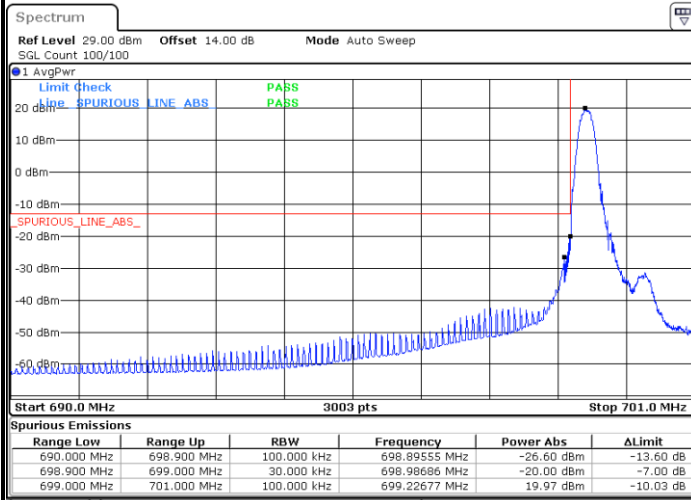


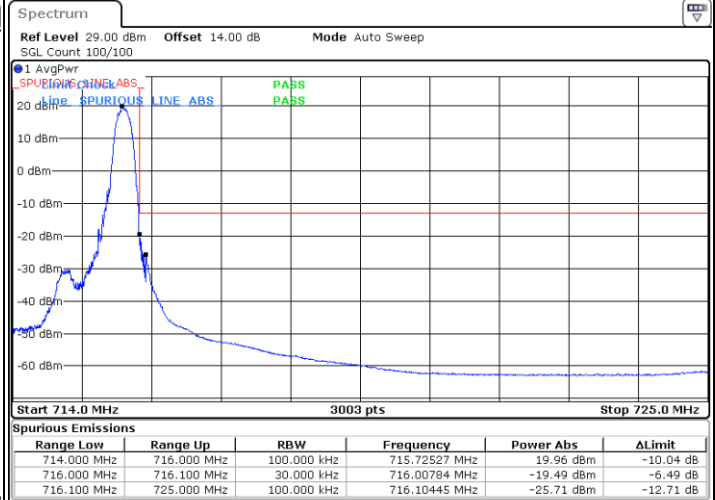


LTE Band 12 / 1.4MHz / 64QAM

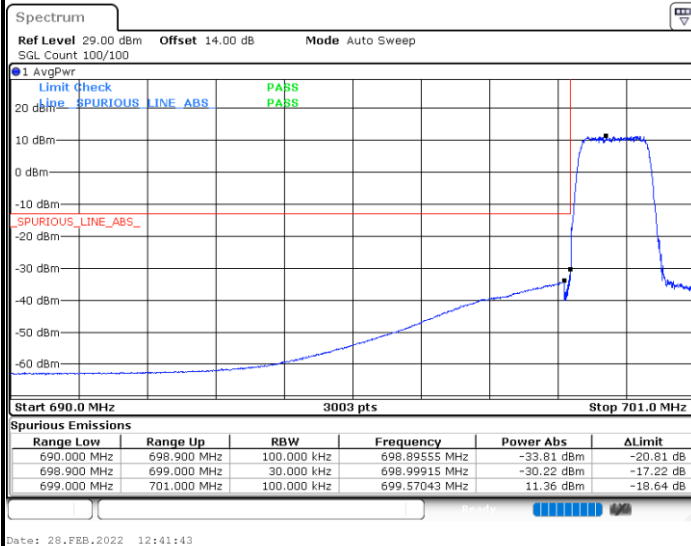
Lowest Band Edge / 1 RB



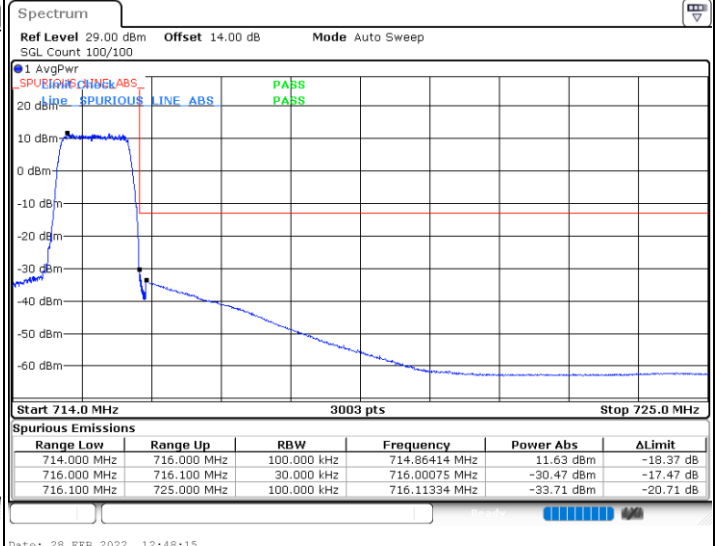
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



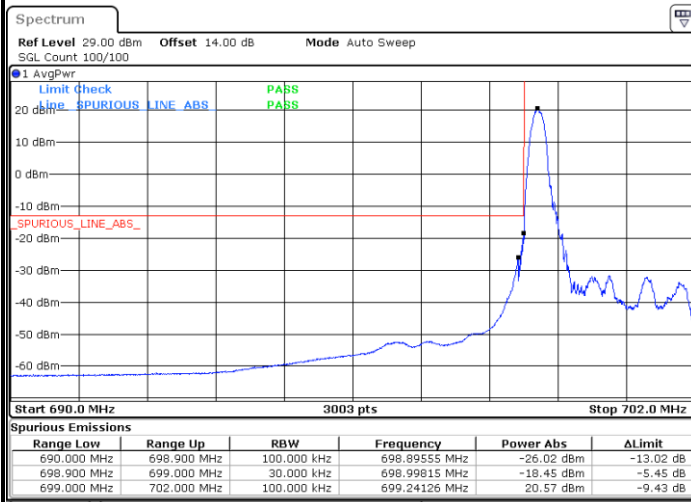
Highest Band Edge / Full RB



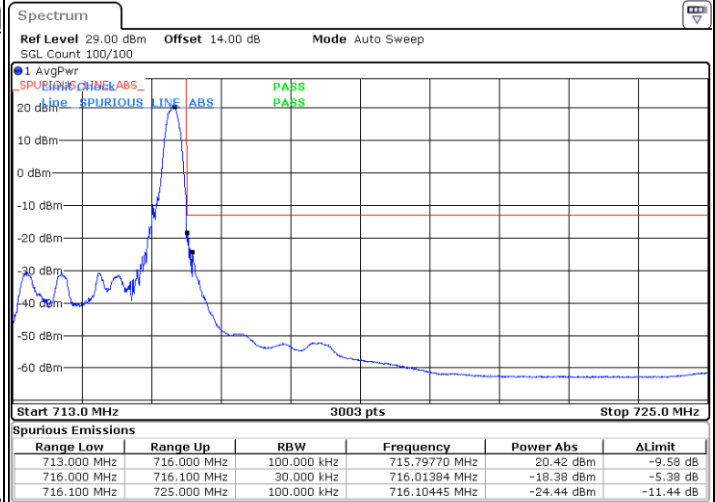


LTE Band 12 / 3MHz / QPSK

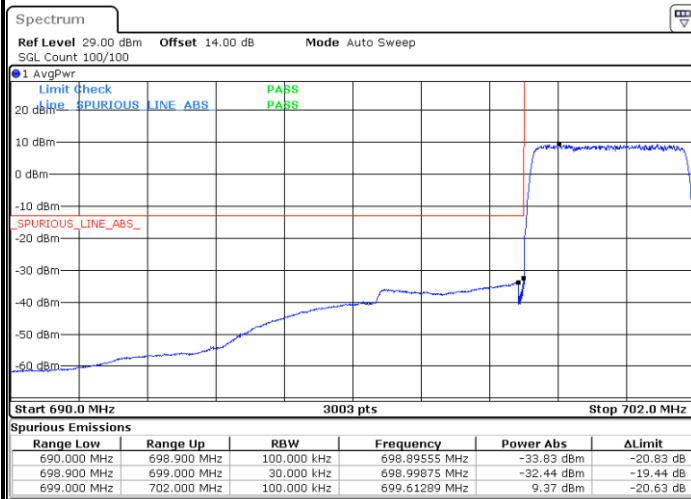
Lowest Band Edge / 1RB



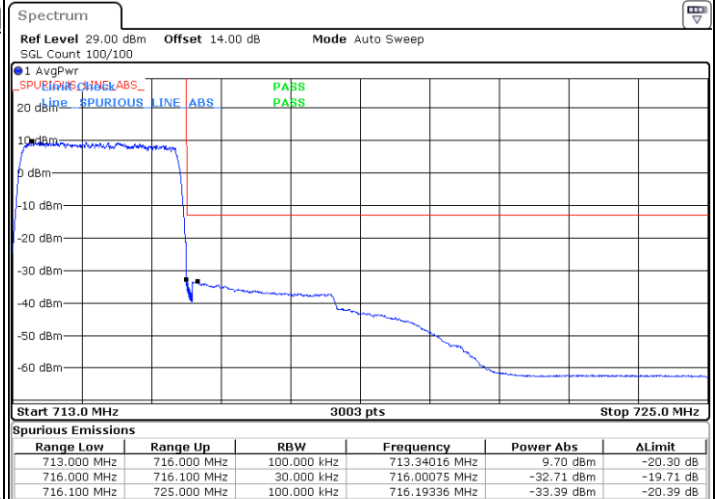
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



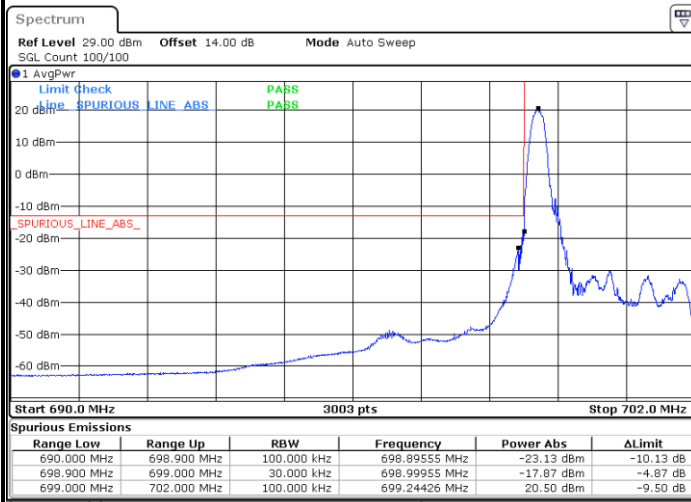
Highest Band Edge / Full RB



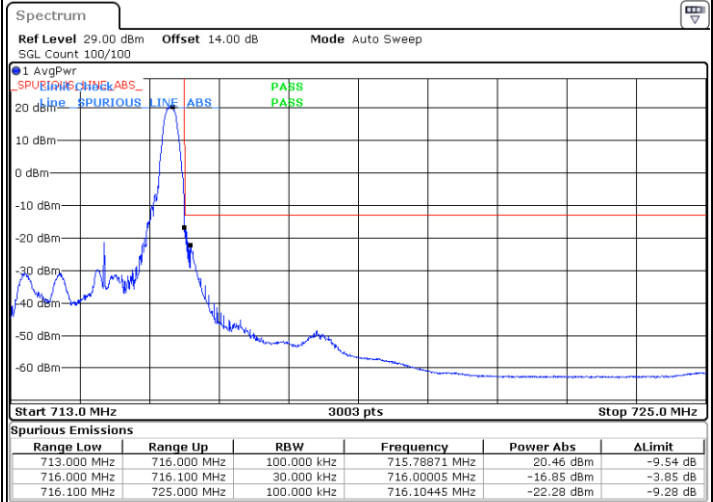


LTE Band 12 / 3MHz / 16QAM

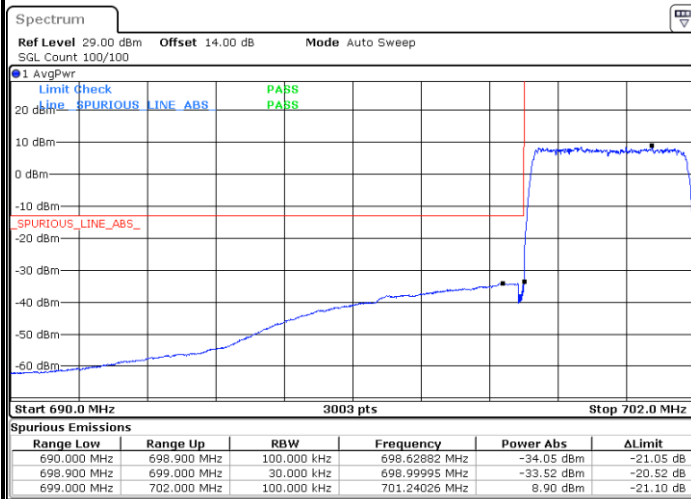
Lowest Band Edge / 1 RB



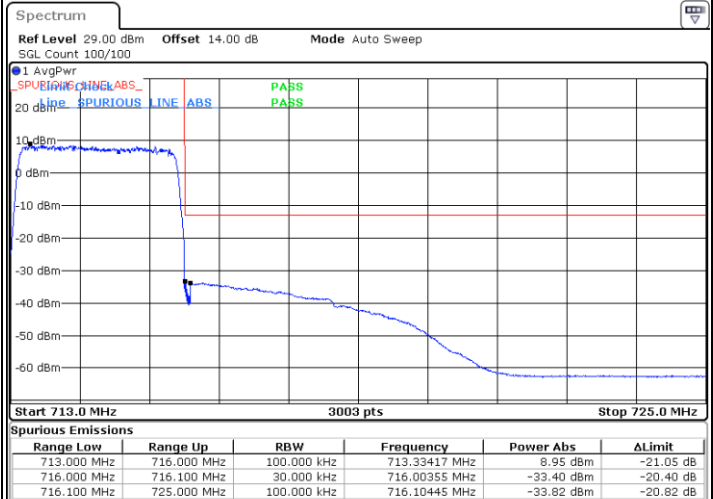
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



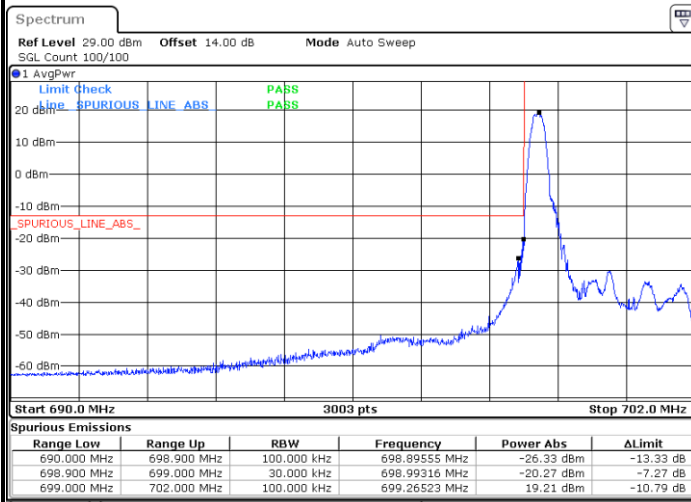
Highest Band Edge / Full RB



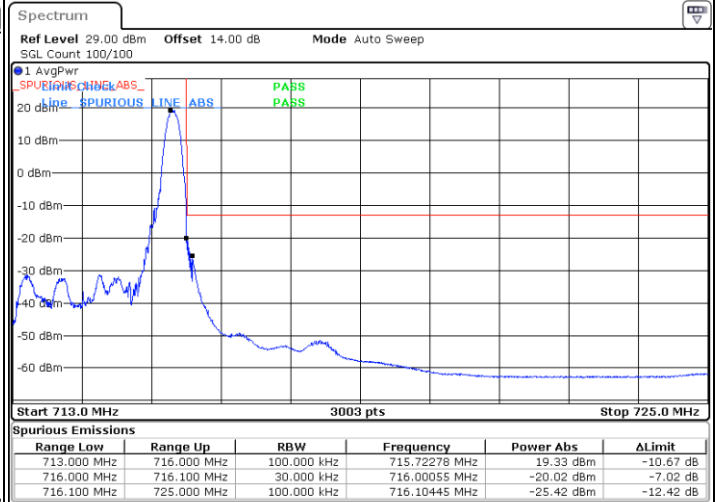


LTE Band 12 / 3MHz / 64QAM

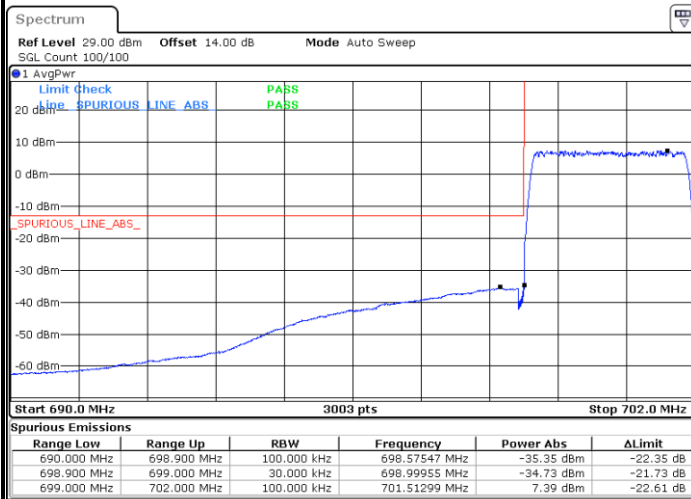
Lowest Band Edge / 1 RB



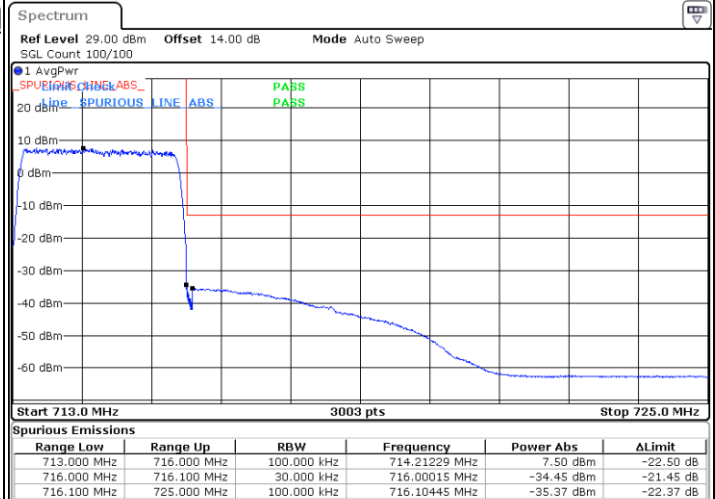
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



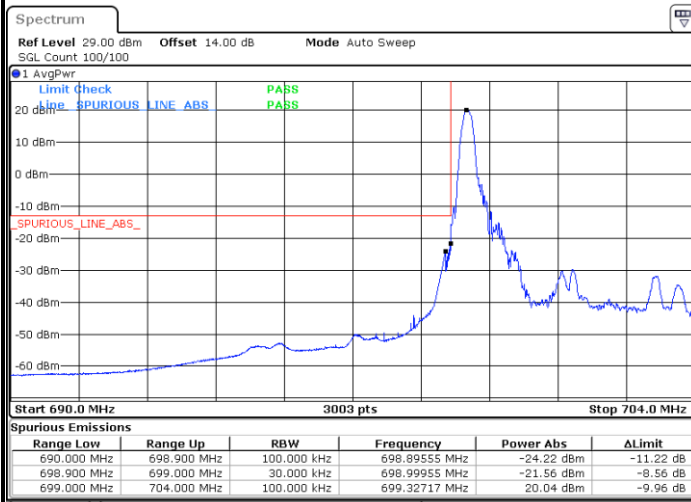
Highest Band Edge / Full RB



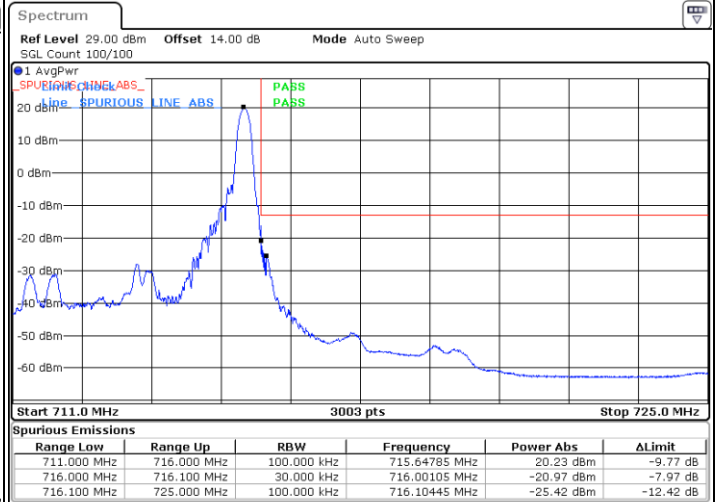


LTE Band 12 / 5MHz / QPSK

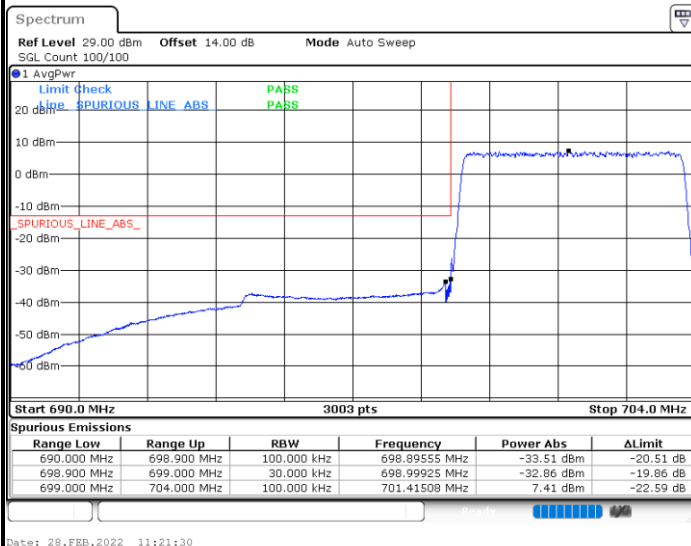
Lowest Band Edge / 1 RB



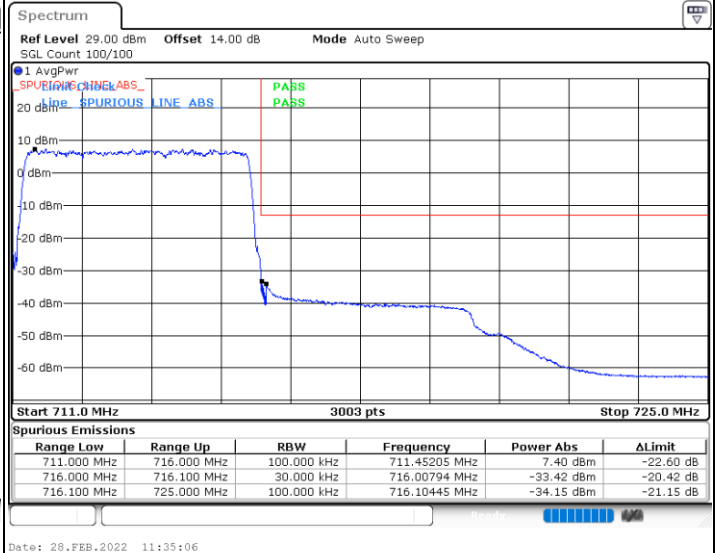
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



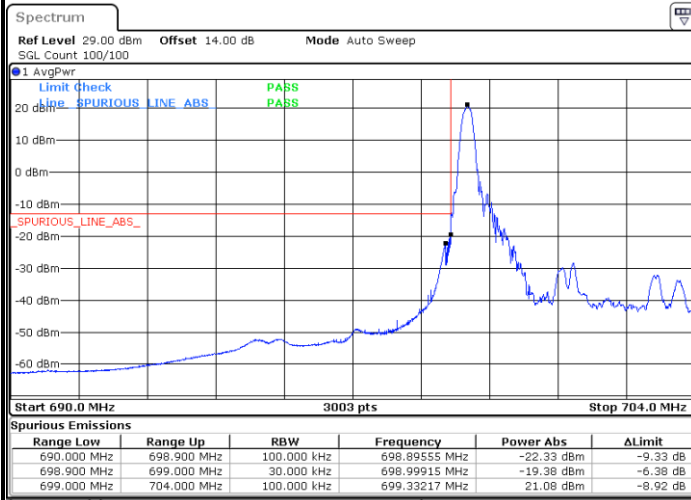
Highest Band Edge / Full RB



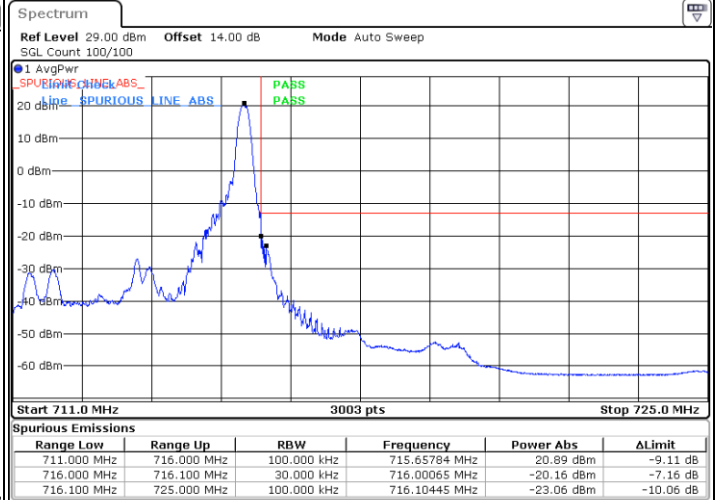


LTE Band 12 / 5MHz / 16QAM

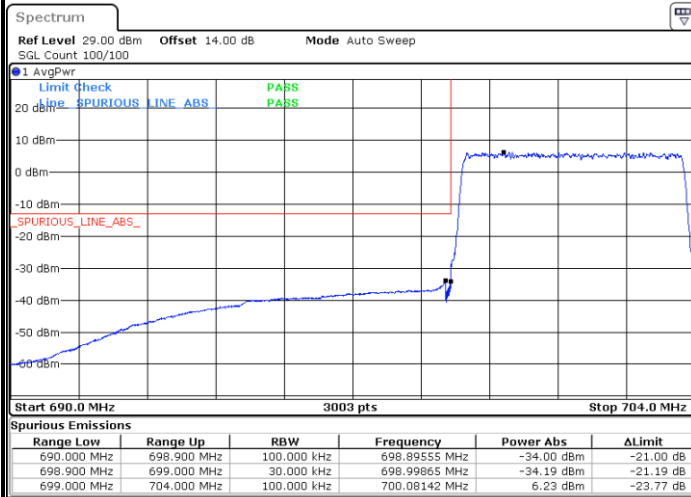
Lowest Band Edge / 1RB



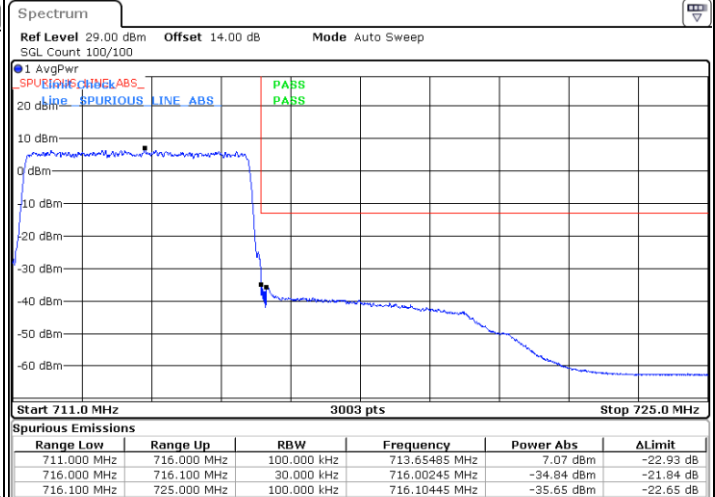
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



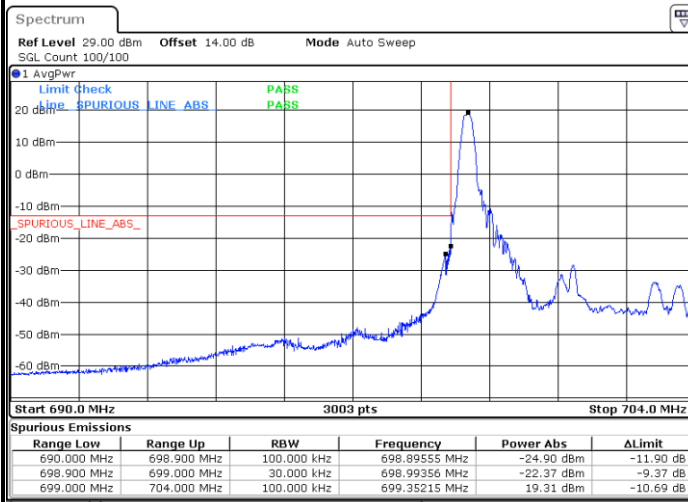
Highest Band Edge / Full RB



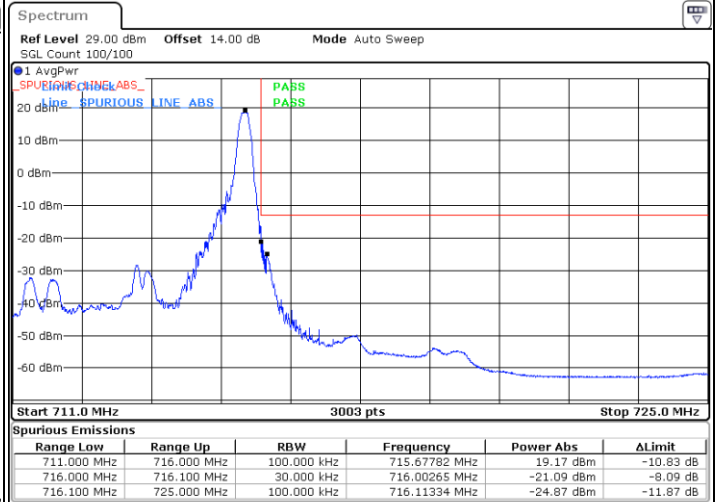


LTE Band 12 / 5MHz / 64QAM

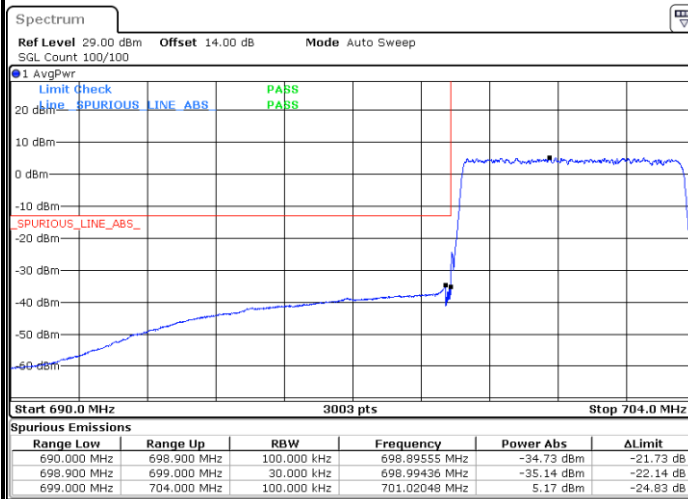
Lowest Band Edge / 1RB



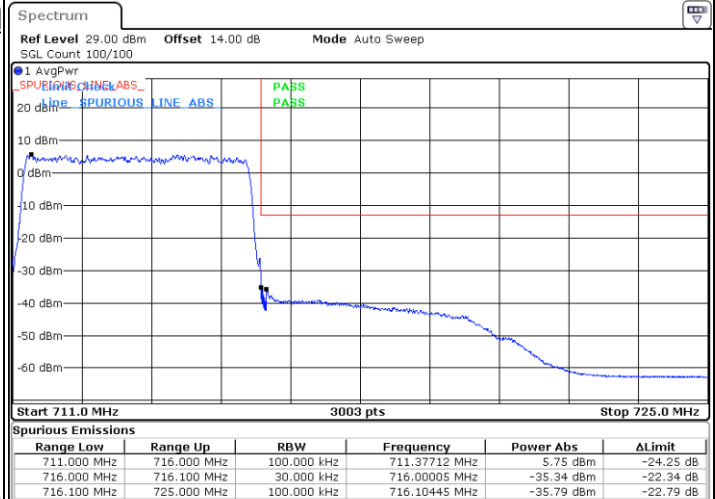
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



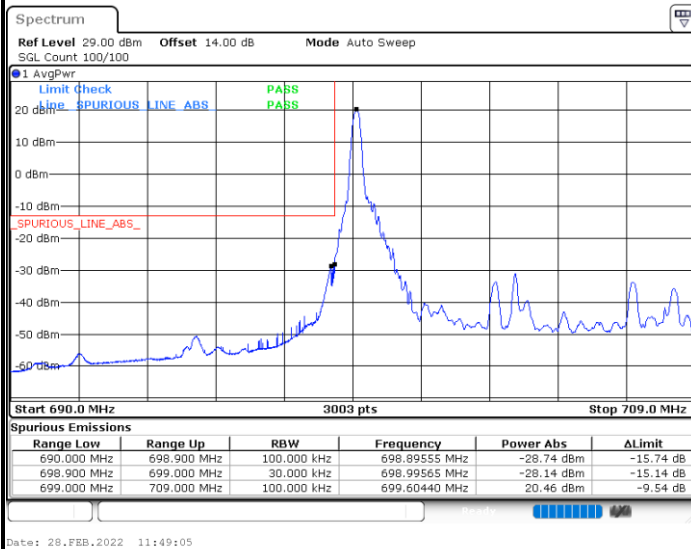
Highest Band Edge / Full RB



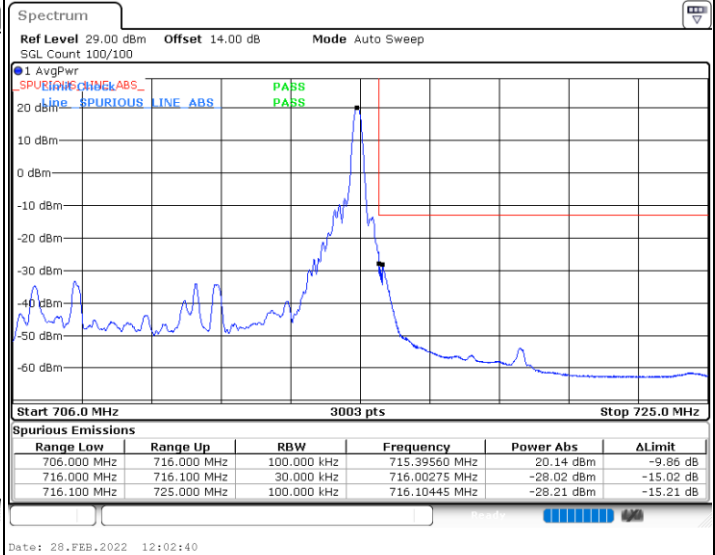


LTE Band 12 / 10MHz / QPSK

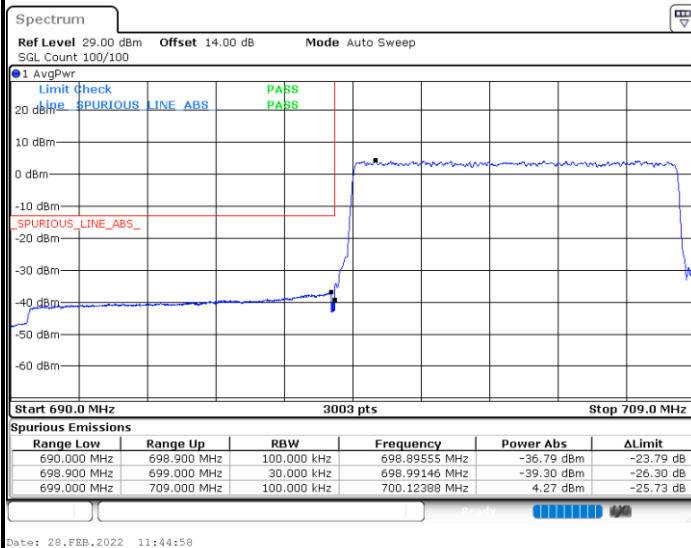
Lowest Band Edge / 1 RB



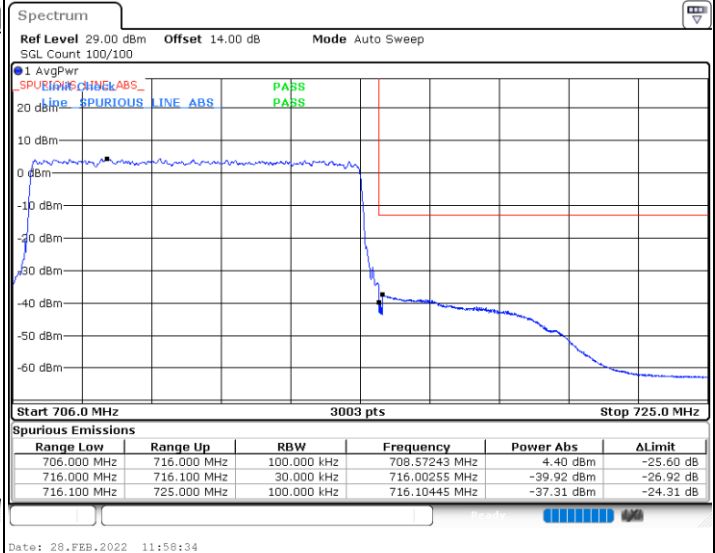
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



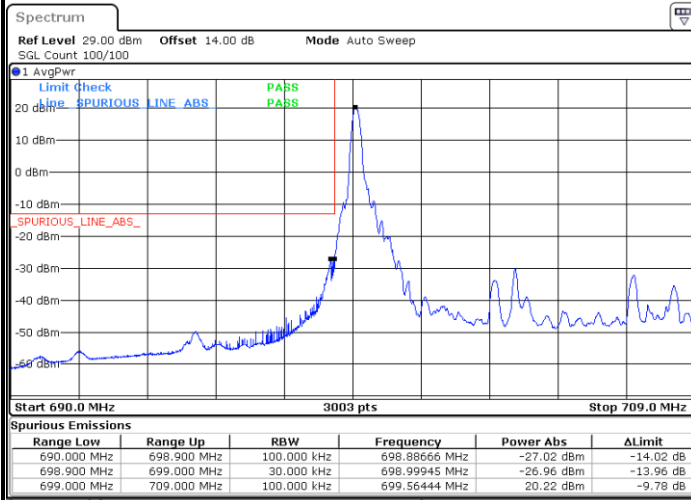
Highest Band Edge / Full RB



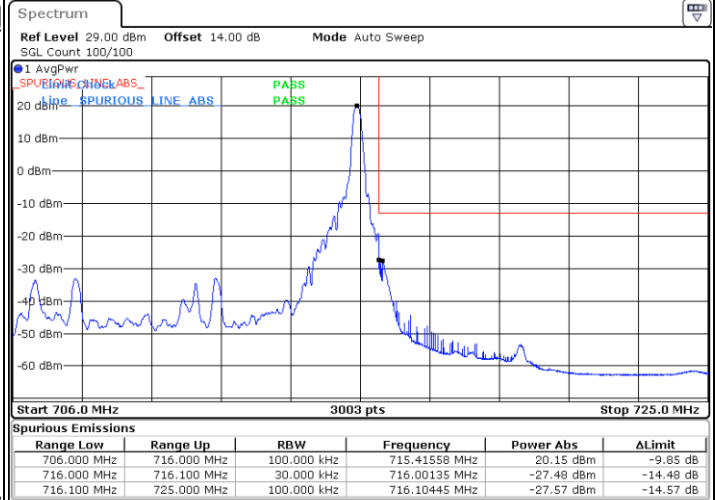


LTE Band 12 / 10MHz / 16QAM

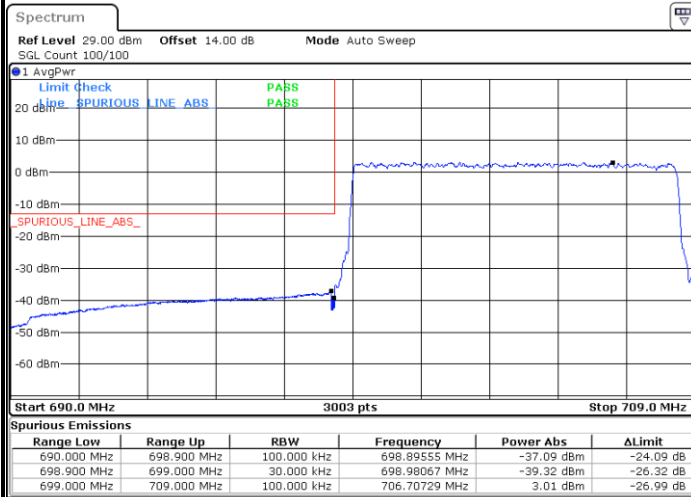
Lowest Band Edge / 1 RB



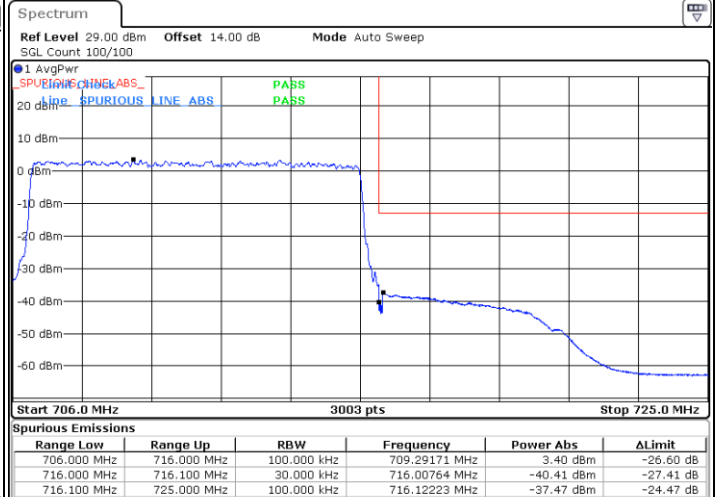
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



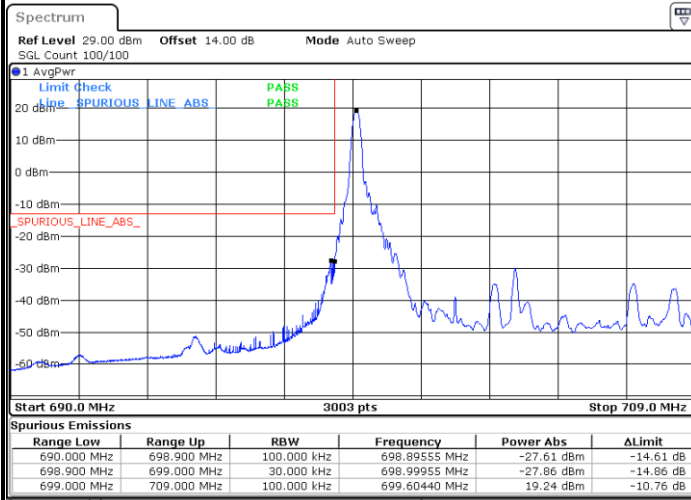
Highest Band Edge / Full RB



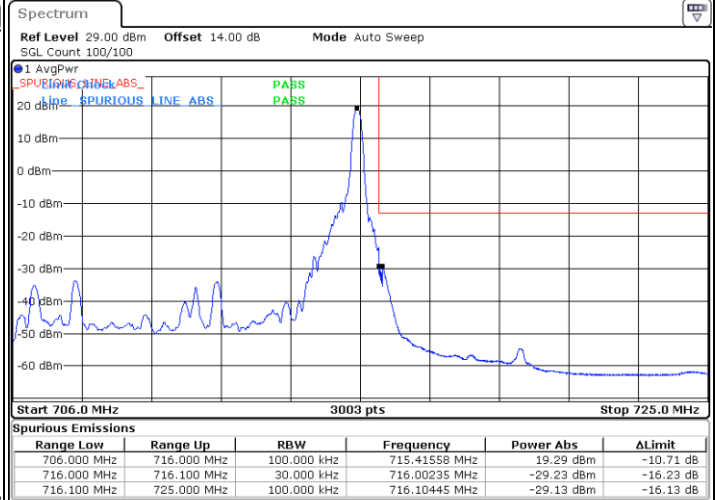


LTE Band 12 / 10MHz / 64QAM

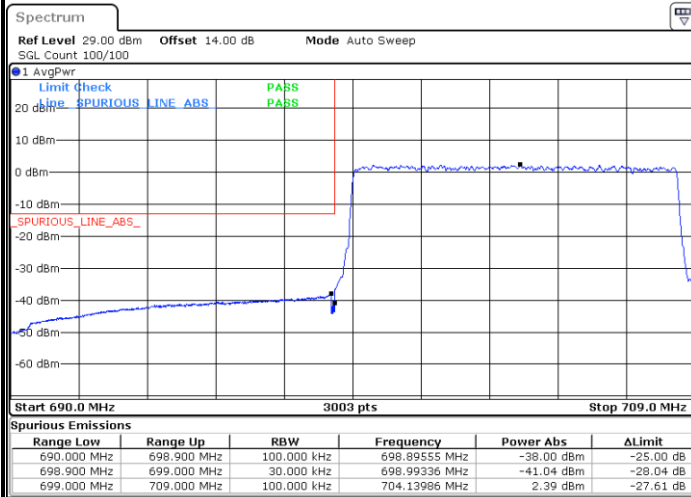
Lowest Band Edge / 1 RB



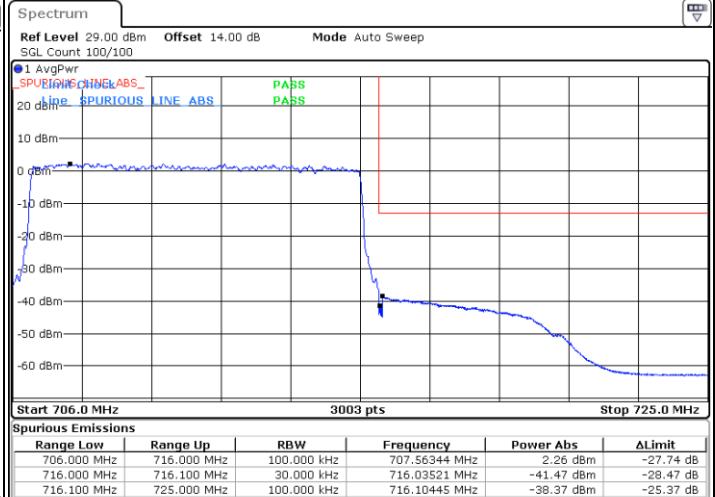
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

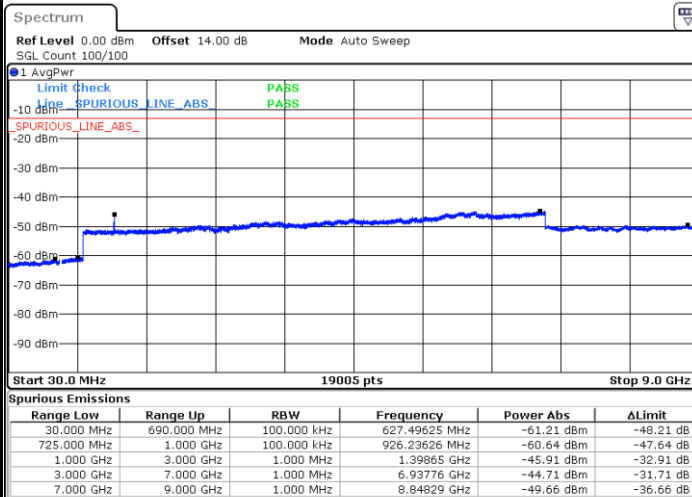




Conducted Spurious Emission

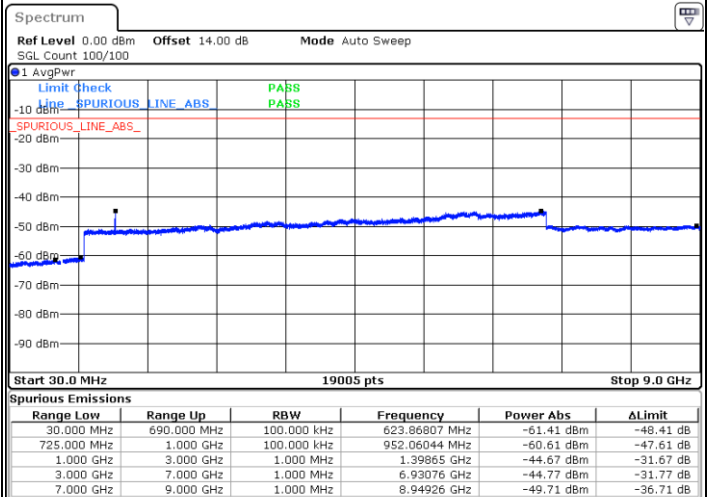
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



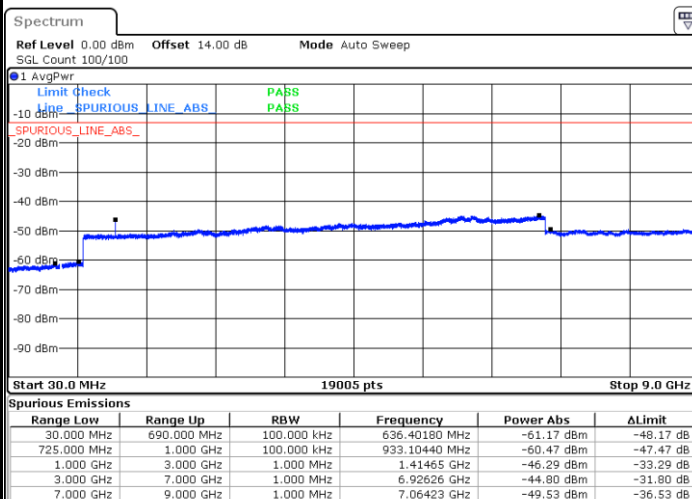
Date: 28.FEB.2022 12:24:39

Lowest Channel / 16QAM



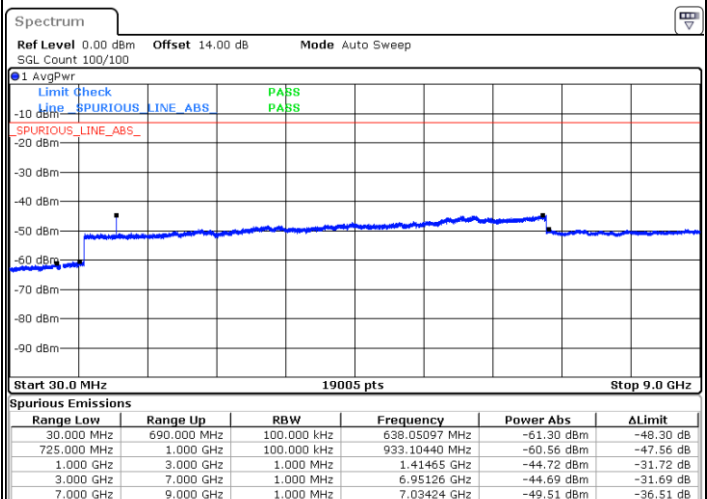
Date: 28.FEB.2022 12:26:02

Middle Channel / QPSK



Date: 28.FEB.2022 12:30:14

Middle Channel / 16QAM

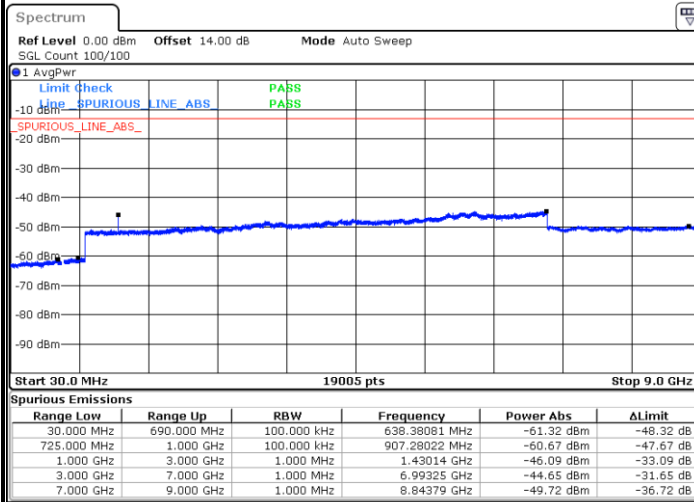


Date: 28.FEB.2022 12:28:52



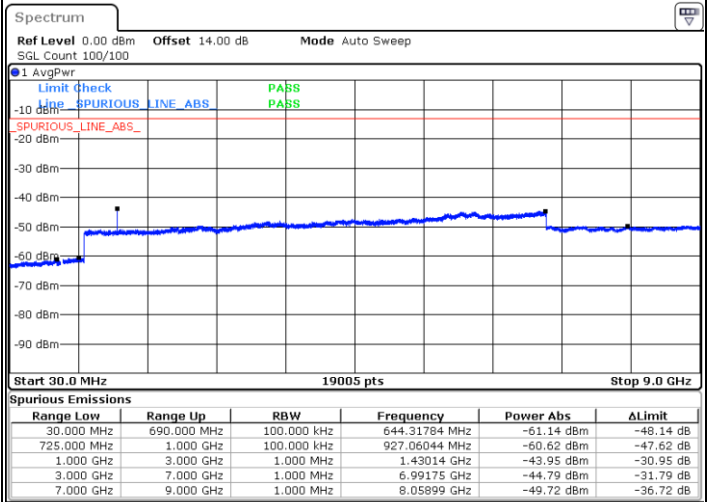
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 28.FEB.2022 12:38:27

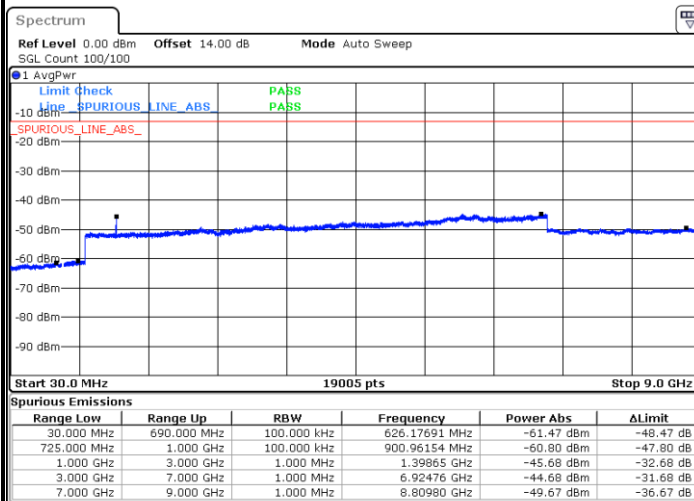
Highest Channel / 16QAM



Date: 28.FEB.2022 12:39:49

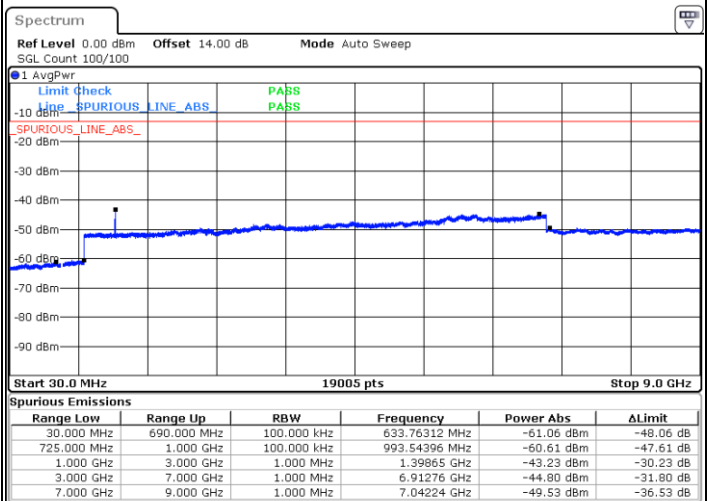
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 28.FEB.2022 09:39:26

Lowest Channel / 16QAM

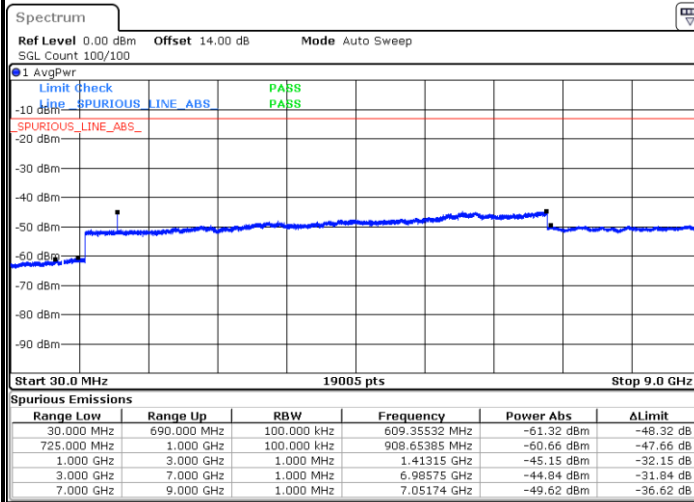


Date: 28.FEB.2022 09:40:48



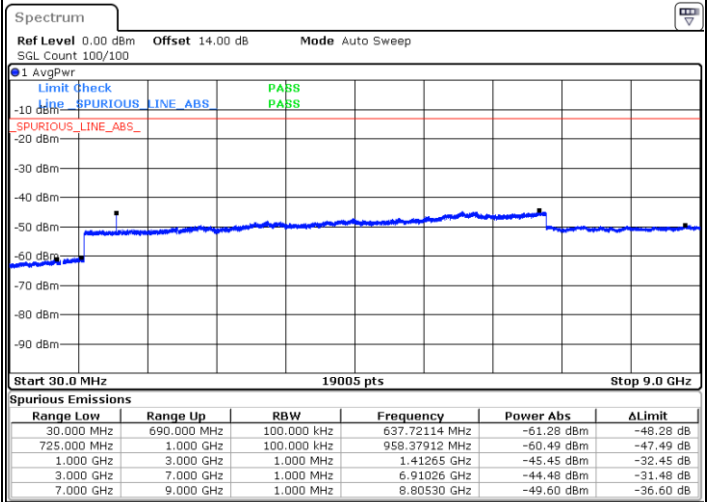
LTE Band 12 / 3MHz

Middle Channel / QPSK



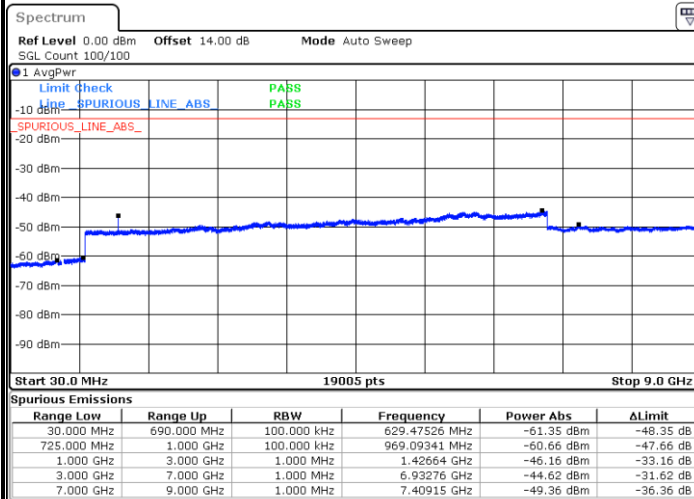
Date: 28.FEB.2022 09:45:00

Middle Channel / 16QAM



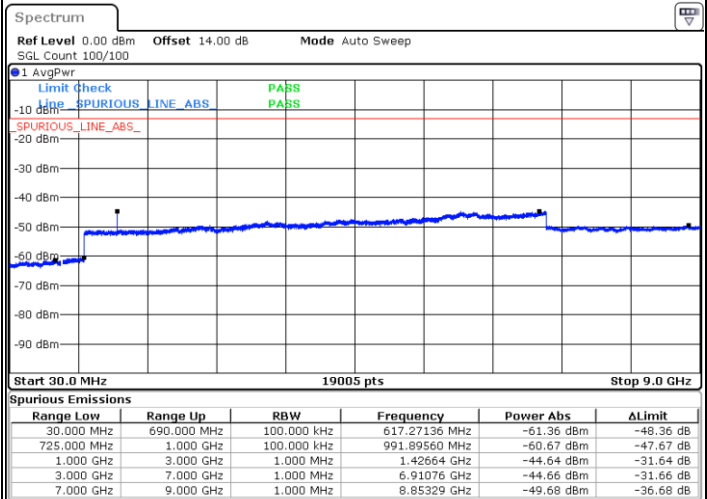
Date: 28.FEB.2022 09:43:38

Highest Channel / QPSK



Date: 28.FEB.2022 09:53:11

Highest Channel / 16QAM

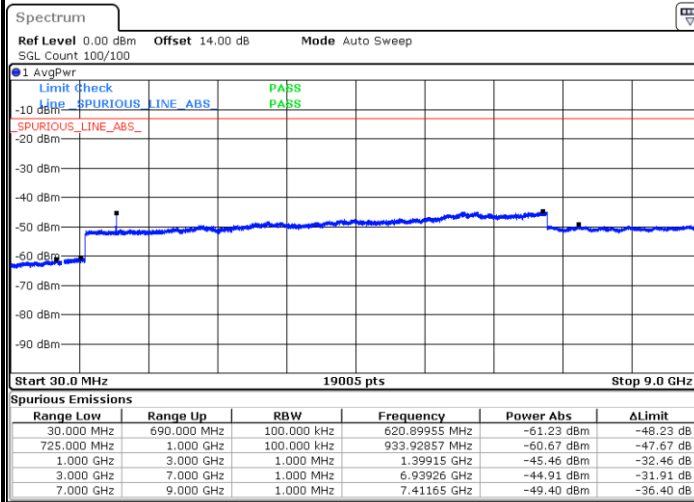


Date: 28.FEB.2022 09:54:34



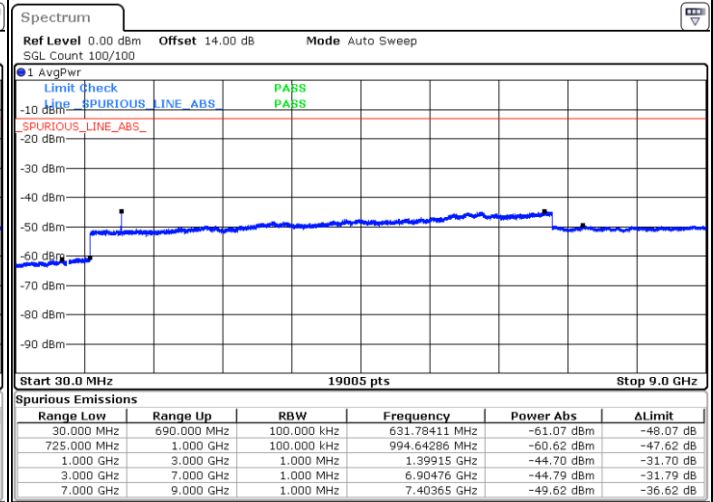
LTE Band 12 / 5MHz

Lowest Channel / QPSK



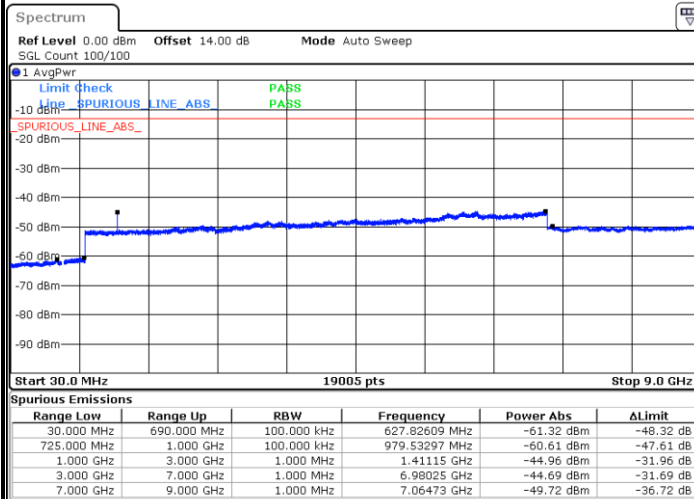
Date: 28.FEB.2022 11:26:51

Lowest Channel / 16QAM



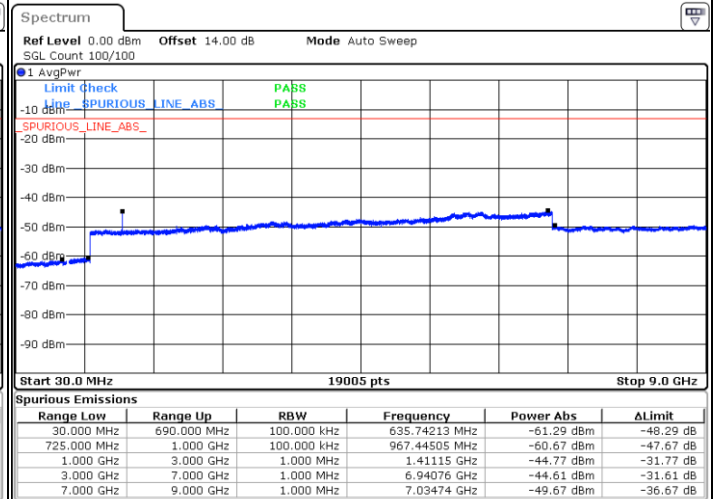
Date: 28.FEB.2022 11:28:13

Middle Channel / QPSK



Date: 28.FEB.2022 11:32:25

Middle Channel / 16QAM

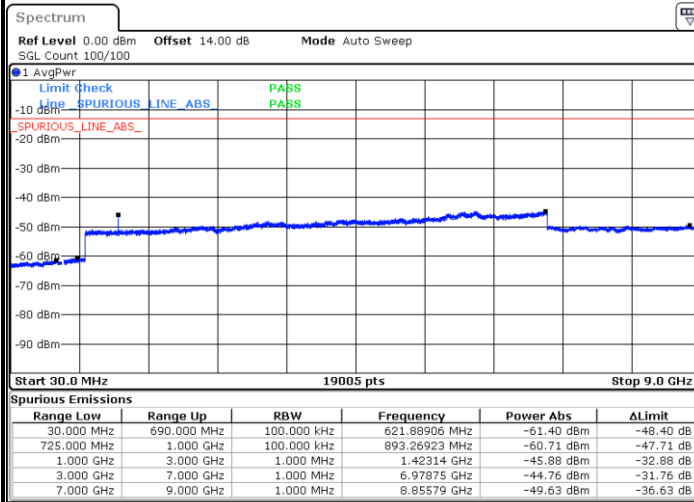


Date: 28.FEB.2022 11:31:03



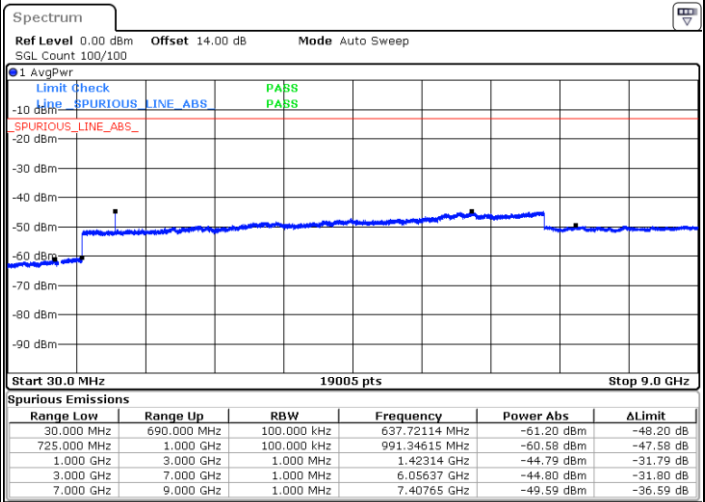
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 28.FEB.2022 11:41:59

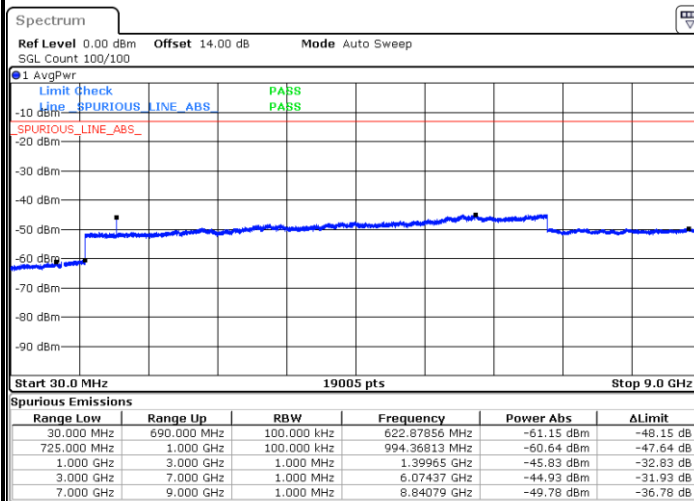
Highest Channel / 16QAM



Date: 28.FEB.2022 11:40:37

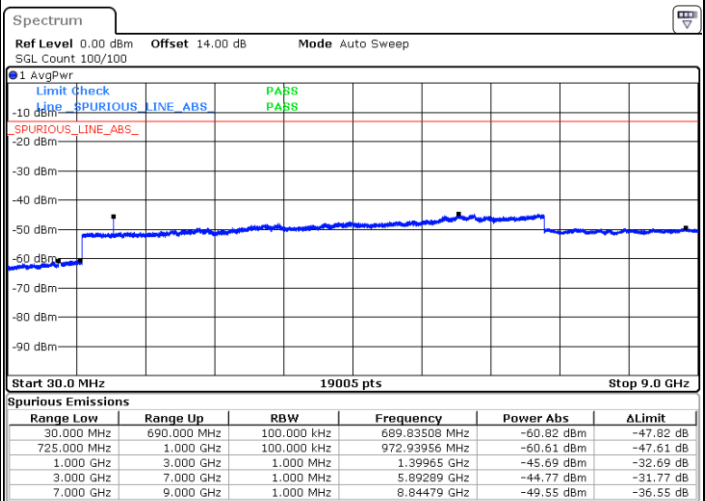
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 28.FEB.2022 11:50:18

Lowest Channel / 16QAM

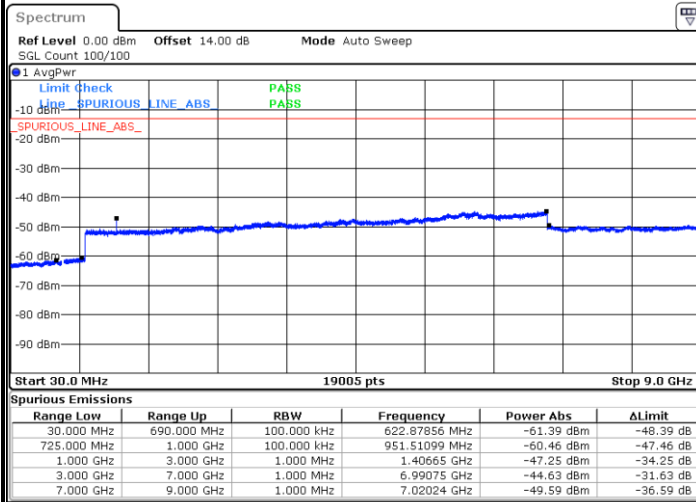


Date: 28.FEB.2022 11:51:41



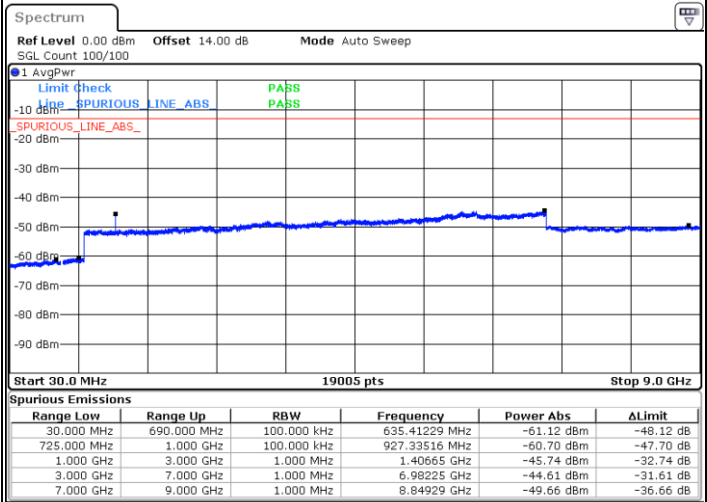
LTE Band 12 / 10MHz

Middle Channel / QPSK



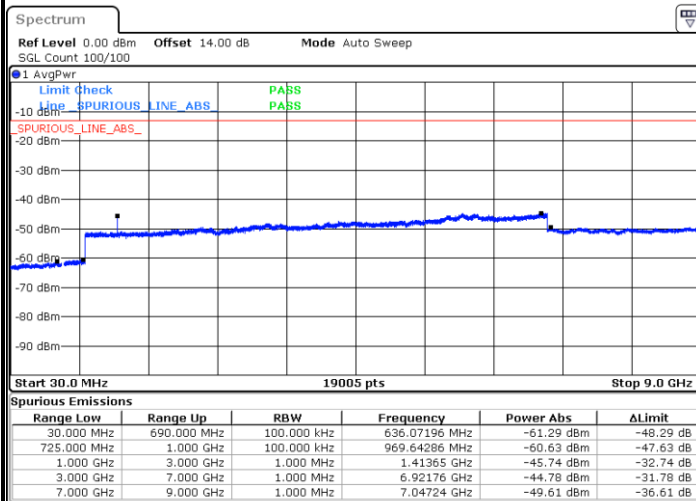
Date: 28.FEB.2022 11:55:52

Middle Channel / 16QAM



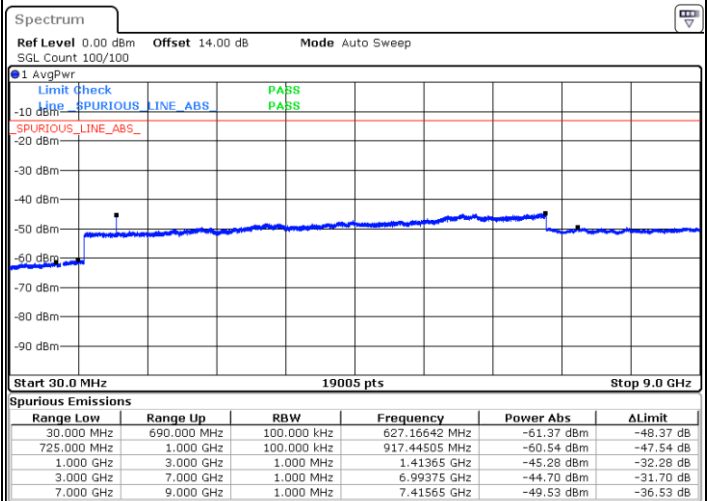
Date: 28.FEB.2022 11:54:30

Highest Channel / QPSK



Date: 28.FEB.2022 12:04:03

Highest Channel / 16QAM

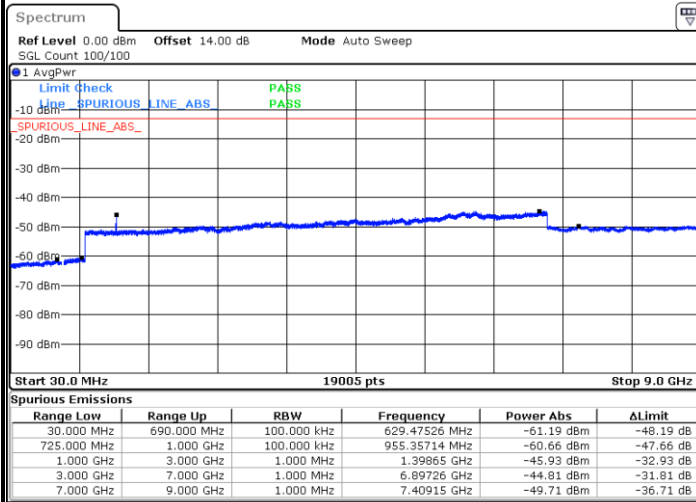


Date: 28.FEB.2022 12:05:26



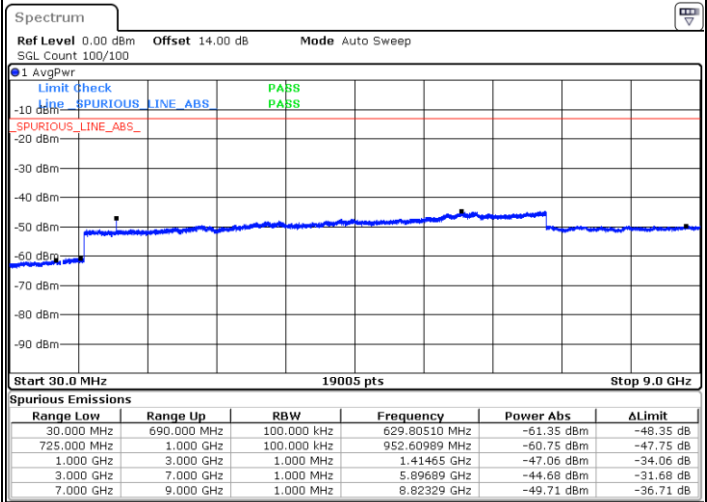
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



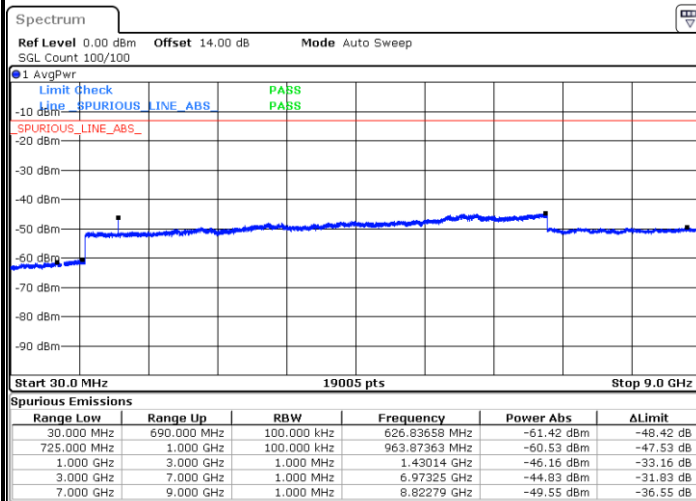
Date: 28.FEB.2022 12:44:19

Middle Channel / 64QAM



Date: 28.FEB.2022 12:46:22

Highest Channel / 64QAM

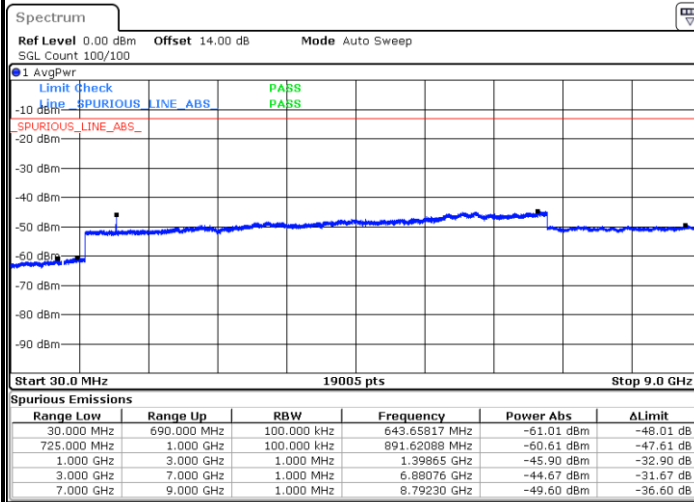


Date: 28.FEB.2022 12:51:01



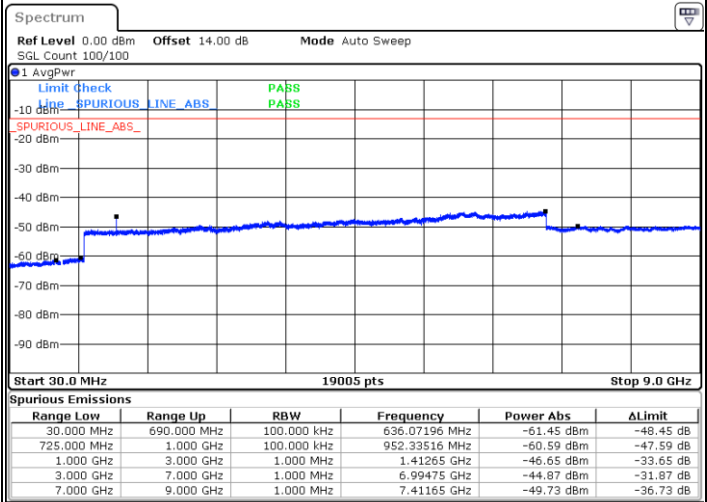
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



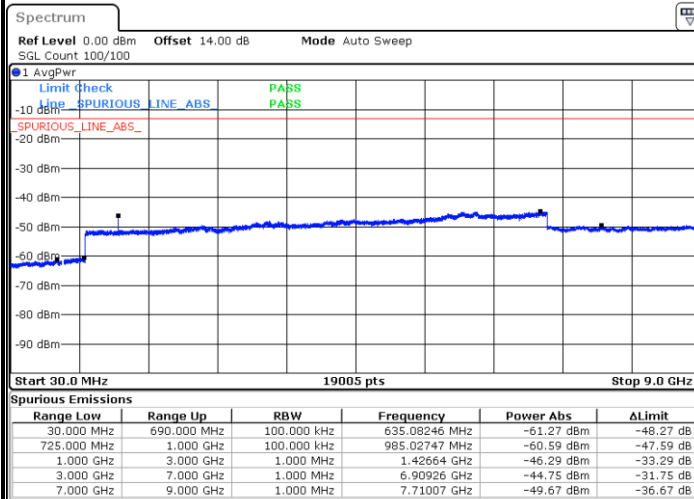
Date: 28.FEB.2022 09:59:04

Middle Channel / 64QAM



Date: 28.FEB.2022 10:01:05

Highest Channel / 64QAM

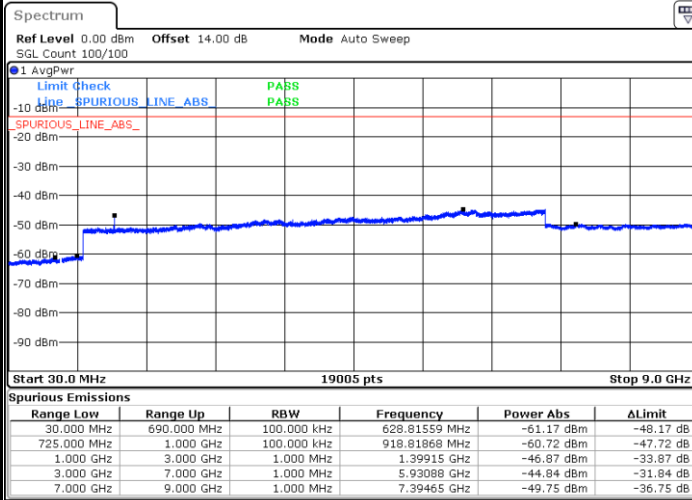


Date: 28.FEB.2022 10:05:43



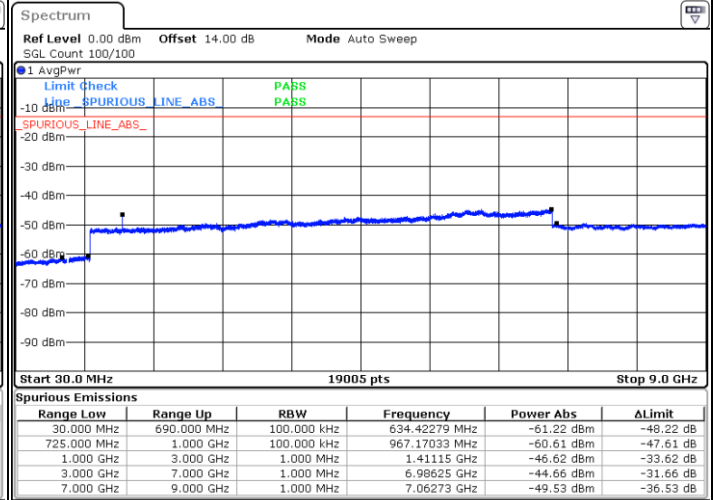
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



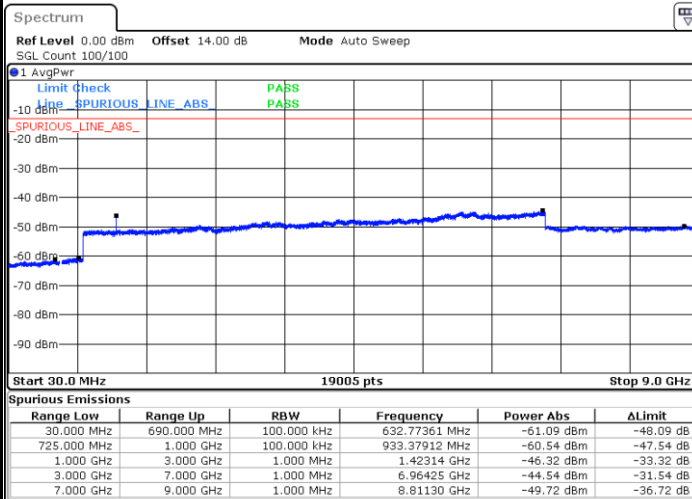
Date: 28.FEB.2022 10:10:13

Middle Channel / 64QAM



Date: 28.FEB.2022 10:12:15

Highest Channel / 64QAM

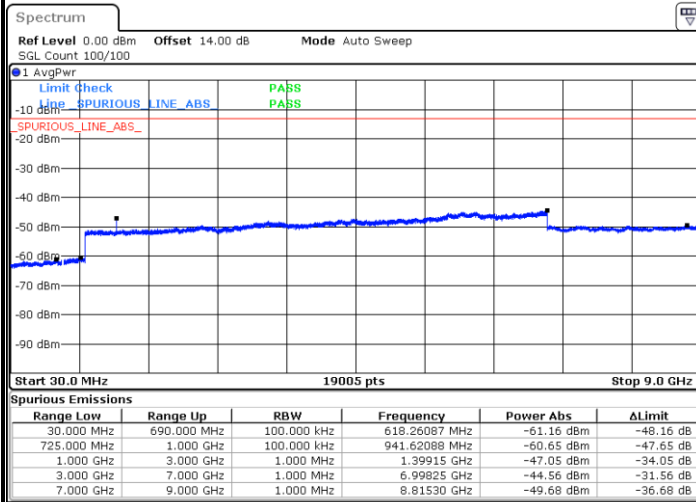


Date: 28.FEB.2022 11:18:48



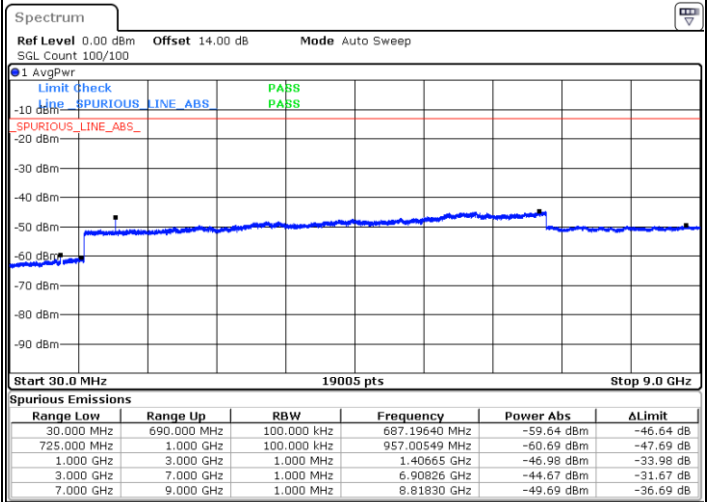
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



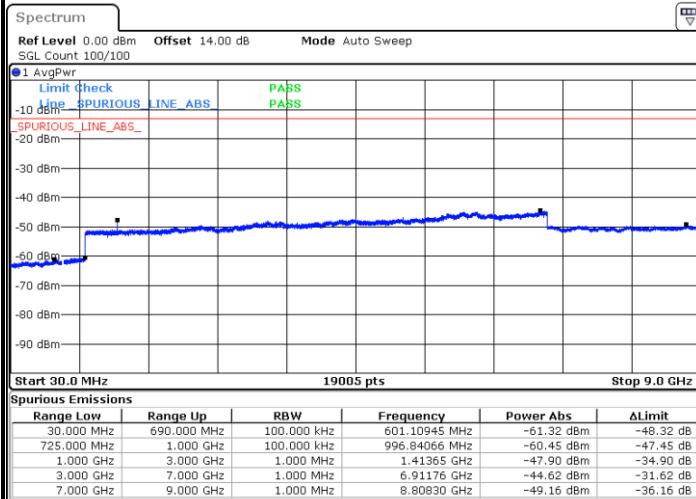
Date: 28.FEB.2022 12:09:55

Middle Channel / 64QAM



Date: 28.FEB.2022 12:11:57

Highest Channel / 64QAM



Date: 28.FEB.2022 12:16:36

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	0.0010	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0008	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

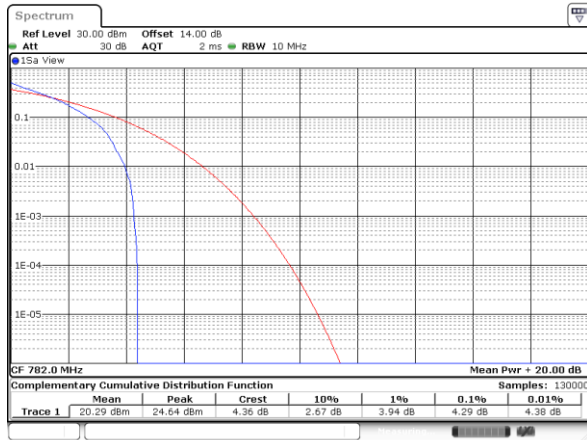
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.29	5.51	5.01	6.26	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.06	6.32	-	-	
Highest CH	-	-	-	-	

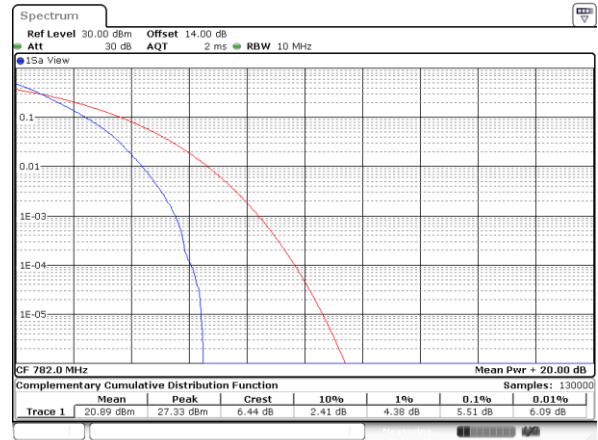


LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB

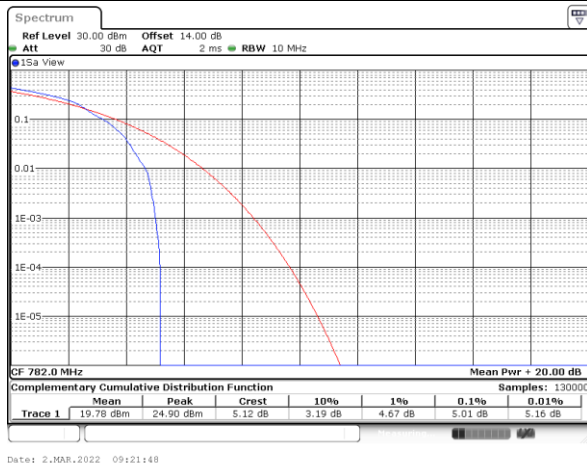


Middle Channel / Full RB

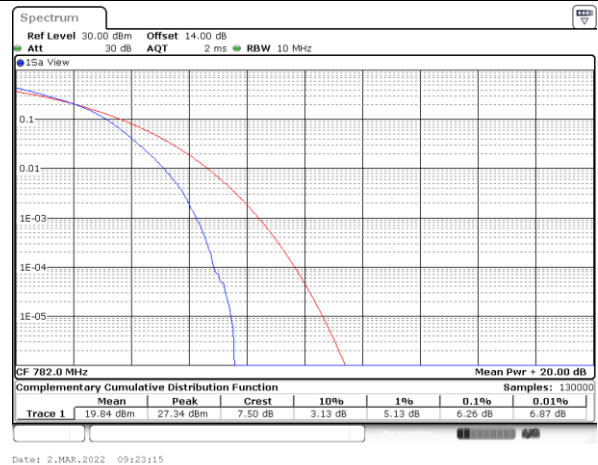


LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB

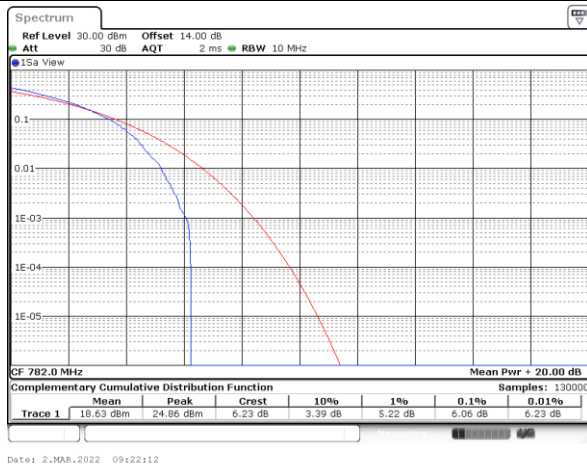


Middle Channel / Full RB

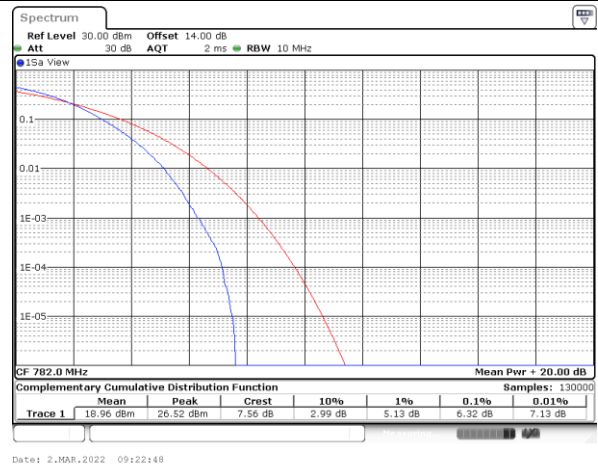


LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Middle Channel / Full RB



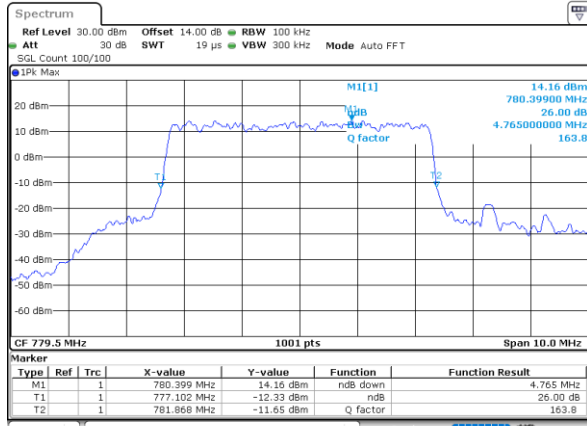
**26dB Bandwidth**

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	-	-	-	-	4.77	4.92	-	-	-	-	-	-
Middle CH	-	-	-	-	4.88	4.88	9.93	9.79	-	-	-	-
Highest CH	-	-	-	-	4.86	4.84	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.85	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.92	-	9.73	-	-	-	-	-
Highest CH	-	-	-	-	4.79	-	-	-	-	-	-	-

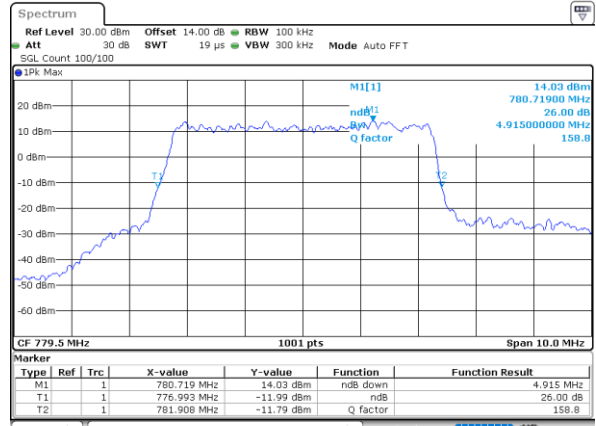


LTE Band 13

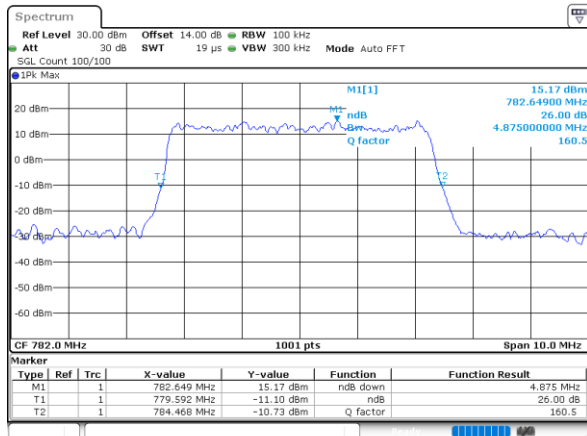
Lowest Channel / 5MHz / QPSK



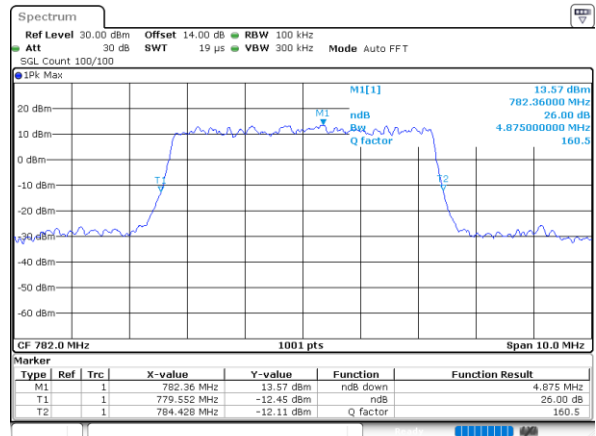
Lowest Channel / 5MHz / 16QAM



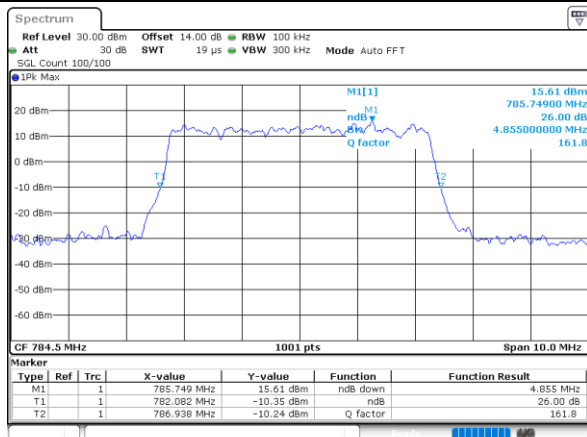
Middle Channel / 5MHz / QPSK



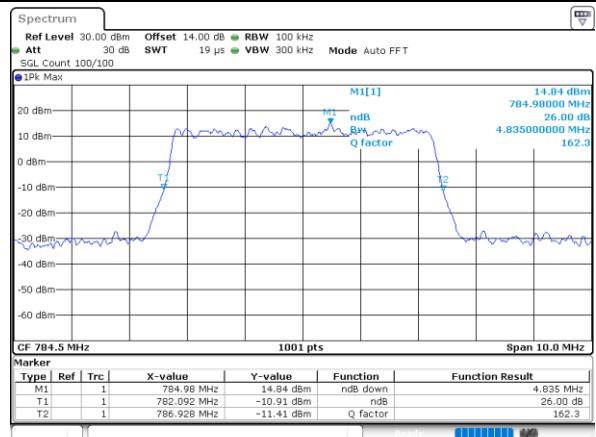
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



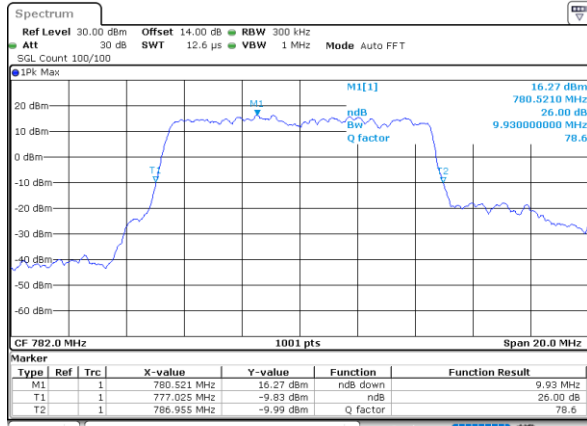
Highest Channel / 5MHz / 16QAM





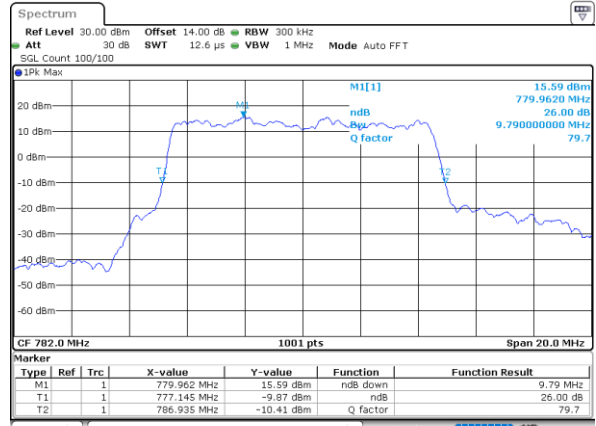
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 28.FEB.2022 13:40:33

Middle Channel / 10MHz / 16QAM

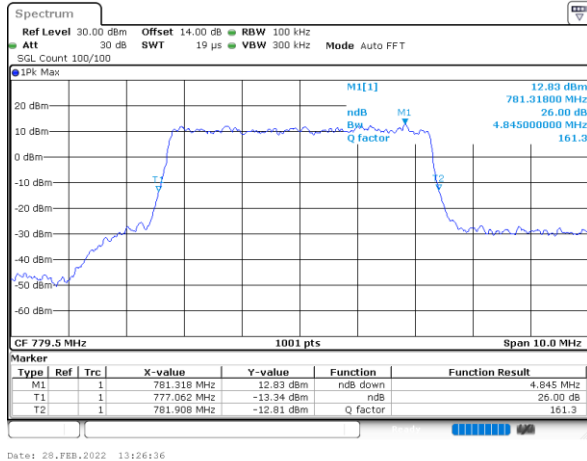


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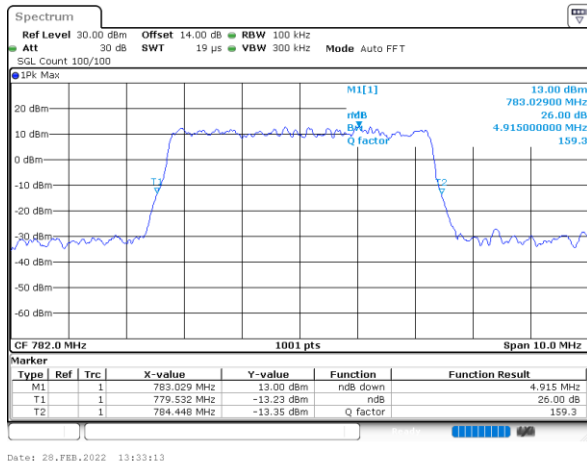


LTE Band 13

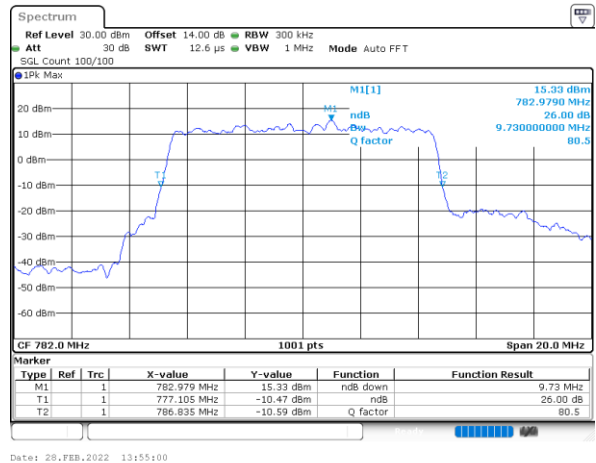
Lowest Channel / 5MHz / 64QAM



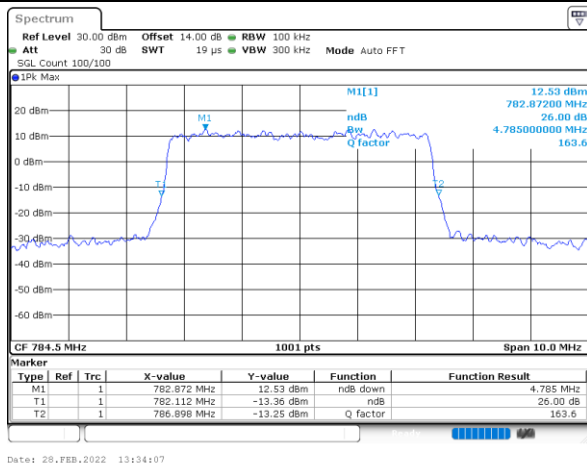
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



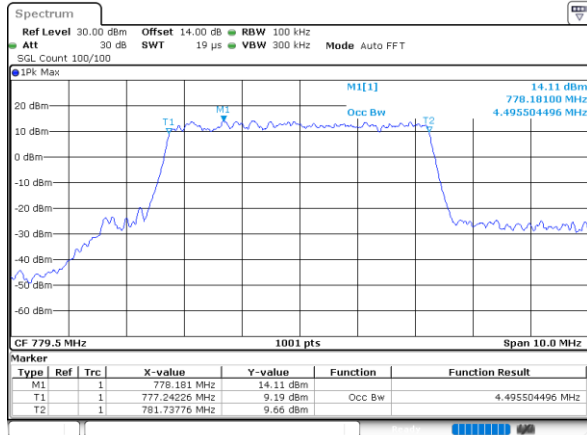
**Occupied Bandwidth**

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	-	-	-	-	4.50	4.47	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	4.51	9.03	9.05	-	-	-	-
Highest CH	-	-	-	-	4.50	4.50	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.48	-	-	-	-	-	-	-

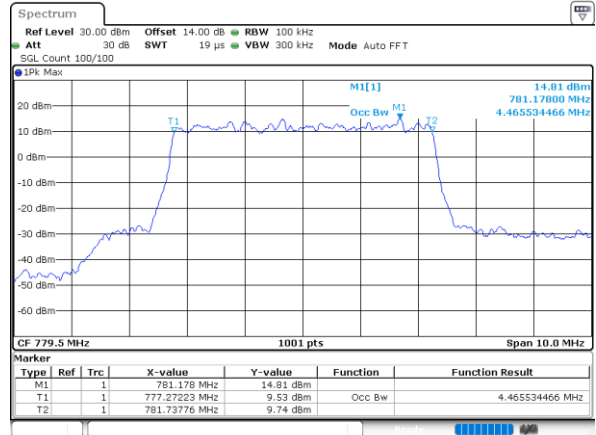


LTE Band 13

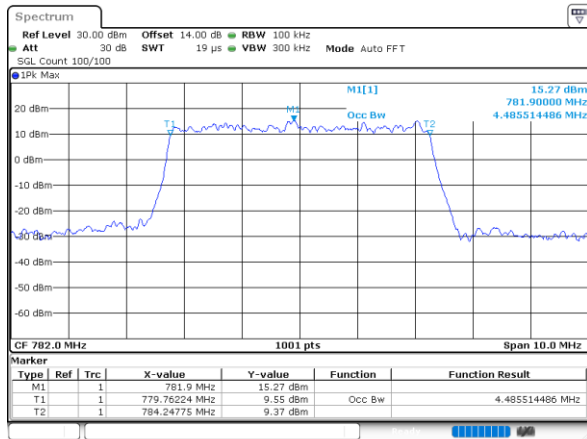
Lowest Channel / 5MHz / QPSK



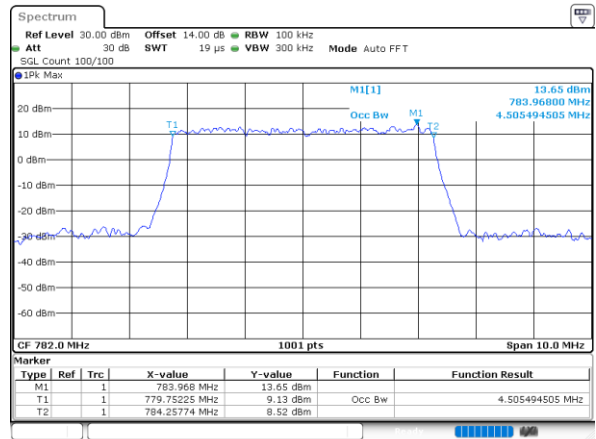
Lowest Channel / 5MHz / 16QAM



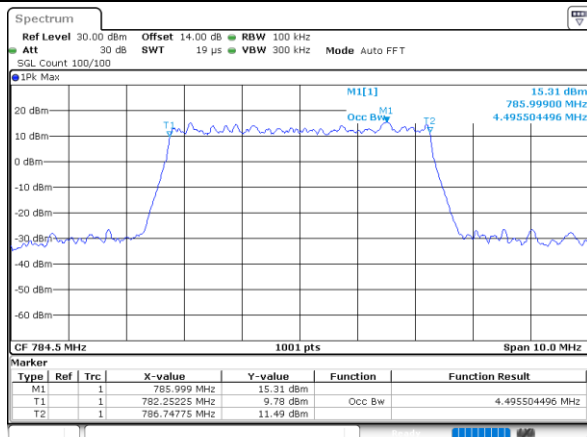
Middle Channel / 5MHz / QPSK



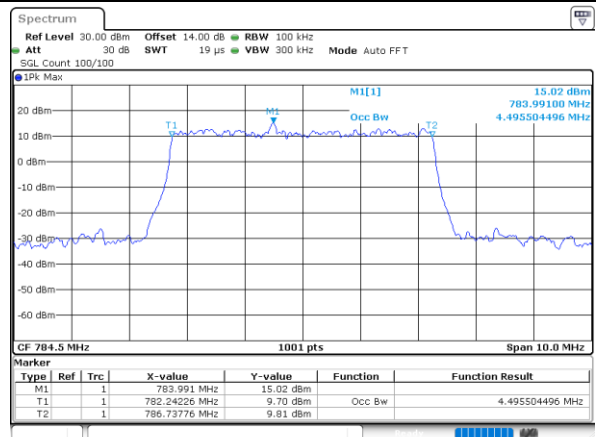
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



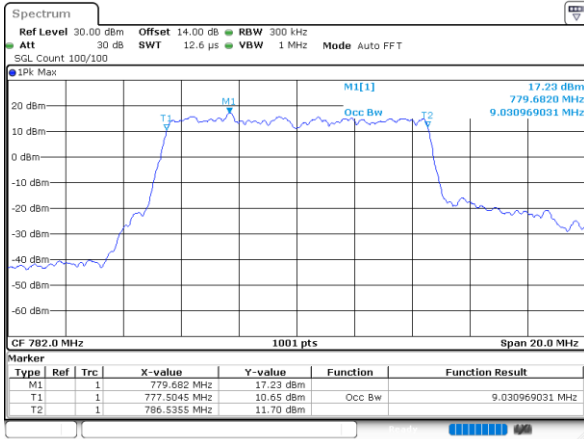
Highest Channel / 5MHz / 16QAM





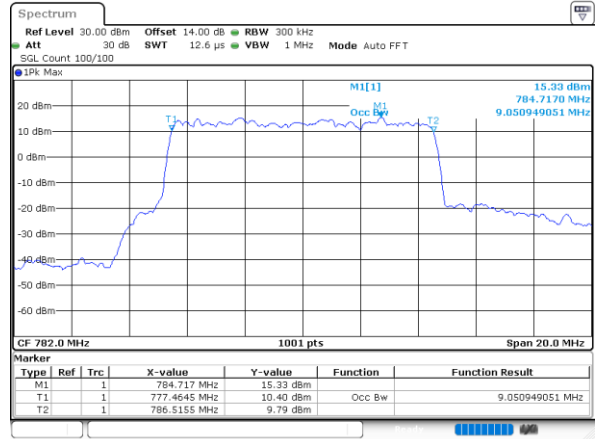
LTE Band 13

Middle Channel / 10MHz / QPSK



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Middle Channel / 10MHz / 16QAM

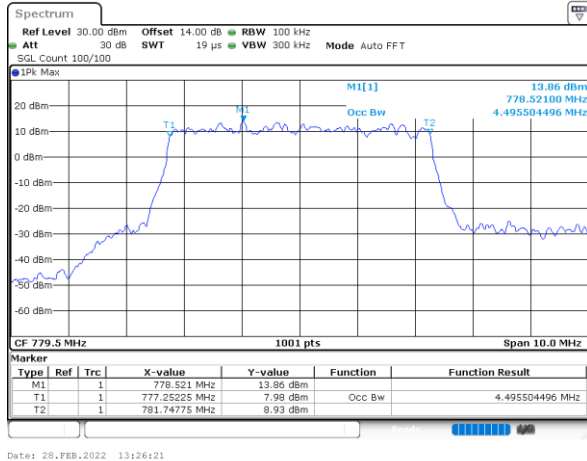


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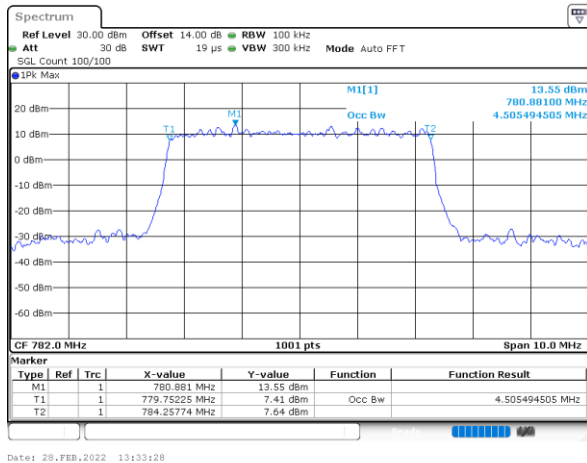


LTE Band 13

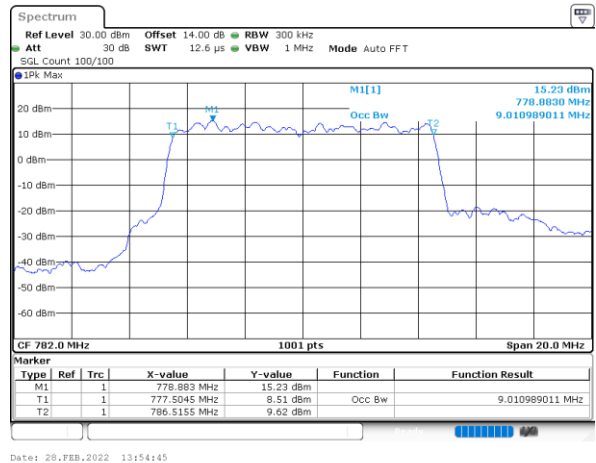
Lowest Channel / 5MHz / 64QAM



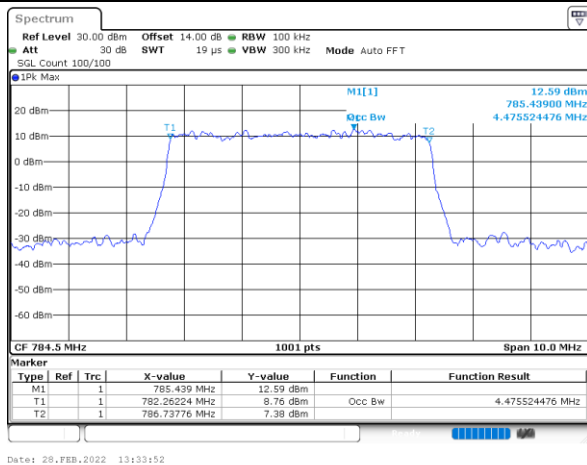
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

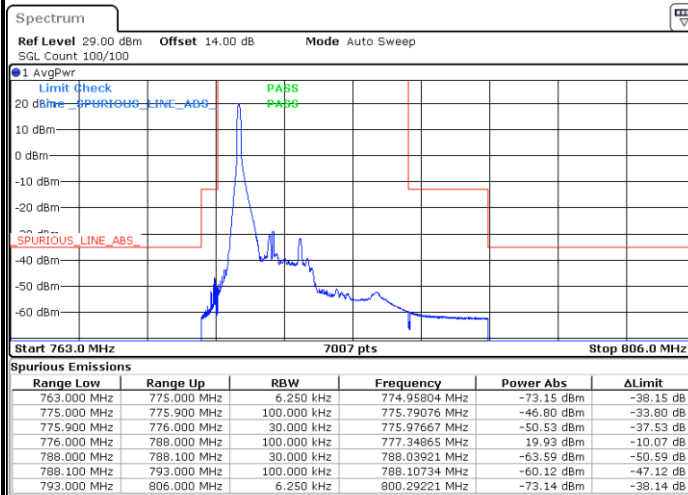




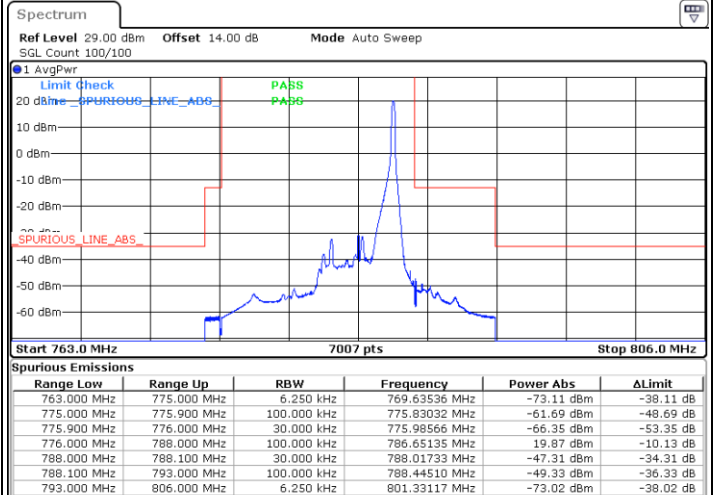
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

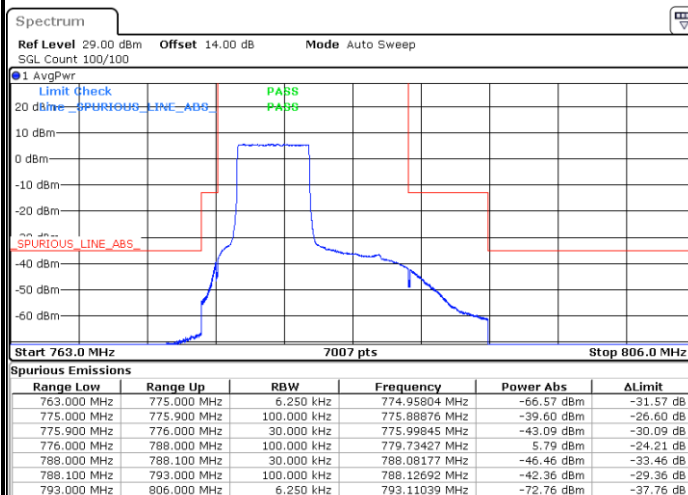
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

