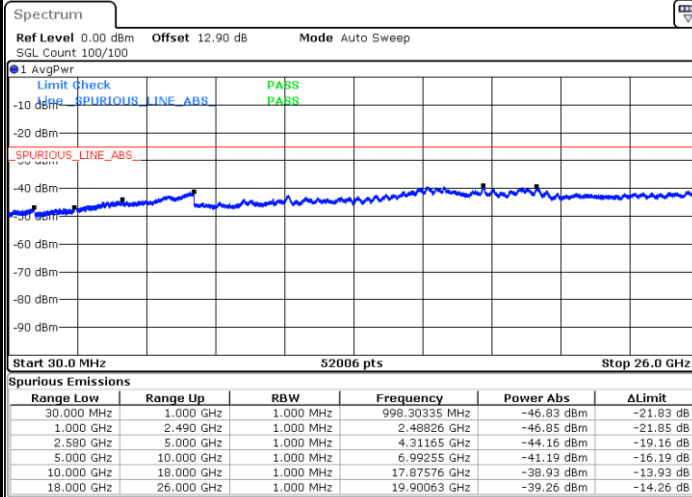




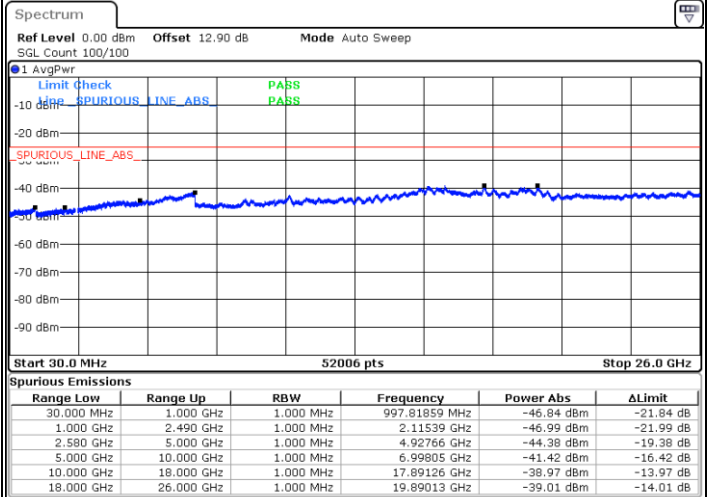
LTE Band 7 / 15MHz

Lowest Channel / QPSK



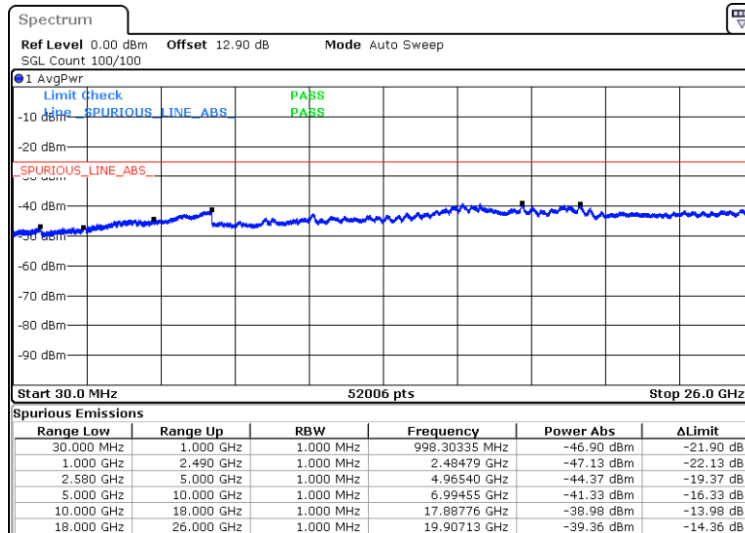
Date: 15 JUN 2021 11:39:34

Middle Channel / QPSK



Date: 15 JUN 2021 11:42:08

Highest Channel / QPSK

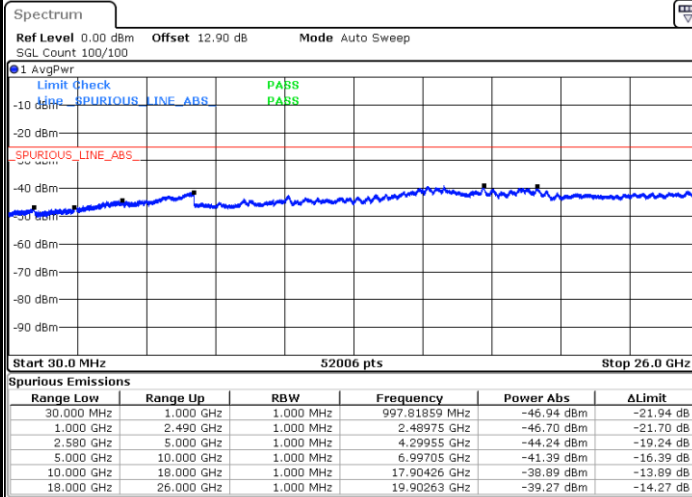


Date: 15 JUN 2021 11:46:07



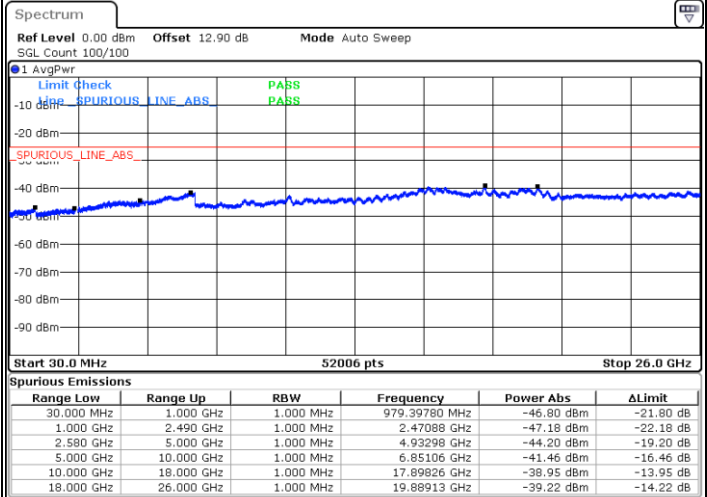
LTE Band 7 / 20MHz

Lowest Channel / QPSK



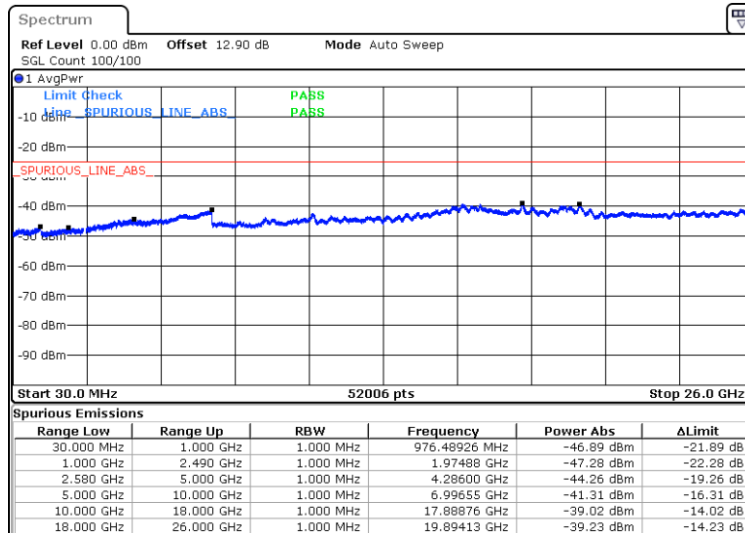
Date: 15 JUN 2021 11:53:38

Middle Channel / QPSK



Date: 15 JUN 2021 11:56:13

Highest Channel / QPSK



Date: 15 JUN 2021 12:00:11

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
40	Normal Voltage	0.0005	PASS
30	Normal Voltage	0.0025	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0038	
-20	Normal Voltage	0.0005	
20	Maximum Voltage	0.0036	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0008	

Note:

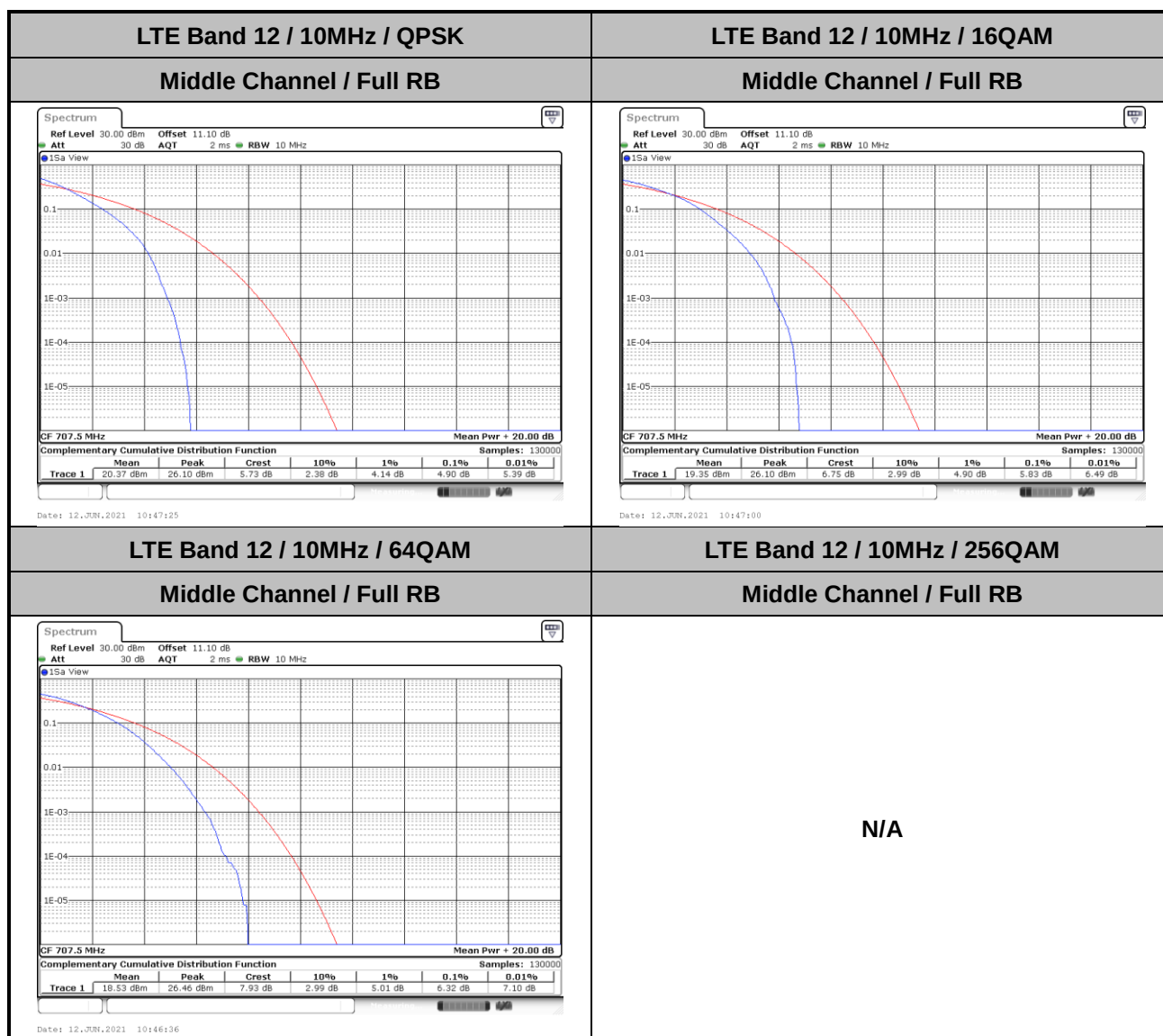
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.
3. EUT can't operate outside the temperatures between -20 °C and 40 °C.



LTE Band 12

Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.90	5.83	6.32	PASS



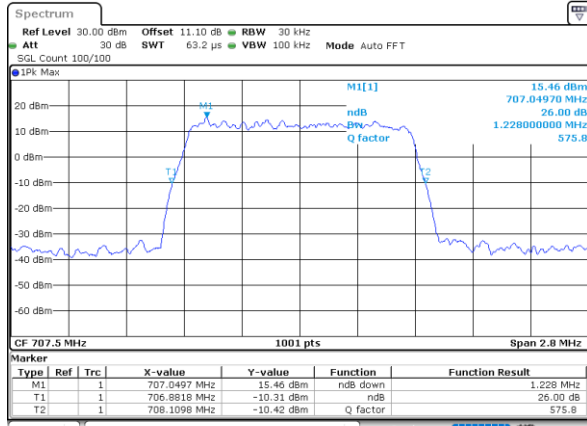
**26dB Bandwidth**

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
Middle CH	1.23	1.22	3.00	3.01	4.91	4.92	9.81	9.71	-	-	-	-
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	1.22	-	3.02	-	4.87	-	9.81	-	-	-	-	-



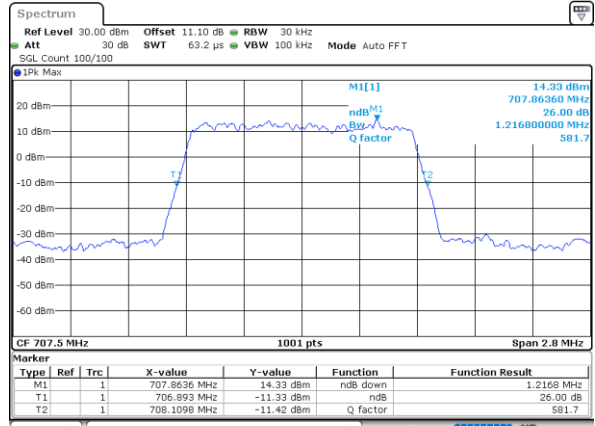
LTE Band 12

Middle Channel / 1.4MHz / QPSK



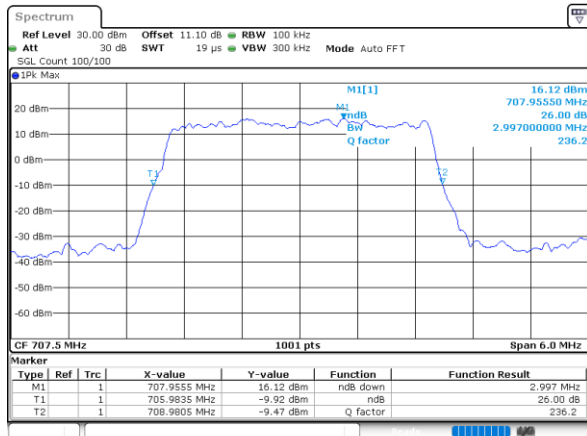
Date: 12 JUN 2021 09:57:46

Middle Channel / 1.4MHz / 16QAM



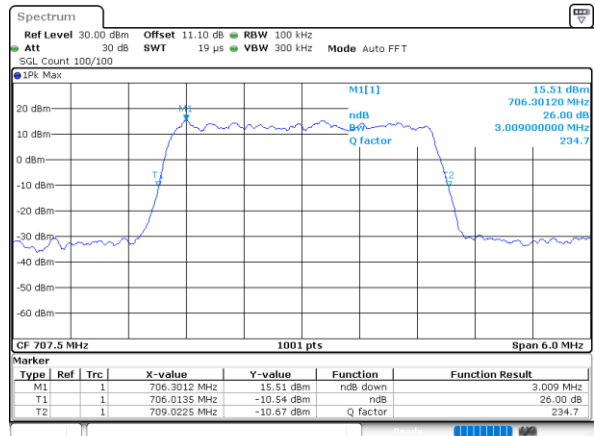
Date: 12 JUN 2021 09:58:08

Middle Channel / 3MHz / QPSK



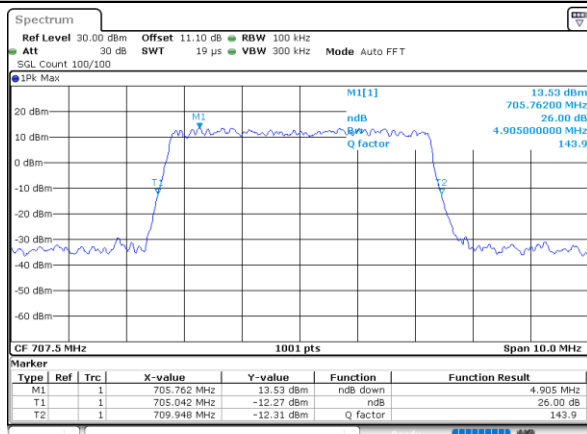
Date: 12 JUN 2021 10:11:05

Middle Channel / 3MHz / 16QAM



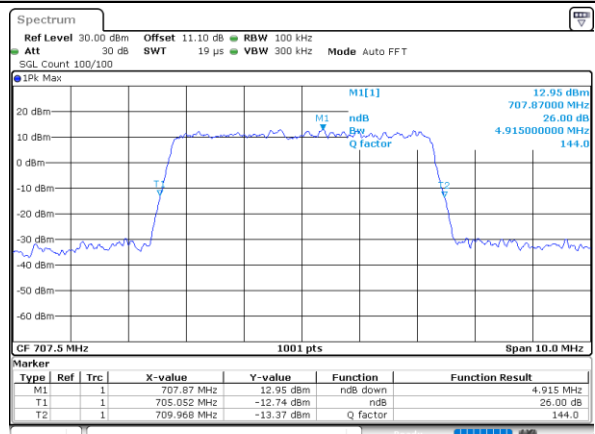
Date: 12 JUN 2021 10:11:27

Middle Channel / 5MHz / QPSK



Date: 12 JUN 2021 10:27:53

Middle Channel / 5MHz / 16QAM

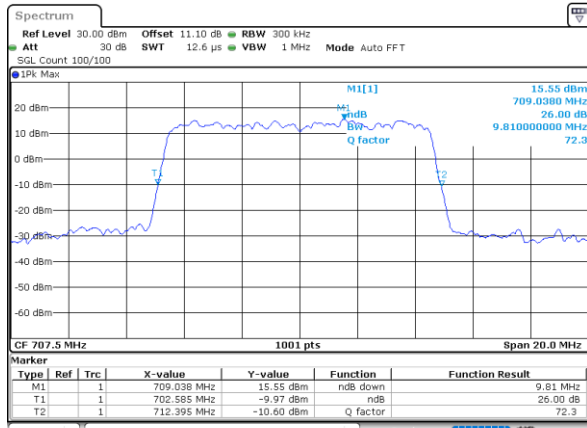


Date: 12 JUN 2021 10:28:14



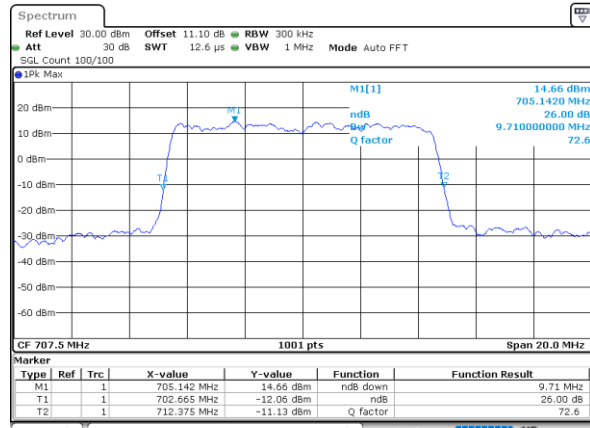
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 12 JUN 2021 10:37:42

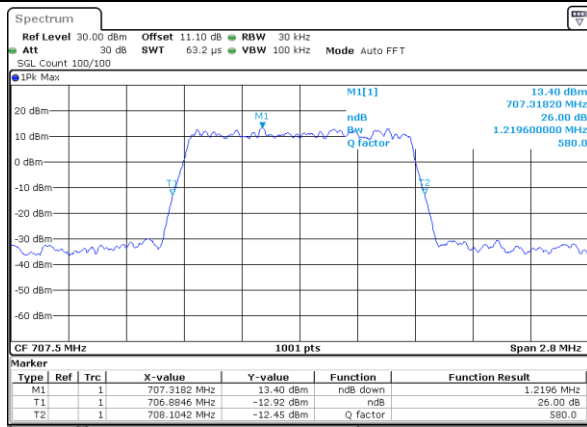
Middle Channel / 10MHz / 16QAM



Date: 12 JUN 2021 10:38:04

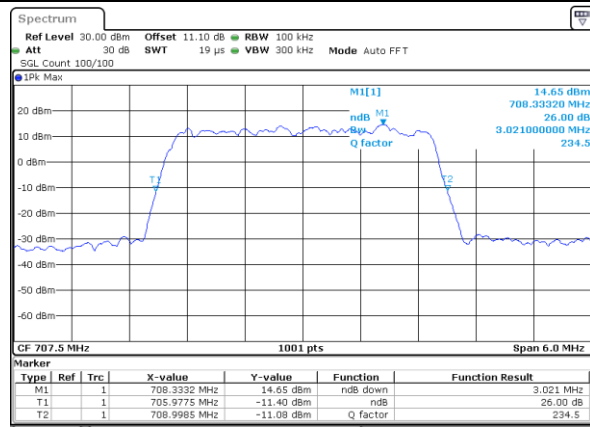
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



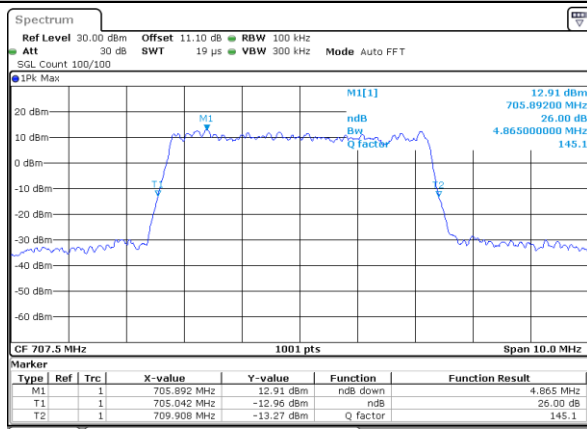
Date: 12 JUN 2021 10:04:53

Middle Channel / 3MHz / 64QAM



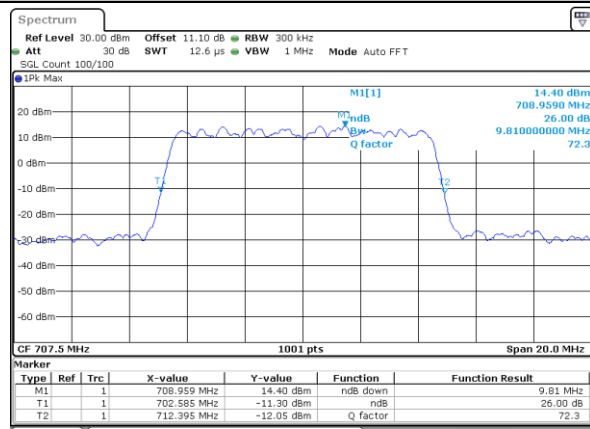
Date: 12 JUN 2021 10:18:11

Middle Channel / 5MHz / 64QAM



Date: 12 JUN 2021 10:21:41

Middle Channel / 10MHz / 64QAM



Date: 12 JUN 2021 10:44:50

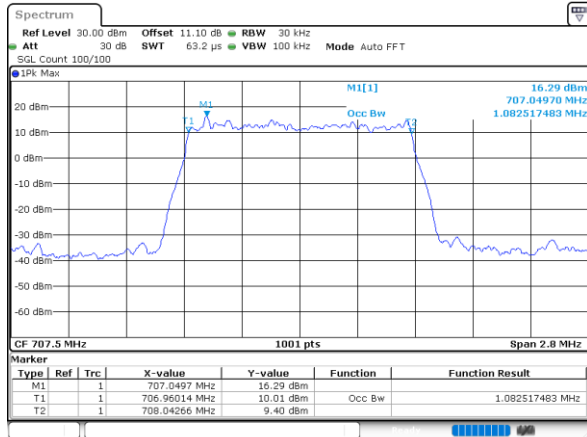
**Occupied Bandwidth**

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
Middle CH	1.08	1.09	2.73	2.73	4.48	4.49	9.03	9.03	-	-	-	-
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	1.08	-	2.72	-	4.49	-	9.01	-	-	-	-	-

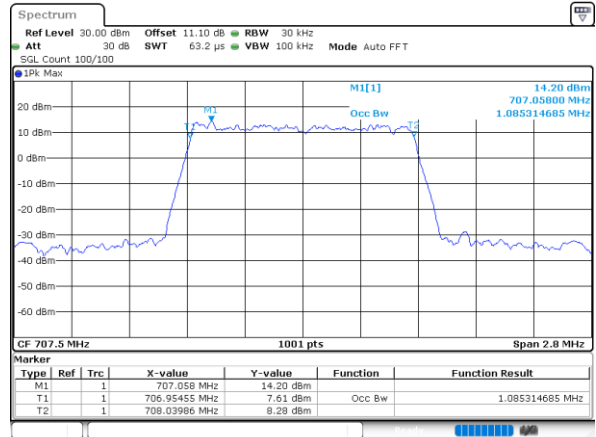


LTE Band 12

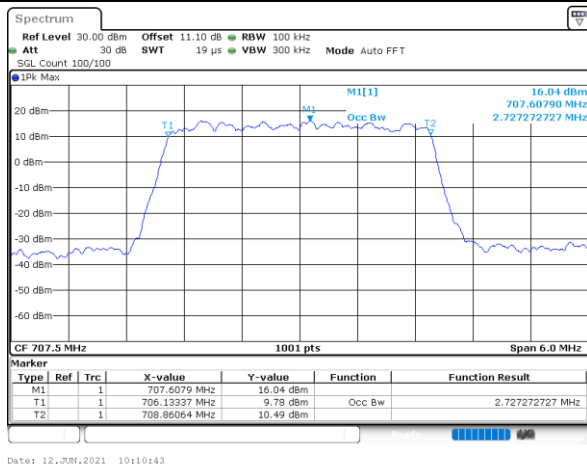
Middle Channel / 1.4MHz / QPSK



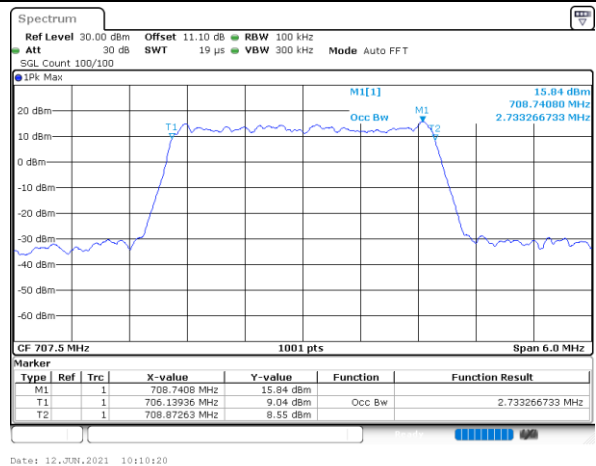
Middle Channel / 1.4MHz / 16QAM



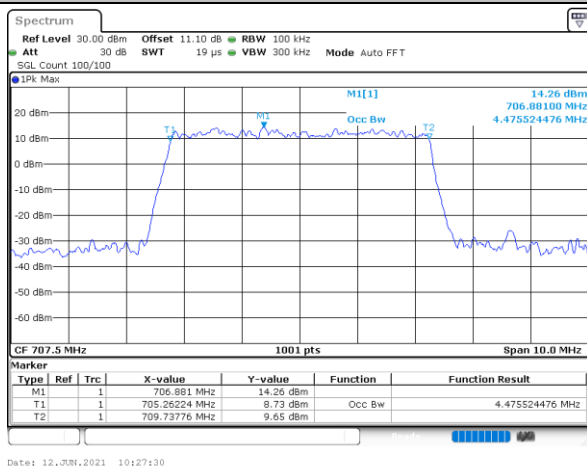
Middle Channel / 3MHz / QPSK



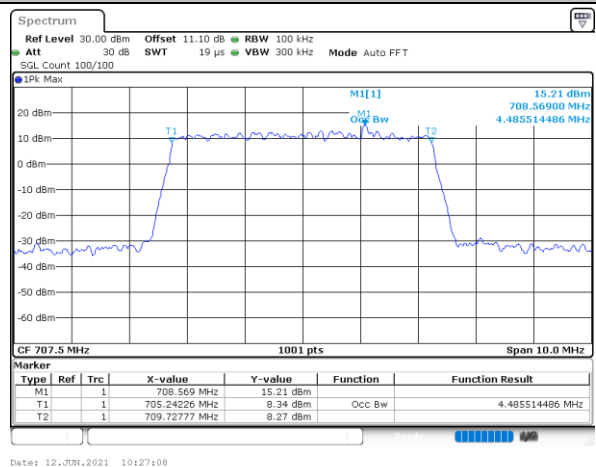
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



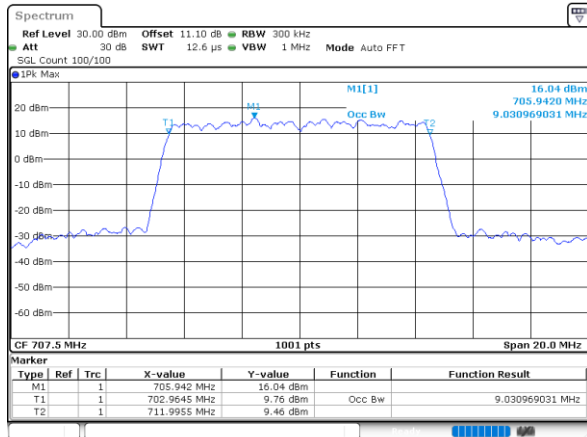
Middle Channel / 5MHz / 16QAM



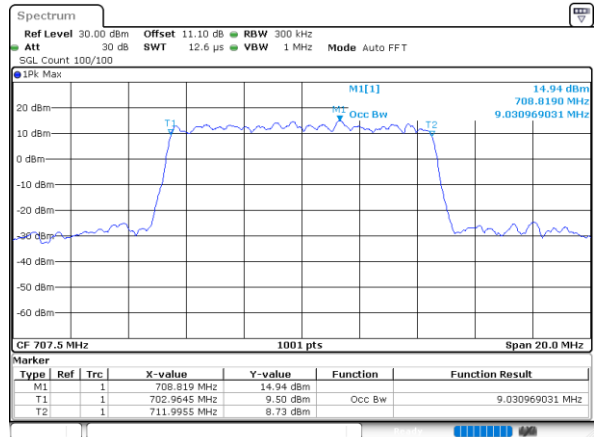


LTE Band 12

Middle Channel / 10MHz / QPSK

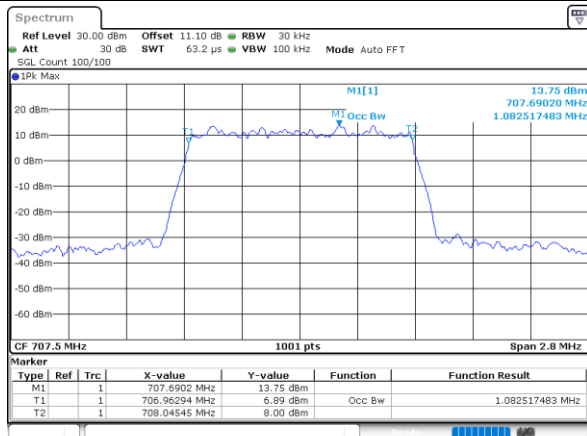


Middle Channel / 10MHz / 16QAM

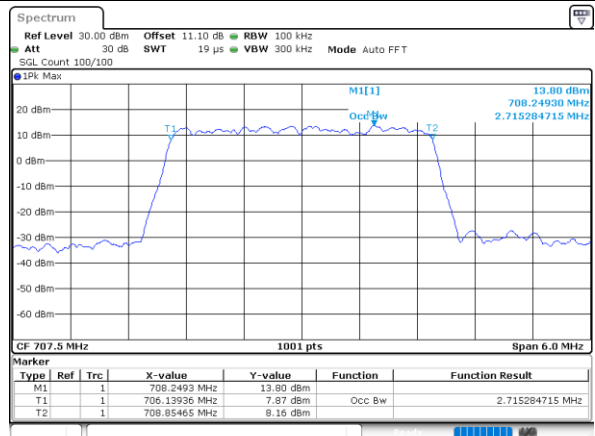


LTE Band 12

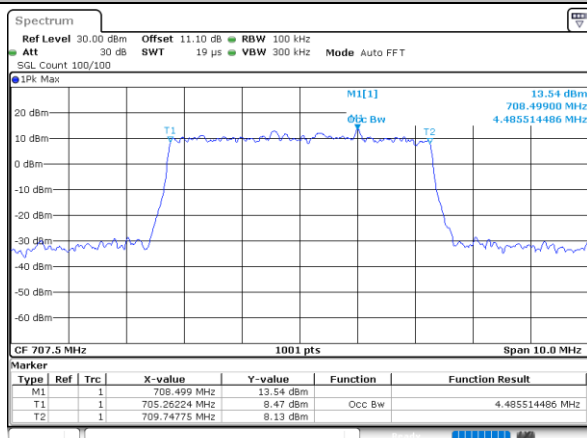
Middle Channel / 1.4MHz / 64QAM



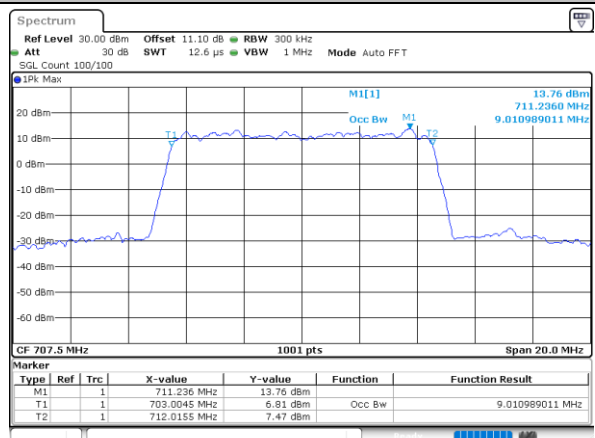
Middle Channel / 3MHz / 64QAM



Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM

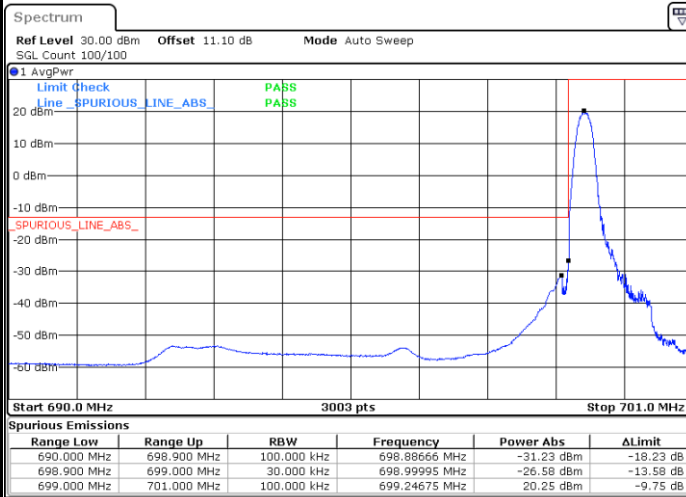




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

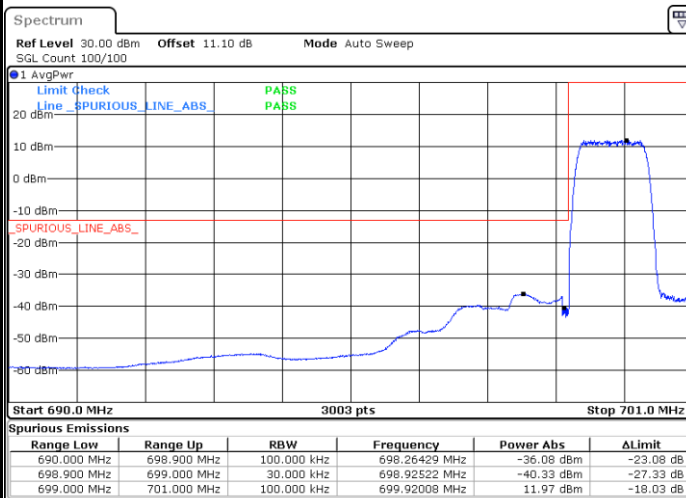
Lowest Band Edge / 1RB



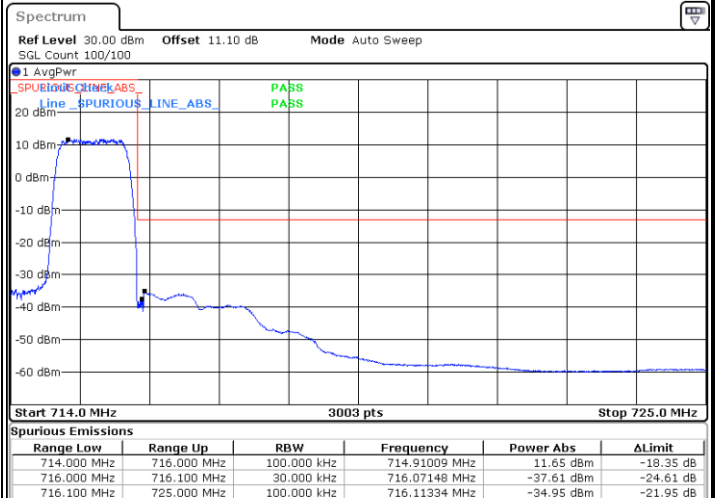
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



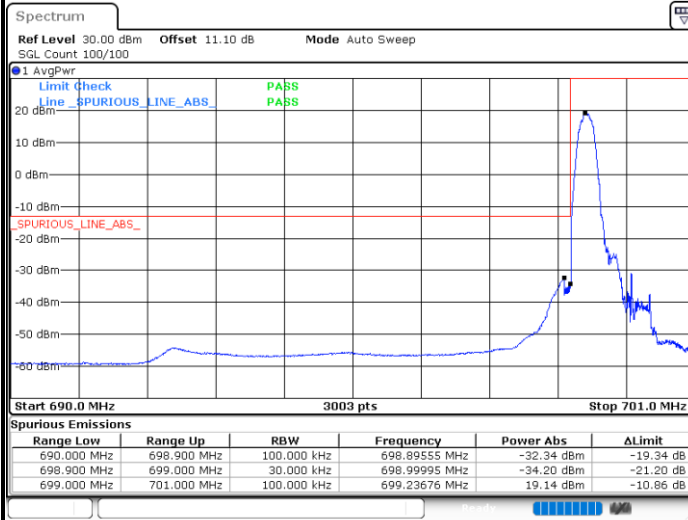
Highest Band Edge / Full RB



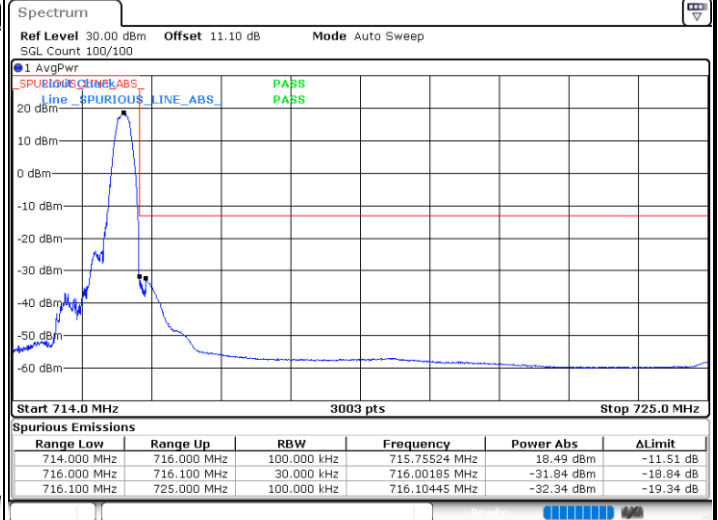


LTE Band 12 / 1.4MHz / 16QAM

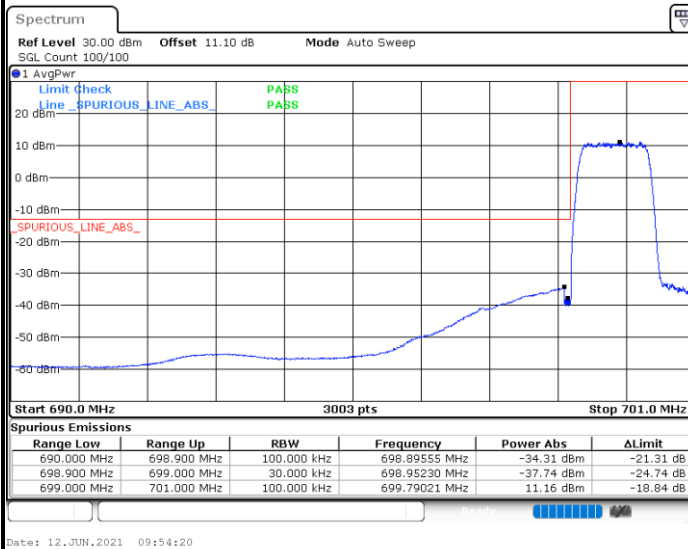
Lowest Band Edge / 1 RB



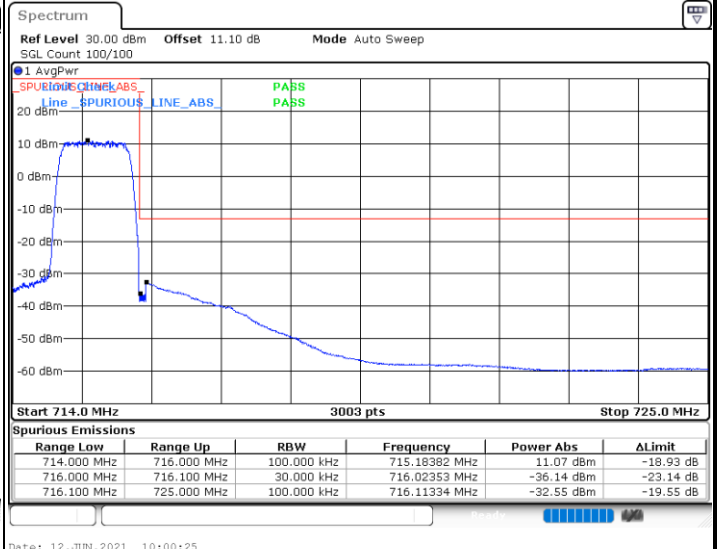
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



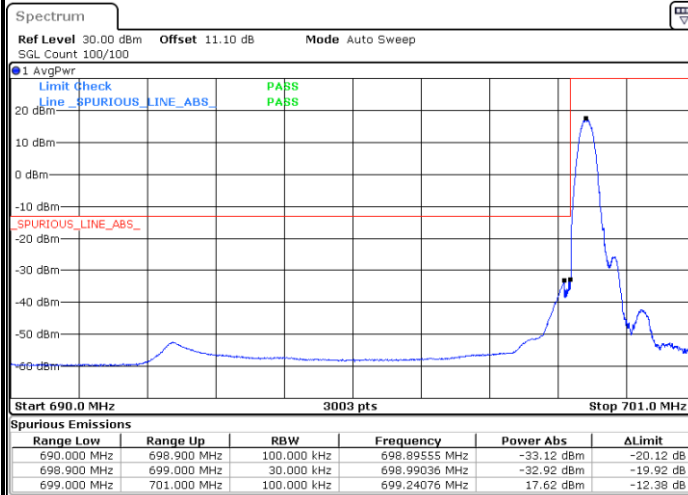
Highest Band Edge / Full RB



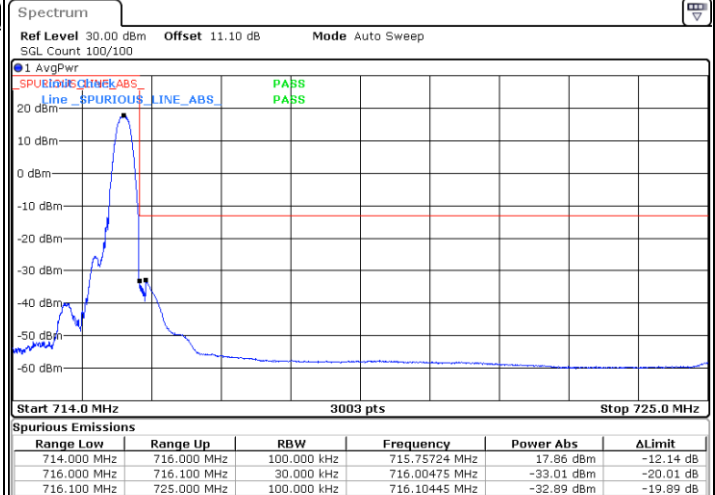


LTE Band 12 / 1.4MHz / 64QAM

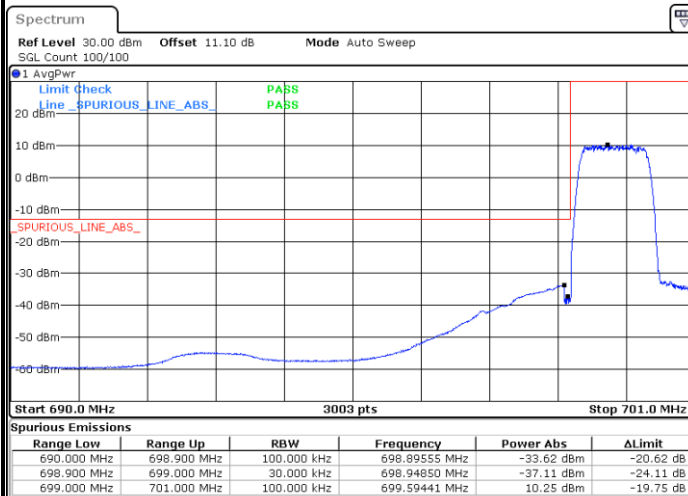
Lowest Band Edge / 1 RB



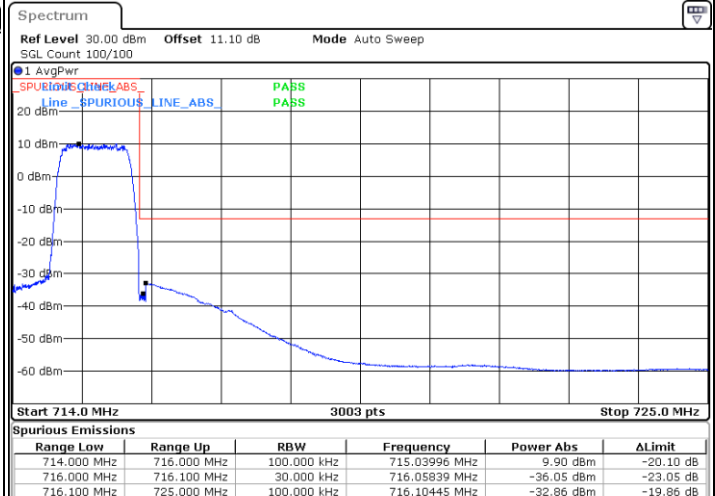
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



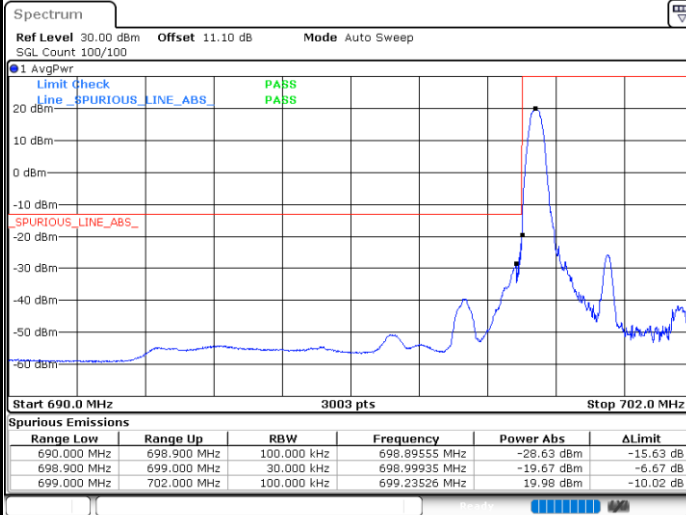
Highest Band Edge / Full RB



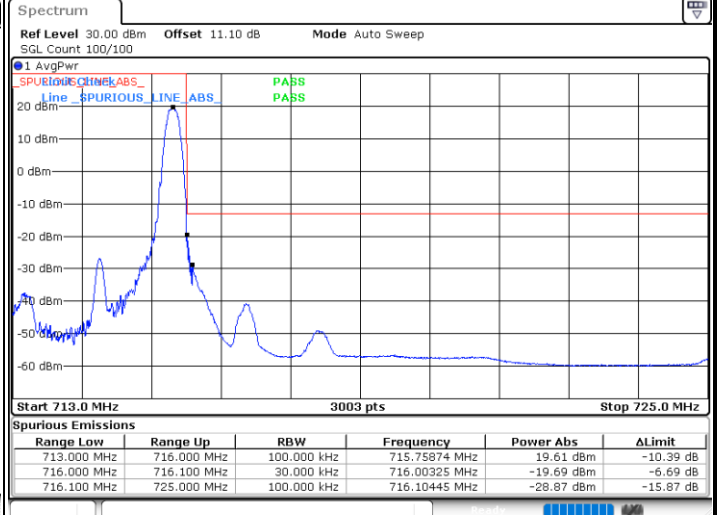


LTE Band 12 / 3MHz / QPSK

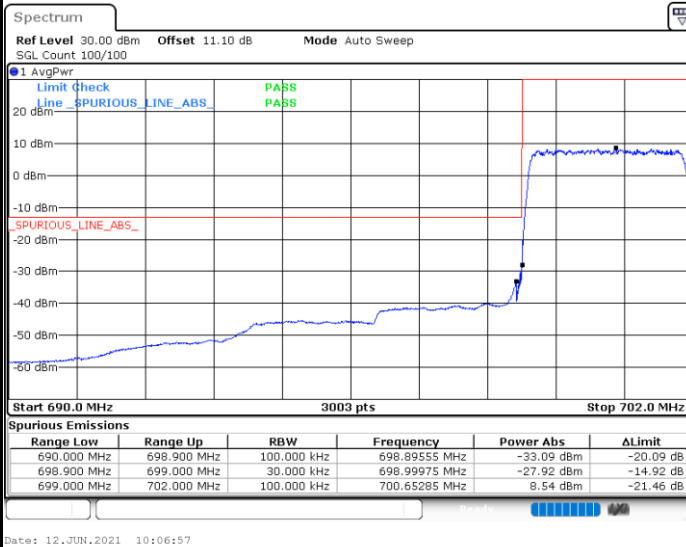
Lowest Band Edge / 1RB



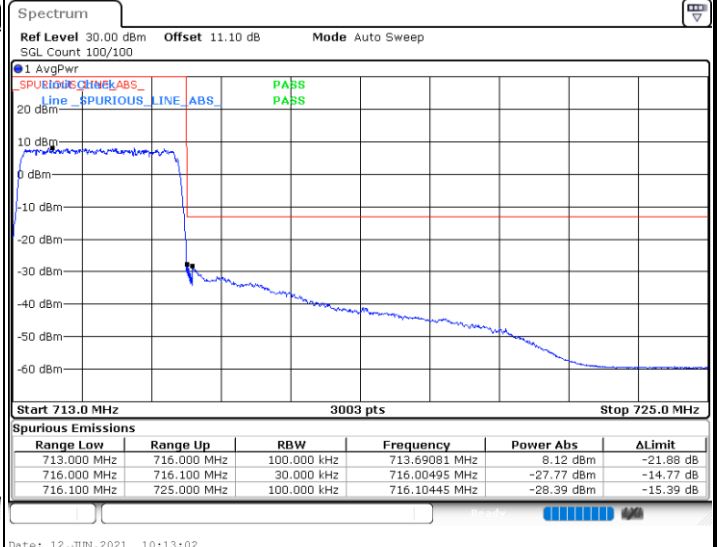
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



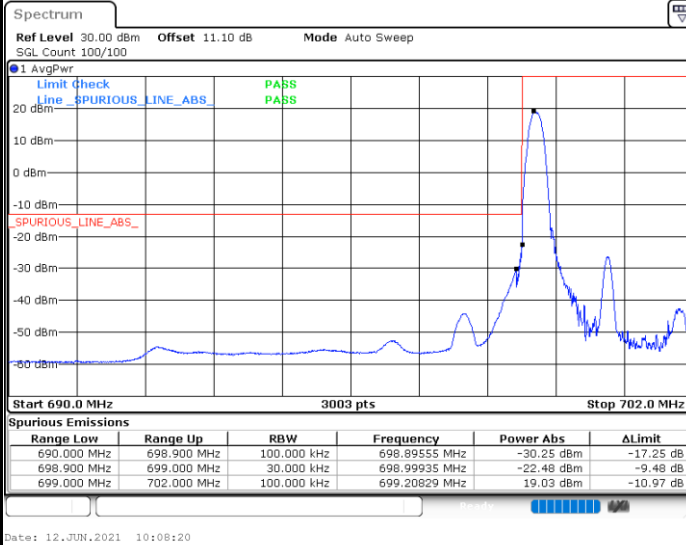
Highest Band Edge / Full RB



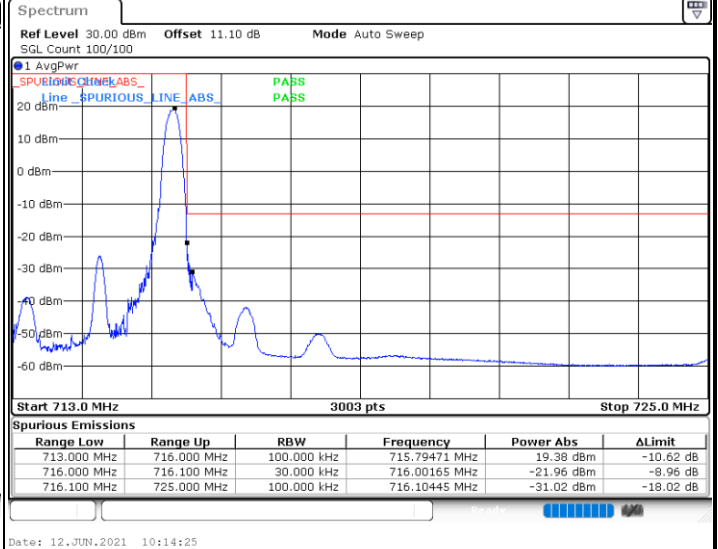


LTE Band 12 / 3MHz / 16QAM

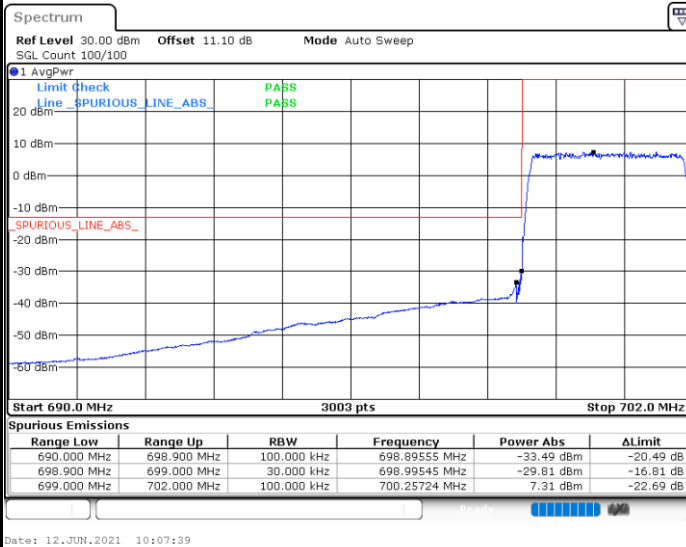
Lowest Band Edge / 1 RB



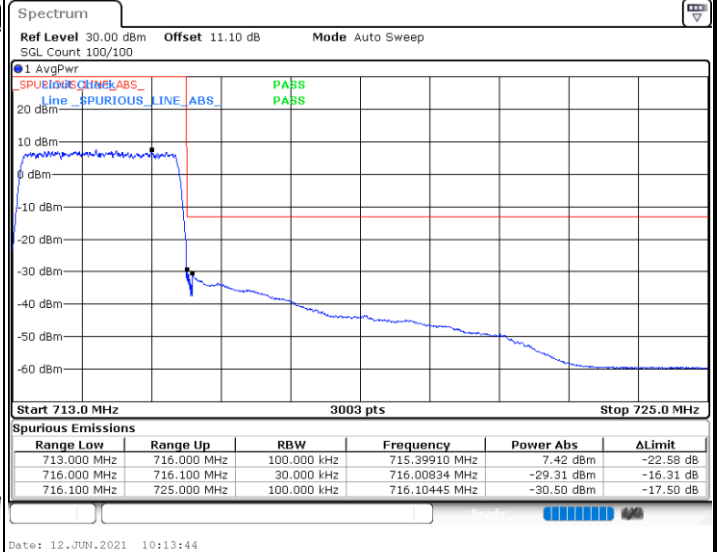
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



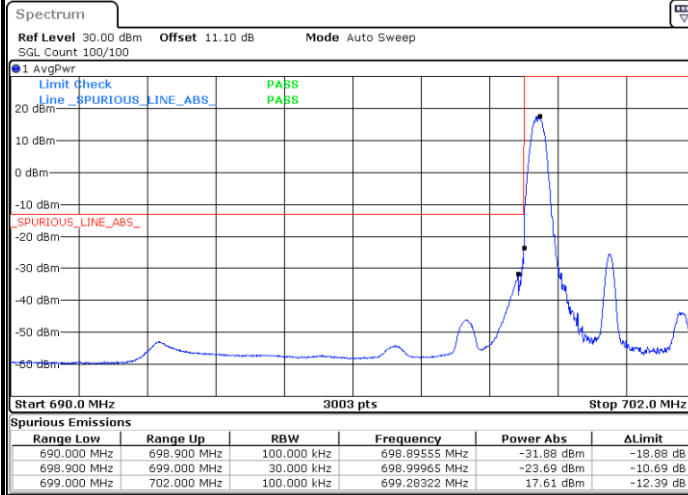
Highest Band Edge / Full RB



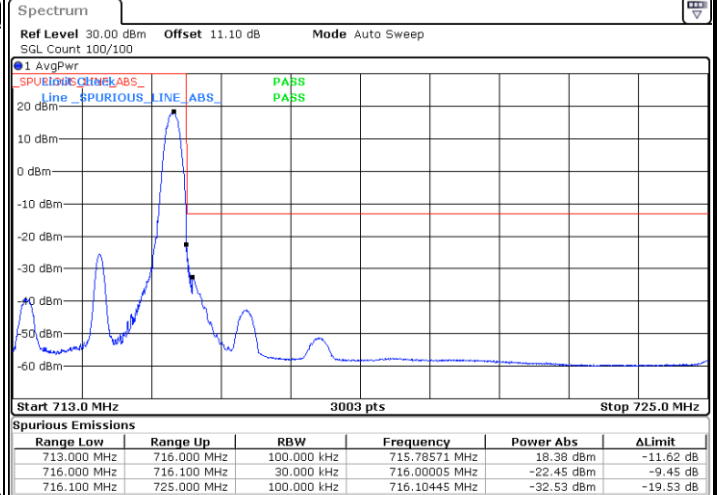


LTE Band 12 / 3MHz / 64QAM

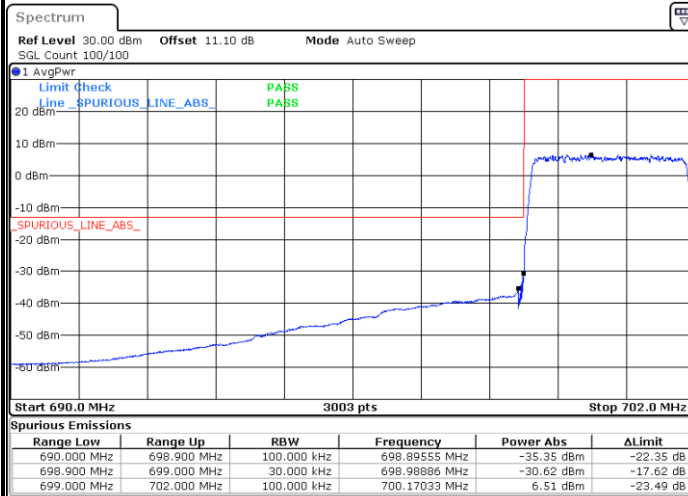
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



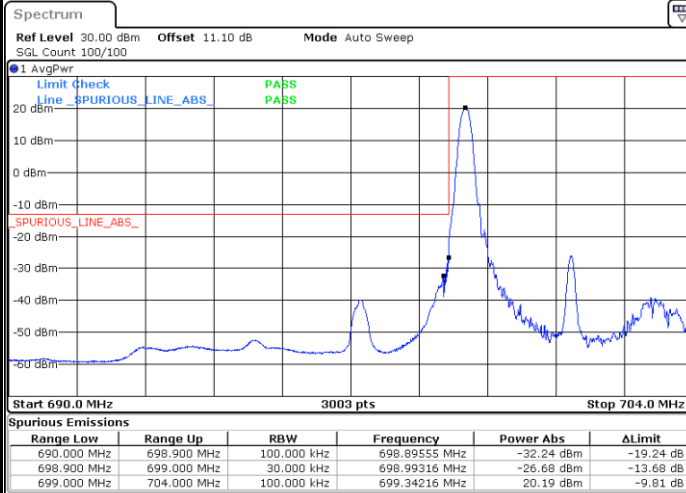
Highest Band Edge / Full RB



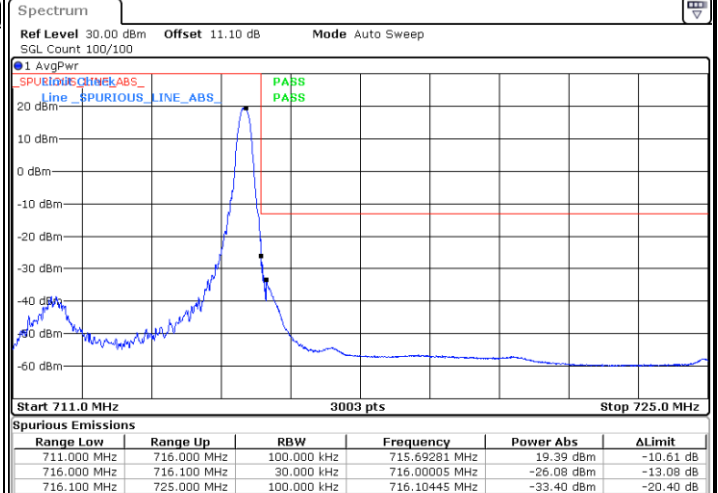


LTE Band 12 / 5MHz / QPSK

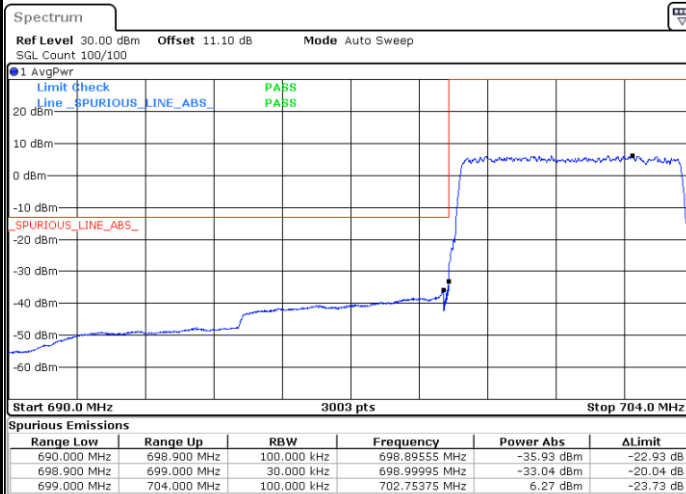
Lowest Band Edge / 1 RB



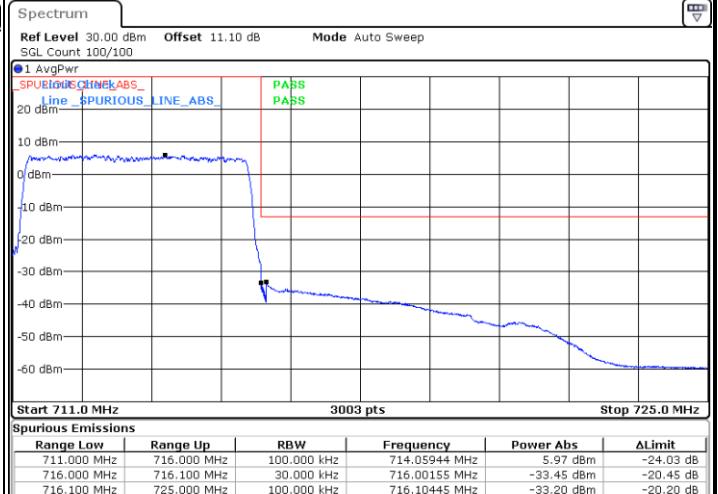
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



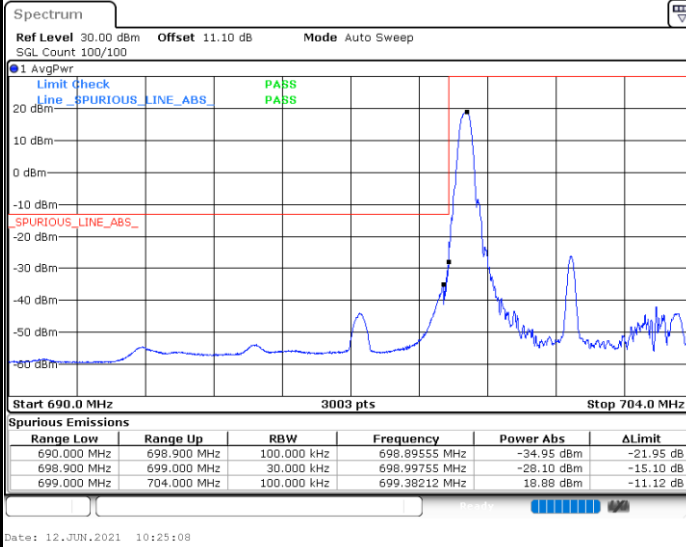
Highest Band Edge / Full RB



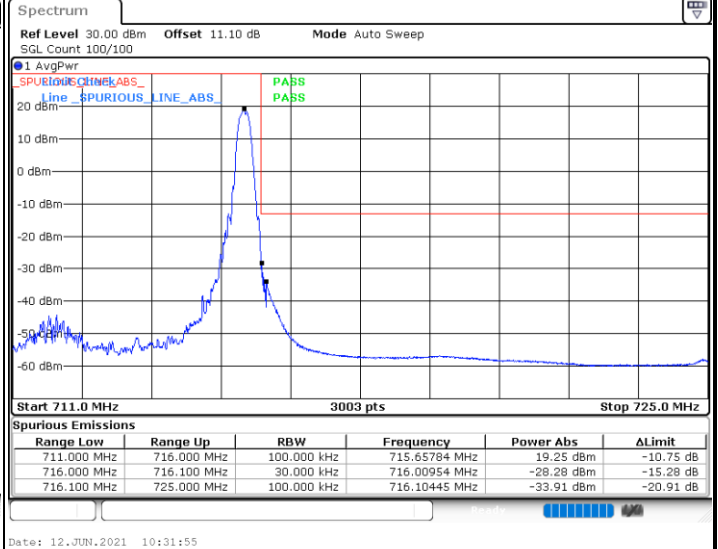


LTE Band 12 / 5MHz / 16QAM

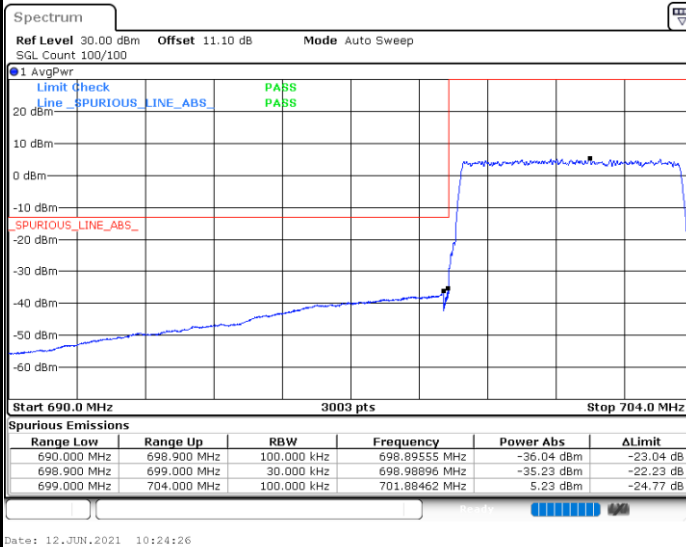
Lowest Band Edge / 1RB



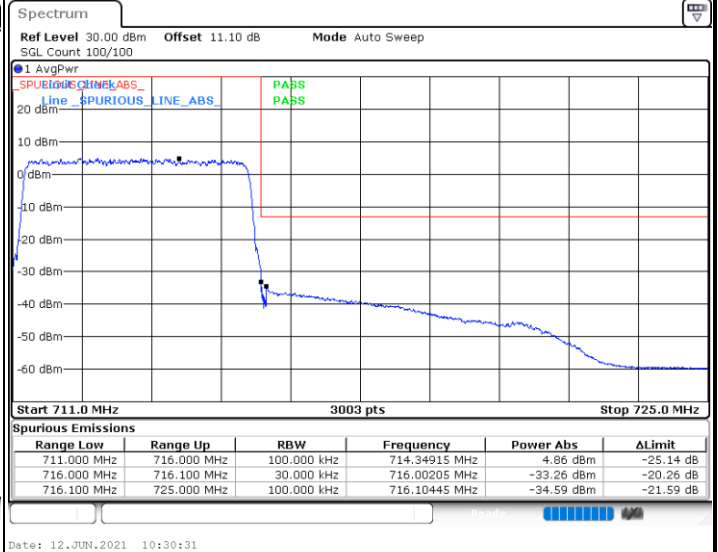
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



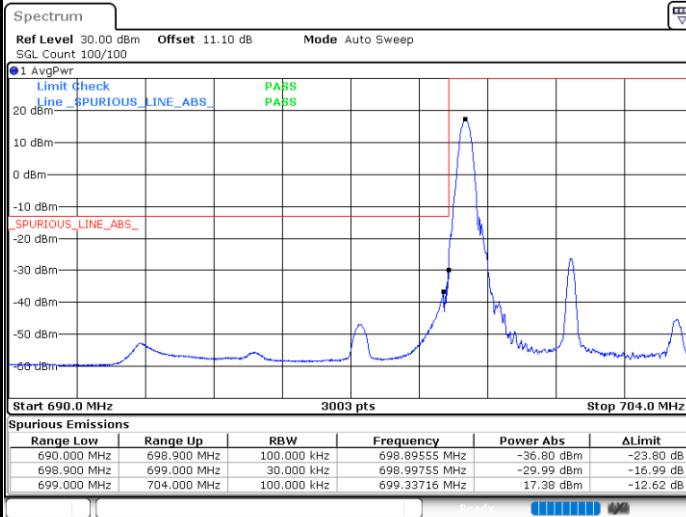
Highest Band Edge / Full RB



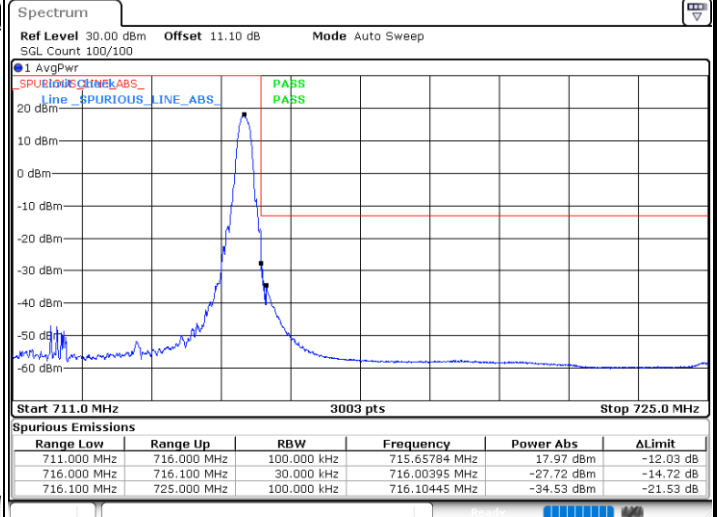


LTE Band 12 / 5MHz / 64QAM

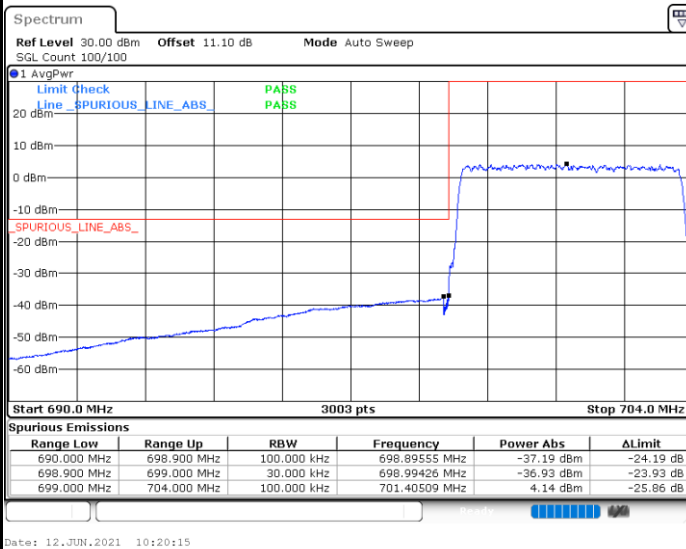
Lowest Band Edge / 1RB



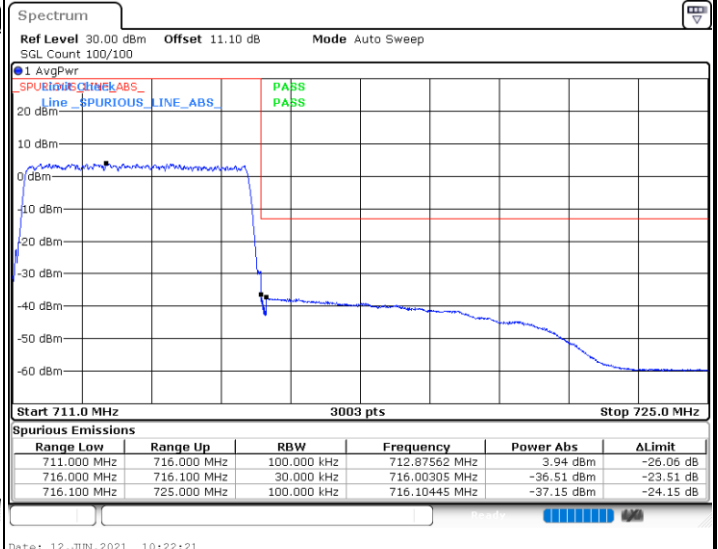
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



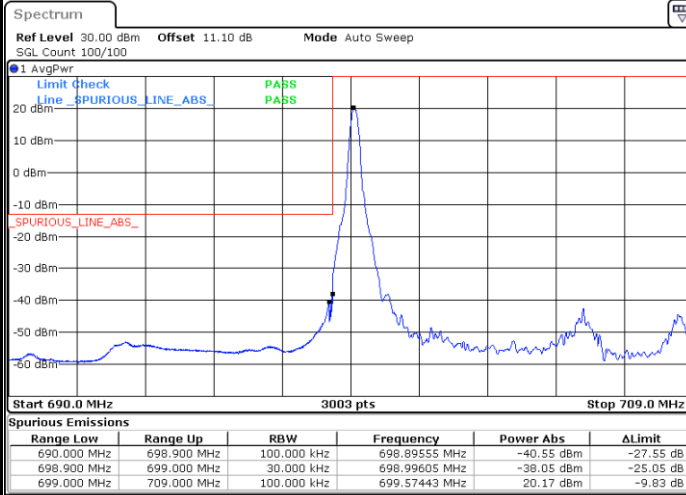
Highest Band Edge / Full RB



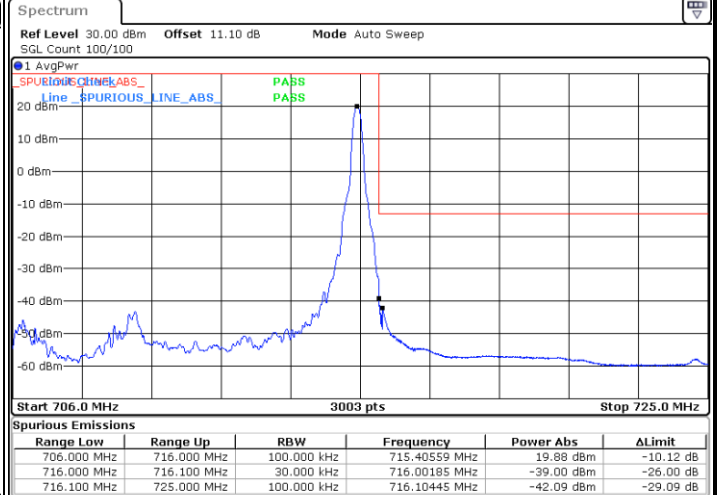


LTE Band 12 / 10MHz / QPSK

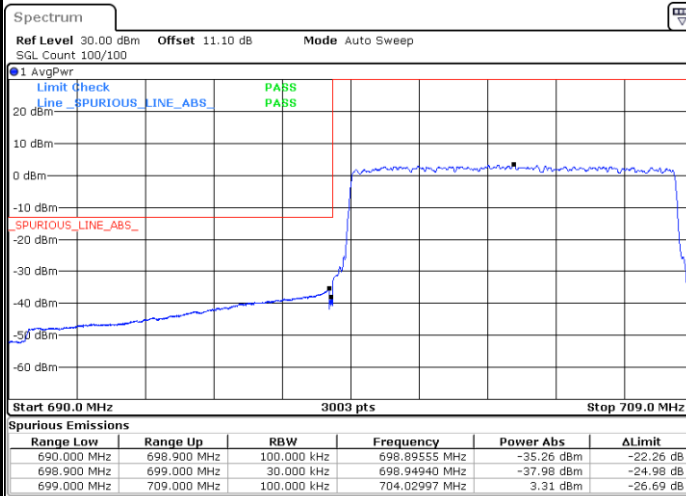
Lowest Band Edge / 1 RB



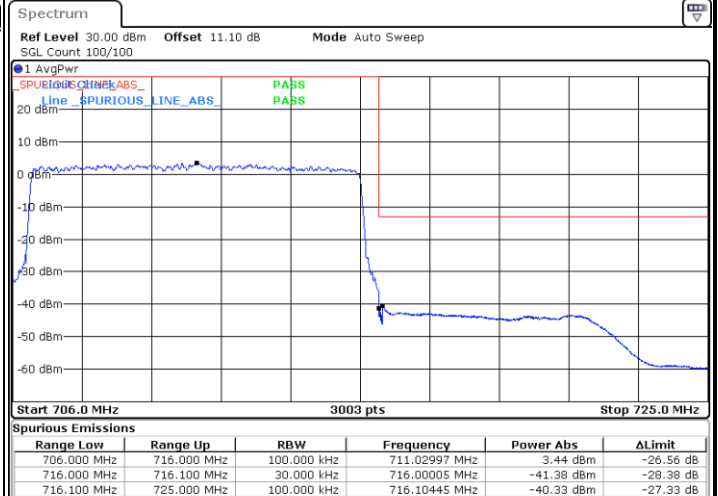
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



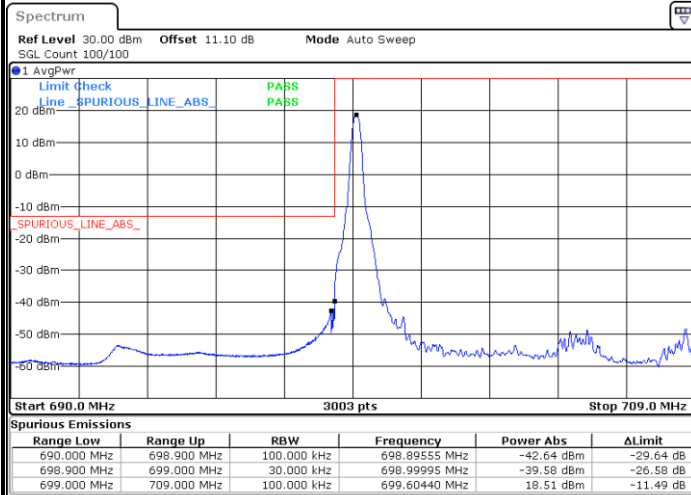
Highest Band Edge / Full RB



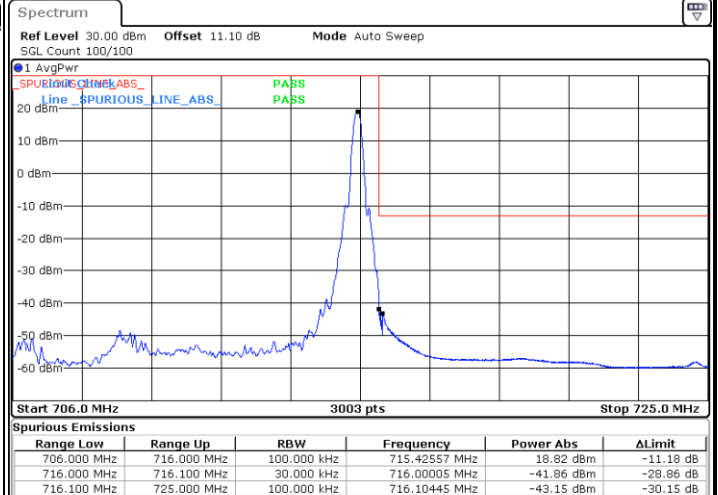


LTE Band 12 / 10MHz / 16QAM

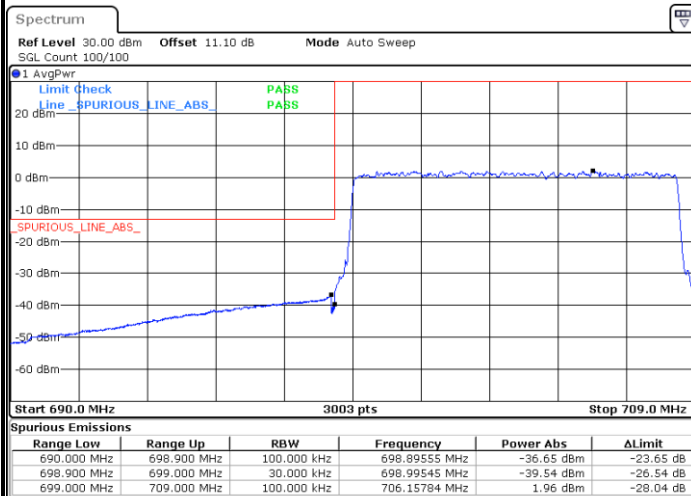
Lowest Band Edge / 1 RB



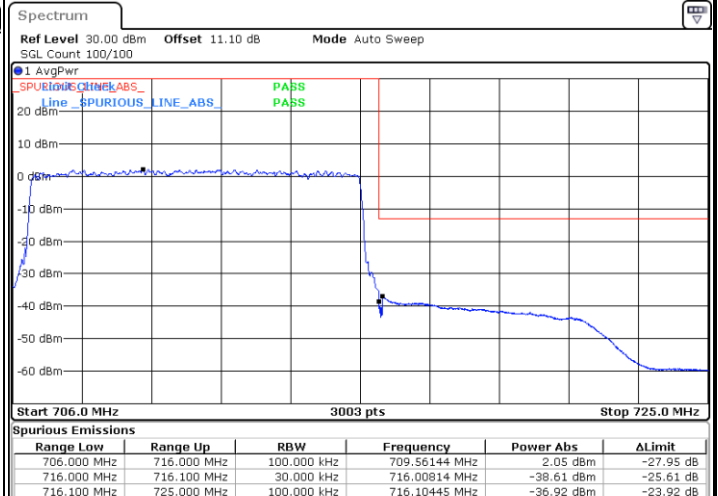
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



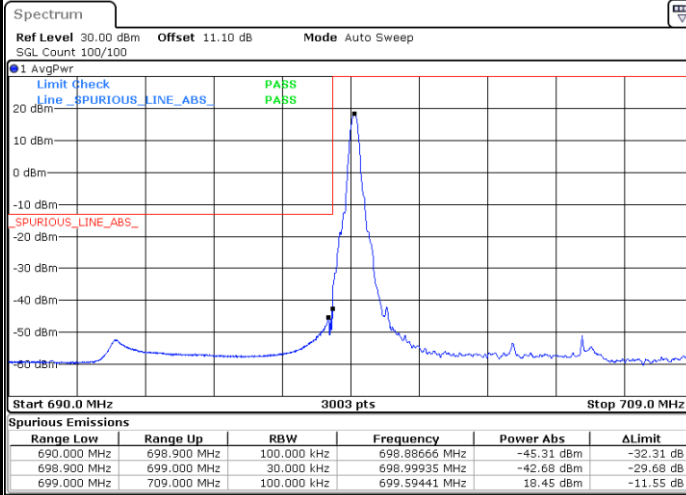
Highest Band Edge / Full RB



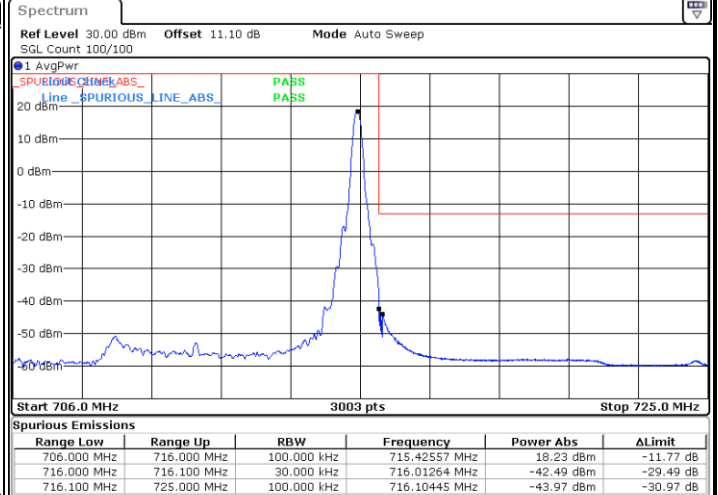


LTE Band 12 / 10MHz / 64QAM

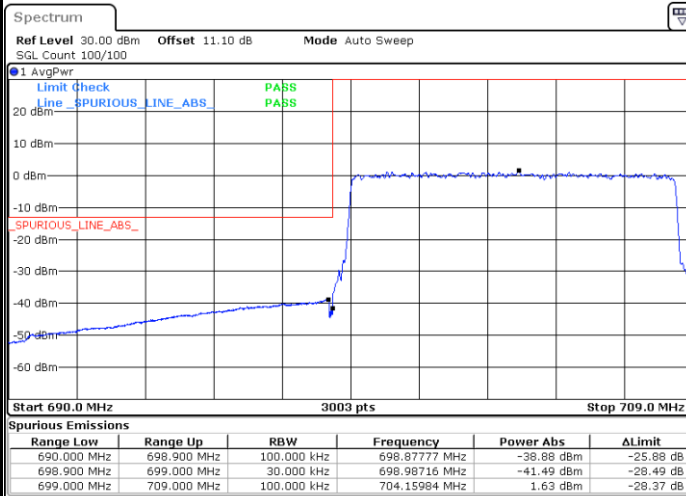
Lowest Band Edge / 1 RB



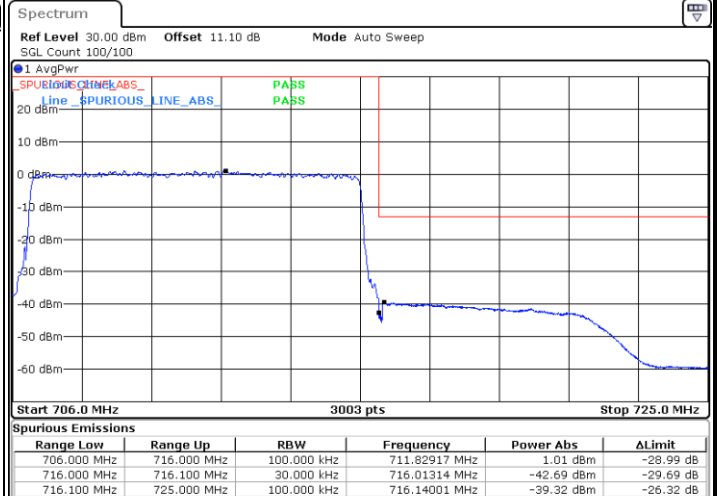
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

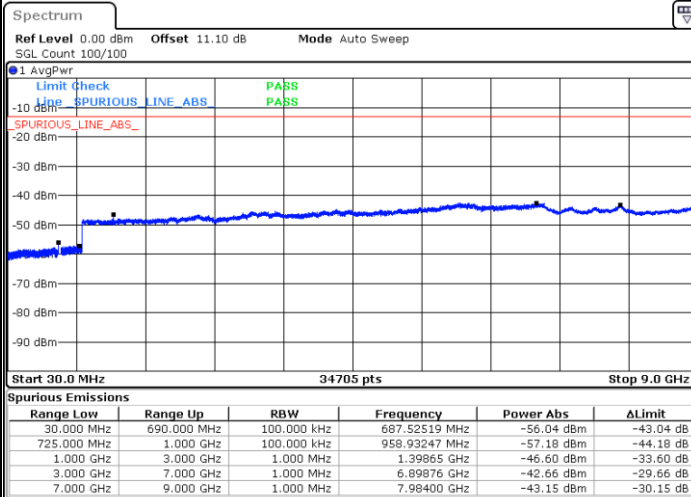




Conducted Spurious Emission

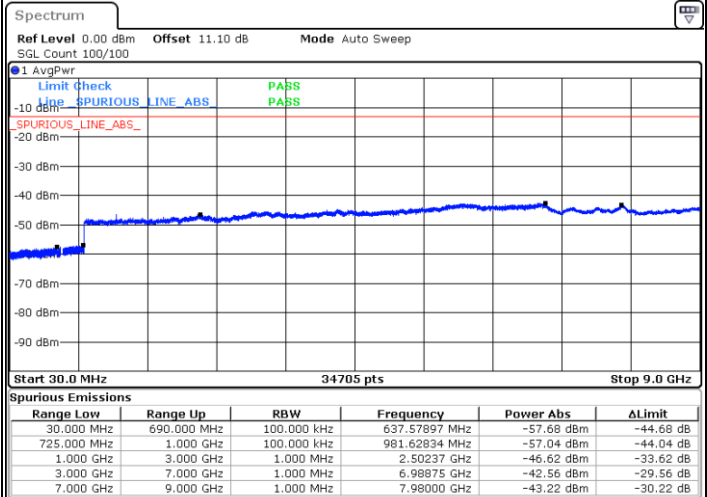
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



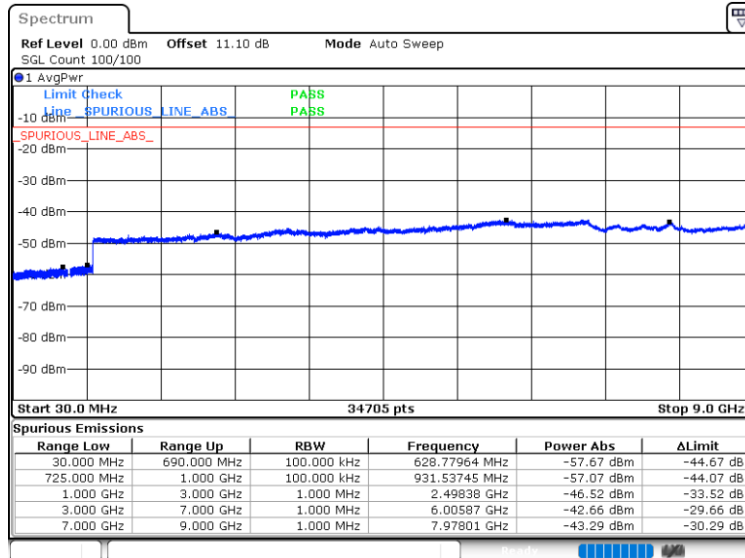
Date: 12.JUN.2021 09:56:38

Middle Channel / QPSK



Date: 12.JUN.2021 09:59:02

Highest Channel / QPSK

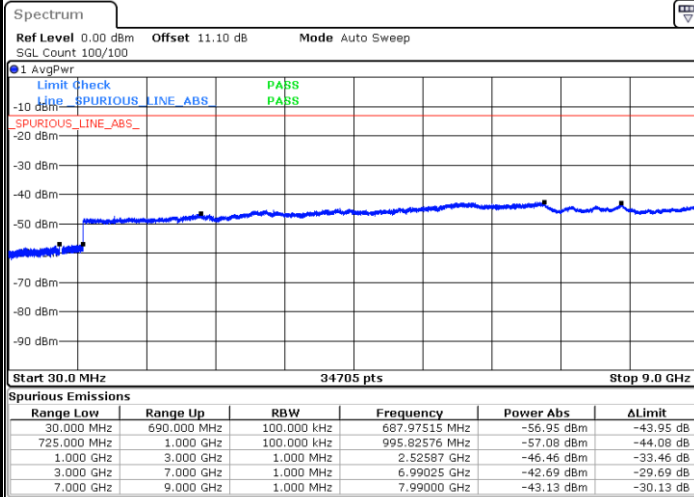


Date: 12.JUN.2021 10:02:44



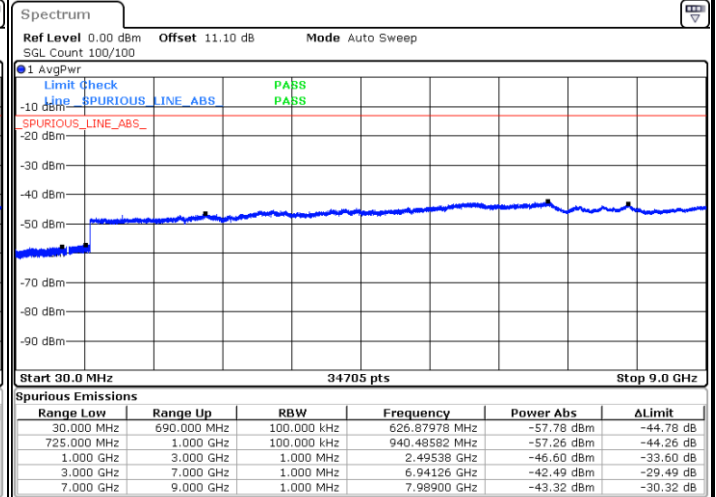
LTE Band 12 / 3MHz

Lowest Channel / QPSK



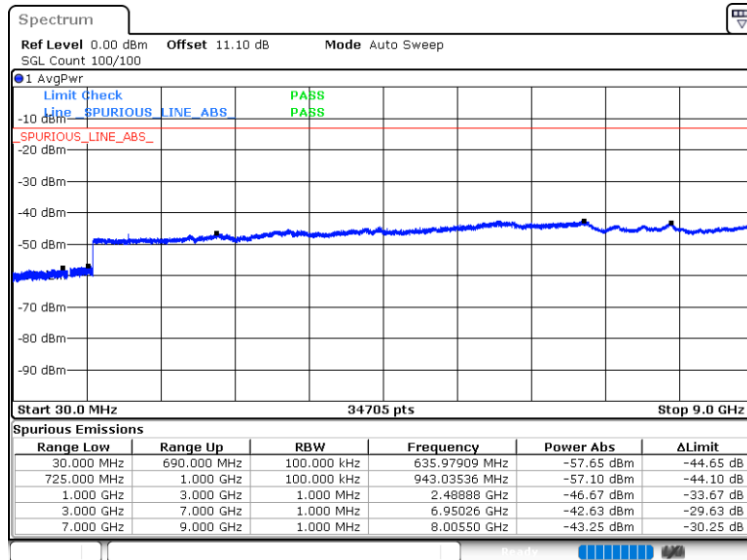
Date: 12.JUN.2021 10:09:57

Middle Channel / QPSK



Date: 12.JUN.2021 10:12:21

Highest Channel / QPSK

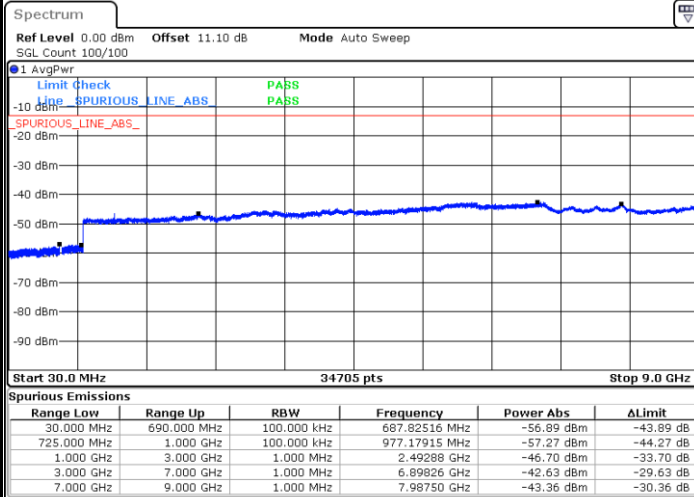


Date: 12.JUN.2021 10:16:02



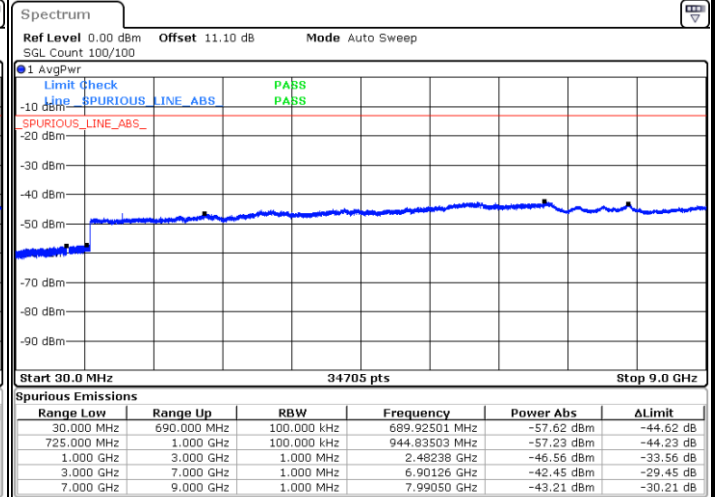
LTE Band 12 / 5MHz

Lowest Channel / QPSK



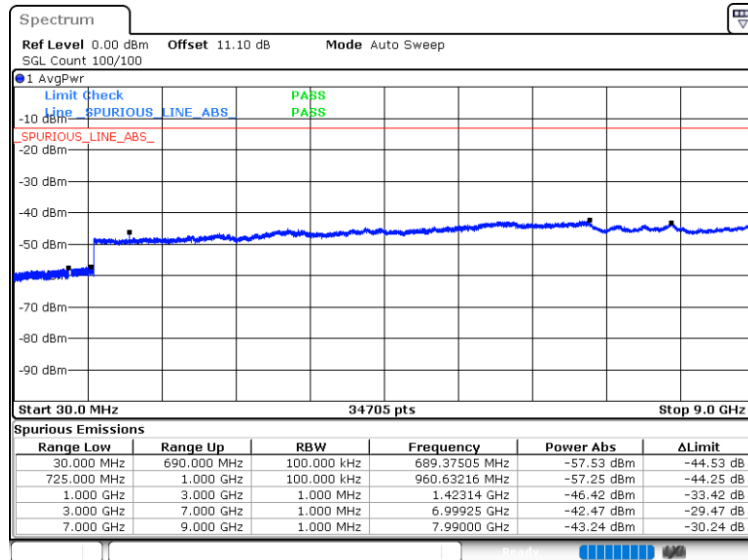
Date: 12.JUN.2021 10:26:45

Middle Channel / QPSK



Date: 12.JUN.2021 10:29:09

Highest Channel / QPSK

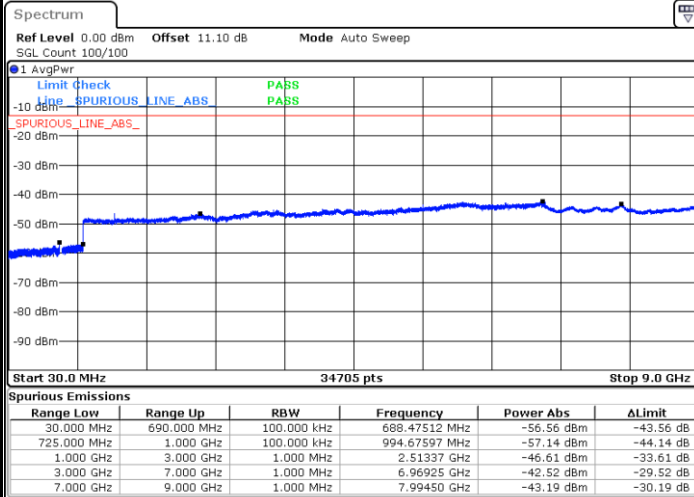


Date: 12.JUN.2021 10:32:50



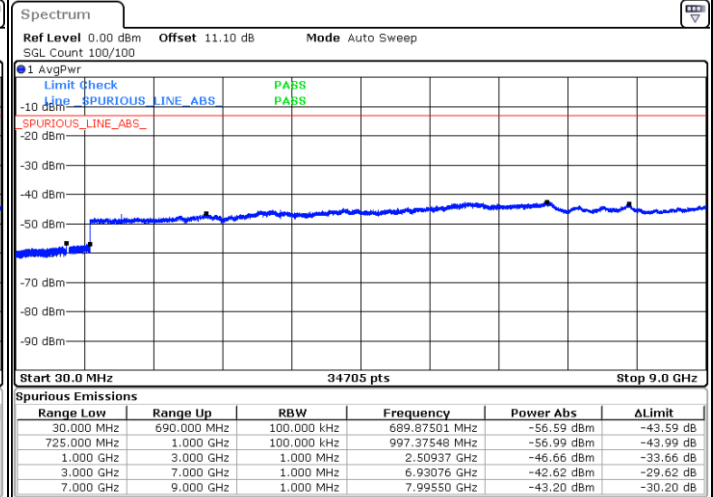
LTE Band 12 / 10MHz

Lowest Channel / QPSK



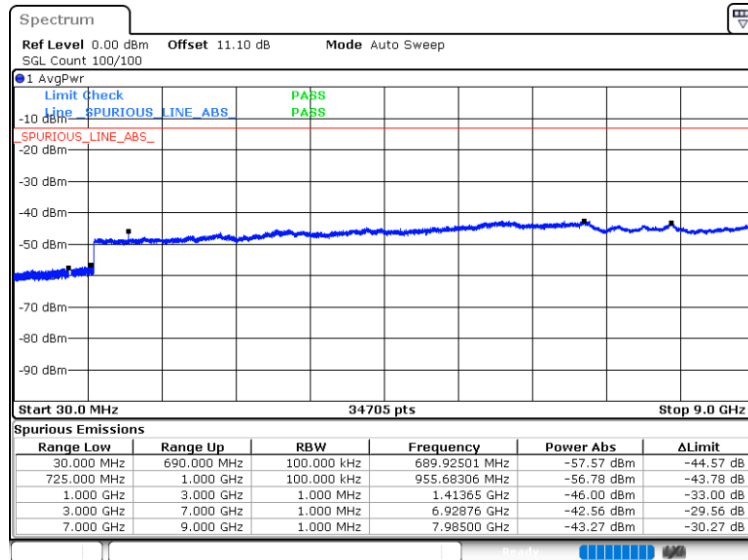
Date: 12.JUN.2021 10:36:35

Middle Channel / QPSK



Date: 12.JUN.2021 10:38:58

Highest Channel / QPSK



Date: 12.JUN.2021 10:42:41

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
40	Normal Voltage	0.0105	PASS
30	Normal Voltage	0.0110	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0069	
0	Normal Voltage	0.0044	
-10	Normal Voltage	0.0102	
-20	Normal Voltage	0.0089	
20	Maximum Voltage	0.0096	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0048	

Note:

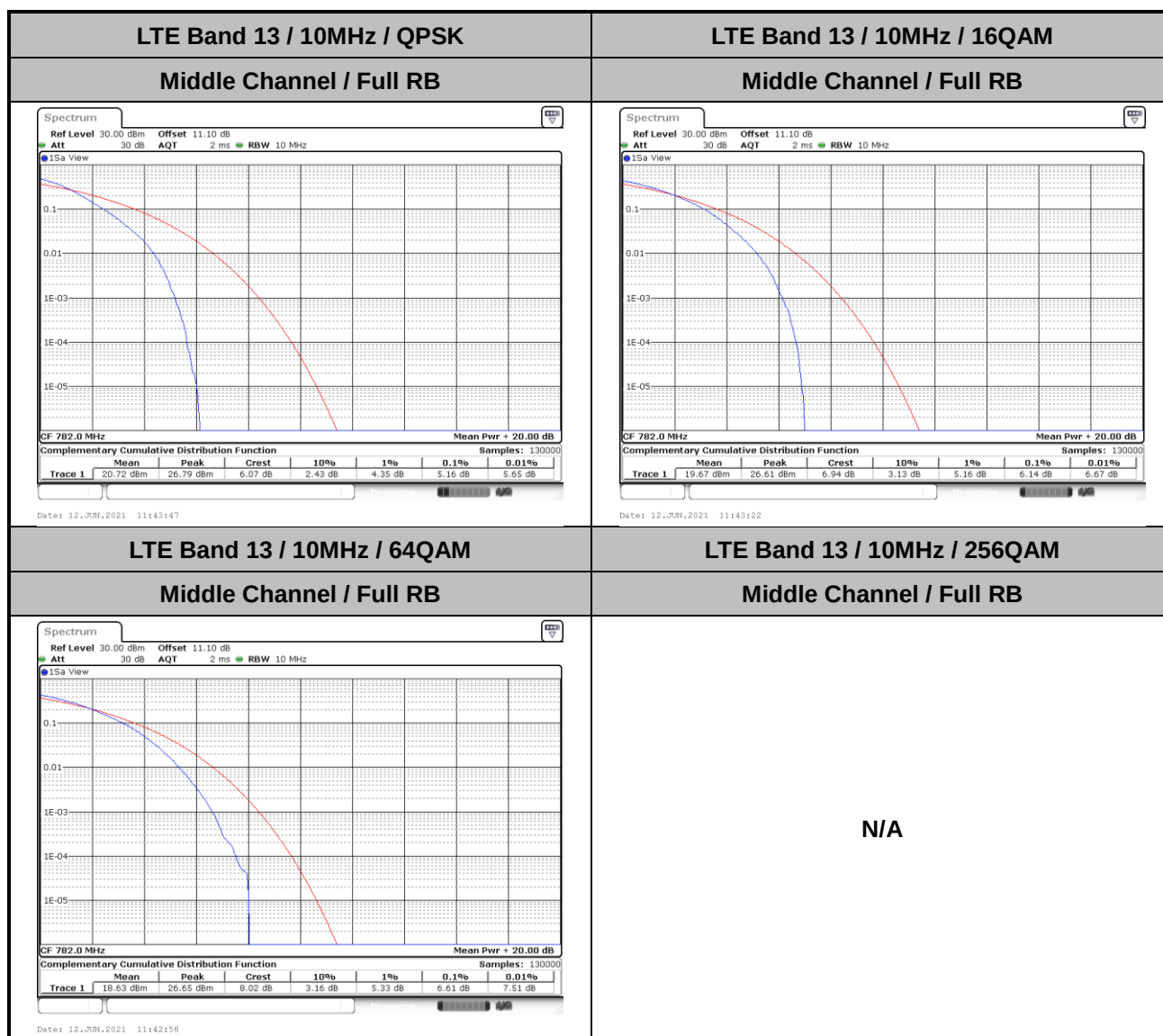
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.
3. EUT can't operate outside the temperatures between -20 °C and 40 °C.



LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.16	6.14	6.61	PASS



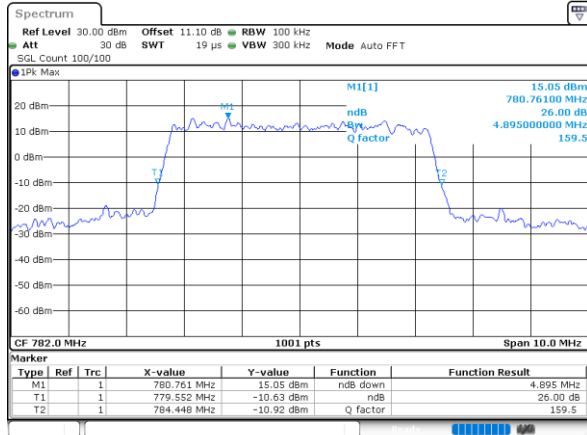
**26dB Bandwidth**

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
Middle CH	-	-	-	-	4.90	4.89	9.83	9.87	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.85	-	9.79	-	-	-	-	-



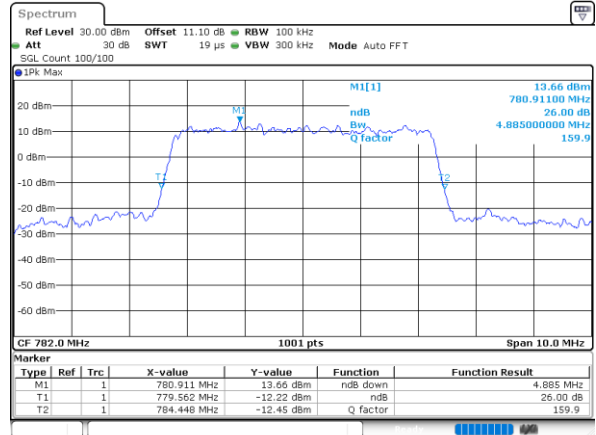
LTE Band 13

Middle Channel / 5MHz / QPSK



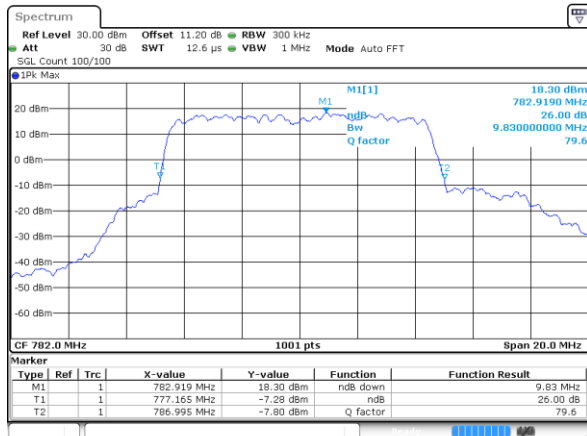
Date: 12 JUN 2021 11:05:24

Middle Channel / 5MHz / 16QAM



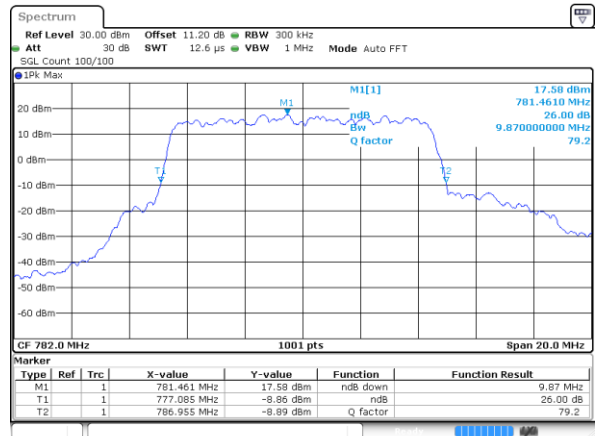
Date: 12 JUN 2021 11:05:45

Middle Channel / 10MHz / QPSK



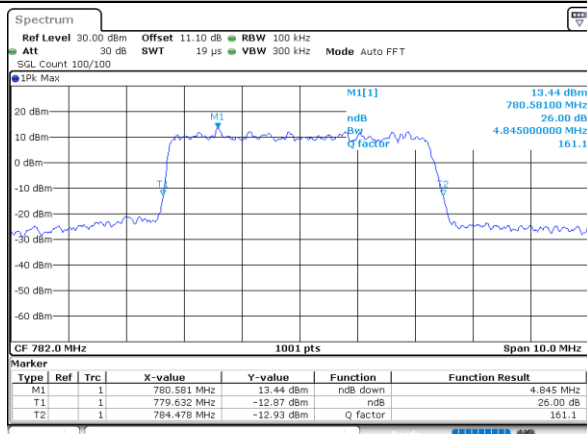
Date: 24 MAR 2021 00:06:31

Middle Channel / 10MHz / 16QAM



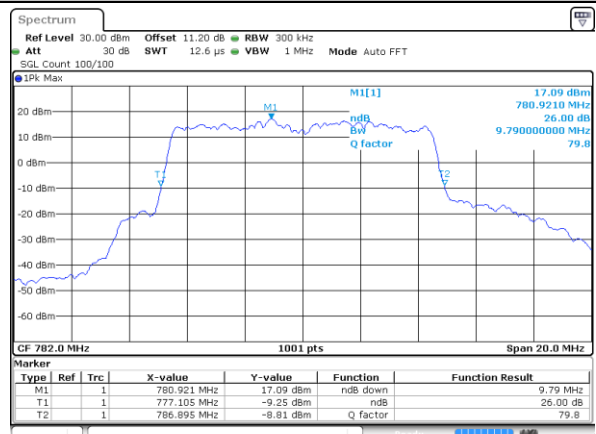
Date: 24 MAR 2021 00:06:08

Middle Channel / 5MHz / 64QAM



Date: 12 JUN 2021 11:18:51

Middle Channel / 10MHz / 64QAM



Date: 24 MAR 2021 00:19:18

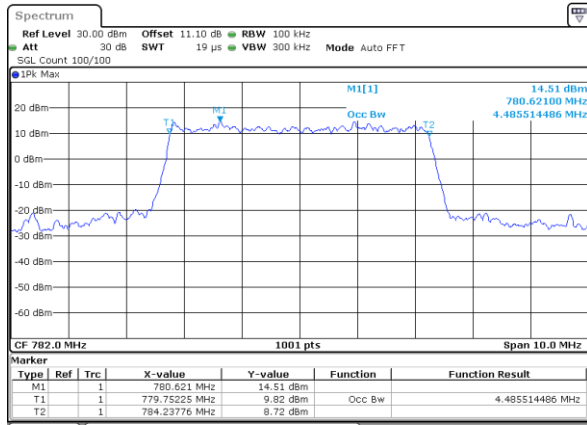
**Occupied Bandwidth**

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
Middle CH	-	-	-	-	4.49	4.50	8.97	8.97	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.50	-	9.01	-	-	-	-	-



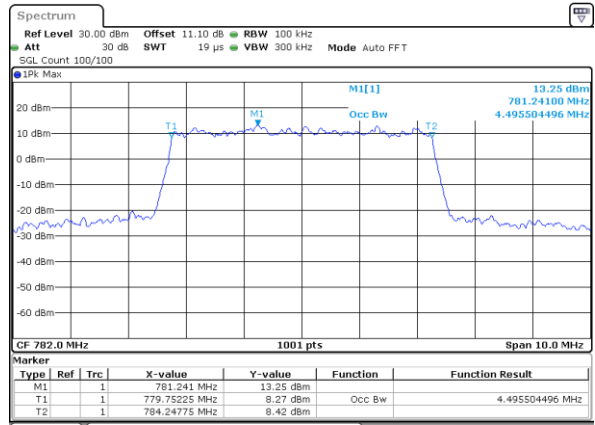
LTE Band 13

Middle Channel / 5MHz / QPSK



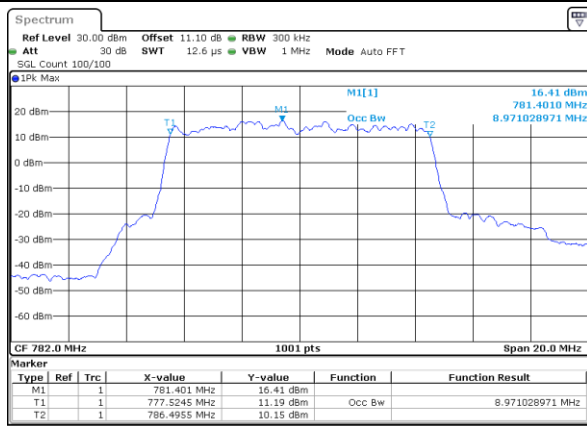
Date: 12 JUN 2021 11:06:20

Middle Channel / 5MHz / 16QAM



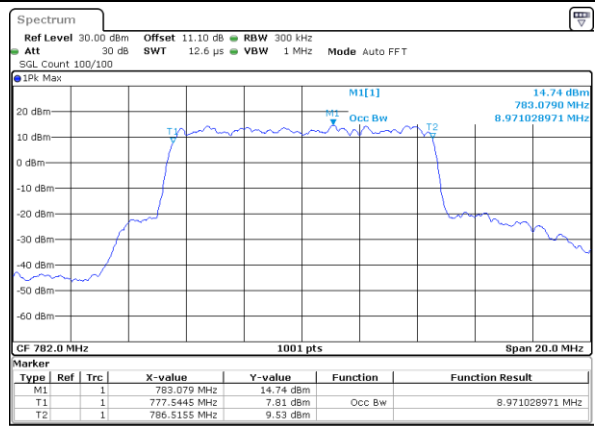
Date: 12 JUN 2021 11:06:06

Middle Channel / 10MHz / QPSK



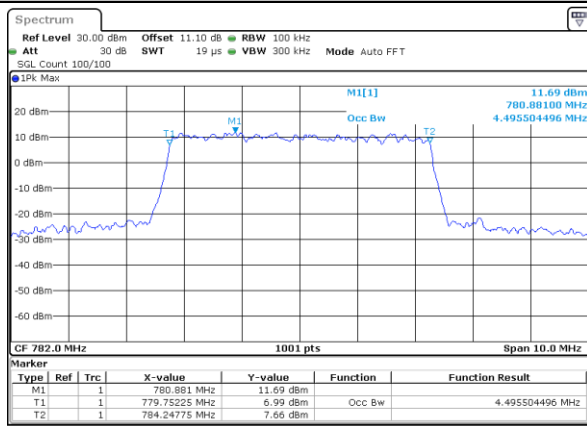
Date: 12 JUN 2021 11:23:17

Middle Channel / 10MHz / 16QAM



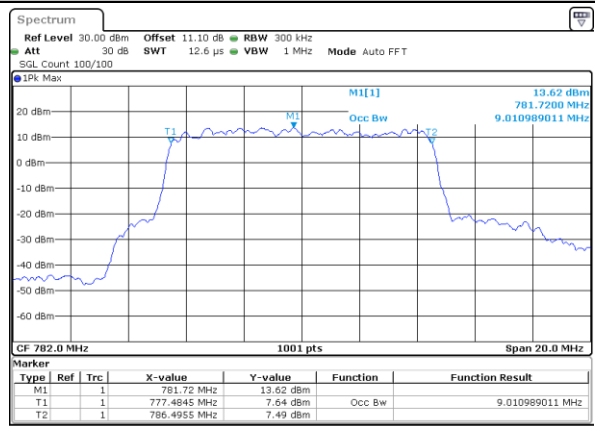
Date: 12 JUN 2021 11:23:40

Middle Channel / 5MHz / 64QAM



Date: 12 JUN 2021 11:19:12

Middle Channel / 10MHz / 64QAM



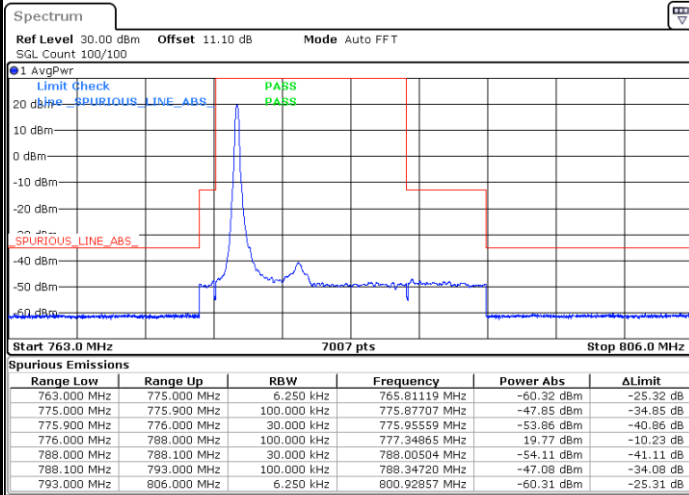
Date: 12 JUN 2021 11:36:42



Conducted Band Edge

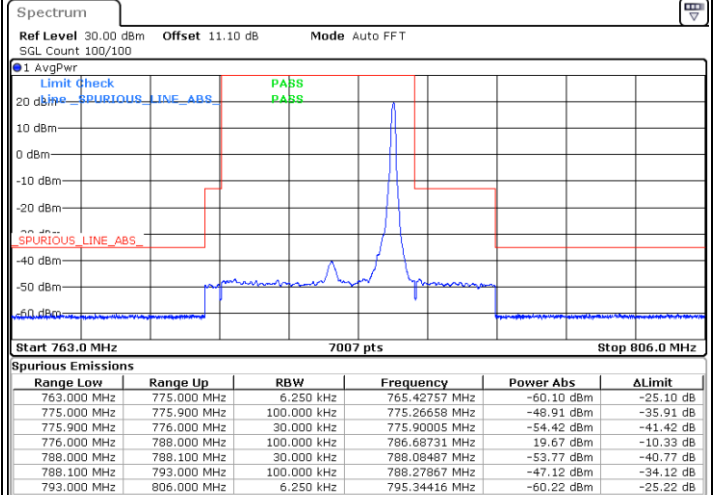
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



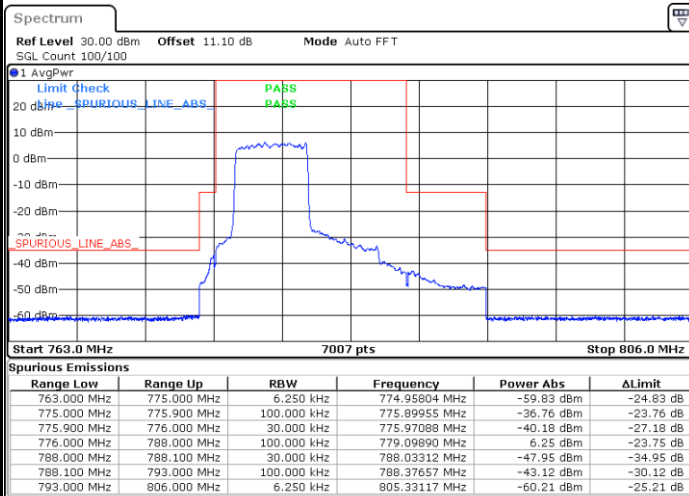
Date: 12.JUN.2021 11:03:11

Highest Band Edge / 1 RB



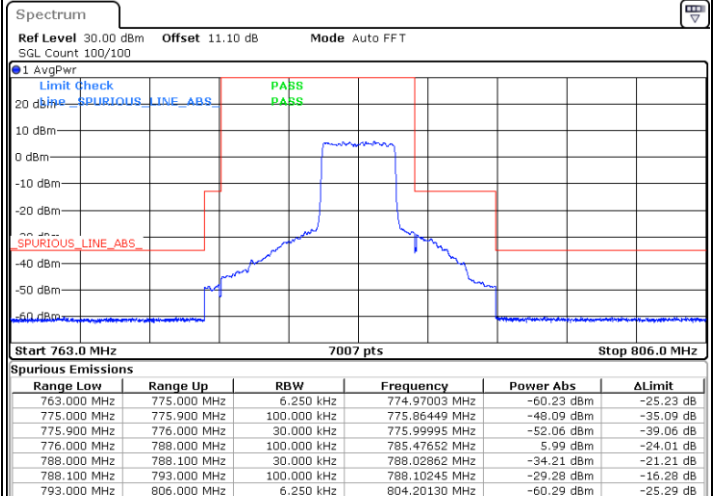
Date: 12.JUN.2021 11:13:53

Lowest Band Edge / Full RB



Date: 12.JUN.2021 10:57:38

Highest Band Edge / Full RB



Date: 12.JUN.2021 11:08:20