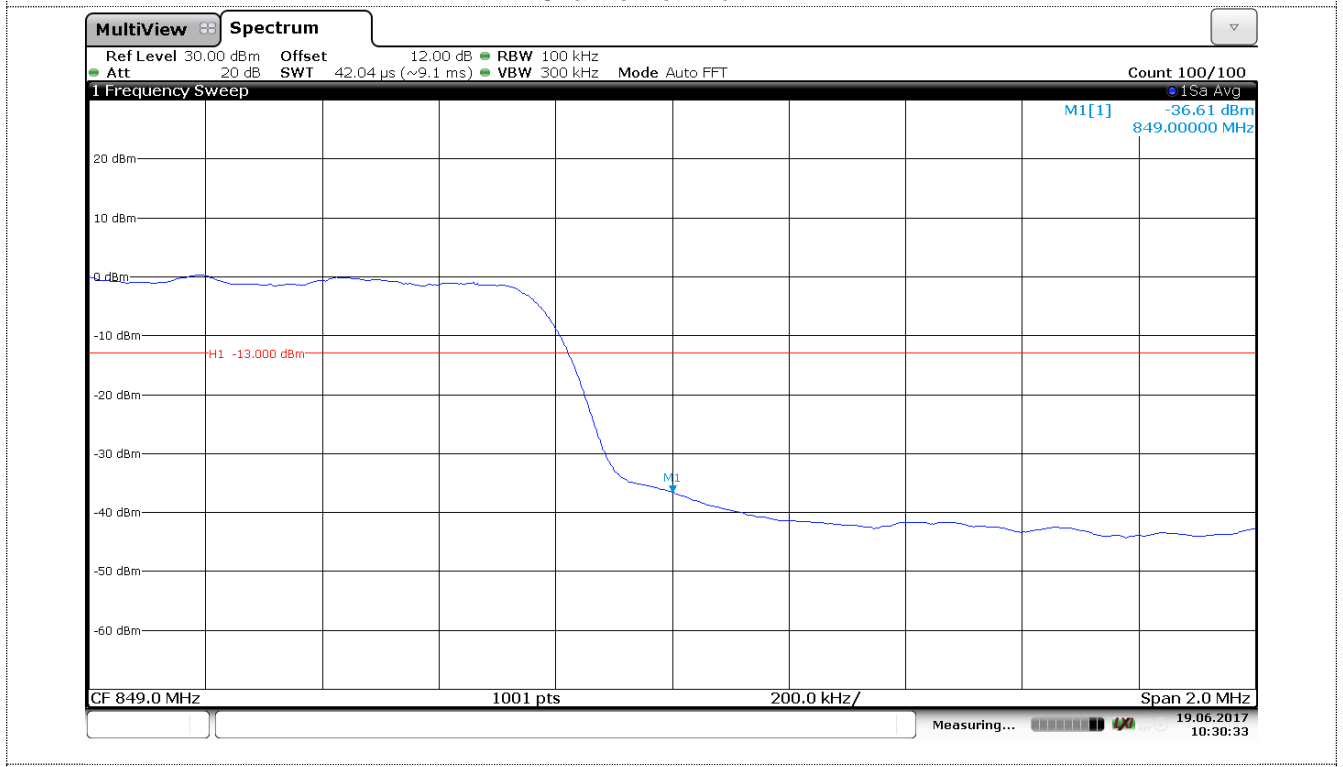
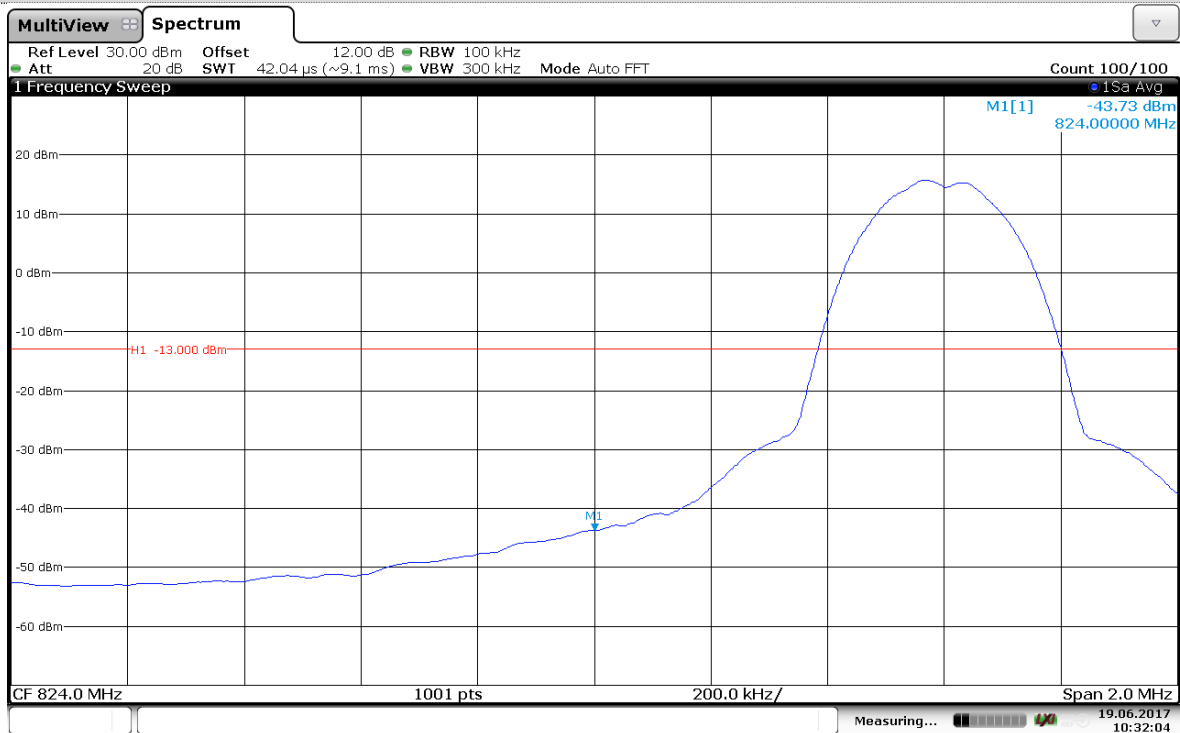


Channel Low-Full RB#

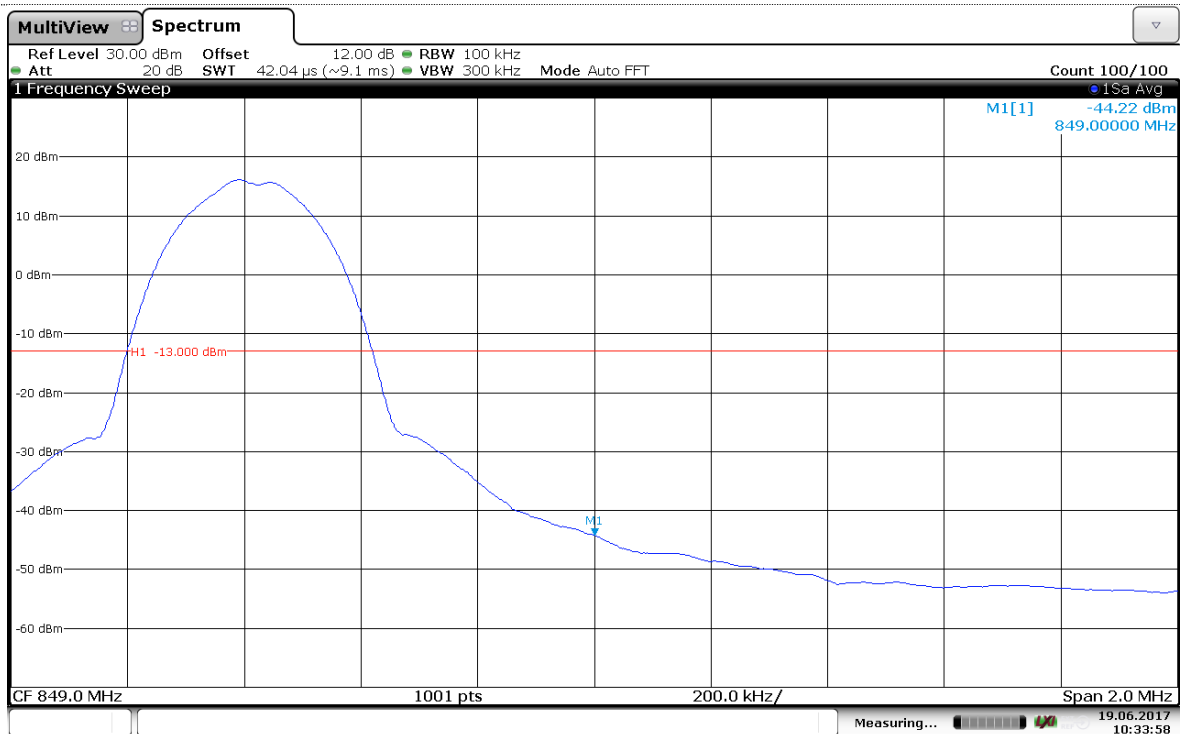


Channel High-Full RB#

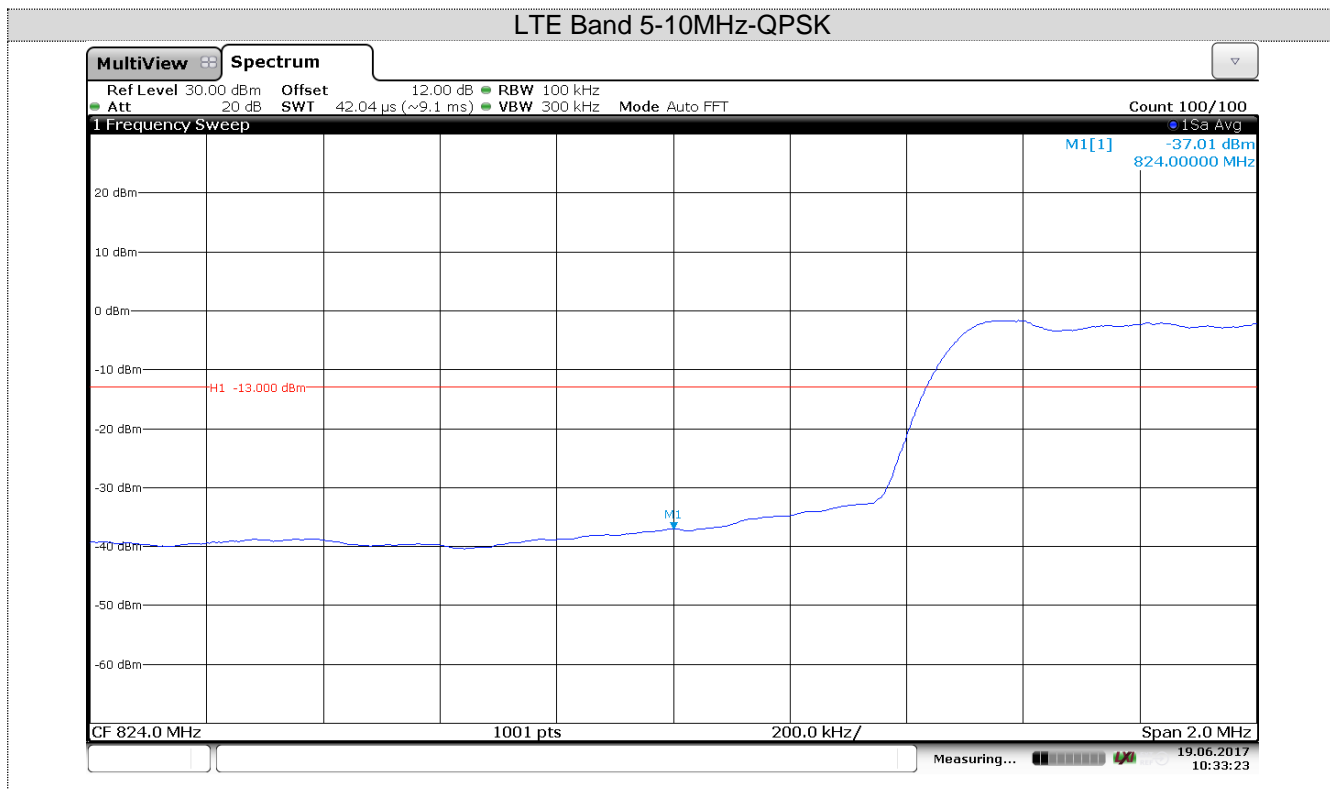
LTE Band 5-10MHz-QPSK



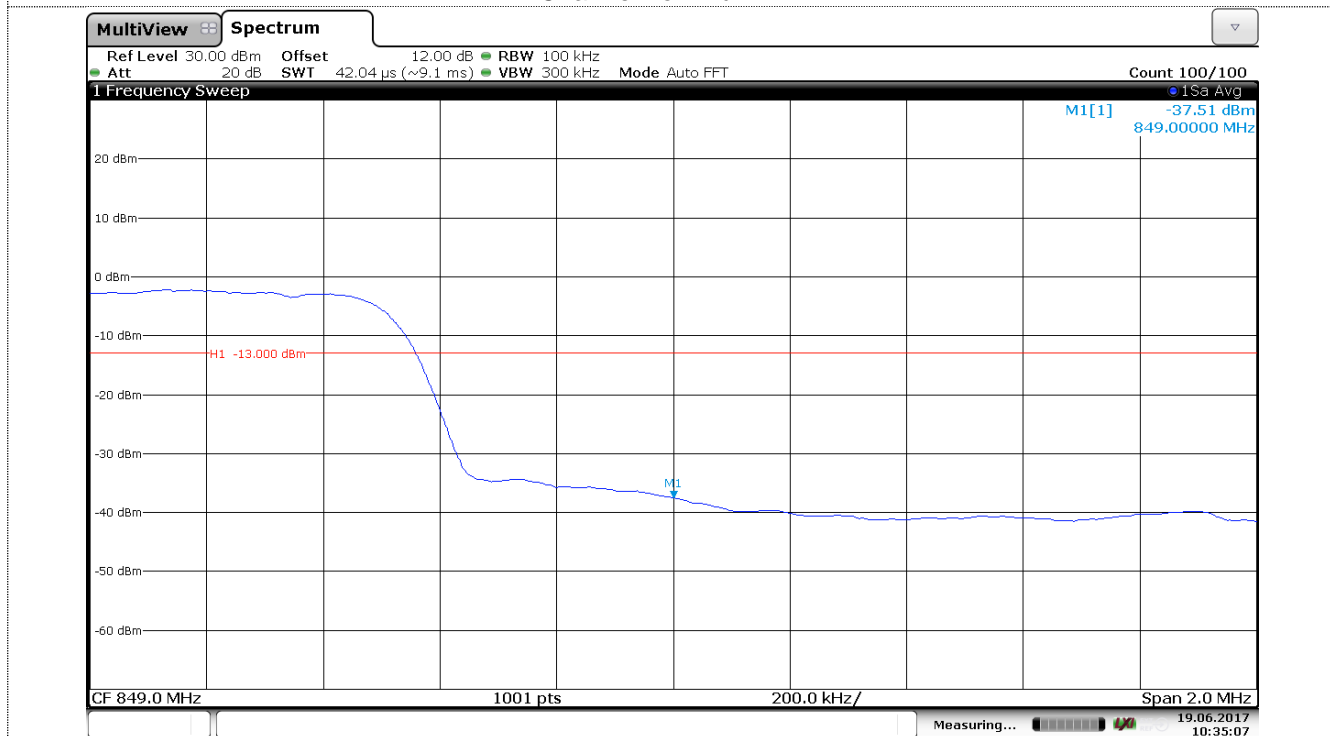
Channel Low-1RB#



Channel High-1RB#



Channel Low-Full RB#

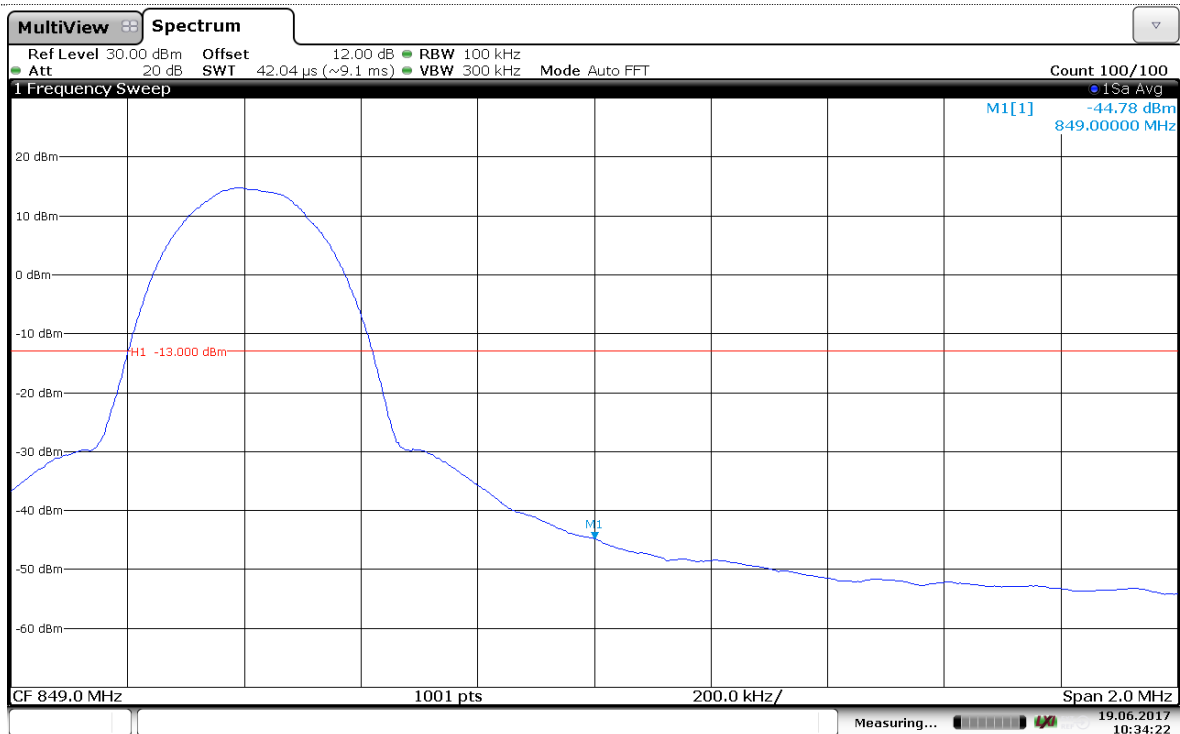


Channel High-Full RB#

LTE Band 5-10MHz-16QAM

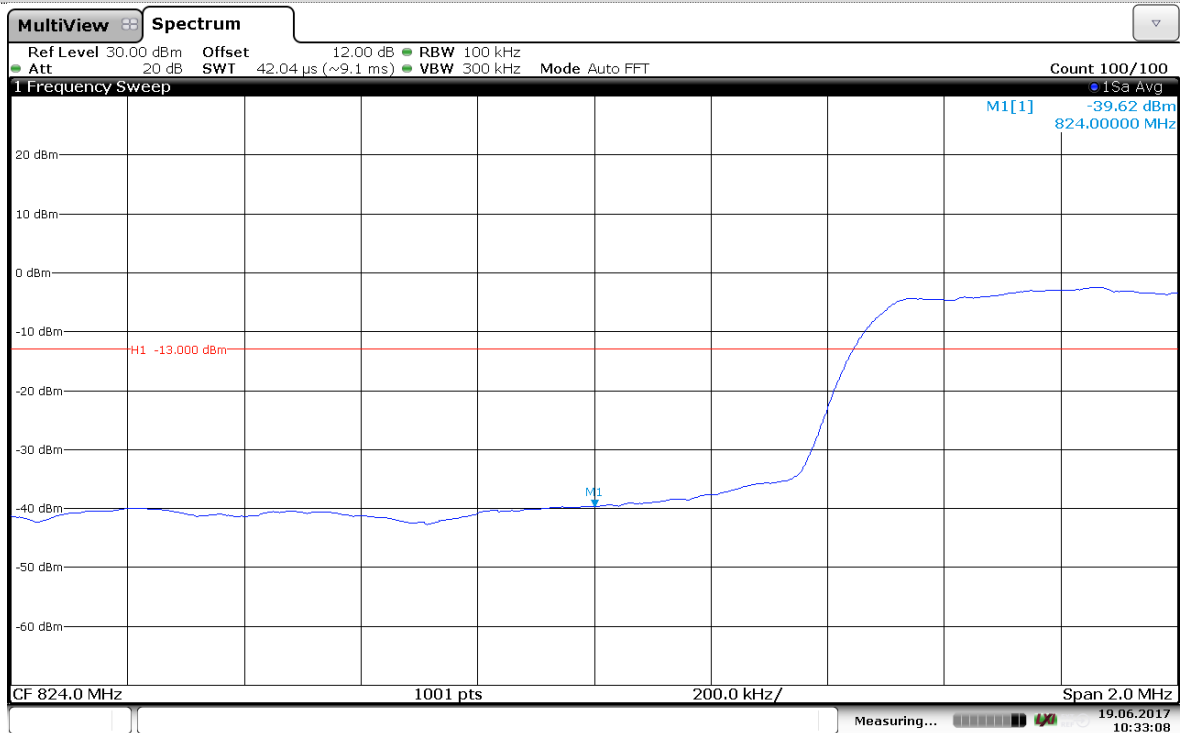


Channel Low-1RB#

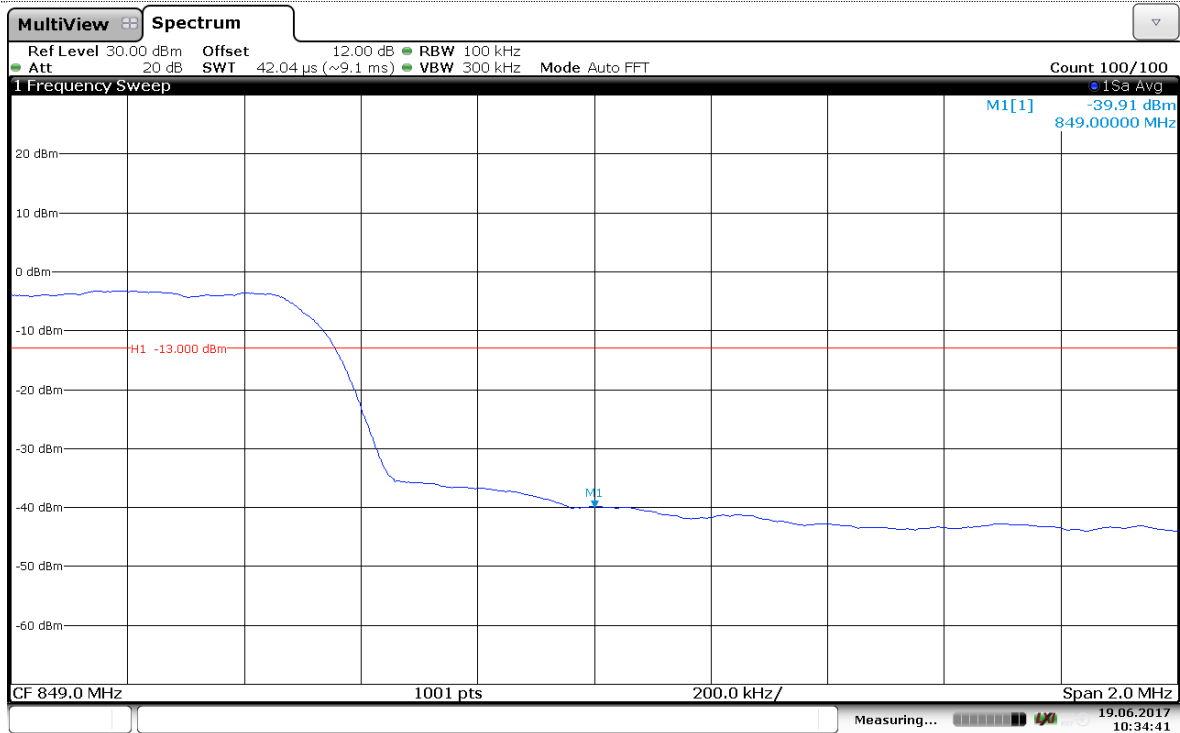


Channel High-1RB#

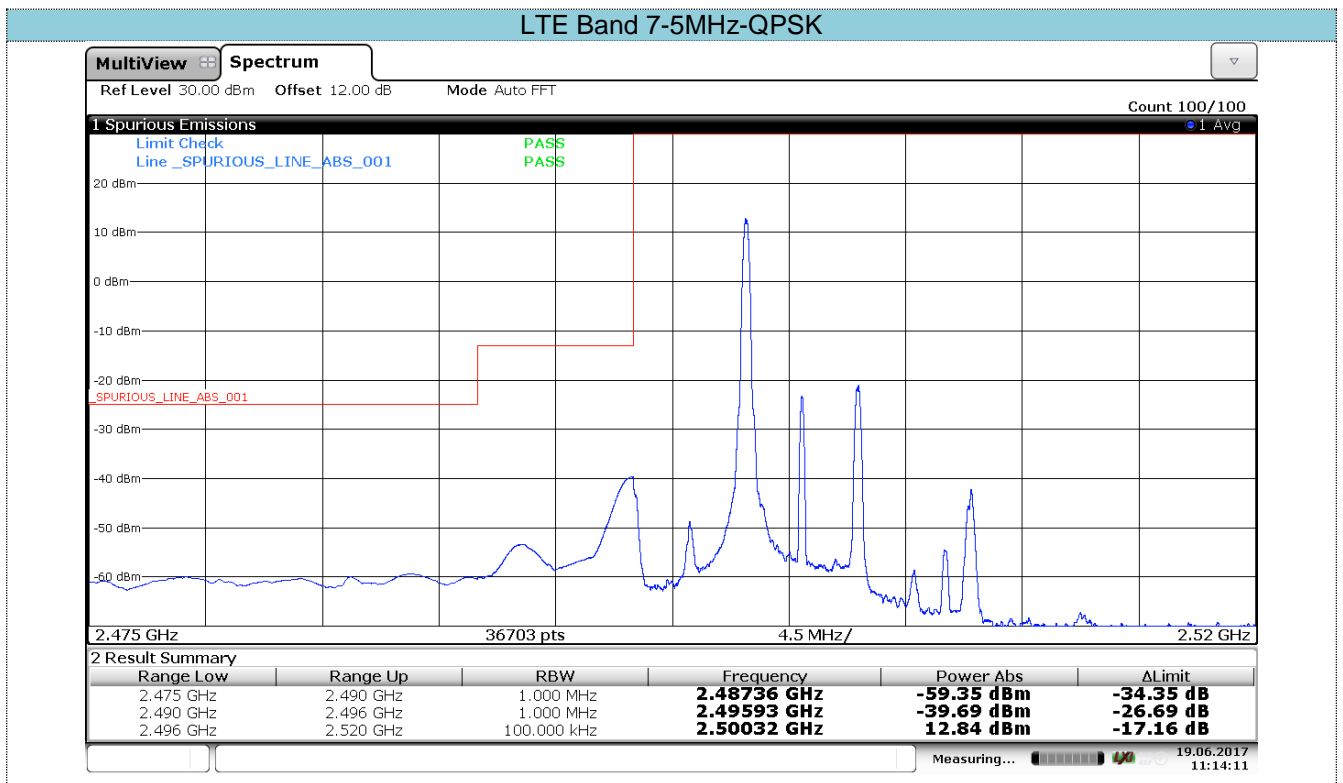
LTE Band 5-10MHz-16QAM



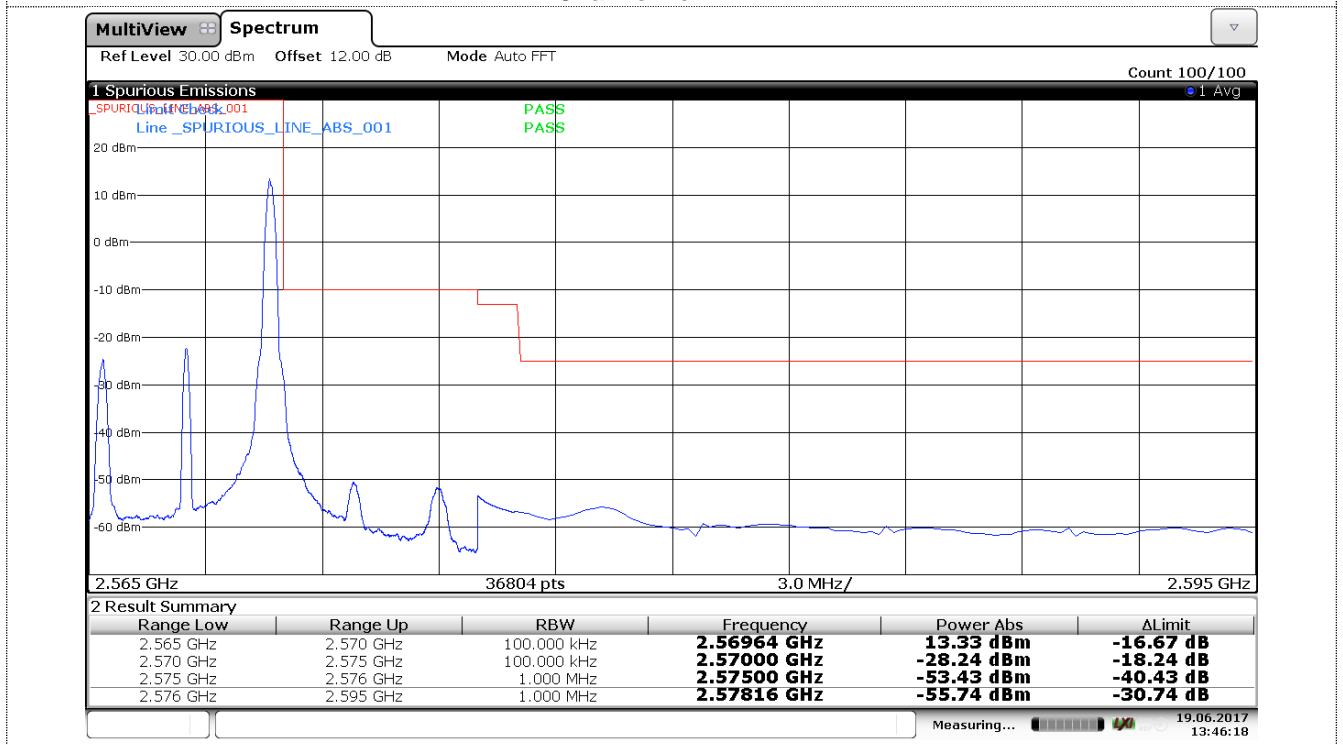
Channel Low-Full RB#



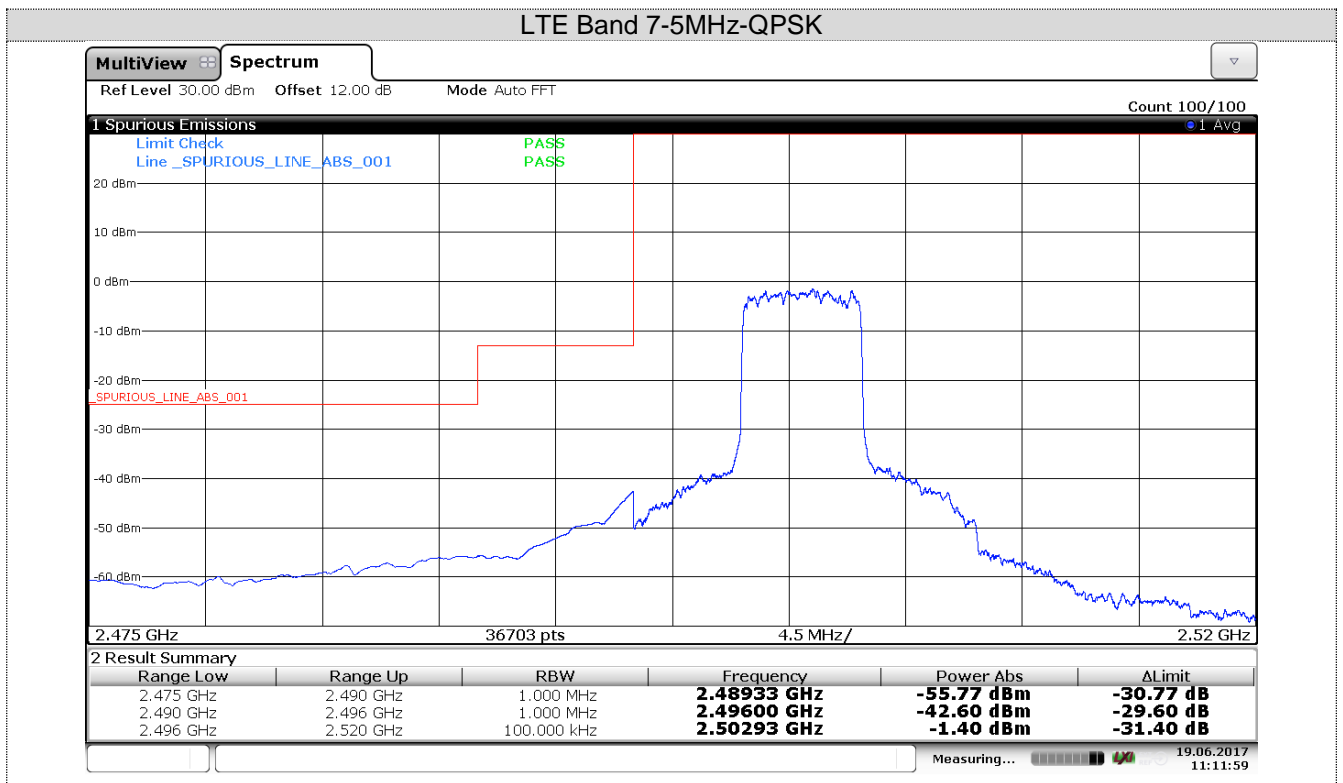
Channel High-Full RB#



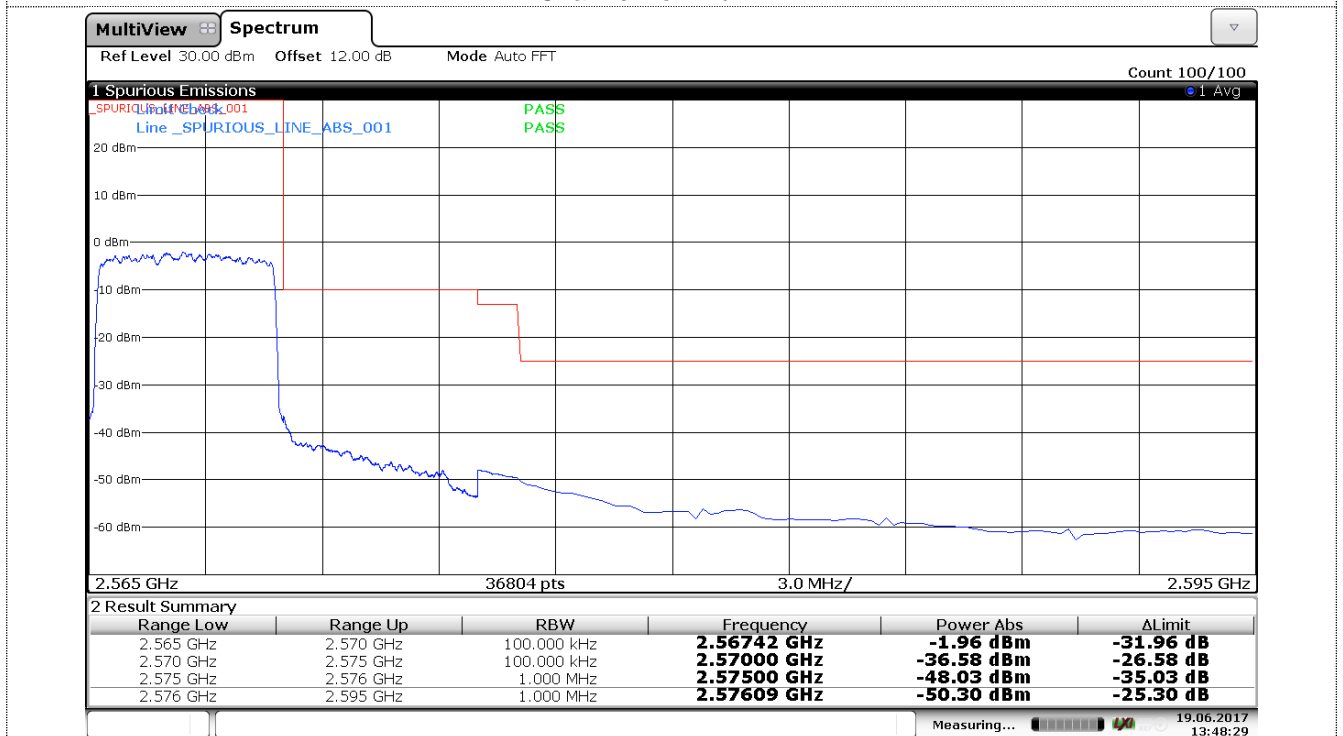
Channel Low-1RB#



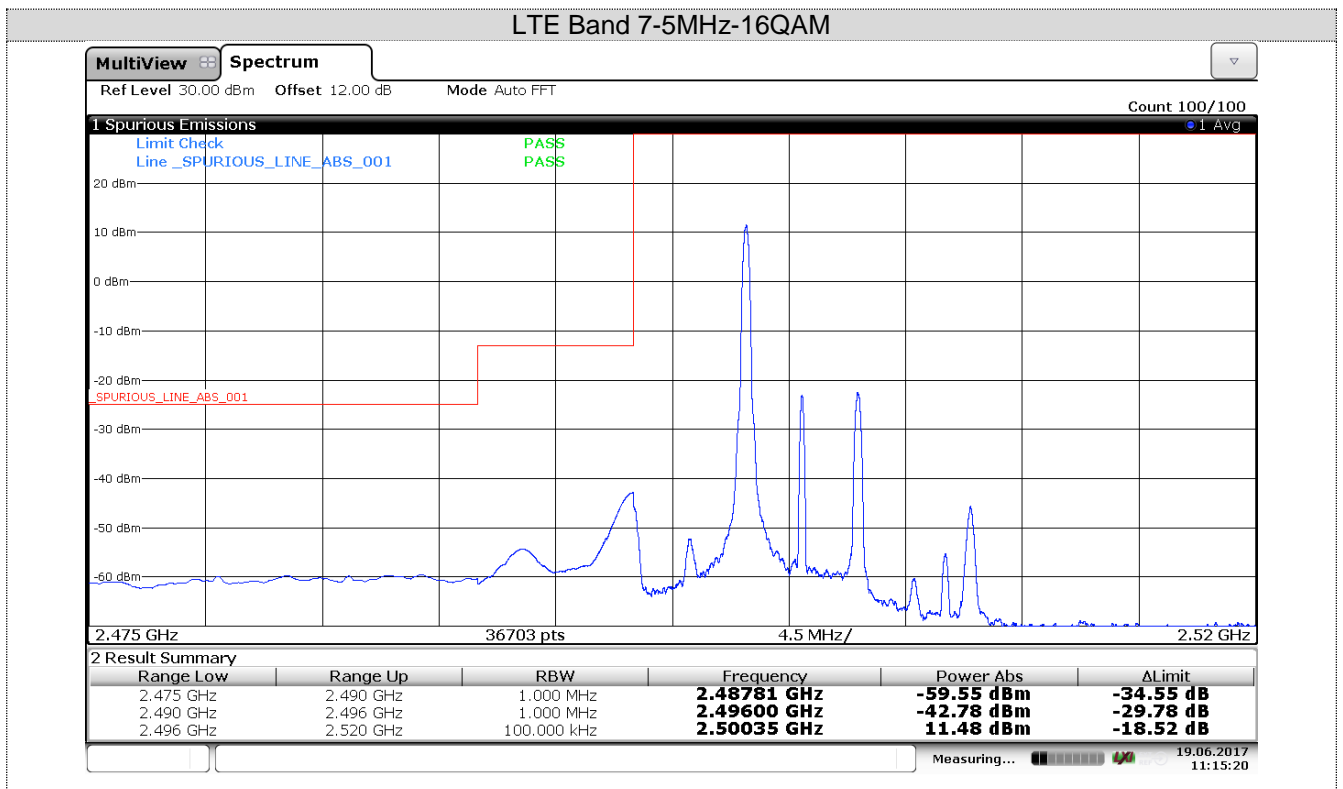
Channel High-1RB#



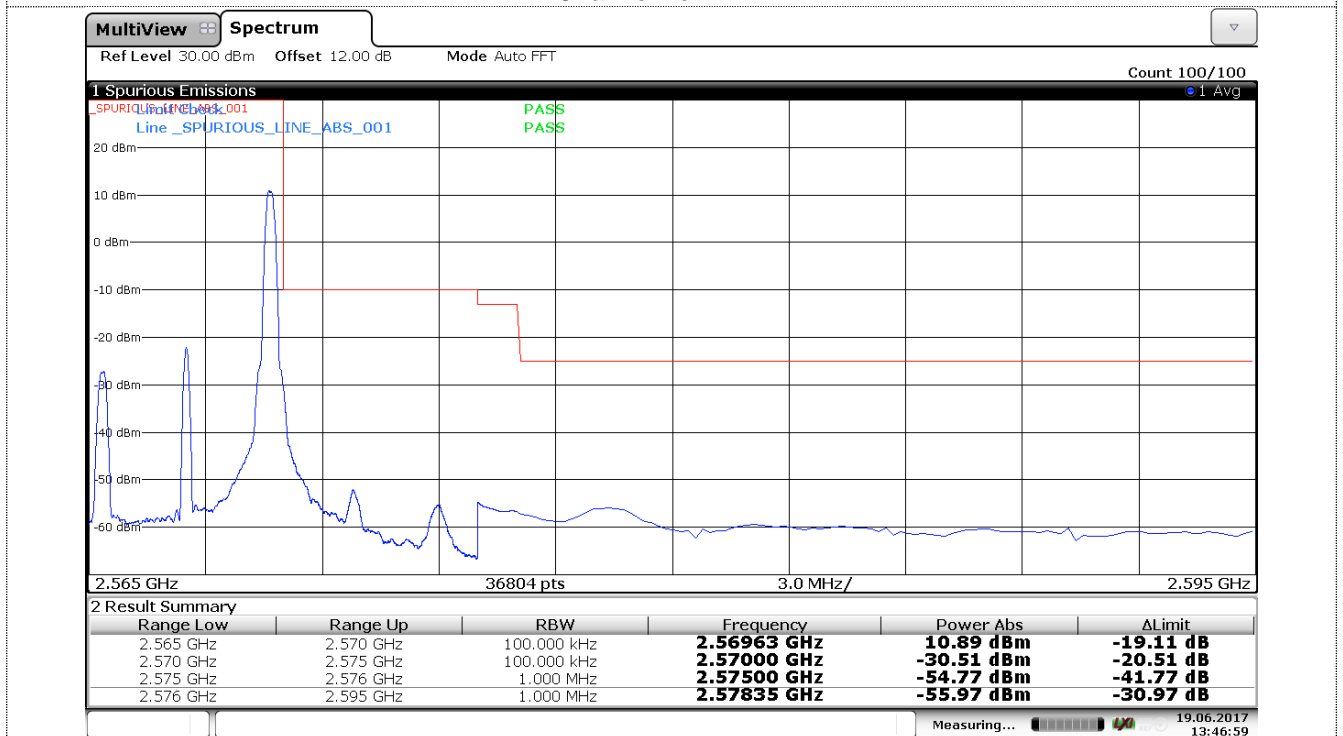
Channel Low-Full RB#



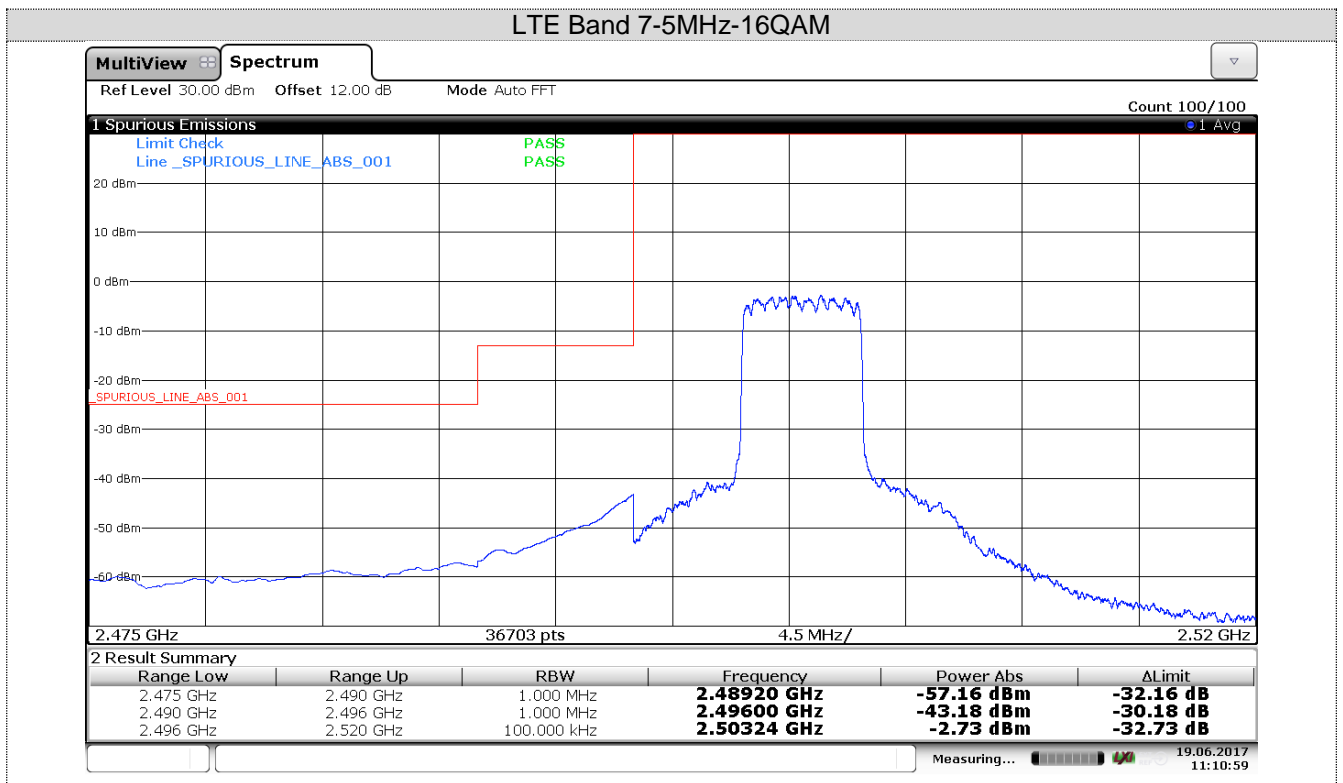
Channel High-Full RB#



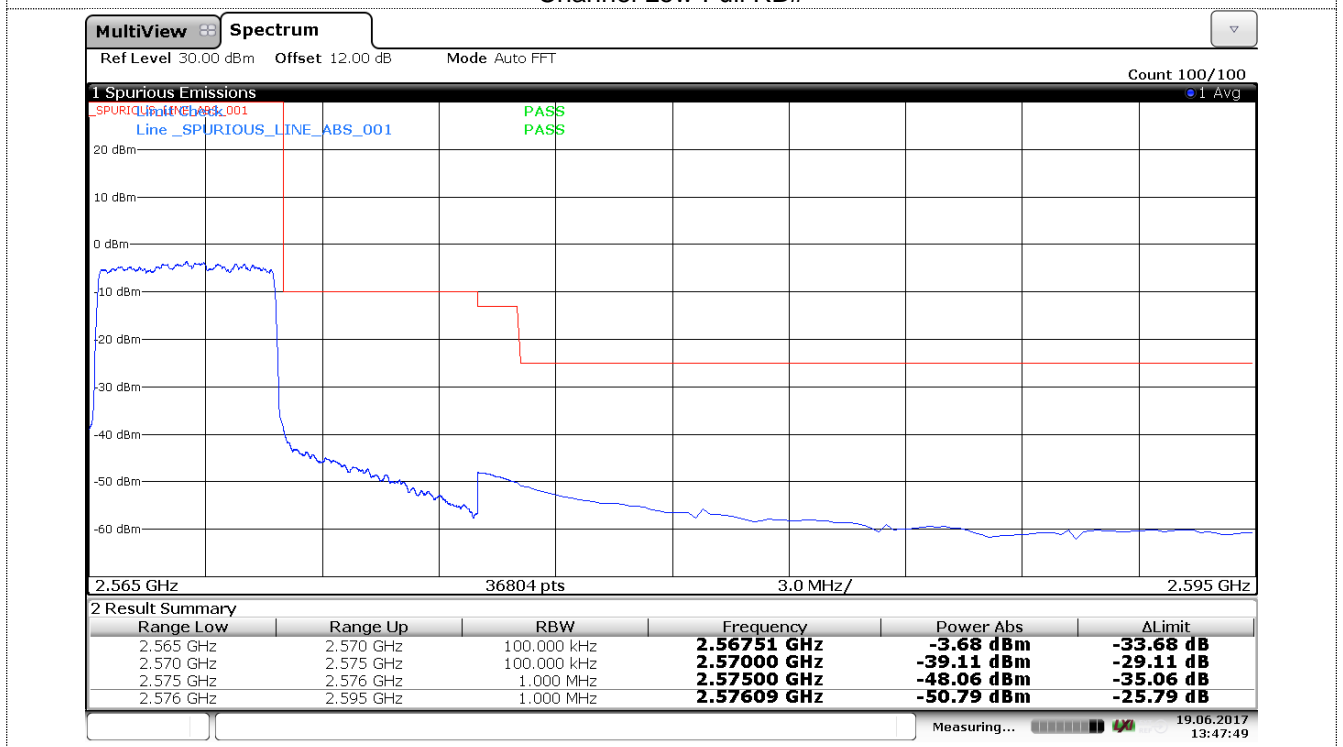
Channel Low-1RB#



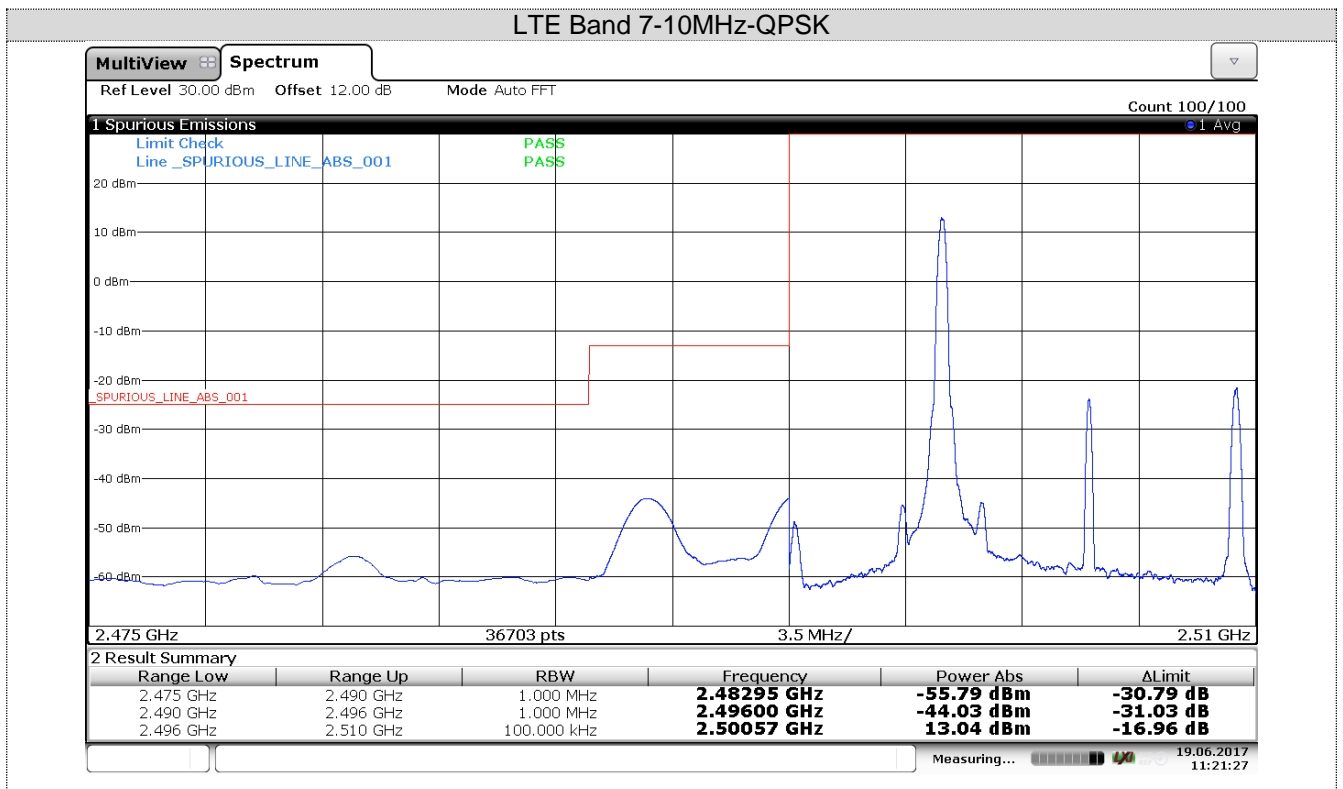
Channel High-1RB#



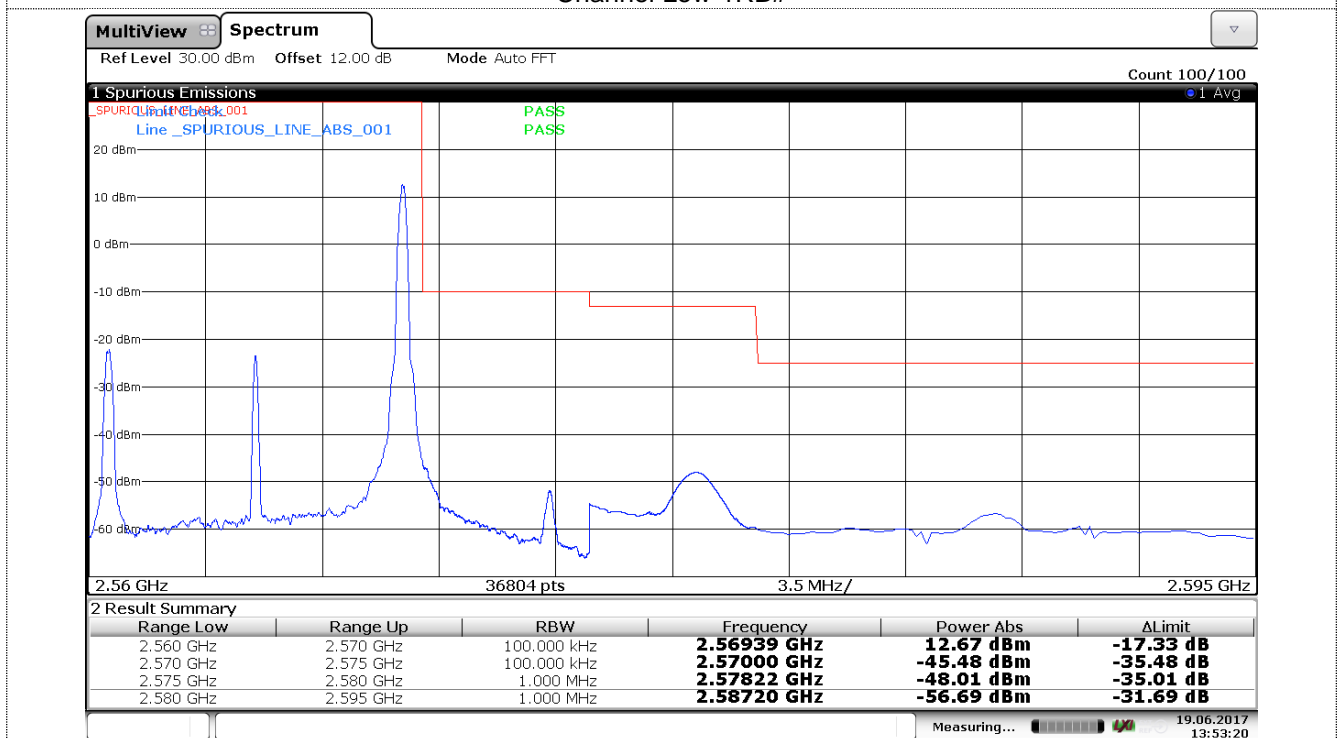
Channel Low-Full RB#



Channel High-Full RB#

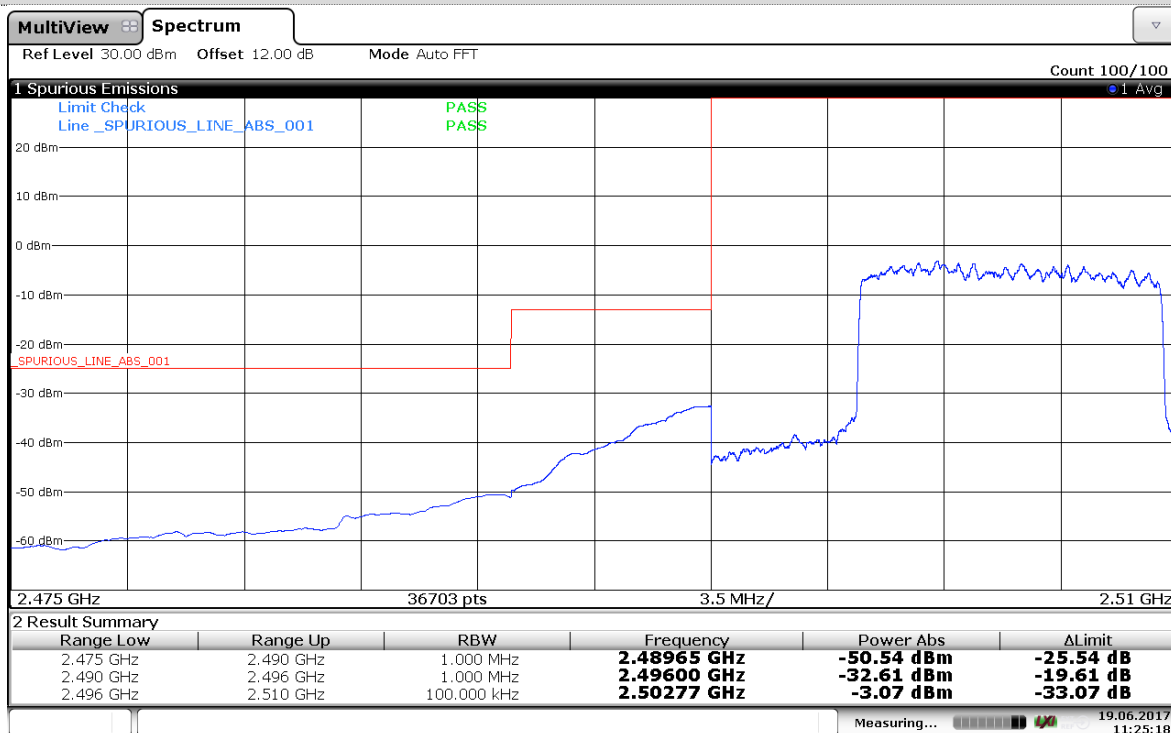


Channel Low-1RB#

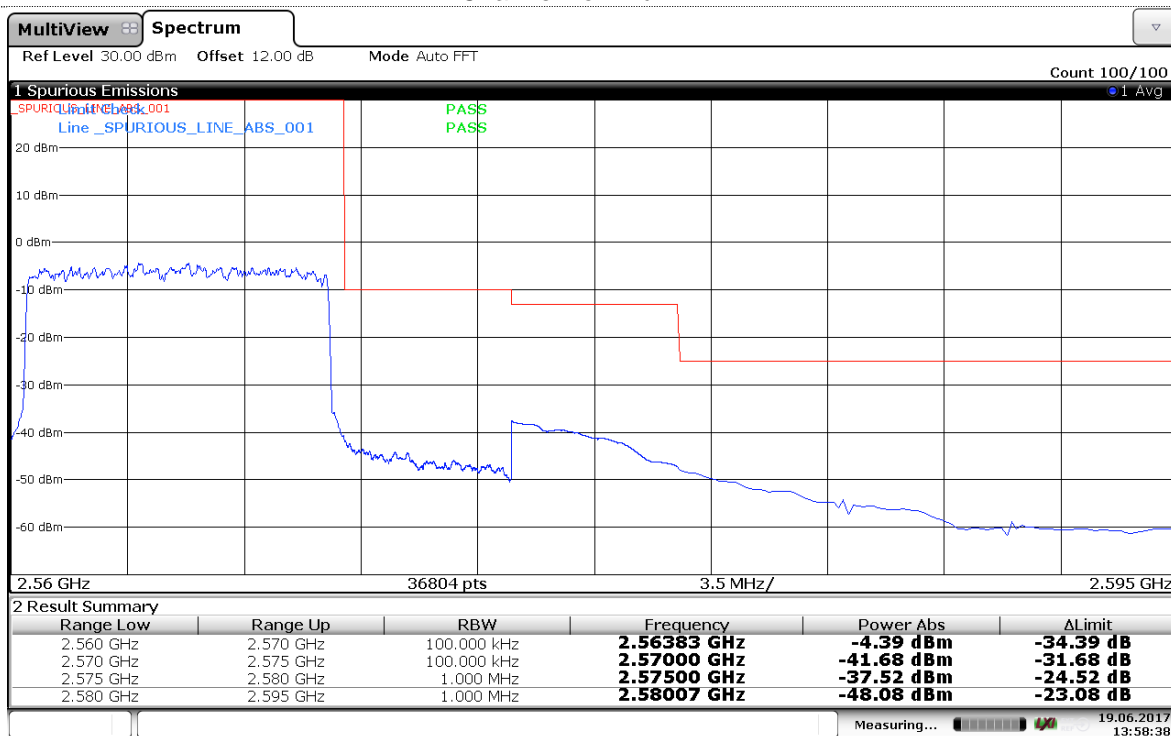


Channel High-1RB#

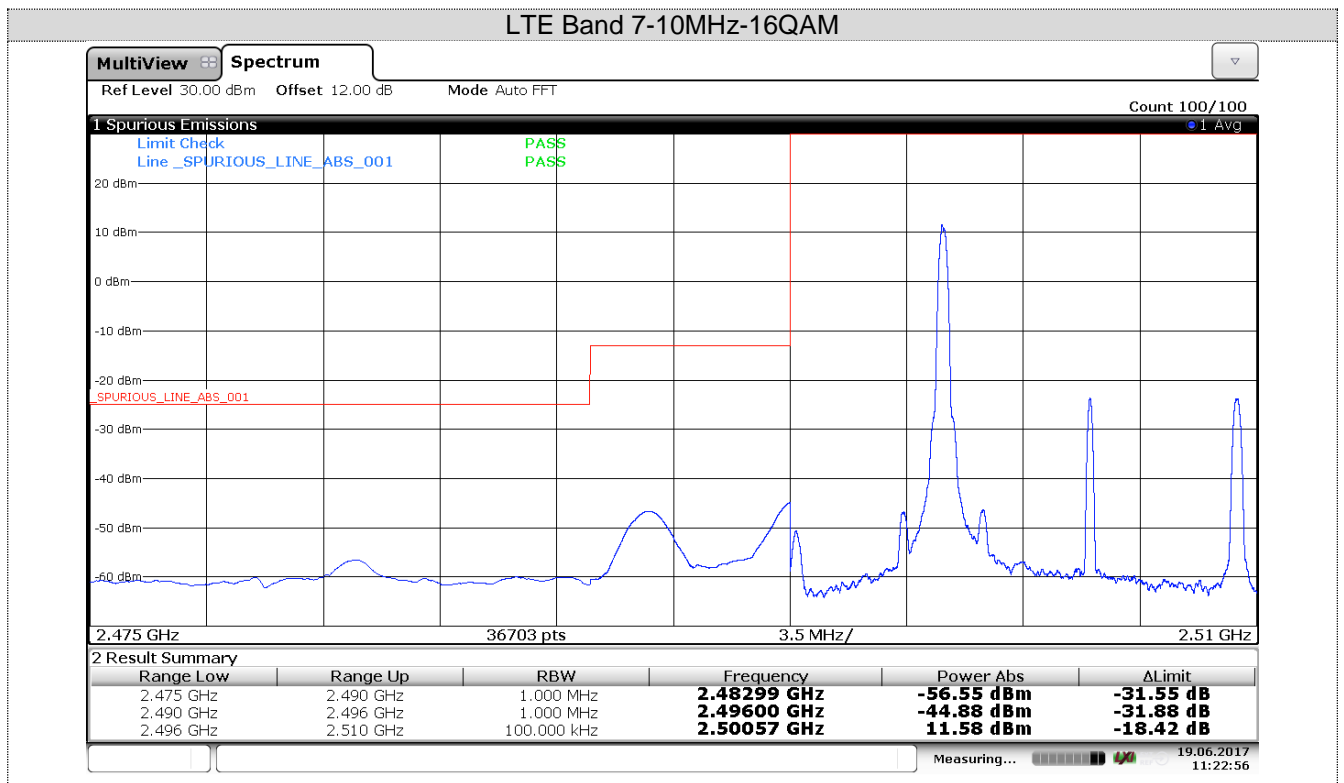
LTE Band 7-10MHz-QPSK



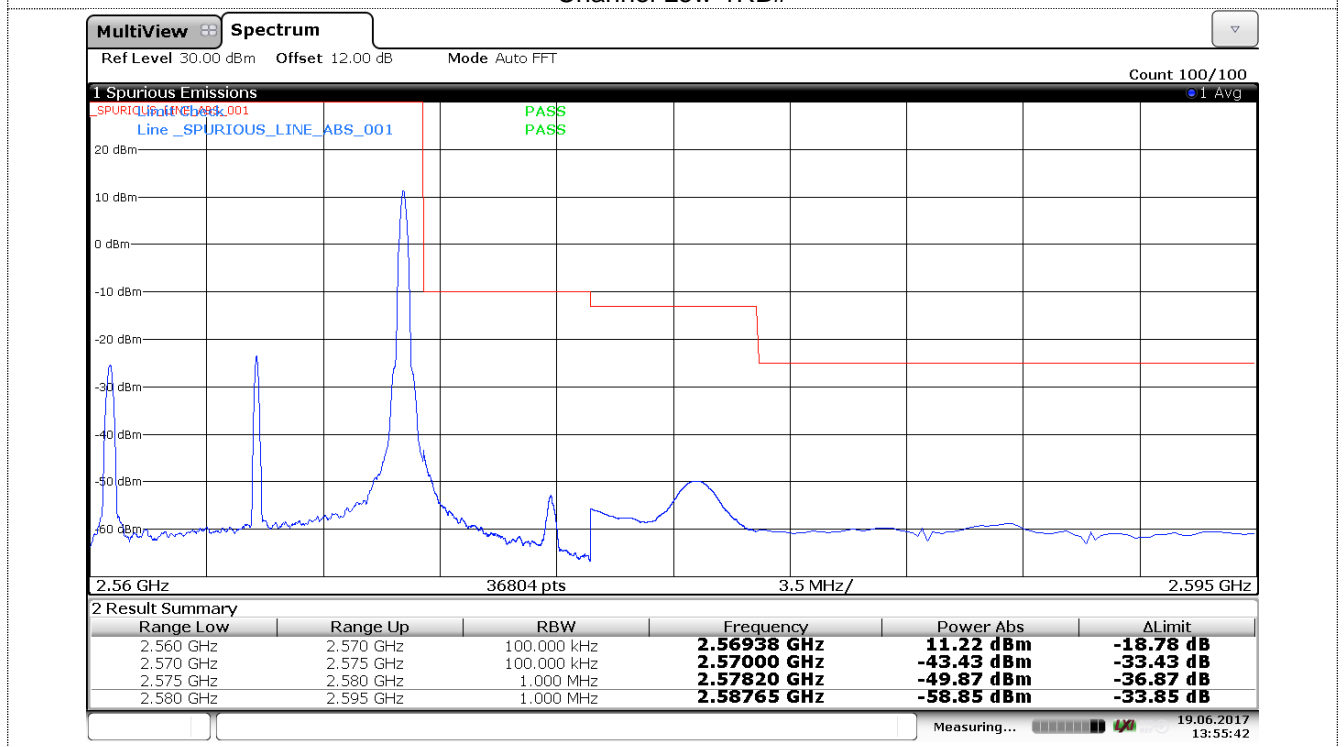
Channel Low-Full RB#



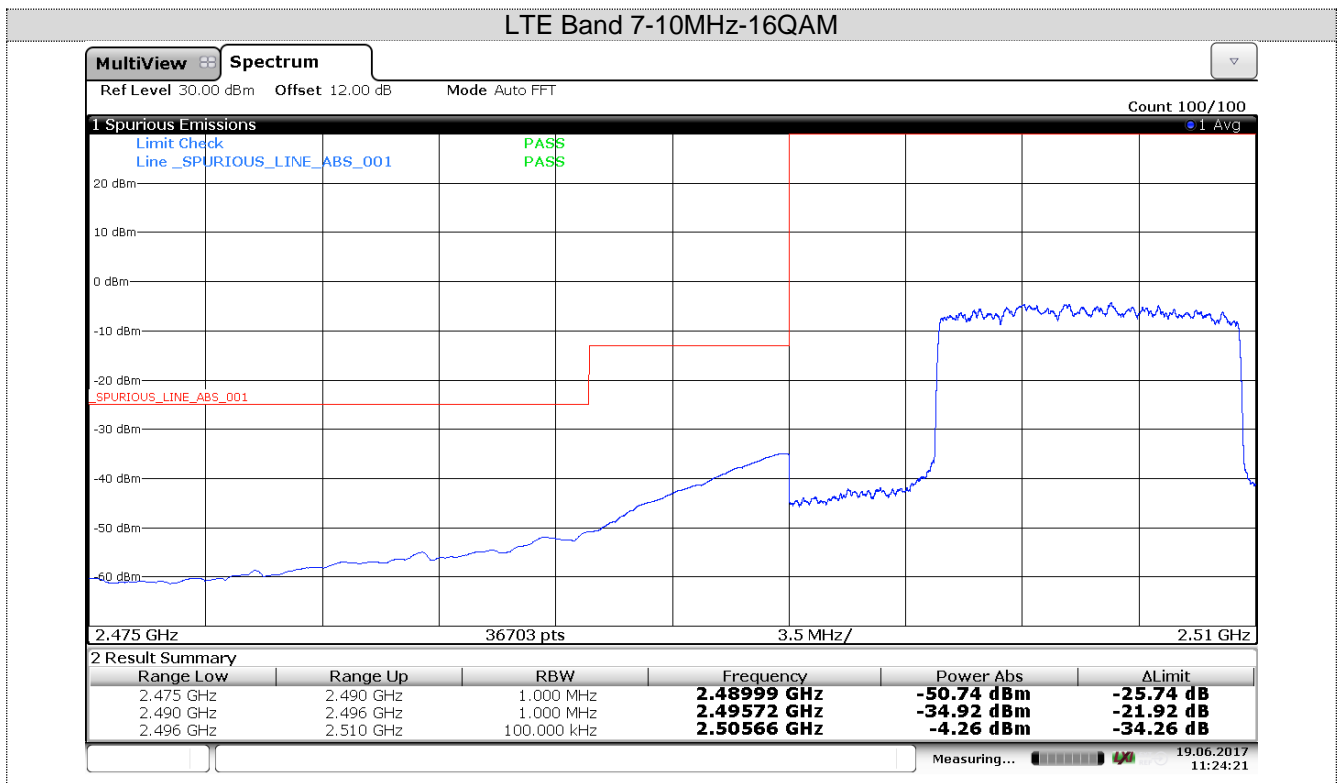
Channel High-Full RB#



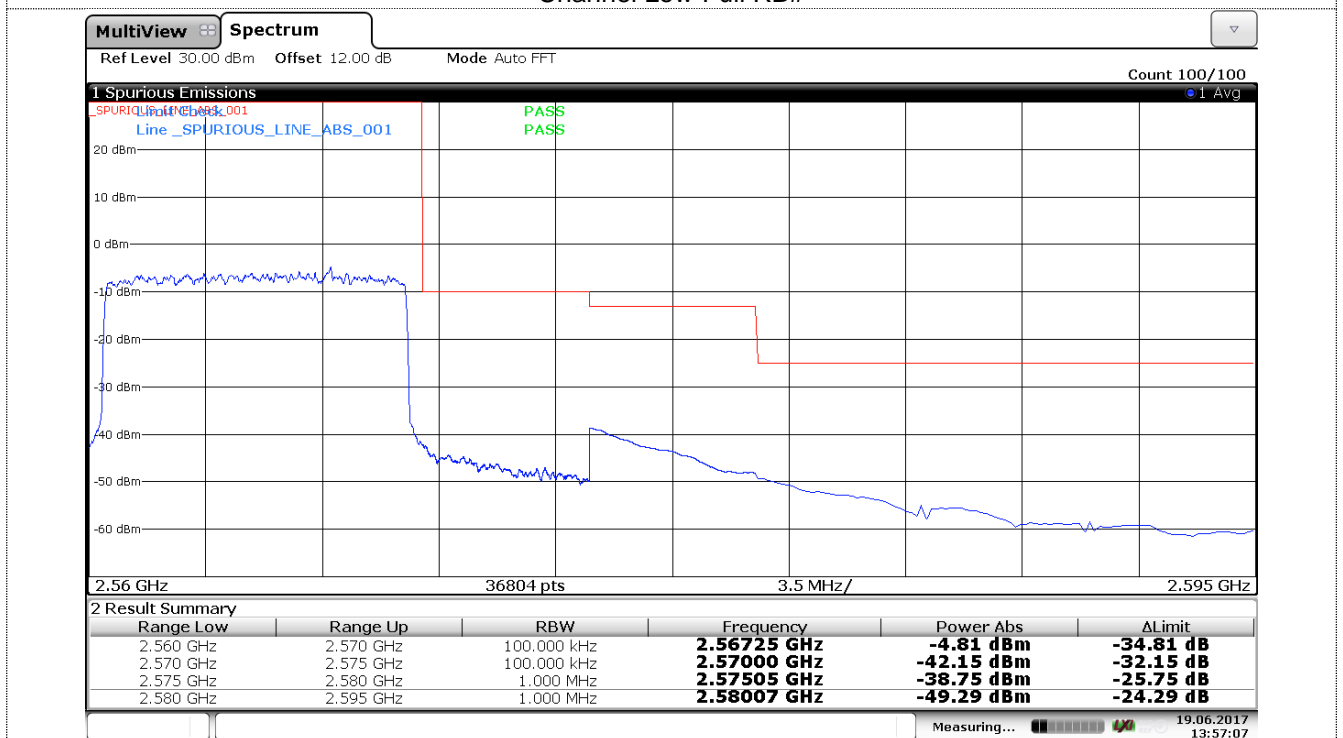
Channel Low-1RB#



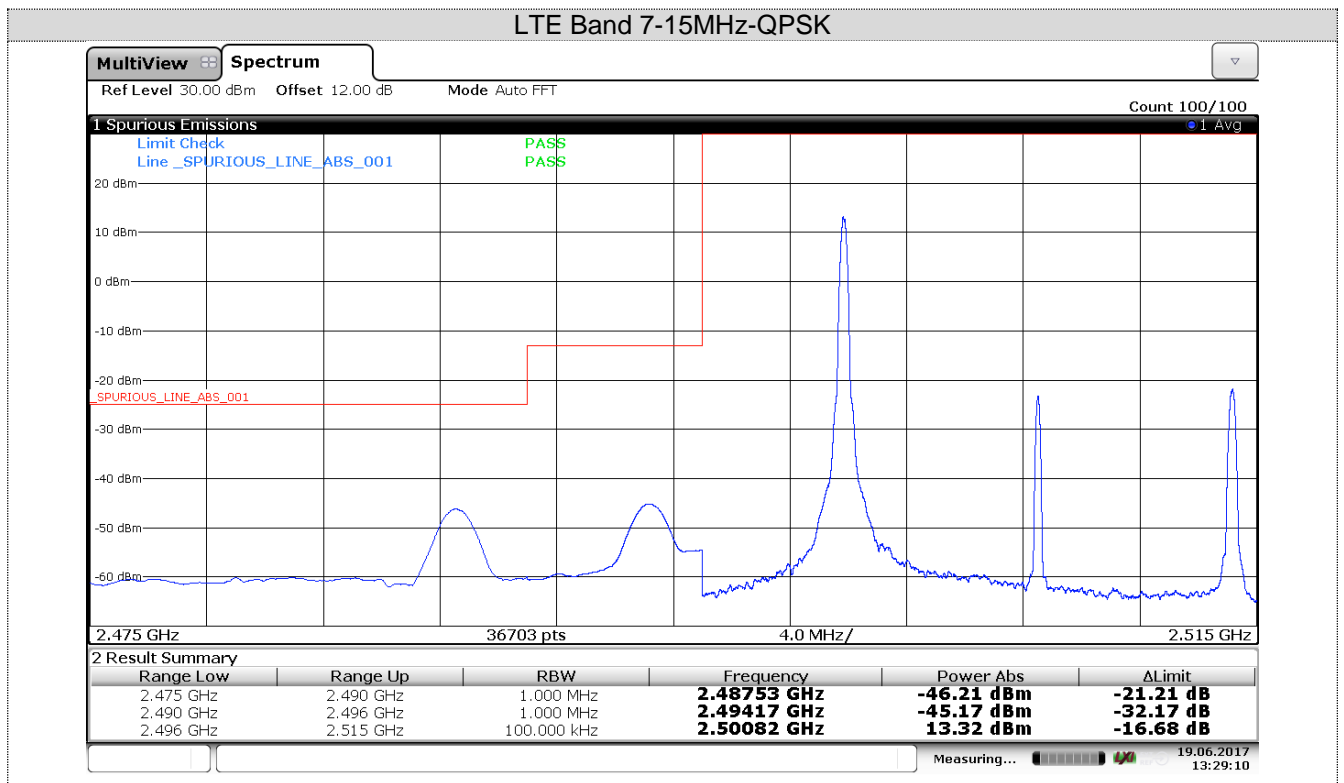
Channel High-1RB#



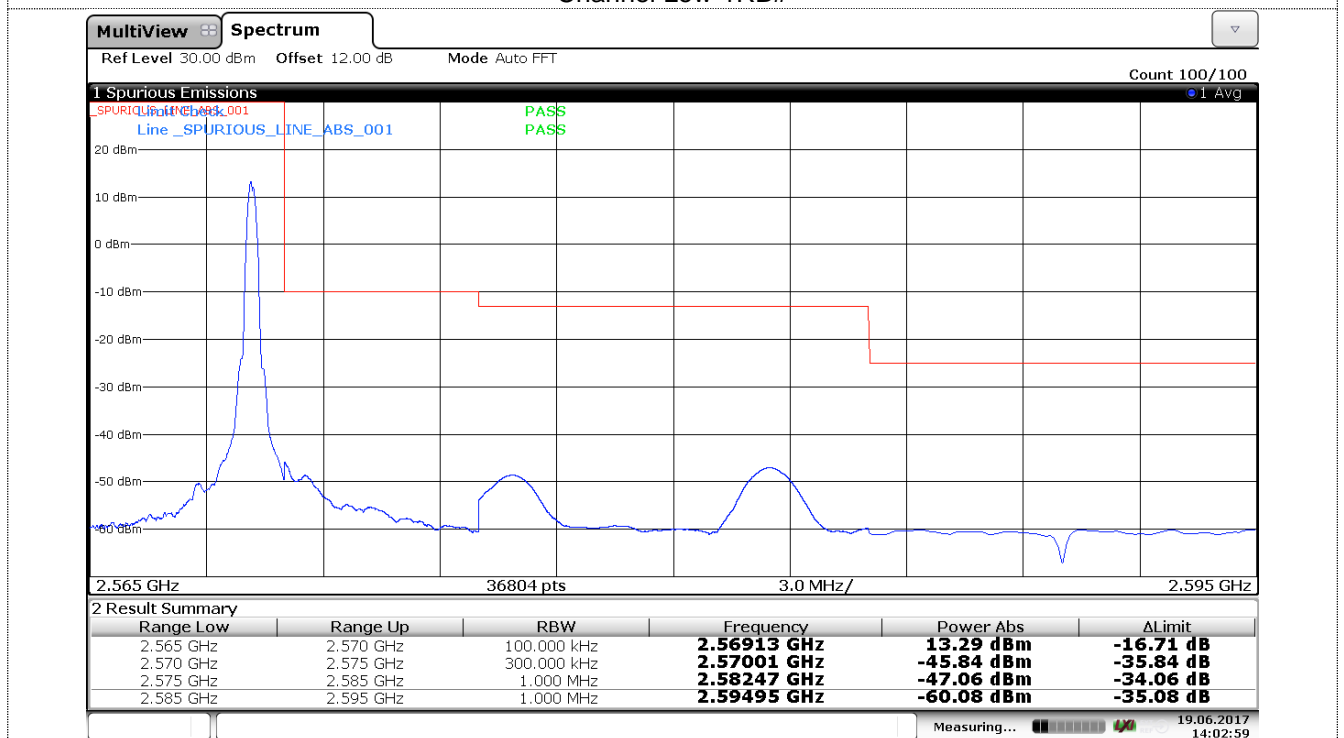
Channel Low-Full RB#



Channel High-Full RB#

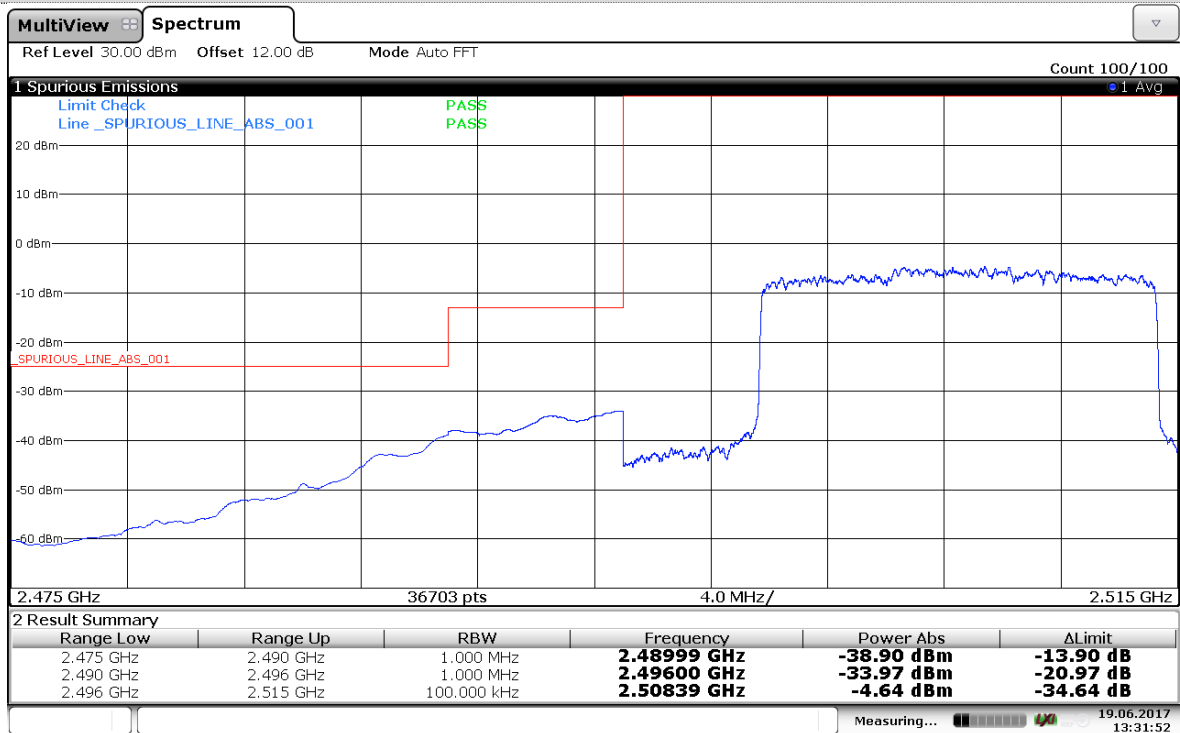


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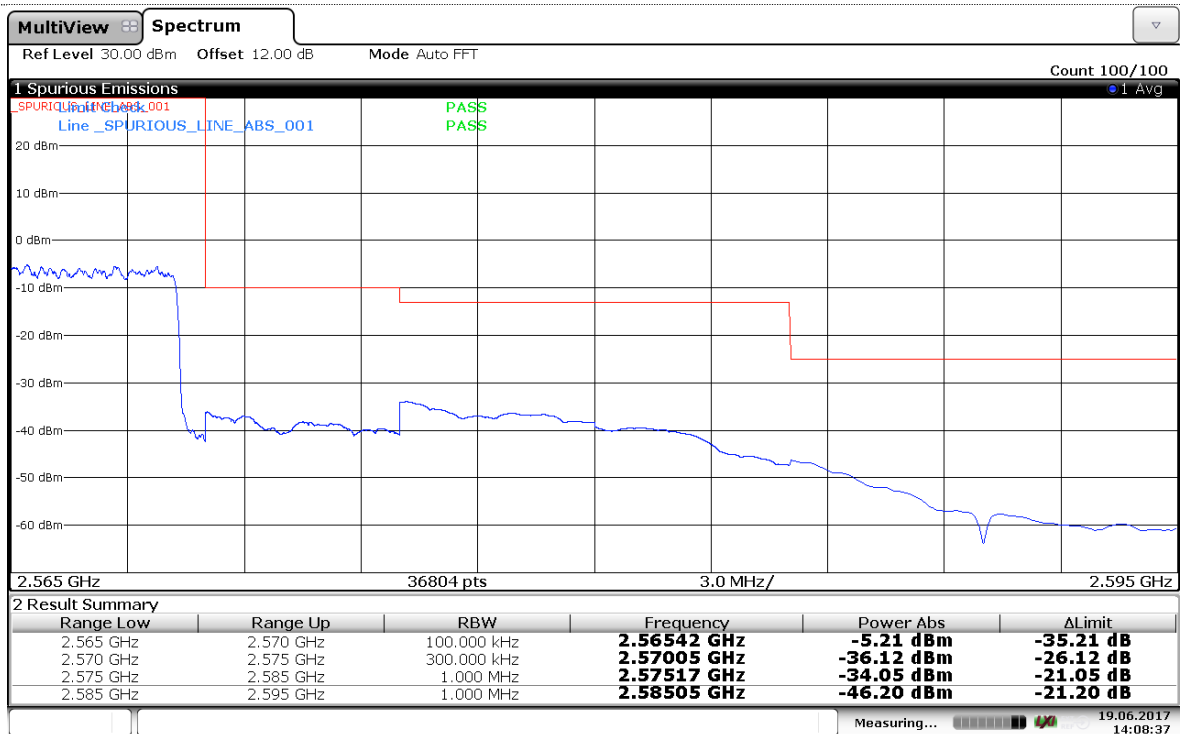


Channel High-1RB#

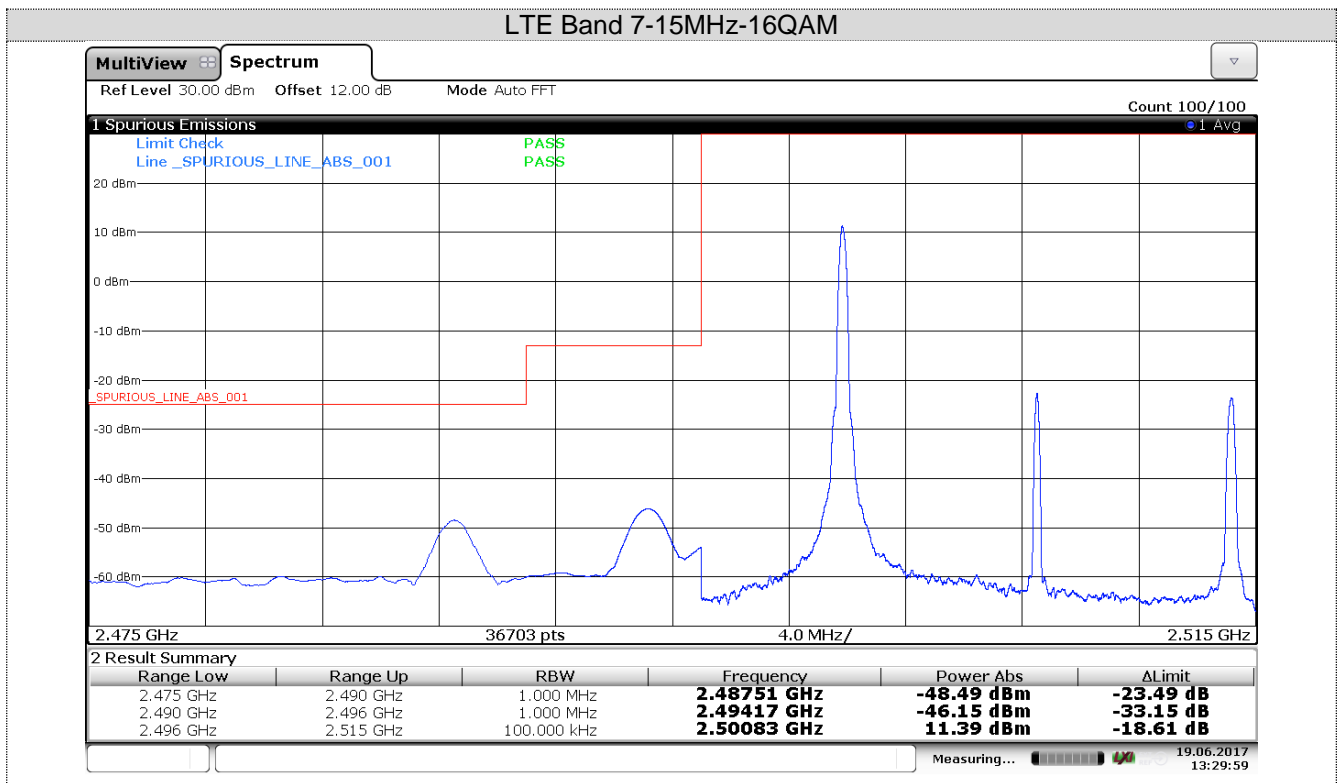
LTE Band 7-15MHz-QPSK



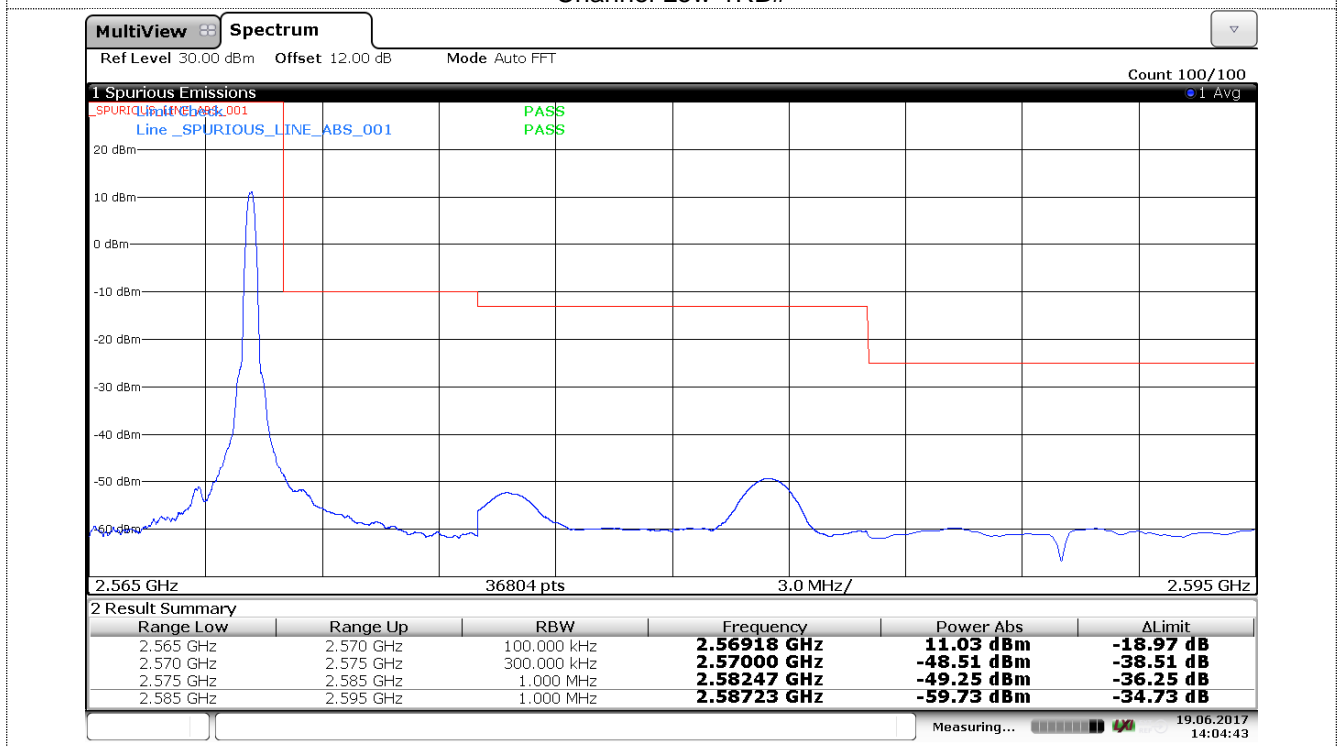
Channel Low-Full RB#



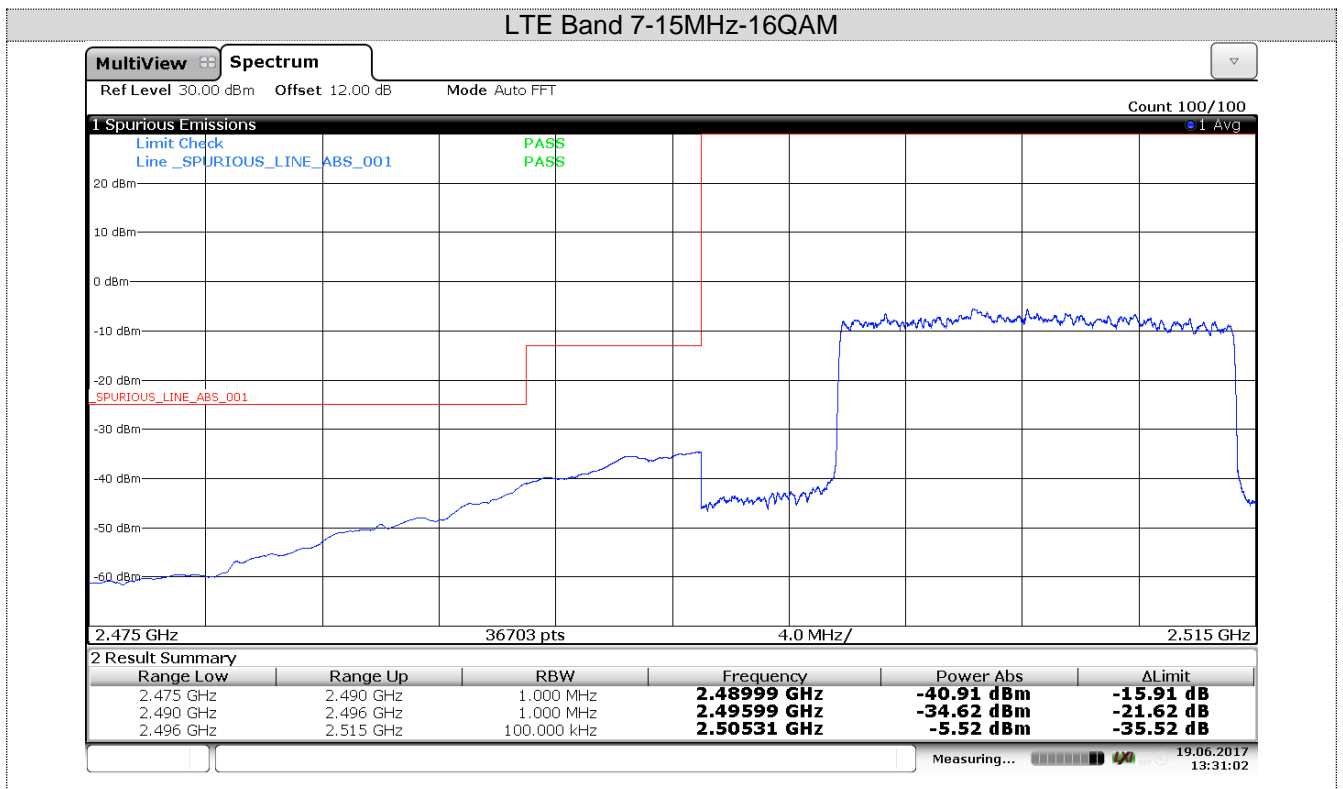
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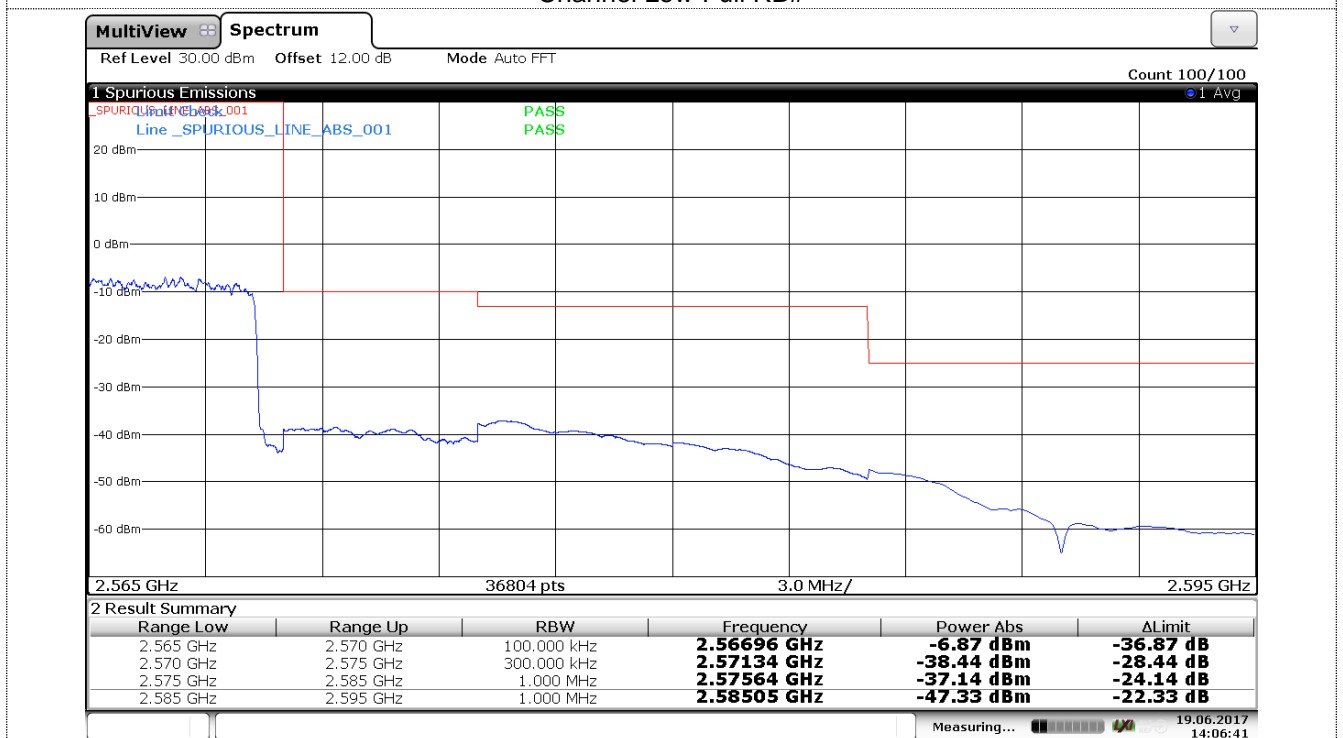
Channel Low-1RB#



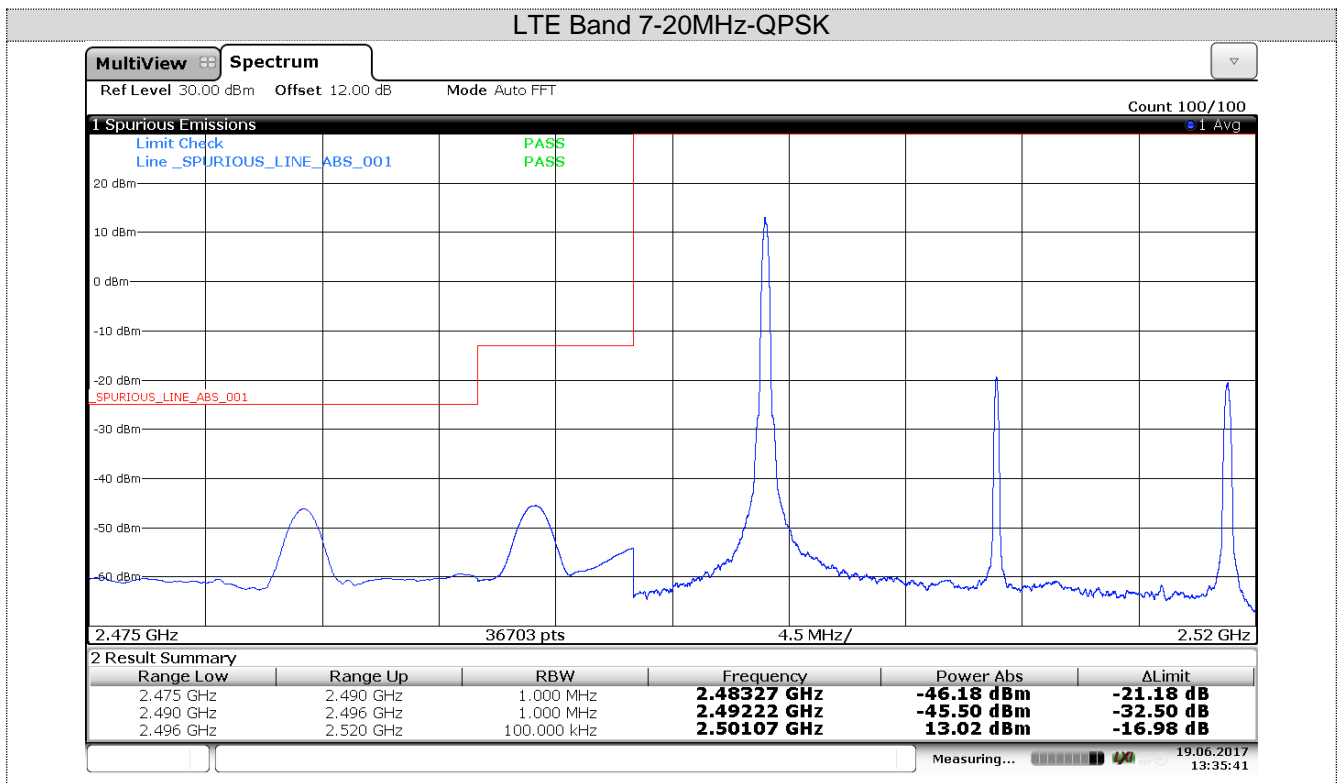
Channel High-1RB#



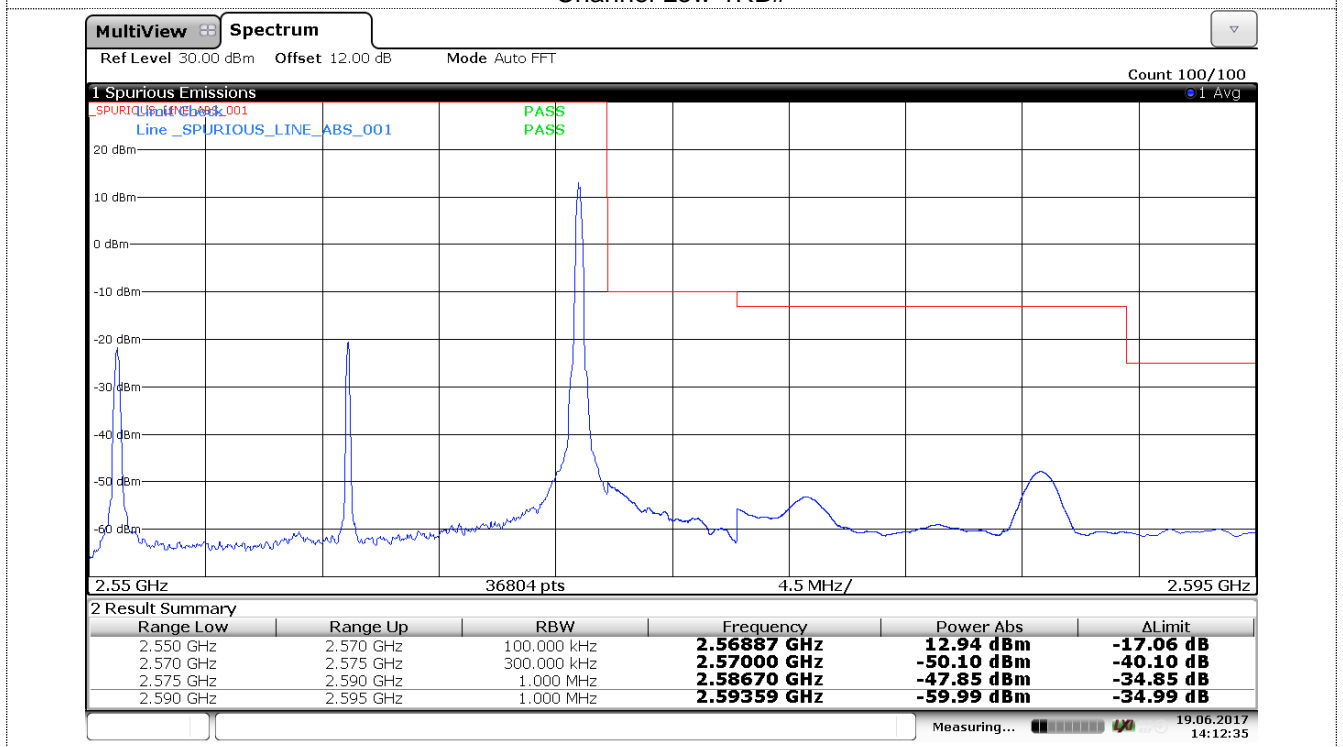
Channel Low-Full RB#



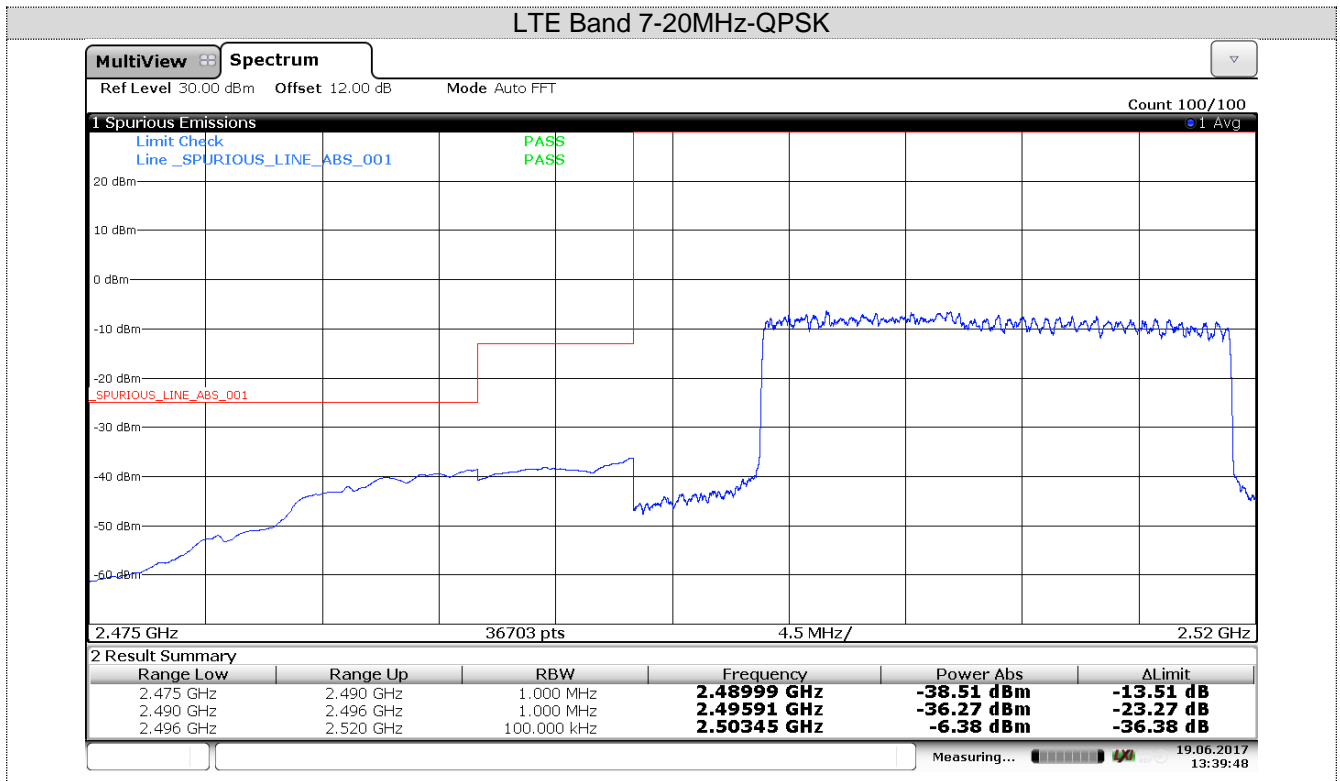
Channel High-Full RB#



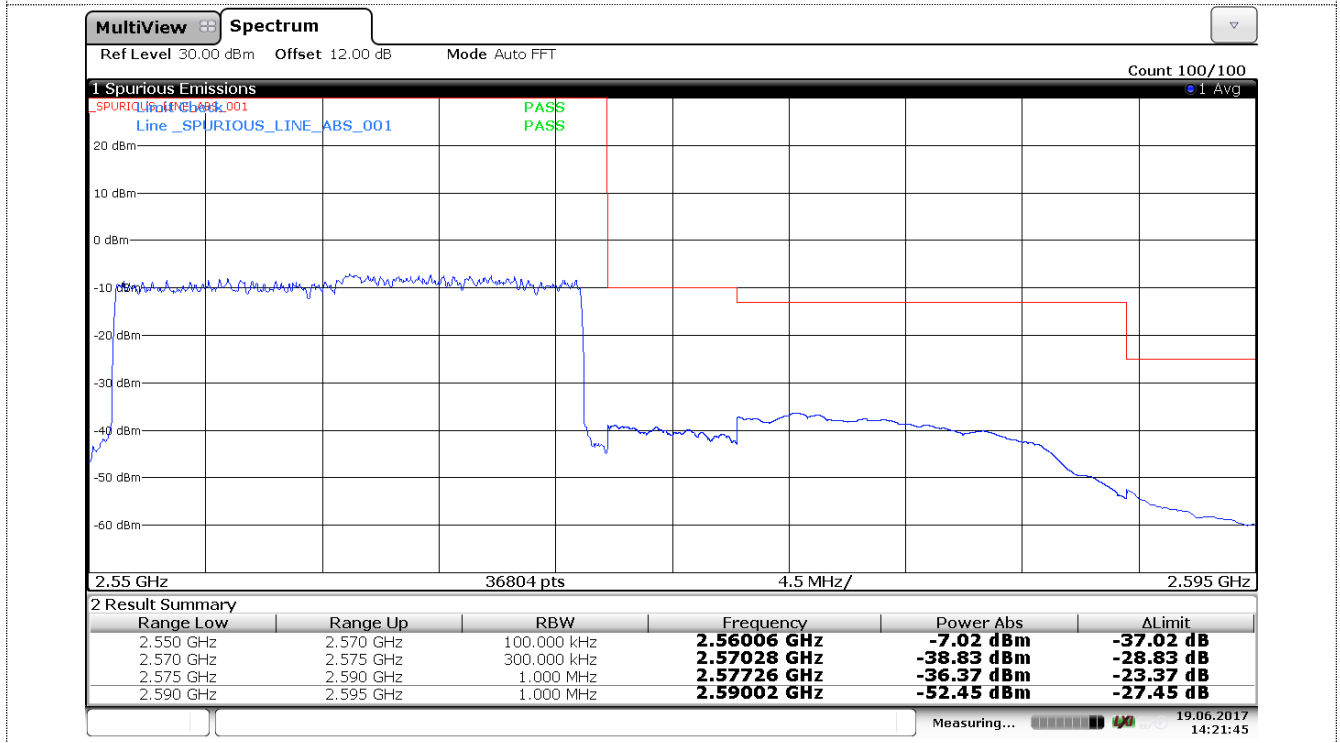
Channel Low-1RB#



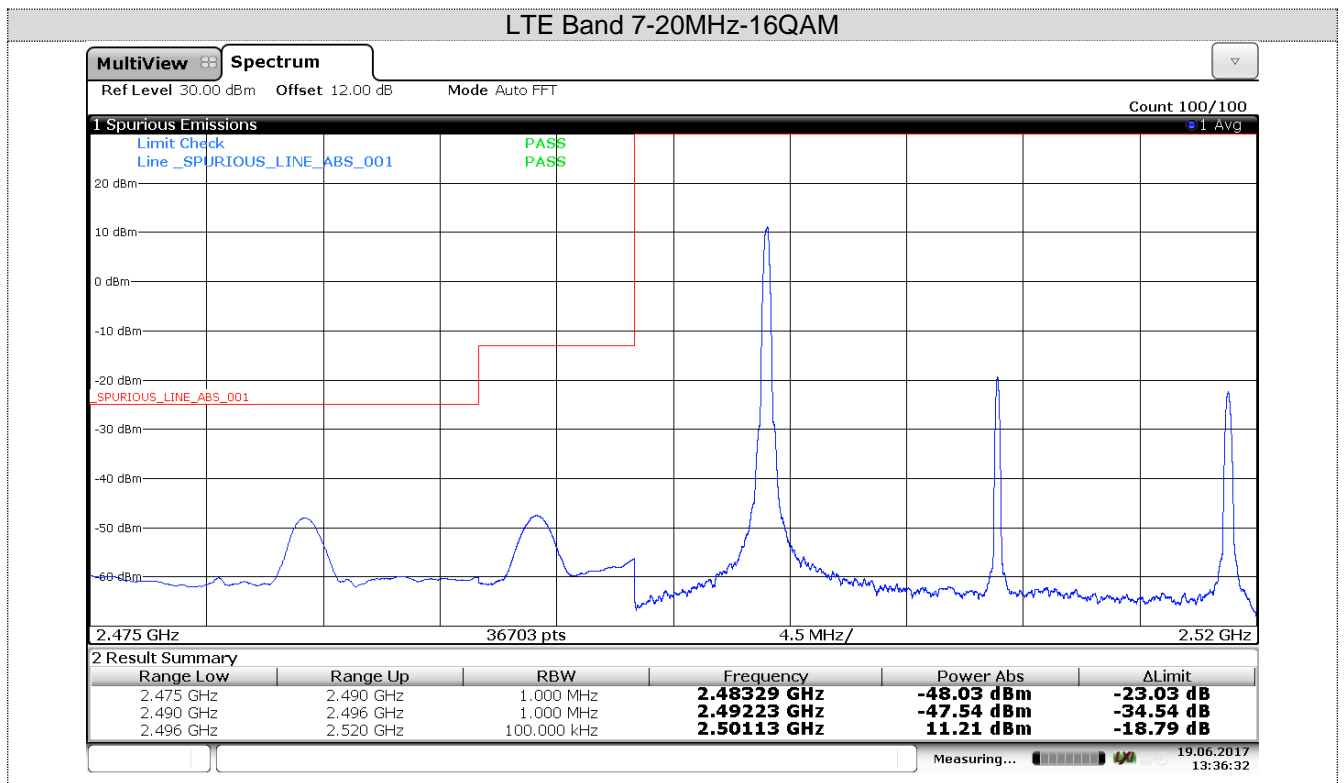
Channel High-1RB#



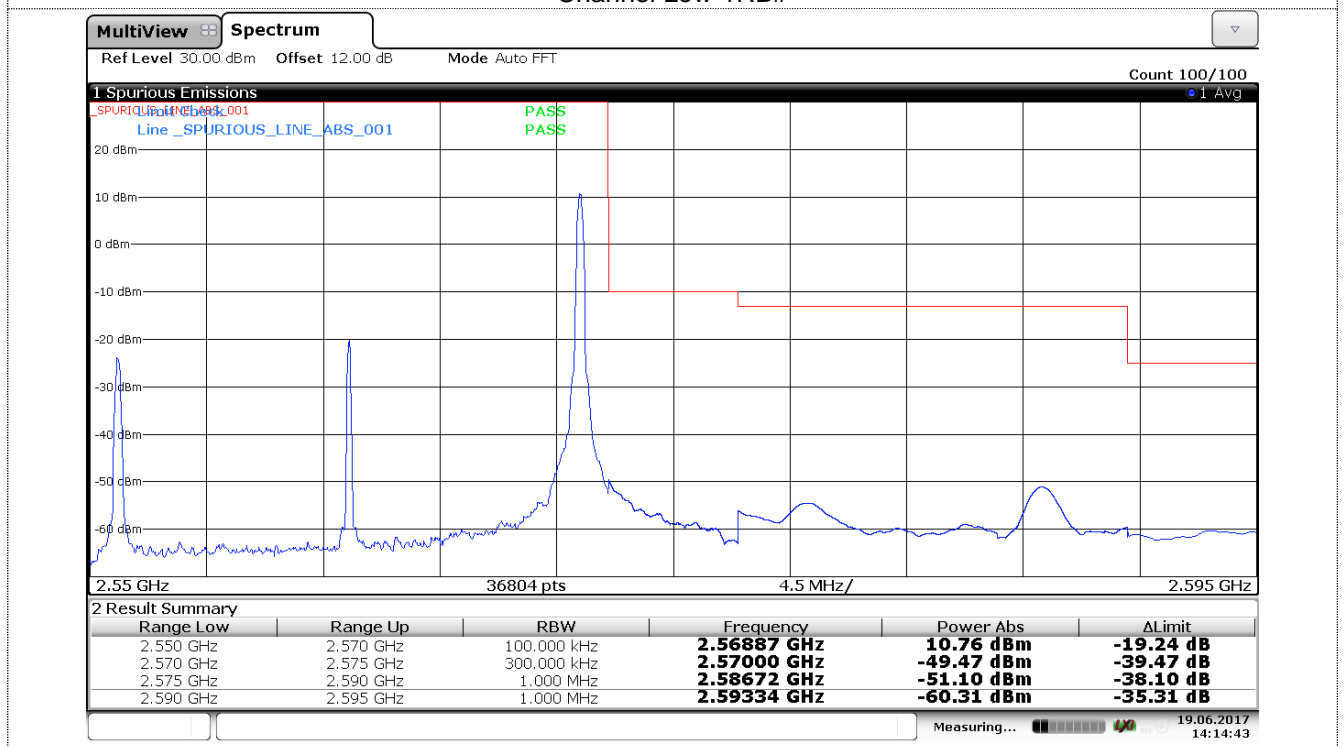
Channel Low-Full RB#



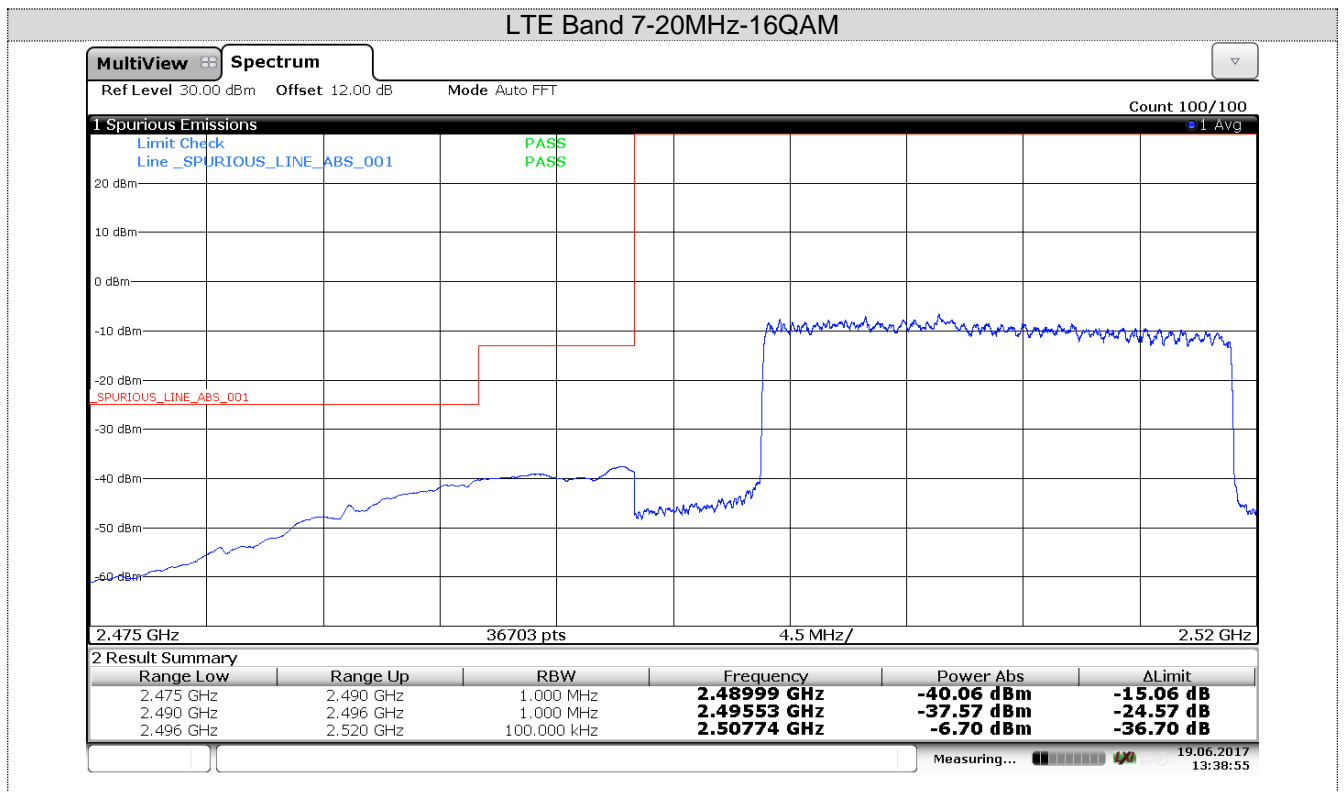
Channel High-Full RB#



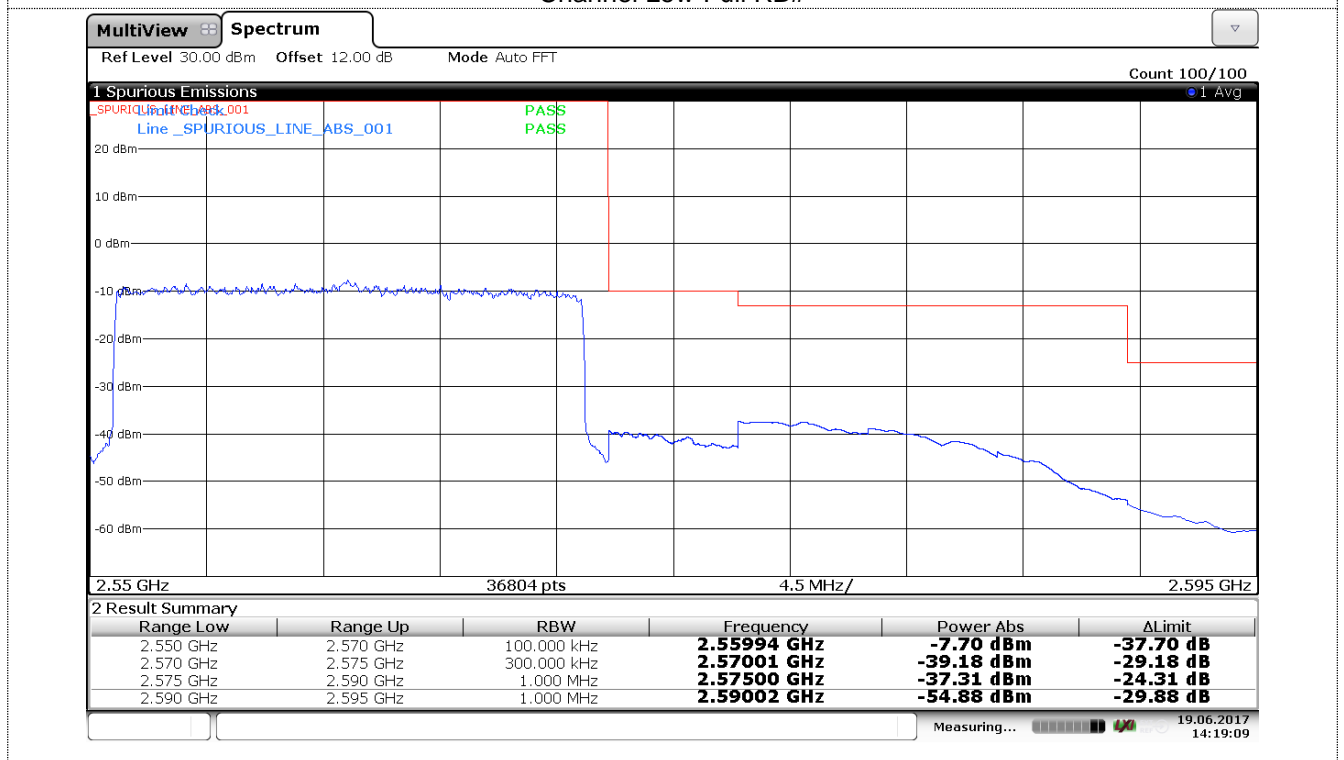
Channel Low-1RB#



Channel High-1RB#

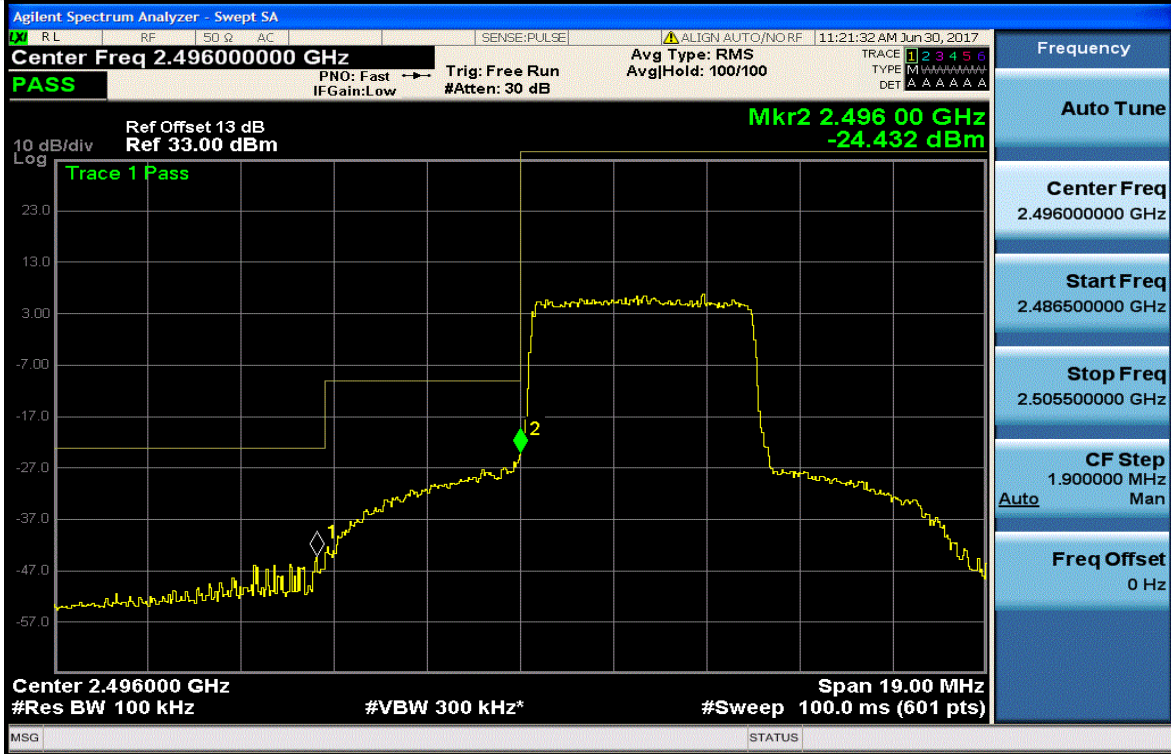


Channel Low-Full RB#

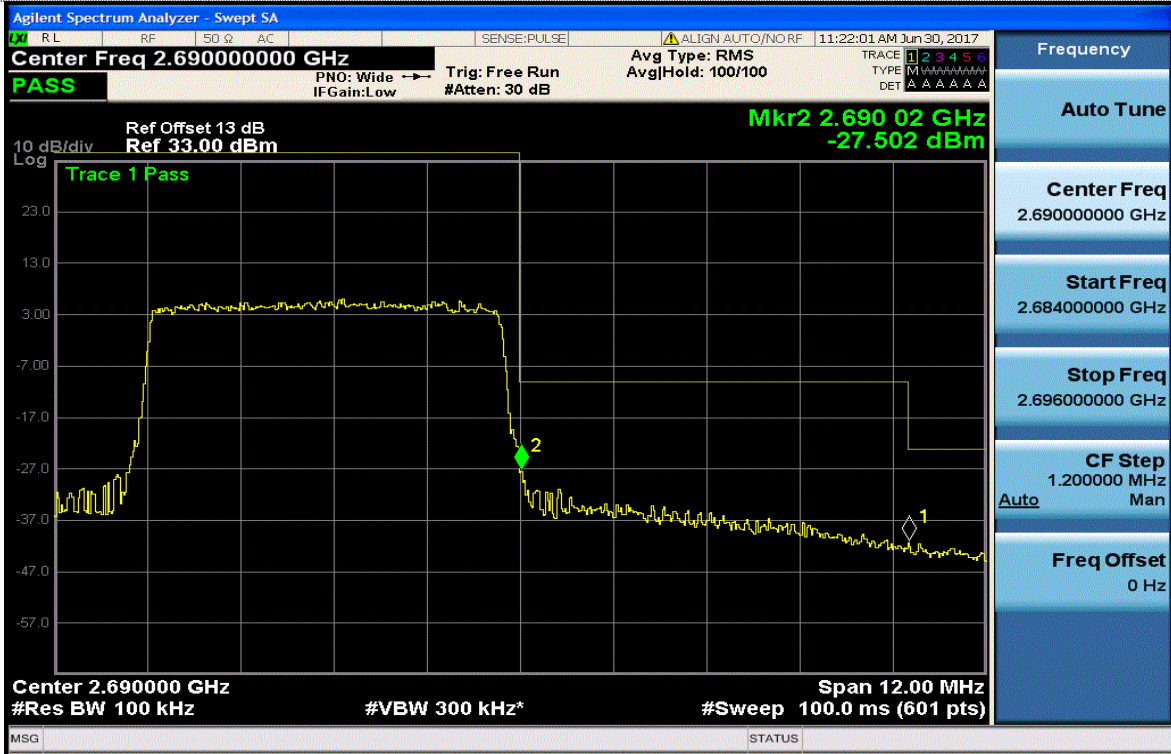


Channel High-Full RB#

LTE Band 41-5MHz-QPSK

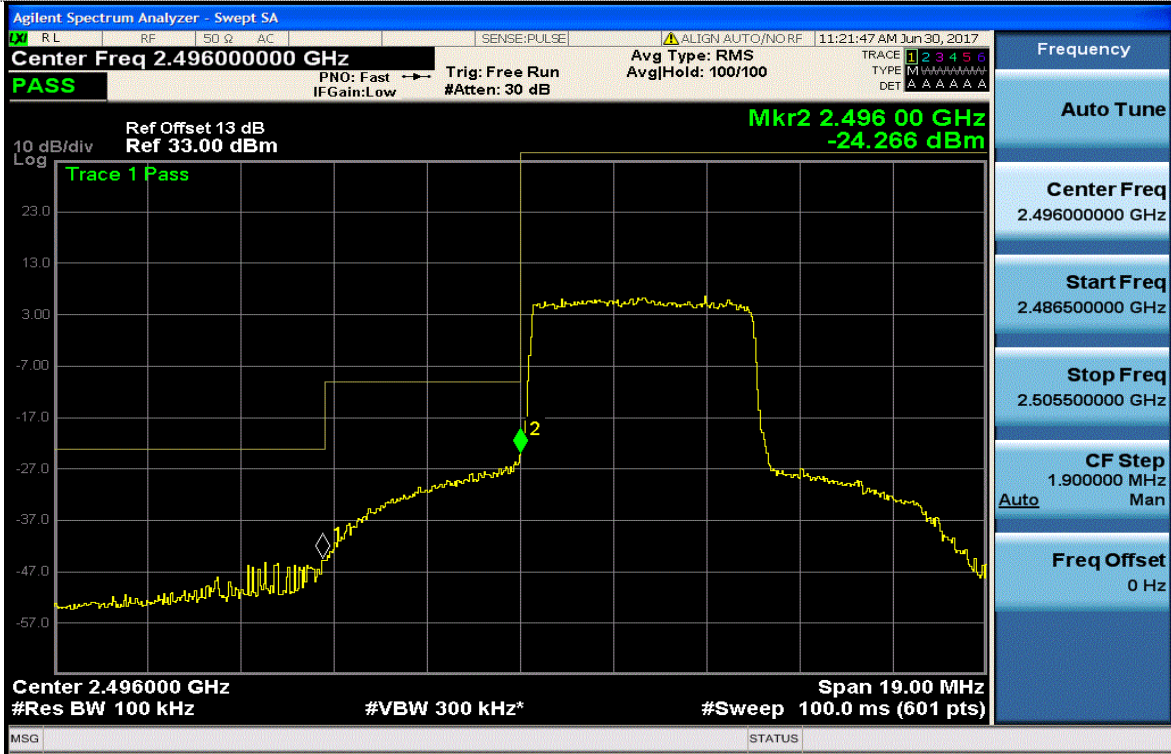


Channel Low-Full RB#



Channel High-Full RB#

LTE Band 41-5MHz-16QAM

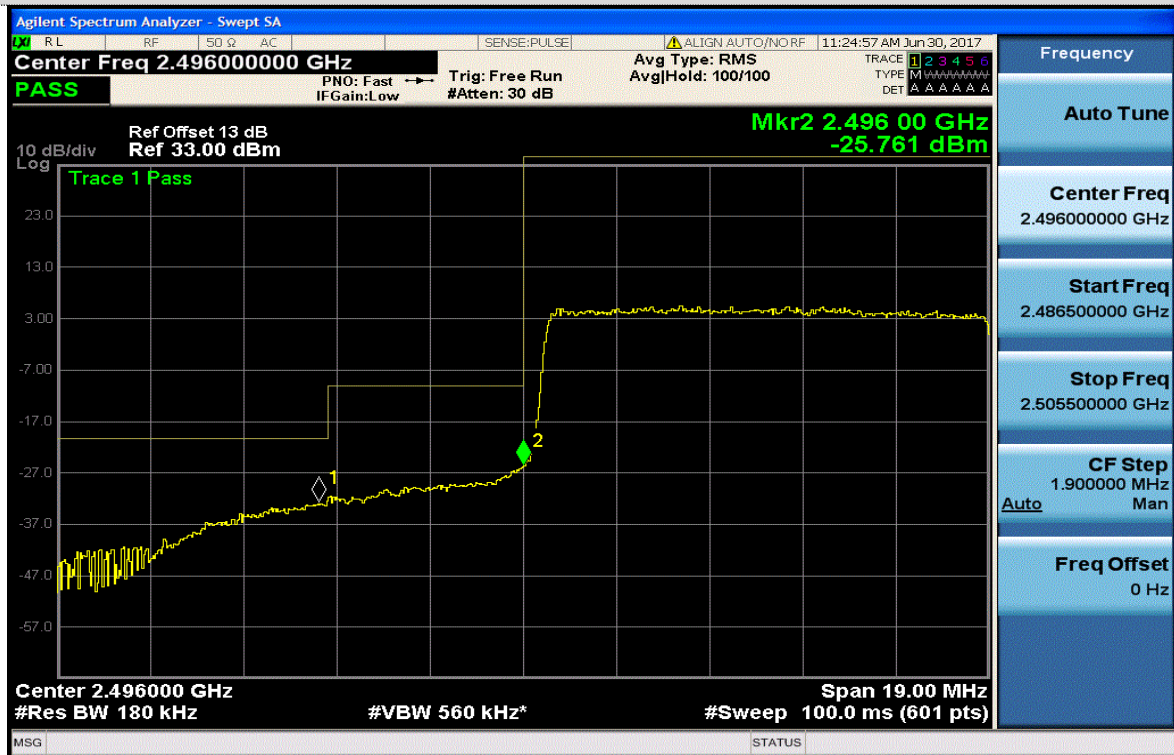


Channel Low-Full RB#



Channel High-Full RB#

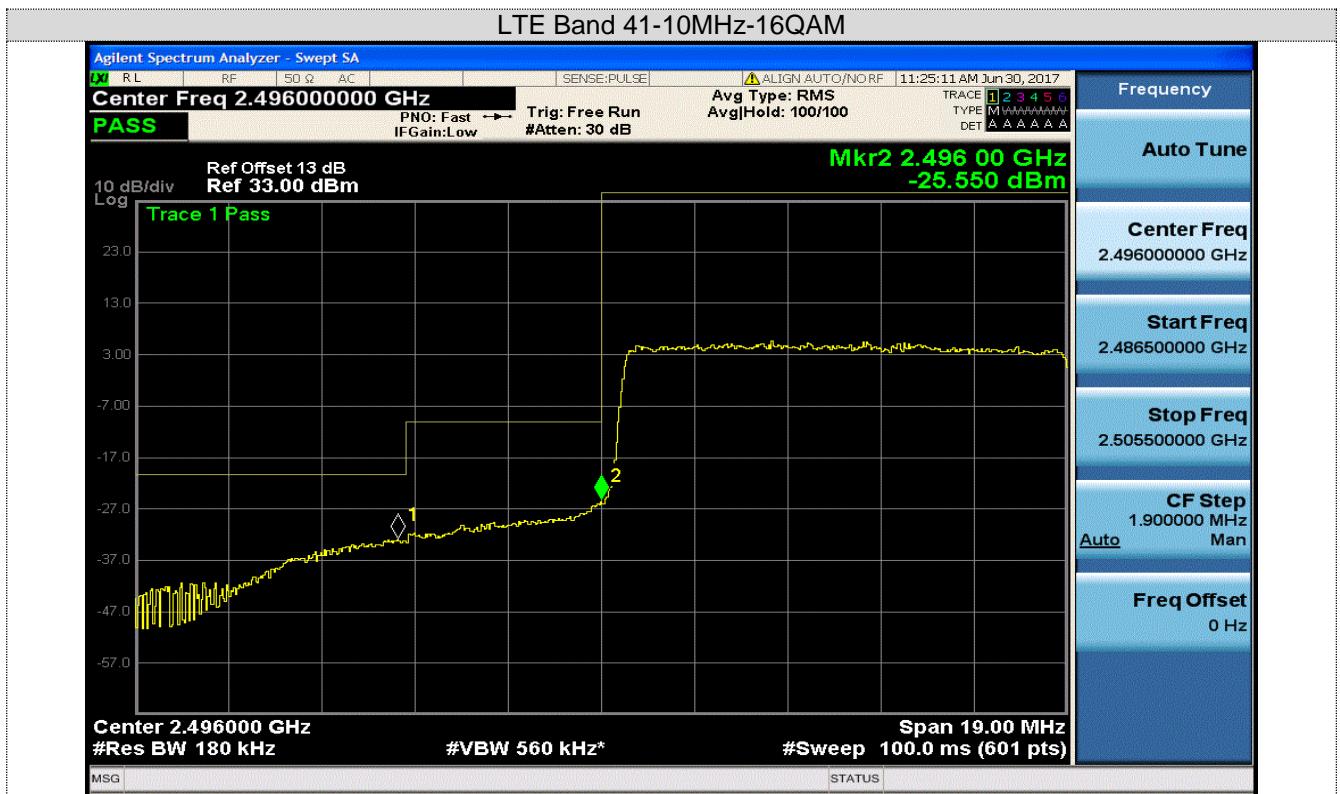
LTE Band 41-10MHz-QPSK



Channel Low-Full RB#



Channel High-Full RB#

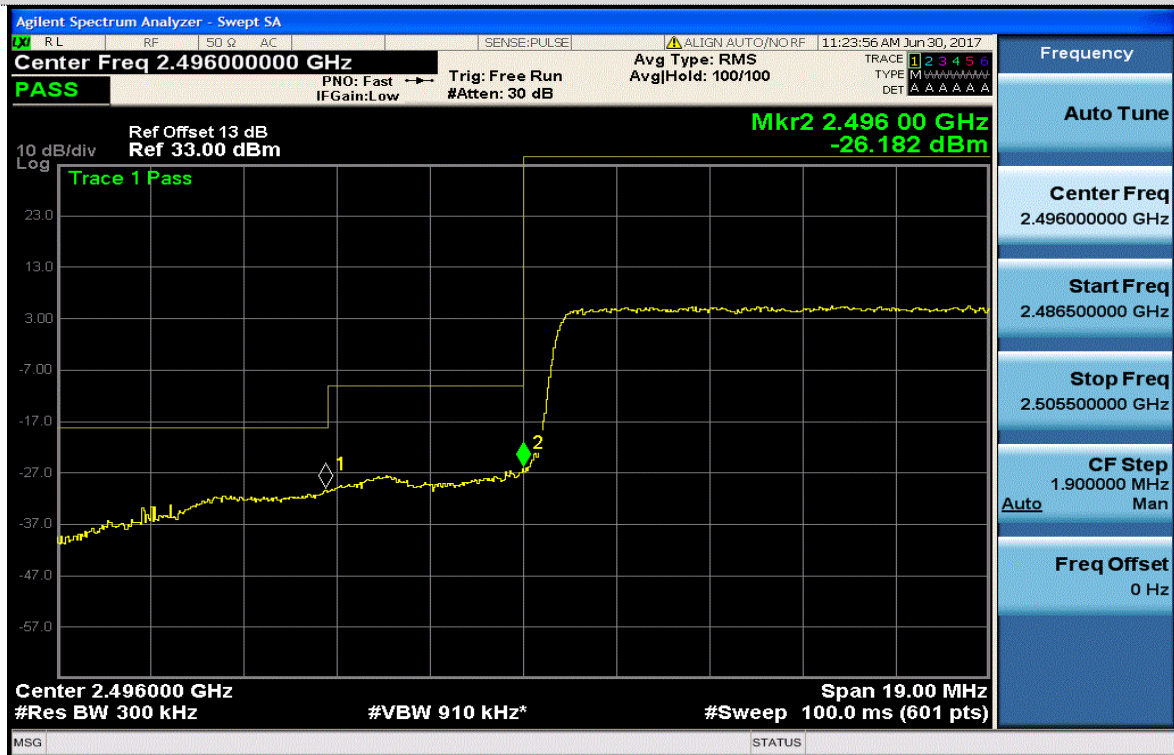


Channel Low-Full RB#



Channel High-Full RB#

LTE Band 41-15MHz-QPSK

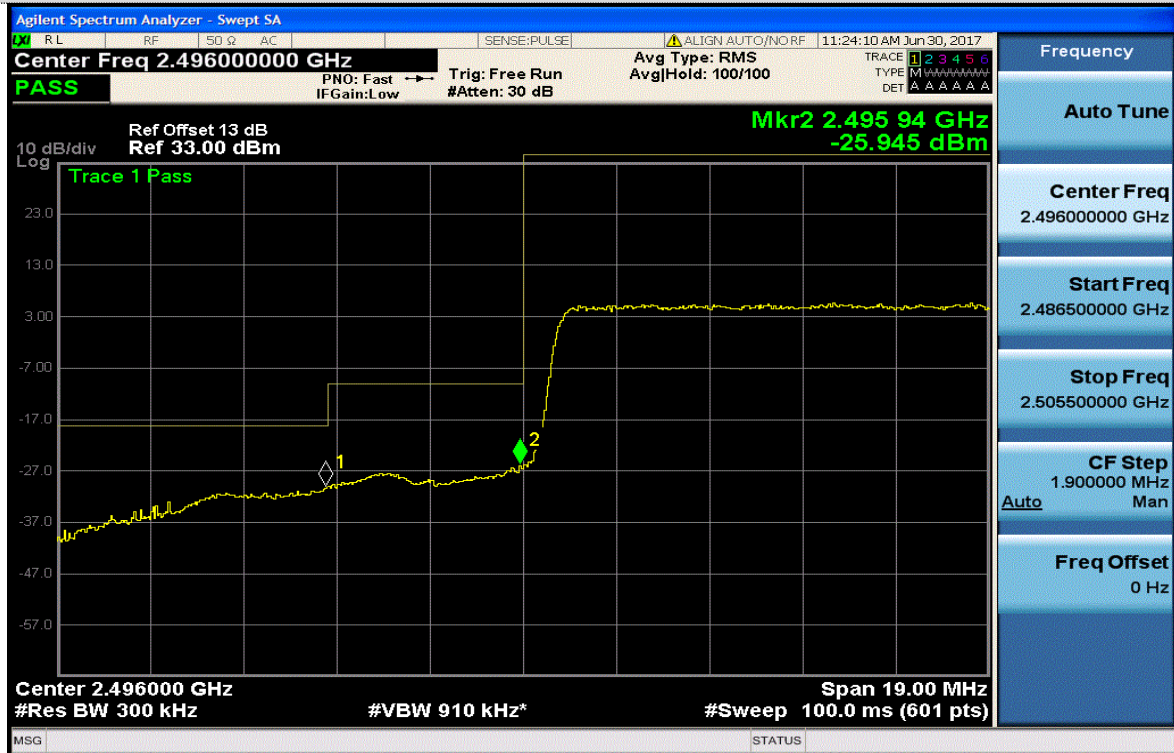


Channel Low-Full RB#



Channel High-Full RB#

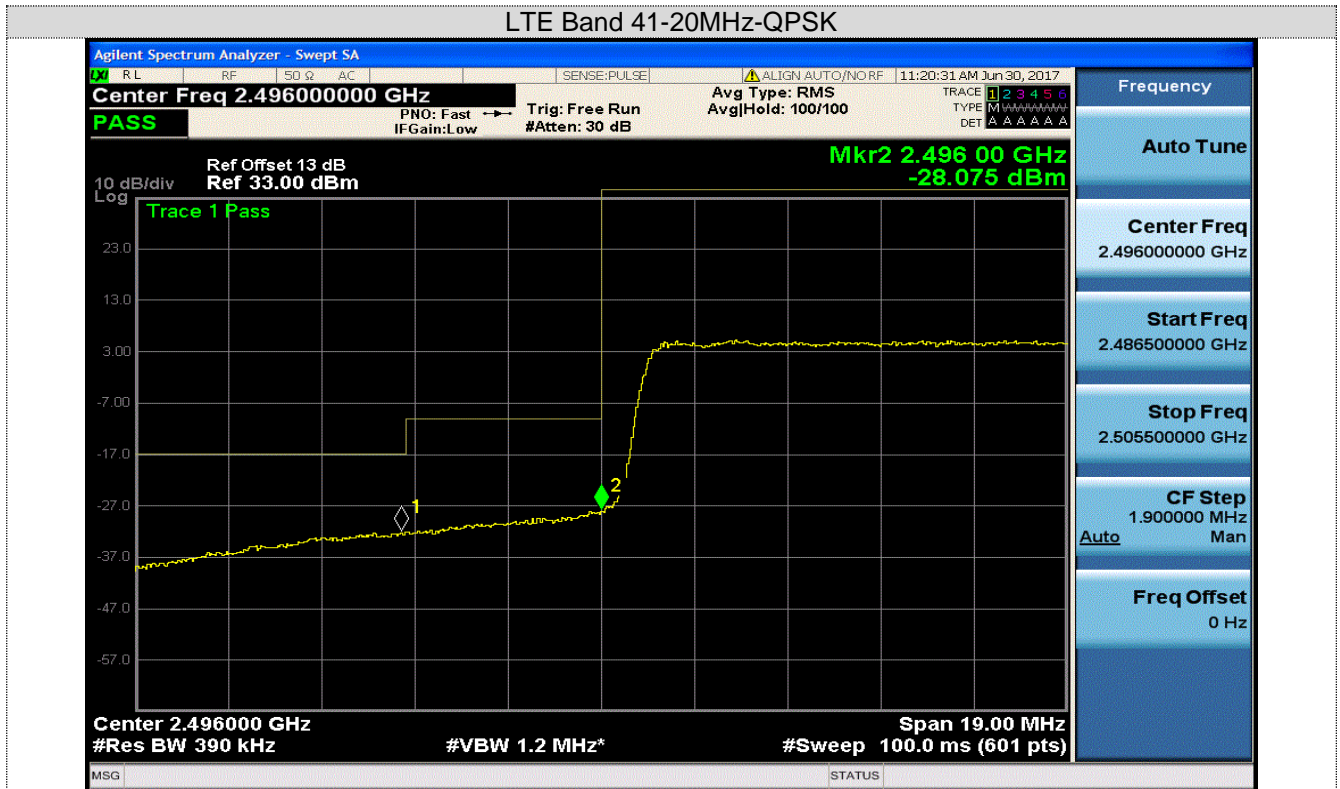
LTE Band 41-15MHz-16QAM



Channel Low-Full RB#



Channel High-Full RB#



Channel Low-Full RB#



Channel High-Full RB#

LTE Band 41-20MHz-16QAM



Channel Low-Full RB#



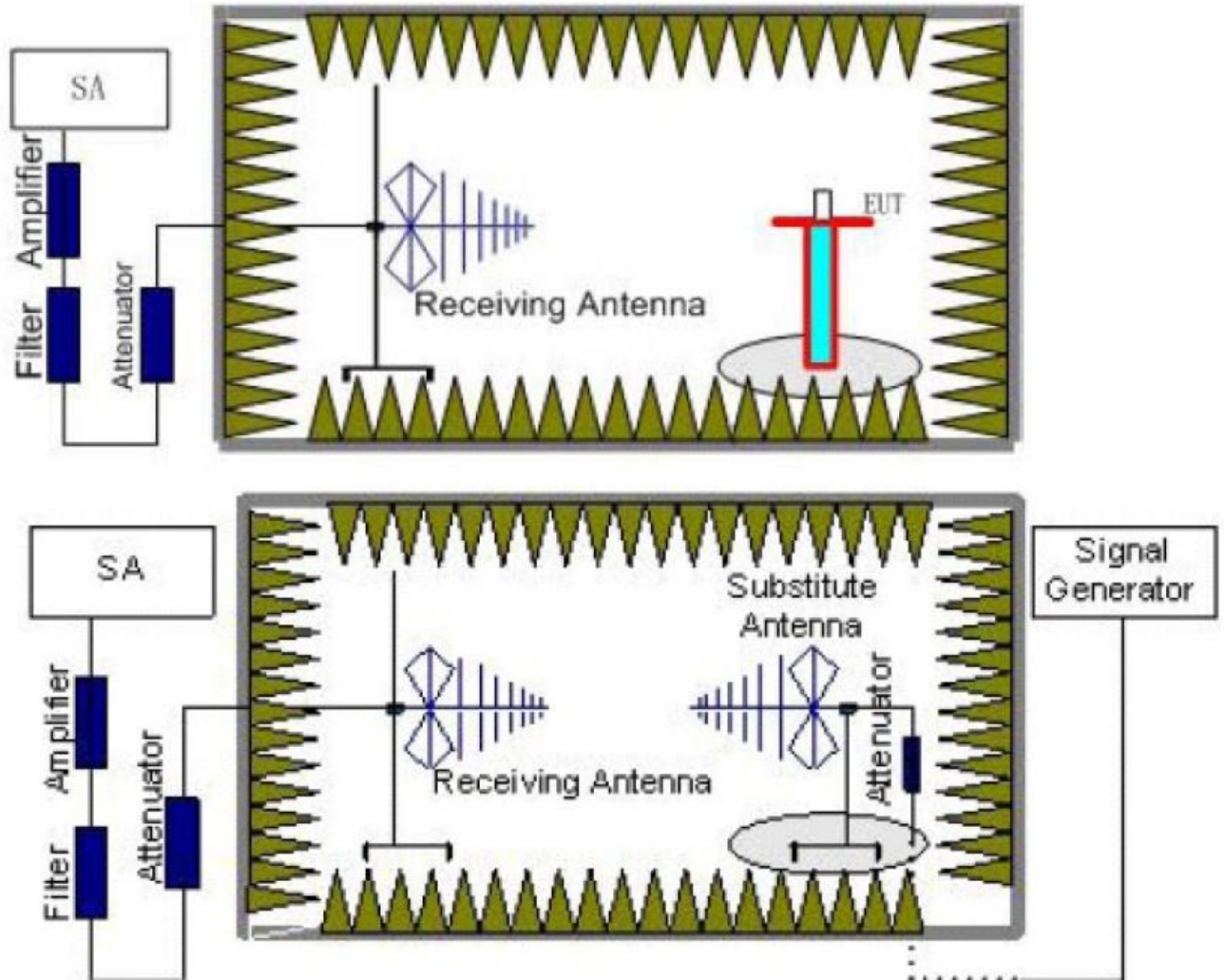
Channel High-Full RB#

5.5. ERP AND EIRP

LIMIT

LTE Band 2: EIRP<2W ,LTE Band 4:EIRP<1W,LTE Band 5/26:ERP<7W,LTE Band 7/41:EIRP<2W,

TEST CONFIGURATION



TEST PROCEDURE

1. EUT was placed on a 0.8 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna shall be moved from 1m to 4m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
3. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=1MHz,VBW=3MHz for above 1GHz and RBW=100kHz,VBW=300kHz for 30MHz to 1GHz,, And the maximum value of the receiver should be recorded as (Pr).
4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the

substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
6. The measurement results are obtained as described below:
Power(EIRP)=PMea- PAg - Pcl + Ga
We used SMF100A micowave signal generator which signal level can up to 33dBm,so we not used power Amplifier for substitution test; The measurement results are amend as described below:
Power(EIRP)=PMea- Pcl + Ga
7. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Passed **Not Applicable**

LTE Band 2-1.4MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.59	18.52	33.00	PASS
	Mid	20.36	18.06		
	High	20.78	18.02		
16QAM	Low	20.00	18.60		
	Mid	20.02	17.99		
	High	20.34	17.95		

LTE Band 2-3MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.53	18.12	33.00	PASS
	Mid	20.69	18.42		
	High	20.15	18.45		
16QAM	Low	20.19	18.05		
	Mid	20.19	18.29		
	High	20.19	18.46		

LTE Band 2-5MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.69	18.40	33.00	PASS
	Mid	20.46	18.45		
	High	20.39	18.08		
16QAM	Low	20.27	18.40		
	Mid	20.04	18.45		
	High	20.73	18.15		

LTE Band 2-10MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.16	18.42	33.00	PASS
	Mid	20.55	18.50		
	High	20.59	18.13		
16QAM	Low	20.12	18.08		
	Mid	20.67	18.57		
	High	20.48	18.00		

LTE Band 2-15MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.36	18.02	33.00	PASS
	Mid	20.03	18.12		
	High	20.69	18.42		
16QAM	Low	19.85	18.02		
	Mid	20.03	18.12		
	High	20.56	18.42		

LTE Band 2-20MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.36	18.53	33.00	PASS
	Mid	20.53	18.52		
	High	20.15	18.12		
16QAM	Low	19.89	18.43		
	Mid	19.83	18.34		
	High	20.22	18.14		

LTE Band 4-1.4MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	21.63	18.66	30.00	PASS
	Mid	21.63	18.63		
	High	21.66	18.67		
16QAM	Low	21.35	18.72		
	Mid	21.37	18.57		
	High	21.61	18.61		

LTE Band 4-3MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	21.50	18.40	30.00	PASS
	Mid	21.12	18.58		
	High	21.30	18.47		
16QAM	Low	21.24	18.35		
	Mid	20.74	18.48		
	High	21.32	18.47		

LTE Band 4-5MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	21.18	18.49	30.00	PASS
	Mid	21.14	18.40		
	High	21.58	18.48		
16QAM	Low	21.86	18.64		
	Mid	20.46	18.27		
	High	22.12	18.60		

LTE Band 4-10MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	21.43	18.36	30.00	PASS
	Mid	21.58	18.42		
	High	21.39	18.45		
16QAM	Low	21.49	18.38		
	Mid	21.56	18.40		
	High	21.57	18.43		

LTE Band 4-15MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	21.03	18.45	30.00	PASS
	Mid	21.04	18.47		
	High	21.06	18.15		
16QAM	Low	21.43	18.45		
	Mid	21.04	18.47		
	High	21.16	18.15		

LTE Band 4-20MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.51	18.45	30.00	PASS
	Mid	20.26	18.42		
	High	20.35	18.58		
16QAM	Low	20.88	18.53		
	Mid	20.81	18.56		
	High	19.82	18.46		

LTE Band 5-1.4MHz					
Modulation	Channel	ERP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	19.57	16.25	38.50	PASS
	Mid	19.46	16.82		
	High	19.42	16.85		
16QAM	Low	19.48	16.31		
	Mid	19.52	16.76		
	High	19.15	16.91		

LTE Band 5-3MHz					
Modulation	Channel	ERP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	19.68	16.88	38.50	PASS
	Mid	19.52	16.50		
	High	19.55	16.36		
16QAM	Low	19.41	16.82		
	Mid	19.12	16.40		
	High	19.57	16.36		

LTE Band 5-5MHz					
Modulation	Channel	ERP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	19.67	16.85	38.50	PASS
	Mid	19.88	16.85		
	High	19.85	16.44		
16QAM	Low	18.96	17.01		
	Mid	20.43	16.73		
	High	20.38	16.56		

LTE Band 5-10MHz					
Modulation	Channel	ERP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	19.48	16.23	38.50	PASS
	Mid	19.58	16.53		
	High	19.47	16.87		
16QAM	Low	20.27	17.19		
	Mid	20.13	16.60		
	High	20.30	16.67		

LTE Band 7-5MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.30	17.57	33.00	PASS
	Mid	20.66	17.85		
	High	20.82	17.23		
16QAM	Low	20.16	17.68		
	Mid	20.77	17.74		
	High	20.34	17.34		

LTE Band 7-10MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.68	17.58	33.00	PASS
	Mid	20.22	17.24		
	High	20.43	17.05		
16QAM	Low	20.20	17.48		
	Mid	19.51	17.06		
	High	20.50	17.07		

LTE Band 7-15MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.36	17.88	33.00	PASS
	Mid	20.02	17.25		
	High	20.15	17.52		
16QAM	Low	20.54	17.84		
	Mid	19.88	17.28		
	High	20.01	17.49		

LTE Band 7-20MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.56	17.02	33.00	PASS
	Mid	20.78	17.42		
	High	20.31	17.36		
16QAM	Low	20.36	17.79		
	Mid	20.64	17.31		
	High	20.10	17.46		

LTE Band 26-1.4MHz					
Modulation	Channel	ERP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	21.45	19.88	38.5	PASS
	Mid	21.56	19.85		
	High	21.30	19.23		
16QAM	Low	21.34	19.97		
	Mid	21.64	19.77		
	High	20.93	19.31		

LTE Band 26-3MHz					
Modulation	Channel	ERP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	21.43	19.85	38.5	PASS
	Mid	21.36	19.43		
	High	21.88	19.75		
16QAM	Low	21.06	19.77		
	Mid	20.81	19.29		
	High	21.92	19.76		

LTE Band 26-5MHz					
Modulation	Channel	ERP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	21.63	18.26	38.5	PASS
	Mid	21.02	18.99		
	High	21.69	18.87		
16QAM	Low	21.99	18.18		
	Mid	20.74	19.05		
	High	21.42	18.81		

LTE Band 26-10MHz					
Modulation	Channel	ERP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	21.57	19.86	38.5	PASS
	Mid	22.69	19.35		
	High	21.69	19.63		
16QAM	Low	21.18	18.09		
	Mid	22.41	19.11		
	High	21.28	18.75		

LTE Band 26-15MHz					
Modulation	Channel	ERP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	21.50	19.57	38.5	PASS
	Mid	21.66	19.55		
	High	22.10	19.56		
16QAM	Low	21.22	19.05		
	Mid	21.35	18.82		
	High	21.80	18.44		

LTE Band 41-5MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.53	18.02	33	PASS
	Mid	20.63	18.42		
	High	20.21	18.56		
16QAM	Low	20.67	17.91		
	Mid	20.53	18.52		
	High	20.67	18.46		

LTE Band 41-10MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.42	18.14	33	PASS
	Mid	20.69	18.45		
	High	20.63	18.34		
16QAM	Low	20.88	18.24		
	Mid	21.37	18.63		
	High	20.69	18.35		

LTE Band 41-15MHz					
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result
		Vertical	Horizontal		
QPSK	Low	20.32	18.24	33	PASS
	Mid	20.45	18.64		
	High	20.68	18.59		
16QAM	Low	20.63	18.30		
	Mid	20.91	18.76		
	High	20.68	18.59		

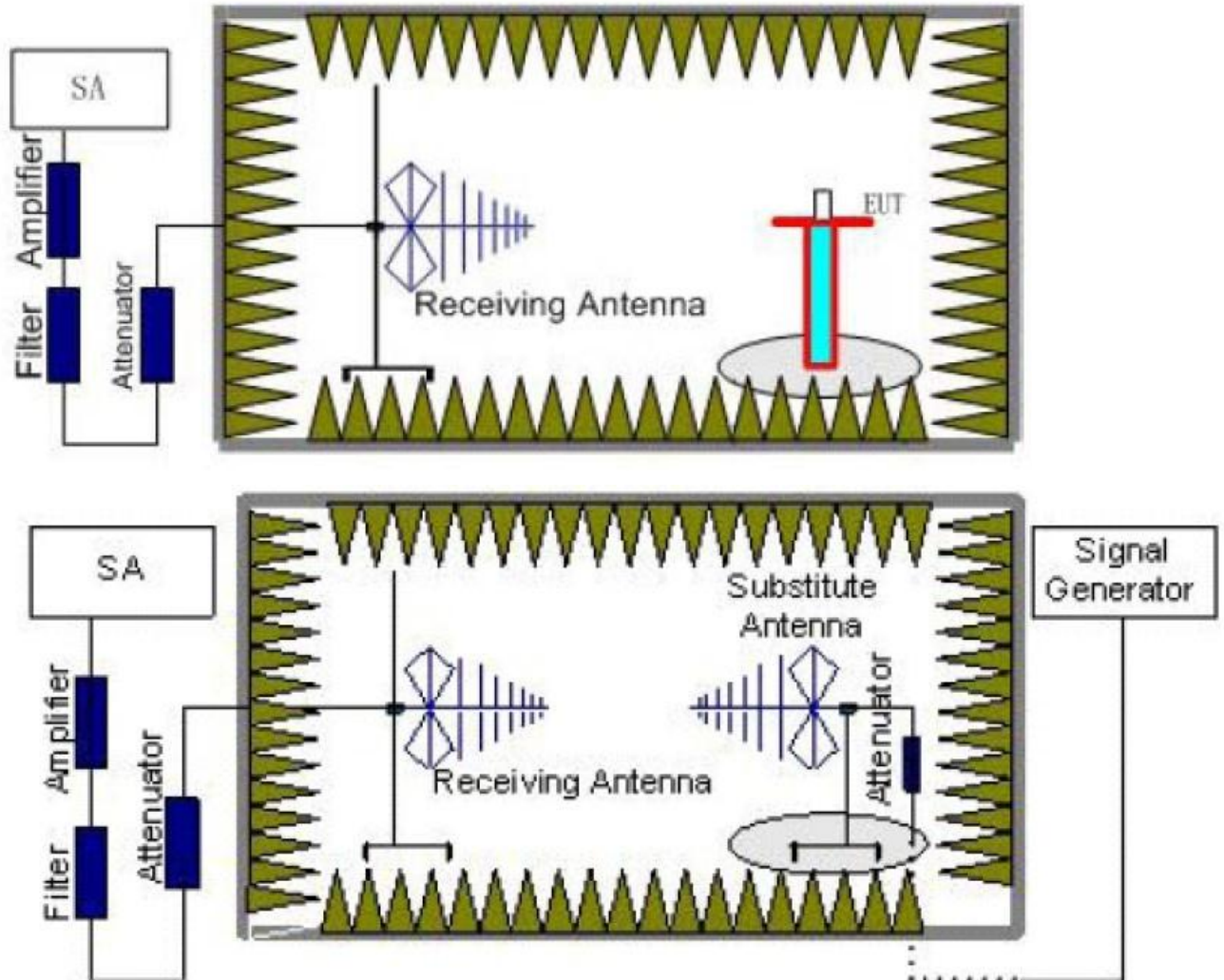
LTE Band 41-20MHz						
Modulation	Channel	EIRP (dBm)		Limit (dBm)	Result	
		Vertical	Horizontal			
QPSK	Low	20.63	19.66	33	PASS	
	Mid	20.54	19.34			
	High	21.55	19.42			
16QAM	Low	20.53	19.64		33	PASS
	Mid	20.39	19.30			
	High	21.55	19.42			

5.6. Radiated Spurious Emission

LIMIT

LTE Band 2/4/5/12/26:<-13dBm;LTE Band 7/41<-25dBm

TEST CONFIGURATION



TEST RESULTS

1. EUT was placed on a 0.8 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna shall be moved from 1m to 4m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
3. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=1MHz,VBW=3MHz for above 1GHz and RBW=100kHz,VBW=300kHz for 30MHz to 1GHz, And the maximum value of the receiver should be recorded as (Pr).
4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the

substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
6. The measurement results are obtained as described below:
Power(EIRP)=PMea- PAg - Pcl + Ga
We used SMF100A micowave signal generator which signal level can up to 33dBm,so we not used power Amplifier for substitution test; The measurement results are amend as described below:
Power(EIRP)=PMea- Pcl + Ga
7. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Passed **Not Applicable**

LTE Band 2-1.4MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3701.4	Vertical	-44.52	-13.00	Pass
	5552.1	V	-40.58		
	7402.8	V	---		
	3701.4	Horizontal	-49.58	-13.00	Pass
	5552.1	H	-42.66		
	7402.8	H	---		
Mid	3760	Vertical	-44.21	-13.00	Pass
	5640	V	-40.64		
	7520	V	---		
	3760	Horizontal	-49.51	-13.00	Pass
	5640	H	-42.59		
	7520	H	---		
High	3818.6	Vertical	-44.33	-13.00	Pass
	5727.9	V	-40.75		
	7637.2	V	---		
	3818.6	Horizontal	-49.52	-13.00	Pass
	5727.9	H	-42.59		
	7637.2	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 2-3MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3703	Vertical	-44.81	-13.00	Pass
	5554.5	V	-40.51		
	7406	V	---		
	3703	Horizontal	-45.15	-13.00	Pass
	5554.5	H	-40.44		
	7406	H	---		
Mid	3760	Vertical	-45.09	-13.00	Pass
	5640	V	-40.21		
	7520	V	---		
	3760	Horizontal	-44.95	-13.00	Pass
	5640	H	-39.68		
	7520	H	---		
High	3817	Vertical	-45.86	-13.00	Pass
	5725.5	V	-39.86		
	7634	V	---		
	3817	Horizontal	-45.46	-13.00	Pass
	5725.5	H	-39.77		
	7634	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 2-5MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3705	Vertical	-45.05	-13.00	Pass
	5557.5	V	-40.68		
	7410	V	---		
	3705	Horizontal	-44.26	-13.00	Pass
	5557.5	H	-40.84		
	7410	H	---		
Mid	3760	Vertical	-44.39	-13.00	Pass
	5640	V	-41.37		
	7520	V	---		
	3760	Horizontal	-43.87	-13.00	Pass
	5640	H	-41.05		
	7520	H	---		
High	3815	Vertical	-44.42	-13.00	Pass
	5722.5	V	-41.15		
	7630	V	---		
	3815	Horizontal	-44.98	-13.00	Pass
	5722.5	H	-41.27		
	7630	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 2-10MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3710	Vertical	-44.49	-13.00	Pass
	5565	V	-40.98		
	7420	V	---		
	3710	Horizontal	-43.14	-13.00	Pass
	5565	H	-41.26		
	7420	H	---		
Mid	3760	Vertical	-43.37	-13.00	Pass
	5640	V	-42.15		
	7520	V	---		
	3760	Horizontal	-42.47	-13.00	Pass
	5640	H	-43.33		
	7520	H	---		
High	3810	Vertical	-40.43	-13.00	Pass
	5715	V	-42.95		
	7620	V	---		
	3810	Horizontal	-39.67	-13.00	Pass
	5715	H	-42.79		
	7620	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 2-15MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3705	Vertical	-43.54	-13.00	Pass
	5557.5	V	-41.37		
	7410	V	---		
	3705	Horizontal	-41.76	-13.00	Pass
	5557.5	H	-41.74		
	7410	H	---		
Mid	3760	Vertical	-42.05	-13.00	Pass
	5640	V	-42.92		
	7520	V	---		
	3760	Horizontal	-40.87	-13.00	Pass
	5640	H	-43.17		
	7520	H	---		
High	3815	Vertical	-40.43	-13.00	Pass
	5722.5	V	-43.09		
	7630	V	---		
	3815	Horizontal	-40.68	-13.00	Pass
	5722.5	H	-43.14		
	7630	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 2-20MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3720	Vertical	-42.28	-13.00	Pass
	5580	V	-41.81		
	7440	V	---		
	3720	Horizontal	-40.27	-13.00	Pass
	5580	H	-42.23		
	7440	H	---		
Mid	3760	Vertical	-40.60	-13.00	Pass
	5640	V	-43.56		
	7520	V	---		
	3760	Horizontal	-39.27	-13.00	Pass
	5640	H	-44.45		
	7520	H	---		
High	3800	Vertical	-37.73	-13.00	Pass
	5700	V	-44.16		
	7600	V	---		
	3800	Horizontal	-39.15	-13.00	Pass
	5700	H	-44.45		
	7600	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 4-1.4MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3421.4	Vertical	-37.00	-13.00	Pass
	5132.1	V	-38.49		
	6842.8	V	---		
	3421.4	Horizontal	-39.88	-13.00	Pass
	5132.1	H	-44.56		
	6842.8	H	---		
Mid	3465	Vertical	-37.08	-13.00	Pass
	5197.5	V	-38.41		
	6930	V	---		
	3465	Horizontal	-39.78	-13.00	Pass
	5197.5	H	-44.48		
	6930	H	---		
High	3508.6	Vertical	-37.21	-13.00	Pass
	5262.9	V	-38.54		
	7017.2	V	---		
	3508.6	Horizontal	-39.79	-13.00	Pass
	5262.9	H	-44.49		
	7017.2	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 4-3MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3423	Vertical	-37.35	-13.00	Pass
	5134.5	V	-38.43		
	6846	V	---		
	3423	Horizontal	-39.72	-13.00	Pass
	5134.5	H	-44.51		
	6846	H	---		
Mid	3465	Vertical	-37.39	-13.00	Pass
	5197.5	V	-38.47		
	6930	V	---		
	3465	Horizontal	-39.64	-13.00	Pass
	5197.5	H	-44.58		
	6930	H	---		
High	3507	Vertical	-37.52	-13.00	Pass
	5260.5	V	-38.36		
	7014	V	---		
	3423	Horizontal	-39.58	-13.00	Pass
	5134.5	H	-44.64		
	6846	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 4-5MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3425	Vertical	-37.53	-13.00	Pass
	5137.5	V	-38.60		
	6850	V	---		
	3425	Horizontal	-39.75	-13.00	Pass
	5137.5	H	-44.80		
	6850	H	---		
Mid	3465	Vertical	-37.40	-13.00	Pass
	5197.5	V	-38.48		
	6930	V	-		
	3465	Horizontal	-39.61	-13.00	Pass
	5197.5	H	-44.68		
	6930	H	---		
High	3505	Vertical	-37.60	-13.00	Pass
	5257.5	V	-38.66		
	7010	V	-		
	3505	Horizontal	-39.73	-13.00	Pass
	5257.5	H	-44.80		
	7010	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 4-10MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3430	Vertical	-36.97	-13.00	Pass
	5145	V	-38.90		
	6860	V	---		
	3430	Horizontal	-39.31	-13.00	Pass
	5145	H	-44.45		
	6860	H	---		
Mid	3465	Vertical	-37.19	-13.00	Pass
	5197.5	V	-39.11		
	6930	V	---		
	3465	Horizontal	-39.34	-13.00	Pass
	5197.5	H	-44.47		
	6930	H	-		
High	3500	Vertical	-37.16	-13.00	Pass
	5250	V	-39.08		
	7000	V	-		
	3500	Horizontal	-39.17	-13.00	Pass
	5250	H	-44.31		
	7000	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 4-15MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3435	Vertical	-36.02	-13.00	Pass
	5152.5	V	-39.29		
	6870	V	---		
	3435	Horizontal	-39.56	-13.00	Pass
	5152.5	H	-43.94		
	6870	H	---		
Mid	3465	Vertical	-36.31	-13.00	Pass
	5197.5	V	-39.57		
	6930	V	---		
	3465	Horizontal	-39.66	-13.00	Pass
	5197.5	H	-44.02		
	6930	H	---		
High	3490	Vertical	-36.18	-13.00	Pass
	5235	V	-39.45		
	6980	V	---		
	3490	Horizontal	-39.60	-13.00	Pass
	5235	H	-43.97		
	6980	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 4-20MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	3440	Vertical	-34.76	-13.00	Pass
	5160	V	-39.89		
	6880	V	---		
	3440	Horizontal	-39.19	-13.00	Pass
	5160	H	-44.32		
	6880	H	---		
Mid	3465	Vertical	-34.45	-13.00	Pass
	5197.5	V	-39.93		
	6930	V	---		
	3465	Horizontal	-39.22	-13.00	Pass
	5197.5	H	-44.29		
	6930	H	---		
High	3490	Vertical	-34.40	-13.00	Pass
	5235	V	-44.27		
	6980	V	---		
	3490	Horizontal	-38.87	-13.00	Pass
	5235	H	-44.03		
	6980	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 5-1.4MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	1649.4	Vertical	-36.47	-13.00	Pass
	2474.1	V	-40.88		
	3298.8	V	---		
	1649.4	Horizontal	-40.58		
	2474.1	H	-44.67		
	3298.8	H	---		
Mid	1673	Vertical	-36.33	-13.00	Pass
	2509.5	V	-40.75		
	3346	V	---		
	1673	Horizontal	-40.43		
	2509.5	H	-44.55		
	3346	H	---		
High	1696.6	Vertical	-36.53	-13.00	Pass
	2544.9	V	-40.93		
	3393.2	V	-		
	1696.6	Horizontal	-40.47		
	2544.9	H	-44.59		
	3393.2	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 5-3MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	1651	Vertical	-36.51	-13.00	Pass
	2476.5	V	-40.84		
	3302	V	---		
	1651	Horizontal	-40.74		
	2476.5	H	-44.71		
	3302	H	---		
Mid	1673	Vertical	-36.64	-13.00	Pass
	2509.5	V	-40.96		
	3346	V	---		
	1673	Horizontal	-40.48		
	2509.5	H	-44.91		
	3346	H	---		
High	1696.6	Vertical	-37.53	-13.00	Pass
	2544.9	V	-42.43		
	3393.2	V	---		
	1696.6	Horizontal	-41.96		
	2544.9	H	-46.32		
	3393.2	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 5-5MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	1653	Vertical	-36.34	-13.00	Pass
	2479.5	V	-41.01		
	3306	V	---		
	1653	Horizontal	-40.01		
	2479.5	H	-44.54		
	3306	H	---		
Mid	1673	Vertical	-35.75	-13.00	Pass
	2509.5	V	-40.50		
	3346	V	---		
	1673	Horizontal	-40.39		
	2509.5	H	-39.18		
	3346	H	---		
High	1695	Vertical	-34.44	-13.00	Pass
	2542.5	V	-38.33		
	3390	V	---		
	1695	Horizontal	-41.47		
	2542.5	H	-40.20		
	3390	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 5-10MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	1658	Vertical	-36.60	-13.00	Pass
	2487	V	-40.75		
	3316	V	---		
	1658	Horizontal	-41.13		
	2487	H	-44.79		
	3316	H	---		
Mid	1673	Vertical	-37.50	-13.00	Pass
	2509.5	V	-41.54		
	3346	V	---		
	1673	Horizontal	-39.92		
	2509.5	H	-44.58		
	3346	H	---		
High	1688	Vertical	-37.12	-13.00	Pass
	2532	V	-41.88		
	3376	V	-		
	1688	Horizontal	-39.80		
	2532	H	-44.69		
	3376	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 7-5MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	5005	Vertical	-28.75	-25.00	Pass
	7507.5	V	-29.46		
	10010	V	---		
	5005	Horizontal	-33.47	-25.00	Pass
	7507.5	H	-35.87		
	10010	H	---		
Mid	5070	Vertical	-28.11	-25.00	Pass
	7605	V	-28.90		
	10140	V	---		
	5070	Horizontal	-32.81	-25.00	Pass
	7605	H	-29.40		
	10140	H	---		
High	5135	Vertical	-28.62	-25.00	Pass
	7702.5	V	-29.74		
	10270	V	---		
	5135	Horizontal	-32.65	-25.00	Pass
	7702.5	H	-29.77		
	10270	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 7-10MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	5010	Vertical	-28.76	-25.00	Pass
	7515	V	-29.45		
	10020	V	---		
	5010	Horizontal	-33.53	-25.00	Pass
	7515	H	-35.88		
	10020	H	---		
Mid	5070	Vertical	-28.81	-25.00	Pass
	7605	V	-29.49		
	10140	V	---		
	5070	Horizontal	-33.08	-25.00	Pass
	7605	H	-29.83		
	10140	H	---		
High	5130	Vertical	-29.16	-25.00	Pass
	7695	V	-30.06		
	10260	V	---		
	5130	Horizontal	-33.01	-25.00	Pass
	7695	H	-30.08		
	10260	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 7-15MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	5015	Vertical	-28.74	-25.00	Pass
	7522.5	V	-29.47		
	10030	V	---		
	5015	Horizontal	-33.44	-25.00	Pass
	7522.5	H	-35.86		
	10030	H	---		
Mid	5070	Vertical	-28.67	-25.00	Pass
	7605	V	-29.40		
	10140	V	---		
	5070	Horizontal	-34.89	-25.00	Pass
	7605	H	-28.28		
	10140	H	---		
High	5125	Vertical	-27.55	-25.00	Pass
	7687.5	V	-27.55		
	10250	V	---		
	5125	Horizontal	-34.11	-25.00	Pass
	7687.5	H	-27.72		
	10250	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 7-20MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	5015	Vertical	-28.97	-25.00	Pass
	7522.5	V	-29.24		
	10030	V	---		
	5015	Horizontal	-34.41	-25.00	Pass
	7522.5	H	-36.08		
	10030	H	---		
Mid	5070	Vertical	-29.75	-25.00	Pass
	7605	V	-29.93		
	10140	V	---		
	5070	Horizontal	-32.96	-25.00	Pass
	7605	H	-31.04		
	10140	H	---		
High	5125	Vertical	-30.86	-25.00	Pass
	7687.5	V	-31.77		
	10250	V	---		
	5125	Horizontal	-32.17	-25.00	Pass
	7687.5	H	-31.93		
	10250	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 41-5MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	1413	Vertical	-47.33	-25.00	Pass
	2119.5	V	-48.52		
	2826	V	---		
	1413	Horizontal	-50.15		
	2119.5	H	-51.47		
Mid	2826	H	---	-25.00	Pass
	1420	Vertical	-46.83		
	2130	V	-48.08		
	2840	V	---		
	1420	Horizontal	-51.09		
High	2130	H	-47.35	-25.00	Pass
	2840	H	---		
	1427	Vertical	-46.10		
	2140.5	V	-46.88		
	2854	V	---		
High	1427	Horizontal	-50.76	-25.00	Pass
	2140.5	H	-46.95		
	2854	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

LTE Band 41-10MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	1418	Vertical	-47.37	-25.00	Pass
	2127	V	-48.48		
	2836	V	---		
	1418	Horizontal	-50.34		
	2127	H	-51.51		
Mid	2836	H	---	-25.00	Pass
	1420	Vertical	-47.52		
	2130	V	-48.61		
	2840	V	---		
	1420	Horizontal	-49.68		
High	2130	H	-49.12	-25.00	Pass
	2840	H	---		
	1422	Vertical	-48.03		
	2133	V	-49.45		
	2844	V	---		
High	1422	Horizontal	-49.51	-25.00	Pass
	2133	H	-49.48		
	2844	H	---		

Remark:

1. Remark"---" means that the emission level is too low to be measured
2. The emission levels of below 1 GHz are very lower than the limit and not show in test report

LTE Band 41-15MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	1418	Vertical	-47.37	-25.00	Pass
	2127	V	-48.48		
	2836	V	---		
	1418	Horizontal	-50.34	-25.00	Pass
	2127	H	-51.51		
	2836	H	---		
Mid	1420	Vertical	-47.52	-25.00	Pass
	2130	V	-48.61		
	2840	V	---		
	1420	Horizontal	-49.68	-25.00	Pass
	2130	H	-49.12		
	2840	H	---		
High	1422	Vertical	-48.03	-25.00	Pass
	2133	V	-49.45		
	2844	V	---		
	1422	Horizontal	-49.51	-25.00	Pass
	2133	H	-49.48		
	2844	H	---		

Remark:

3. Remark"---" means that the emission level is too low to be measured
4. The emission levels of below 1 GHz are very lower than the limit and not show in test report

LTE Band 41-20MHz					
Channel	Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
		Polarization	Level (dBm)		
Low	1418	Vertical	-47.37	-25.00	Pass
	2127	V	-48.48		
	2836	V	---		
	1418	Horizontal	-50.34	-25.00	Pass
	2127	H	-51.51		
	2836	H	---		
Mid	1420	Vertical	-47.52	-25.00	Pass
	2130	V	-48.61		
	2840	V	---		
	1420	Horizontal	-49.68	-25.00	Pass
	2130	H	-49.12		
	2840	H	---		
High	1422	Vertical	-48.03	-25.00	Pass
	2133	V	-49.45		
	2844	V	---		
	1422	Horizontal	-49.51	-25.00	Pass
	2133	H	-49.48		
	2844	H	---		

Remark:

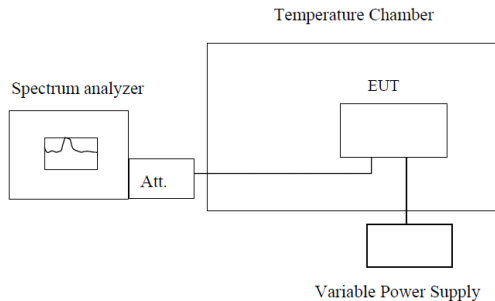
5. Remark"---" means that the emission level is too low to be measured
6. The emission levels of below 1 GHz are very lower than the limit and not show in test report

5.7. Frequency stability V.S. Temperature measurement

LIMIT

2.5ppm

TEST CONFIGURATION



Note : Measurement setup for testing on Antenna connector

TEST PROCEDURE

1. The equipment under test was connected to an external DC power supply and input rated voltage.
2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators.
3. The EUT was placed inside the temperature chamber.
4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency.
5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.
6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Passed **Not Applicable**

Reference Frequency: LTE Band 2 Middle channel=1880MHz,20MHz Bandwidth							
Power supplied (Vdc)	Temperature (°C)	Frequency error				Limit (ppm)	Result
		QPSK		16QAM			
		Hz	ppm	Hz	ppm		
7.60	-30	8	0.004	32	0.017	2.50	Pass
	-20	9	0.005	30	0.016		
	-10	10	0.005	29	0.015		
	0	11	0.006	28	0.015		
	10	12	0.006	25	0.013		
	20	10	0.005	30	0.016		
	30	9	0.005	26	0.014		
	40	8	0.004	24	0.013		
50	13	0.007	26	0.014			
Reference Frequency: LTE Band 4 Middle channel=1732.5MHz,20MHz Bandwidth							
Power supplied (Vdc)	Temperature (°C)	Frequency error				Limit (ppm)	Result
		QPSK		16QAM			
		Hz	ppm	Hz	ppm		
7.60	-30	10	0.006	28	0.016	2.50	Pass
	-20	12	0.007	26	0.015		
	-10	16	0.009	24	0.014		
	0	15	0.009	23	0.013		
	10	14	0.008	25	0.014		
	20	11	0.006	26	0.015		
	30	15	0.009	24	0.014		
	40	13	0.008	26	0.015		
50	15	0.009	29	0.017			
Reference Frequency: LTE Band 5 Middle channel=836.5MHz,10MHz Bandwidth							
Power supplied (Vdc)	Temperature (°C)	Frequency error				Limit (ppm)	Result
		QPSK		16QAM			
		Hz	ppm	Hz	ppm		
7.60	-30	13	0.016	26	0.031	2.50	Pass
	-20	12	0.014	28	0.033		
	-10	15	0.018	30	0.036		
	0	16	0.019	31	0.037		
	10	14	0.017	29	0.035		
	20	15	0.018	32	0.038		
	30	15	0.018	35	0.042		
	40	18	0.022	28	0.033		
50	19	0.023	27	0.032			

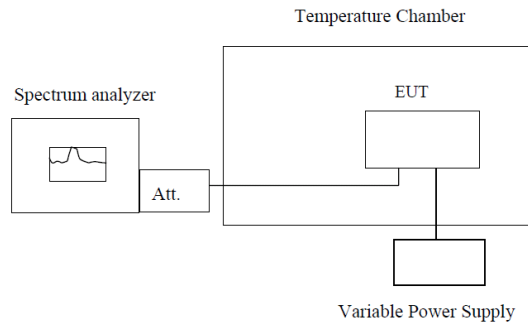
Reference Frequency: LTE Band 7 Middle channel=2535MHz,20MHz Bandwidth							
Power supplied (Vdc)	Temperature (°C)	Frequency error				Limit (ppm)	Result
		QPSK		16QAM			
		Hz	ppm	Hz	ppm		
7.60	-30	12	0.005	28	0.011	2.50	Pass
	-20	14	0.006	29	0.011		
	-10	15	0.006	27	0.011		
	0	16	0.006	30	0.012		
	10	12	0.005	26	0.010		
	20	11	0.004	31	0.012		
	30	13	0.005	30	0.012		
	40	14	0.006	28	0.011		
50	15	0.006	31	0.012			
Reference Frequency: LTE Band 41 Middle channel=2593MHz,20MHz Bandwidth							
Power supplied (Vdc)	Temperature (°C)	Frequency error				Limit (ppm)	Result
		QPSK		16QAM			
		Hz	ppm	Hz	ppm		
7.60	-30	16	0.006	32	0.012	2.50	Pass
	-20	15	0.006	36	0.014		
	-10	17	0.007	35	0.013		
	0	16	0.006	34	0.013		
	10	18	0.007	35	0.013		
	20	18	0.007	31	0.012		
	30	19	0.007	30	0.012		
	40	20	0.008	29	0.011		
50	22	0.008	32	0.012			

5.8. Frequency stability V.S. Voltage measurement

LIMIT

2.5ppm

TEST CONFIGURATION



Note : Measurement setup for testing on Antenna connector

TEST PROCEDURE

1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage.
2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.
3. Reduce the input voltage to specified extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Passed **Not Applicable**

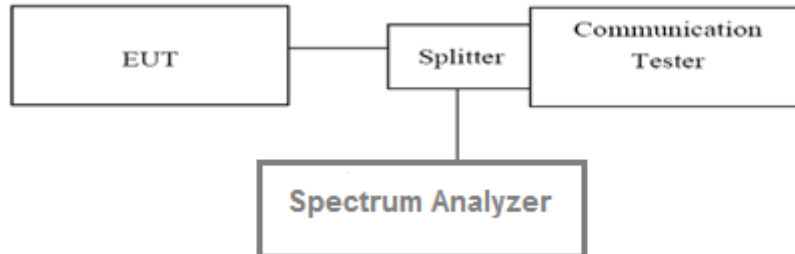
Reference Frequency: LTE Band 2 Middle channel=1880MHz,20MHz Bandwidth							
Temperature (°C)	Power supplied (Vdc)	Frequency error				Limit (ppm)	Result
		QPSK		16QAM			
		Hz	ppm	Hz	ppm		
25	8.74	11	0.006	35	0.019	2.50	Pass
	7.60	13	0.007	36	0.019		
	6.46	14	0.007	37	0.020		
Reference Frequency: LTE Band 4 Middle channel=1732.5MHz,20MHz Bandwidth							
Temperature (°C)	Power supplied (Vdc)	Frequency error				Limit (ppm)	Result
		QPSK		16QAM			
		Hz	ppm	Hz	ppm		
25	8.74	13	0.008	35	0.020	2.50	Pass
	7.60	16	0.009	33	0.019		
	6.46	15	0.009	30	0.017		
Reference Frequency: LTE Band 5 Middle channel=836.5MHz,10MHz Bandwidth							
Temperature (°C)	Power supplied (Vdc)	Frequency error				Limit (ppm)	Result
		QPSK		16QAM			
		Hz	ppm	Hz	ppm		
25	8.74	14	0.017	38	0.045	2.50	Pass
	7.60	15	0.018	32	0.038		
	6.46	17	0.020	34	0.041		
Reference Frequency: LTE Band 7 Middle channel=2535MHz,20MHz Bandwidth							
Temperature (°C)	Power supplied (Vdc)	Frequency error				Limit (ppm)	Result
		QPSK		16QAM			
		Hz	ppm	Hz	ppm		
25	8.74	15	0.006	36	0.014	2.50	Pass
	7.60	18	0.007	33	0.013		
	6.46	14	0.006	37	0.015		
Reference Frequency: LTE Band 41 Middle channel=2593MHz,20MHz Bandwidth							
Temperature (°C)	Power supplied (Vdc)	Frequency error				Limit (ppm)	Result
		QPSK		16QAM			
		Hz	ppm	Hz	ppm		
25	8.74	17	0.007	37	0.014	2.50	Pass
	7.60	18	0.007	31	0.012		
	6.46	20	0.008	34	0.013		

5.9. Peak-Average Ratio

LIMIT

13dB

TEST CONFIGURATION



TEST PROCEDURE

According with KDB 971168

1. The signal analyzer' s CCDF measurement profile is enabled
2. Frequency = carrier center frequency
3. Measurement BW > Emission bandwidth of signal
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal " RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the " on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Passed Not Applicable

LTE Band 2-20MHz						
Modulation	QPSK		16QAM		Limit(dB)	Result
Channel	1RB#	Full RB#	1RB#	Full RB#		
Low	4.30	5.14	5.32	5.92	13.00	Pass
Mid	4.24	5.06	5.10	5.86	13.00	Pass
High	4.18	5.10	4.84	6.02	13.00	Pass

LTE Band 4-20MHz						
Modulation	QPSK		16QAM		Limit(dB)	Result
Channel	1RB#	Full RB#	1RB#	Full RB#		
Low	3.78	5.06	4.54	5.86	13.00	Pass
Mid	3.90	4.90	4.58	5.76	13.00	Pass
High	4.20	4.98	4.84	5.80	13.00	Pass

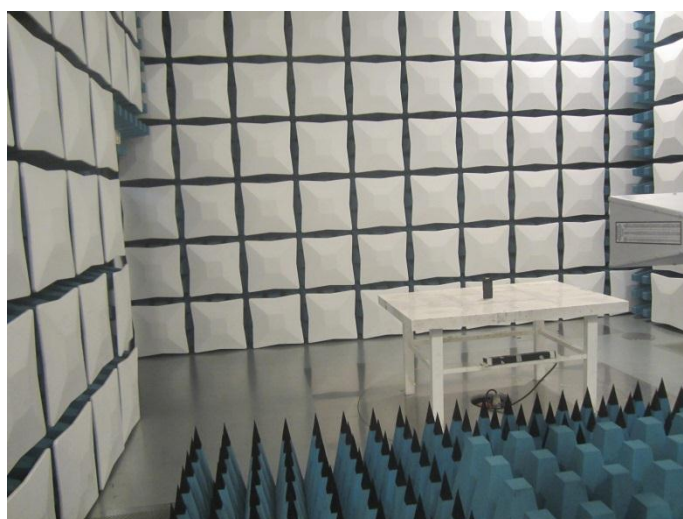
LTE Band 5-10MHz						
Modulation	QPSK		16QAM		Limit(dB)	Result
Channel	1RB#	Full RB#	1RB#	Full RB#		
Low	3.82	5.32	4.78	6.12	13.00	Pass
Mid	3.70	5.18	4.54	6.00	13.00	Pass
High	3.74	5.18	4.42	5.96	13.00	Pass

LTE Band 7-20MHz						
Modulation	QPSK		16QAM		Limit(dB)	Result
Channel	1RB#	Full RB#	1RB#	Full RB#		
Low	4.14	5.06	4.92	5.78	13.00	Pass
Mid	4.08	5.08	5.00	5.92	13.00	Pass
High	3.94	5.18	5.08	6.00	13.00	Pass

LTE Band 41-20MHz						
Modulation	QPSK		16QAM		Limit(dB)	Result
Channel	1RB#	Full RB#	1RB#	Full RB#		
Low	7.82	8.56	8.74	9.20	13.00	Pass
Mid	8.26	8.86	8.90	9.72	13.00	Pass
High	8.30	8.74	8.90	9.54	13.00	Pass

6. Test Setup Photos of the EUT

Radiated emission:



7. External and Internal Photos of the EUT

Reference to the test report No.: TRE1705015001.

.....**End of Report**.....