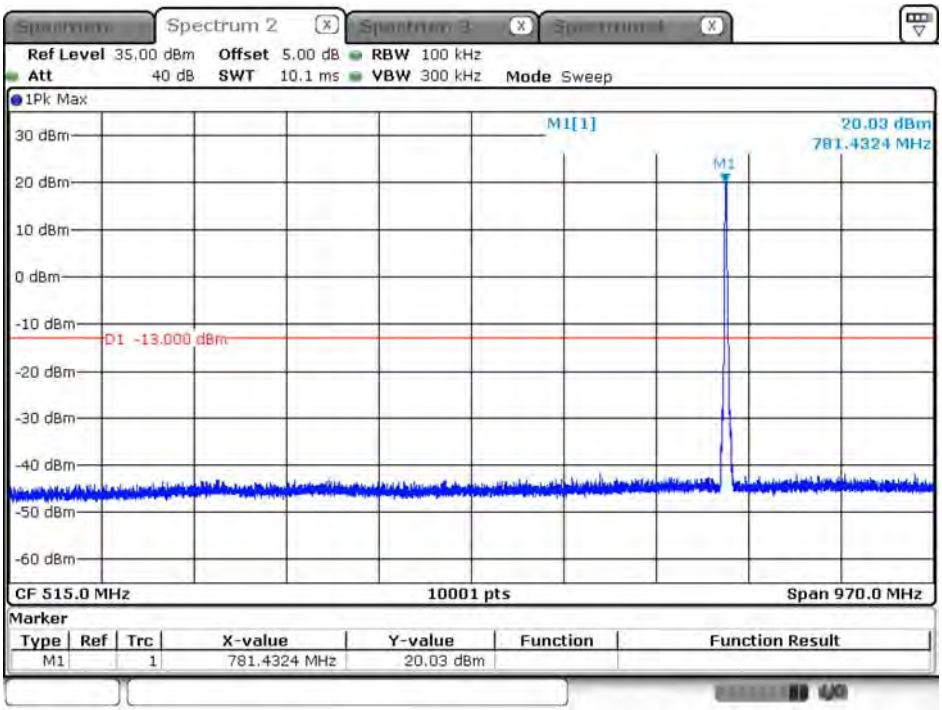
Date: 1.APR.2018 11:15:46

LTE_B13_CH23230_5M_QPSK_above 1G_12RB6



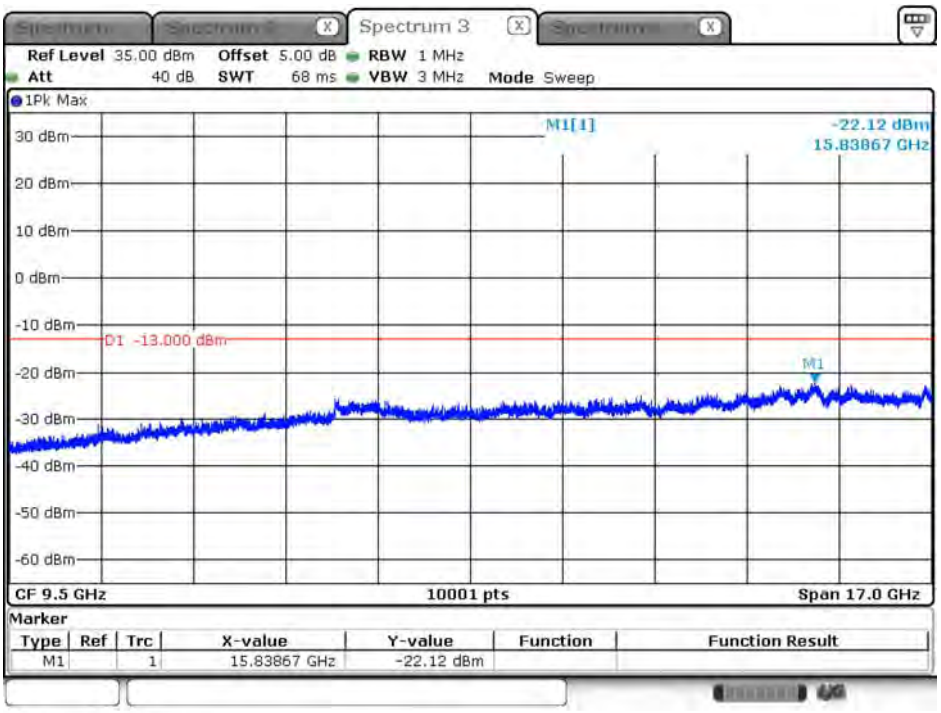
Date: 1.APR.2018 11:31:35

LTE_B13_CH23230_5M_QPSK_under 1G_12RB6



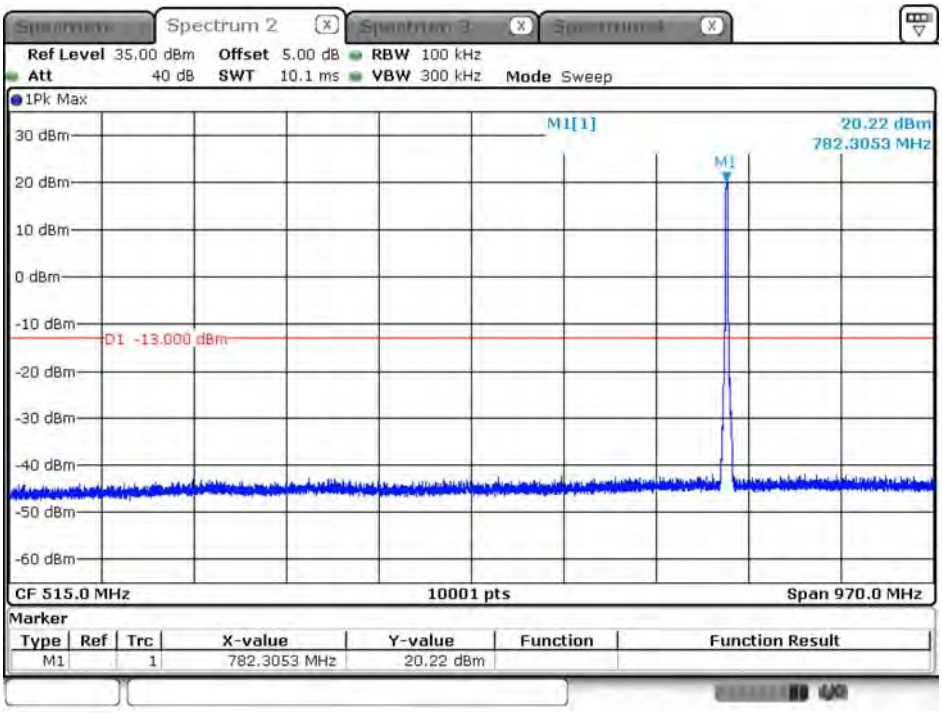
Date: 1.APR.2018 11:32:53

LTE_B13_CH23230_5M_QPSK_above 1G_12RB11



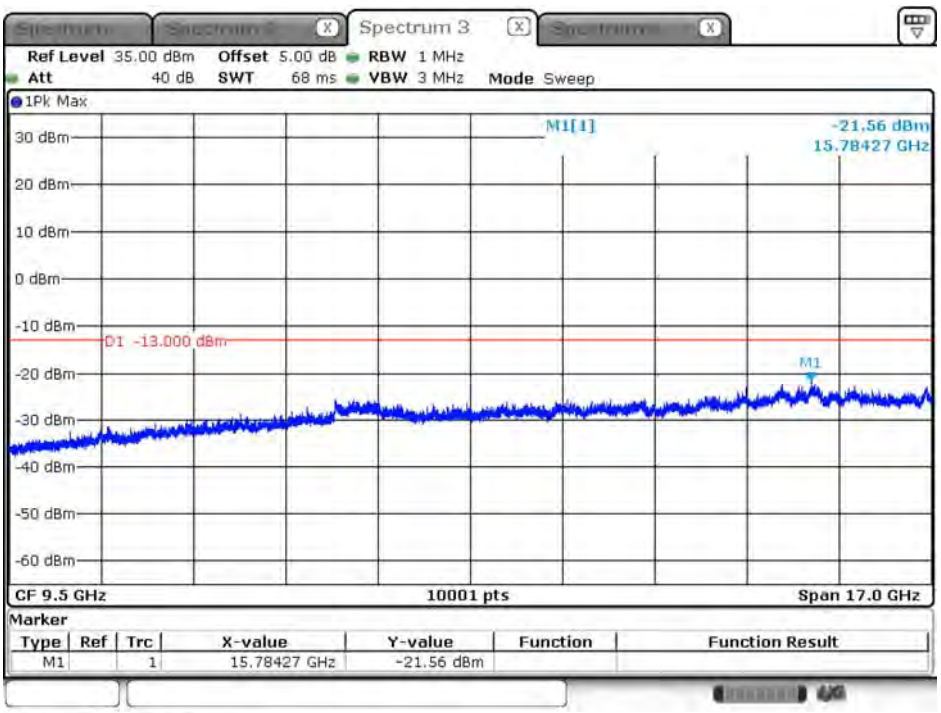
Date: 1.APR.2018 11:36:30

LTE_B13_CH23230_5M_QPSK_under 1G_12RB11



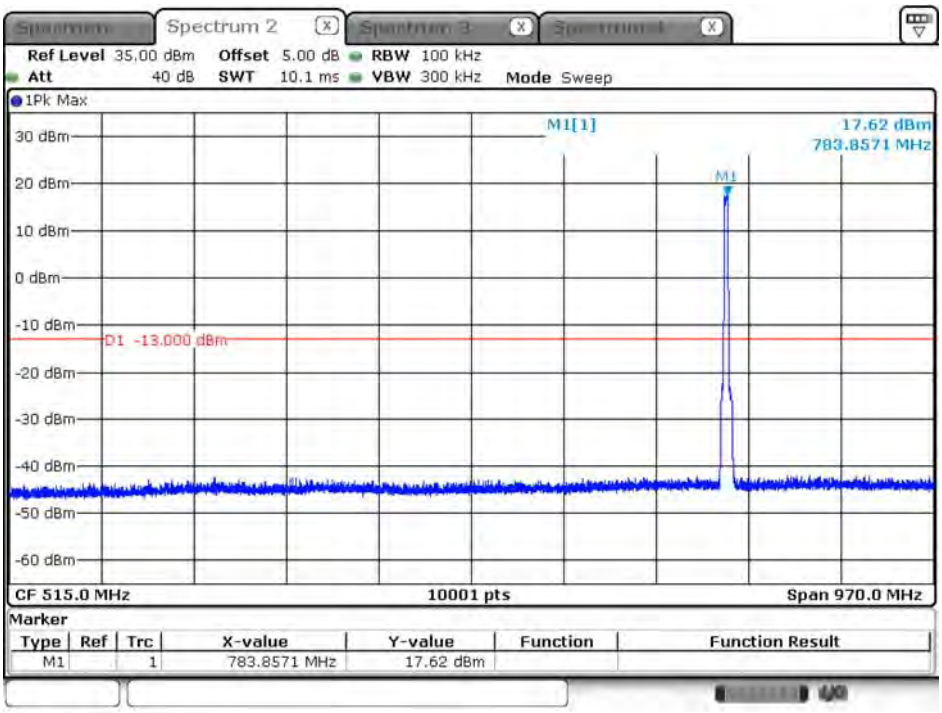
Date: 1.APR.2018 11:35:09

LTE_B13_CH23230_5M_QPSK_above 1G_25RB0



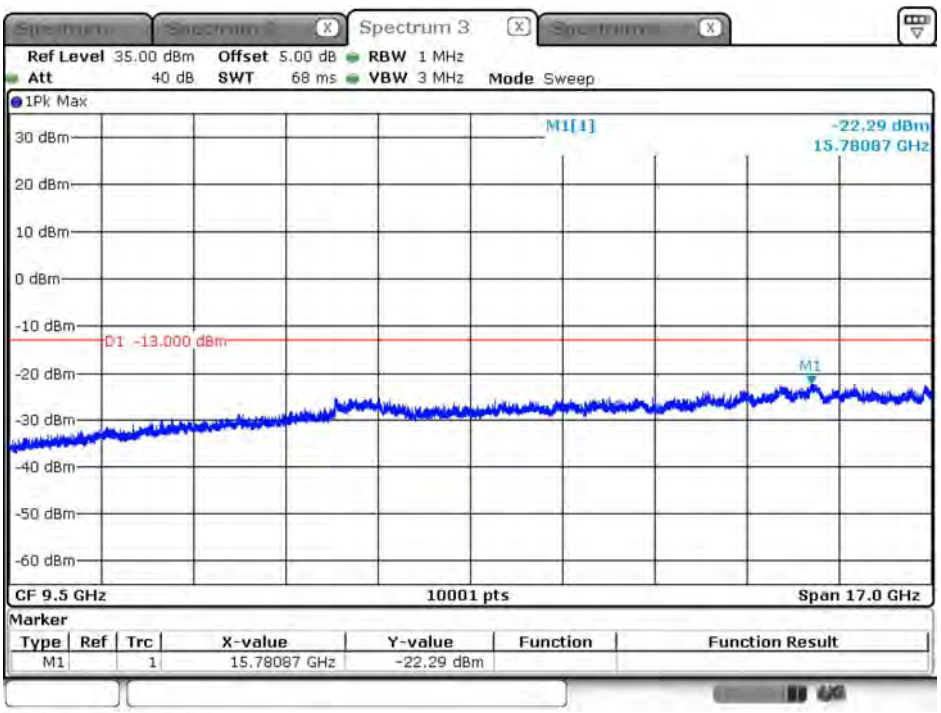
Date: 1.APR.2018 11:48:47

LTE_B13_CH23230_5M_QPSK_under 1G_25RB0



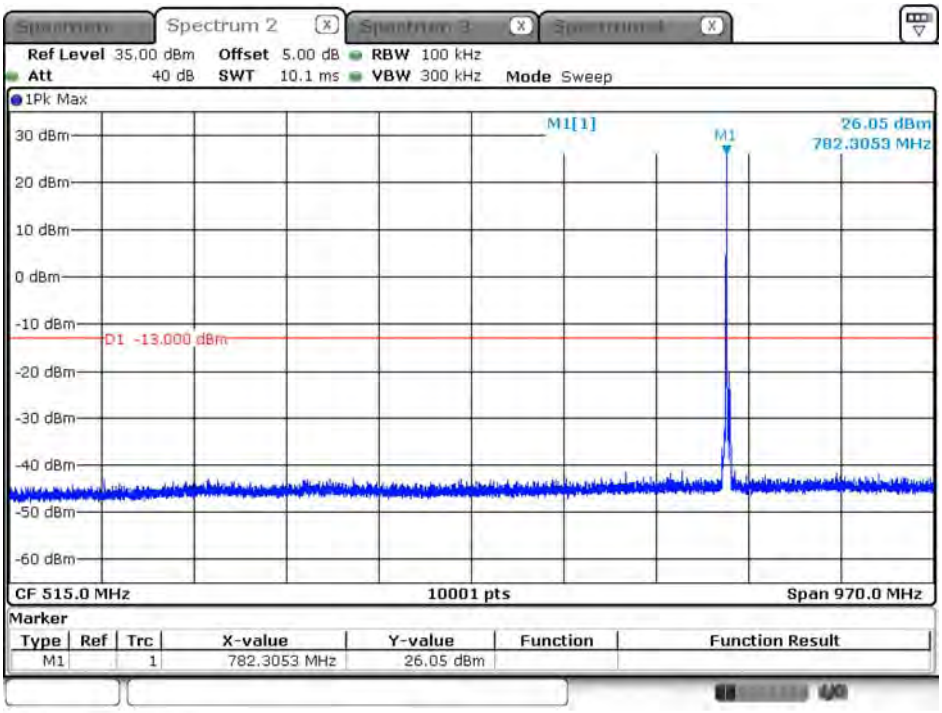
Date: 1.APR.2018 11:53:00

LTE_B13_CH23255_5M_QPSK_above 1G_1RB0



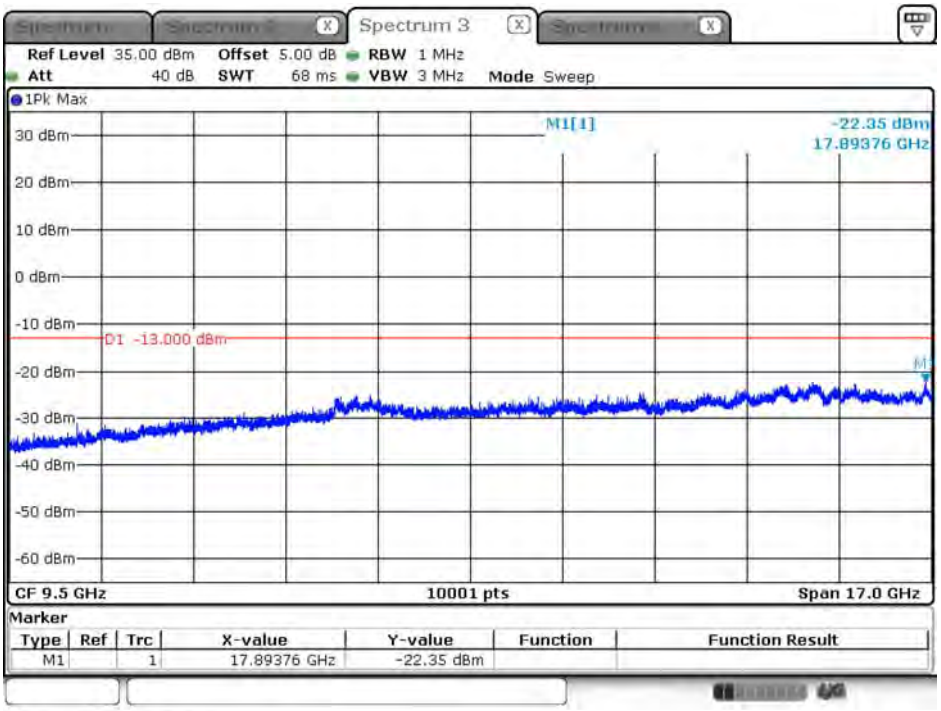
Date: 1.APR.2018 13:17:37

LTE_B13_CH23255_5M_QPSK_under 1G_1RB0



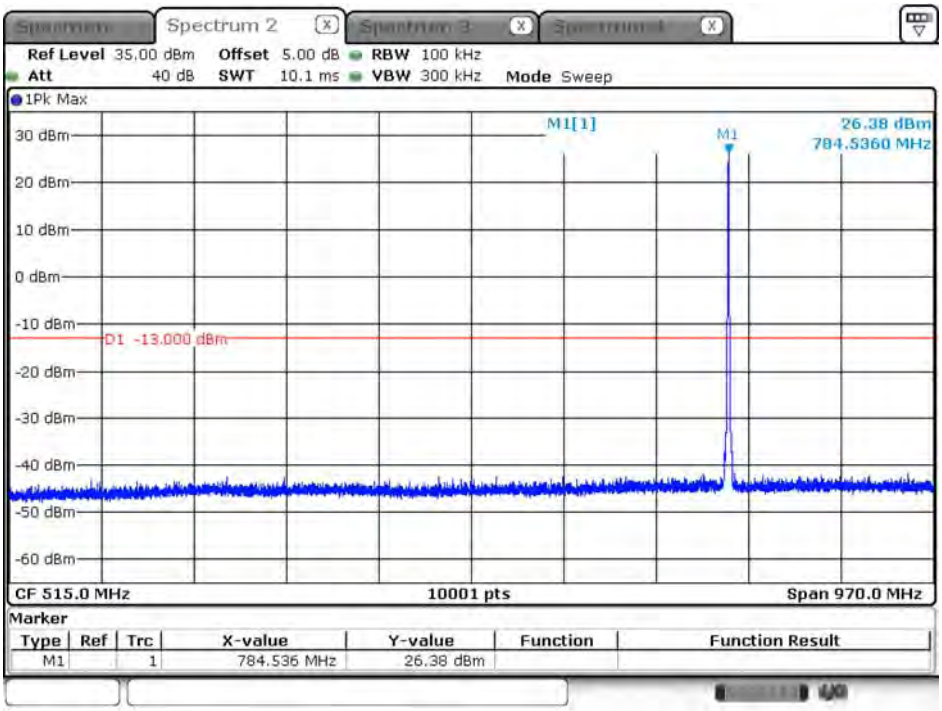
Date: 1.APR.2018 13:13:33

LTE_B13_CH23255_5M_QPSK_above 1G_1RB12



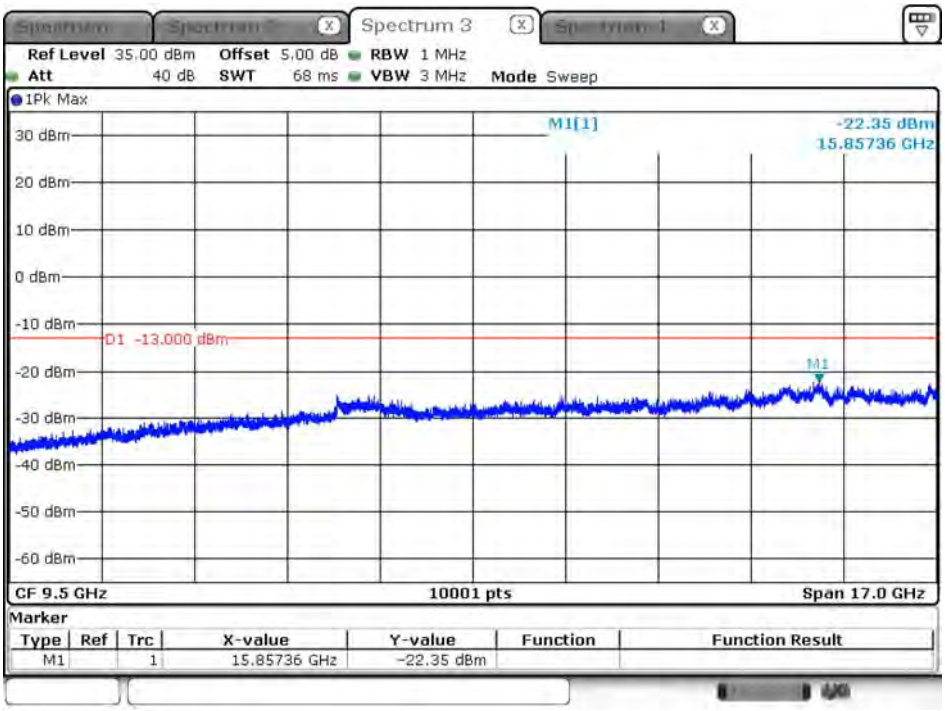
Date: 1.APR.2018 13:33:44

LTE_B13_CH23255_5M_QPSK_under 1G_1RB12



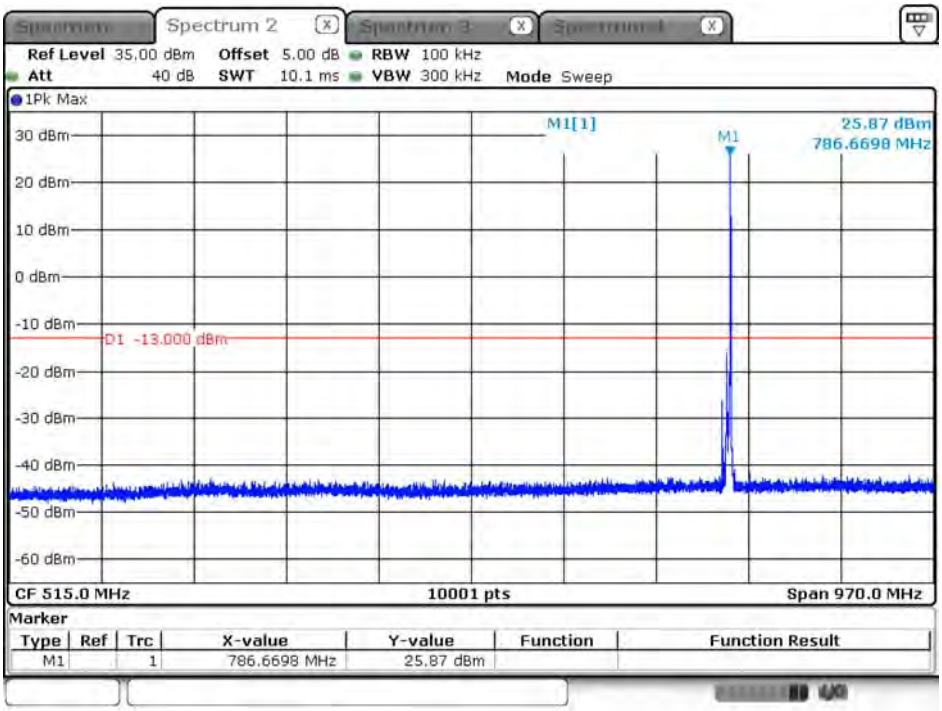
Date: 1.APR.2018 13:35:08

LTE_B13_CH23255_5M_QPSK_above 1G_1RB24



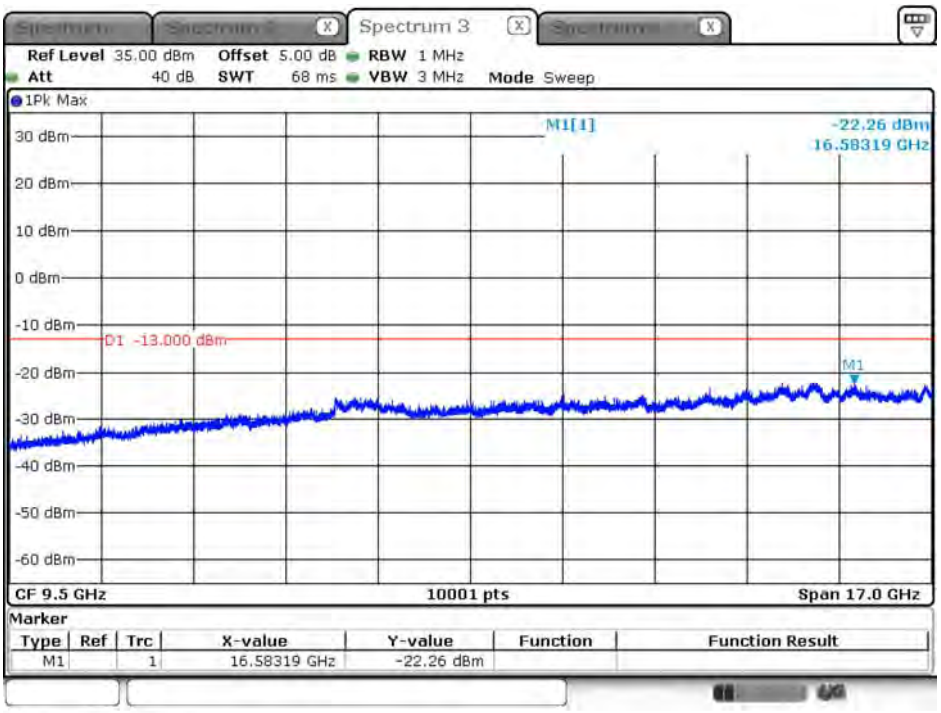
Date: 1.APR.2018 13:37:52

LTE_B13_CH23255_5M_QPSK_under 1G_1RB24



Date: 1.APR.2018 13:36:30

LTE_B13_CH23255_5M_QPSK_above 1G_12RB0



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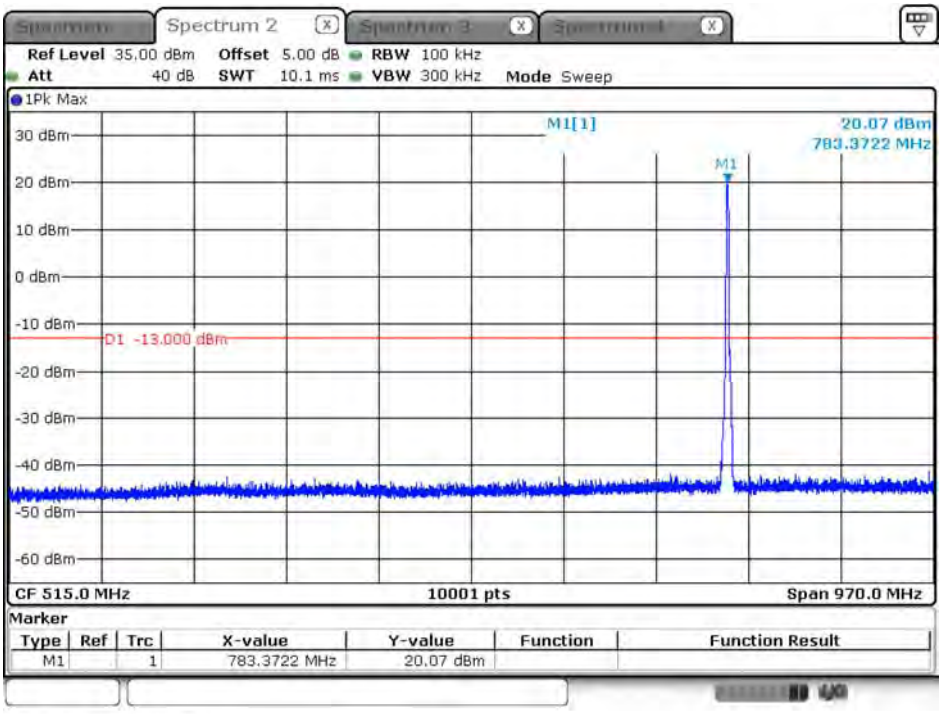
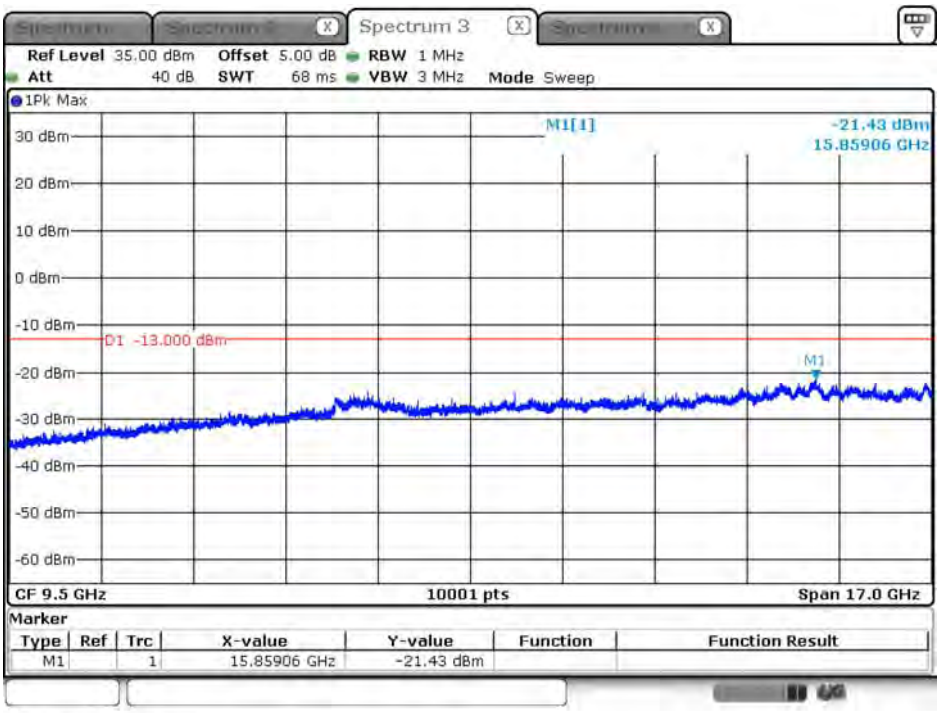


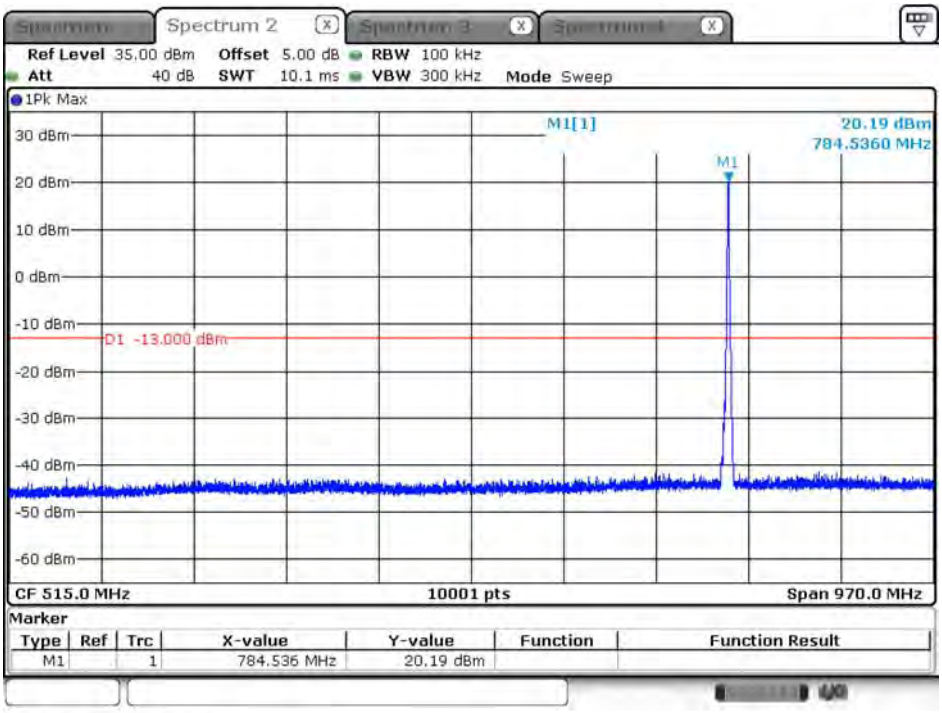
Date: 1.APR.2018 13:53:28

LTE_B13_CH23255_5M_QPSK_above 1G_12RB6



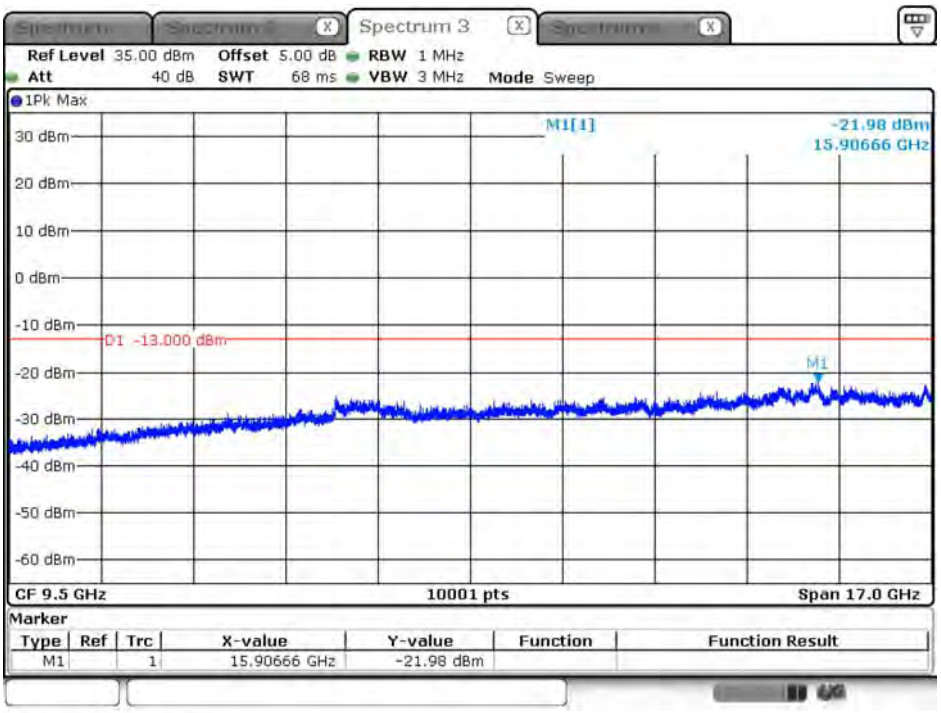
Date: 1.APR.2018 14:05:21

LTE_B13_CH23255_5M_QPSK_under 1G_12RB6



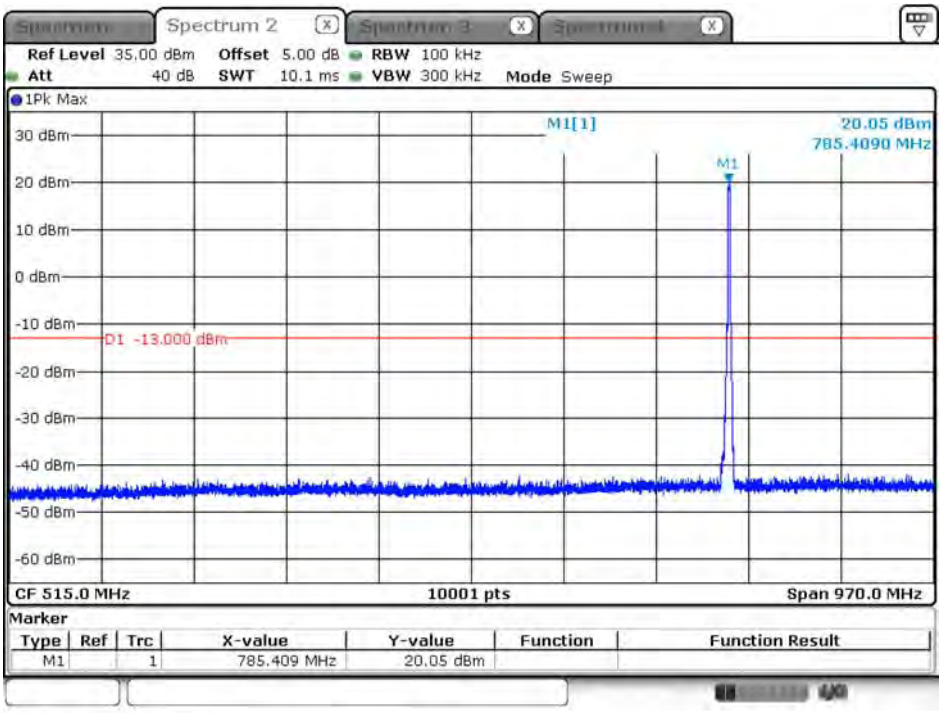
Date: 1.APR.2018 13:56:45

LTE_B13_CH23255_5M_QPSK_above 1G_12RB11



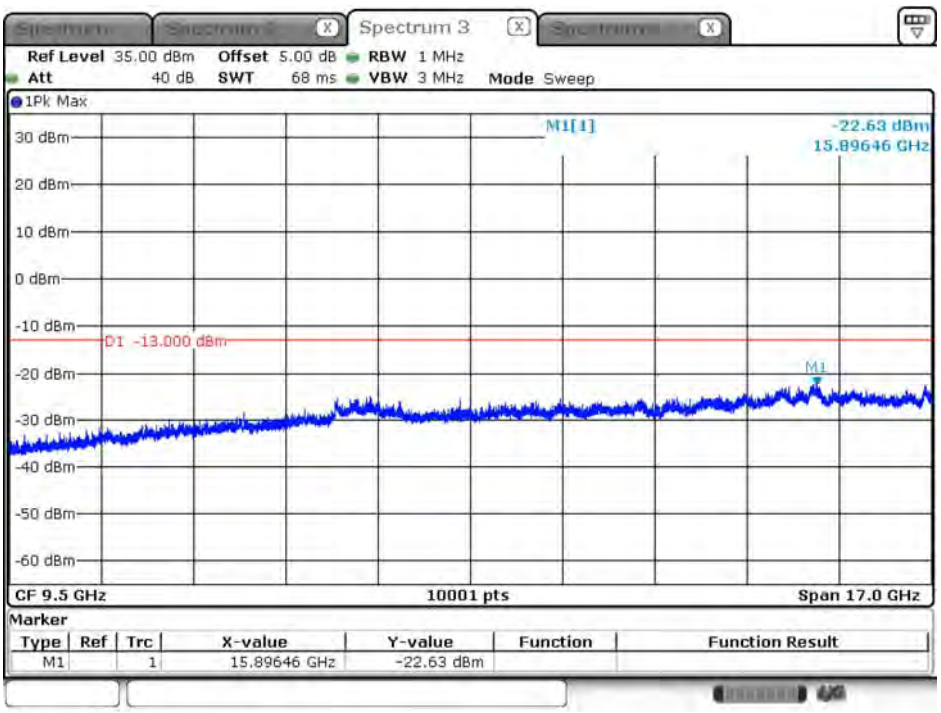
Date: 1.APR.2018 14:12:41

LTE_B13_CH23255_5M_QPSK_under 1G_12RB11



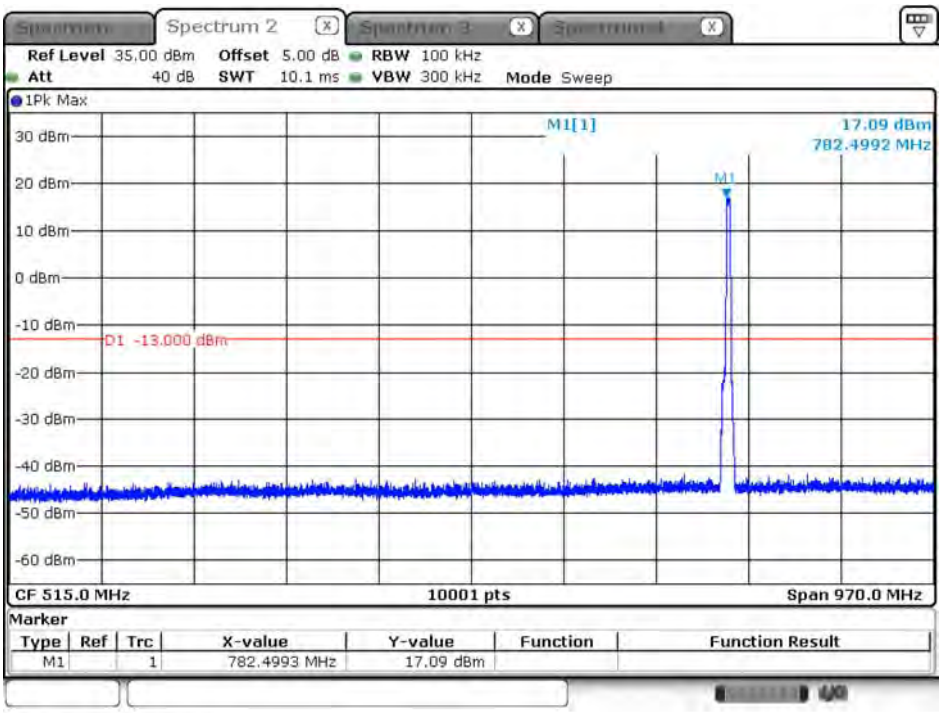
Date: 1.APR.2018 14:14:28

LTE_B13_CH23255_5M_QPSK_above 1G_25RB0



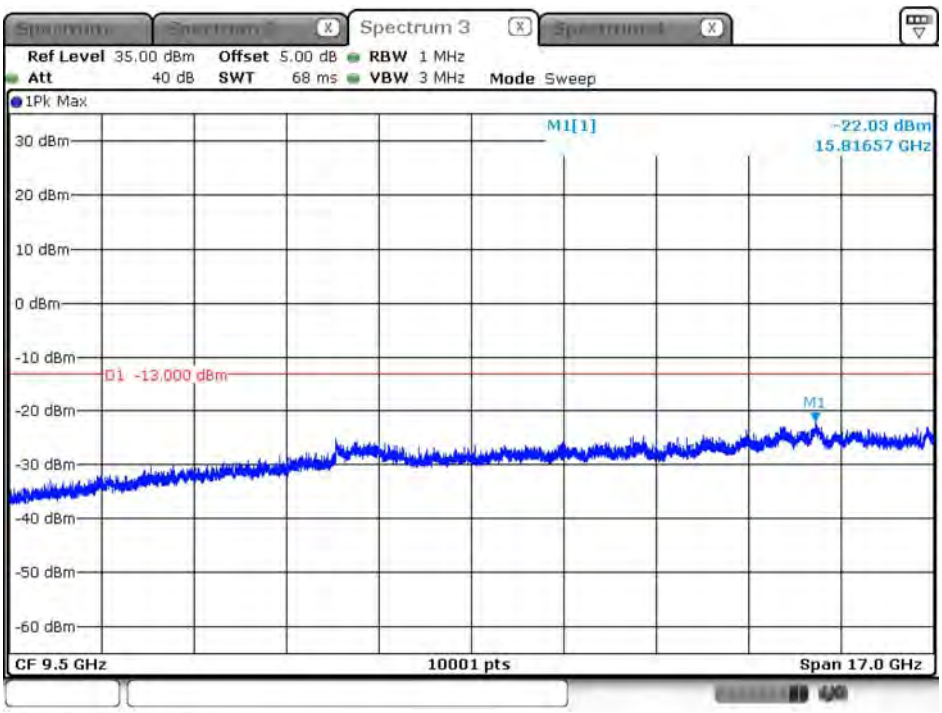
Date: 1.APR.2018 14:17:18

LTE_B13_CH23255_5M_QPSK_under 1G_25RB0



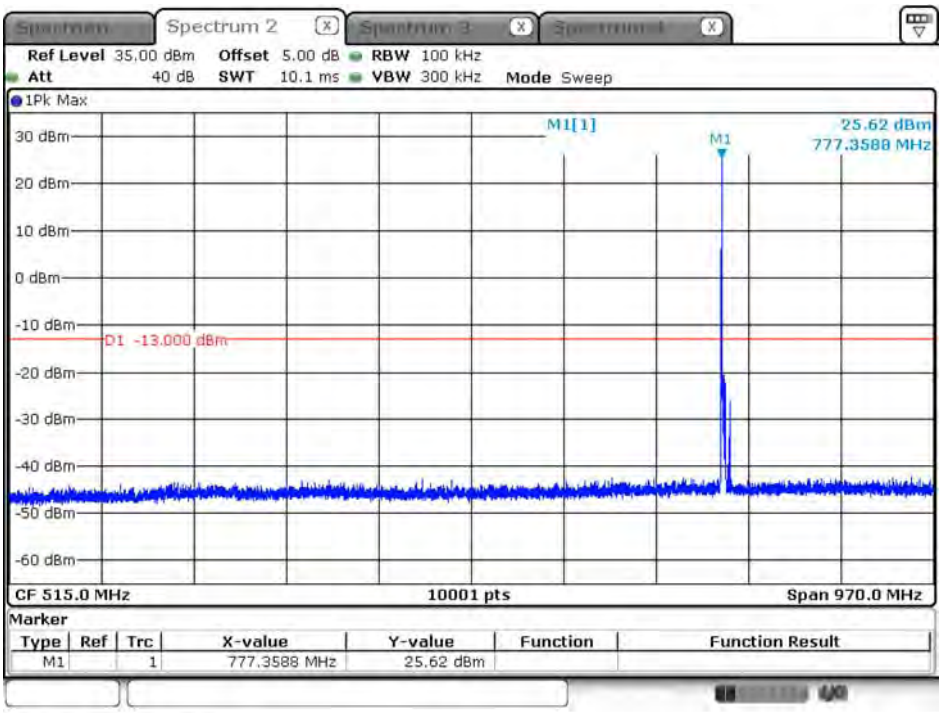
Date: 1.APR.2018 14:16:04

LTE_B13_CH23205_10M_QPSK_above 1G_1RB0



Date: 1.APR.2018 09:23:26

LTE_B13_CH23205_10M_QPSK_under 1G_1RB0



Date: 1.APR.2018 09:34:08

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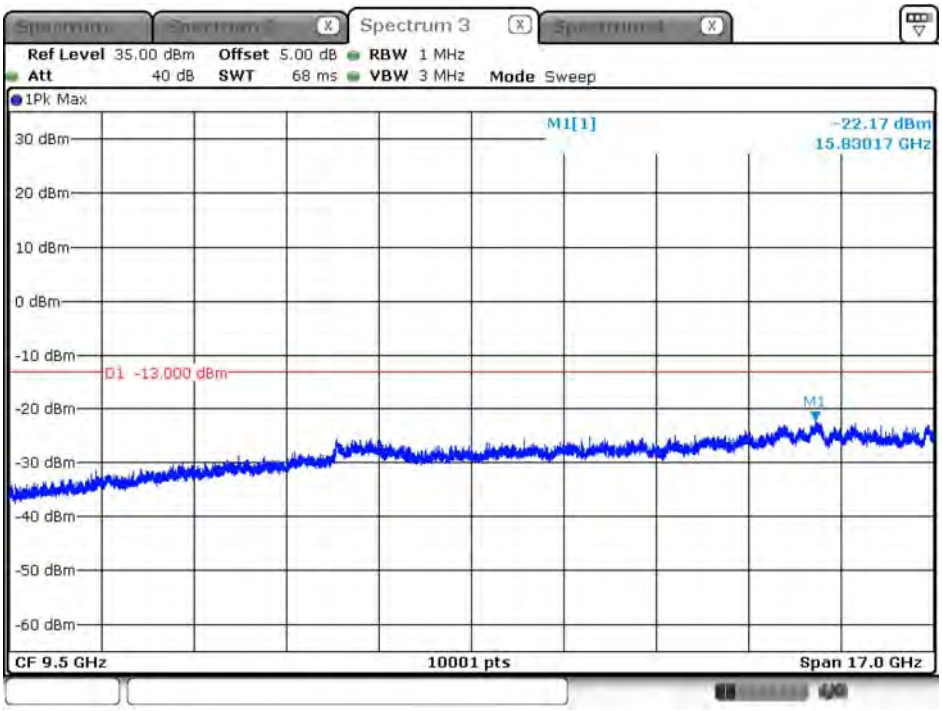

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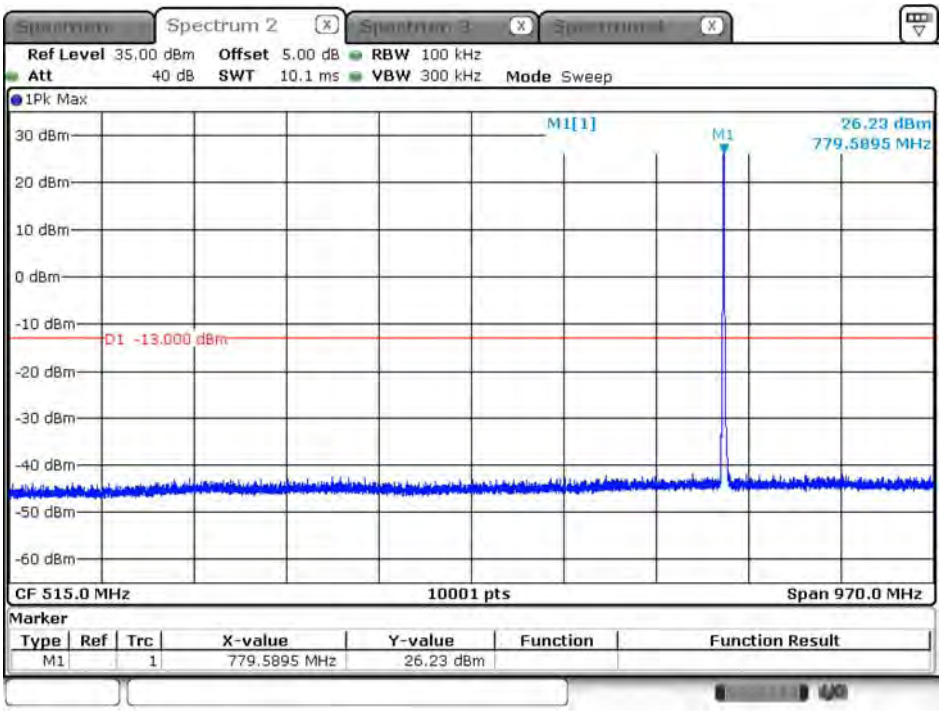
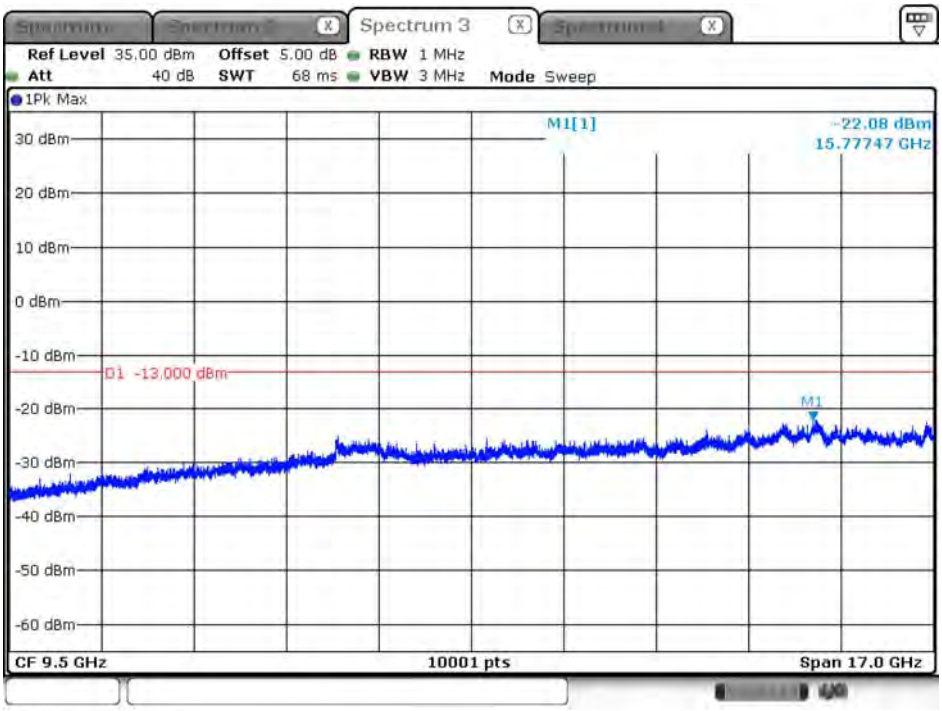
LTE_B13_CH23205_10M_QPSK_under 1G_1RB12



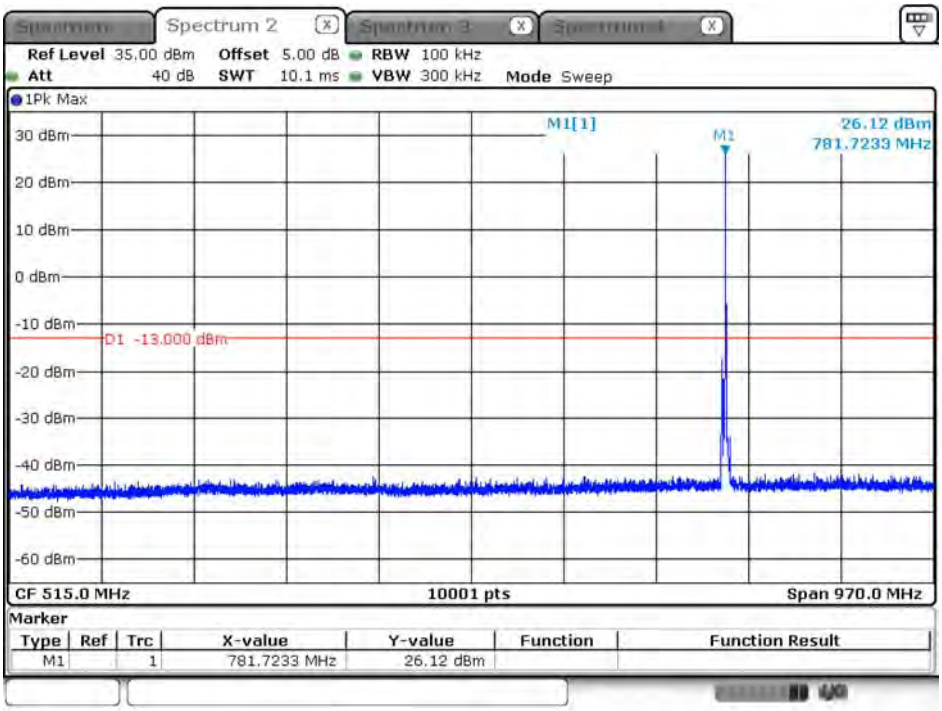
Date: 1.APR.2018 09:43:37

LTE_B13_CH23205_10M_QPSK_above 1G_1RB24



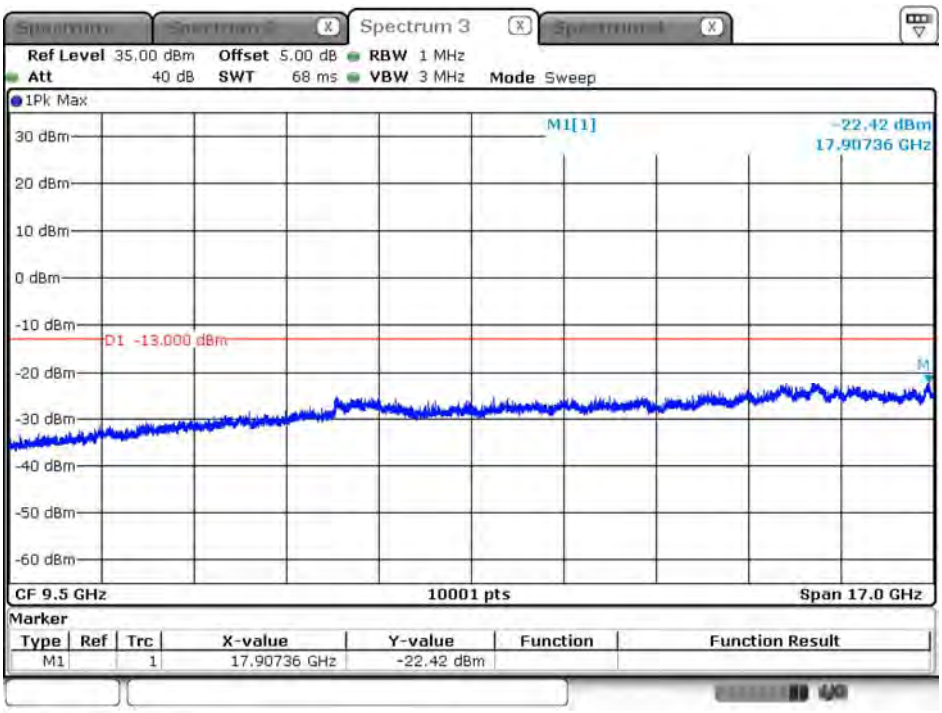
Date: 1.APR.2018 09:48:29

LTE_B13_CH23205_10M_QPSK_under 1G_1RB24



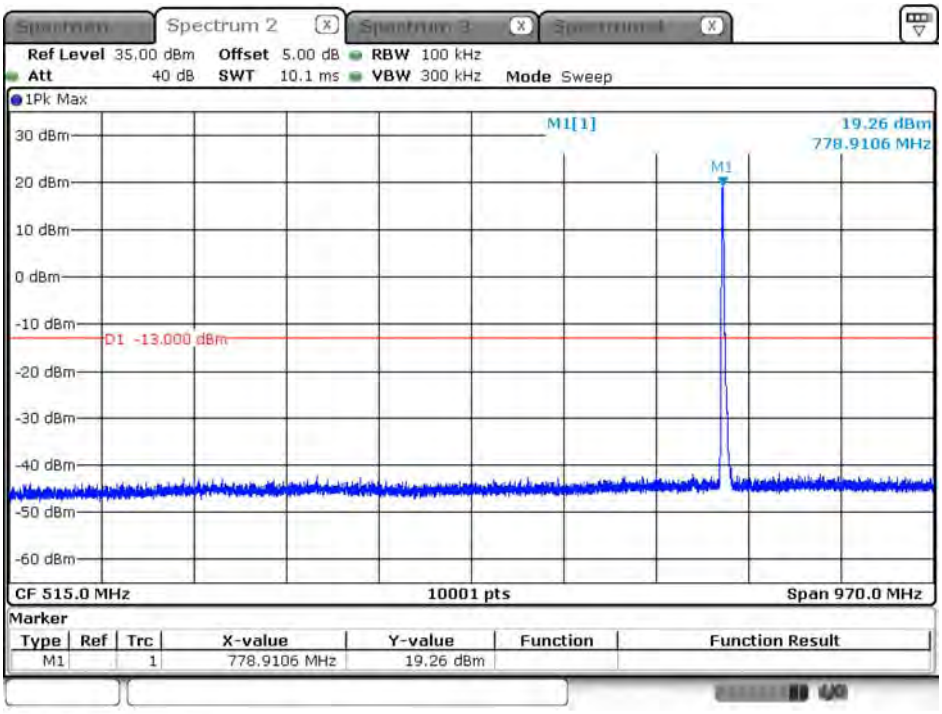
Date: 1.APR.2018 09:45:49

LTE_B13_CH23205_10M_QPSK_above 1G_12RB0



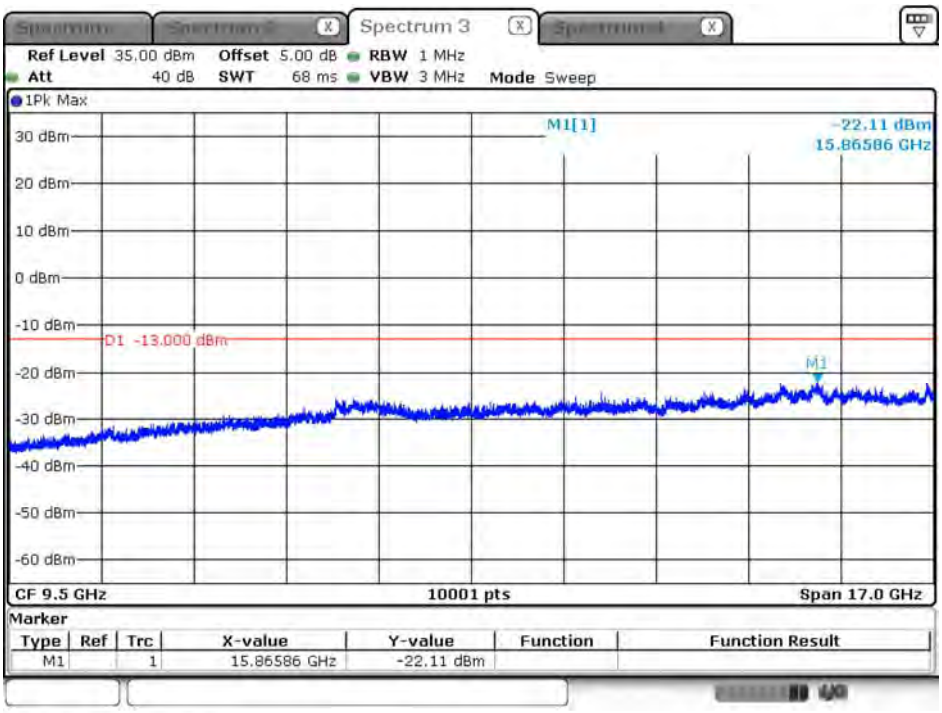
Date: 1.APR.2018 10:05:26

LTE_B13_CH23205_10M_QPSK_under 1G_12RB0



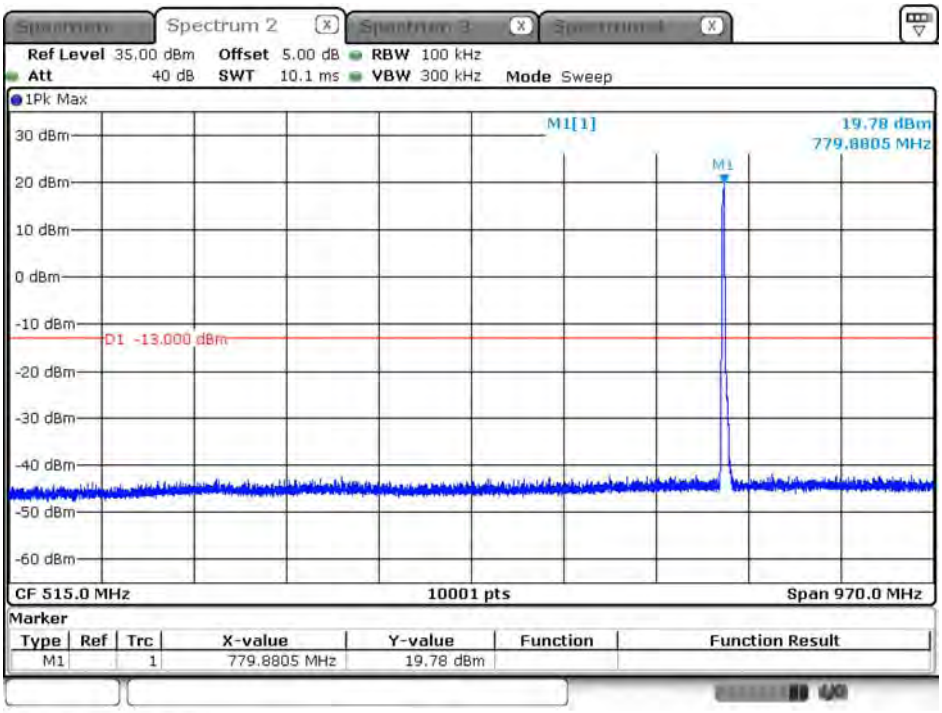
Date: 1.APR.2018 10:07:18

LTE_B13_CH23205_10M_QPSK_above 1G_12RB6



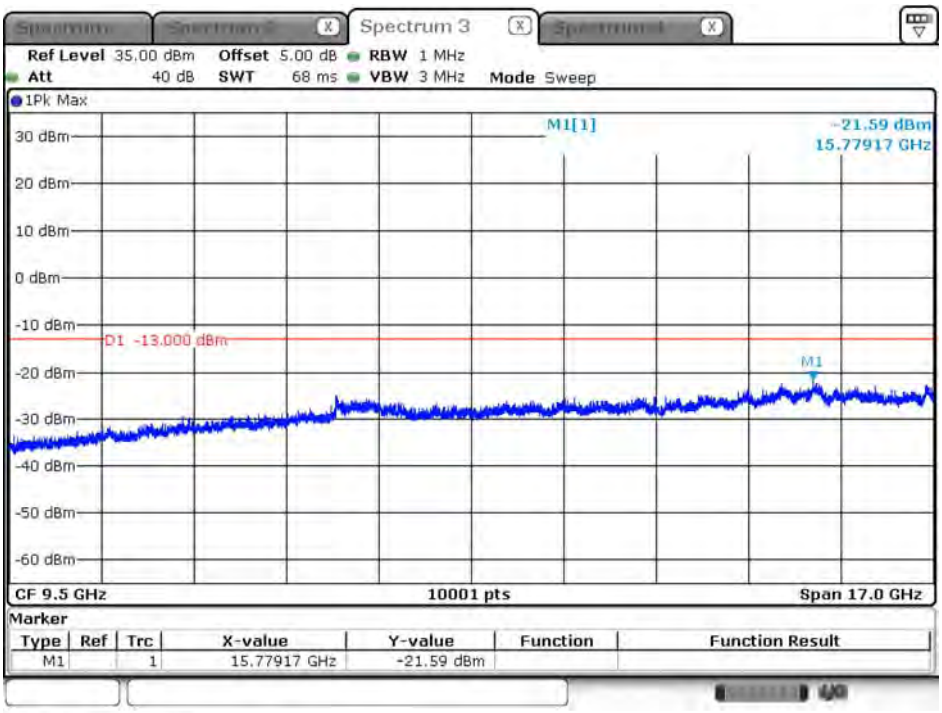
Date: 1.APR.2018 10:11:28

LTE_B13_CH23205_10M_QPSK_under 1G_12RB6



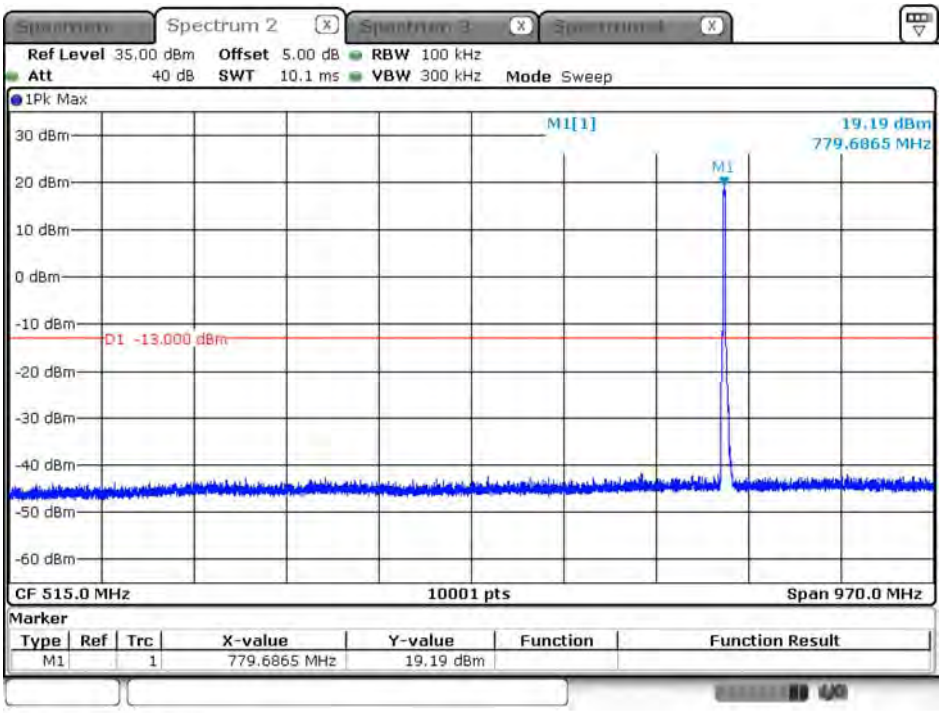
Date: 1.APR.2018 10:09:23

LTE_B13_CH23205_10M_QPSK_above 1G_12RB11



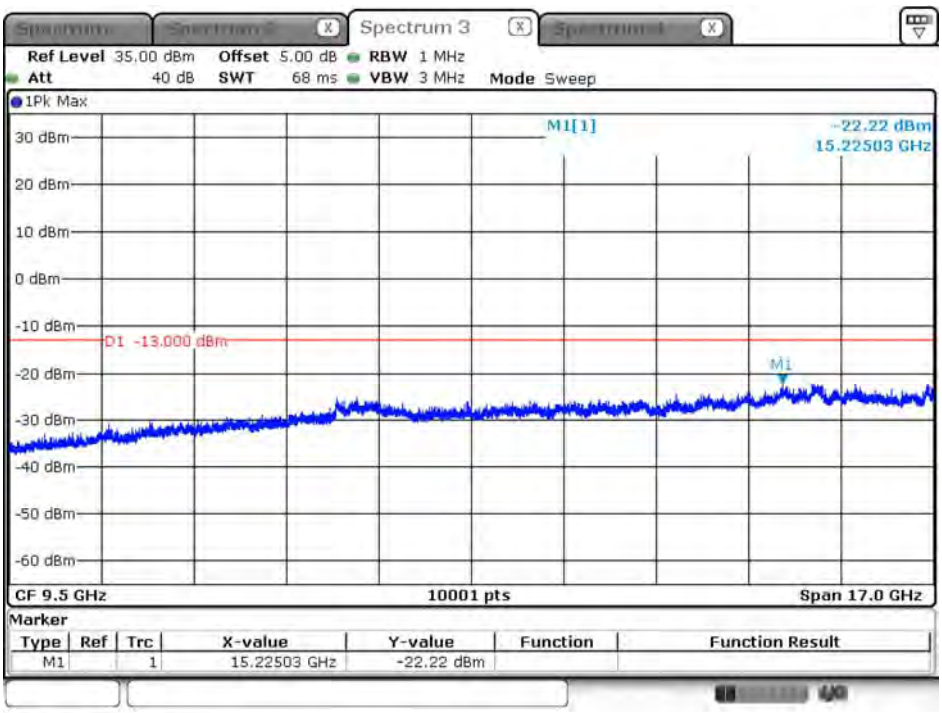
Date: 1.APR.2018 10:25:56

LTE_B13_CH23205_10M_QPSK_under 1G_12RB11



Date: 1.APR.2018 10:27:52

LTE_B13_CH23205_10M_QPSK_above 1G_25RB0



Date: 1.APR.2018 10:31:34

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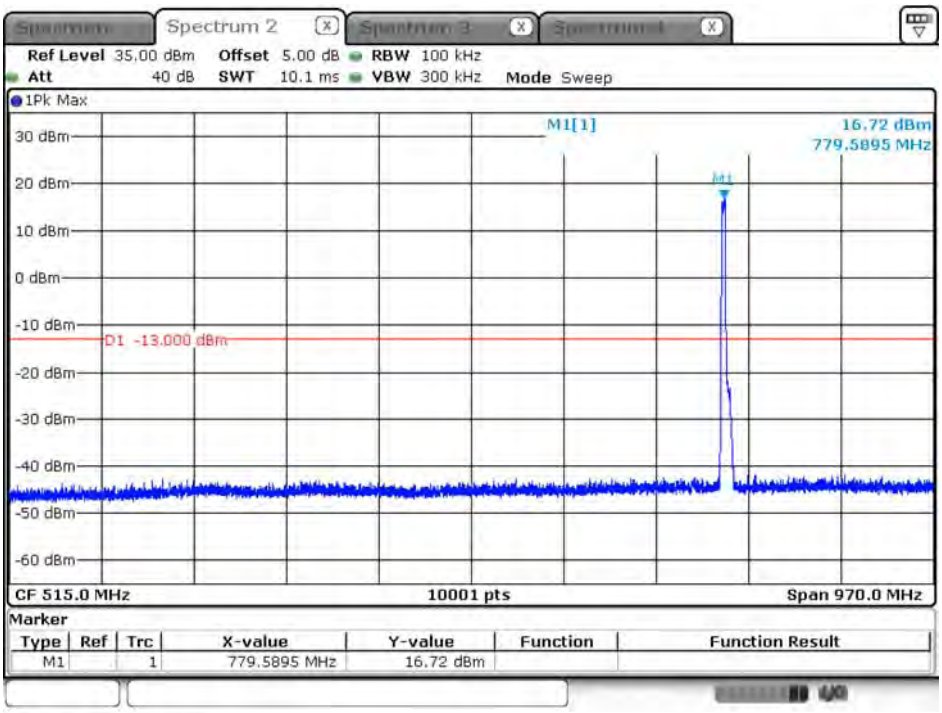
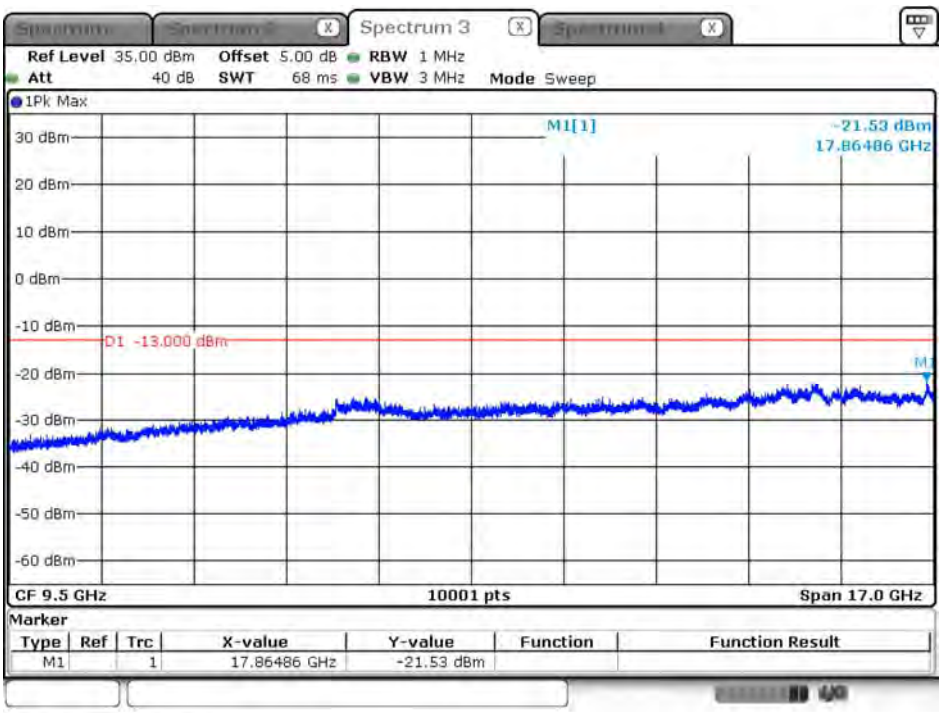


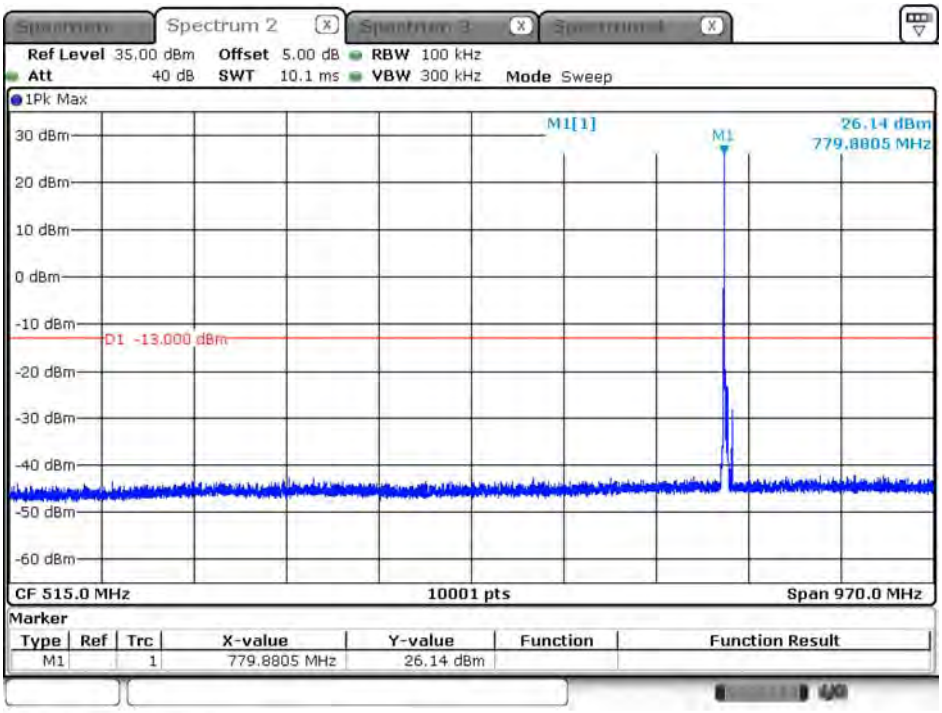
Date: 1.APR.2018 10:29:37

LTE_B13_CH23230_10M_QPSK_above 1G_1RB0



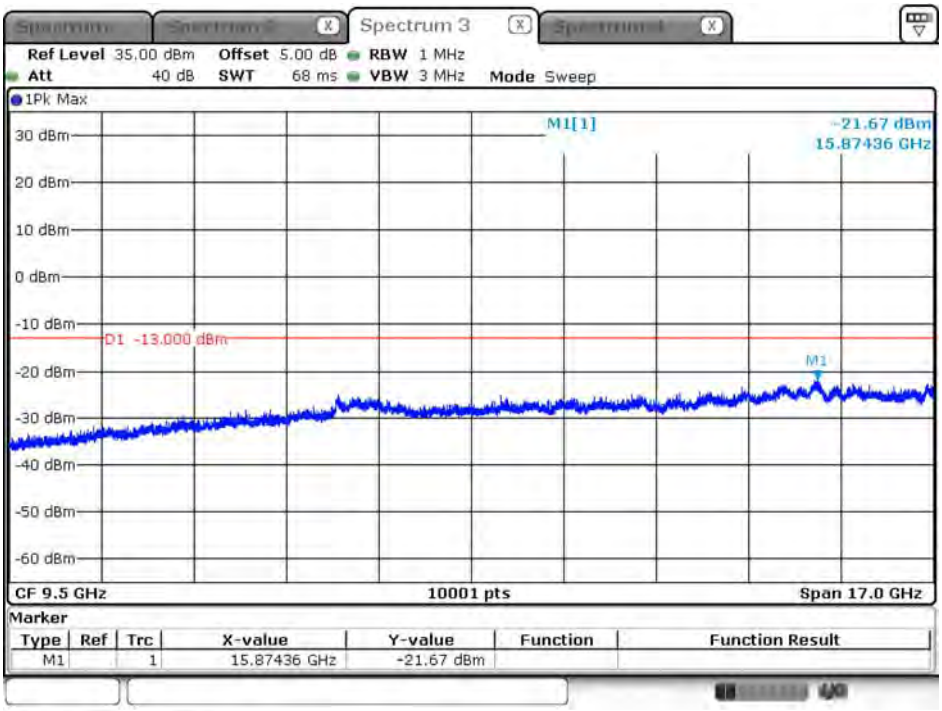
Date: 1.APR.2018 10:35:28

LTE_B13_CH23230_10M_QPSK_under 1G_1RB0



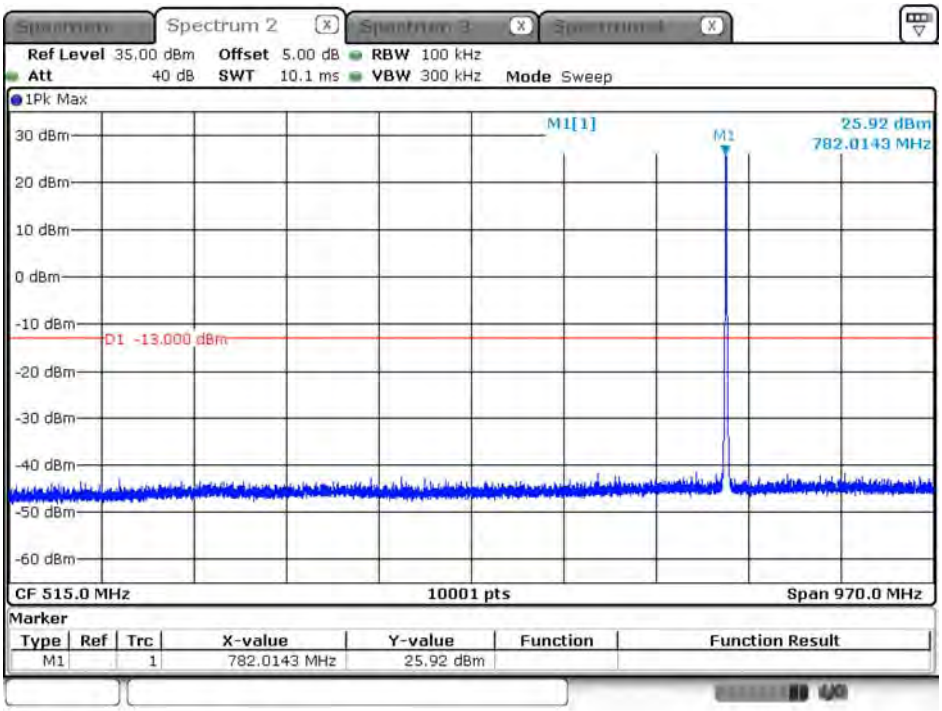
Date: 1.APR.2018 10:36:46

LTE_B13_CH23230_10M_QPSK_above 1G_1RB12



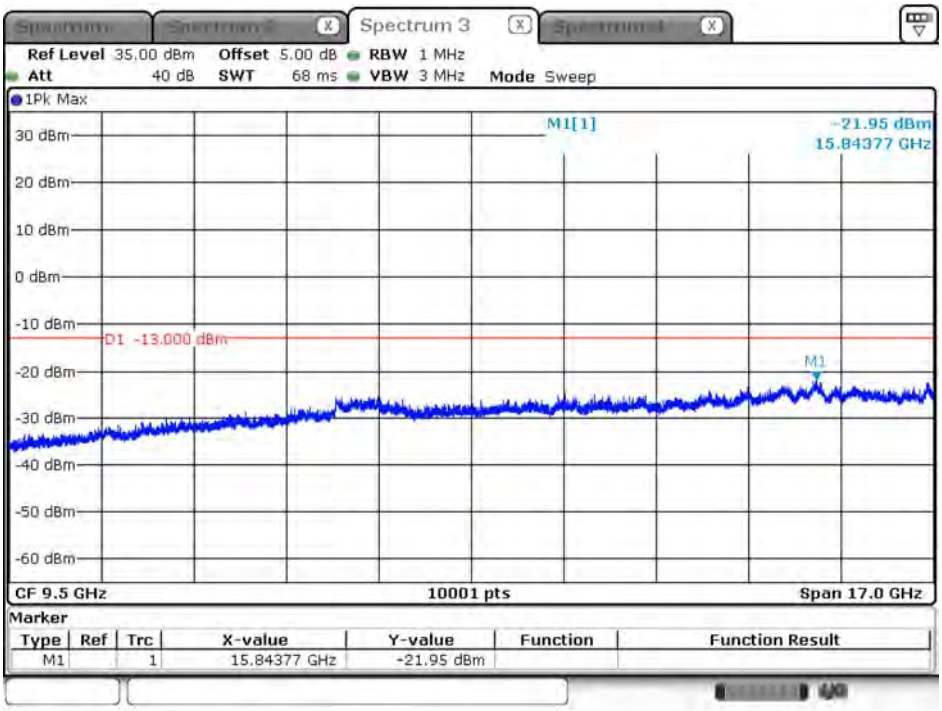
Date: 1.APR.2018 11:02:08

LTE_B13_CH23230_10M_QPSK_under 1G_1RB12



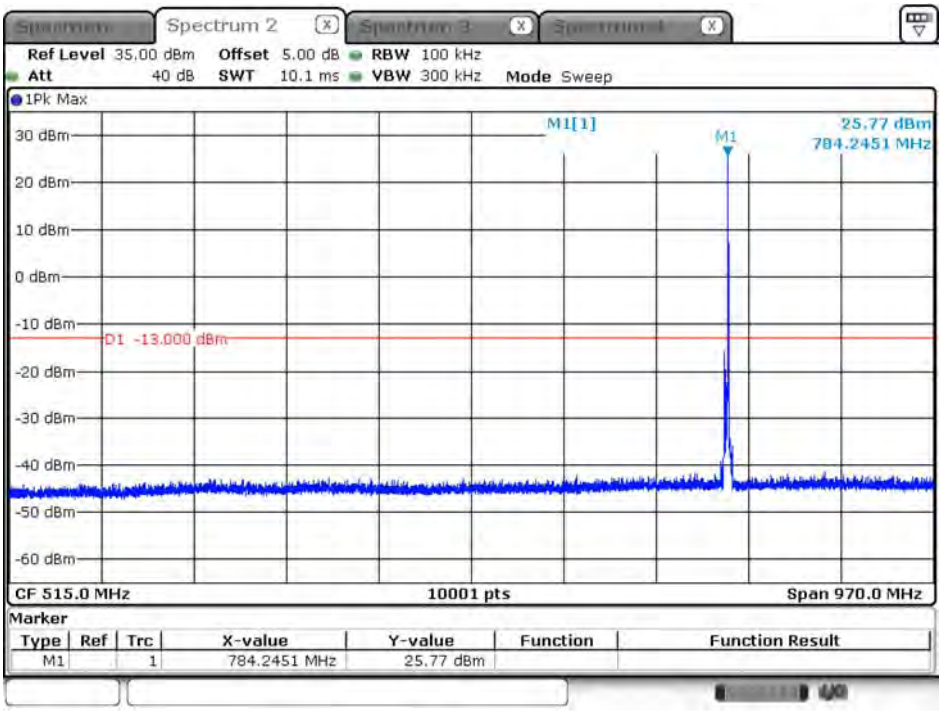
Date: 1.APR.2018 11:03:10

LTE_B13_CH23230_10M_QPSK_above 1G_1RB24



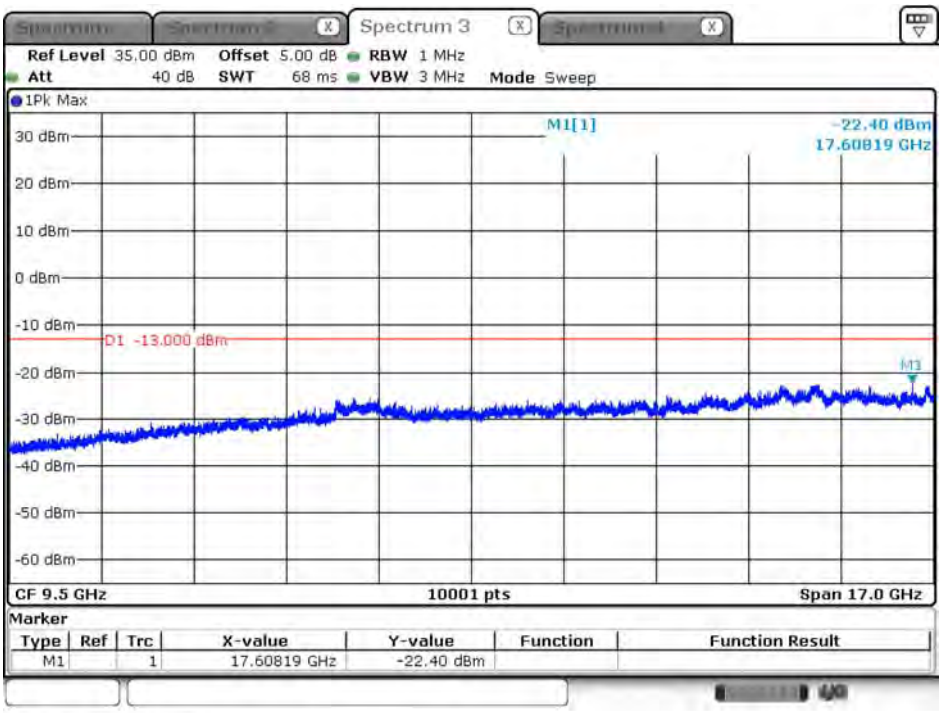
Date: 1.APR.2018 11:08:47

LTE_B13_CH23230_10M_QPSK_under 1G_1RB24



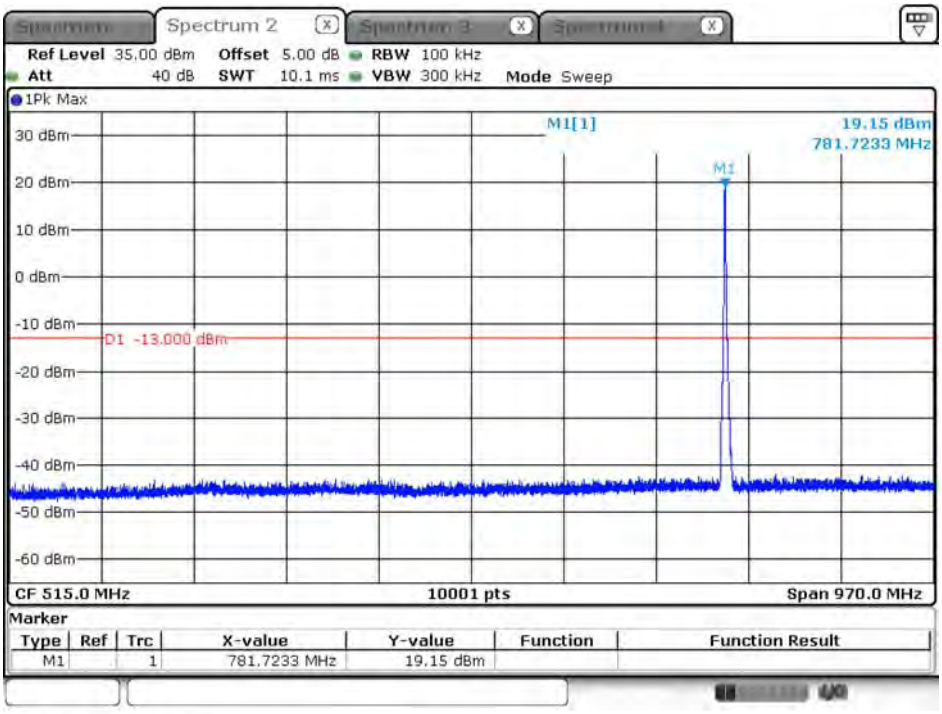
Date: 1.APR.2018 11:06:04

LTE_B13_CH23230_10M_QPSK_above 1G_12RB0



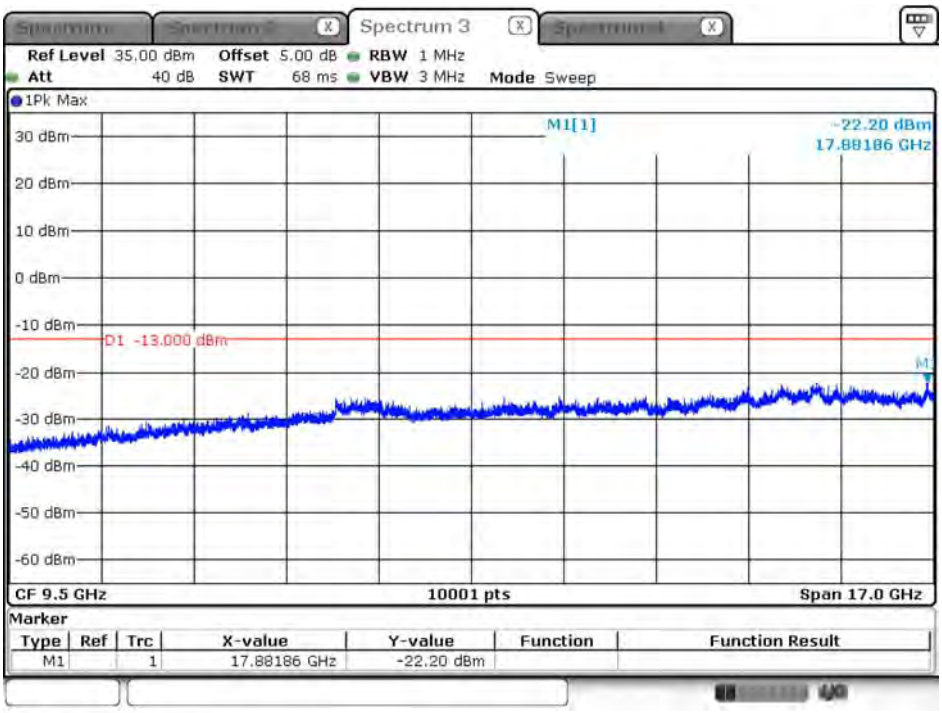
Date: 1.APR.2018 11:18:17

LTE_B13_CH23230_10M_QPSK_under 1G_12RB0



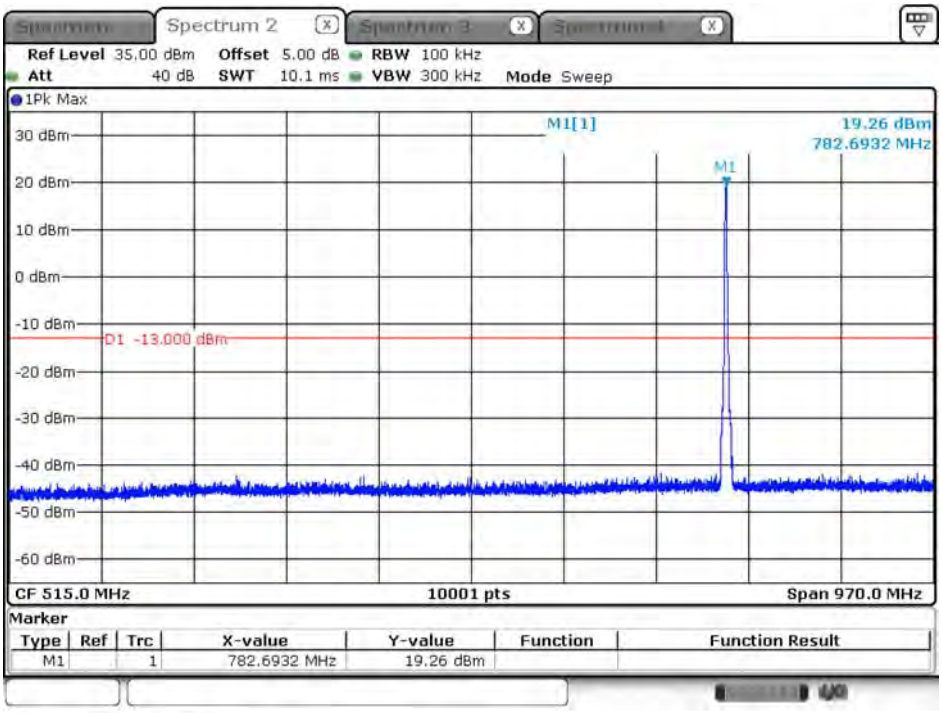
Date: 1.APR.2018 11:20:10

LTE_B13_CH23230_10M_QPSK_above 1G_12RB6



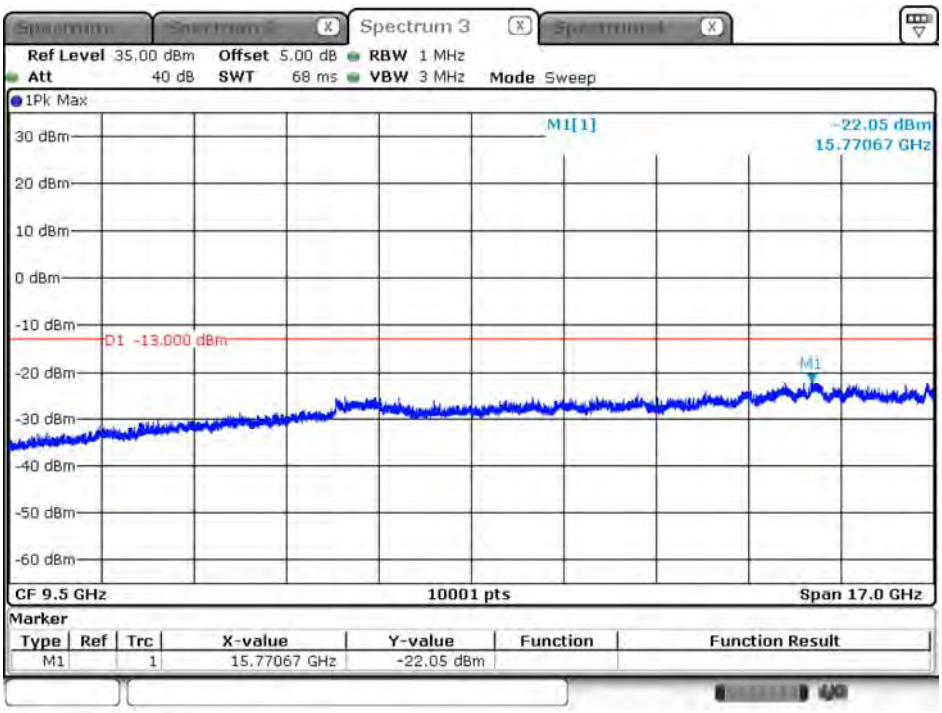
Date: 1.APR.2018 11:23:41

LTE_B13_CH23230_10M_QPSK_under 1G_12RB6



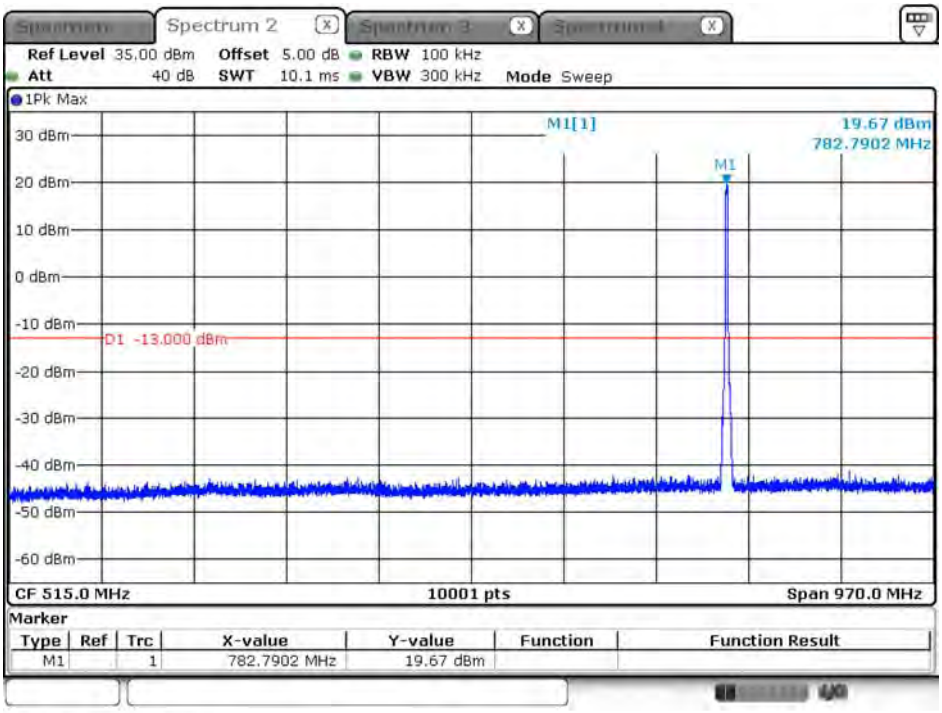
Date: 1.APR.2018 11:21:58

LTE_B13_CH23230_10M_QPSK_above 1G_12RB11



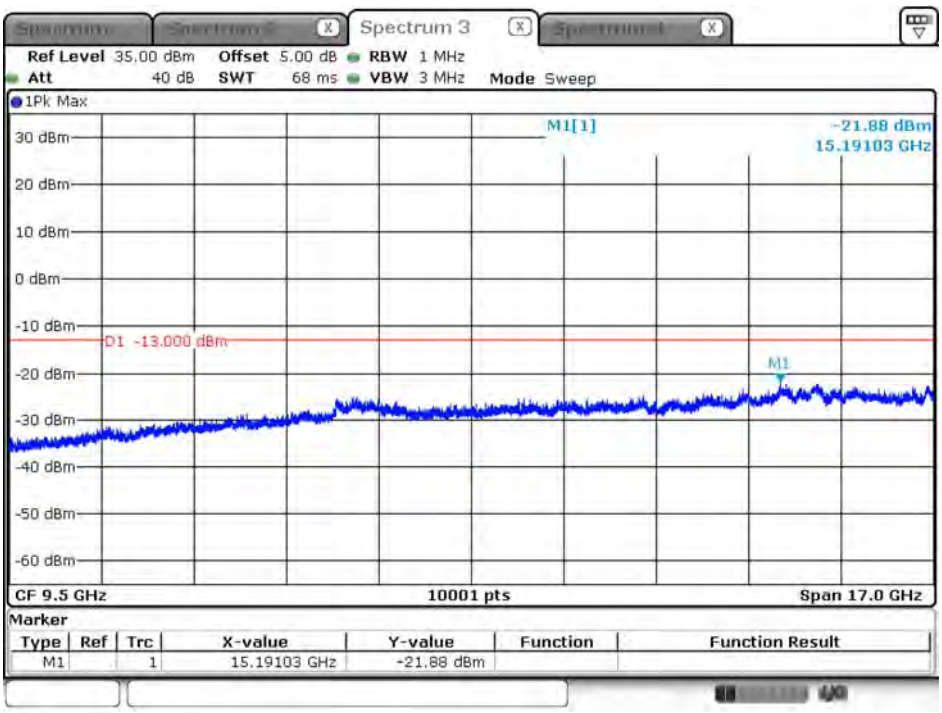
Date: 1.APR.2018 11:40:57

LTE_B13_CH23230_10M_QPSK_under 1G_12RB11



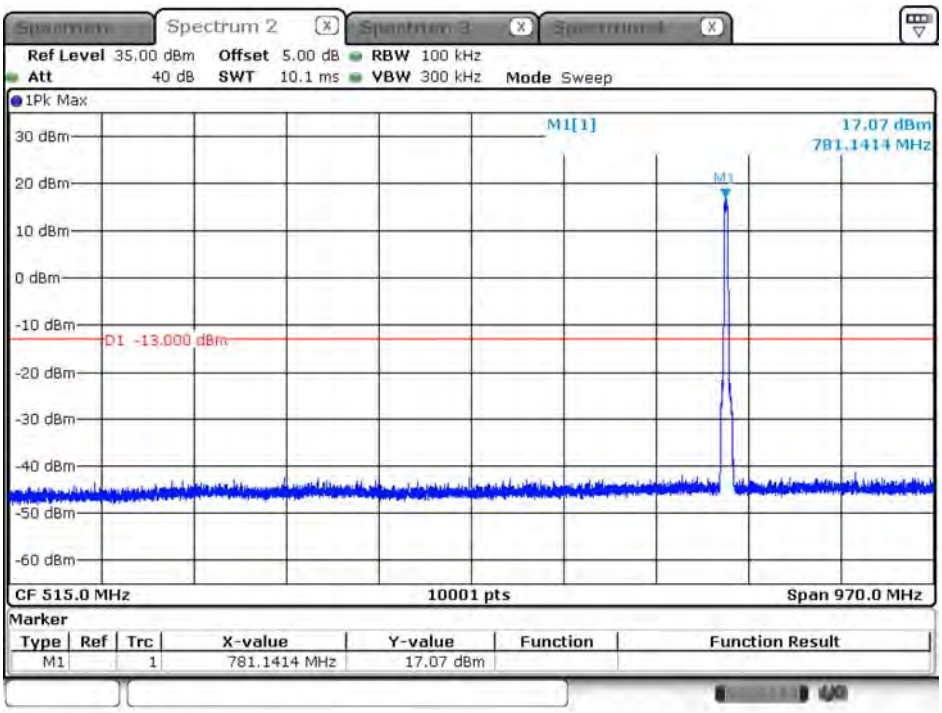
Date: 1.APR.2018 11:42:27

LTE_B13_CH23230_10M_QPSK_above 1G_25RB0



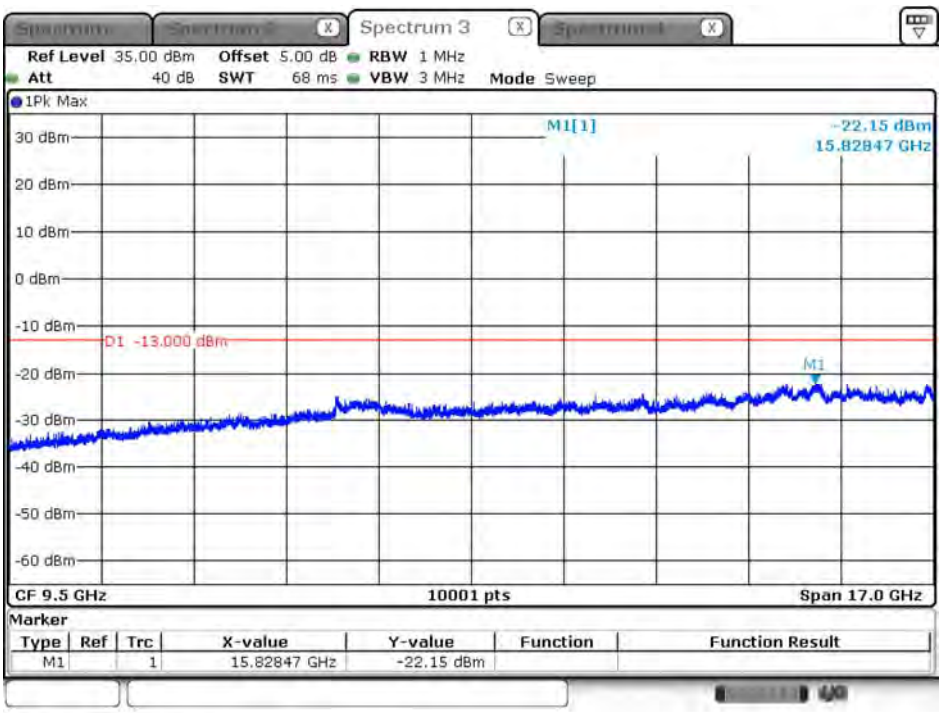
Date: 1.APR.2018 11:47:16

LTE_B13_CH23230_10M_QPSK_under 1G_25RB0



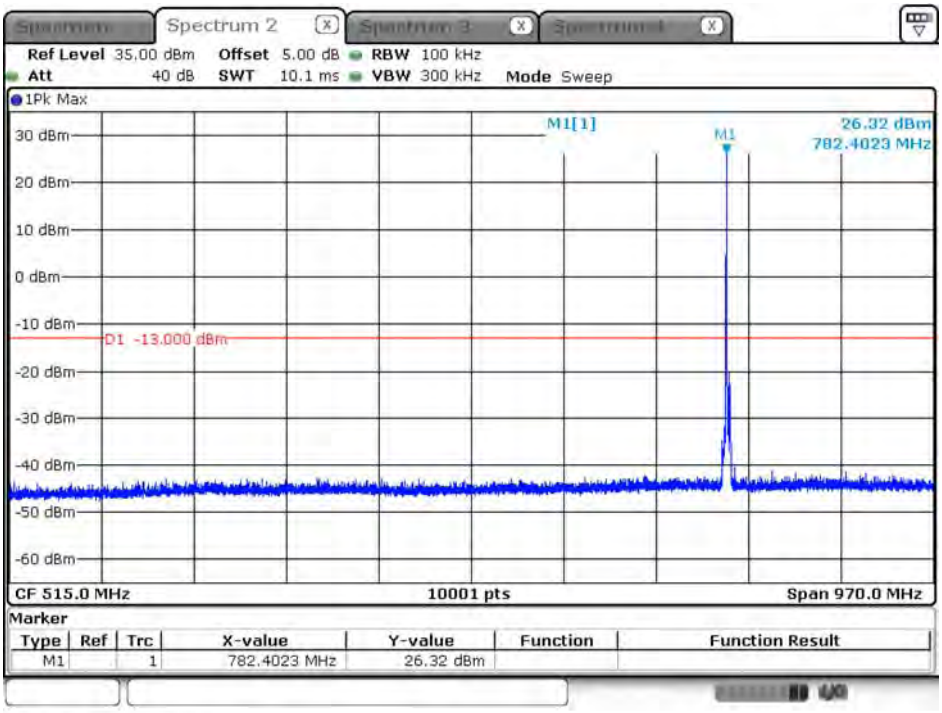
Date: 1.APR.2018 11:43:34

LTE_B13_CH23255_10M_QPSK_above 1G_1RB0



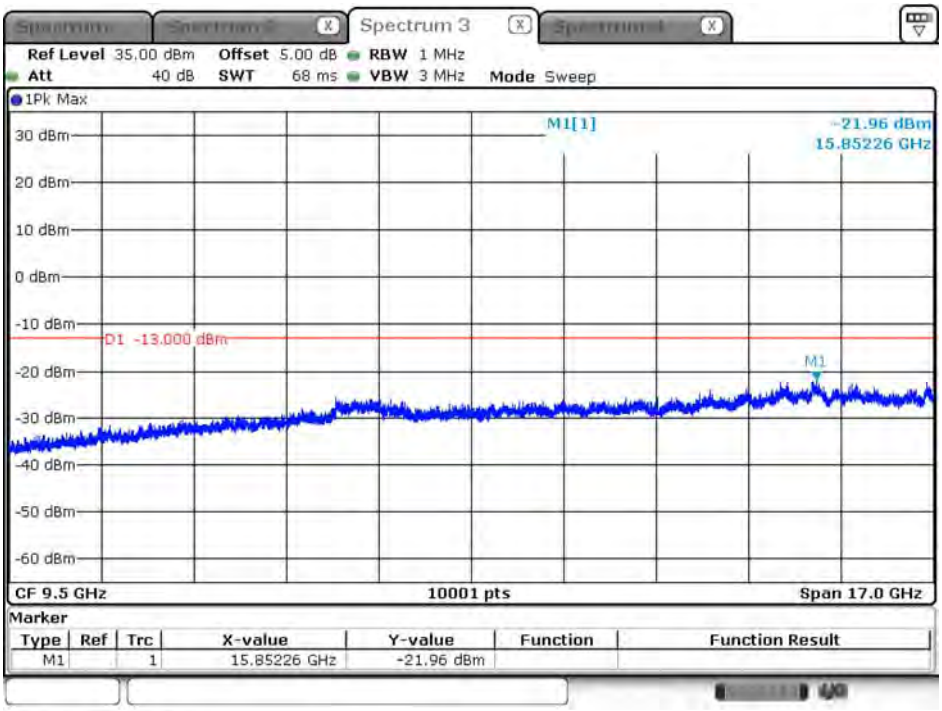
Date: 1.APR.2018 13:23:04

LTE_B13_CH23255_10M_QPSK_under 1G_1RB0



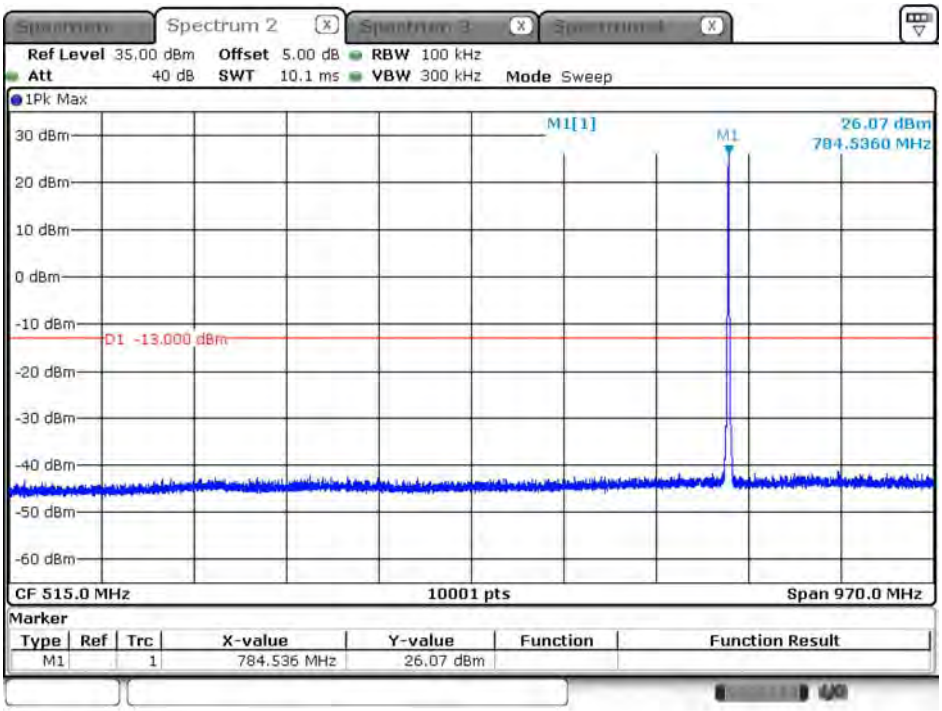
Date: 1.APR.2018 13:25:04

LTE_B13_CH23255_10M_QPSK_above 1G_1RB12



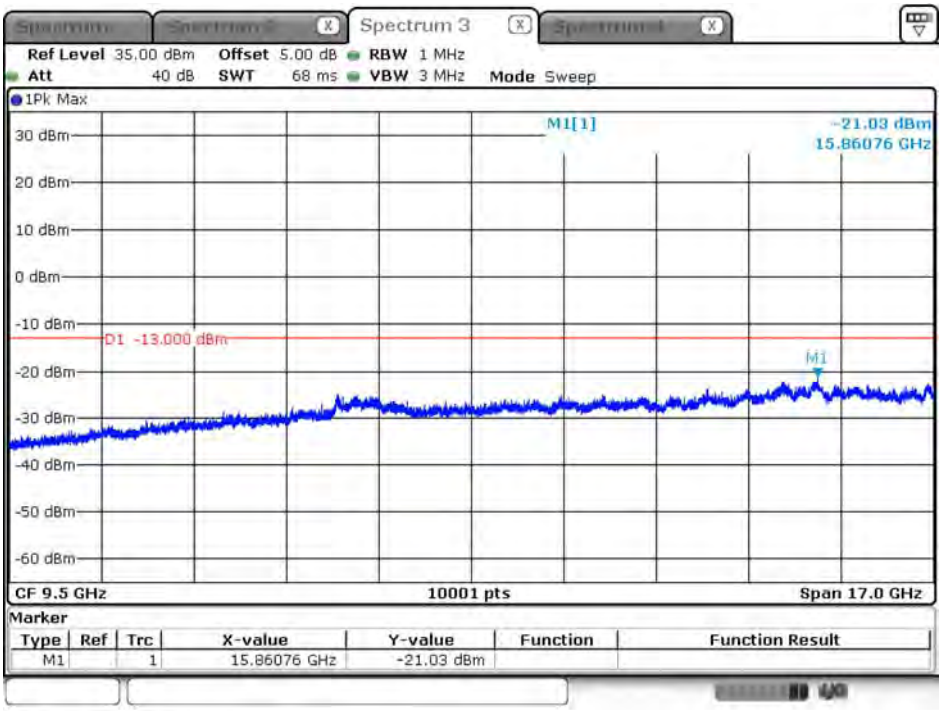
Date: 1.APR.2018 13:32:03

LTE_B13_CH23255_10M_QPSK_under 1G_1RB12



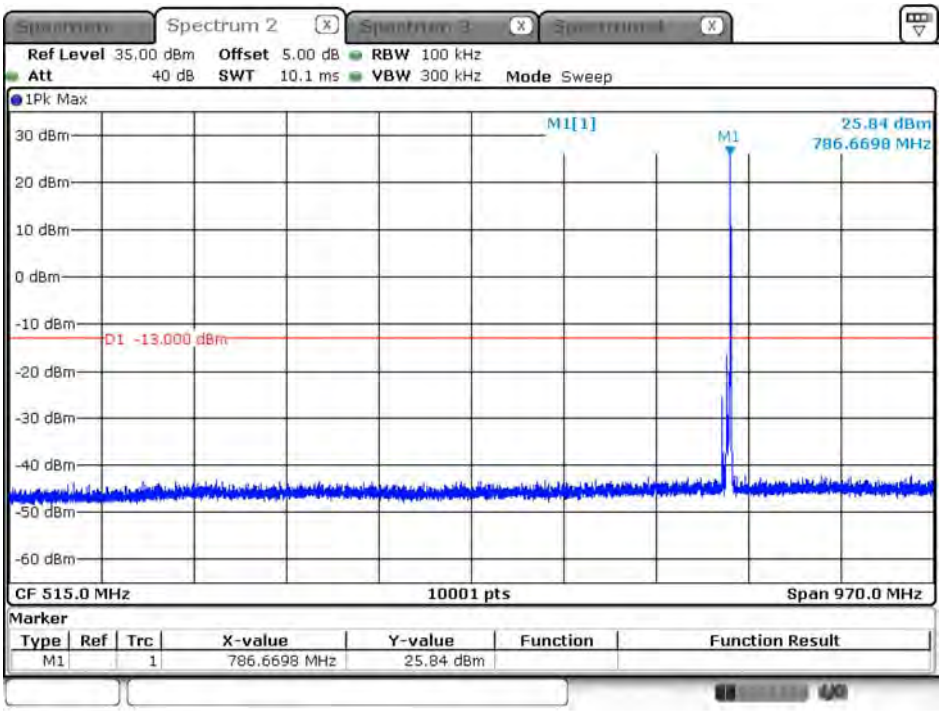
Date: 1.APR.2018 13:31:04

LTE_B13_CH23255_10M_QPSK_above 1G_1RB24



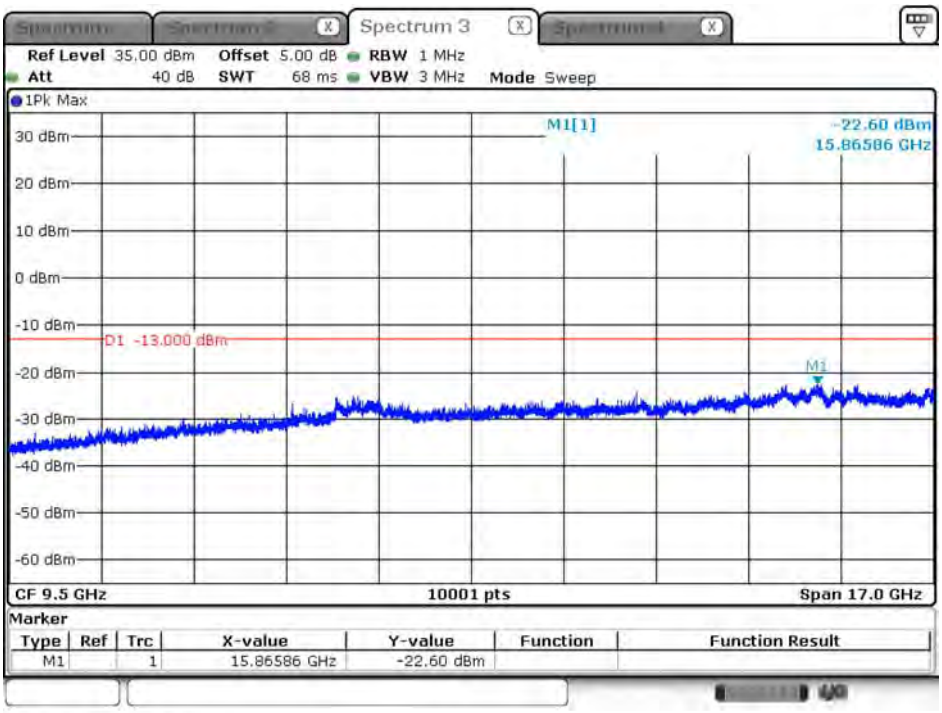
Date: 1.APR.2018 13:41:32

LTE_B13_CH23255_10M_QPSK_under 1G_1RB24



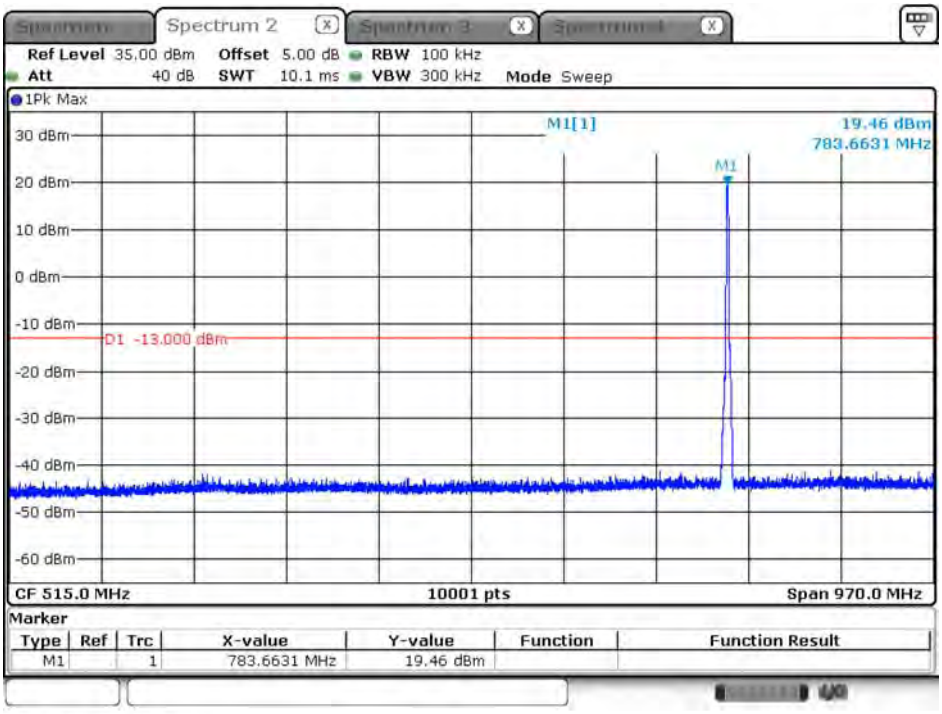
Date: 1.APR.2018 13:42:20

LTE_B13_CH23255_10M_QPSK_above 1G_12RB0



Date: 1.APR.2018 13:47:50

LTE_B13_CH23255_10M_QPSK_under 1G_12RB0



Date: 1.APR.2018 13:46:50

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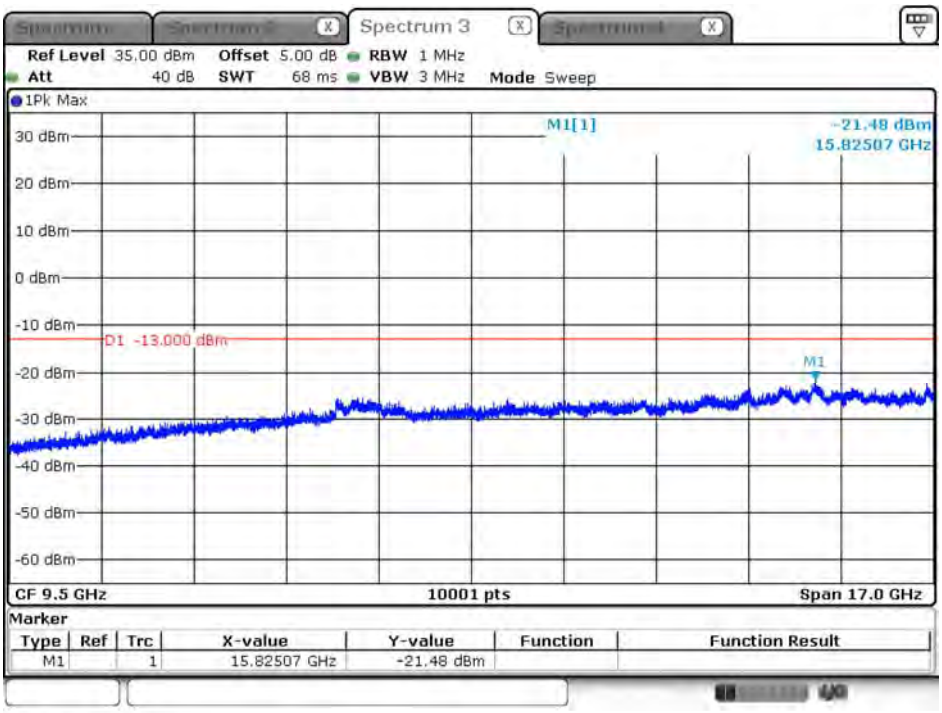
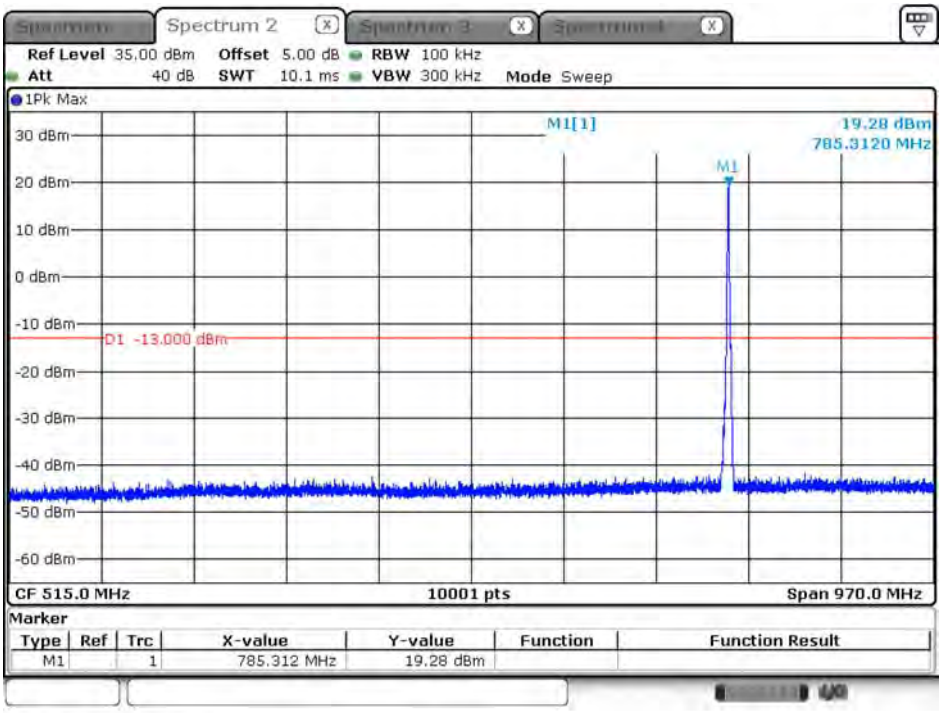


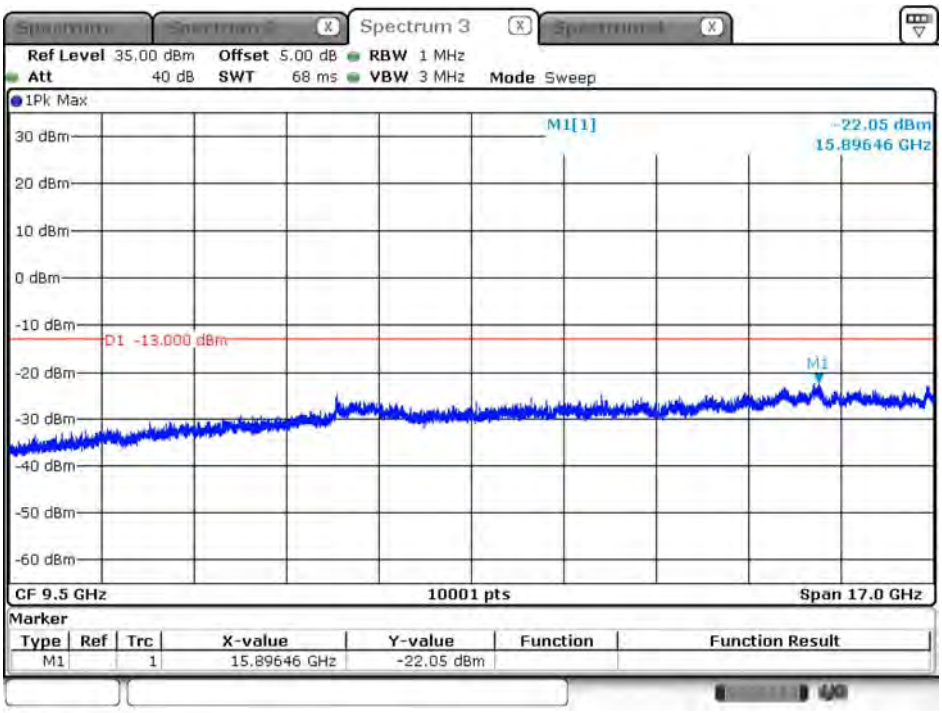
Date: 1.APR.2018 14:06:59

LTE_B13_CH23255_10M_QPSK_under 1G_12RB6



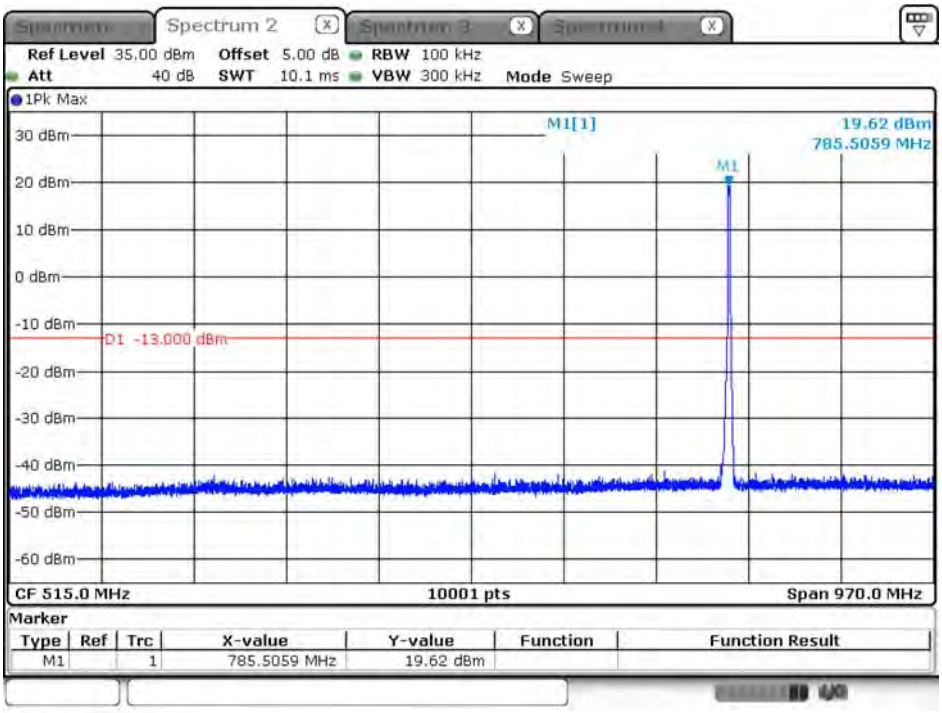
Date: 1.APR.2018 14:08:03

LTE_B13_CH23255_10M_QPSK_above 1G_12RB11



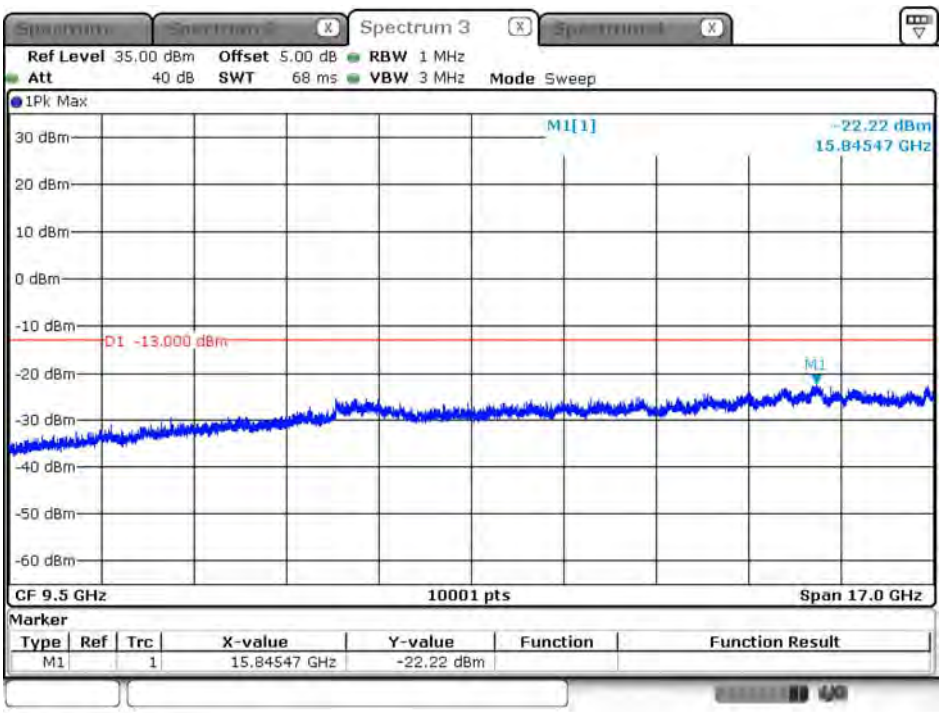
Date: 1.APR.2018 14:11:20

LTE_B13_CH23255_10M_QPSK_under 1G_12RB11



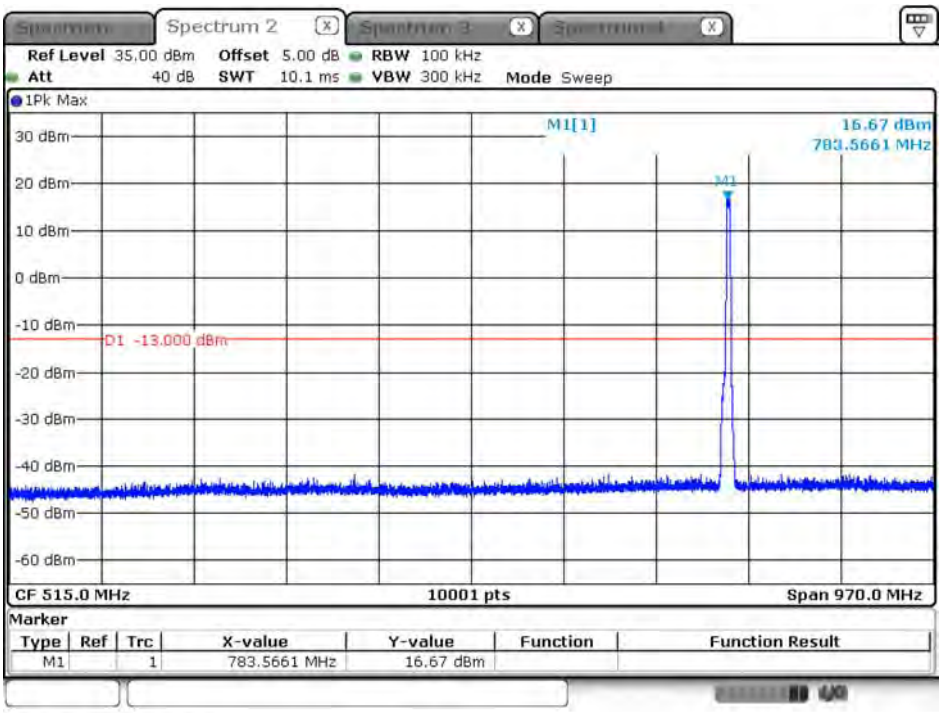
Date: 1.APR.2018 14:10:40

LTE_B13_CH23255_10M_QPSK_above 1G_25RB0



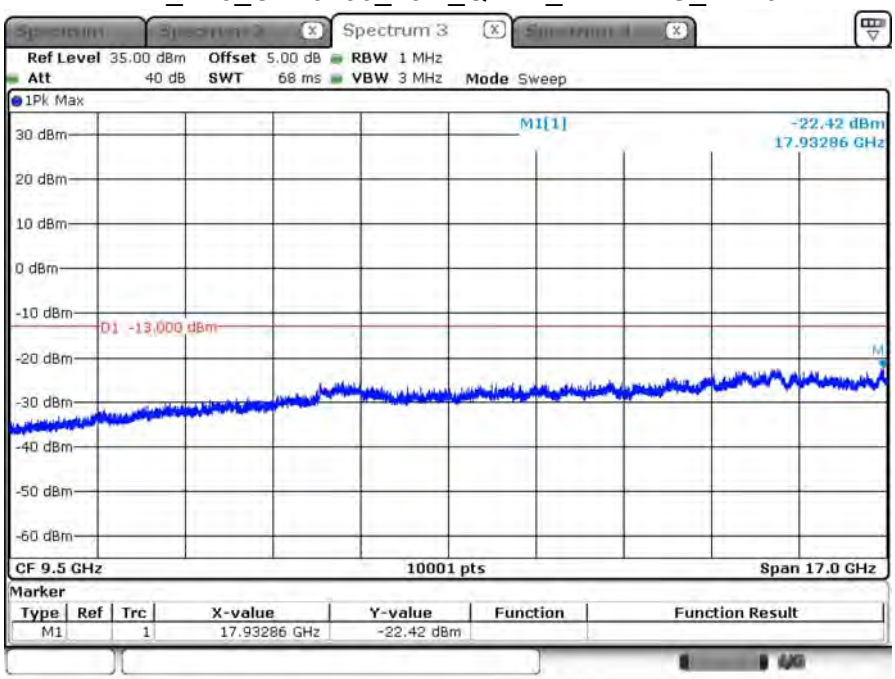
Date: 1.APR.2018 14:19:00

LTE_B13_CH23255_10M_QPSK_under 1G_25RB0



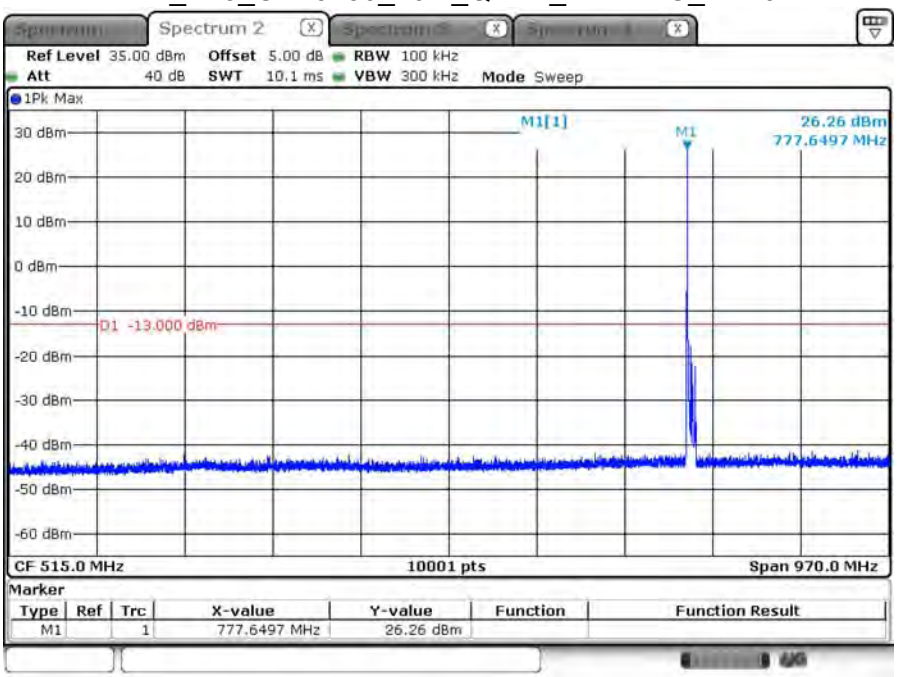
Date: 1.APR.2018 14:21:45

LTE_B13_CH23230_10M_QPSK_above 1G_1RB0



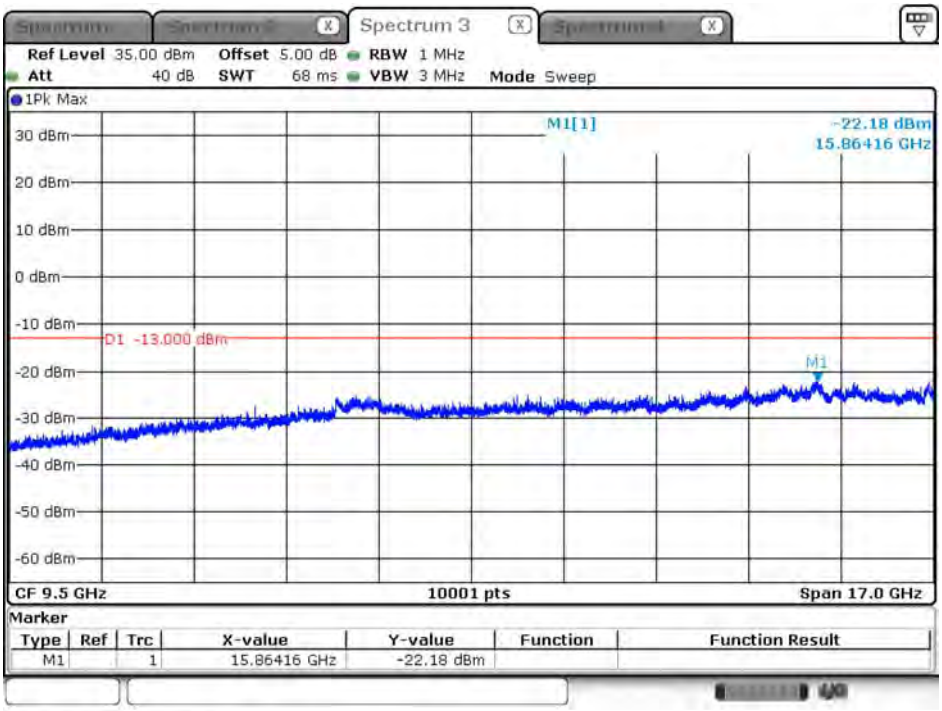
Date: 1.APR.2018 14:34:45

LTE_B13_CH23230_10M_QPSK_under 1G_1RB0



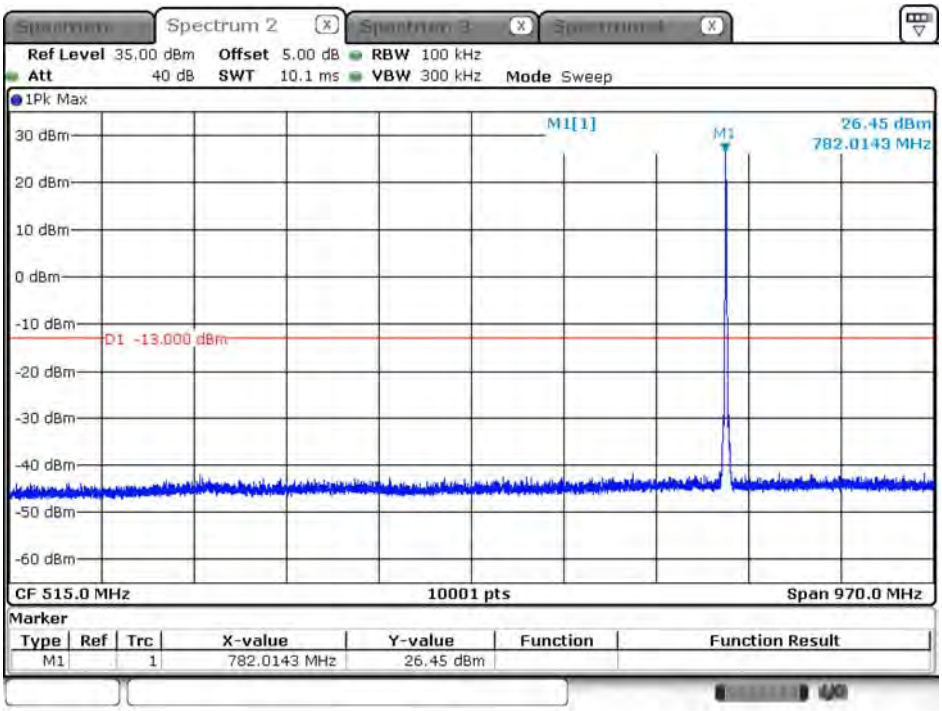
Date: 1.APR.2018 14:32:59

LTE_B13_CH23230_10M_QPSK_above 1G_1RB24



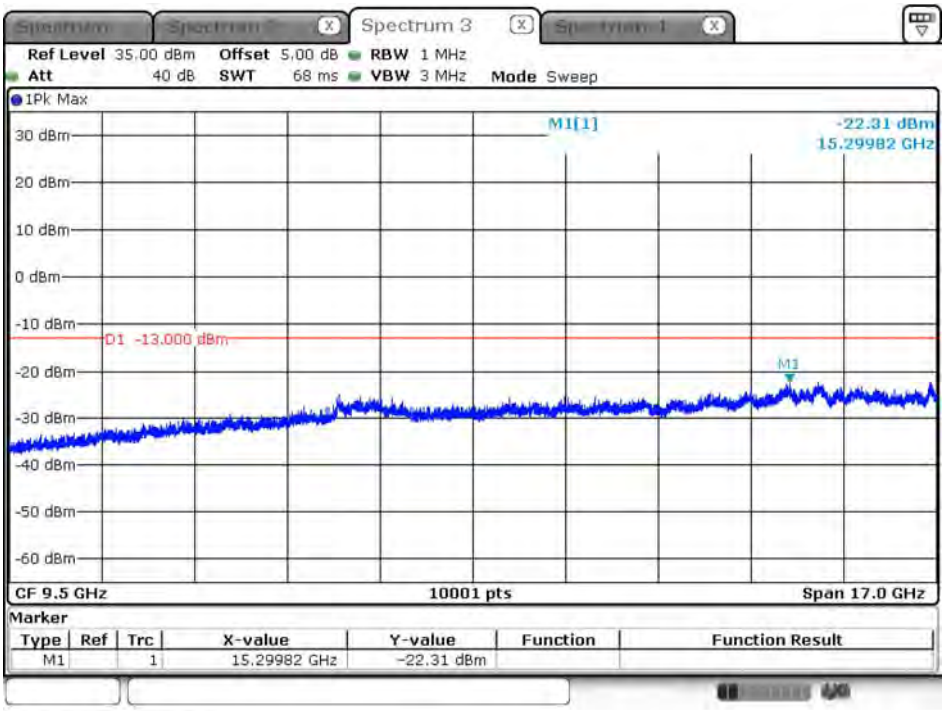
Date: 1.APR.2018 15:52:52

LTE_B13_CH23230_10M_QPSK_under 1G_1RB24



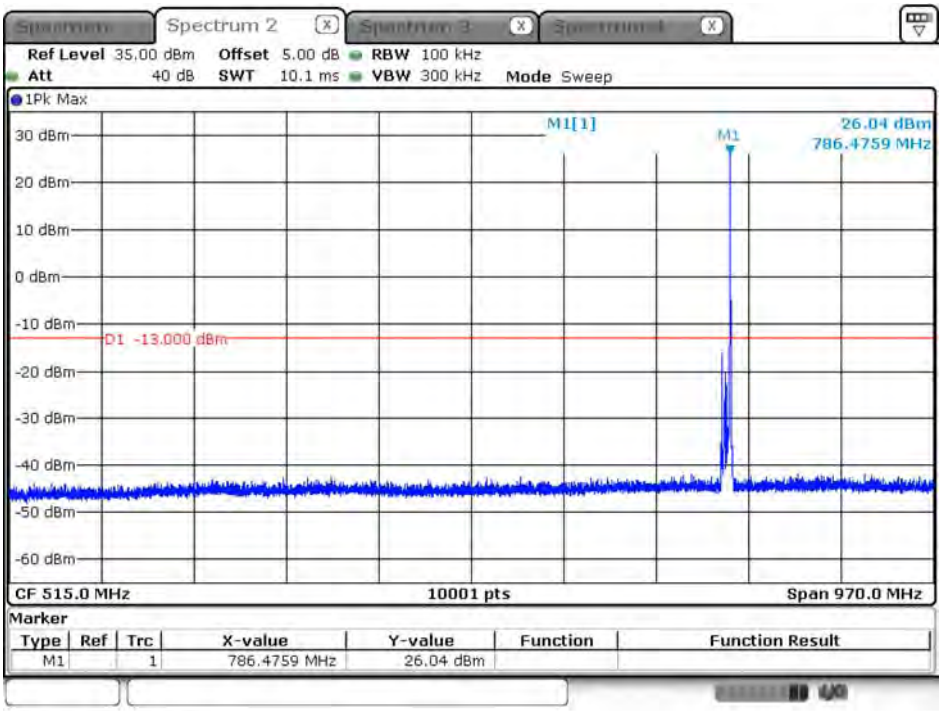
Date: 1.APR.2018 15:50:35

LTE_B13_CH23230_10M_QPSK_above 1G_1RB49



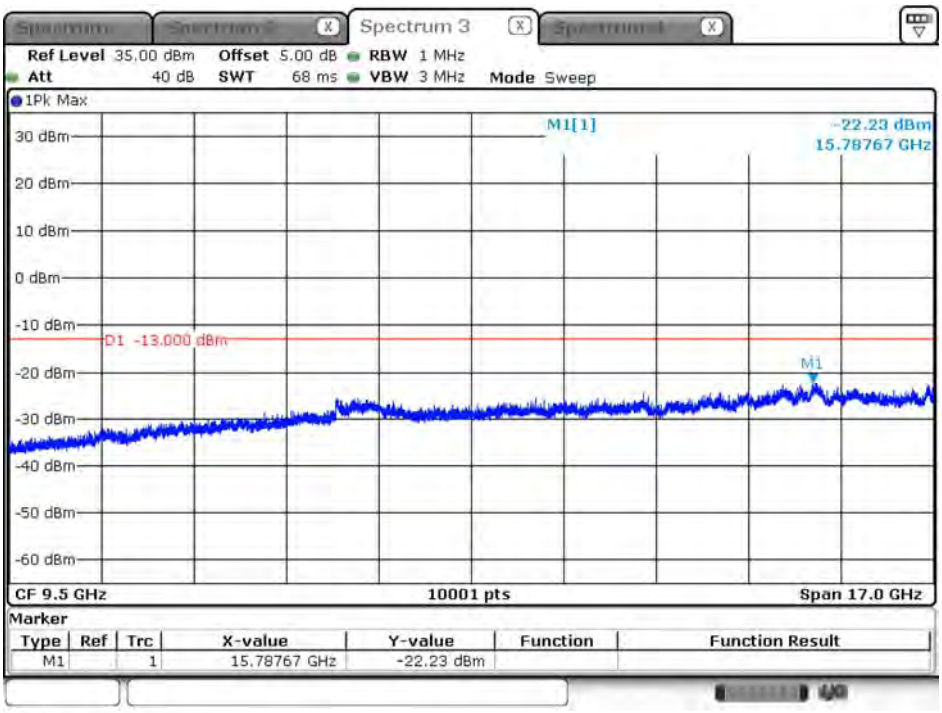
Date: 1.APR.2018 16:11:45

LTE_B13_CH23230_10M_QPSK_under 1G_1RB49



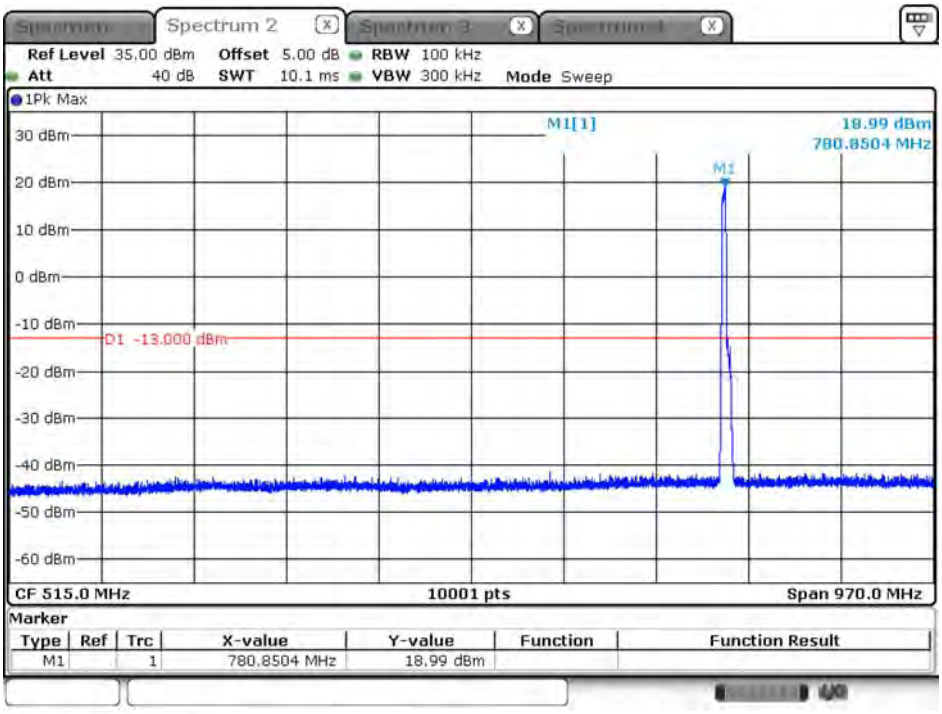
Date: 1.APR.2018 16:25:21

LTE_B13_CH23230_10M_QPSK_above 1G_25RB0



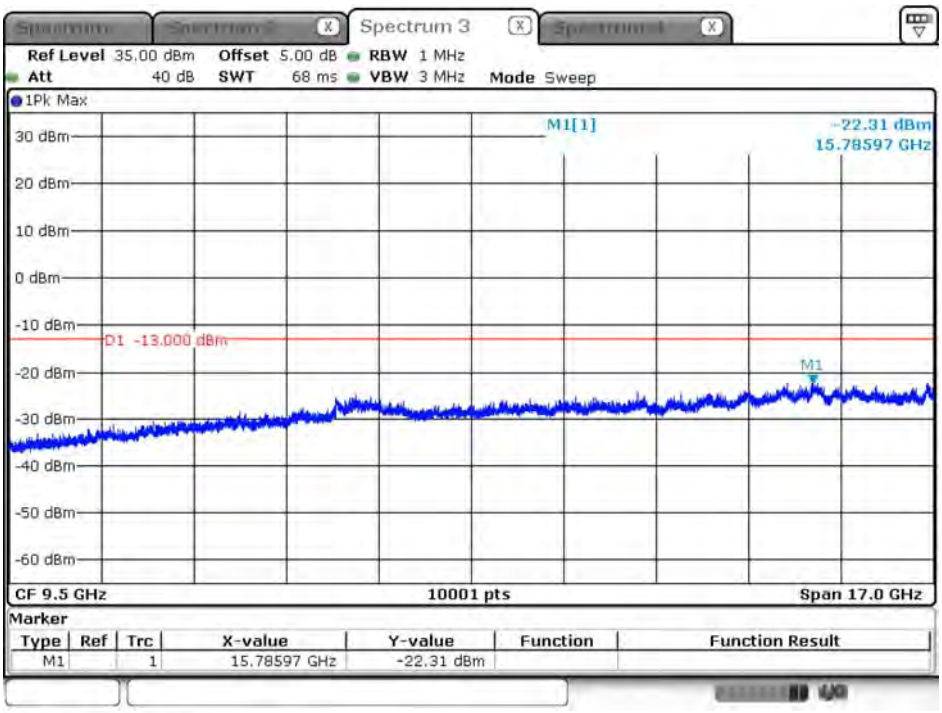
Date: 1.APR.2018 16:34:16

LTE_B13_CH23230_10M_QPSK_under 1G_25RB0



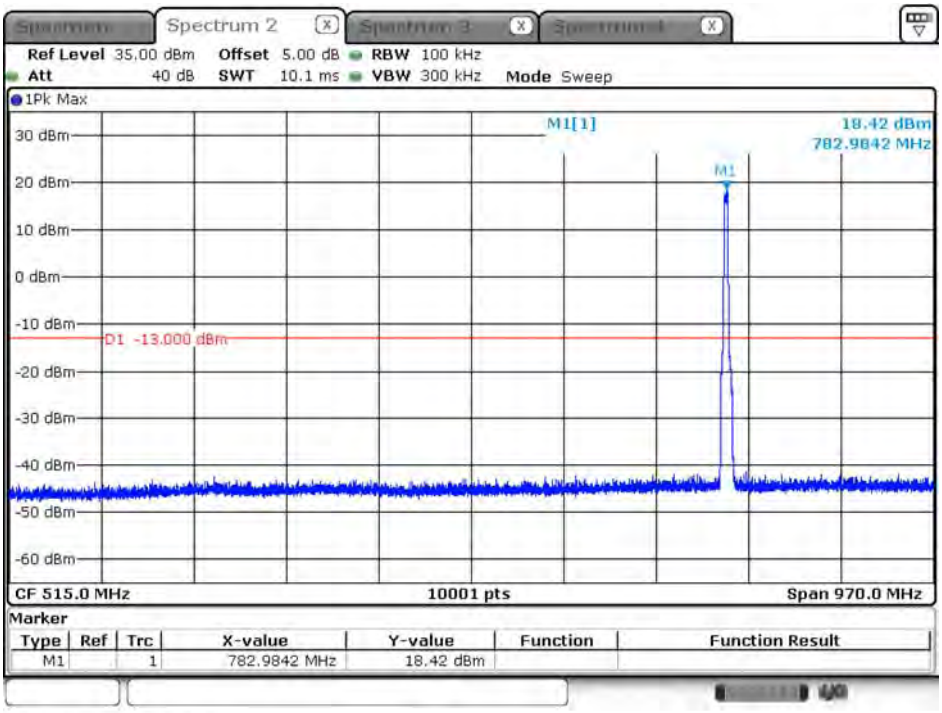
Date: 1.APR.2018 16:33:01

LTE_B13_CH23230_10M_QPSK_above 1G_25RB12



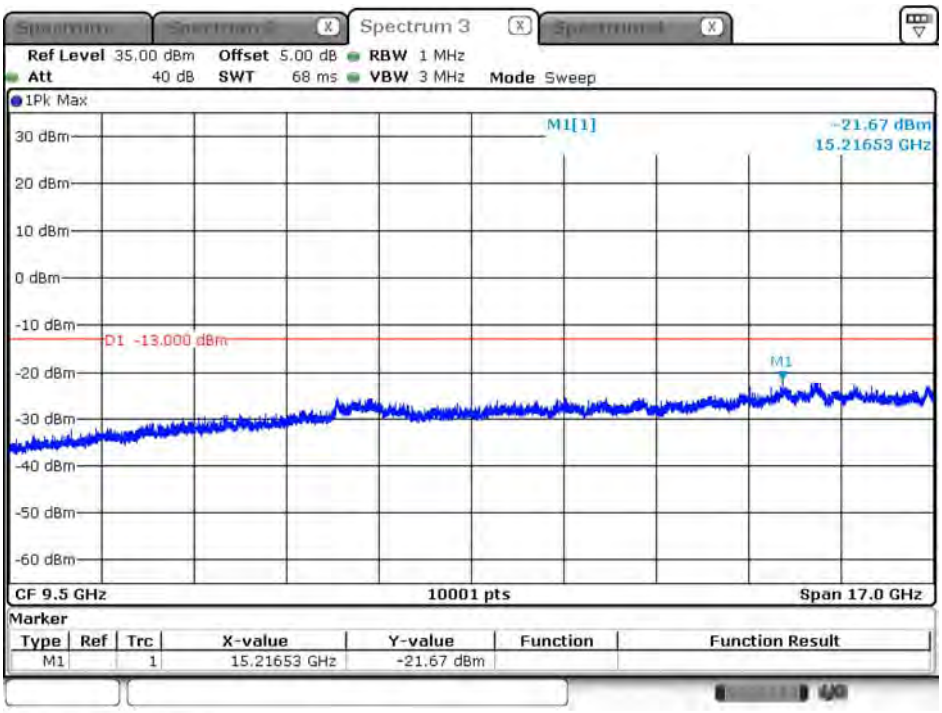
Date: 1.APR.2018 16:45:56

LTE_B13_CH23230_10M_QPSK_under 1G_25RB12



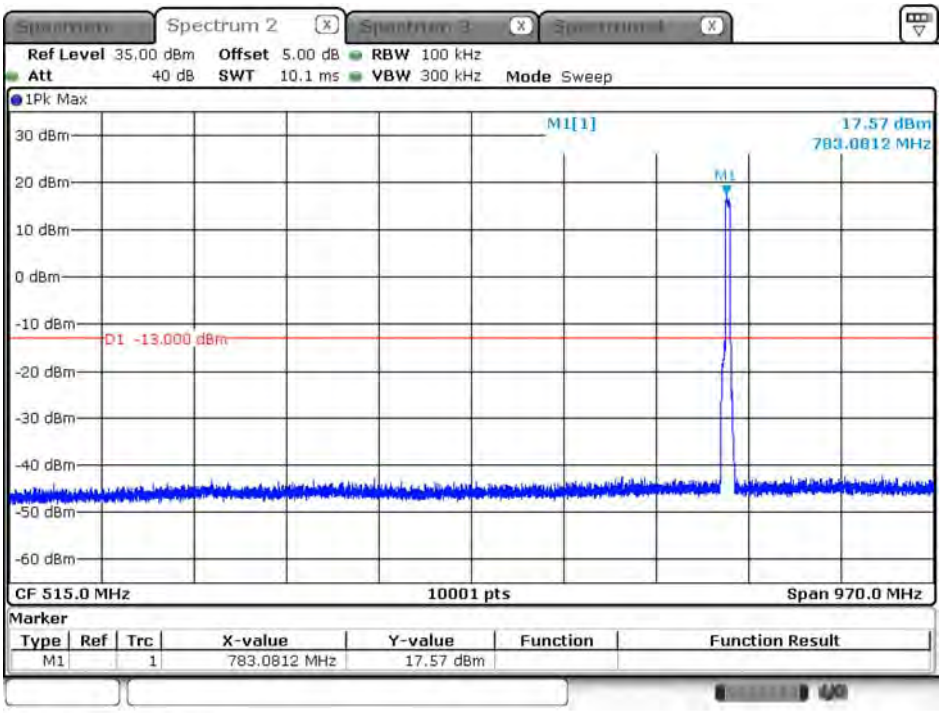
Date: 1.APR.2018 16:47:32

LTE_B13_CH23230_10M_QPSK_above 1G_25RB24



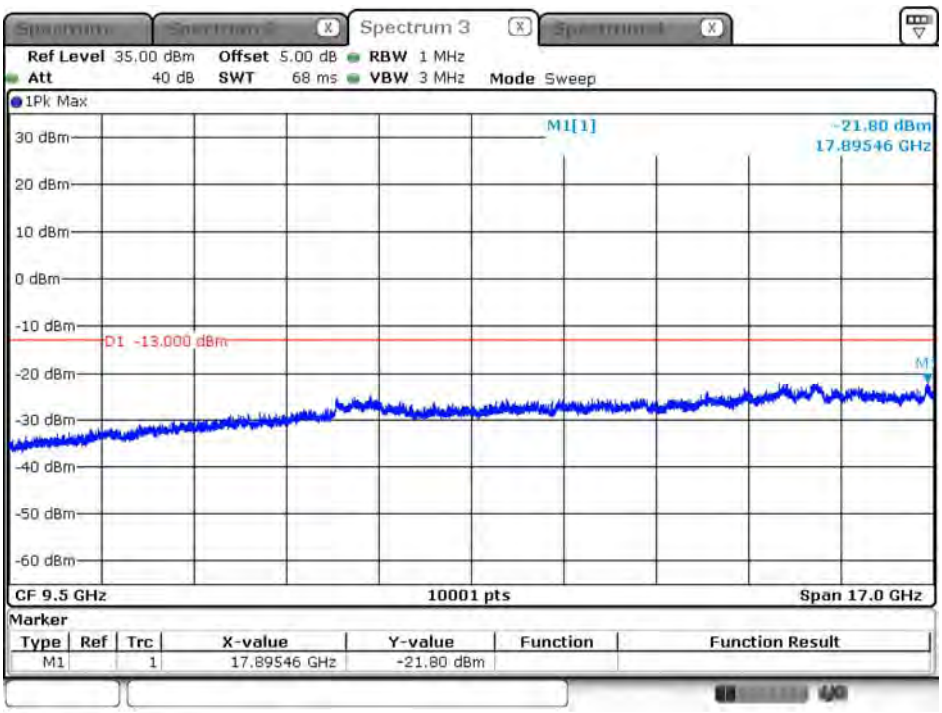
Date: 1.APR.2018 16:54:05

LTE_B13_CH23230_10M_QPSK_under 1G_25RB24



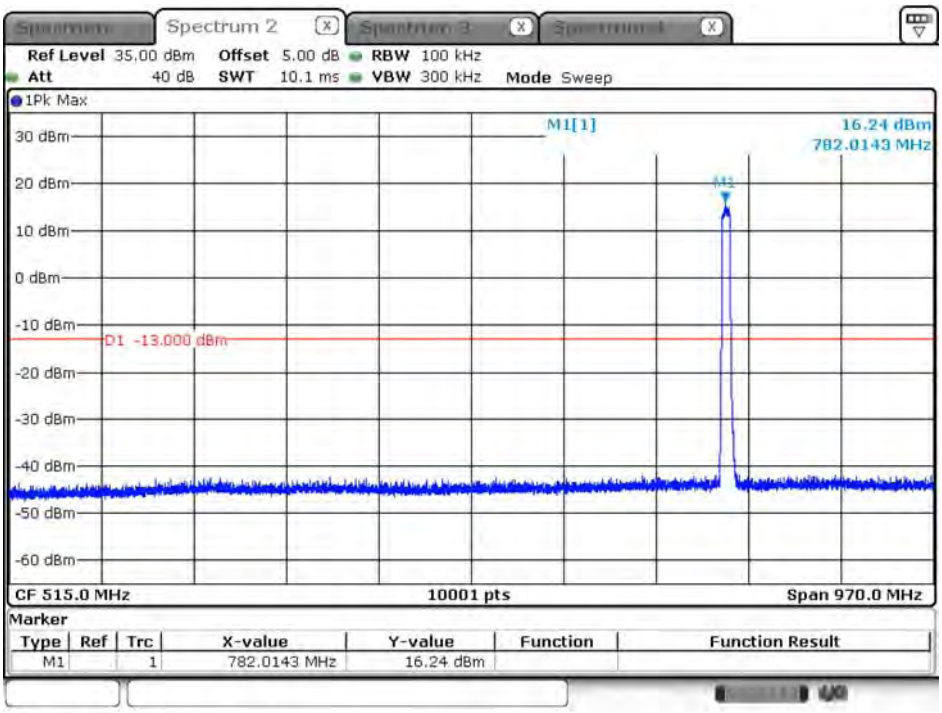
Date: 1.APR.2018 16:52:41

LTE_B13_CH23230_10M_QPSK_above 1G_50RB0



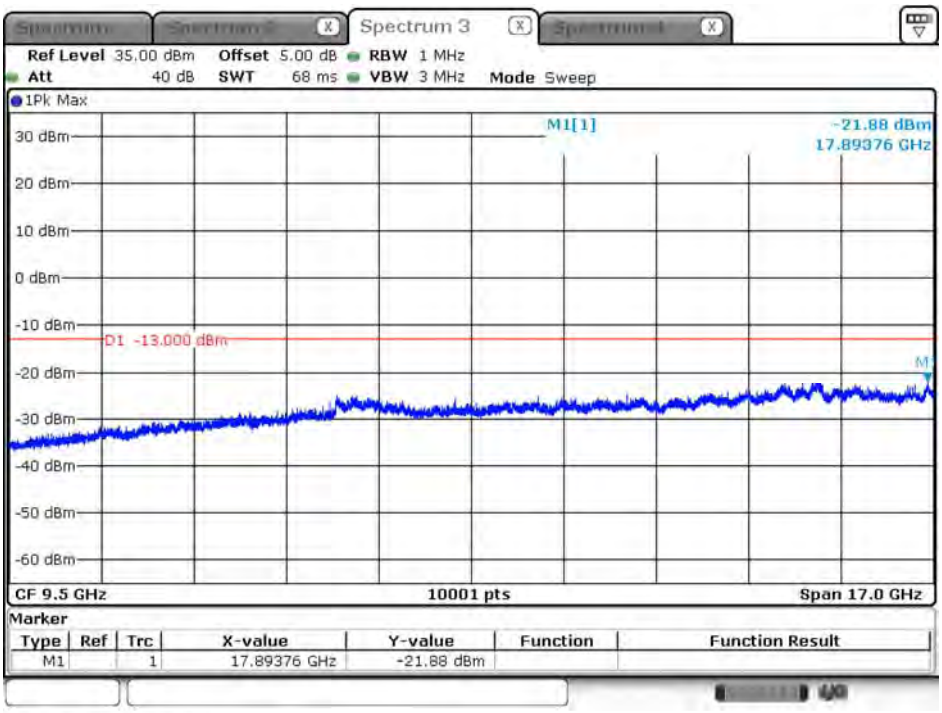
Date: 1.APR.2018 17:09:58

LTE_B13_CH23230_10M_QPSK_under 1G_50RB0



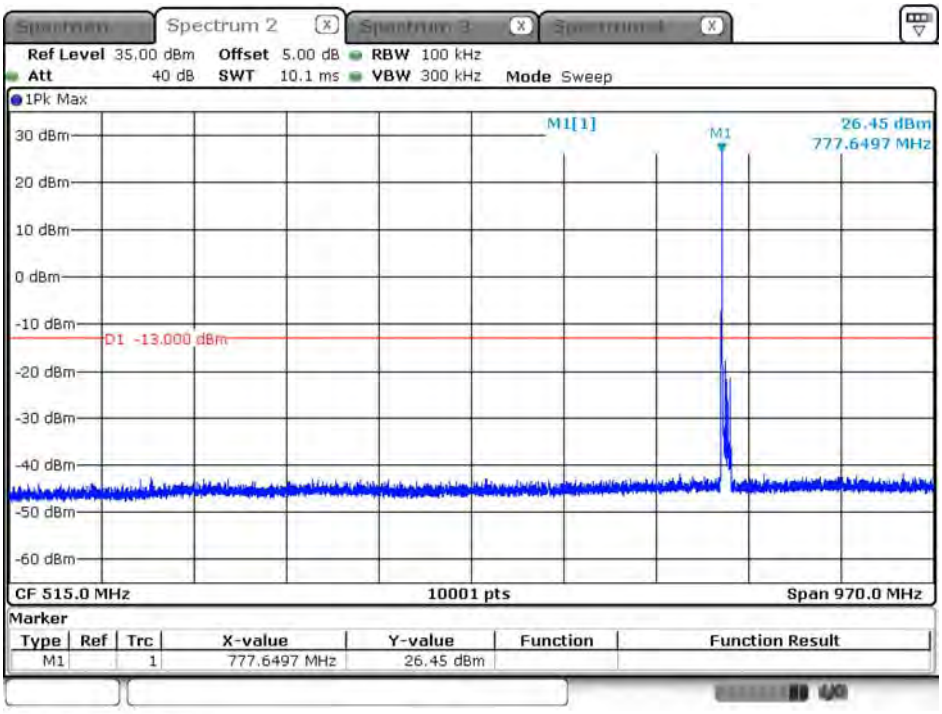
Date: 1.APR.2018 17:13:31

LTE_B13_CH23230_10M_16-QAM_above 1G_1RB0



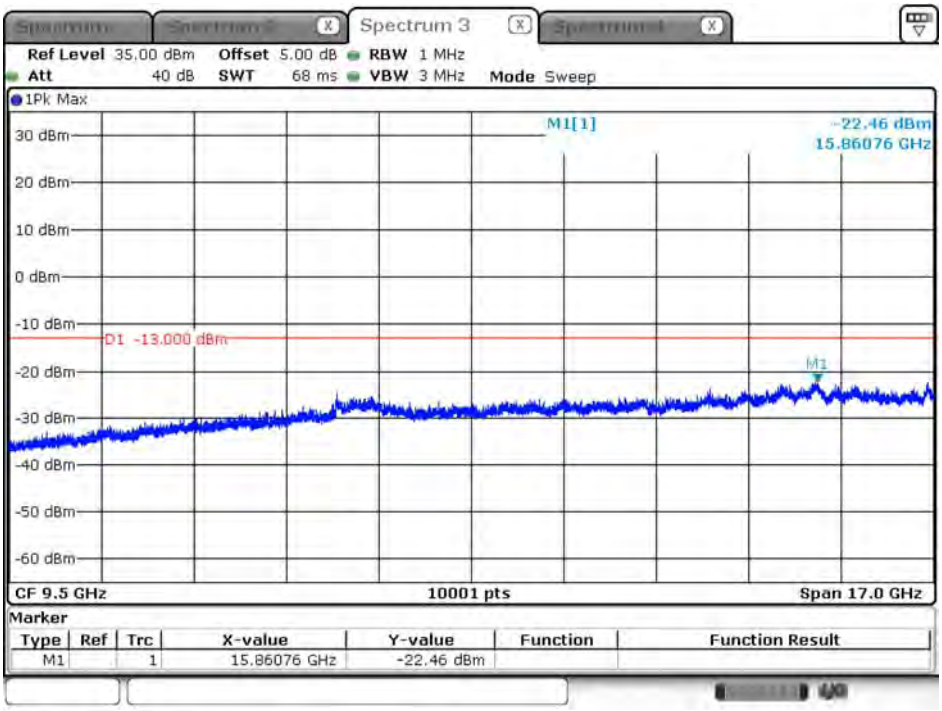
Date: 1.APR.2018 14:39:30

LTE_B13_CH23230_10M_16-QAM_under 1G_1RB0



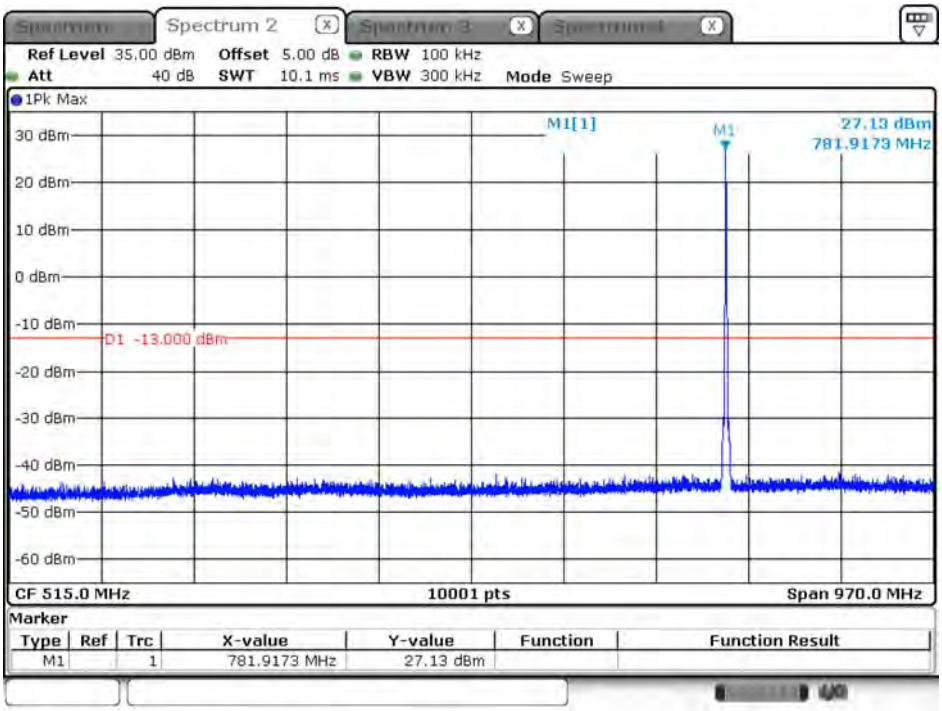
Date: 1.APR.2018 14:41:21

LTE_B13_CH23230_10M_16-QAM_above 1G_1RB24



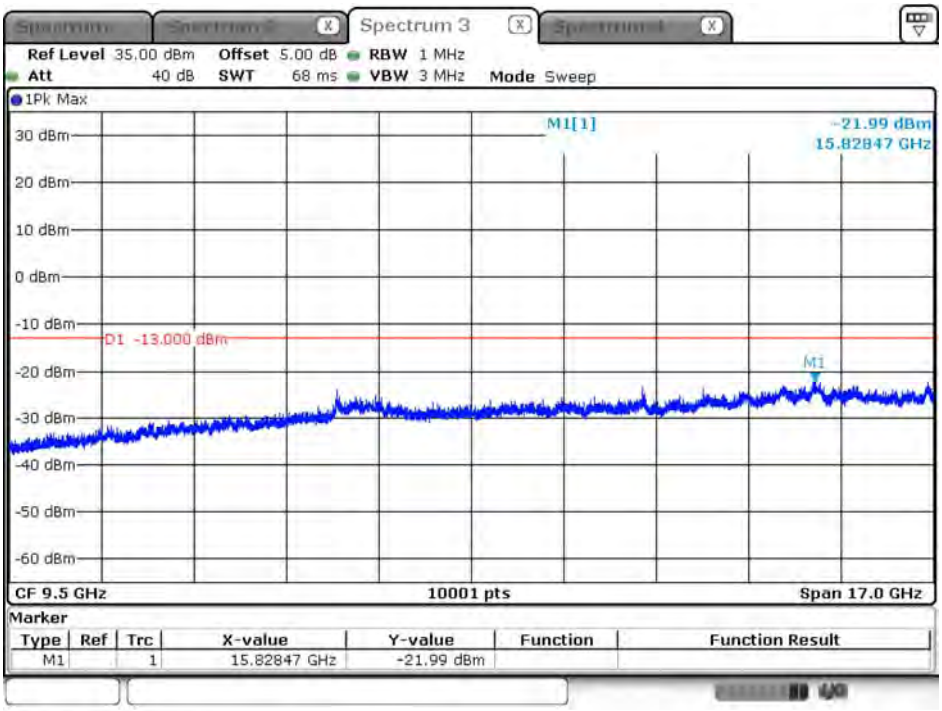
Date: 1.APR.2018 15:54:28

LTE_B13_CH23230_10M_16-QAM_under 1G_1RB24



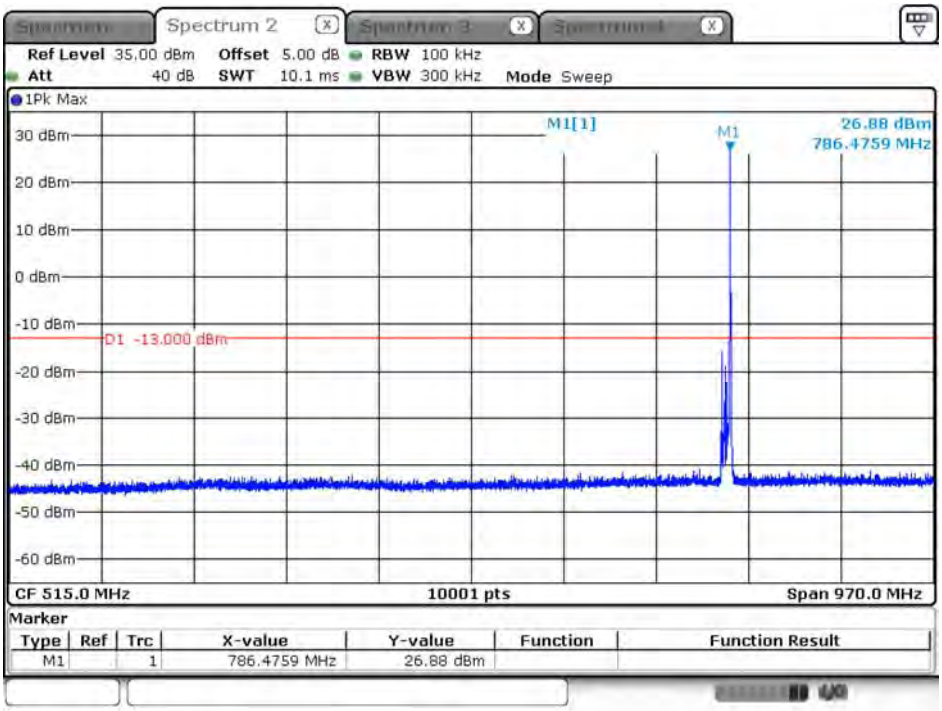
Date: 1.APR.2018 15:55:56

LTE_B13_CH23230_10M_16-QAM_above 1G_1RB49



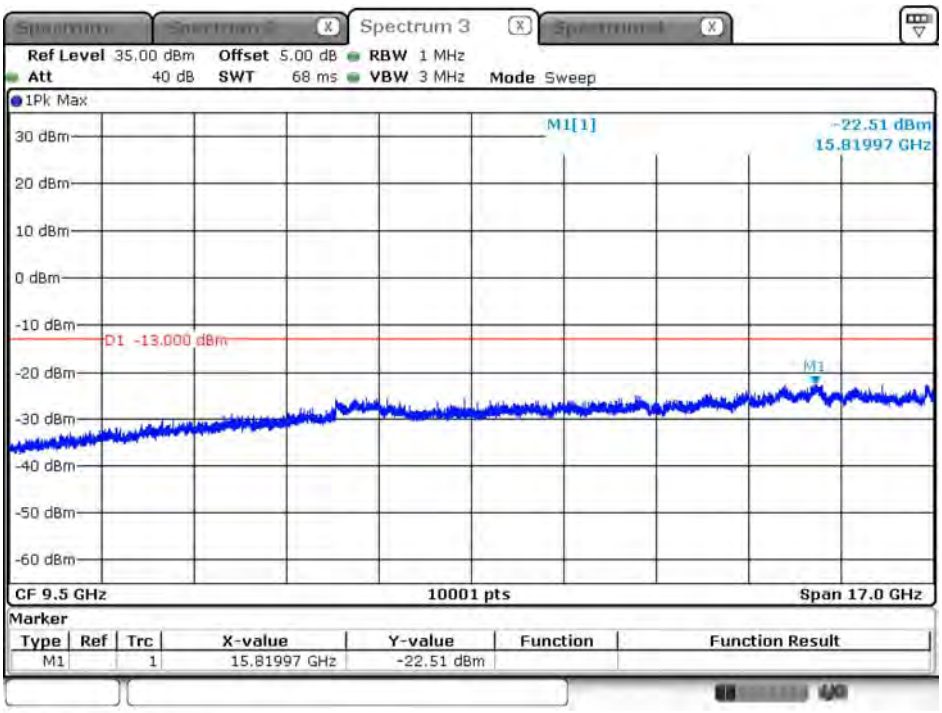
Date: 1.APR.2018 16:10:13

LTE_B13_CH23230_10M_16-QAM_under 1G_1RB49



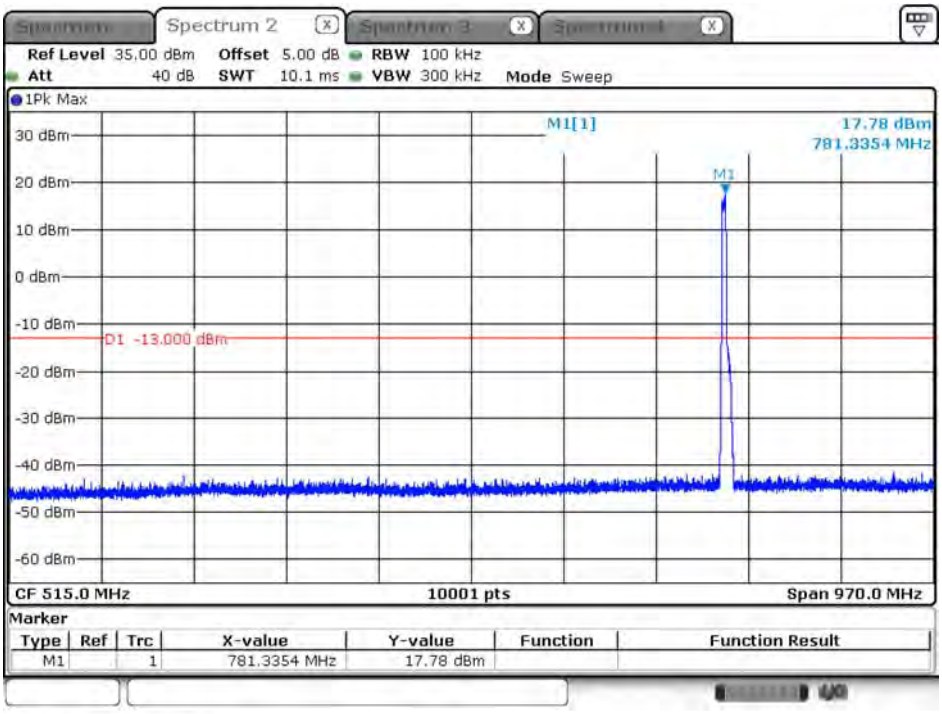
Date: 1.APR.2018 16:09:00

LTE_B13_CH23230_10M_16-QAM_above 1G_25RB0



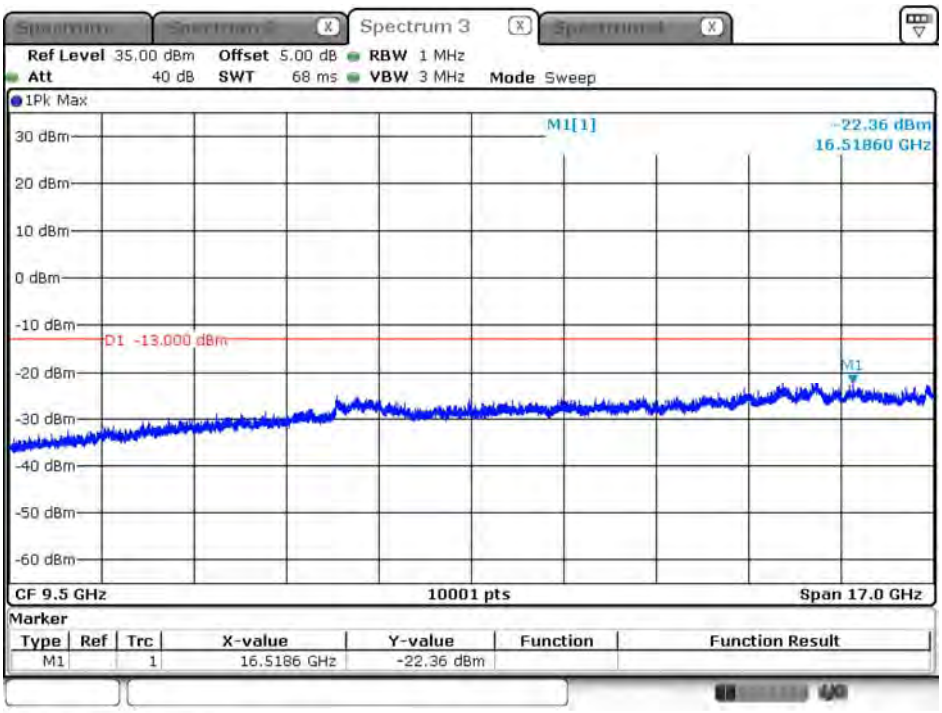
Date: 1.APR.2018 16:35:59

LTE_B13_CH23230_10M_16-QAM_under 1G_25RB0



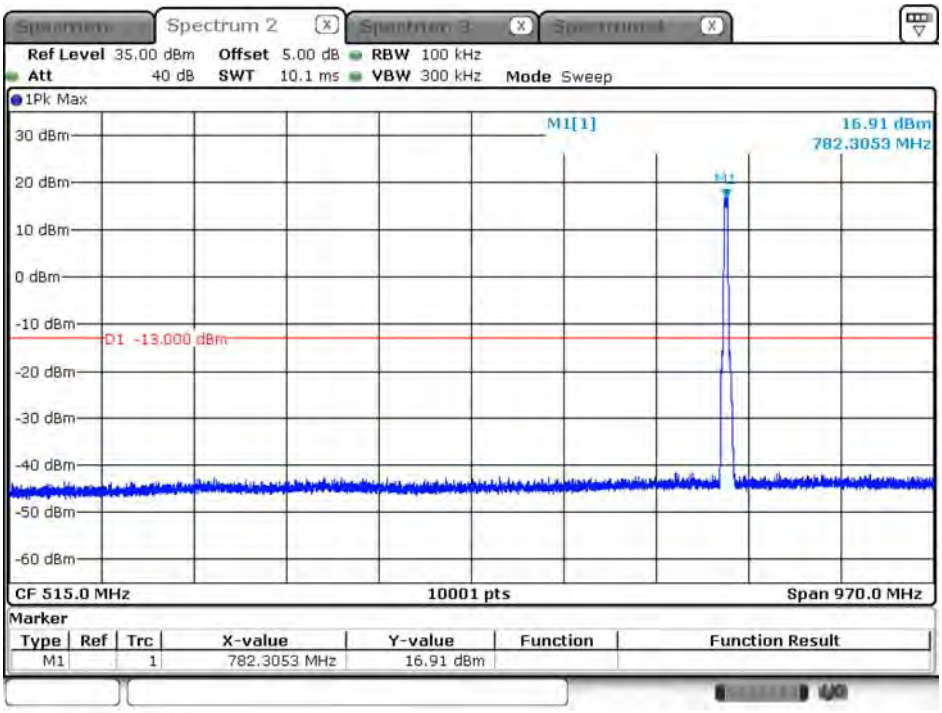
Date: 1.APR.2018 16:37:39

LTE_B13_CH23230_10M_16-QAM_above 1G_25RB12



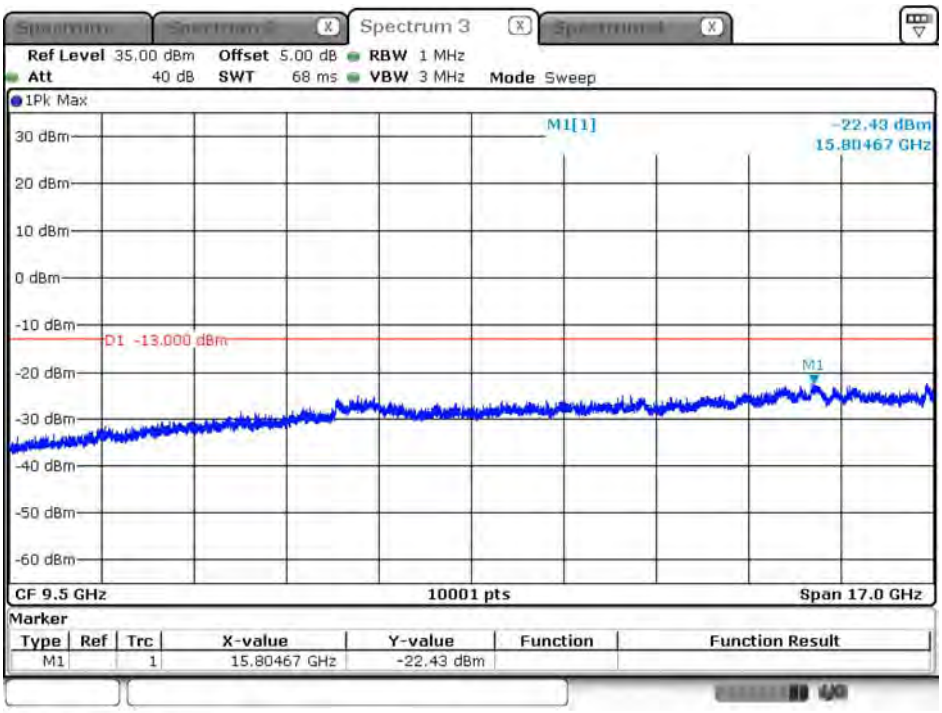
Date: 1.APR.2018 16:43:28

LTE_B13_CH23230_10M_16-QAM_under 1G_25RB12



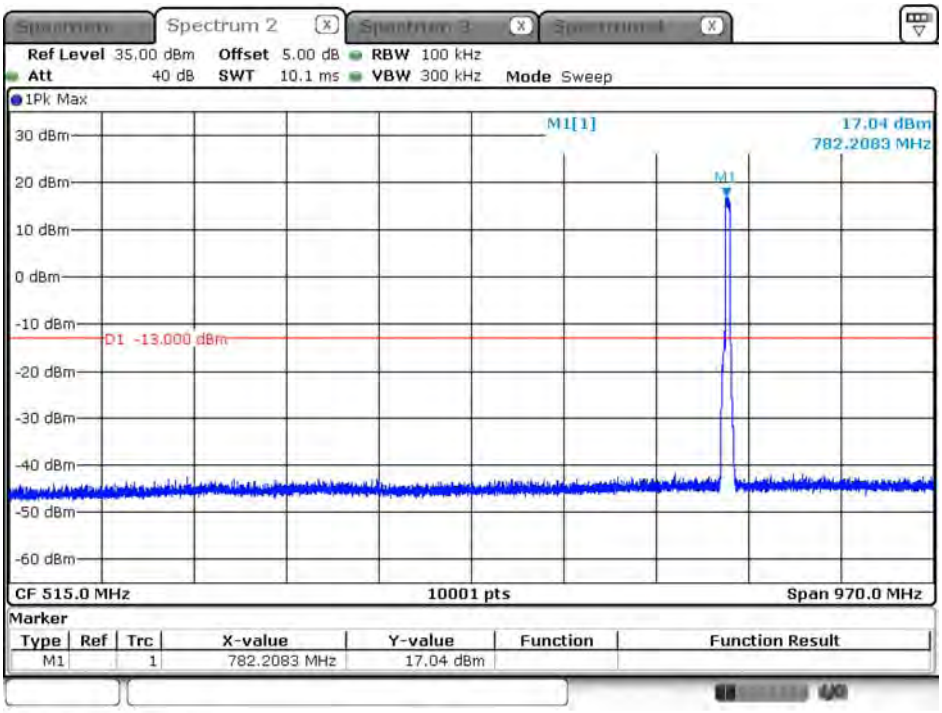
Date: 1.APR.2018 16:41:32

LTE_B13_CH23230_10M_16-QAM_above 1G_25RB24



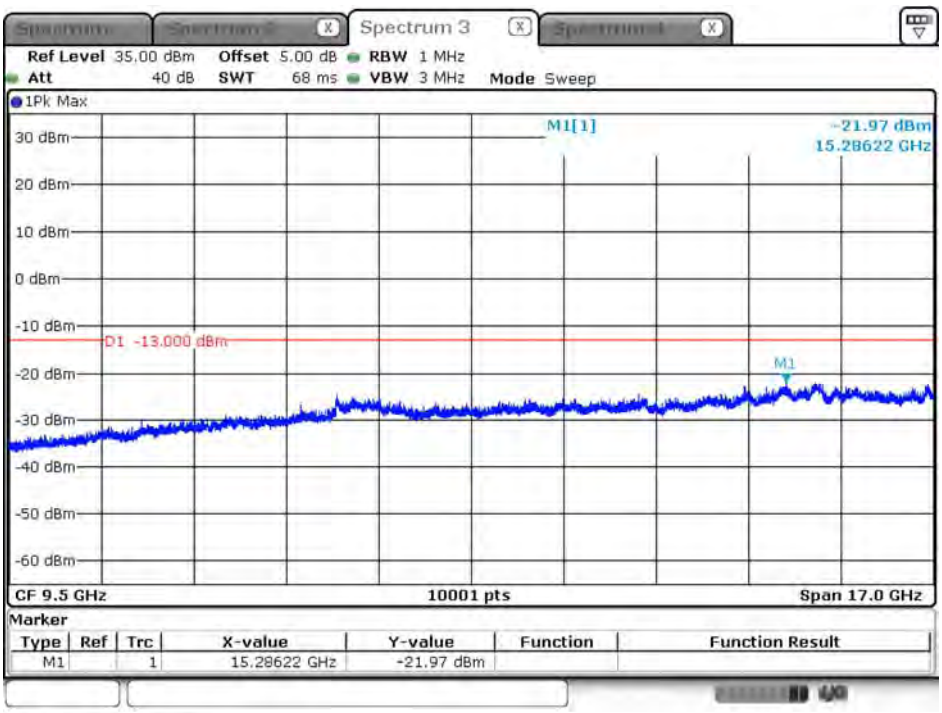
Date: 1.APR.2018 16:55:59

LTE_B13_CH23230_10M_16-QAM_under 1G_25RB24



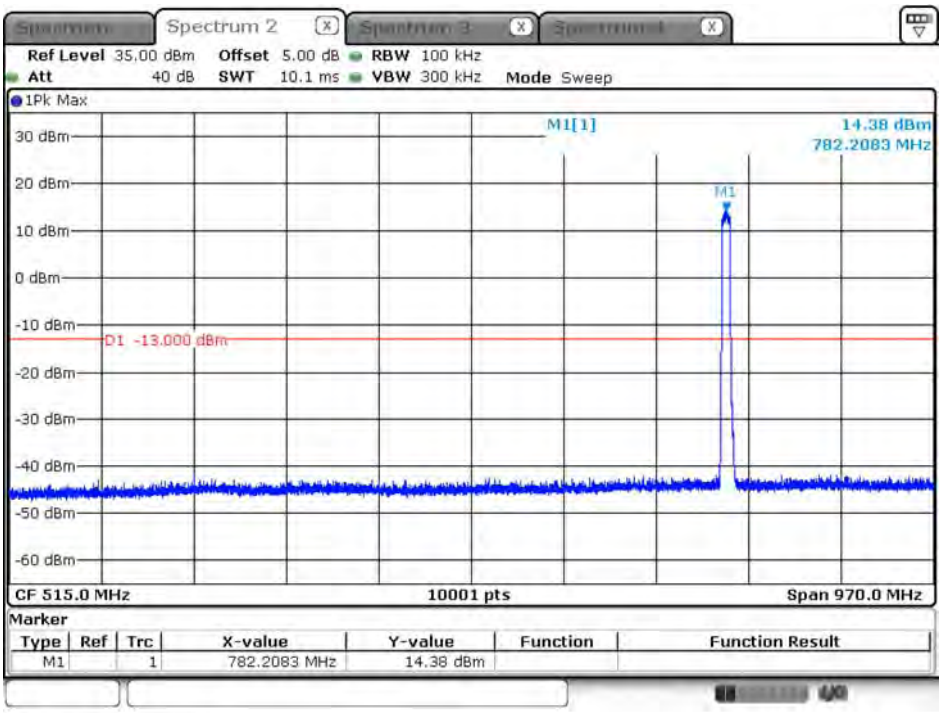
Date: 1.APR.2018 16:57:43

LTE_B13_CH23230_10M_16-QAM_above 1G_50RB0



Date: 1.APR.2018 17:04:37

LTE_B13_CH23230_10M_16-QAM_under 1G_50RB0



Date: 1.APR.2018 17:00:41

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_QPSK_1RB0_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-63.920	H	-64.936	4.300	11.904	-57.332	-13	-44.332
5580.00	-65.570	H	-60.869	5.212	12.900	-53.181	-13	-40.181
3720.00	-63.730	V	-64.605	4.300	11.904	-57.001	-13	-44.001
5580.00	-64.750	V	-59.776	5.212	12.900	-52.088	-13	-39.088
Middle Channel 18900 (1880.00MHz)								
3760.00	-64.230	H	-65.039	4.335	11.832	-57.542	-13	-44.542
5640.00	-65.670	H	-60.775	5.235	12.900	-53.110	-13	-40.110
3760.00	-64.050	V	-64.660	4.335	11.832	-57.163	-13	-44.163
5640.00	-63.550	V	-58.497	5.235	12.900	-50.832	-13	-37.832
High Channel 19100 (1900.00MHz)								
3800.00	-64.090	H	-64.816	4.369	11.760	-57.425	-13	-44.425
5700.00	-66.120	H	-61.030	5.259	12.900	-53.389	-13	-40.389
3800.00	-64.350	V	-64.880	4.369	11.760	-57.489	-13	-44.489
5700.00	-65.510	V	-60.376	5.259	12.900	-52.735	-13	-39.735

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_QPSK_1RB49_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-63.260	H	-64.276	4.300	11.904	-56.672	-13	-43.672
5580.00	-64.850	H	-60.149	5.212	12.900	-52.461	-13	-39.461
3720.00	-61.890	V	-62.765	4.300	11.904	-55.161	-13	-42.161
5580.00	-63.290	V	-58.316	5.212	12.900	-50.628	-13	-37.628
Middle Channel 18900 (1880.00MHz)								
3760.00	-63.690	H	-64.499	4.335	11.832	-57.002	-13	-44.002
5640.00	-65.410	H	-60.515	5.235	12.900	-52.850	-13	-39.850
3760.00	-63.060	V	-63.670	4.335	11.832	-56.173	-13	-43.173
5640.00	-65.180	V	-60.127	5.235	12.900	-52.462	-13	-39.462
High Channel 19100 (1900.00MHz)								
3800.00	-63.560	H	-64.286	4.369	11.760	-56.895	-13	-43.895
5700.00	-66.180	H	-61.090	5.259	12.900	-53.449	-13	-40.449
3800.00	-63.430	V	-63.960	4.369	11.760	-56.569	-13	-43.569
5700.00	-63.890	V	-58.756	5.259	12.900	-51.115	-13	-38.115

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_QPSK_1RB99_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-61.610	H	-62.626	4.300	11.904	-55.022	-13	-42.022
5580.00	-63.130	H	-58.429	5.212	12.900	-50.741	-13	-37.741
3720.00	-62.210	V	-63.085	4.300	11.904	-55.481	-13	-42.481
5580.00	-63.330	V	-58.356	5.212	12.900	-50.668	-13	-37.668
Middle Channel 18900 (1880.00MHz)								
3760.00	-63.260	H	-64.069	4.335	11.832	-56.572	-13	-43.572
5640.00	-65.810	H	-60.915	5.235	12.900	-53.250	-13	-40.250
3760.00	-64.040	V	-64.650	4.335	11.832	-57.153	-13	-44.153
5640.00	-64.840	V	-59.787	5.235	12.900	-52.122	-13	-39.122
High Channel 19100 (1900.00MHz)								
3800.00	-63.660	H	-64.386	4.369	11.760	-56.995	-13	-43.995
5700.00	-65.920	H	-60.830	5.259	12.900	-53.189	-13	-40.189
3800.00	-64.000	V	-64.726	4.369	11.760	-57.335	-13	-44.335
5700.00	-65.440	V	-60.306	5.259	12.900	-52.665	-13	-39.665

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_QPSK_50RB0_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-64.110	H	-65.126	4.300	11.904	-57.522	-13	-44.522
5580.00	-65.940	H	-61.239	5.212	12.900	-53.551	-13	-40.551
3720.00	-63.310	V	-64.185	4.300	11.904	-56.581	-13	-43.581
5580.00	-65.400	V	-60.426	5.212	12.900	-52.738	-13	-39.738
Middle Channel 18900 (1880.00MHz)								
3760.00	-63.760	H	-64.569	4.335	11.832	-57.072	-13	-44.072
5640.00	-65.400	H	-60.505	5.235	12.900	-52.840	-13	-39.840
3760.00	-63.300	V	-63.910	4.335	11.832	-56.413	-13	-43.413
5640.00	-65.000	V	-59.947	5.235	12.900	-52.282	-13	-39.282
High Channel 19100 (1900.00MHz)								
3800.00	-64.020	H	-64.746	4.369	11.760	-57.355	-13	-44.355
5700.00	-65.660	H	-60.570	5.259	12.900	-52.929	-13	-39.929
3800.00	-63.590	V	-64.120	4.369	11.760	-56.729	-13	-43.729
5700.00	-65.630	V	-60.496	5.259	12.900	-52.855	-13	-39.855

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_QPSK_50RB25_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-64.030	H	-65.046	4.300	11.904	-57.442	-13	-44.442
5580.00	-65.590	H	-60.889	5.212	12.900	-53.201	-13	-40.201
3720.00	-63.100	V	-63.975	4.300	11.904	-56.371	-13	-43.371
5580.00	-64.250	V	-59.276	5.212	12.900	-51.588	-13	-38.588
Middle Channel 18900 (1880.00MHz)								
3760.00	-63.720	H	-64.529	4.335	11.832	-57.032	-13	-44.032
5640.00	-65.060	H	-60.165	5.235	12.900	-52.500	-13	-39.500
3760.00	-63.500	V	-64.110	4.335	11.832	-56.613	-13	-43.613
5640.00	-65.360	V	-60.307	5.235	12.900	-52.642	-13	-39.642
High Channel 19100 (1900.00MHz)								
3800.00	-63.990	H	-64.716	4.369	11.760	-57.325	-13	-44.325
5700.00	-65.470	H	-60.380	5.259	12.900	-52.739	-13	-39.739
3800.00	-65.190	V	-65.720	4.369	11.760	-58.329	-13	-45.329
5700.00	-65.760	V	-60.626	5.259	12.900	-52.985	-13	-39.985

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_QPSK_50RB49_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-63.690	H	-64.706	4.300	11.904	-57.102	-13	-44.102
5580.00	-63.690	H	-58.989	5.212	12.900	-51.301	-13	-38.301
3720.00	-63.280	V	-64.155	4.300	11.904	-56.551	-13	-43.551
5580.00	-63.280	V	-58.306	5.212	12.900	-50.618	-13	-37.618
Middle Channel 18900 (1880.00MHz)								
3760.00	-63.780	H	-64.589	4.335	11.832	-57.092	-13	-44.092
5640.00	-65.260	H	-60.365	5.235	12.900	-52.700	-13	-39.700
3760.00	-63.950	V	-64.560	4.335	11.832	-57.063	-13	-44.063
5640.00	-65.040	V	-59.987	5.235	12.900	-52.322	-13	-39.322
High Channel 19100 (1900.00MHz)								
3800.00	-64.400	H	-65.126	4.369	11.760	-57.735	-13	-44.735
5700.00	-65.310	H	-60.220	5.259	12.900	-52.579	-13	-39.579
3800.00	-64.080	V	-64.610	4.369	11.760	-57.219	-13	-44.219
5700.00	-65.130	V	-59.996	5.259	12.900	-52.355	-13	-39.355

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_QPSK_100RB0_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-64.180	H	-65.196	4.300	11.904	-57.592	-13	-44.592
5580.00	-65.450	H	-60.749	5.212	12.900	-53.061	-13	-40.061
3720.00	-63.480	V	-64.355	4.300	11.904	-56.751	-13	-43.751
5580.00	-65.480	V	-60.506	5.212	12.900	-52.818	-13	-39.818
Middle Channel 18900 (1880.00MHz)								
3760.00	-63.820	H	-64.629	4.335	11.832	-57.132	-13	-44.132
5640.00	-65.320	H	-60.425	5.235	12.900	-52.760	-13	-39.760
3760.00	-63.880	V	-64.490	4.335	11.832	-56.993	-13	-43.993
5640.00	-64.840	V	-59.787	5.235	12.900	-52.122	-13	-39.122
High Channel 19100 (1900.00MHz)								
3800.00	-62.890	H	-63.616	4.369	11.760	-56.225	-13	-43.225
5700.00	-65.970	H	-60.880	5.259	12.900	-53.239	-13	-40.239
3800.00	-64.670	V	-65.200	4.369	11.760	-57.809	-13	-44.809
5700.00	-65.880	V	-60.746	5.259	12.900	-53.105	-13	-40.105

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_16-QAM_1RB0_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-63.360	H	-64.376	4.300	11.904	-56.772	-13	-43.772
5580.00	-64.990	H	-60.289	5.212	12.900	-52.601	-13	-39.601
3720.00	-63.840	V	-64.715	4.300	11.904	-57.111	-13	-44.111
5580.00	-65.430	V	-60.456	5.212	12.900	-52.768	-13	-39.768
Middle Channel 18900 (1880.00MHz)								
3760.00	-63.700	H	-64.509	4.335	11.832	-57.012	-13	-44.012
5640.00	-65.420	H	-60.525	5.235	12.900	-52.860	-13	-39.860
3760.00	-64.040	V	-64.650	4.335	11.832	-57.153	-13	-44.153
5640.00	-65.450	V	-60.397	5.235	12.900	-52.732	-13	-39.732
High Channel 19100 (1900.00MHz)								
3800.00	-64.620	H	-65.346	4.369	11.760	-57.955	-13	-44.955
5700.00	-65.910	H	-60.820	5.259	12.900	-53.179	-13	-40.179
3800.00	-63.900	V	-64.430	4.369	11.760	-57.039	-13	-44.039
5700.00	-65.740	V	-60.606	5.259	12.900	-52.965	-13	-39.965

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_16-QAM_1RB49_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-63.620	H	-64.636	4.300	11.904	-57.032	-13	-44.032
5580.00	-65.120	H	-60.419	5.212	12.900	-52.731	-13	-39.731
3720.00	-62.790	V	-63.665	4.300	11.904	-56.061	-13	-43.061
5580.00	-65.120	V	-60.146	5.212	12.900	-52.458	-13	-39.458
Middle Channel 18900 (1880.00MHz)								
3760.00	-64.100	H	-64.909	4.335	11.832	-57.412	-13	-44.412
5640.00	-65.520	H	-60.625	5.235	12.900	-52.960	-13	-39.960
3760.00	-63.360	V	-63.970	4.335	11.832	-56.473	-13	-43.473
5640.00	-65.110	V	-60.057	5.235	12.900	-52.392	-13	-39.392
High Channel 19100 (1900.00MHz)								
3800.00	-64.280	H	-65.006	4.369	11.760	-57.615	-13	-44.615
5700.00	-65.960	H	-60.870	5.259	12.900	-53.229	-13	-40.229
3800.00	-63.900	V	-64.430	4.369	11.760	-57.039	-13	-44.039
5700.00	-65.290	V	-60.156	5.259	12.900	-52.515	-13	-39.515

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_16-QAM_1RB99_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-63.830	H	-64.846	4.300	11.904	-57.242	-13	-44.242
5580.00	-65.520	H	-60.819	5.212	12.900	-53.131	-13	-40.131
3720.00	-63.840	V	-64.715	4.300	11.904	-57.111	-13	-44.111
5580.00	-63.550	V	-58.576	5.212	12.900	-50.888	-13	-37.888
Middle Channel 18900 (1880.00MHz)								
3760.00	-63.360	H	-64.169	4.335	11.832	-56.672	-13	-43.672
5640.00	-65.080	H	-60.185	5.235	12.900	-52.520	-13	-39.520
3760.00	-63.750	V	-64.360	4.335	11.832	-56.863	-13	-43.863
5640.00	-65.350	V	-60.297	5.235	12.900	-52.632	-13	-39.632
High Channel 19100 (1900.00MHz)								
3800.00	-64.140	H	-64.866	4.369	11.760	-57.475	-13	-44.475
5700.00	-66.100	H	-61.010	5.259	12.900	-53.369	-13	-40.369
3800.00	-63.630	V	-64.160	4.369	11.760	-56.769	-13	-43.769
5700.00	-65.870	V	-60.736	5.259	12.900	-53.095	-13	-40.095

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_16-QAM_50RB0_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-63.580	H	-64.596	4.300	11.904	-56.992	-13	-43.992
5580.00	-65.580	H	-60.879	5.212	12.900	-53.191	-13	-40.191
3720.00	-63.680	V	-64.555	4.300	11.904	-56.951	-13	-43.951
5580.00	-63.330	V	-58.356	5.212	12.900	-50.668	-13	-37.668
Middle Channel 18900 (1880.00MHz)								
3760.00	-64.190	H	-64.999	4.335	11.832	-57.502	-13	-44.502
5640.00	-65.180	H	-60.285	5.235	12.900	-52.620	-13	-39.620
3760.00	-63.510	V	-64.120	4.335	11.832	-56.623	-13	-43.623
5460.00	-64.510	V	-59.762	5.169	12.828	-52.103	-13	-39.103
High Channel 19100 (1900.00MHz)								
3800.00	-64.100	H	-64.826	4.369	11.760	-57.435	-13	-44.435
5700.00	-66.010	H	-60.920	5.259	12.900	-53.279	-13	-40.279
3800.00	-63.540	V	-64.070	4.369	11.760	-56.679	-13	-43.679
5700.00	-66.080	V	-60.946	5.259	12.900	-53.305	-13	-40.305

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_16-QAM_50RB25_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-63.510	H	-64.526	4.300	11.904	-56.922	-13	-43.922
5580.00	-65.090	H	-60.389	5.212	12.900	-52.701	-13	-39.701
3720.00	-63.850	V	-64.725	4.300	11.904	-57.121	-13	-44.121
5580.00	-65.140	V	-60.166	5.212	12.900	-52.478	-13	-39.478
Middle Channel 18900 (1880.00MHz)								
3760.00	-63.640	H	-64.449	4.335	11.832	-56.952	-13	-43.952
5640.00	-65.550	H	-60.655	5.235	12.900	-52.990	-13	-39.990
3760.00	-63.960	V	-64.570	4.335	11.832	-57.073	-13	-44.073
5640.00	-65.340	V	-60.287	5.235	12.900	-52.622	-13	-39.622
High Channel 19100 (1900.00MHz)								
3800.00	-63.960	H	-64.686	4.369	11.760	-57.295	-13	-44.295
5700.00	-65.690	H	-60.600	5.259	12.900	-52.959	-13	-39.959
3800.00	-64.710	V	-65.240	4.369	11.760	-57.849	-13	-44.849
5700.00	-65.430	V	-60.296	5.259	12.900	-52.655	-13	-39.655

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_16-QAM_50RB49_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-63.440	H	-64.456	4.300	11.904	-56.852	-13	-43.852
5580.00	-65.830	H	-61.129	5.212	12.900	-53.441	-13	-40.441
3720.00	-63.790	V	-64.665	4.300	11.904	-57.061	-13	-44.061
5580.00	-65.450	V	-60.476	5.212	12.900	-52.788	-13	-39.788
Middle Channel 18900 (1880.00MHz)								
3670.00	-63.970	H	-65.297	4.257	11.994	-57.560	-13	-44.560
5640.00	-65.500	H	-60.605	5.235	12.900	-52.940	-13	-39.940
3760.00	-63.930	V	-64.540	4.335	11.832	-57.043	-13	-44.043
5640.00	-65.070	V	-60.017	5.235	12.900	-52.352	-13	-39.352
High Channel 19100 (1900.00MHz)								
3800.00	-63.910	H	-64.636	4.369	11.760	-57.245	-13	-44.245
5700.00	-66.060	H	-60.970	5.259	12.900	-53.329	-13	-40.329
3800.00	-63.490	V	-64.020	4.369	11.760	-56.629	-13	-43.629
5700.00	-65.890	V	-60.756	5.259	12.900	-53.115	-13	-40.115

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B2_20M_16-QAM_100RB0_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 18700 (1860.00MHz)								
3720.00	-64.460	H	-65.476	4.300	11.904	-57.872	-13	-44.872
5580.00	-65.980	H	-61.279	5.212	12.900	-53.591	-13	-40.591
3720.00	-64.020	V	-64.895	4.300	11.904	-57.291	-13	-44.291
5580.00	-65.250	V	-60.276	5.212	12.900	-52.588	-13	-39.588
Middle Channel 18900 (1880.00MHz)								
3760.00	-63.810	H	-64.619	4.335	11.832	-57.122	-13	-44.122
5640.00	-64.980	H	-59.927	5.235	12.900	-52.262	-13	-39.262
3760.00	-64.230	V	-64.840	4.335	11.832	-57.343	-13	-44.343
5640.00	-65.010	V	-59.957	5.235	12.900	-52.292	-13	-39.292
High Channel 19100 (1900.00MHz)								
3800.00	-63.970	H	-64.696	4.369	11.760	-57.305	-13	-44.305
5700.00	-66.030	H	-60.940	5.259	12.900	-53.299	-13	-40.299
3800.00	-63.940	V	-64.470	4.369	11.760	-57.079	-13	-44.079
5700.00	-65.800	V	-60.666	5.259	12.900	-53.025	-13	-40.025

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 2: LTE Band 4		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B4_10M_QPSK_1RB0_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 20000 (1715.00MHz)								
3430.00	-45.440	H	-47.817	4.069	12.118	-39.768	-13	-26.768
5145.00	-65.570	H	-61.652	5.079	12.261	-54.470	-13	-41.470
3430.00	-51.480	V	-54.147	4.069	12.118	-46.098	-13	-33.098
5145.00	-65.530	V	-61.328	5.079	12.261	-54.146	-13	-41.146
Middle Channel 20175 (1732.50MHz)								
3465.00	-44.550	H	-46.931	4.090	12.209	-38.812	-13	-25.812
5197.50	-65.410	H	-61.454	5.094	12.356	-54.192	-13	-41.192
3465.00	-49.840	V	-52.513	4.090	12.209	-44.394	-13	-31.394
5197.50	-65.350	V	-61.185	5.094	12.356	-53.923	-13	-40.923
High Channel 20325 (1750.00MHz)								
3500.00	-46.900	H	-49.282	4.111	12.300	-41.093	-13	-28.093
5250.00	-64.640	H	-60.644	5.109	12.450	-53.303	-13	-40.303
3500.00	-53.840	V	-56.516	4.111	12.300	-48.327	-13	-35.327
5250.00	-65.460	V	-61.332	5.109	12.450	-53.991	-13	-40.991

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 2: LTE Band 4		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B4_10M_QPSK_1RB24_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 20000 (1715.00MHz)								
3430.00	-44.860	H	-47.237	4.069	12.118	-39.188	-13	-26.188
5145.00	-65.500	H	-61.582	5.079	12.261	-54.400	-13	-41.400
3430.00	-51.340	V	-54.007	4.069	12.118	-45.958	-13	-32.958
5145.00	-65.730	V	-61.528	5.079	12.261	-54.346	-13	-41.346
Middle Channel 20175 (1732.50MHz)								
3465.00	-45.980	H	-48.361	4.090	12.209	-40.242	-13	-27.242
5197.50	-65.400	H	-61.444	5.094	12.356	-54.182	-13	-41.182
3465.00	-51.860	V	-54.533	4.090	12.209	-46.414	-13	-33.414
5197.50	-65.190	V	-61.025	5.094	12.356	-53.763	-13	-40.763
High Channel 20325 (1750.00MHz)								
3500.00	-47.430	H	-49.812	4.111	12.300	-41.623	-13	-28.623
5250.00	-64.414	H	-60.418	5.109	12.450	-53.077	-13	-40.077
3500.00	-54.250	V	-56.926	4.111	12.300	-48.737	-13	-35.737
5250.00	-64.870	V	-60.742	5.109	12.450	-53.401	-13	-40.401

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 2: LTE Band 4		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B4_10M_QPSK_1RB49_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 20000 (1715.00MHz)								
3430.00	-44.830	H	-47.207	4.069	12.118	-39.158	-13	-26.158
5145.00	-65.300	H	-61.382	5.079	12.261	-54.200	-13	-41.200
3430.00	-51.060	V	-53.727	4.069	12.118	-45.678	-13	-32.678
5145.00	-64.870	V	-60.668	5.079	12.261	-53.486	-13	-40.486
Middle Channel 20175 (1732.50MHz)								
3465.00	-45.690	H	-48.071	4.090	12.209	-39.952	-13	-26.952
5197.50	-65.240	H	-61.284	5.094	12.356	-54.022	-13	-41.022
3465.00	-52.240	V	-54.913	4.090	12.209	-46.794	-13	-33.794
5197.50	-65.270	V	-61.105	5.094	12.356	-53.843	-13	-40.843
High Channel 20325 (1750.00MHz)								
3500.00	-53.490	H	-55.872	4.111	12.300	-47.683	-13	-34.683
5250.00	-65.330	H	-61.334	5.109	12.450	-53.993	-13	-40.993
3500.00	-54.070	V	-56.746	4.111	12.300	-48.557	-13	-35.557
5250.00	-64.510	V	-60.382	5.109	12.450	-53.041	-13	-40.041

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 2: LTE Band 4		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B4_10M_QPSK_25RB0_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 20000 (1715.00MHz)								
3430.00	-51.920	H	-54.297	4.069	12.118	-46.248	-13	-33.248
5145.00	-65.820	H	-61.902	5.079	12.261	-54.720	-13	-41.720
3430.00	-57.440	V	-60.107	4.069	12.118	-52.058	-13	-39.058
5145.00	-65.610	V	-61.408	5.079	12.261	-54.226	-13	-41.226
Middle Channel 20175 (1732.50MHz)								
3465.00	-52.620	H	-55.001	4.090	12.209	-46.882	-13	-33.882
5197.50	-65.460	H	-61.504	5.094	12.356	-54.242	-13	-41.242
3465.00	-55.860	V	-58.533	4.090	12.209	-50.414	-13	-37.414
5197.50	-63.670	V	-59.505	5.094	12.356	-52.243	-13	-39.243
High Channel 20325 (1750.00MHz)								
3500.00	-54.040	H	-56.422	4.111	12.300	-48.233	-13	-35.233
5250.00	-64.240	H	-60.244	5.109	12.450	-52.903	-13	-39.903
3500.00	-59.510	V	-62.186	4.111	12.300	-53.997	-13	-40.997
5250.00	-65.140	V	-61.012	5.109	12.450	-53.671	-13	-40.671

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 2: LTE Band 4		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B4_10M_QPSK_25RB12_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 20000 (1715.00MHz)								
3430.00	-52.170	H	-54.547	4.069	12.118	-46.498	-13	-33.498
5145.00	-65.960	H	-62.042	5.079	12.261	-54.860	-13	-41.860
3430.00	-57.660	V	-60.327	4.069	12.118	-52.278	-13	-39.278
5145.00	-65.300	V	-61.098	5.079	12.261	-53.916	-13	-40.916
Middle Channel 20175 (1732.50MHz)								
3465.00	-52.640	H	-55.021	4.090	12.209	-46.902	-13	-33.902
5197.50	-64.830	H	-60.874	5.094	12.356	-53.612	-13	-40.612
3465.00	-58.180	V	-60.853	4.090	12.209	-52.734	-13	-39.734
5197.50	-63.980	V	-59.815	5.094	12.356	-52.553	-13	-39.553
High Channel 20325 (1750.00MHz)								
3500.00	-57.430	H	-59.812	4.111	12.300	-51.623	-13	-38.623
5250.00	-65.080	H	-61.084	5.109	12.450	-53.743	-13	-40.743
3500.00	-60.100	V	-62.776	4.111	12.300	-54.587	-13	-41.587
5250.00	-65.370	V	-61.242	5.109	12.450	-53.901	-13	-40.901

Product	Module		
Test Item	Radiated Spurious Emission		
Test Mode	Mode 2: LTE Band 4		
Date of Test	2018/04/17	Test Site	CB4-H

LTE_B4_10M_QPSK_25RB24_Link

Frequency (MHz)	SA Reading (dBm)	Ant.Pol. (H/V)	SG Reading (dBm)	Cable Loss (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)
Low Channel 20000 (1715.00MHz)								
3430.00	-51.770	H	-54.147	4.069	12.118	-46.098	-13	-33.098
5145.00	-65.880	H	-61.962	5.079	12.261	-54.780	-13	-41.780
3430.00	-57.930	V	-60.597	4.069	12.118	-52.548	-13	-39.548
5145.00	-65.640	V	-61.438	5.079	12.261	-54.256	-13	-41.256
Middle Channel 20175 (1732.50MHz)								
3465.00	-51.980	H	-54.361	4.090	12.209	-46.242	-13	-33.242
5197.50	-65.660	H	-61.704	5.094	12.356	-54.442	-13	-41.442
3465.00	-58.630	V	-61.303	4.090	12.209	-53.184	-13	-40.184
5197.50	-65.310	V	-61.145	5.094	12.356	-53.883	-13	-40.883
High Channel 20325 (1750.00MHz)								
3500.00	-54.010	H	-56.392	4.111	12.300	-48.203	-13	-35.203
5250.00	-65.090	H	-61.094	5.109	12.450	-53.753	-13	-40.753
3500.00	-60.360	V	-63.036	4.111	12.300	-54.847	-13	-41.847
5250.00	-64.320	V	-60.192	5.109	12.450	-52.851	-13	-39.851