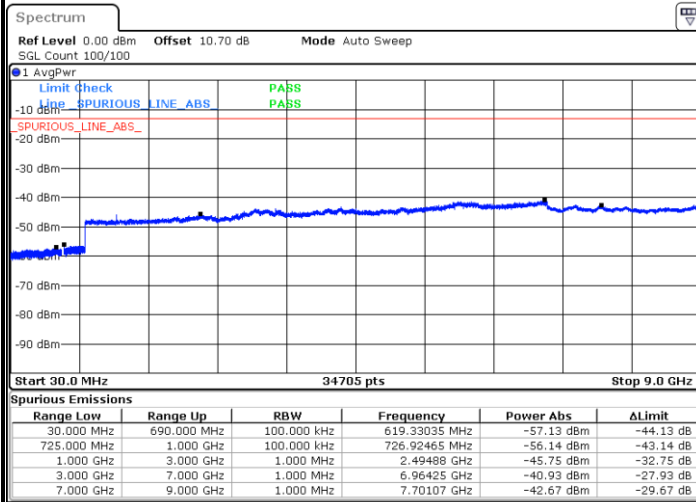




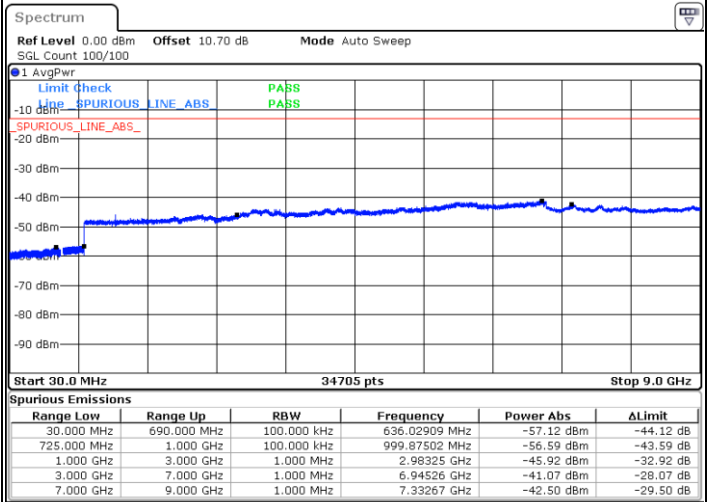
LTE Band 12 / 10MHz

Lowest Channel / QPSK



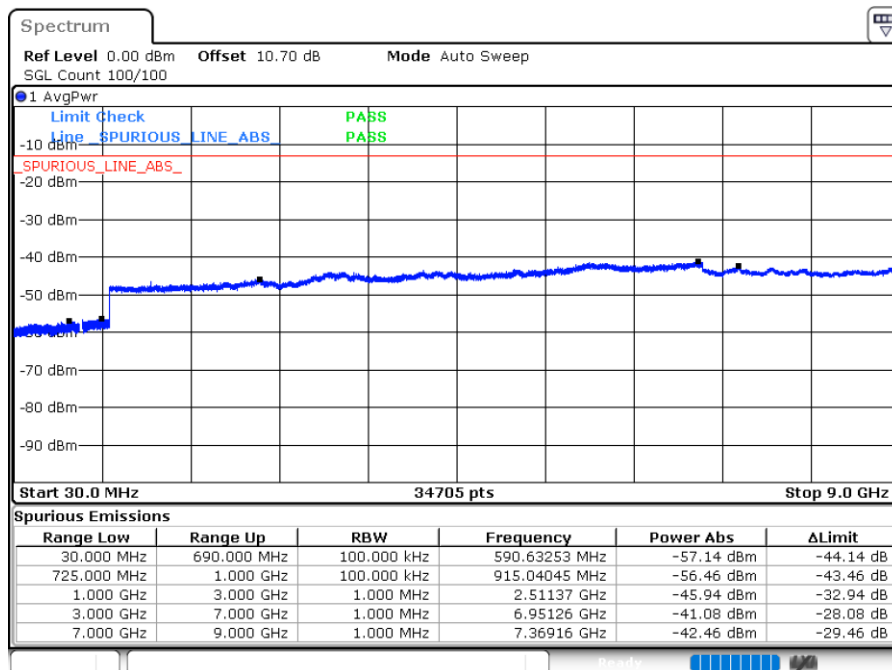
Date: 25.JUL.2022 23:45:19

Middle Channel / QPSK



Date: 25.JUL.2022 23:48:06

Highest Channel / QPSK



Date: 25.JUL.2022 23:53:13

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	0.0076	PASS
40	Normal Voltage	0.0204	
30	Normal Voltage	0.0211	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0260	
0	Normal Voltage	0.0198	
-10	Normal Voltage	0.0098	
-20	Normal Voltage	0.0042	
-30	Normal Voltage	0.0168	
20	Maximum Voltage	0.0192	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0113	

Note:

1. Normal Voltage = 3.7 V. ; Battery End Point (BEP) = 3.5 V. ; Maximum Voltage = 4.1 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

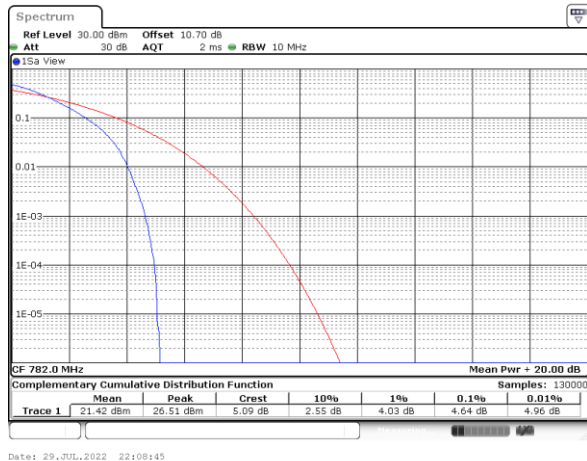
**LTE Band 13****Peak-to-Average Ratio**

Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.64	5.88	6.49	PASS



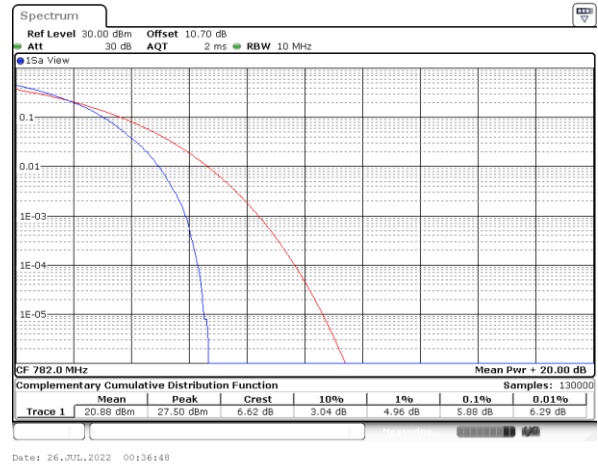
LTE Band 13 / 10MHz / QPSK

Middle Channel / Full RB



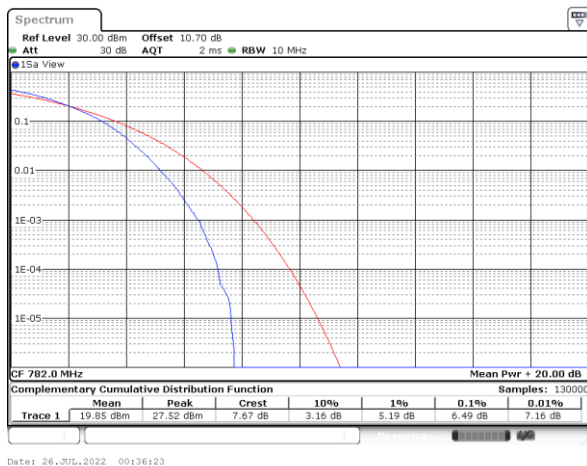
LTE Band 13 / 10MHz / 16QAM

Middle Channel / Full RB



LTE Band 13 / 10MHz / 64QAM

Middle Channel / Full RB



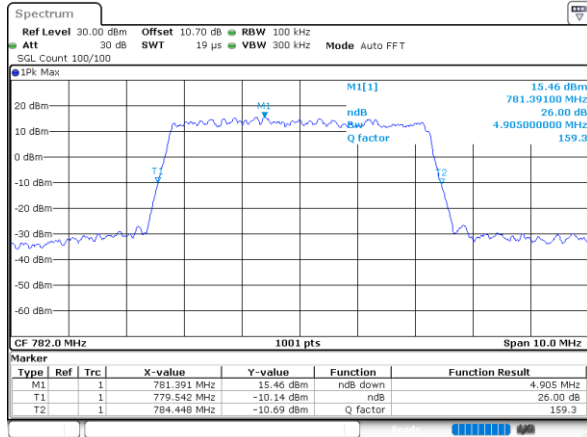
**26dB Bandwidth**

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	-	-	-	-	4.91	4.88	9.99	9.89	-	-	-	-
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	-	-	-	-	4.87	-	9.75	-	-	-	-	-

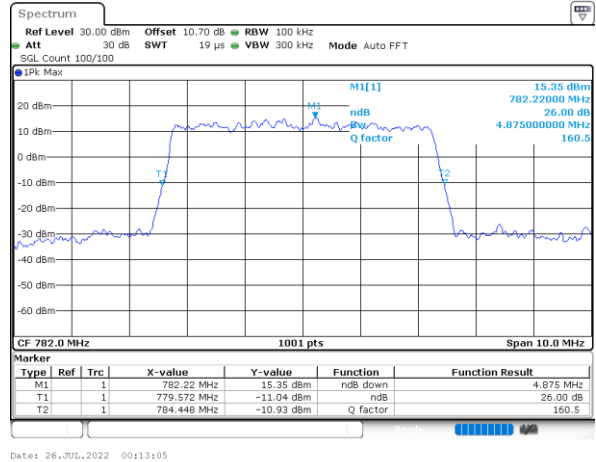


LTE Band 13

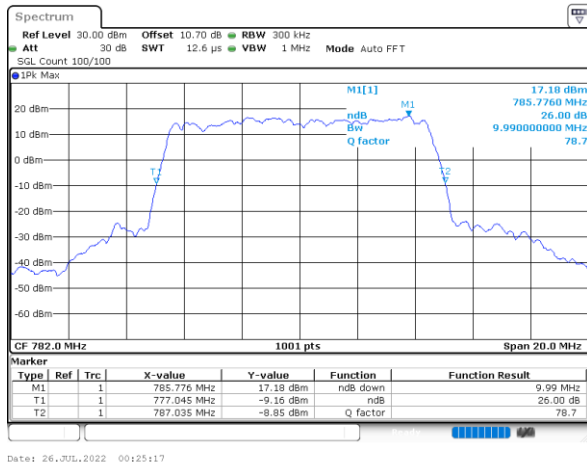
Middle Channel / 5MHz / QPSK



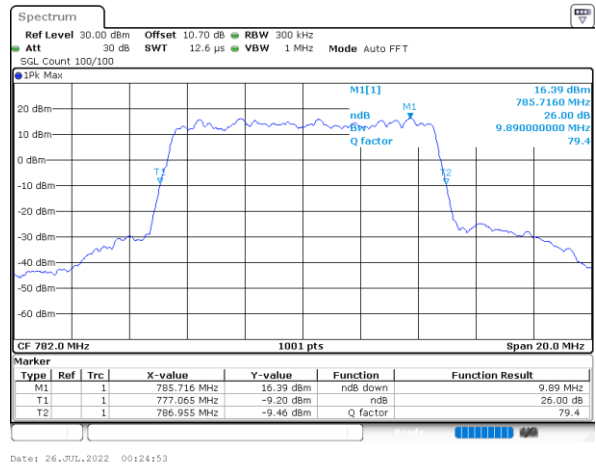
Middle Channel / 5MHz / 16QAM



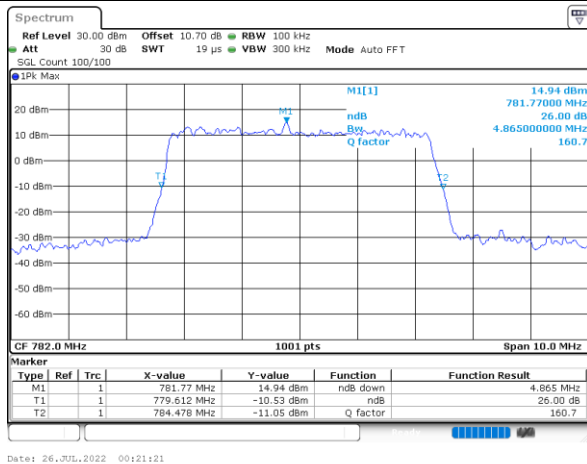
Middle Channel / 10MHz / QPSK



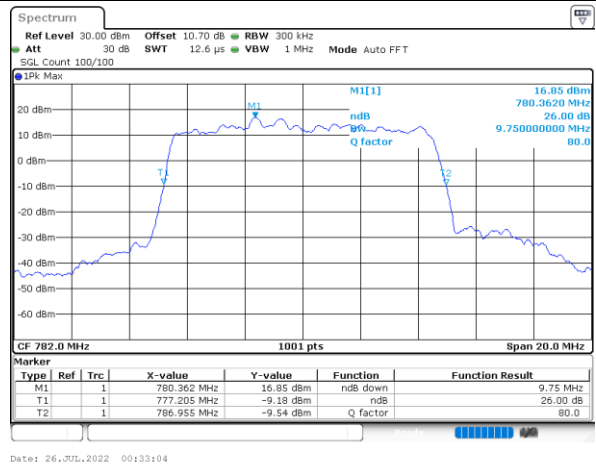
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM

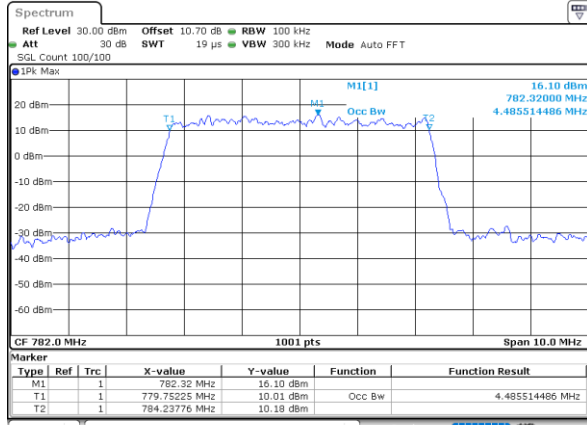
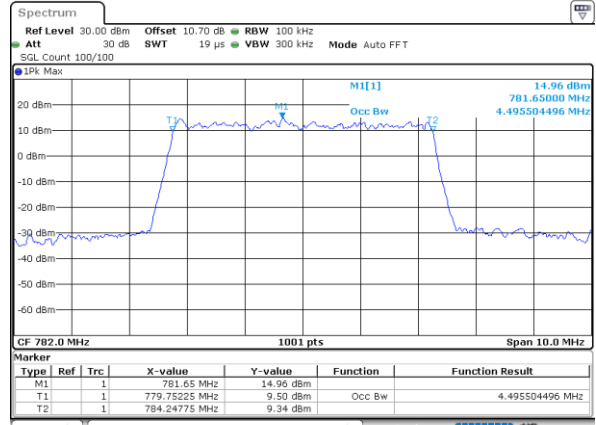
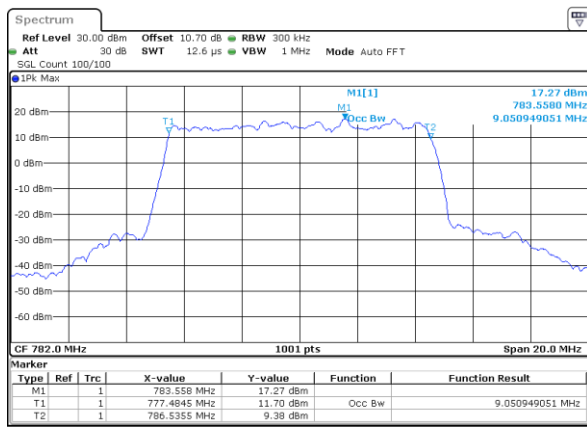
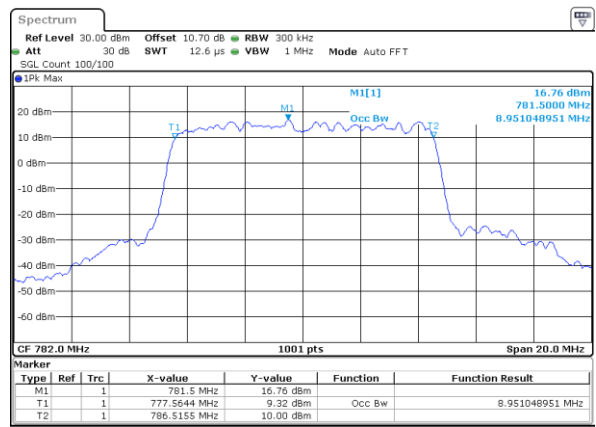
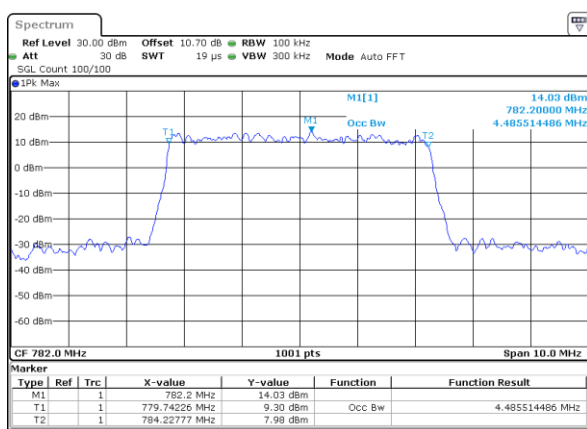
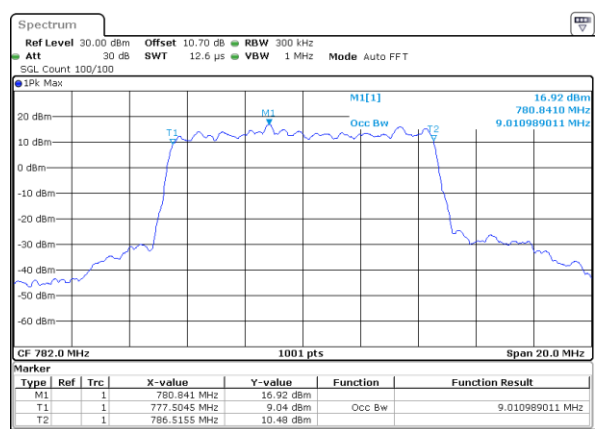


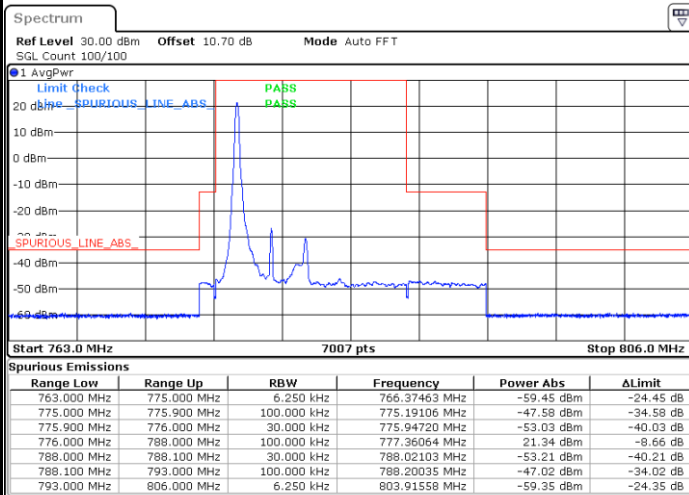
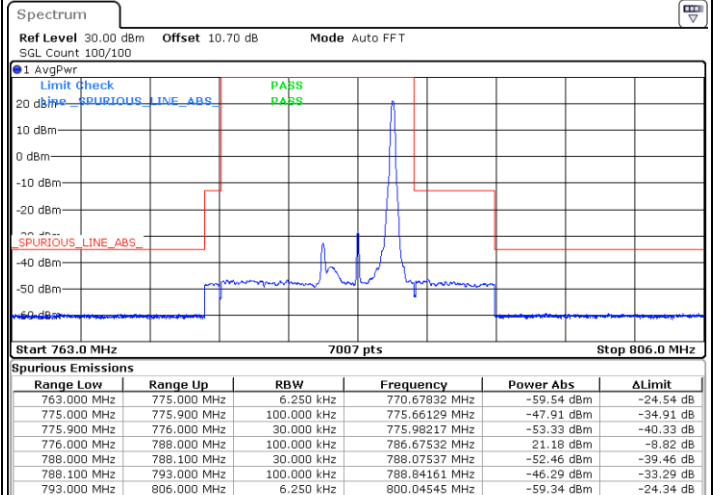
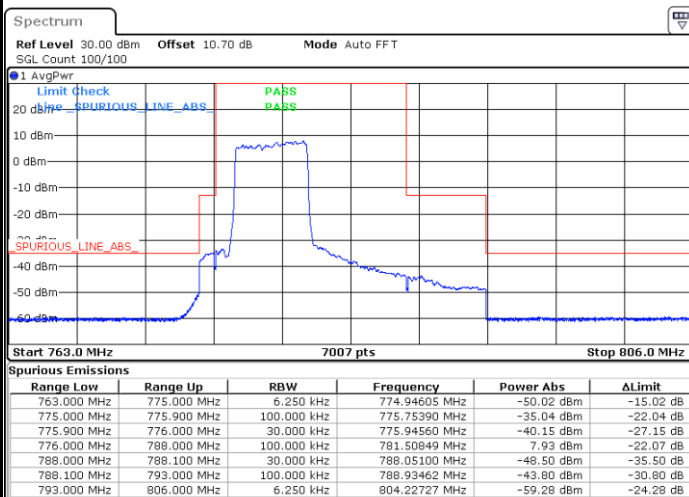
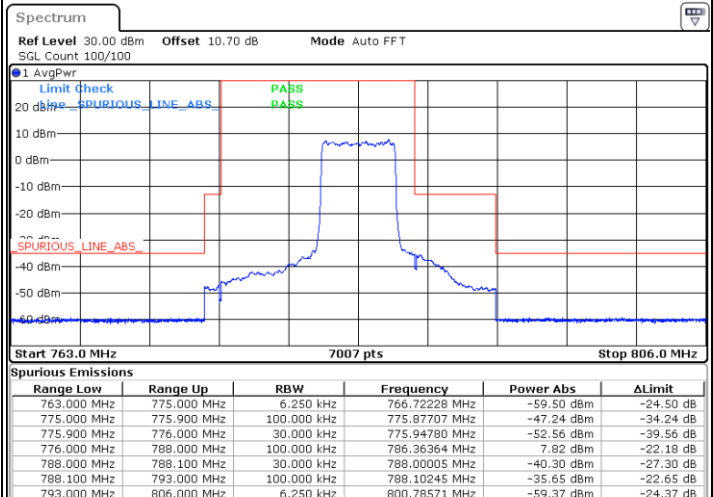
Middle Channel / 10MHz / 64QAM



**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	-	-	-	-	4.49	4.50	9.05	8.95	-	-	-	-
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	-	9.01	-	-	-	-	-

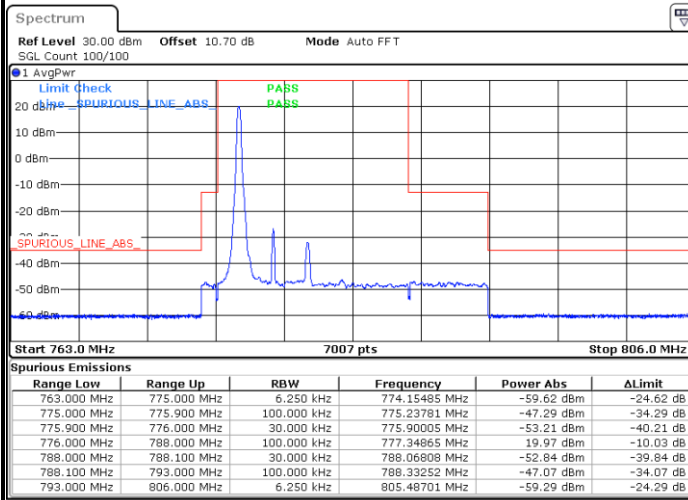
**LTE Band 13****Middle Channel / 5MHz / QPSK****Middle Channel / 5MHz / 16QAM****Middle Channel / 10MHz / QPSK****Middle Channel / 10MHz / 16QAM****Middle Channel / 5MHz / 64QAM****Middle Channel / 10MHz / 64QAM**

**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**



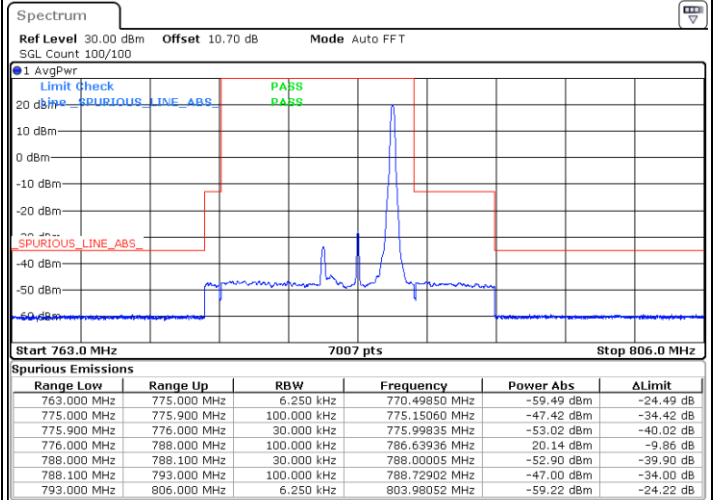
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



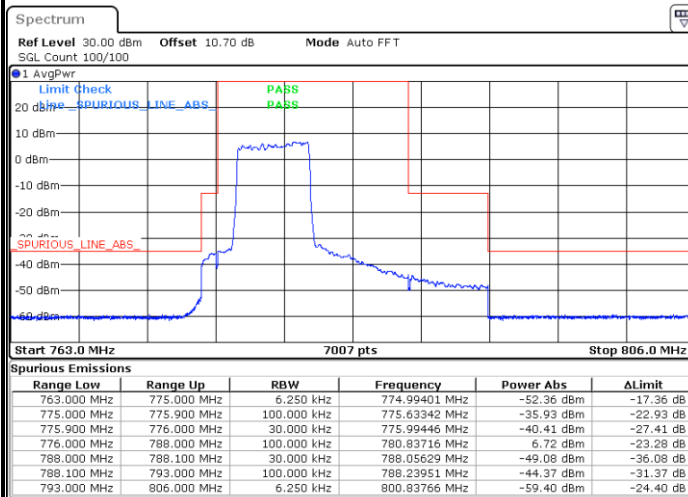
Date: 26.JUL.2022 00:08:54

Highest Band Edge / 1 RB



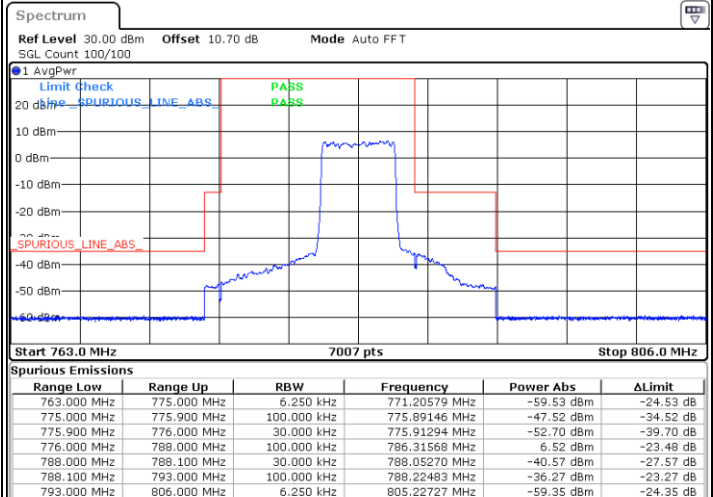
Date: 26.JUL.2022 00:16:47

Lowest Band Edge / Full RB



Date: 26.JUL.2022 00:07:55

Highest Band Edge / Full RB

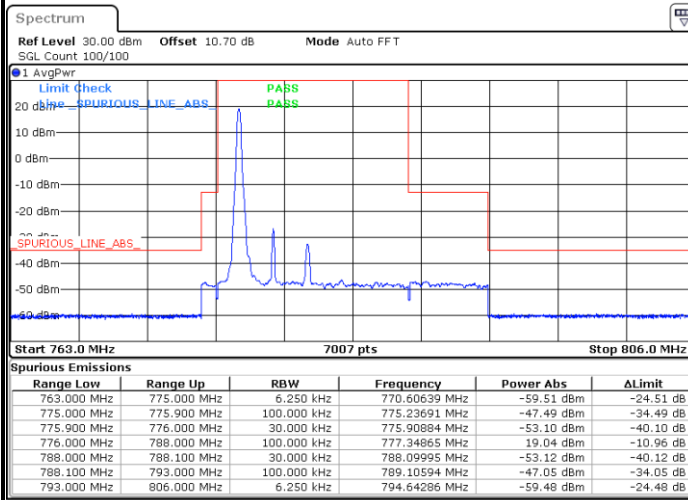


Date: 26.JUL.2022 00:15:49



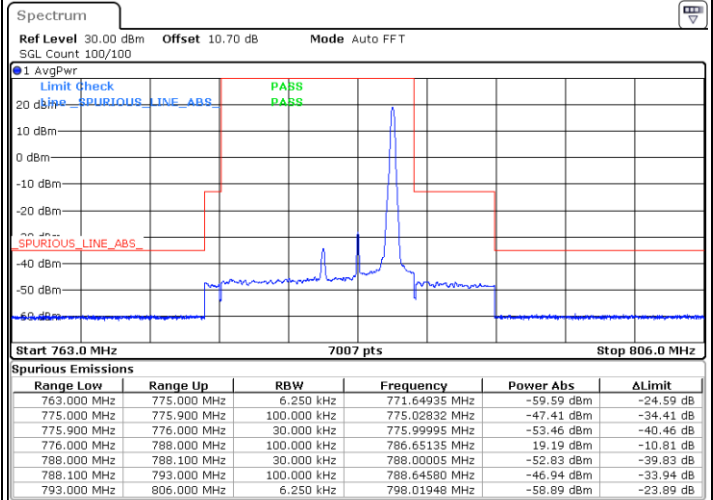
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



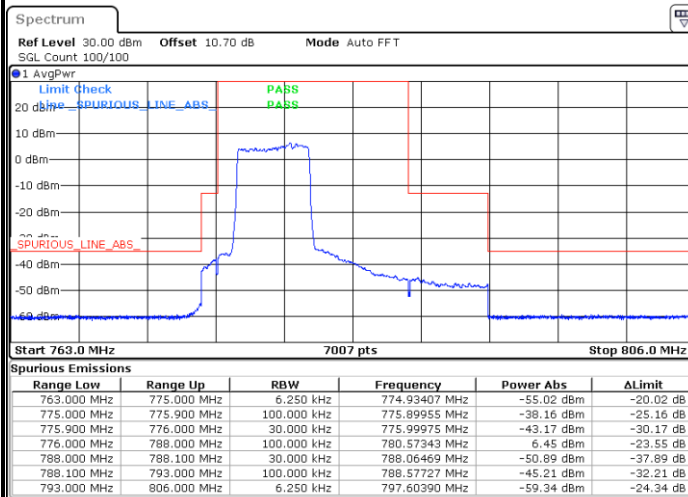
Date: 26.JUL.2022 00:20:57

Highest Band Edge / 1 RB



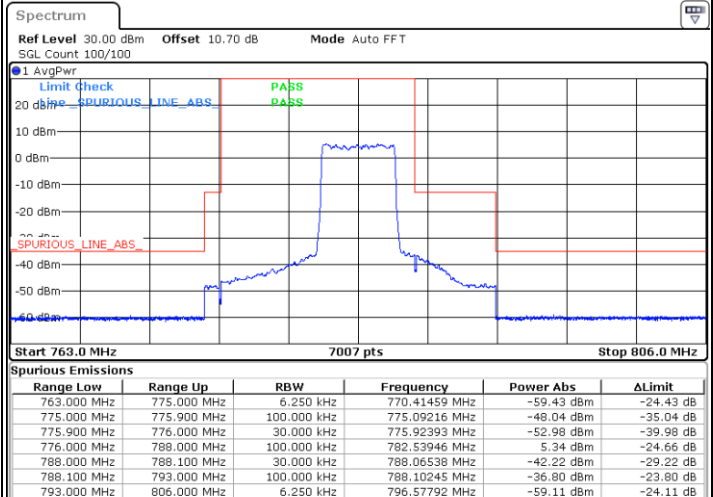
Date: 26.JUL.2022 00:23:41

Lowest Band Edge / Full RB



Date: 26.JUL.2022 00:19:58

Highest Band Edge / Full RB

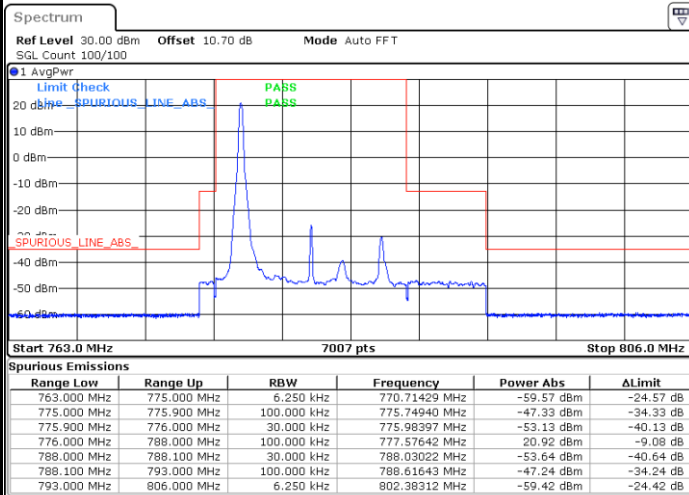


Date: 26.JUL.2022 00:22:42

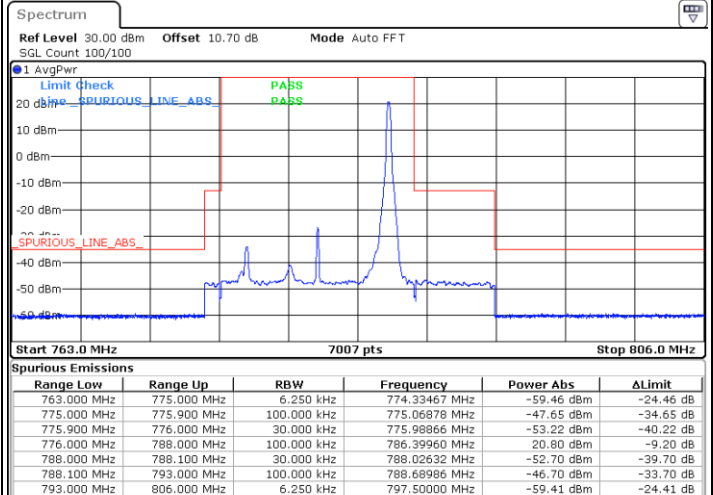


LTE Band 13 / 10MHz / QPSK

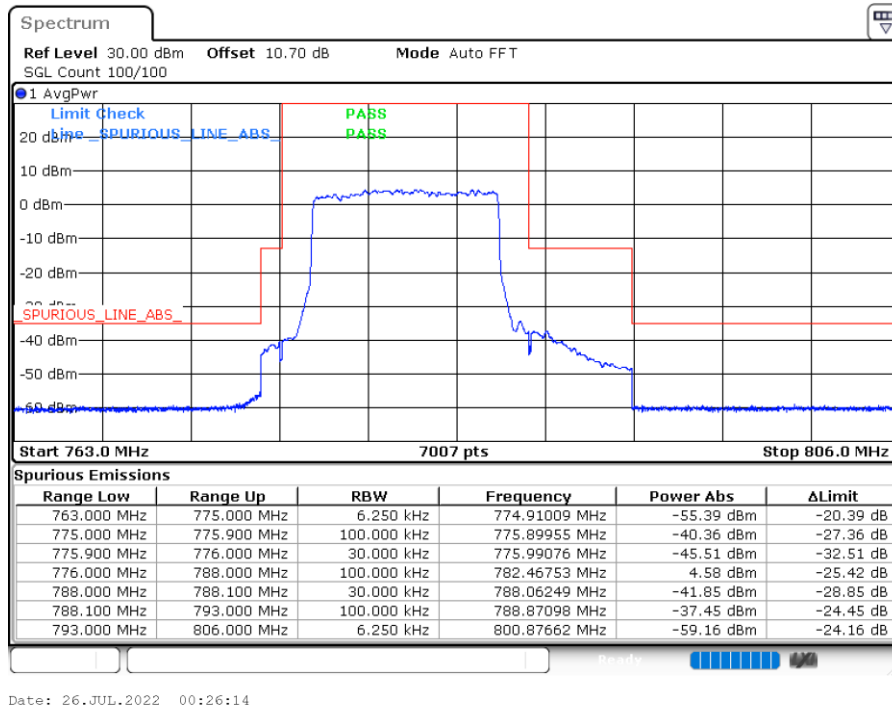
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



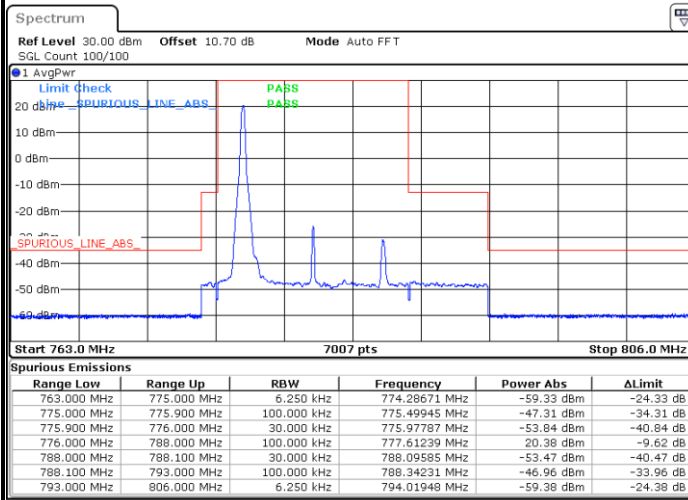
Band Edge / Full RB





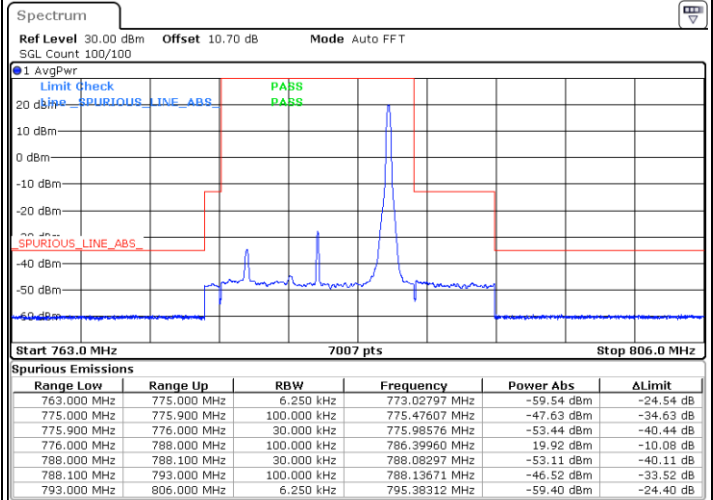
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



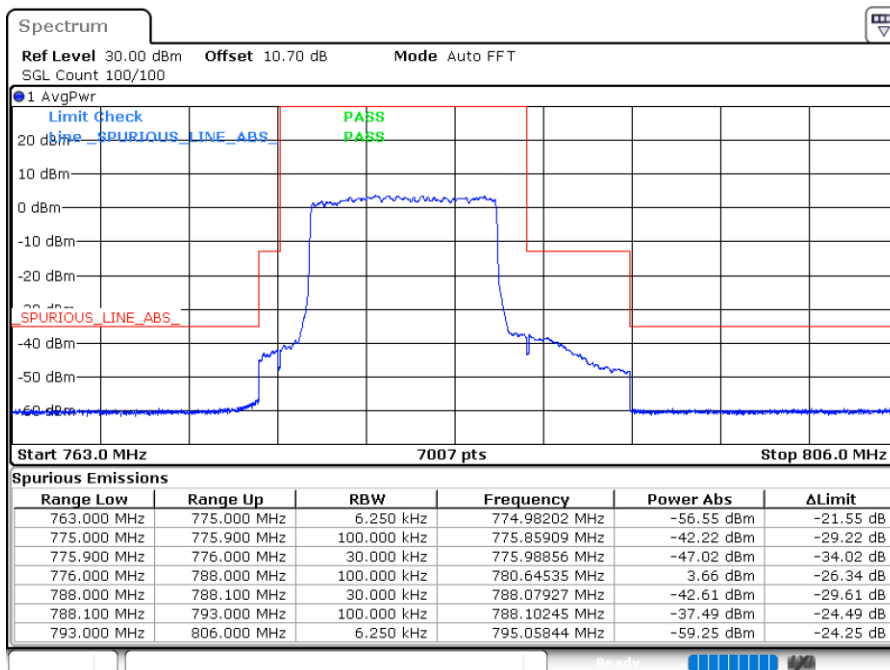
Date: 26.JUL.2022 00:28:10

Highest Band Edge / 1 RB



Date: 26.JUL.2022 00:31:04

Band Edge / Full RB

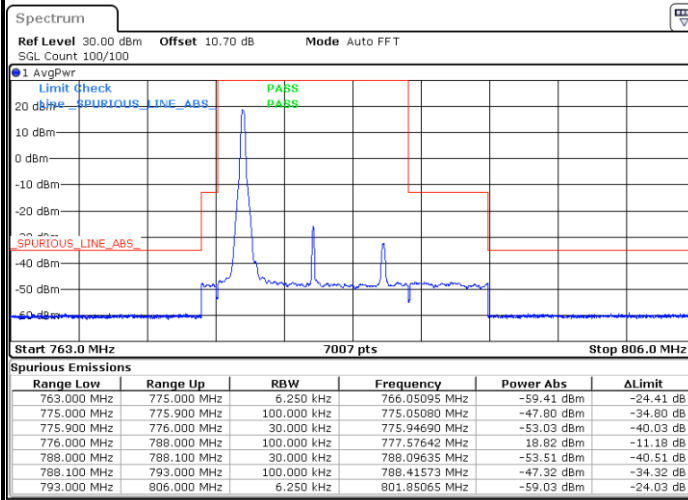


Date: 26.JUL.2022 00:27:12



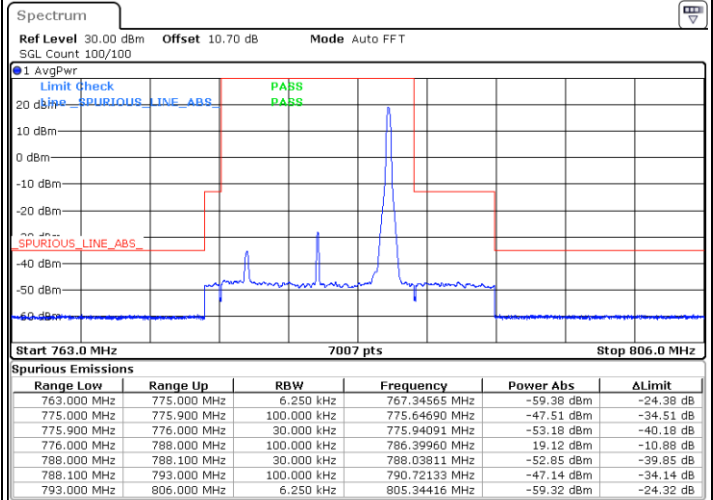
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



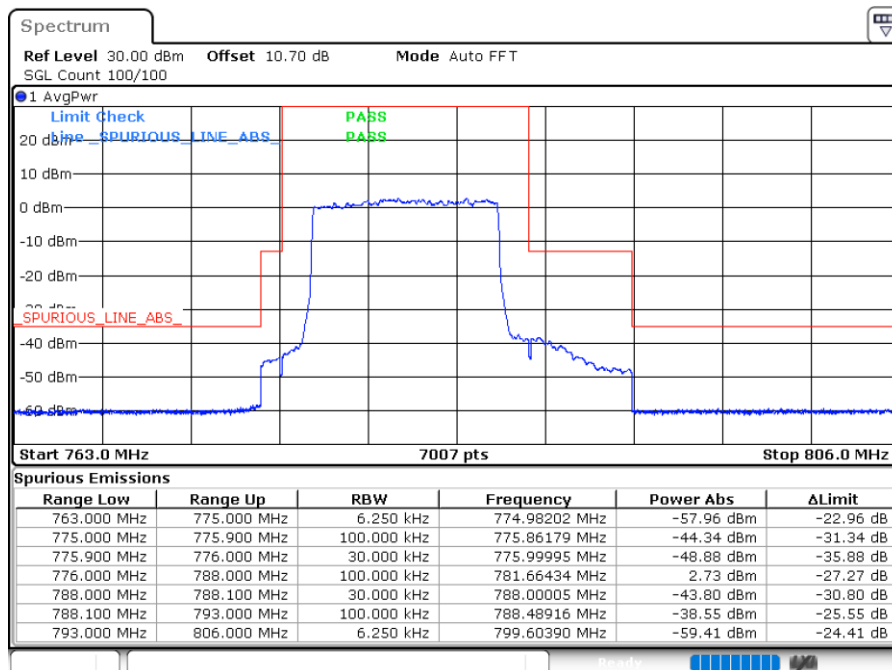
Date: 26.JUL.2022 00:34:59

Highest Band Edge / 1 RB

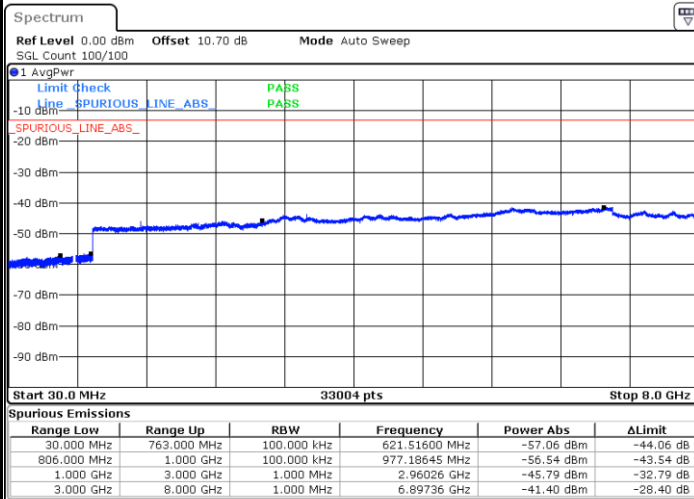


Date: 26.JUL.2022 00:35:58

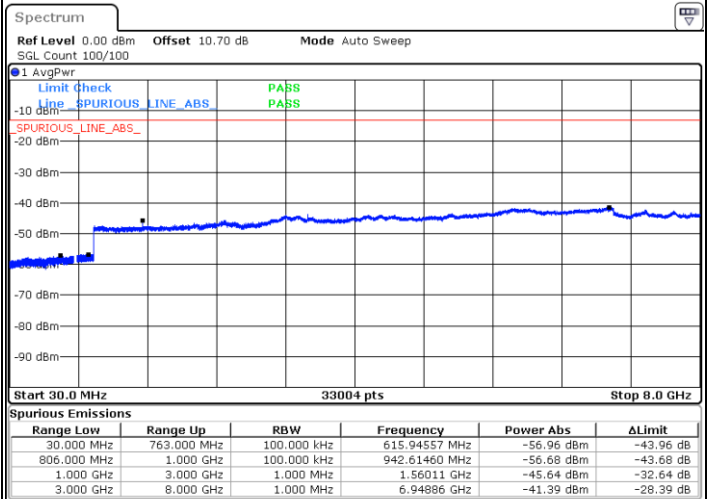
Band Edge / Full RB



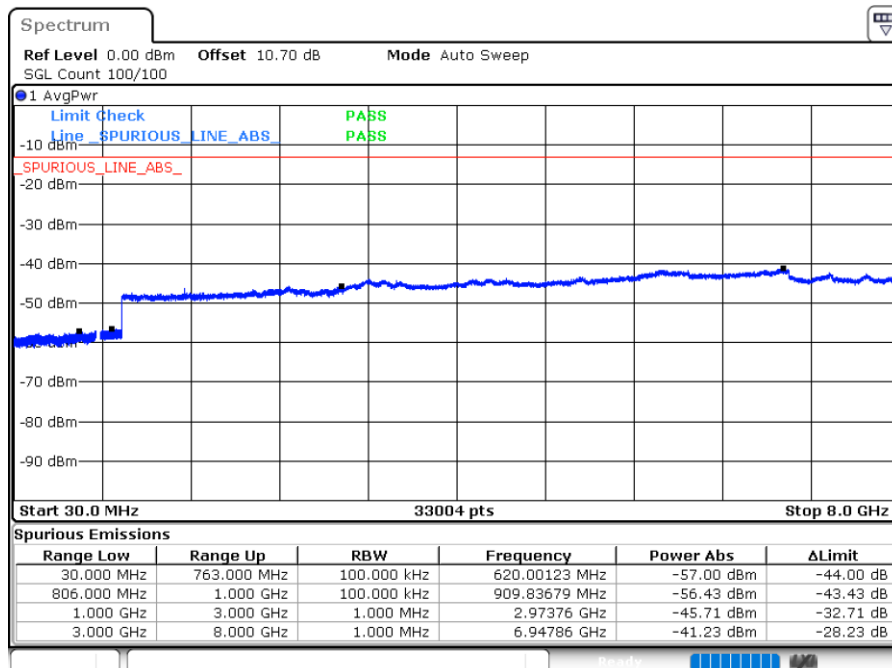
Date: 26.JUL.2022 00:34:02

**Conducted Spurious Emission****LTE Band 13 / 5MHz****Lowest Channel / QPSK**

Date: 26.JUL.2022 00:11:05

Middle Channel / QPSK

Date: 26.JUL.2022 00:12:18

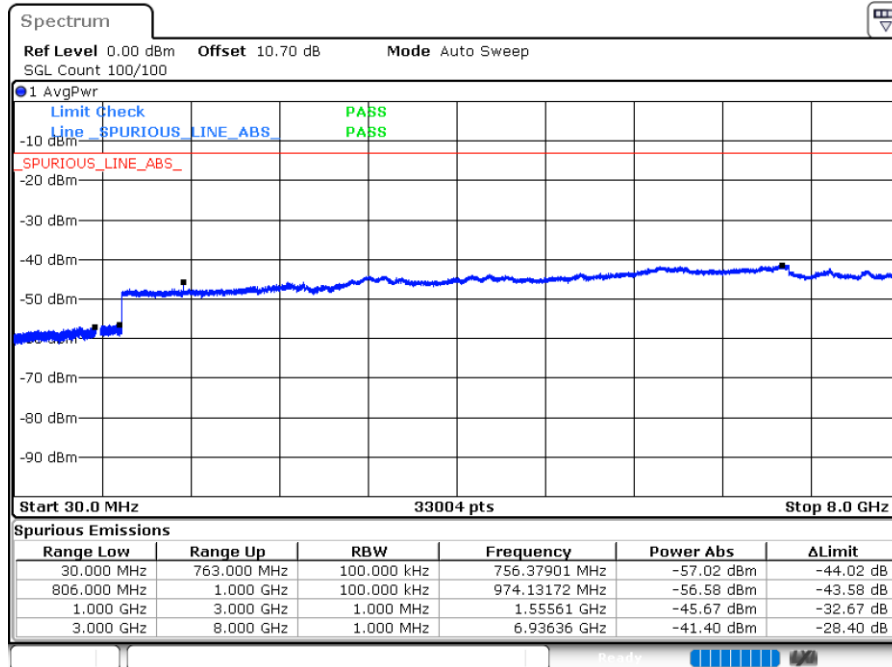
Highest Channel / QPSK

Date: 26.JUL.2022 00:18:59



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 26.JUL.2022 00:32:17

Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0118	PASS
40	Normal Voltage	0.0079	
30	Normal Voltage	0.0104	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0040	
0	Normal Voltage	0.0193	
-10	Normal Voltage	0.0114	
-20	Normal Voltage	0.0116	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0151	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0133	

Note:

1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.1 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



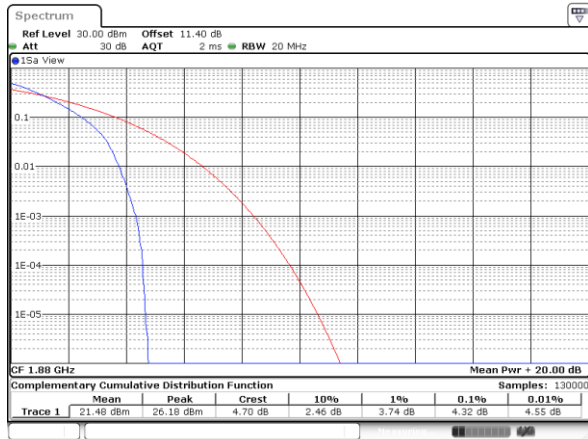
LTE Band 25

Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.32	5.51	6.12	PASS

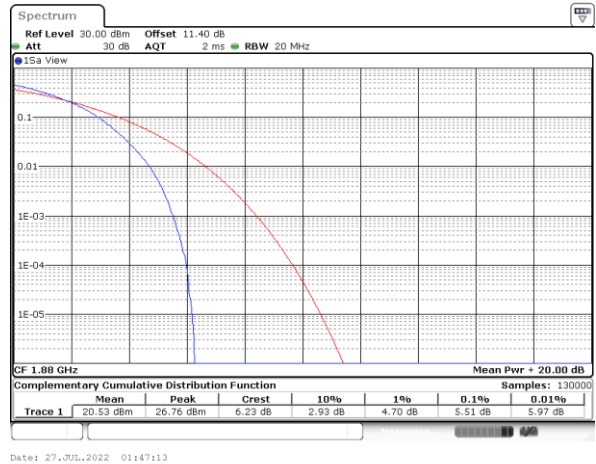
LTE Band 25 / 20MHz / QPSK

Middle Channel / Full RB



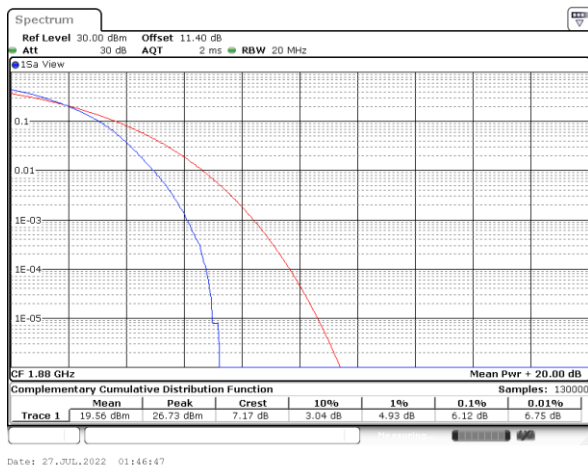
LTE Band 25 / 20MHz / 16QAM

Middle Channel / Full RB



LTE Band 25 / 20MHz / 64QAM

Middle Channel / Full RB



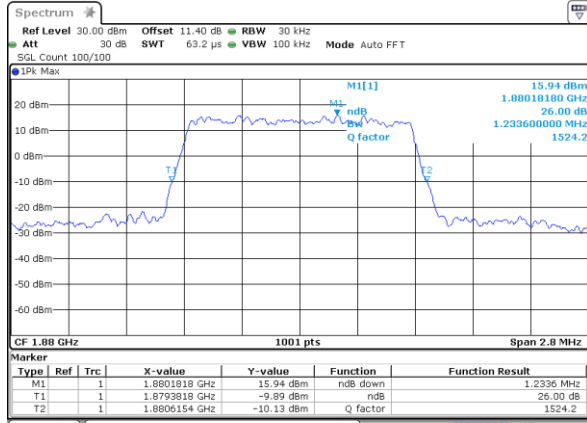
**26dB Bandwidth**

Mode	LTE Band 25 : 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	1.23	3.00	3.03	5.03	4.89	9.79	9.85	14.39	14.48	18.90	18.66
Mode	LTE Band 25 : 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	-	3.03	-	4.98	-	9.85	-	14.15	-	18.94	-

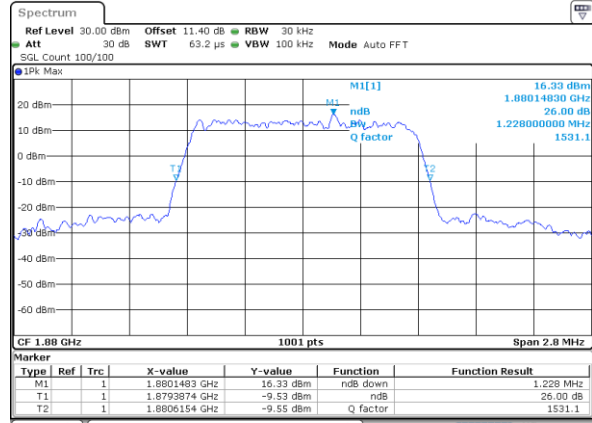


LTE Band 25

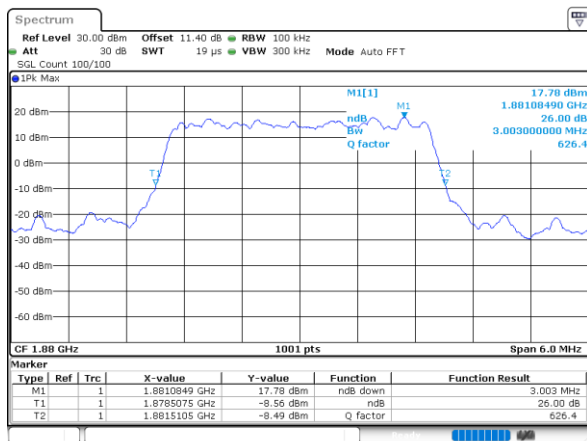
Middle Channel / 1.4MHz / QPSK



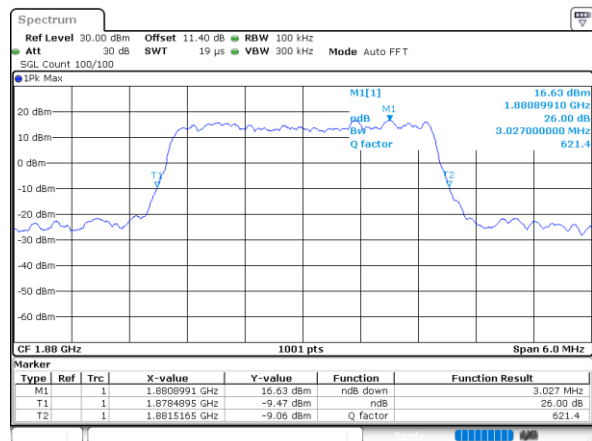
Middle Channel / 1.4MHz / 16QAM



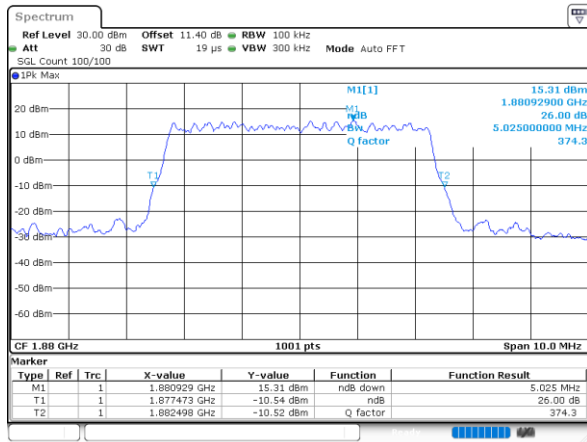
Middle Channel / 3MHz / QPSK



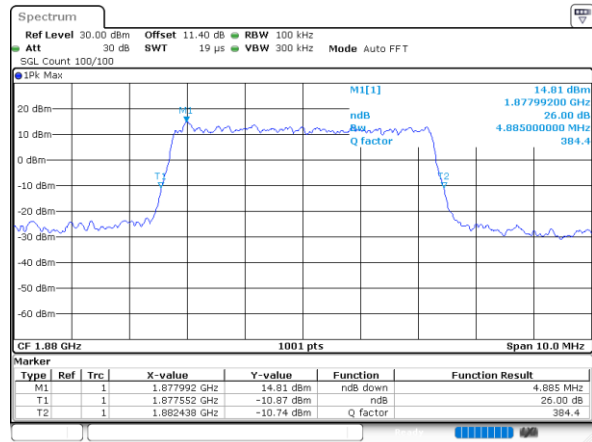
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



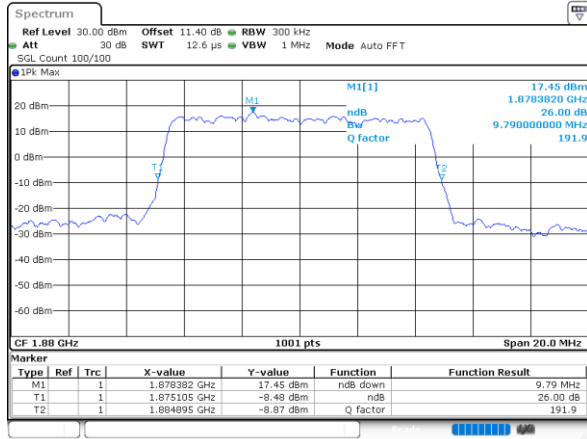
Middle Channel / 5MHz / 16QAM



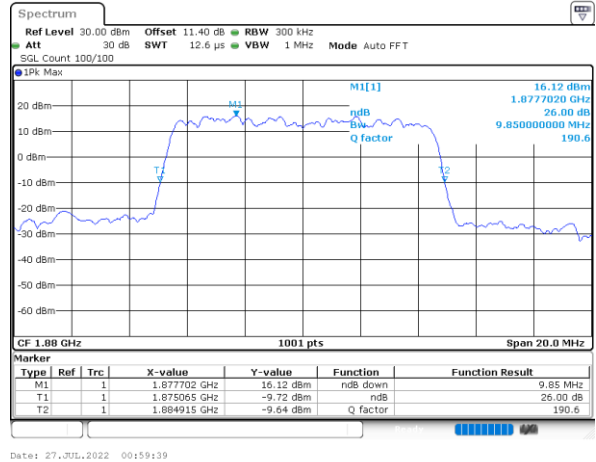


LTE Band 25

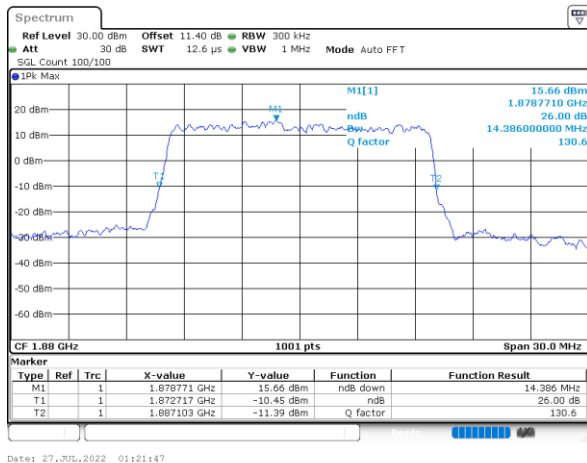
Middle Channel / 10MHz / QPSK



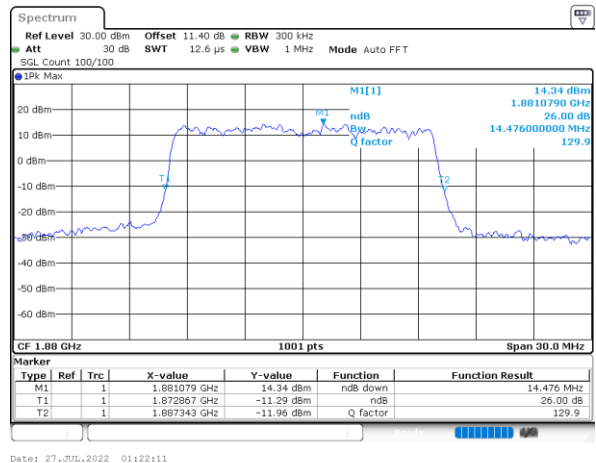
Middle Channel / 10MHz / 16QAM



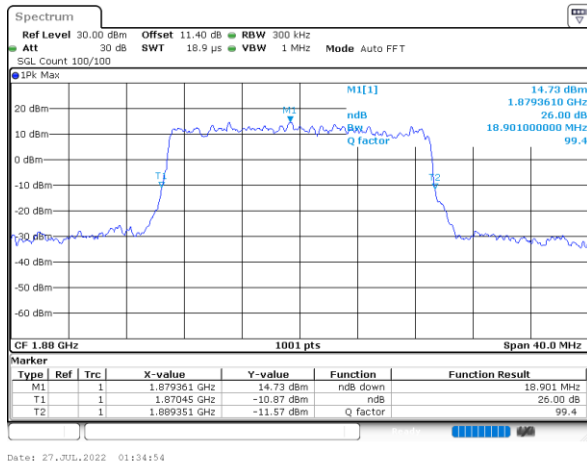
Middle Channel / 15MHz / QPSK



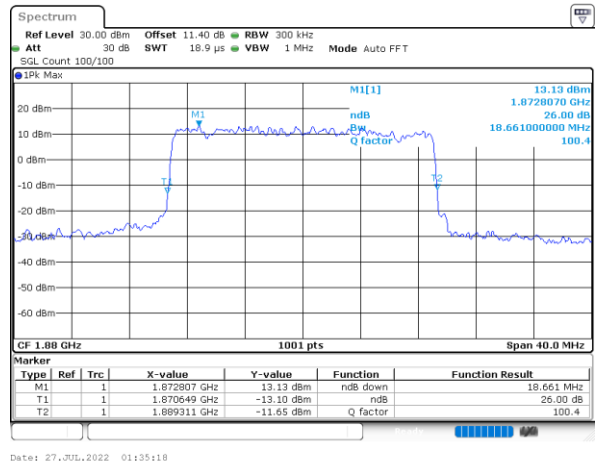
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



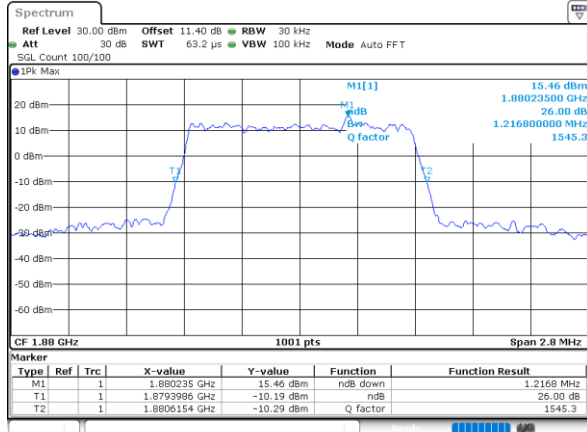
Middle Channel / 20MHz / 16QAM



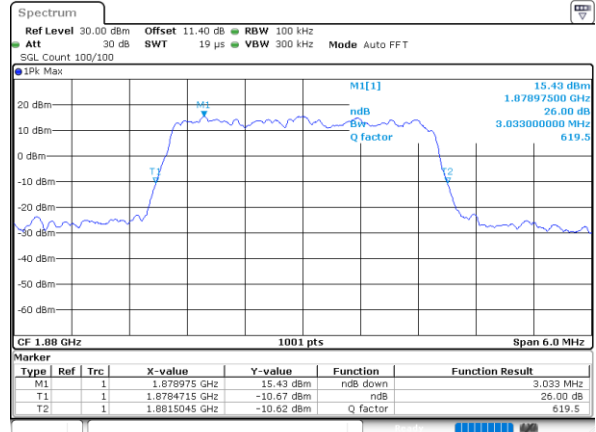


LTE Band 25

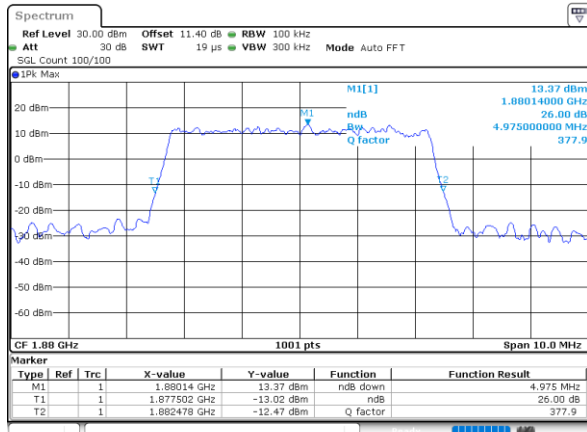
Middle Channel / 1.4MHz / 64QAM



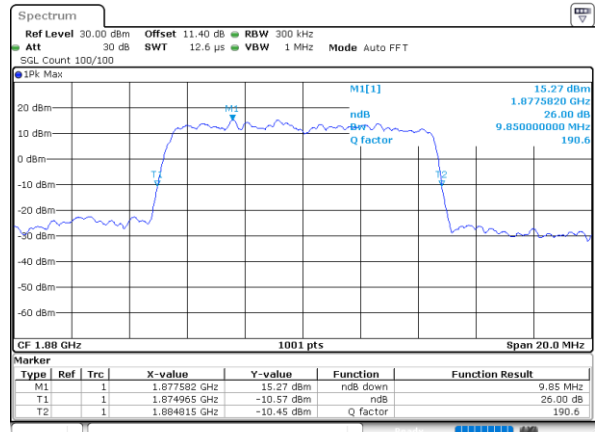
Middle Channel / 3MHz / 64QAM



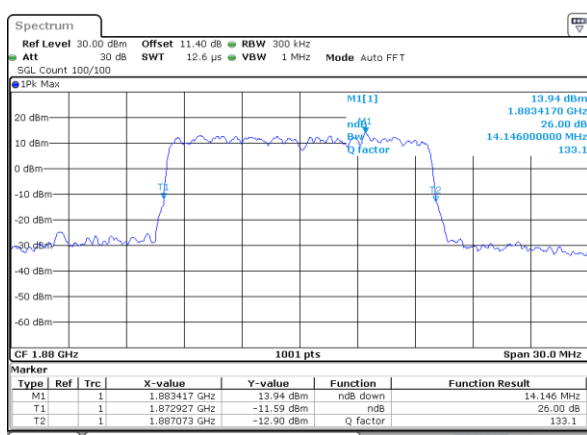
Middle Channel / 5MHz / 64QAM



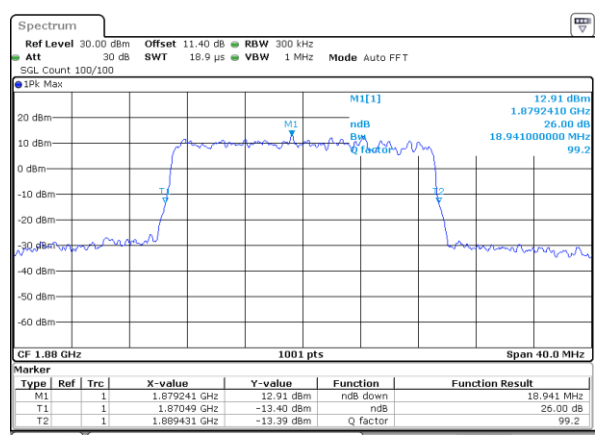
Middle Channel / 10MHz / 64QAM



Middle Channel / 15MHz / 64QAM



Middle Channel / 20MHz / 64QAM



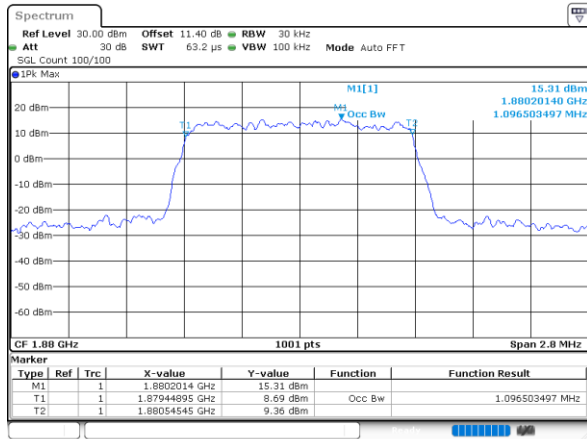
**Occupied Bandwidth**

Mode	LTE Band 25 : 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	1.10	1.10	2.73	2.75	4.50	4.48	9.05	9.07	13.43	13.37	17.82	17.94
Mode	LTE Band 25 : 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	1.09	-	2.73	-	4.48	-	9.09	-	13.46	-	17.90	-

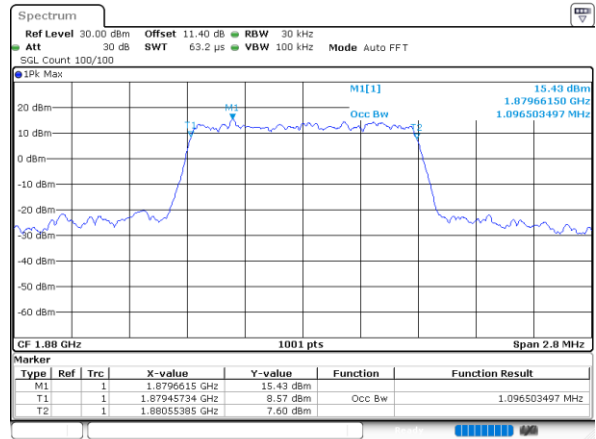


LTE Band 25

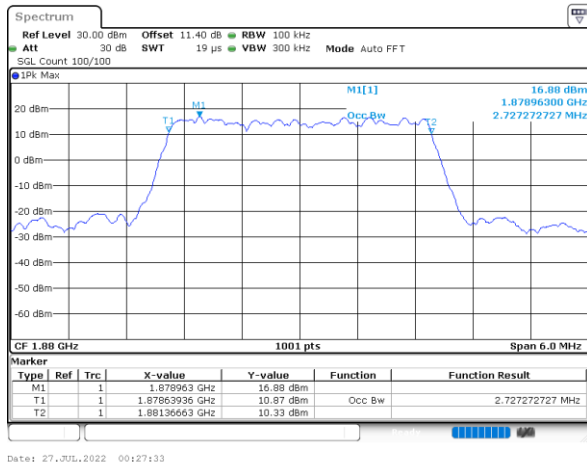
Middle Channel / 1.4MHz / QPSK



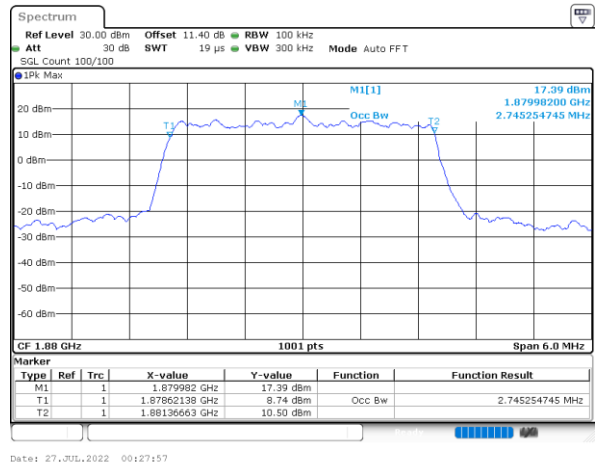
Middle Channel / 1.4MHz / 16QAM



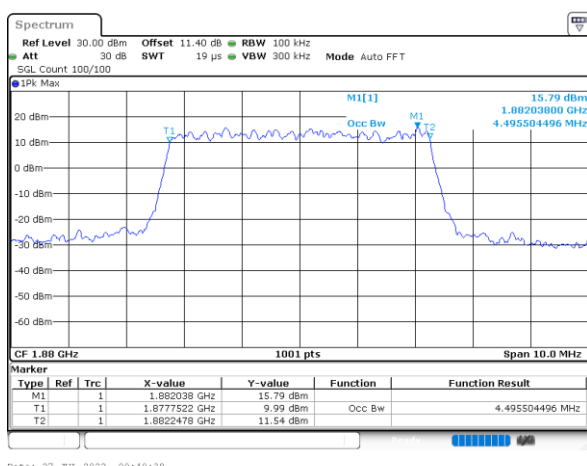
Middle Channel / 3MHz / QPSK



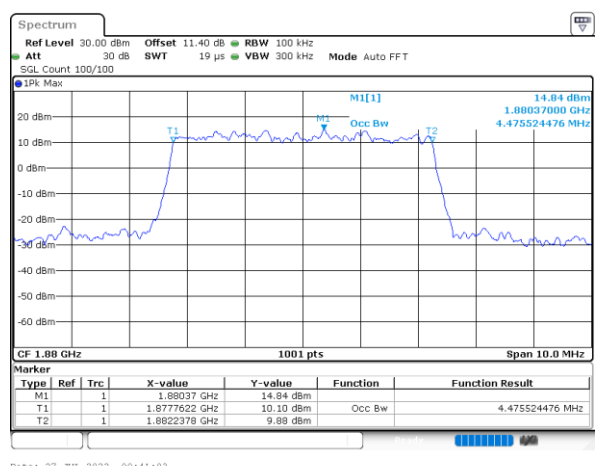
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



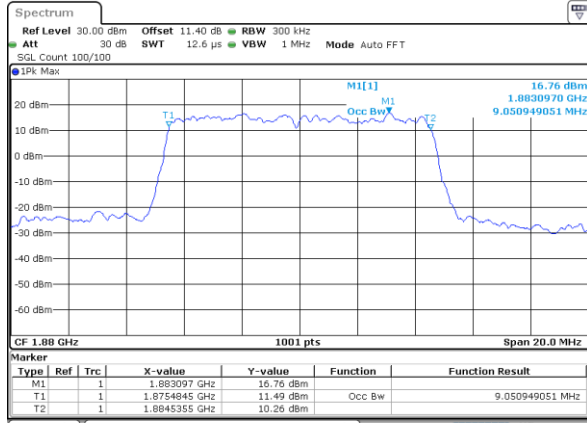
Middle Channel / 5MHz / 16QAM



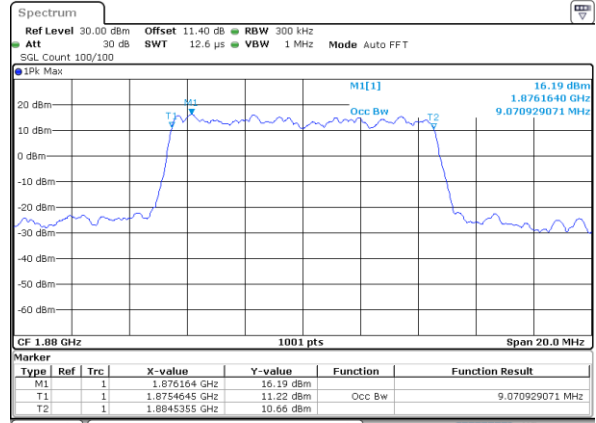


LTE Band 25

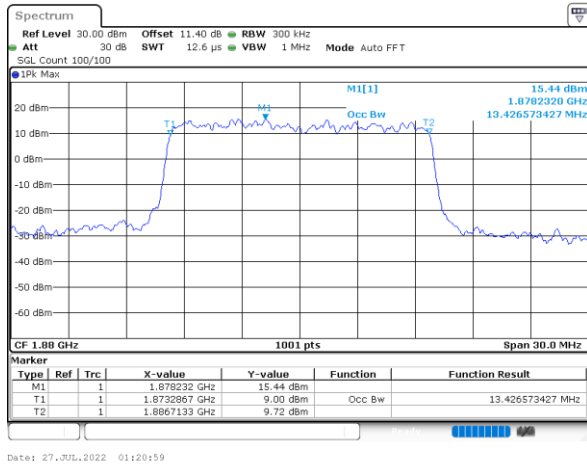
Middle Channel / 10MHz / QPSK



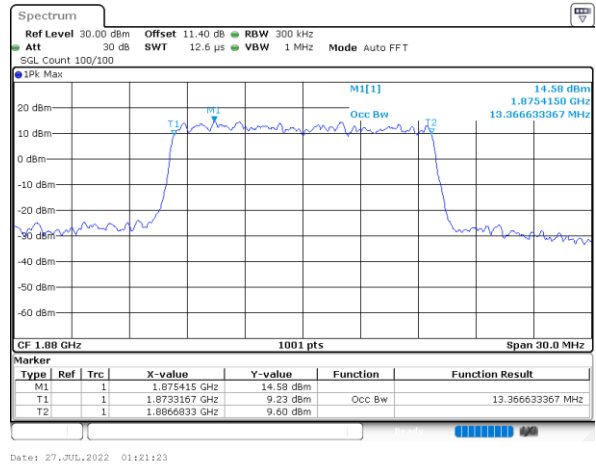
Middle Channel / 10MHz / 16QAM



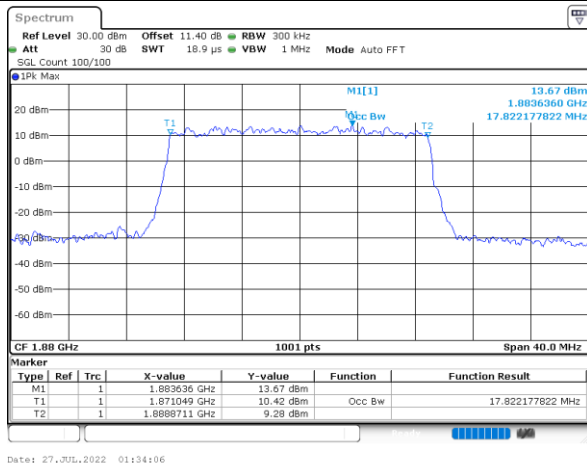
Middle Channel / 15MHz / QPSK



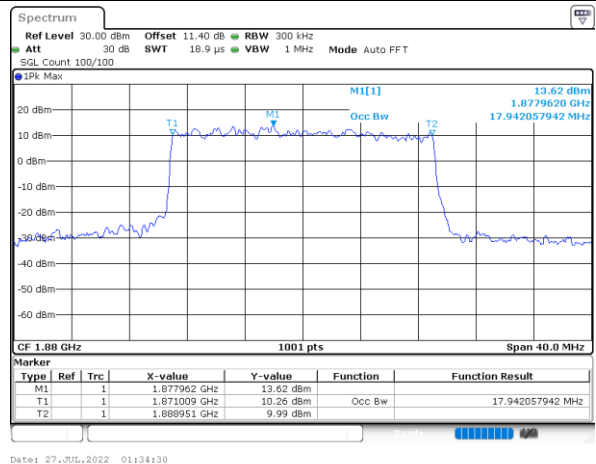
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



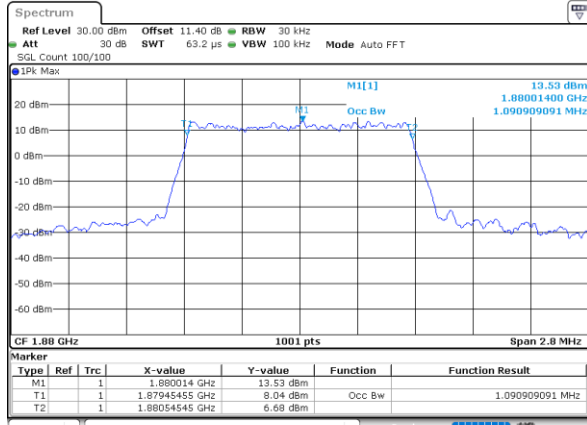
Middle Channel / 20MHz / 16QAM



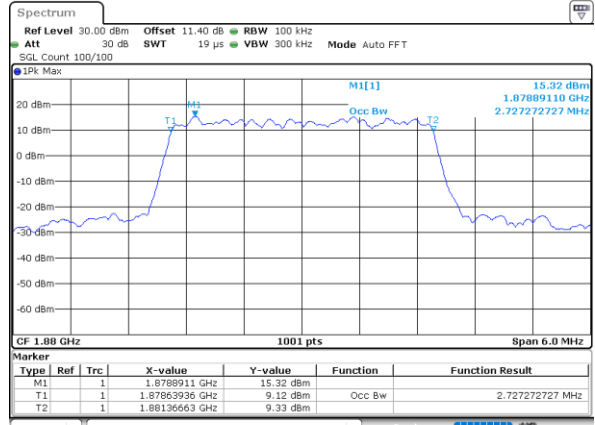


LTE Band 25

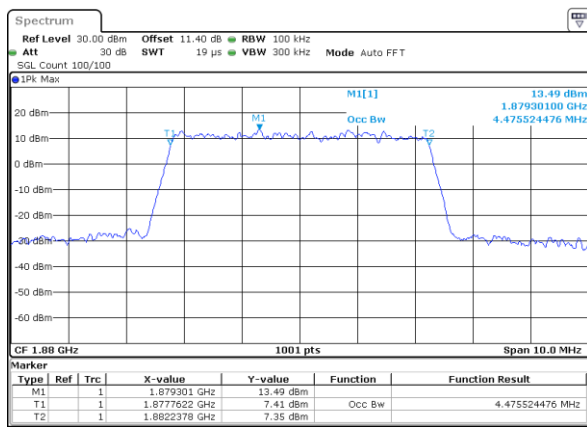
Middle Channel / 1.4MHz / 64QAM



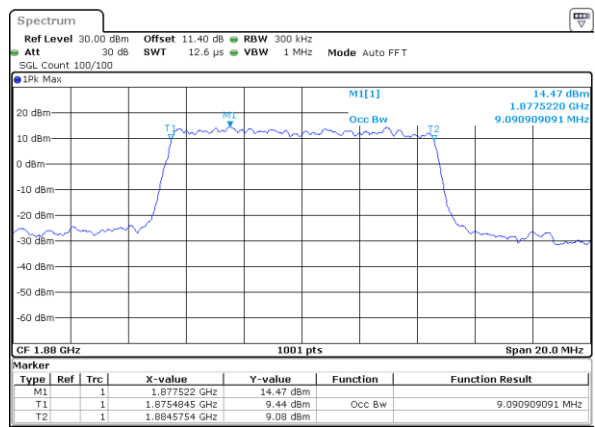
Middle Channel / 3MHz / 64QAM



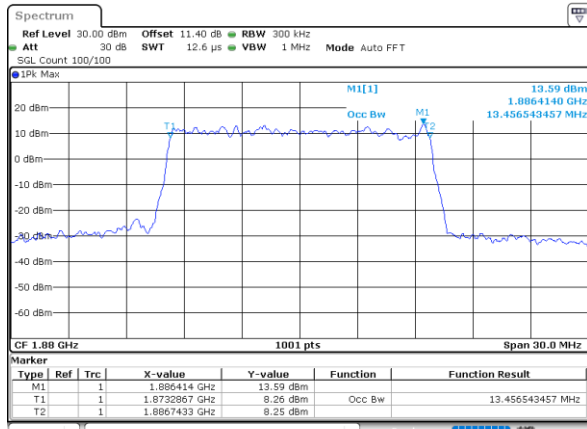
Middle Channel / 5MHz / 64QAM



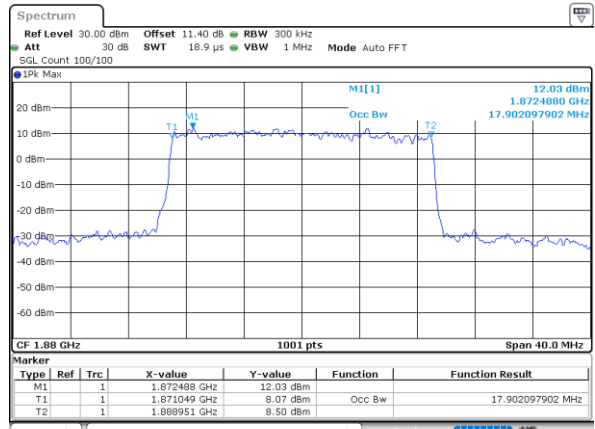
Middle Channel / 10MHz / 64QAM



Middle Channel / 15MHz / 64QAM



Middle Channel / 20MHz / 64QAM

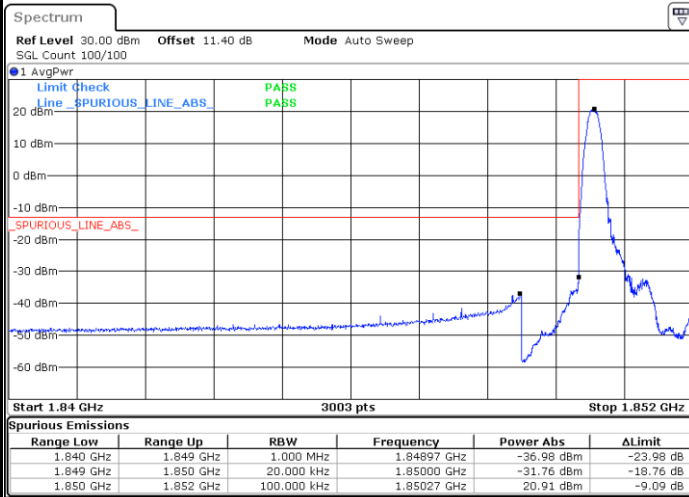




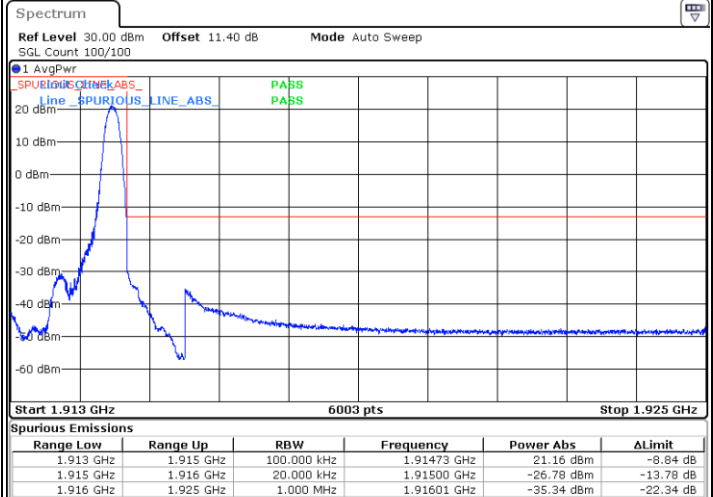
Conducted Band Edge

LTE Band 25 / 1.4MHz / QPSK

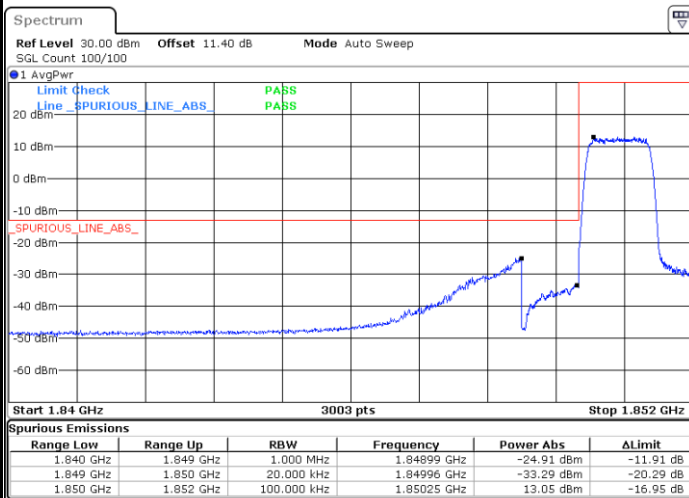
Lowest Band Edge / 1RB



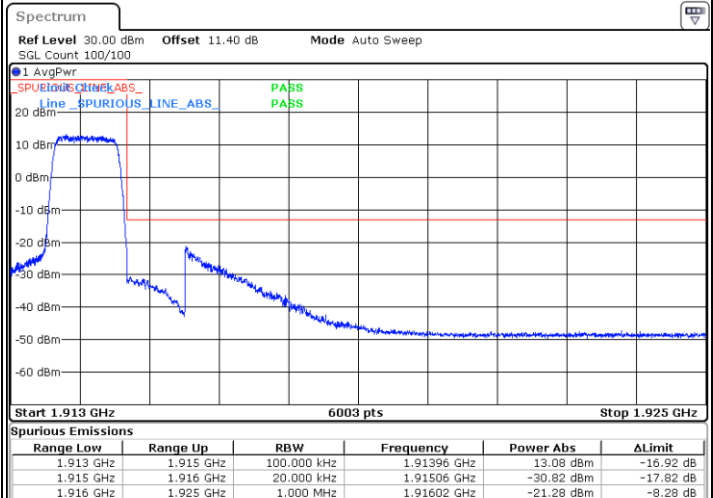
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



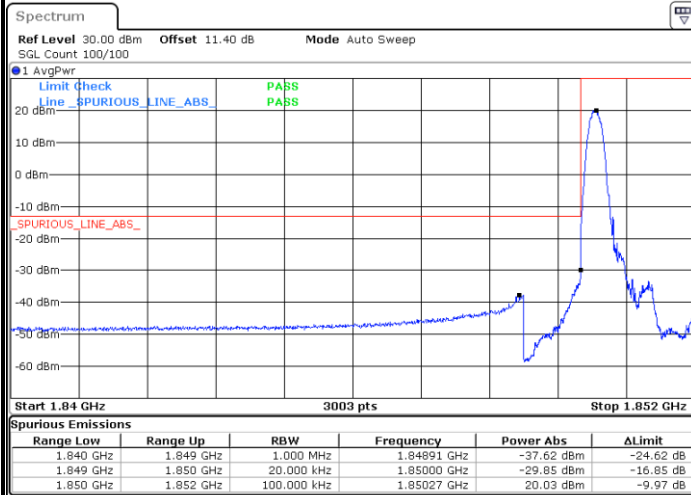
Highest Band Edge / Full RB



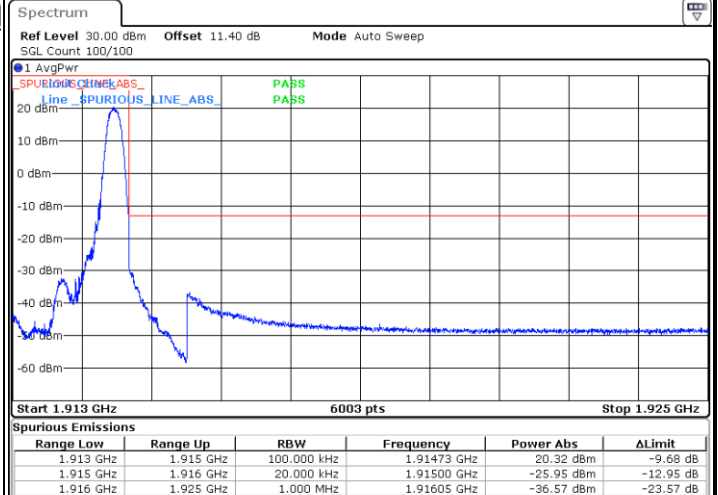


LTE Band 25 / 1.4MHz / 16QAM

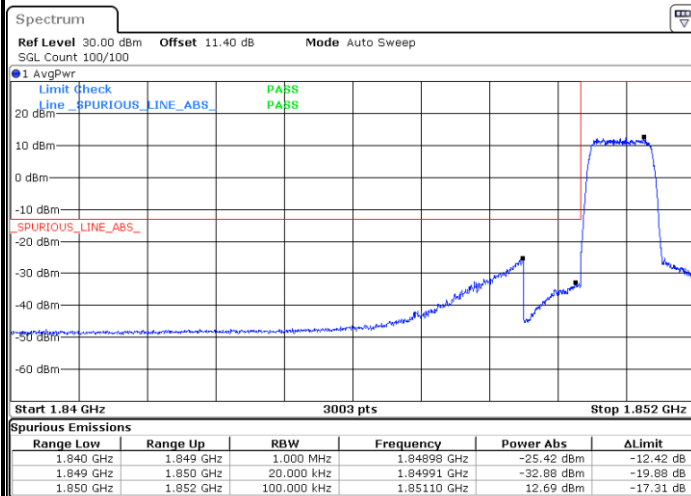
Lowest Band Edge / 1 RB



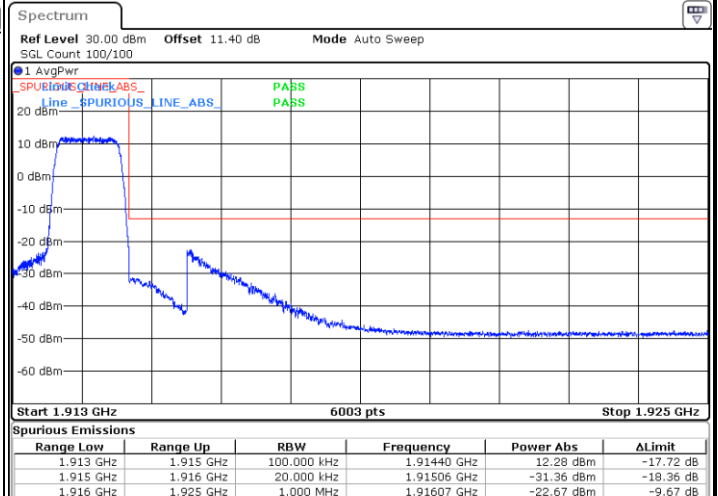
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



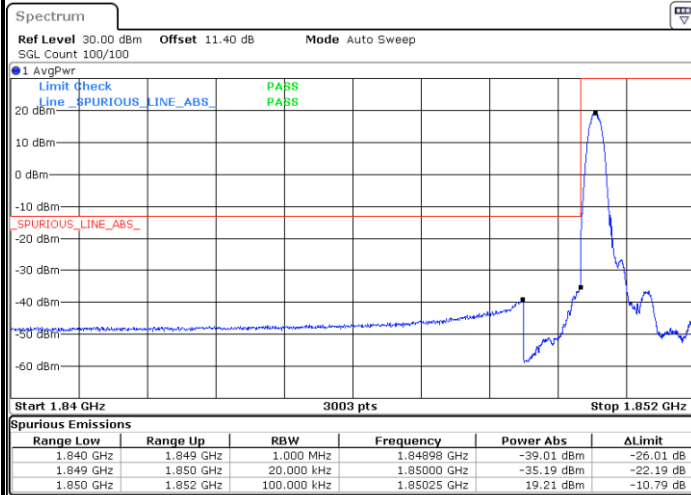
Highest Band Edge / Full RB



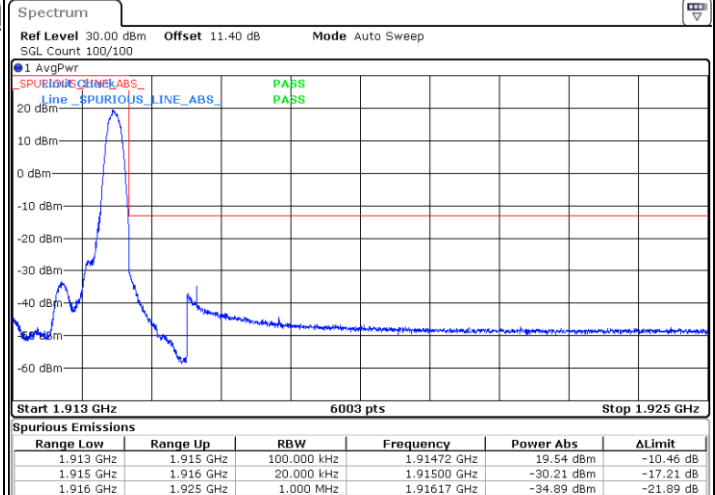


LTE Band 25 / 1.4MHz / 64QAM

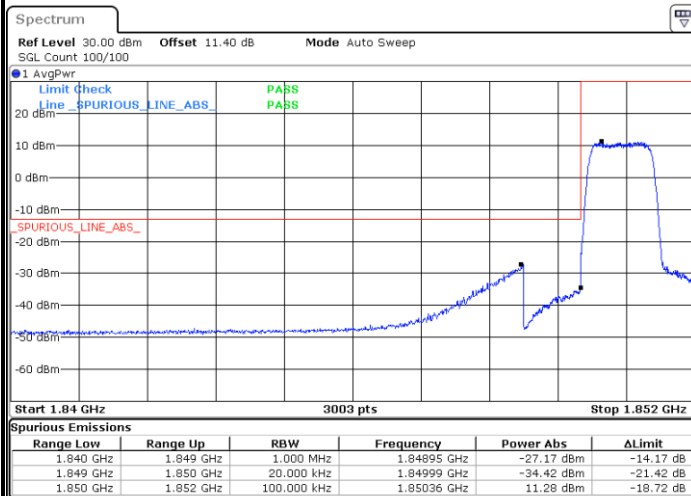
Lowest Band Edge / 1 RB



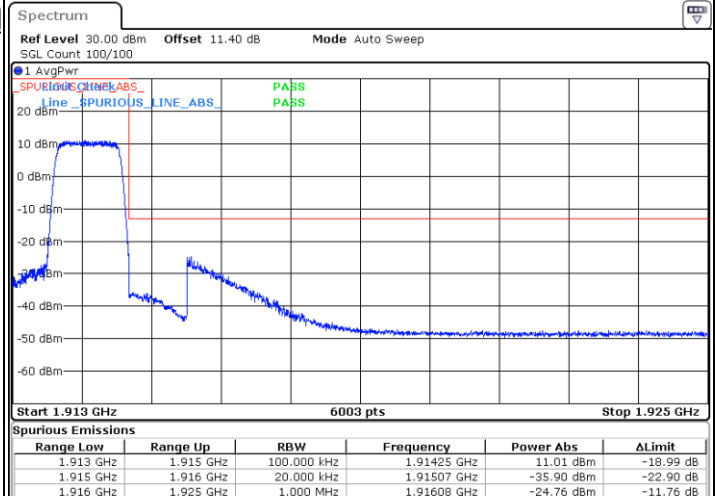
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



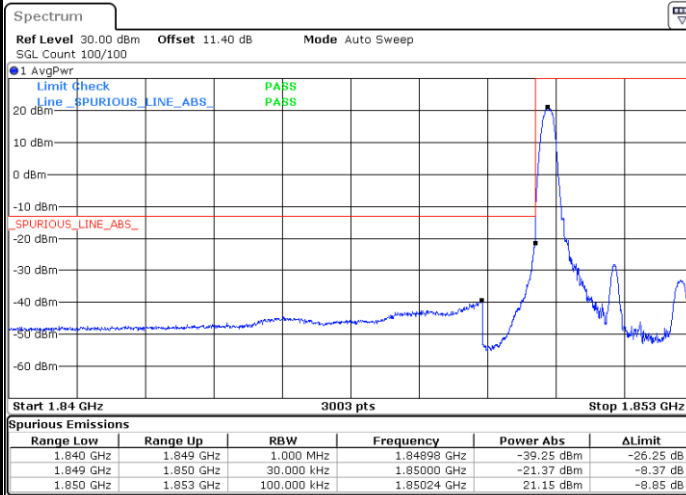
Highest Band Edge / Full RB



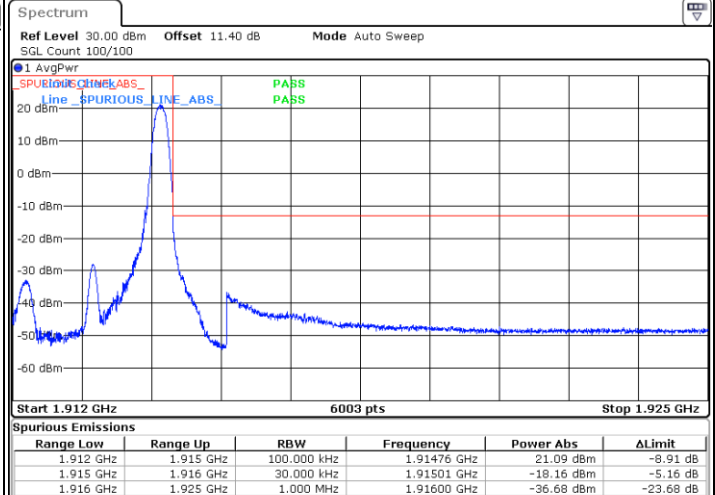


LTE Band 25 / 3MHz / QPSK

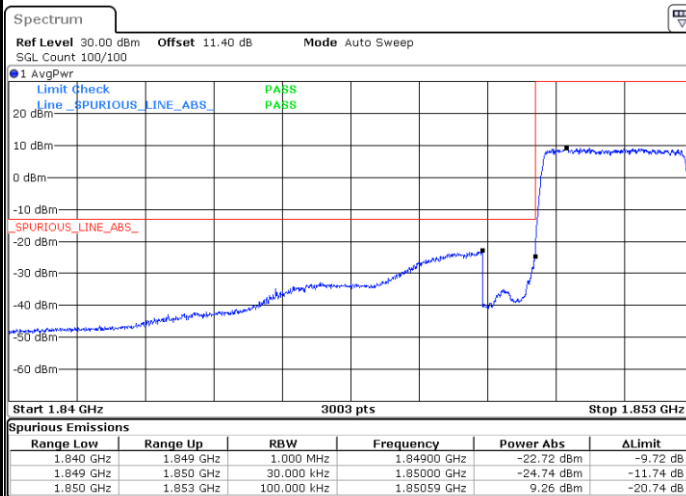
Lowest Band Edge / 1RB



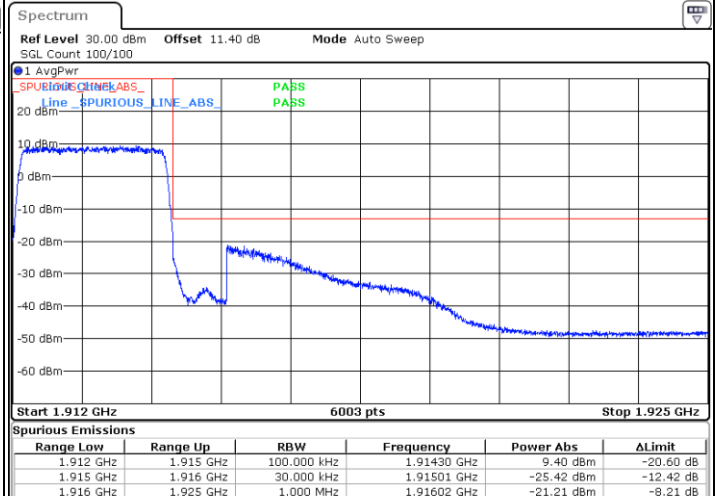
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



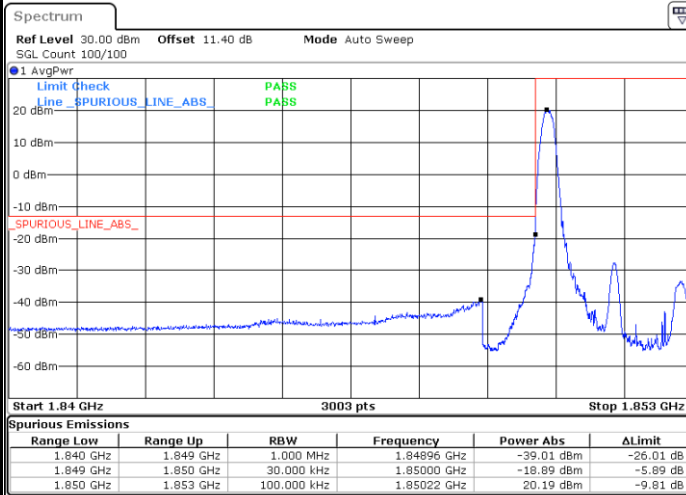
Highest Band Edge / Full RB



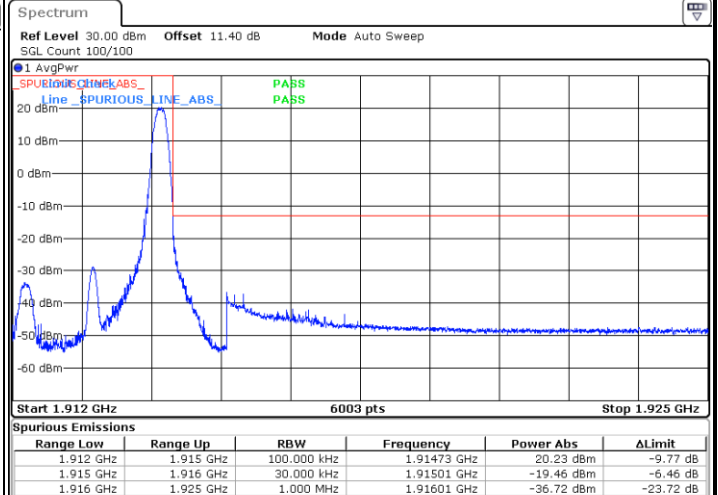


LTE Band 25 / 3MHz / 16QAM

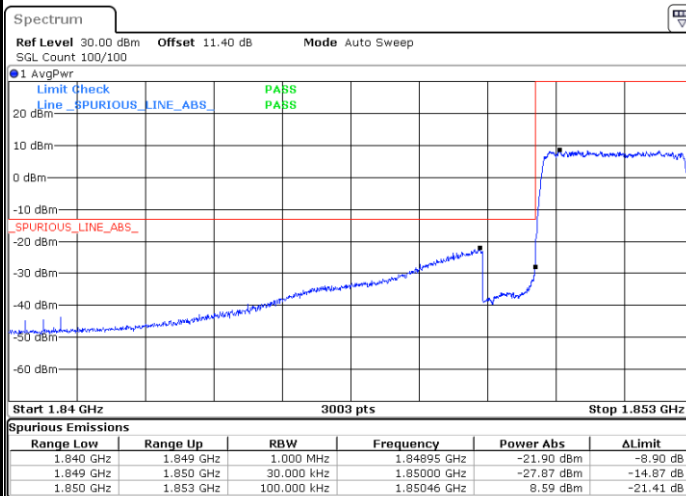
Lowest Band Edge / 1 RB



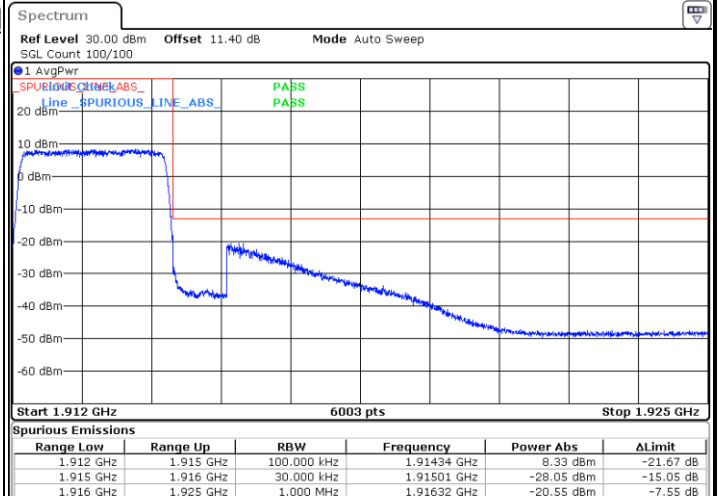
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



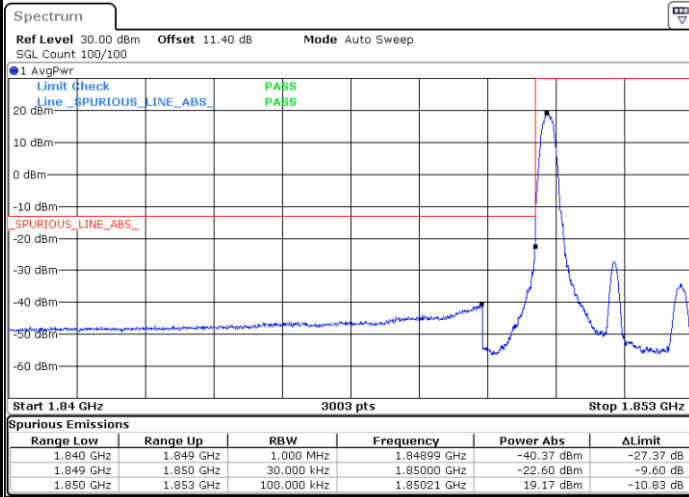
Highest Band Edge / Full RB



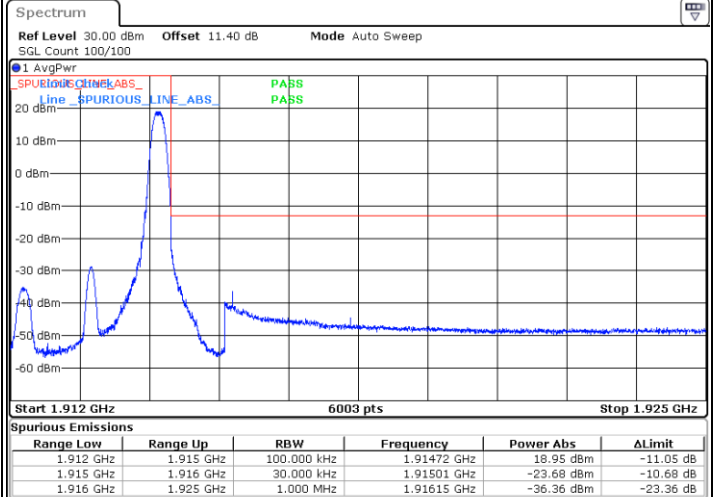


LTE Band 25 / 3MHz / 64QAM

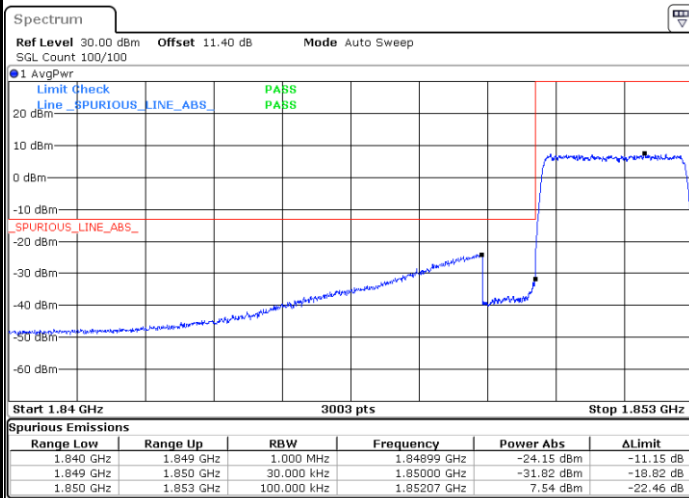
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

