

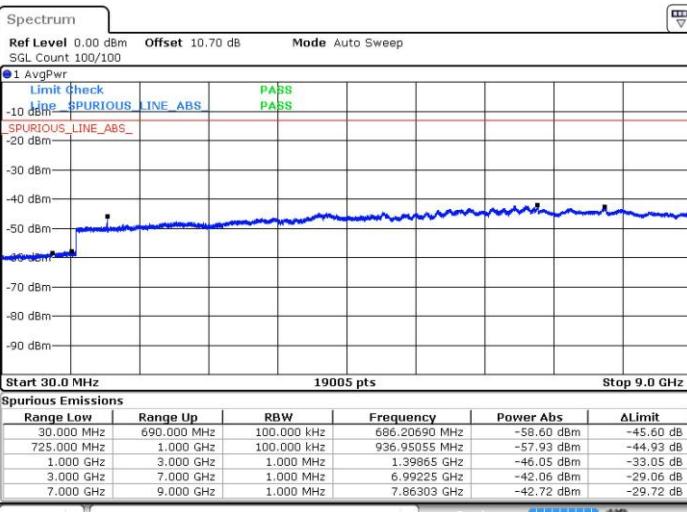
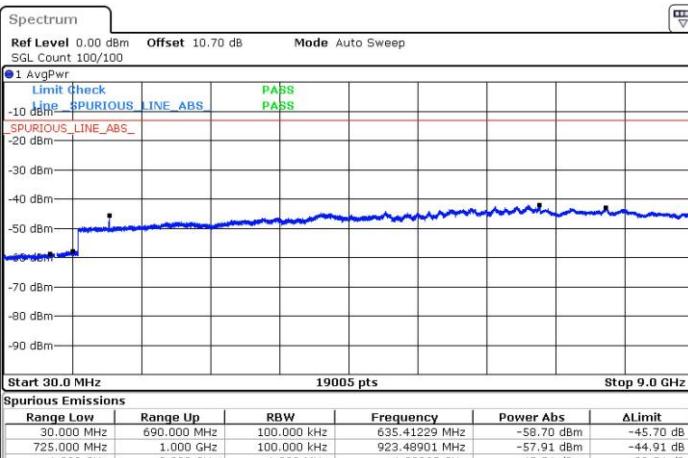


## Conducted Spurious Emission

### LTE Band 12 / 1.4MHz

#### Lowest Channel / QPSK

#### Lowest Channel / 16QAM

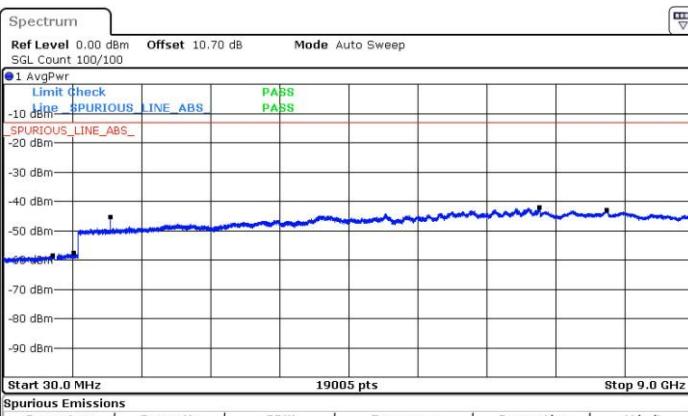


Date: 16.MAY.2017 00:12:46

Date: 16.MAY.2017 00:13:40

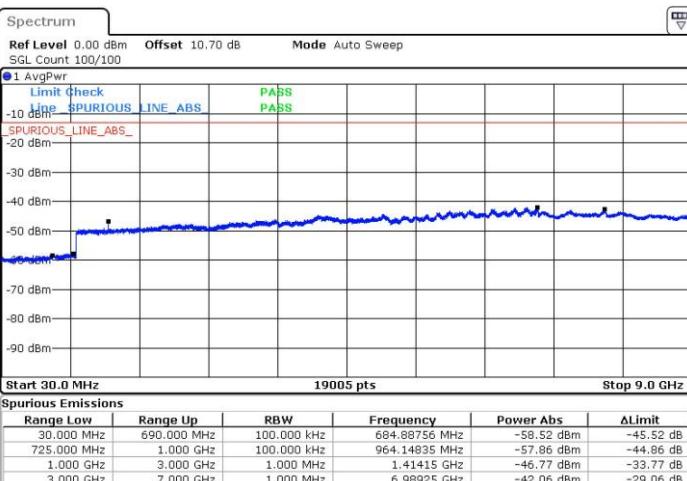
#### Middle Channel / QPSK

#### Middle Channel / 16QAM



Date: 16.MAY.2017 00:16:10

Date: 16.MAY.2017 00:15:16

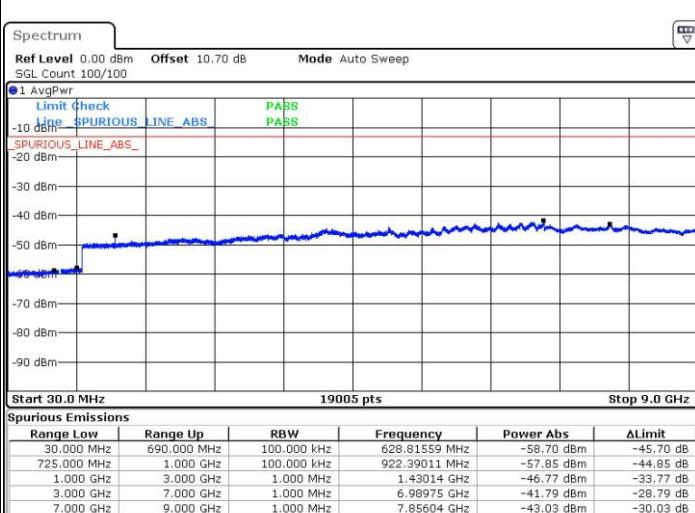
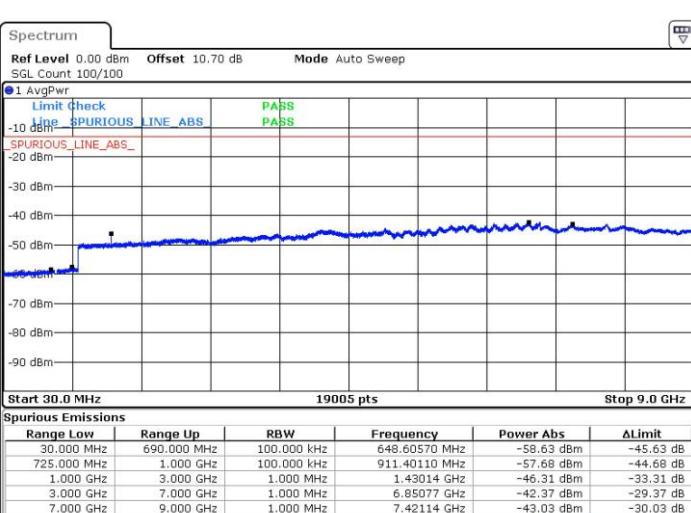




## LTE Band 12 / 1.4MHz

## Highest Channel / QPSK

## Highest Channel / 16QAM

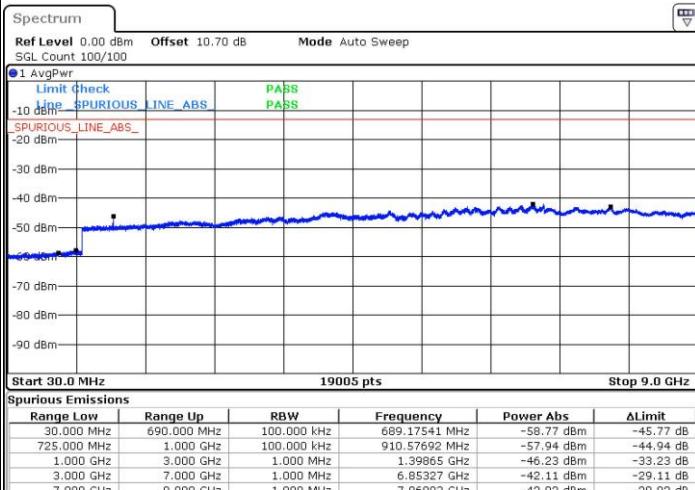
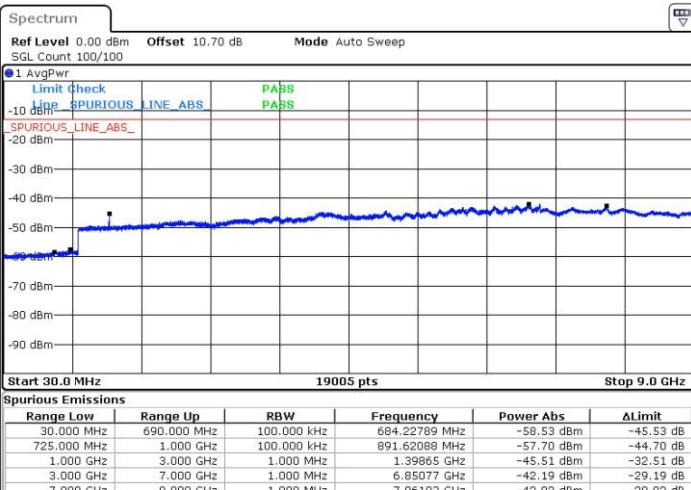


Date: 16.MAY.2017 00:22:22

## LTE Band 12 / 3MHz

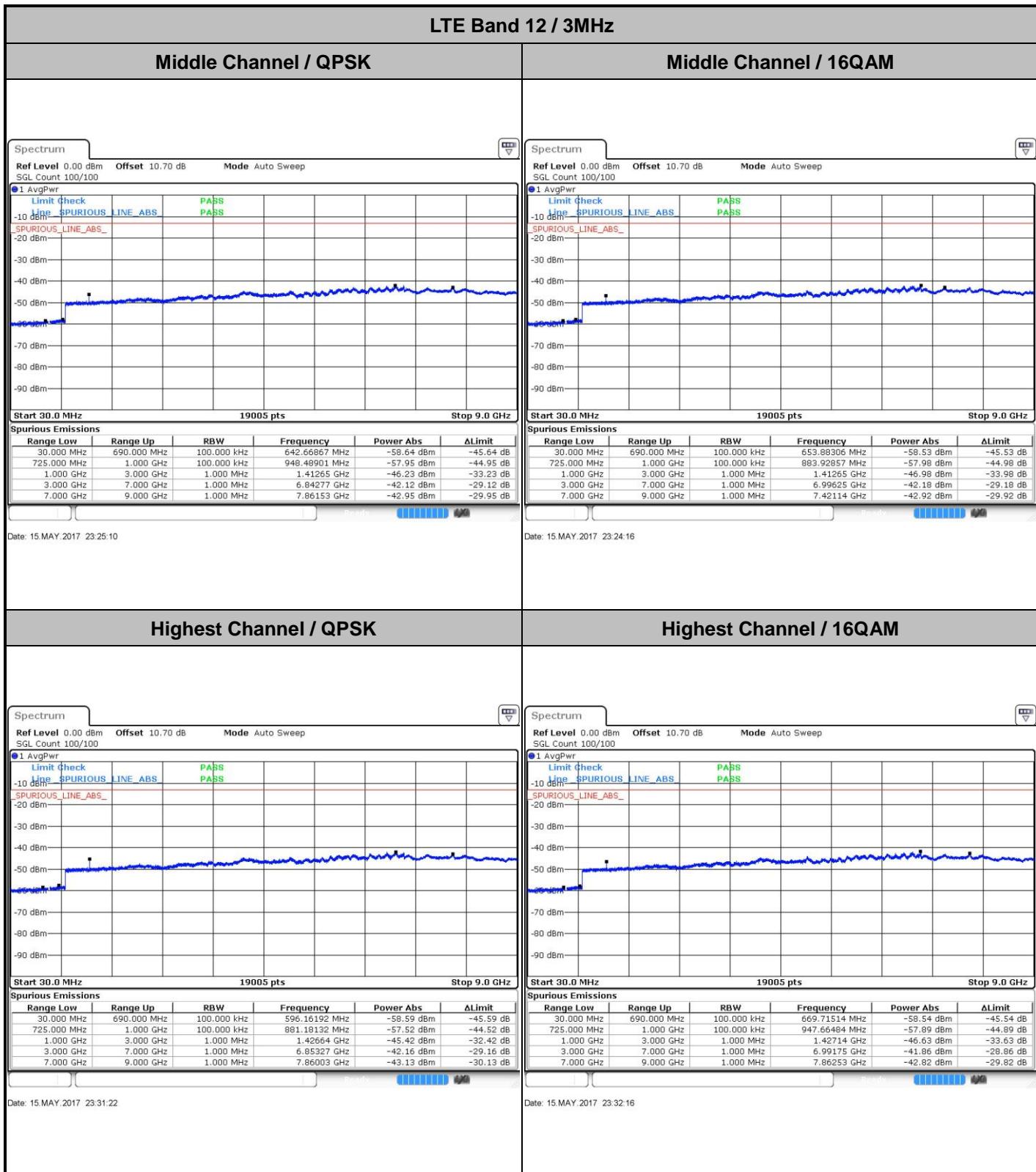
## Lowest Channel / QPSK

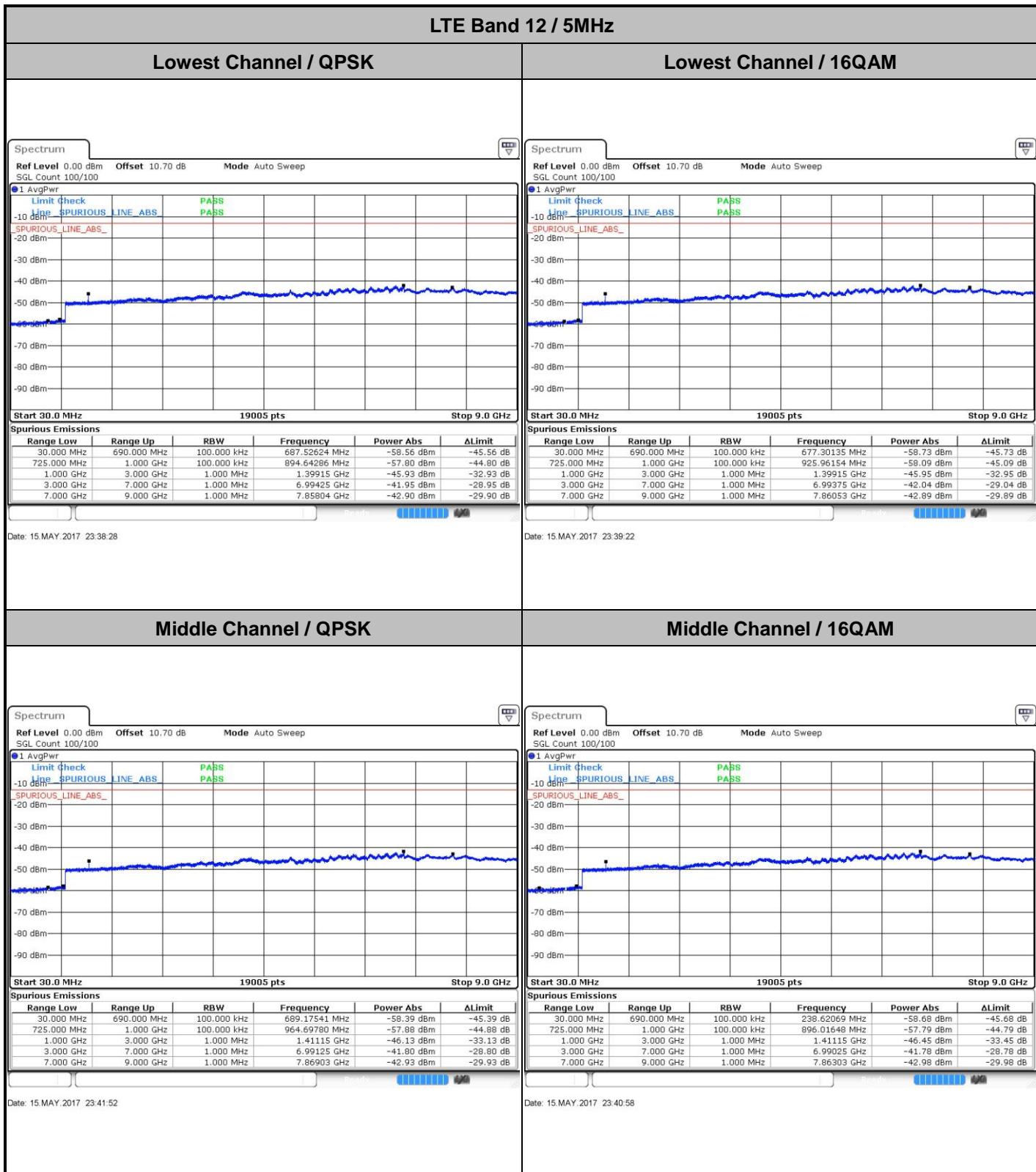
## Lowest Channel / 16QAM



Date: 15.MAY.2017 23:21:46

Date: 15.MAY.2017 23:22:40



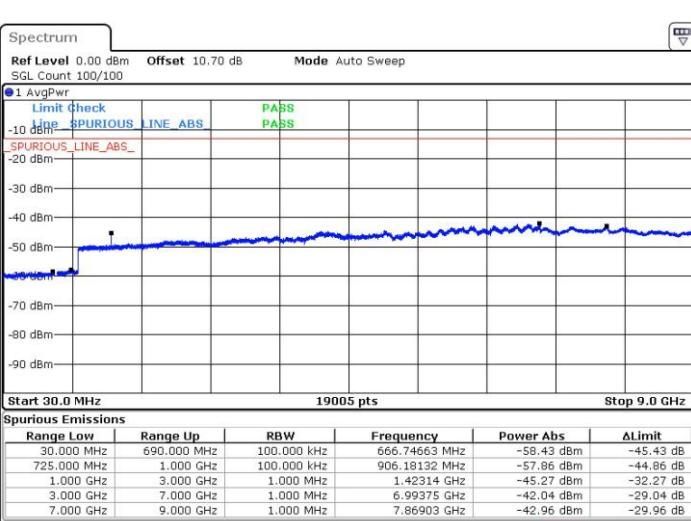




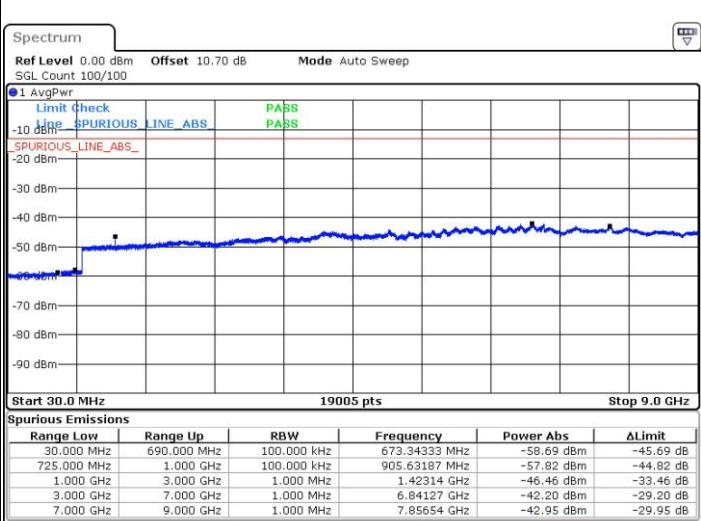
## LTE Band 12 / 5MHz

## Highest Channel / QPSK

## Highest Channel / 16QAM



Date: 15.MAY.2017 23:48:59



Date: 15.MAY.2017 23:48:05

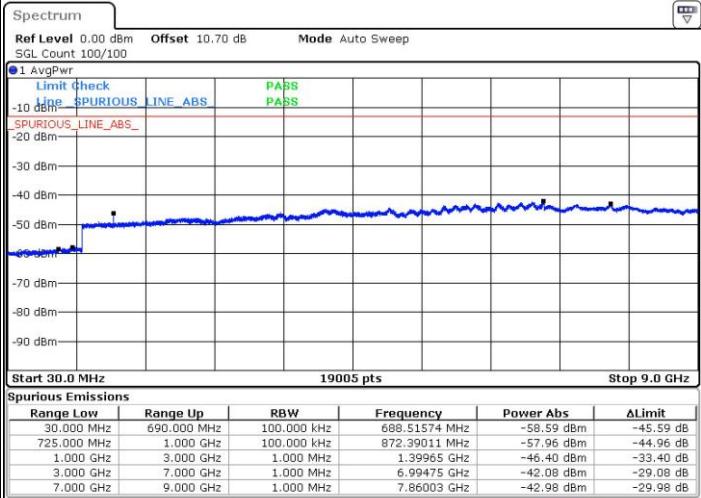
## LTE Band 12 / 10MHz

## Lowest Channel / QPSK

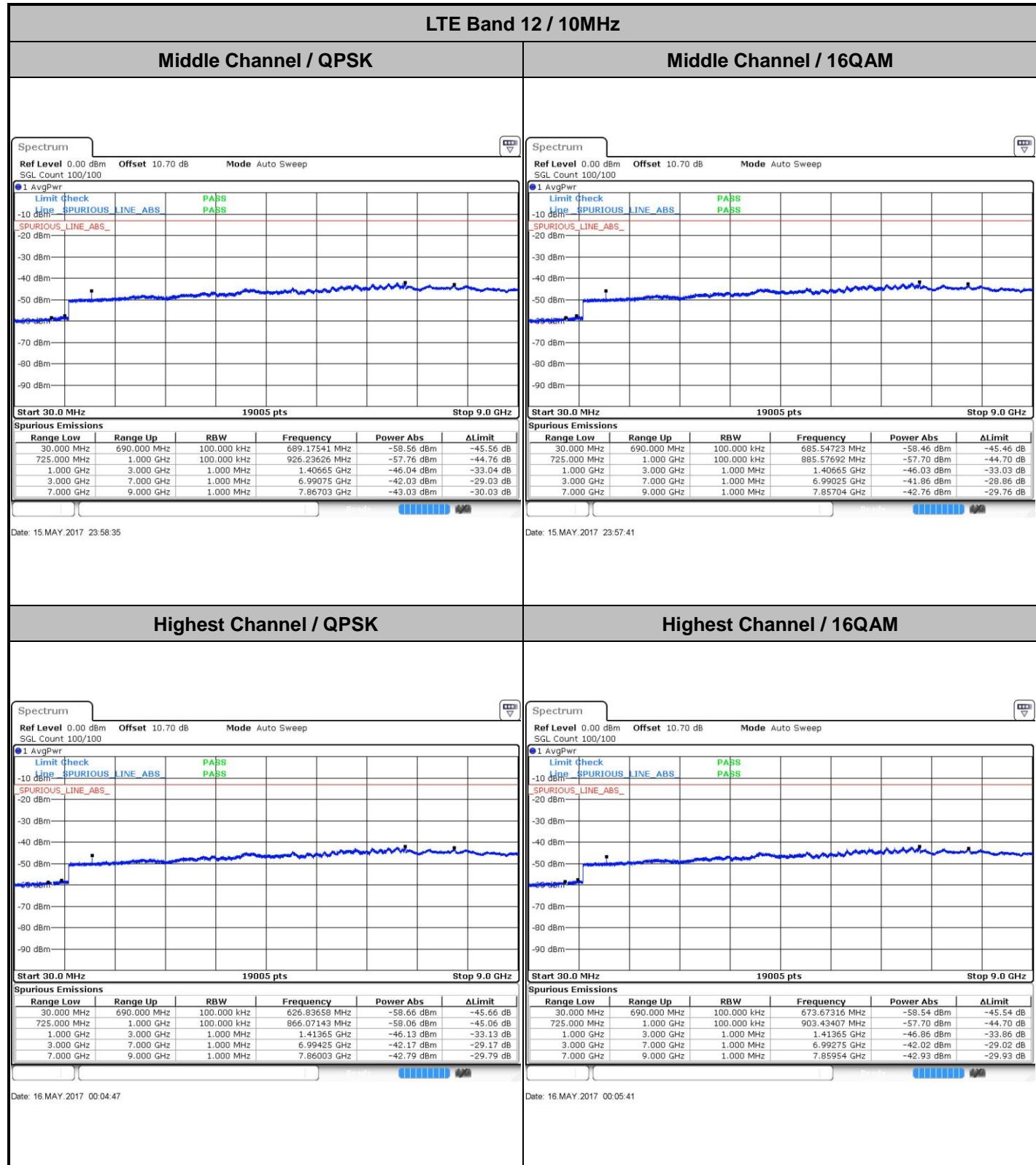
## Lowest Channel / 16QAM



Date: 15.MAY.2017 23:55:11



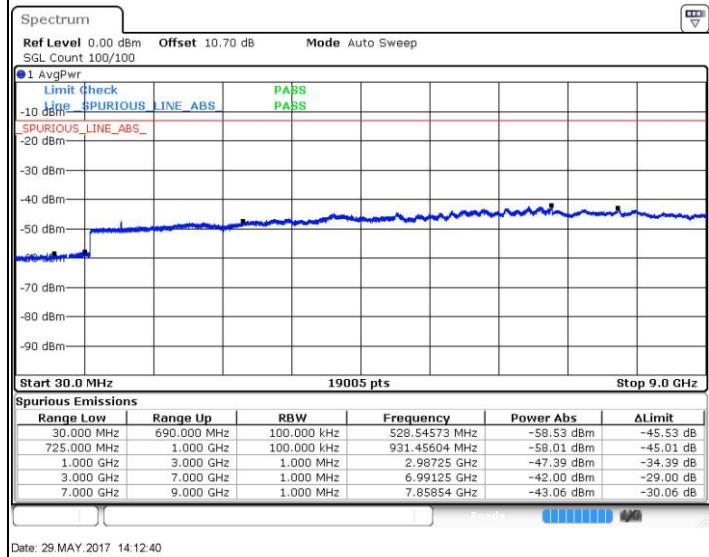
Date: 15.MAY.2017 23:56:05



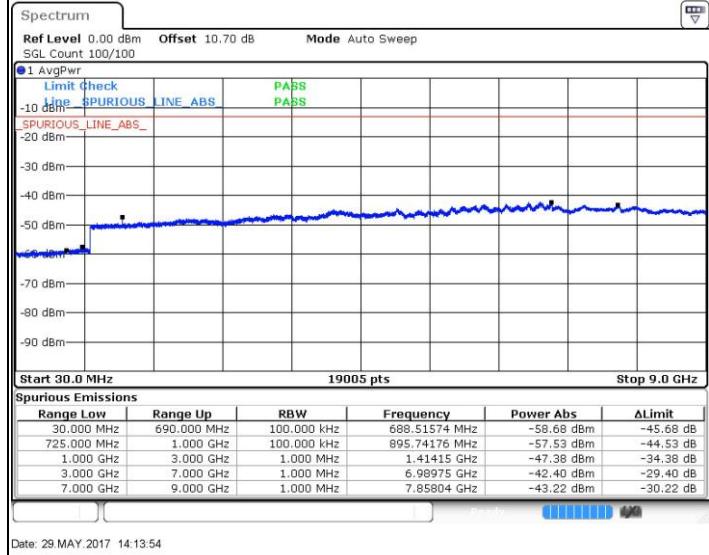


## LTE Band 12 / 1.4MHz

## Lowest Channel / 64QAM



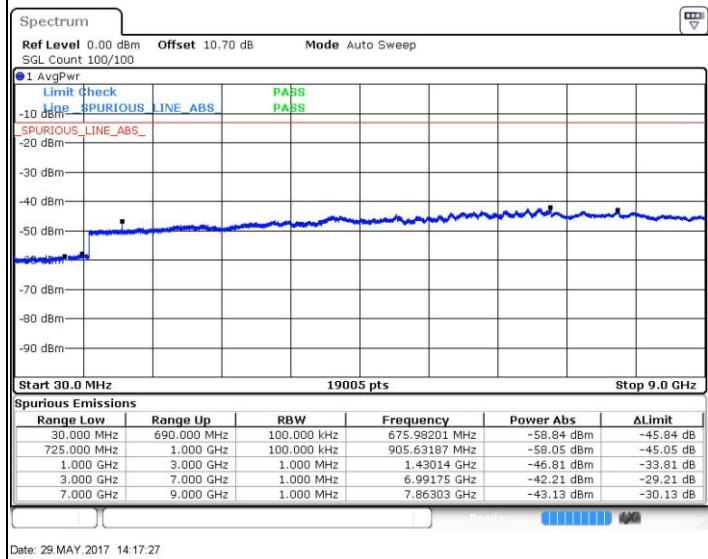
## Middle Channel / 64QAM





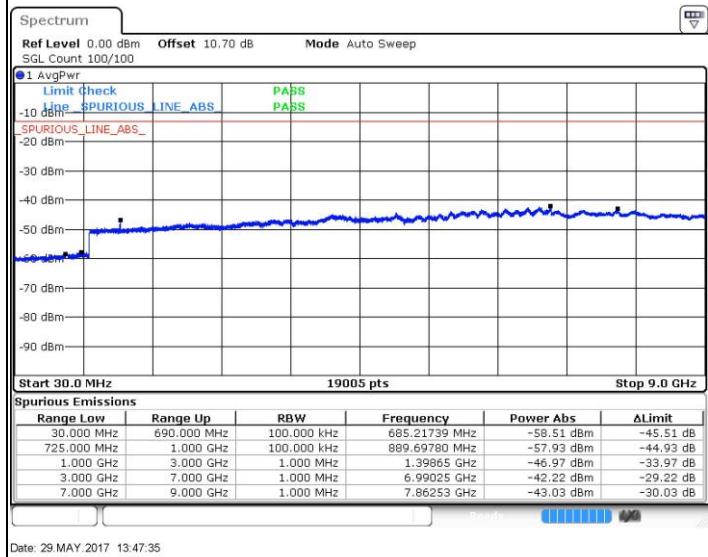
## LTE Band 12 / 1.4MHz

## Highest Channel / 64QAM



## LTE Band 12 / 3MHz

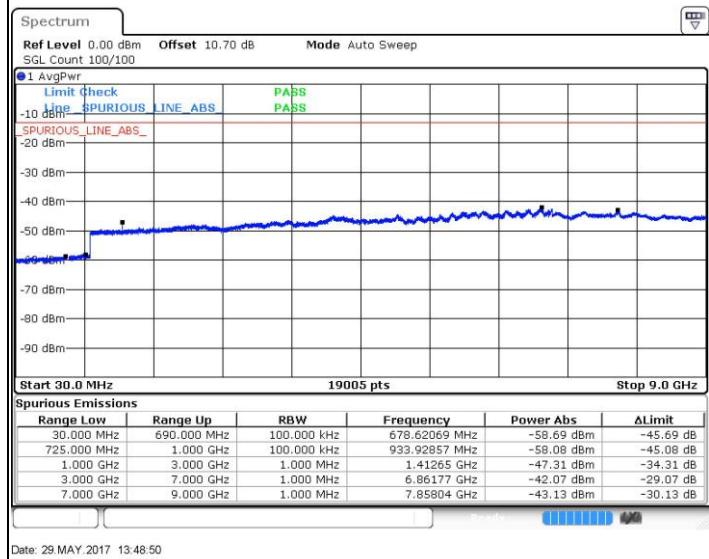
## Lowest Channel / 64QAM



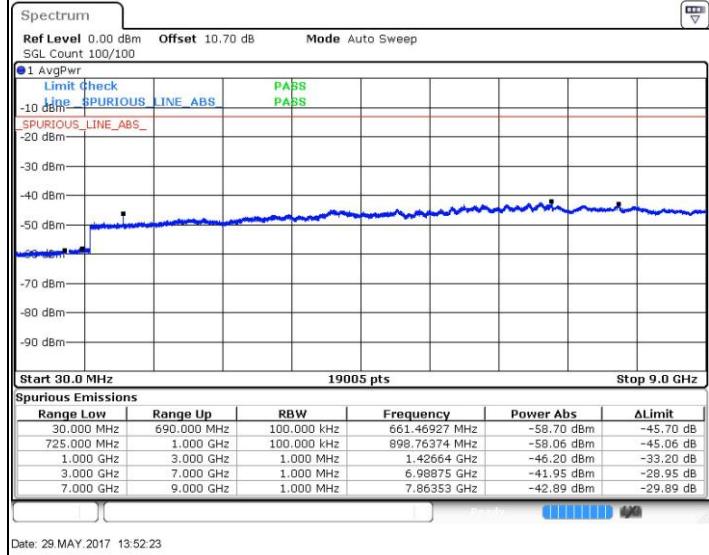


## LTE Band 12 / 3MHz

## Middle Channel / 64QAM



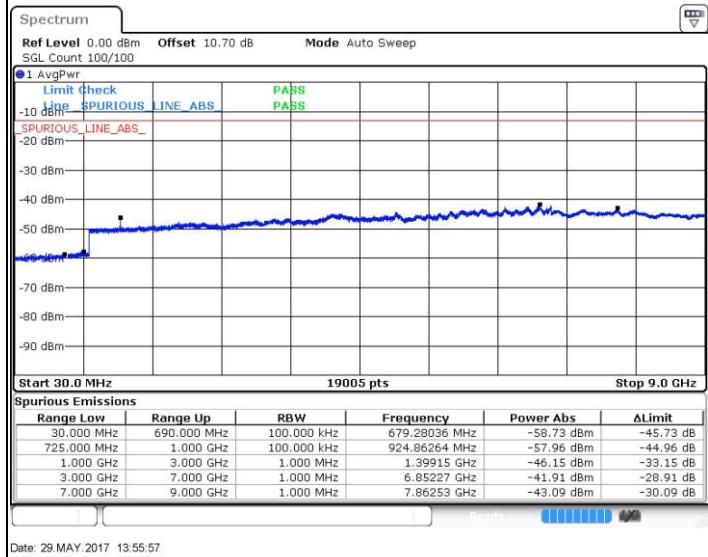
## Highest Channel / 64QAM



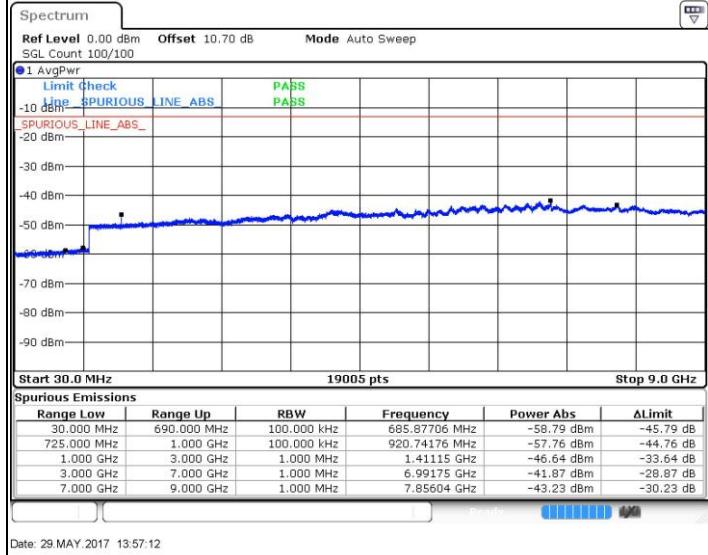


## LTE Band 12 / 5MHz

## Lowest Channel / 64QAM



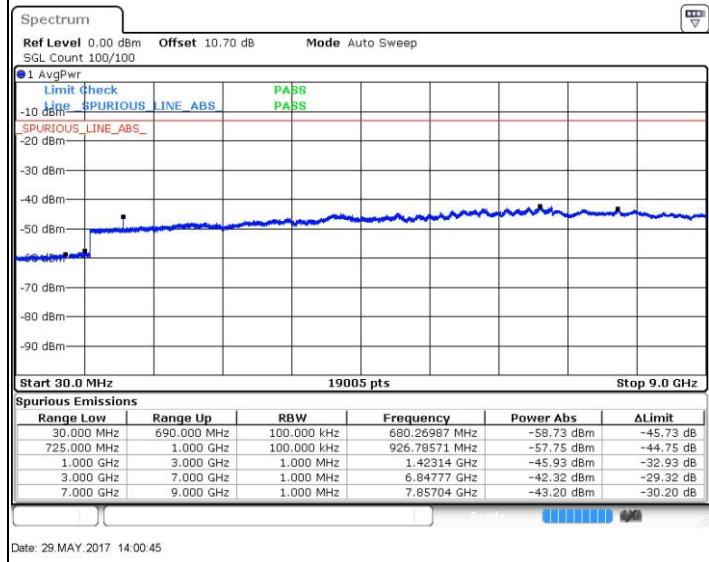
## Middle Channel / 64QAM





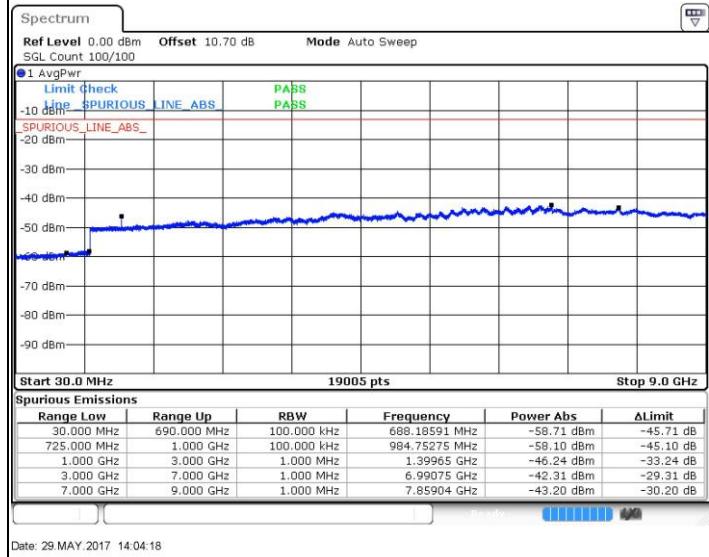
## LTE Band 12 / 5MHz

## Highest Channel / 64QAM



## LTE Band 12 / 10MHz

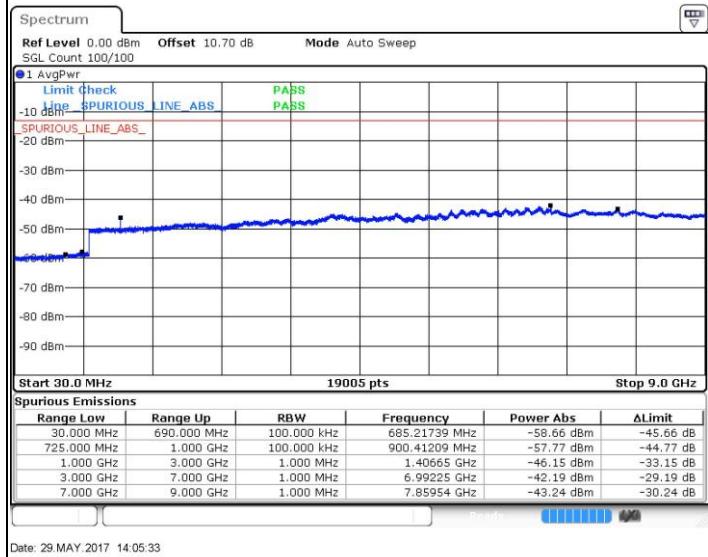
## Lowest Channel / 64QAM



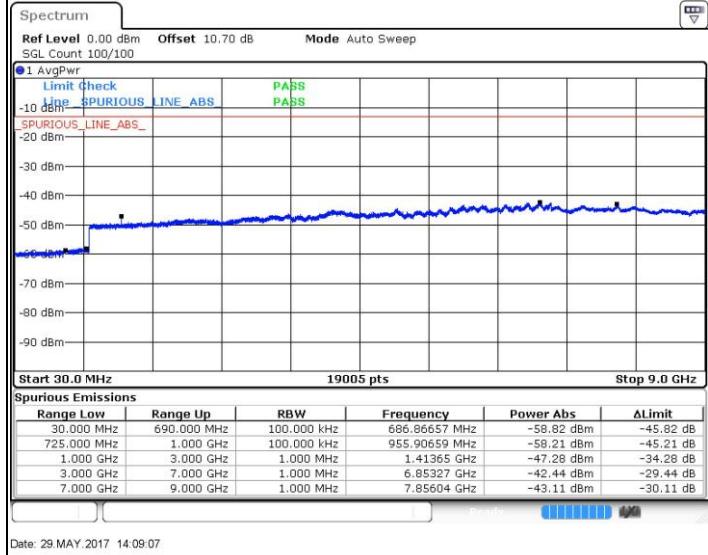


## LTE Band 12 / 10MHz

## Middle Channel / 64QAM



## Highest Channel / 64QAM





## Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0099	PASS
40	Normal Voltage	0.0072	
30	Normal Voltage	0.0090	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0035	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0030	
-20	Normal Voltage	0.0143	
-30	Normal Voltage	0.0154	
20	Maximum Voltage	0.0151	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0140	

**Note:**

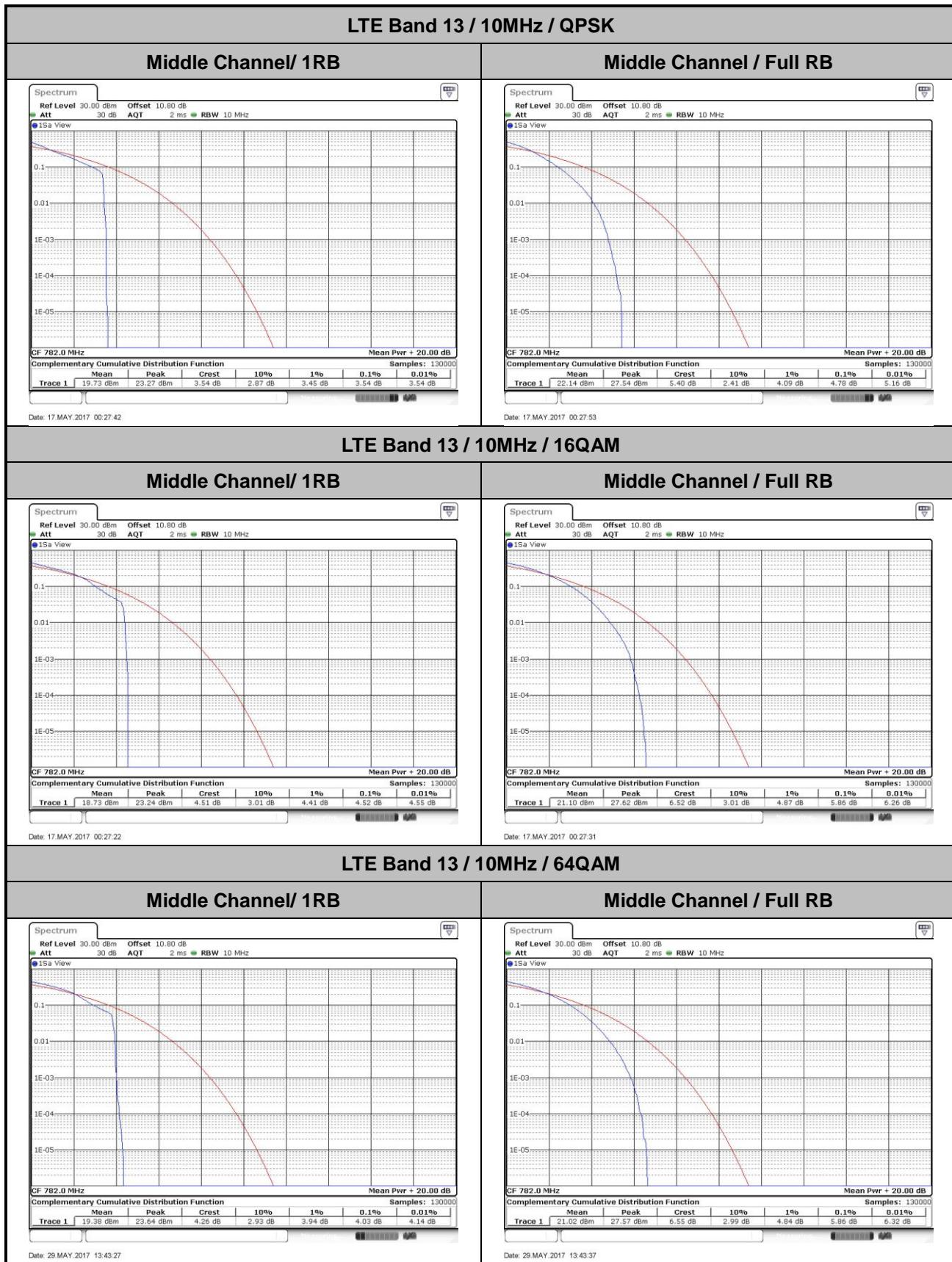
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 13

### Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.54	4.78	4.52	5.86	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	-		64QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	-	-	4.03	5.86	
Highest CH	-	-	-	-	

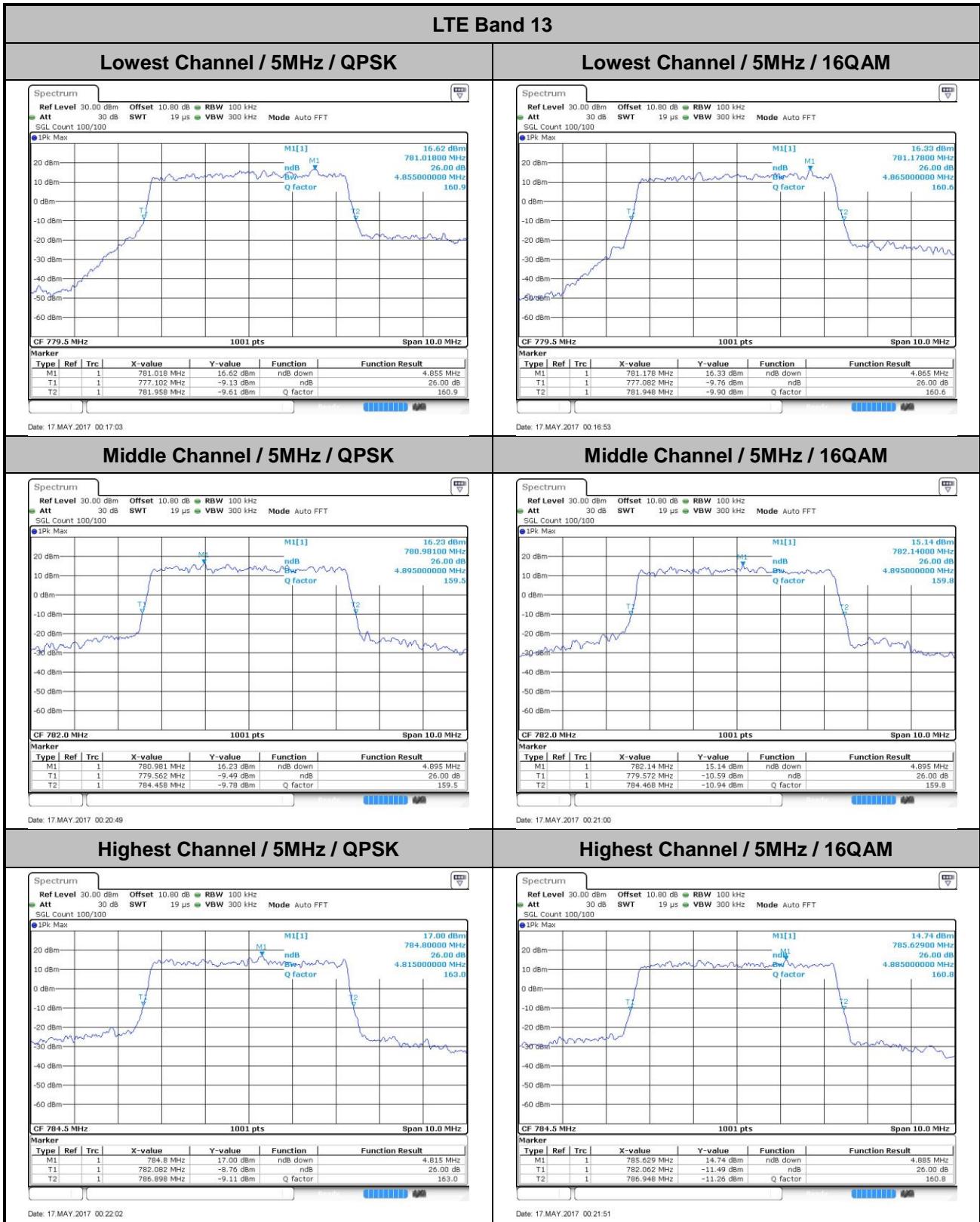


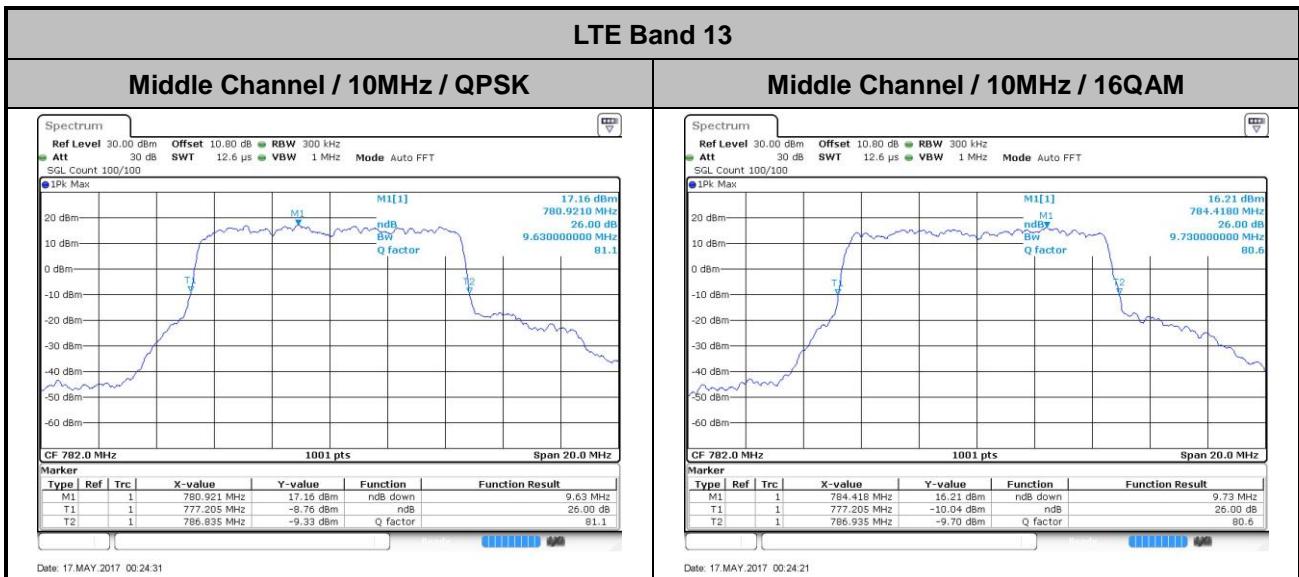
**26dB Bandwidth**

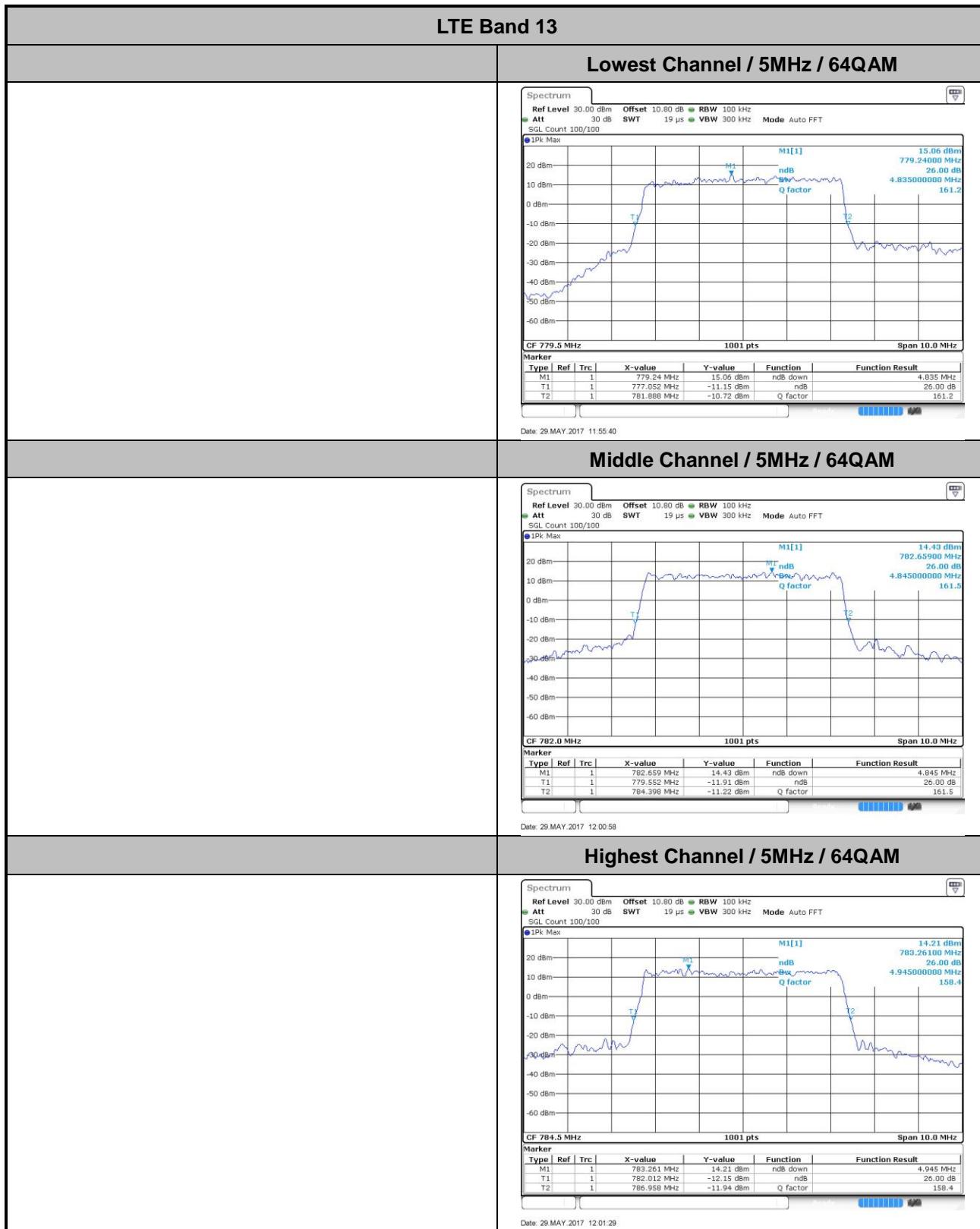
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.86	4.87	-	-	-	-	-	-
Middle CH	-	-	-	-	4.90	4.90	9.63	9.73	-	-	-	-
Highest CH	-	-	-	-	4.82	4.89	-	-	-	-	-	-

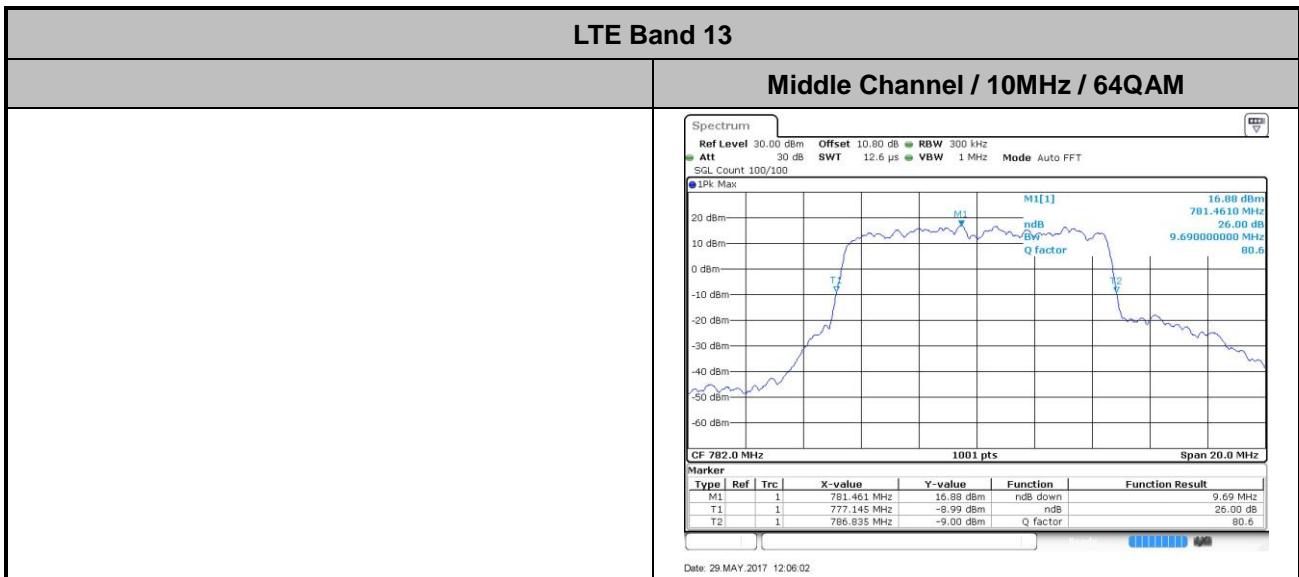
  

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	-	-	-	-	4.84	-	-	-	-	-	-
Middle CH	-	-	-	-	-	4.85	-	9.69	-	-	-	-
Highest CH	-	-	-	-	-	4.95	-	-	-	-	-	-







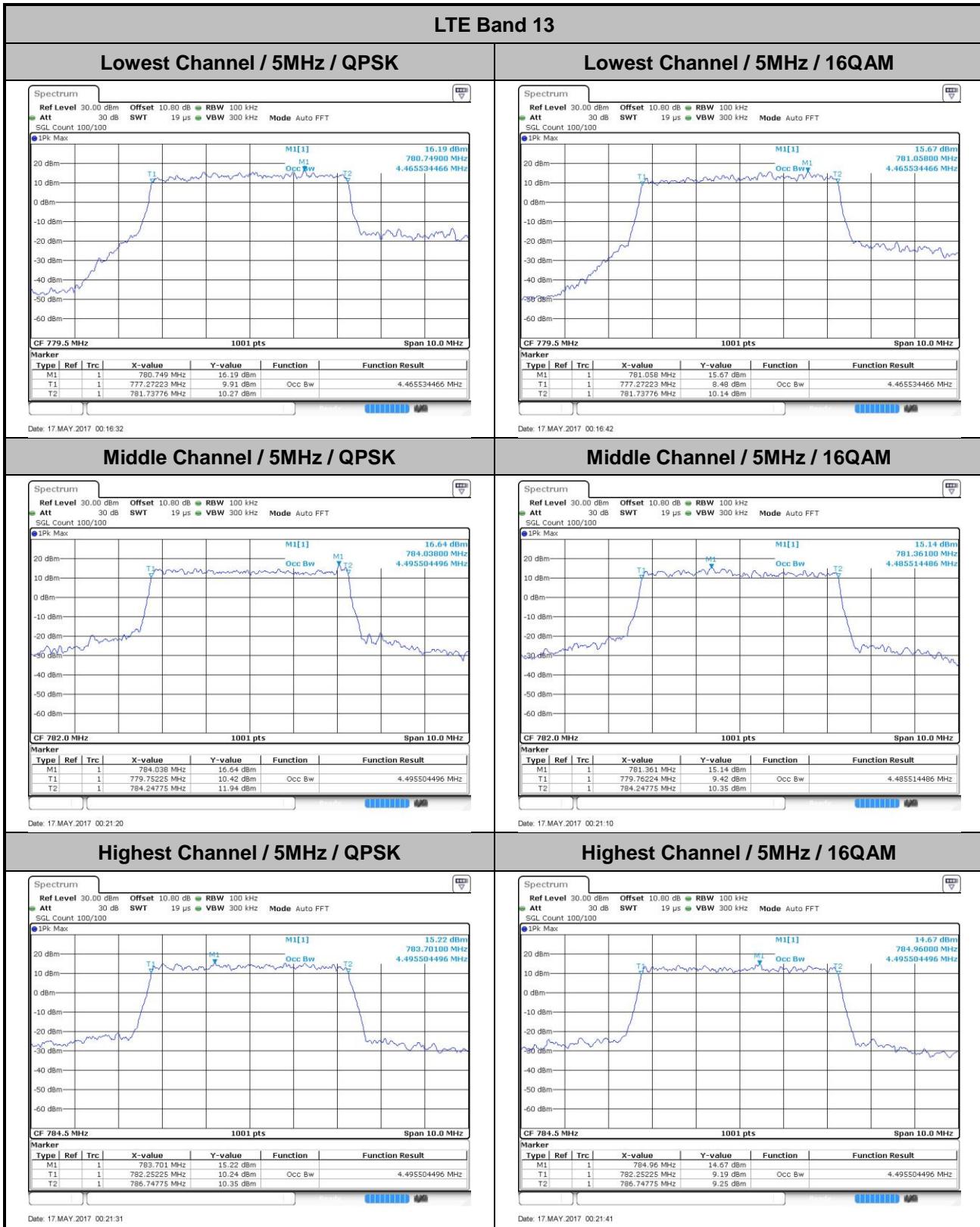


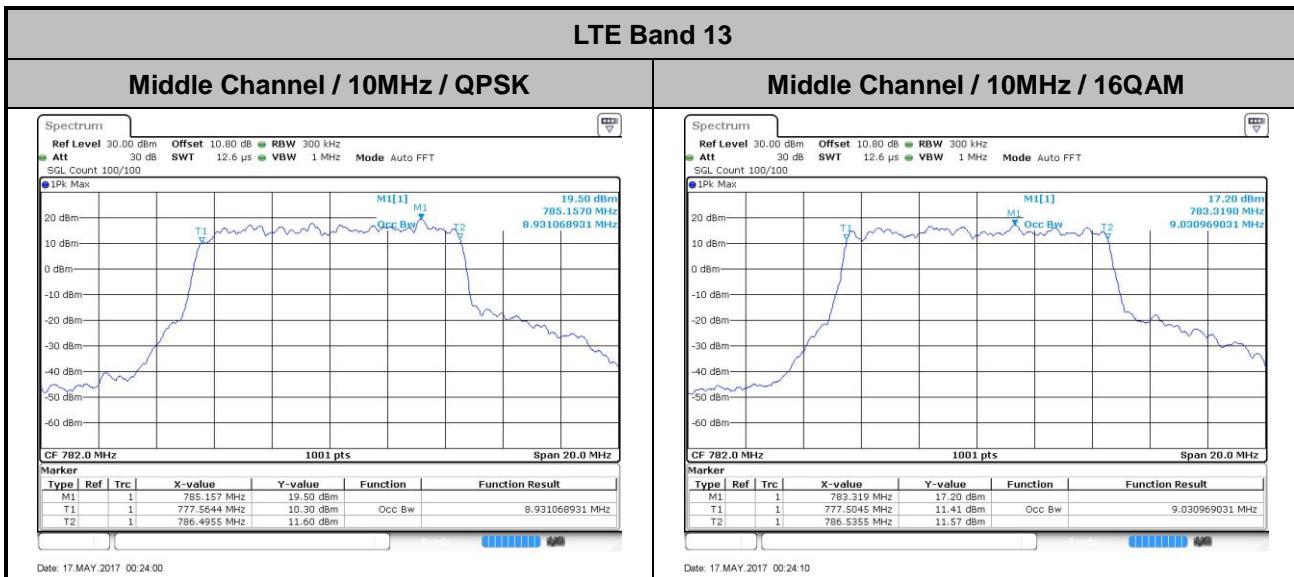
**Occupied Bandwidth**

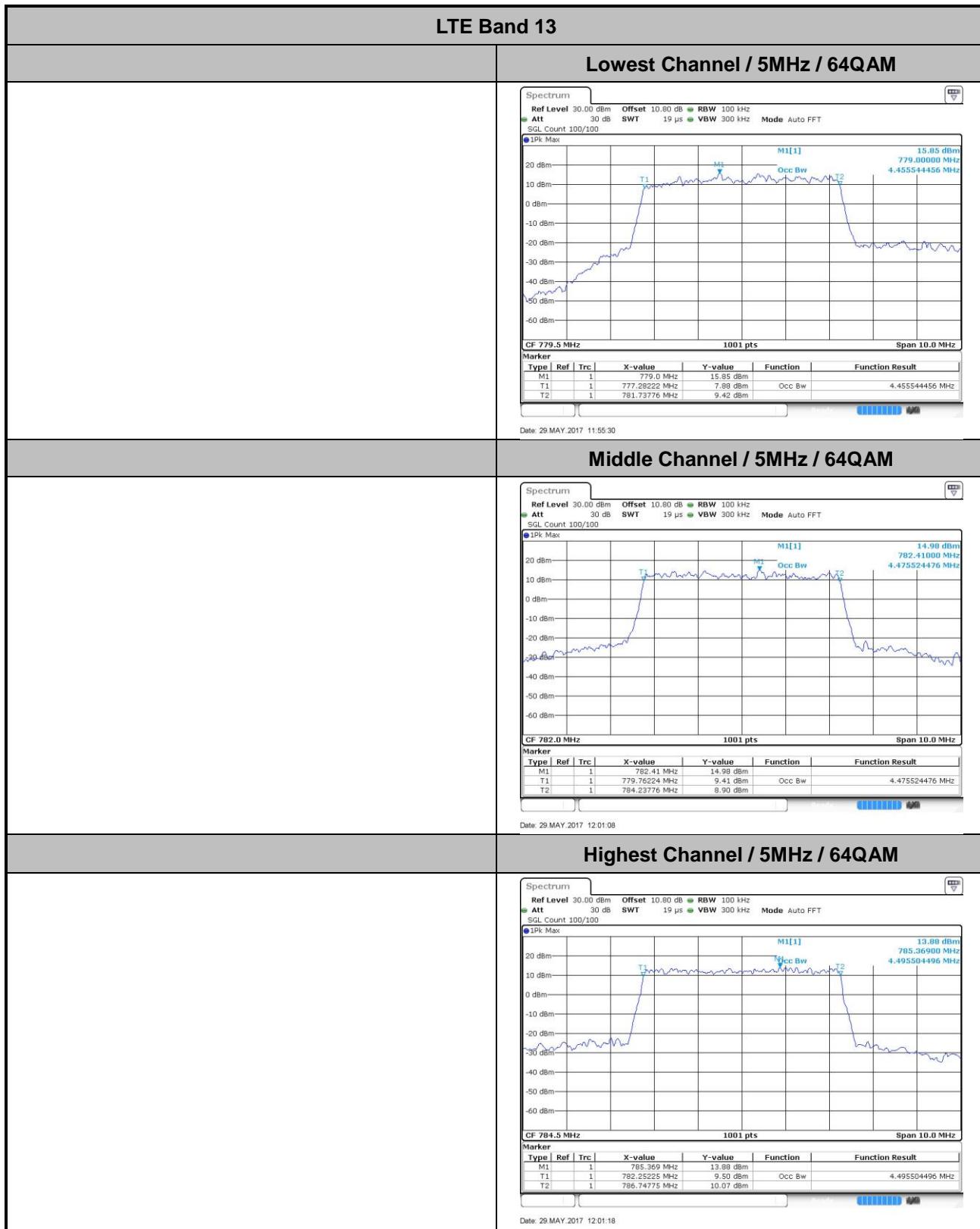
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.47	4.47	-	-	-	-	-	-
Middle CH	-	-	-	-	4.5	4.49	8.93	9.03	-	-	-	-
Highest CH	-	-	-	-	4.5	4.5	-	-	-	-	-	-

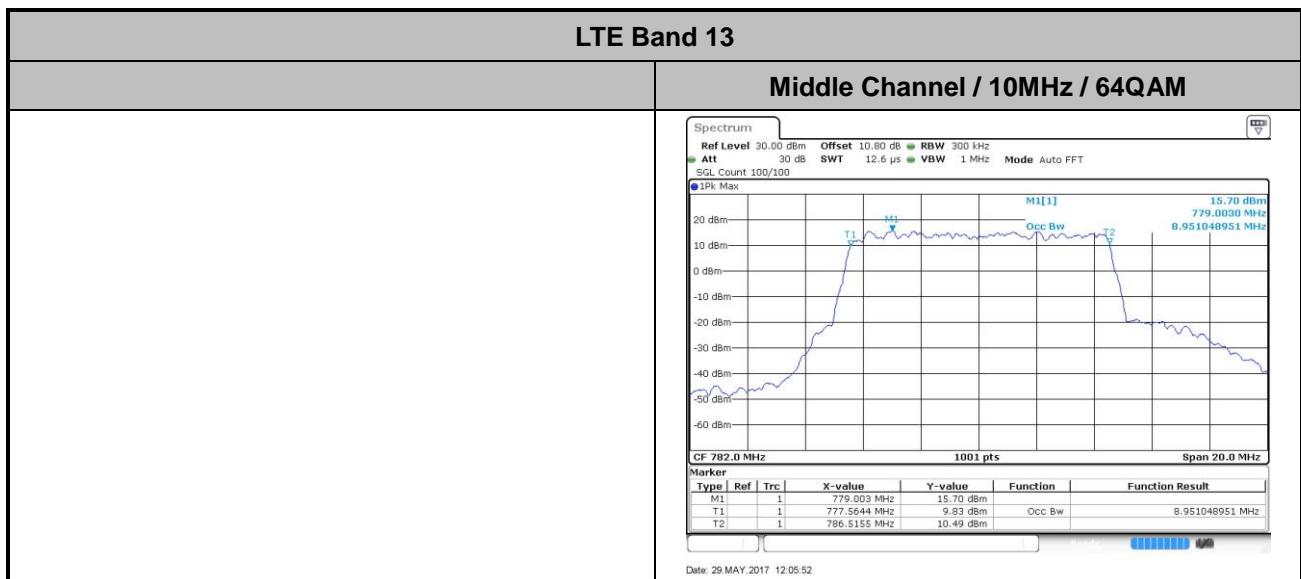
  

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	-	-	-	-	4.46	-	-	-	-	-	-
Middle CH	-	-	-	-	-	4.48	-	8.95	-	-	-	-
Highest CH	-	-	-	-	-	4.5	-	-	-	-	-	-











## Conducted Band Edge

