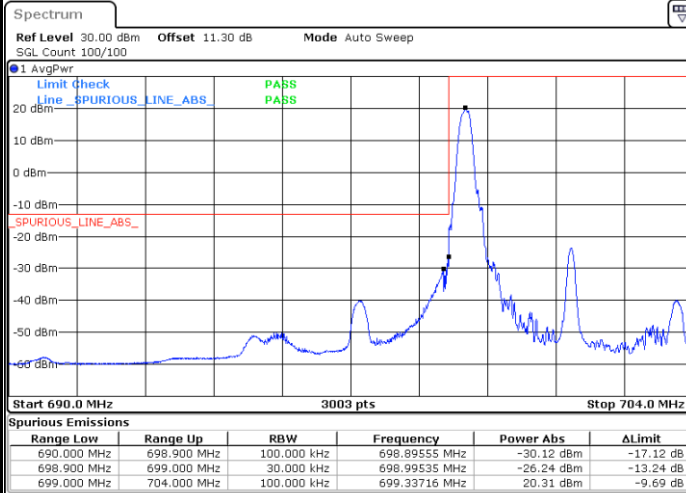


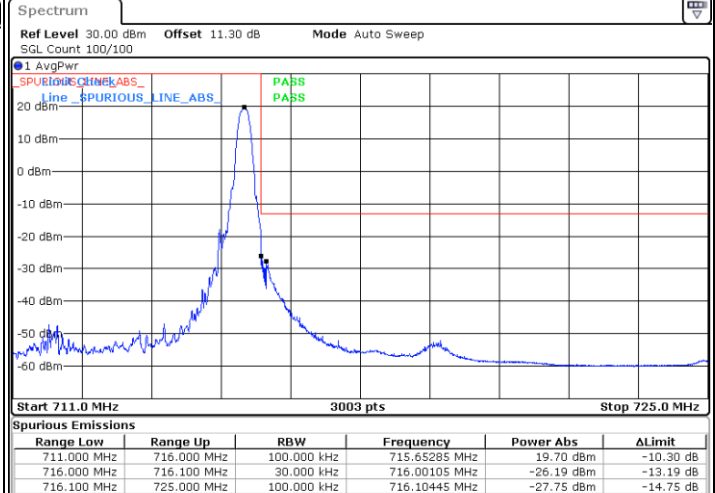


LTE Band 12 / 5MHz / 16QAM

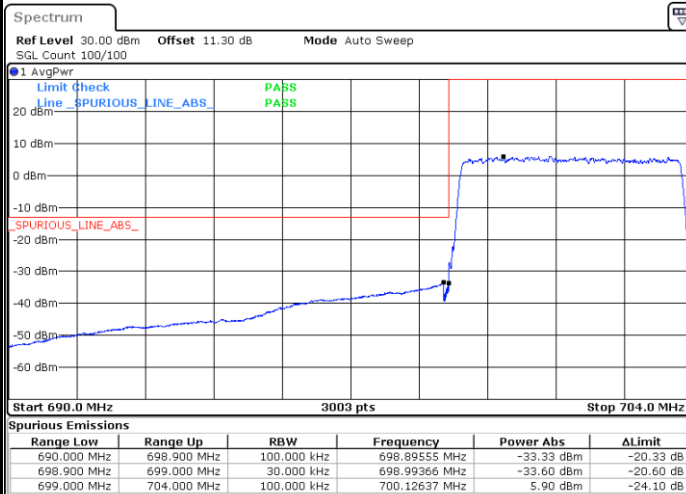
Lowest Band Edge / 1RB



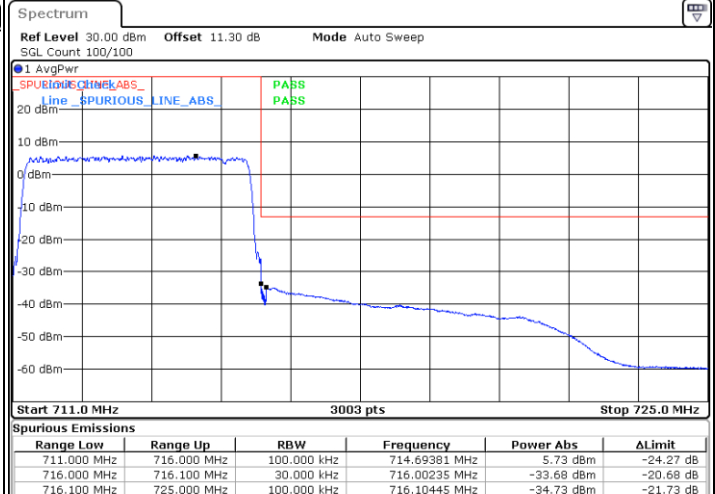
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



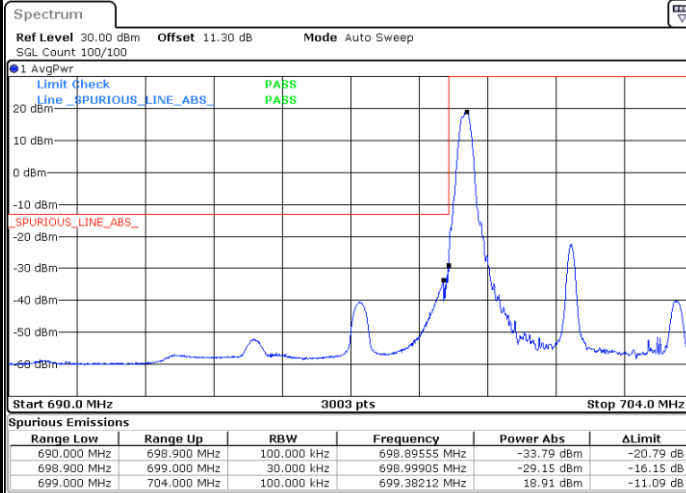
Highest Band Edge / Full RB



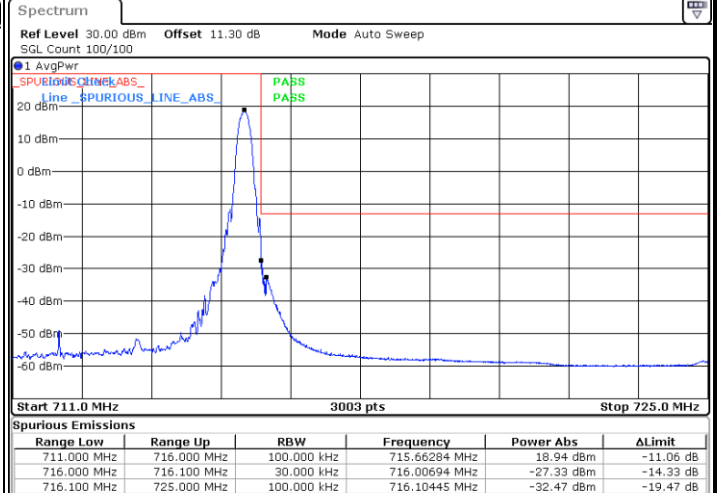


LTE Band 12 / 5MHz / 64QAM

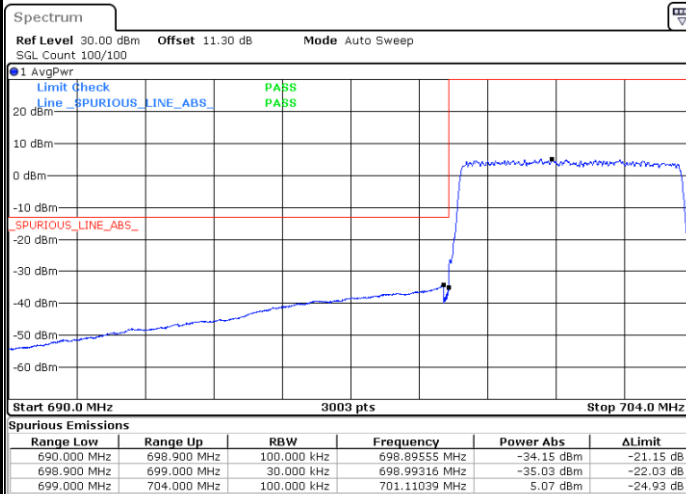
Lowest Band Edge / 1RB



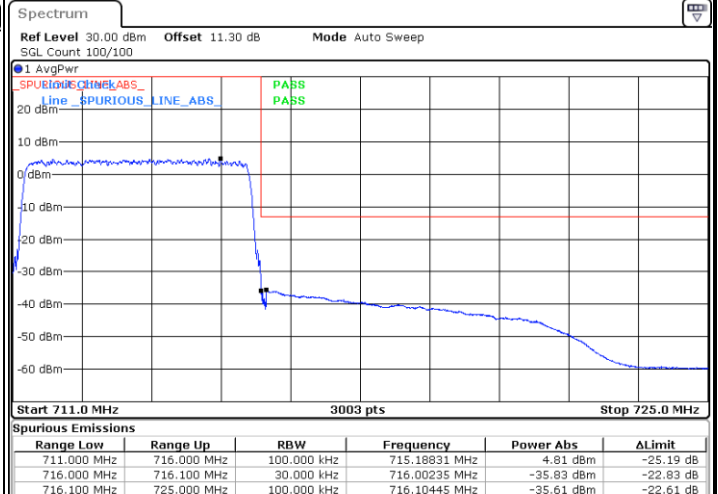
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



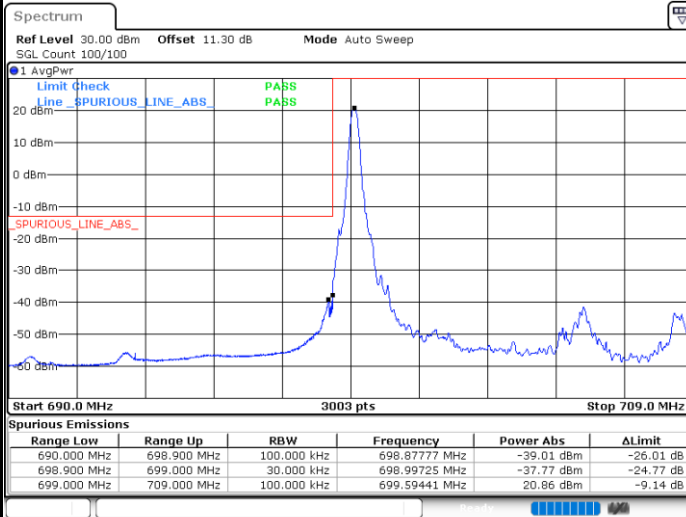
Highest Band Edge / Full RB



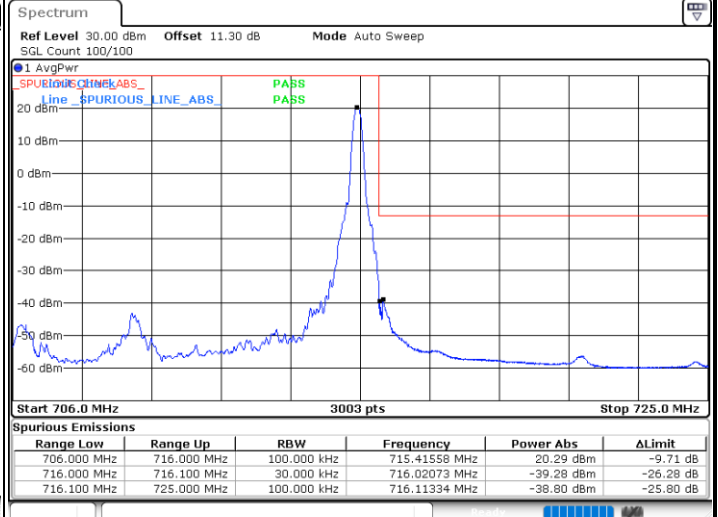


LTE Band 12 / 10MHz / QPSK

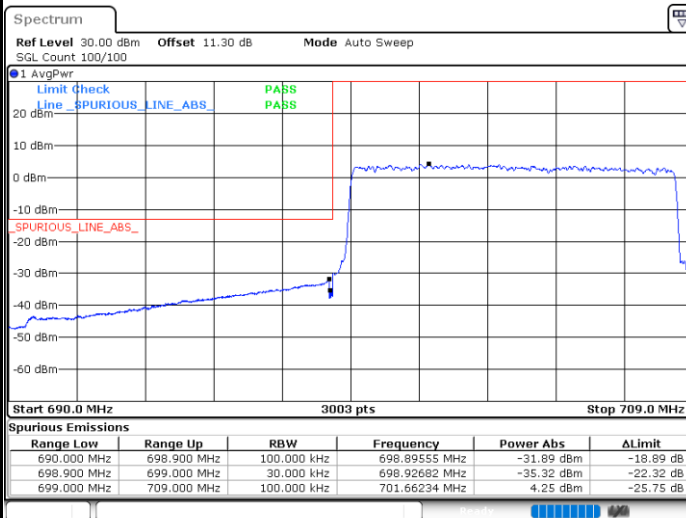
Lowest Band Edge / 1 RB



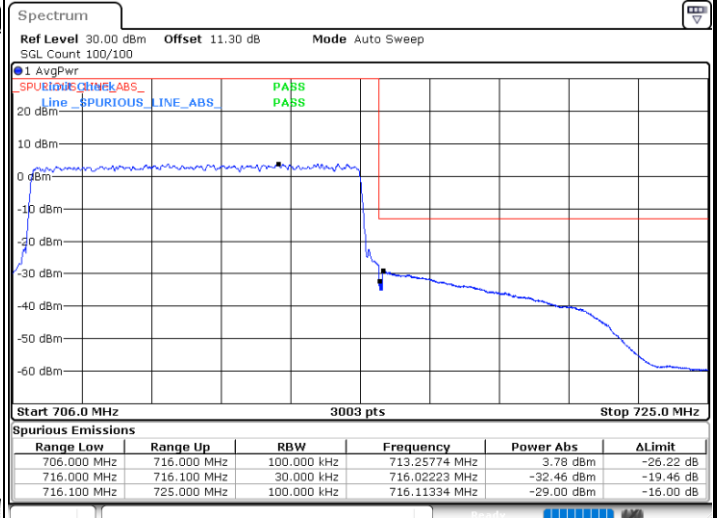
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



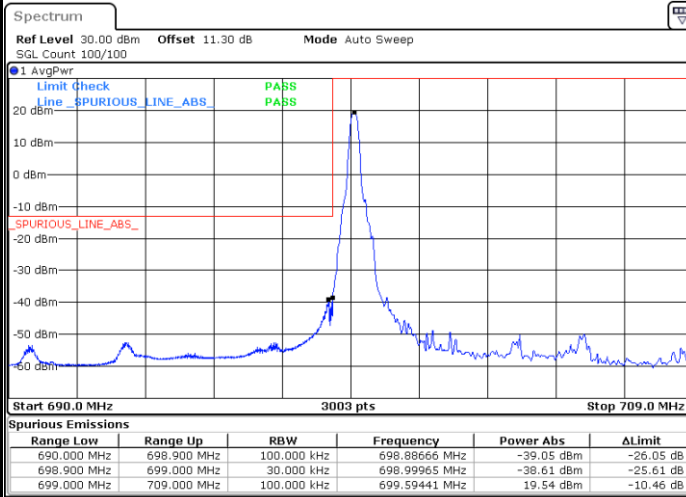
Highest Band Edge / Full RB



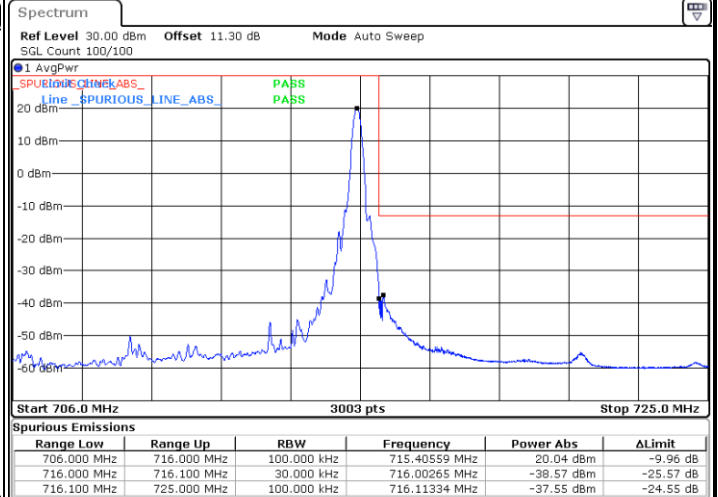


LTE Band 12 / 10MHz / 16QAM

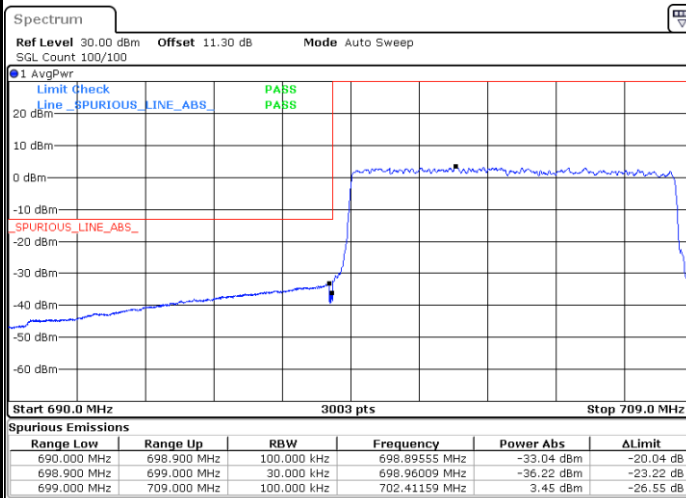
Lowest Band Edge / 1 RB



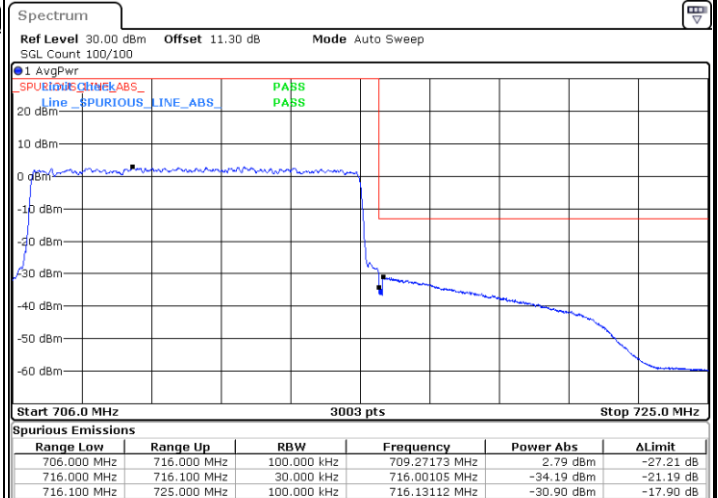
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



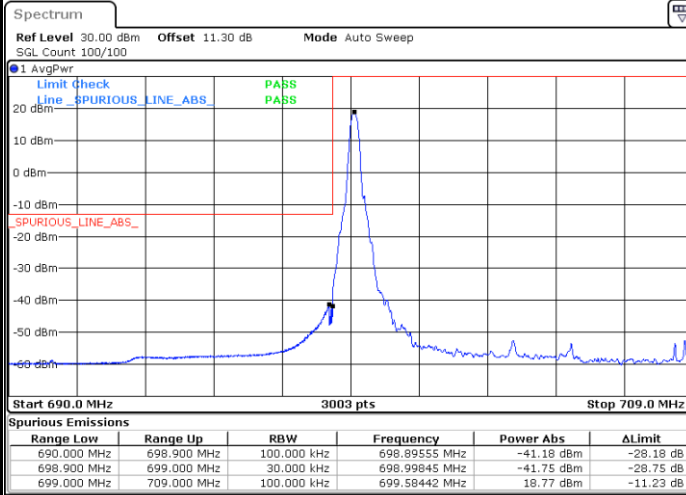
Highest Band Edge / Full RB



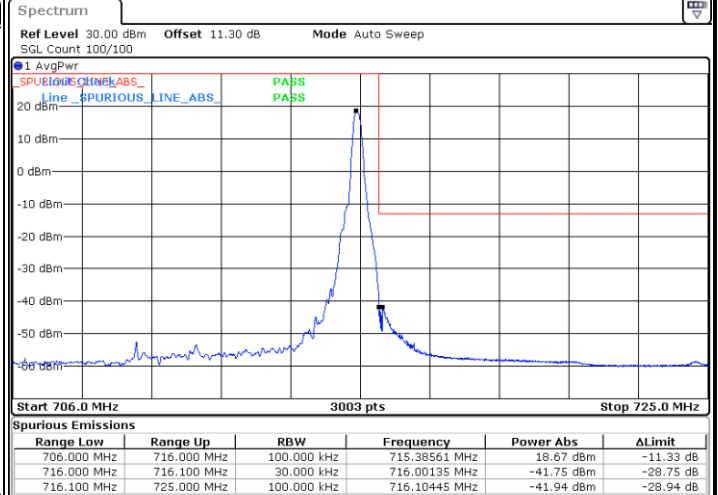


LTE Band 12 / 10MHz / 64QAM

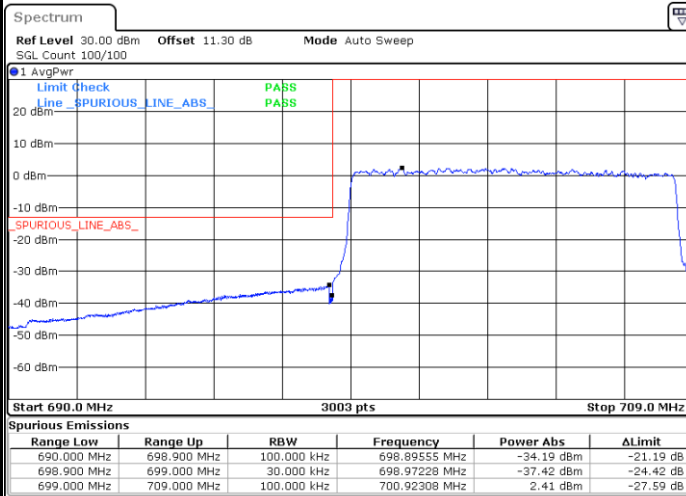
Lowest Band Edge / 1 RB



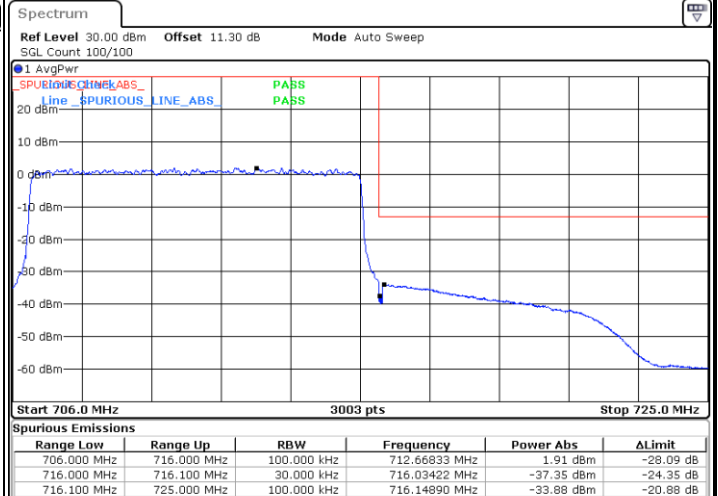
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

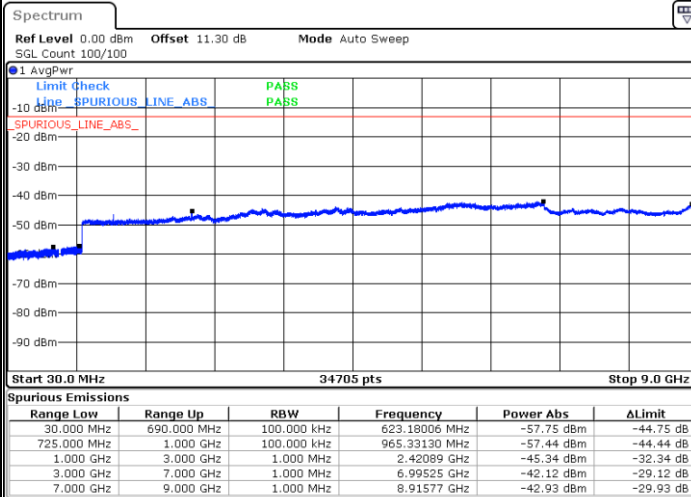




Conducted Spurious Emission

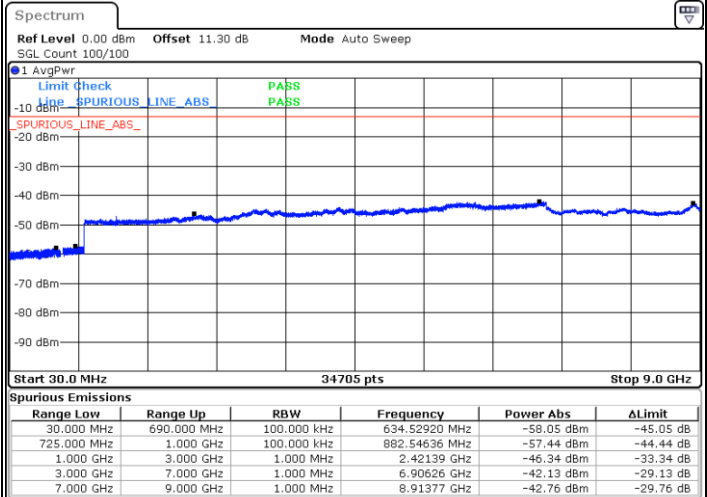
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



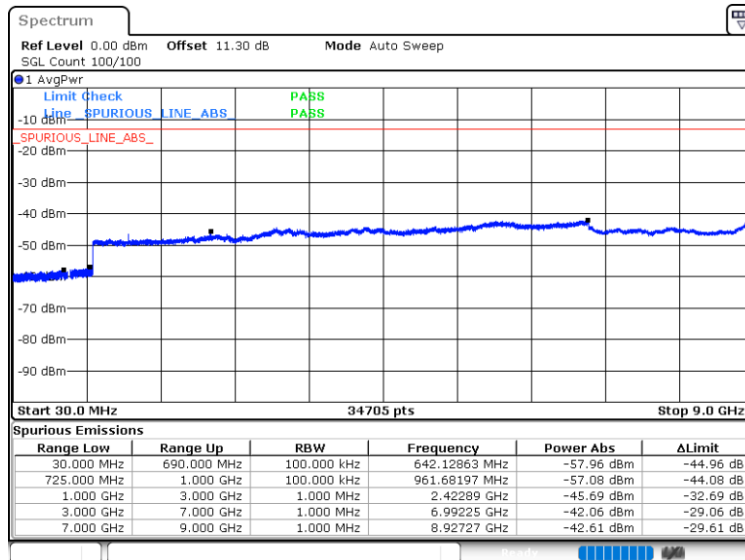
Date: 15.JUN.2021 09:08:39

Middle Channel / QPSK



Date: 15.JUN.2021 09:10:56

Highest Channel / QPSK

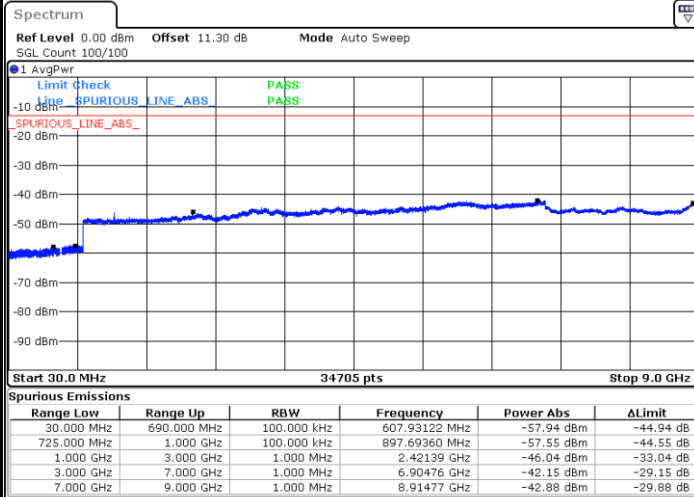


Date: 15.JUN.2021 09:15:10



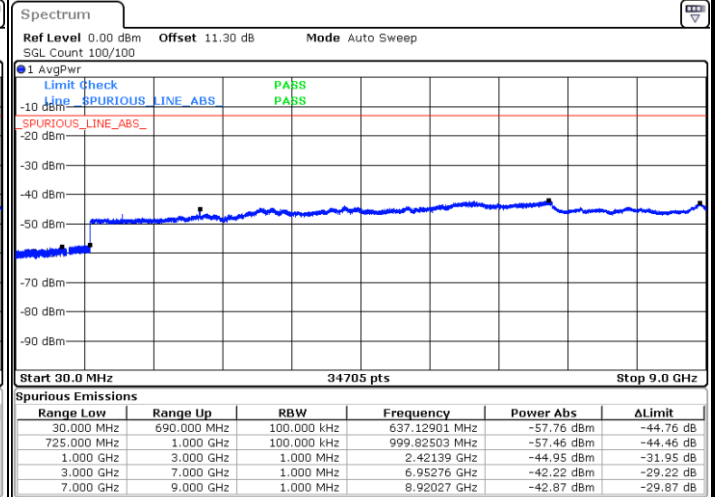
LTE Band 12 / 3MHz

Lowest Channel / QPSK



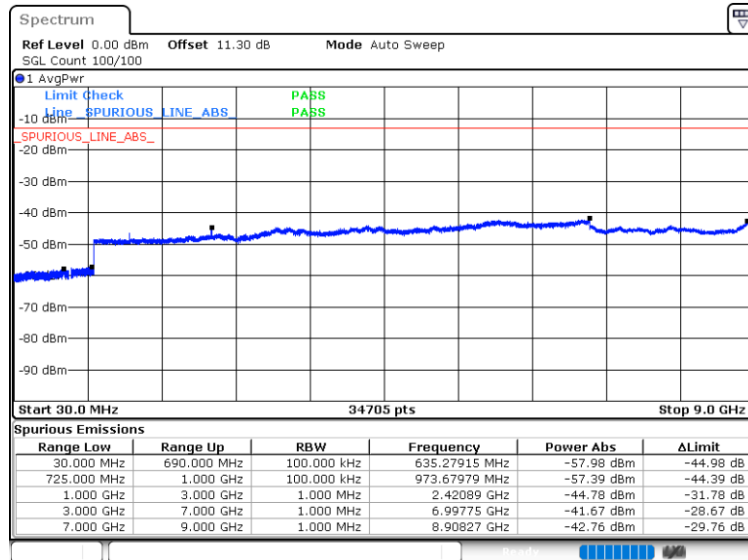
Date: 15.JUN.2021 09:23:30

Middle Channel / QPSK



Date: 15.JUN.2021 09:25:47

Highest Channel / QPSK

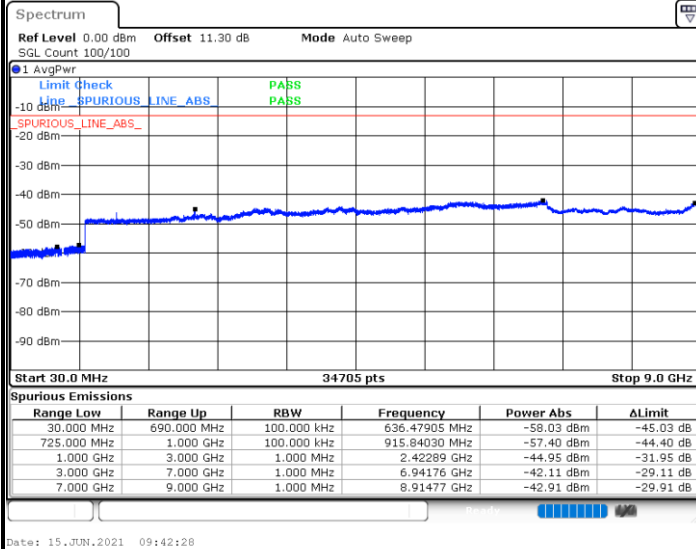


Date: 15.JUN.2021 09:30:01

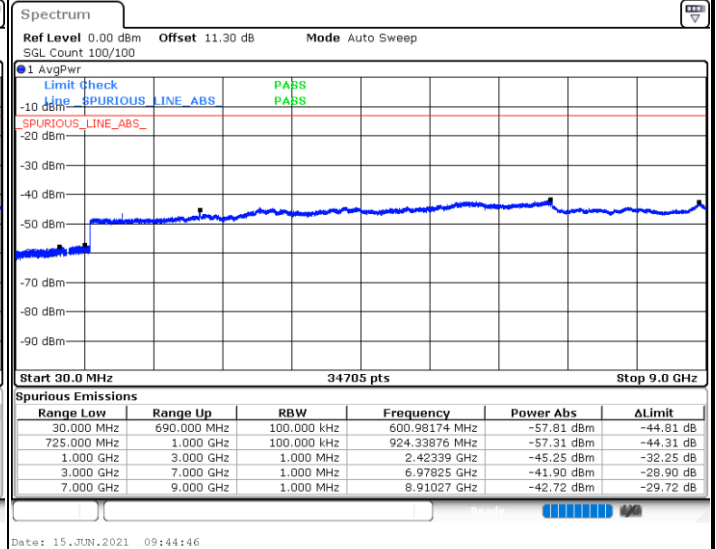


LTE Band 12 / 5MHz

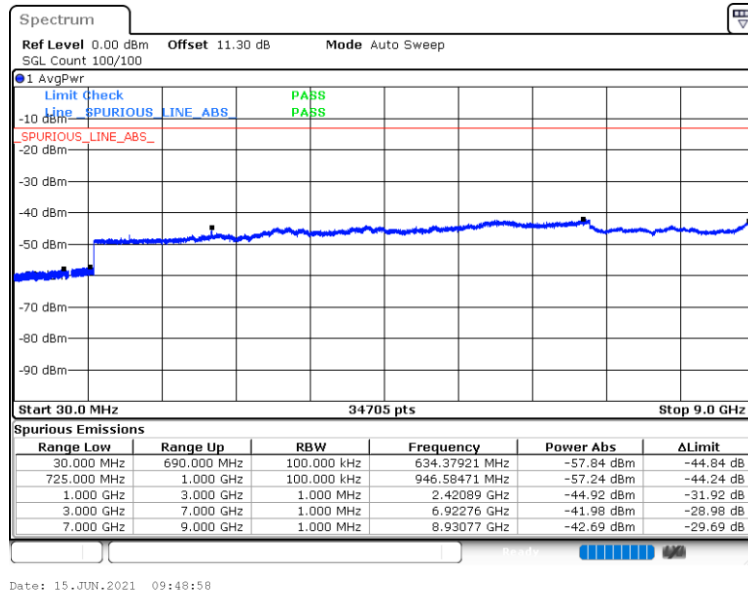
Lowest Channel / QPSK



Middle Channel / QPSK



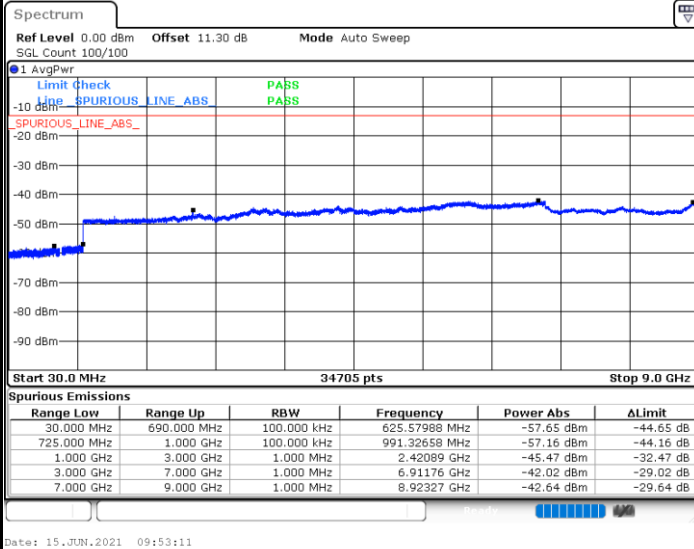
Highest Channel / QPSK



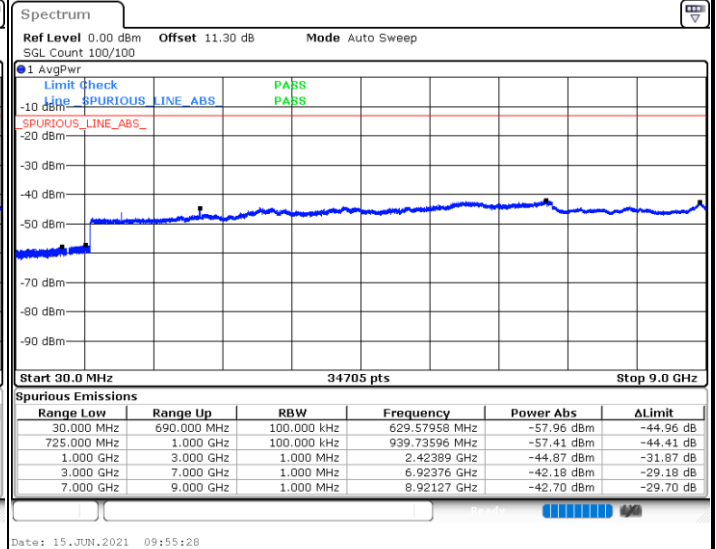


LTE Band 12 / 10MHz

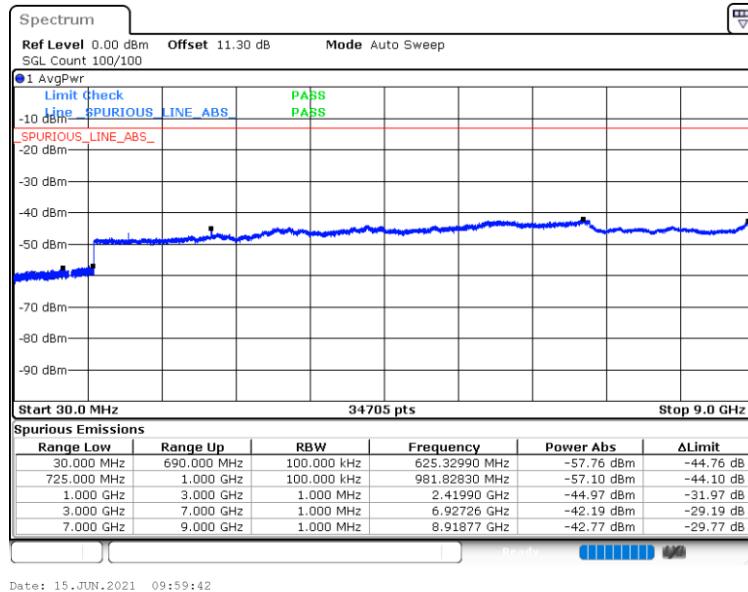
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK



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	0.0037	PASS
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0098	
-10	Normal Voltage	0.0062	
-20	Normal Voltage	0.0007	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0027	

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.



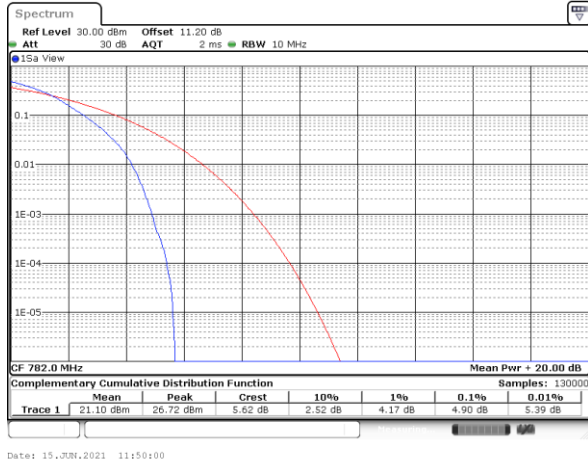
LTE Band 13

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	4.90	5.91	6.38	PASS

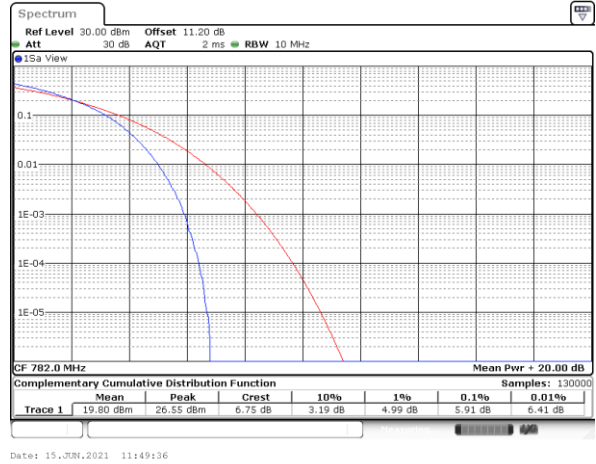
LTE Band 13 / 10MHz / QPSK

Middle Channel / Full RB



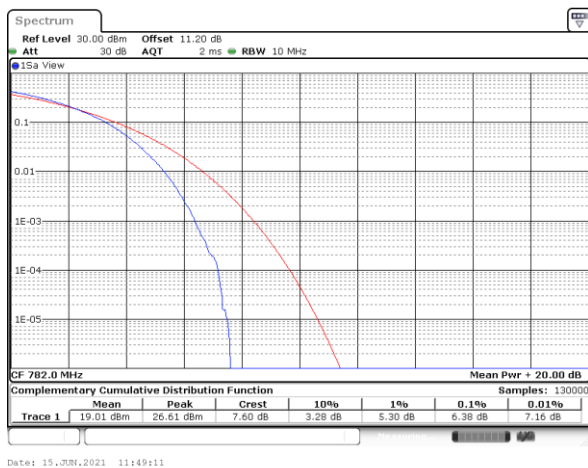
LTE Band 13 / 10MHz / 16QAM

Middle Channel / Full RB



LTE Band 13 / 10MHz / 64QAM

Middle Channel / Full RB



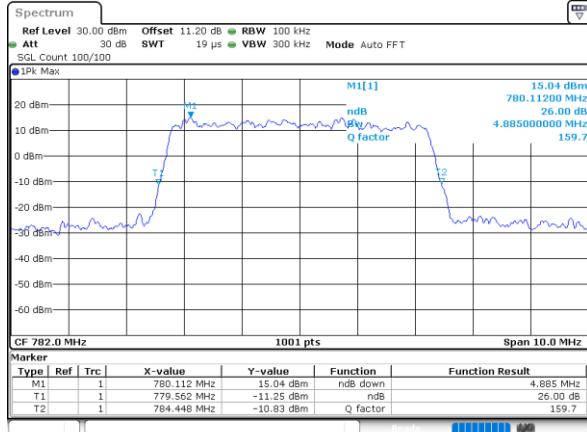
**26dB Bandwidth**

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
Middle CH	-	-	-	-	4.89	4.88	9.83	9.73	-	-	-	-
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	-	-	-	-	4.92	-	9.83	-	-	-	-	-

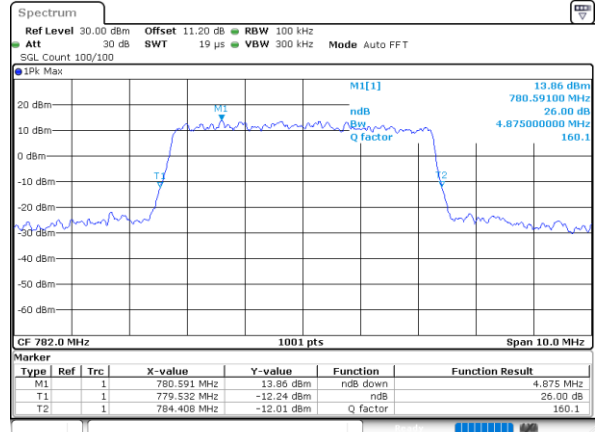


LTE Band 13

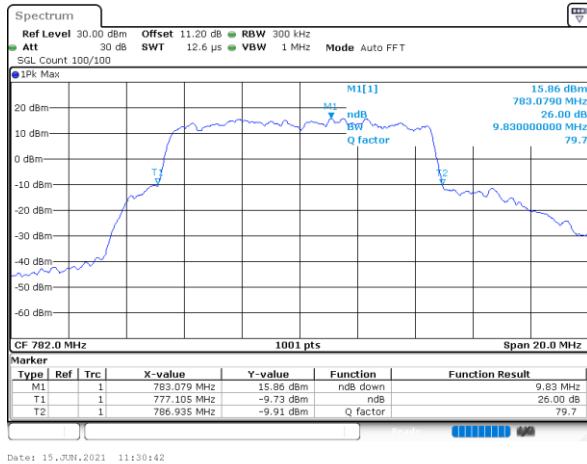
Middle Channel / 5MHz / QPSK



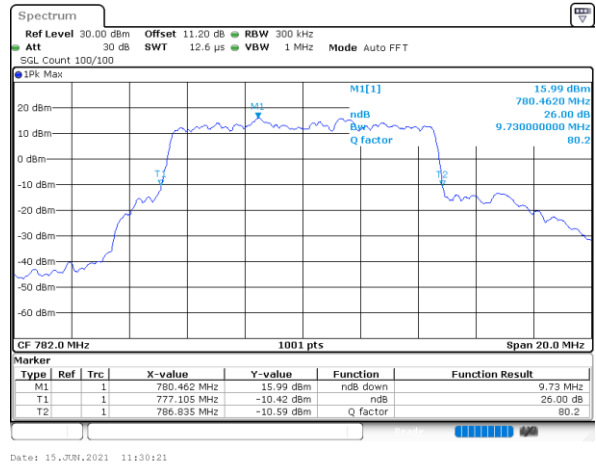
Middle Channel / 5MHz / 16QAM



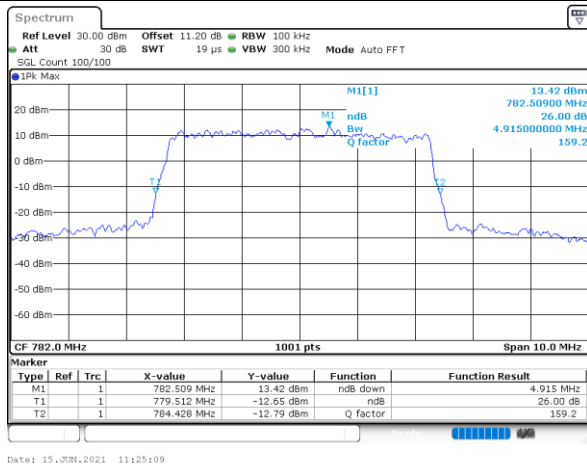
Middle Channel / 10MHz / QPSK



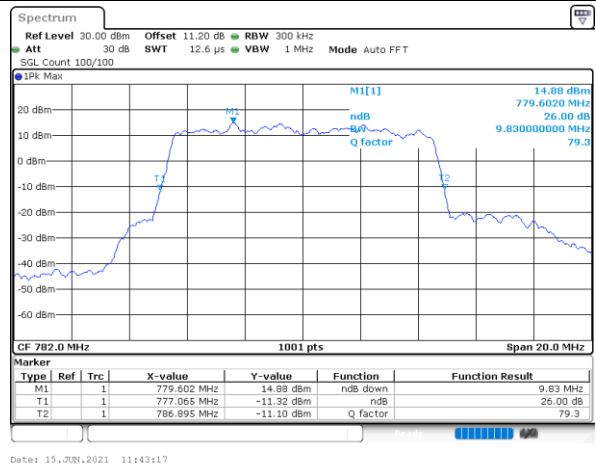
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



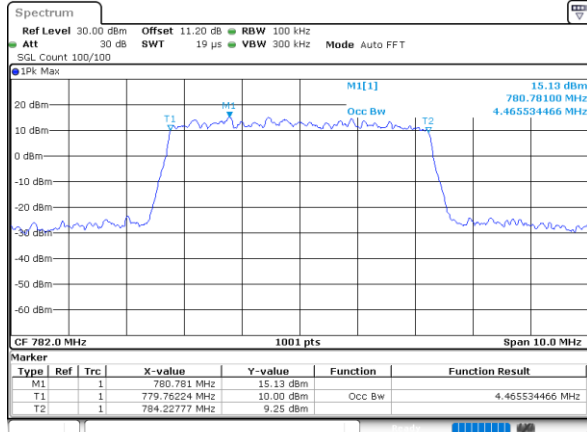
**Occupied Bandwidth**

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
Middle CH	-	-	-	-	4.47	4.48	9.01	9.01	-	-	-	-
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	-	-	-	-	4.49	-	8.99	-	-	-	-	-

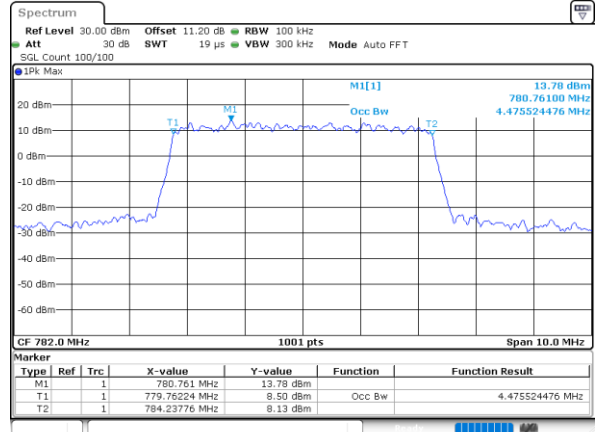


LTE Band 13

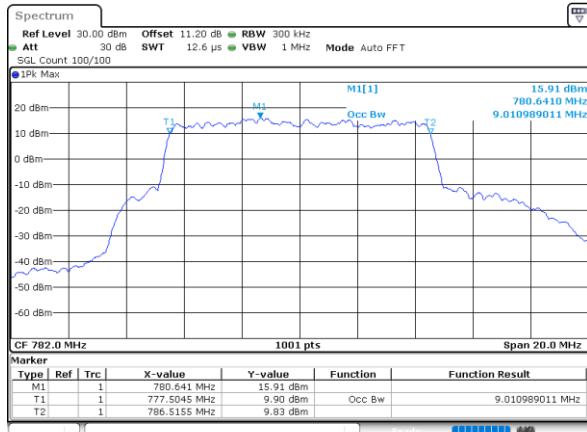
Middle Channel / 5MHz / QPSK



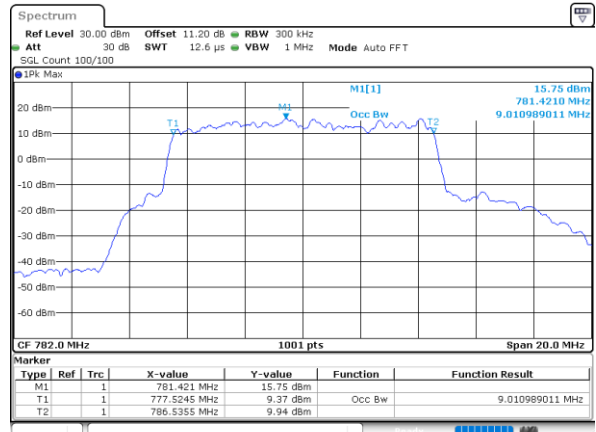
Middle Channel / 5MHz / 16QAM



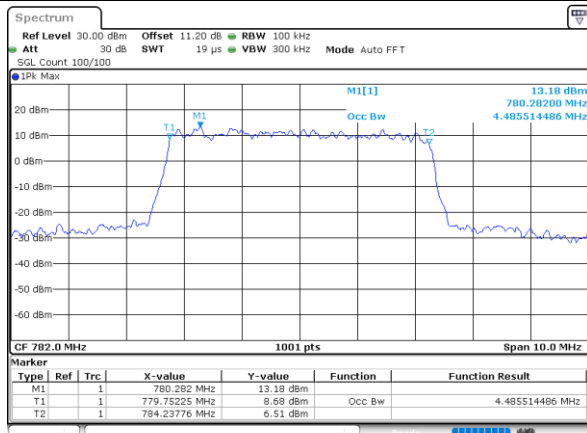
Middle Channel / 10MHz / QPSK



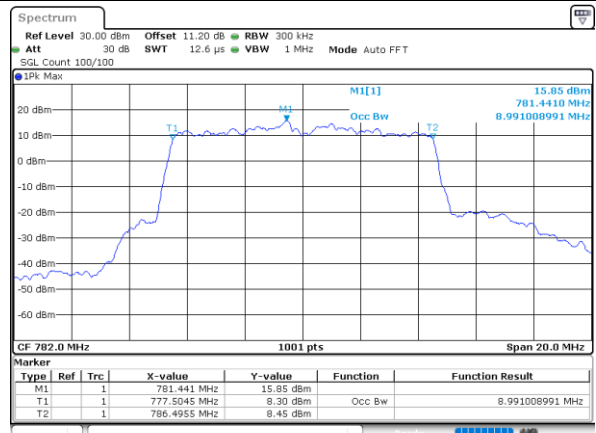
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM

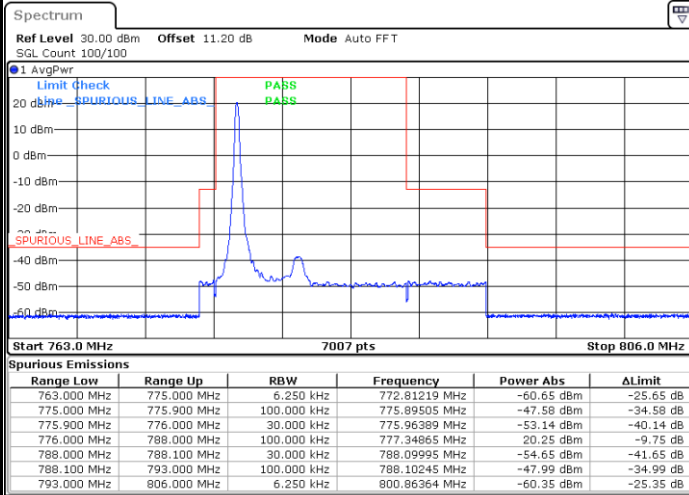




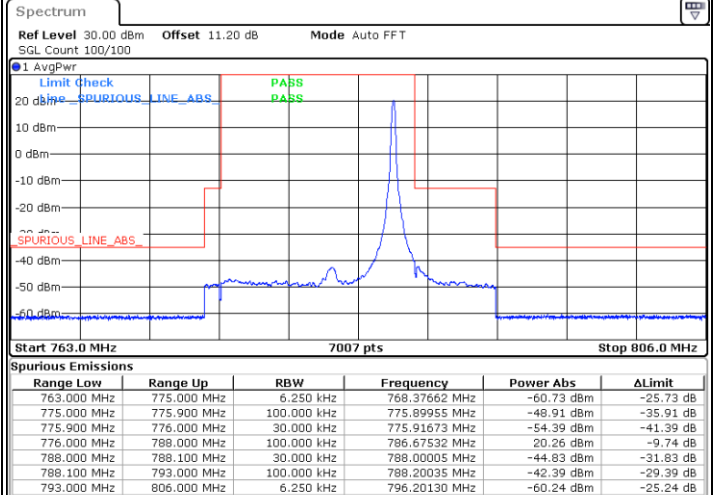
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

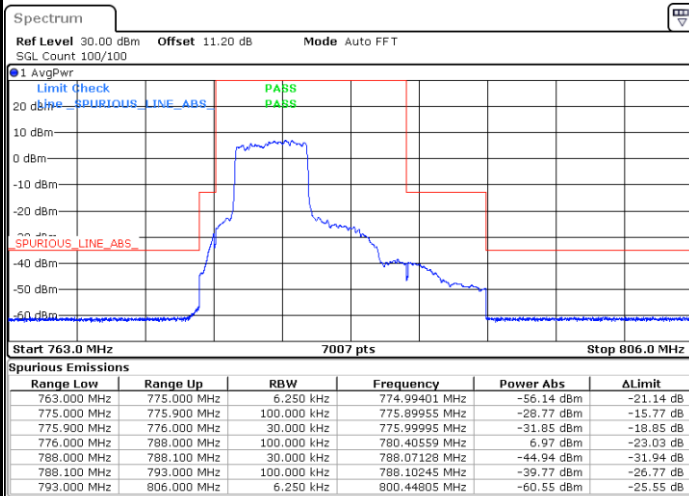
Lowest Band Edge / 1 RB



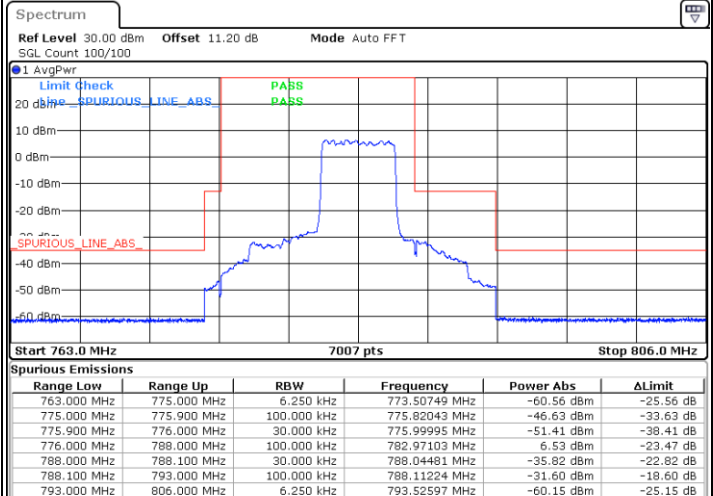
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



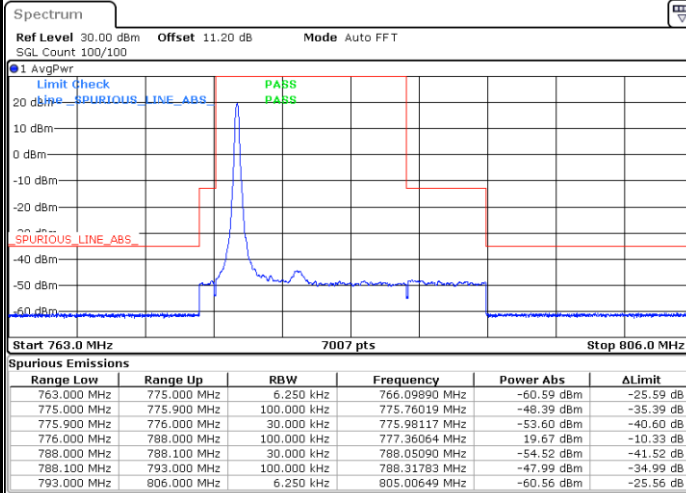
Highest Band Edge / Full RB





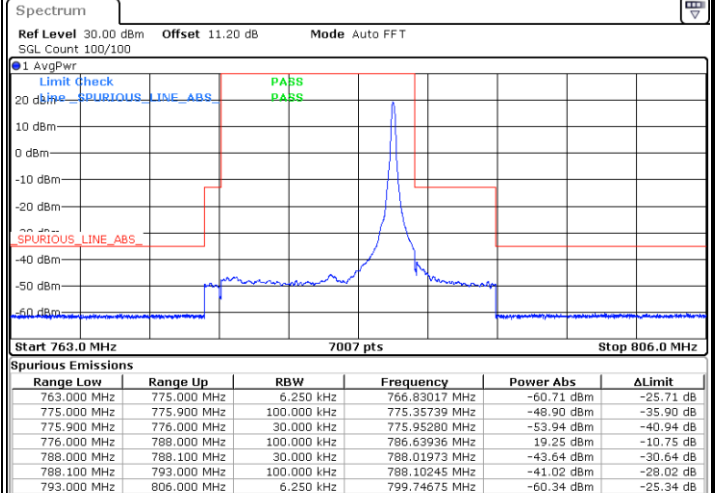
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



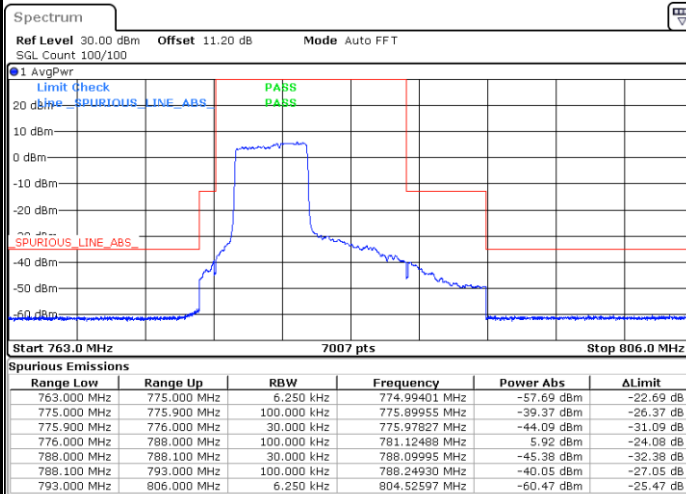
Date: 15 JUN 2021 11:07:49

Highest Band Edge / 1 RB



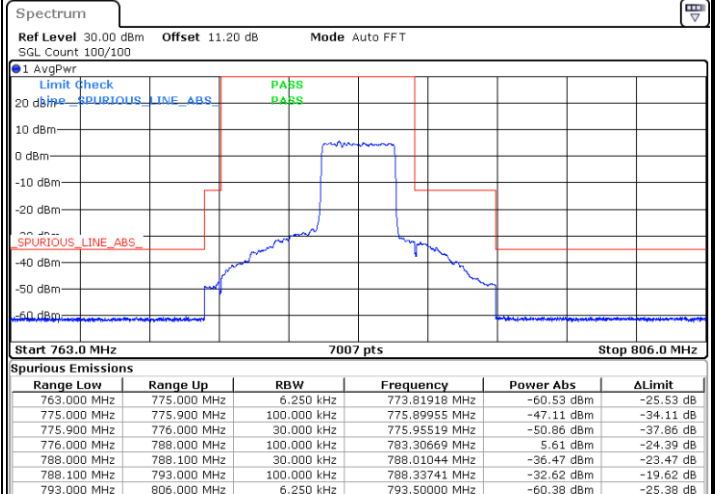
Date: 15 JUN 2021 11:18:23

Lowest Band Edge / Full RB



Date: 15 JUN 2021 11:05:58

Highest Band Edge / Full RB

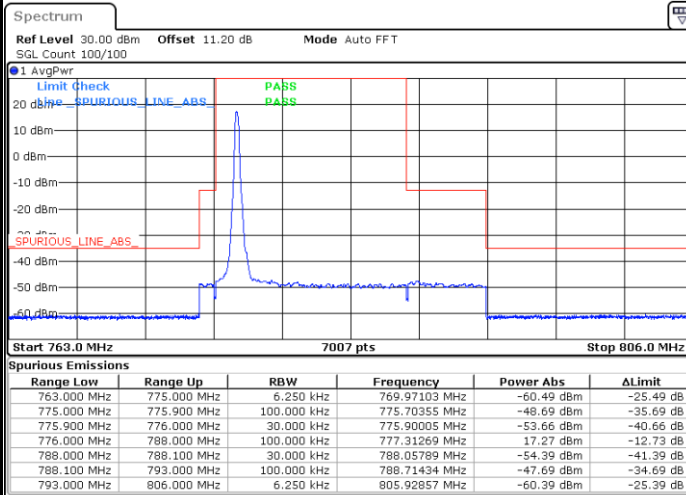


Date: 15 JUN 2021 11:16:32



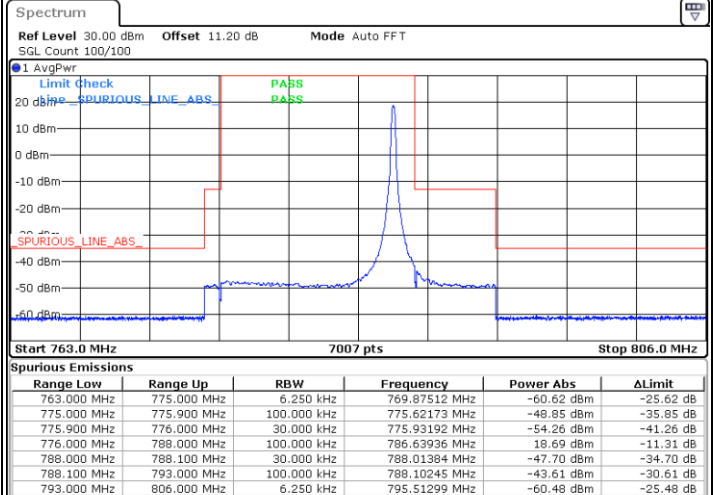
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



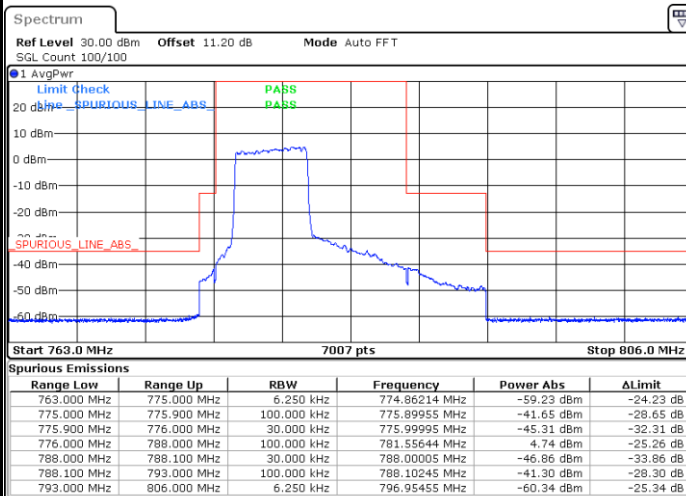
Date: 15 JUN 2021 11:24:48

Highest Band Edge / 1 RB



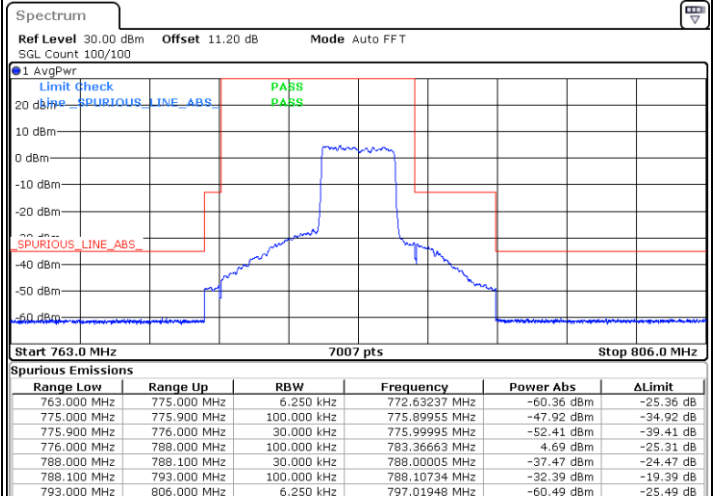
Date: 15 JUN 2021 11:29:13

Lowest Band Edge / Full RB



Date: 15 JUN 2021 11:22:56

Highest Band Edge / Full RB

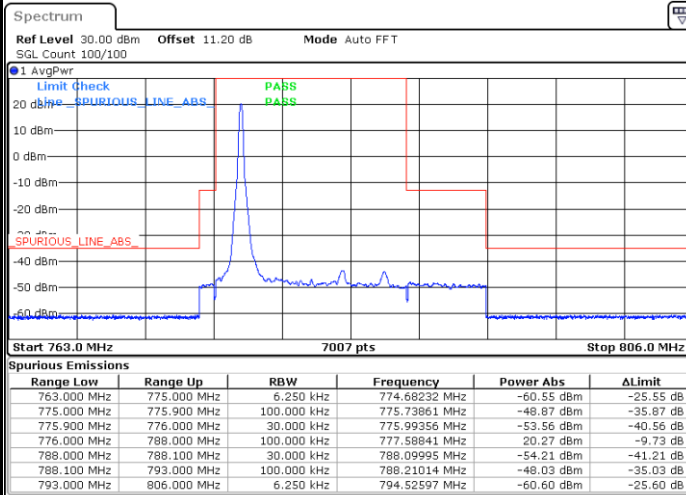


Date: 15 JUN 2021 11:27:21

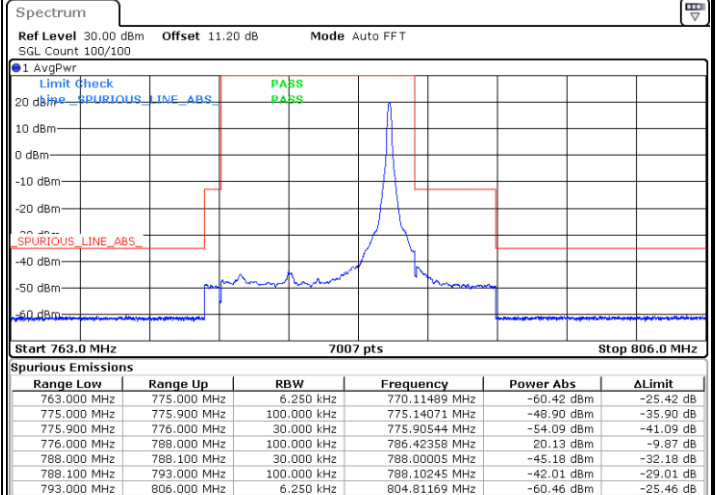


LTE Band 13 / 10MHz / QPSK

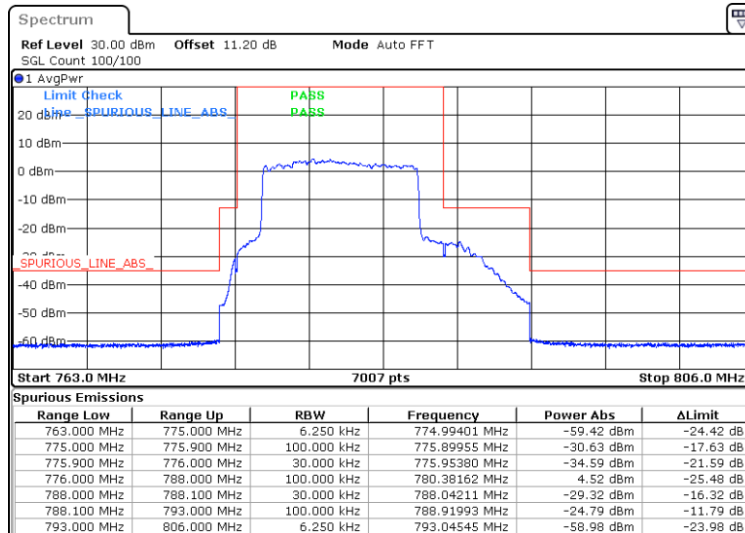
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



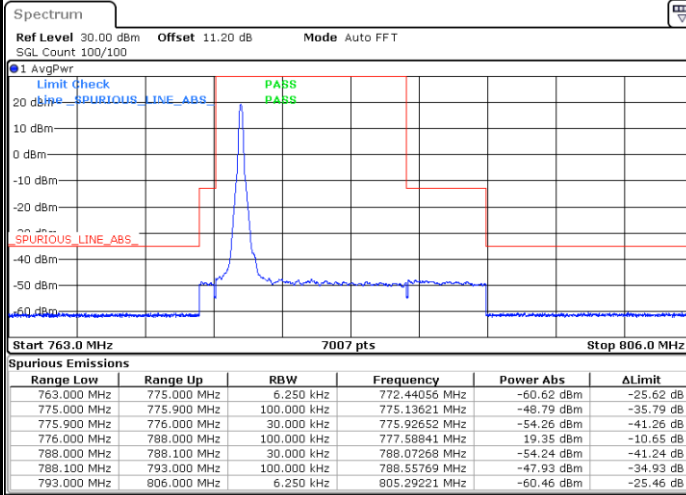
Band Edge / Full RB



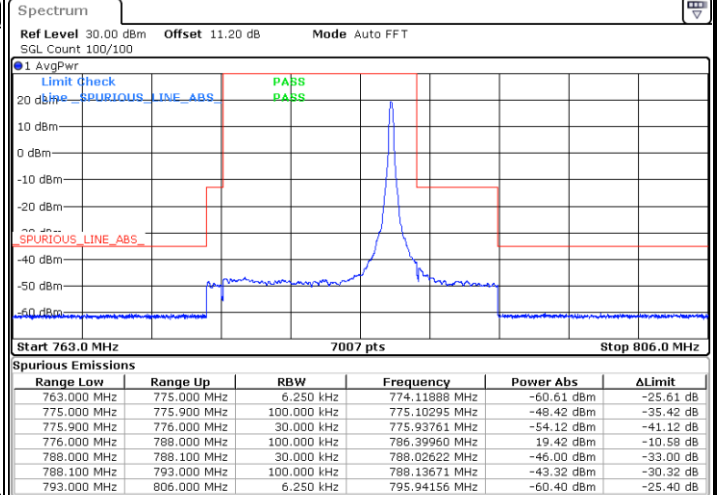


LTE Band 13 / 10MHz / 16QAM

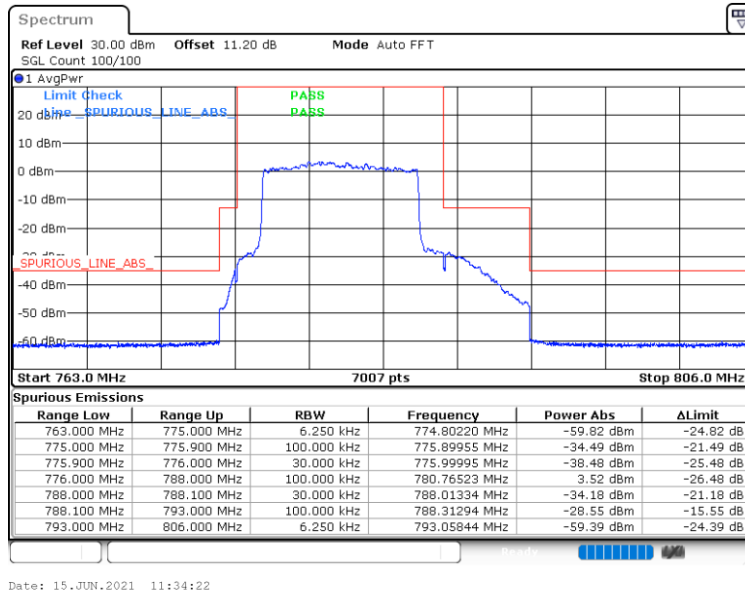
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



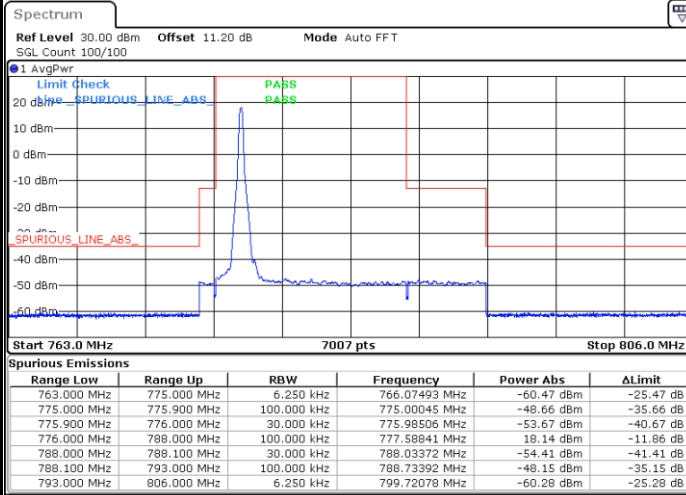
Band Edge / Full RB



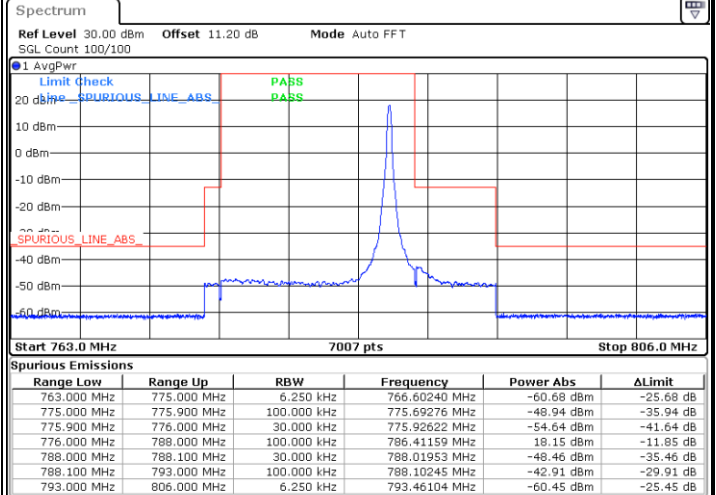


LTE Band 13 / 10MHz / 64QAM

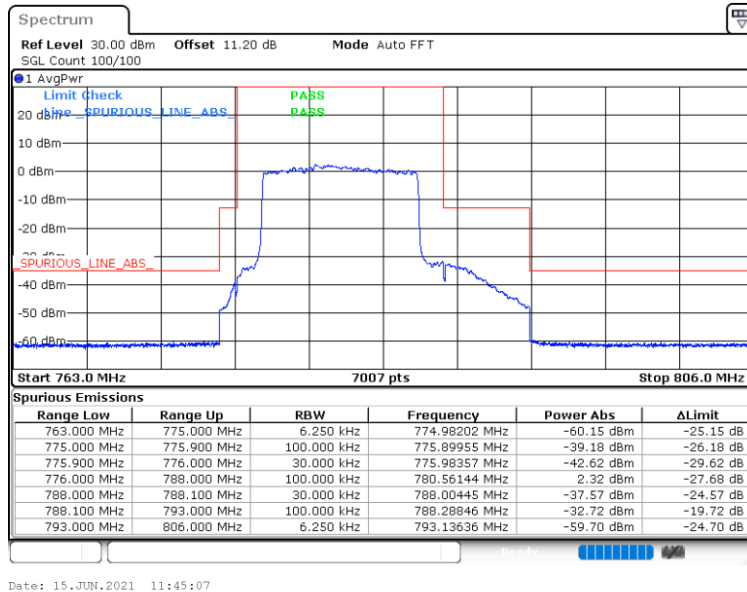
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Band Edge / Full RB

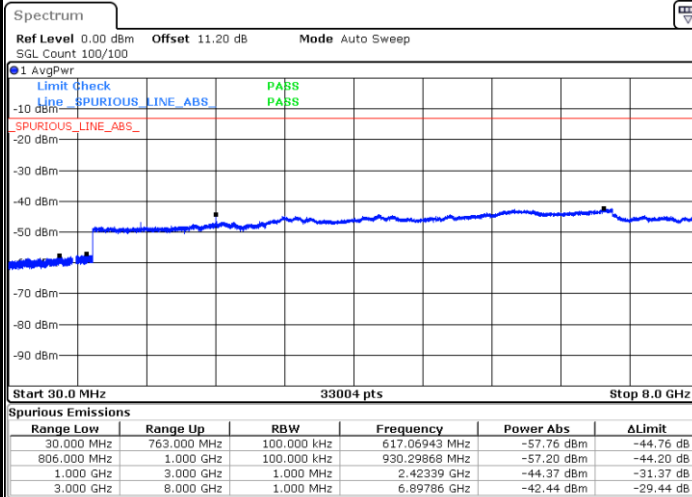




Conducted Spurious Emission

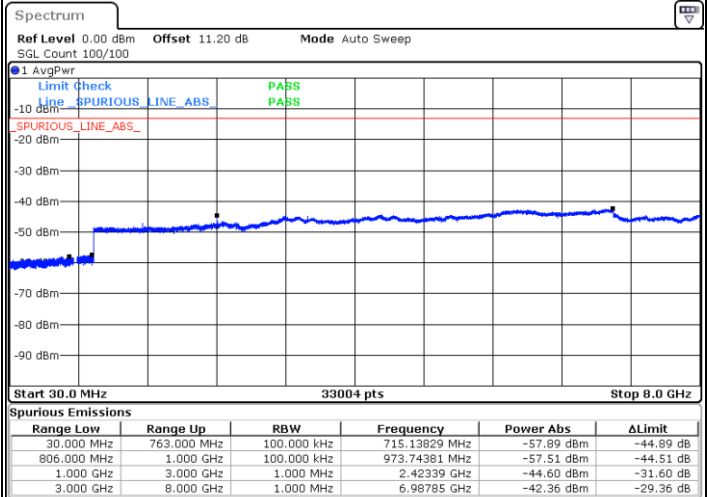
LTE Band 13 / 5MHz

Lowest Channel / QPSK



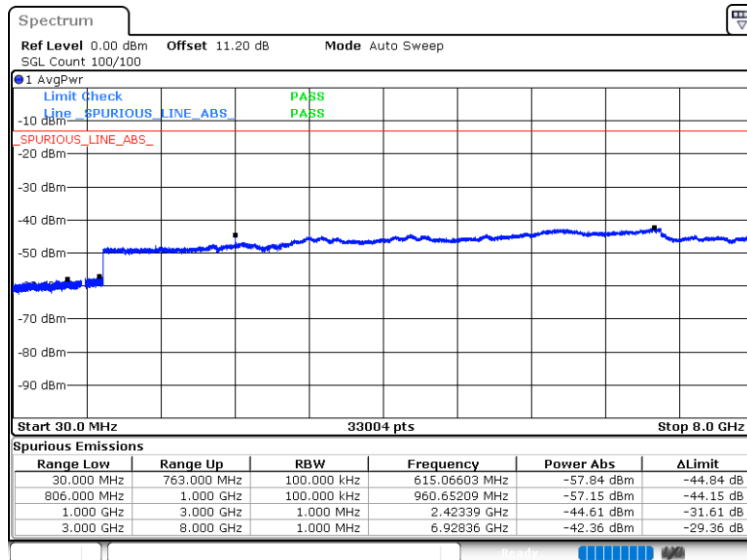
Date: 15.JUN.2021 11:10:32

Middle Channel / QPSK



Date: 15.JUN.2021 11:11:22

Highest Channel / QPSK

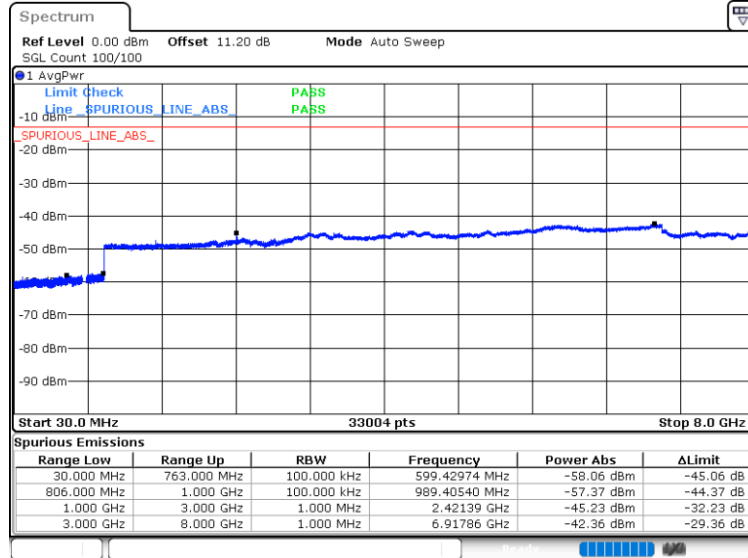


Date: 15.JUN.2021 11:21:05



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 15.JUN.2021 11:42:32

Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
40	Normal Voltage	0.0100	PASS
30	Normal Voltage	0.0081	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0042	
-20	Normal Voltage	0.0000	
20	Maximum Voltage	0.0038	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

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.



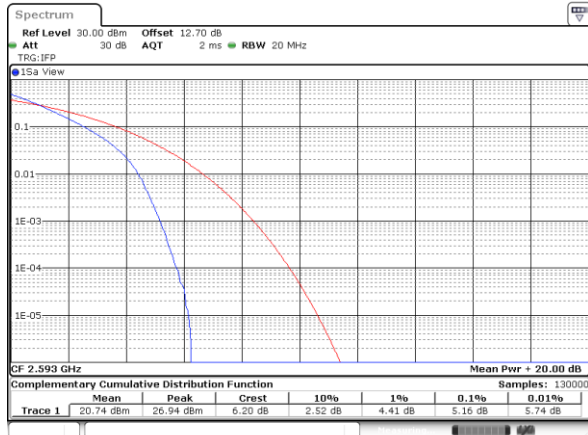
LTE Band 41

Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.16	6.06	6.58	PASS

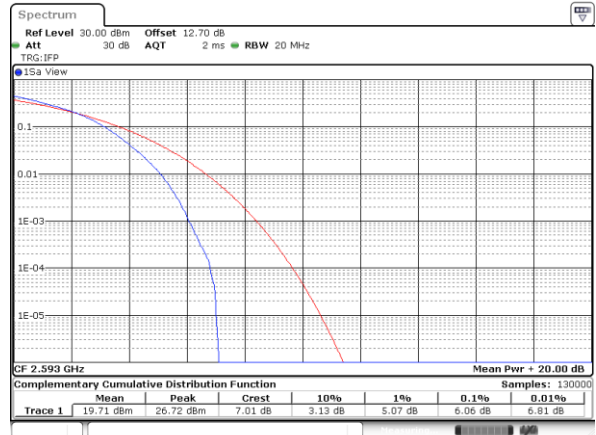
LTE Band 41 / 20MHz / QPSK

Middle Channel / Full RB



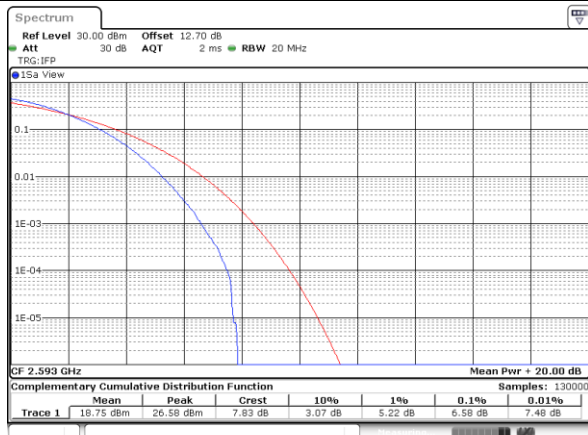
LTE Band 41 / 20MHz / 16QAM

Middle Channel / Full RB



LTE Band 41 / 20MHz / 64QAM

Middle Channel / Full RB



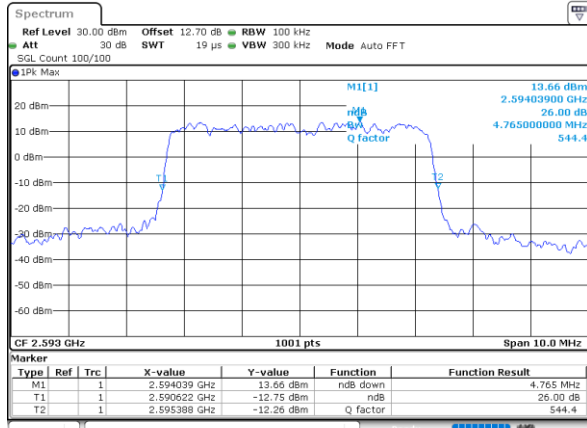
**26dB Bandwidth**

Mode	LTE Band 41 : 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	-	-	-	-	4.77	4.83	9.91	9.71	14.15	14.54	19.02	18.74
Mode	LTE Band 41 : 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	-	-	-	-	4.96	-	9.81	-	14.45	-	18.62	-

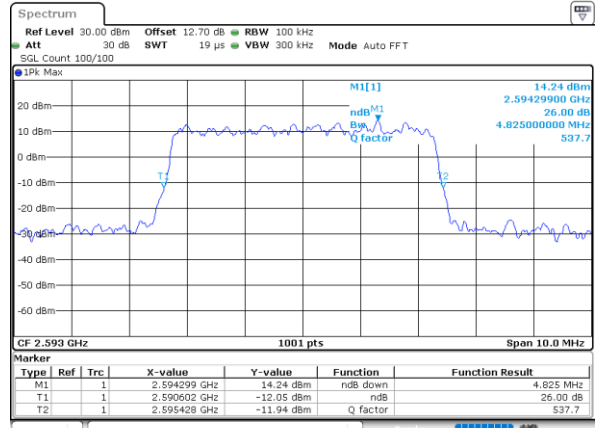


LTE Band 41

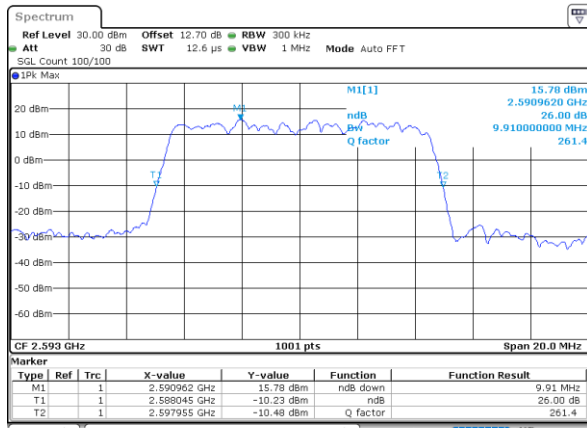
Middle Channel / 5MHz / QPSK



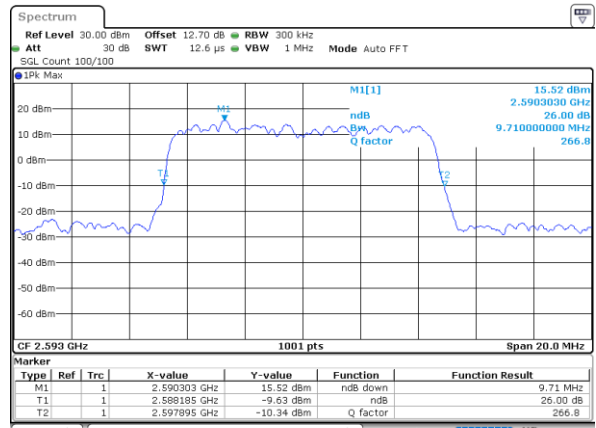
Middle Channel / 5MHz / 16QAM



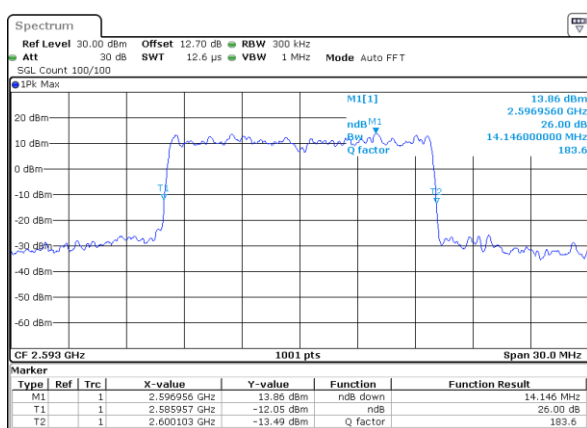
Middle Channel / 10MHz / QPSK



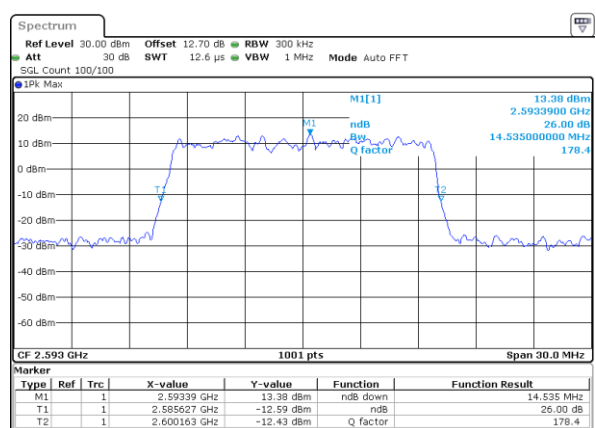
Middle Channel / 10MHz / 16QAM



Middle Channel / 15MHz / QPSK



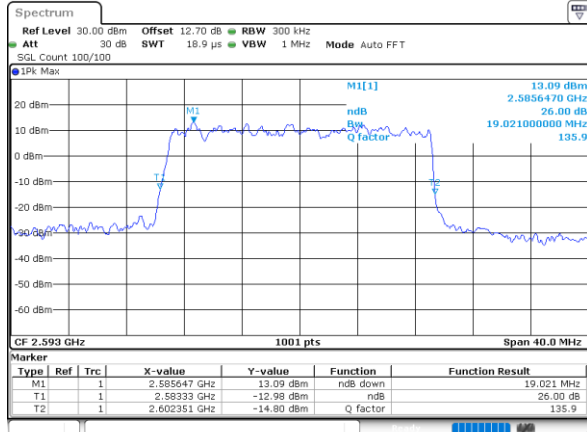
Middle Channel / 15MHz / 16QAM



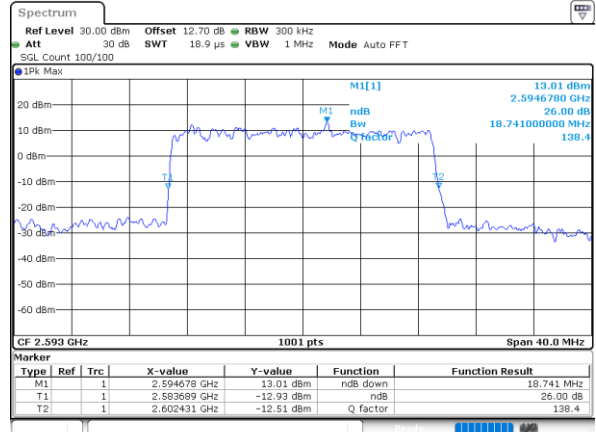


LTE Band 41

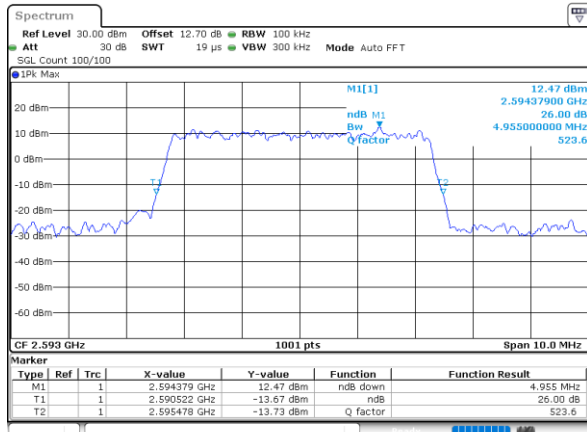
Middle Channel / 20MHz / QPSK



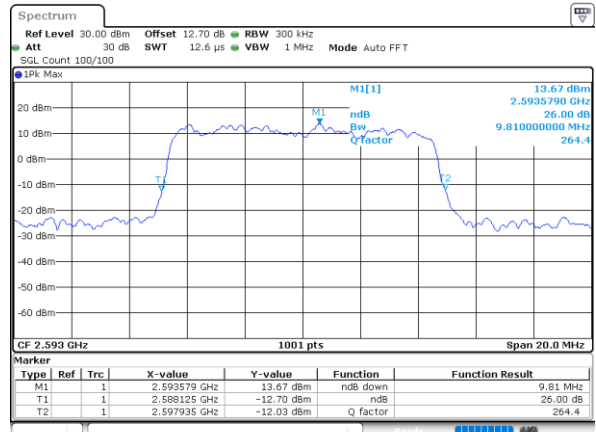
Middle Channel / 20MHz / 16QAM



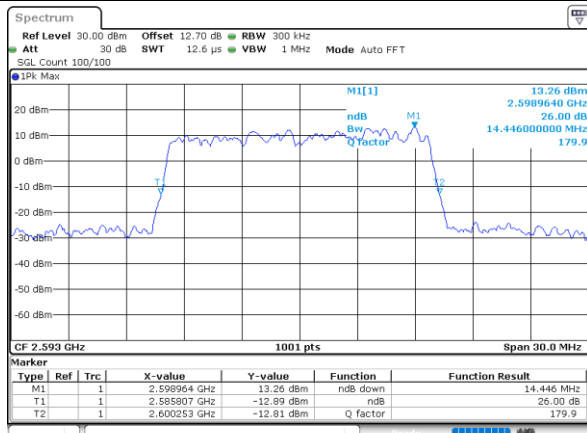
Middle Channel / 5MHz / 64QAM



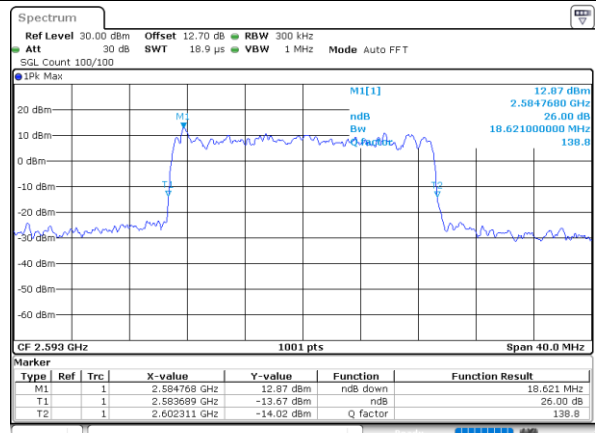
Middle Channel / 10MHz / 64QAM



Middle Channel / 15MHz / 64QAM



Middle Channel / 20MHz / 64QAM



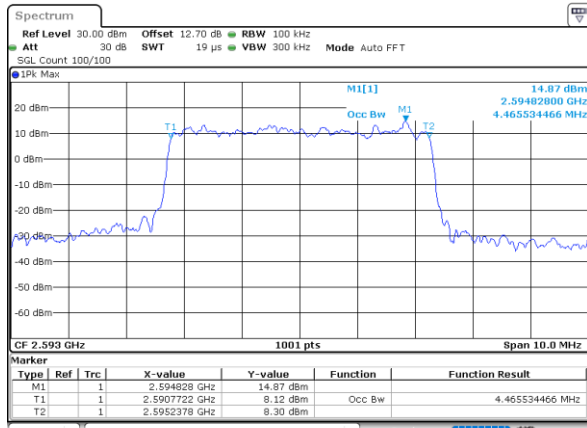
**Occupied Bandwidth**

Mode	LTE Band 41 : 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	-	-	-	-	4.47	4.48	9.07	8.99	13.40	13.46	17.86	17.74
Mode	LTE Band 41 : 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	-	-	-	-	4.49	-	9.01	-	13.46	-	17.86	-

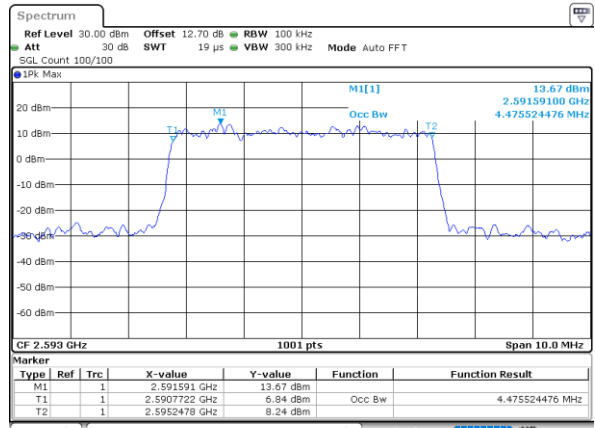


LTE Band 41

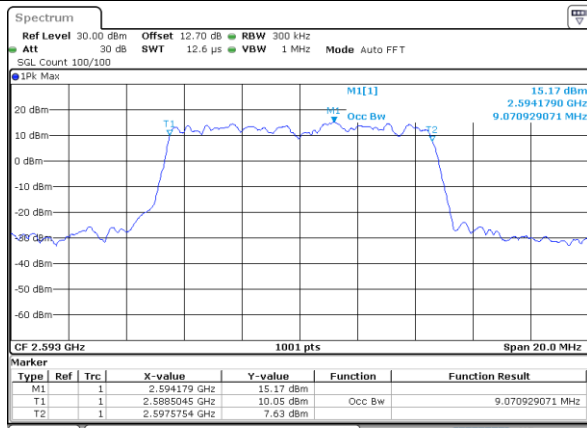
Middle Channel / 5MHz / QPSK



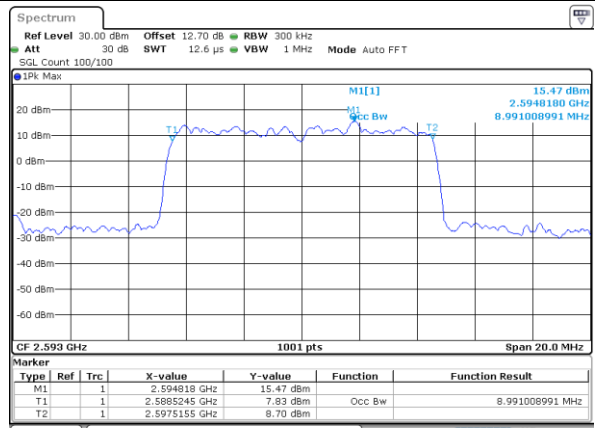
Middle Channel / 5MHz / 16QAM



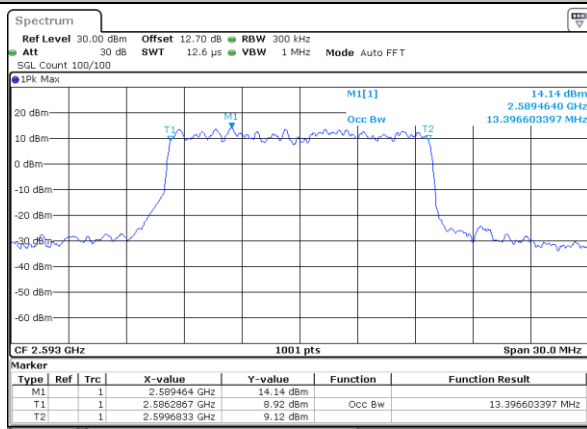
Middle Channel / 10MHz / QPSK



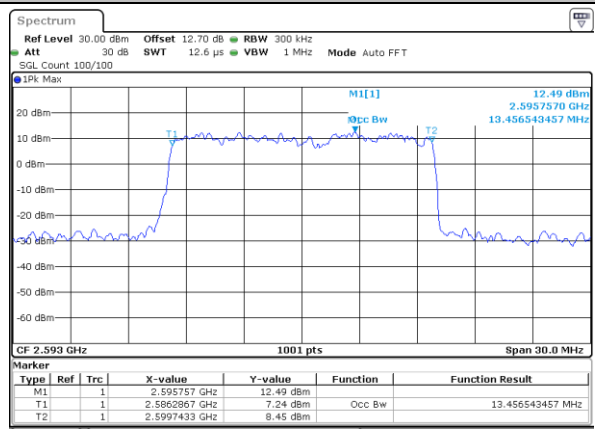
Middle Channel / 10MHz / 16QAM



Middle Channel / 15MHz / QPSK



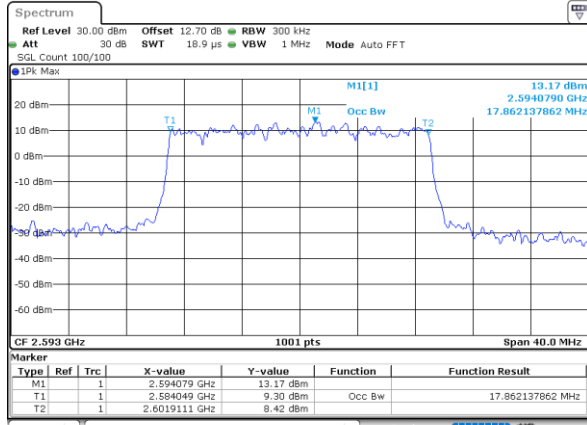
Middle Channel / 15MHz / 16QAM



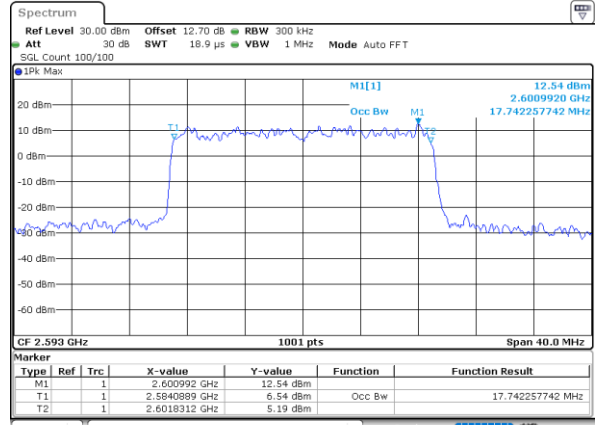


LTE Band 41

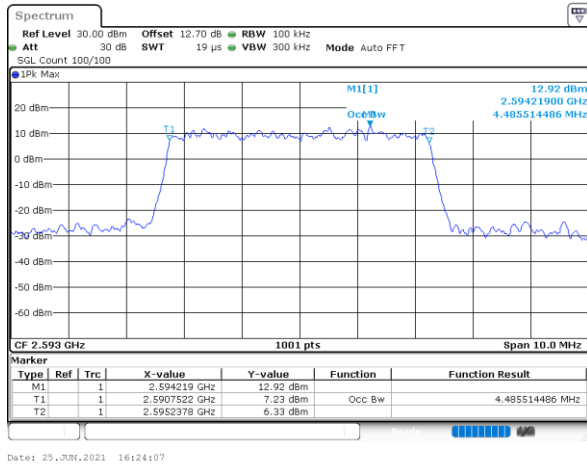
Middle Channel / 20MHz / QPSK



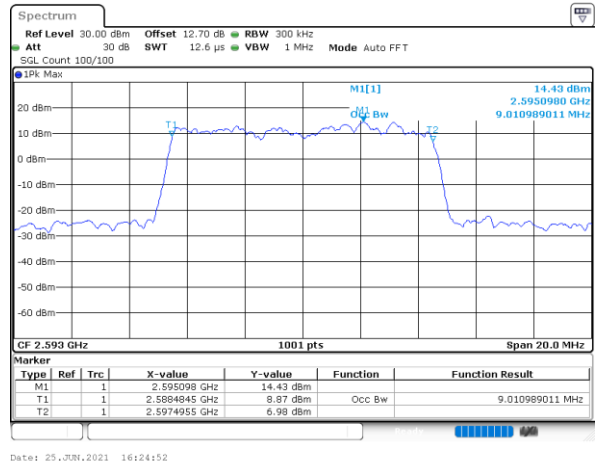
Middle Channel / 20MHz / 16QAM



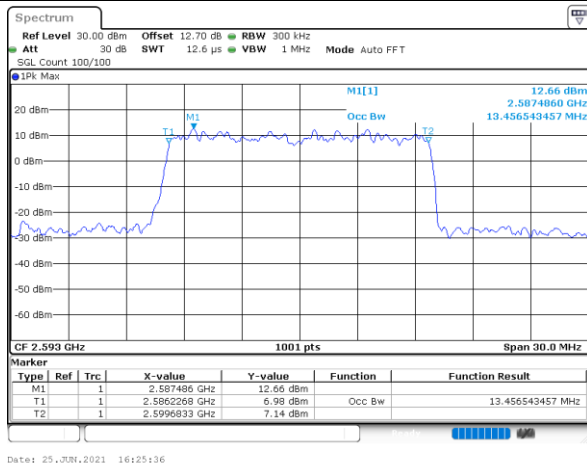
Middle Channel / 5MHz / 64QAM



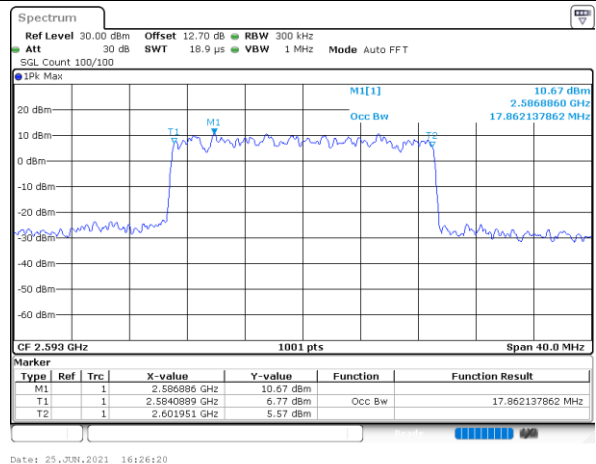
Middle Channel / 10MHz / 64QAM

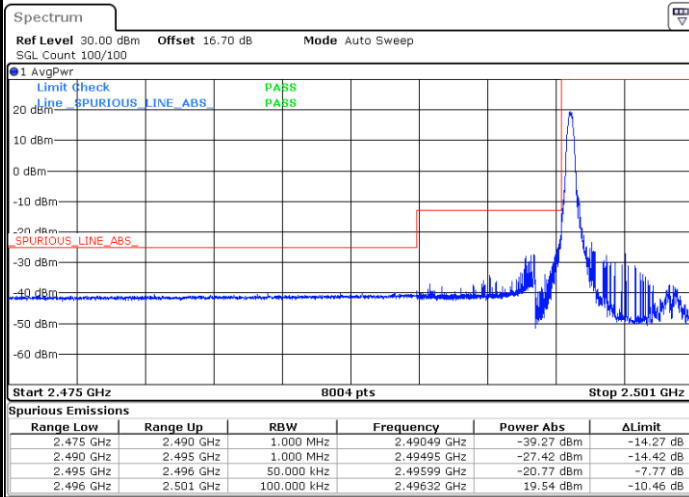


Middle Channel / 15MHz / 64QAM

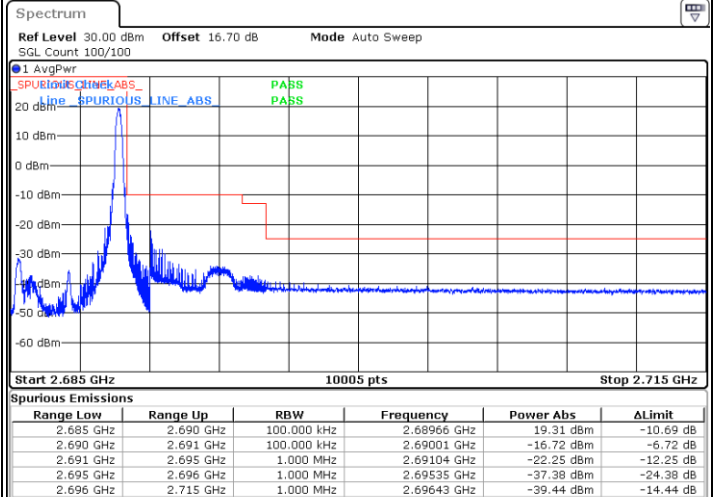


Middle Channel / 20MHz / 64QAM

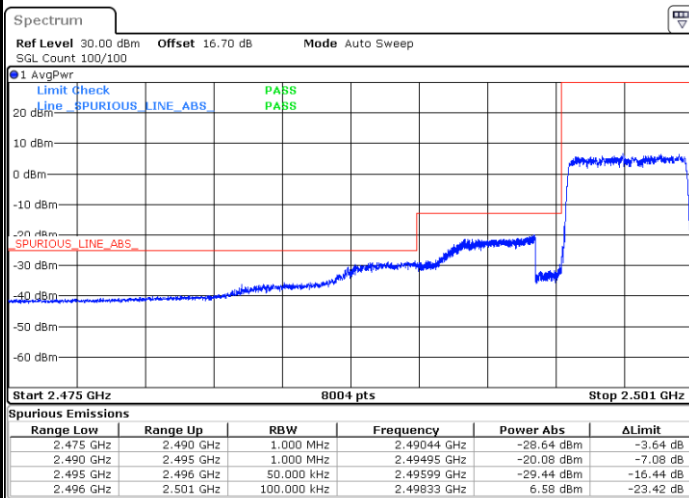


**Conducted Band Edge****LTE Band 41 / 5MHz / QPSK****Lowest Band Edge / 1 RB**

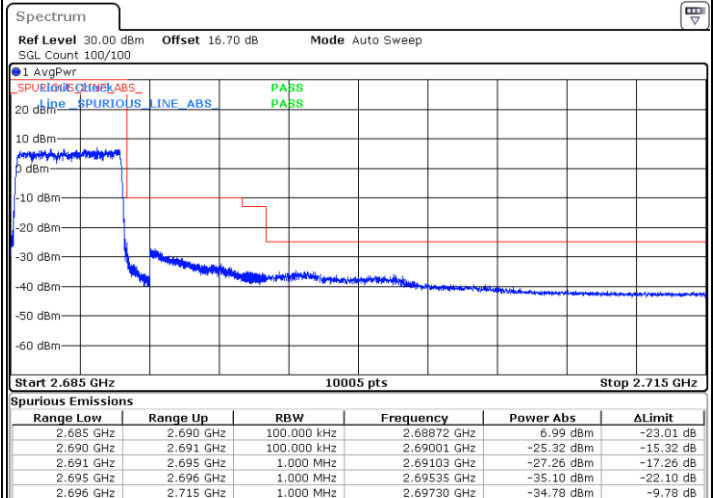
Date: 17.JUN.2021 09:56:32

Highest Band Edge / 1 RB

Date: 17.JUN.2021 09:59:55

Lowest Band Edge / Full RB

Date: 17.JUN.2021 09:58:13

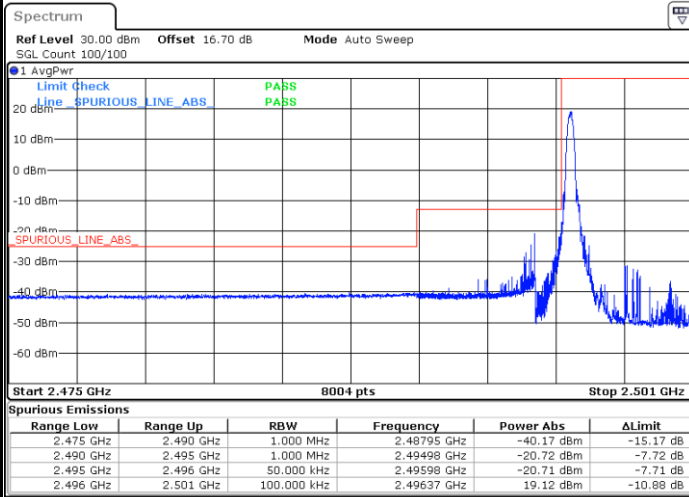
Highest Band Edge / Full RB

Date: 17.JUN.2021 10:01:36

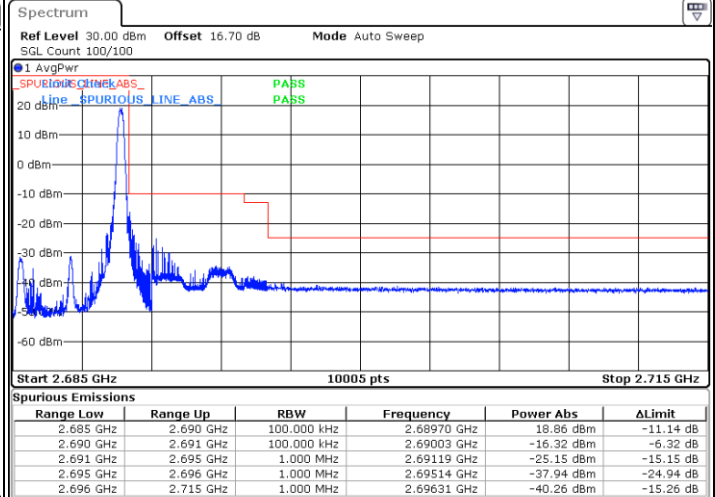


LTE Band 41 / 5MHz / 16QAM

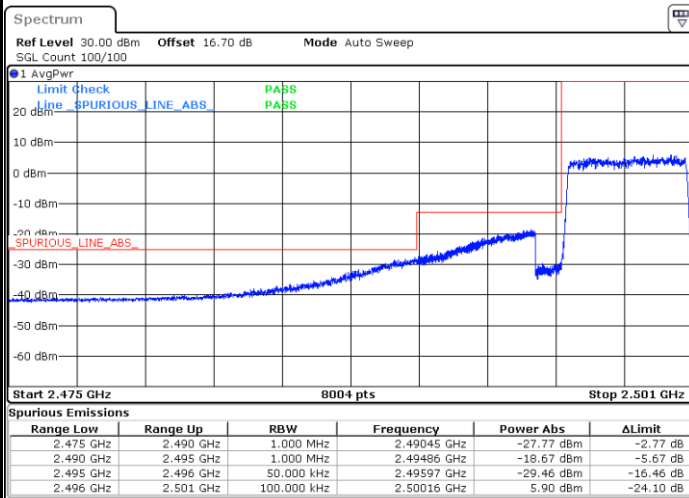
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

