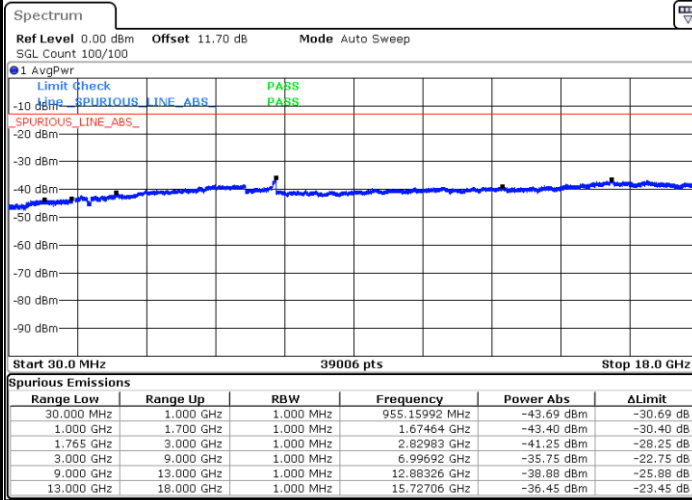




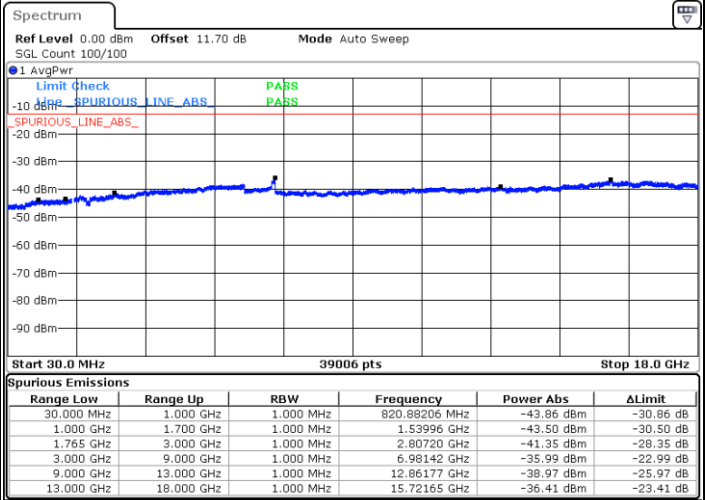
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 12.FEB.2020 04:51:47

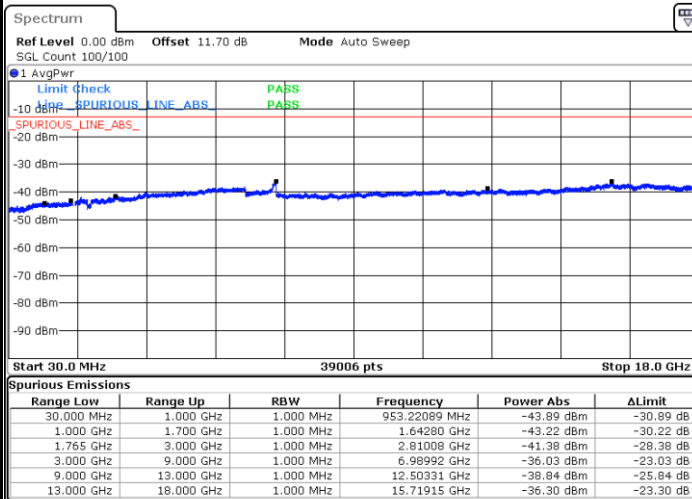
Highest Channel / 16QAM



Date: 12.FEB.2020 04:52:43

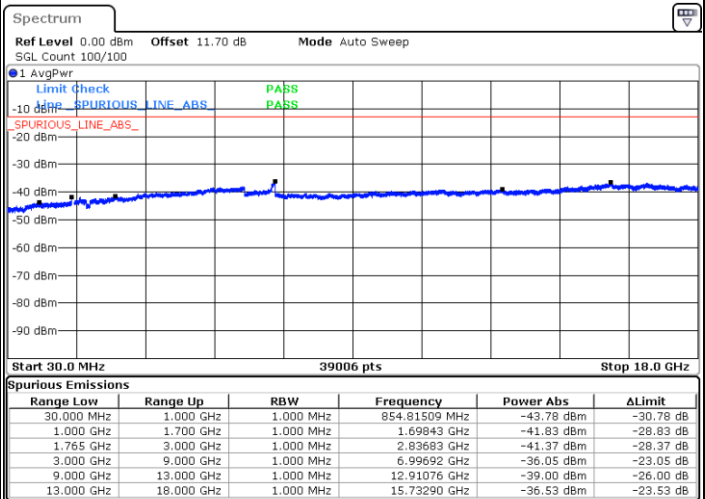
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 12.FEB.2020 05:18:18

Lowest Channel / 16QAM

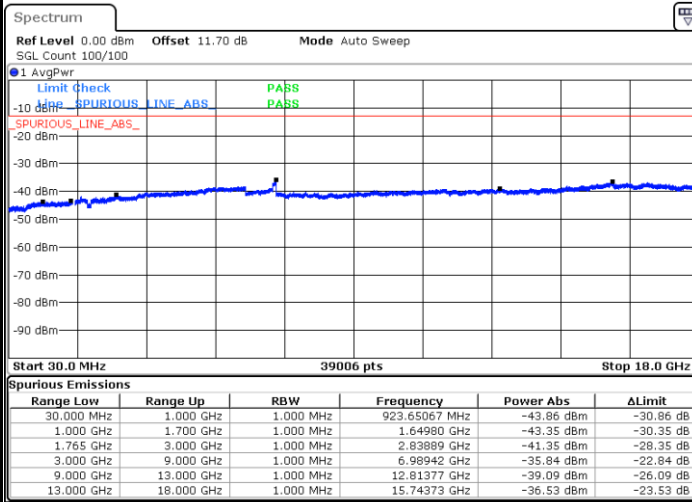


Date: 12.FEB.2020 05:19:10



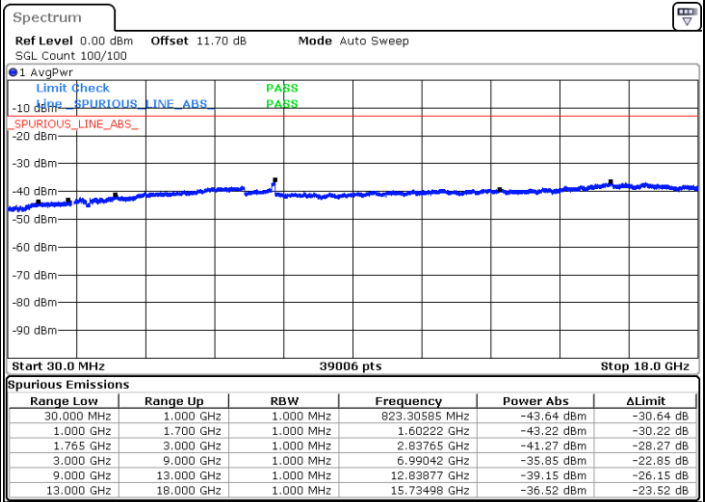
LTE Band 4 / 20MHz

Middle Channel / QPSK



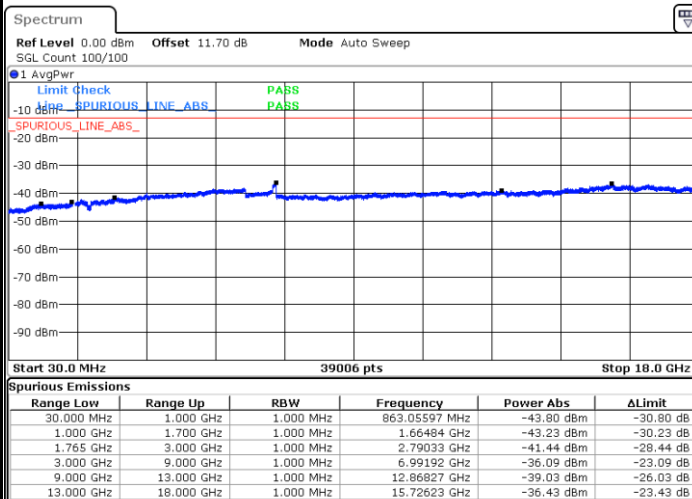
Date: 12.FEB.2020 05:21:25

Middle Channel / 16QAM



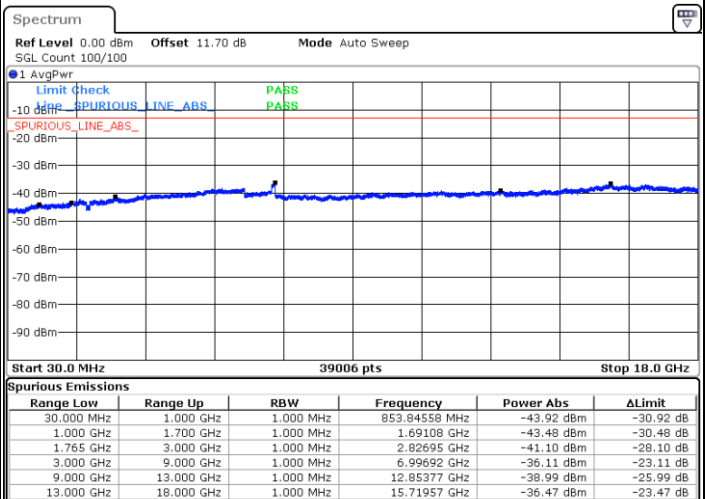
Date: 12.FEB.2020 05:22:19

Highest Channel / QPSK



Date: 12.FEB.2020 05:30:21

Highest Channel / 16QAM



Date: 12.FEB.2020 05:31:19

Frequency Stability

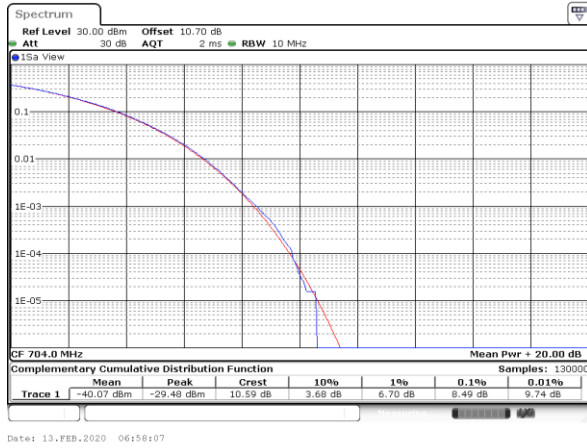
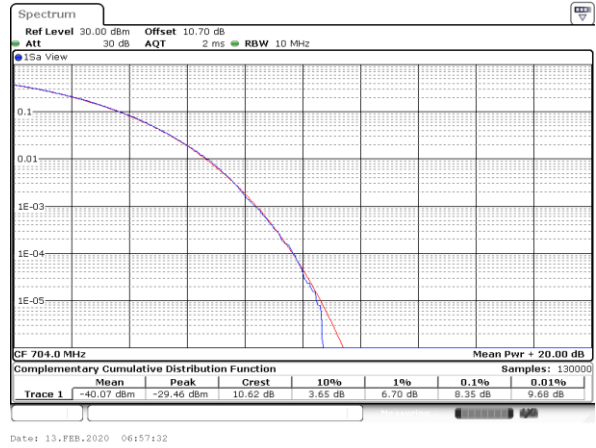
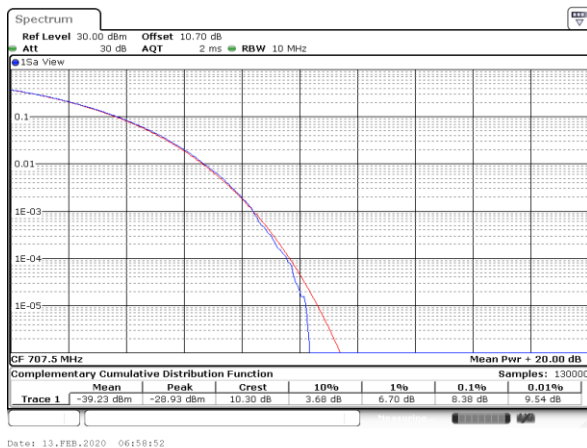
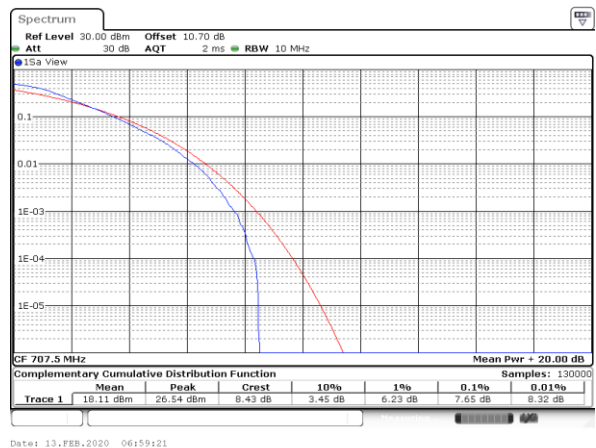
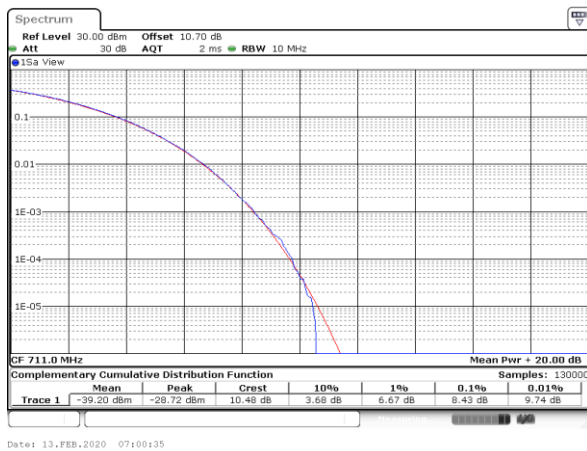
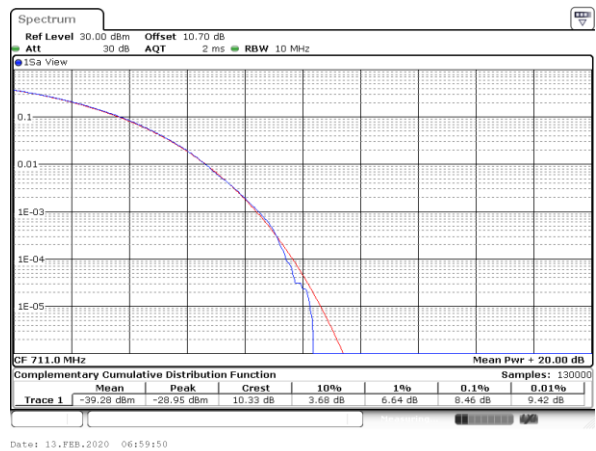
Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0027	PASS
40	Normal Voltage	0.0038	
30	Normal Voltage	0.0050	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0050	
-10	Normal Voltage	0.0066	
-20	Normal Voltage	0.0049	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0033	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

**LTE Band 12****Peak-to-Average Ratio**

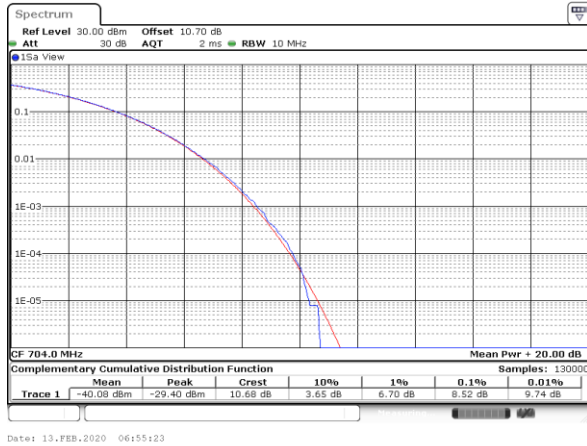
Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	8.49	8.35	8.52	8.46	PASS
Middle CH	8.38	7.65	8.41	8.43	
Highest CH	8.43	8.46	8.46	8.35	

LTE Band 12 / 10MHz / QPSK
Lowest Channel / 1RB

Lowest Channel / Full RB

Middle Channel / 1RB

Middle Channel / Full RB

Highest Channel / 1RB

Highest Channel / Full RB


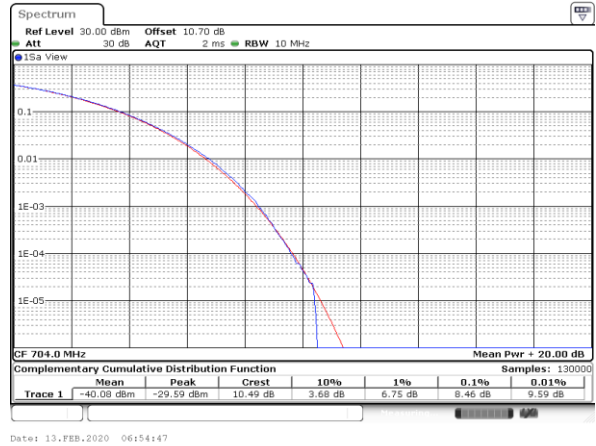


LTE Band 12 / 10MHz / 16QAM

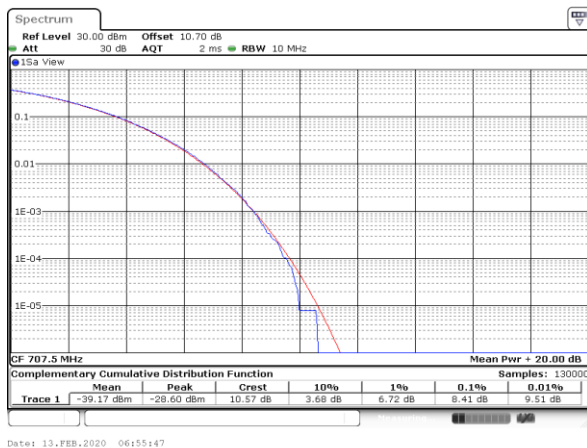
Lowest Channel / 1RB



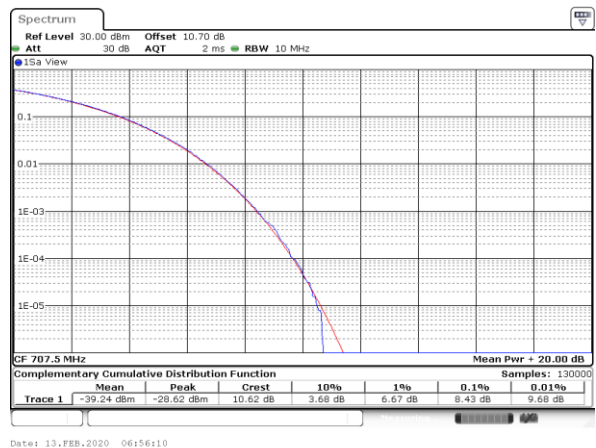
Lowest Channel / Full RB



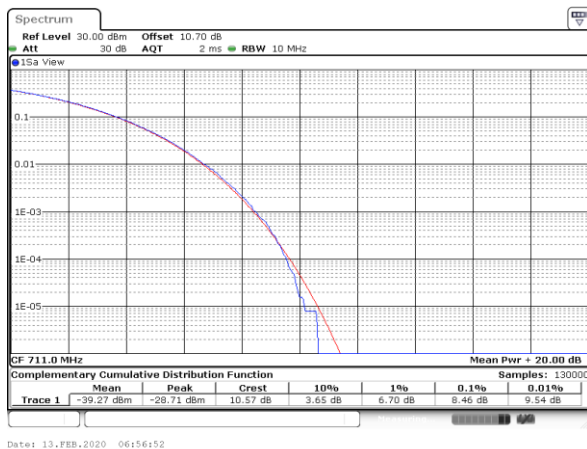
Middle Channel / 1RB



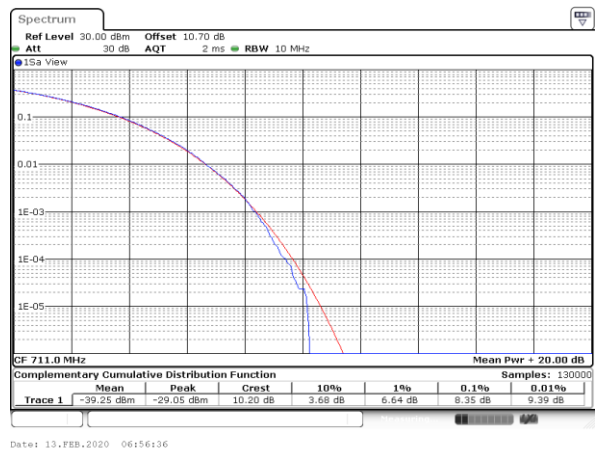
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



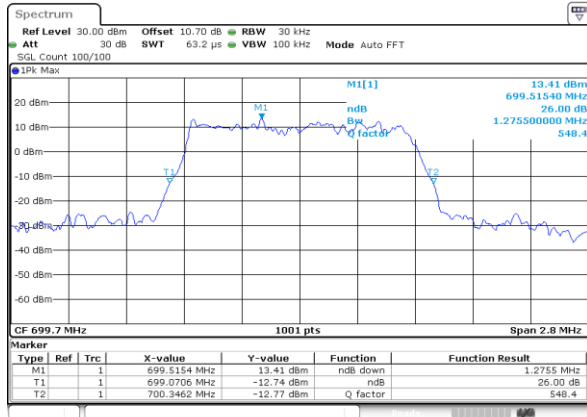
**26dB Bandwidth**

Mode	LTE Band 12 : 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	1.28	1.28	1.39	1.38	1.41	1.40	1.76	1.76	-	-	-	-
Middle CH	1.25	1.29	1.38	1.29	1.43	1.40	1.76	1.80	-	-	-	-
Highest CH	1.28	1.31	1.35	1.37	1.35	1.34	1.84	1.80	-	-	-	-

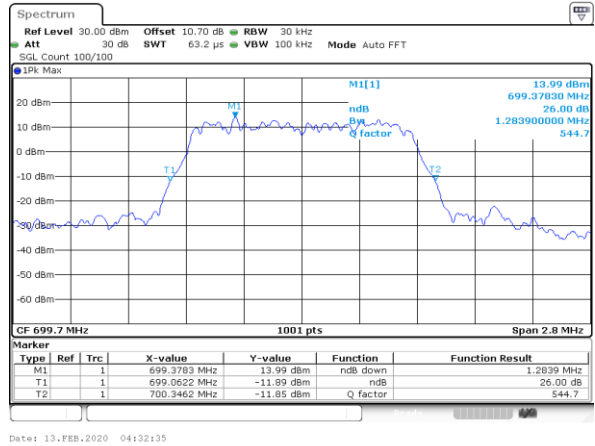


LTE Band 12

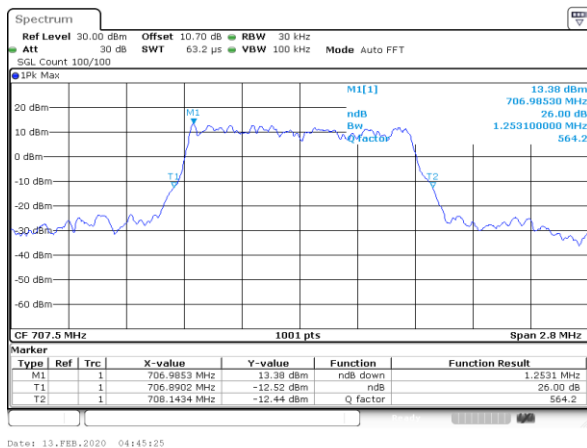
Lowest Channel / 1.4MHz / QPSK



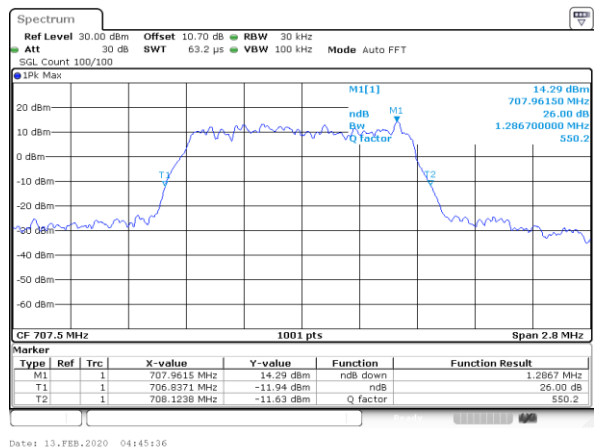
Lowest Channel / 1.4MHz / 16QAM



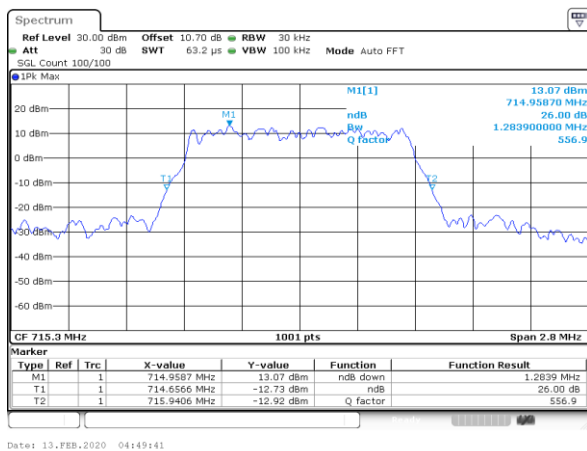
Middle Channel / 1.4MHz / QPSK



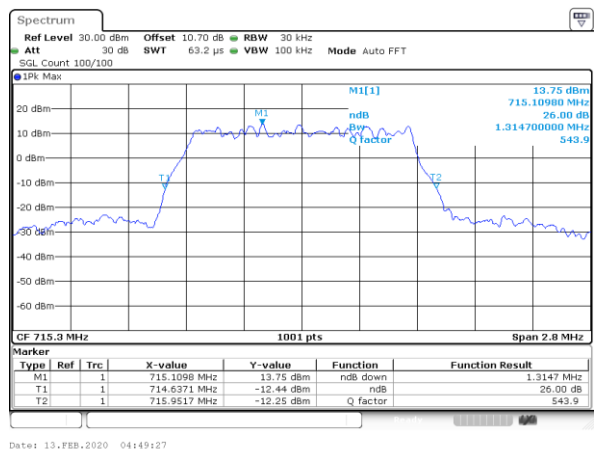
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



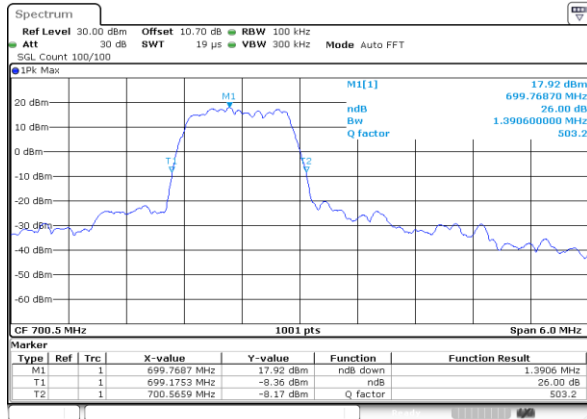
Highest Channel / 1.4MHz / 16QAM





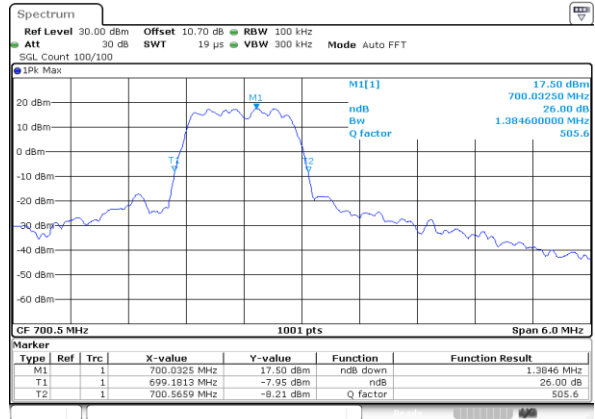
LTE Band 12

Lowest Channel / 3MHz / QPSK



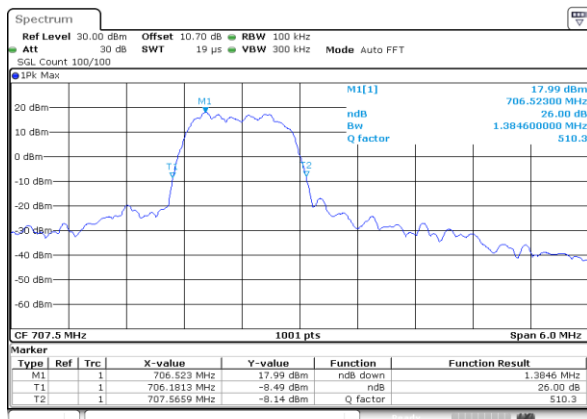
Date: 13.FEB.2020 05:01:51

Lowest Channel / 3MHz / 16QAM



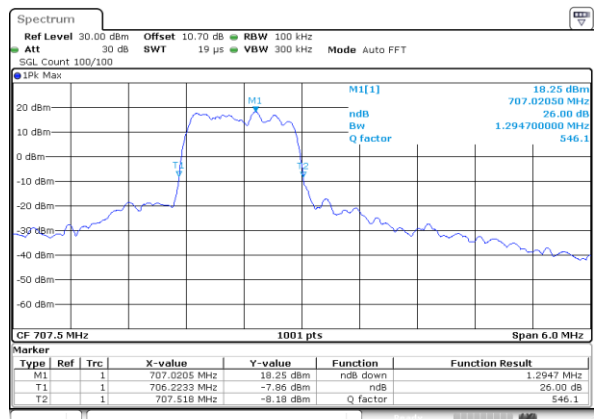
Date: 13.FEB.2020 05:00:53

Middle Channel / 3MHz / QPSK



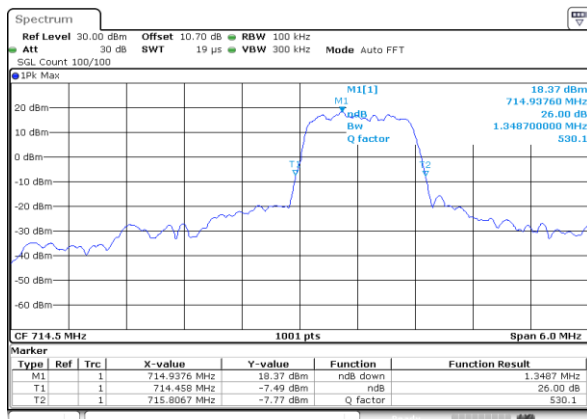
Date: 13.FEB.2020 05:11:54

Middle Channel / 3MHz / 16QAM



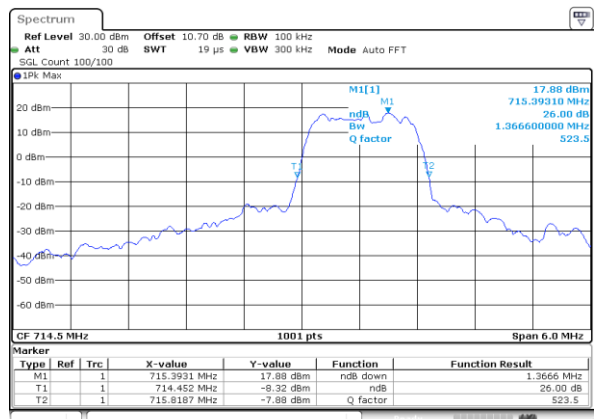
Date: 13.FEB.2020 05:12:11

Highest Channel / 3MHz / QPSK



Date: 13.FEB.2020 05:27:27

Highest Channel / 3MHz / 16QAM

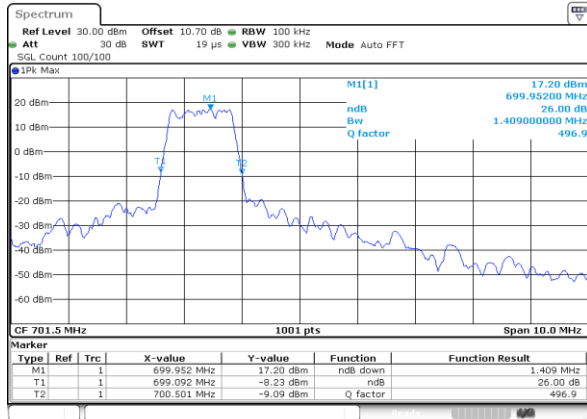


Date: 13.FEB.2020 05:27:06



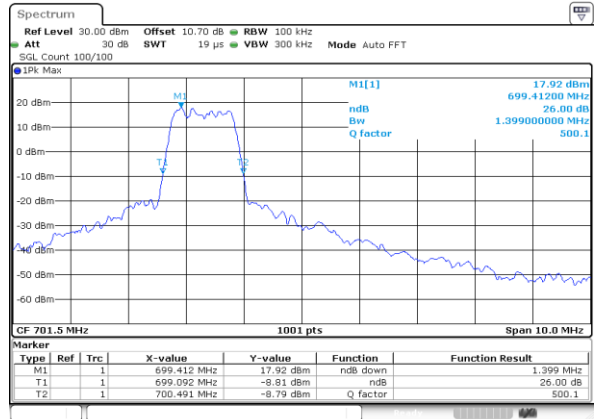
LTE Band 12

Lowest Channel / 5MHz / QPSK



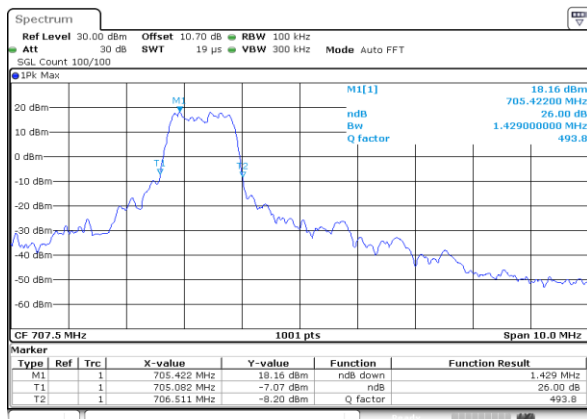
Date: 13.FEB.2020 05:48:45

Lowest Channel / 5MHz / 16QAM



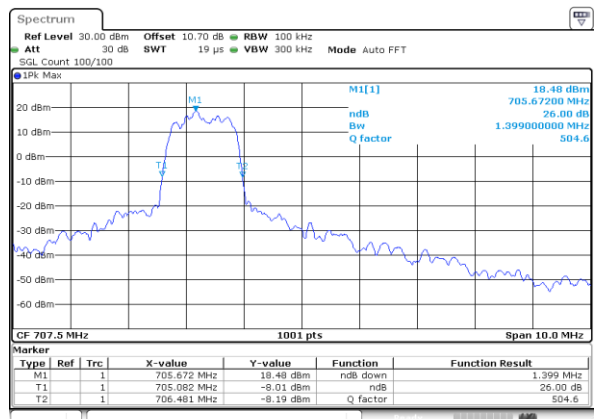
Date: 13.FEB.2020 05:48:29

Middle Channel / 5MHz / QPSK



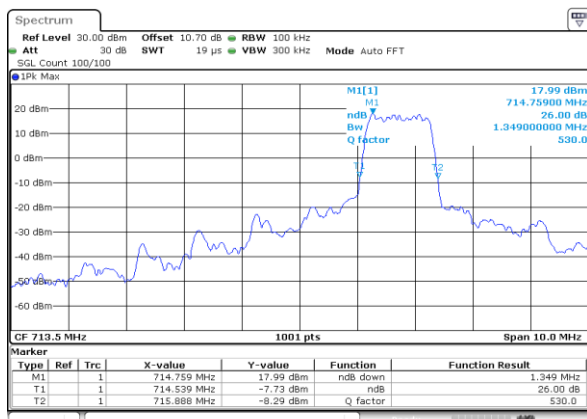
Date: 13.FEB.2020 05:57:10

Middle Channel / 5MHz / 16QAM



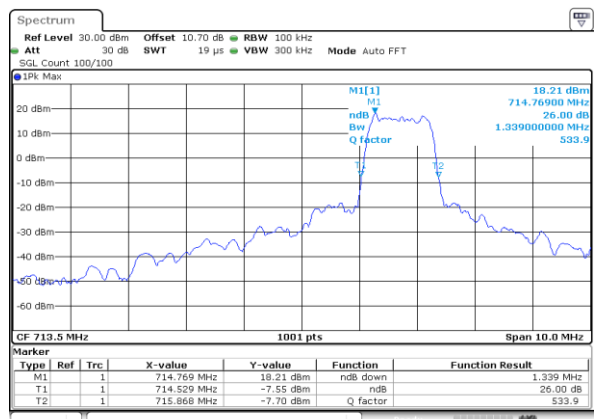
Date: 13.FEB.2020 05:57:31

Highest Channel / 5MHz / QPSK



Date: 13.FEB.2020 06:21:26

Highest Channel / 5MHz / 16QAM

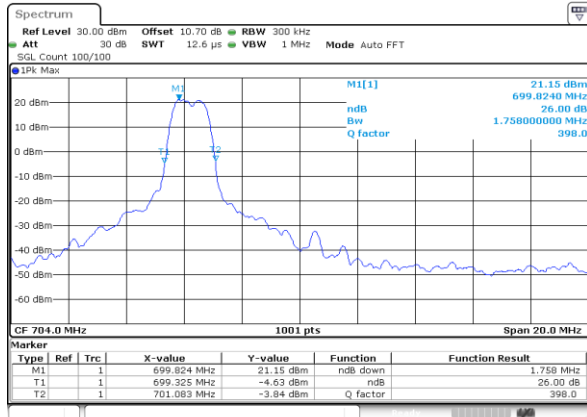


Date: 13.FEB.2020 06:21:02

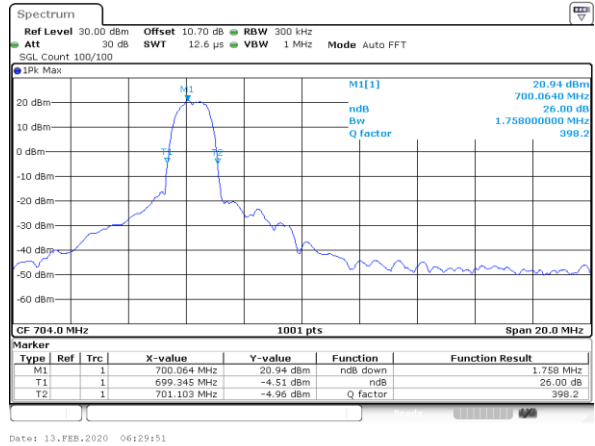


LTE Band 12

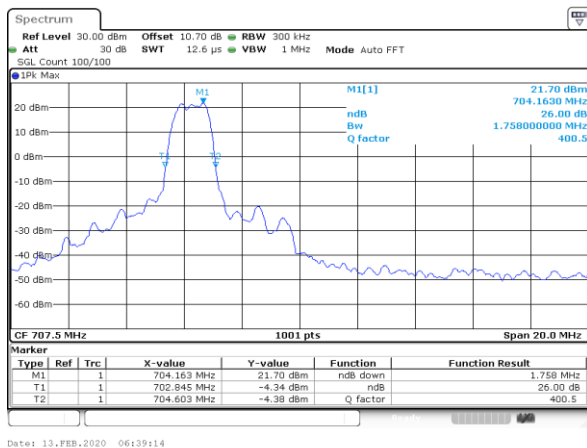
Lowest Channel / 10MHz / QPSK



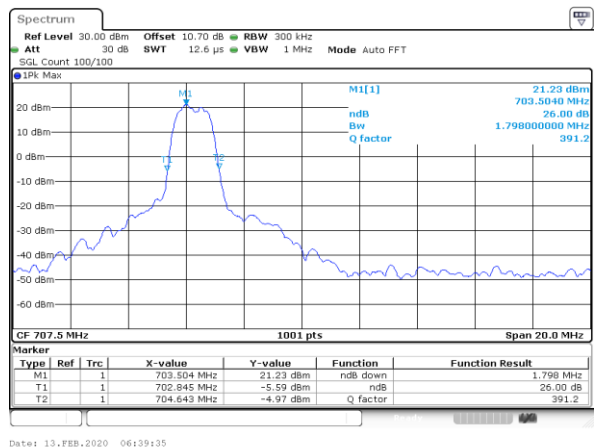
Lowest Channel / 10MHz / 16QAM



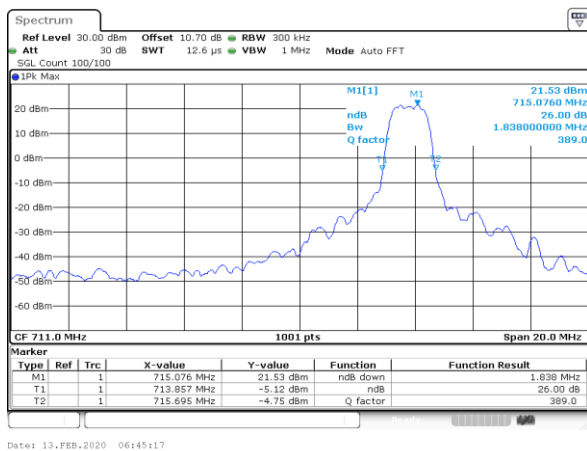
Middle Channel / 10MHz / QPSK



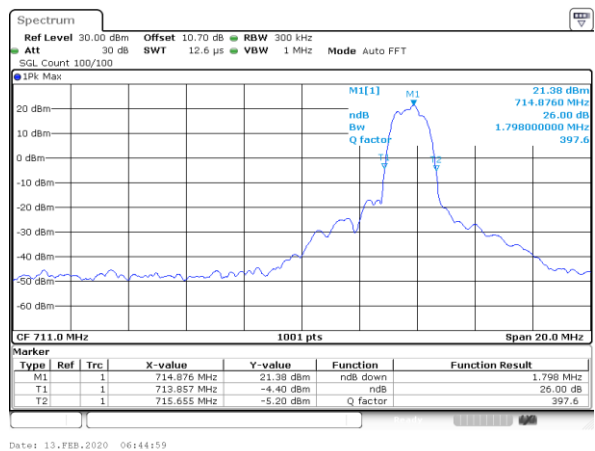
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



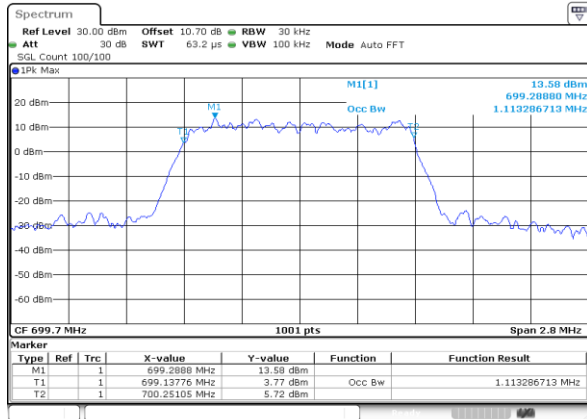


Occupied Bandwidth

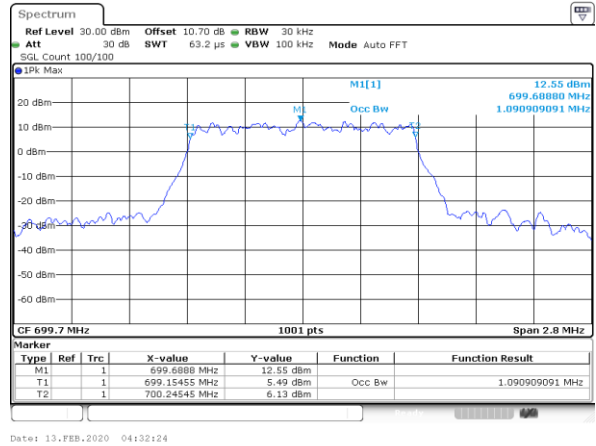
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.11	1.09	1.18	1.18	1.20	1.18	1.48	1.40	-	-	-	-
Middle CH	1.09	1.09	1.13	1.17	1.19	1.15	1.46	1.50	-	-	-	-
Highest CH	1.09	1.11	1.18	1.16	1.15	1.18	1.42	1.46	-	-	-	-

LTE Band 12

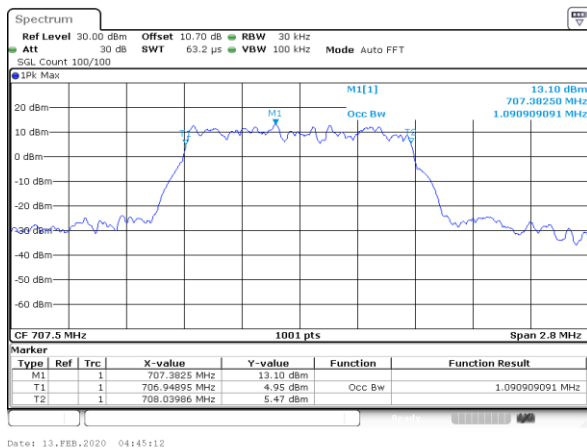
Lowest Channel / 1.4MHz / QPSK



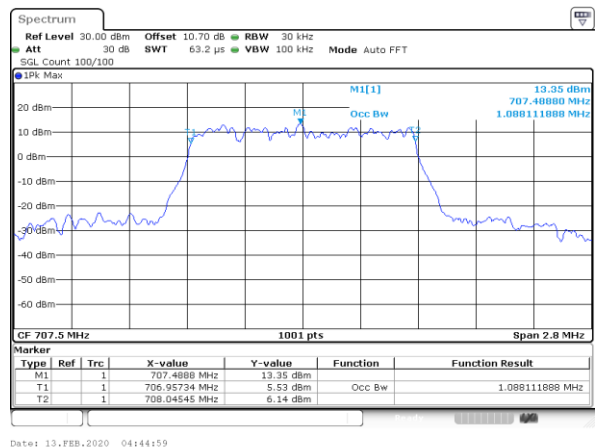
Lowest Channel / 1.4MHz / 16QAM



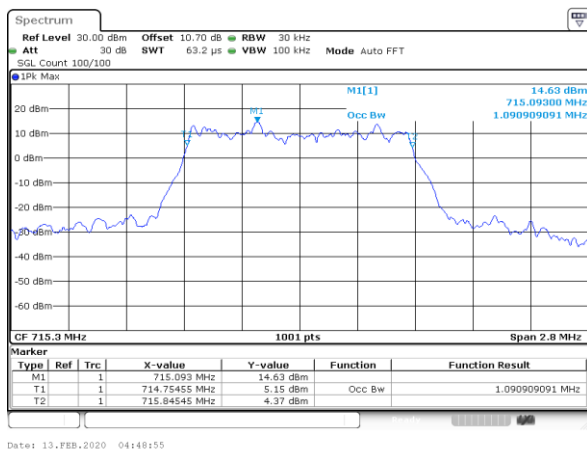
Middle Channel / 1.4MHz / QPSK



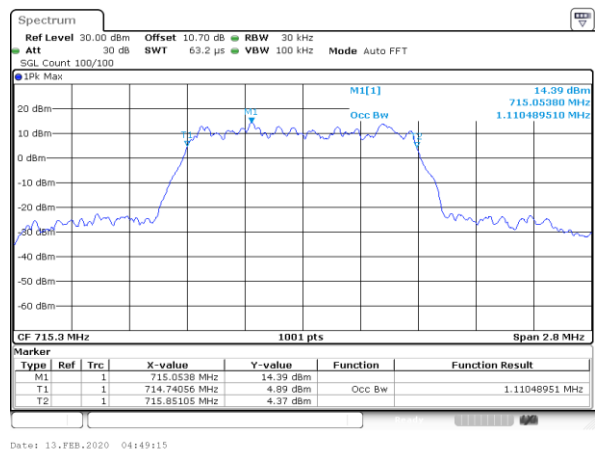
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



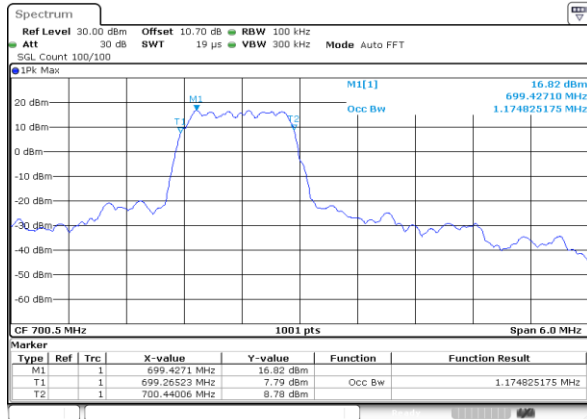
Highest Channel / 1.4MHz / 16QAM



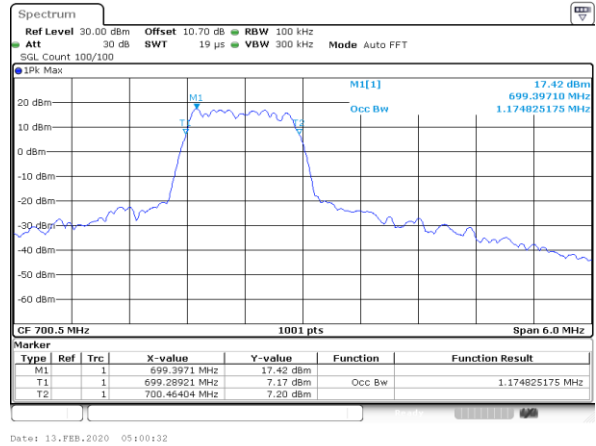


LTE Band 12

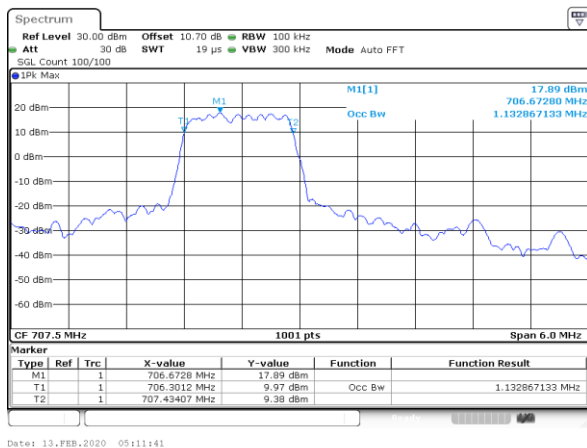
Lowest Channel / 3MHz / QPSK



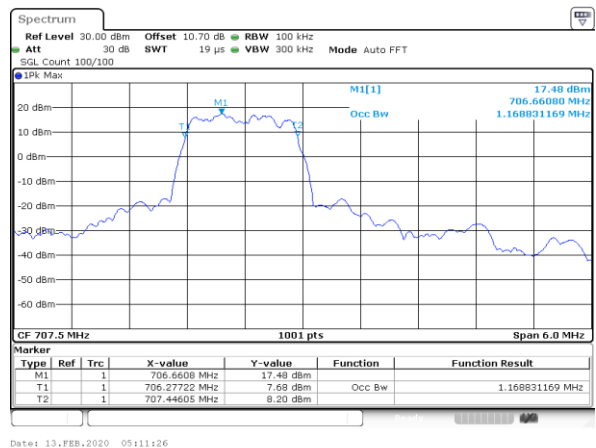
Lowest Channel / 3MHz / 16QAM



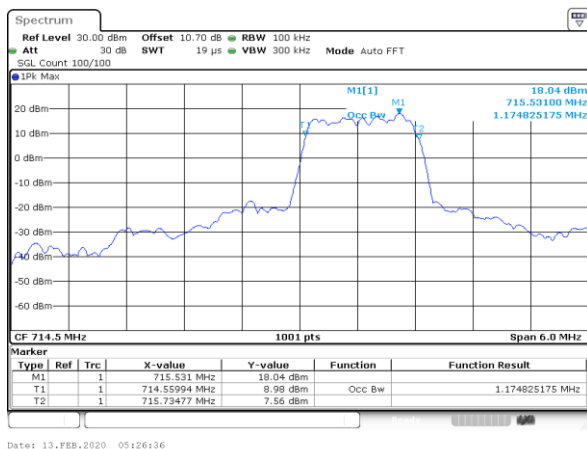
Middle Channel / 3MHz / QPSK



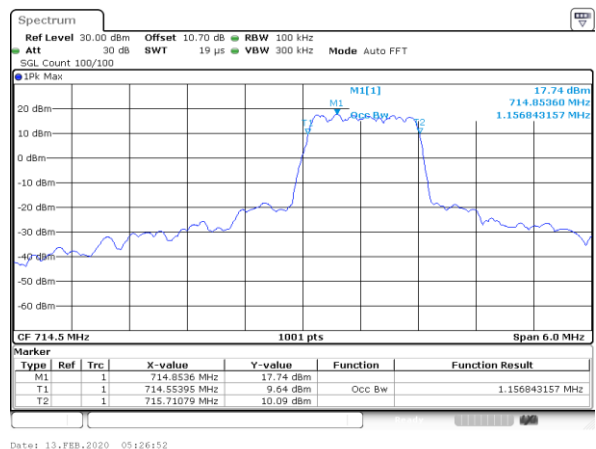
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



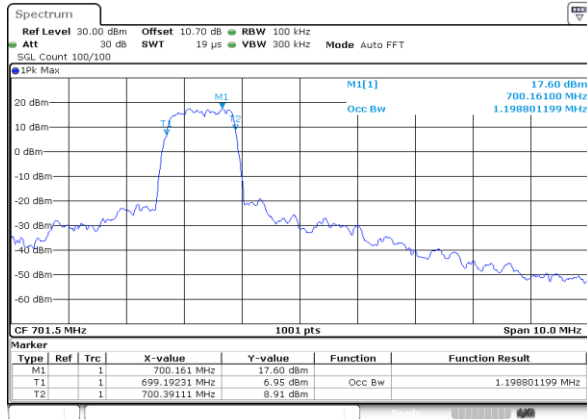
Highest Channel / 3MHz / 16QAM



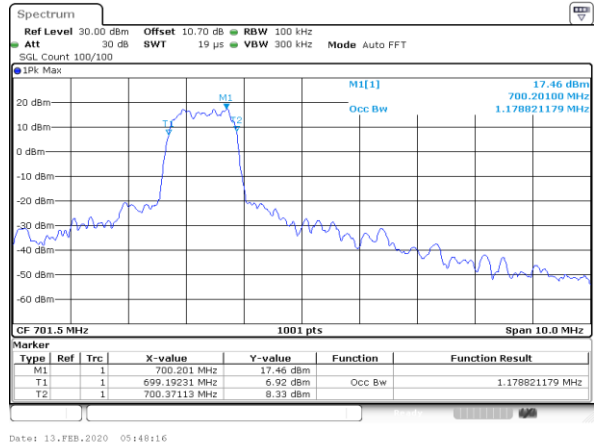


LTE Band 12

Lowest Channel / 5MHz / QPSK



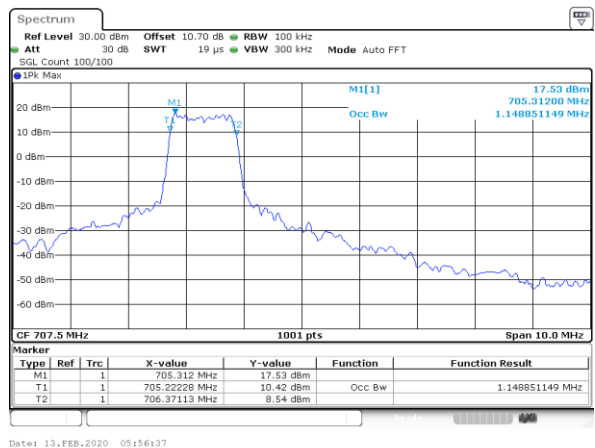
Lowest Channel / 5MHz / 16QAM



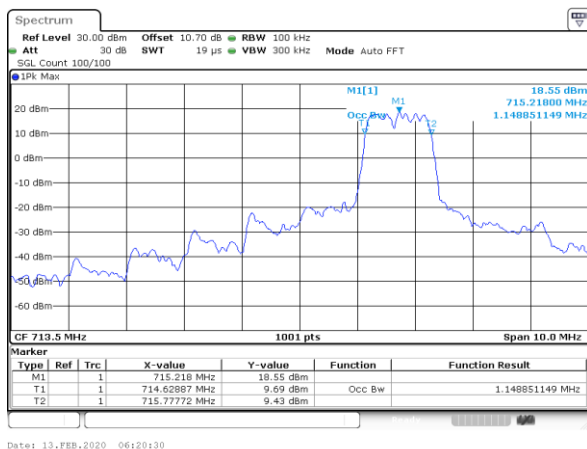
Middle Channel / 5MHz / QPSK



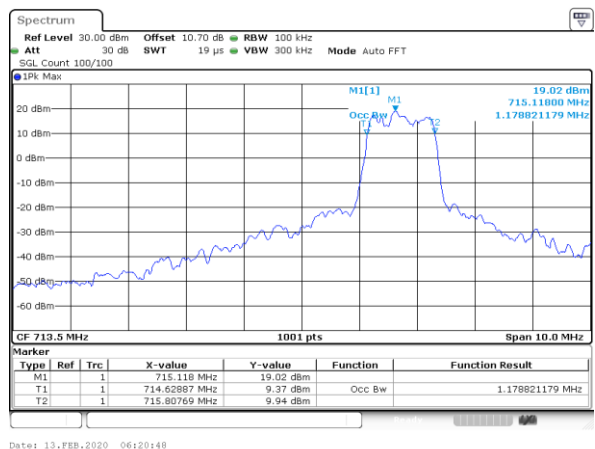
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



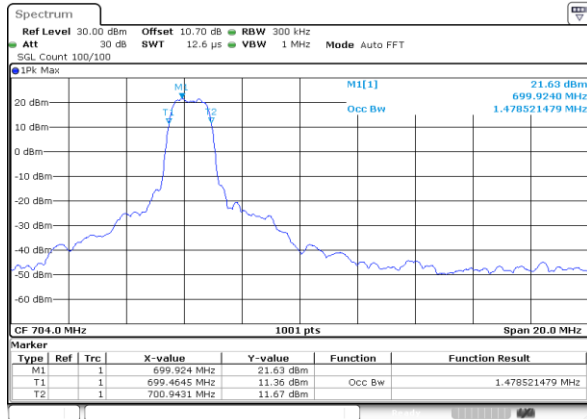
Highest Channel / 5MHz / 16QAM



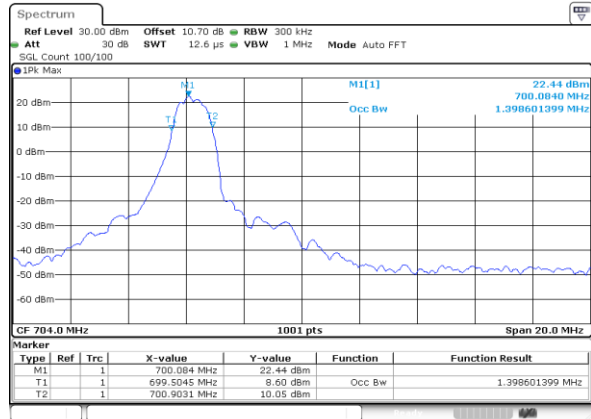


LTE Band 12

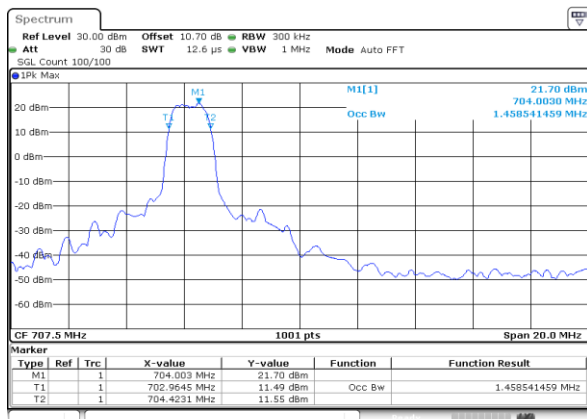
Lowest Channel / 10MHz / QPSK



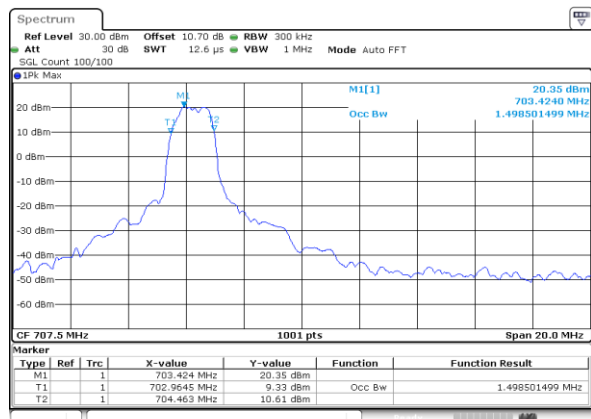
Lowest Channel / 10MHz / 16QAM



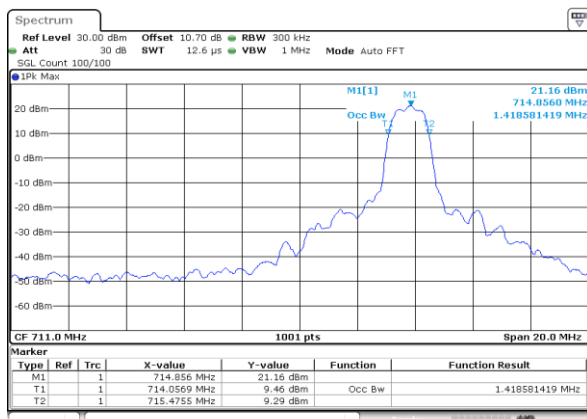
Middle Channel / 10MHz / QPSK



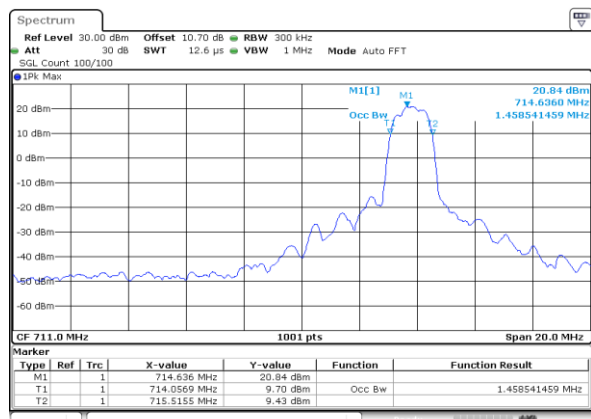
Middle Channel / 10MHz / 16QAM

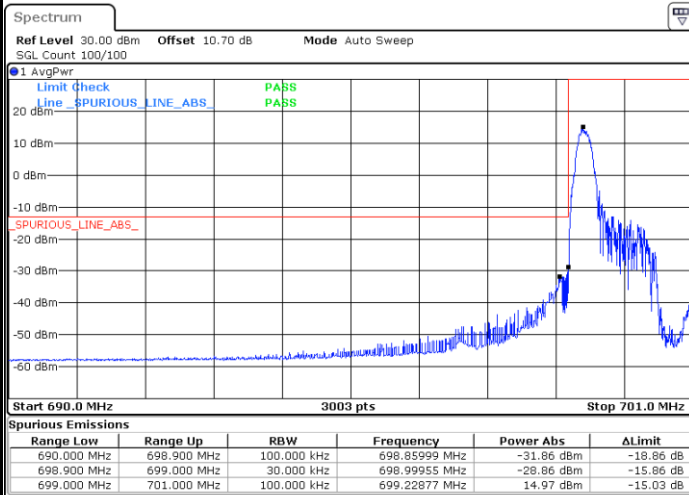
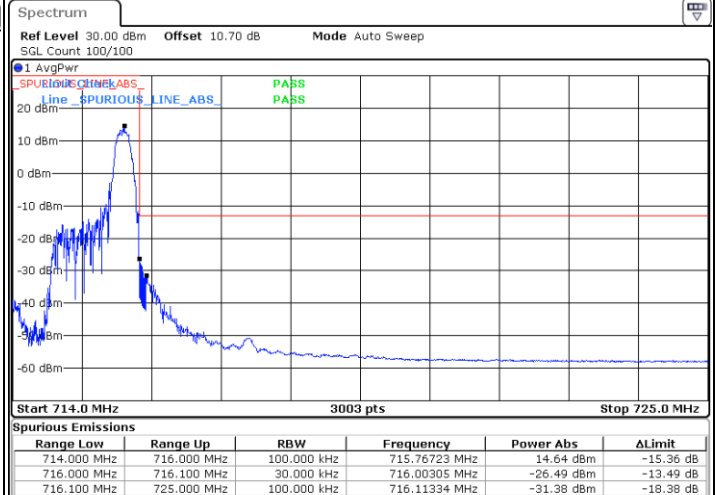
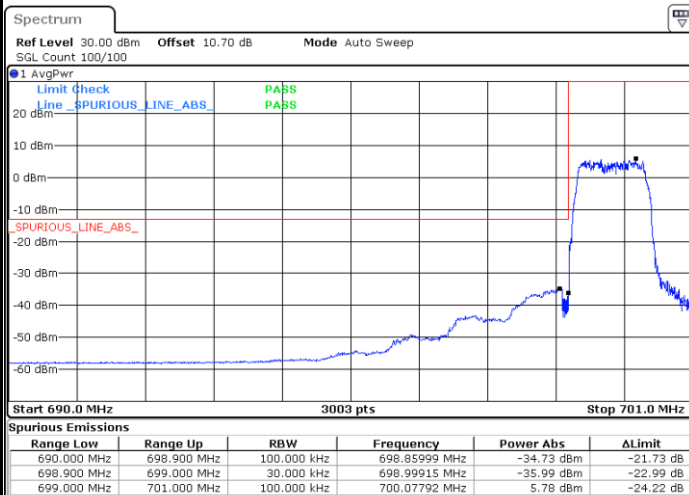


Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

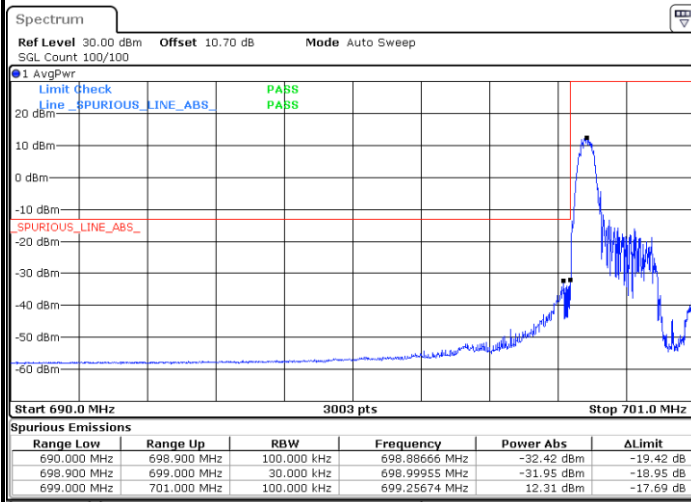


**Conducted Band Edge****LTE Band 12 / 1.4MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

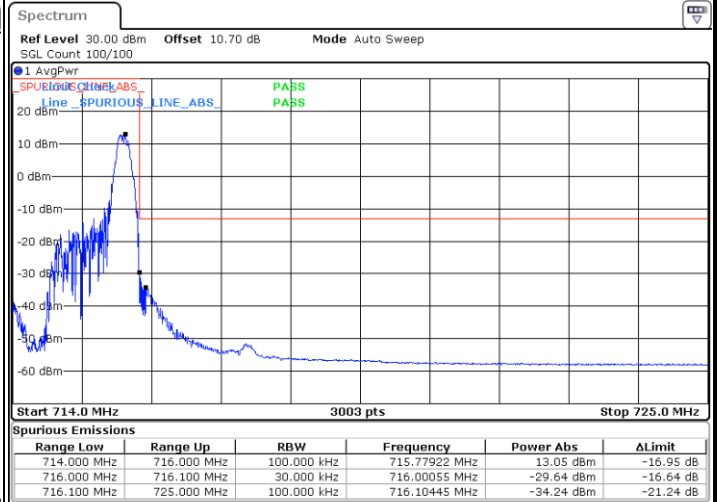


LTE Band 12 / 1.4MHz / 16QAM

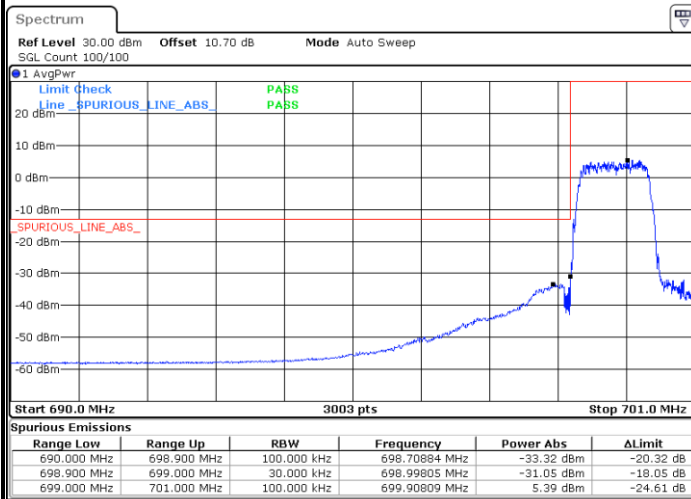
Lowest Band Edge / 1 RB



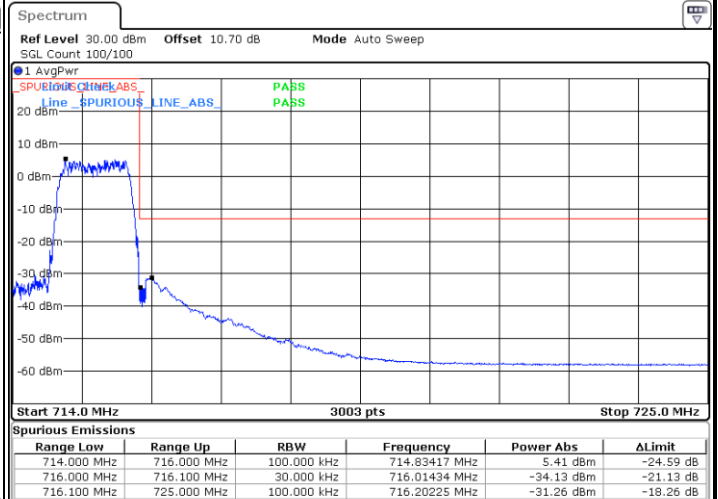
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



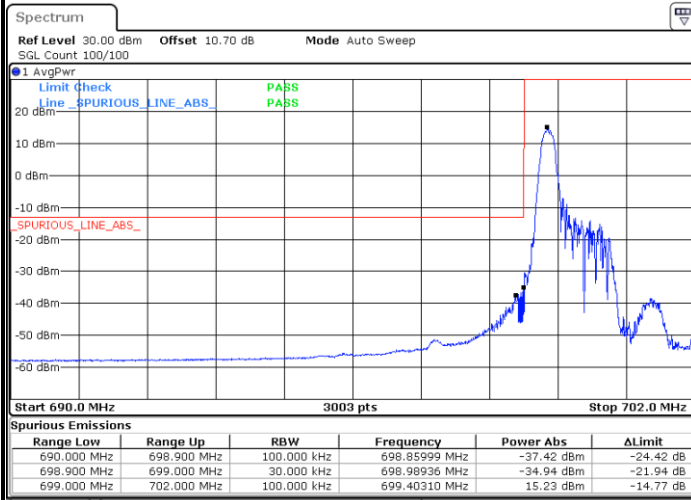
Highest Band Edge / Full RB





LTE Band 12 / 3MHz / QPSK

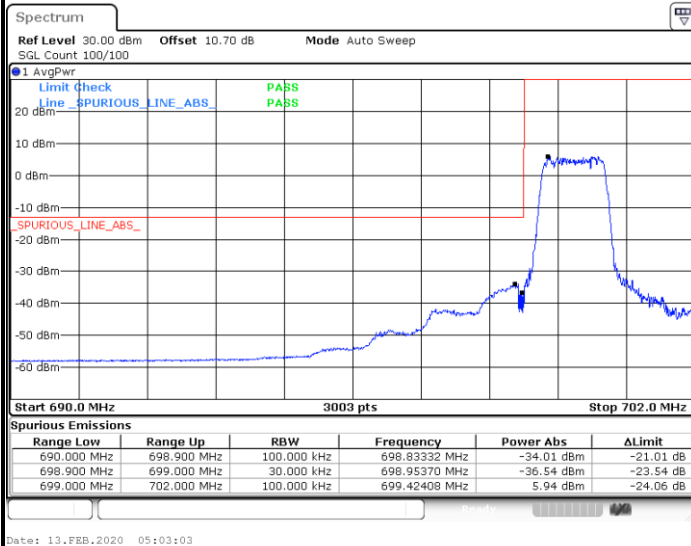
Lowest Band Edge / 1RB



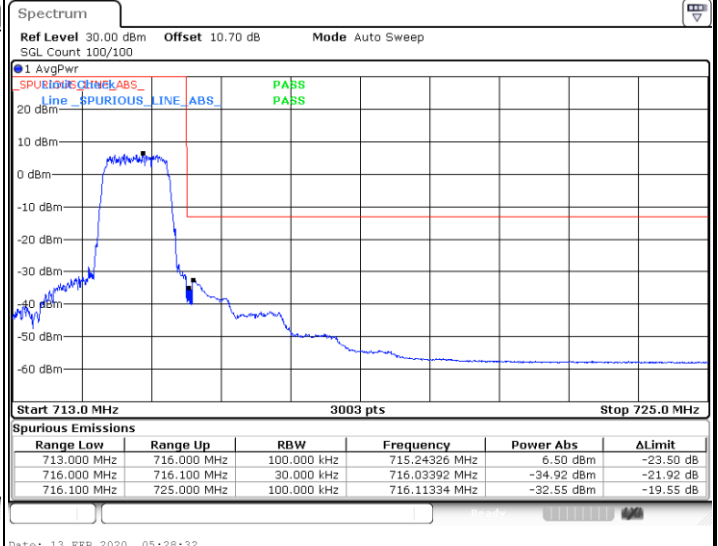
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



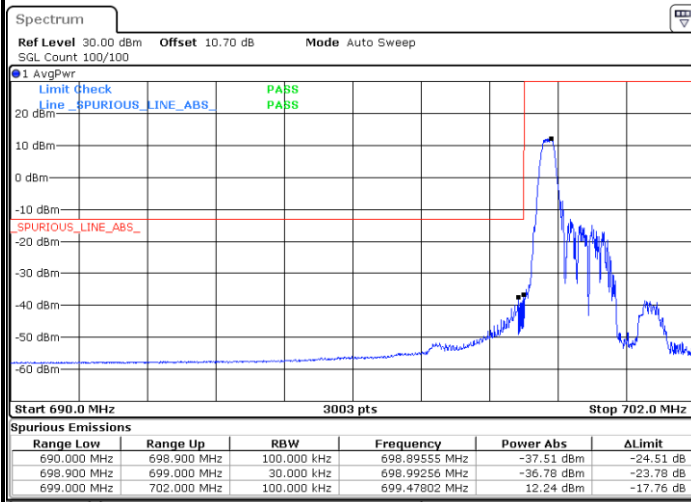
Highest Band Edge / Full RB



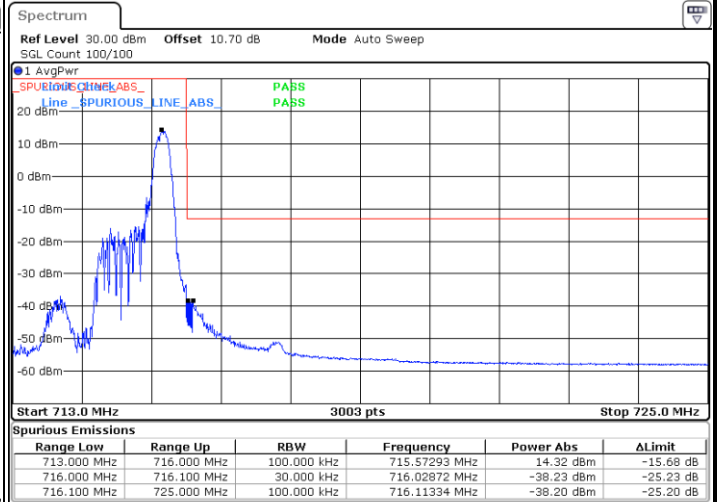


LTE Band 12 / 3MHz / 16QAM

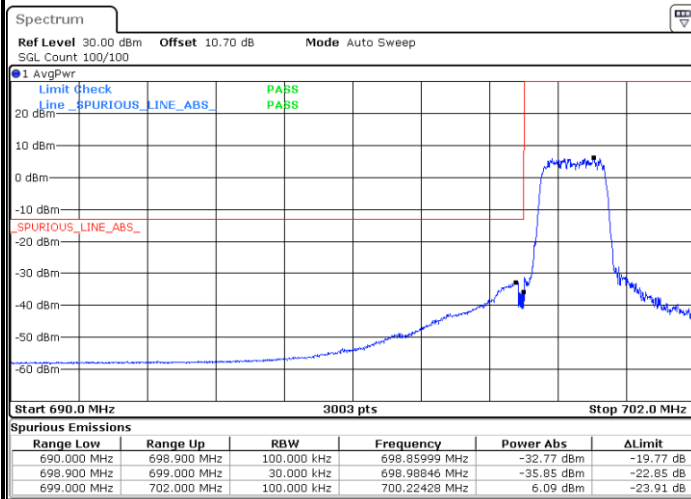
Lowest Band Edge / 1 RB



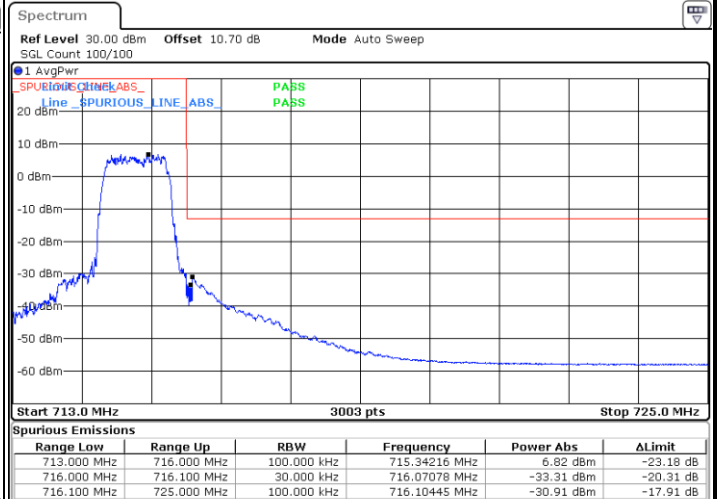
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



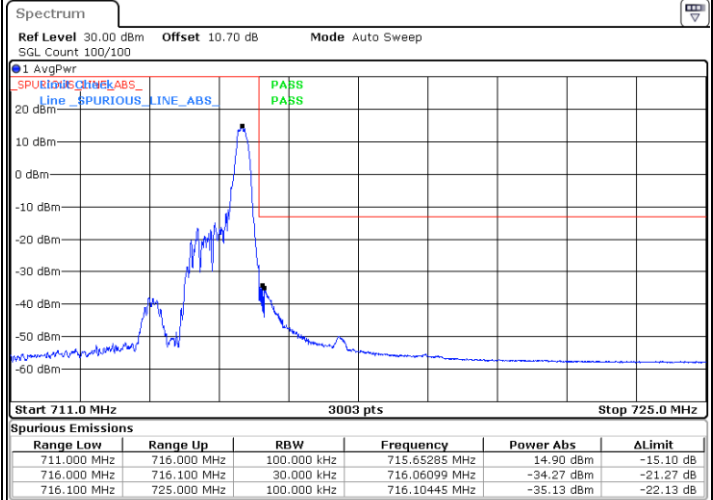


LTE Band 12 / 5MHz / QPSK

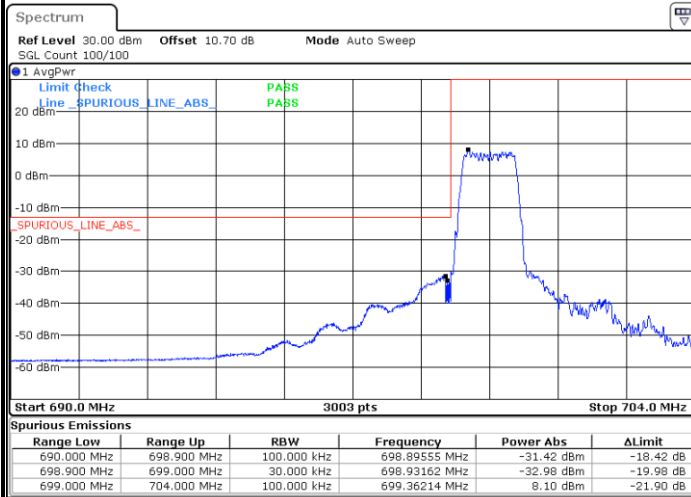
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



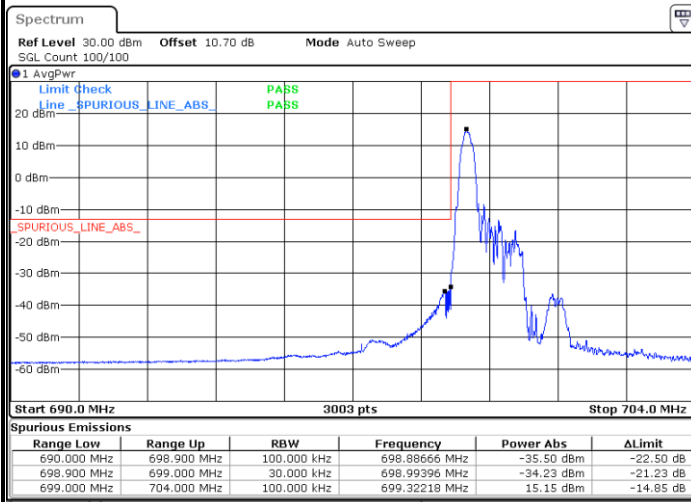
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 16QAM

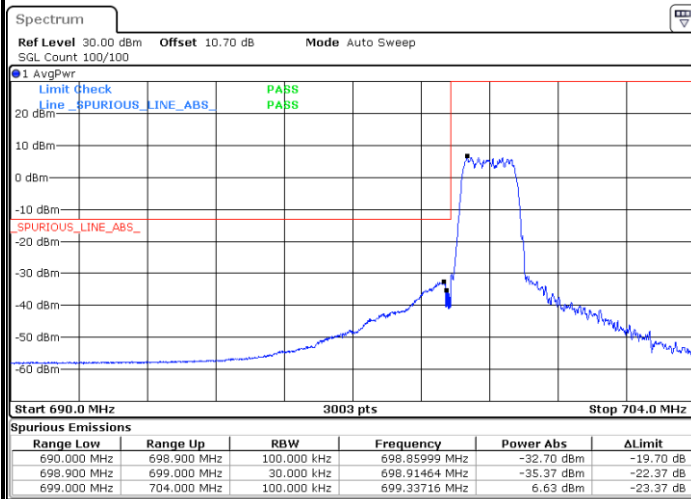
Lowest Band Edge / 1RB



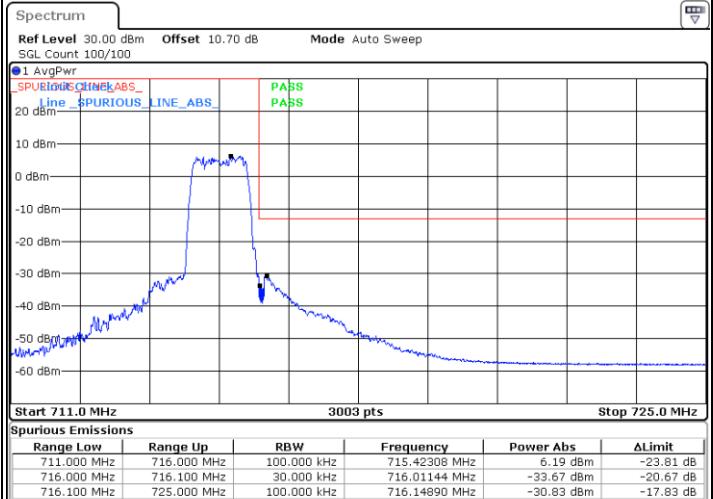
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



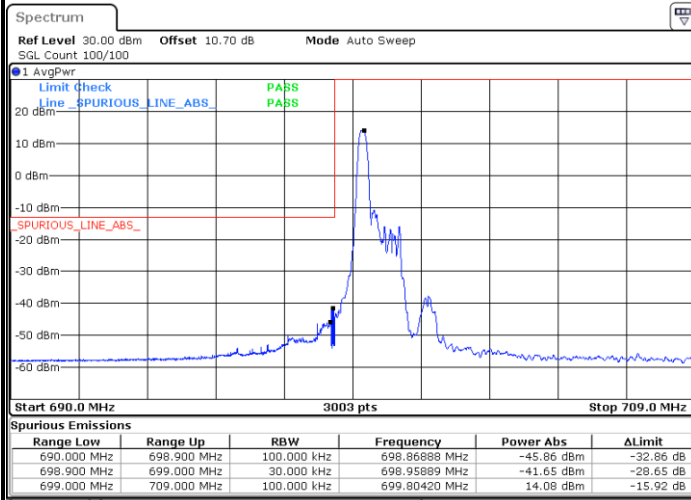
Highest Band Edge / Full RB





LTE Band 12 / 10MHz / QPSK

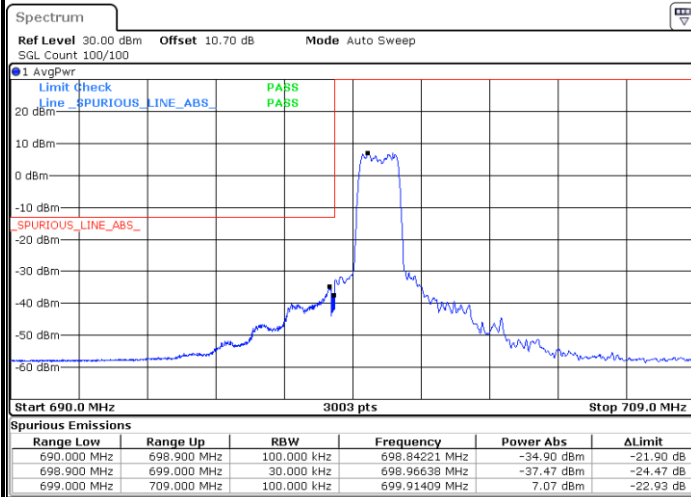
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



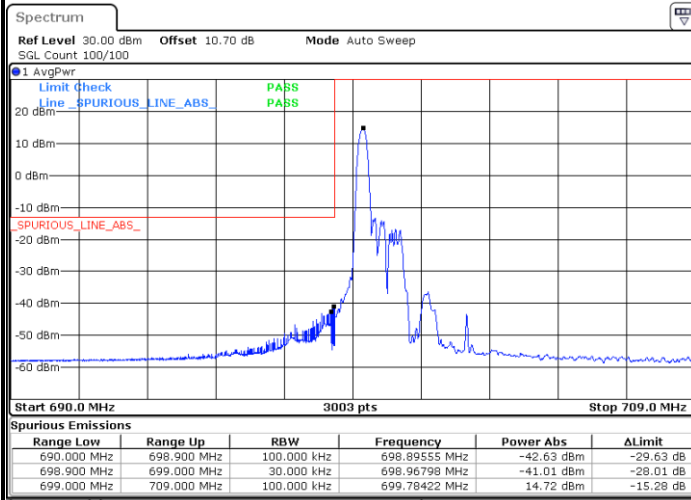
Highest Band Edge / Full RB



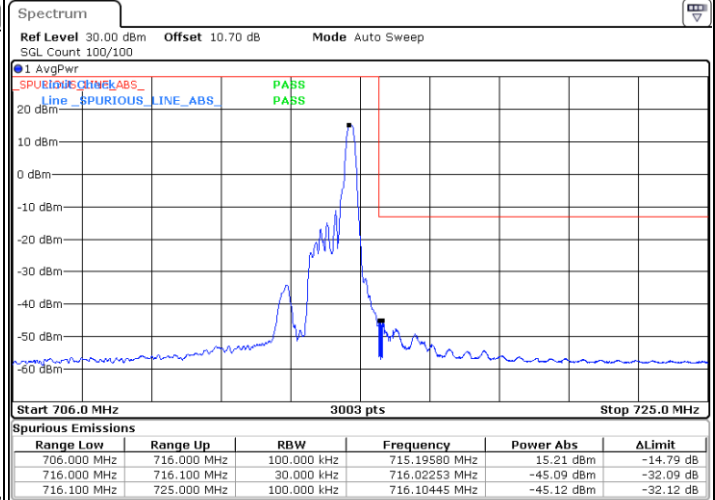


LTE Band 12 / 10MHz / 16QAM

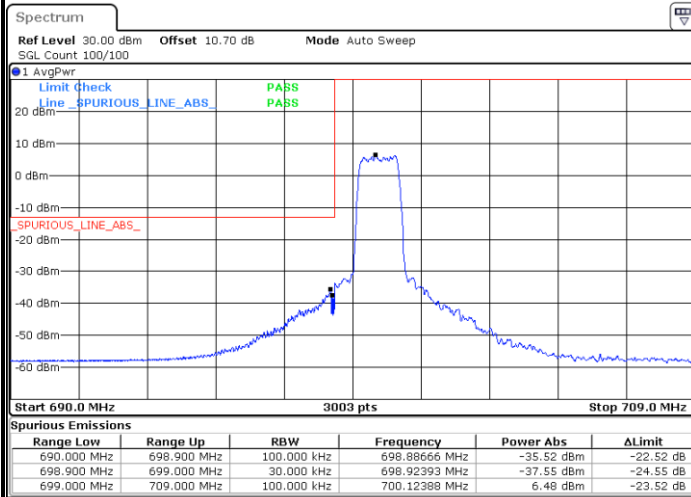
Lowest Band Edge / 1 RB



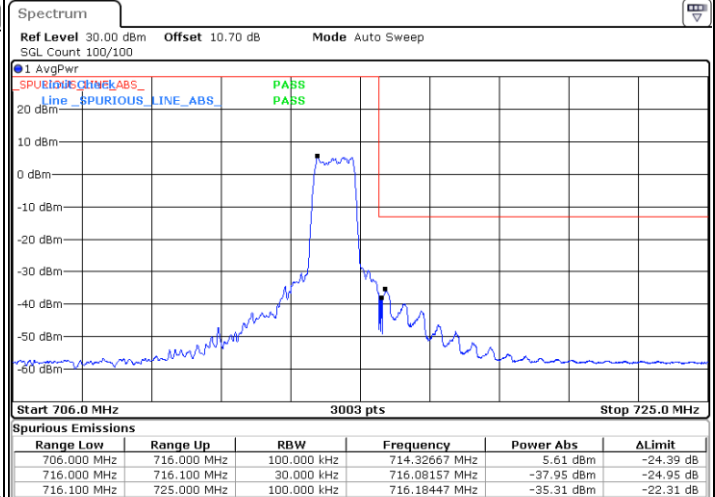
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

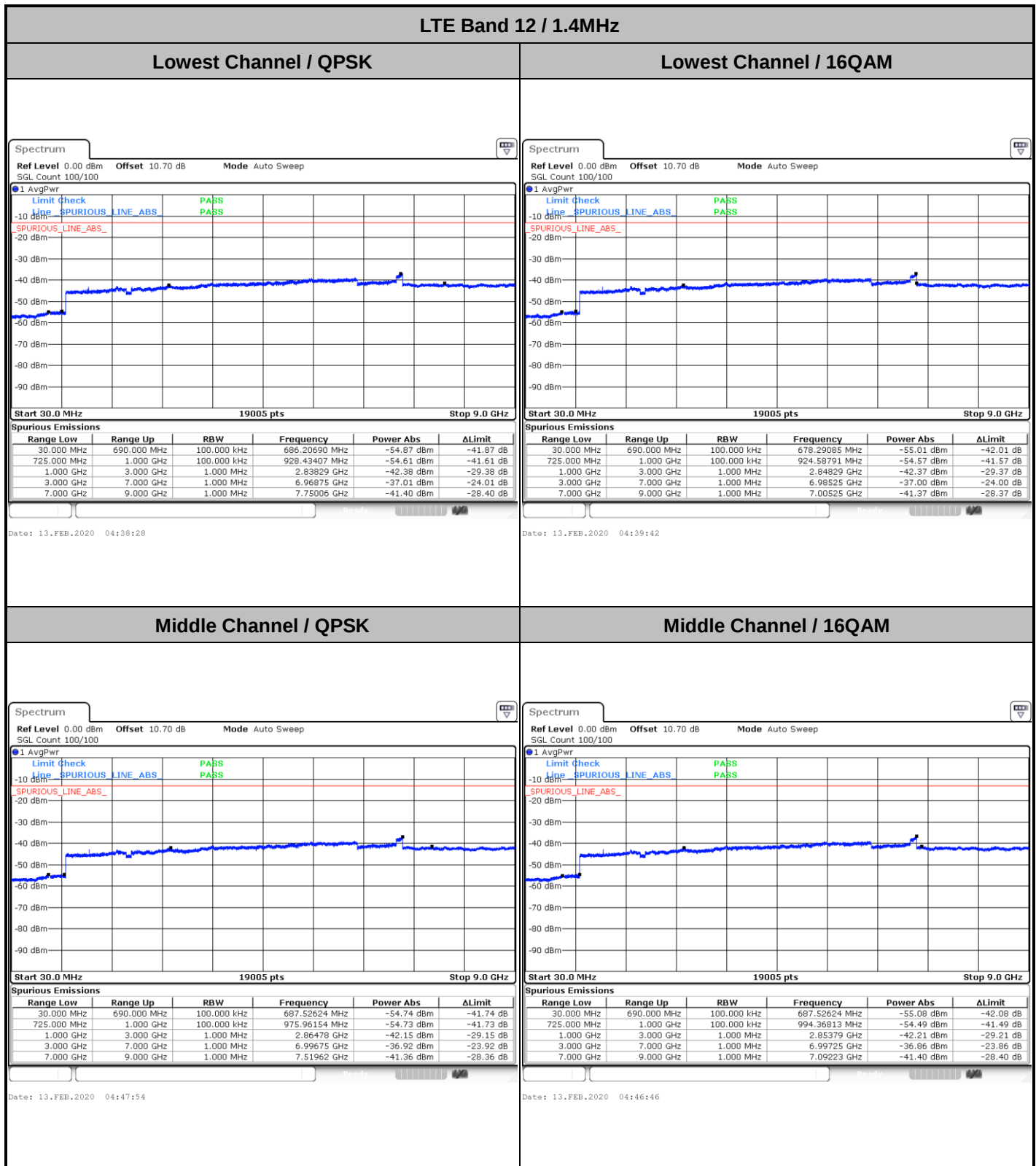


Highest Band Edge / Full RB





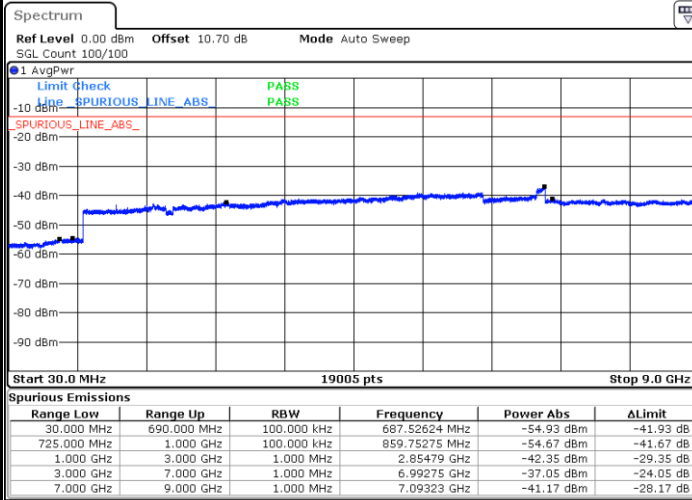
Conducted Spurious Emission





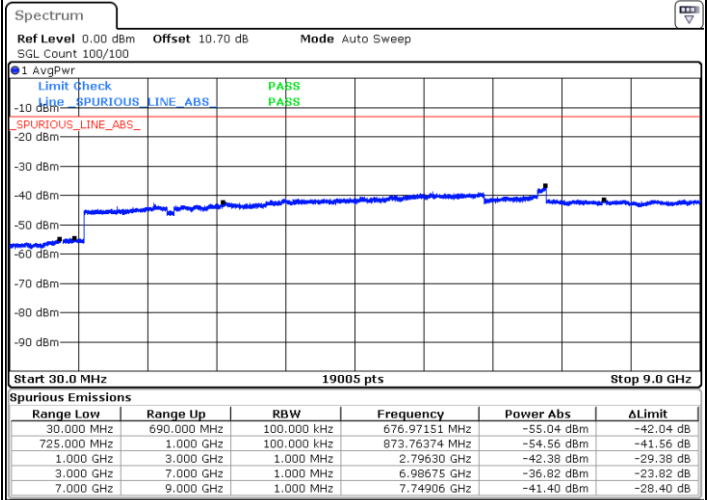
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 13.FEB.2020 04:55:16

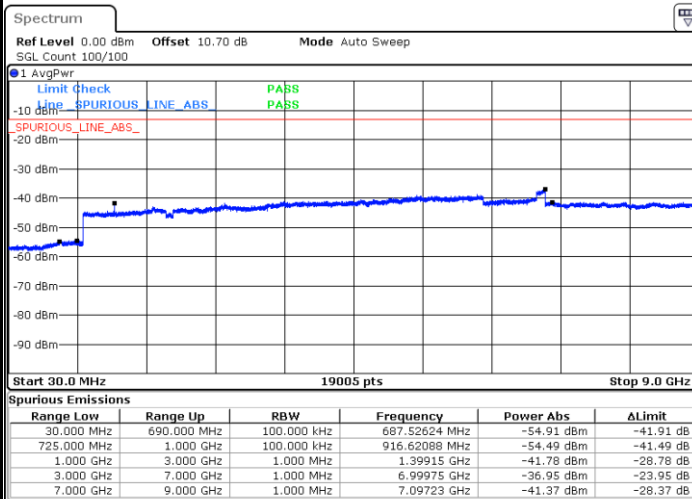
Highest Channel / 16QAM



Date: 13.FEB.2020 04:56:26

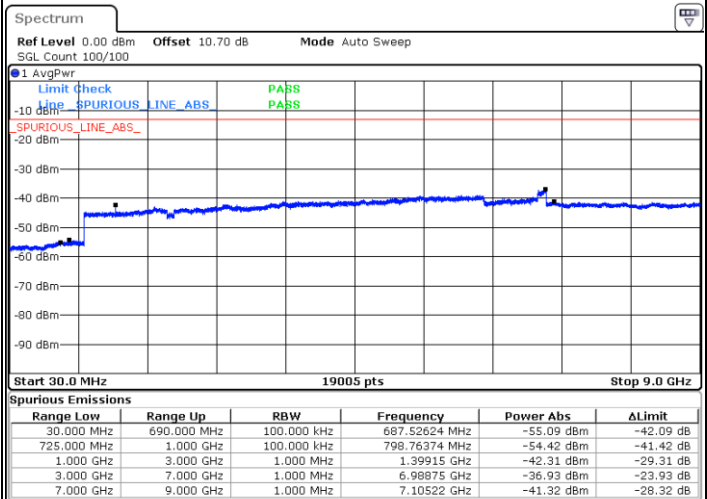
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 13.FEB.2020 05:09:30

Lowest Channel / 16QAM

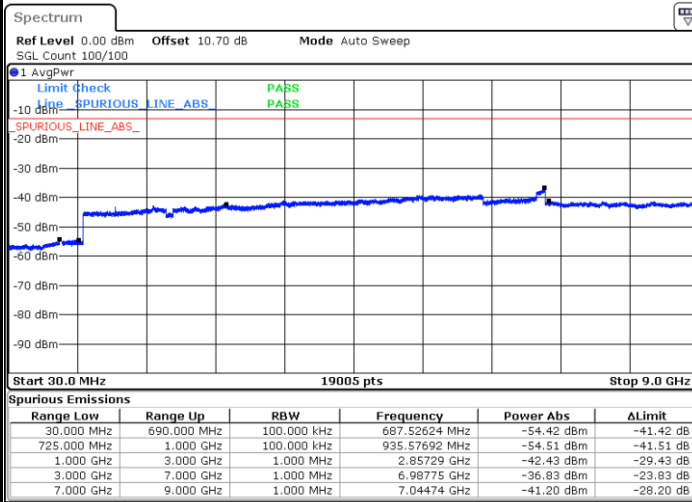


Date: 13.FEB.2020 05:10:52



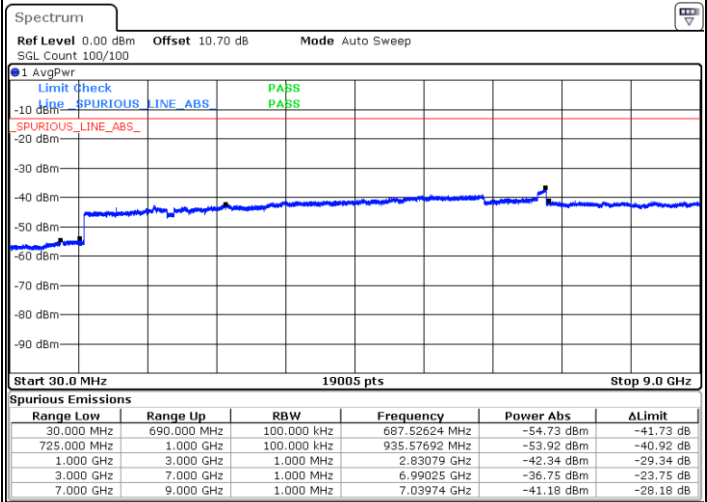
LTE Band 12 / 3MHz

Middle Channel / QPSK



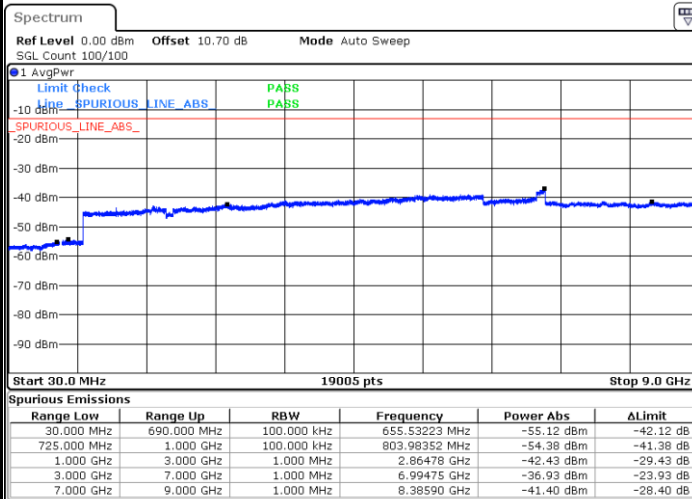
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Middle Channel / 16QAM



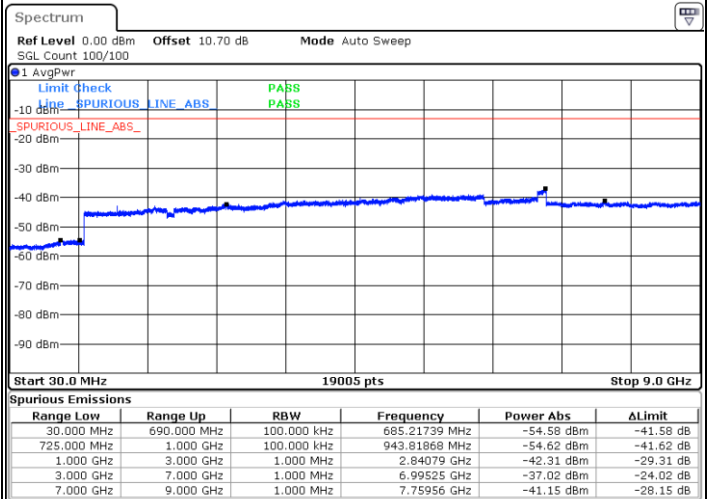
Date: 13.FEB.2020 05:13:17

Highest Channel / QPSK



Date: 13.FEB.2020 05:32:52

Highest Channel / 16QAM



Date: 13.FEB.2020 05:33:56