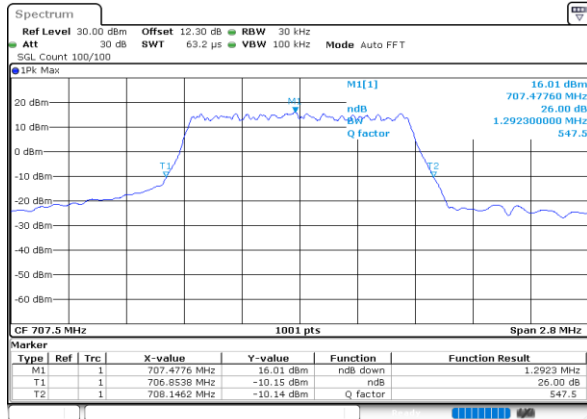


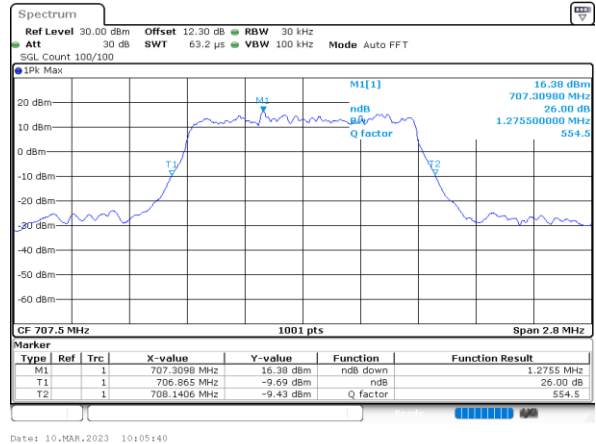


LTE Band 12

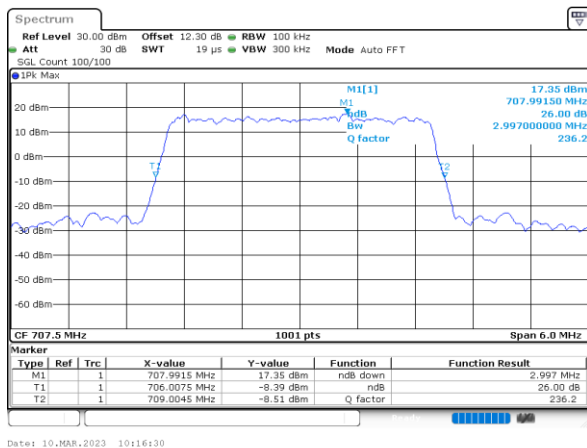
Middle Channel / 1.4MHz / QPSK



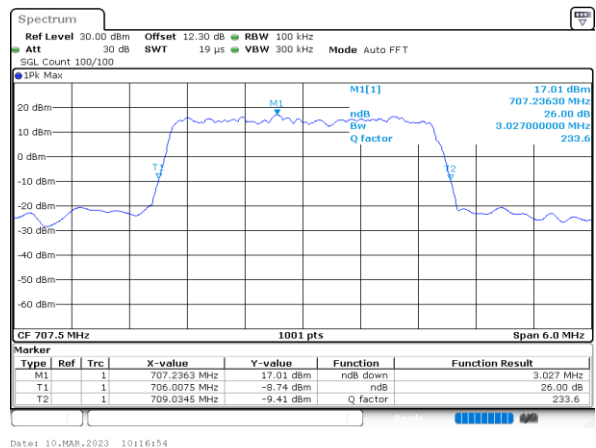
Middle Channel / 1.4MHz / 16QAM



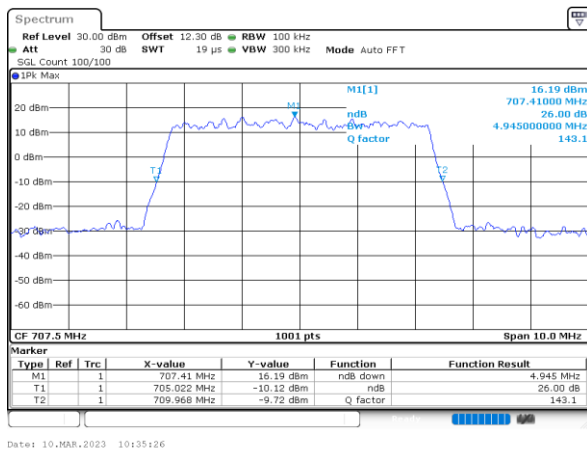
Middle Channel / 3MHz / QPSK



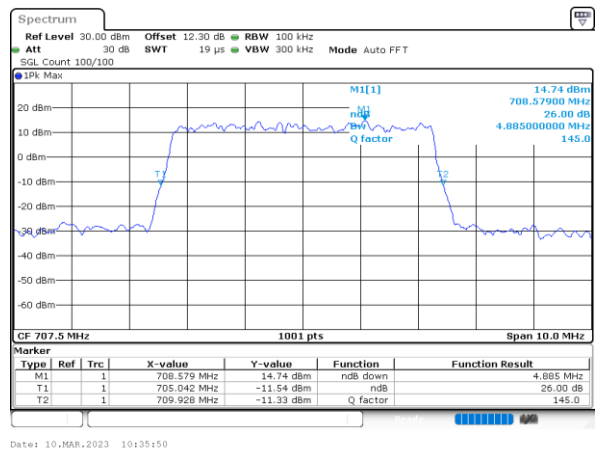
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



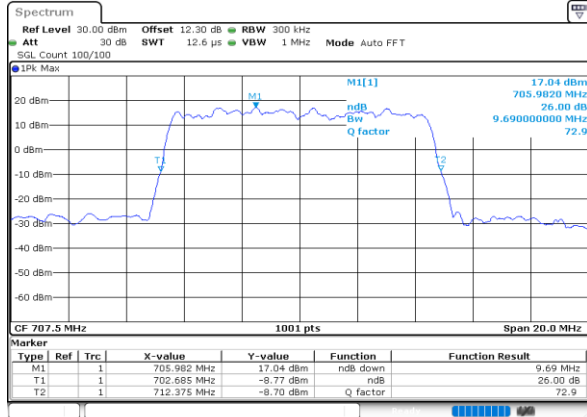
Middle Channel / 5MHz / 16QAM



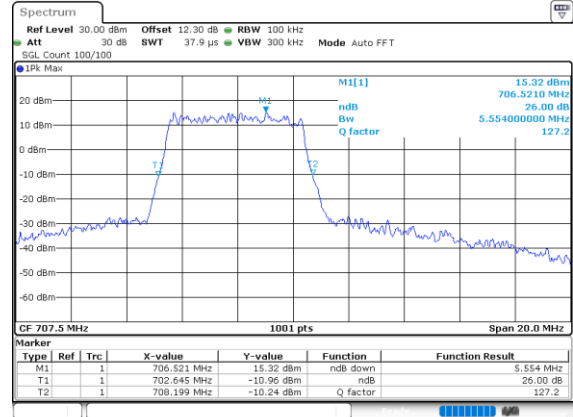


LTE Band 12

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM





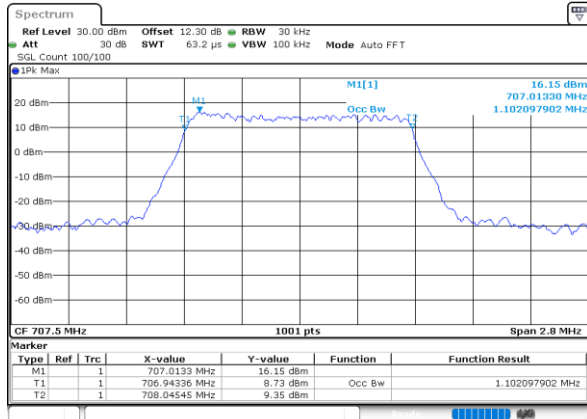
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.10	1.09	2.72	2.73	4.50	4.51	9.01	4.86

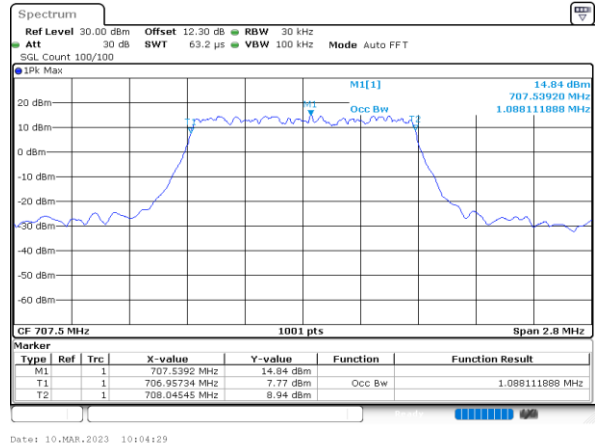


LTE Band 12

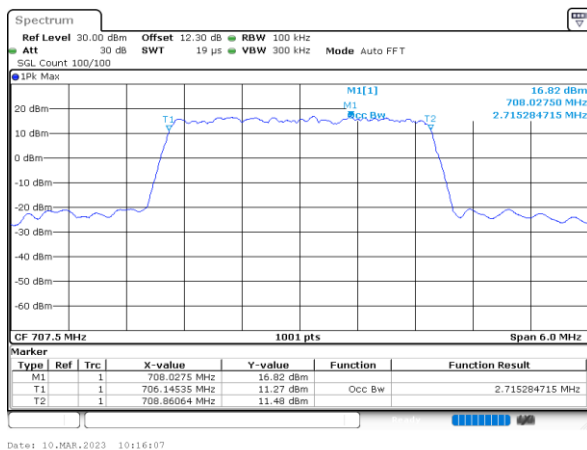
Middle Channel / 1.4MHz / QPSK



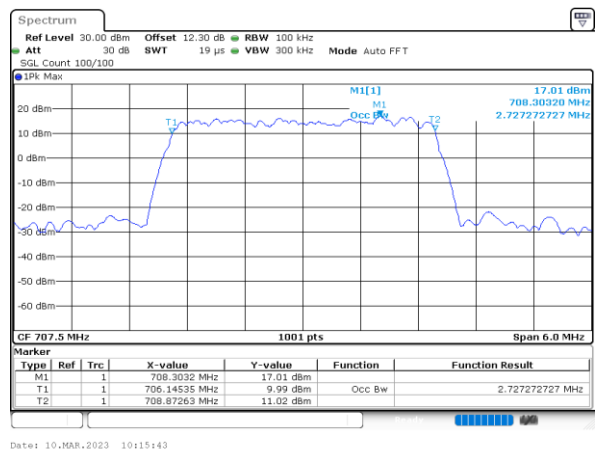
Middle Channel / 1.4MHz / 16QAM



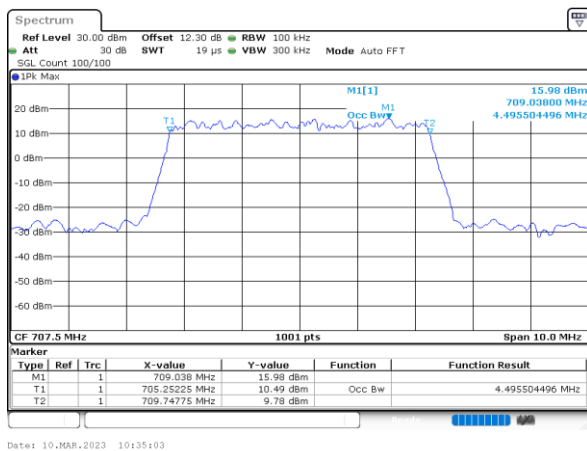
Middle Channel / 3MHz / QPSK



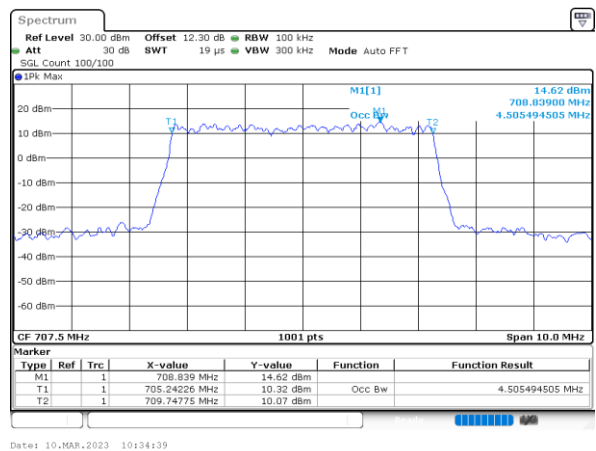
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



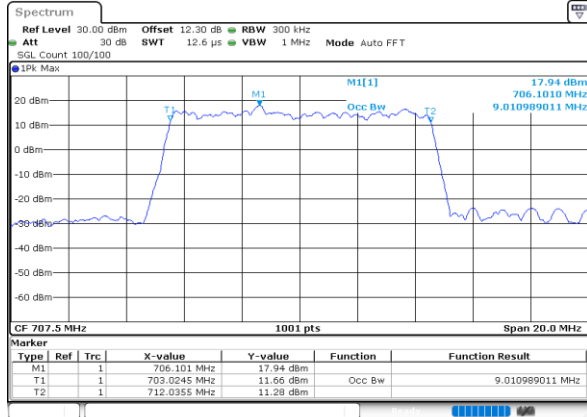
Middle Channel / 5MHz / 16QAM



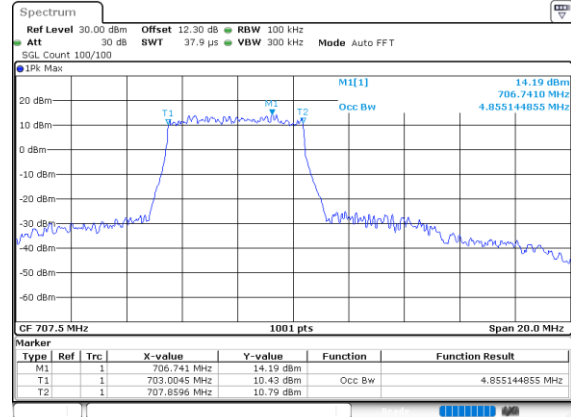


LTE Band 12

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

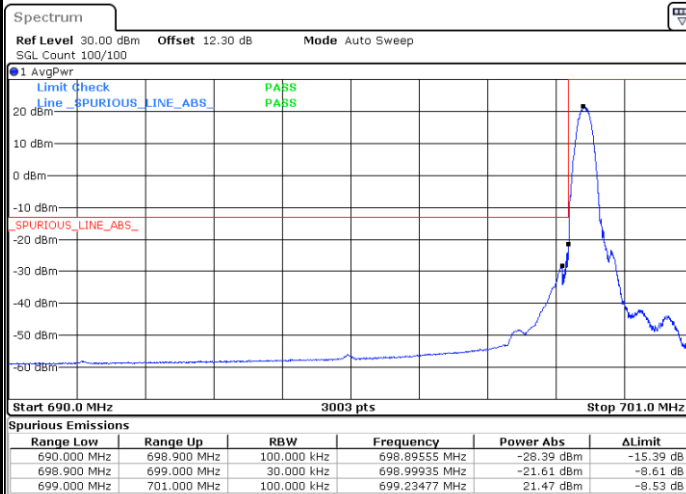




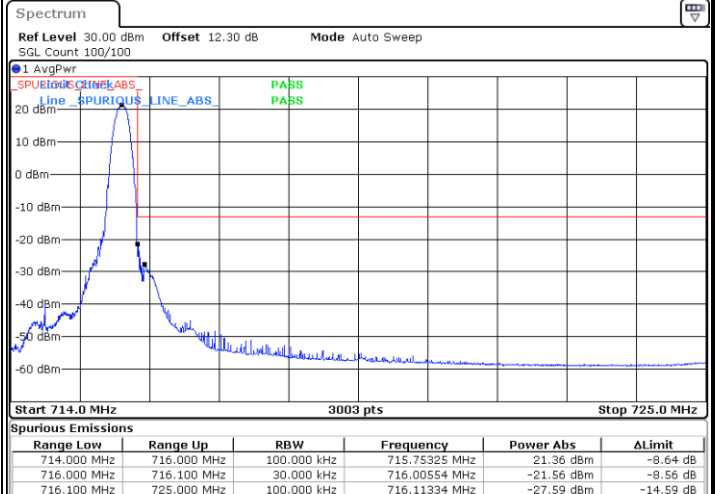
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

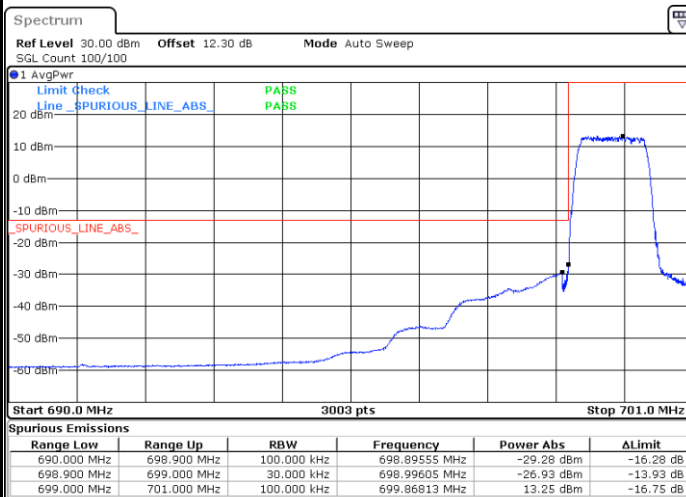
Lowest Band Edge / 1RB



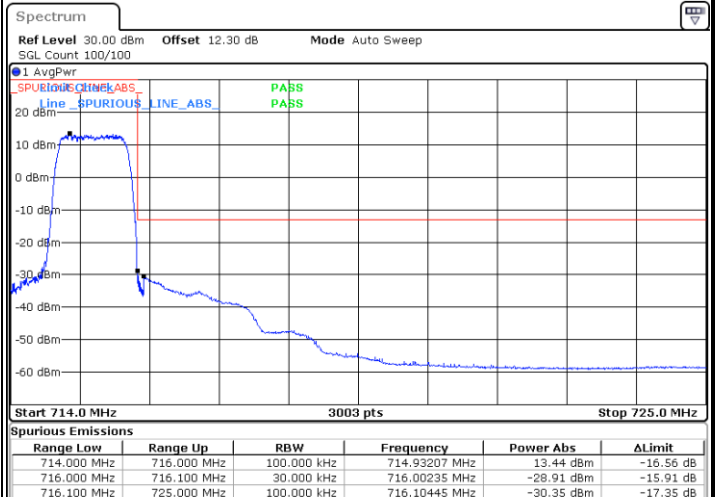
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



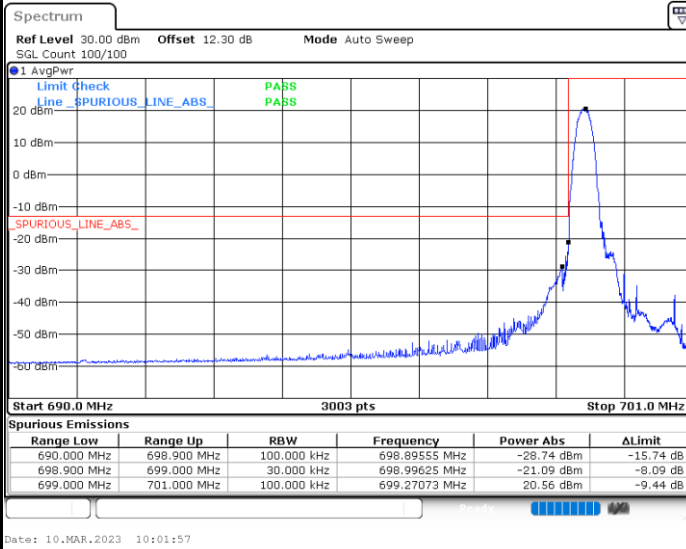
Highest Band Edge / Full RB



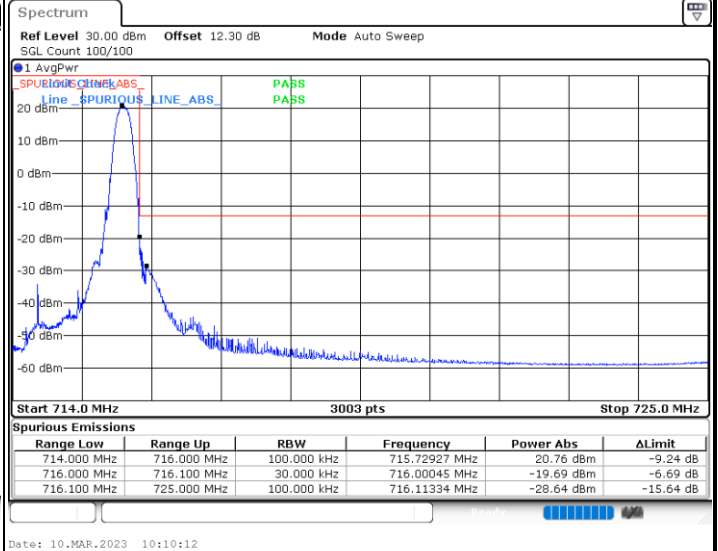


LTE Band 12 / 1.4MHz / 16QAM

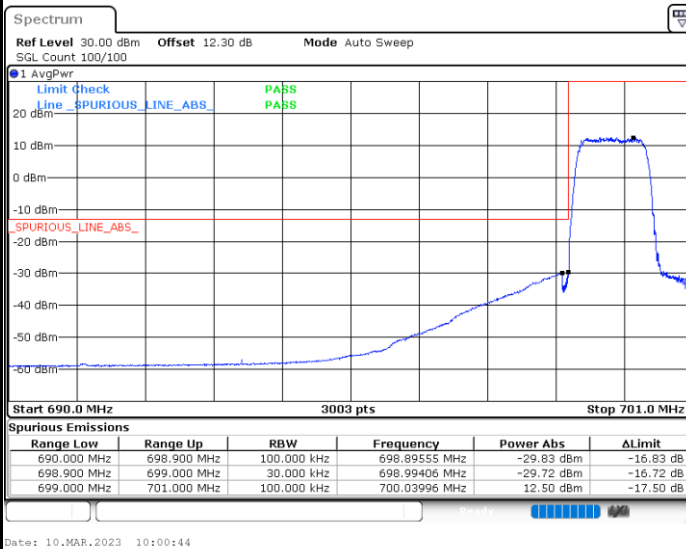
Lowest Band Edge / 1 RB



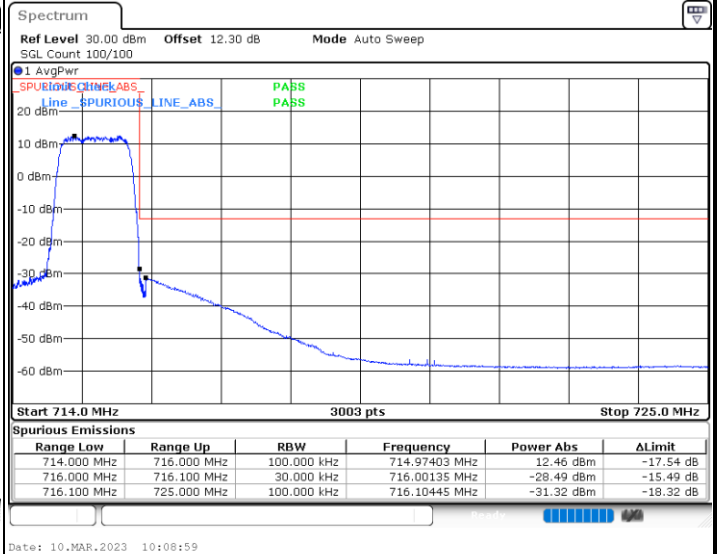
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



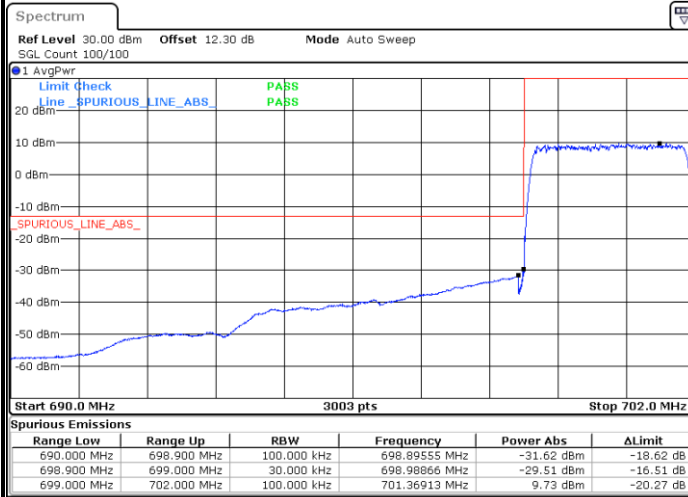
Highest Band Edge / Full RB



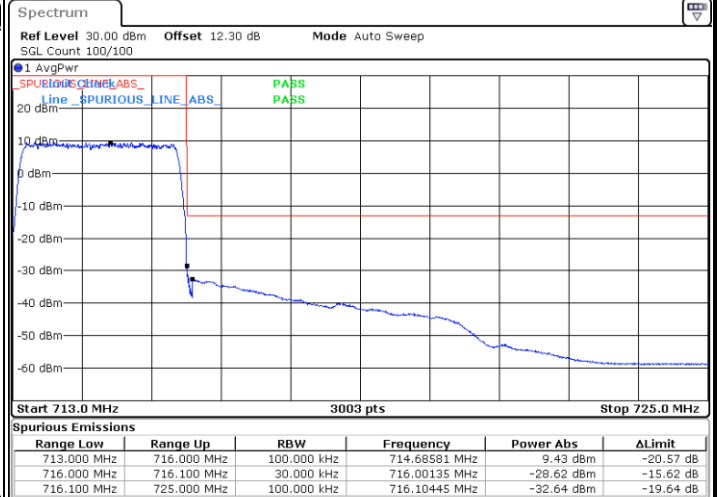


LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / Full RB

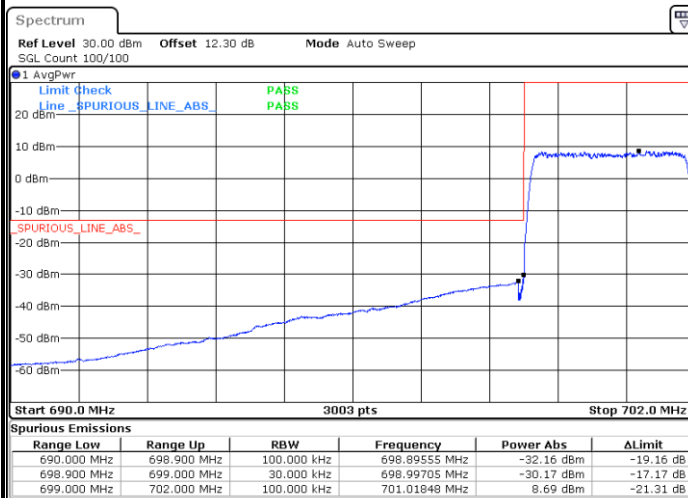


Highest Band Edge / Full RB

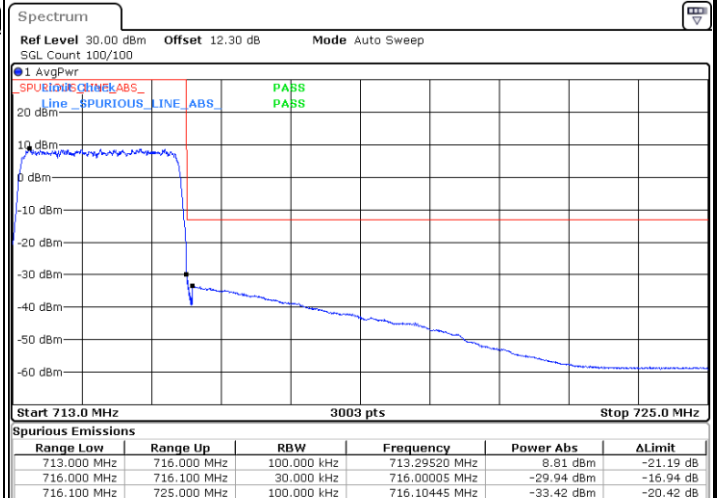


LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / Full RB



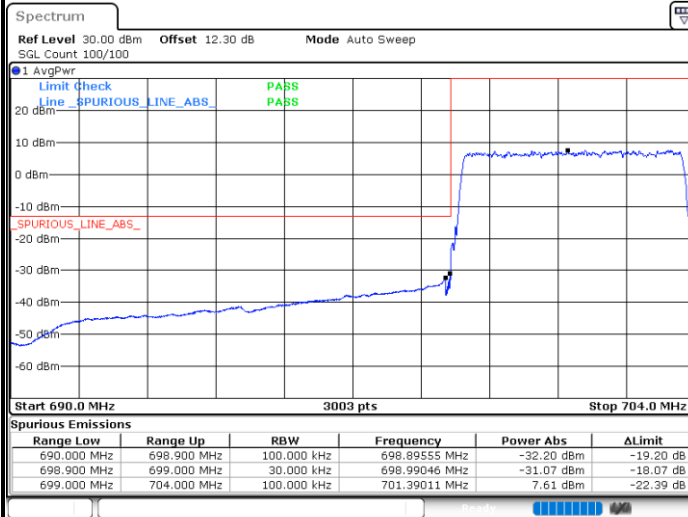
Highest Band Edge / Full RB



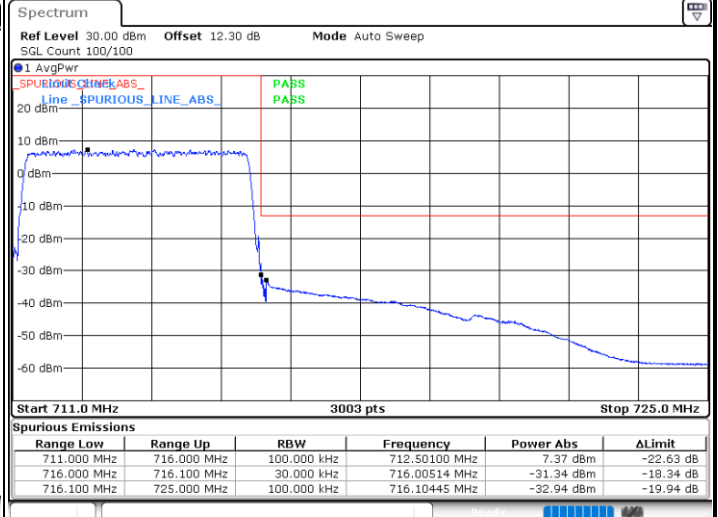


LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / Full RB

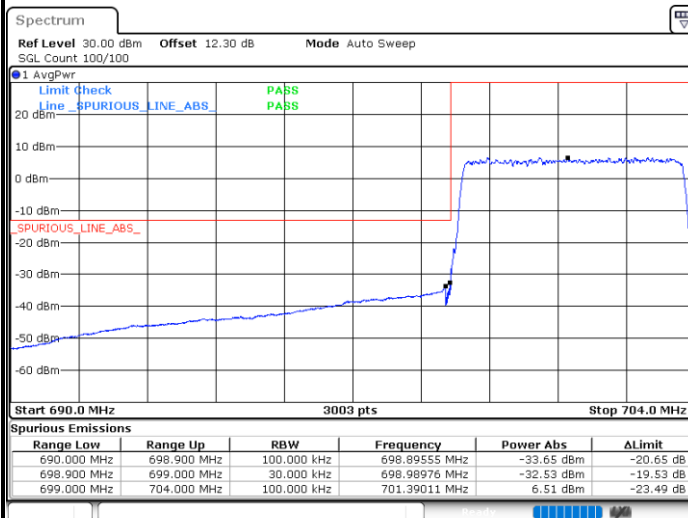


Highest Band Edge / Full RB

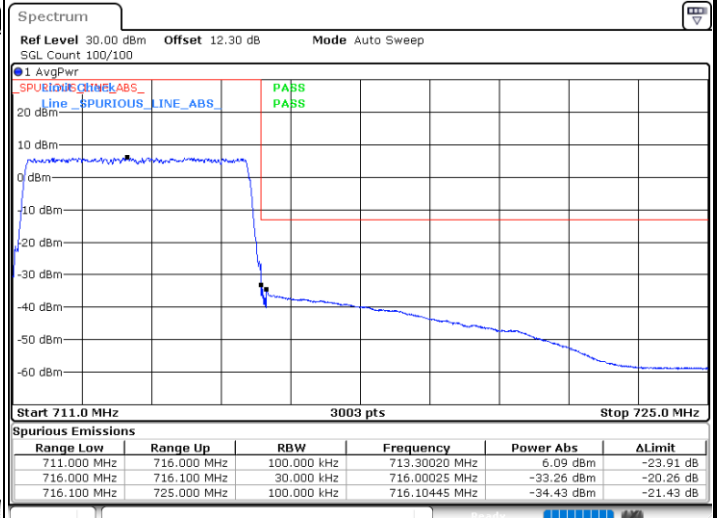


LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / Full RB



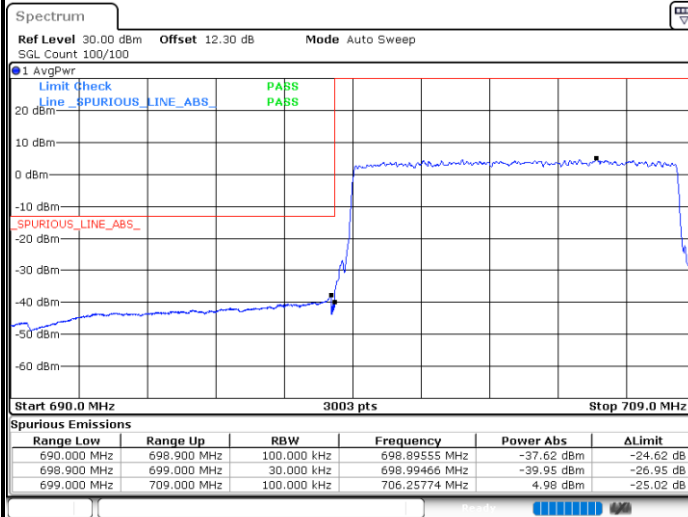
Highest Band Edge / Full RB



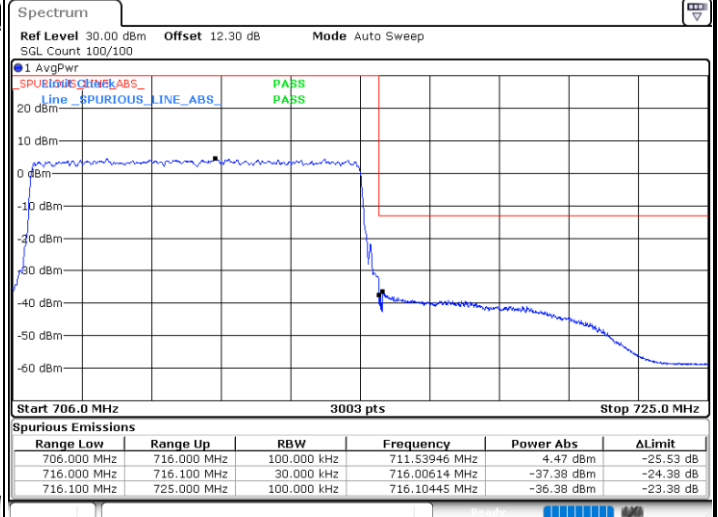


LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / Full RB

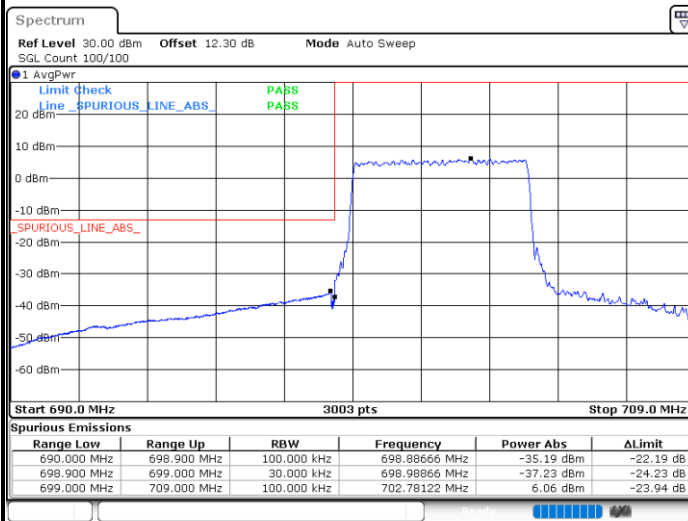


Highest Band Edge / Full RB

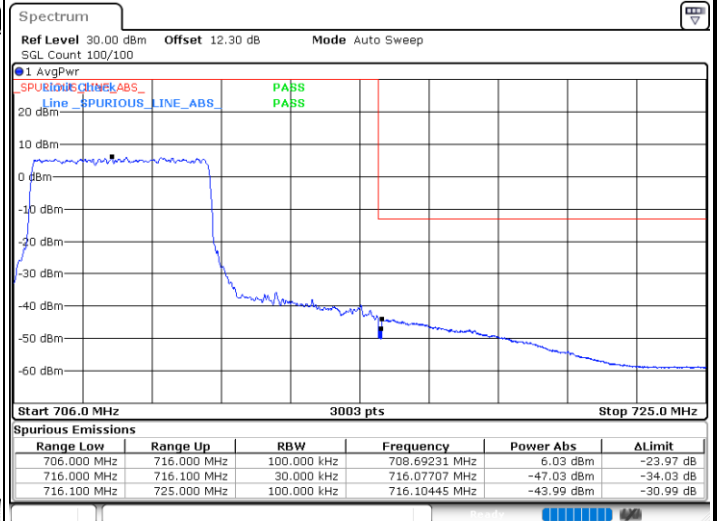


LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 27 RB0



Highest Band Edge / 27 RB0

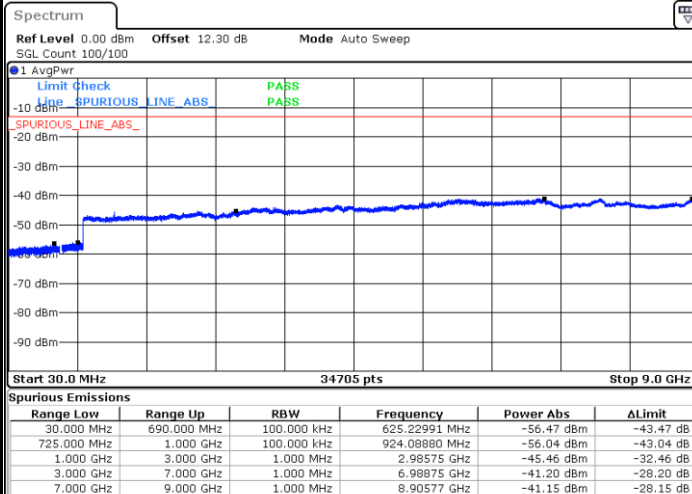




Conducted Spurious Emission

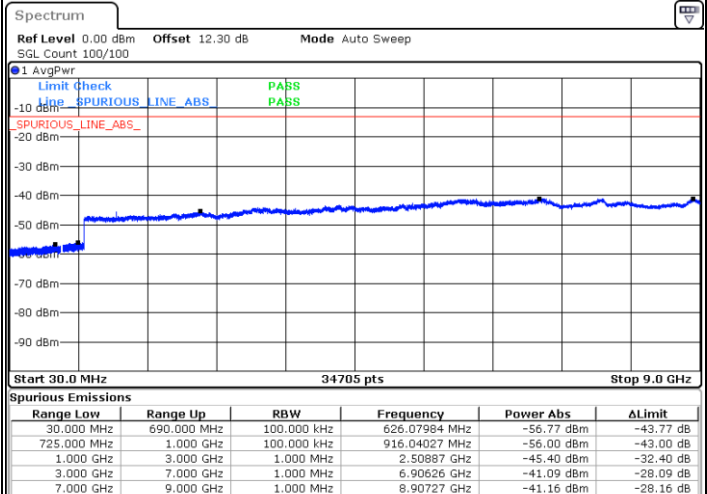
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



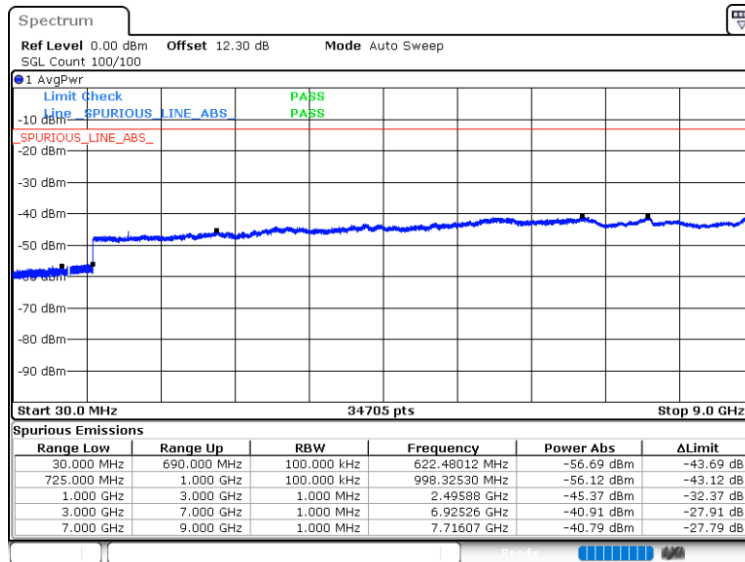
Date: 10.MAR.2023 10:04:05

Middle Channel / QPSK



Date: 10.MAR.2023 10:06:32

Highest Channel / QPSK

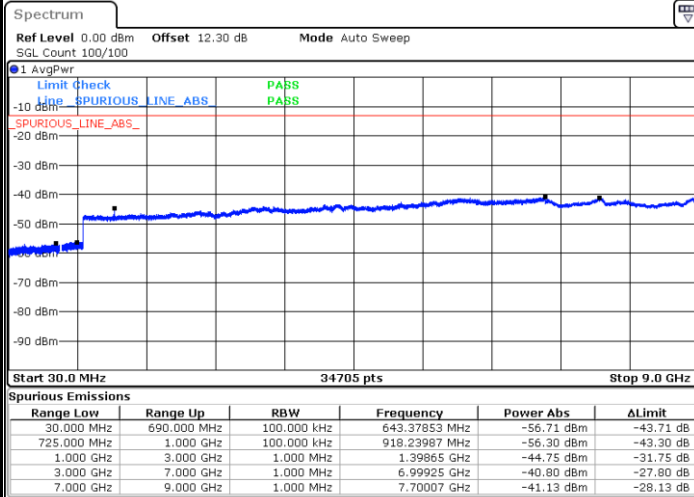


Date: 10.MAR.2023 10:12:18



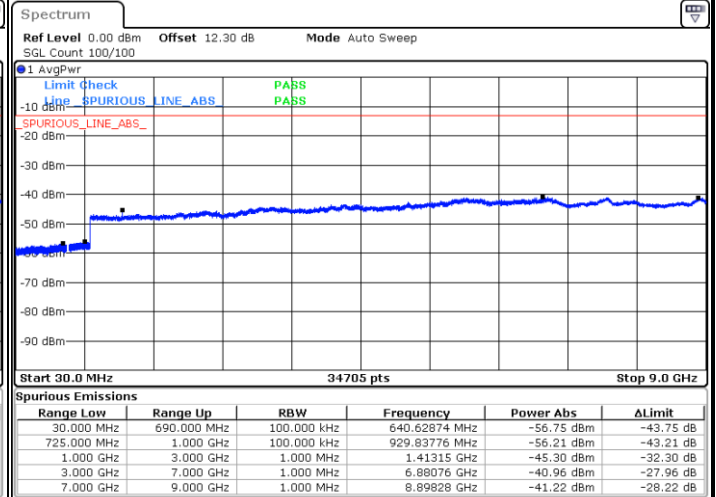
LTE Band 12 / 3MHz

Lowest Channel / QPSK



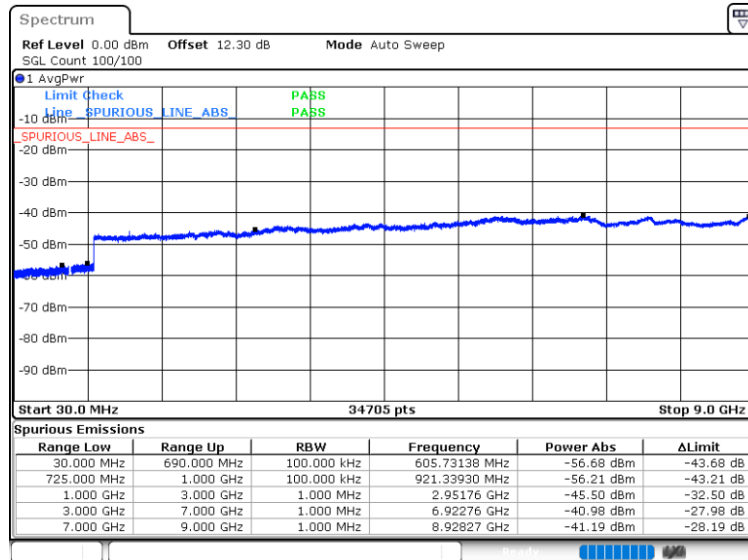
Date: 10.MAR.2023 10:46:29

Middle Channel / QPSK



Date: 10.MAR.2023 10:47:22

Highest Channel / QPSK

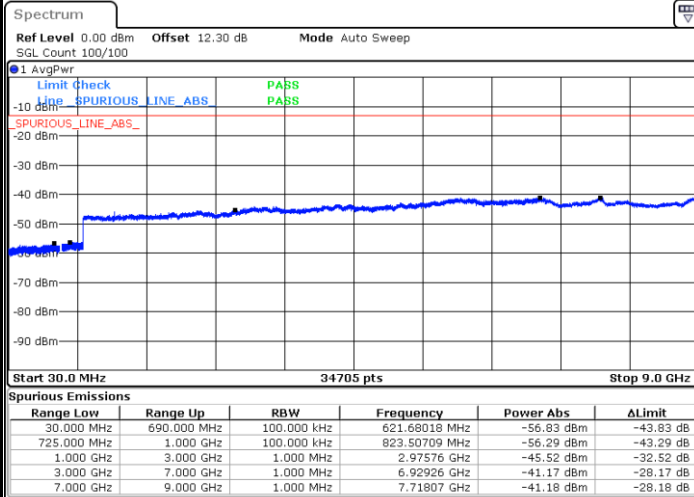


Date: 10.MAR.2023 10:48:14



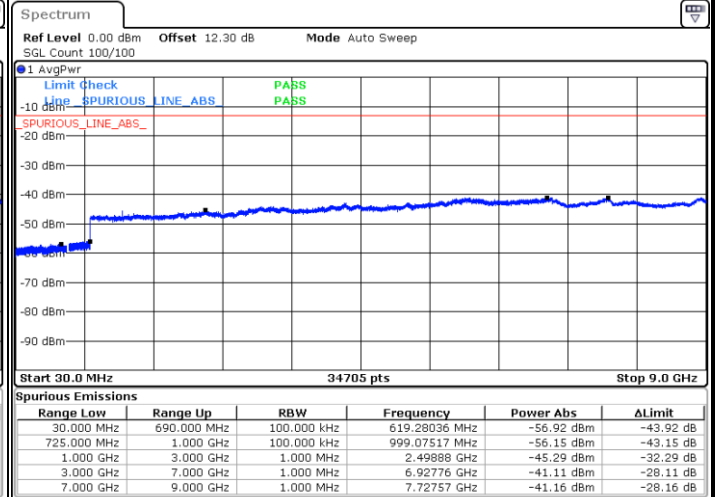
LTE Band 12 / 5MHz

Lowest Channel / QPSK



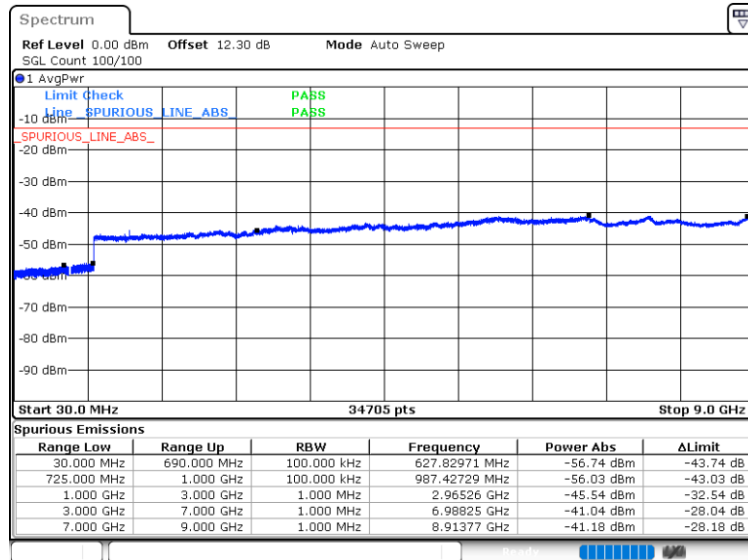
Date: 10.MAR.2023 10:49:08

Middle Channel / QPSK



Date: 10.MAR.2023 10:50:00

Highest Channel / QPSK

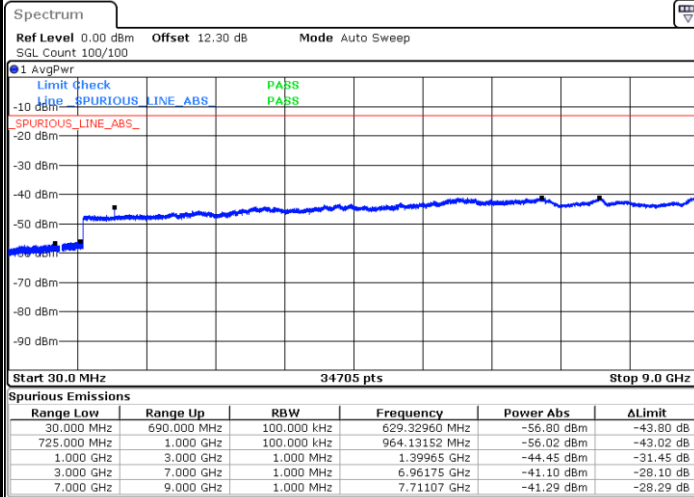


Date: 10.MAR.2023 10:50:53



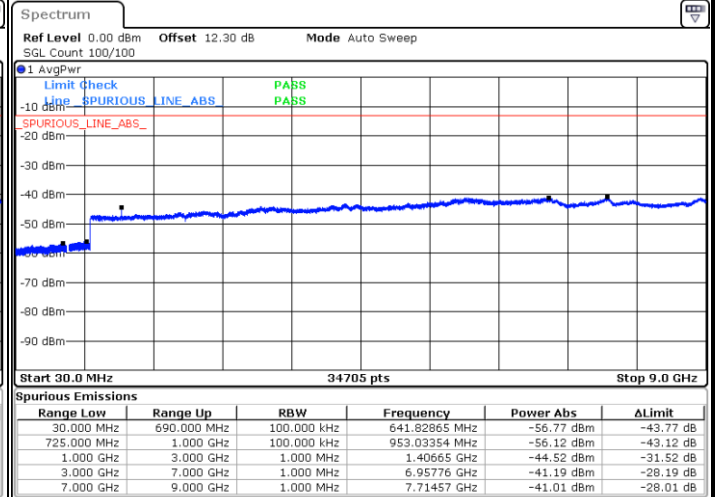
LTE Band 12 / 10MHz

Lowest Channel / QPSK



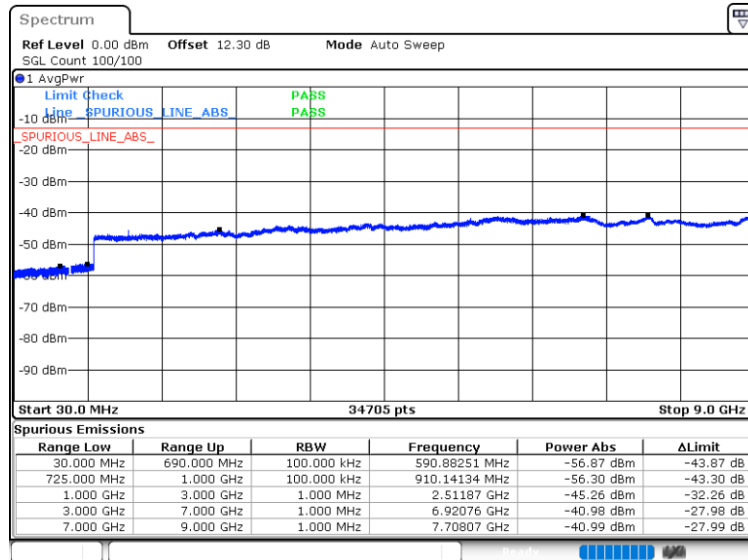
Date: 10.MAR.2023 10:51:47

Middle Channel / QPSK



Date: 10.MAR.2023 10:52:39

Highest Channel / QPSK



Date: 10.MAR.2023 10:53:32

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
35	Normal Voltage	0.0164	PASS
30	Normal Voltage	0.0055	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0141	
0	Normal Voltage	0.0148	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0151	
20	Battery End Point	0.0054	

Note:

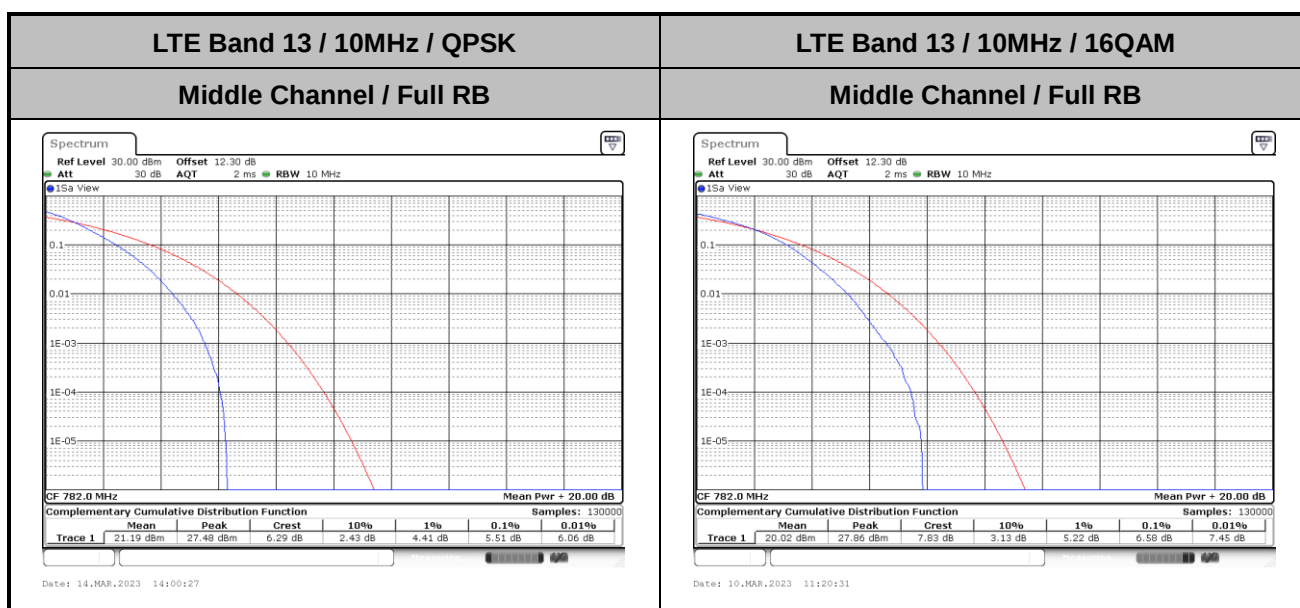
1. Normal Voltage = 3.87 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

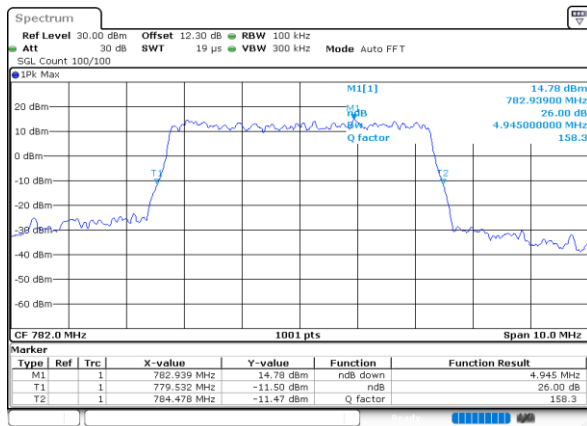
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	27 RB0	Result
Middle CH	5.51	6.58	PASS

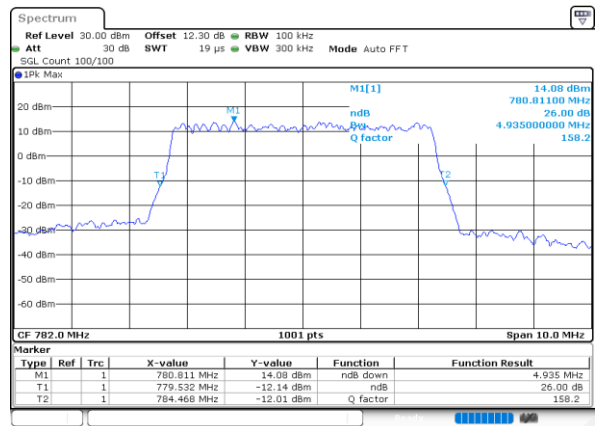


**26dB Bandwidth**

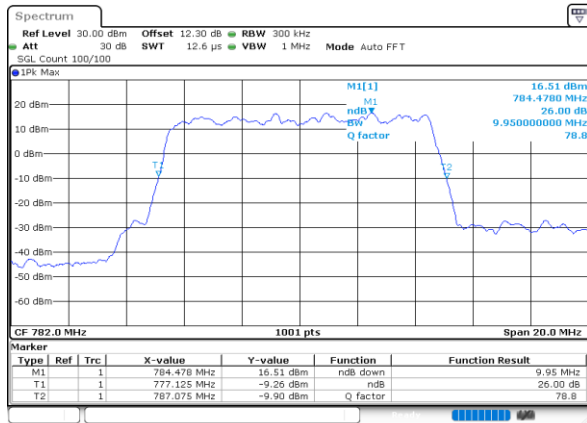
Mode	LTE Band 13 : 26dB BW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.95	4.94	9.95	5.40

LTE Band 13**Middle Channel / 5MHz / QPSK**

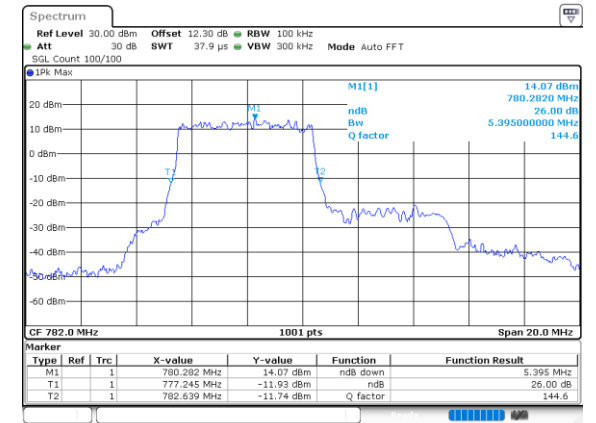
Date: 10.MAR.2023 11:09:08

Middle Channel / 5MHz / 16QAM

Date: 10.MAR.2023 11:09:32

Middle Channel / 10MHz / QPSK

Date: 10.MAR.2023 11:17:41

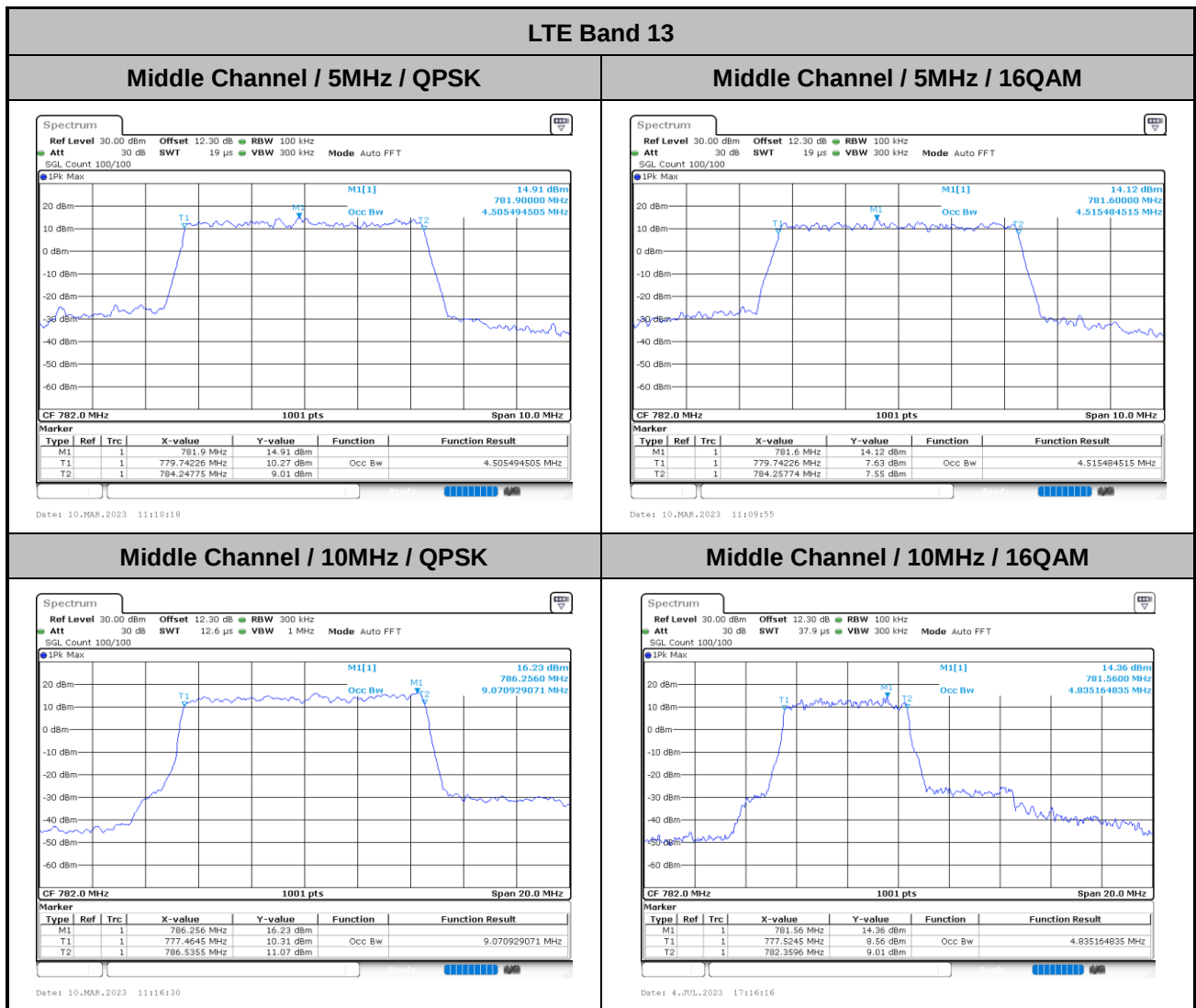
Middle Channel / 10MHz / 16QAM

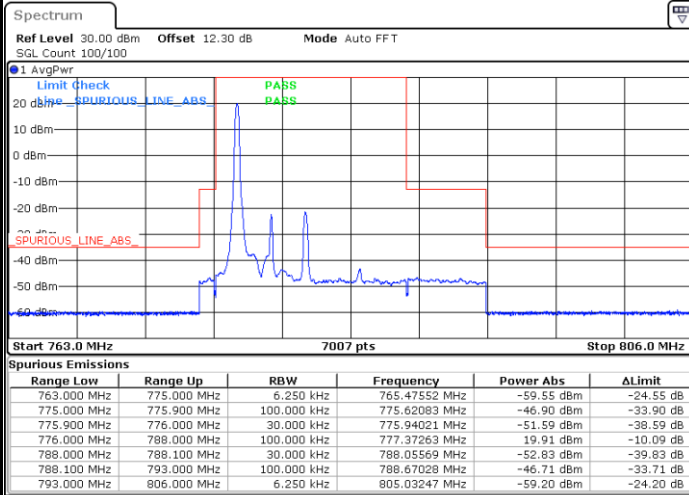
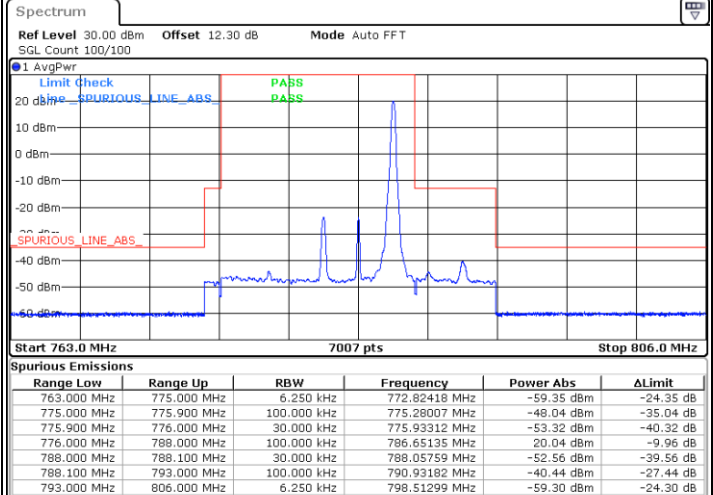
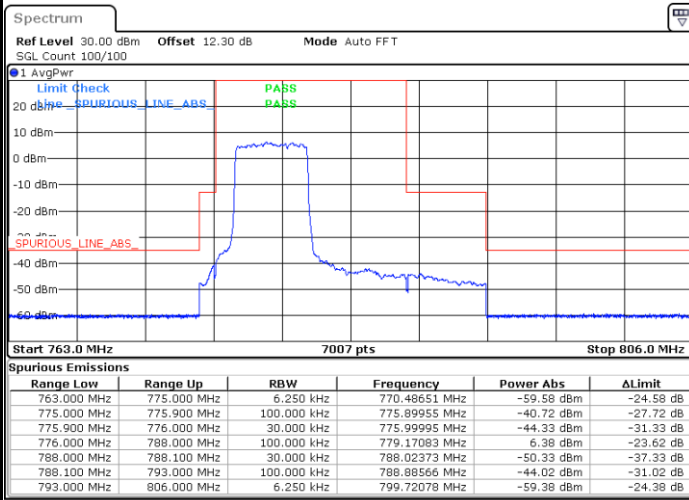
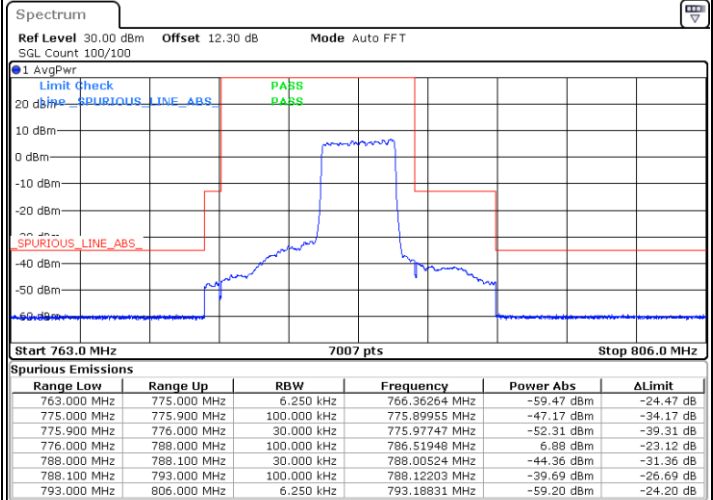
Date: 4.JUL.2023 17:16:40



Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.51	4.52	9.07	4.84

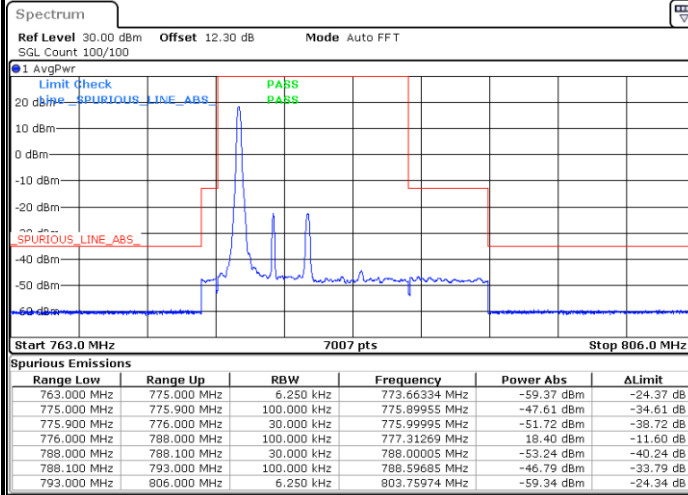


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



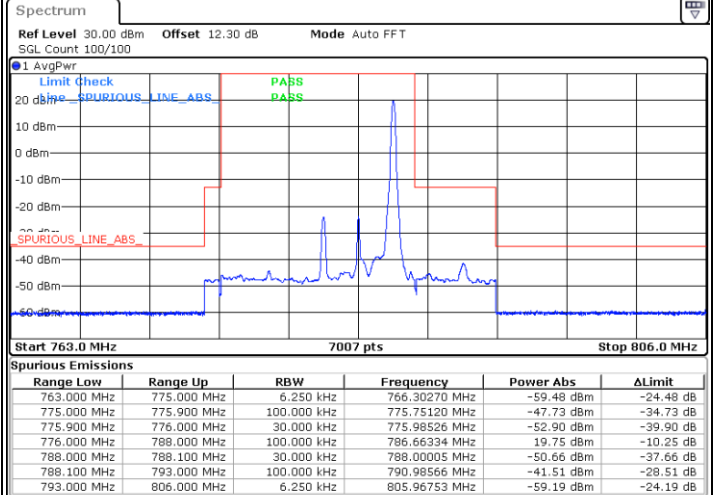
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



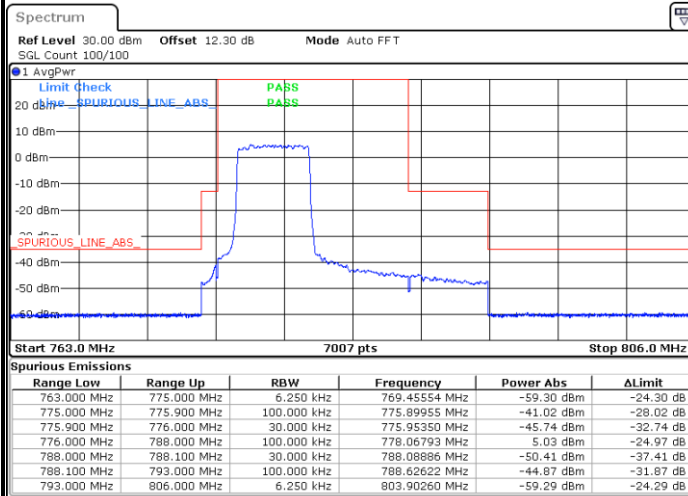
Date: 10.MAR.2023 11:05:45

Highest Band Edge / 1 RB



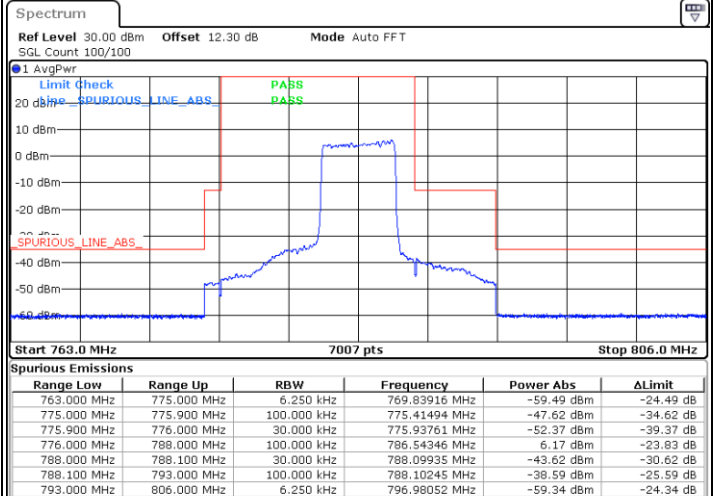
Date: 10.MAR.2023 11:13:59

Lowest Band Edge / Full RB



Date: 10.MAR.2023 11:04:31

Highest Band Edge / Full RB



Date: 10.MAR.2023 11:12:45

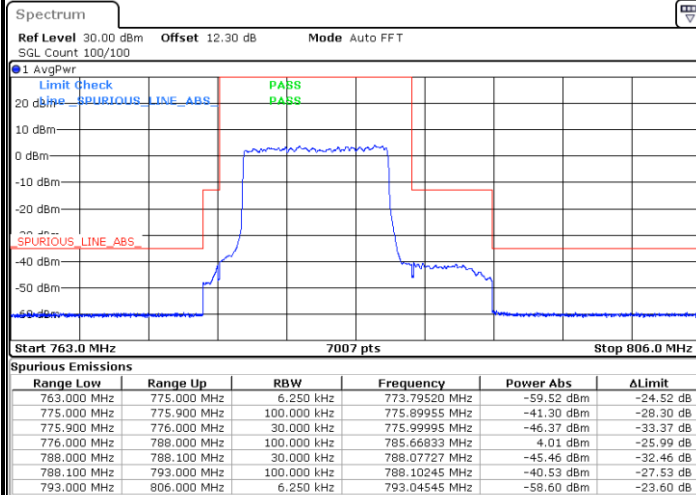


LTE Band 13 / 10MHz / QPSK

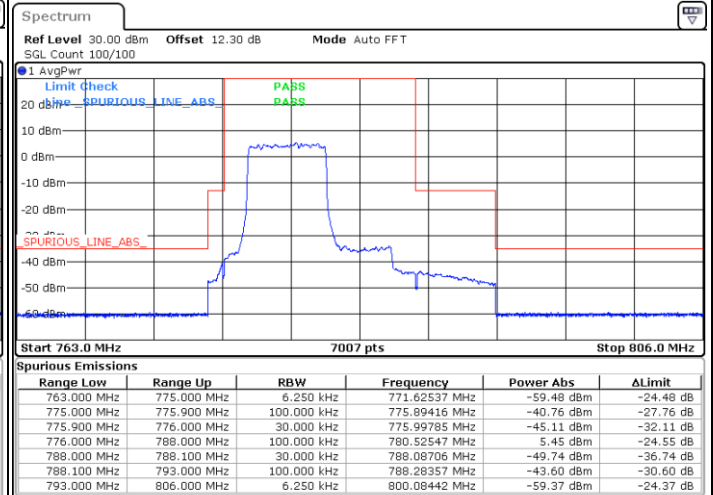
Band Edge / Full RB

LTE Band 13 / 10MHz / 16QAM

Band Edge / 27 RB0



Date: 10.MAR.2023 11:18:53



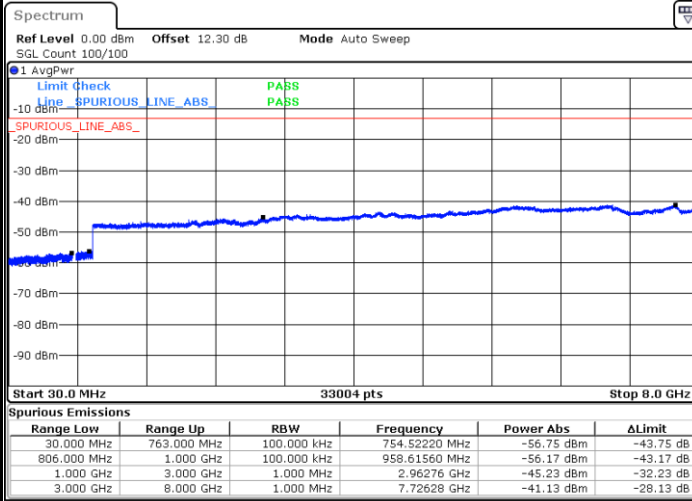
Date: 10.MAR.2023 11:20:06



Conducted Spurious Emission

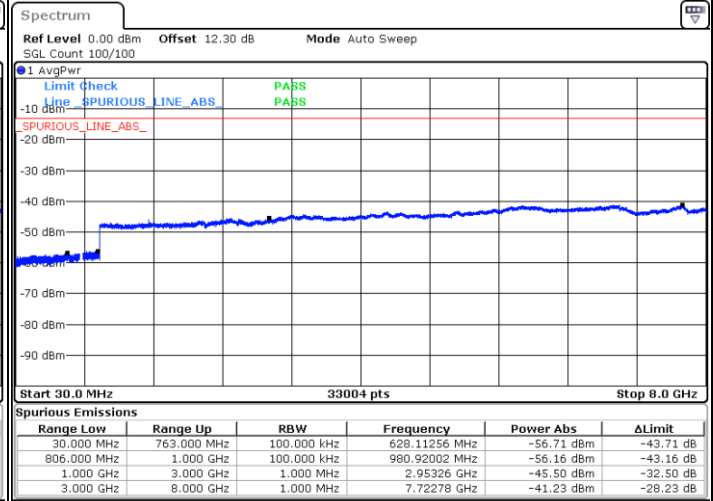
LTE Band 13 / 5MHz

Lowest Channel / QPSK



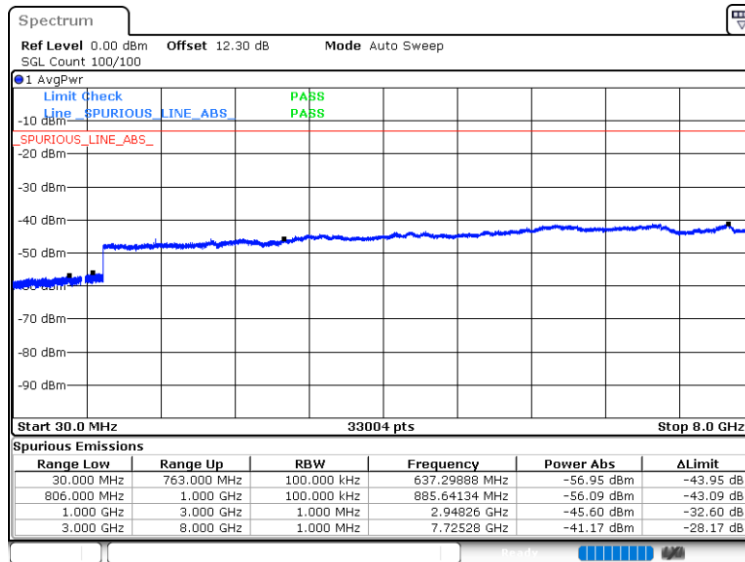
Date: 10.MAR.2023 11:07:51

Middle Channel / QPSK



Date: 10.MAR.2023 11:08:44

Highest Channel / QPSK

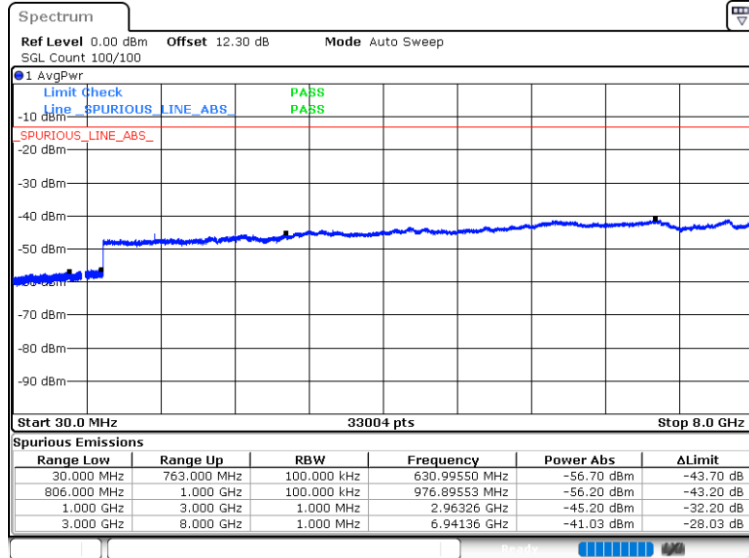


Date: 10.MAR.2023 11:16:05



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 10.MAR.2023 11:21:24

Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
35	Normal Voltage	0.0020	PASS
30	Normal Voltage	0.0097	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0056	
0	Normal Voltage	0.0051	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0150	
20	Battery End Point	0.0022	

Note:

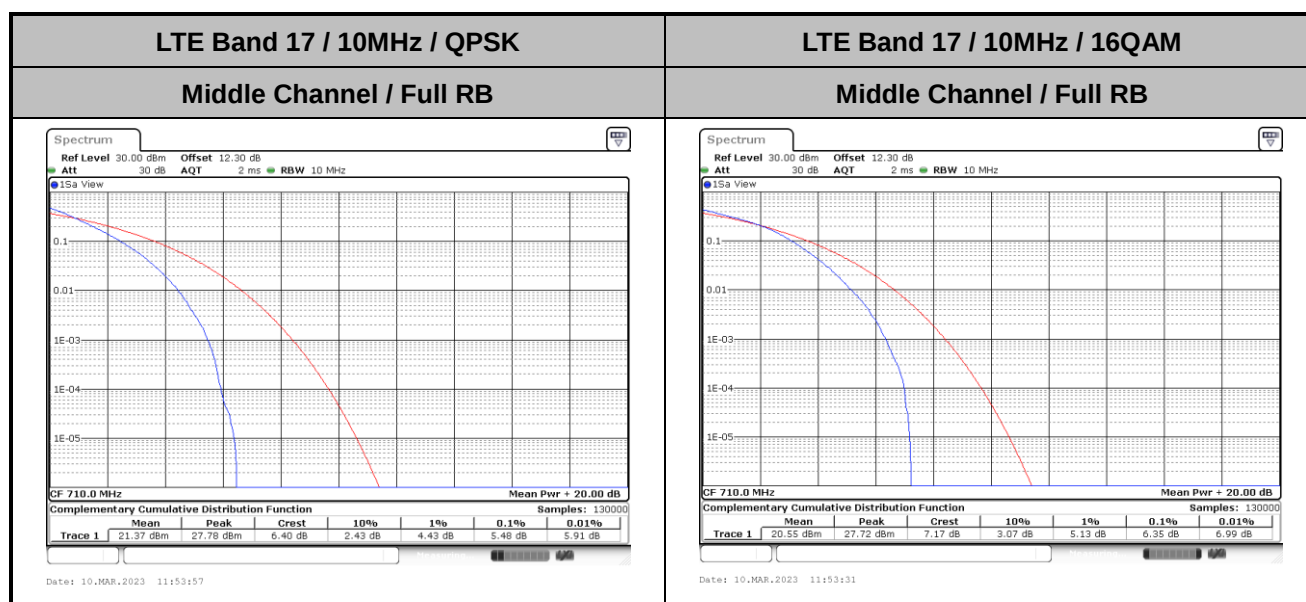
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 17

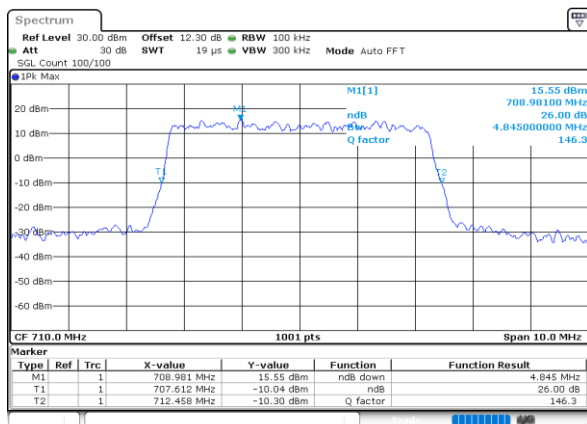
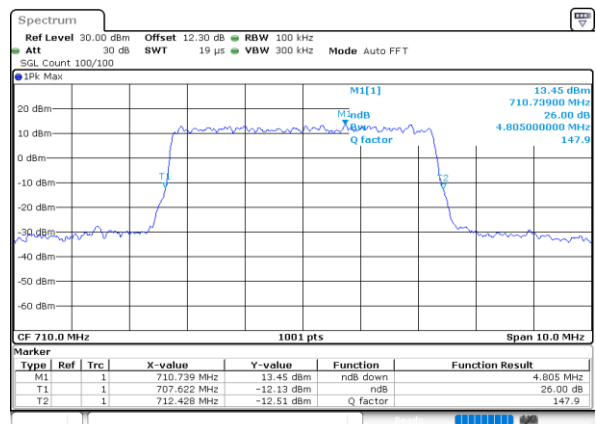
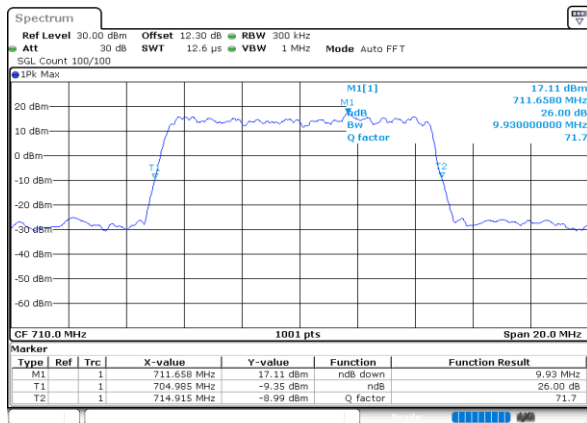
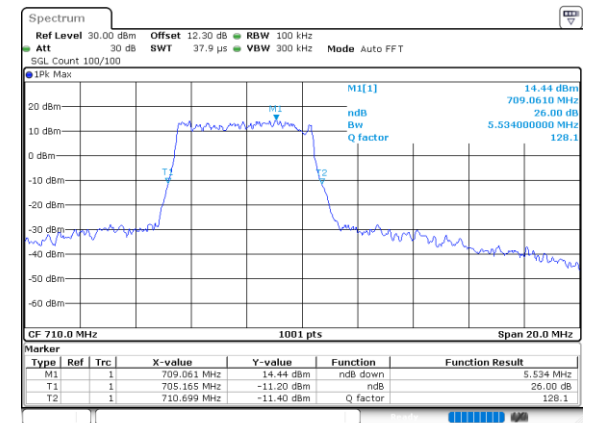
Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	27RB0	Result
Middle CH	5.48	6.35	PASS



**26dB Bandwidth**

Mode	LTE Band 17 : 26dB BW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.85	4.81	9.93	5.53

LTE Band 17**Middle Channel / 5MHz / QPSK****Middle Channel / 5MHz / 16QAM****Middle Channel / 10MHz / QPSK****Middle Channel / 10MHz / 16QAM**

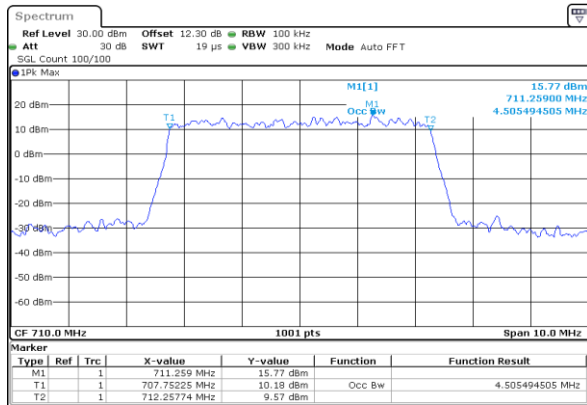


Occupied Bandwidth

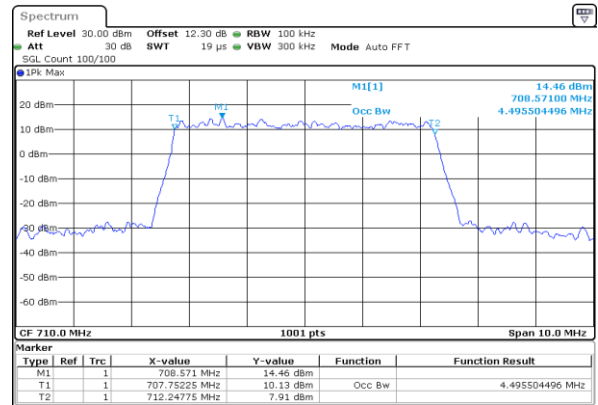
Mode	LTE Band 17 : 99%OBW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.51	4.50	9.05	4.88

LTE Band 17

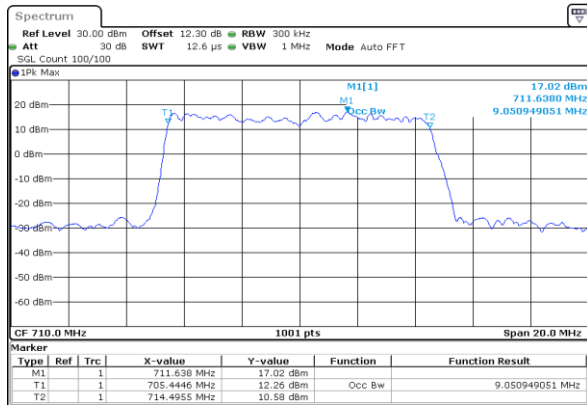
Middle Channel / 5MHz / QPSK



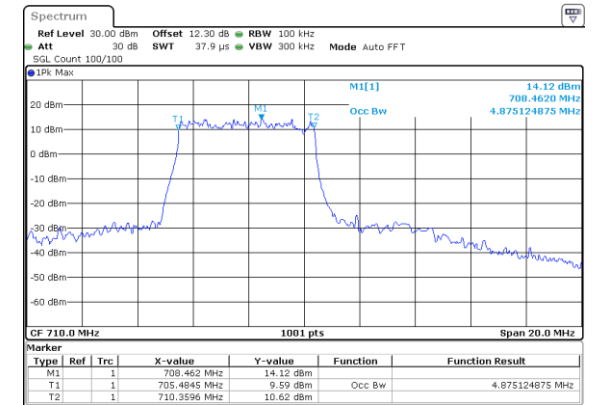
Middle Channel / 5MHz / 16QAM

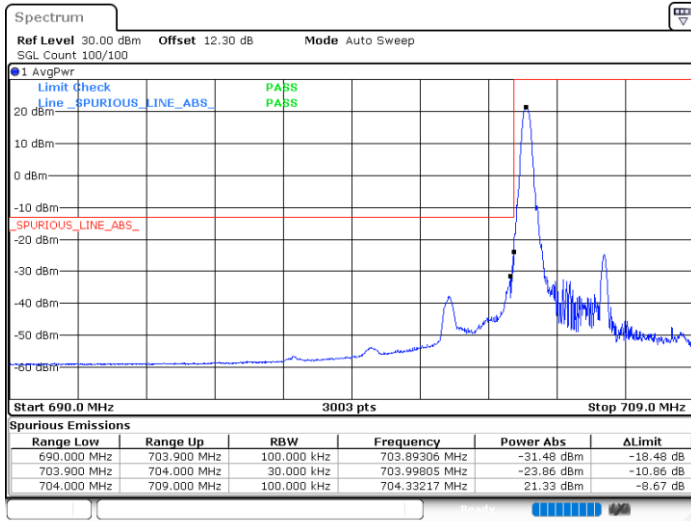
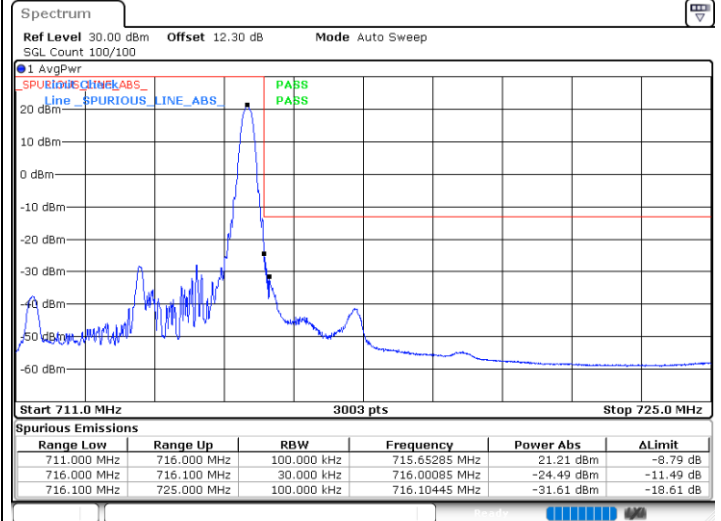
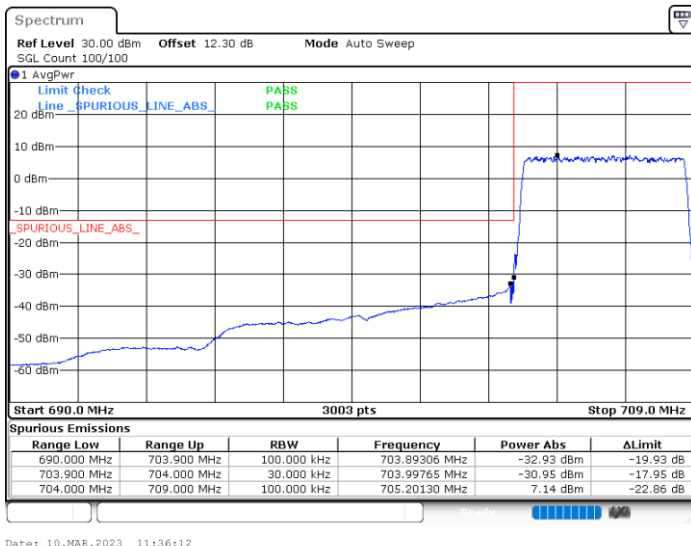
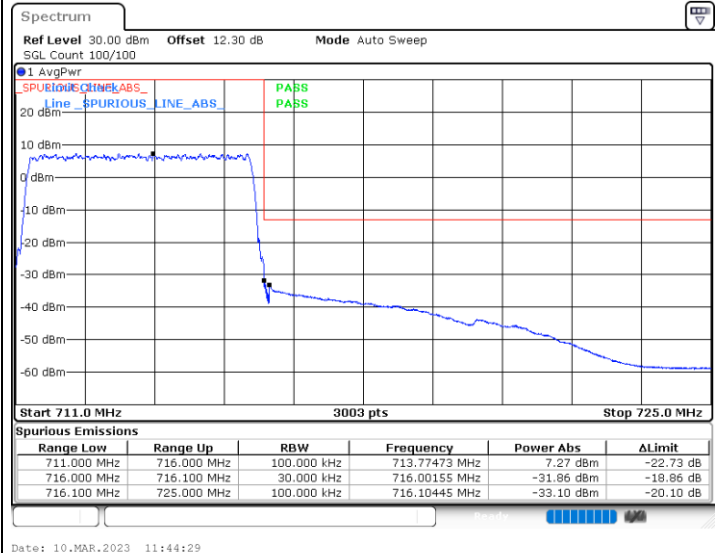


Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

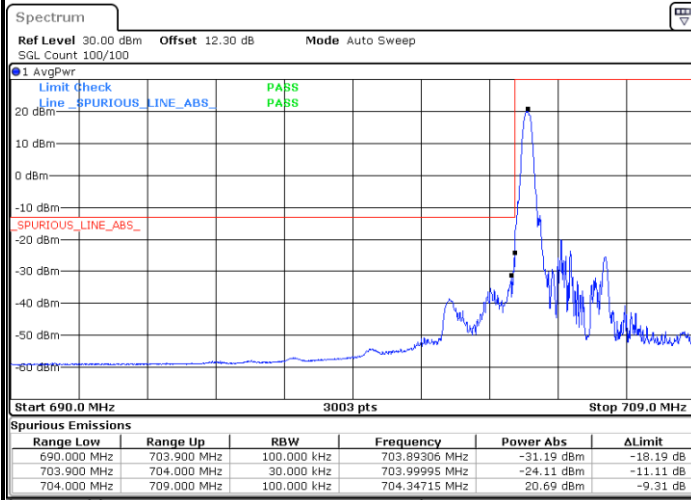


**Conducted Band Edge****LTE Band 17 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



LTE Band 17 / 5MHz / 16QAM

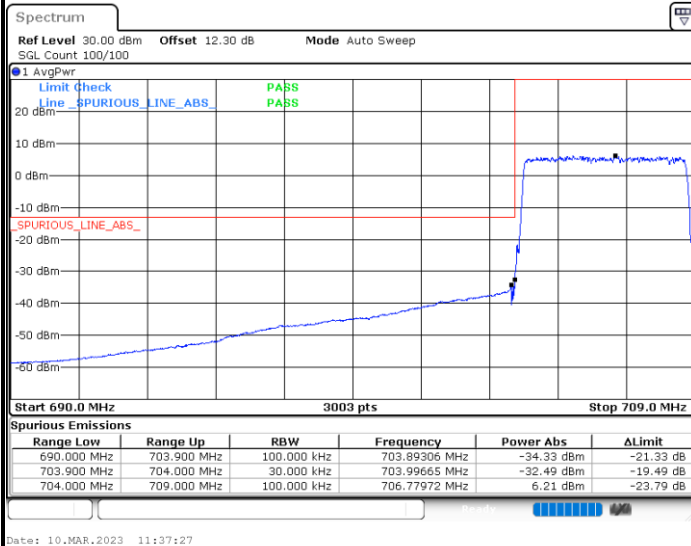
Lowest Band Edge / 1 RB



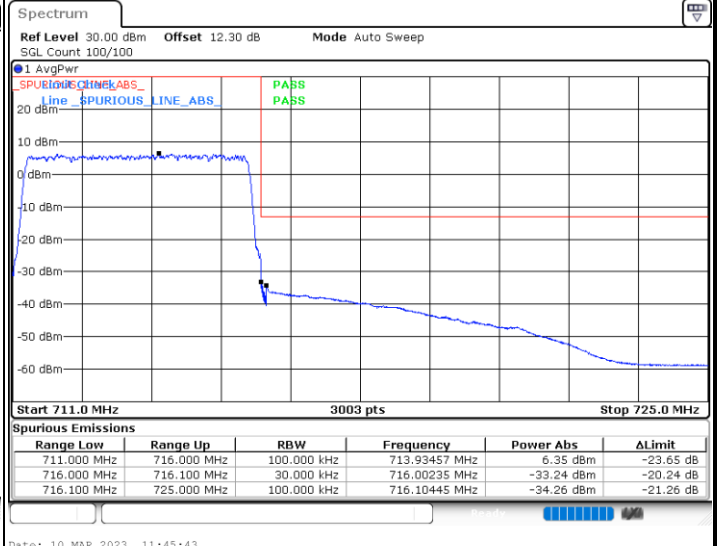
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



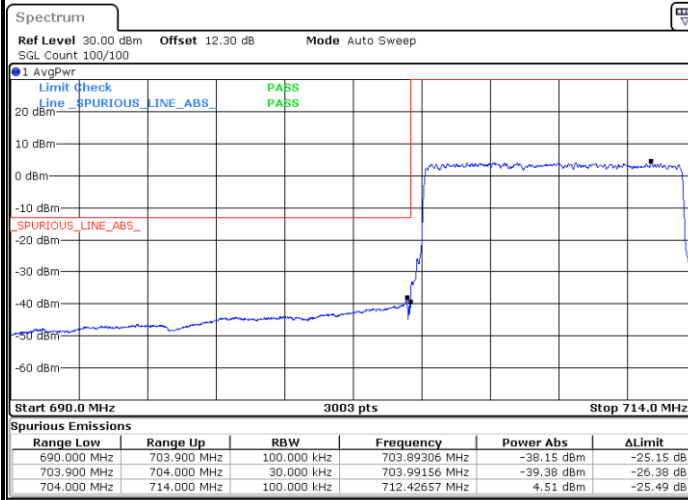
Highest Band Edge / Full RB



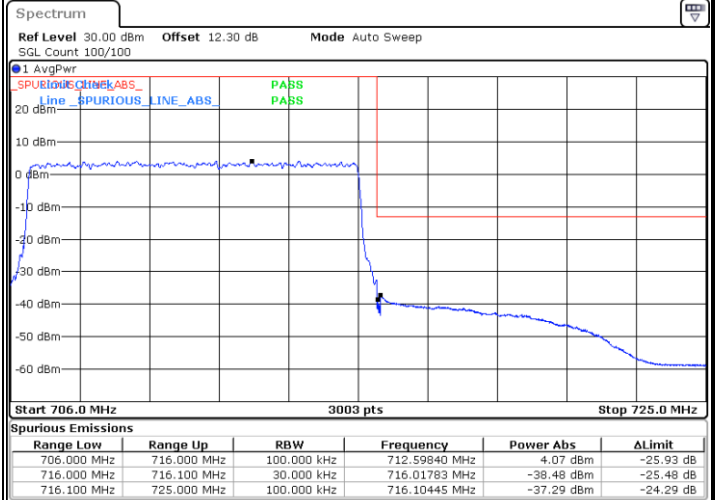


LTE Band 17 / 10MHz / QPSK

Lowest Band Edge / Full RB

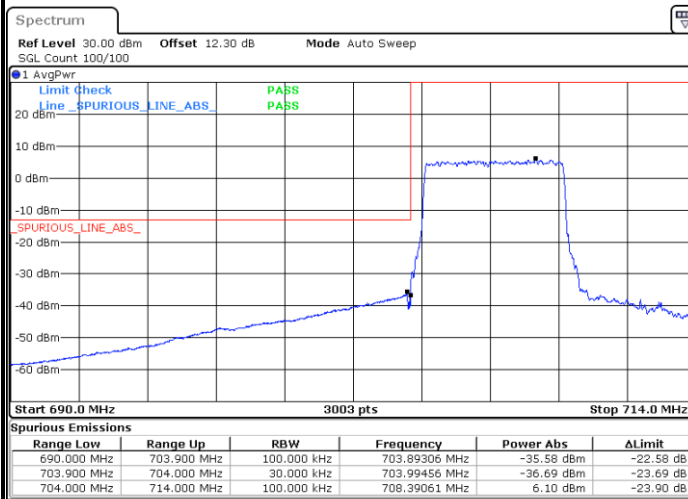


Highest Band Edge / Full RB

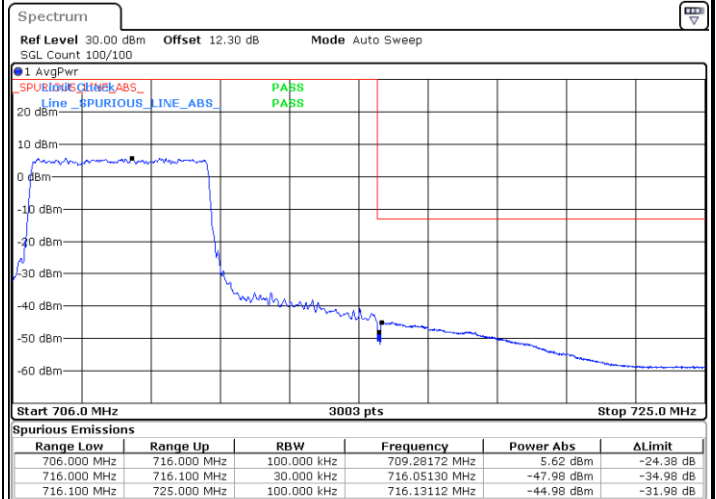


LTE Band 17 / 10MHz / 16QAM

Lowest Band Edge / 27 RB0



Highest Band Edge / 27 RB0

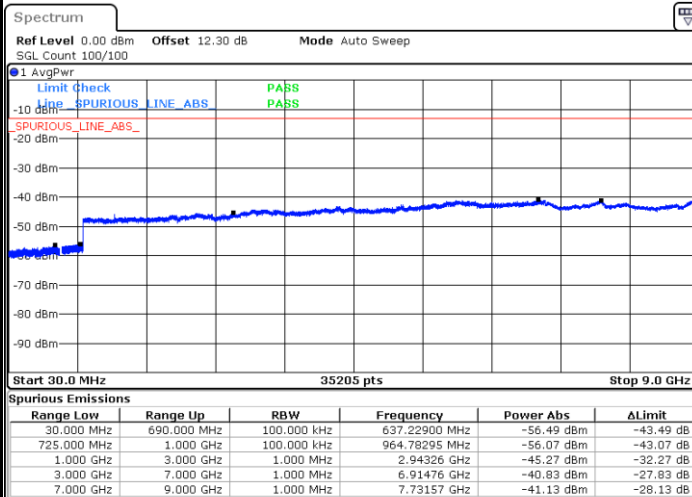




Conducted Spurious Emission

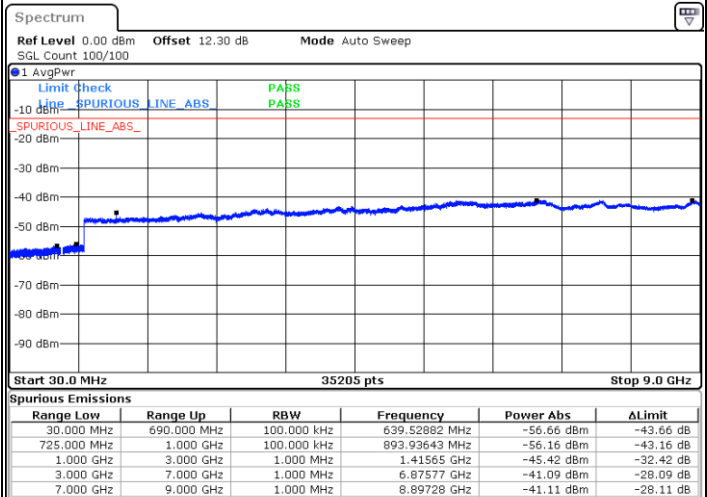
LTE Band 17 / 5MHz

Lowest Channel / QPSK



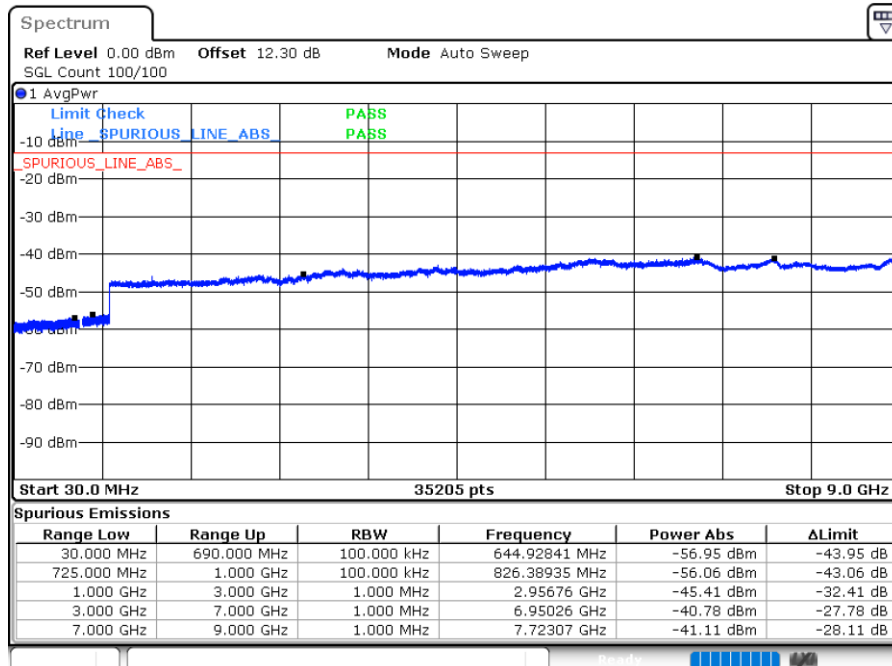
Date: 10.MAR.2023 11:38:20

Middle Channel / QPSK



Date: 10.MAR.2023 11:40:48

Highest Channel / QPSK

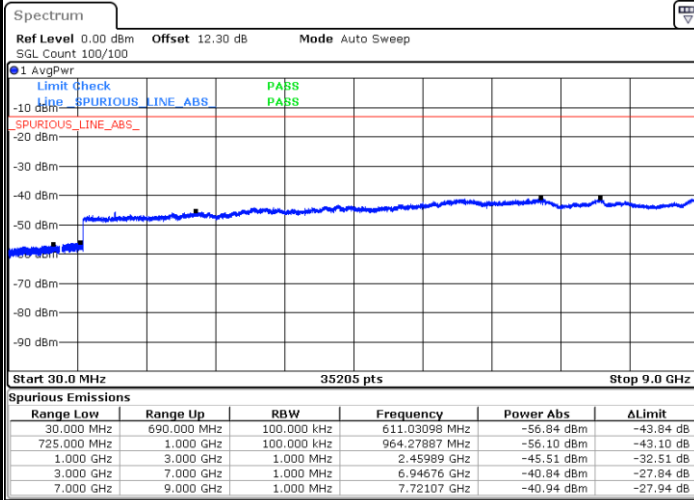


Date: 10.MAR.2023 11:46:36



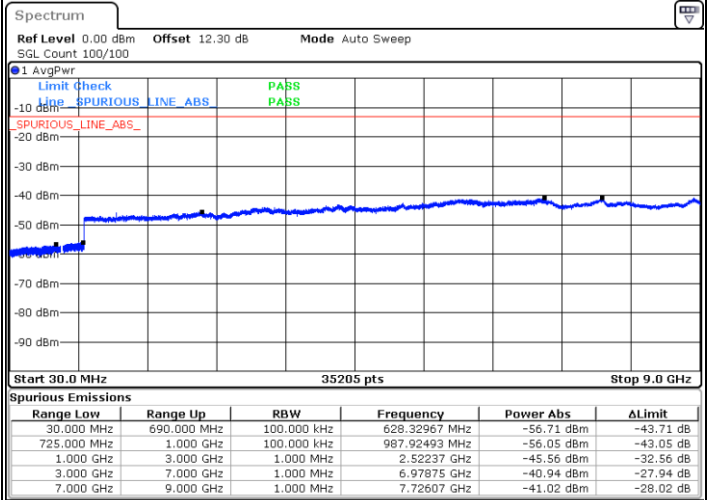
LTE Band 17 / 10MHz

Lowest Channel / QPSK



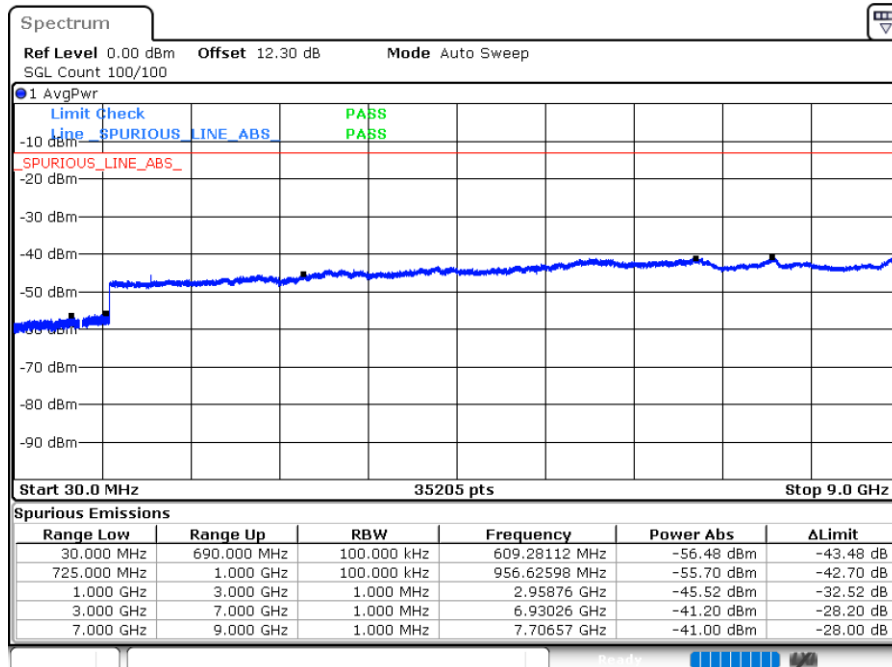
Date: 10.MAR.2023 11:54:49

Middle Channel / QPSK



Date: 10.MAR.2023 11:55:42

Highest Channel / QPSK



Date: 10.MAR.2023 11:56:34

Frequency Stability

Test Conditions		LTE Band 17 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
35	Normal Voltage	0.0059	PASS
30	Normal Voltage	0.0072	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0149	
0	Normal Voltage	0.0051	
20	Maximum Voltage	0.0086	
20	Normal Voltage	0.0075	
20	Battery End Point	0.0048	

Note:

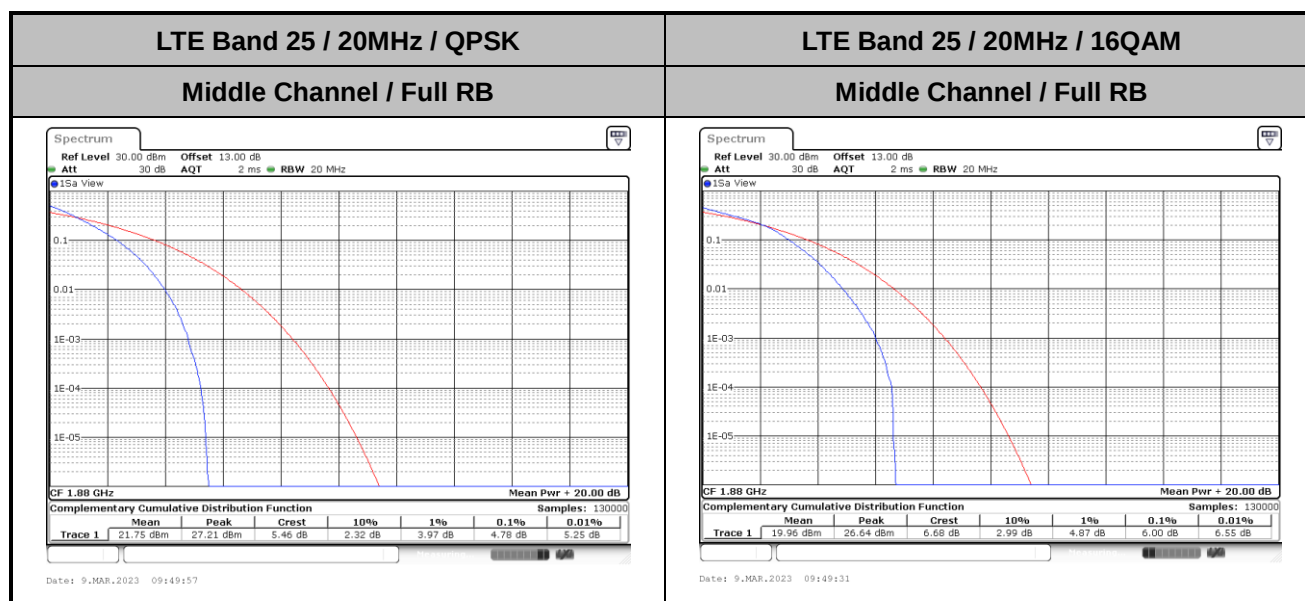
1. Normal Voltage = 3.87 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 25

Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	27 RB0	Result
Middle CH	4.78	6.00	PASS



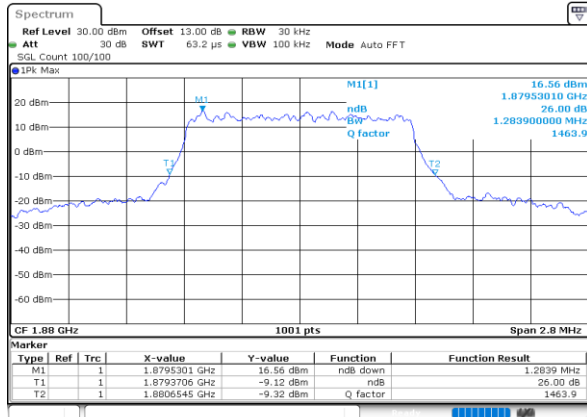
**26dB Bandwidth**

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	1.28	1.24	3.01	3.02	4.91	4.98	10.03	5.36	14.54	5.66	18.98	5.51

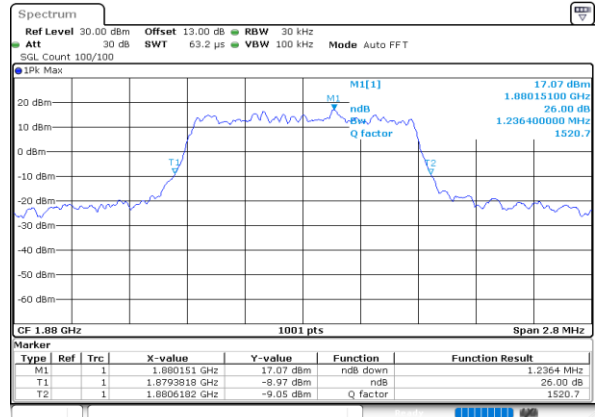


LTE Band 25

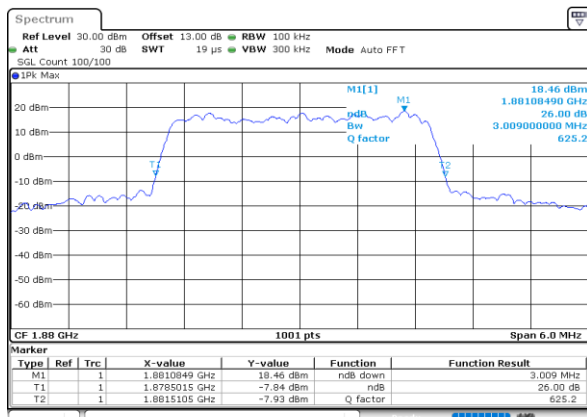
Middle Channel / 1.4MHz / QPSK



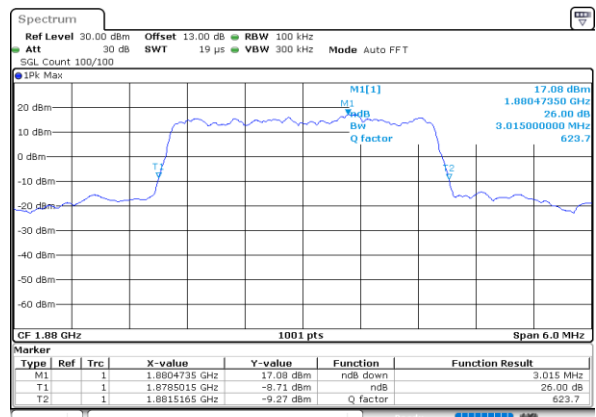
Middle Channel / 1.4MHz / 16QAM



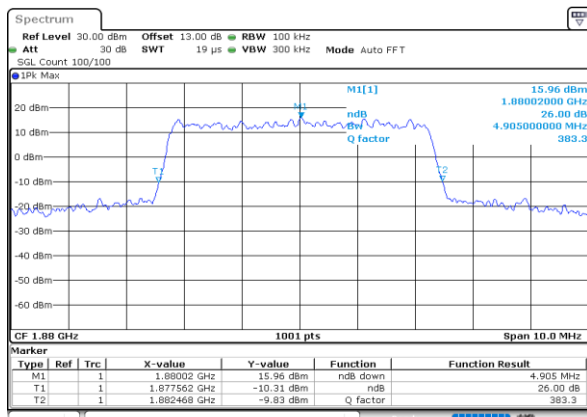
Middle Channel / 3MHz / QPSK



Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



Middle Channel / 5MHz / 16QAM

