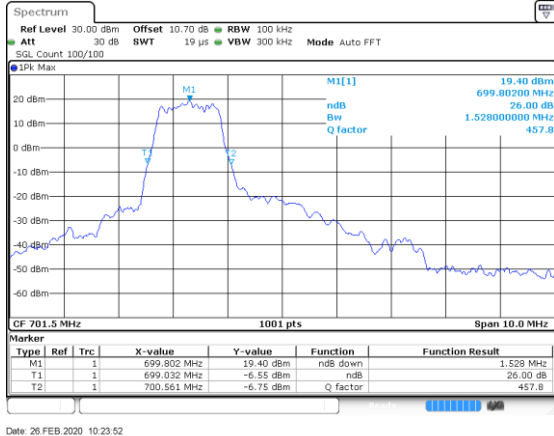


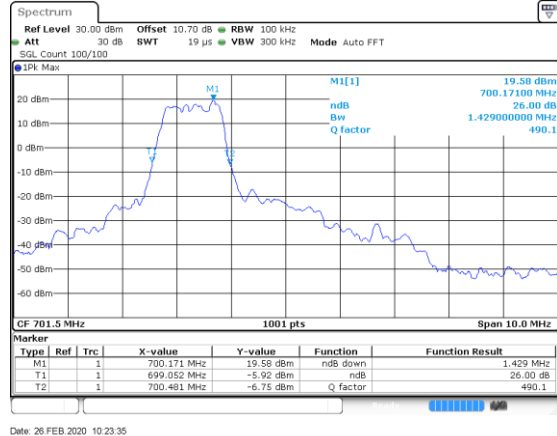


LTE Band 12

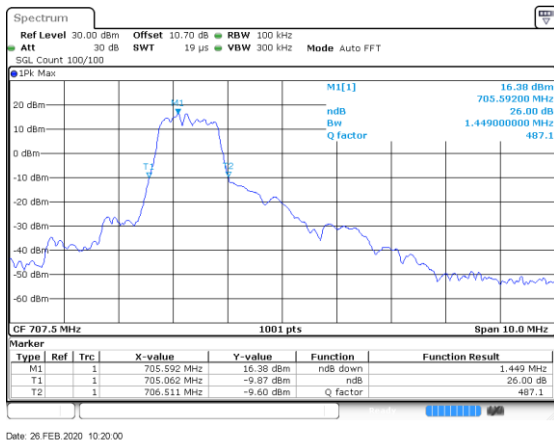
Lowest Channel / 5MHz / QPSK



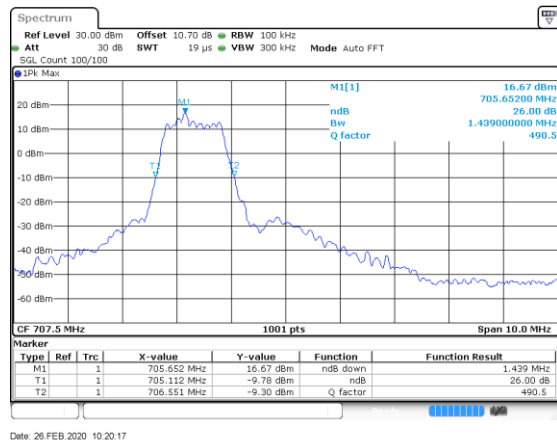
Lowest Channel / 5MHz / 16QAM



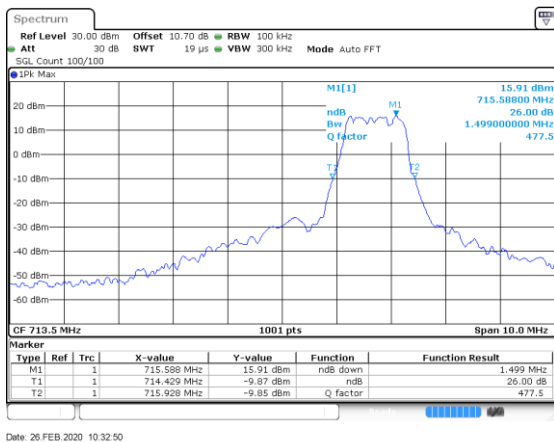
Middle Channel / 5MHz / QPSK



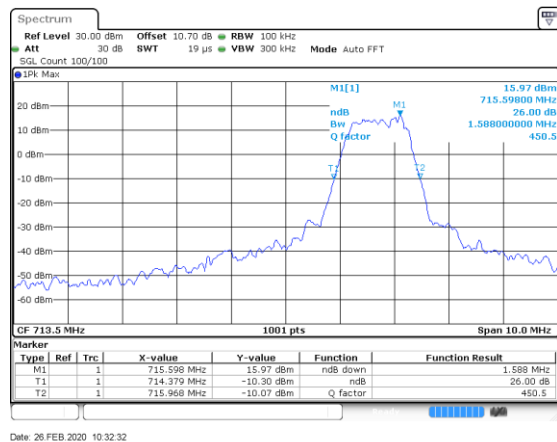
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



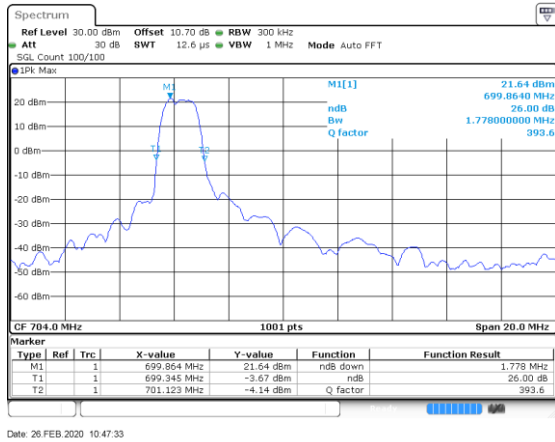
Highest Channel / 5MHz / 16QAM



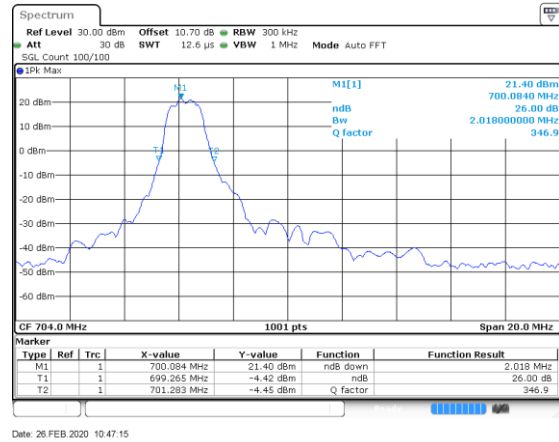


LTE Band 12

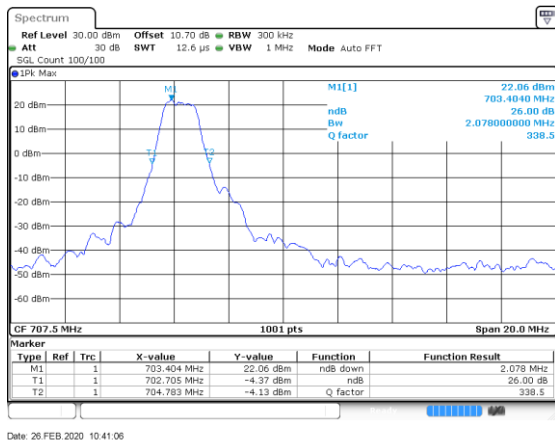
Lowest Channel / 10MHz / QPSK



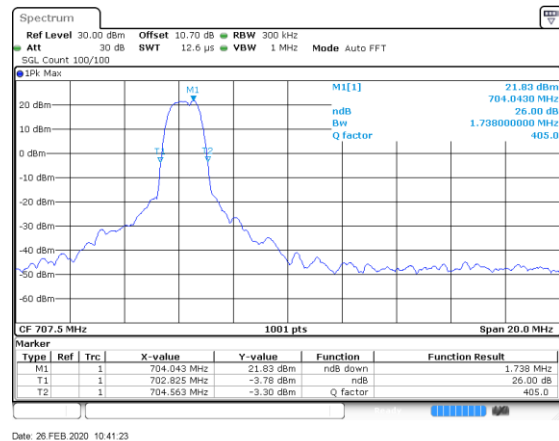
Lowest Channel / 10MHz / 16QAM



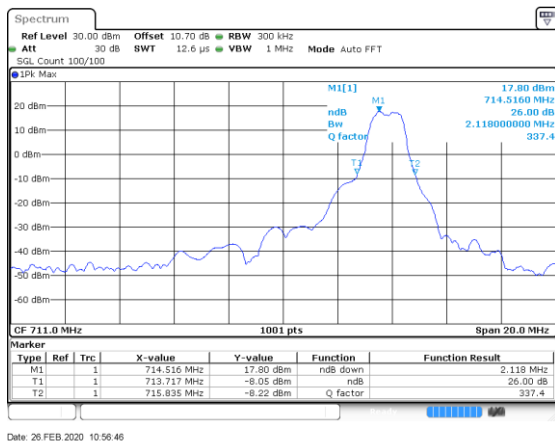
Middle Channel / 10MHz / QPSK



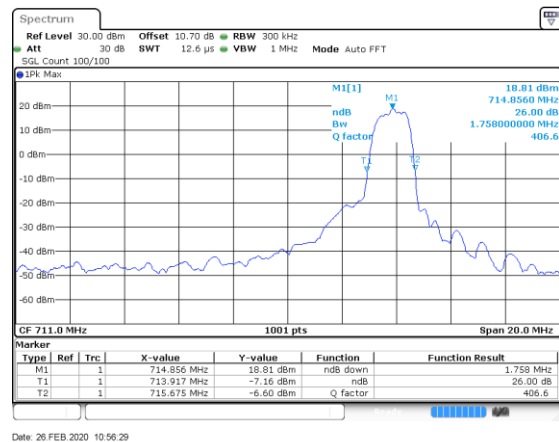
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM





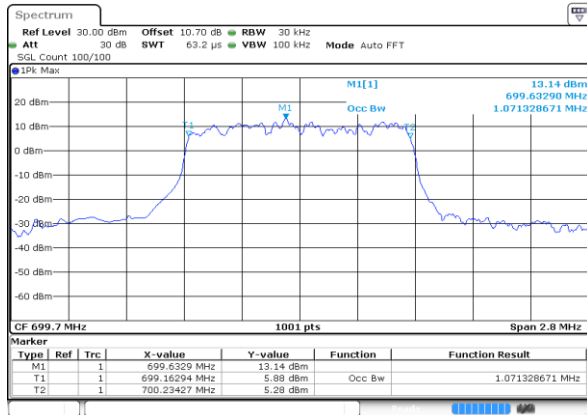
Occupied Bandwidth

Mode	LTE Band 12 : 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	1.07	1.10	1.17	1.19	1.16	1.19	1.52	1.54	-	-	-	-
Middle CH	1.08	1.09	1.57	1.22	1.18	1.17	1.42	1.46	-	-	-	-
Highest CH	1.10	1.09	1.20	1.16	1.17	1.14	1.44	1.70	-	-	-	-

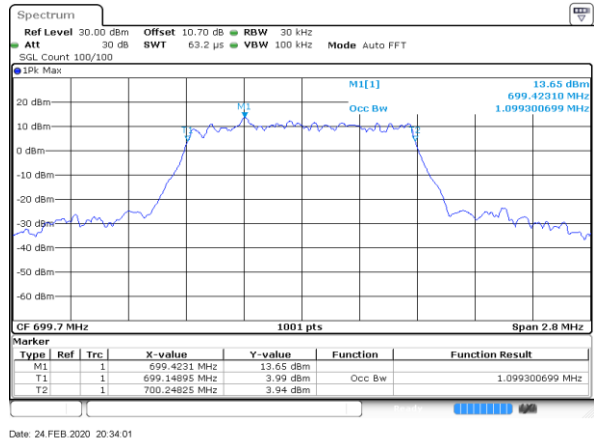


LTE Band 12

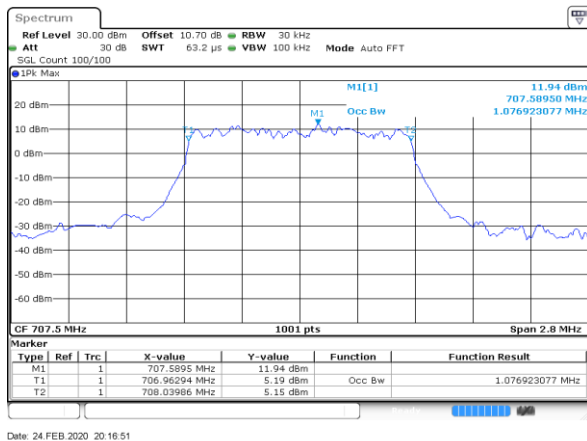
Lowest Channel / 1.4MHz / QPSK



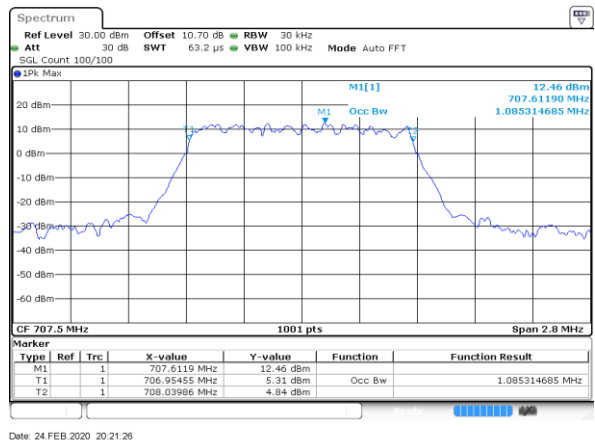
Lowest Channel / 1.4MHz / 16QAM



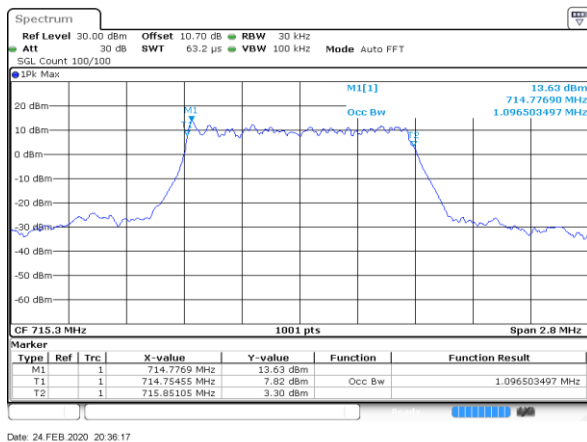
Middle Channel / 1.4MHz / QPSK



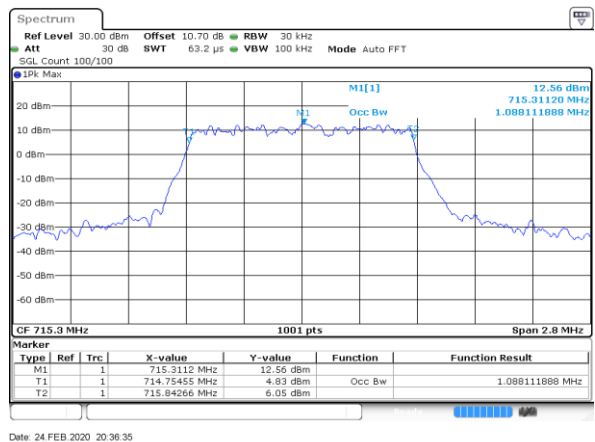
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



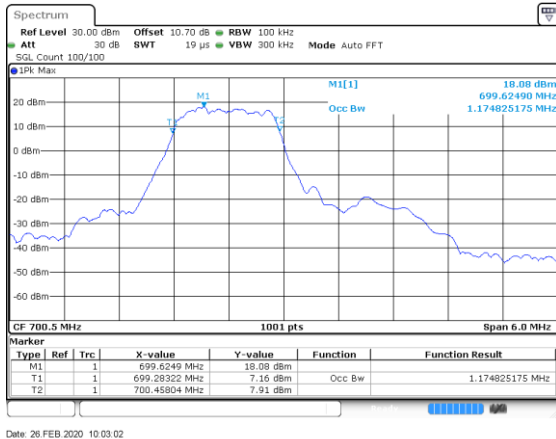
Highest Channel / 1.4MHz / 16QAM



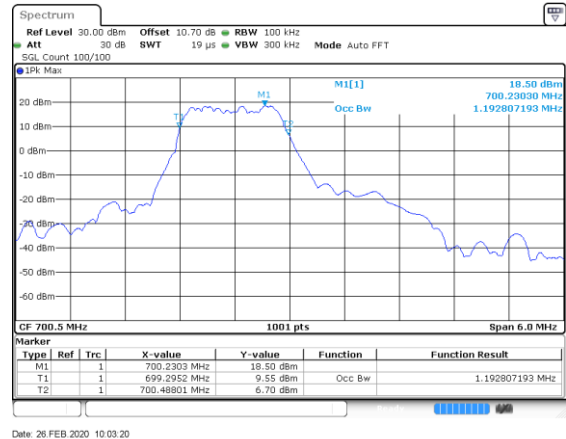


LTE Band 12

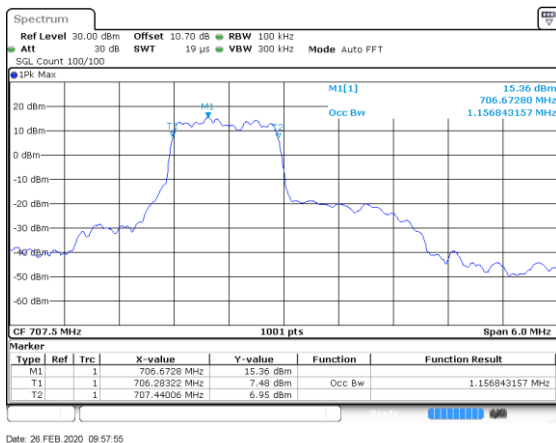
Lowest Channel / 3MHz / QPSK



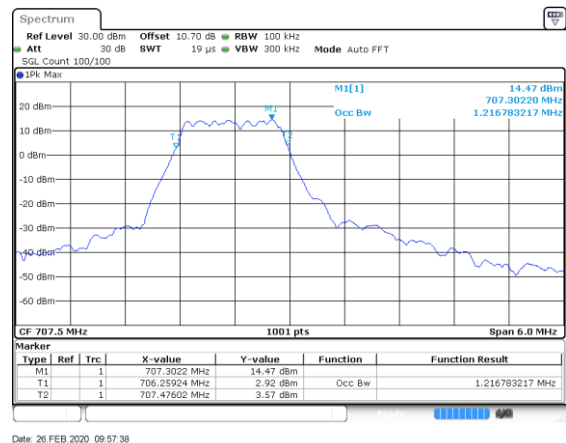
Lowest Channel / 3MHz / 16QAM



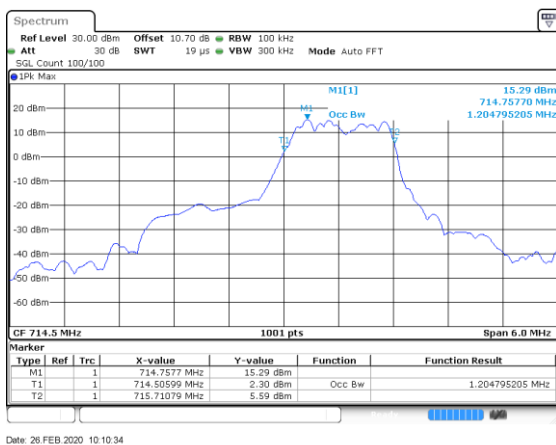
Middle Channel / 3MHz / QPSK



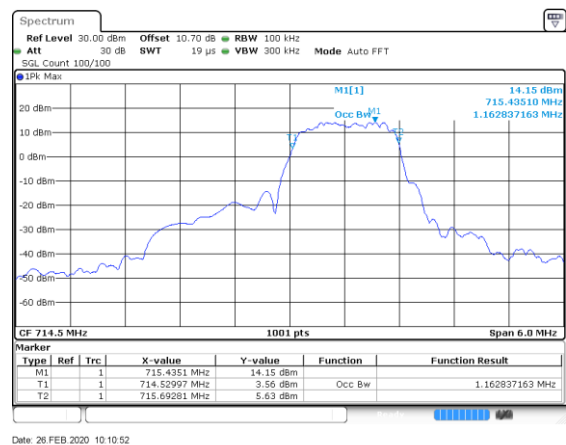
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



Highest Channel / 3MHz / 16QAM





LTE Band 12

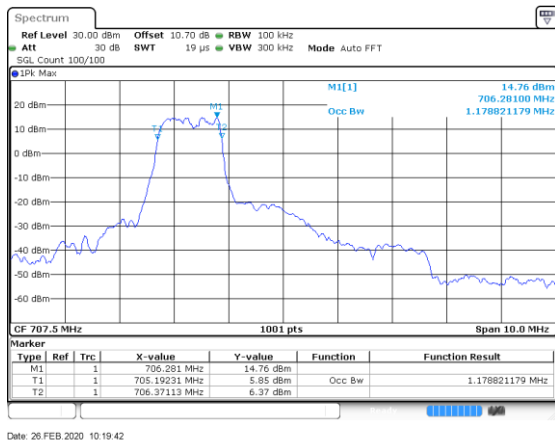
Lowest Channel / 5MHz / QPSK



Lowest Channel / 5MHz / 16QAM



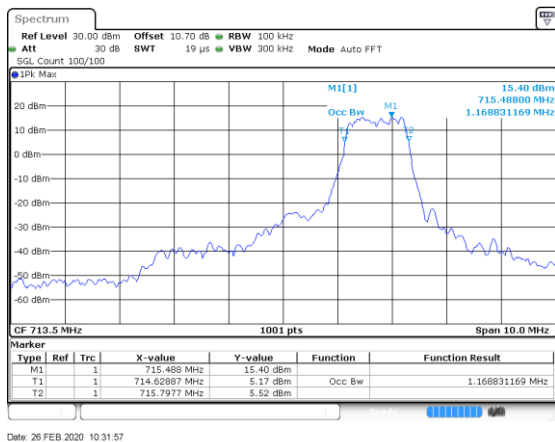
Middle Channel / 5MHz / QPSK



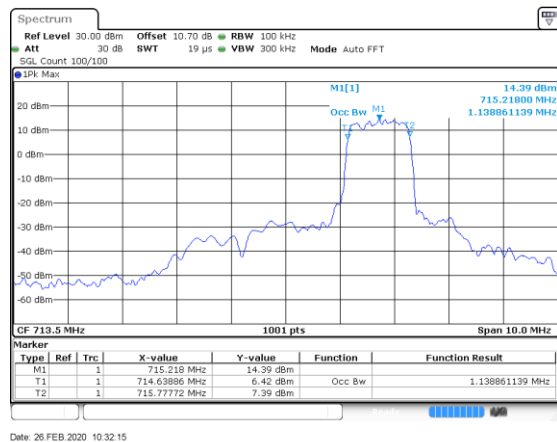
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



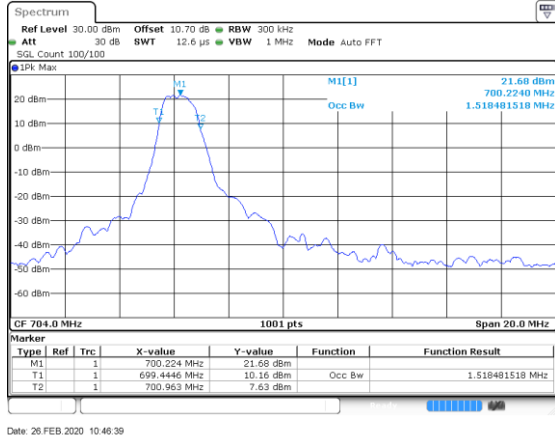
Highest Channel / 5MHz / 16QAM



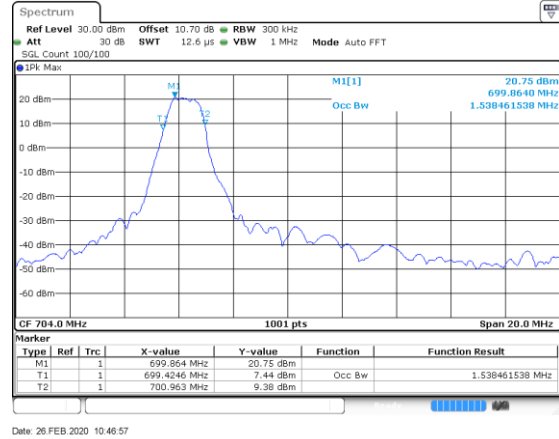


LTE Band 12

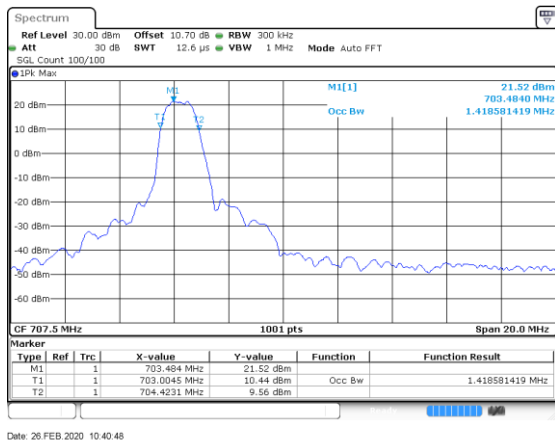
Lowest Channel / 10MHz / QPSK



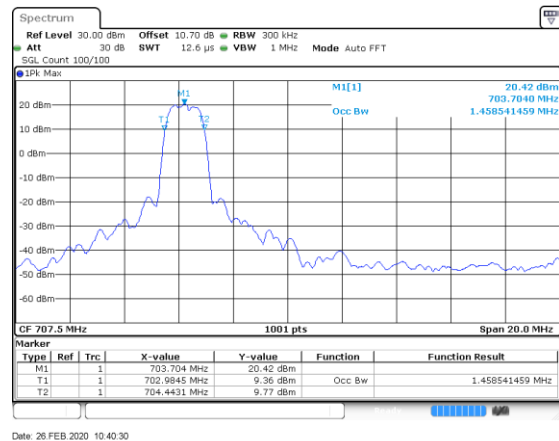
Lowest Channel / 10MHz / 16QAM



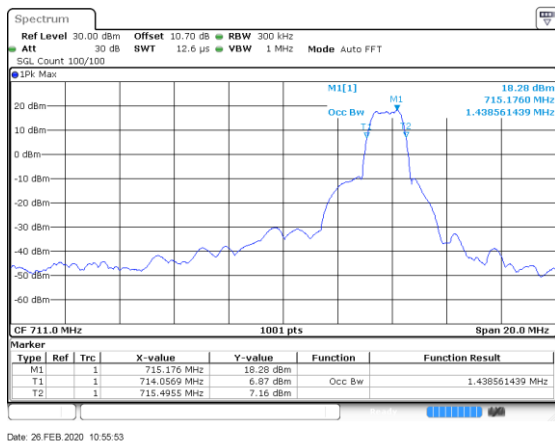
Middle Channel / 10MHz / QPSK



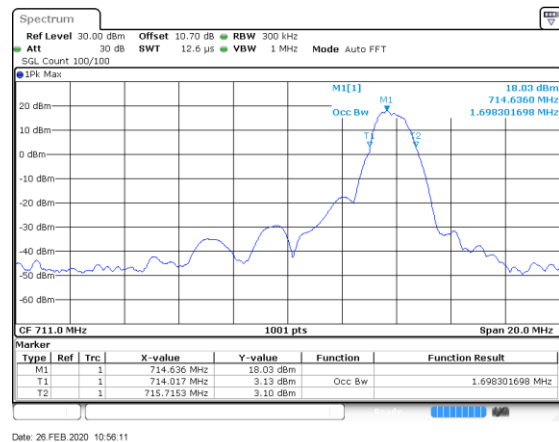
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

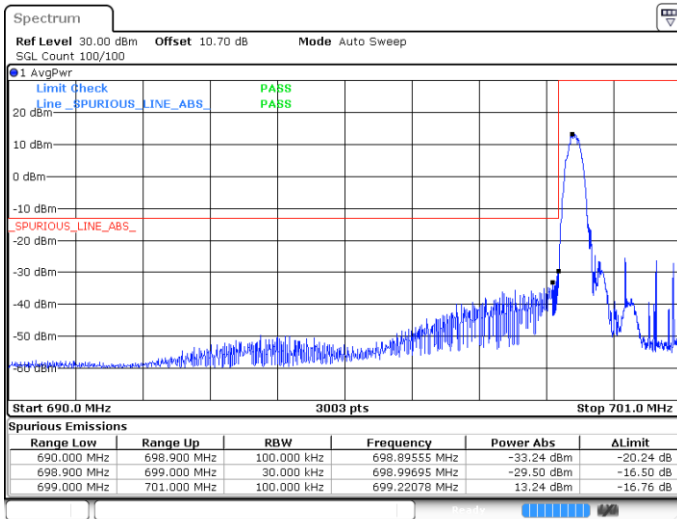




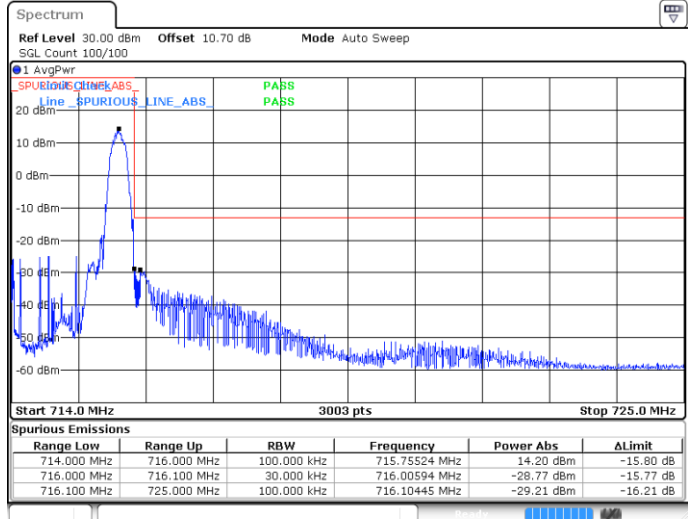
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

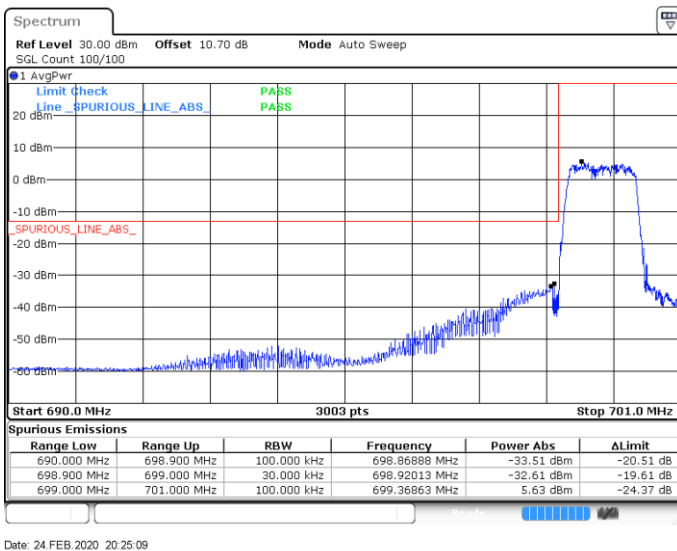
Lowest Band Edge / 1 RB



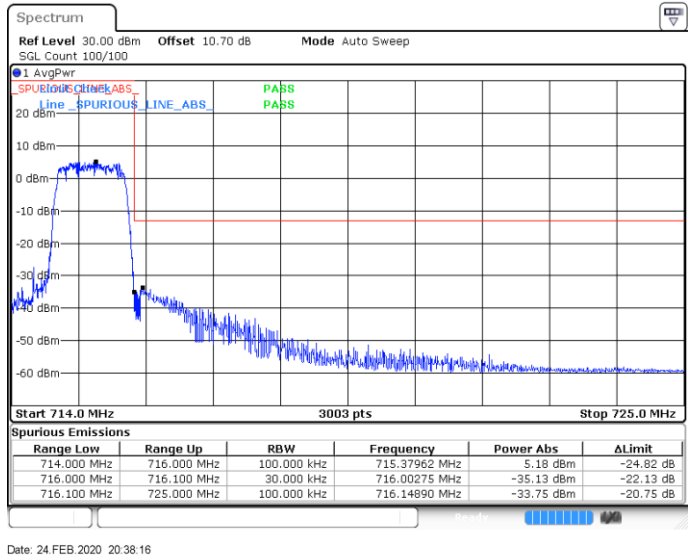
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

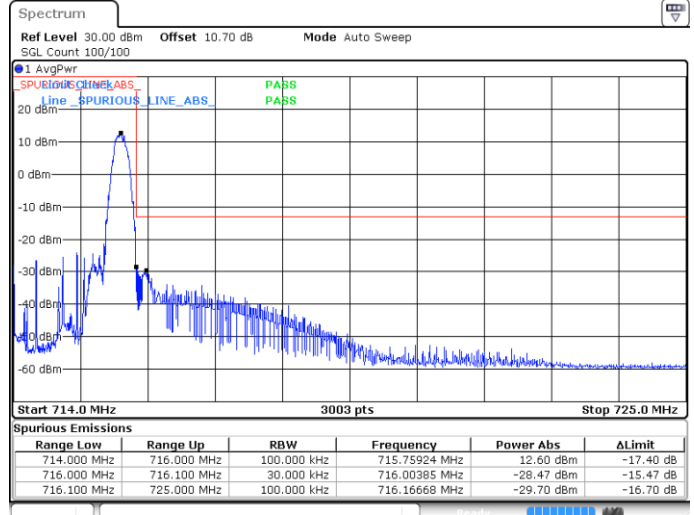
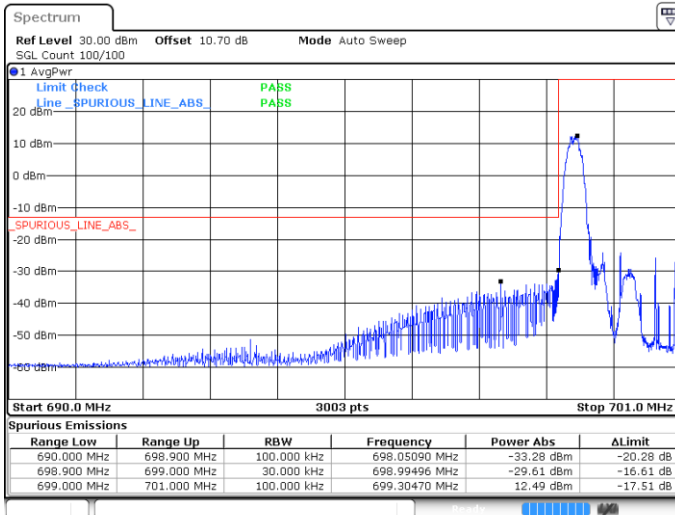




LTE Band 12 / 1.4MHz / 16QAM

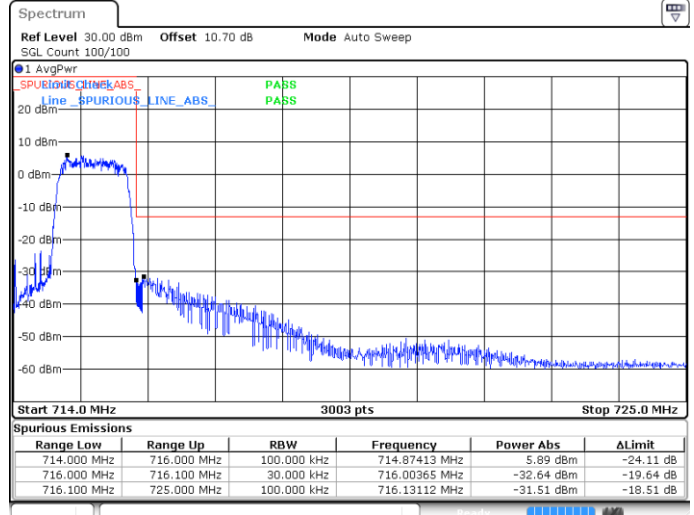
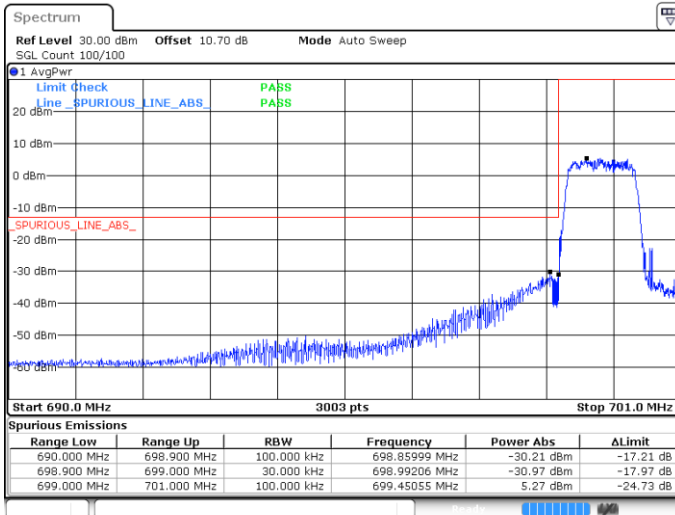
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

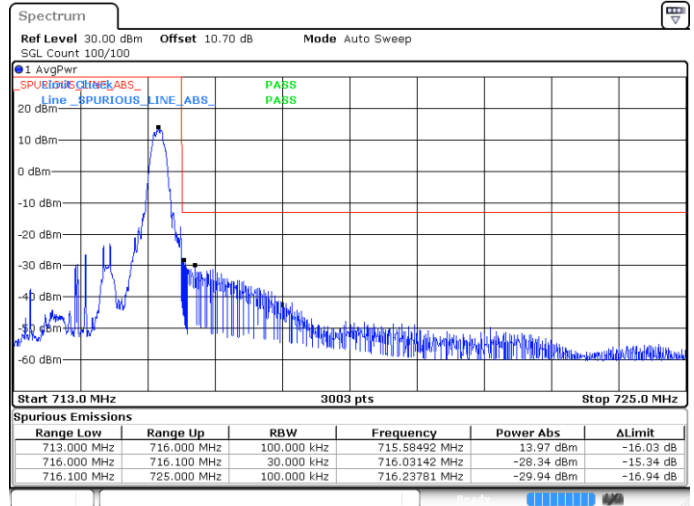
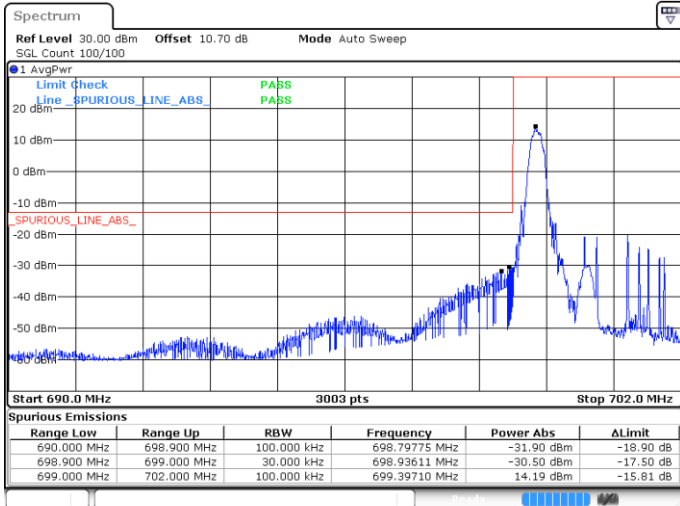




LTE Band 12 / 3MHz / QPSK

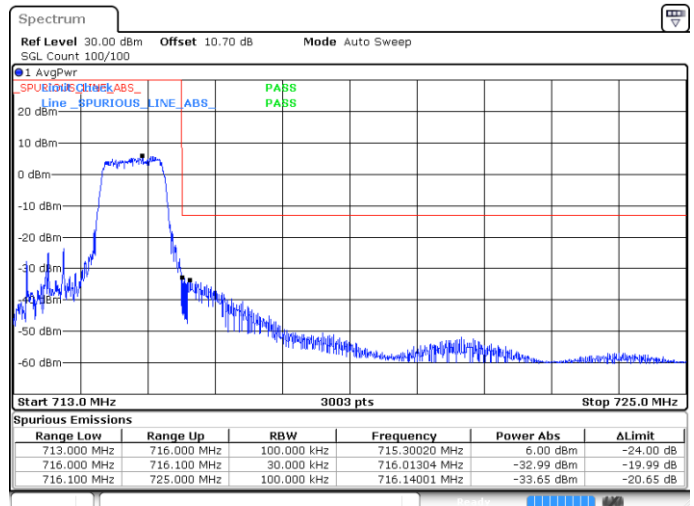
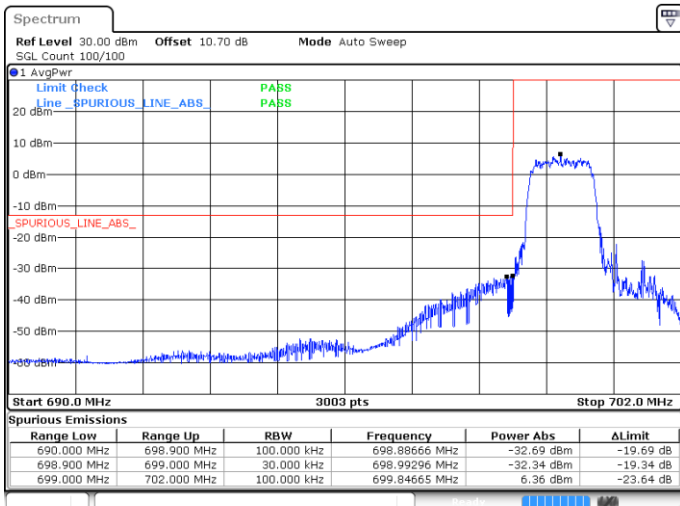
Lowest Band Edge / 1RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

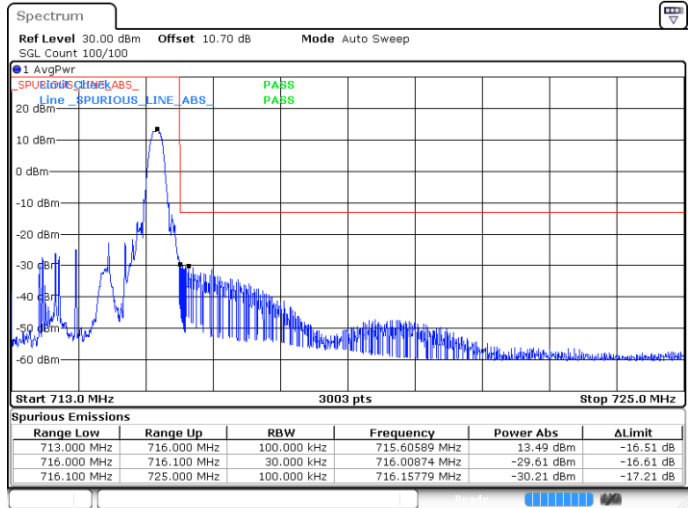
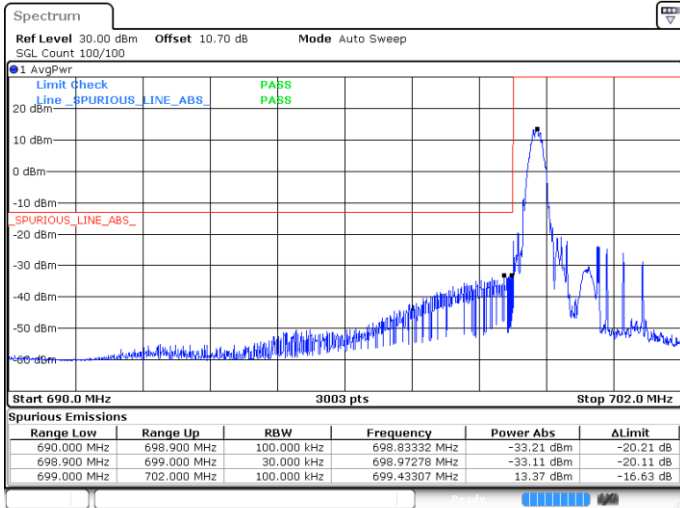




LTE Band 12 / 3MHz / 16QAM

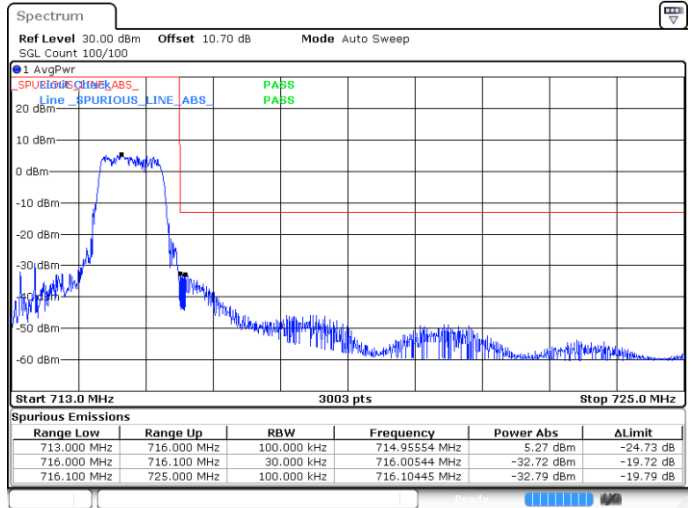
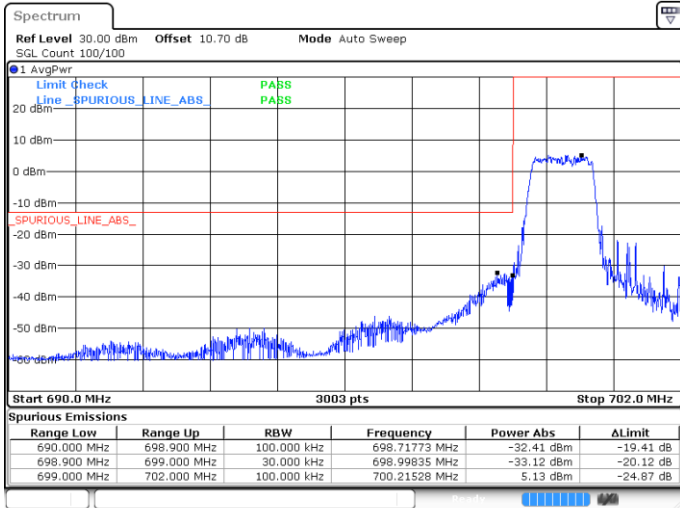
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

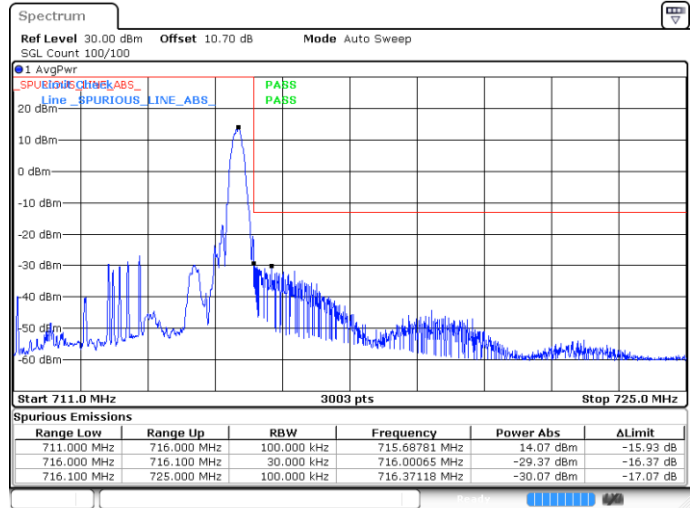
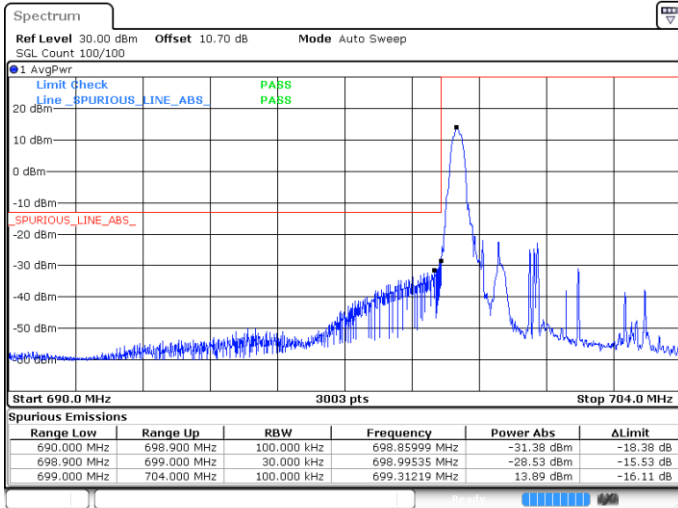




LTE Band 12 / 5MHz / QPSK

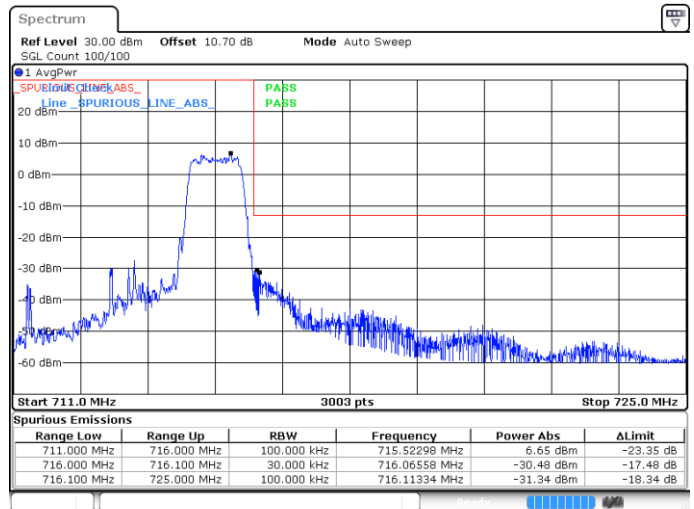
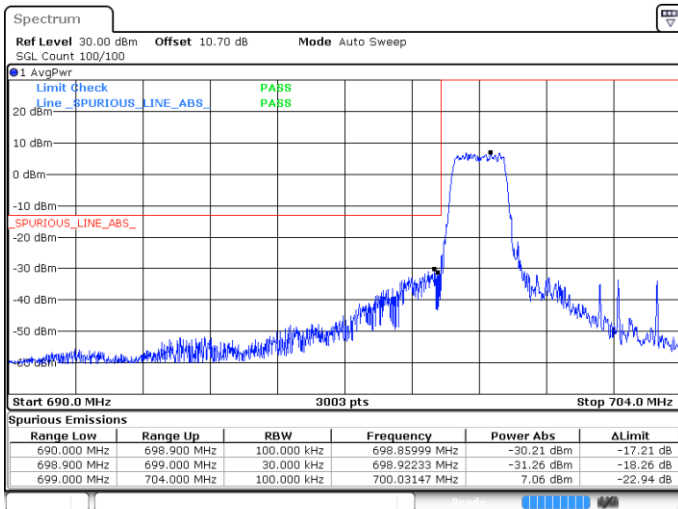
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

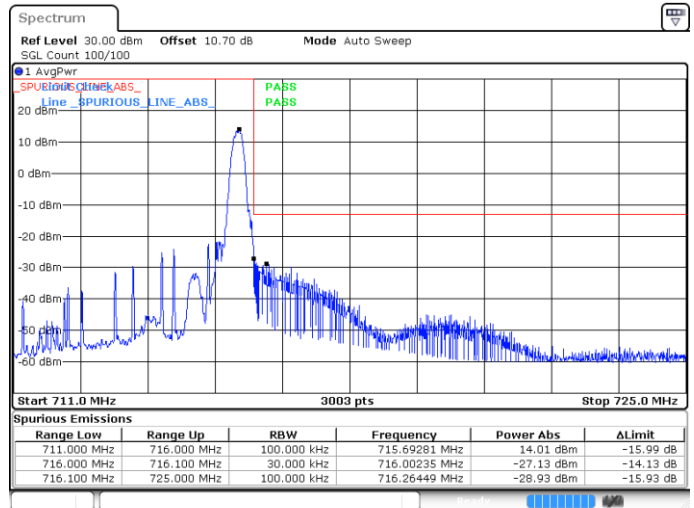
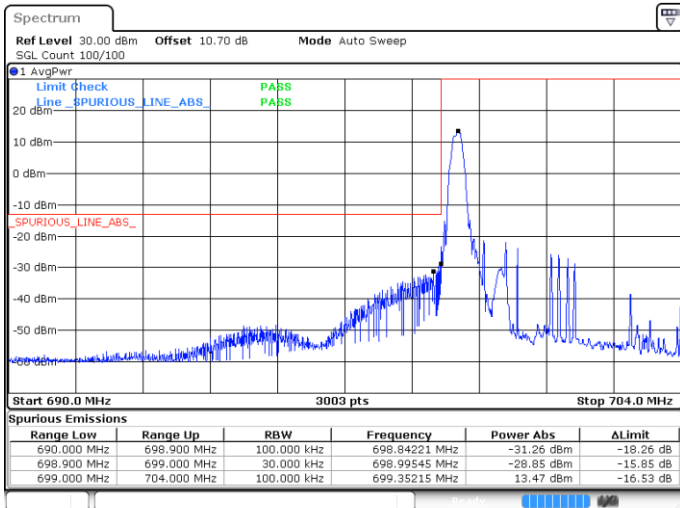




LTE Band 12 / 5MHz / 16QAM

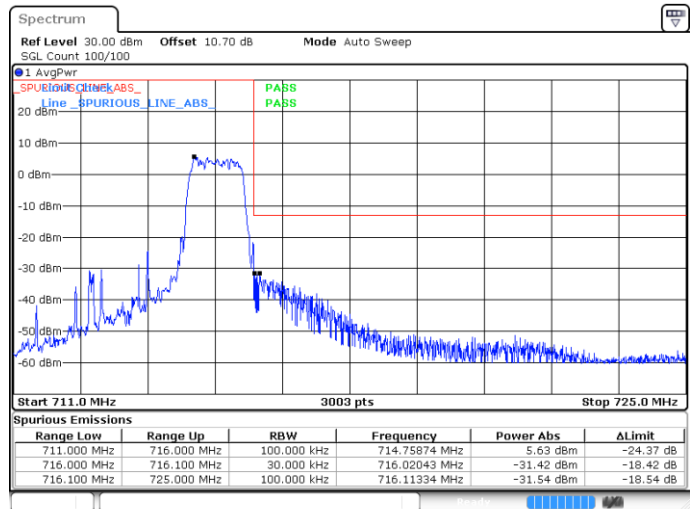
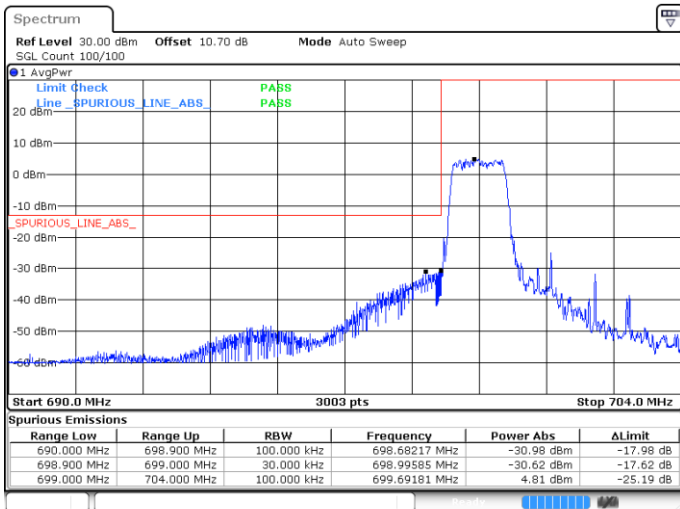
Lowest Band Edge / 1RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

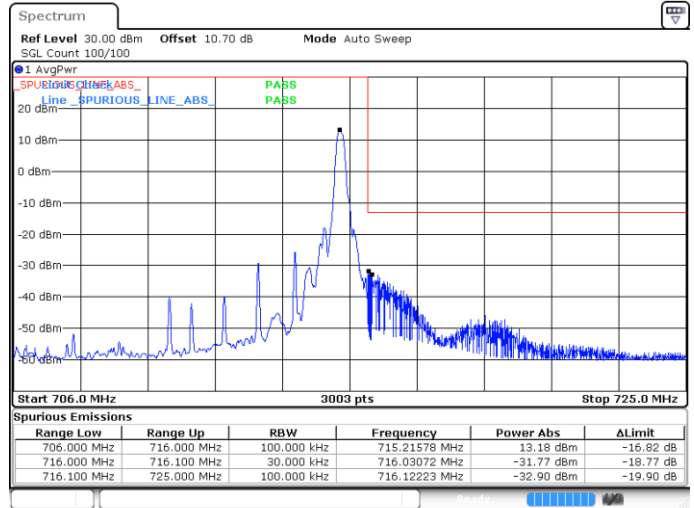
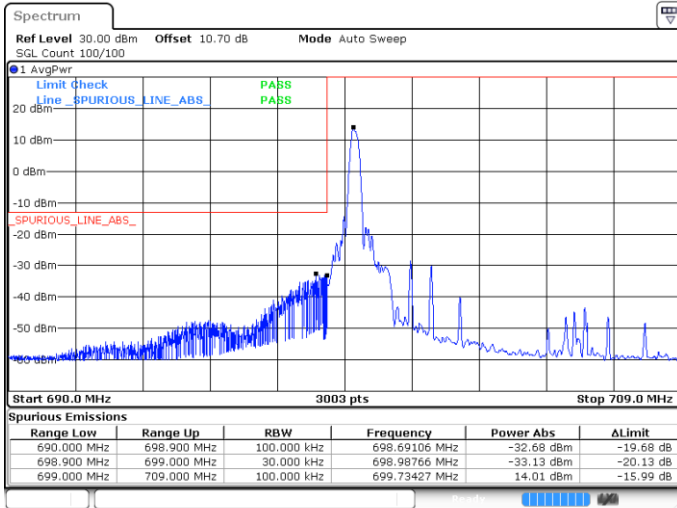




LTE Band 12 / 10MHz / QPSK

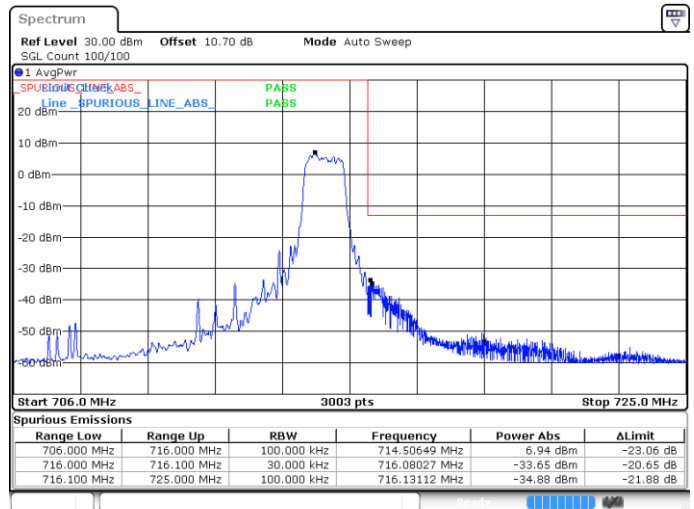
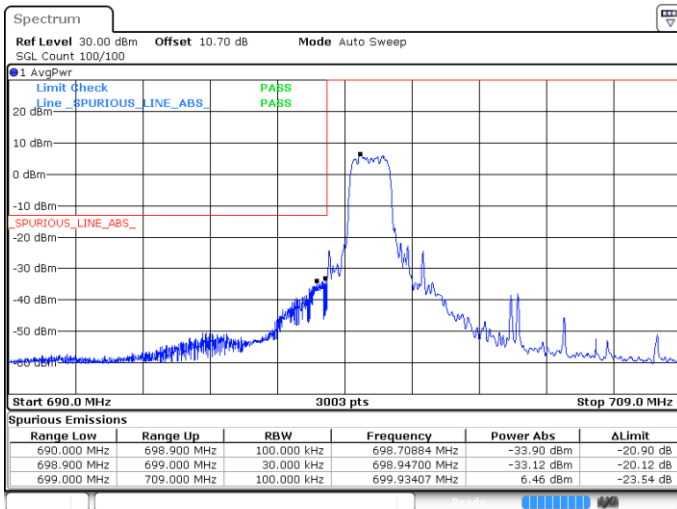
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

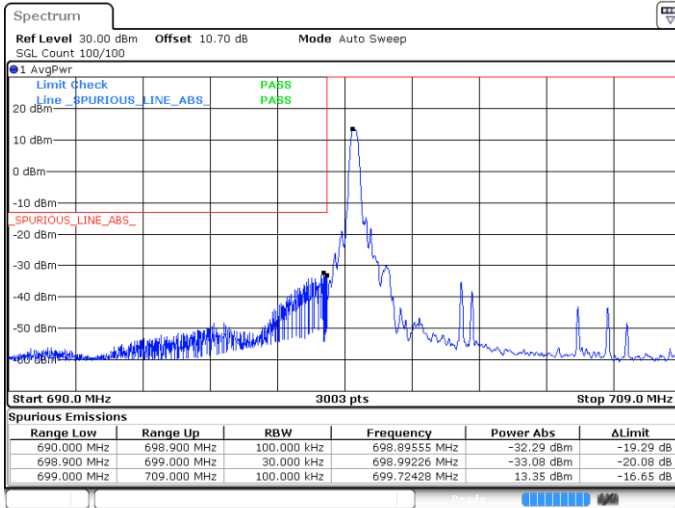




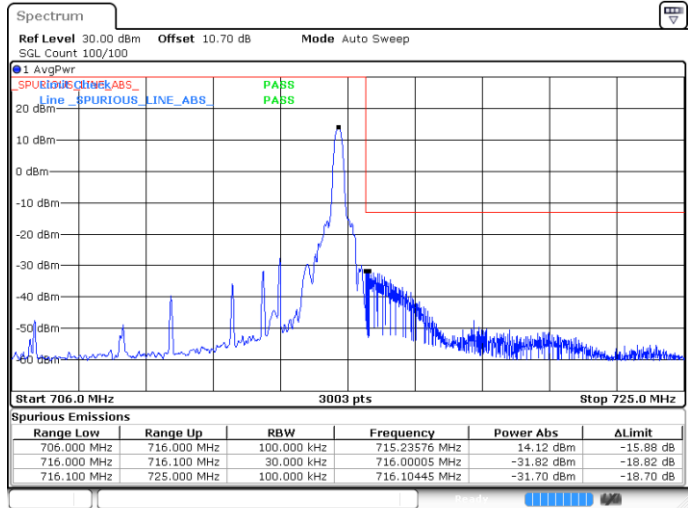
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



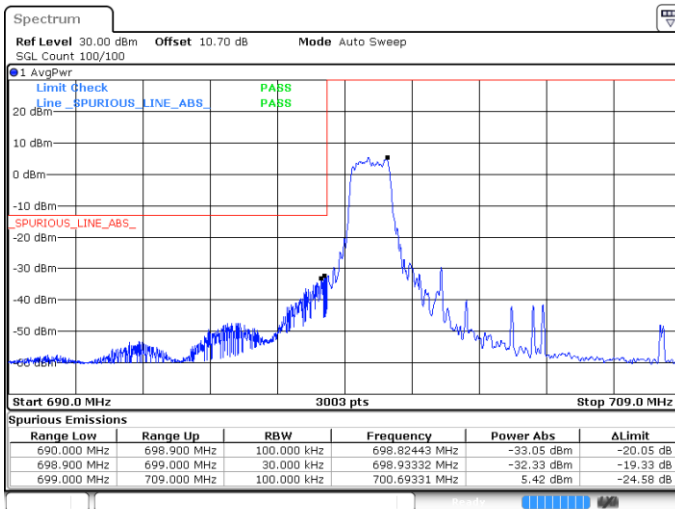
Date: 26 FEB 2020 10:50:52



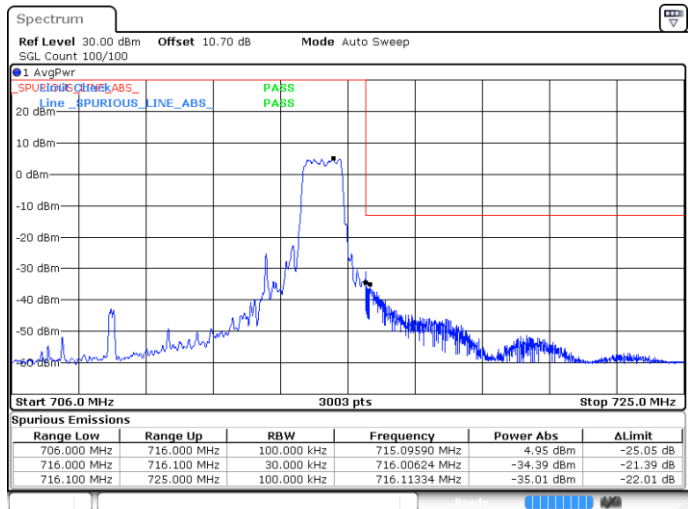
Date: 26 FEB 2020 11:00:06

Lowest Band Edge / Full RB

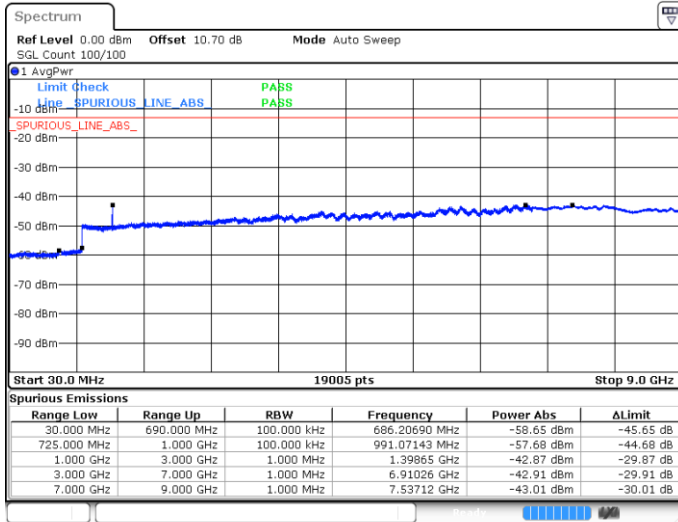
Highest Band Edge / Full RB



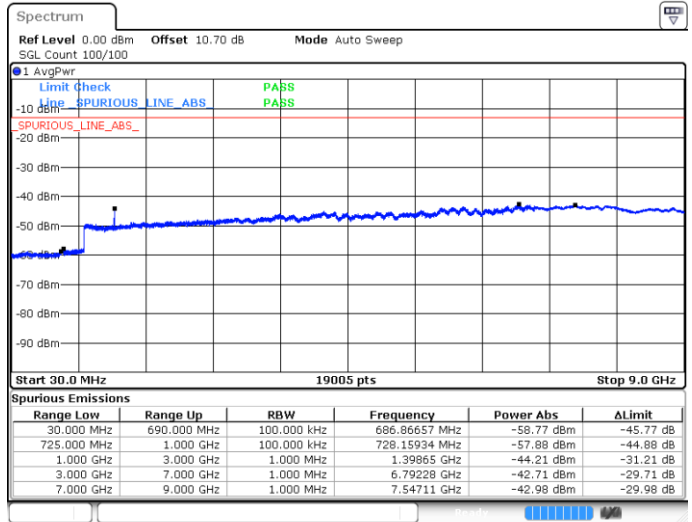
Date: 26 FEB 2020 10:49:45



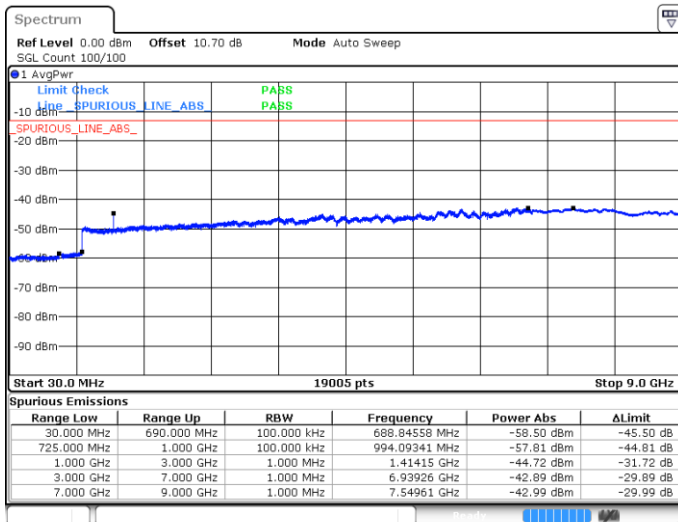
Date: 26 FEB 2020 10:58:59

**Conducted Spurious Emission****LTE Band 12 / 1.4MHz****Lowest Channel / QPSK**

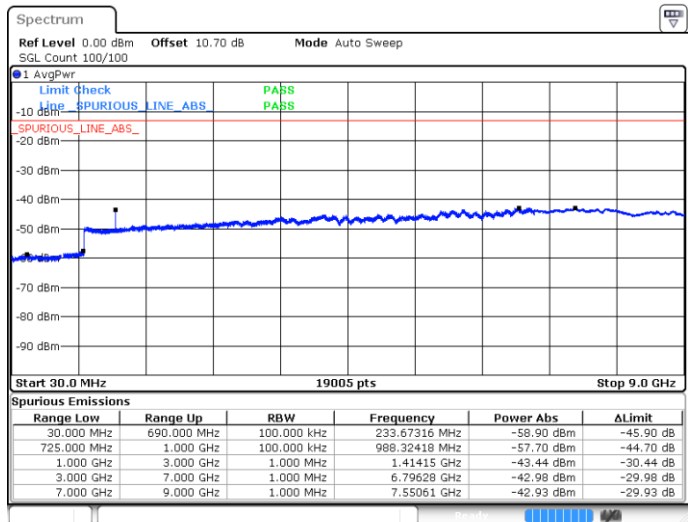
Date: 24 FEB 2020 20:29:17

Lowest Channel / 16QAM

Date: 24 FEB 2020 20:30:04

Middle Channel / QPSK

Date: 24 FEB 2020 20:18:59

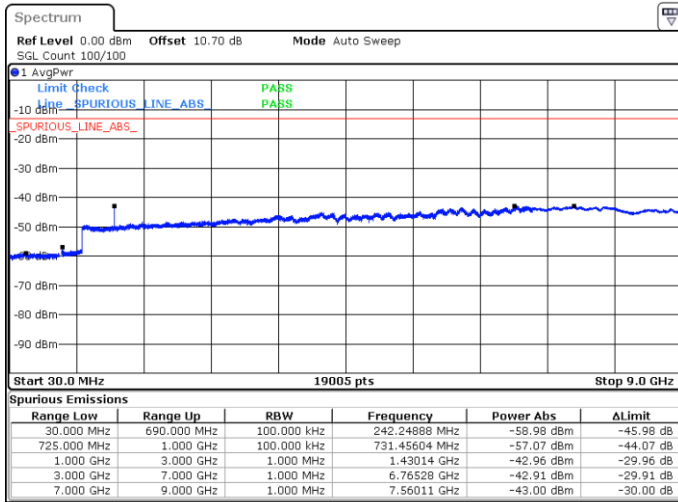
Middle Channel / 16QAM

Date: 24 FEB 2020 20:18:13



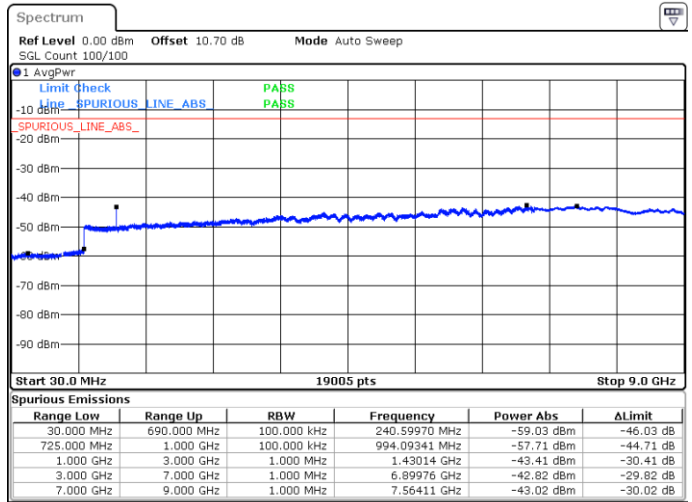
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 24 FEB 2020 20:42:23

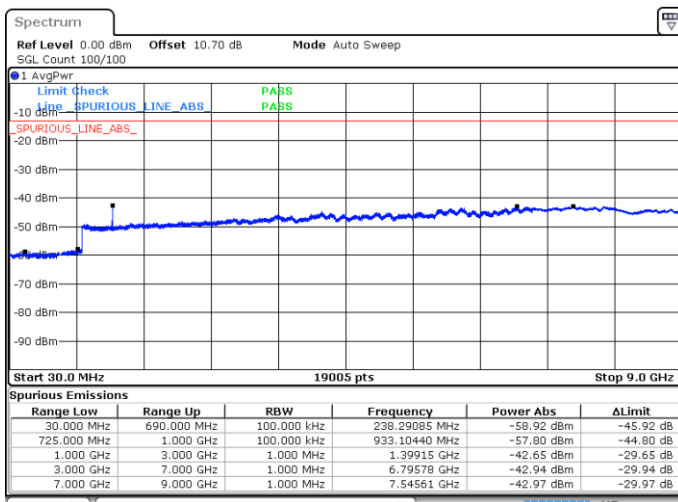
Highest Channel / 16QAM



Date: 24 FEB 2020 20:43:10

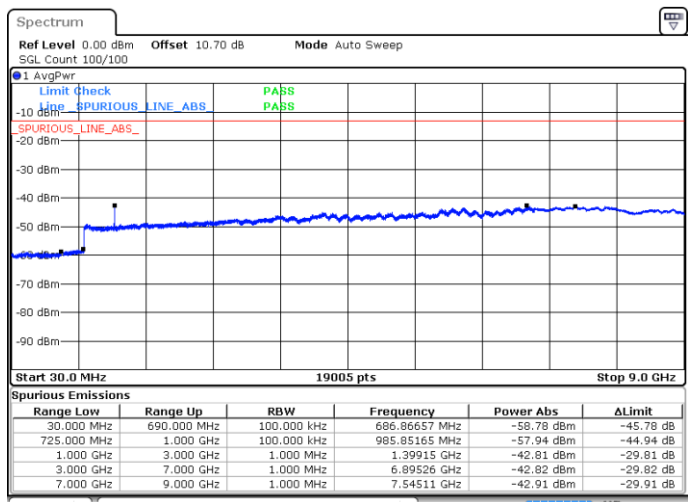
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 26 FEB 2020 10:09:09

Lowest Channel / 16QAM



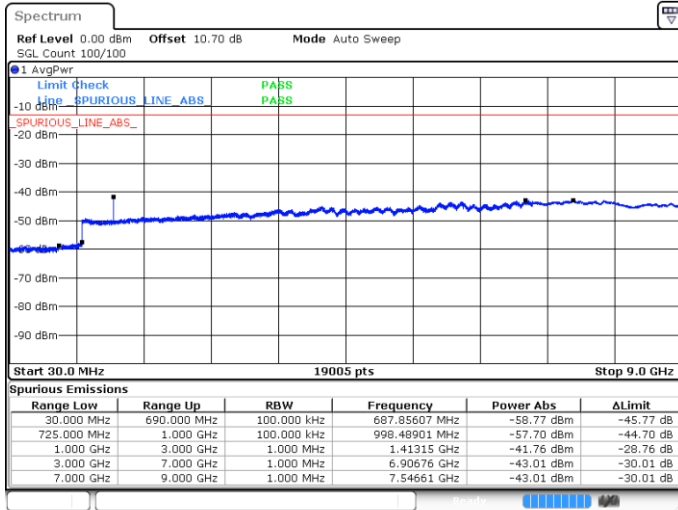
Date: 26 FEB 2020 10:09:55



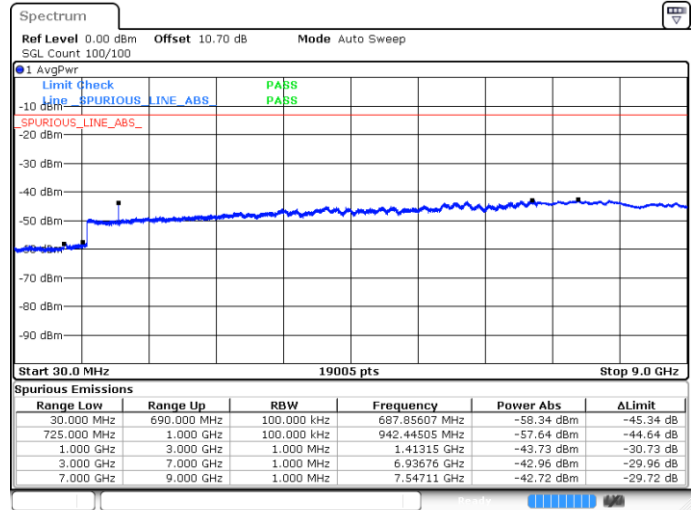
LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



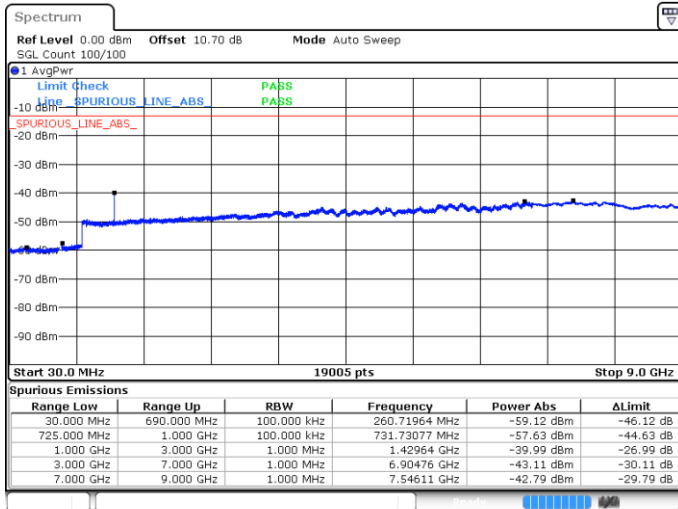
Date: 26 FEB 2020 10:00:05



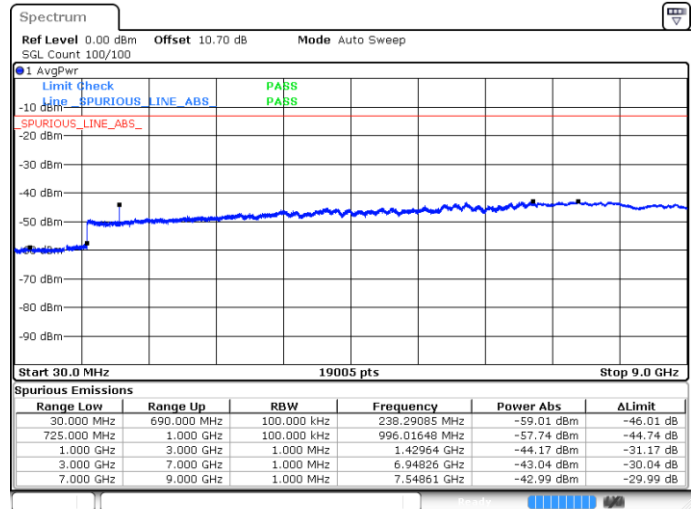
Date: 26 FEB 2020 09:59:18

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 26 FEB 2020 10:16:41

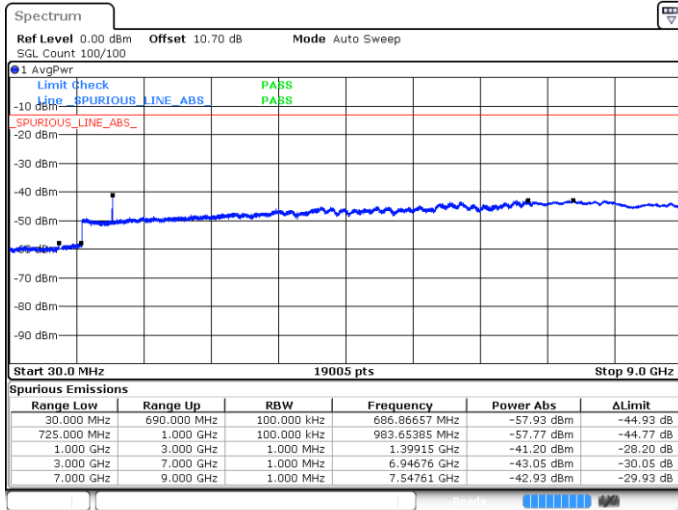


Date: 26 FEB 2020 10:17:28

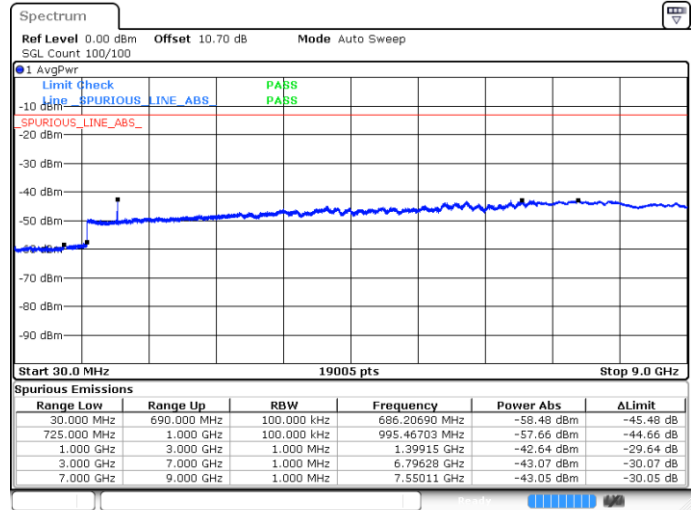


LTE Band 12 / 5MHz

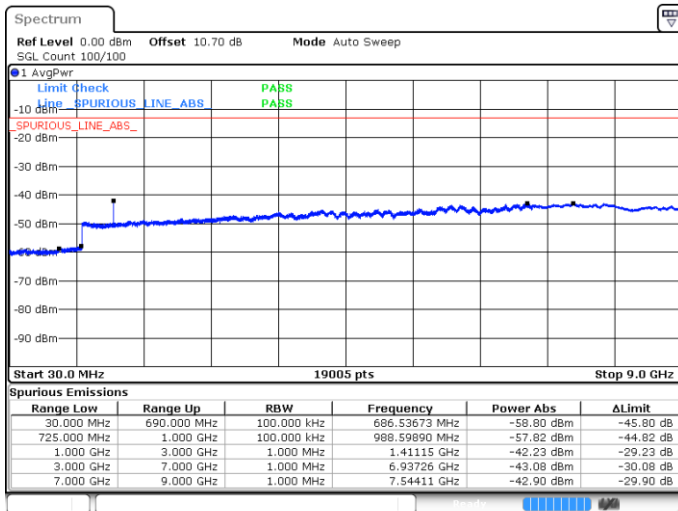
Lowest Channel / QPSK



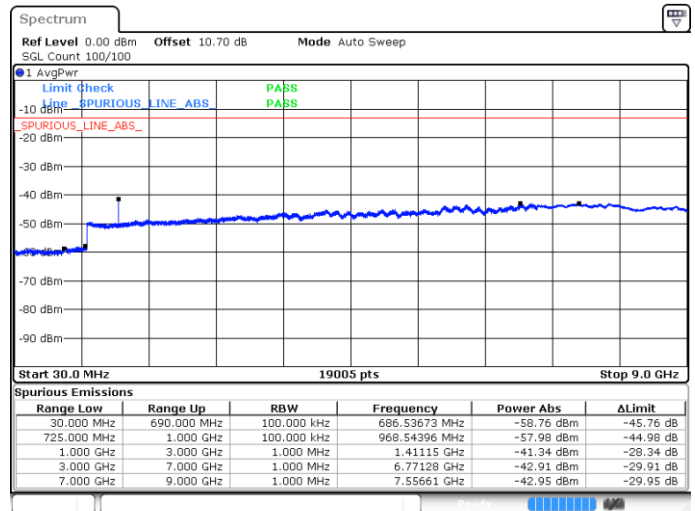
Lowest Channel / 16QAM



Middle Channel / QPSK



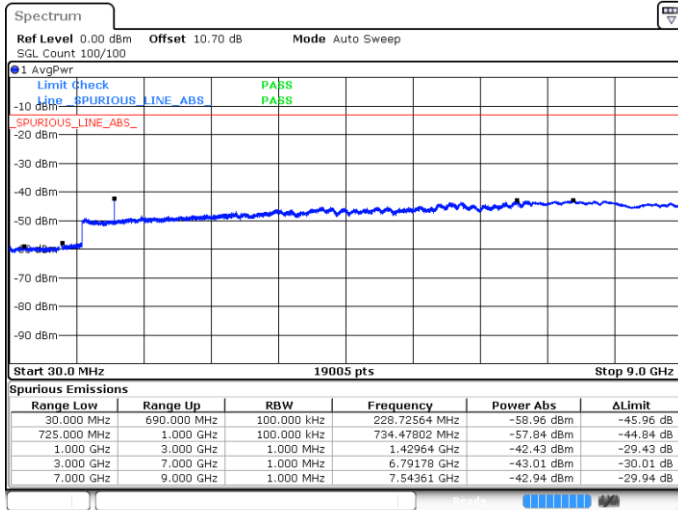
Middle Channel / 16QAM



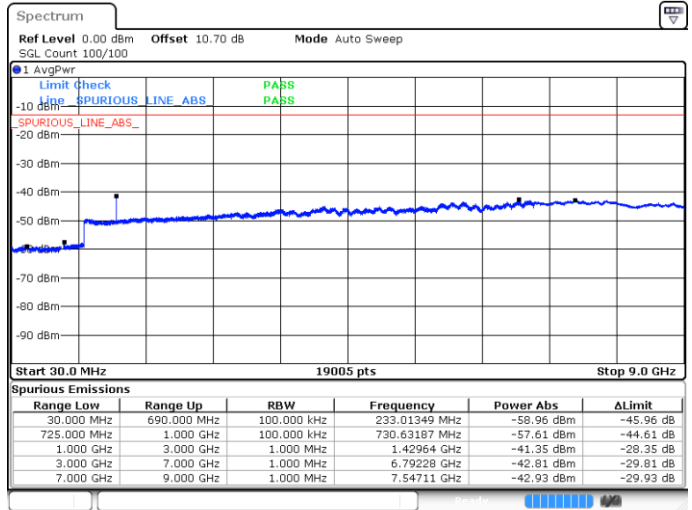


LTE Band 12 / 5MHz

Highest Channel / QPSK

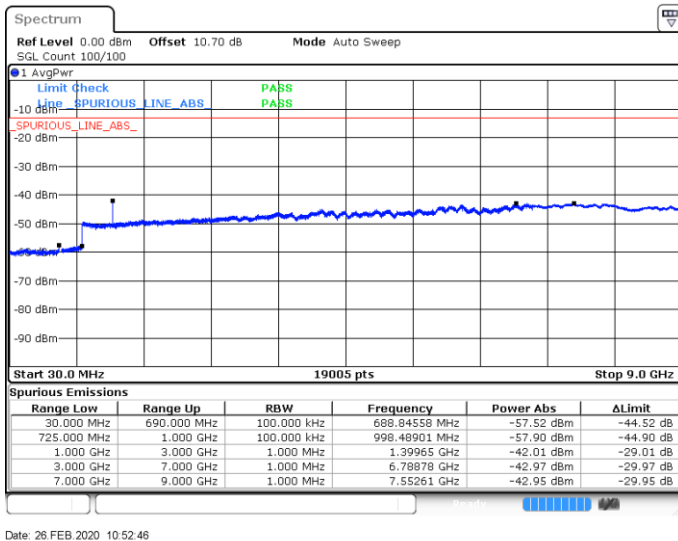


Highest Channel / 16QAM

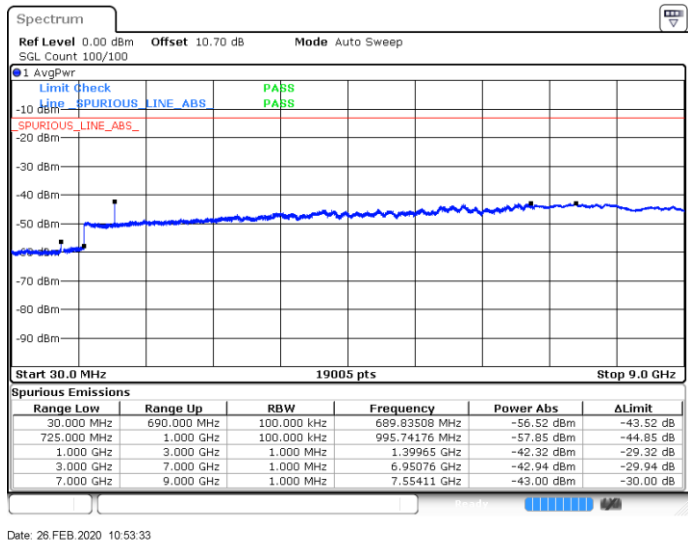


LTE Band 12 / 10MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

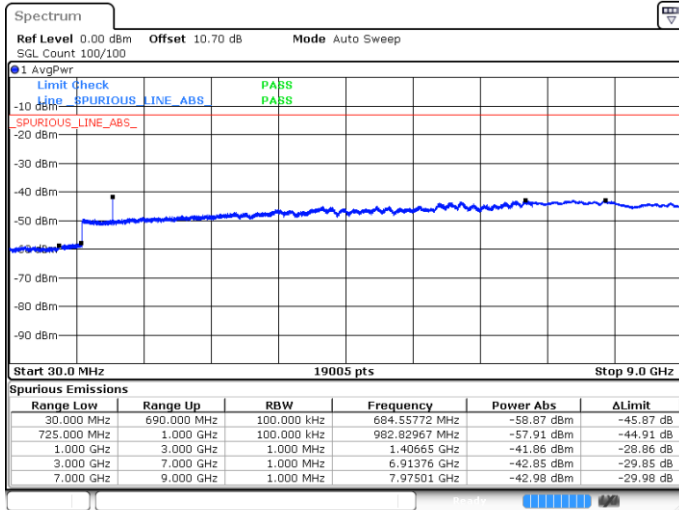




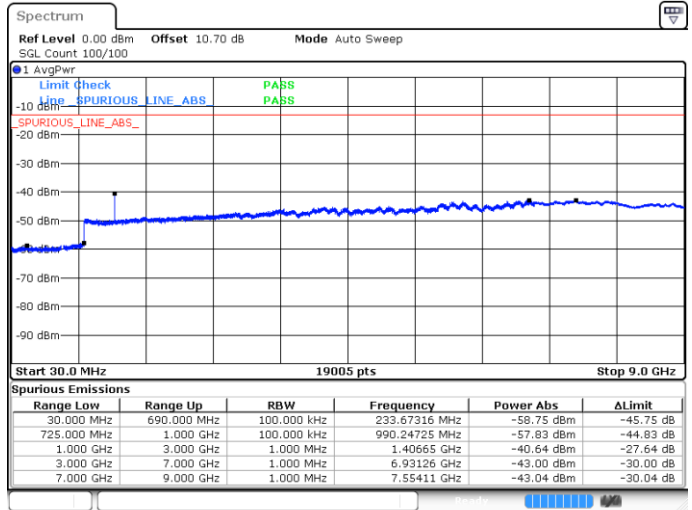
LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



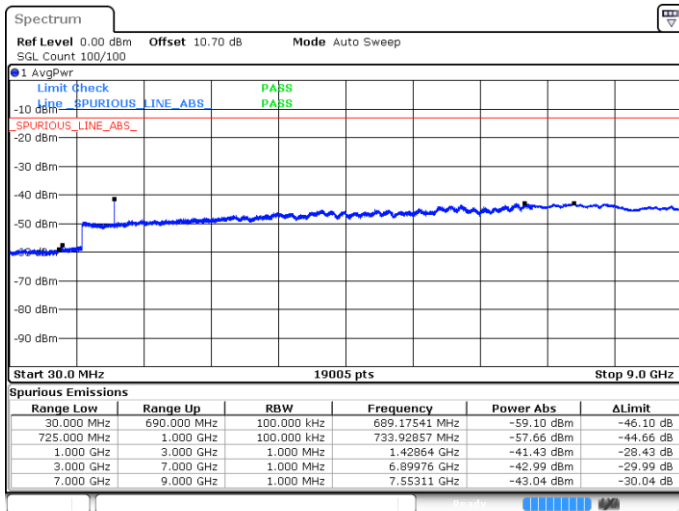
Date: 26 FEB 2020 10:42:57



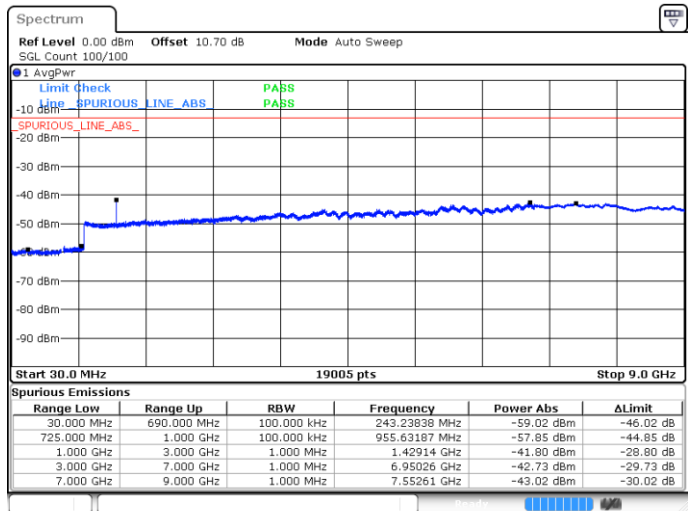
Date: 26 FEB 2020 10:42:10

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 26 FEB 2020 11:02:00



Date: 26 FEB 2020 11:02:46

Frequency Stability

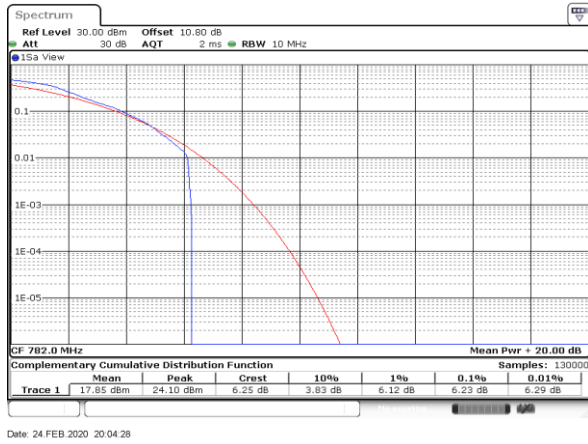
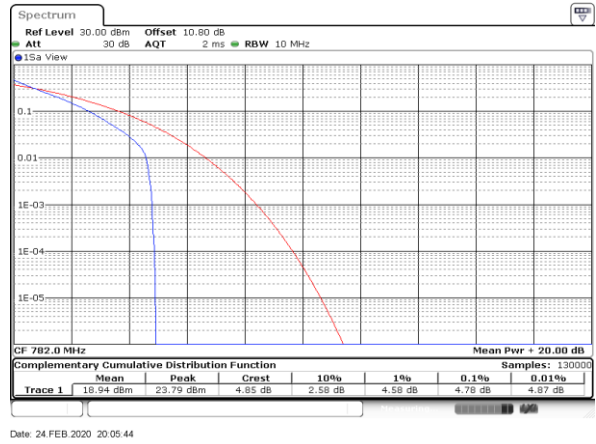
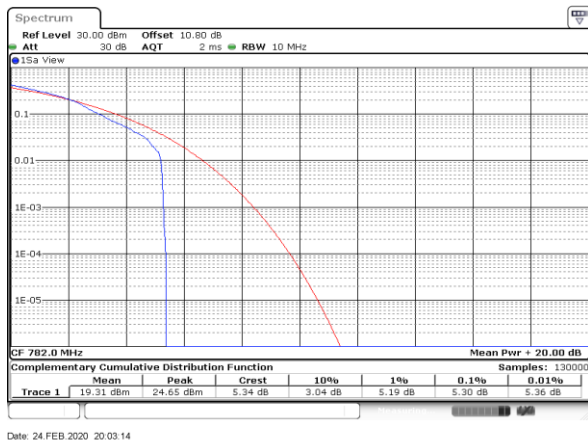
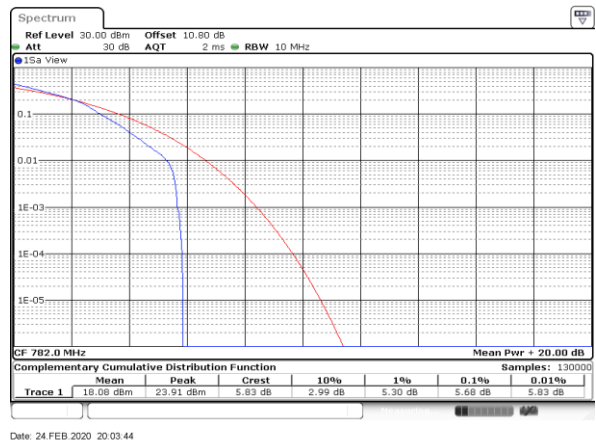
Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0092	PASS
40	Normal Voltage	0.0020	
30	Normal Voltage	0.0078	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0082	
0	Normal Voltage	0.0090	
-10	Normal Voltage	0.0082	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0075	
20	Maximum Voltage	0.0113	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0010	

Note:

1. Normal Voltage =5.00 V. ; Battery End Point (BEP) =4.75 V. ; Maximum Voltage =5.25 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	6.23	4.78	5.30	5.68	
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




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	-	-	-	-	1.44	1.56	-	-	-	-	-	-
Middle CH	-	-	-	-	1.58	1.34	1.80	1.82	-	-	-	-
Highest CH	-	-	-	-	1.49	1.31	-	-	-	-	-	-