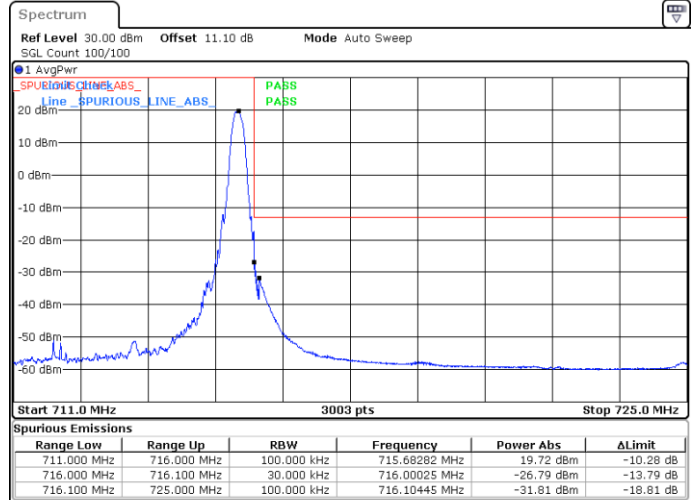
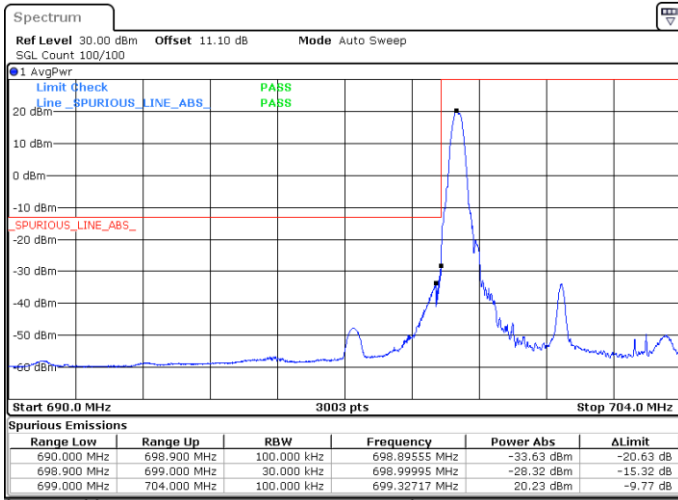




LTE Band 12 / 5MHz / 64QAM

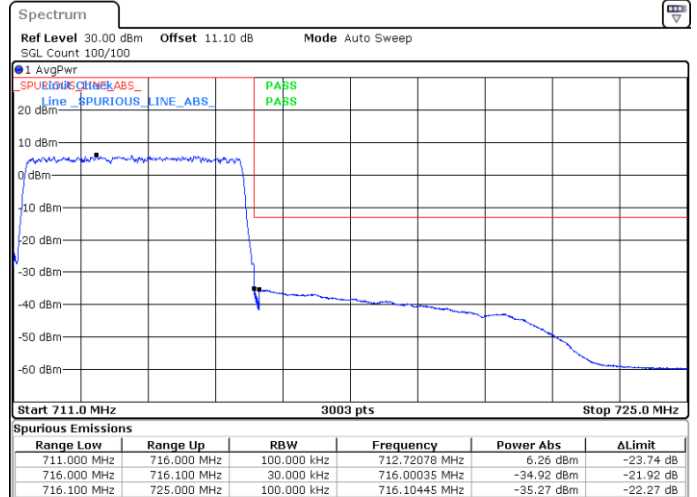
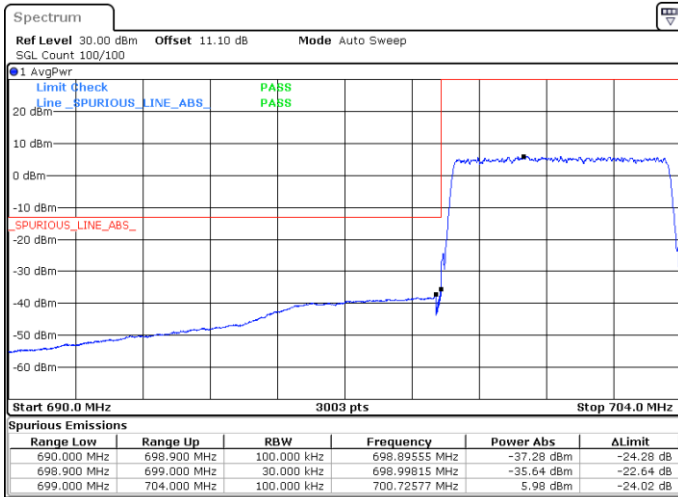
Lowest Band Edge / 1RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

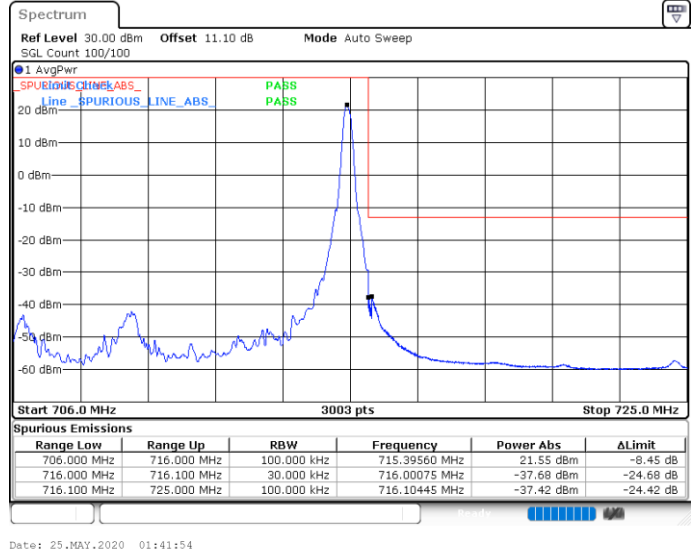
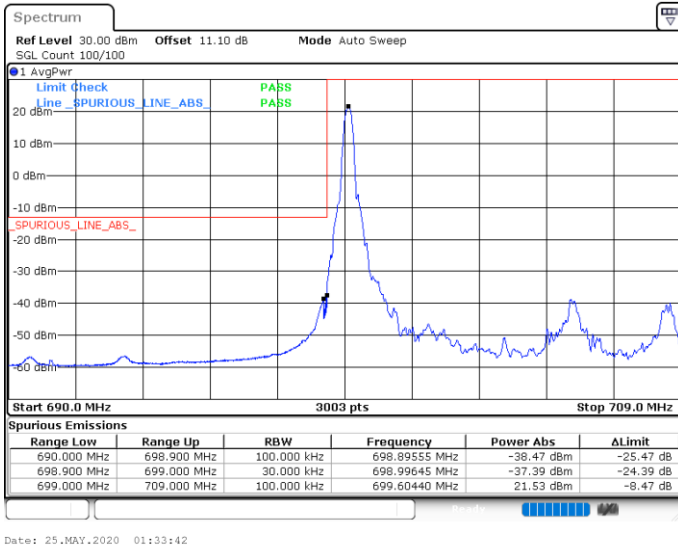




LTE Band 12 / 10MHz / QPSK

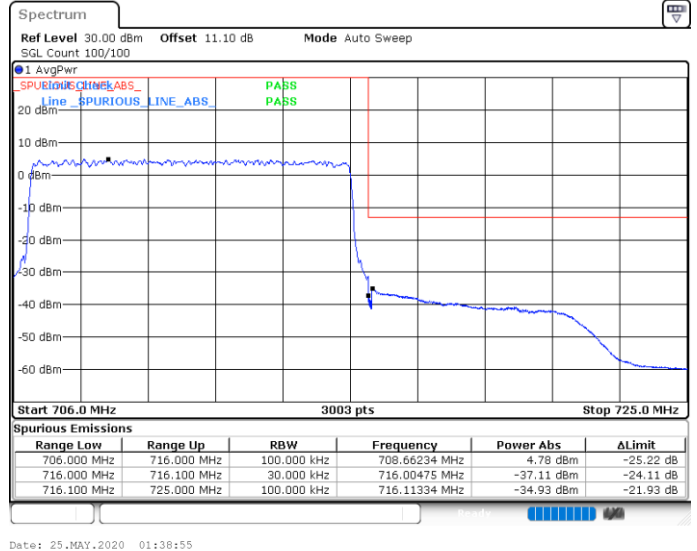
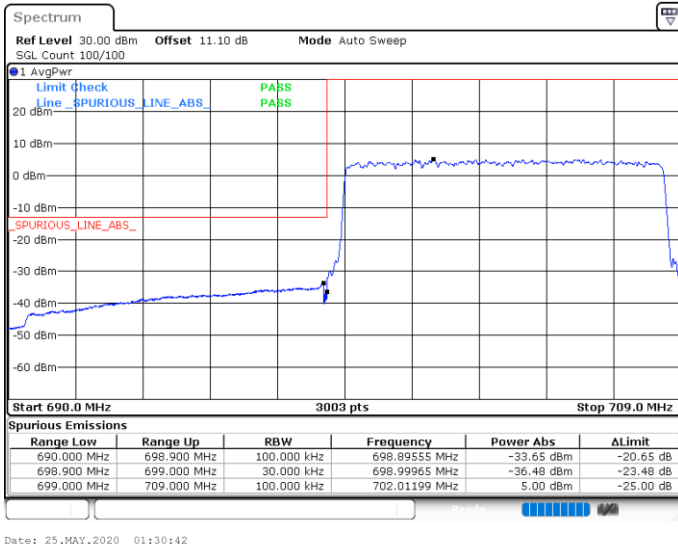
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

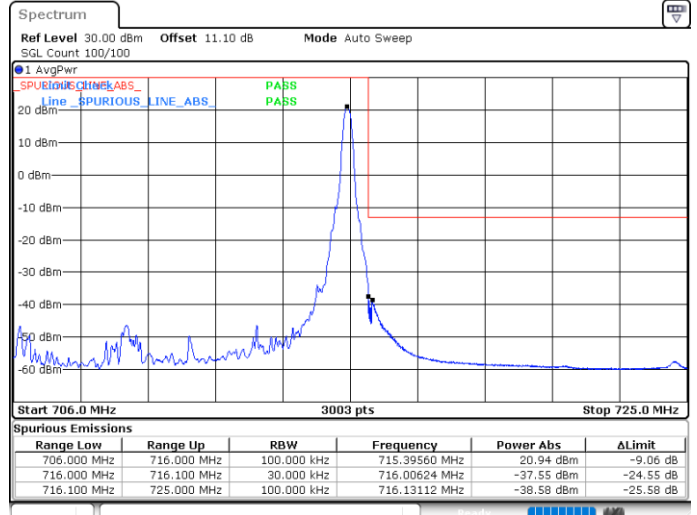
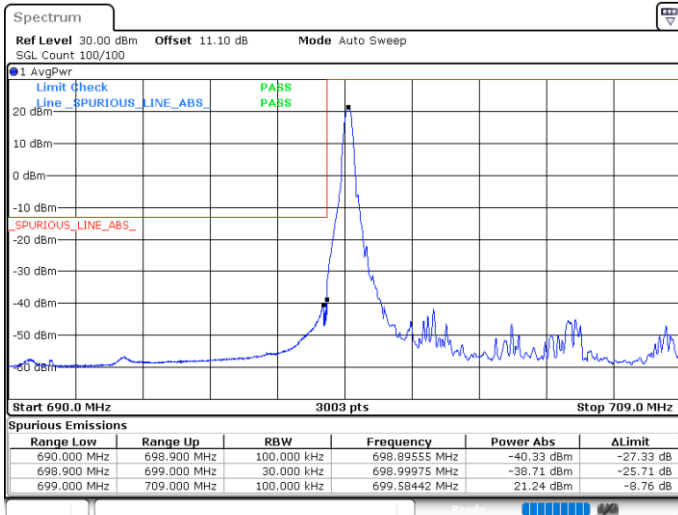




LTE Band 12 / 10MHz / 16QAM

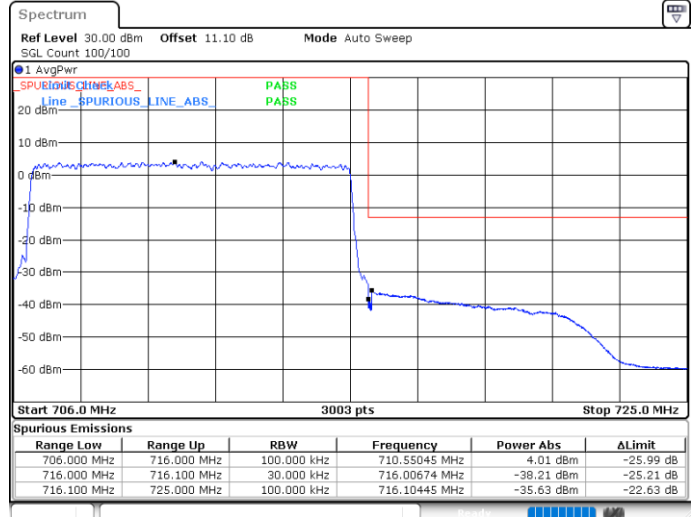
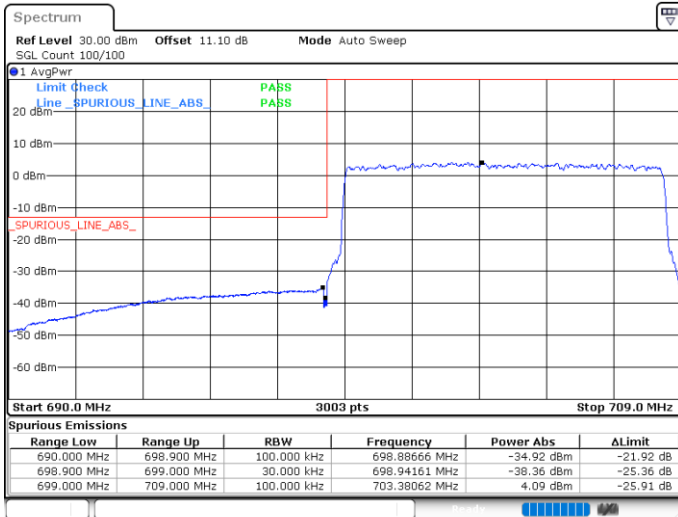
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

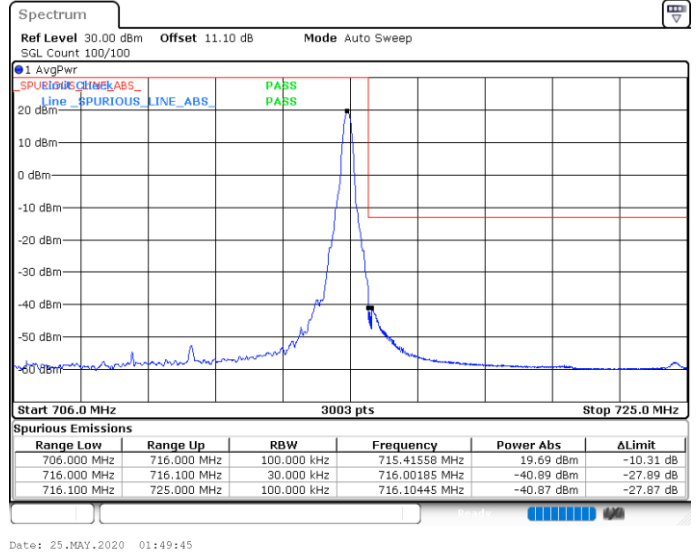
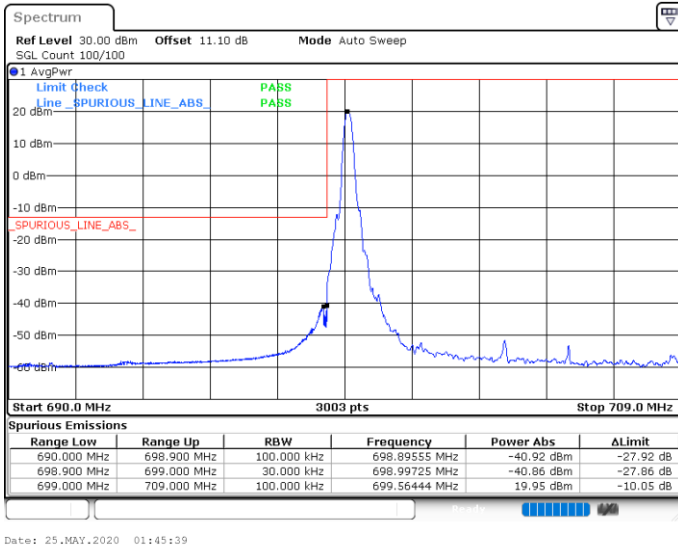




LTE Band 12 / 10MHz / 64QAM

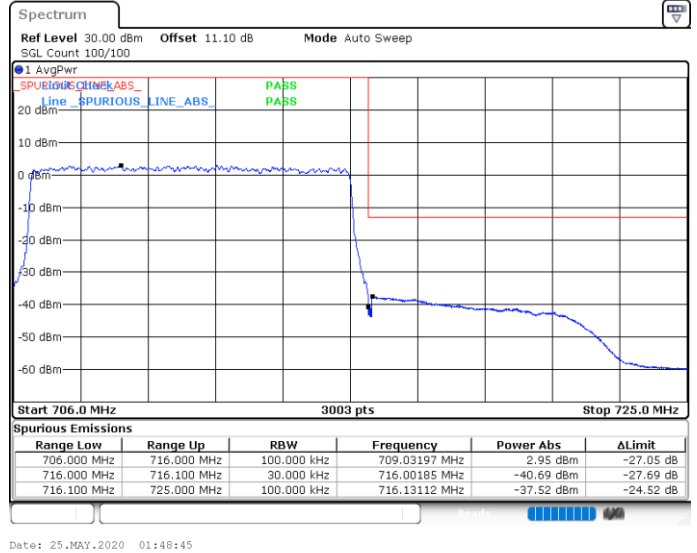
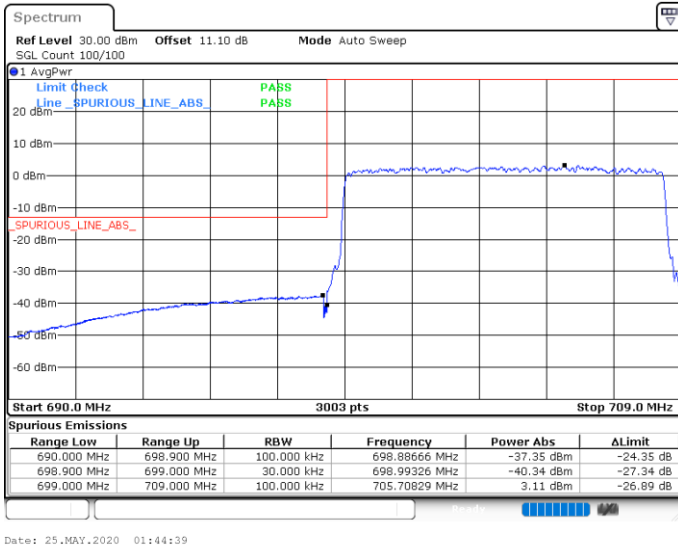
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

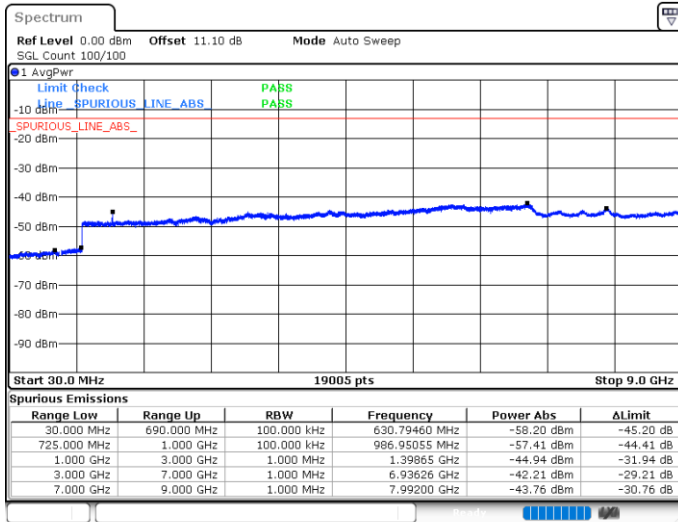




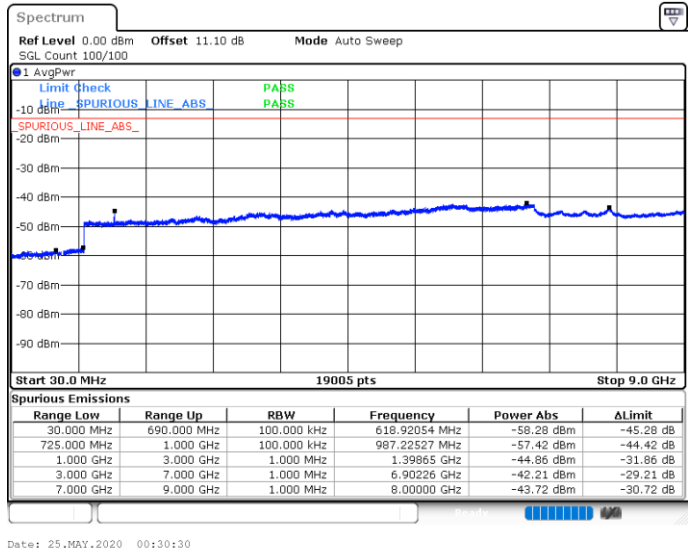
Conducted Spurious Emission

LTE Band 12 / 1.4MHz

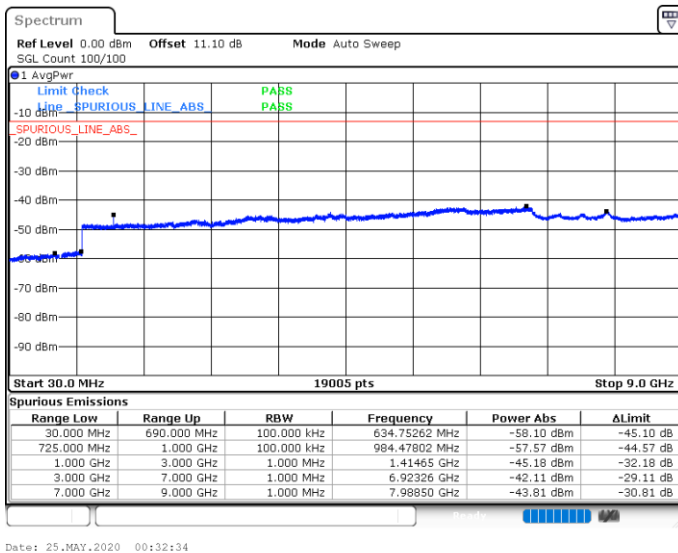
Lowest Channel / QPSK



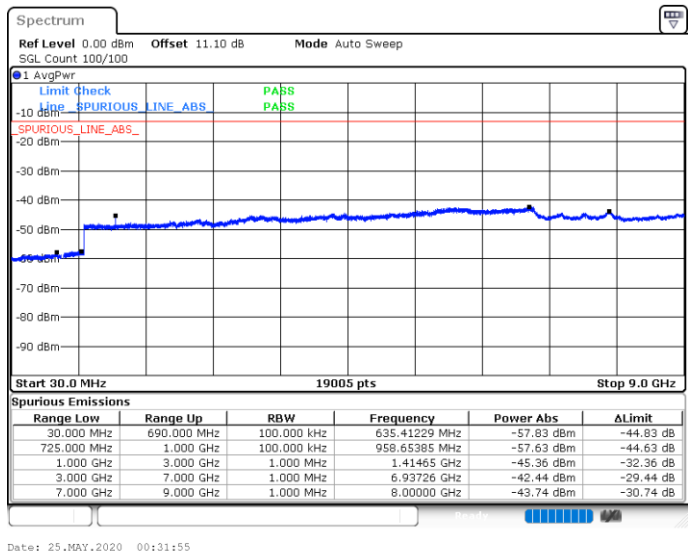
Lowest Channel / 16QAM



Middle Channel / QPSK



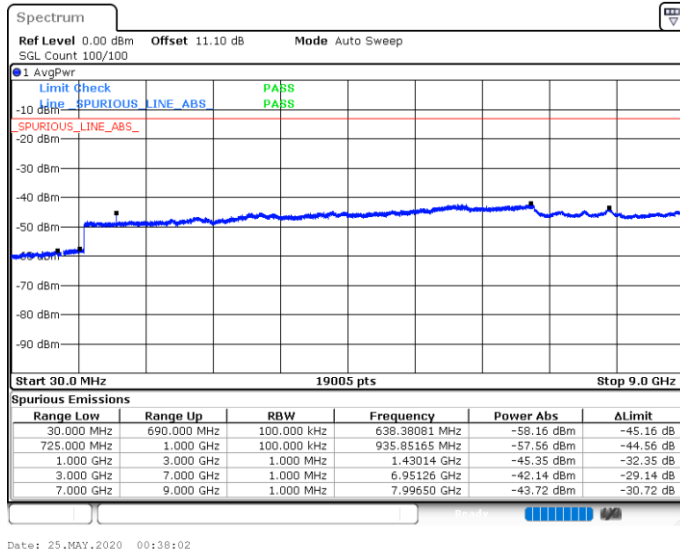
Middle Channel / 16QAM



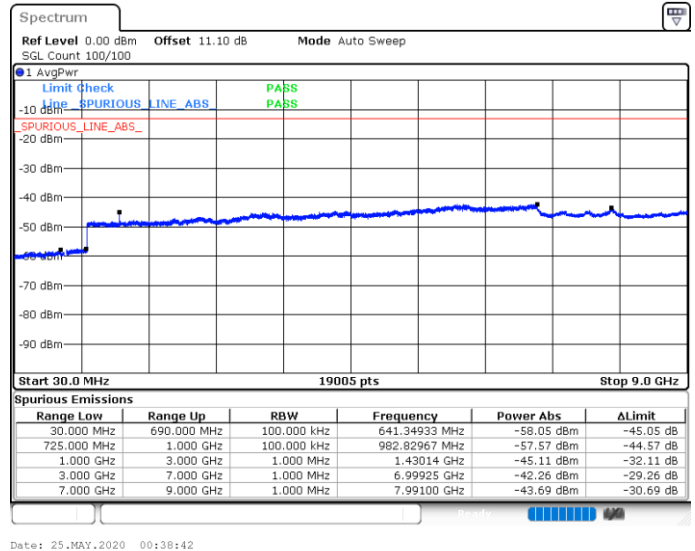


LTE Band 12 / 1.4MHz

Highest Channel / QPSK

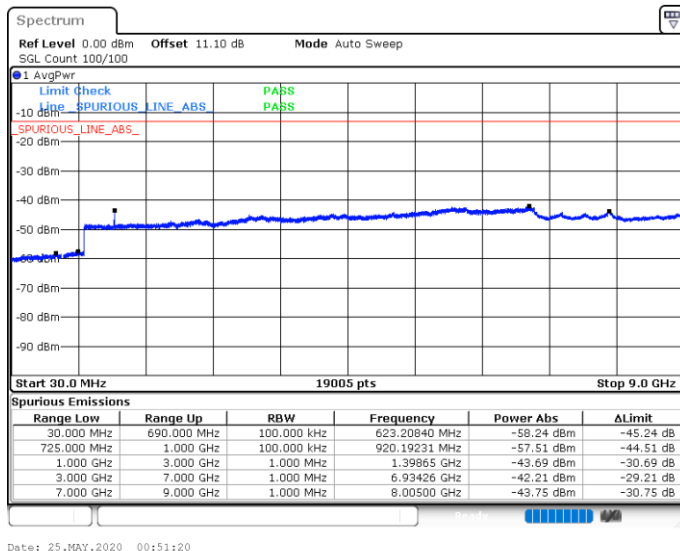


Highest Channel / 16QAM

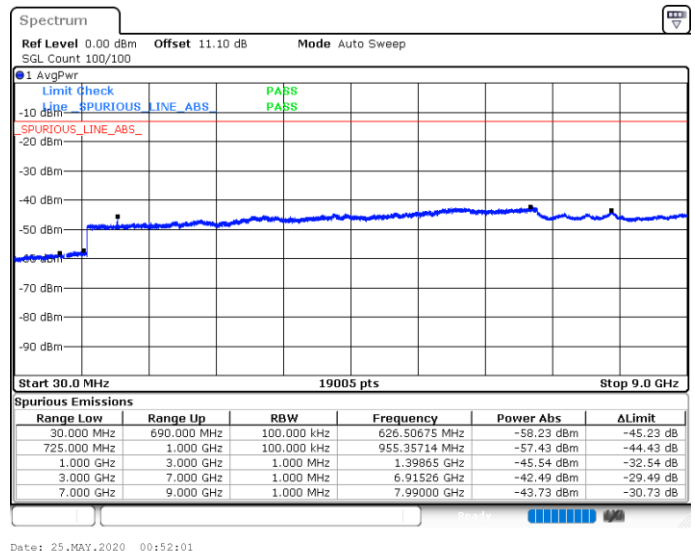


LTE Band 12 / 3MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

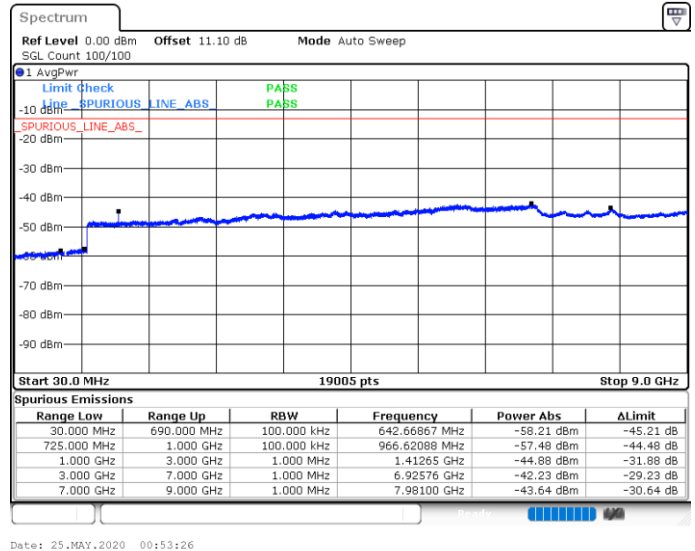
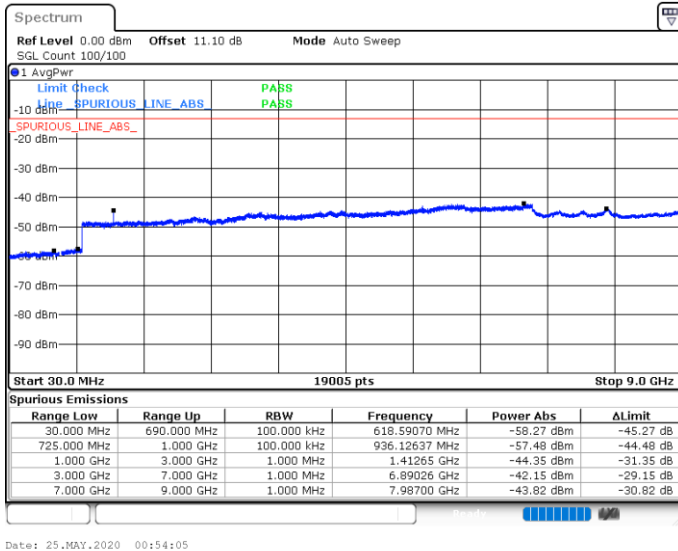




LTE Band 12 / 3MHz

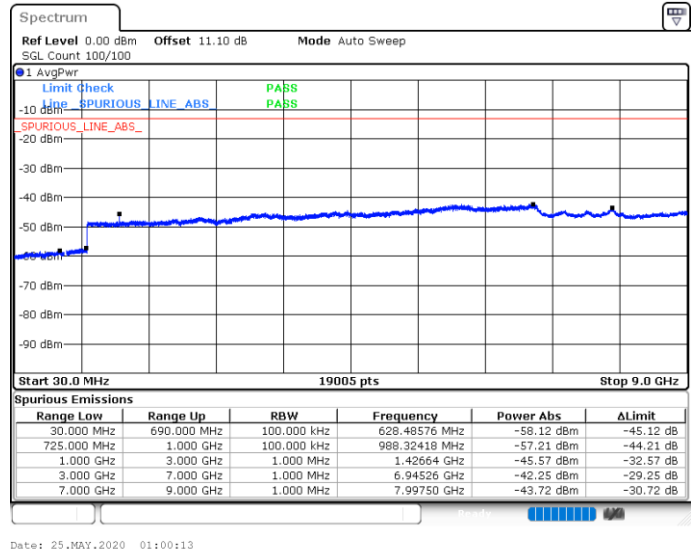
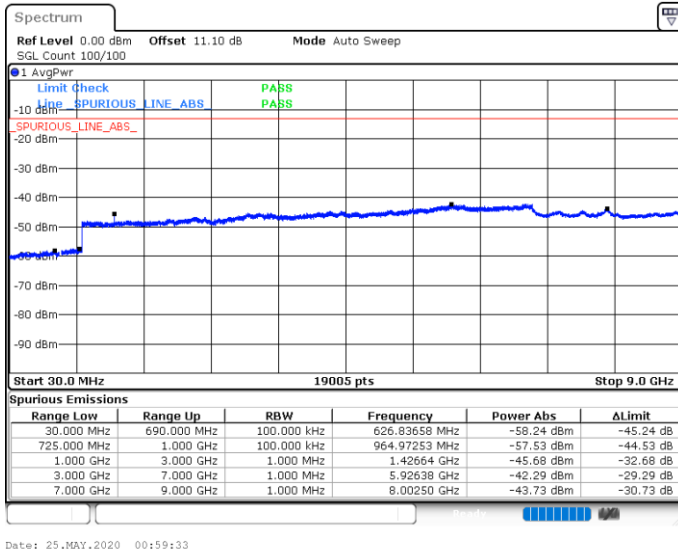
Middle Channel / QPSK

Middle Channel / 16QAM



Highest Channel / QPSK

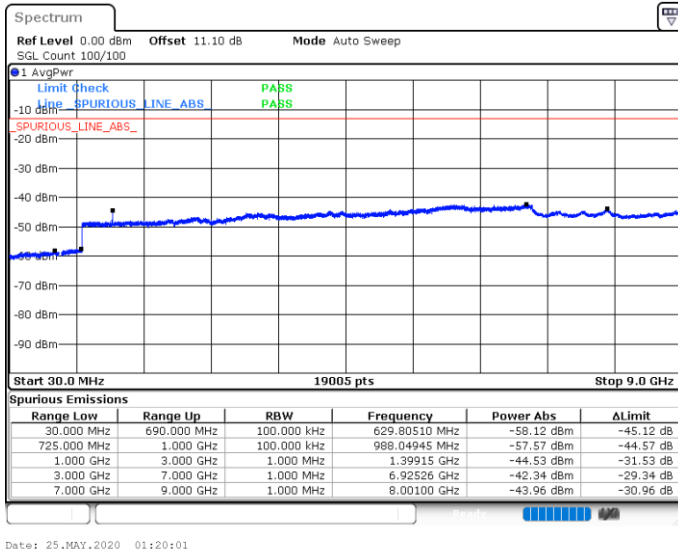
Highest Channel / 16QAM



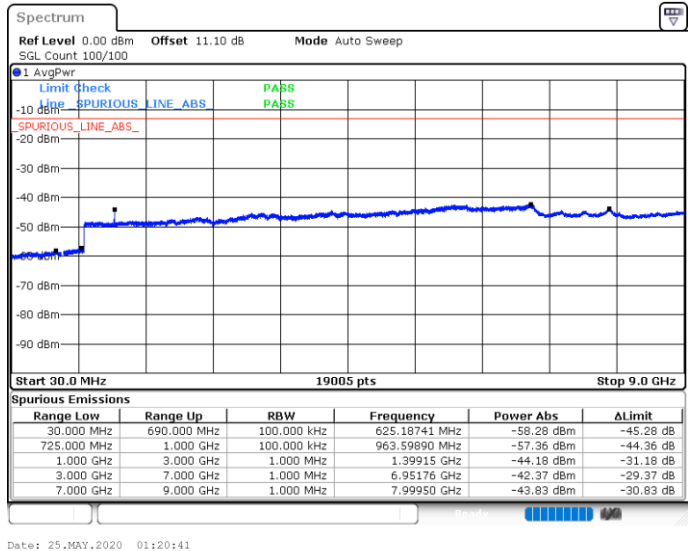


LTE Band 12 / 5MHz

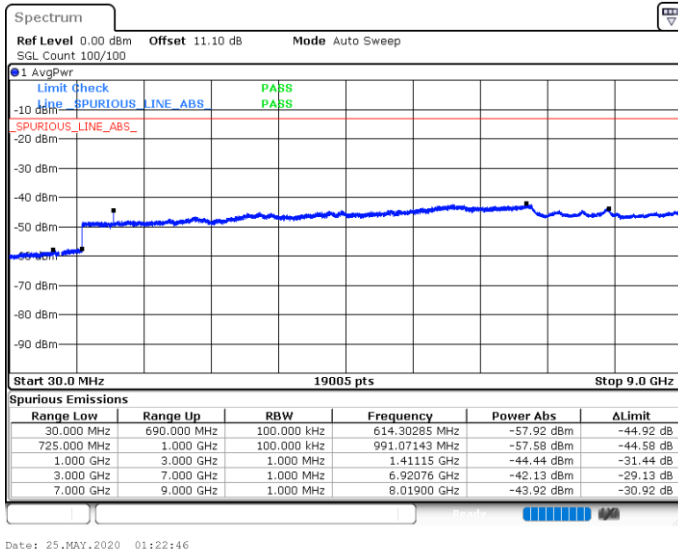
Lowest Channel / QPSK



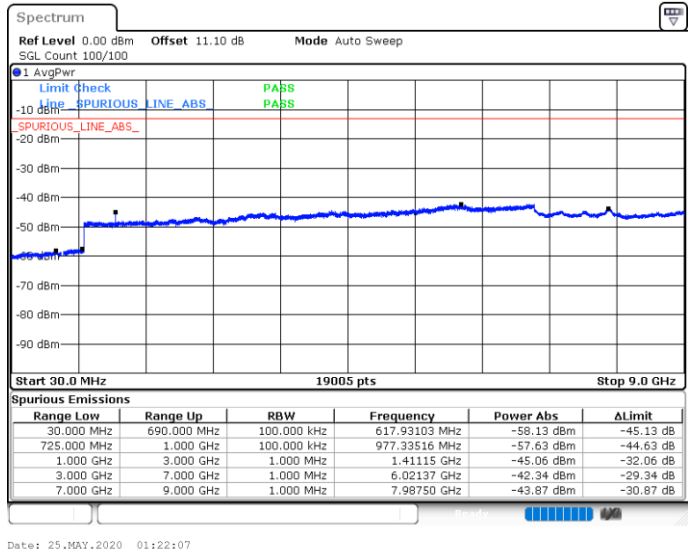
Lowest Channel / 16QAM



Middle Channel / QPSK



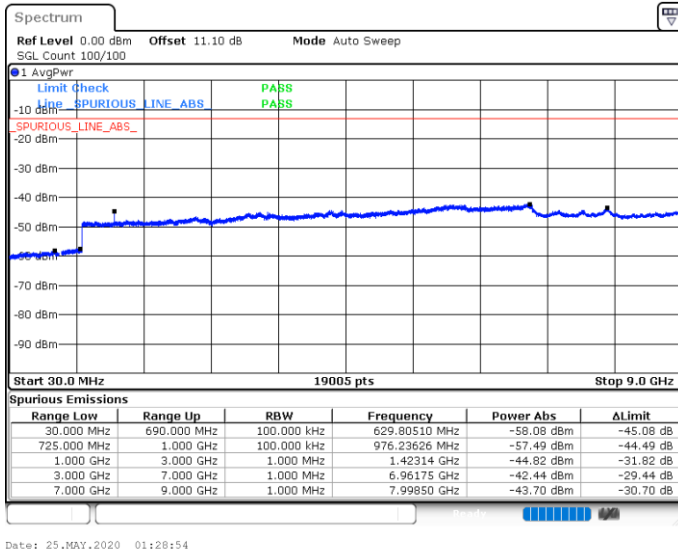
Middle Channel / 16QAM



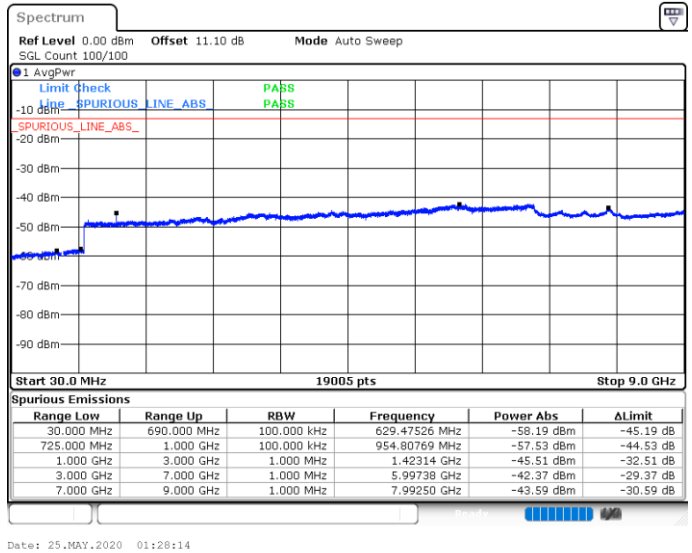


LTE Band 12 / 5MHz

Highest Channel / QPSK

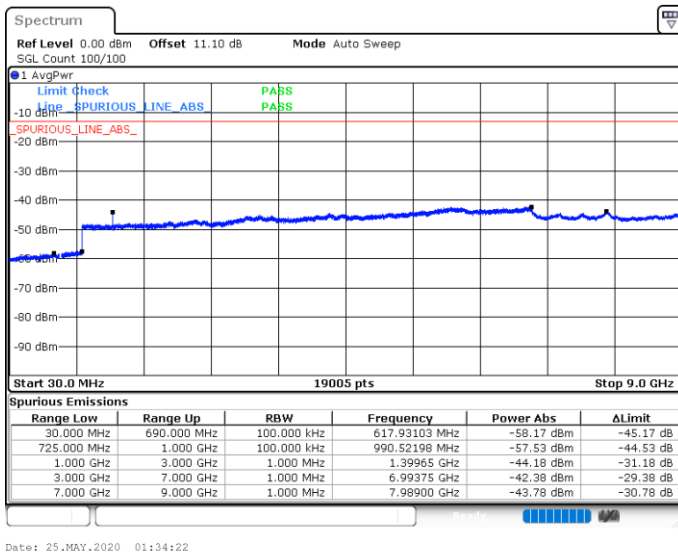


Highest Channel / 16QAM

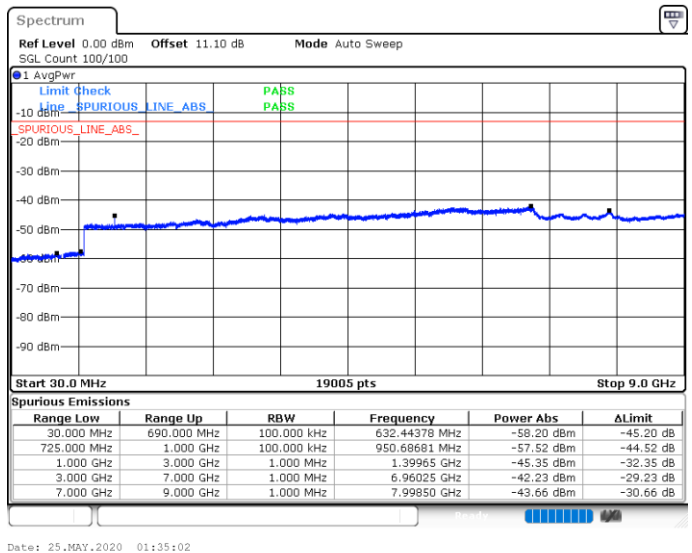


LTE Band 12 / 10MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

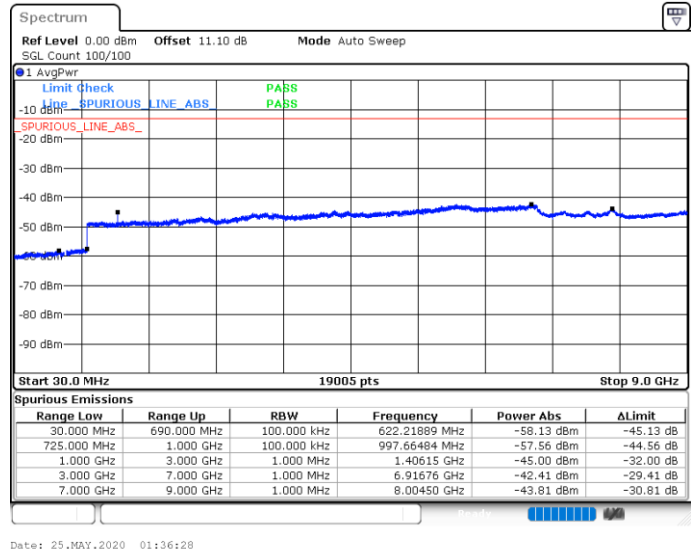
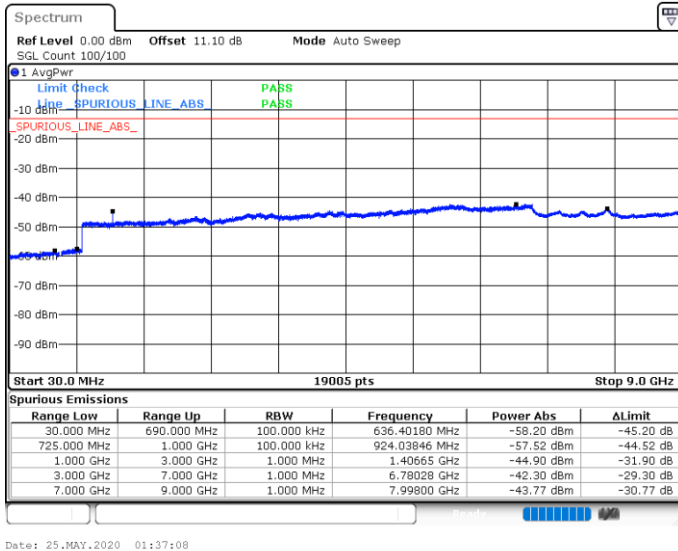




LTE Band 12 / 10MHz

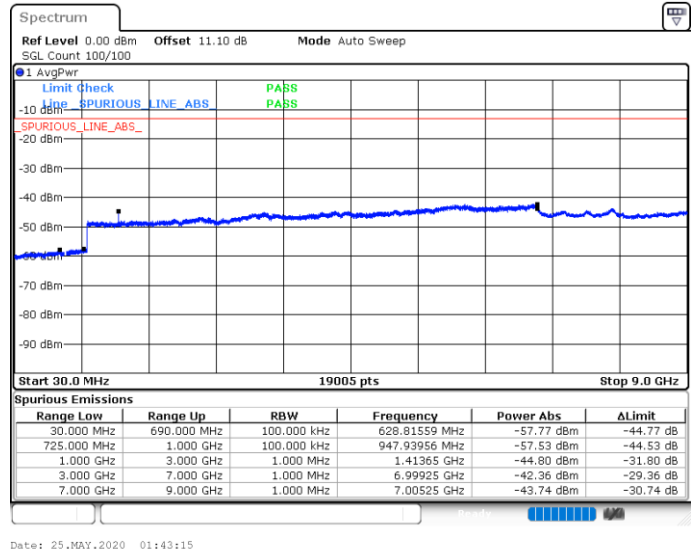
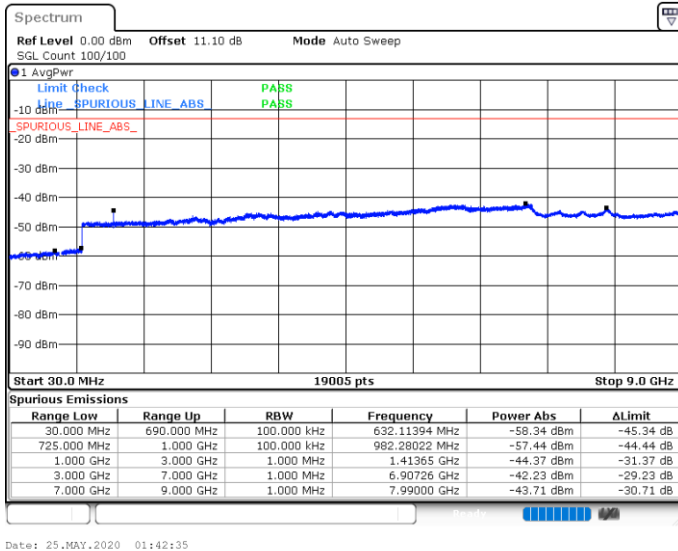
Middle Channel / QPSK

Middle Channel / 16QAM



Highest Channel / QPSK

Highest Channel / 16QAM

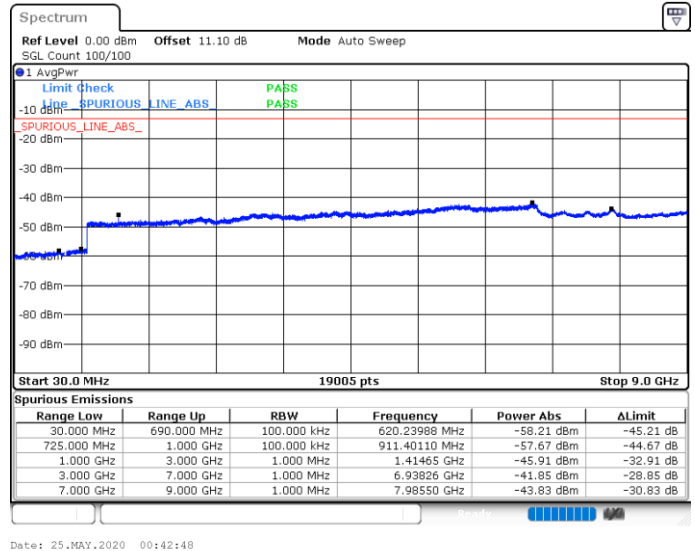
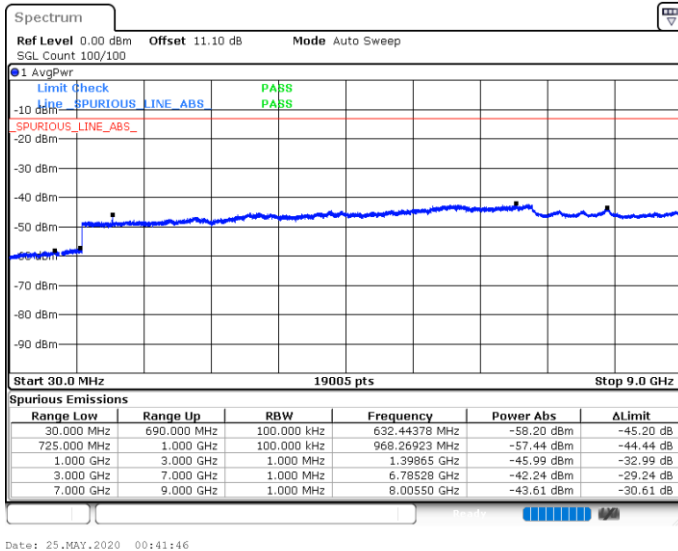




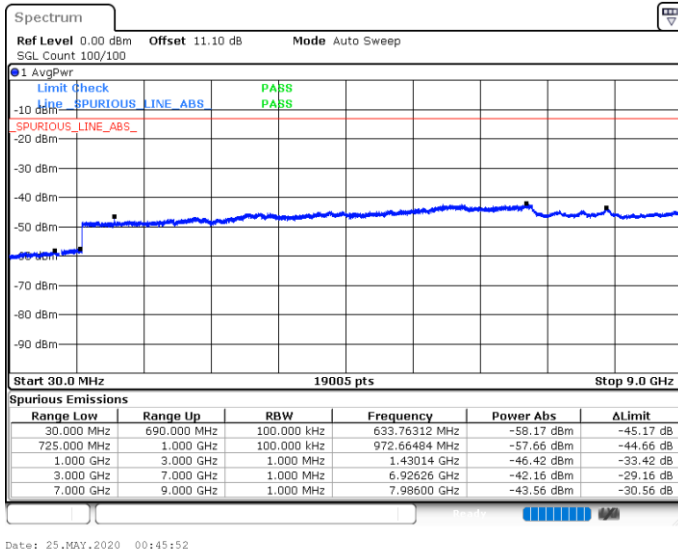
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM



Highest Channel / 64QAM

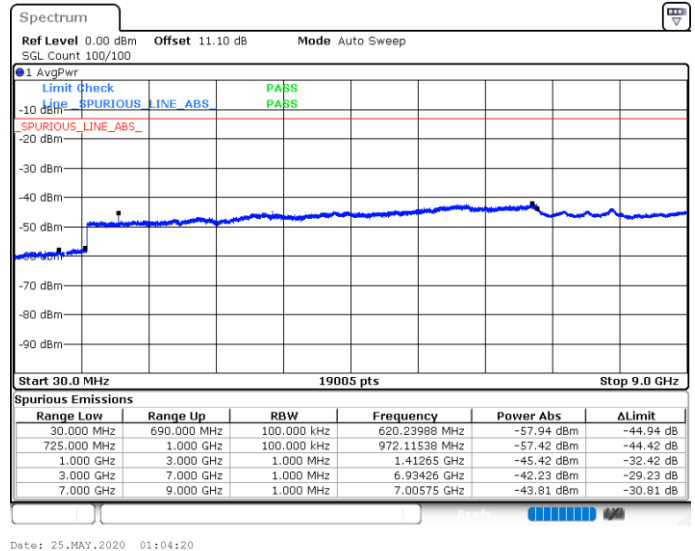
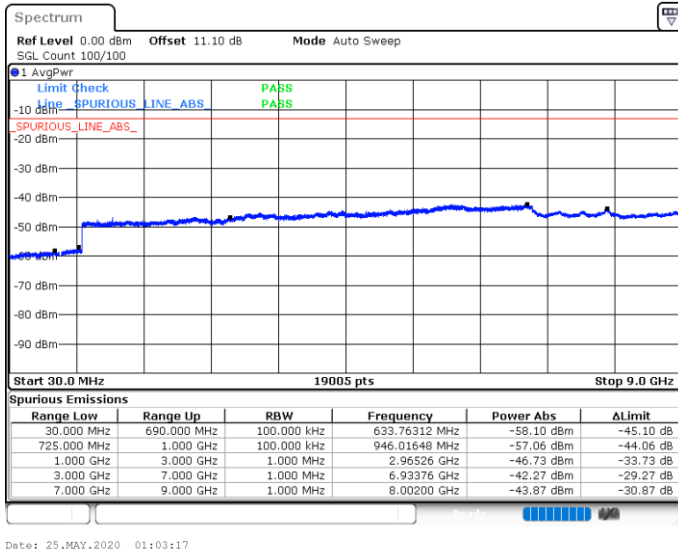




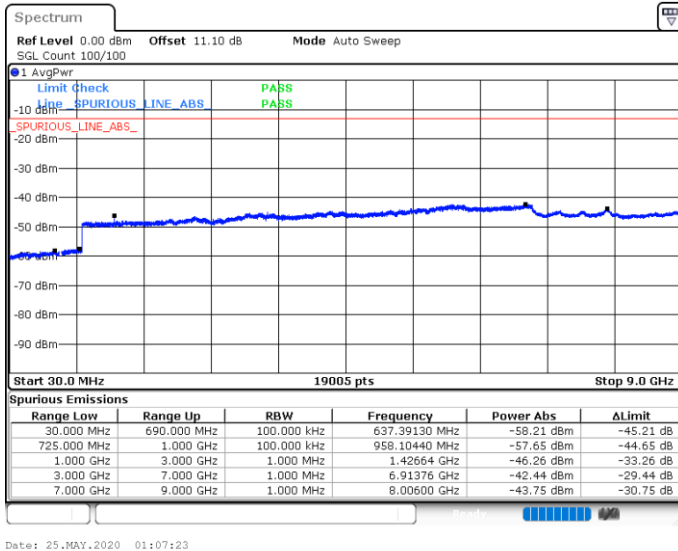
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM



Highest Channel / 64QAM

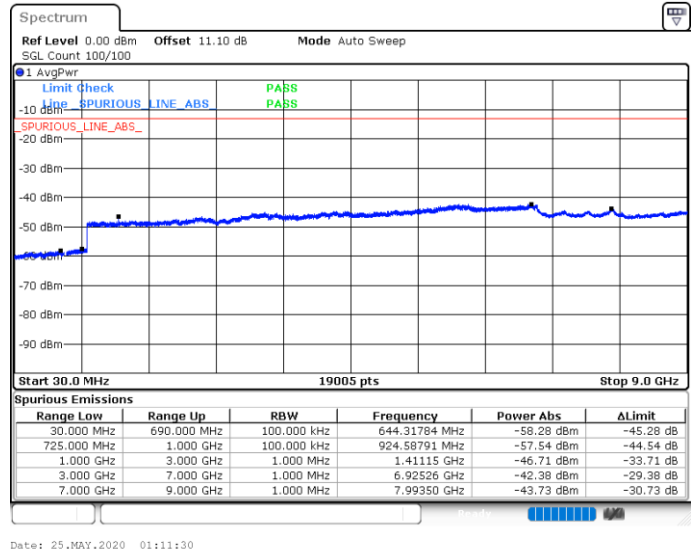
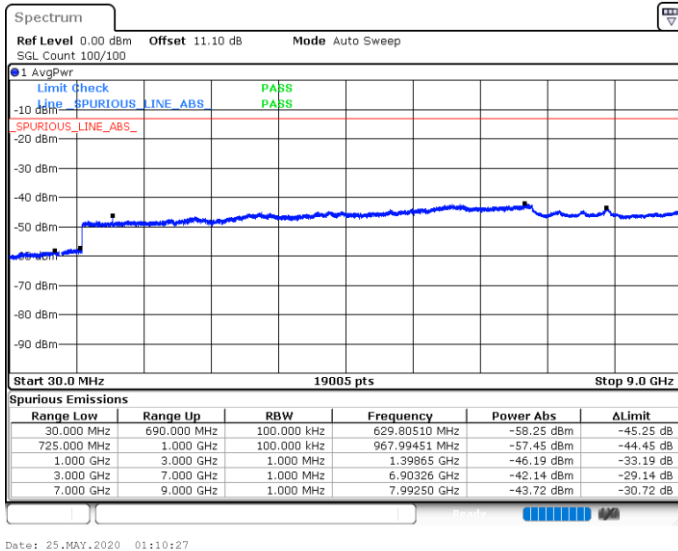




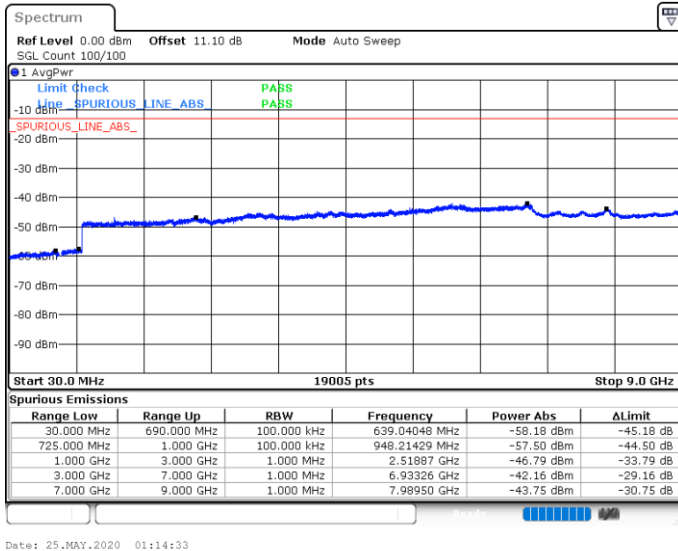
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM



Highest Channel / 64QAM

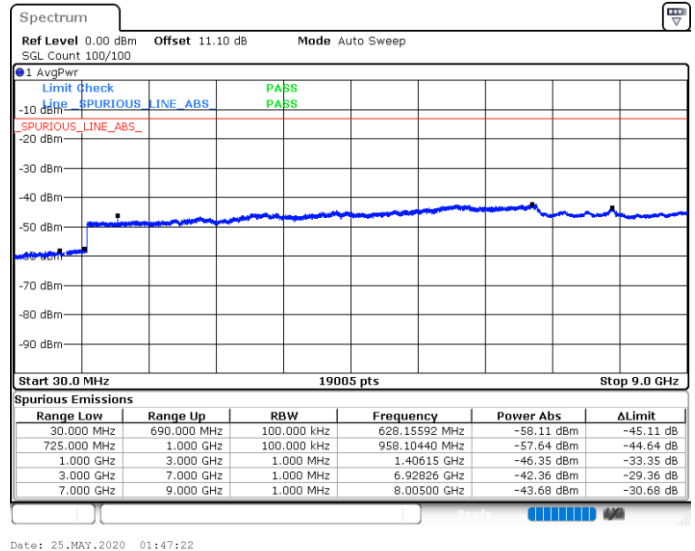
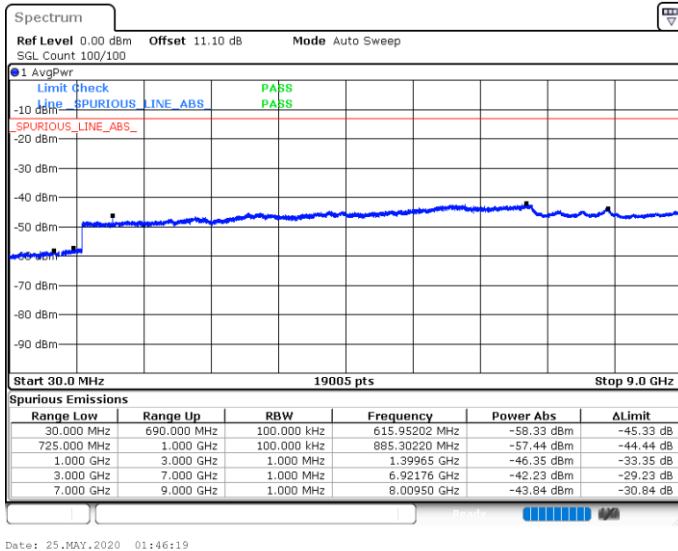




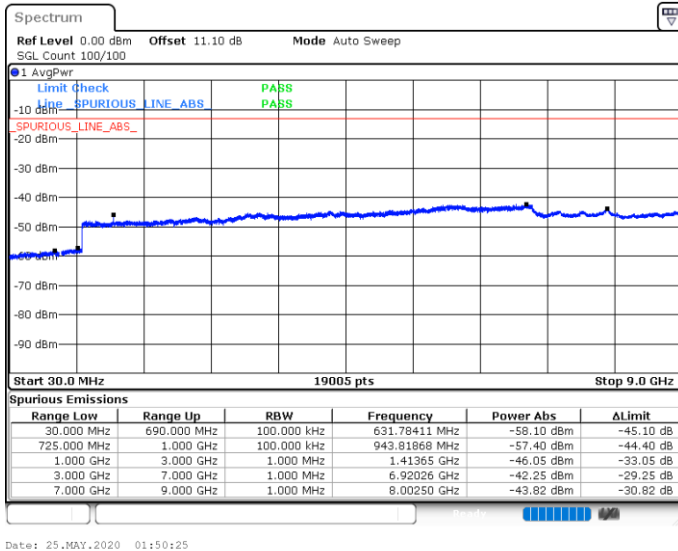
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

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	0.0059	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0054	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0061	
0	Normal Voltage	0.0001	
-10	Normal Voltage	0.0062	
-20	Normal Voltage	0.0079	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0048	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0075	

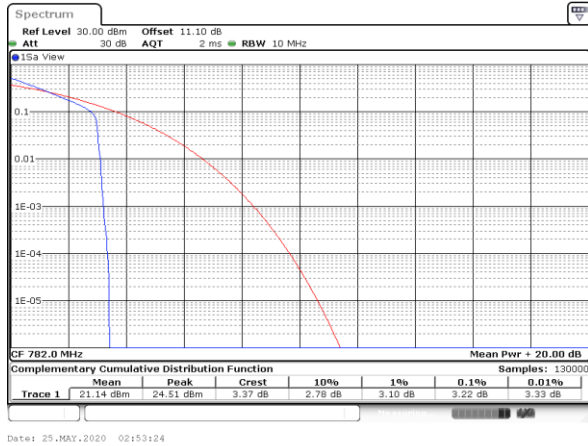
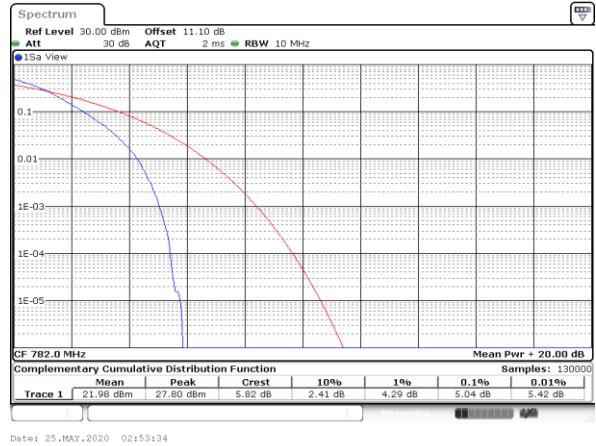
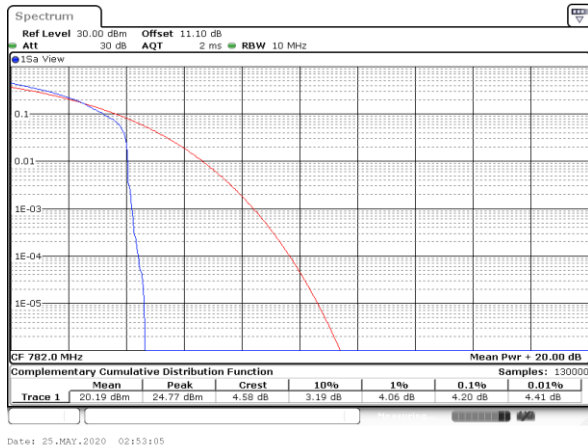
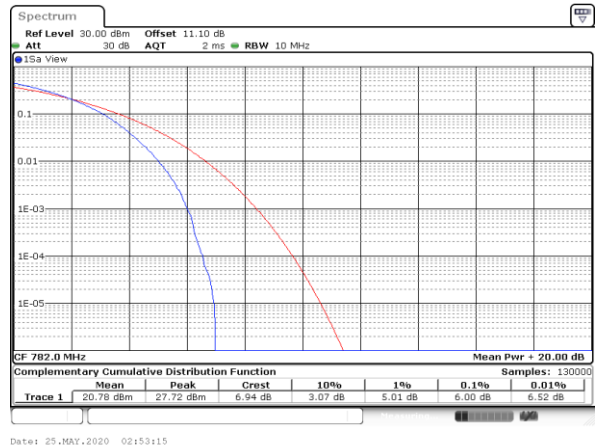
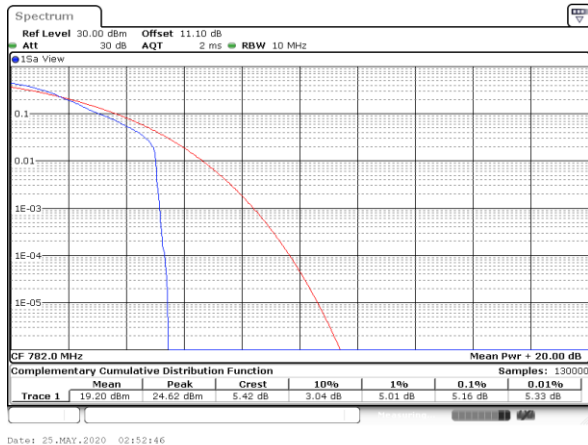
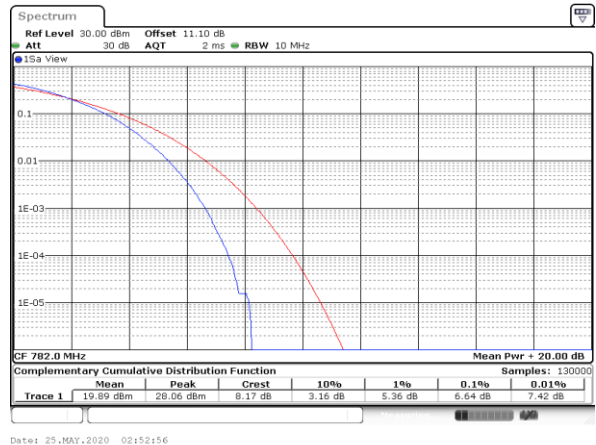
Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. 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	3.22	5.04	4.20	6.00	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	5.16	6.64	-	-	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK
Middle Channel / 1RB

Middle Channel / Full RB

LTE Band 13 / 10MHz / 16QAM
Middle Channel / 1RB

Middle Channel / Full RB

LTE Band 13 / 10MHz / 64QAM
Middle Channel / 1RB

Middle Channel / Full RB


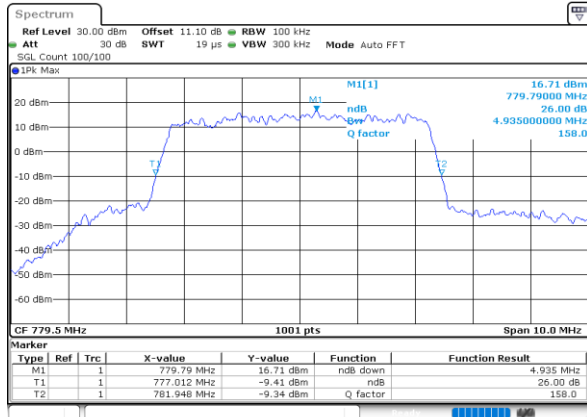
**26dB Bandwidth**

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	-	-	-	-	4.94	4.81	-	-	-	-	-	-
Middle CH	-	-	-	-	4.96	4.89	9.63	9.71	-	-	-	-
Highest CH	-	-	-	-	4.96	4.90	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.88	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.94	-	9.65	-	-	-	-	-
Highest CH	-	-	-	-	4.87	-	-	-	-	-	-	-

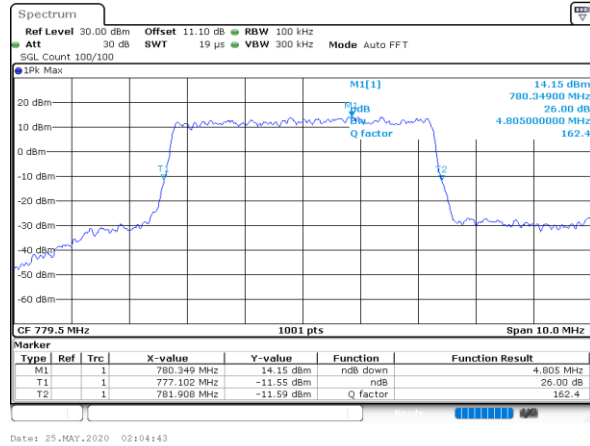


LTE Band 13

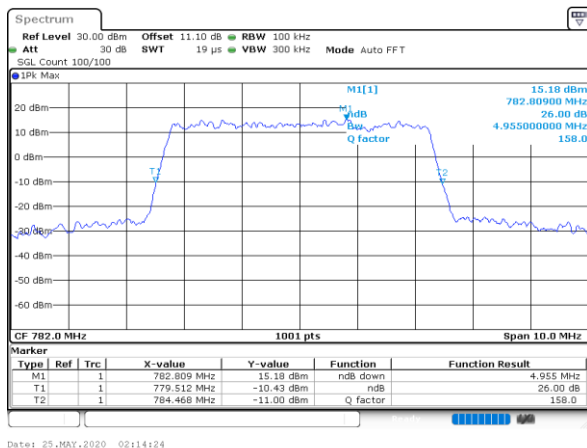
Lowest Channel / 5MHz / QPSK



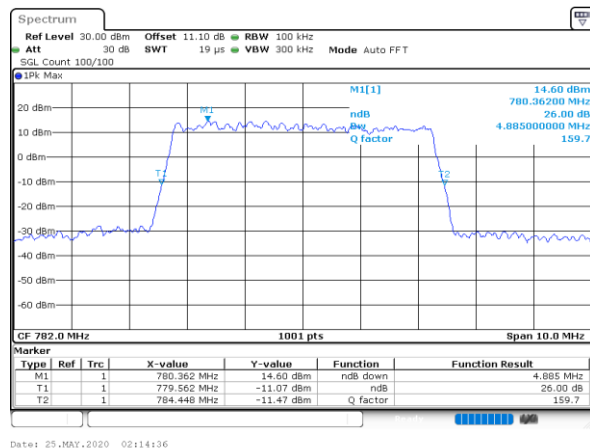
Lowest Channel / 5MHz / 16QAM



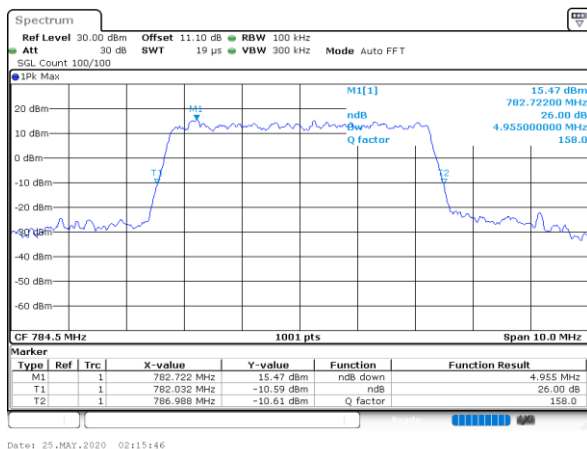
Middle Channel / 5MHz / QPSK



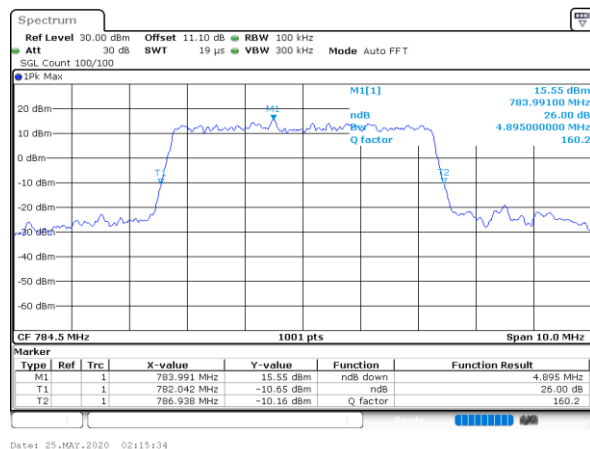
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



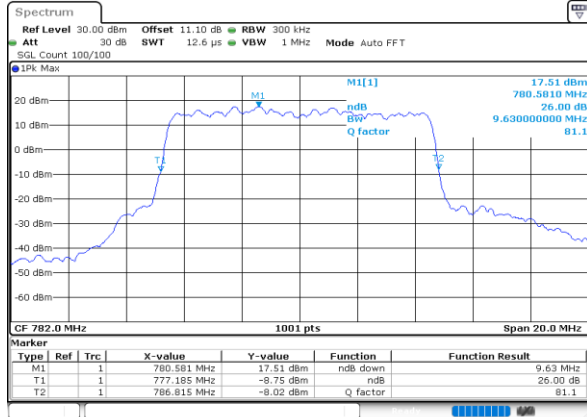
Highest Channel / 5MHz / 16QAM



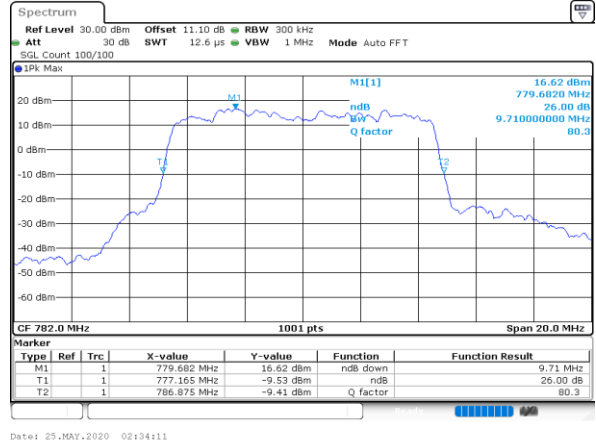


LTE Band 13

Middle Channel / 10MHz / QPSK



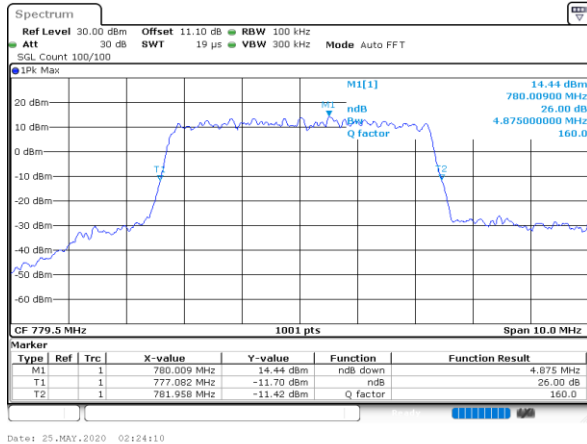
Middle Channel / 10MHz / 16QAM



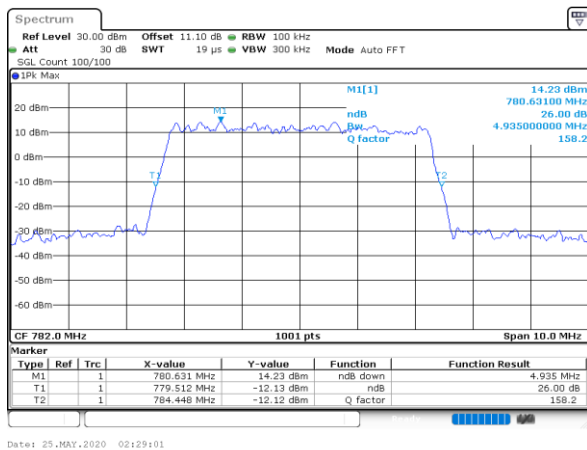


LTE Band 13

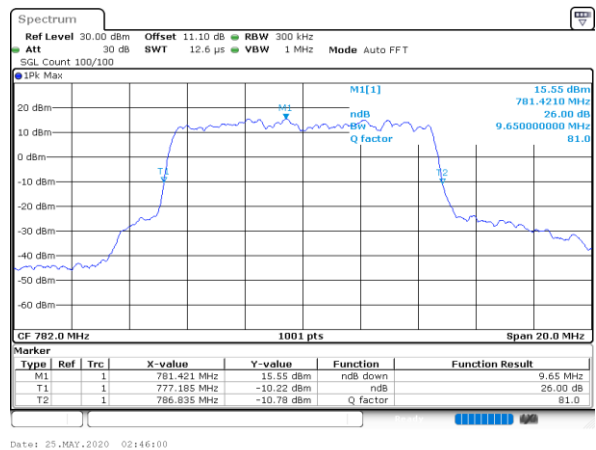
Lowest Channel / 5MHz / 64QAM



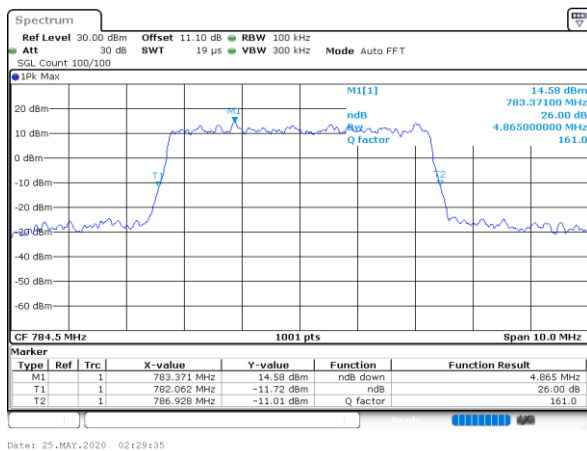
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



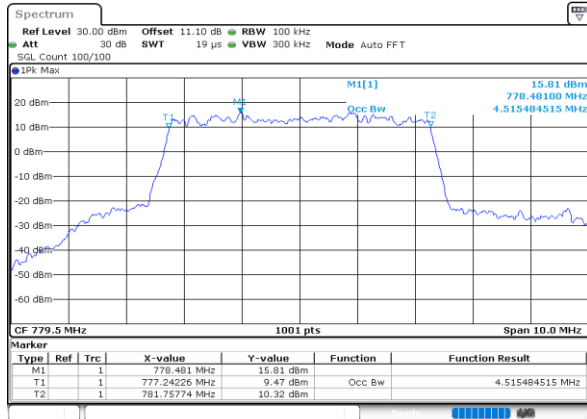
**Occupied Bandwidth**

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	-	-	-	-	4.52	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	4.50	8.95	9.03	-	-	-	-
Highest CH	-	-	-	-	4.49	4.48	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.49	-	-	-	-	-	-	-

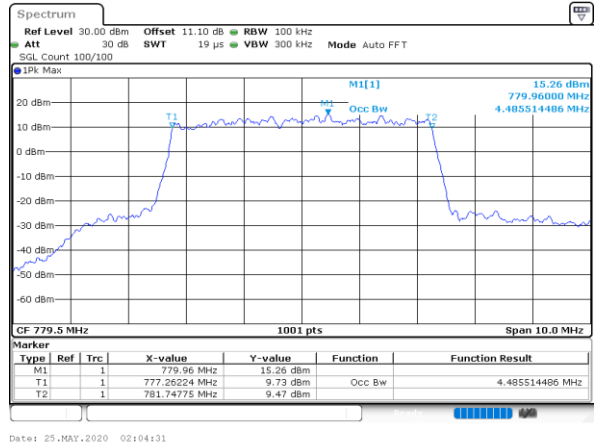


LTE Band 13

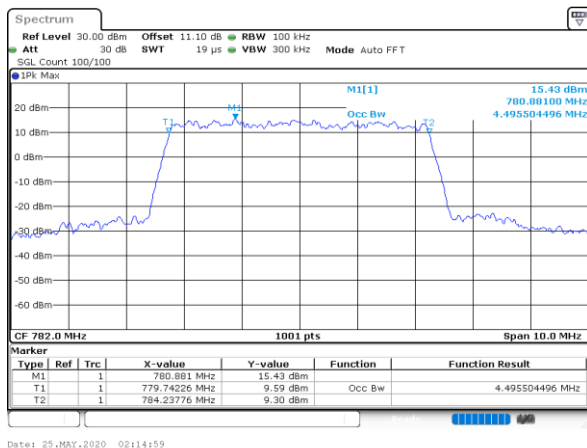
Lowest Channel / 5MHz / QPSK



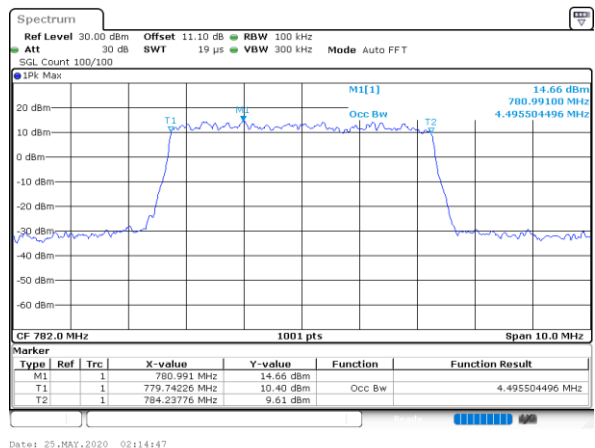
Lowest Channel / 5MHz / 16QAM



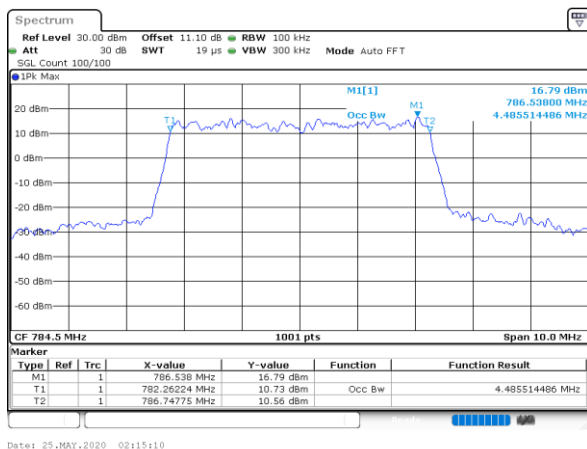
Middle Channel / 5MHz / QPSK



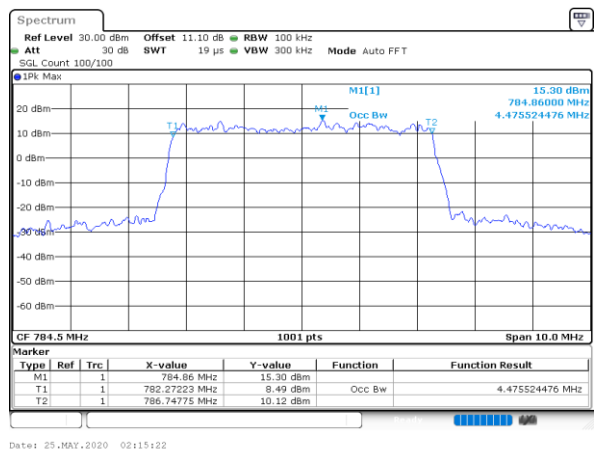
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



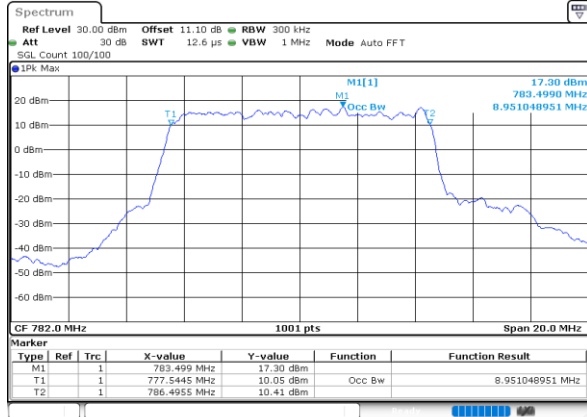
Highest Channel / 5MHz / 16QAM



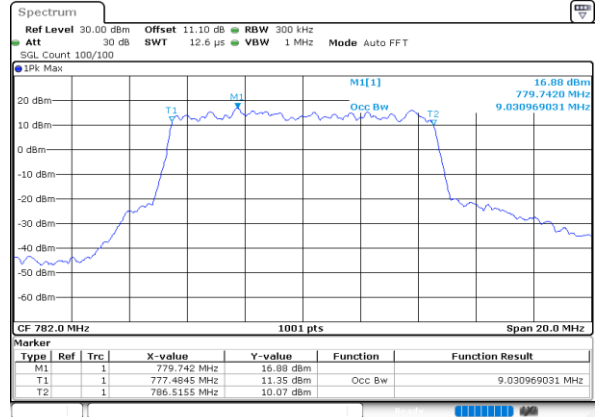


LTE Band 13

Middle Channel / 10MHz / QPSK

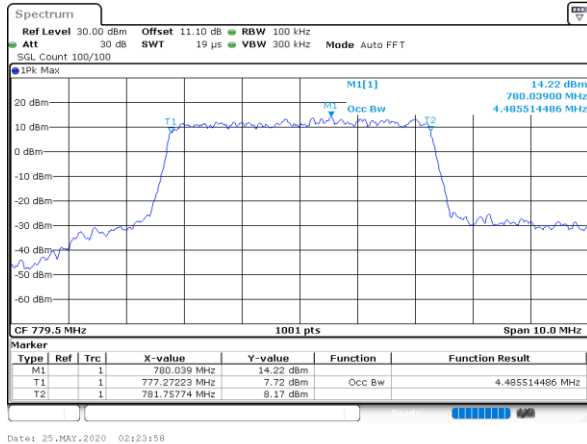


Middle Channel / 10MHz / 16QAM

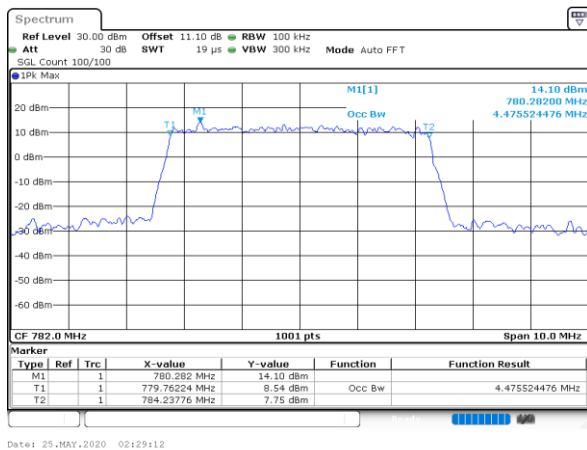


LTE Band 13

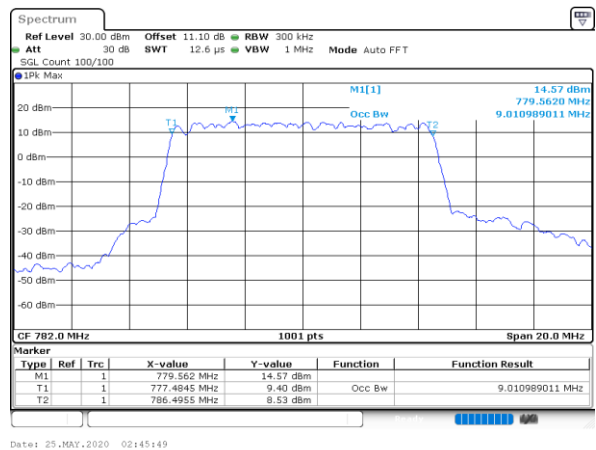
Lowest Channel / 5MHz / 64QAM



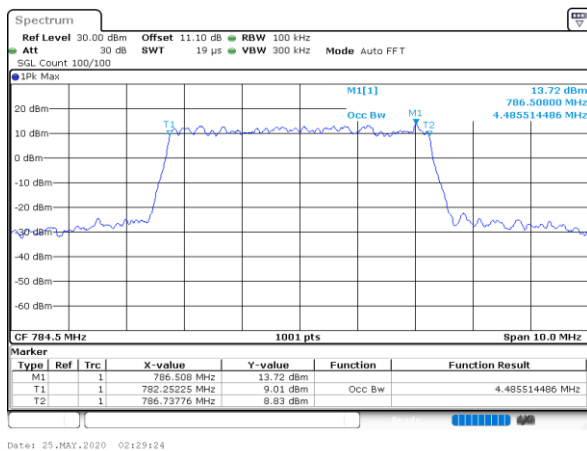
Middle Channel / 5MHz / 64QAM

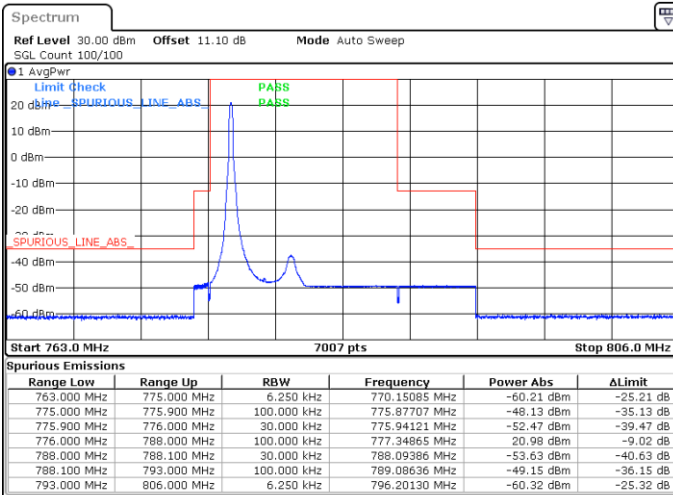


Middle Channel / 10MHz / 64QAM

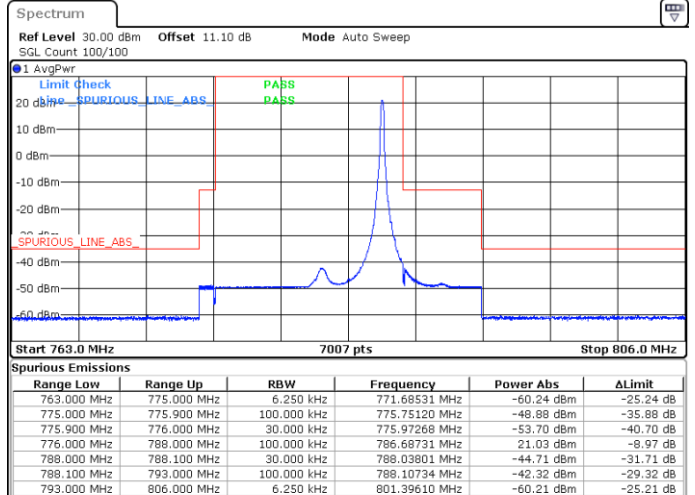


Highest Channel / 5MHz / 64QAM

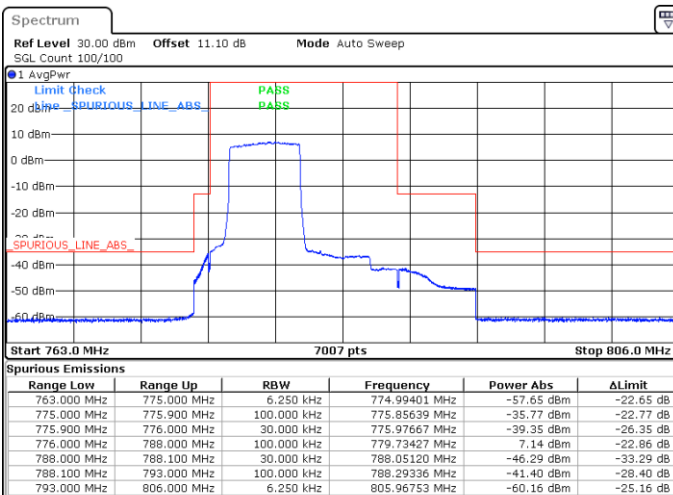


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB**

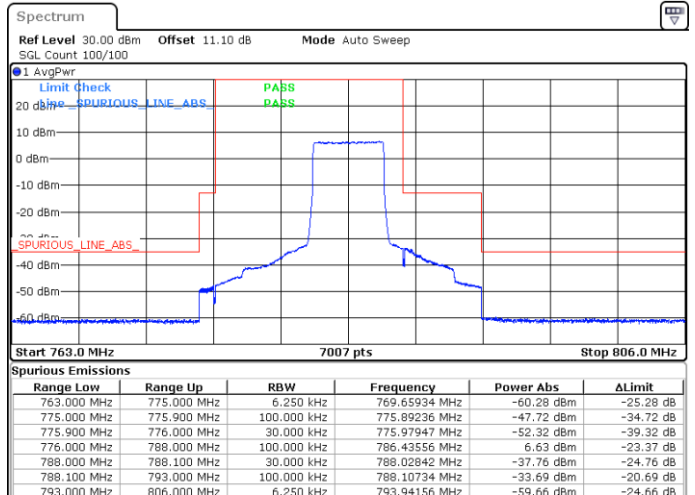
Date: 25.MAY.2020 02:11:35



Date: 25.MAY.2020 02:22:26

Lowest Band Edge / Full RB**Highest Band Edge / Full RB**

Date: 25.MAY.2020 02:06:35



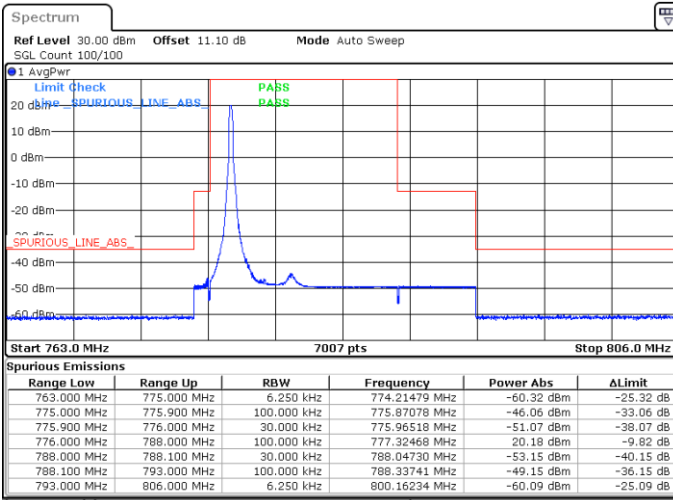
Date: 25.MAY.2020 02:17:26



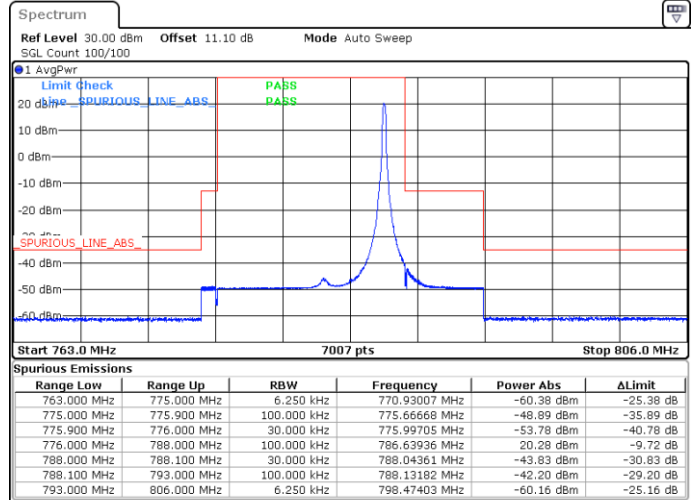
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



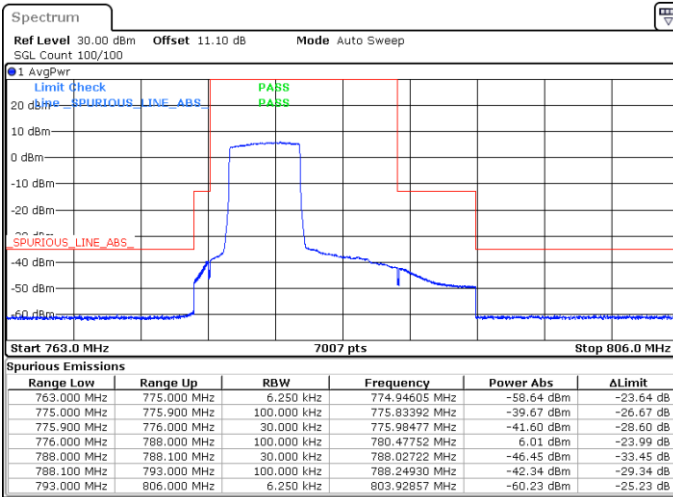
Date: 25.MAY.2020 02:09:55



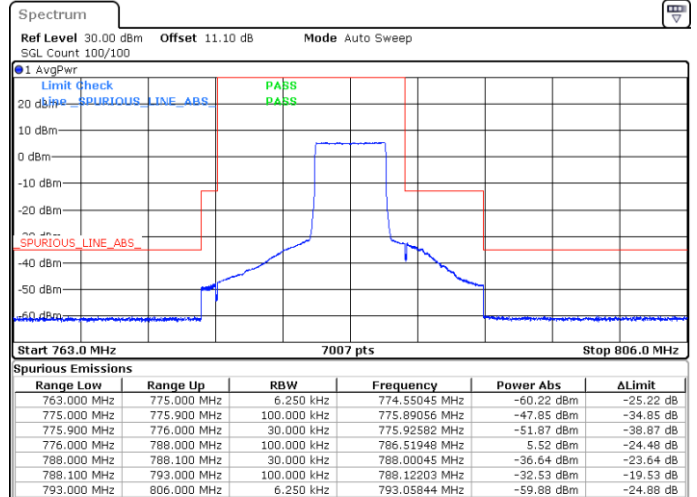
Date: 25.MAY.2020 02:20:46

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 25.MAY.2020 02:08:15



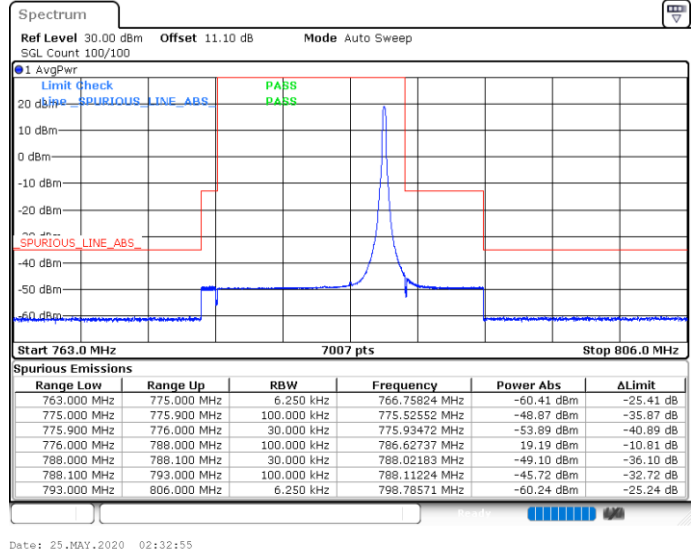
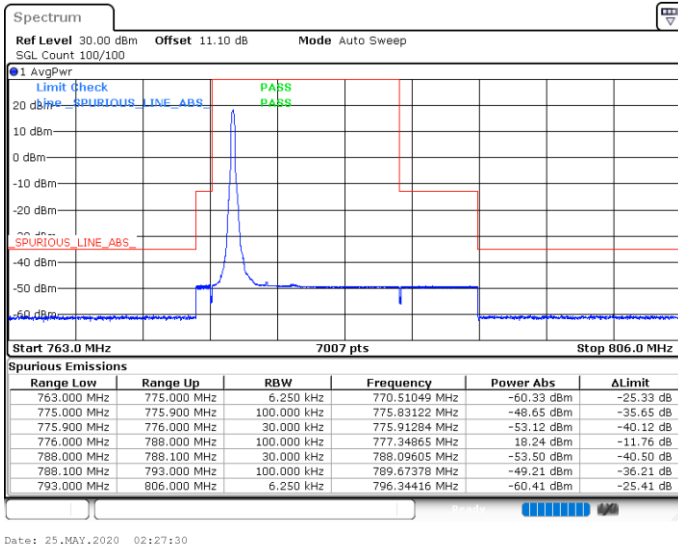
Date: 25.MAY.2020 02:19:06



LTE Band 13 / 5MHz / 64QAM

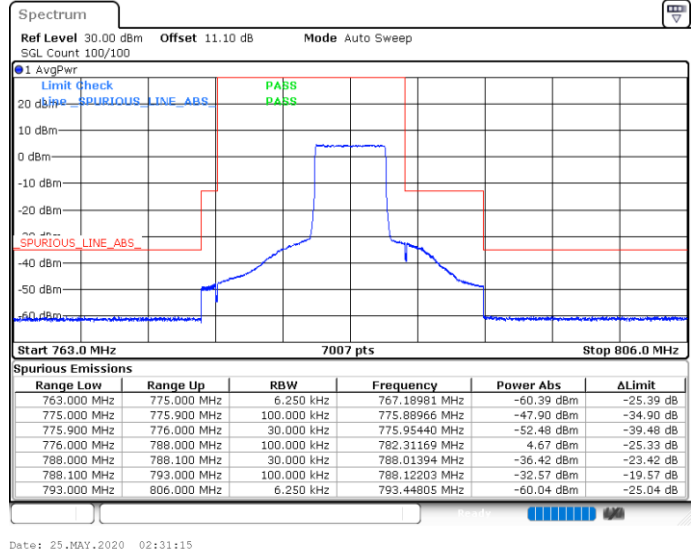
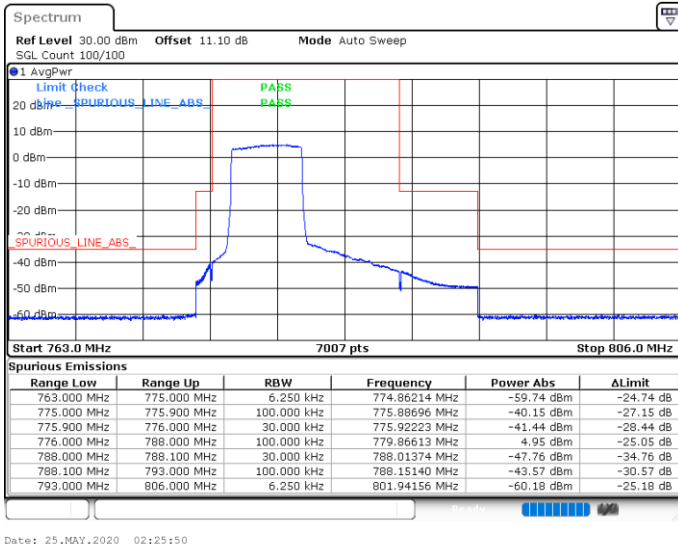
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

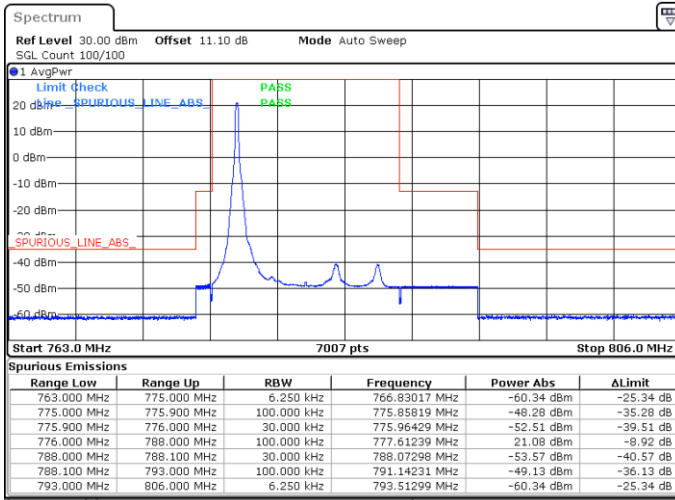




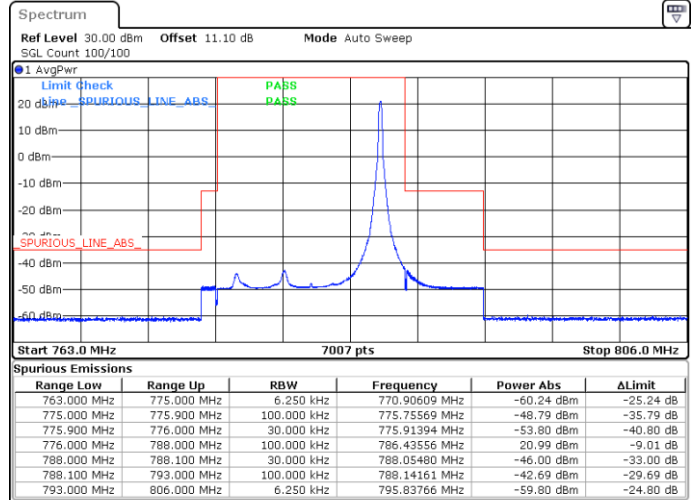
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

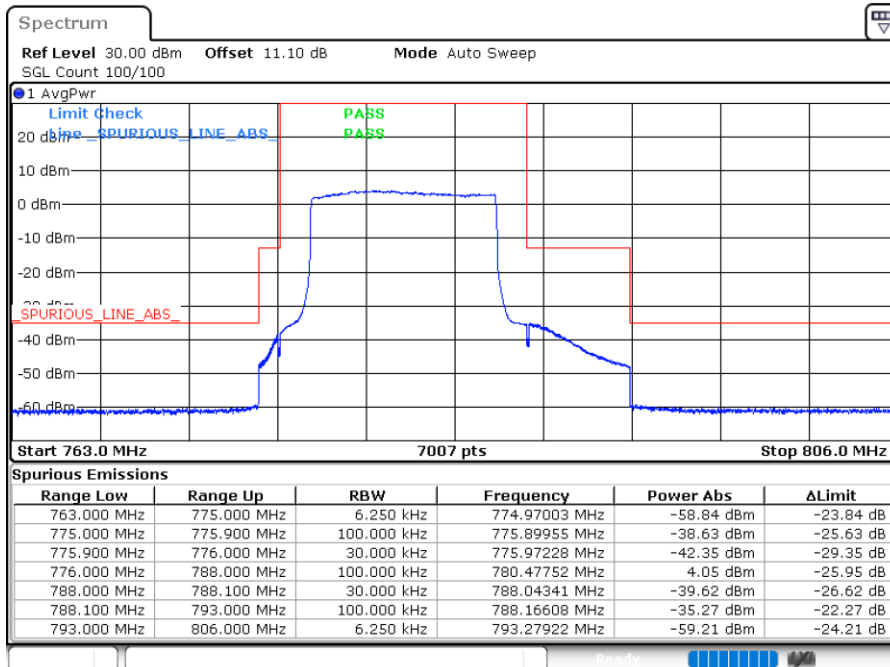


Date: 25.MAY.2020 02:41:00



Date: 25.MAY.2020 02:42:39

Band Edge / Full RB



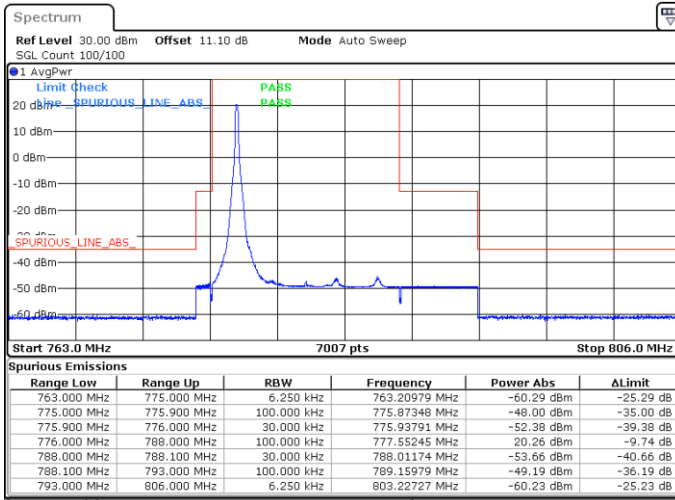
Date: 25.MAY.2020 02:36:01



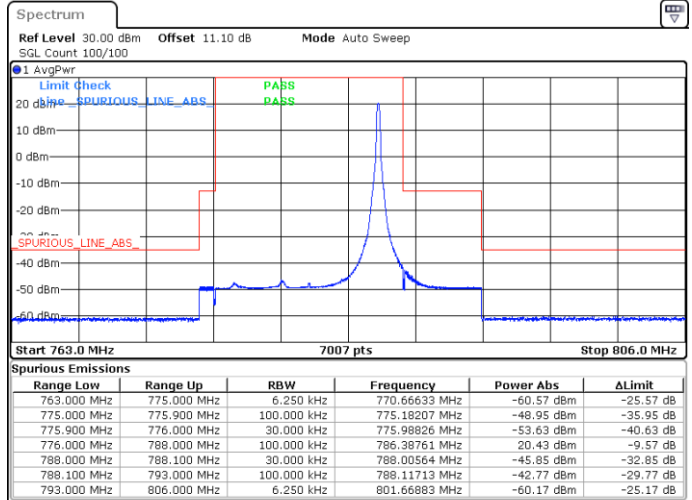
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

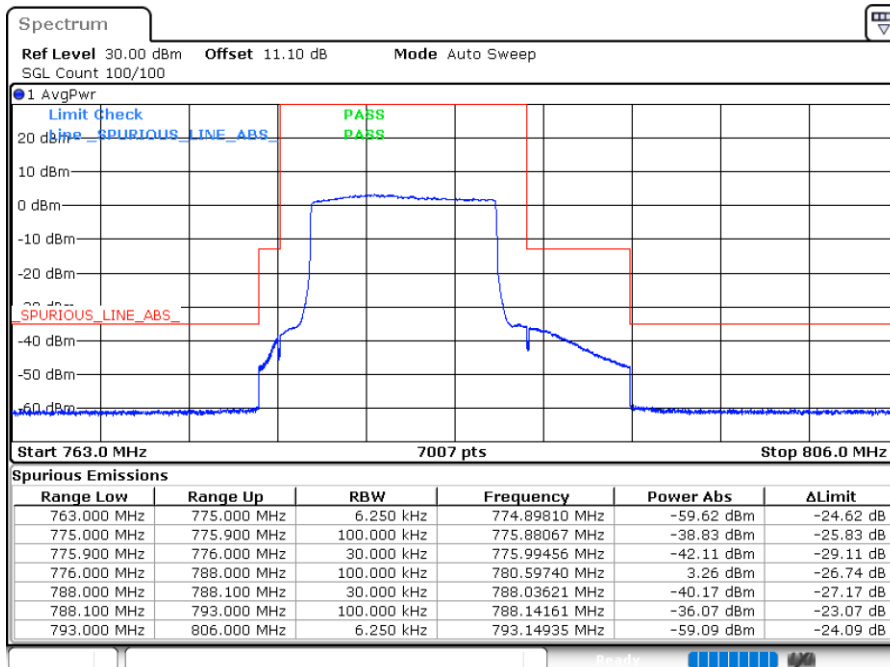


Date: 25.MAY.2020 02:39:20



Date: 25.MAY.2020 02:44:19

Band Edge / Full RB



Date: 25.MAY.2020 02:37:41