FCC 47 CFR PART 27
&
INDUSTRY CANADA RSS-130 & RSS-139

For

Body Worn Camera

FCC Model No.: BC-03

ISED Model No.: ATT-WP7603

Trade Name: Getac

Issued to

Getac Technology Corp.
5F, Building A, No.209, Sec.1, Nangang Rd., Nangang Dist., Taipei City 11568, Taiwan.

Issued by

Compliance Certification Services Inc.
No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City 24891, Taiwan. (R.O.C.)
Issued Date: June 12, 2019

Revision History

Rev.		Issue Date		Revisions	Effect Page	Revised By
00		June 12, 2019		Initial Issue	ALL	May Lin

TABLE OF CONTENTS

1. TEST RESULT CERTIFICATION

Applicant:	Getac Technology Corp. 5F, Building A, No.209, Sec.1, Nangang Rd., Nangang Dist., Taipei City 11568, Taiwan.
Manufacturer:	Getac Technology Corp. 4F., NO.1, R&D ROAD 2, SCIENCE PARK, HSINCHU, TAIWAN, R.O.C.
Equipment Under Test:	Body Worn Camera
Trade Name:	Getac
FCC Model No.:	BC-03
ISED Model No.:	ATT-WP7603
Date of Test:	February 18 ~ March 13, 2019

APPLICABLE STANDARDS	
Standard	**TEST RESULT**
FCC Part 27, FCC Part 2 & RSS-130 Issue 1 October 2013 & RSS-139 Issue 3 July 2015	No non-compliance noted

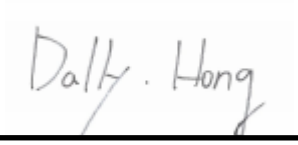
Statements of Conformity
Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by

Kevin Tsai
Deputy Manager
Compliance Certification Services Inc.

Tested by



Dally Hong
Engineer
Compliance Certification Services Inc.

2. EUT DESCRIPTION

Product	Body Worn Camera	
FCC Model No.	BC-03	
ISED Model No.	ATT-WP7603	
Model Discrepancy	N/A	
Trade	Getac	
Received Date	January 15, 2019	
Power Supply	1. Powered from battery: DC 5V 2. Powered from docking	
Modulation Technology	LTE Band 12	QPSK, 16QAM
	LTE Band 4	QPSK, 16QAM
Frequency Range	LTE Band 12 Channel Bandwidth: 1.4MHz	699.7MHz ~ 715.3MHz
	LTE Band 12 Channel Bandwidth: 3MHz	700.5MHz ~ 714.5MHz
	LTE Band 12 Channel Bandwidth: 5MHz	701.5MHz ~ 713.5MHz
	LTE Band 12 Channel Bandwidth: 10MHz	704.0MHz ~ 711.0MHz
	LTE Band 4 Channel Bandwidth: 1.4MHz	1710.7MHz ~1754.2MHz
	LTE Band 4 Channel Bandwidth: 3MHz	1711.5MHz ~ 1753.4MHz
	LTE Band 4 Channel Bandwidth: 5MHz	1712.5MHz ~1752.5MHz
	LTE Band 4 Channel Bandwidth: 10MHz	1715.0MHz ~1750.0MHz
	LTE Band 4 Channel Bandwidth: 15MHz	1717.5MHz ~ 1747.5MHz
	LTE Band 4 Channel Bandwidth: 20MHz	1720MHz ~1745MHz
Maximum ERP Power	LTE Band 12 Channel Bandwidth: 1.4MHz	QPSK: 25.50 dBm 16QAM: 25.61 dBm
	LTE Band 12 Channel Bandwidth: 3MHz	QPSK: 25.11 dBm 16QAM: 25.03 dBm
	LTE Band 12 Channel Bandwidth: 5MHz	QPSK: 25.26 dBm 16QAM: 25.35 dBm

	LTE Band 12 Channel Bandwidth: 10MHz	QPSK: 25.46 dBm 16QAM: 25.49 dBm
Maximum EIRP Power	LTE Band 4 Channel Bandwidth: 1.4MHz	QPSK: 27.98 dBm 16QAM: 27.68 dBm
	LTE Band 4 Channel Bandwidth: 3MHz	QPSK: 27.91 dBm 16QAM: 27.78 dBm
	LTE Band 4 Channel Bandwidth: 5MHz	QPSK: 28.04 dBm 16QAM: 27.76 dBm
	LTE Band 4 Channel Bandwidth: 10MHz	QPSK: 28.27 dBm 16QAM: 27.87 dBm
	LTE Band 4 Channel Bandwidth: 15MHz	QPSK: 28.03 dBm 16QAM: 27.74 dBm
	LTE Band 4 Channel Bandwidth: 20MHz	QPSK: 26.72 dBm 16QAM: 26.46 dBm
Antenna Specification	Coupling Antenna LTE Band 4: Gain: 0.86dBi LTE Band 12: Gain: -2.76dBi	

Note: *1. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.*

3. TEST METHODOLOGY

3.1 DESCRIPTION OF TEST TYPE

The EUT had been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting mode was programmed.

LTE Band 12: 699 MHz ~ 716 MHz

Three channels had been tested for each channel bandwidth.

Channel Bandwidth	1.4MHz		3MHz	
	Channel	Frequency(MHz)	Channel	Frequency(MHz)
Low channel (L)	23017	699.7	23025	700.5
Middle channel (M)	23095	707.5	23095	707.5
High channel (H)	23173	715.3	23165	714.5
Channel Bandwidth	**5MHz**		**10MHz**	
	Channel	**Frequency(MHz)**	**Channel**	**Frequency(MHz)**
Low channel (L)	23035	701.5	23060	704.0
Middle channel (M)	23095	707.5	23095	707.5
High channel (H)	23155	713.5	23130	711.0

LTE Band 4: 1710MHz ~ 1755MHz

Three channels had been tested for each channel bandwidth.

Channel Bandwidth	1.4MHz		3MHz		5MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low channel (L)	19957	1710.7	19965	1711.5	19975	1712.5
Middle channel (M)	20175	1732.5	20175	1732.5	20175	1732.5
High channel (H)	20393	1754.3	20384	1753.4	20375	1752.5
Channel Bandwidth	**10MHz**		**15MHz**		**20MHz**	
	Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
Low channel (L)	20000	1715.0	20025	1717.5	20050	1720
Middle channel (M)	20175	1732.5	20175	1732.5	20175	1732.5
High channel (H)	20350	1750.0	20325	1747.5	20300	1745

For test mode:
The conducted power be measured in 1, 50% and 100% RB allocation, offset to upper edge, centered and lower edge of the channel bandwidth of each required channel.

	QPSK	Worst Mode	16QAM	Worst Mode
Band 4	1.4M	1 RB ALLOCATED AT THE LOWER EDGE	1.4M	1 RB ALLOCATED AT THE LOWER EDGE
	3M	1 RB ALLOCATED AT THE LOWER EDGE	3M	1 RB ALLOCATED AT THE LOWER EDGE
	5M	1 RB ALLOCATED AT THE LOWER EDGE	5M	1 RB ALLOCATED AT THE LOWER EDGE
	10M	1 RB ALLOCATED AT THE LOWER EDGE	10M	1 RB ALLOCATED AT THE LOWER EDGE
	15M	1 RB ALLOCATED AT THE LOWER EDGE	15M	1 RB ALLOCATED AT THE LOWER EDGE
	20M	1 RB ALLOCATED AT THE LOWER EDGE	20M	1 RB ALLOCATED AT THE LOWER EDGE
Band 12	1.4M	1 RB ALLOCATED AT THE LOWER EDGE	1.4M	1 RB ALLOCATED AT THE LOWER EDGE
	3M	1 RB ALLOCATED AT THE LOWER EDGE	3M	1 RB ALLOCATED AT THE LOWER EDGE
	5M	1 RB ALLOCATED AT THE LOWER EDGE	5M	1 RB ALLOCATED AT THE LOWER EDGE
	10M	1 RB ALLOCATED AT THE LOWER EDGE	10M	1 RB ALLOCATED AT THE LOWER EDGE

3.2 The worst mode of measurement

Radiated Emission Measurement	
Test Condition	**Band edge, Emission for Unwanted and Fundamental**
Power supply Mode	**Mode 1: EUT Power by Docking (Big).** **Mode 2: EUT Power by Docking (Small).** **Mode 3: EUT Power by Battery.**
Worst Mode	☒ **Mode 1** ☐ **Mode 2** ☐ **Mode 3** ☐ **Mode 4**
Position	☐ **P**laced in fixed position. ☒ **P**laced in fixed position at X-Plane (E2-Plane) ☐ **P**laced in fixed position at Y-Plane (E1-Plane) ☐ **P**laced in fixed position at Z-Plane (H-Plane)

Radiated Emission Measurement Below 1G	
Test Condition	**Radiated Emission Below 1G**
Power supply Mode	**Mode 1: EUT Power by Docking (Big).** **Mode 2: EUT Power by Docking (Small).** **Mode 3: EUT Power by Battery.**
Worst Mode	☒ **Mode 1** ☐ **Mode 2** ☐ **Mode 3** ☐ **Mode 4**

Remark:
1. The worst mode was record in this test report.
2. The EUT pre-scanned in three axis, X, Y, Z and two polarity, Horizontal and Vertical for radiated measurement. The worst case (X-Plane) were recorded in this report.

4. Test Summery

FCC Standard Sec.	IC Standard Sec.	Chapter	Test Item	Result
2.1046	RSS GEN 6.12	8.1	OUTPUT POWER MEASUREMENT	Pass
27.50 (c) 27.50 (d)	RSS-130 RSS-139	8.2	ERP & EIRP	Pass
27.54	RSS-130 RSS-139	8.3	FREQUENCY STABILITY	Pass
2.1049	RSS-GEN Sec. 6.6	8.4	OCCUPIED BANDWIDTH	Pass
27.50	RSS-130 RSS-139	8.5	PEAK TO AVERAGE POWER RATIO	Pass
27.53	RSS-130 RSS-139	8.6	BAND EDGE	Pass
27.53	RSS-130 RSS-139	8.7	CONDUCTED SPURIOUS EMISSIONS	Pass
27.53	RSS-130 RSS-139	8.8	RADIATED EMISSION	Pass

5. INSTRUMENT CALIBRATION

5.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

5.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Conducted Emissions Test Site					
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Date**	**Calibration Due**
Coaxial Cable	Woken	WC12	CC001	06/29/2018	06/28/2019
Coaxial Cable	Woken	WC12	CC002	06/29/2018	06/28/2019
Coaxial Cable	Woken	WC12	CC003	06/29/2018	06/28/2019
Power Divider	Solvang Technology	STI08-0015	008	07/27/2018	07/26/2019
Wideband Radio Communication Tester	R&S	CMW 500	116875	04/20/2018	04/19/2019
Signal Analyzer	R&S	FSV 40	101073	09/27/2018	09/26/2019
Wireless Communication Test Set	Agilent	8960/E5515C	MY48363204	07/23/2018	07/22/2019
Software	N/A				

Wugu 966 Chamber A					
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Date**	**Calibration Due**
Bilog Antenna	Sunol Sciences	JB1	A052609	03/14/2018	03/13/2019
Cable	HUBER SUHNER	SUCOFLEX 104PEA	23452	06/29/2018	06/28/2019
Cable	HUBER SUHNER	SUCOFLEX 104PEA	33960	06/29/2018	06/28/2019
Digital Radio Communication Tester	R&S	CMU200	116604	07/19/2018	07/18/2019
Digital Thermo-Hygro Meter	WISEWIND	1110	D06	01/30/2019	01/29/2020
Horn Antenna	SCHWARZBECK	BBHA 9120D	779	03/14/2018	03/13/2019
Pre-Amplifier	Anritsu	MH648A	M89145	06/29/2018	06/28/2019
Pre-Amplifier	EMEC	EM01G26G	060570	06/29/2018	06/28/2019
Signal Analyzer	Agilent	N9010A	MY52220817	03/22/2018	03/21/2019
Wideband Radio Communication Tester	R&S	CMW 500	116875	04/20/2018	04/19/2019
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	EZ-EMC (CCS-3A1RE)				

Remark: *Each piece of equipment is scheduled for calibration once a year.*

5.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
3M Semi Anechoic Chamber / 30M~200M	+/-1.2575
3M Semi Anechoic Chamber / 200M~1000M	+/- 4.12
3M Semi Anechoic Chamber / 1G~8G	+/- 4.68
3M Semi Anechoic Chamber / 8G~18G	+/- 5.18
3M Semi Anechoic Chamber / 18G~26G	+/- 5.47
3M Semi Anechoic Chamber / 26G~40G	+/- 3.81

***Remark**: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.*

6. FACILITIES AND ACCREDITATIONS

6.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

☐ No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.
Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

☒ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan. (R.O.C.)
Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10: 2013 and CISPR Publication 22.

6.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

7. SETUP OF EQUIPMENT UNDER TEST

7.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix I for the actual connections between EUT and support equipment.

7.2 SUPPORT EQUIPMENT

No	Equipment	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
	N/A						

Remark:

1. *All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.*
2. *Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.*

8. TEST PROCEDURE AND RESULT

8.1 OUTPUT POWER MEASUREMENT

TEST PROCEDURES

CONDUCTED POWER MEASUREMENT:

1. The transmitter output power was connected to the call box.
2. Set EUT at maximum output power via call box.
3. Set Call box at lowest, middle and highest channels for each band and modulation.

TEST RESULTS

LTE Band 12

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power(dBm)	Output Power (W)
12	10	23060	704.0	QPSK	1	0	0	22.3	0.16788
					1	24	0	22.2	0.16482
					1	49	0	22.1	0.16144
					25	0	1	22.0	0.15922
					25	12	1	21.7	0.14859
					25	24	1	21.5	0.14158
					50	0	1	21.6	0.14454
				16QAM	1	0	1	22.0	0.15668
					1	24	1	21.9	0.15596
					1	49	1	21.9	0.15417
					25	0	2	20.6	0.11535
					25	12	2	20.5	0.11324
					25	24	2	20.5	0.11143
					50	0	2	20.6	0.11350
		23095	707.5	QPSK	1	0	0	22.2	0.16520
					1	24	0	22.1	0.16032
					1	49	0	22.2	0.16406
					25	0	1	21.2	0.13274
					25	12	1	21.2	0.13152
					25	24	1	21.2	0.13062
					50	0	1	21.2	0.13092
				16QAM	1	0	1	21.2	0.13243
					1	24	1	21.2	0.13305
					1	49	1	21.2	0.13152
					25	0	2	20.3	0.10765
					25	12	2	20.3	0.10691
					25	24	2	20.2	0.10447
					50	0	2	20.2	0.10351
		23130	711.0	QPSK	1	0	0	22.1	0.16181
					1	24	0	22.1	0.16293
					1	49	0	22.0	0.15996
					25	0	1	21.3	0.13552
					25	12	1	21.3	0.13397
					25	24	1	21.2	0.13243
					50	0	1	21.2	0.13152
				16QAM	1	0	1	21.5	0.14256
					1	24	1	21.5	0.14060
					1	49	1	21.4	0.13932
					25	0	2	20.6	0.11482
					25	12	2	20.5	0.11272
					25	24	2	20.5	0.11194
					50	0	2	20.5	0.11298

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power(dBm)	Output Power (W)
12	5	23035	701.5	QPSK	1	0	0	22.2	0.16596
					1	12	0	22.1	0.16293
					1	24	0	22.0	0.15959
					12	0	1	22.0	0.15740
					12	6	1	21.7	0.14689
					12	11	1	21.5	0.13996
					25	0	1	21.6	0.14289
				16QAM	1	0	1	21.9	0.15488
					1	12	1	21.9	0.15417
					1	24	1	21.8	0.15241
					12	0	2	20.6	0.11402
					12	6	2	20.5	0.11194
					12	11	2	20.4	0.11015
					25	0	2	20.5	0.11220
		23095	707.5	QPSK	1	0	0	22.1	0.16368
					1	12	0	22.0	0.15885
					1	24	0	22.1	0.16255
					12	0	1	21.2	0.13152
					12	6	1	21.2	0.13032
					12	11	1	21.1	0.12942
					25	0	1	21.1	0.12972
				16QAM	1	0	1	21.2	0.13122
					1	12	1	21.2	0.13183
					1	24	1	21.2	0.13032
					12	0	2	20.3	0.10666
					12	6	2	20.3	0.10593
					12	11	2	20.2	0.10351
					25	0	2	20.1	0.10257
		23155	713.5	QPSK	1	0	0	22.0	0.15922
					1	12	0	22.1	0.16032
					1	24	0	22.0	0.15740
					12	0	1	21.3	0.13335
					12	6	1	21.2	0.13183
					12	11	1	21.2	0.13032
					25	0	1	21.1	0.12942
				16QAM	1	0	1	21.5	0.14028
					1	12	1	21.4	0.13836
					1	24	1	21.4	0.13709
					12	0	2	20.5	0.11298
					12	6	2	20.5	0.11092
					12	11	2	20.4	0.11015
					25	0	2	20.5	0.11117

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power(dBm)	Output Power (W)
12	3	23025	700.5	QPSK	1	0	0	22.2	0.16520
					1	7	0	22.1	0.16218
					1	14	0	22.0	0.15885
					8	0	1	22.0	0.15668
					8	4	1	21.7	0.14622
					8	7	1	21.4	0.13932
					15	0	1	21.5	0.14223
				16QAM	1	0	1	21.9	0.15417
					1	7	1	21.9	0.15346
					1	14	1	21.8	0.15171
					8	0	2	20.6	0.11350
					8	4	2	20.5	0.11143
					8	7	2	20.4	0.10965
					15	0	2	20.5	0.11169
		23095	707.5	QPSK	1	0	0	22.1	0.16331
					1	7	0	22.0	0.15849
					1	14	0	22.1	0.16218
					8	0	1	21.2	0.13122
					8	4	1	21.1	0.13002
					8	7	1	21.1	0.12912
					15	0	1	21.1	0.12942
				16QAM	1	0	1	21.2	0.13092
					1	7	1	21.2	0.13152
					1	14	1	21.1	0.13002
					8	0	2	20.3	0.10641
					8	4	2	20.2	0.10568
					8	7	2	20.1	0.10328
					15	0	2	20.1	0.10233
		23165	714.5	QPSK	1	0	0	22.0	0.15849
					1	7	0	22.0	0.15959
					1	14	0	22.0	0.15668
					8	0	1	21.2	0.13274
					8	4	1	21.2	0.13122
					8	7	1	21.1	0.12972
					15	0	1	21.1	0.12882
				16QAM	1	0	1	21.5	0.13964
					1	7	1	21.4	0.13772
					1	14	1	21.4	0.13646
					8	0	2	20.5	0.11246
					8	4	2	20.4	0.11041
					8	7	2	20.4	0.10965
					15	0	2	20.4	0.11066

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power(dBm)	Output Power (W)
12	1.4	23017	699.7	QPSK	1	0	0	22.2	0.16406
					1	2	0	22.1	0.16106
					1	5	0	22.0	0.15776
					3	0	1	21.9	0.15560
					3	1	1	21.6	0.14521
					3	2	1	21.4	0.13836
					6	0	1	21.5	0.14125
				16QAM	1	0	1	21.9	0.15311
					1	2	1	21.8	0.15241
					1	5	1	21.8	0.15066
					3	0	2	20.5	0.11272
					3	1	2	20.4	0.11066
					3	2	2	20.4	0.10889
					6	0	2	20.5	0.11092
		23095	707.5	QPSK	1	0	0	22.1	0.16293
					1	2	0	22.0	0.15812
					1	5	0	22.1	0.16181
					3	0	1	21.2	0.13092
					3	1	1	21.1	0.12972
					3	2	1	21.1	0.12882
					6	0	1	21.1	0.12912
				16QAM	1	0	1	21.2	0.13062
					1	2	1	21.2	0.13122
					1	5	1	21.1	0.12972
					3	0	2	20.3	0.10617
					3	1	2	20.2	0.10544
					3	2	2	20.1	0.10304
					6	0	2	20.1	0.10209
		23173	715.3	QPSK	1	0	0	22.0	0.15776
					1	2	0	22.0	0.15885
					1	5	0	21.9	0.15596
					3	0	1	21.2	0.13213
					3	1	1	21.2	0.13062
					3	2	1	21.1	0.12912
					6	0	1	21.1	0.12823
				16QAM	1	0	1	21.4	0.13900
					1	2	1	21.4	0.13709
					1	5	1	21.3	0.13583
					3	0	2	20.5	0.11194
					3	1	2	20.4	0.10990
					3	2	2	20.4	0.10914
					6	0	2	20.4	0.11015

LTE Band 4

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power(dBm)	Output Power (W)
4	20	20050	1720.0	QPSK	1	0	0	23.0	0.19953
					1	49	0	22.9	0.19679
					1	99	0	22.7	0.18621
					50	0	1	22.0	0.15996
					50	24	1	22.2	0.16634
					50	49	1	22.0	0.15885
					100	0	1	22.0	0.15922
				16QAM	1	0	1	22.2	0.16406
					1	49	1	22.1	0.16181
					1	99	1	22.0	0.15996
					50	0	2	21.1	0.12823
					50	24	2	21.2	0.13032
					50	49	2	21.0	0.12618
					100	0	2	21.0	0.12706
		20175	1732.5	QPSK	1	0	0	23.0	0.19770
					1	49	0	22.8	0.19231
					1	99	0	22.7	0.18793
					50	0	1	22.0	0.15885
					50	24	1	21.9	0.15631
					50	49	1	21.9	0.15417
					100	0	1	22.0	0.15704
				16QAM	1	0	1	22.0	0.15776
					1	49	1	22.0	0.15668
					1	99	1	21.9	0.15560
					50	0	2	21.0	0.12531
					50	24	2	21.0	0.12445
					50	49	2	21.0	0.12560
					100	0	2	20.9	0.12274
		20300	1745.0	QPSK	1	0	0	22.7	0.18793
					1	49	0	22.8	0.19099
					1	99	0	22.8	0.18967
					50	0	1	22.0	0.15704
					50	24	1	21.9	0.15631
					50	49	1	21.9	0.15560
					100	0	1	22.1	0.16032
				16QAM	1	0	1	22.1	0.16069
					1	49	1	22.1	0.16293
					1	99	1	22.1	0.16181
					50	0	2	22.0	0.15776
					50	24	2	21.9	0.15382
					50	49	2	21.8	0.15101
					100	0	2	21.8	0.15205

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power(dBm)	Output Power (W)
4	15	20025	1717.5	QPSK	1	0	0	22.9	0.19588
					1	37	0	22.9	0.19320
					1	74	0	22.6	0.18281
					36	0	1	22.0	0.15704
					36	18	1	22.1	0.16331
					36	35	1	21.9	0.15596
					75	0	1	21.9	0.15631
				16QAM	1	0	1	22.1	0.16106
					1	37	1	22.0	0.15885
					1	74	1	22.0	0.15704
					36	0	2	21.0	0.12589
					36	18	2	21.1	0.12794
					36	35	2	20.9	0.12388
					75	0	2	21.0	0.12474
		20175	1732.5	QPSK	1	0	0	22.9	0.19498
					1	37	0	22.8	0.18967
					1	74	0	22.7	0.18535
					36	0	1	22.0	0.15668
					36	18	1	21.9	0.15417
					36	35	1	21.8	0.15205
					75	0	1	21.9	0.15488
				16QAM	1	0	1	21.9	0.15560
					1	37	1	21.9	0.15453
					1	74	1	21.9	0.15346
					36	0	2	20.9	0.12359
					36	18	2	20.9	0.12274
					36	35	2	20.9	0.12388
					75	0	2	20.8	0.12106
		20325	1747.5	QPSK	1	0	0	22.7	0.18578
					1	37	0	22.8	0.18880
					1	74	0	22.7	0.18750
					36	0	1	21.9	0.15524
					36	18	1	21.9	0.15453
					36	35	1	21.9	0.15382
					75	0	1	22.0	0.15849
				16QAM	1	0	1	22.0	0.15885
					1	37	1	22.1	0.16106
					1	74	1	22.0	0.15996
					36	0	2	21.9	0.15596
					36	18	2	21.8	0.15205
					36	35	2	21.7	0.14928
					75	0	2	21.8	0.15031

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power(dBm)	Output Power (W)
4	10	20000	1715.0	QPSK	1	0	0	22.9	0.19454
					1	24	0	22.8	0.19187
					1	49	0	22.6	0.18155
					25	0	1	21.9	0.15596
					25	12	1	22.1	0.16218
					25	24	1	21.9	0.15488
					50	0	1	21.9	0.15524
				16QAM	1	0	1	22.0	0.15996
					1	24	1	22.0	0.15776
					1	49	1	21.9	0.15596
					25	0	2	21.0	0.12503
					25	12	2	21.0	0.12706
					25	24	2	20.9	0.12303
					50	0	2	20.9	0.12388
		20175	1732.5	QPSK	1	0	0	22.9	0.19409
					1	24	0	22.8	0.18880
					1	49	0	22.7	0.18450
					25	0	1	21.9	0.15596
					25	12	1	21.9	0.15346
					25	24	1	21.8	0.15136
					50	0	1	21.9	0.15417
				16QAM	1	0	1	21.9	0.15488
					1	24	1	21.9	0.15382
					1	49	1	21.8	0.15276
					25	0	2	20.9	0.12303
					25	12	2	20.9	0.12218
					25	24	2	20.9	0.12331
					50	0	2	20.8	0.12050
		20350	1750.0	QPSK	1	0	0	22.7	0.18493
					1	24	0	22.7	0.18793
					1	49	0	22.7	0.18664
					25	0	1	21.9	0.15453
					25	12	1	21.9	0.15382
					25	24	1	21.9	0.15311
					50	0	1	22.0	0.15776
				16QAM	1	0	1	22.0	0.15812
					1	24	1	22.1	0.16032
					1	49	1	22.0	0.15922
					25	0	2	21.9	0.15524
					25	12	2	21.8	0.15136
					25	24	2	21.7	0.14859
					50	0	2	21.8	0.14962

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power(dBm)	Output Power (W)
4	5	19975	1712.5	QPSK	1	0	0	22.9	0.19409
					1	12	0	22.8	0.19143
					1	24	0	22.6	0.18113
					12	0	1	21.9	0.15560
					12	6	1	22.1	0.16181
					12	11	1	21.9	0.15453
					25	0	1	21.9	0.15488
				16QAM	1	0	1	22.0	0.15959
					1	12	1	22.0	0.15740
					1	24	1	21.9	0.15560
					12	0	2	21.0	0.12474
					12	6	2	21.0	0.12677
					12	11	2	20.9	0.12274
					25	0	2	20.9	0.12359
		20175	1732.5	QPSK	1	0	0	22.9	0.19320
					1	12	0	22.7	0.18793
					1	24	0	22.6	0.18365
					12	0	1	21.9	0.15524
					12	6	1	21.8	0.15276
					12	11	1	21.8	0.15066
					25	0	1	21.9	0.15346
				16QAM	1	0	1	21.9	0.15417
					1	12	1	21.9	0.15311
					1	24	1	21.8	0.15205
					12	0	2	20.9	0.12246
					12	6	2	20.9	0.12162
					12	11	2	20.9	0.12274
					25	0	2	20.8	0.11995
		20375	1752.5	QPSK	1	0	0	22.6	0.18365
					1	12	0	22.7	0.18664
					1	24	0	22.7	0.18535
					12	0	1	21.9	0.15346
					12	6	1	21.8	0.15276
					12	11	1	21.8	0.15205
					25	0	1	22.0	0.15668
				16QAM	1	0	1	22.0	0.15704
					1	12	1	22.0	0.15922
					1	24	1	22.0	0.15812
					12	0	2	21.9	0.15417
					12	6	2	21.8	0.15031
					12	11	2	21.7	0.14757
					25	0	2	21.7	0.14859

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power(dBm)	Output Power (W)
4	3	19965	1711.5	QPSK	1	0	0	22.9	0.19320
					1	7	0	22.8	0.19055
					1	14	0	22.6	0.18030
					8	0	1	21.9	0.15488
					8	4	1	22.1	0.16106
					8	7	1	21.9	0.15382
					15	0	1	21.9	0.15417
				16QAM	1	0	1	22.0	0.15885
					1	7	1	22.0	0.15668
					1	14	1	21.9	0.15488
					8	0	2	20.9	0.12417
					8	4	2	21.0	0.12618
					8	7	2	20.9	0.12218
					15	0	2	20.9	0.12303
		20175	1732.5	QPSK	1	0	0	22.9	0.19275
					1	7	0	22.7	0.18750
					1	14	0	22.6	0.18323
					8	0	1	21.9	0.15488
					8	4	1	21.8	0.15241
					8	7	1	21.8	0.15031
					15	0	1	21.9	0.15311
				16QAM	1	0	1	21.9	0.15382
					1	7	1	21.8	0.15276
					1	14	1	21.8	0.15171
					8	0	2	20.9	0.12218
					8	4	2	20.8	0.12134
					8	7	2	20.9	0.12246
					15	0	2	20.8	0.11967
		20384	1753.4	QPSK	1	0	0	22.6	0.18323
					1	7	0	22.7	0.18621
					1	14	0	22.7	0.18493
					8	0	1	21.9	0.15311
					8	4	1	21.8	0.15241
					8	7	1	21.8	0.15171
					15	0	1	21.9	0.15631
				16QAM	1	0	1	22.0	0.15668
					1	7	1	22.0	0.15885
					1	14	1	22.0	0.15776
					8	0	2	21.9	0.15382
					8	4	2	21.8	0.14997
					8	7	2	21.7	0.14723
					15	0	2	21.7	0.14825

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power(dBm)	Output Power (W)
4	1.4	19957	1710.7	QPSK	1	0	0	22.9	0.19275
					1	2	0	22.8	0.19011
					1	5	0	22.6	0.17989
					3	0	1	21.9	0.15453
					3	1	1	22.1	0.16069
					3	2	1	21.9	0.15346
					6	0	1	21.9	0.15382
				16QAM	1	0	1	22.0	0.15849
					1	2	1	21.9	0.15631
					1	5	1	21.9	0.15453
					3	0	2	20.9	0.12388
					3	1	2	21.0	0.12589
					3	2	2	20.9	0.12190
					6	0	2	20.9	0.12274
		20175	1732.5	QPSK	1	0	0	22.8	0.19231
					1	2	0	22.7	0.18707
					1	5	0	22.6	0.18281
					3	0	1	21.9	0.15453
					3	1	1	21.8	0.15205
					3	2	1	21.8	0.14997
					6	0	1	21.8	0.15276
				16QAM	1	0	1	21.9	0.15346
					1	2	1	21.8	0.15241
					1	5	1	21.8	0.15136
					3	0	2	20.9	0.12190
					3	1	2	20.8	0.12106
					3	2	2	20.9	0.12218
					6	0	2	20.8	0.11940
		20392	1754.2	QPSK	1	0	0	22.6	0.18281
					1	2	0	22.7	0.18578
					1	5	0	22.7	0.18450
					3	0	1	21.8	0.15276
					3	1	1	21.8	0.15205
					3	2	1	21.8	0.15136
					6	0	1	21.9	0.15596
				16QAM	1	0	1	21.9	0.15631
					1	2	1	22.0	0.15849
					1	5	1	22.0	0.15740
					3	0	2	21.9	0.15346
					3	1	2	21.8	0.14962
					3	2	2	21.7	0.14689
					6	0	2	21.7	0.14791

8.2 ERP & EIRP MEASUREMENT

LIMIT

According to FCC §2.1046

FCC 27.50 (c) (10): The portable stations (hand-held devices) in the 600MHz uplink band and the 698-746MHz band, and fixed and mobile stations in the 600MHz uplink band are limited to 3 Watts ERP.

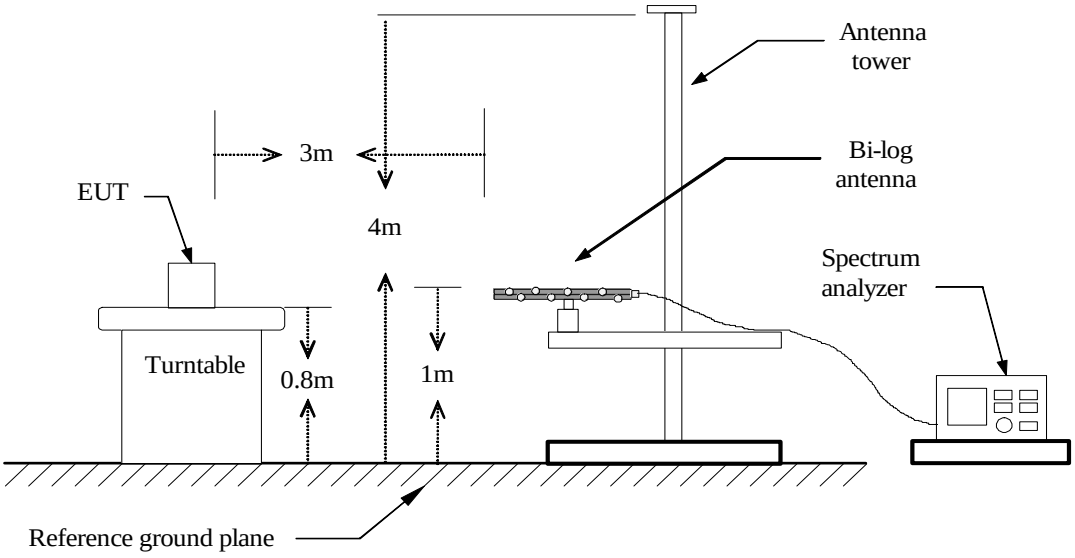
FCC 27.50 (d) (4): Fixed, mobile, and portable (handheld)stations operating in the 1710-1755MHz band and mobile and portable stations operating in the 1695-1710MHz and 1755-1780MHz bands are limited to 1 watt EIRP.

According to RSS-130, Band 12,
The e.r.p. shall not exceed 3 watts for mobile equipment, fixed subscriber equipment and portable equipment.

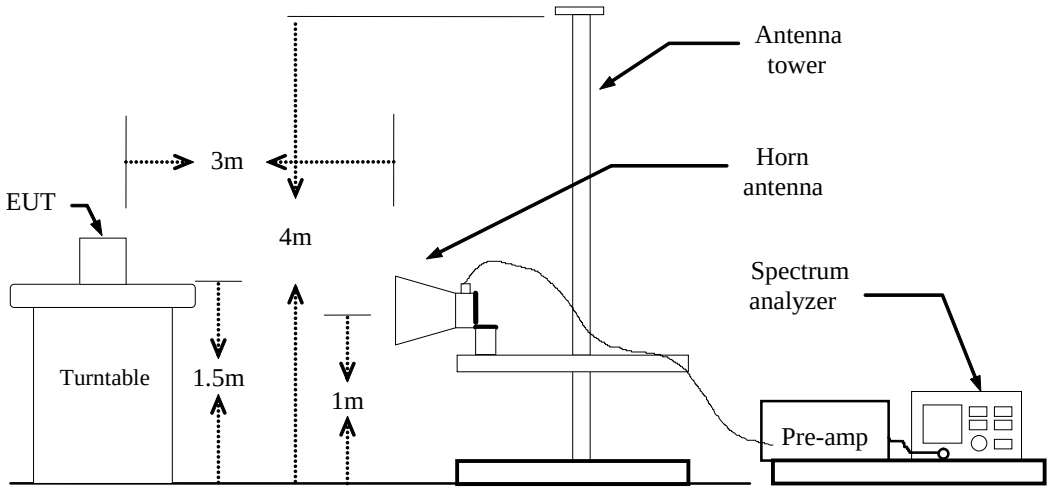
According to RSS-139, Band 4,
The equivalent isotropically radiated power (e.i.r.p.) for mobile and portable transmitters shall not exceed one watt. The e.i.r.p. for fixed and base stations in the band 1710-1780 MHz shall not exceed 1 watt.

Test Configuration

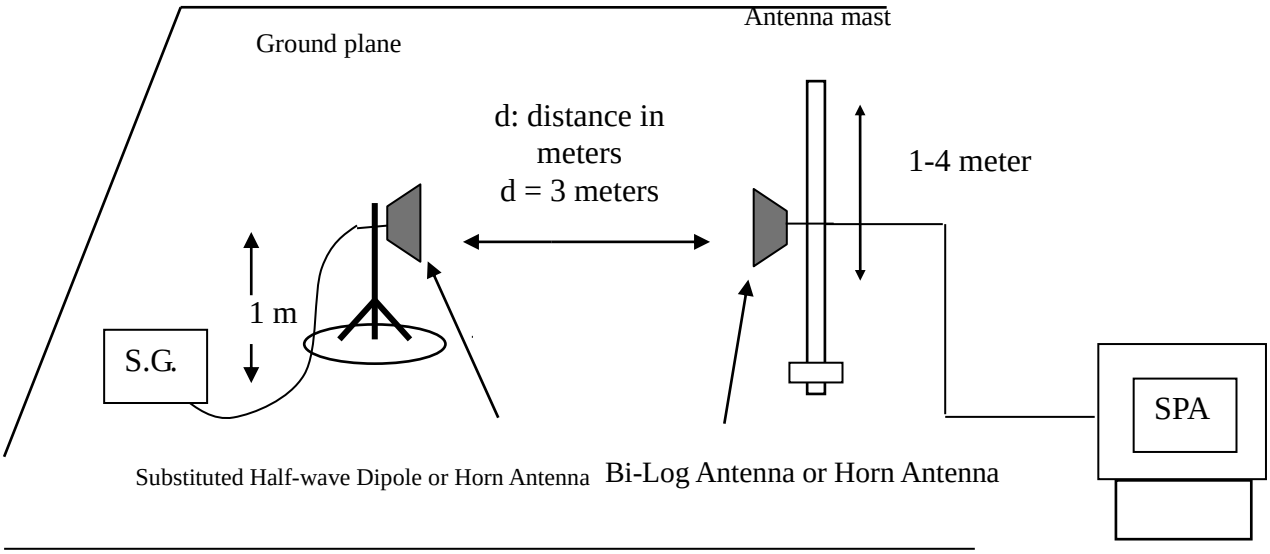
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



TEST PROCEDURE

1. The EUT was placed on a non-conductive rotating platform (0.8m for below 1G and 1.5m for above 1G) in a semi-chamber. The radiated emission at the fundamental frequency was measured at 3m and SA with RMS detector per photograph 5, KDB 971168 D01.

2. During the measurement, the call box parameters were set to get the maximum output power of the EUT. The maximum emission was recorded from spectrum analyzer power level (LVL) from 360 degrees rotation of turntable and the test antenna raised and lowered over a range from 1m to 4m in both horizontally and vertically polarized orientations.

3. EIRP was measured method according to TIA/EIA-603-D:2010. The EUT was replaced by the substitution antenna at same location, and then record the maximum Analyzer reading through raised and lowered the test antenna.

ERP = S.G. output (dBm) + Antenna Gain (dBi) – Cable (dB)-2.15
EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable (dB)

TEST RESULTS

No non-compliance noted.

ERP POWER

LTE Band 12

BW: 1.4MHz / RB=1, RB Offset=0

Band	BW (MHz)	Channel	Mode	UL RB Allocation	UL RB offset	Vertical		Horizontal	
						ERP (dBm)	ERP (W)	ERP (dBm)	ERP (W)
12	1.4	Lowest	QPSK	1	0	7.22	0.00527	24.11	0.25763
		Middle		1	0	8.70	0.00741	25.50	0.35481
		Highest		1	0	8.65	0.00733	24.58	0.28708
		Lowest	16 QAM	1	0	7.33	0.00541	24.47	0.27990
		Middle		1	0	8.94	0.00783	25.61	0.36392
		Highest		1	0	8.76	0.00752	24.56	0.28576

BW: 3MHz / RB=1, RB Offset=0

Band	BW (MHz)	Channel	Mode	UL RB Allocation	UL RB offset	Vertical		Horizontal	
						ERP (dBm)	ERP (W)	ERP (dBm)	ERP (W)
12	3	Lowest	QPSK	1	0	7.23	0.00528	23.78	0.23878
		Middle		1	0	8.64	0.00731	24.88	0.30761
		Highest		1	0	9.59	0.00910	25.11	0.32434
		Lowest	16 QAM	1	0	7.12	0.00515	25.03	0.31842
		Middle		1	0	8.34	0.00682	24.64	0.29107
		Highest		1	0	9.28	0.00847	24.71	0.29580

BW: 5MHz / RB=1, RB Offset=0

Band	BW (MHz)	Channel	Mode	UL RB Allocation	UL RB offset	Vertical		Horizontal	
						ERP (dBm)	ERP (W)	ERP (dBm)	ERP (W)
12	5	Lowest	QPSK	1	0	6.62	0.00459	25.07	0.32137
		Middle		1	0	8.14	0.00652	24.90	0.30903
		Highest		1	0	9.88	0.00973	25.26	0.33574
		Lowest	16 QAM	1	0	7.85	0.00610	25.24	0.33420
		Middle		1	0	7.95	0.00624	24.24	0.26546
		Highest		1	0	9.43	0.00877	25.35	0.34277

BW: 10MHz / RB=1, RB Offset=0

Band	BW (MHz)	Channel	Mode	UL RB Allocation	UL RB offset	Vertical		Horizontal	
						ERP (dBm)	ERP (W)	ERP (dBm)	ERP (W)
12	10	Lowest	QPSK	1	0	6.22	0.00419	24.24	0.26546
		Middle		1	0	7.90	0.00617	25.46	0.35156
		Highest		1	0	7.24	0.00530	24.88	0.30761
		Lowest	16 QAM	1	0	6.37	0.00434	23.80	0.23988
		Middle		1	0	8.01	0.00632	25.49	0.35400
		Highest		1	0	7.93	0.00621	24.23	0.26485

LTE Band 4

BW: 1.4MHz / RB=1, RB Offset=0

Band	BW (MHz)	Channel	Mode	UL RB Allocation	UL RB offset	Vertical		Horizontal	
						EIRP (dBm)	EIRP (W)	EIRP (dBm)	EIRP (W)
4	1.4	Lowest	QPSK	1	0	10.70	0.01175	27.98	0.62806
		Middle		1	0	13.39	0.02183	27.48	0.55976
		Highest		1	0	14.18	0.02618	26.93	0.49317
		Lowest	16 QAM	1	0	10.83	0.01211	27.68	0.58614
		Middle		1	0	13.63	0.02307	27.23	0.52845
		Highest		1	0	13.90	0.02455	26.55	0.45186

BW: 3MHz / RB=1, RB Offset=0

Band	BW (MHz)	Channel	Mode	UL RB Allocation	UL RB offset	Vertical		Horizontal	
						EIRP (dBm)	EIRP (W)	EIRP (dBm)	EIRP (W)
4	3	Lowest	QPSK	1	0	11.16	0.01306	27.91	0.61802
		Middle		1	0	13.83	0.02415	27.35	0.54325
		Highest		1	0	14.16	0.02606	26.84	0.48306
		Lowest	16 QAM	1	0	11.03	0.01268	27.78	0.59979
		Middle		1	0	13.30	0.02138	27.03	0.50466
		Highest		1	0	13.71	0.02350	26.53	0.44978

BW: 5MHz / RB=1, RB Offset=0

Band	BW (MHz)	Channel	Mode	UL RB Allocation	UL RB offset	Vertical		Horizontal	
						EIRP (dBm)	EIRP (W)	EIRP (dBm)	EIRP (W)
4	5	Lowest	QPSK	1	0	10.67	0.01167	28.04	0.63680
		Middle		1	0	13.24	0.02109	27.37	0.54576
		Highest		1	0	14.27	0.02673	26.52	0.44875
		Lowest	16 QAM	1	0	10.96	0.01247	27.76	0.59704
		Middle		1	0	13.32	0.02148	26.96	0.49659
		Highest		1	0	13.80	0.02399	26.18	0.41495

BW: 10MHz / RB=1, RB Offset=0

Band	BW (MHz)	Channel	Mode	UL RB Allocation	UL RB offset	Vertical		Horizontal	
						EIRP (dBm)	EIRP (W)	EIRP (dBm)	EIRP (W)
4	10	Lowest	QPSK	1	0	10.86	0.01219	28.27	0.67143
		Middle		1	0	12.99	0.01991	27.52	0.56494
		Highest		1	0	14.57	0.02864	26.56	0.45290
		Lowest	16 QAM	1	0	10.05	0.01012	27.87	0.61235
		Middle		1	0	12.54	0.01795	27.04	0.50582
		Highest		1	0	14.43	0.02773	26.25	0.42170

BW: 15MHz / RB=1, RB Offset=0

Band	BW (MHz)	Channel	Mode	UL RB Allocation	UL RB offset	Vertical		Horizontal	
						EIRP (dBm)	EIRP (W)	EIRP (dBm)	EIRP (W)
4	15	Lowest	QPSK	1	0	11.07	0.01279	28.03	0.63533
		Middle		1	0	12.90	0.01950	27.57	0.57148
		Highest		1	0	14.50	0.02818	27.32	0.53951
		Lowest	16 QAM	1	0	11.49	0.01409	27.74	0.59429
		Middle		1	0	12.79	0.01901	25.57	0.36058
		Highest		1	0	14.56	0.02858	26.96	0.49659

BW: 20MHz / RB=1, RB Offset=0

Band	BW (MHz)	Channel	Mode	UL RB Allocation	UL RB offset	Vertical		Horizontal	
						EIRP (dBm)	EIRP (W)	EIRP (dBm)	EIRP (W)
4	20	Lowest	QPSK	1	0	12.81	0.01910	26.72	0.46989
		Middle		1	0	13.68	0.02333	26.22	0.41879
		Highest		1	0	14.89	0.03083	26.66	0.46345
		Lowest	16 QAM	1	0	12.46	0.01762	26.46	0.44259
		Middle		1	0	12.15	0.01641	25.29	0.33806
		Highest		1	0	14.69	0.02944	26.26	0.42267

8.3 FREQUENCY STABILITY MEASUREMENT

LIMIT

According to the FCC part 27.54 shall be tested the frequency stability. The rule is defined that" The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

According to RSS-139 and RSS-130,
The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

TEST PROCEDURE

Use Anritsu 8820 with frequency Error measurement capability.
Temp = -30 to +50℃
Voltage= 85% to 115% of the nominal value for AC powered equipment.

NOTE: *The frequency error was recorded frequency error from the communication simulator.*

TEST RESULTS

FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT:
LTE Band 12

Reference Frequency: LTE Band 12 Max Bandwidth QPSK, 710 MHz				
Limit: ± 2.5 ppm = 1775Hz				
Power Supply	Environment	Frequency Error	Frequency Error	Limit (ppm)
Vdc	Temperature (°C)	(Hz)	(ppm)	(ppm)
120	50	0.05	0.000071	+/- 2.5
120	40	0.03	0.000042	
120	30	0.02	0.000028	
120	20	0.01	0.000014	
120	10	0.01	0.000014	
120	0	0.01	0.000014	
120	-10	0.04	0.000057	
120	-20	0.05	0.000071	

Reference Frequency: LTE Band 12 Max Bandwidth 16QAM, 710 MHz				
Limit: ± 2.5 ppm = 1775Hz				
Power Supply	Environment	Frequency Error	Frequency Error	Limit (ppm)
Vdc	Temperature (°C)	(Hz)	(ppm)	(ppm)
120	50	0.03	0.000042	+/- 2.5
120	40	0.01	0.000014	
120	30	0.01	0.000014	
120	20	0.01	0.000014	
120	10	0.03	0.000042	
120	0	0.02	0.000028	
120	-10	0.02	0.000028	
20	-20	0.01	0.000014	

LTE Band 4

Reference Frequency: LTE Band 4 Max Bandwidth QPSK, 1732.5MHz				
Limit: ± 2.5 ppm = 4331.25Hz				
Power Supply	Environment	Frequency Error	Frequency Error	Limit (ppm)
Vdc	Temperature (°C)	(Hz)	(ppm)	(ppm)
120	50	0.00	0.000000	+/- 2.5
120	40	0.01	0.000006	
120	30	0.00	0.000000	
120	20	-0.01	-0.000006	
120	10	0.01	0.000006	
120	0	0.00	0.000000	
120	-10	0.00	0.000000	
120	-20	0.03	0.000017	

Reference Frequency: LTE Band 4 Max Bandwidth 16QAM, 1732.5MHz				
Limit: ± 2.5 ppm = 4331.25Hz				
Power Supply	Environment	Frequency Error	Frequency Error	Limit (ppm)
Vdc	Temperature (°C)	(Hz)	(ppm)	(ppm)
120	50	-0.01	-0.000006	+/- 2.5
120	40	0.01	0.000006	
120	30	0.00	0.000000	
120	20	0.01	0.000006	
120	10	0.02	0.000012	
120	0	0.01	0.000006	
120	-10	-0.01	-0.000006	
120	-20	-0.02	-0.000012	

FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT:
LTE Band 12

Reference Frequency: LTE Band 12 Max Bandwidth QPSK, MHz				
Limit: ± 2.5 ppm = Hz				
Power Supply	Environment	Frequency Error	Frequency Error	Limit (ppm)
Vdc	Temperature (°C)	(Hz)	(ppm)	(ppm)
102	20	0.03	0.000042	+/- 2.5
120	20	0.00	0.000000	
138	20	0.02	0.000028	

Reference Frequency: LTE Band 12 Max Bandwidth 16QAM, MHz				
Limit: ± 2.5 ppm = Hz				
Power Supply	Environment	Frequency Error	Frequency Error	Limit (ppm)
Vdc	Temperature (°C)	(Hz)	(ppm)	(ppm)
102	20	0.02	0.000028	+/- 2.5
120	20	0.00	0.000000	
138	20	0.01	0.000014	

LTE Band 4

Reference Frequency: LTE Band 4 Max Bandwidth QPSK, MHz				
Limit: ± 2.5 ppm = Hz				
Power Supply	Environment	Frequency Error	Frequency Error	Limit (ppm)
Vdc	Temperature (°C)	(Hz)	(ppm)	(ppm)
102	20	0.00	0.000000	+/- 2.5
120	20	-0.01	-0.000006	
138	20	0.01	0.000006	

Reference Frequency: LTE Band 4 Max Bandwidth 16QAM, MHz				
Limit: ± 2.5 ppm = Hz				
Power Supply	Environment	Frequency Error	Frequency Error	Limit (ppm)
Vdc	Temperature (°C)	(Hz)	(ppm)	(ppm)
102	20	0.00	0.000000	+/- 2.5
120	20	0.00	0.000000	
138	20	0.01	0.000006	

8.4 OCCUPIED BANDWIDTH MEASUREMENT

LIMITS

For Reporting purpose only.
.

TEST PROCEDURES

KDB 971168 D01 v02r02 - Section 4.2

1. The occupied bandwidth was measured with the spectrum analyzer at the lowest, middle and highest channels in each band and different modulation. The 99% and -26dB bandwidth was measured and recorded.
2. RBW = 1-5% of the expected OBW
3. VBW ≥ 3 x RBW
4. Detector = Peak
5. Trace mode = max. hold

TEST RESULTS

LTE Band 12

CHANNEL BANDWIDTH: 1.4MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23095	707.5	1.0984

CHANNEL BANDWIDTH: 3MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23095	707.5	2.6830

CHANNEL BANDWIDTH: 5MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23095	707.5	4.4717

CHANNEL BANDWIDTH: 10MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23095	707.5	8.9146

CHANNEL BANDWIDTH: 1.4MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23095	707.5	1.1027

CHANNEL BANDWIDTH: 3MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23095	707.5	2.6830

CHANNEL BANDWIDTH: 5MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23095	707.5	4.4717

CHANNEL BANDWIDTH: 10MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
23095	707.5	8.9146

LTE Band 4

CHANNEL BANDWIDTH: 1.4MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	1.0984

CHANNEL BANDWIDTH: 3MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	2.6830

CHANNEL BANDWIDTH: 5MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	4.4717

CHANNEL BANDWIDTH: 10MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	9.725

CHANNEL BANDWIDTH: 15MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	14.559

CHANNEL BANDWIDTH: 20MHz / QPSK

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	19.827

CHANNEL BANDWIDTH: 1.4MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	1.0984

CHANNEL BANDWIDTH: 3MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	2.6917

CHANNEL BANDWIDTH: 5MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	4.4862

CHANNEL BANDWIDTH: 10MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	8.9435

CHANNEL BANDWIDTH: 15MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	13.4587

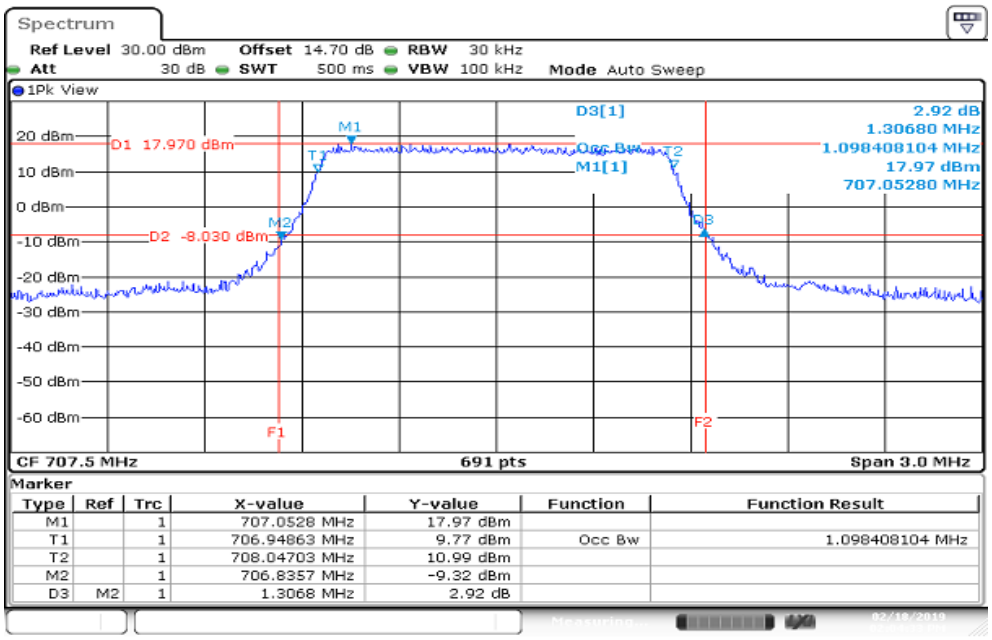
CHANNEL BANDWIDTH: 20MHz / 16QAM

Channel	FREQUENCY (MHz)	Occupied bandwidth (MHz)
20175	1732.5	18.0028

LTE Band 12

CHANNEL BANDWIDTH: 1.4MHz / QPSK

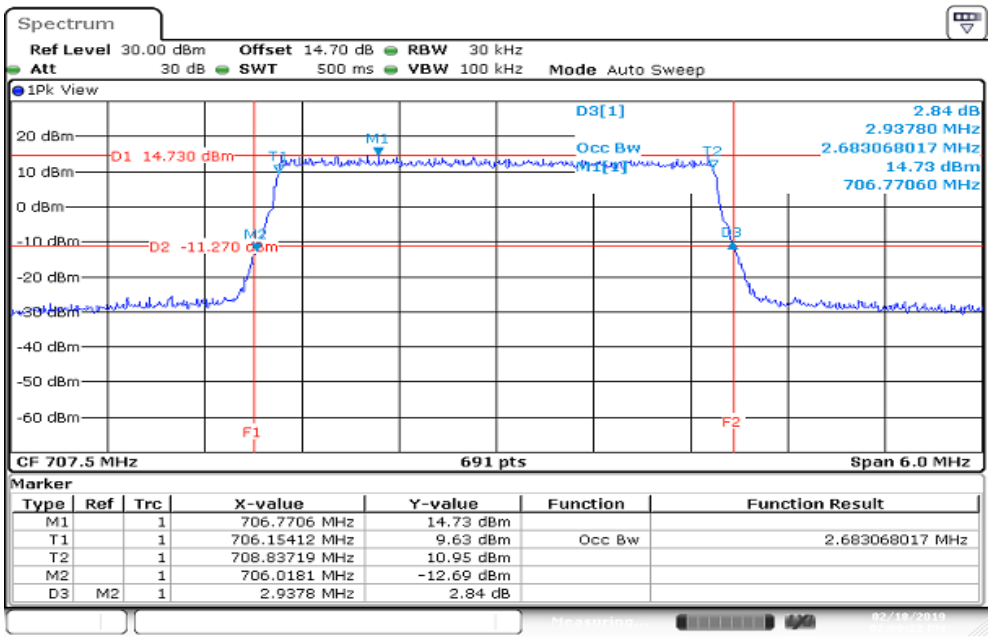
CH Mid



Date: 18.FEB.2019 14:04:33

CHANNEL BANDWIDTH: 3MHz / QPSK

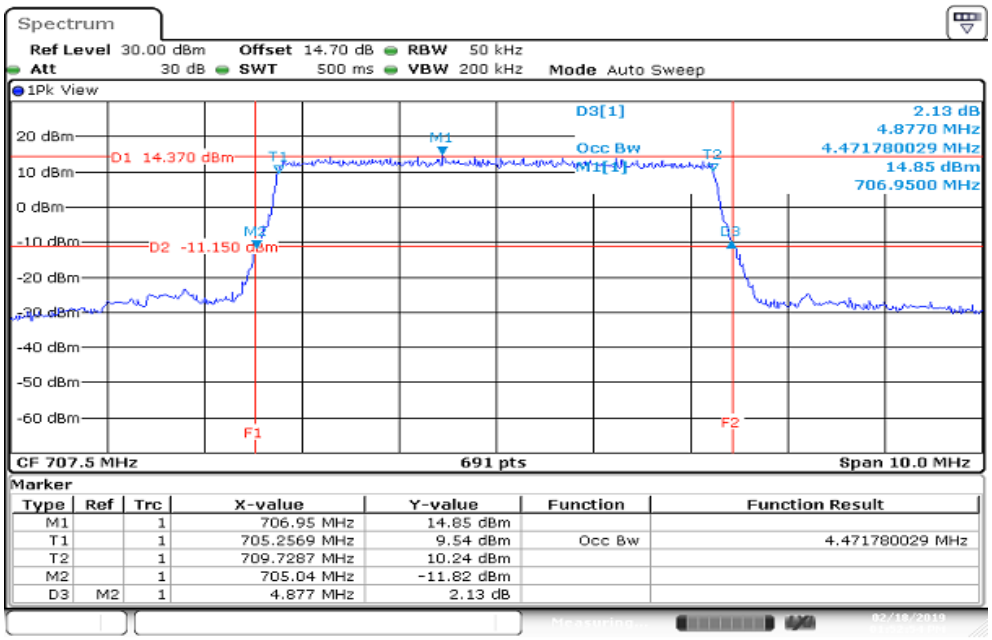
CH Mid



Date: 18.FEB.2019 14:00:23

CHANNEL BANDWIDTH: 5MHz / QPSK

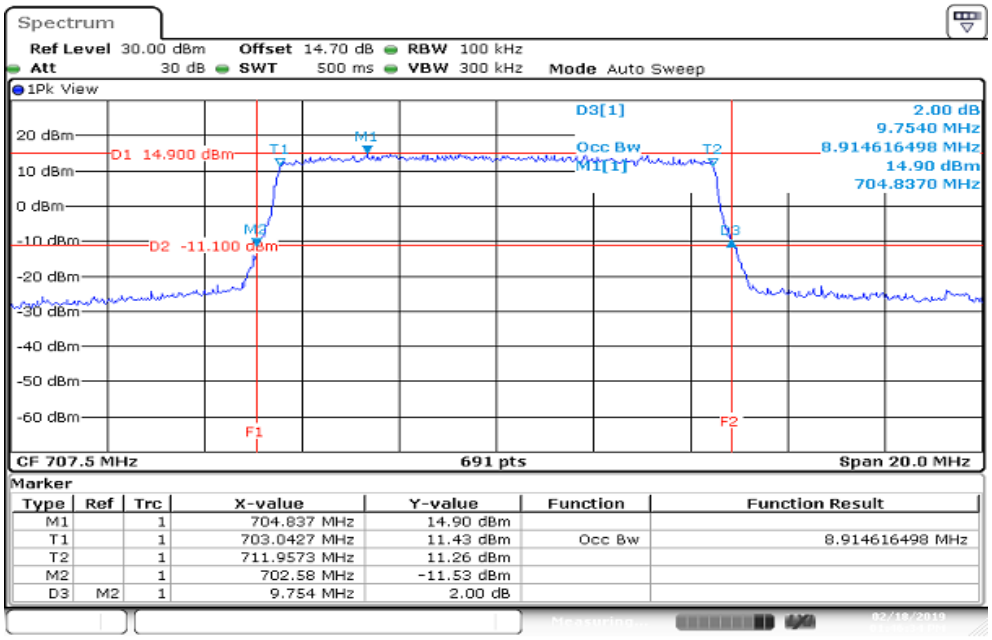
CH Mid



Date: 18.FEB.2019 13:52:55

CHANNEL BANDWIDTH: 10MHz / QPSK

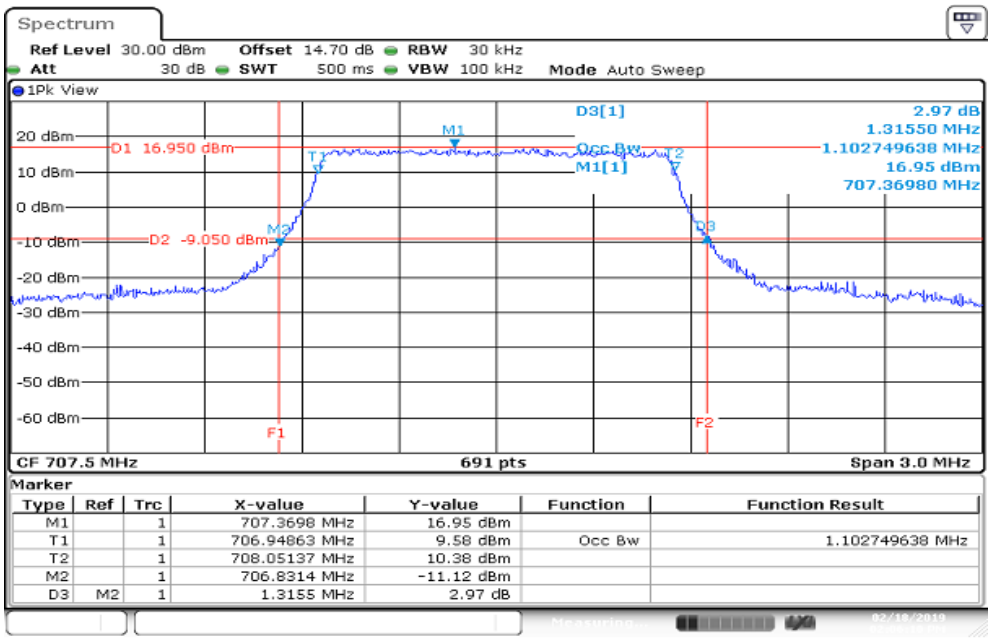
CH Mid



Date: 18.FEB.2019 13:46:34

CHANNEL BANDWIDTH: 1.4MHz / 16QAM

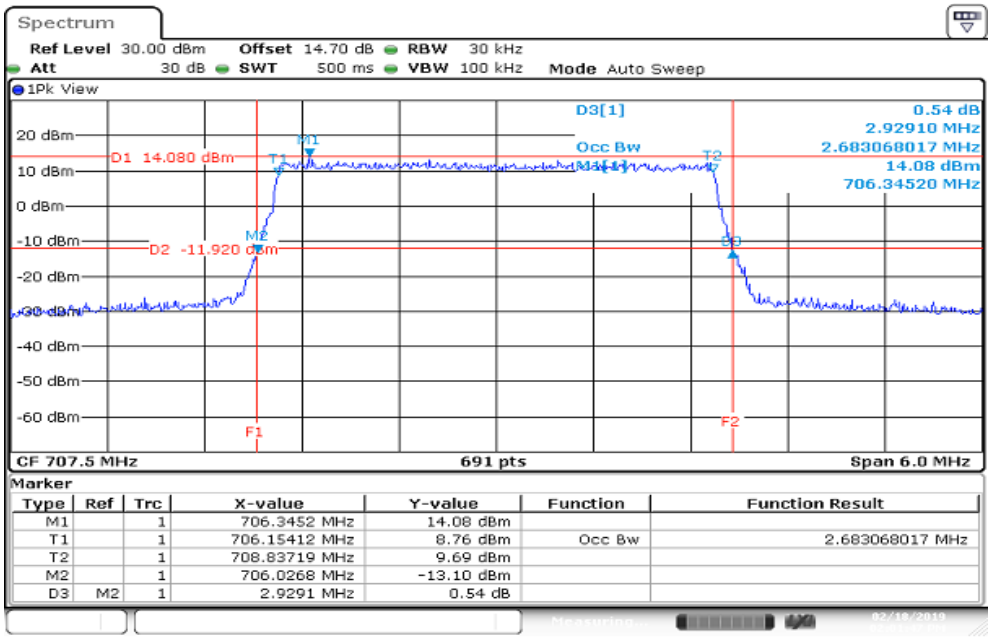
CH Min



Date: 18.FEB.2019 14:06:10

CHANNEL BANDWIDTH: 3MHz / 16QAM

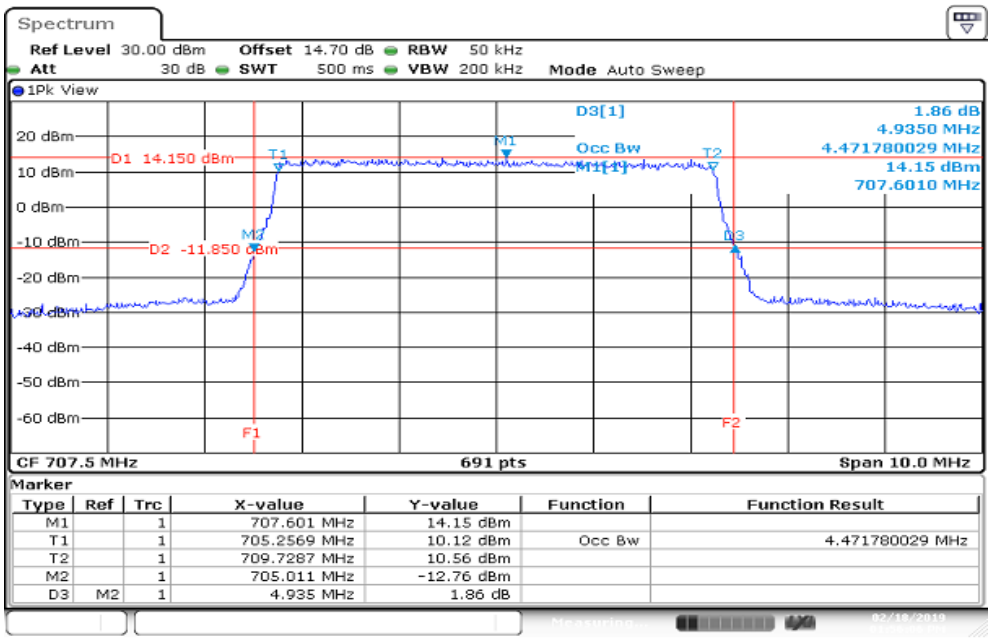
CH Min



Date: 18.FEB.2019 14:01:48

CHANNEL BANDWIDTH: 5MHz / 16QAM

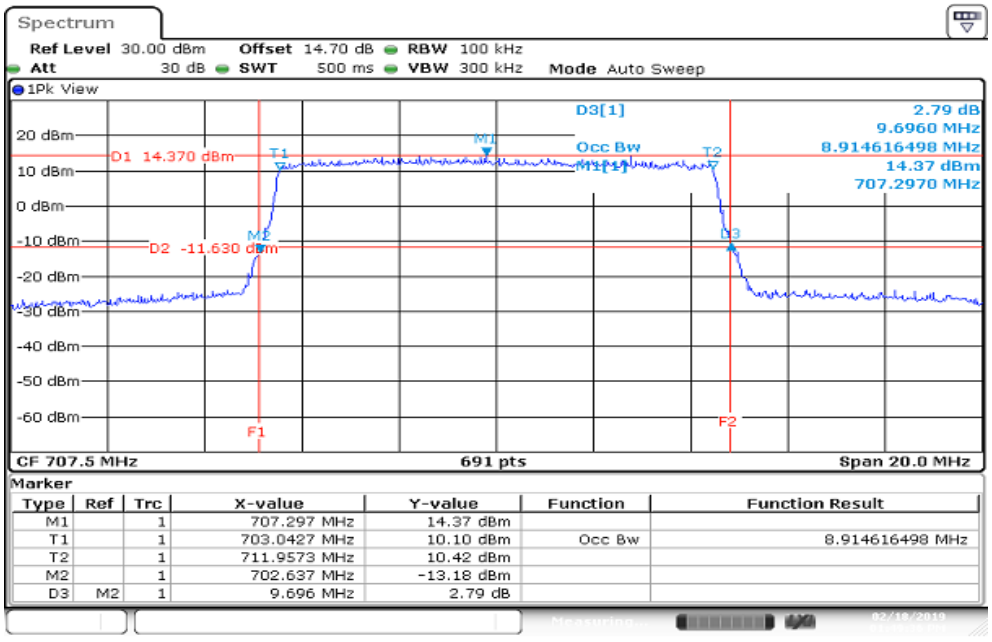
CH Min



Date: 18.FEB.2019 13:56:06

CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Min

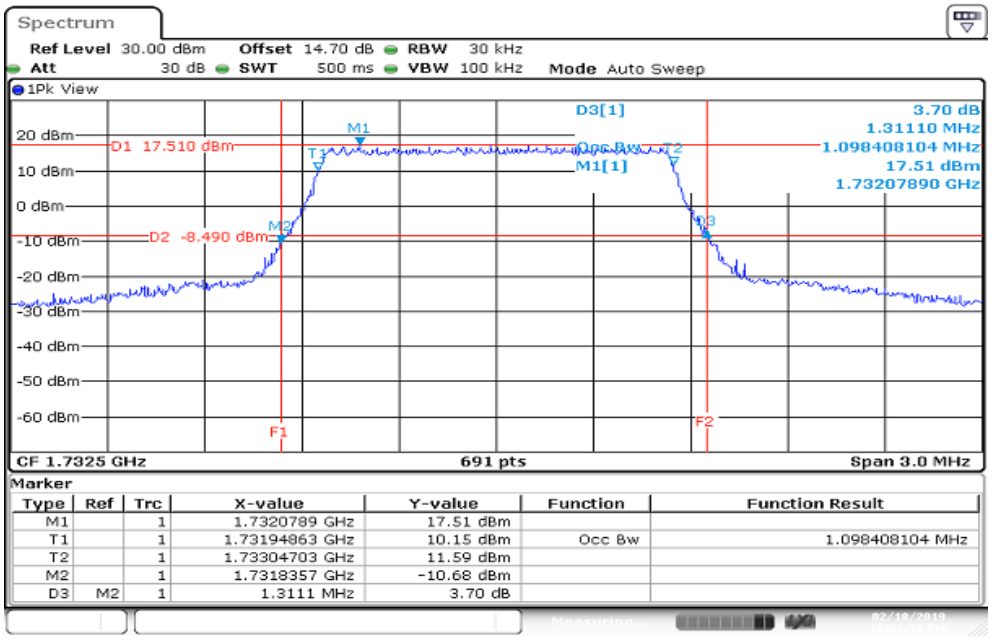


Date: 18.FEB.2019 13:49:36

LTE Band 4

CHANNEL BANDWIDTH: 1.4MHz / QPSK

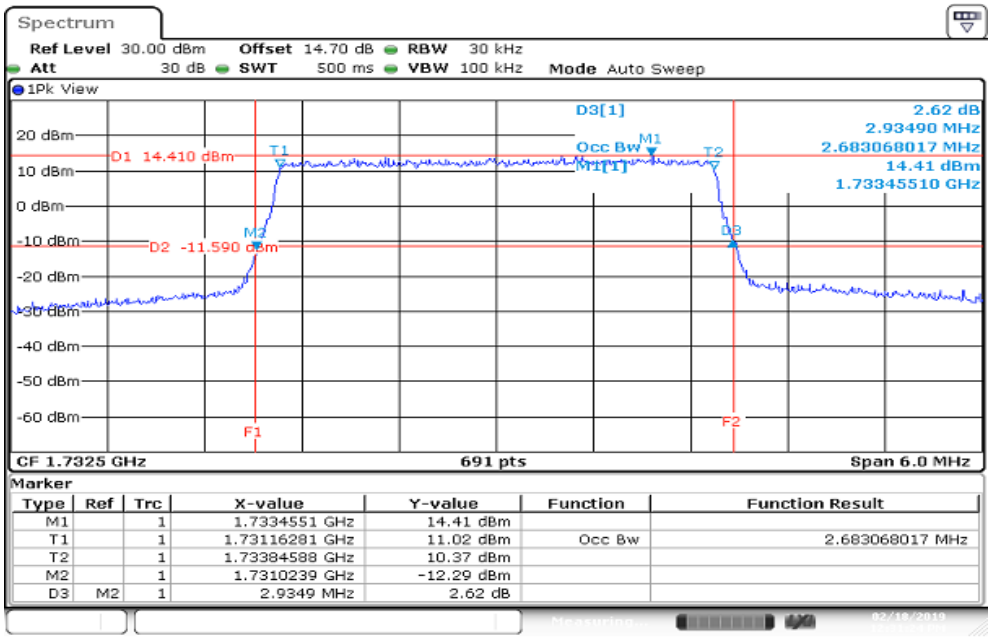
CH Min



Date: 18.FEB.2019 12:21:58

CHANNEL BANDWIDTH: 3MHz / QPSK

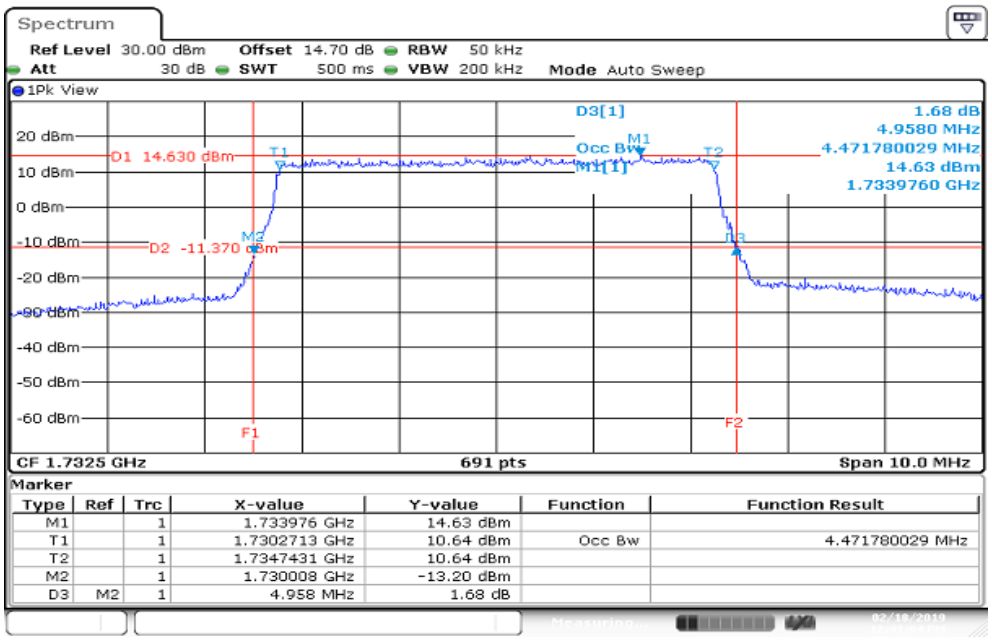
CH Min



Date: 18.FEB.2019 12:31:24

CHANNEL BANDWIDTH: 5MHz / QPSK

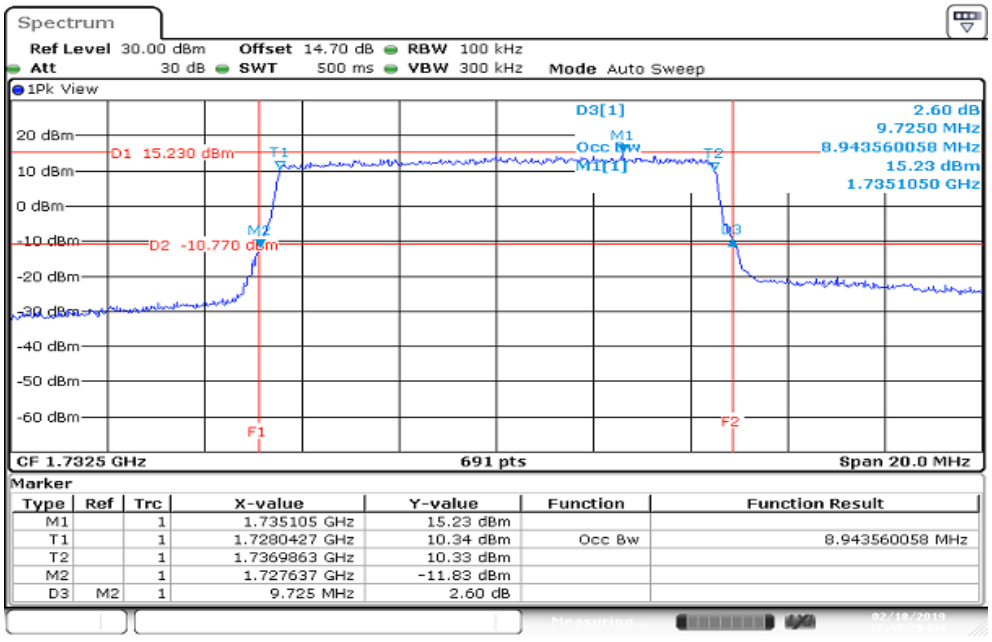
CH Min



Date: 18.FEB.2019 12:41:05

CHANNEL BANDWIDTH: 10MHz / QPSK

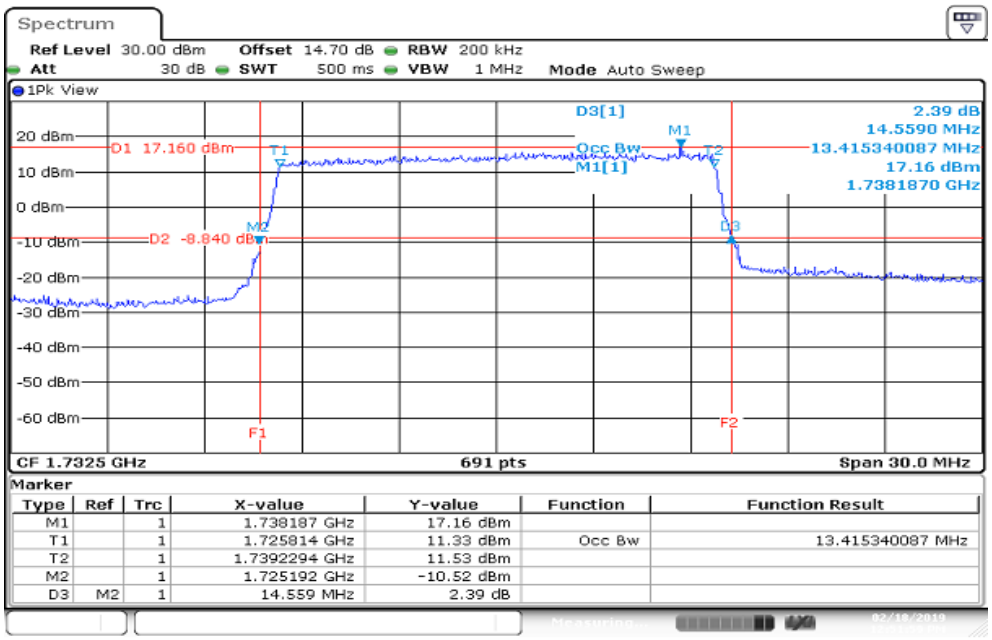
CH Min



Date: 18.FEB.2019 12:45:30

CHANNEL BANDWIDTH: 15MHz / QPSK

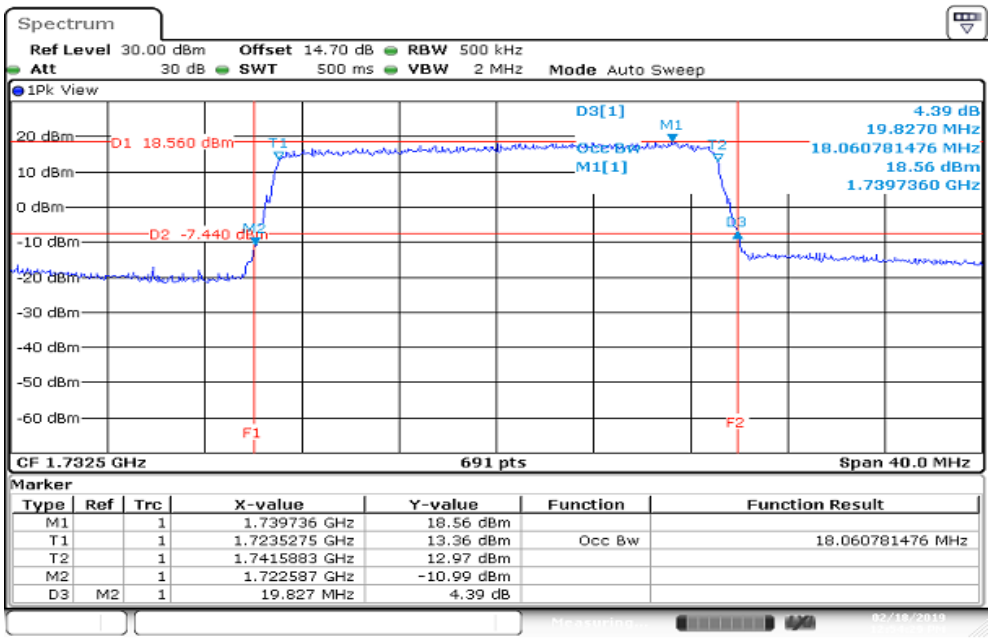
CH Min



Date: 18.FEB.2019 12:52:00

CHANNEL BANDWIDTH: 20MHz / QPSK

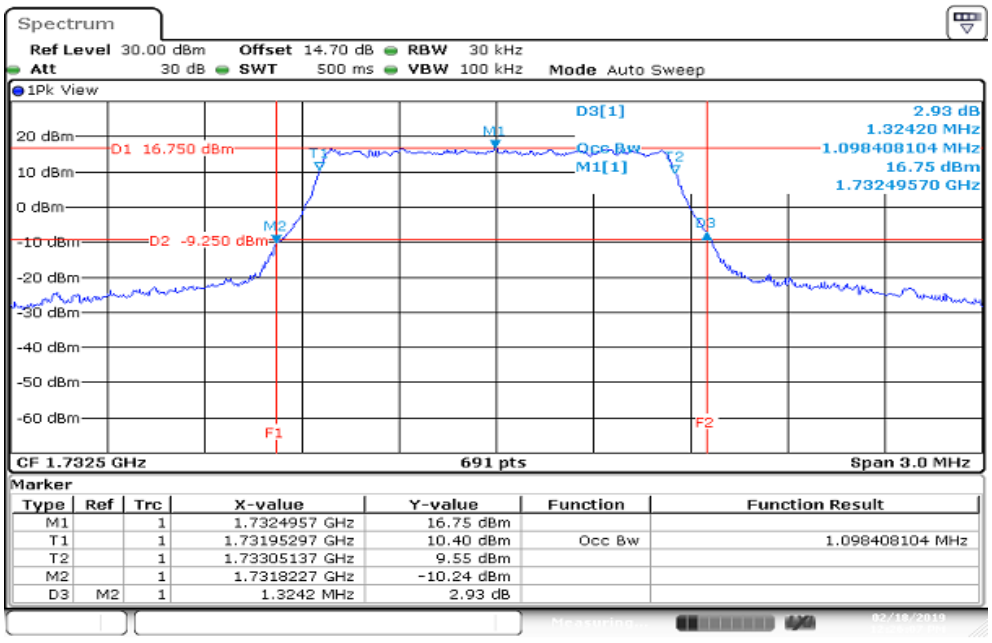
CH Min



Date: 18.FEB.2019 12:54:29

CHANNEL BANDWIDTH: 1.4MHz / 16QAM

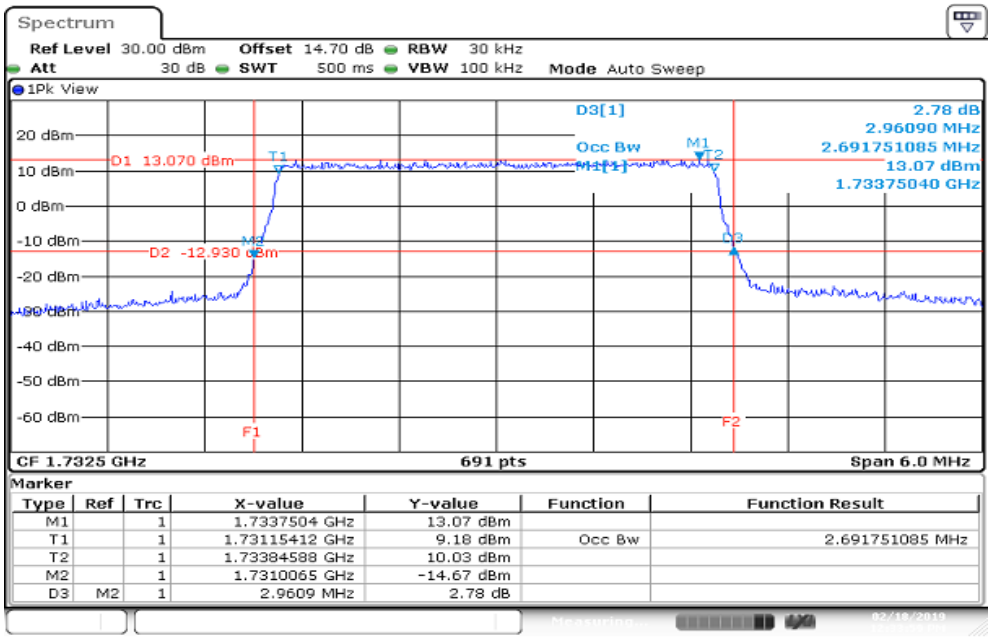
CH Min



Date: 18.FEB.2019 12:26:08

CHANNEL BANDWIDTH: 3MHz / 16QAM

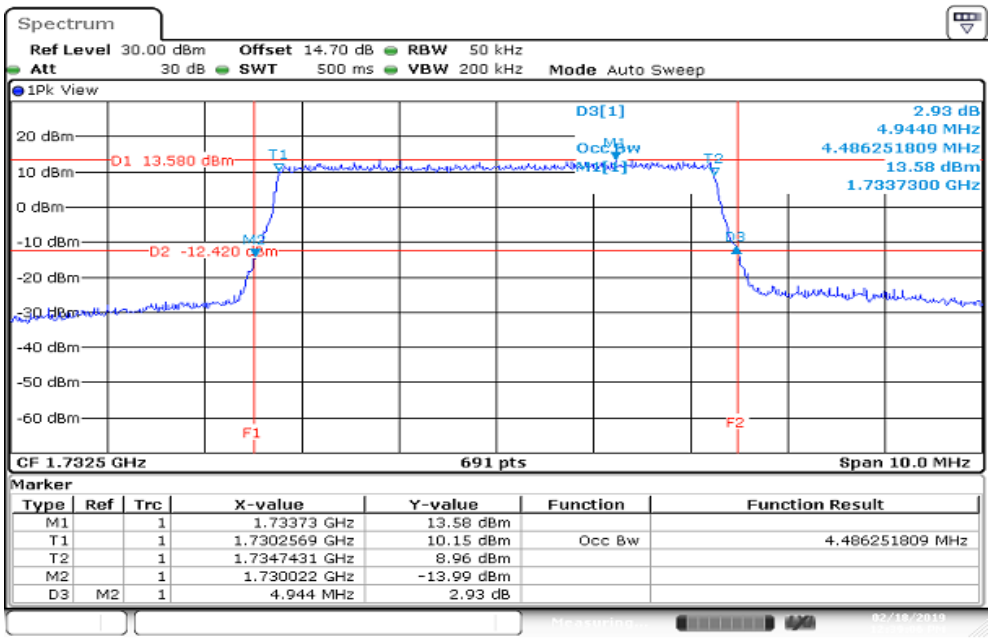
CH Min



Date: 18.FEB.2019 12:33:59

CHANNEL BANDWIDTH: 5MHz / 16QAM

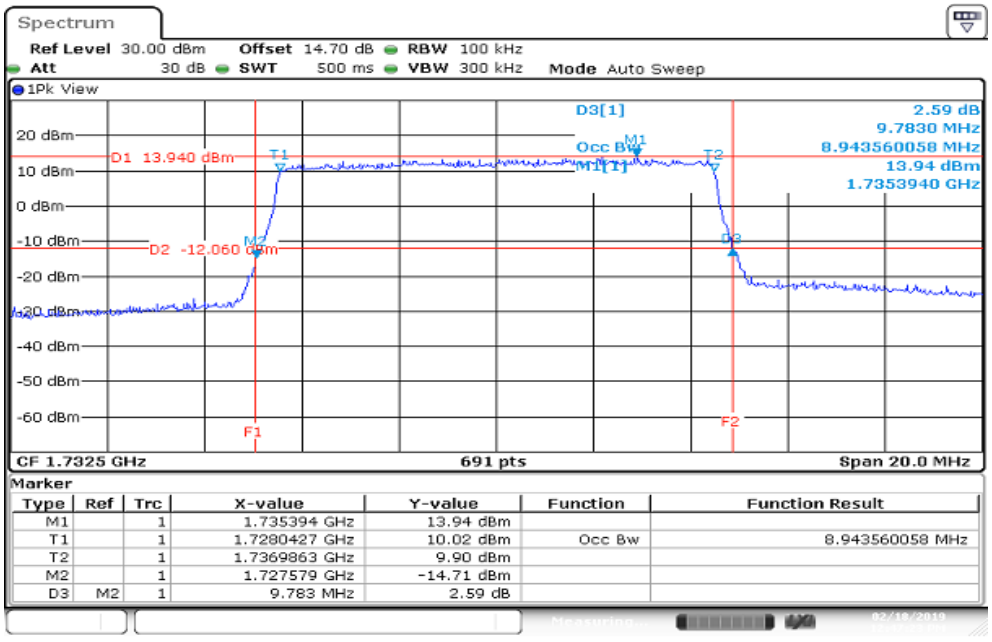
CH Min



Date: 18.FEB.2019 12:39:06

CHANNEL BANDWIDTH: 10MHz / 16QAM

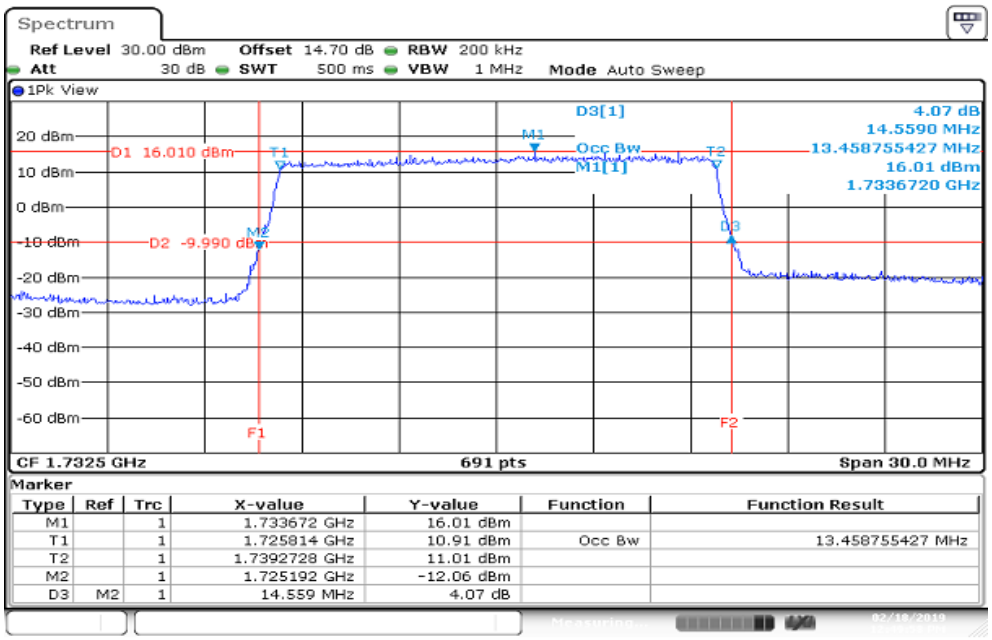
CH Min



Date: 18.FEB.2019 12:47:23

CHANNEL BANDWIDTH: 15MHz / 16QAM

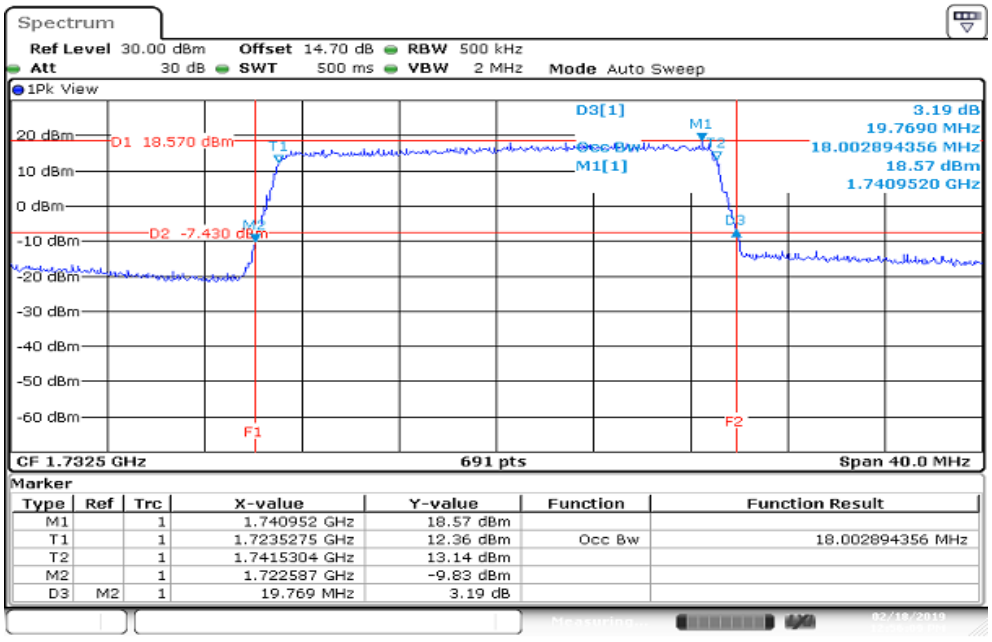
CH Min



Date: 18.FEB.2019 12:49:58

CHANNEL BANDWIDTH: 20MHz / 16QAM

CH Min



Date: 18.FEB.2019 12:56:09

8.5 PEAK TO AVERAGE POWER RATIO

LIMIT

In measuring transmissions in this band using an average power technique, peak-to-average power ratio (PAPR) of the transmission may not exceed 13 dB.

TEST PROCEDURES

1. According to KDB 971168D01, photograph 5.7.1
2. The EUT was connect to spectrum analyzer and call box.
3. Set the CCDF function in spectrum analyzer.
4. The highest RF output power were measured and recorded the maximum PAPR level associated with a probability of 0.1%.
5. Record the Peak to Average Power Ratio.

TEST RESULTS

LTE Band 12

CHANNEL BANDWIDTH: 1.4Hz / QPSK / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	4.58

CHANNEL BANDWIDTH: 3Hz / QPSK / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	4.52

CHANNEL BANDWIDTH: 5Hz / QPSK / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	4.32

CHANNEL BANDWIDTH: 10Hz / QPSK / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	4.72

CHANNEL BANDWIDTH: 1.4Hz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	5.04

CHANNEL BANDWIDTH: 3Hz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	4.99

CHANNEL BANDWIDTH: 5Hz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	4.41

CHANNEL BANDWIDTH: 10Hz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	4.55

CHANNEL BANDWIDTH: 1.4MHz / 16QAM / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	5.57

CHANNEL BANDWIDTH: 3MHz / 16QAM / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	5.42

CHANNEL BANDWIDTH: 5MHz / 16QAM / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	5.10

CHANNEL BANDWIDTH: 10MHz / 16QAM / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	5.59

CHANNEL BANDWIDTH: 1.5MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	5.01

CHANNEL BANDWIDTH: 3MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	5.94

CHANNEL BANDWIDTH: 5MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	5.94

CHANNEL BANDWIDTH: 10MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
23095	707.5	6.43

LTE Band 4

CHANNEL BANDWIDTH: 1.4MHz / QPSK / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.5	4.55

CHANNEL BANDWIDTH: 3MHz / QPSK / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.5	4.64

CHANNEL BANDWIDTH: 5MHz / QPSK / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	4.49

CHANNEL BANDWIDTH: 10MHz / QPSK / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	5.28

CHANNEL BANDWIDTH: 15MHz / QPSK / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	2.00

CHANNEL BANDWIDTH: 20MHz / QPSK / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	1.65

CHANNEL BANDWIDTH: 1.4MHz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.5	5.07

CHANNEL BANDWIDTH: 3MHz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.5	5.01

CHANNEL BANDWIDTH: 5MHz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	4.32

CHANNEL BANDWIDTH: 10MHz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	4.70

CHANNEL BANDWIDTH: 15MHz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	6.20

CHANNEL BANDWIDTH: 20MHz / QPSK / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	6.84

CHANNEL BANDWIDTH: 1.4MHz / 16QAM / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.5	5.30

CHANNEL BANDWIDTH: 3MHz / 16QAM / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.5	5.45

CHANNEL BANDWIDTH: 5MHz / 16QAM / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	5.19

CHANNEL BANDWIDTH: 10MHz / 16QAM / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	5.80

CHANNEL BANDWIDTH: 15MHz / 16QAM / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	1.80

CHANNEL BANDWIDTH: 20MHz / 16QAM / 1RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	1.57

CHANNEL BANDWIDTH: 1.4MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.5	5.97

CHANNEL BANDWIDTH: 3MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.5	5.83

CHANNEL BANDWIDTH: 5MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	5.74

CHANNEL BANDWIDTH: 10MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	6.43

CHANNEL BANDWIDTH: 15MHz / 16QAM / 100%RB

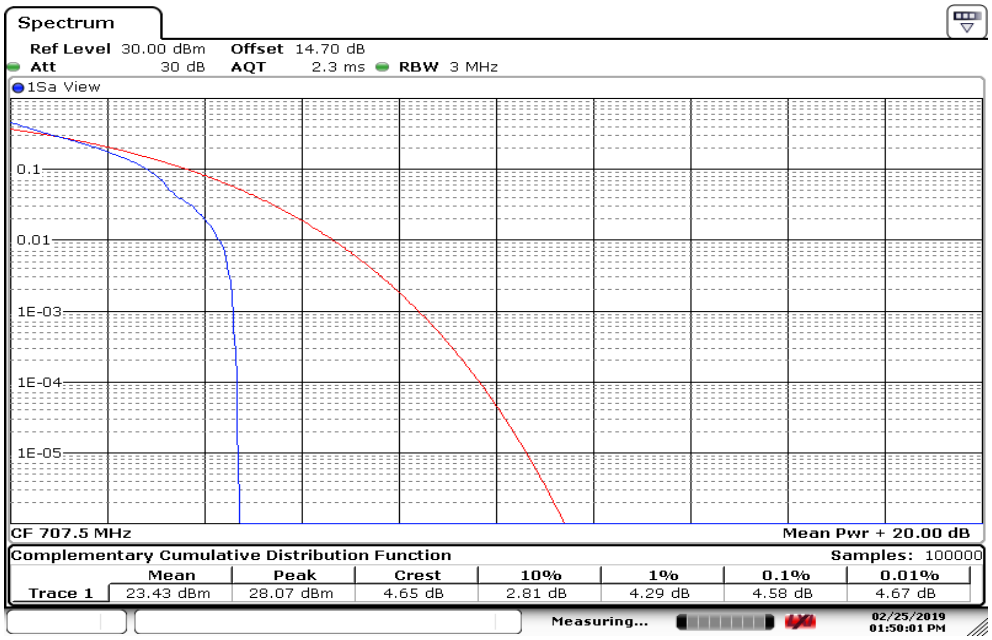
Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	7.25

CHANNEL BANDWIDTH: 20MHz / 16QAM / 100%RB

Channel	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)
20175	1732.50	7.48

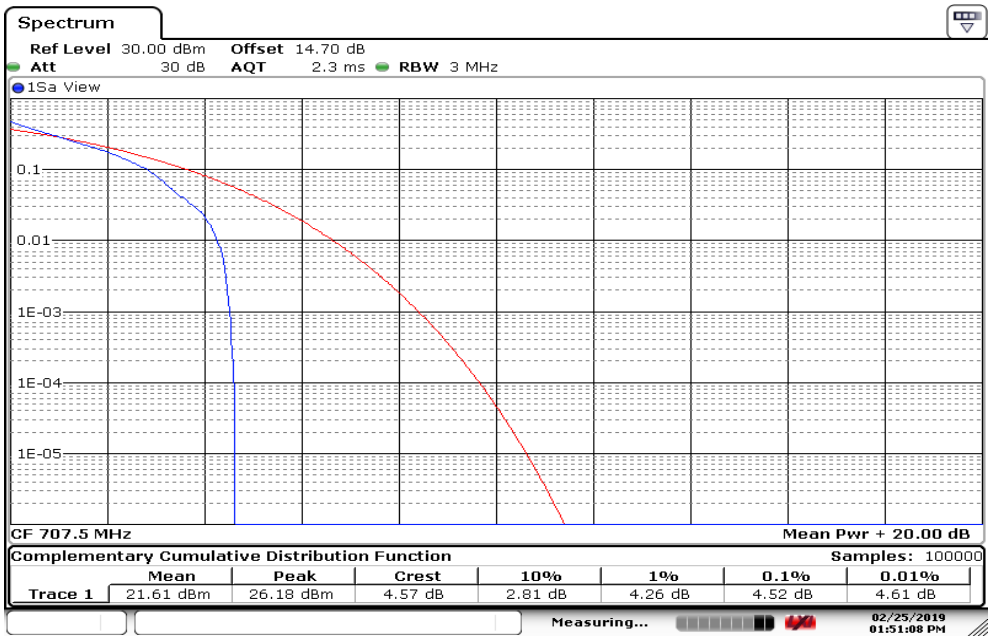
LTE Band 12

CHANNEL BANDWIDTH: 1.4MHz / QPSK/ 1RB



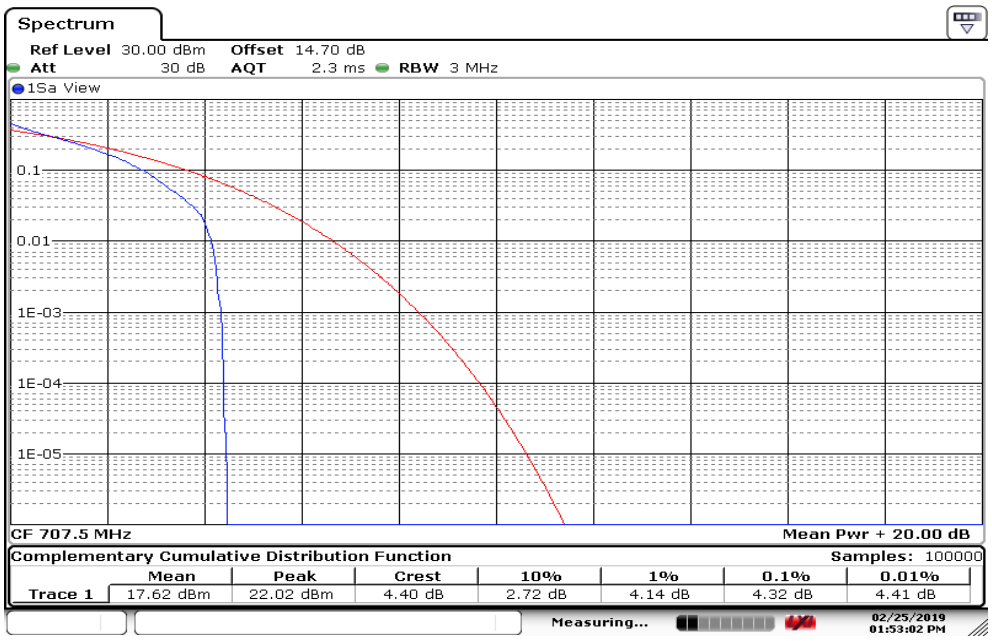
Date: 25.FEB.2019 13:50:02

CHANNEL BANDWIDTH: 3MHz / QPSK/ 1RB



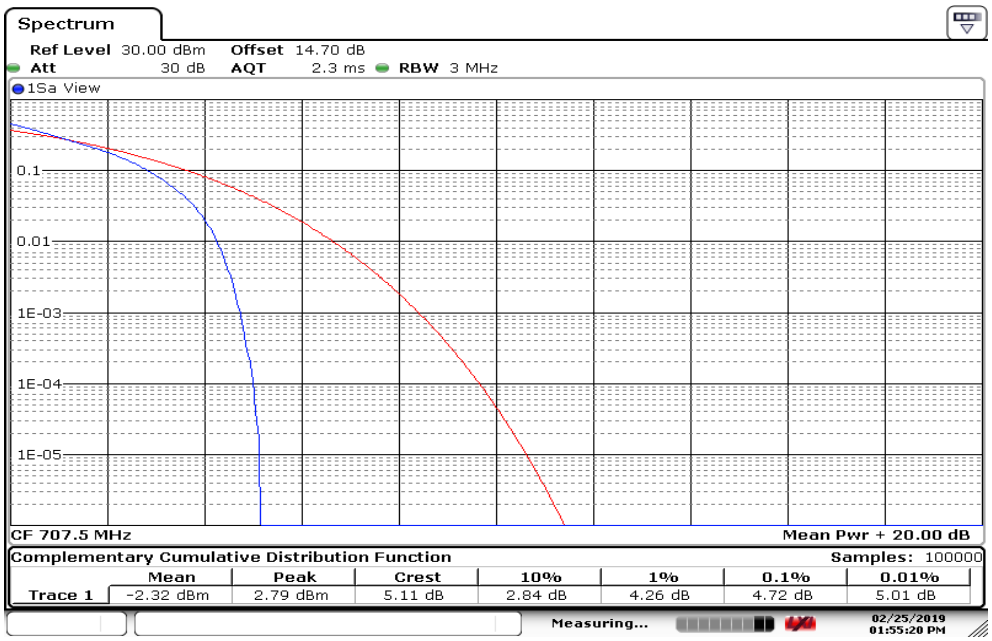
Date: 25.FEB.2019 13:51:09

CHANNEL BANDWIDTH: 5MHz / QPSK/ 1RB



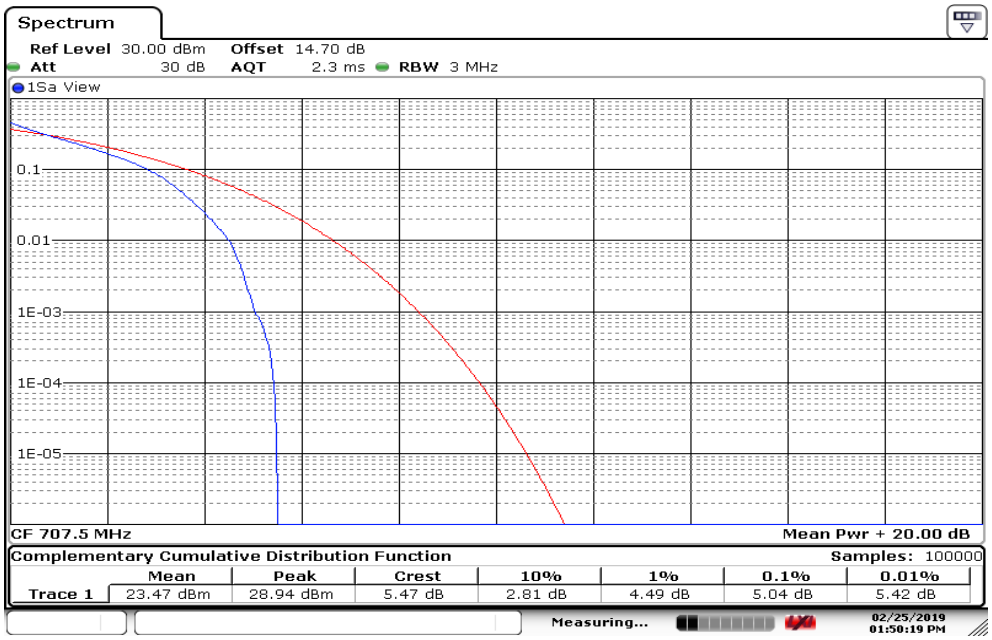
Date: 25.FEB.2019 13:53:03

CHANNEL BANDWIDTH: 10MHz / QPSK/ 1RB



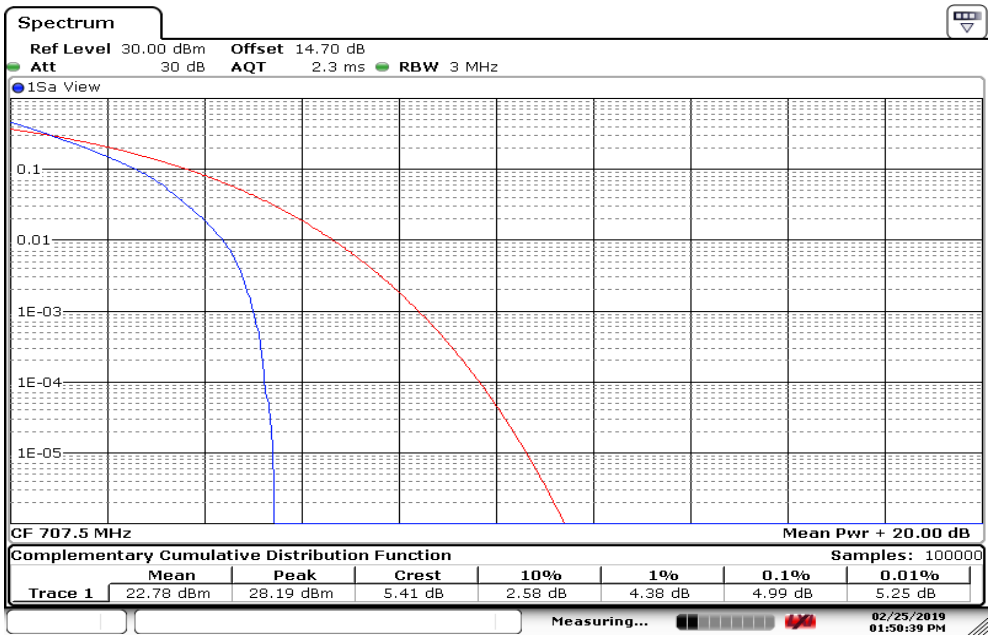
Date: 25.FEB.2019 13:55:21

CHANNEL BANDWIDTH: 1.4MHz / QPSK/ 100%RB



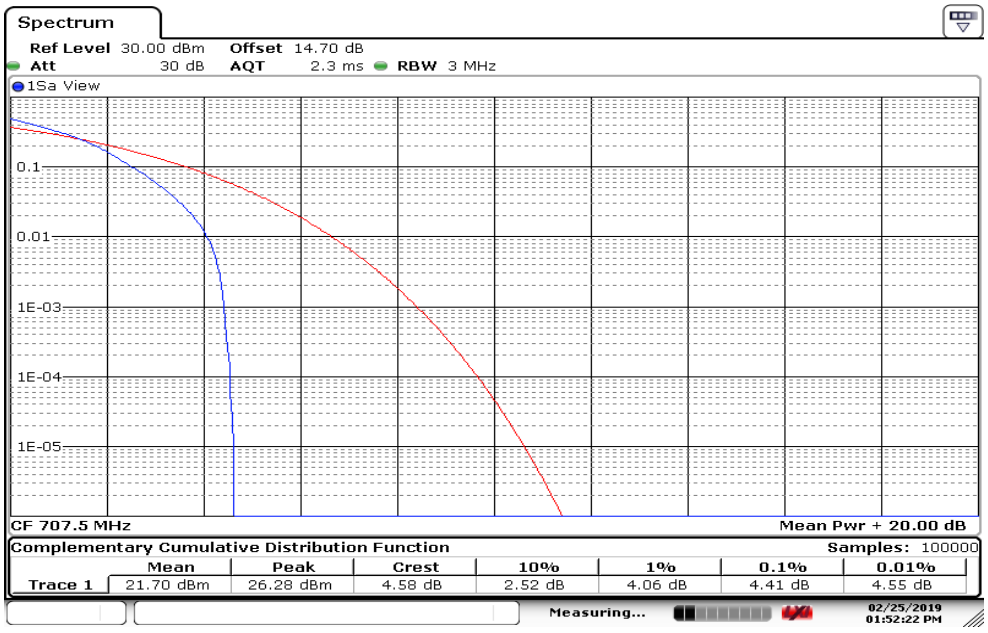
Date: 25.FEB.2019 13:50:20

CHANNEL BANDWIDTH: 3MHz / QPSK/ 100%RB



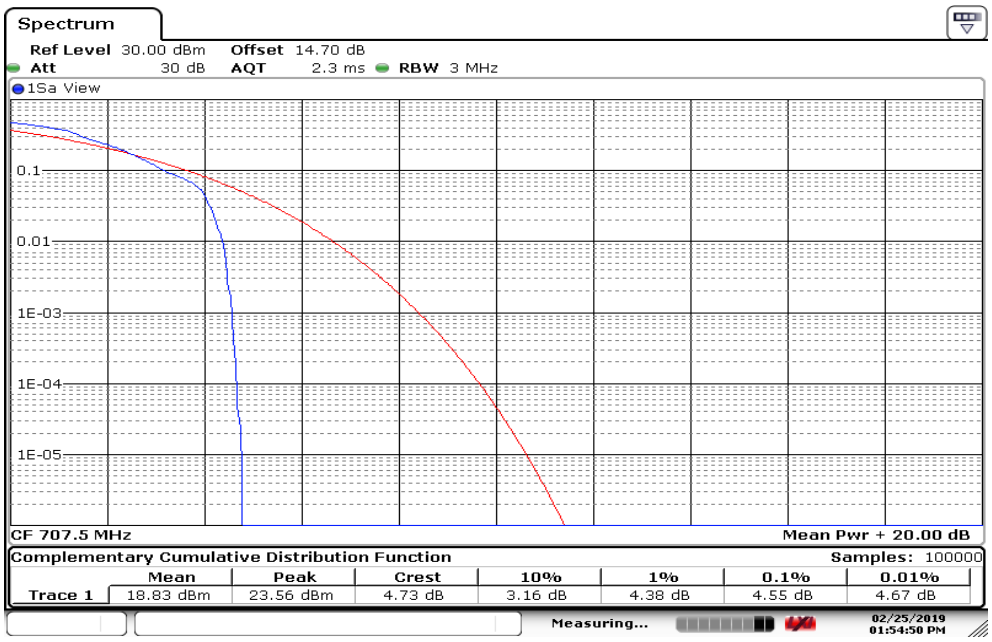
Date: 25.FEB.2019 13:50:40

CHANNEL BANDWIDTH: 5MHz / QPSK/ 100%RB



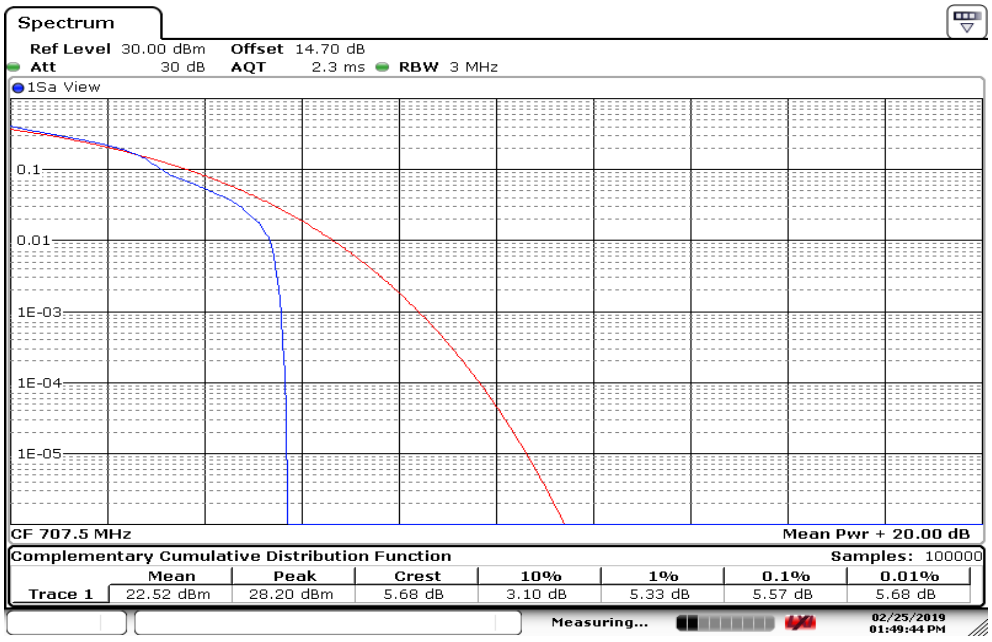
Date: 25.FEB.2019 13:52:23

CHANNEL BANDWIDTH: 10MHz / QPSK/ 100%RB



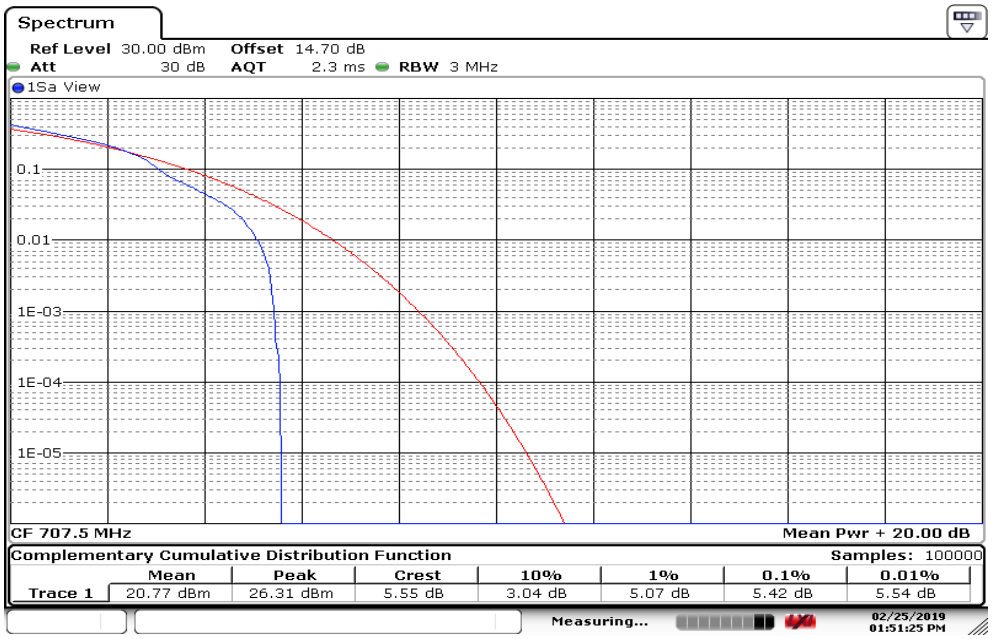
Date: 25.FEB.2019 13:54:51

CHANNEL BANDWIDTH: 1.4MHz / 16QAM / 1RB



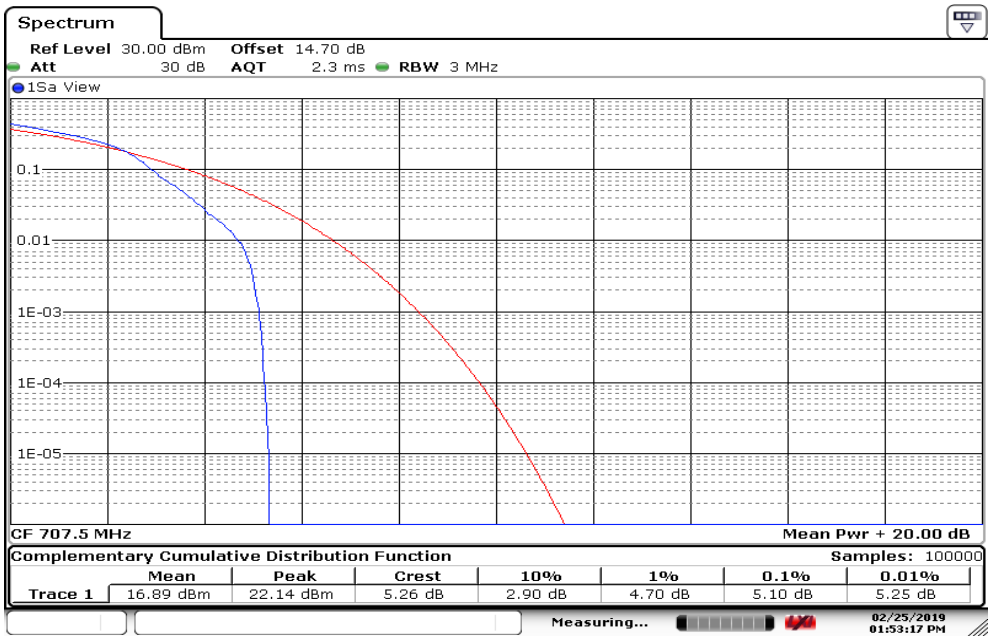
Date: 25.FEB.2019 13:49:44

CHANNEL BANDWIDTH: 3MHz / 16QAM / 1RB



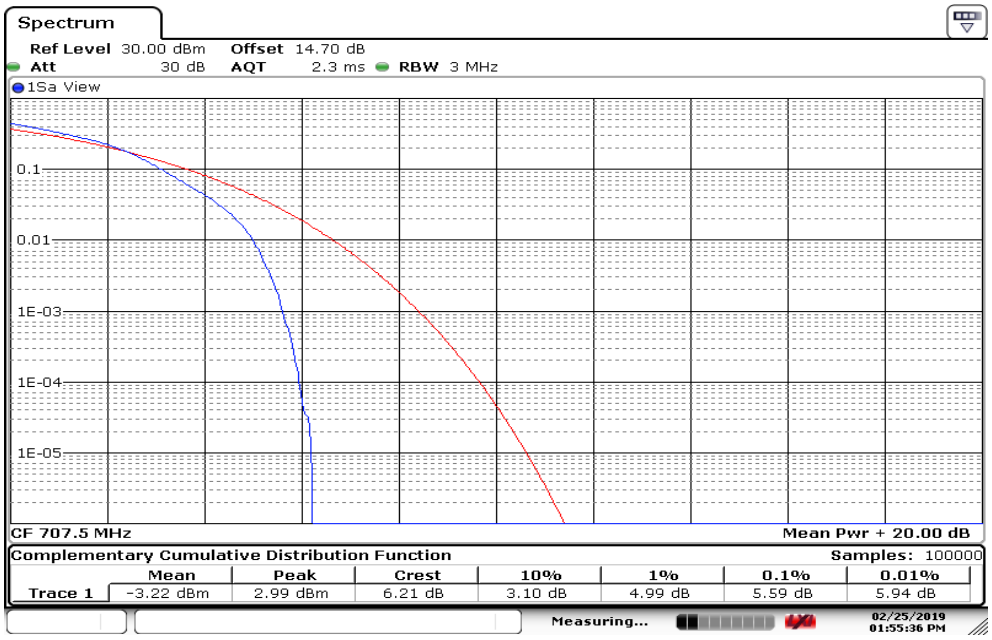
Date: 25.FEB.2019 13:51:26

CHANNEL BANDWIDTH: 5MHz / 16QAM / 1RB



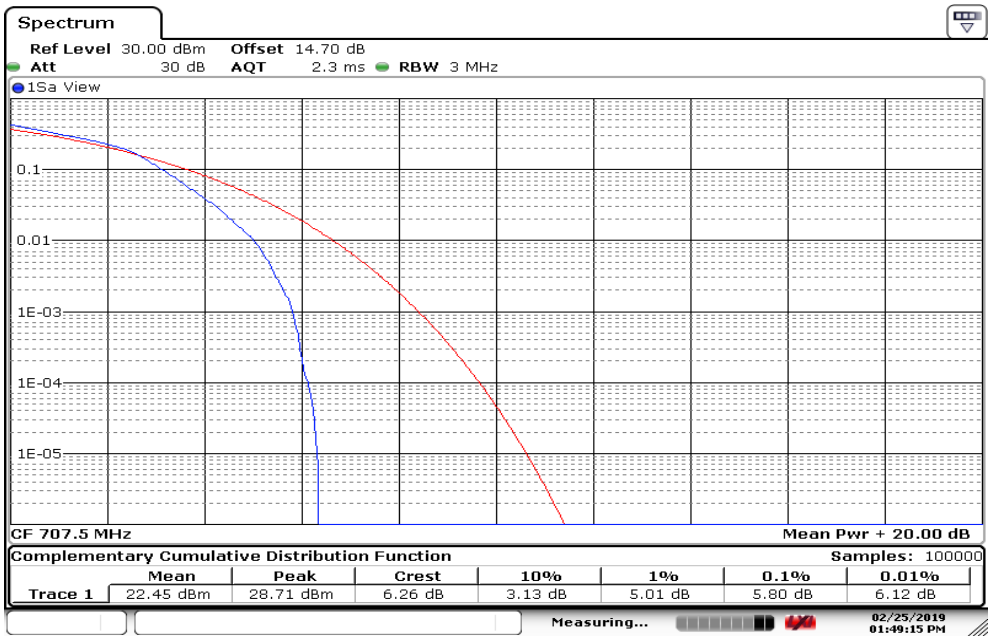
Date: 25.FEB.2019 13:53:17

CHANNEL BANDWIDTH: 10MHz / 16QAM / 1RB



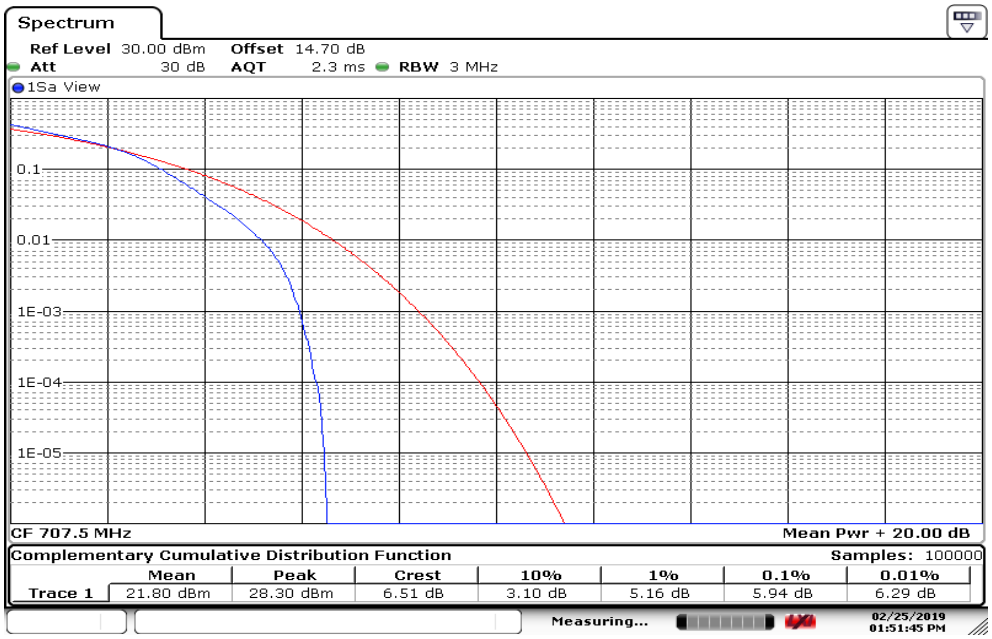
Date: 25.FEB.2019 13:55:36

CHANNEL BANDWIDTH: 1.4MHz / 16QAM / 100%RB



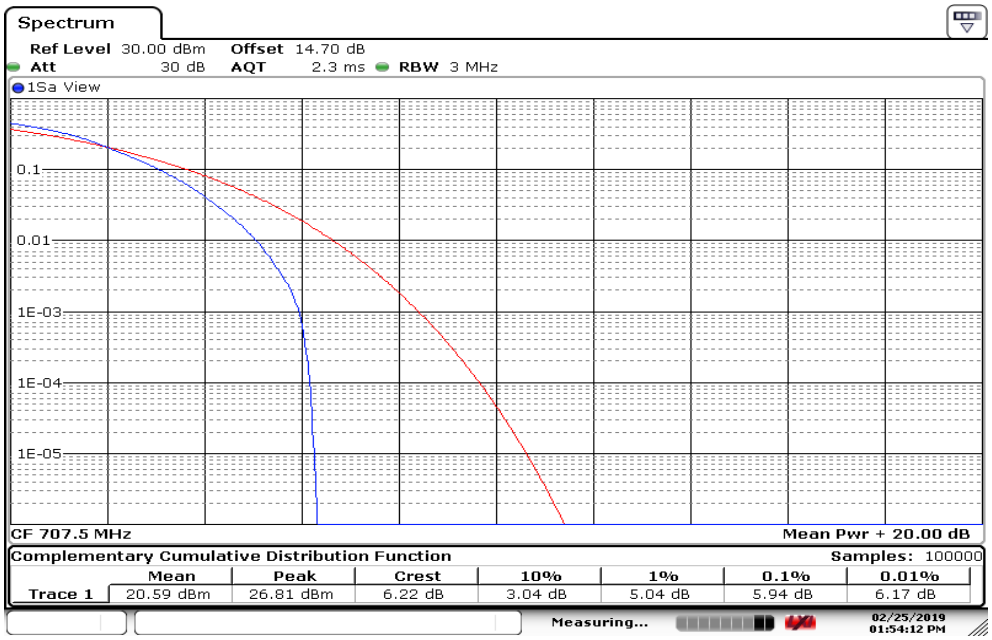
Date: 25.FEB.2019 13:49:16

CHANNEL BANDWIDTH: 3MHz / 16QAM / 100%RB



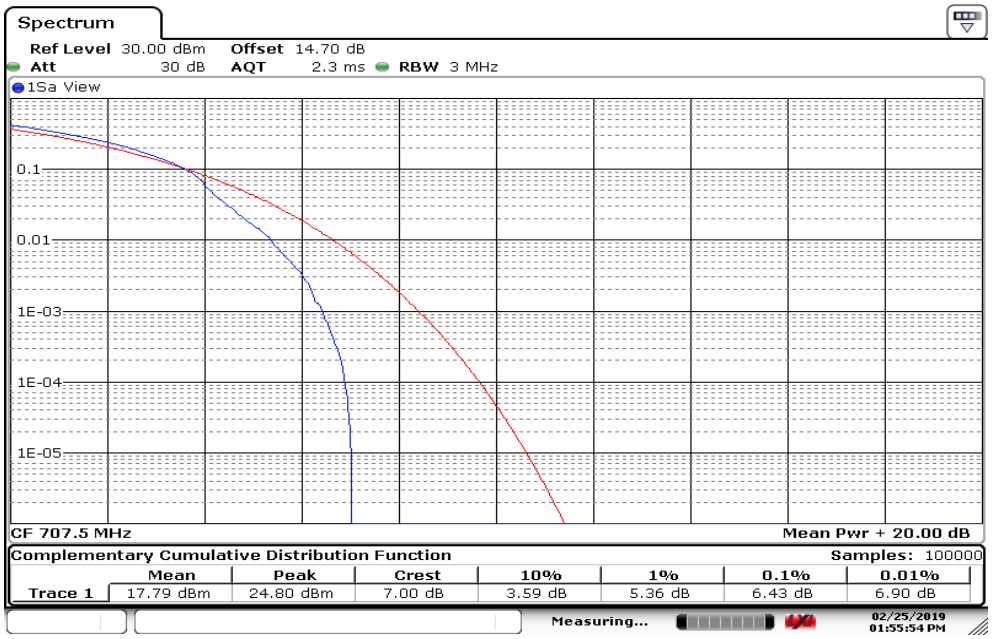
Date: 25.FEB.2019 13:51:46

CHANNEL BANDWIDTH: 5MHz / 16QAM / 100%RB



Date: 25.FEB.2019 13:54:13

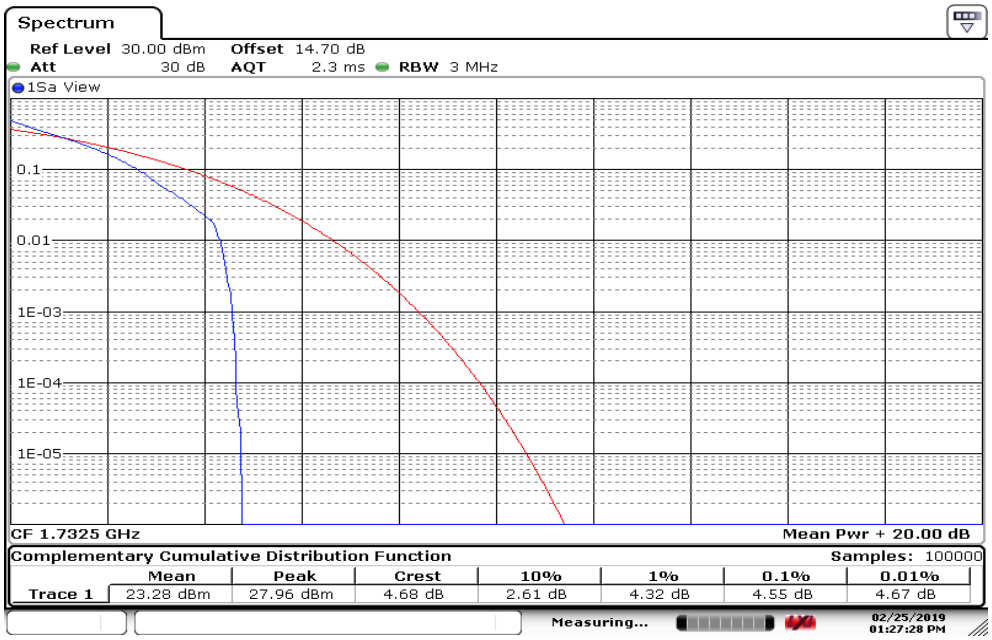
CHANNEL BANDWIDTH: 10MHz / 16QAM / 100%RB



Date: 25.FEB.2019 13:55:54

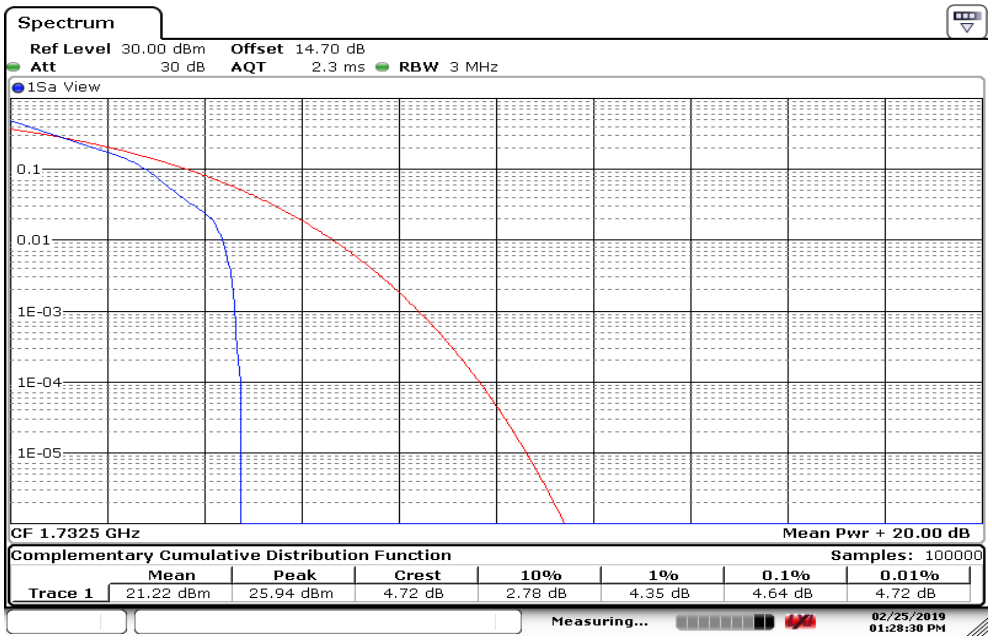
LTE Band 4

CHANNEL BANDWIDTH: 1.4MHz / QPSK/1RB



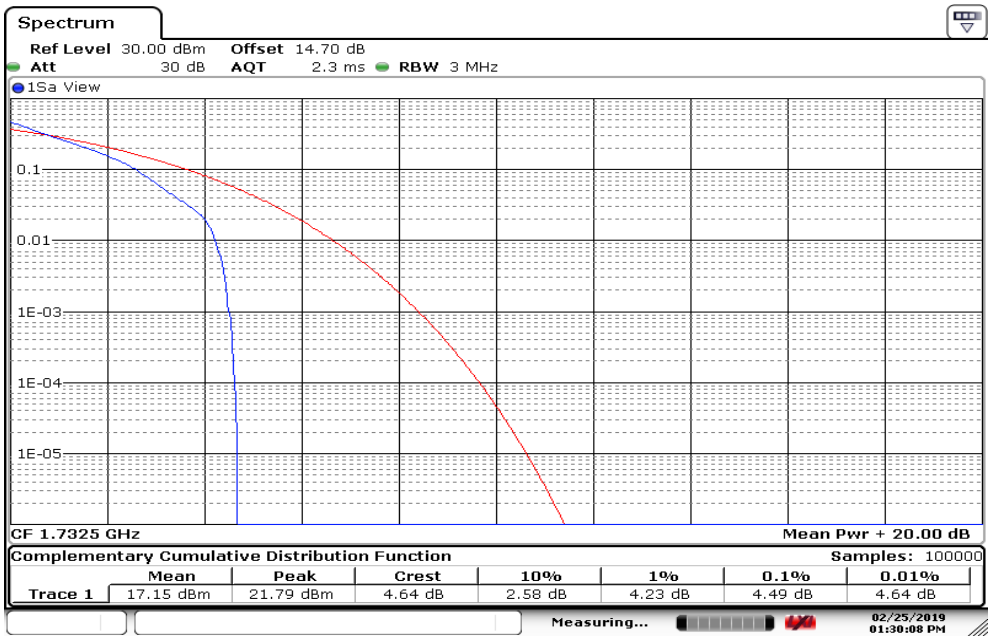
Date: 25.FEB.2019 13:27:28

CHANNEL BANDWIDTH: 3MHz / QPSK /1RB



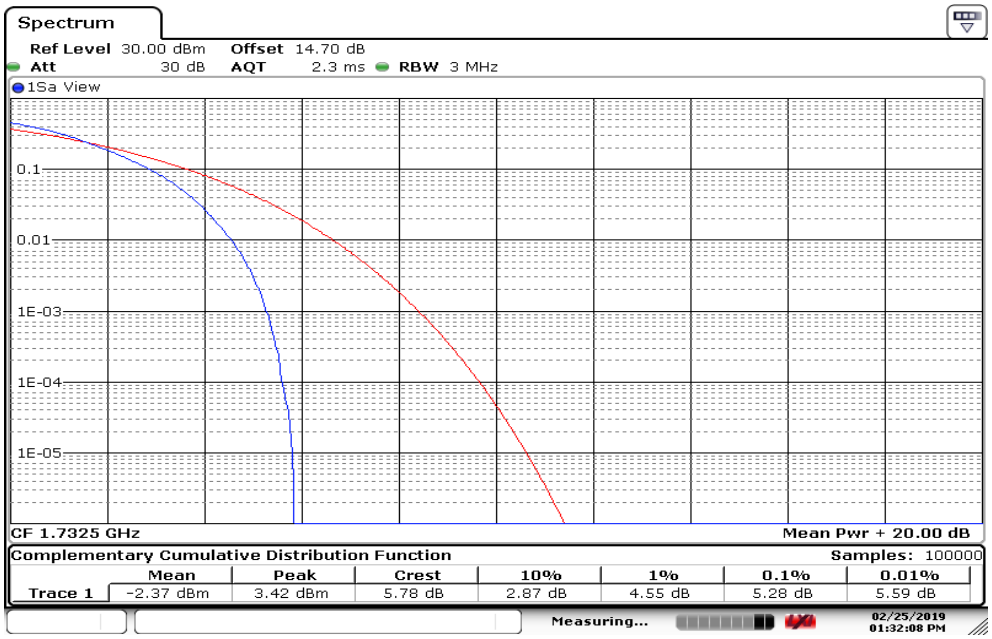
Date: 25.FEB.2019 13:28:30

CHANNEL BANDWIDTH: 5MHz / QPSK/1RB



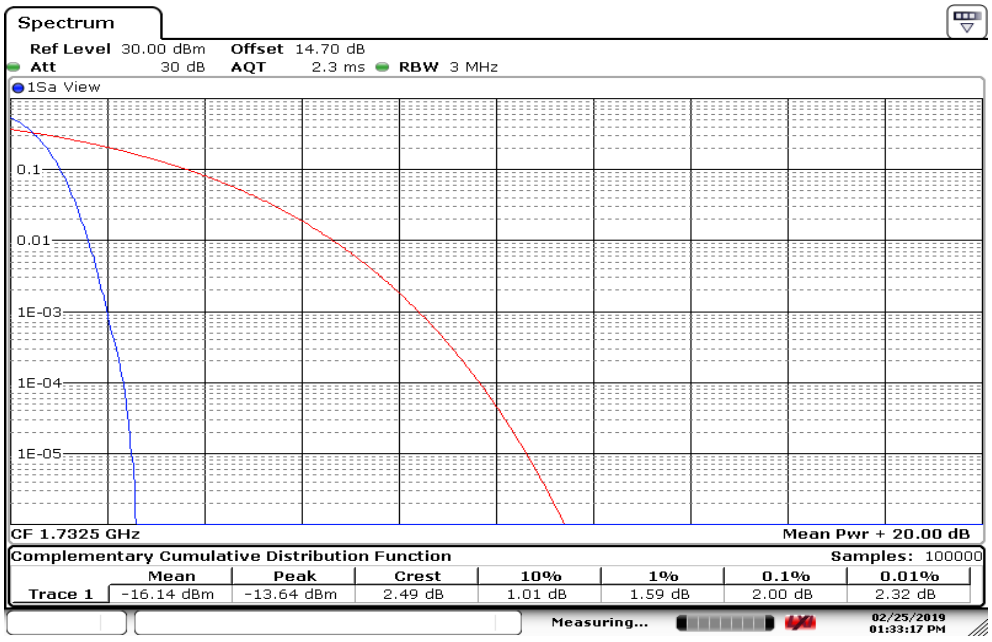
Date: 25.FEB.2019 13:30:09

CHANNEL BANDWIDTH: 10MHz / QPSK /1RB



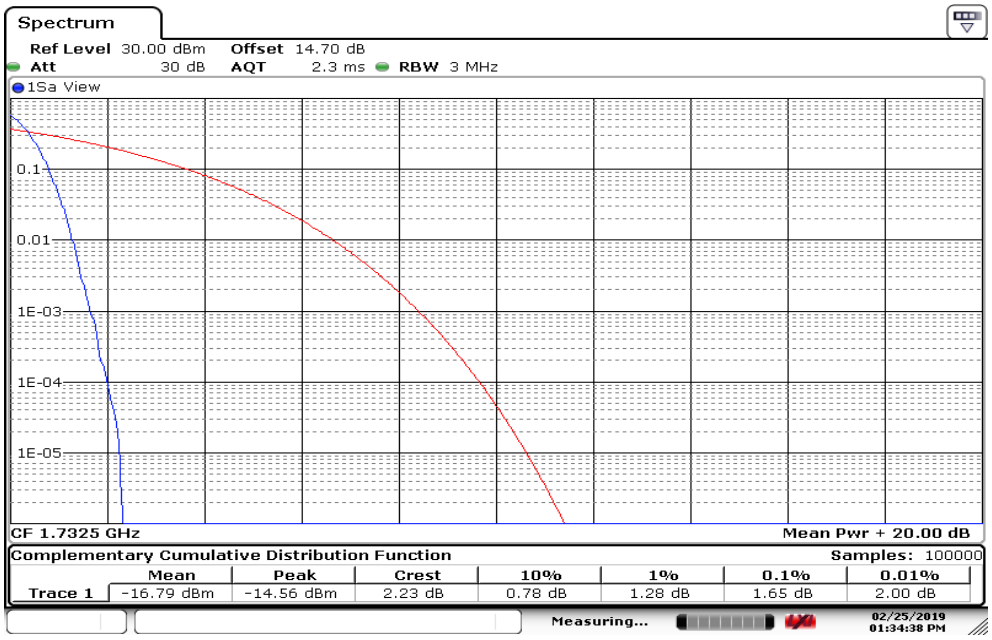
Date: 25.FEB.2019 13:32:08

CHANNEL BANDWIDTH: 15MHz / QPSK/1RB



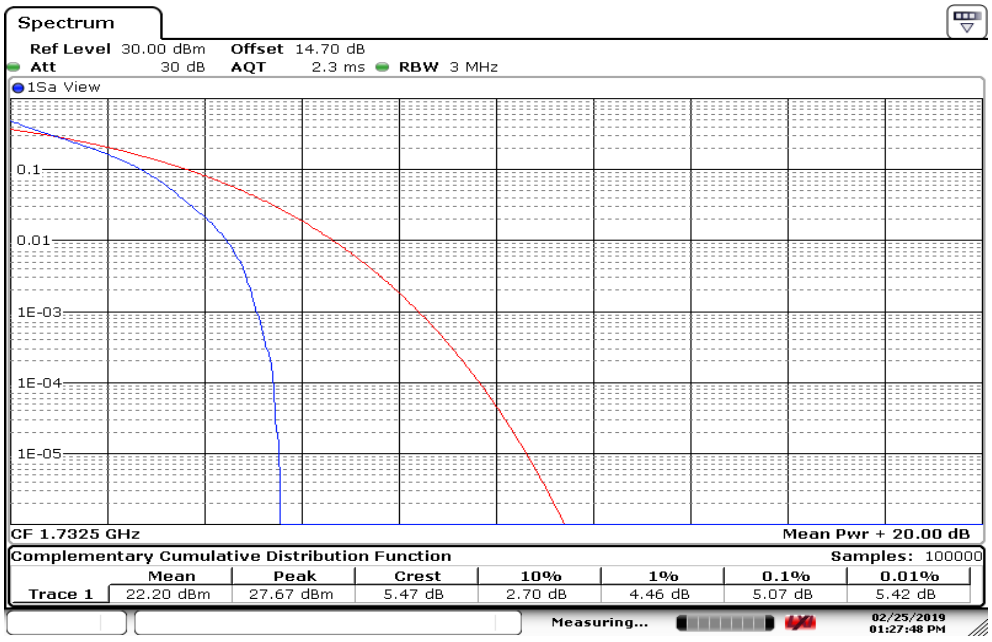
Date: 25.FEB.2019 13:33:18

CHANNEL BANDWIDTH: 20MHz / QPSK /1RB



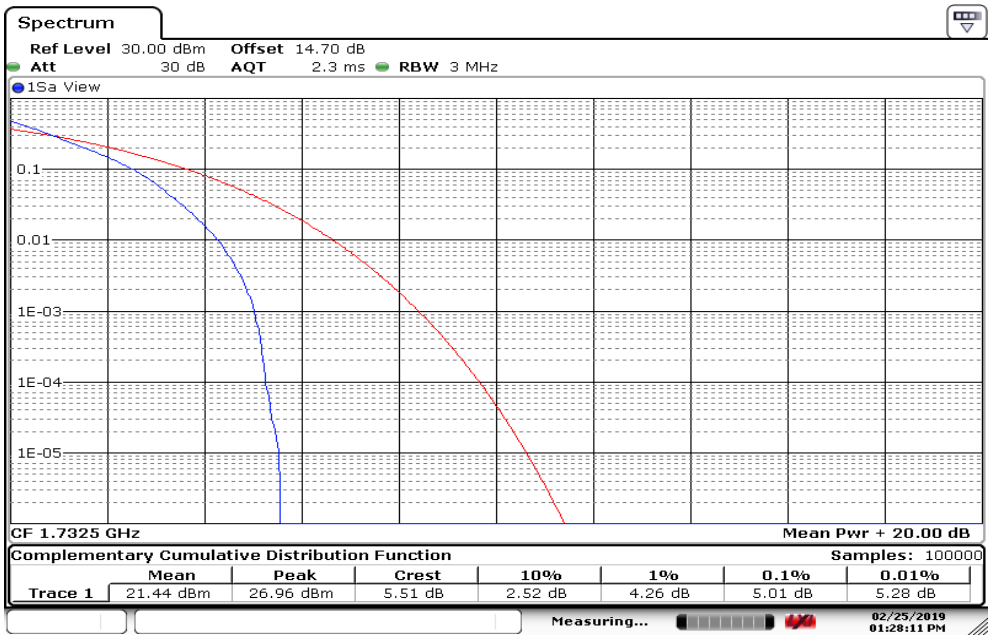
Date: 25.FEB.2019 13:34:38

CHANNEL BANDWIDTH: 1.4MHz / QPSK/100%RB



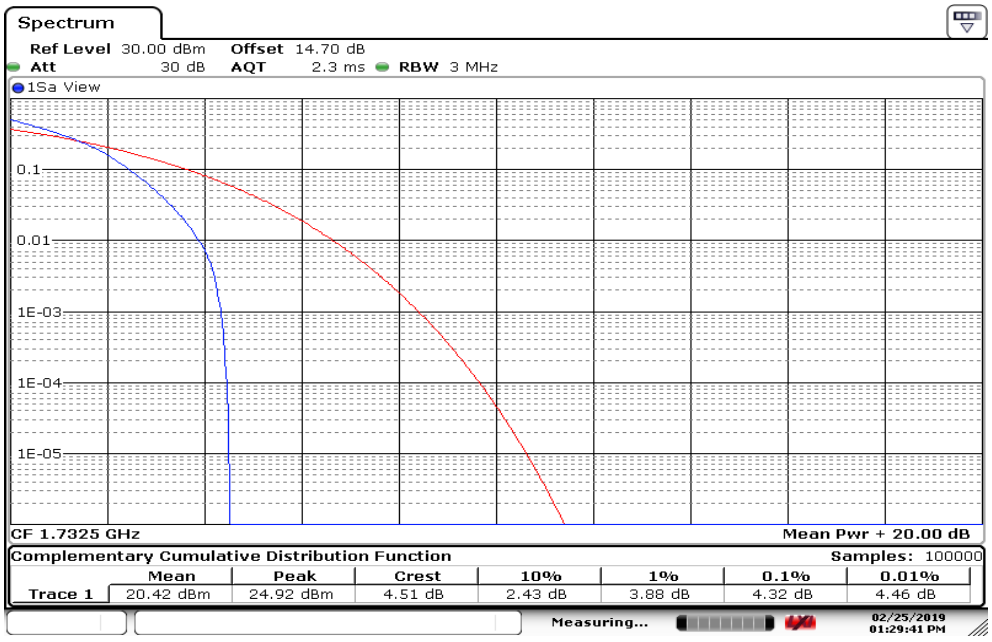
Date: 25.FEB.2019 13:27:47

CHANNEL BANDWIDTH: 3MHz / QPSK /100%RB



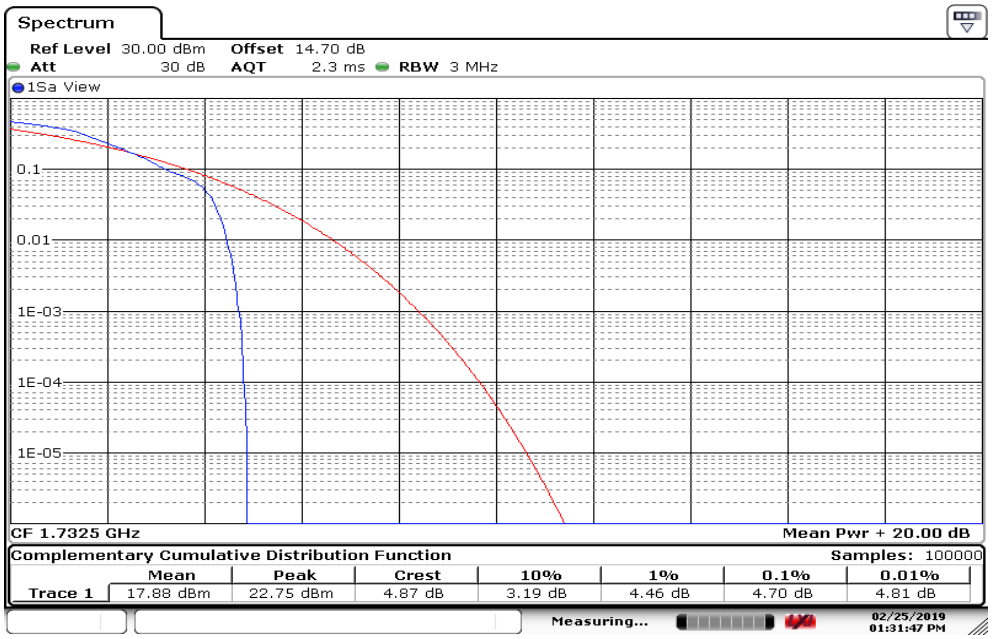
Date: 25.FEB.2019 13:28:11

CHANNEL BANDWIDTH: 5MHz / QPSK/100%RB



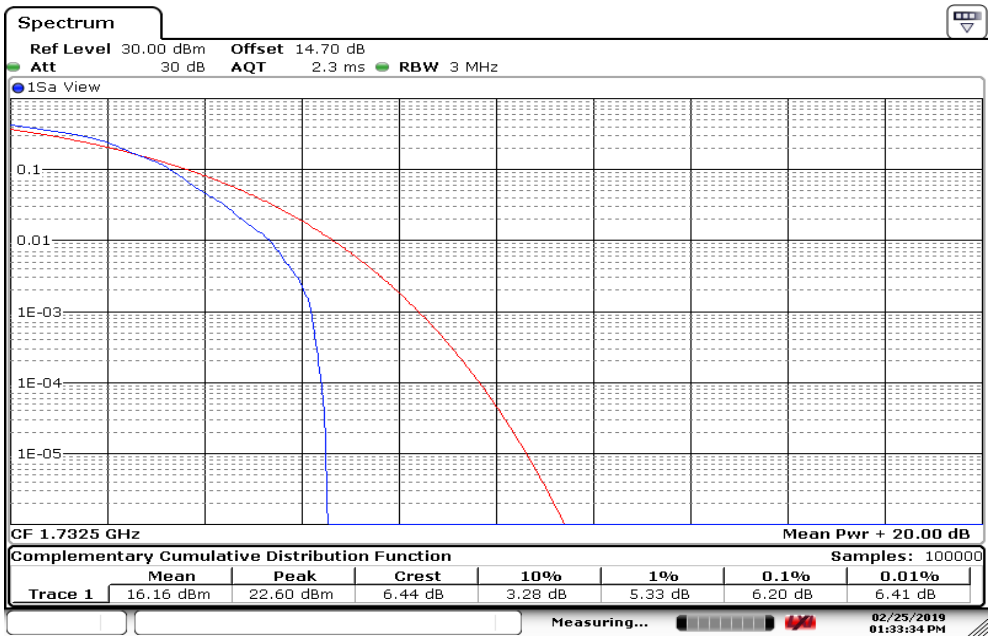
Date: 25.FEB.2019 13:29:42

CHANNEL BANDWIDTH: 10MHz / QPSK /100%RB



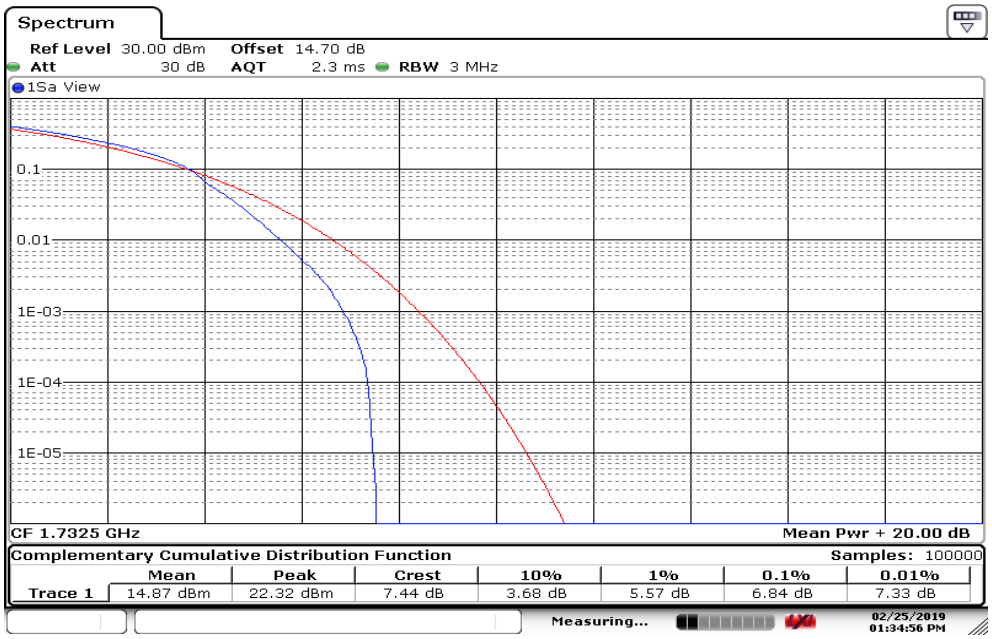
Date: 25.FEB.2019 13:31:47

CHANNEL BANDWIDTH: 15MHz / QPSK/100%RB



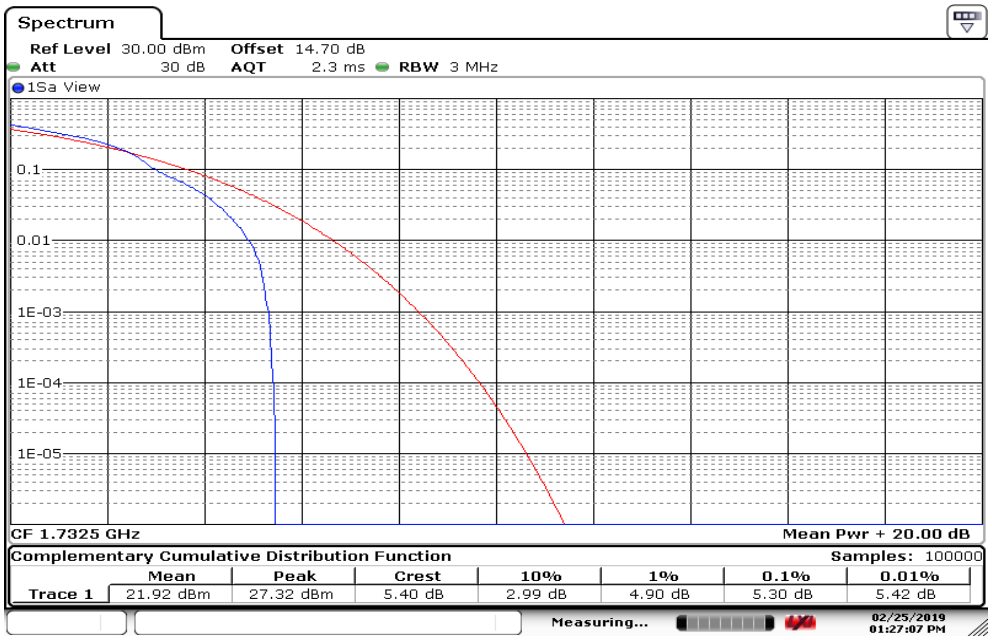
Date: 25.FEB.2019 13:33:35

CHANNEL BANDWIDTH: 20MHz / QPSK /100%RB



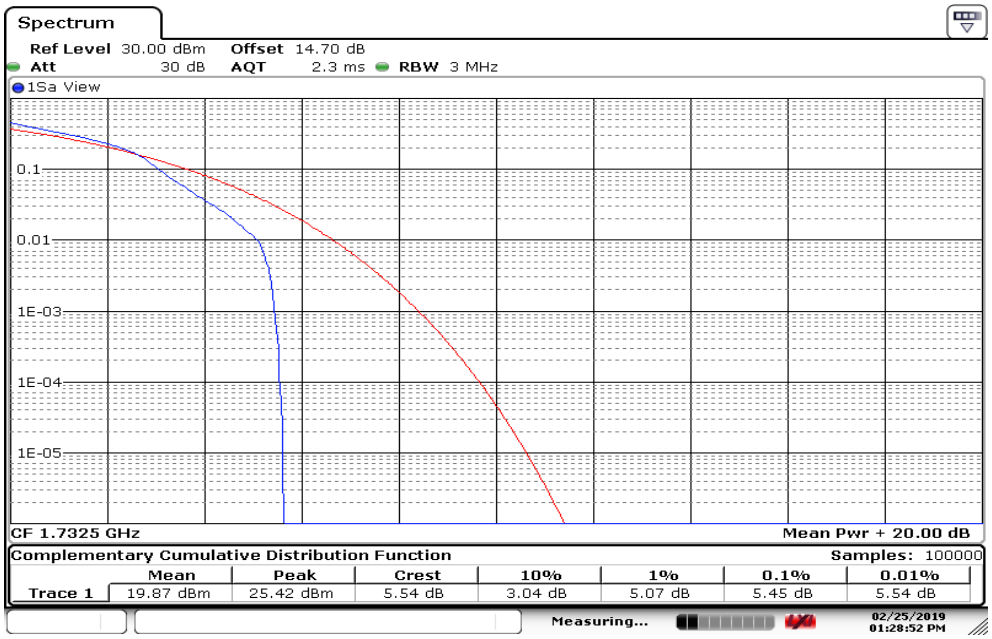
Date: 25.FEB.2019 13:34:56

CHANNEL BANDWIDTH: 1.4MHz / 16QAM/1RB



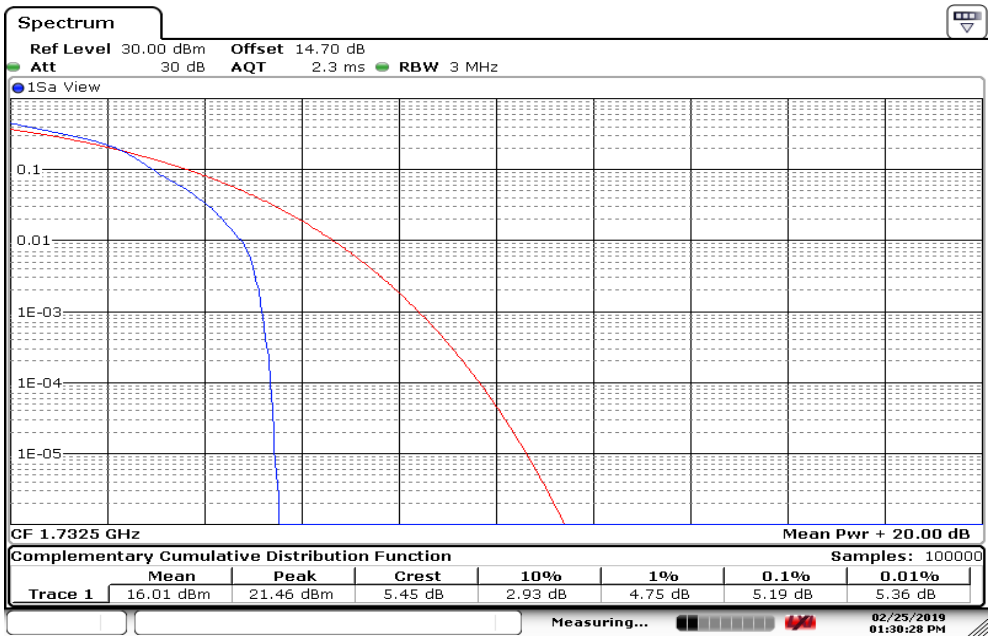
Date: 25.FEB.2019 13:27:08

CHANNEL BANDWIDTH: 3MHz / 16QAM /1RB



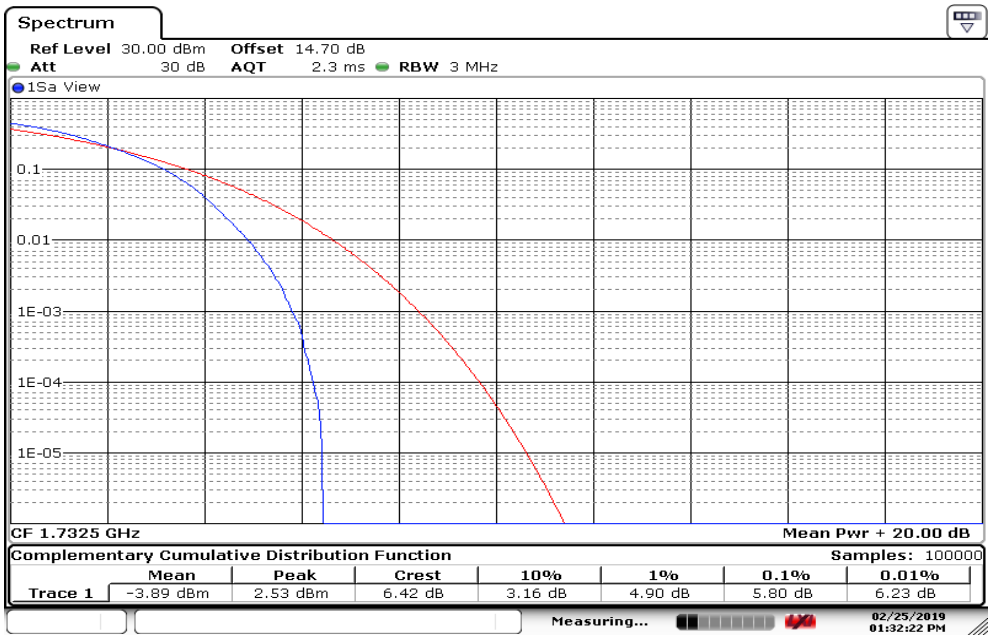
Date: 25.FEB.2019 13:28:52

CHANNEL BANDWIDTH: 5MHz / 16QAM /1RB



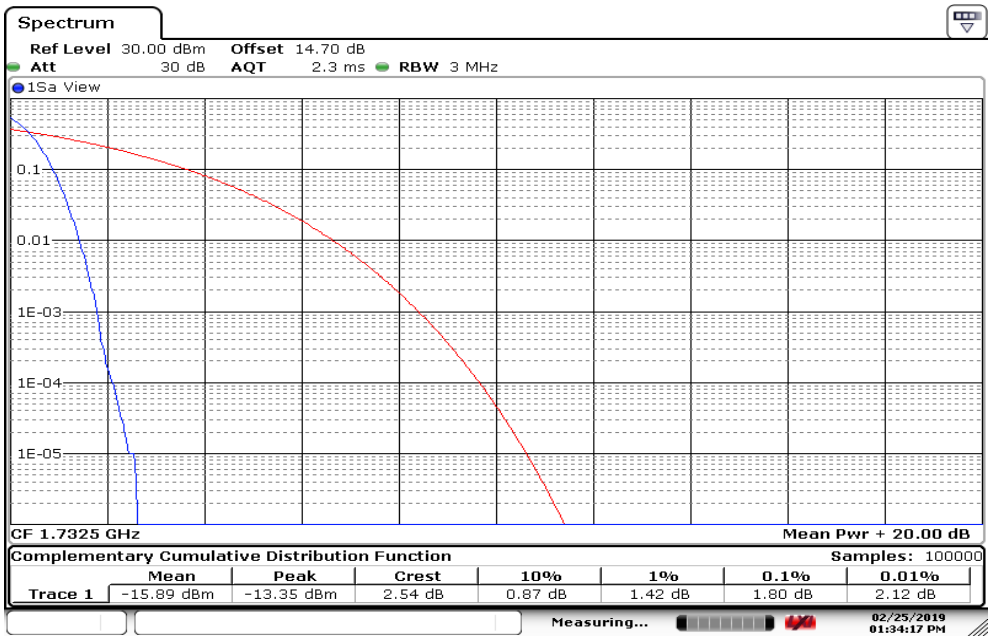
Date: 25.FEB.2019 13:30:28

CHANNEL BANDWIDTH: 10MHz / 16QAM /1RB



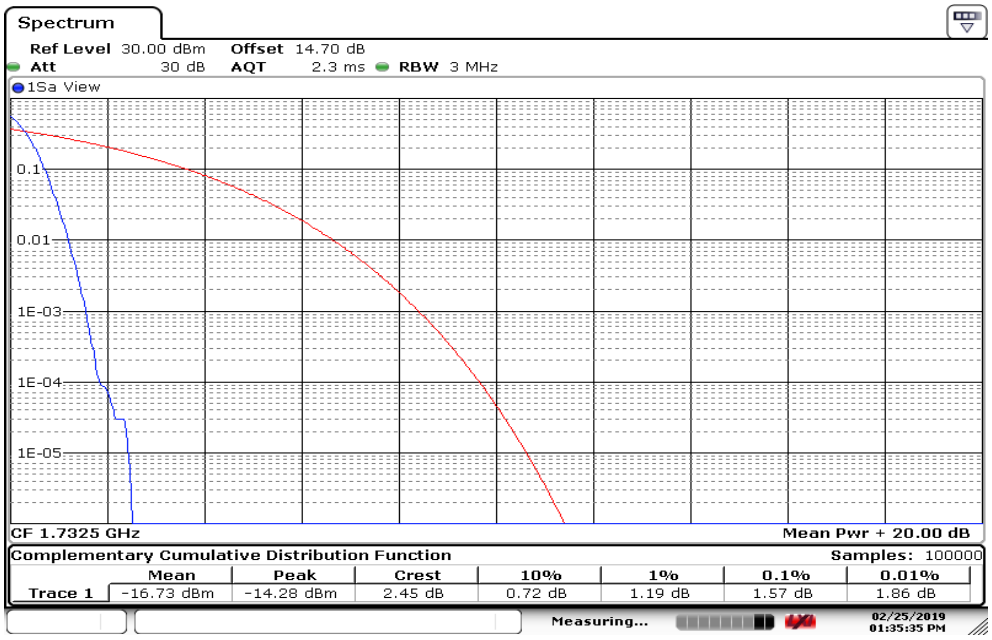
Date: 25.FEB.2019 13:32:23

CHANNEL BANDWIDTH: 15MHz / 16QAM /1RB



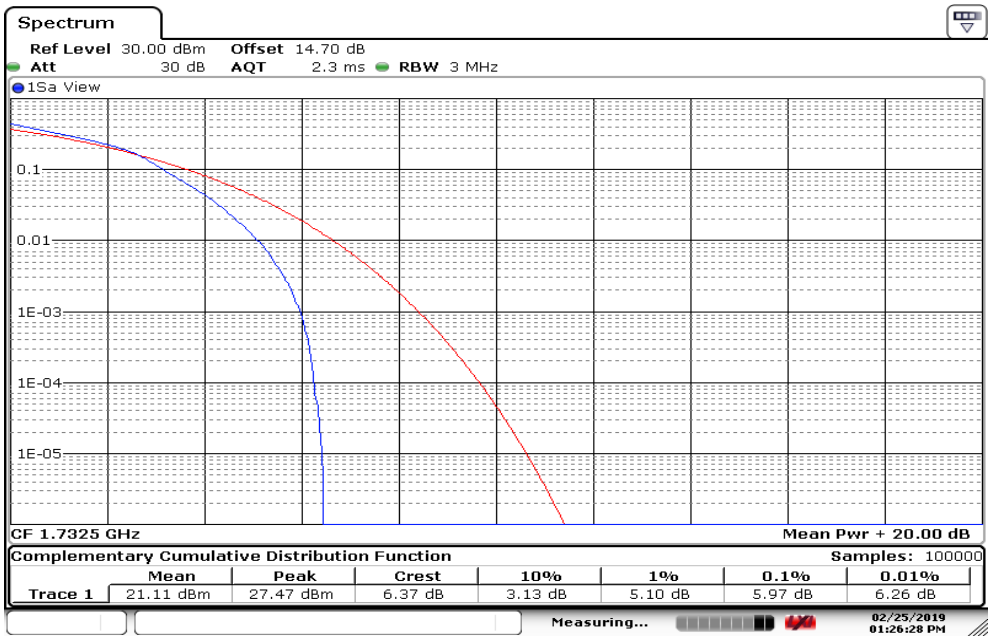
Date: 25.FEB.2019 13:34:17

CHANNEL BANDWIDTH: 20MHz / 16QAM /1RB



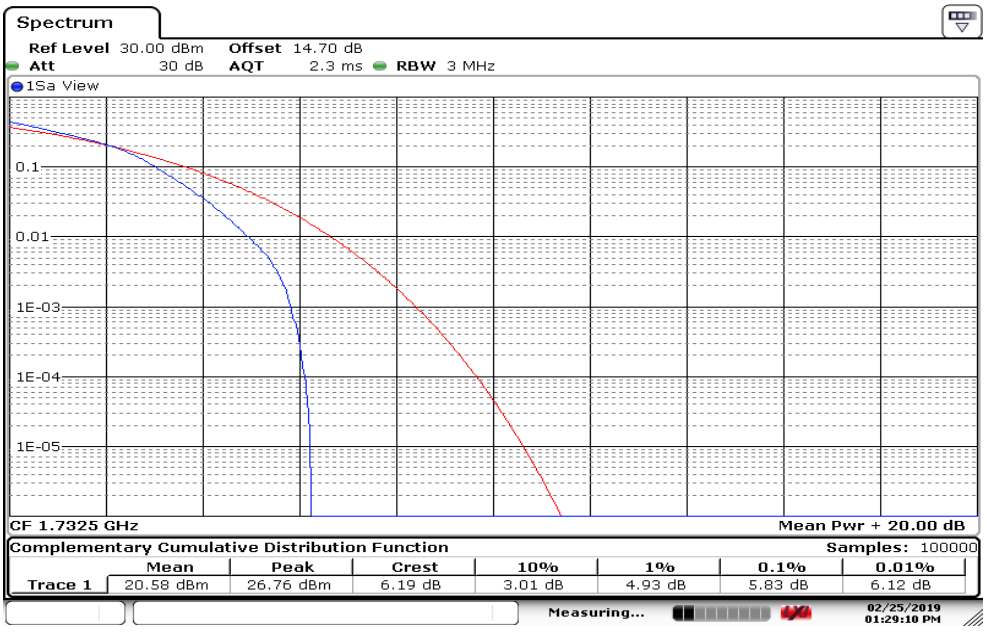
Date: 25.FEB.2019 13:35:36

CHANNEL BANDWIDTH: 1.4MHz / 16QAM/100%RB



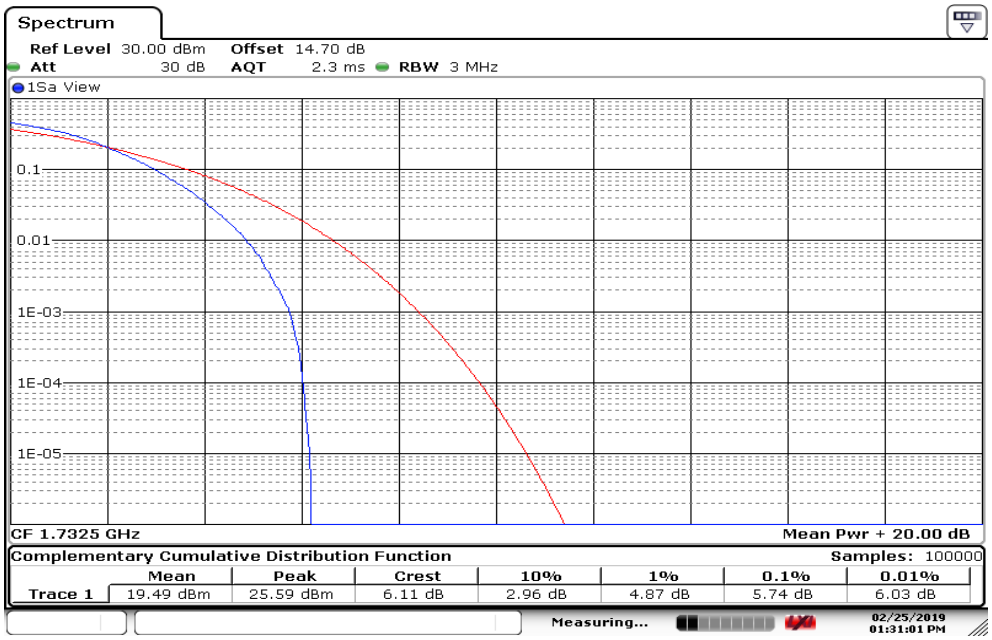
Date: 25.FEB.2019 13:26:29

CHANNEL BANDWIDTH: 3MHz / 16QAM /100%RB



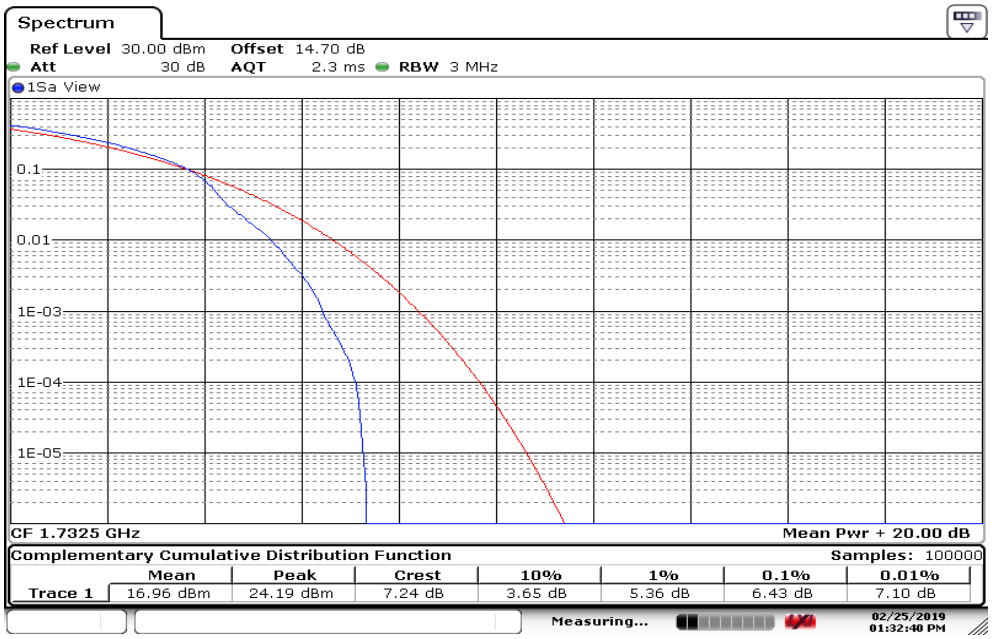
Date: 25.FEB.2019 13:29:10

CHANNEL BANDWIDTH: 5MHz / 16QAM /100%RB



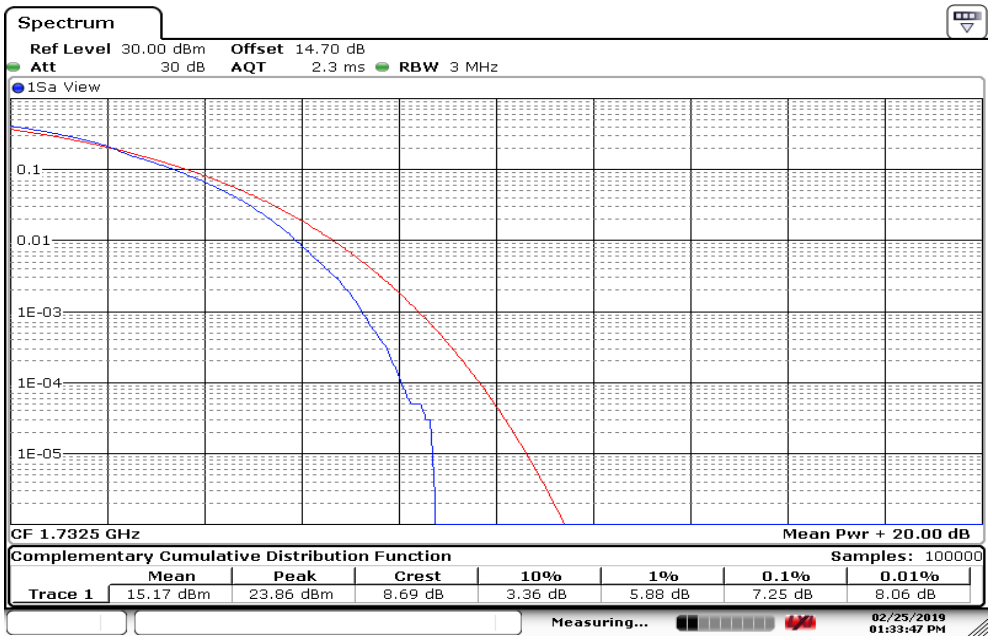
Date: 25.FEB.2019 13:31:01

CHANNEL BANDWIDTH: 10MHz / 16QAM /100%RB



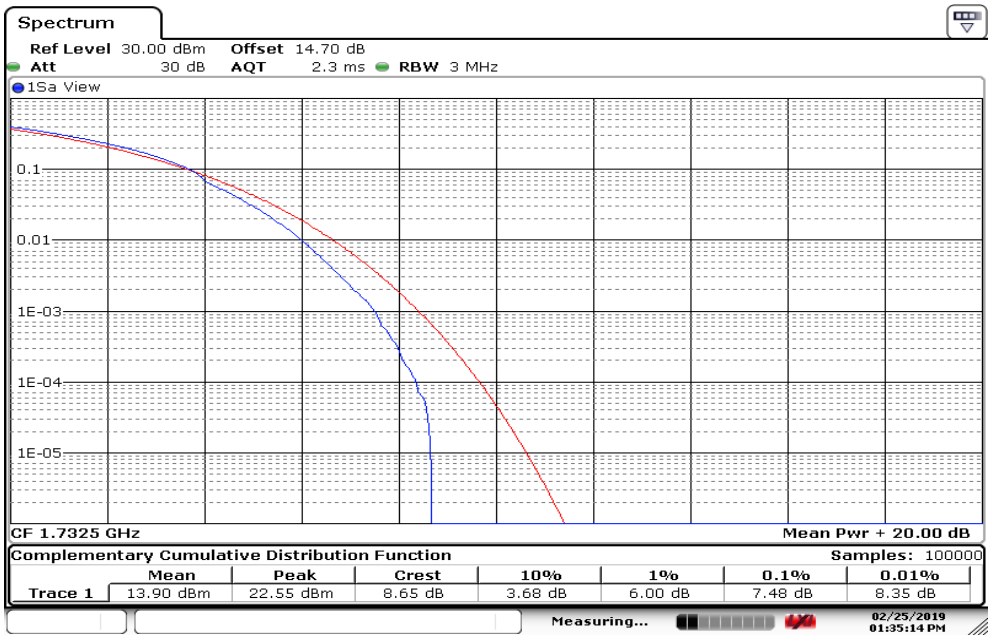
Date: 25.FEB.2019 13:32:40

CHANNEL BANDWIDTH: 15MHz / 16QAM /100%RB



Date: 25.FEB.2019 13:33:48

CHANNEL BANDWIDTH: 20MHz / 16QAM /100%RB



Date: 25.FEB.2019 13:35:14

8.6 BAND EDGE MEASUREMENT

LIMIT

FCC §27.53(g), Band 12

For operations in the 600 MHz band and the 698-746MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a .licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed

FCC §27.53(h), Band 4

General protection levels. Except as otherwise specified below, for operations in the 1755MHz bands, the power of any emission outside a licensee's frequency block -1710 shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) .dB

According to RSS-130, Band 12,

The power of any unwanted emissions in any 100 kHz bandwidth on any frequency outside the frequency range(s) within which the equipment is designed to operate shall be attenuated below the transmitter power, P (dBW), by at least 43 + 10 $\log_{10}$ p (watts), dB. However, in the100 kHz band immediately outside the equipment's operating frequency range, a resolution bandwidth of 30 kHz may be employed.

According to RSS-139, Band 4,

General protection levels. Except as otherwise specified below, for operations in the In the first 1.0 MHz bands immediately outside and adjacent to the equipment's smallest operating frequency block,2 which can contain the equipment's occupied bandwidth, the emission power per any 1% of the emission bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least 43 + 10 $\log_{10}$ p (watts) dB
After the first 1.0 MHz outside the equipment's smallest operating frequency block, which can contain the equipment's occupied bandwidth, the emission power in any 1 MHz bandwidth shall be attenuated below the transmitter output power P (in dBW) by at least 43 + 10 $\log_{10}$ p (watts) dB.

TEST PROCEDURES

KDB 971168 D01 v02r02 - Section 6.0

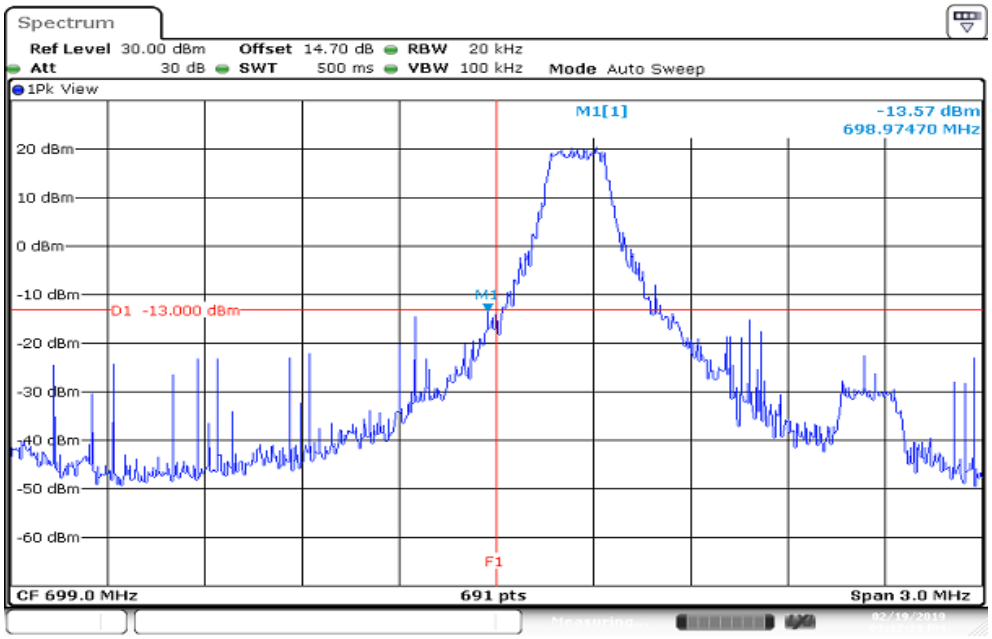
1. RBW ≥ 1% of the emission bandwidth
2. VBW ≥ 3 x RBW
3. Span was set large enough so as to capture all out of emissions near the band edge.

TEST RESULTS:

LTE Band 12

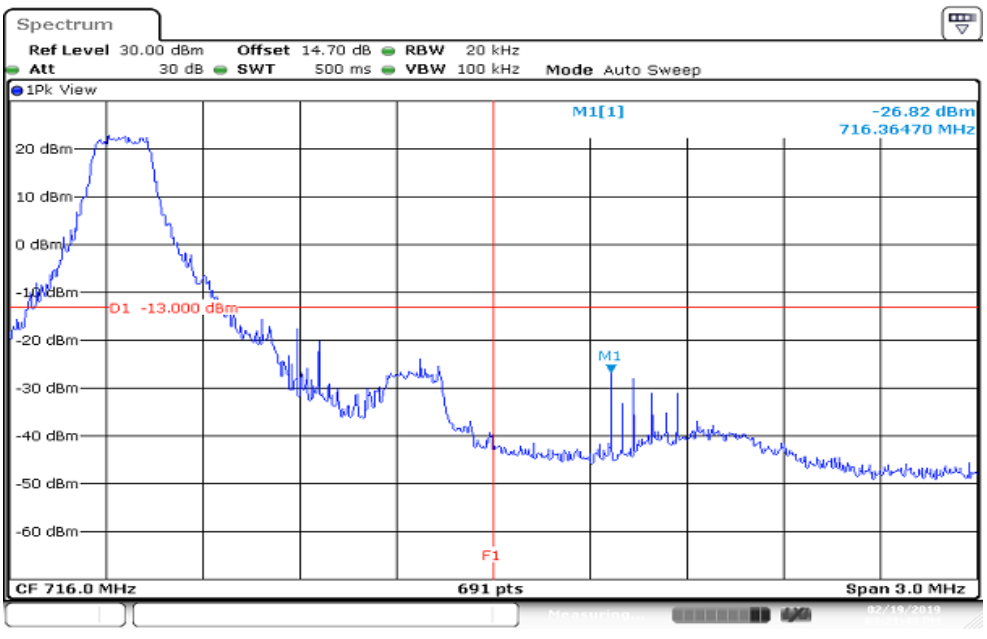
CHANNEL BANDWIDTH: 1.4MHz / QPSK / 1 RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:17:21

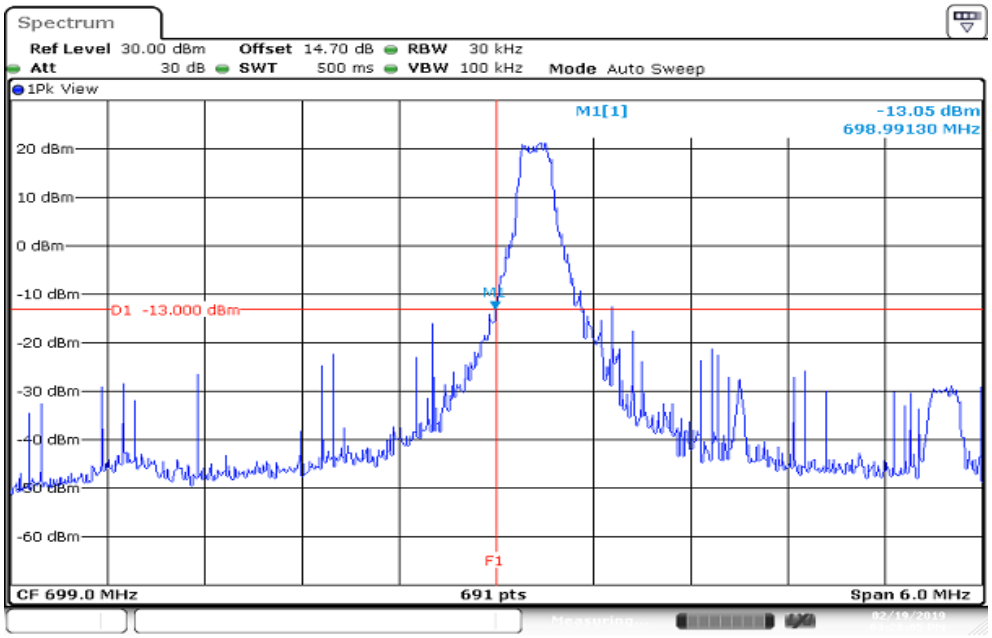
HIGHER BAND EDGE



Date: 19.FEB.2019 15:21:43

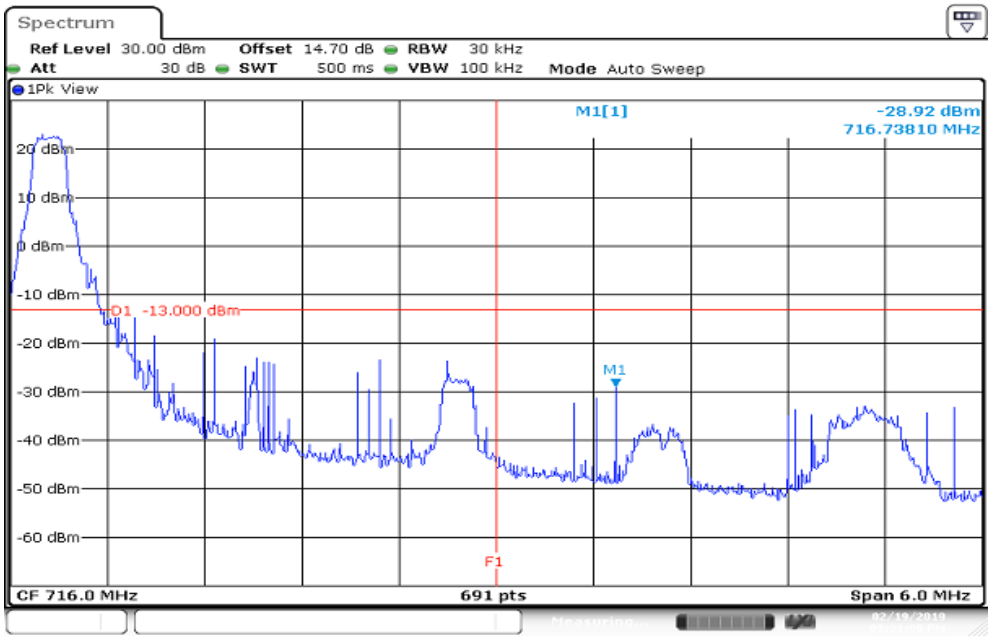
CHANNEL BANDWIDTH: 3MHz / QPSK / 1 RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:28:05

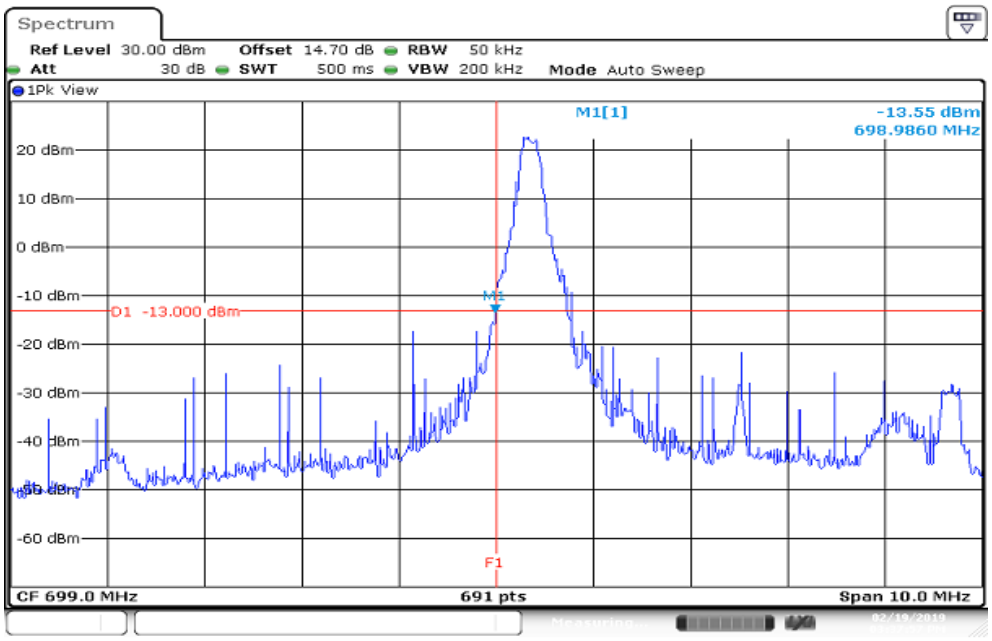
HIGHER BAND EDGE



Date: 19.FEB.2019 15:31:00

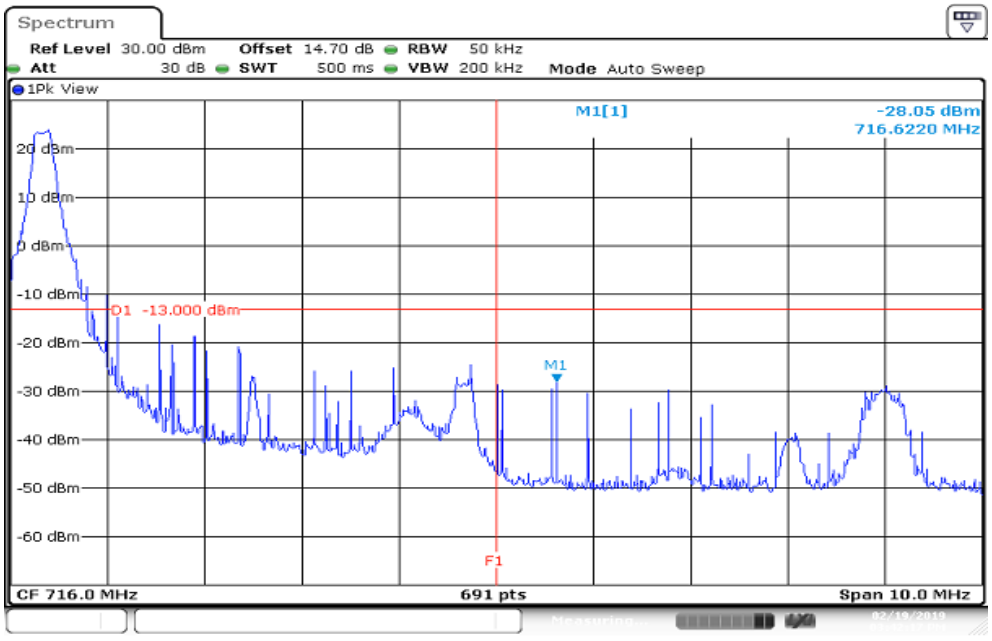
CHANNEL BANDWIDTH: 5MHz / QPSK / 1 RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:37:58

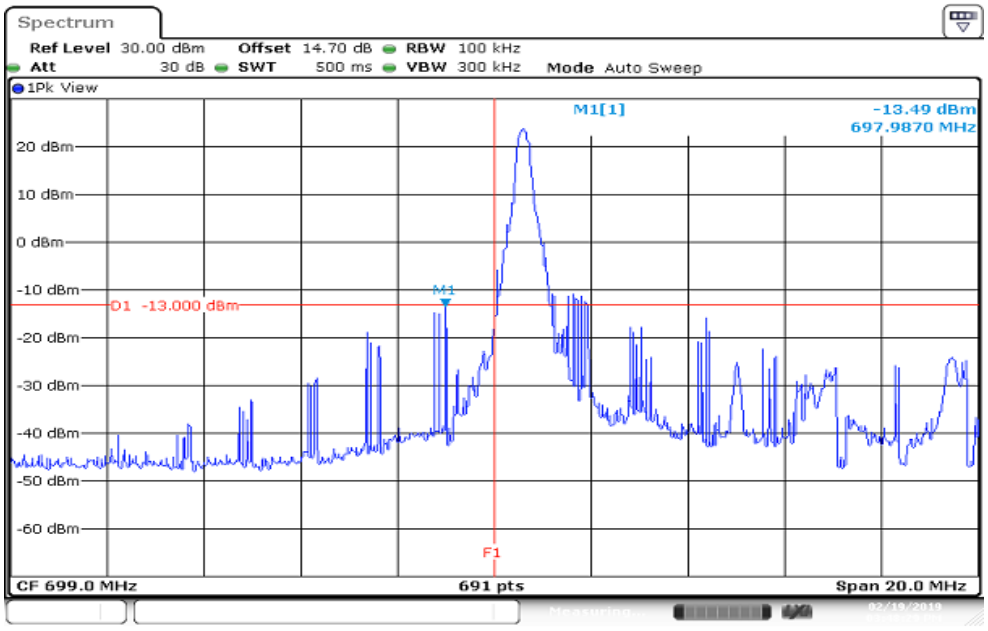
HIGHER BAND EDGE



Date: 19.FEB.2019 15:42:18

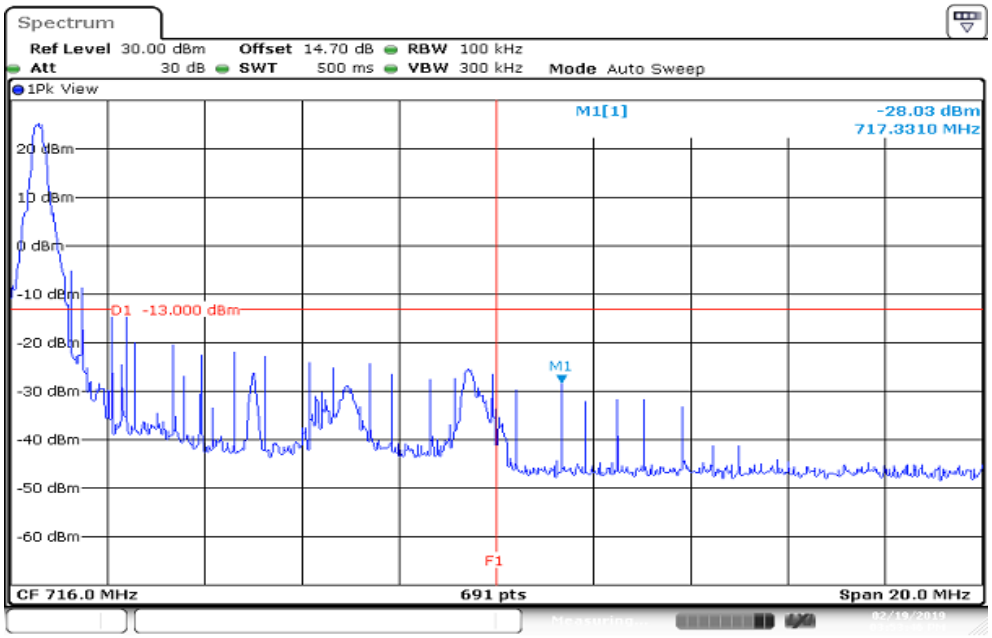
CHANNEL BANDWIDTH: 10MHz / QPSK / 1 RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:48:29

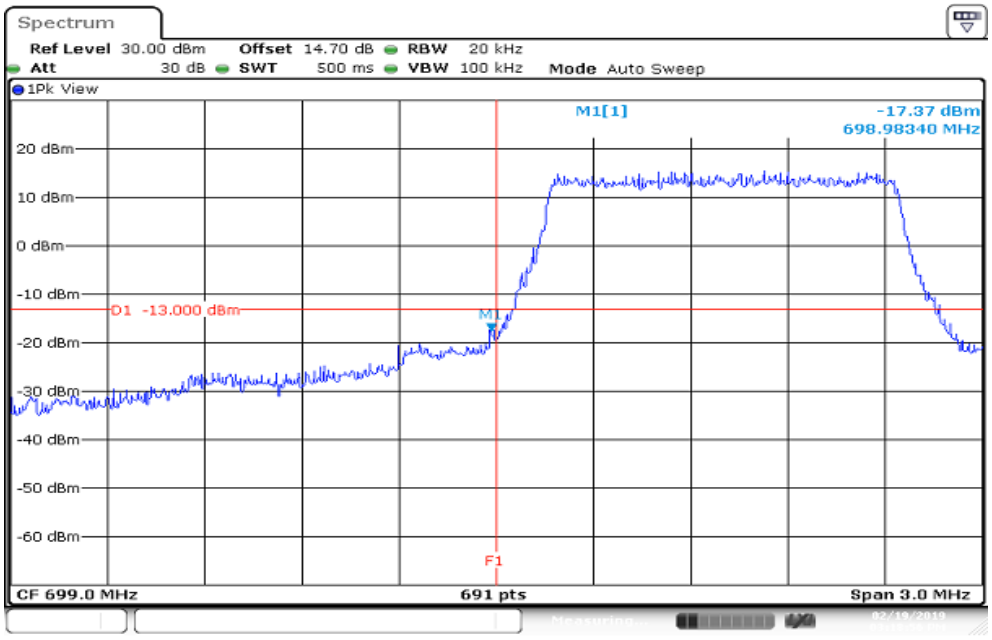
HIGHER BAND EDGE



Date: 19.FEB.2019 15:53:46

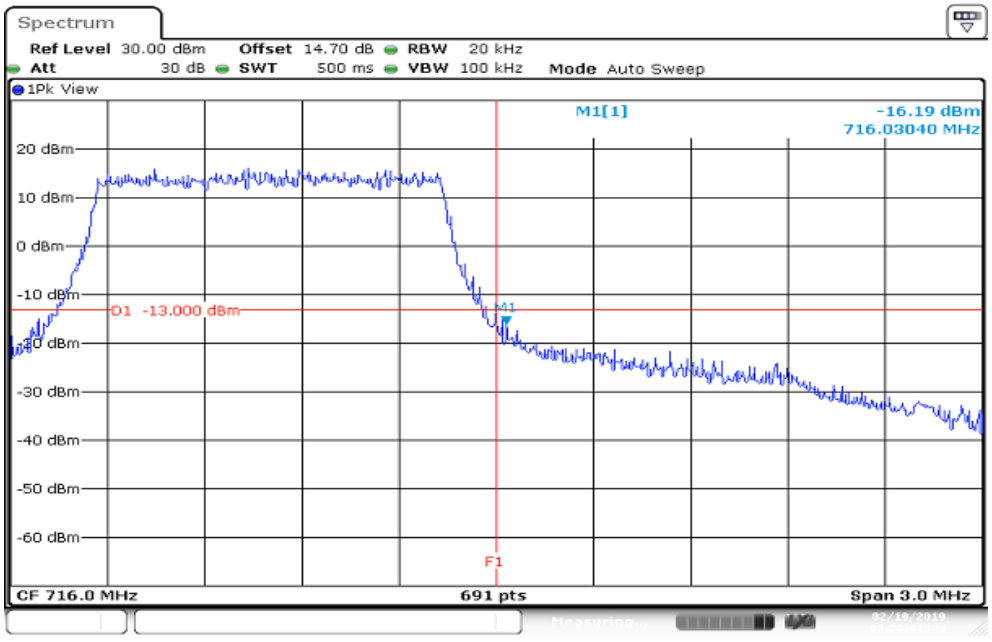
CHANNEL BANDWIDTH: 1.4MHz / QPSK / FULL RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:18:56

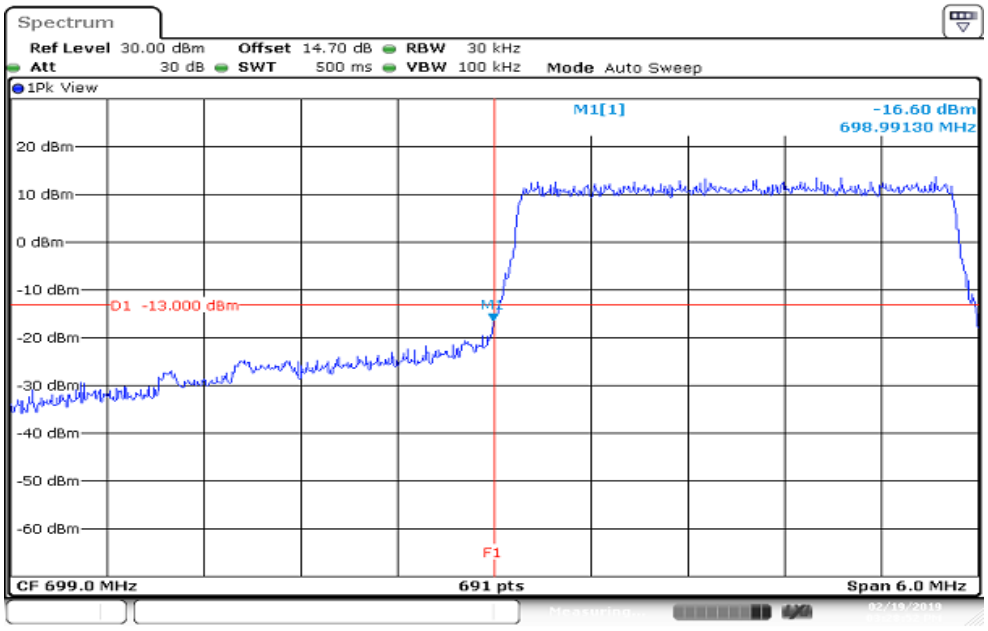
HIGHER BAND EDGE



Date: 19.FEB.2019 15:20:42

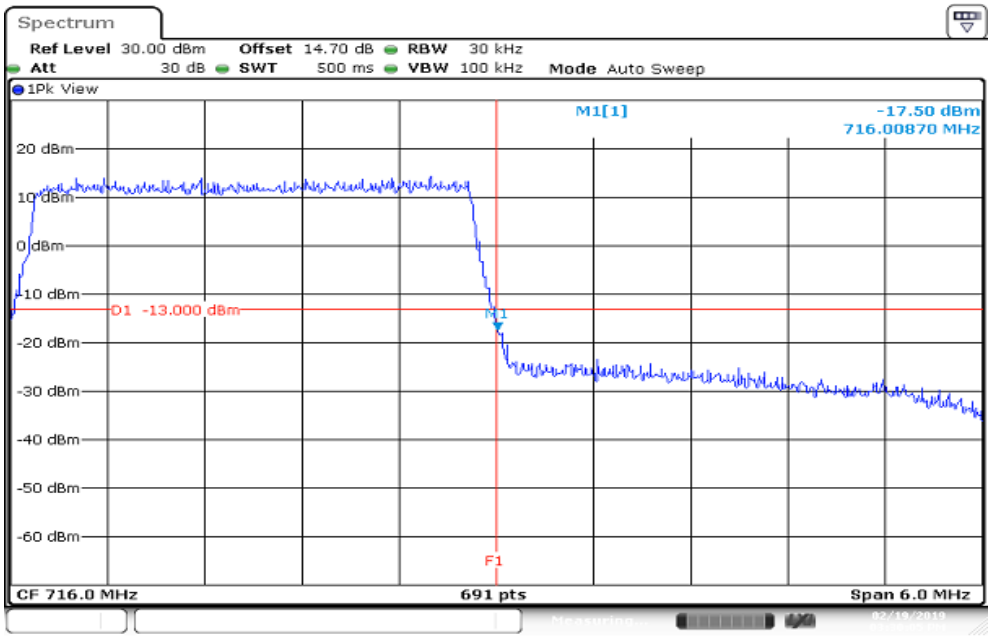
CHANNEL BANDWIDTH: 3MHz / QPSK / FULL RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:28:52

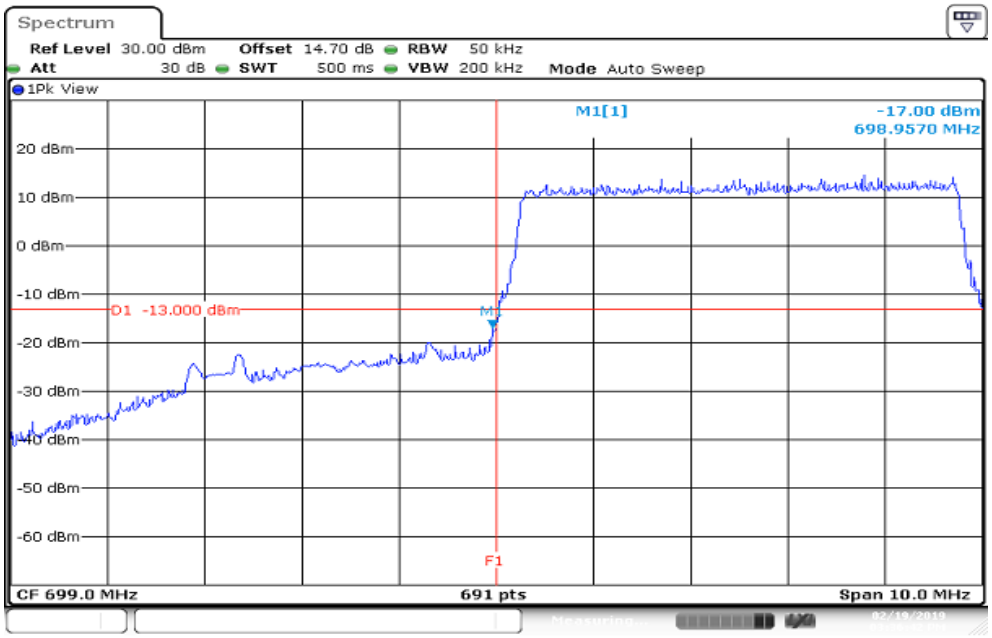
HIGHER BAND EDGE



Date: 19.FEB.2019 15:30:05

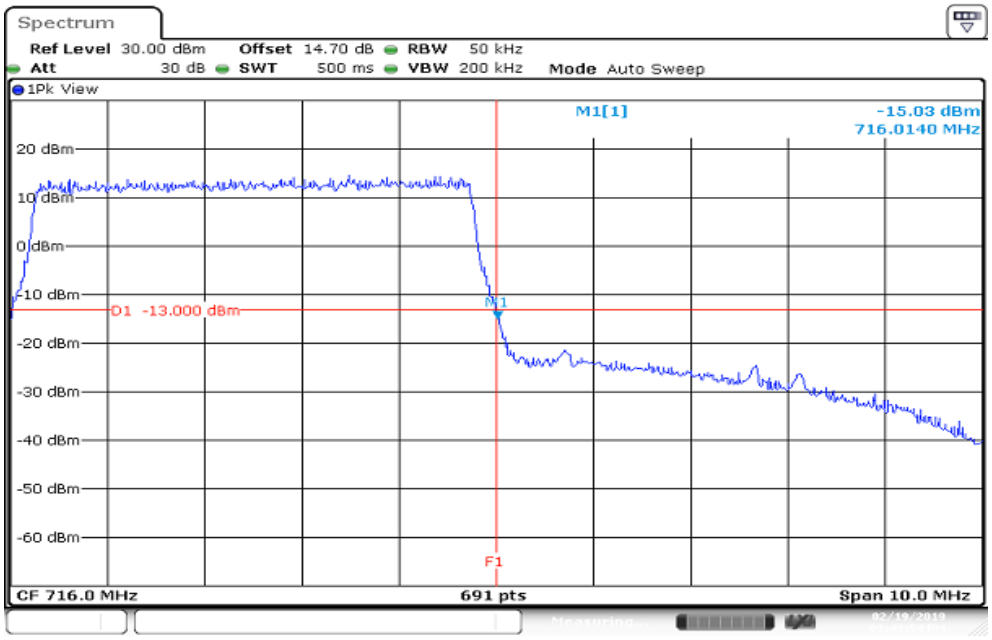
CHANNEL BANDWIDTH: 5MHz / QPSK / FULL RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:36:43

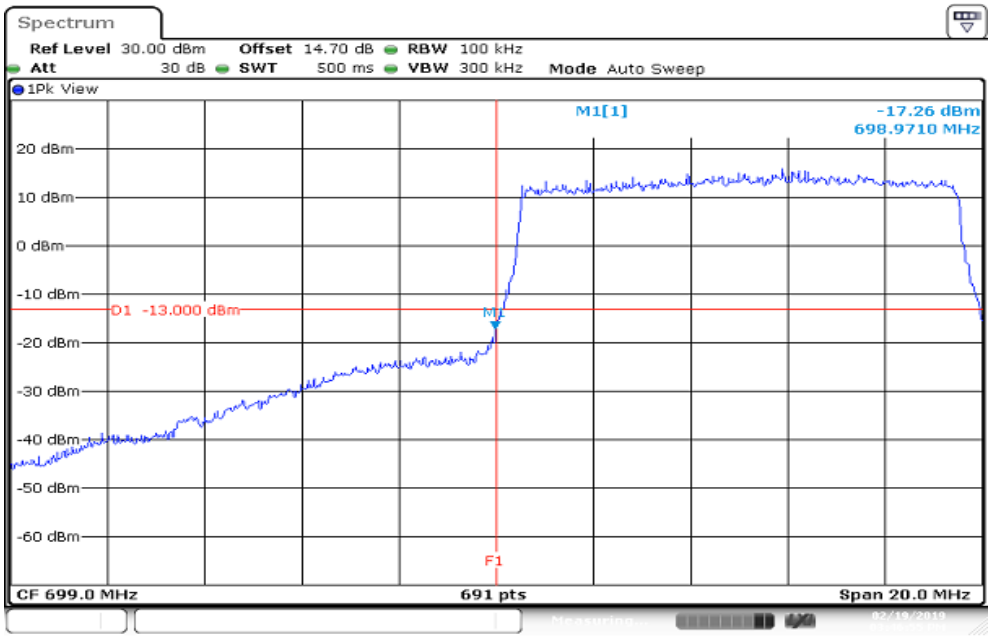
HIGHER BAND EDGE



Date: 19.FEB.2019 15:43:55

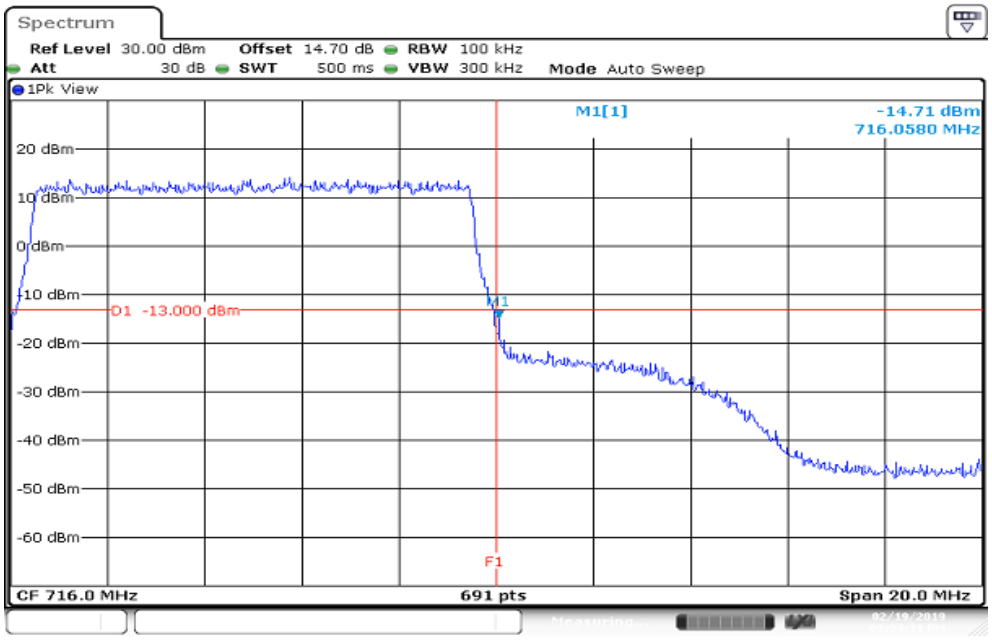
CHANNEL BANDWIDTH: 10MHz / QPSK / FULL RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:46:55

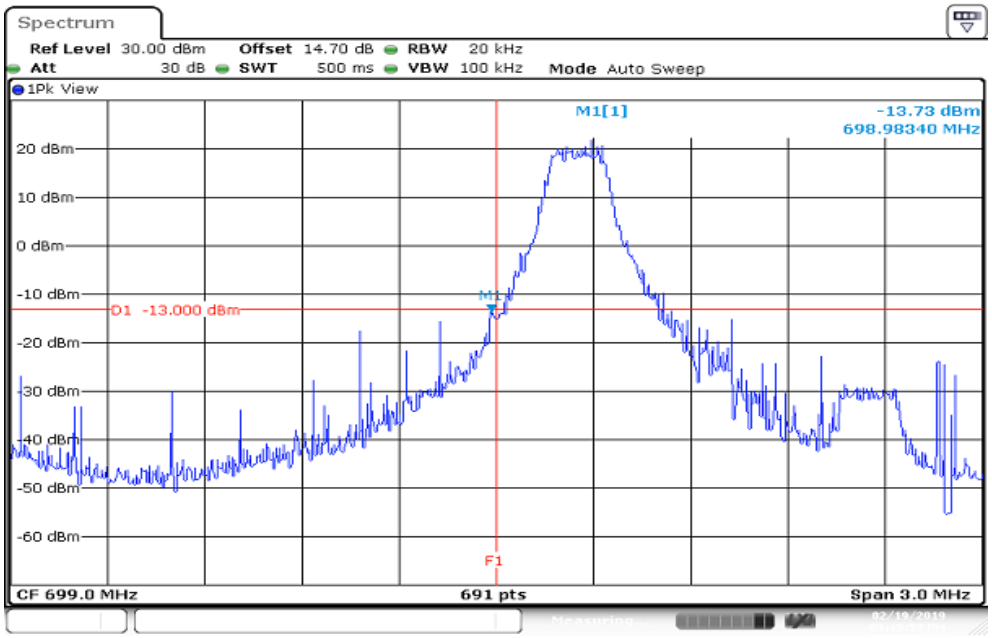
HIGHER BAND EDGE



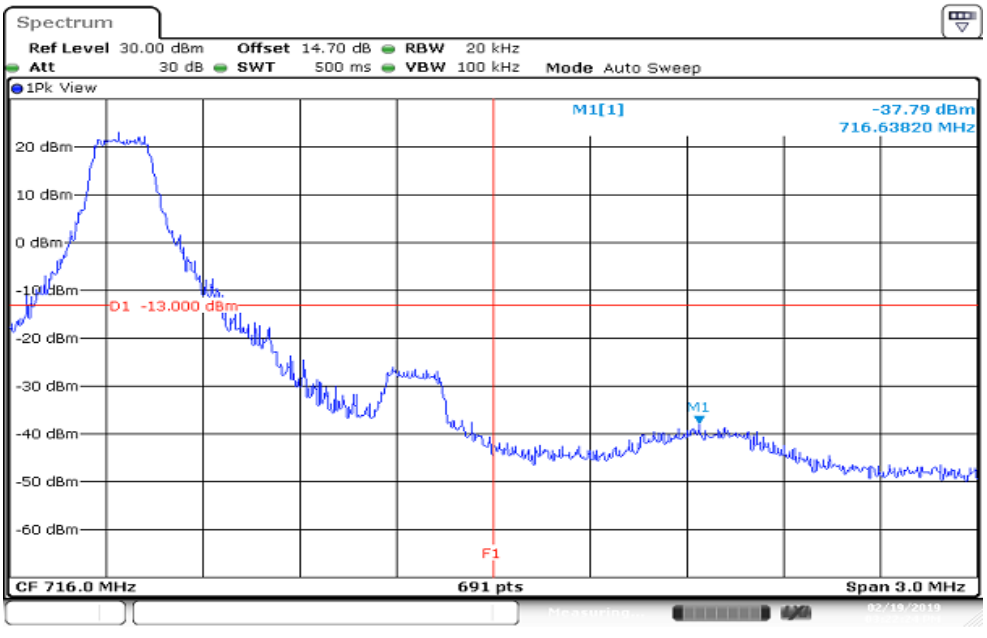
Date: 19.FEB.2019 15:54:31

CHANNEL BANDWIDTH: 1.4MHz / 16QAM / 1RB ALLOCATED

LOWER BAND EDGE

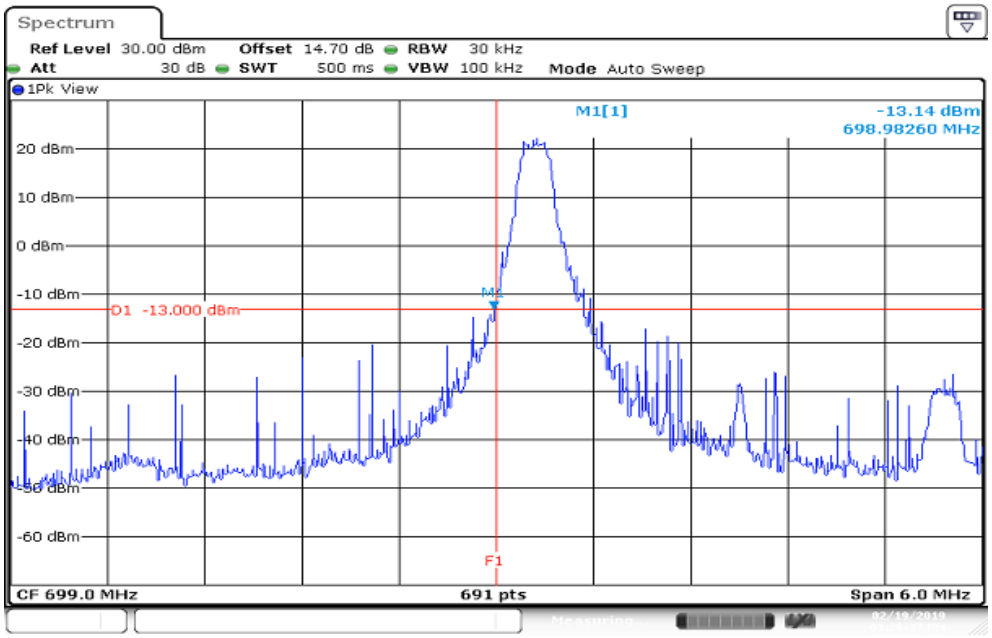


HIGHER BAND EDGE



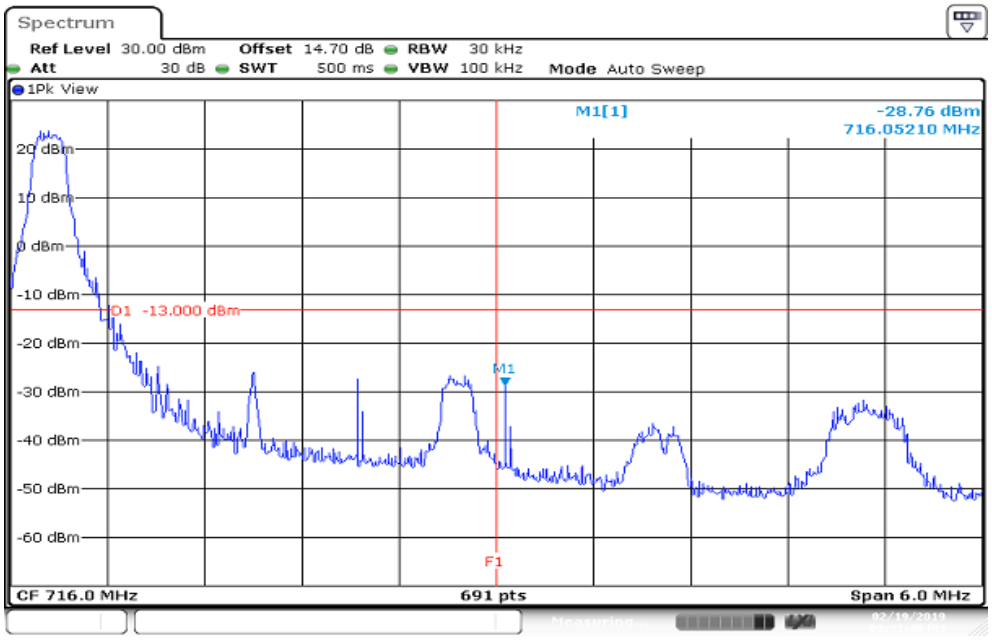
CHANNEL BANDWIDTH: 3MHz / 16QAM / 1RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:26:37

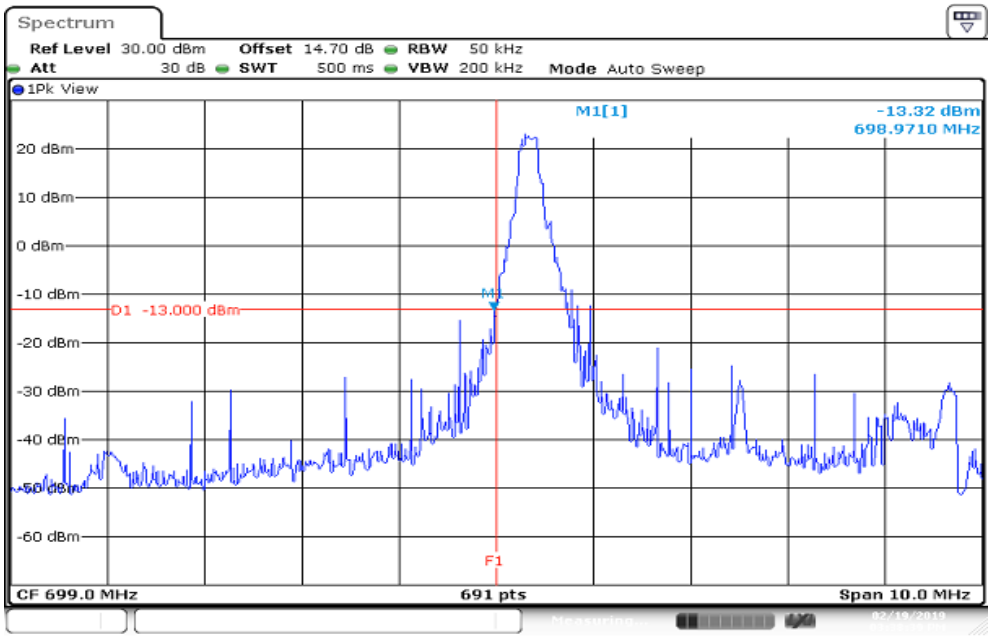
HIGHER BAND EDGE



Date: 19.FEB.2019 15:31:40

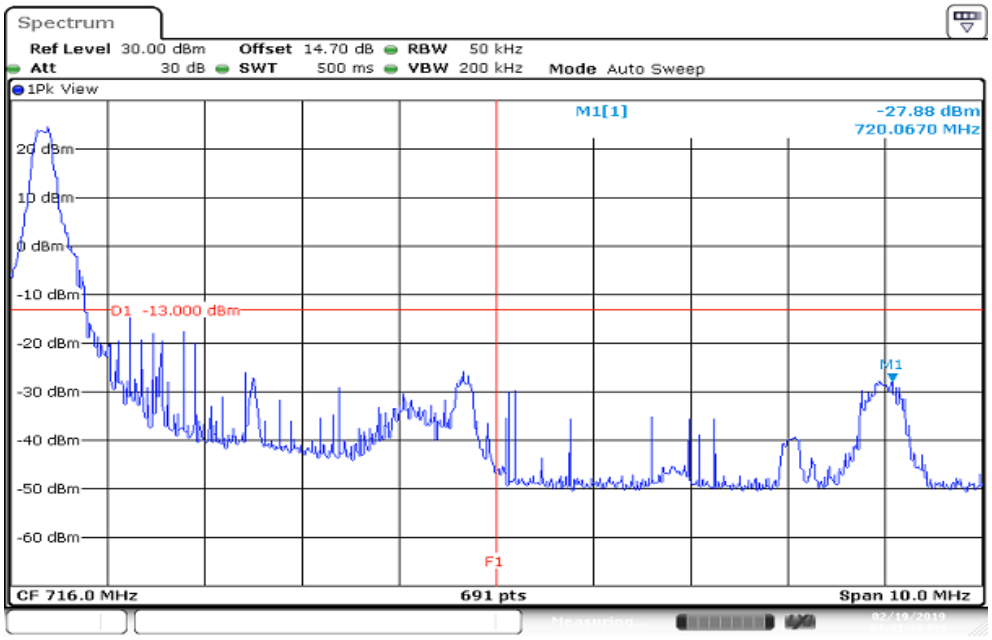
CHANNEL BANDWIDTH: 5MHz / 16QAM / 1RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:38:40

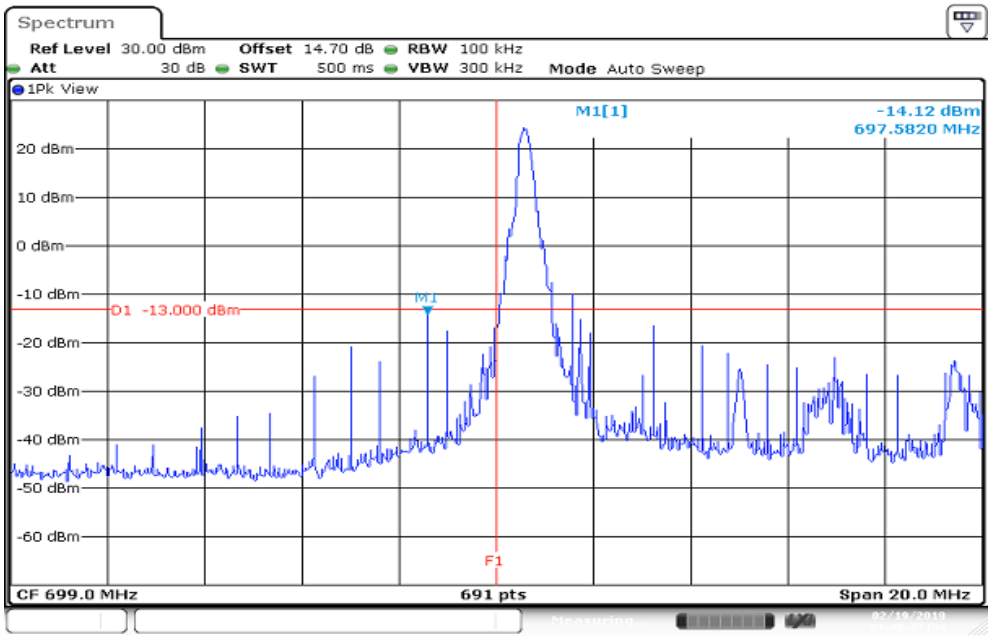
HIGHER BAND EDGE



Date: 19.FEB.2019 15:41:31

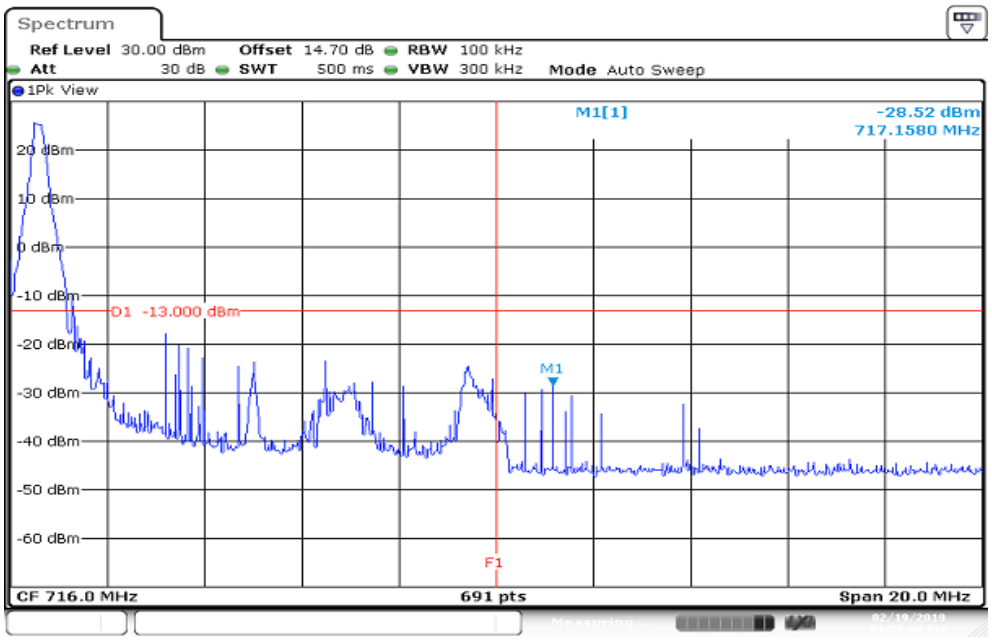
CHANNEL BANDWIDTH: 10MHz / 16QAM / 1RB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:49:48

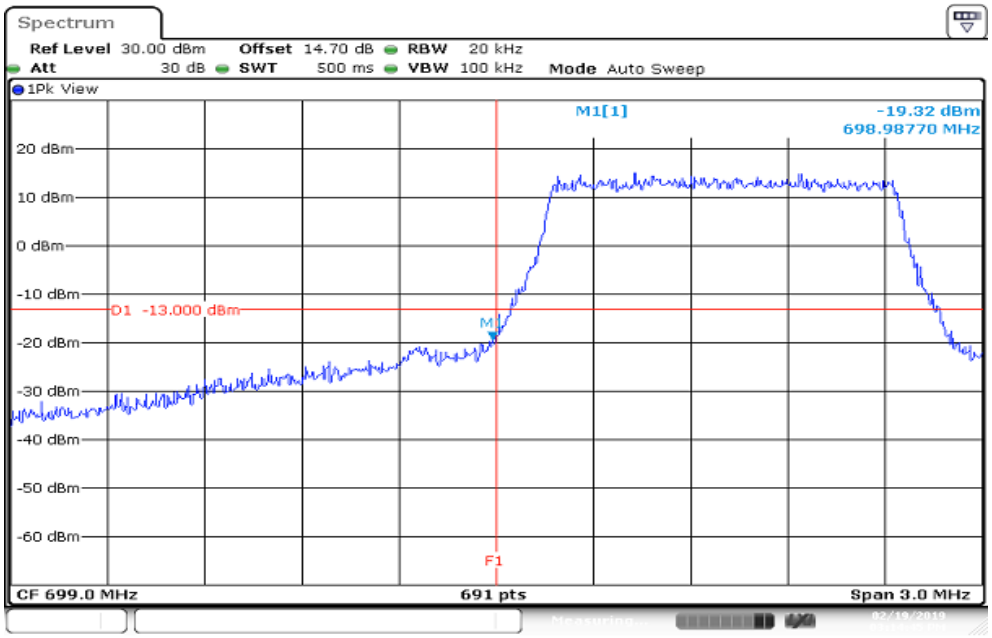
HIGHER BAND EDGE



Date: 19.FEB.2019 15:53:00

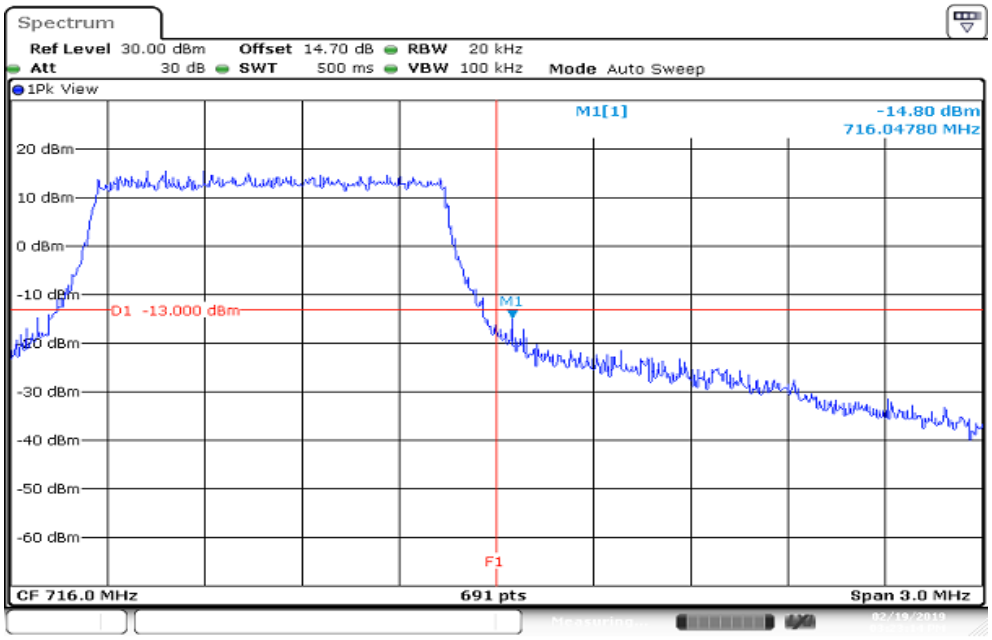
CHANNEL BANDWIDTH: 1.4MHz / 16QAM / FULLRB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:14:45

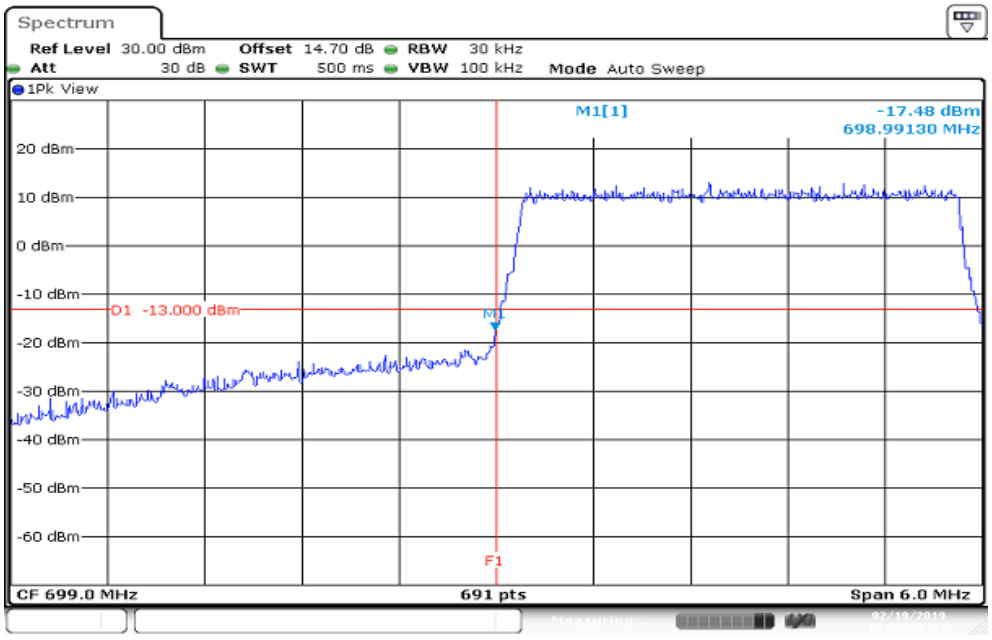
HIGHER BAND EDGE



Date: 19.FEB.2019 15:23:15

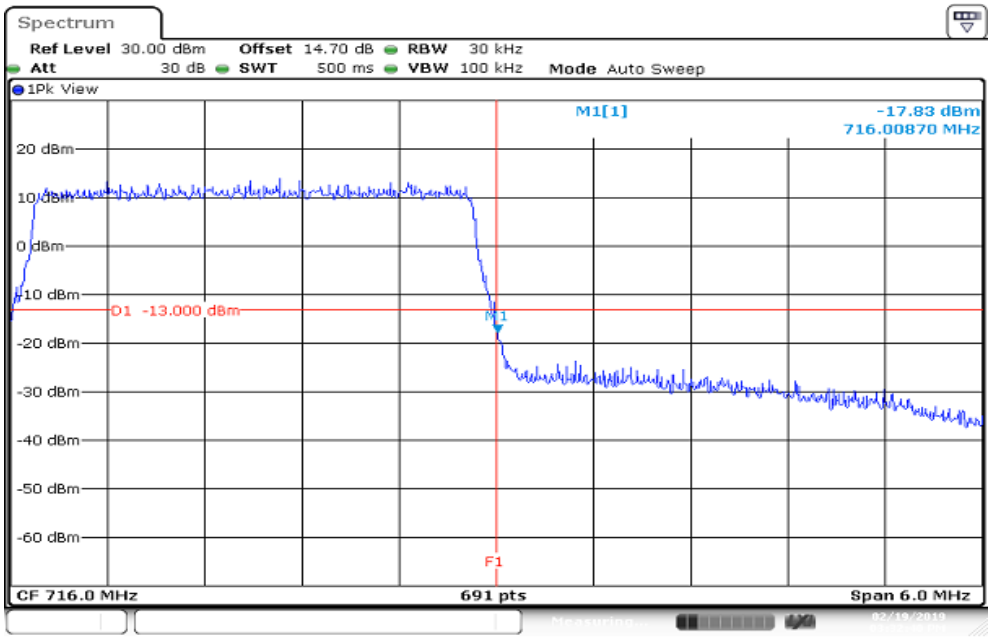
CHANNEL BANDWIDTH: 3MHz / 16QAM / FULLRB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:25:46

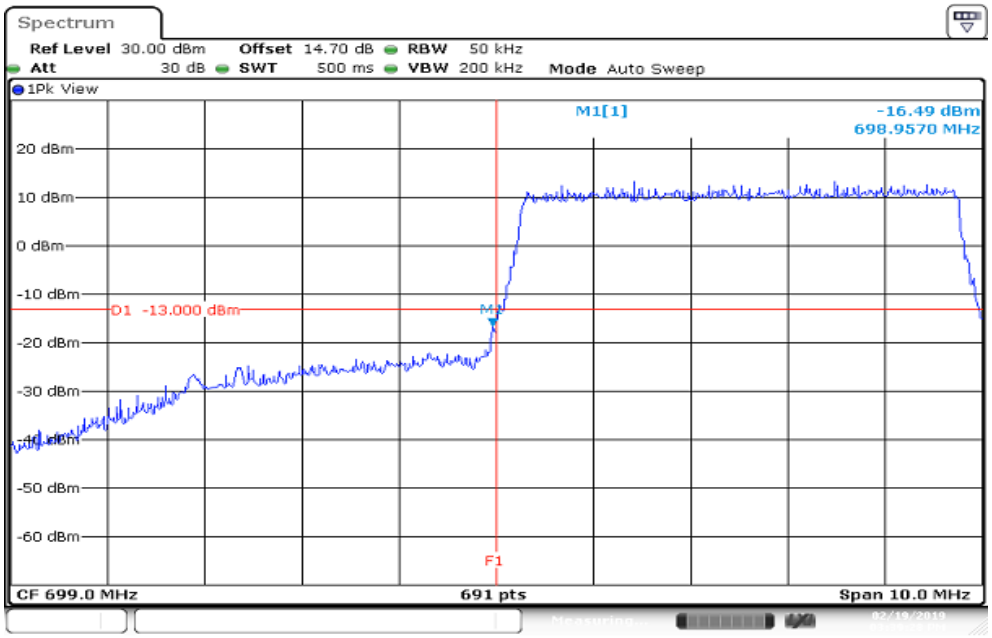
HIGHER BAND EDGE



Date: 19.FEB.2019 15:32:41

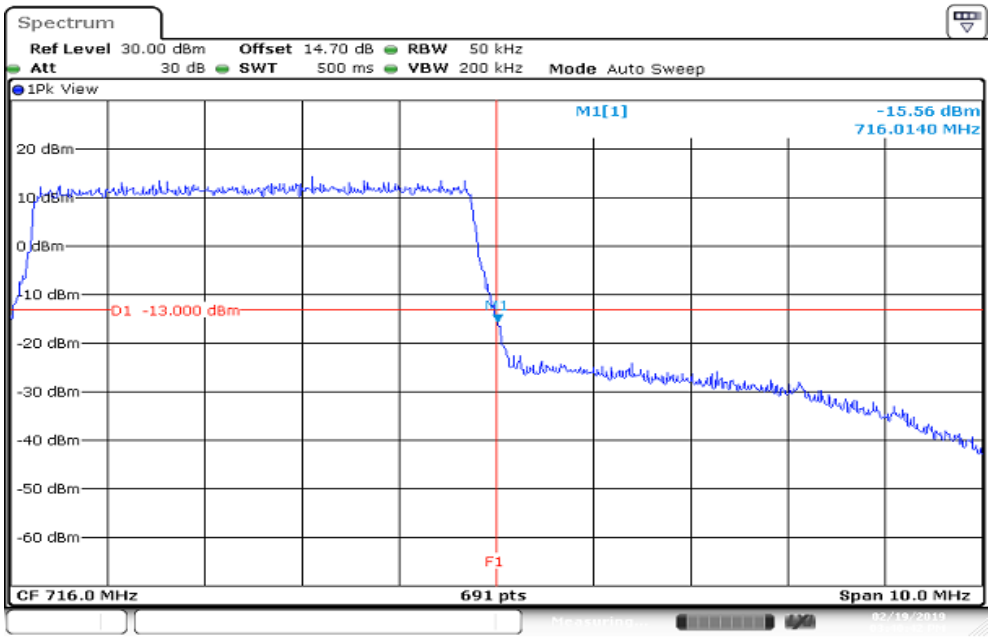
CHANNEL BANDWIDTH: 5MHz / 16QAM / FULLRB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:39:28

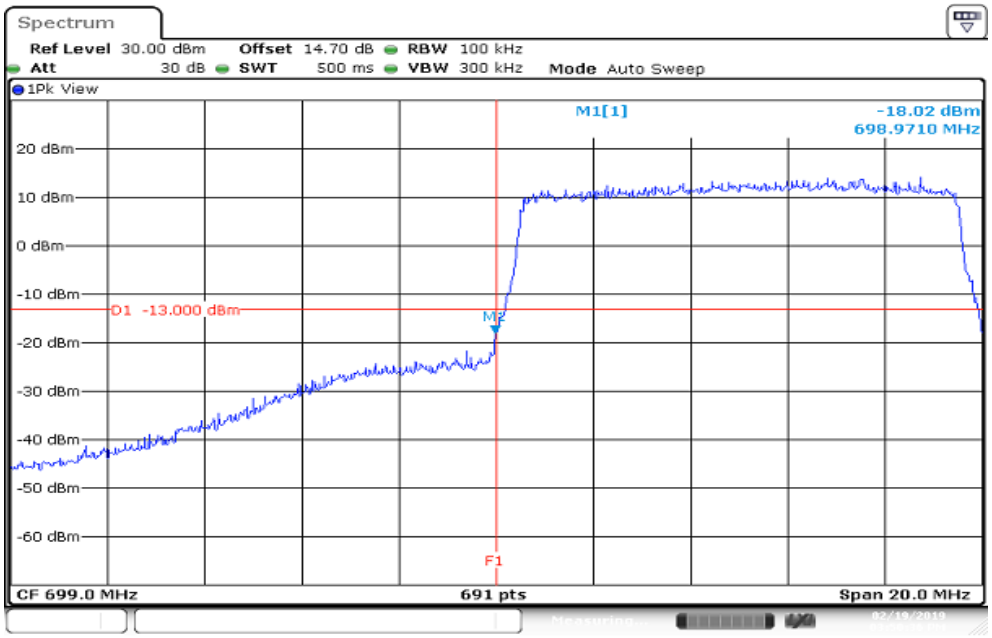
HIGHER BAND EDGE



Date: 19.FEB.2019 15:40:42

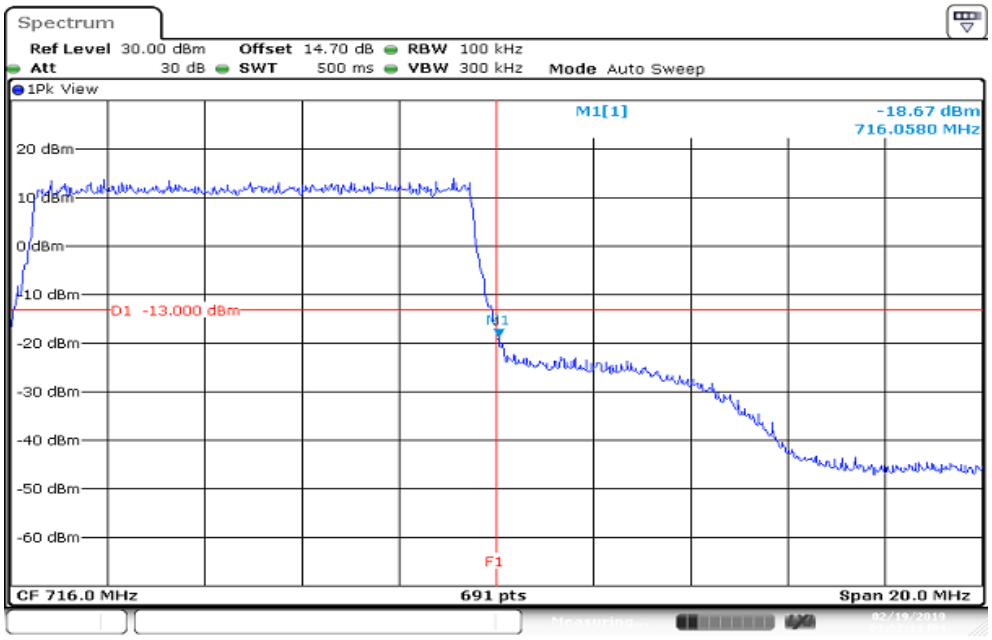
CHANNEL BANDWIDTH: 10MHz / 16QAM / FULLRB ALLOCATED

LOWER BAND EDGE



Date: 19.FEB.2019 15:50:36

HIGHER BAND EDGE

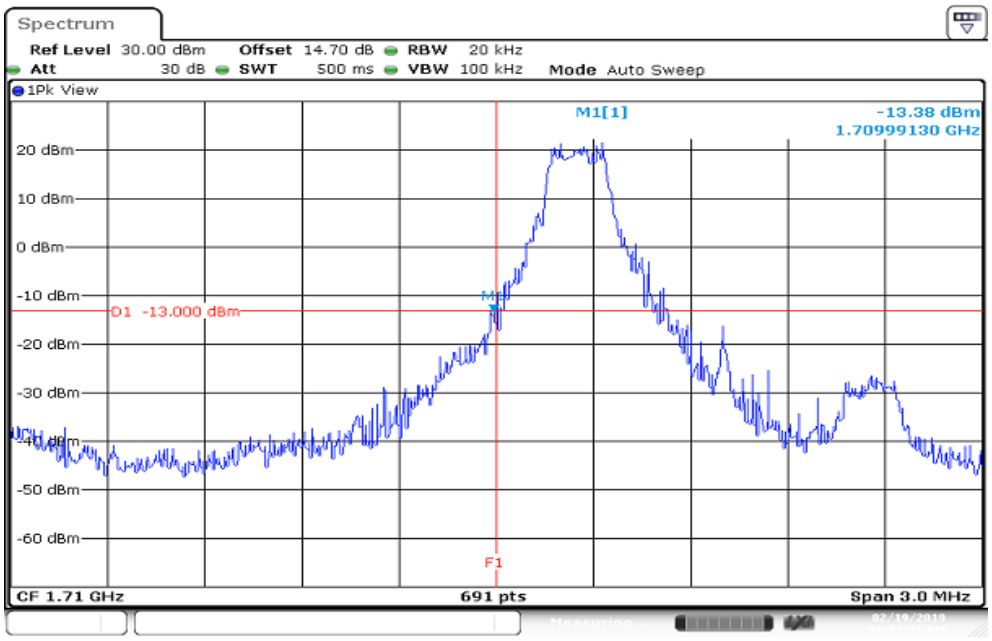


Date: 19.FEB.2019 15:52:12

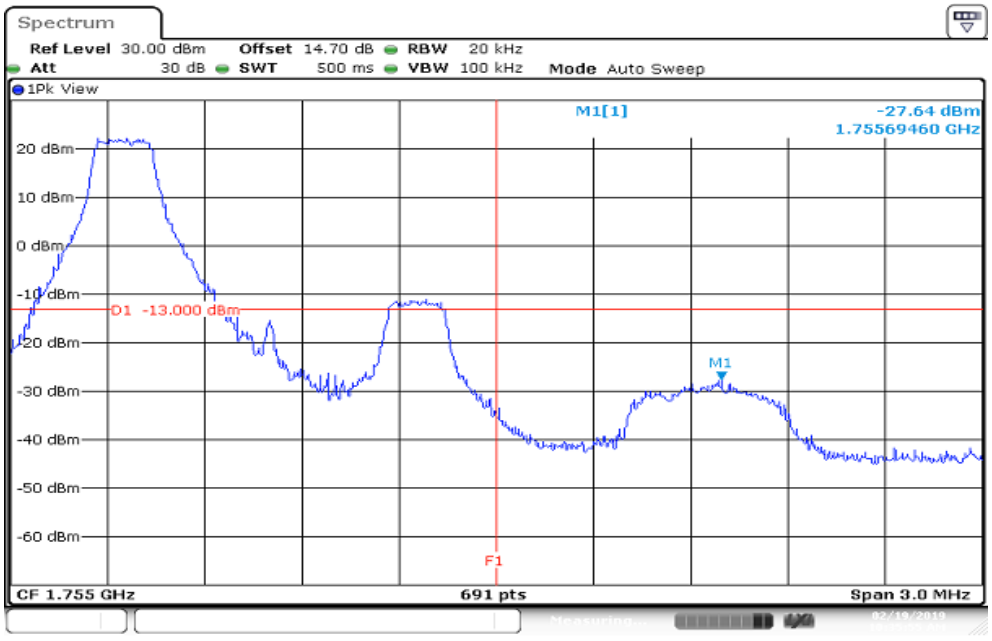
LTE Band 4

CHANNEL BANDWIDTH: 1.4MHz / QPSK / 1RB ALLOCATION

LOWER BAND EDGE

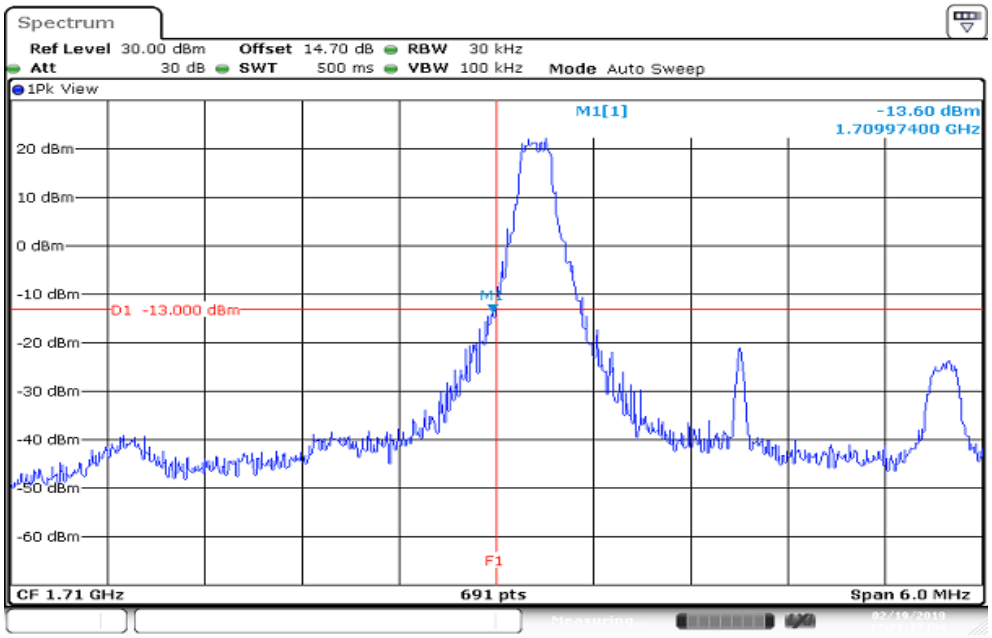


HIGHER BAND EDGE



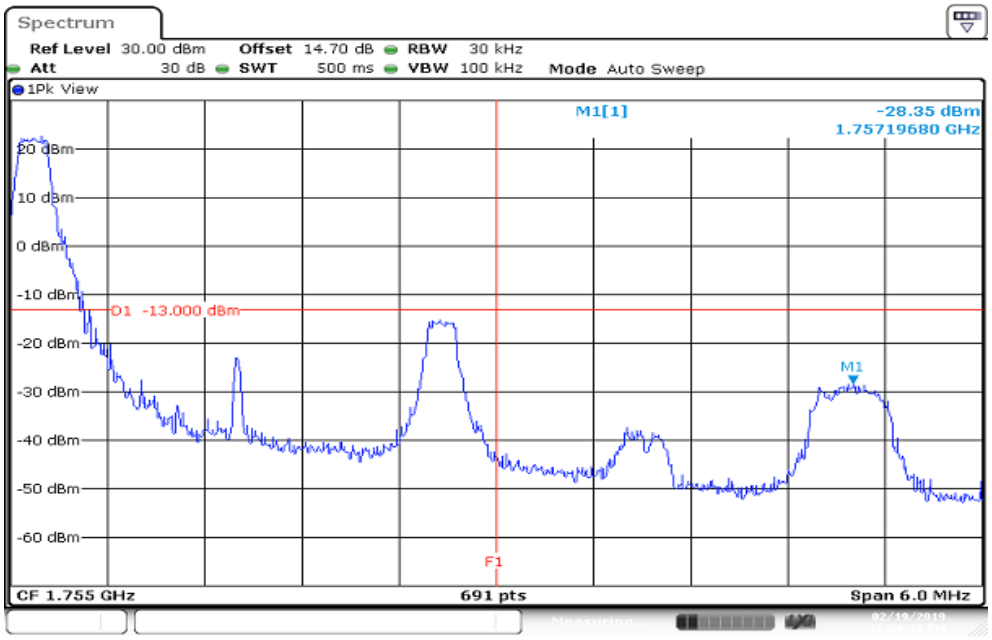
CHANNEL BANDWIDTH: 3MHz / QPSK / 1RB ALLOCATION

LOWER BAND EDGE



Date: 19.FEB.2019 12:21:18

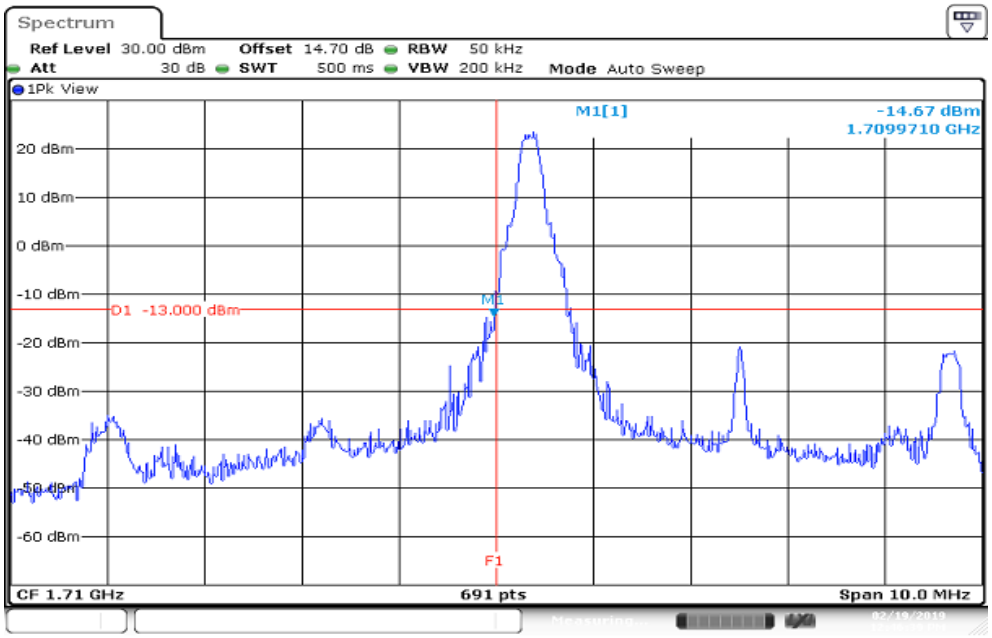
HIGHER BAND EDGE



Date: 19.FEB.2019 12:26:12

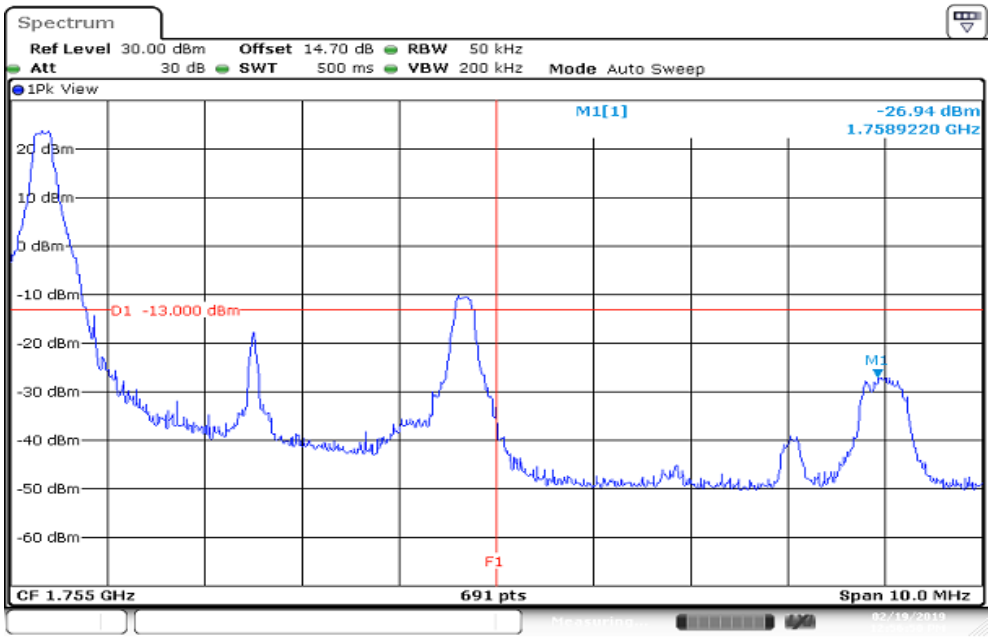
CHANNEL BANDWIDTH: 5MHz / QPSK / 1RB ALLOCATION

LOWER BAND EDGE



Date: 19.FEB.2019 12:46:40

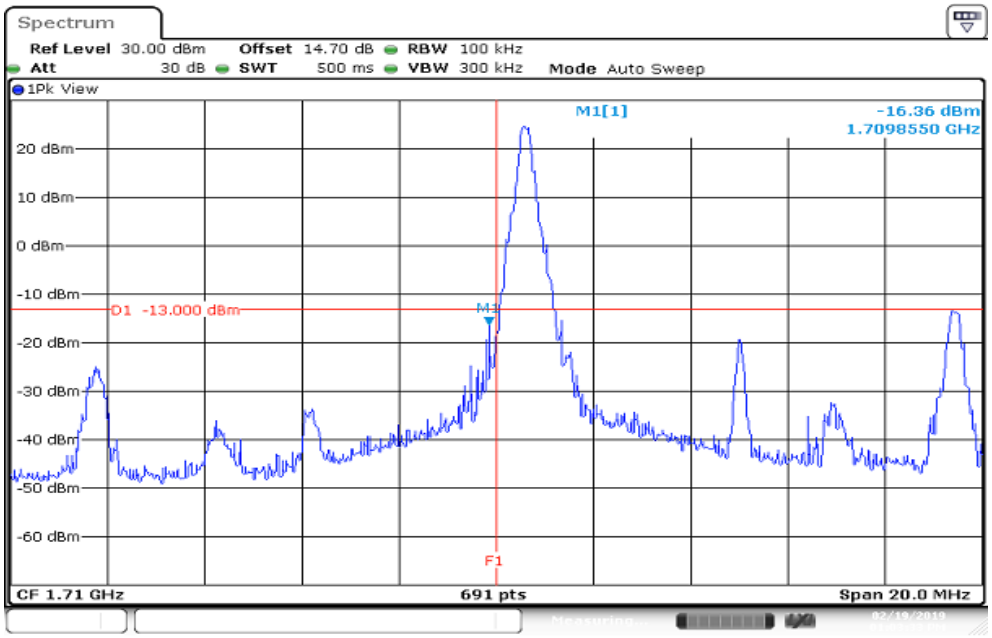
HIGHER BAND EDGE



Date: 19.FEB.2019 12:56:50

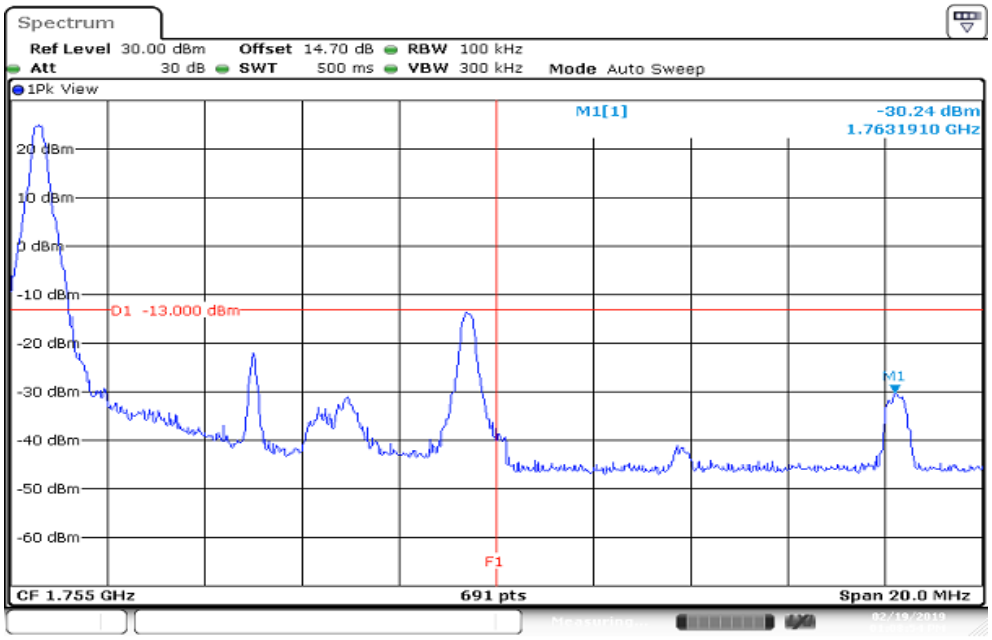
CHANNEL BANDWIDTH: 10MHz / QPSK / 1RB ALLOCATION

LOWER BAND EDGE



Date: 19.FEB.2019 13:03:34

HIGHER BAND EDGE



Date: 19.FEB.2019 13:08:54