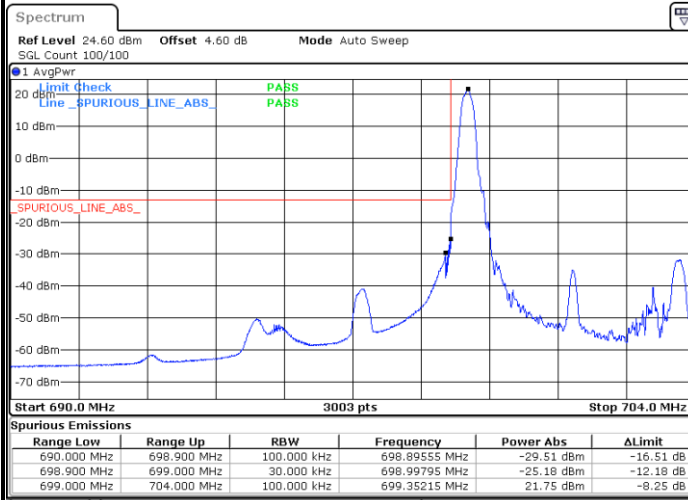


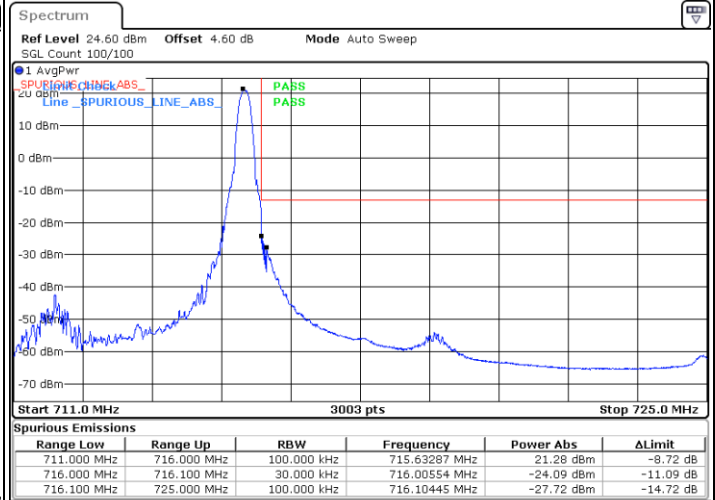


LTE Band 12 / 5MHz / 16QAM

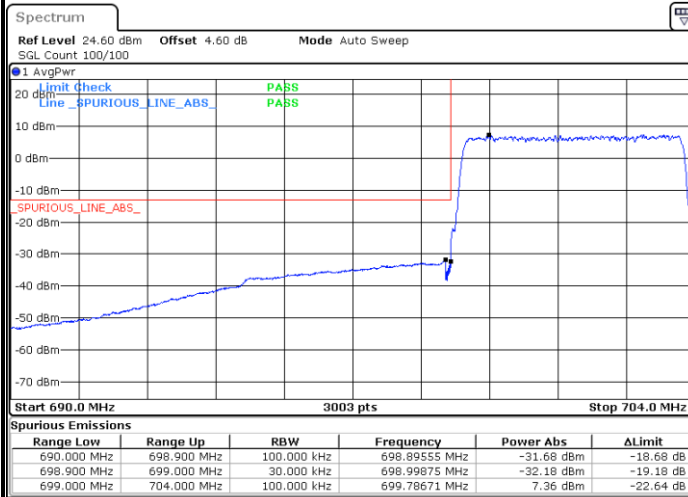
Lowest Band Edge / 1RB



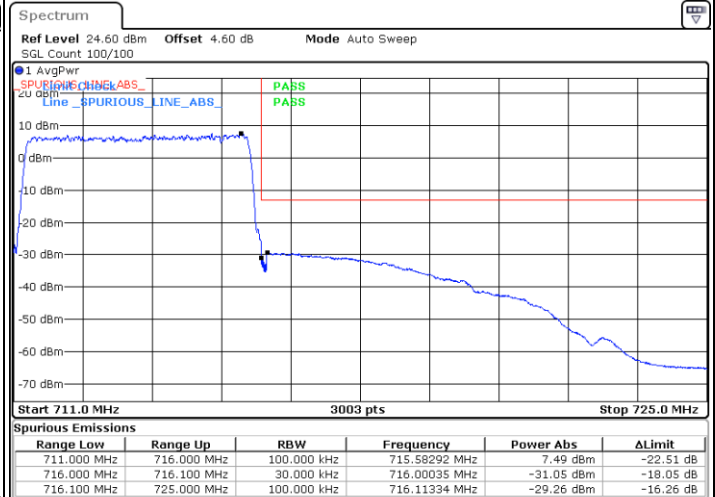
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



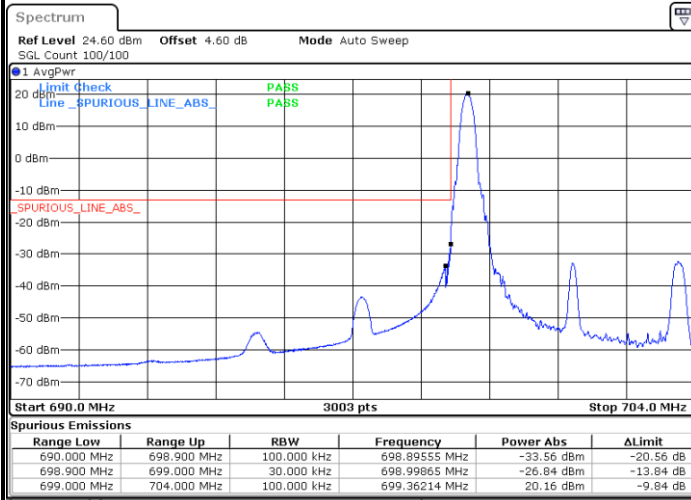
Highest Band Edge / Full RB



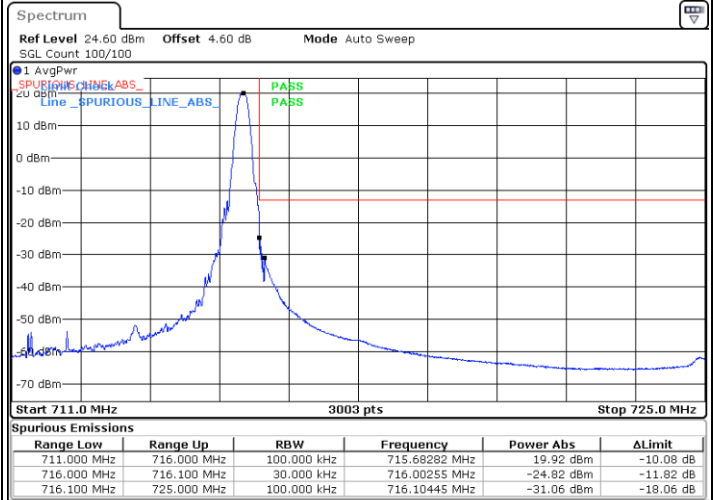


LTE Band 12 / 5MHz / 64QAM

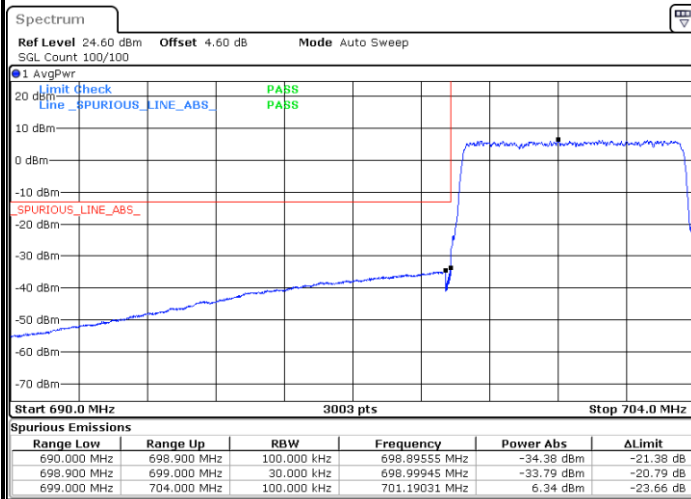
Lowest Band Edge / 1RB



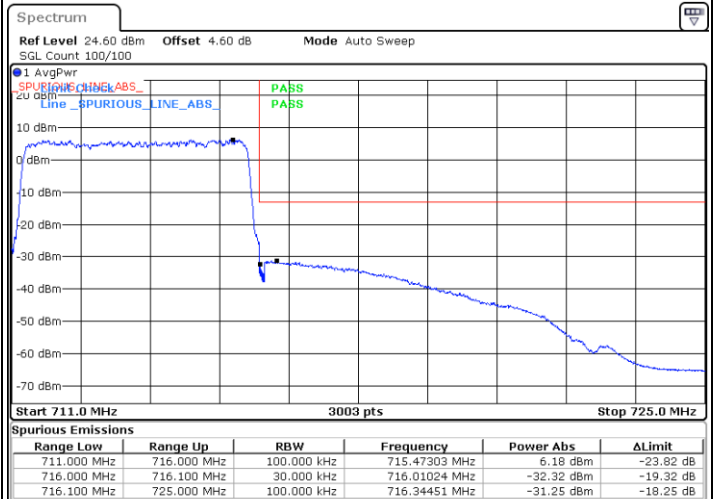
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



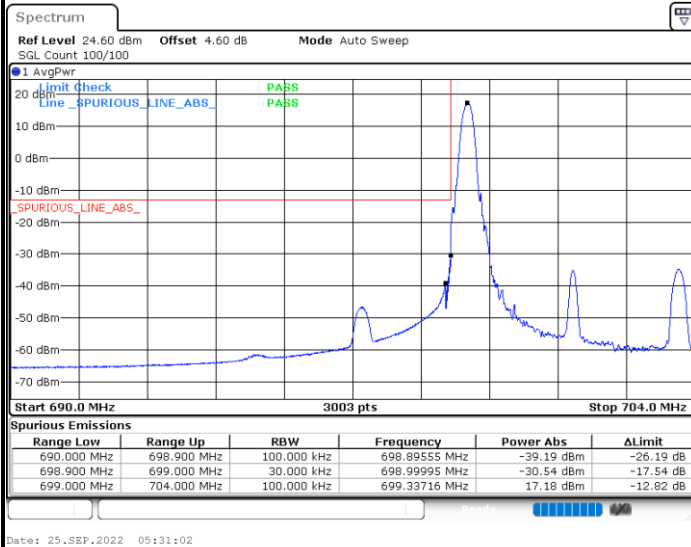
Highest Band Edge / Full RB



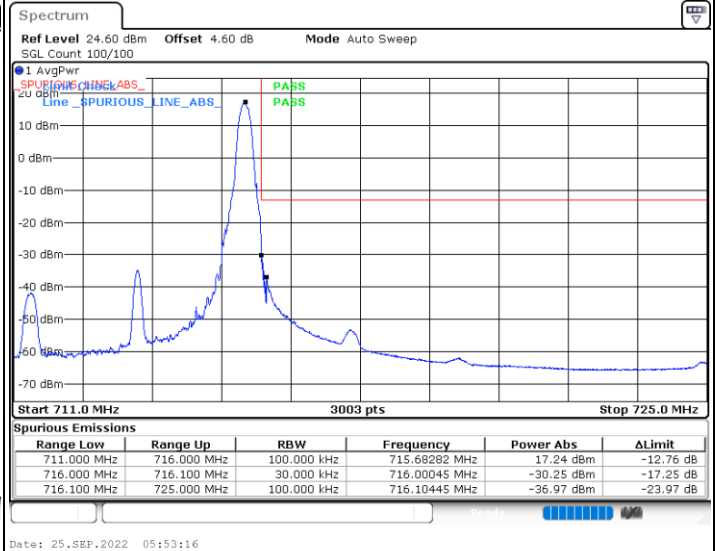


LTE Band 12 / 5MHz / 256QAM

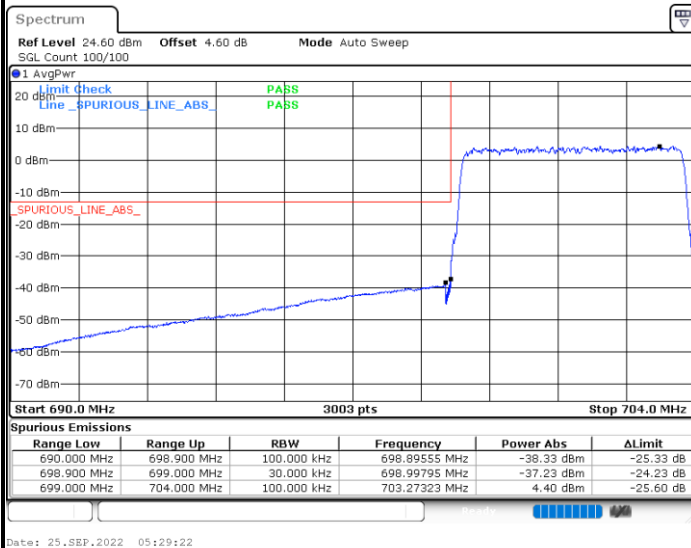
Lowest Band Edge / 1RB



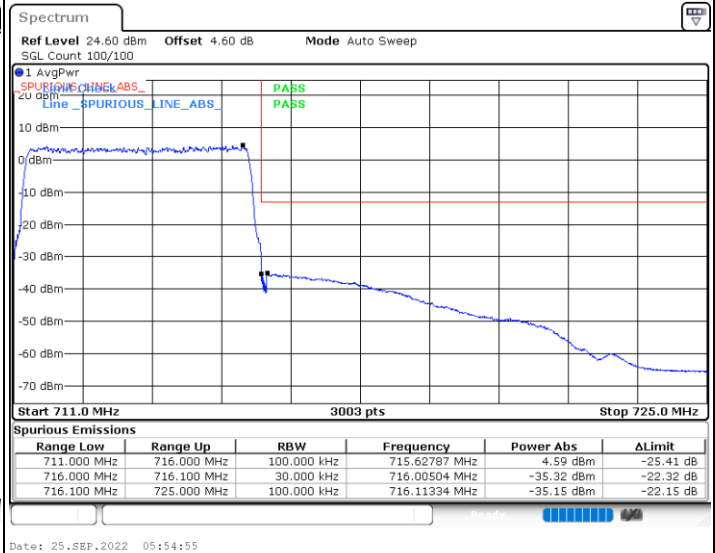
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



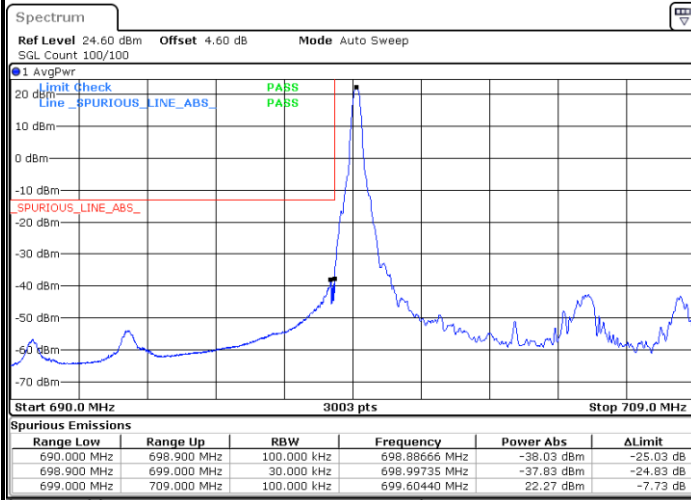
Highest Band Edge / Full RB



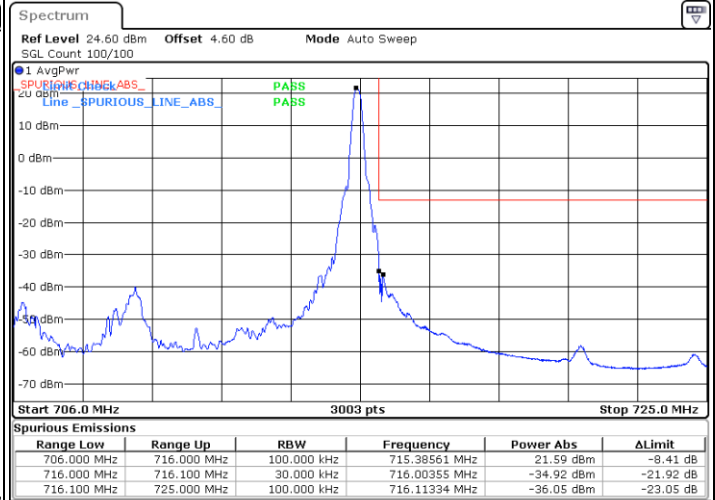


LTE Band 12 / 10MHz / QPSK

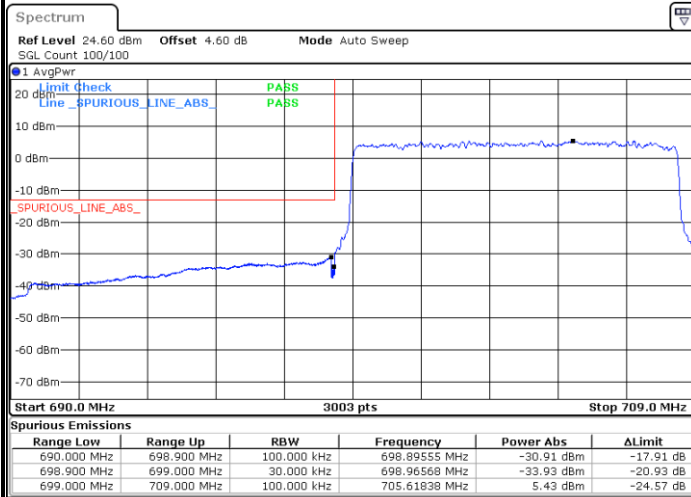
Lowest Band Edge / 1 RB



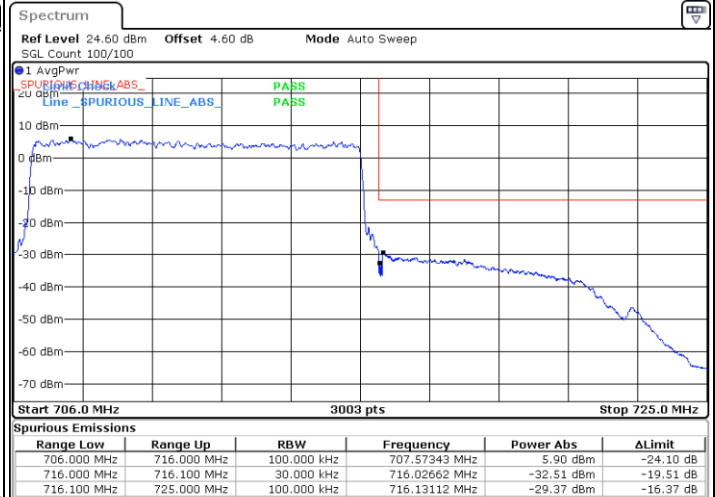
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



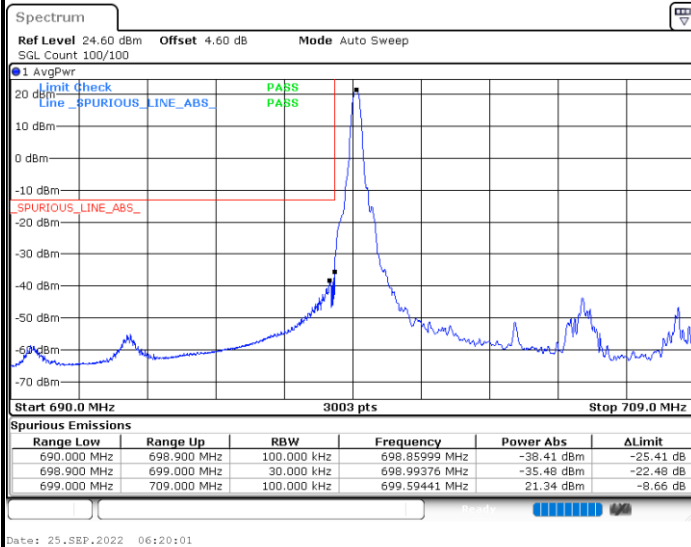
Highest Band Edge / Full RB



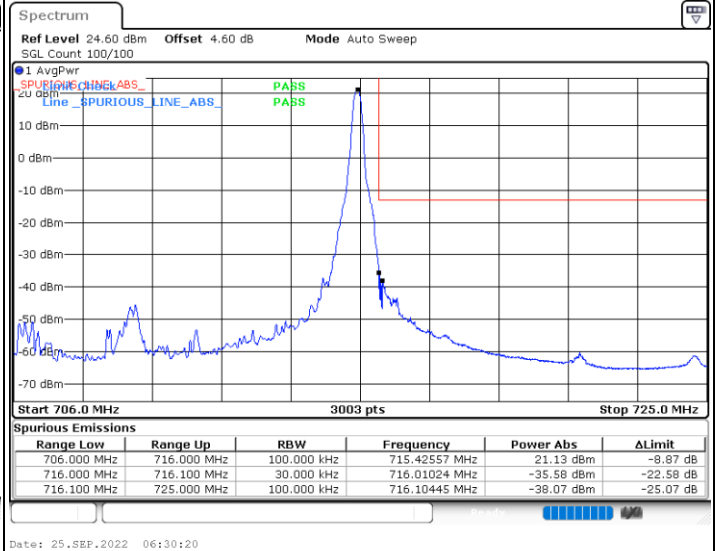


LTE Band 12 / 10MHz / 16QAM

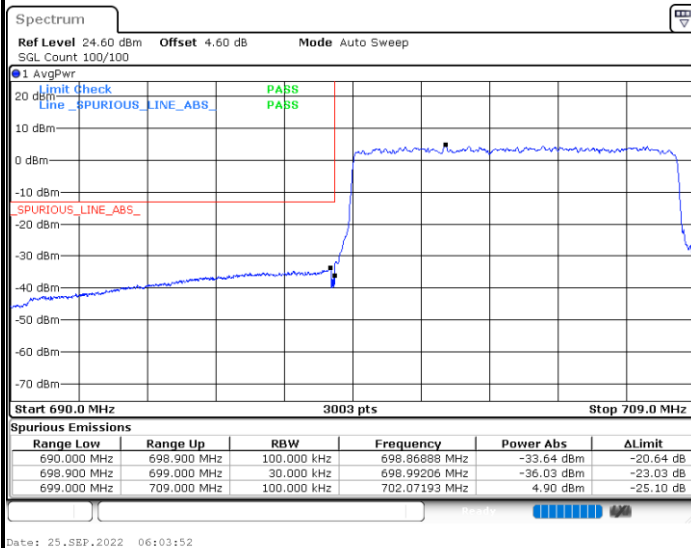
Lowest Band Edge / 1 RB



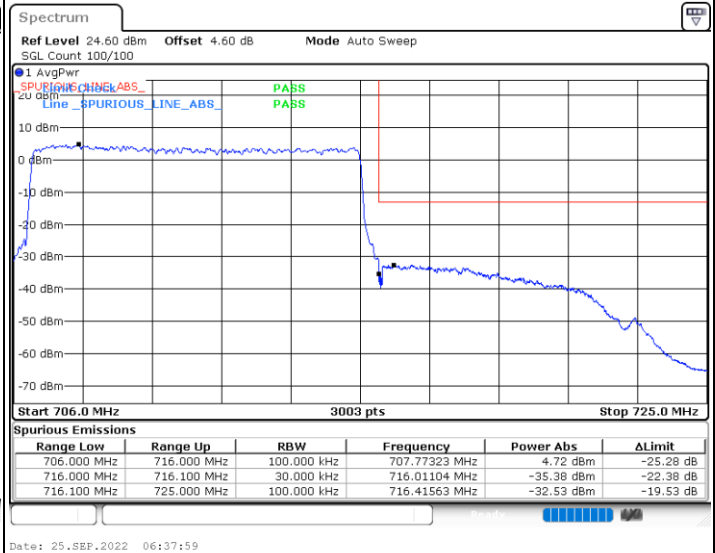
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



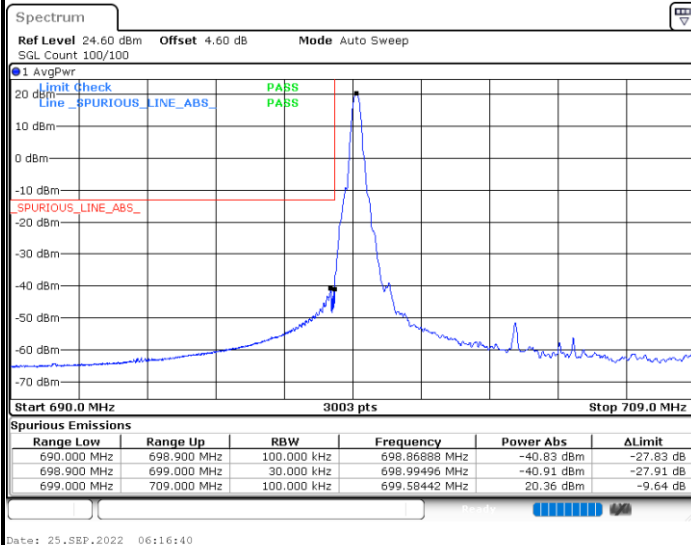
Highest Band Edge / Full RB



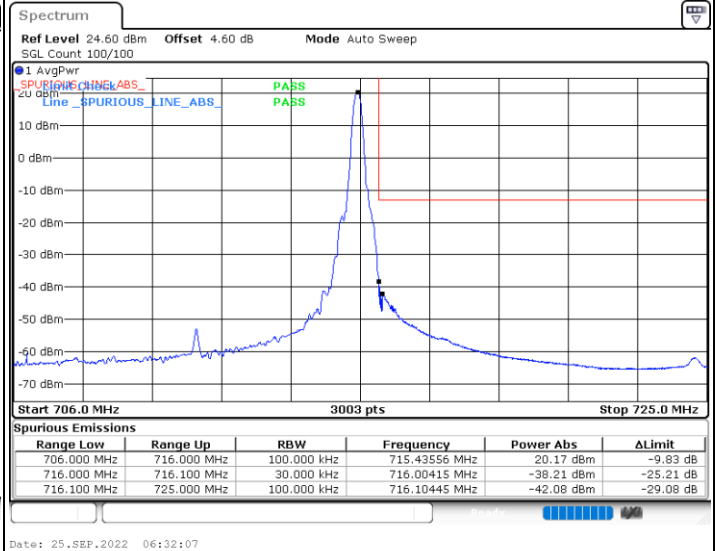


LTE Band 12 / 10MHz / 64QAM

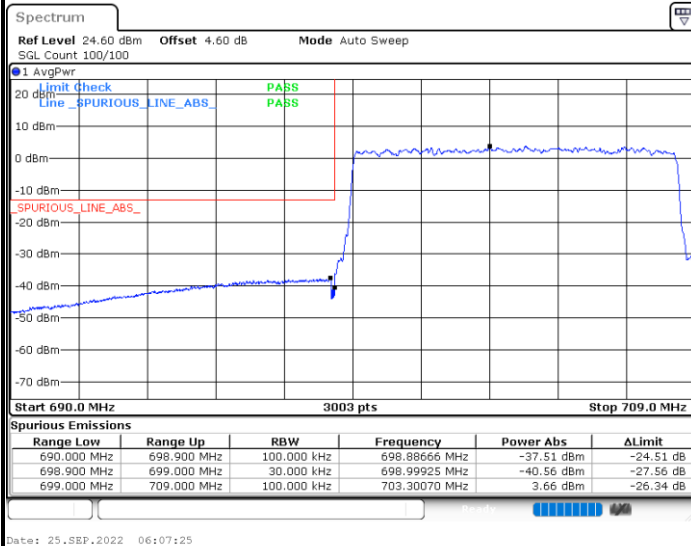
Lowest Band Edge / 1 RB



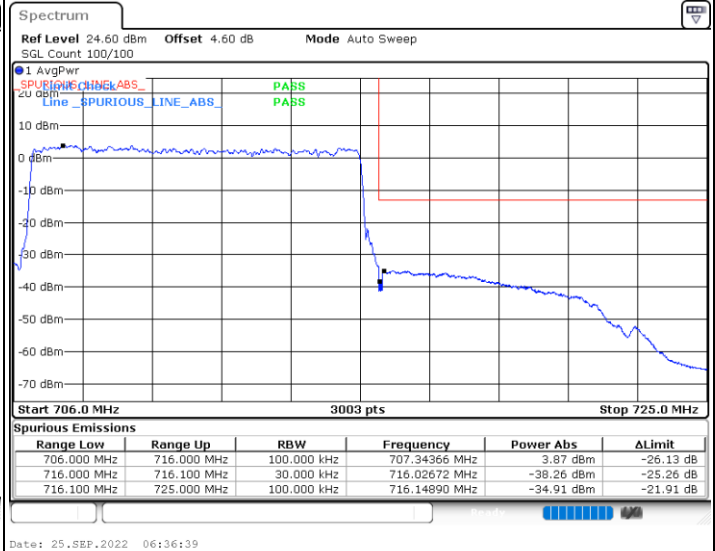
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



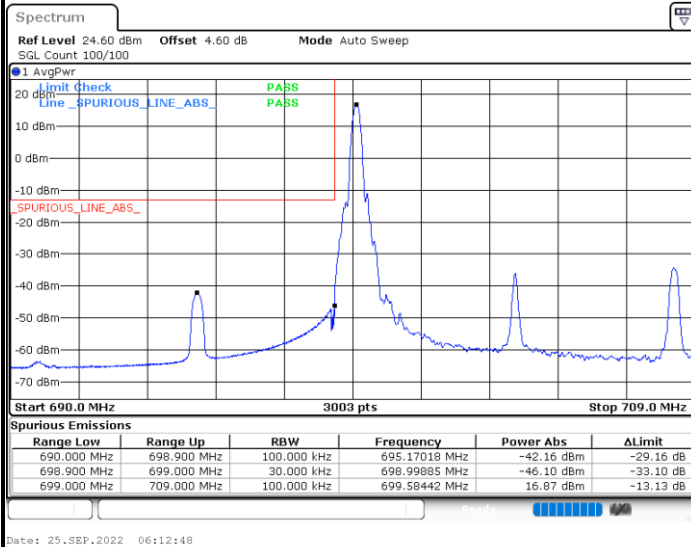
Highest Band Edge / Full RB



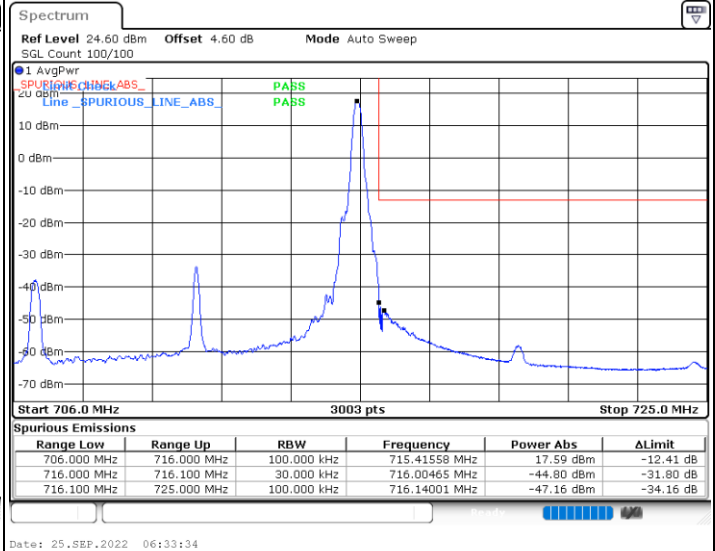


LTE Band 12 / 10MHz / 256QAM

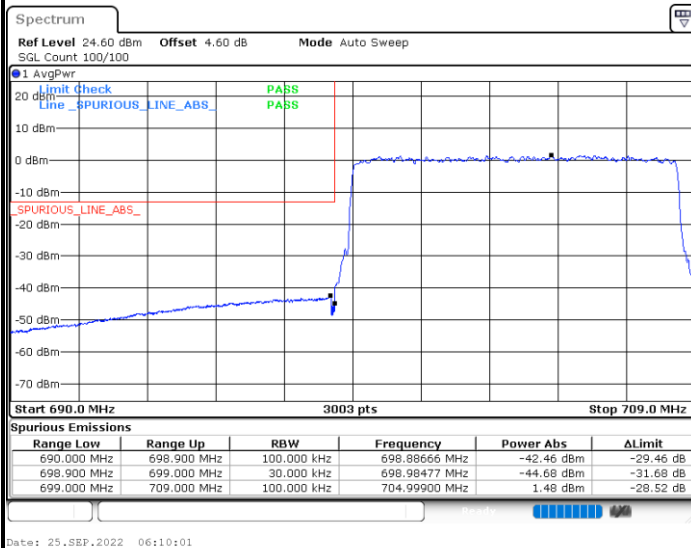
Lowest Band Edge / 1 RB



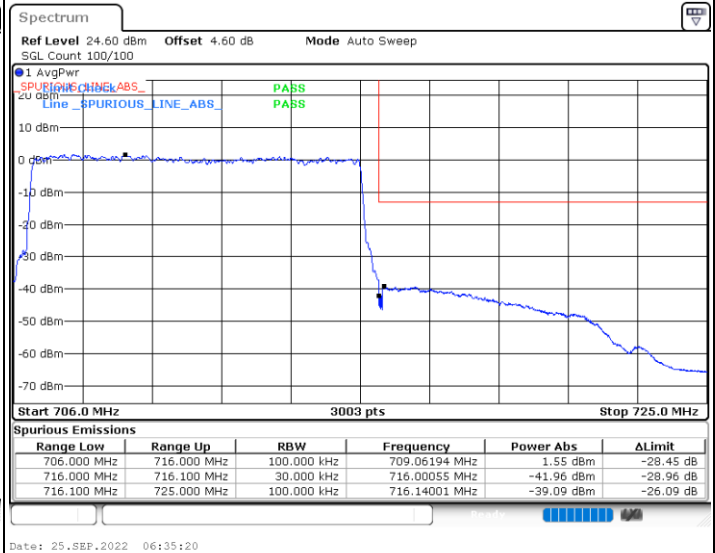
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

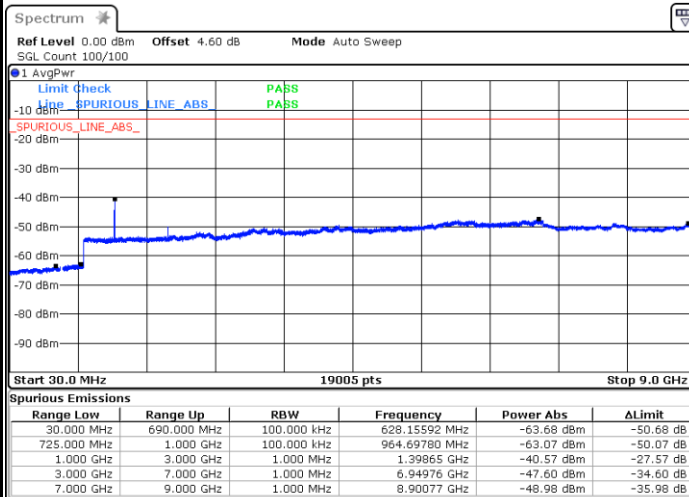




Conducted Spurious Emission

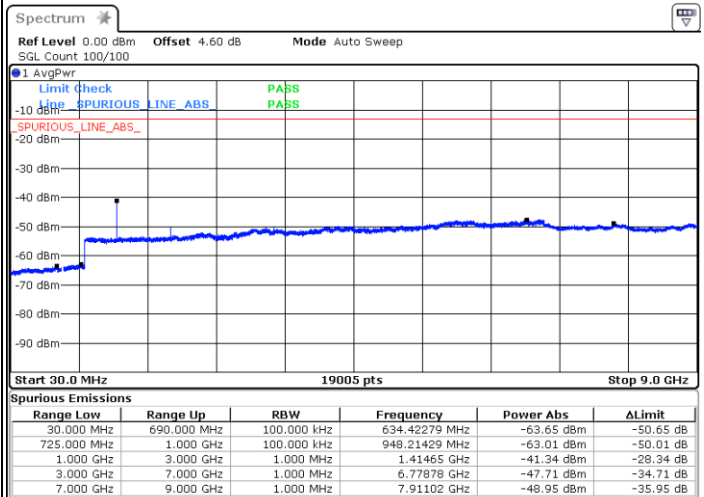
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



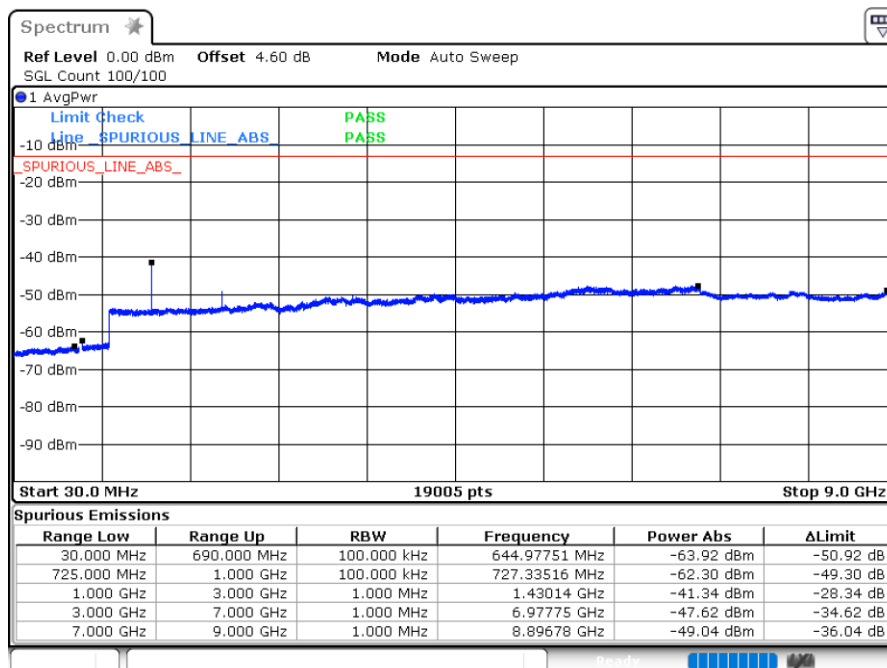
Date: 25.SEP.2022 04:50:51

Middle Channel / QPSK



Date: 25.SEP.2022 04:51:59

Highest Channel / QPSK

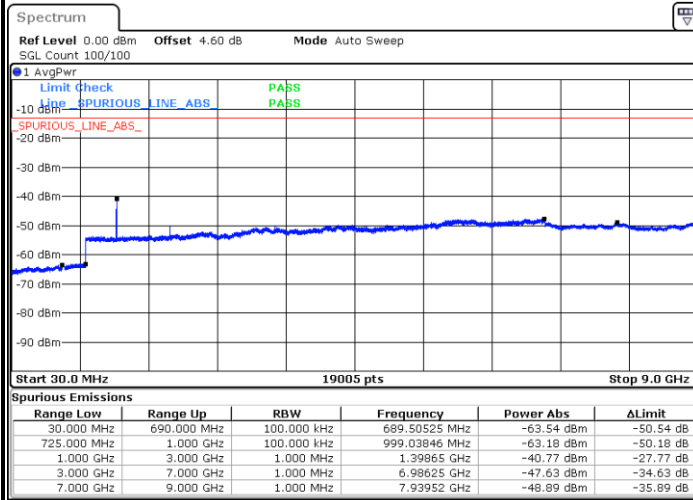


Date: 25.SEP.2022 04:53:38



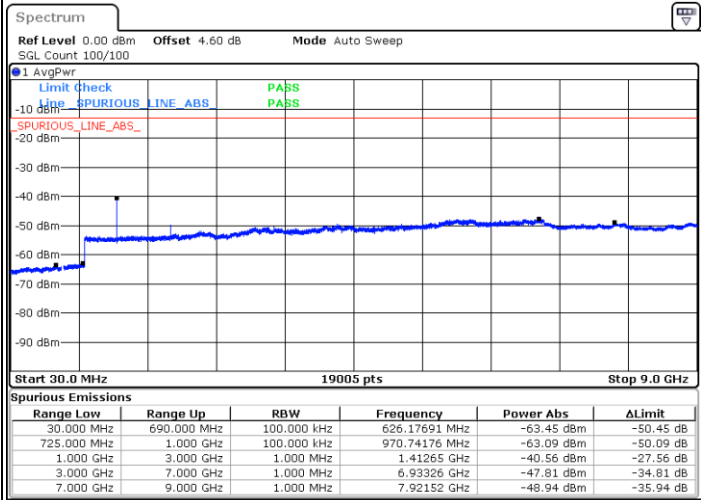
LTE Band 12 / 3MHz

Lowest Channel / QPSK



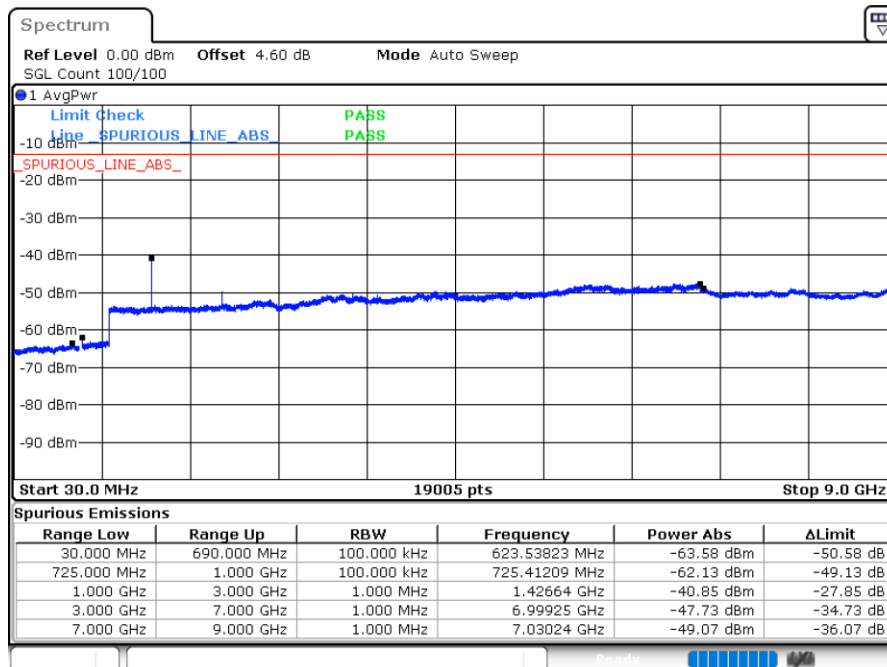
Date: 25.SEP.2022 05:14:05

Middle Channel / QPSK



Date: 25.SEP.2022 05:15:33

Highest Channel / QPSK

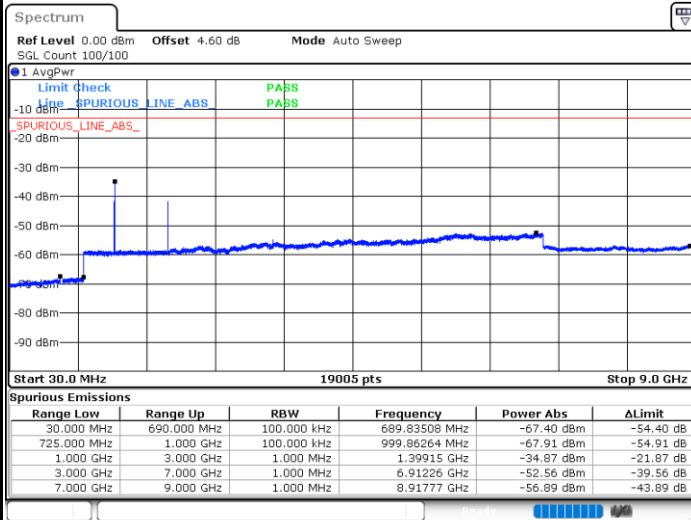


Date: 25.SEP.2022 05:16:24



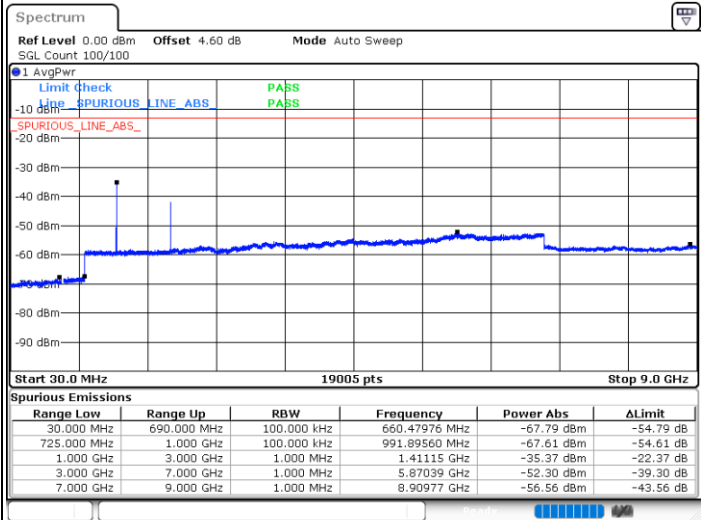
LTE Band 12 / 5MHz

Lowest Channel / QPSK



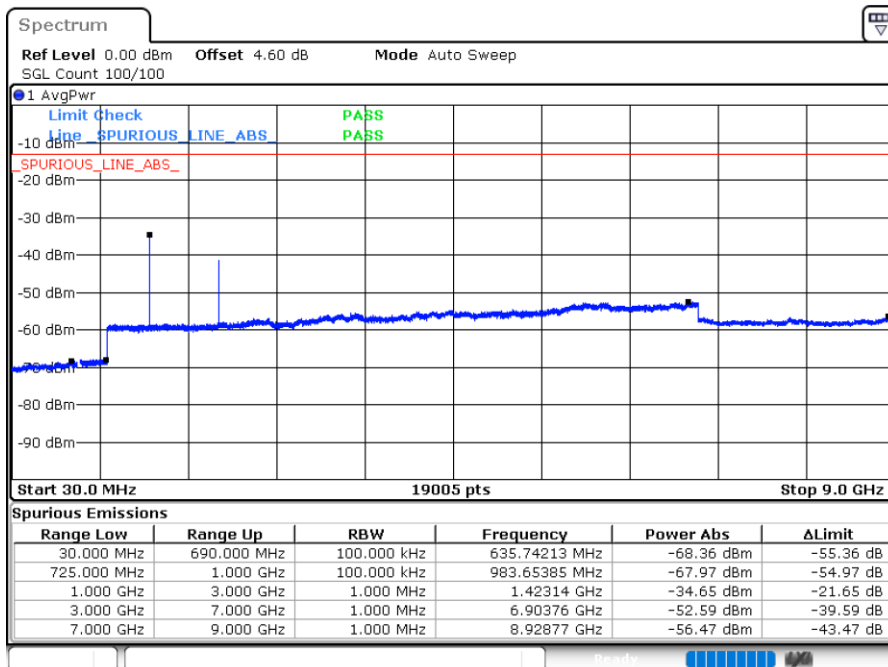
Date: 25.SEP.2022 05:34:38

Middle Channel / QPSK



Date: 25.SEP.2022 05:35:32

Highest Channel / QPSK

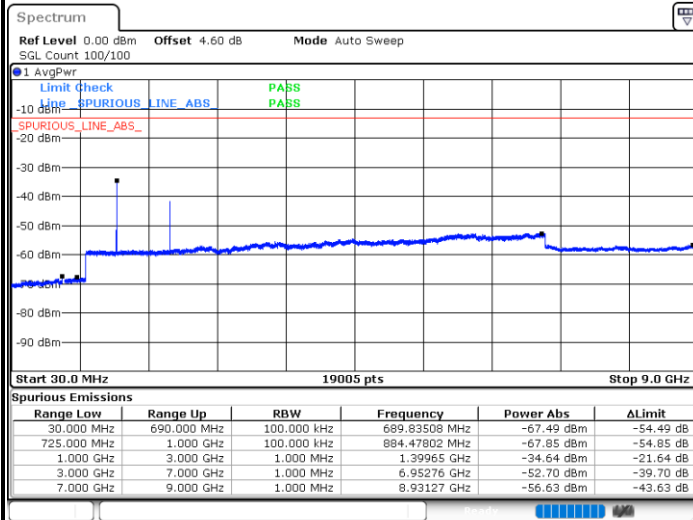


Date: 25.SEP.2022 05:45:22

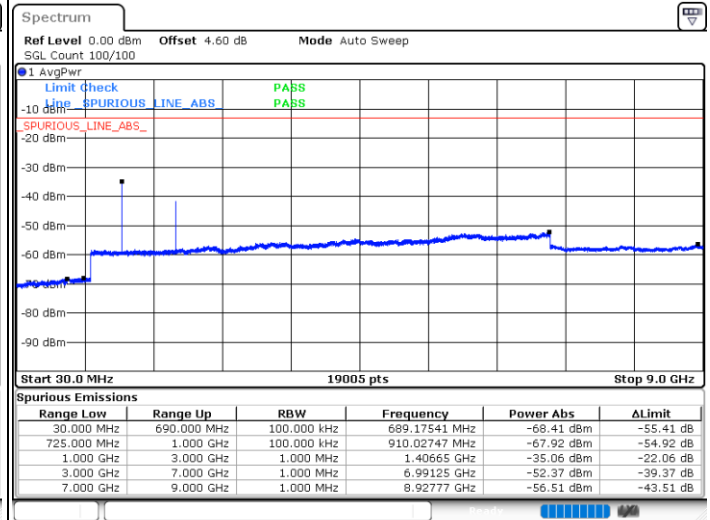


LTE Band 12 / 10MHz

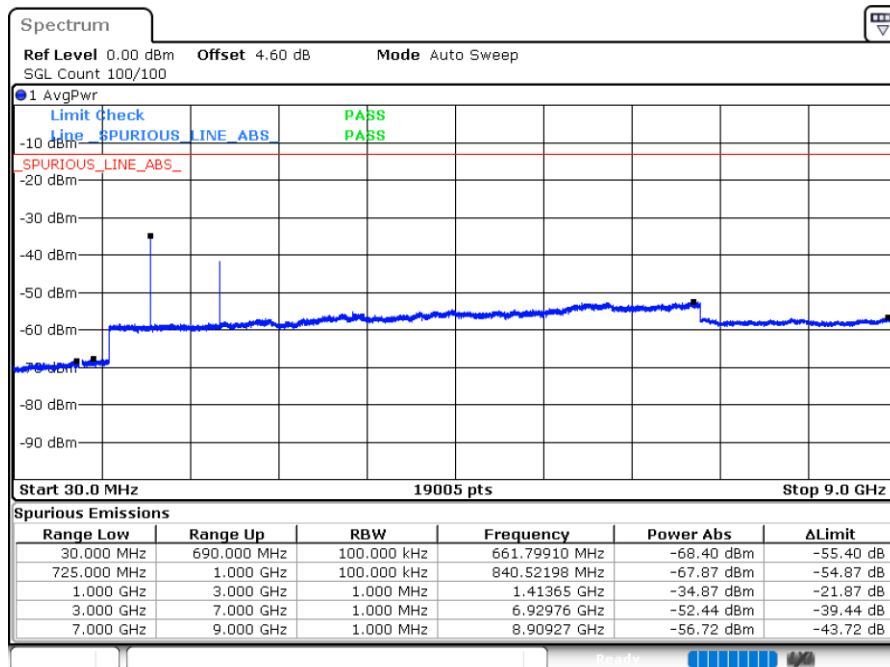
Lowest Channel / QPSK



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
50	Normal Voltage	0.0028	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0031	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

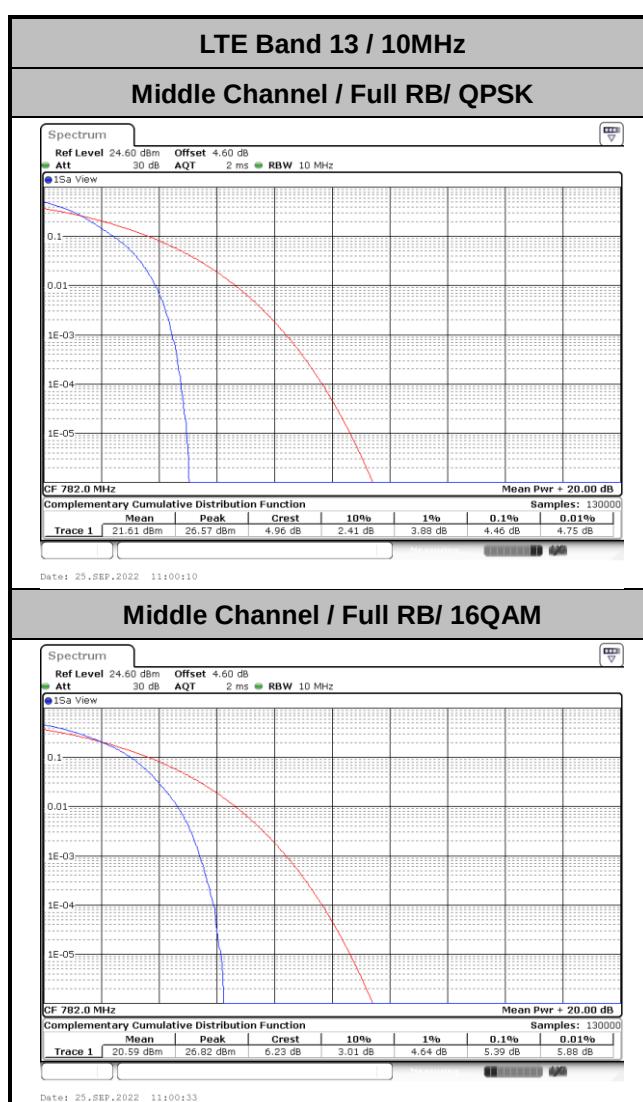
Note:

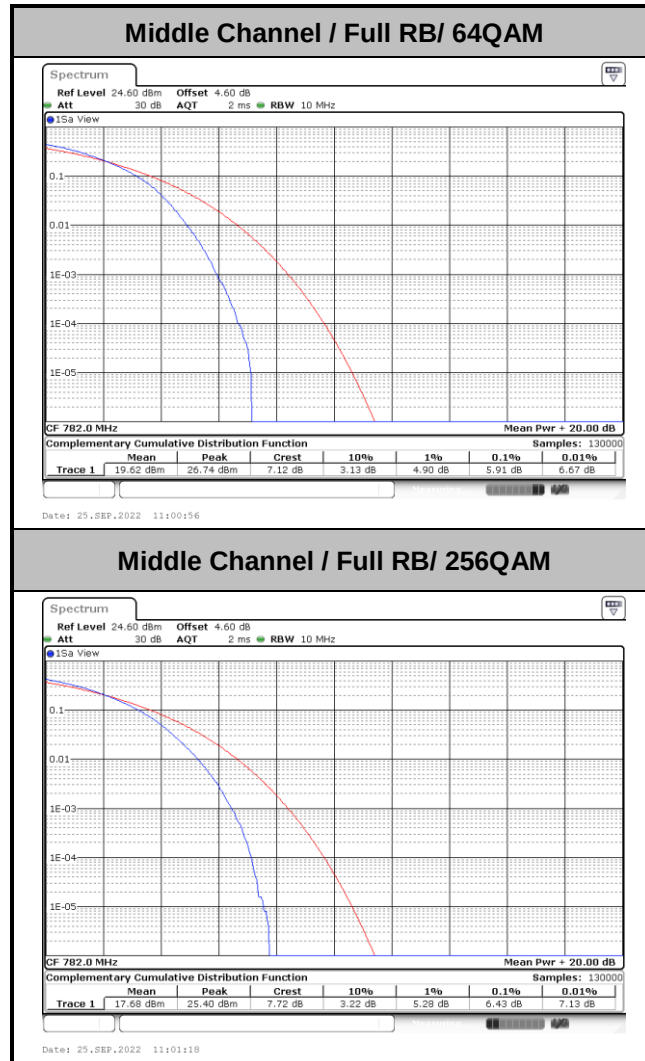
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 13

Peak-to-Average Ratio

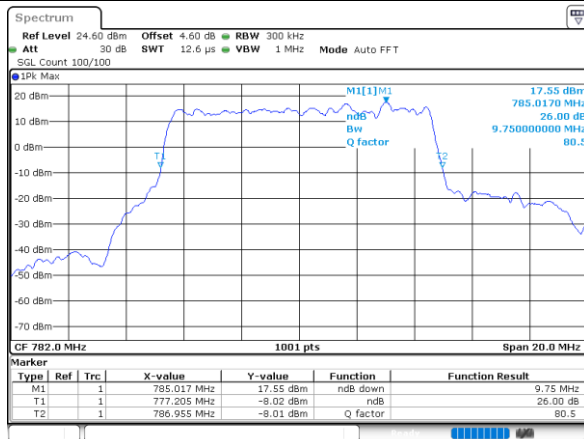
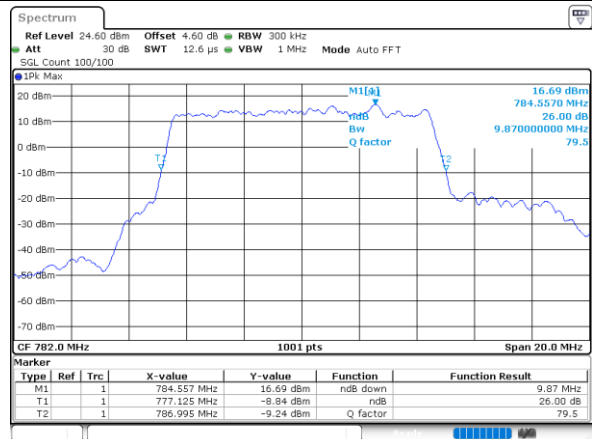
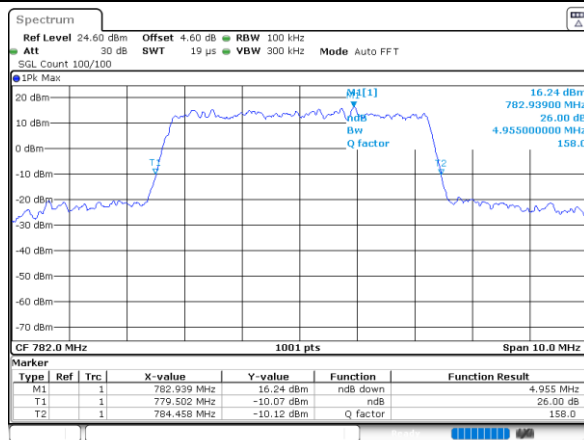
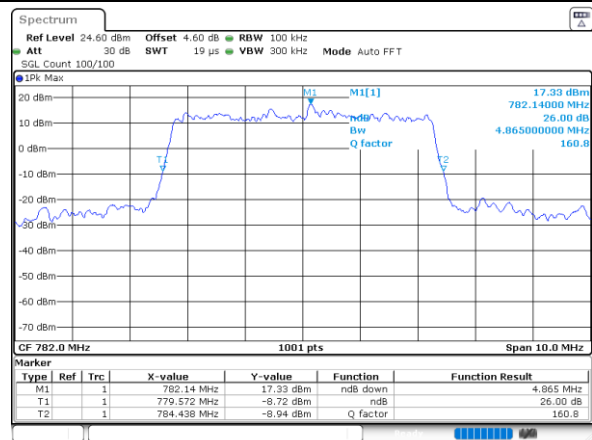
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.46	5.39	5.91	6.43	PASS





**26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.75	9.87
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.96	4.87

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

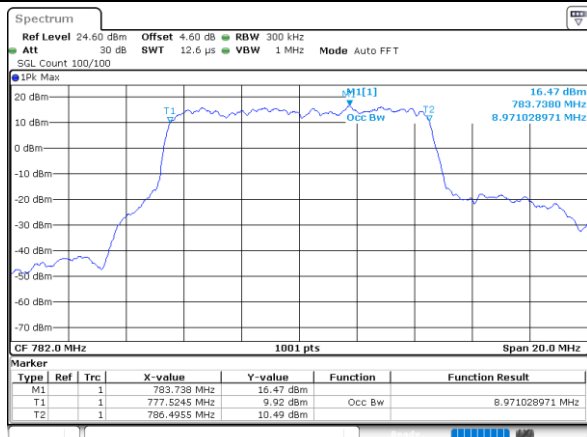


Occupied Bandwidth

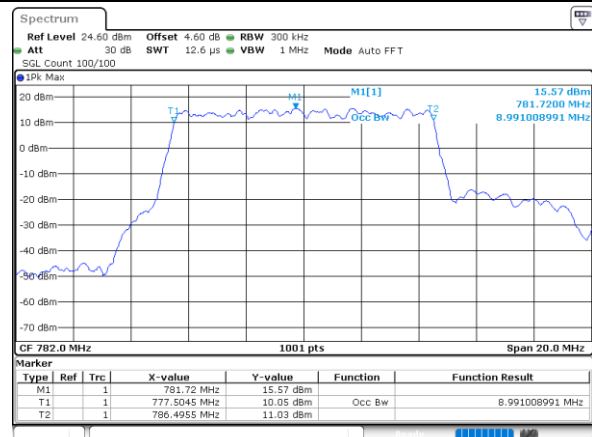
Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.97	8.99
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.49

LTE Band 13

Middle Channel / 10MHz / QPSK

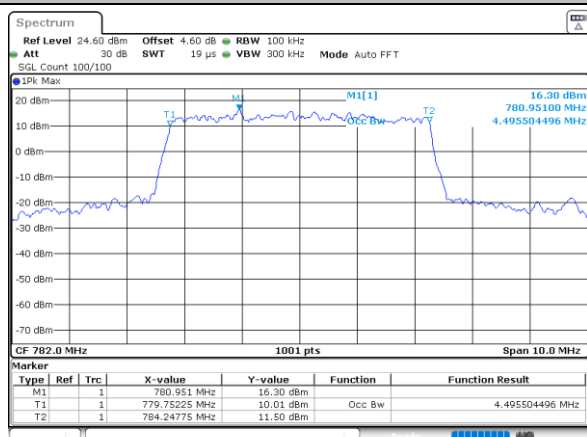


Middle Channel / 10MHz / 16QAM

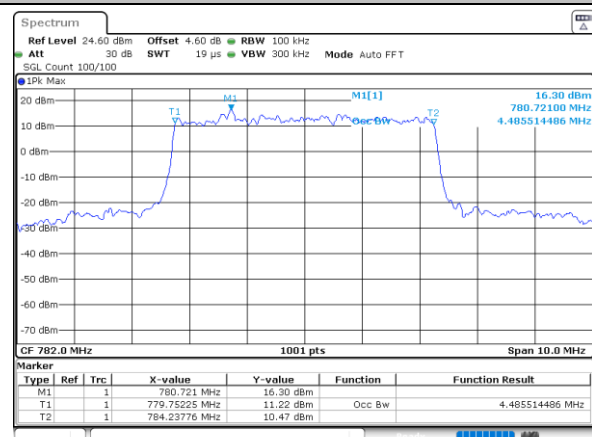


LTE Band 13

Middle Channel / 5MHz / QPSK



Middle Channel / 5MHz / 16QAM

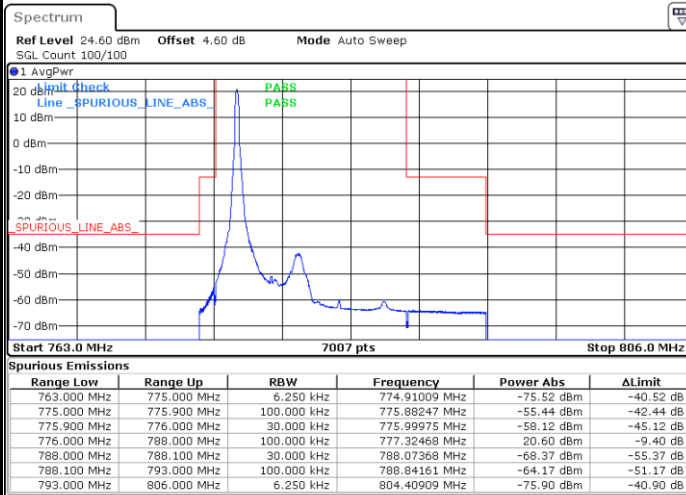




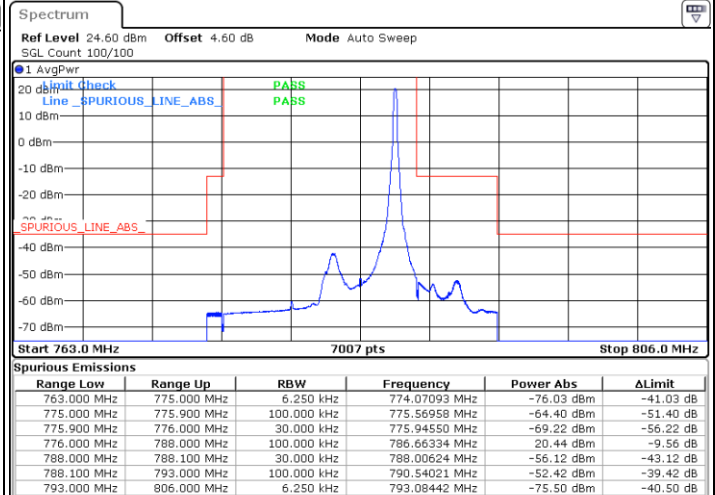
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

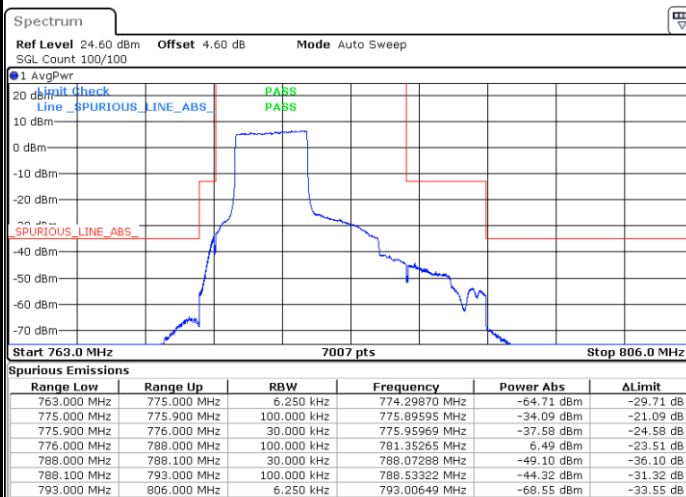
Lowest Band Edge / 1 RB



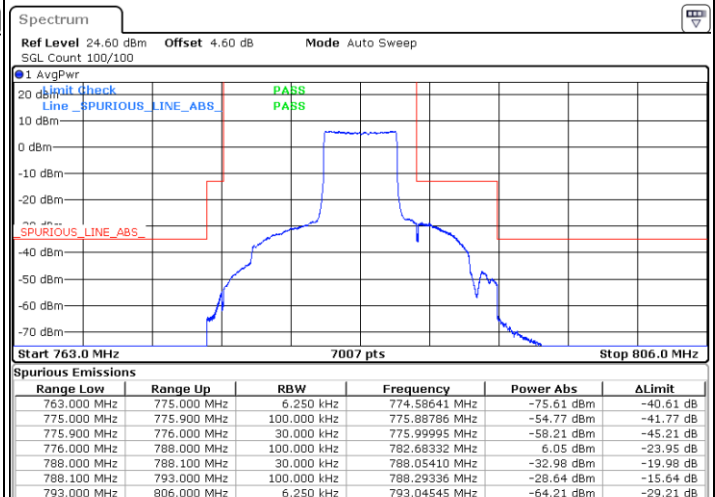
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



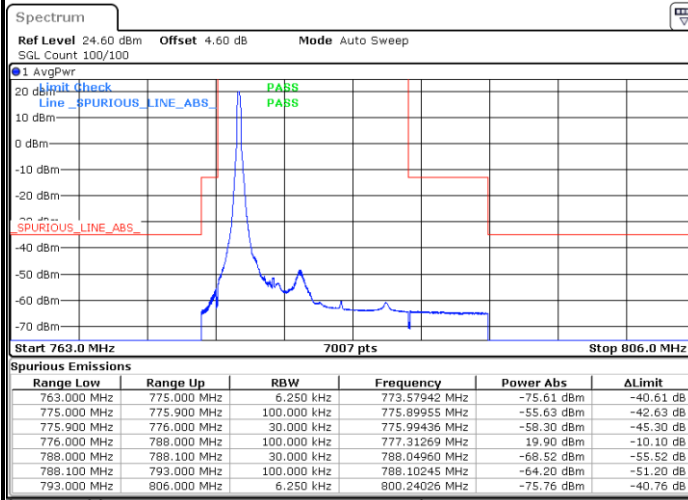
Highest Band Edge / Full RB



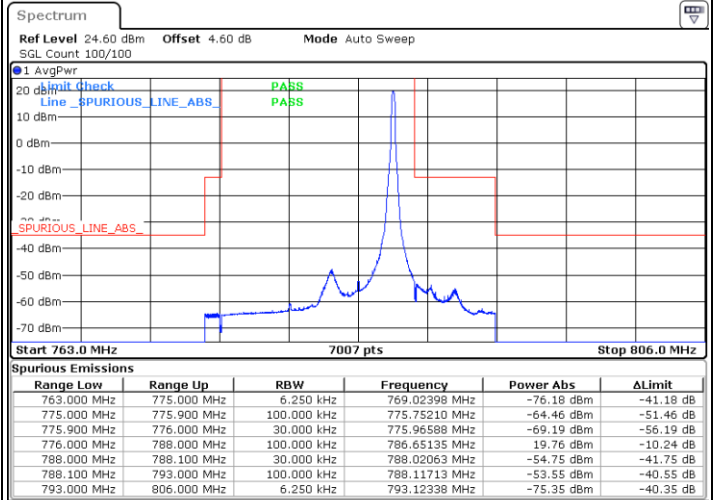


LTE Band 13 / 5MHz / 16QAM

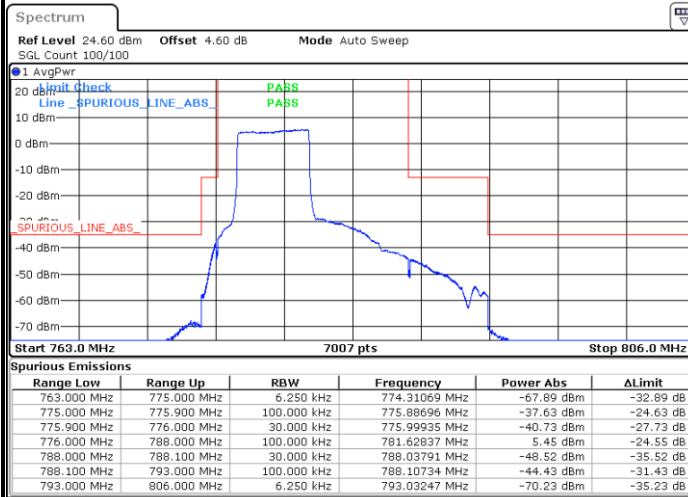
Lowest Band Edge / 1RB



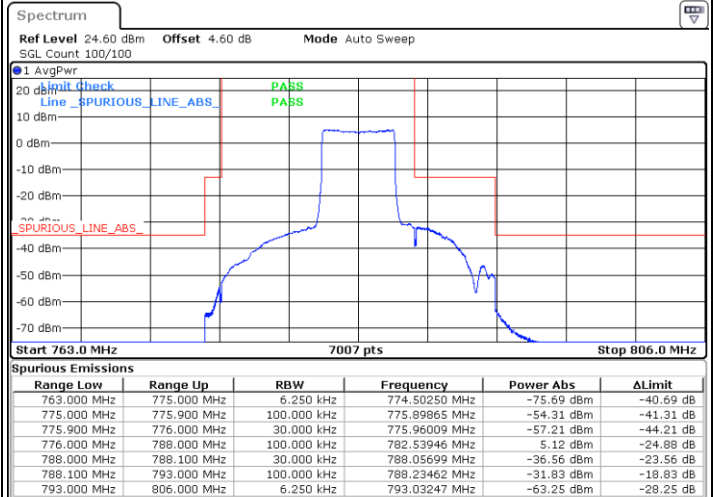
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



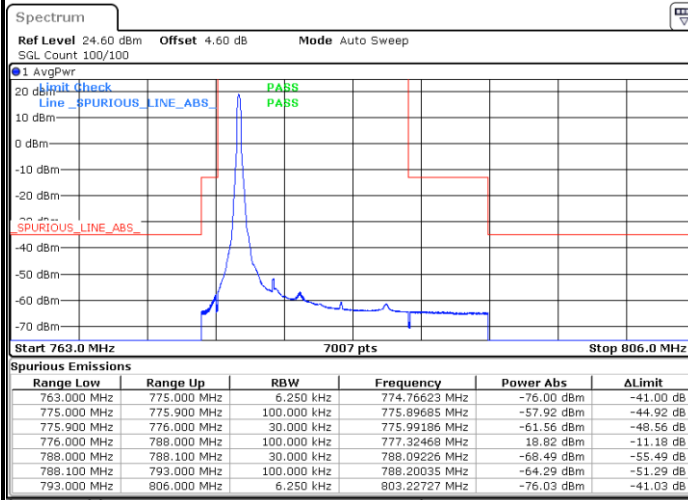
Highest Band Edge / Full RB



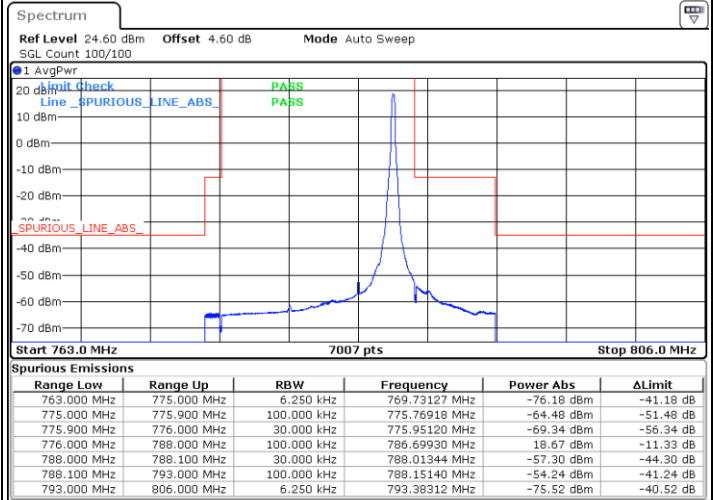


LTE Band 13 / 5MHz / 64QAM

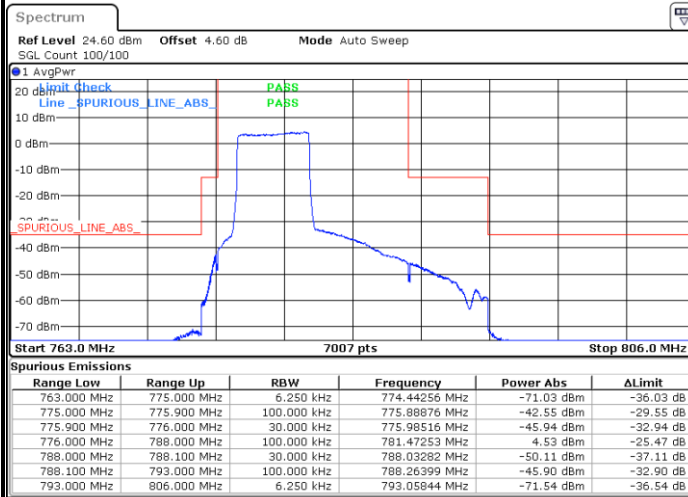
Lowest Band Edge / 1RB



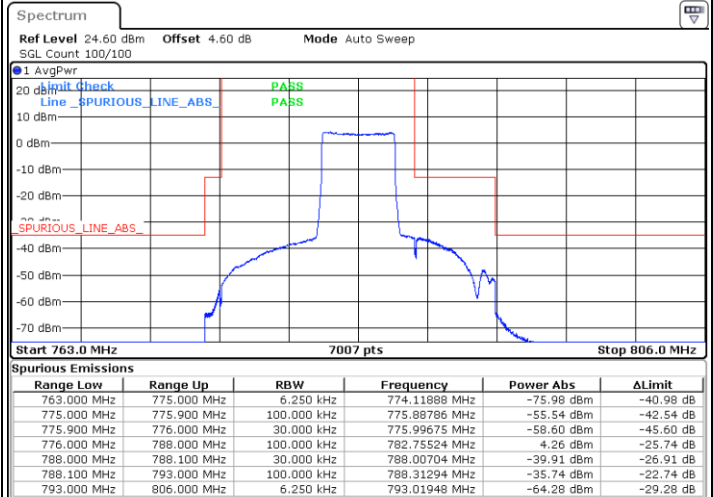
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



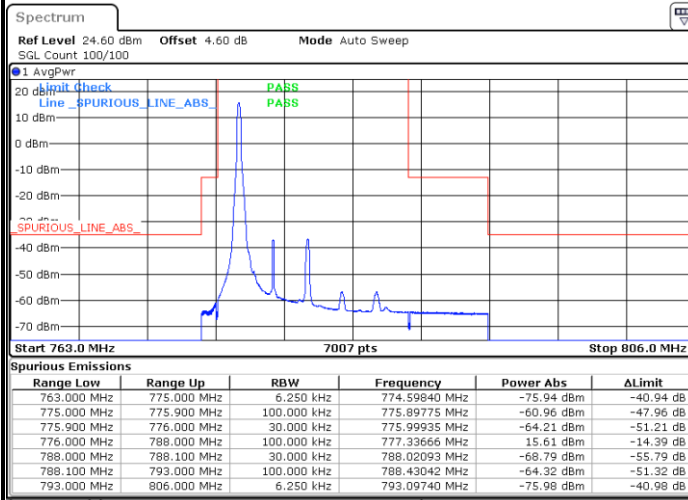
Highest Band Edge / Full RB



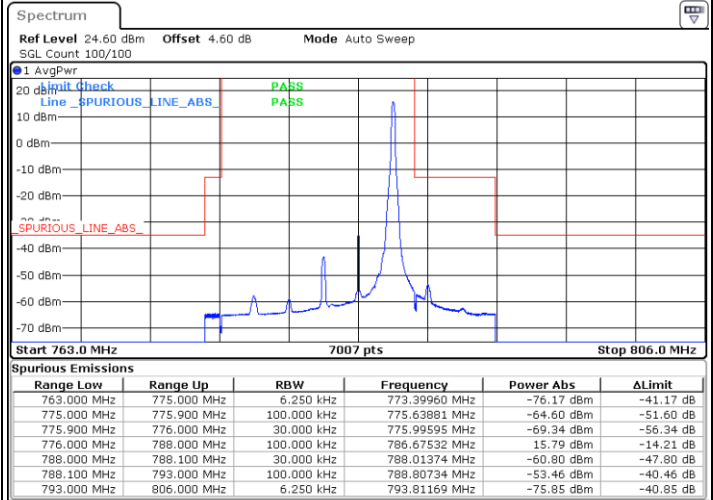


LTE Band 13 / 5MHz / 256QAM

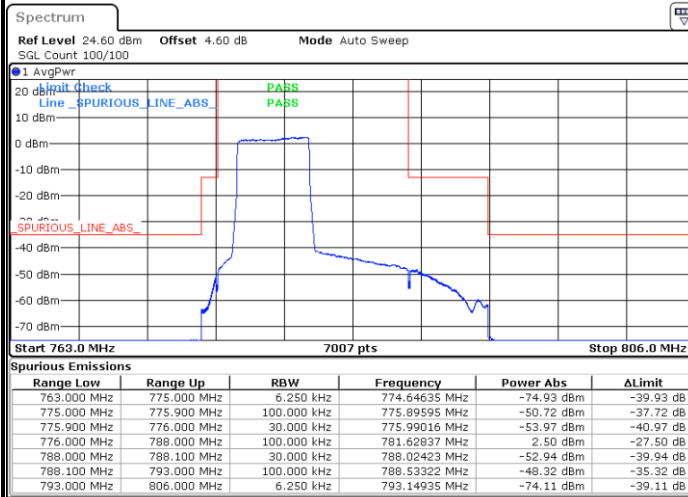
Lowest Band Edge / 1RB



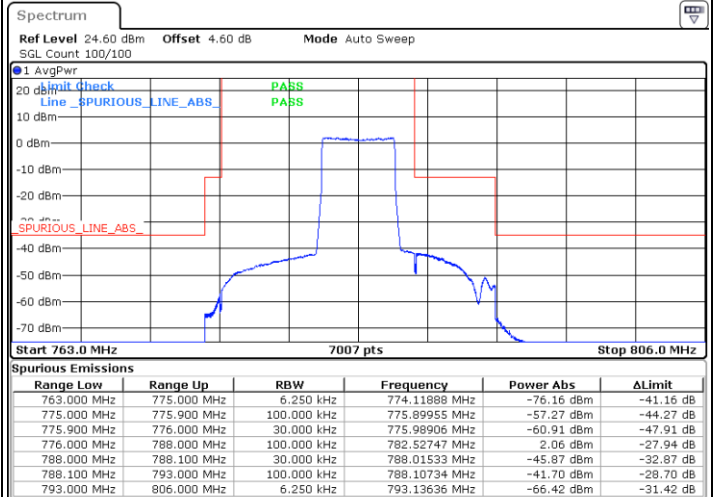
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



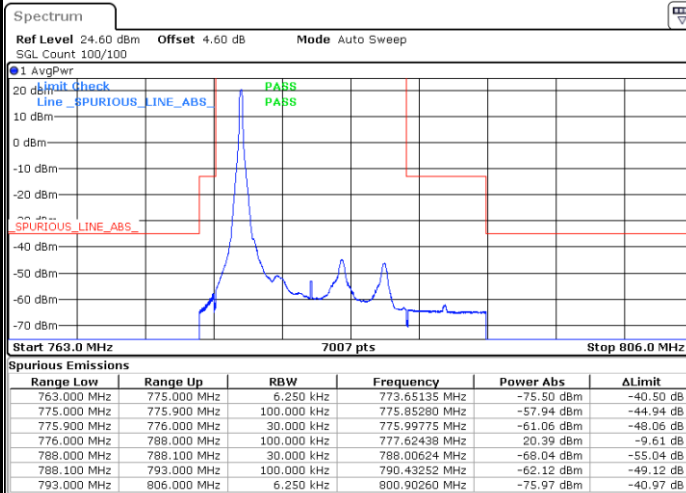
Highest Band Edge / Full RB





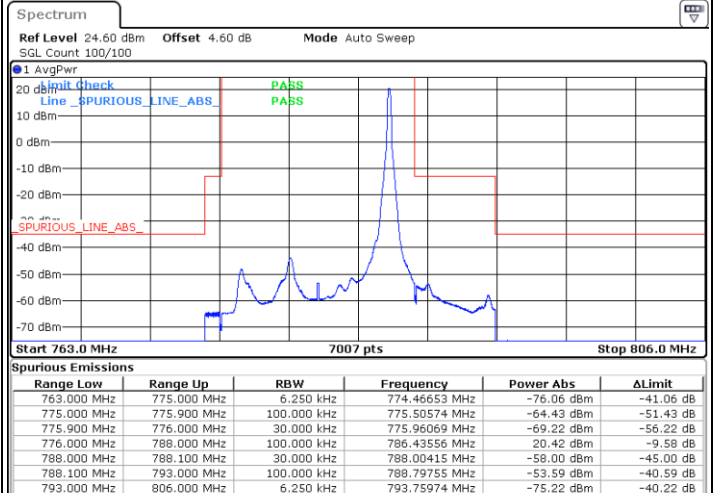
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



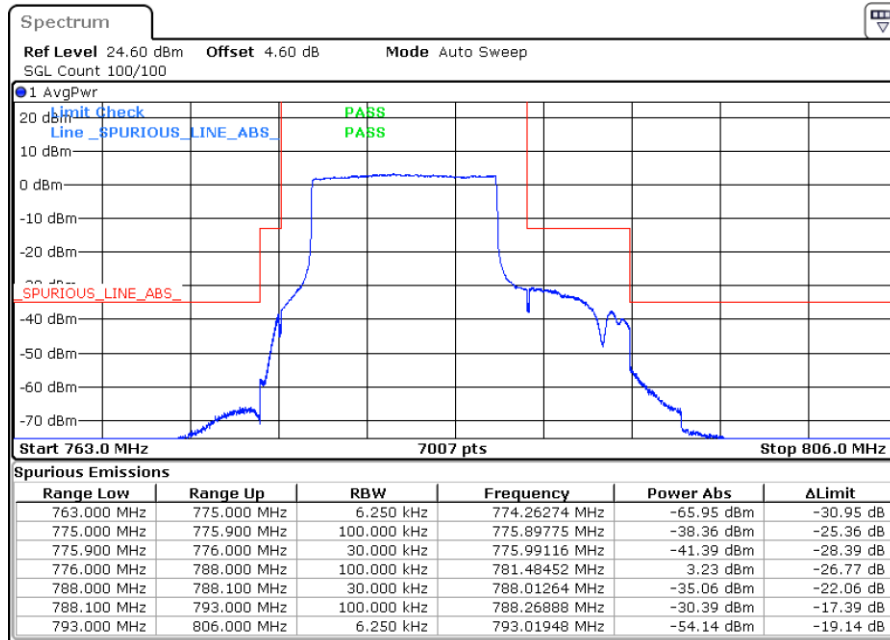
Date: 25.SEP.2022 10:33:24

middle Band Edge / 1 RB



Date: 25.SEP.2022 10:52:49

Middle Band Edge / Full RB

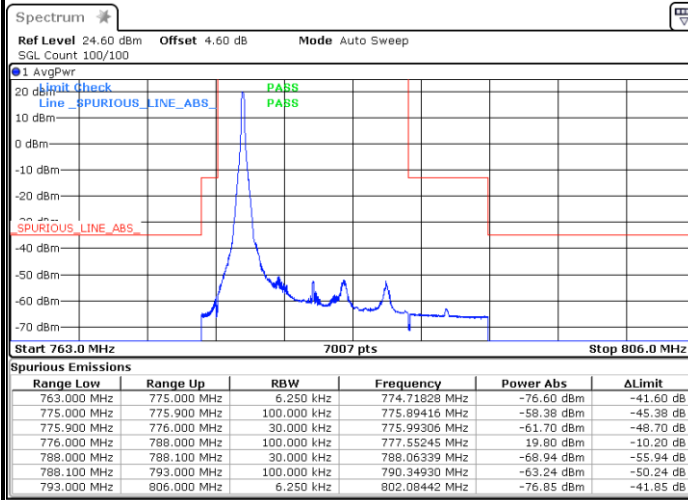


Date: 25.SEP.2022 10:51:00



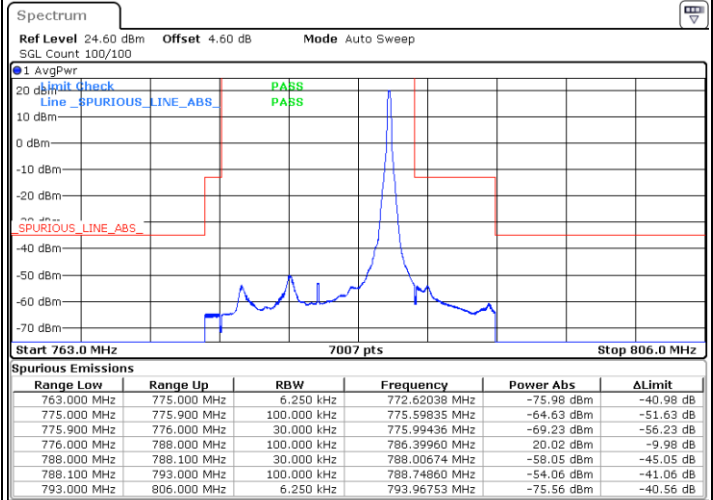
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



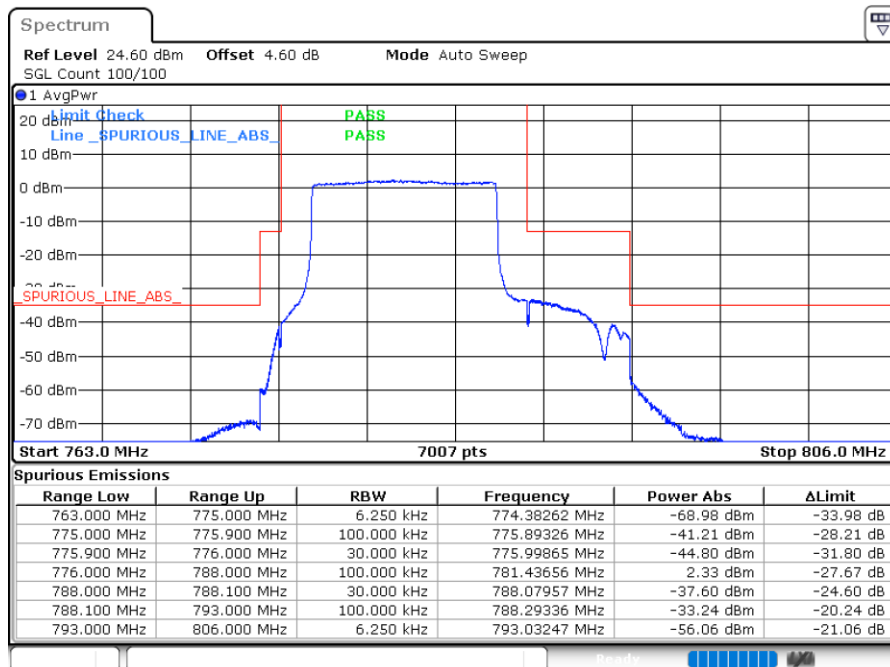
Date: 11.DEC.2022 16:47:07

middle Band Edge / 1 RB



Date: 25.SEP.2022 10:54:38

middle Band Edge / Full RB

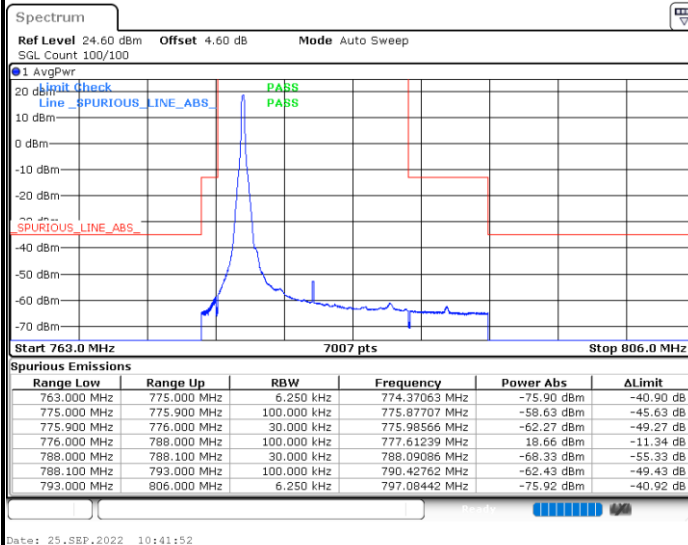


Date: 25.SEP.2022 10:49:10

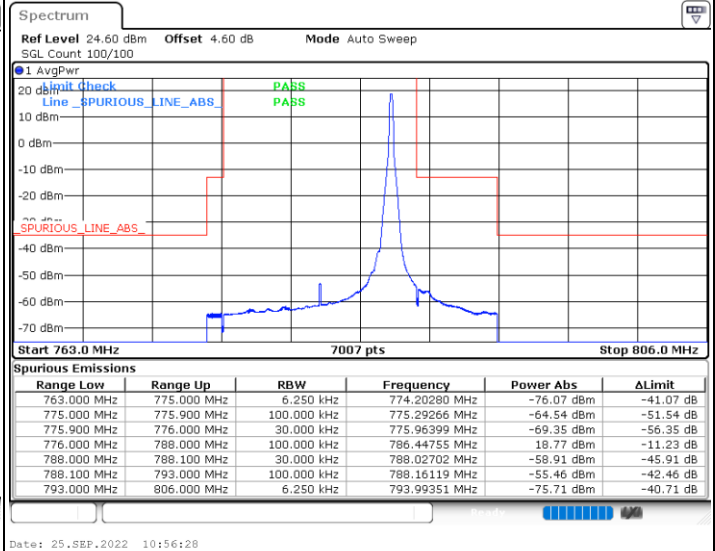


LTE Band 13 / 10MHz / 64QAM

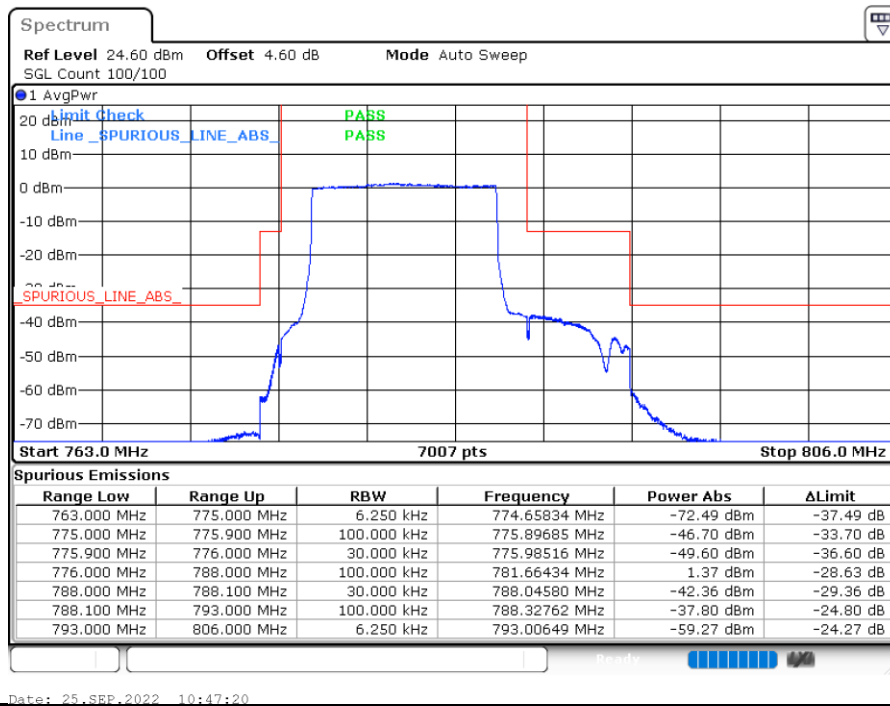
middle Band Edge / 1 RB



middle Band Edge / 1 RB



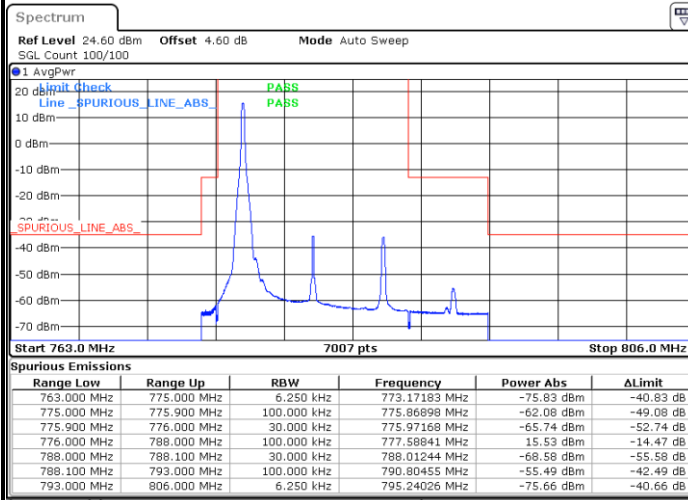
middle Band Edge / Full RB





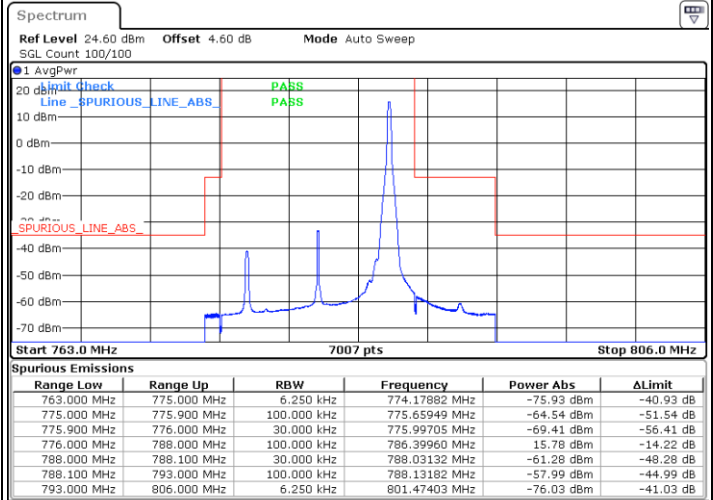
LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB



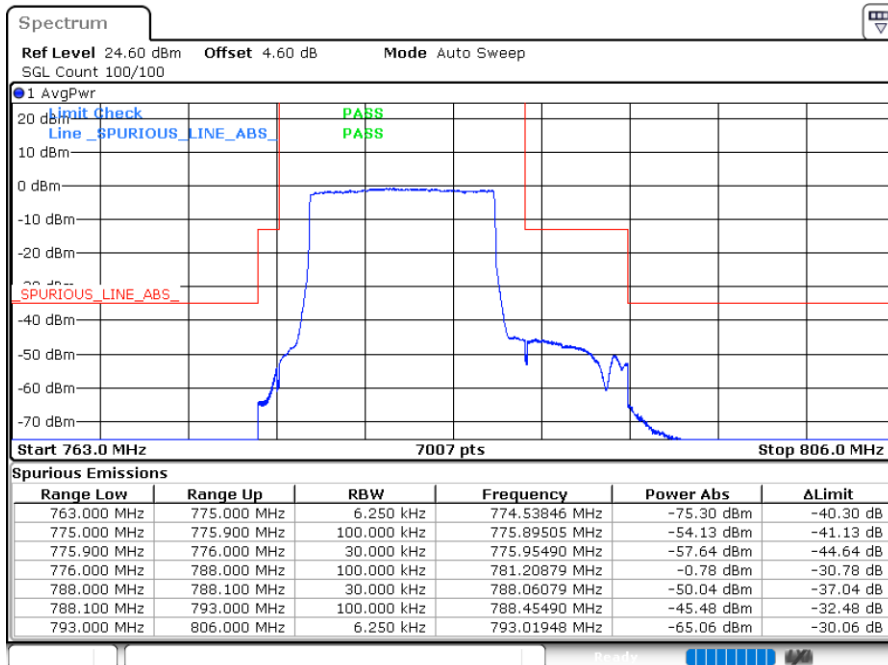
Date: 25.SEP.2022 10:43:41

middle Band Edge / 1 RB



Date: 25.SEP.2022 10:58:22

middle Band Edge / Full RB



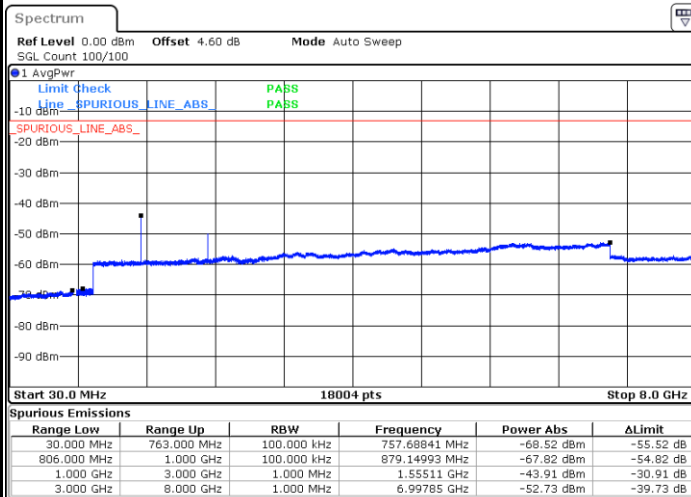
Date: 25.SEP.2022 10:45:30



Conducted Spurious Emission

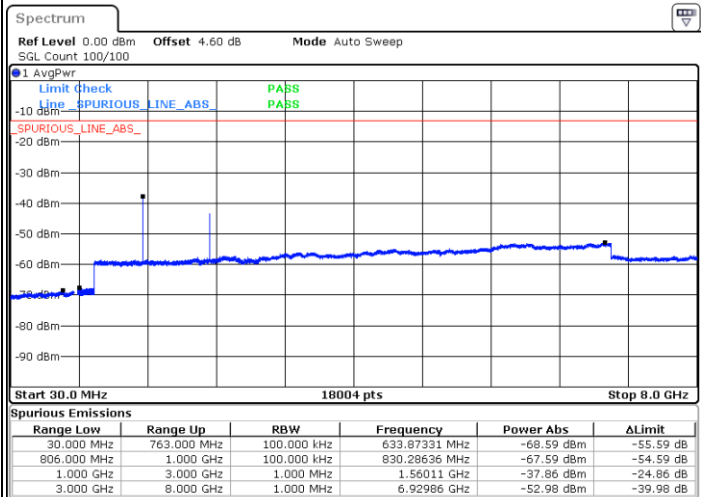
LTE Band 13 / 5MHz

Lowest Channel / QPSK



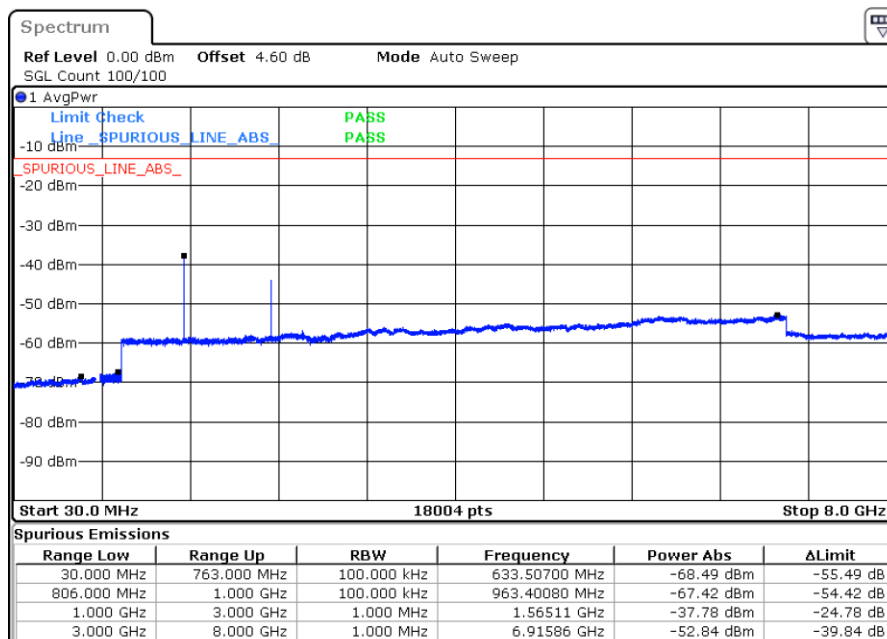
Date: 25.SEP.2022 09:56:13

Middle Channel / QPSK



Date: 25.SEP.2022 10:14:01

Highest Channel / QPSK

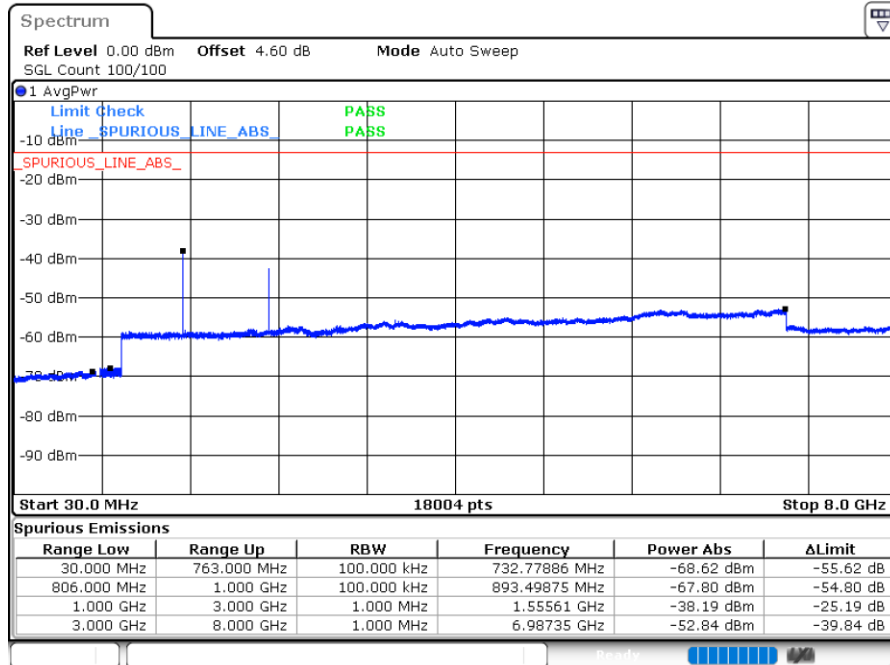


Date: 25.SEP.2022 10:15:21



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 25.SEP.2022 10:31:34

**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	0.0213	PASS
40	Normal Voltage	0.0075	
30	Normal Voltage	0.0237	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0022	
0	Normal Voltage	0.0038	
-10	Normal Voltage	0.0165	
-20	Normal Voltage	0.0032	
-30	Normal Voltage	0.0072	
20	Maximum Voltage	0.0168	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0026	

Note:

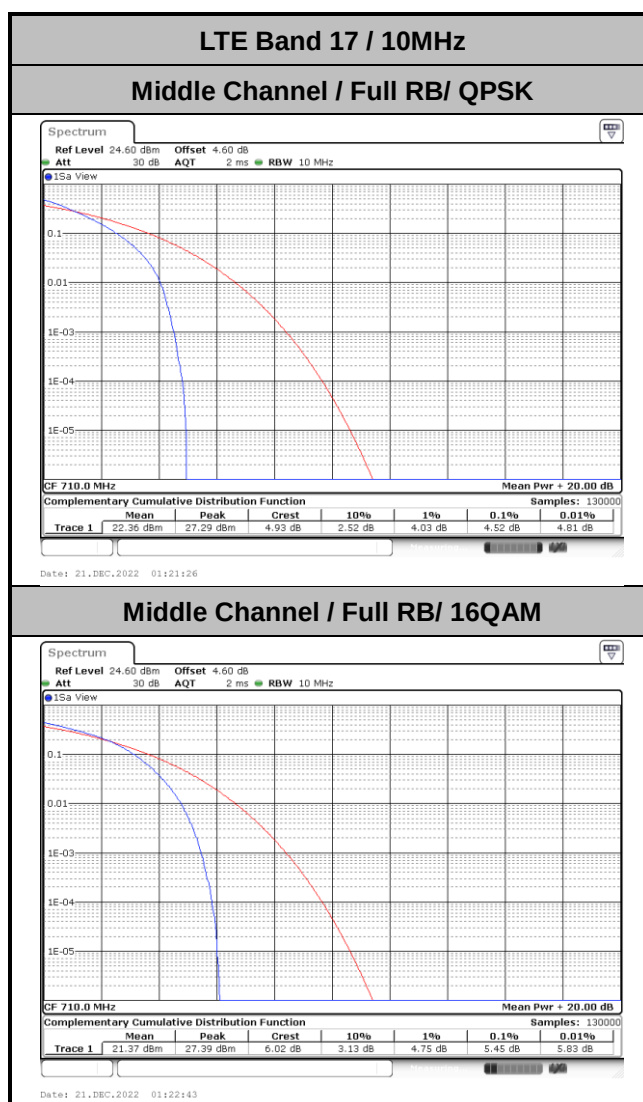
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

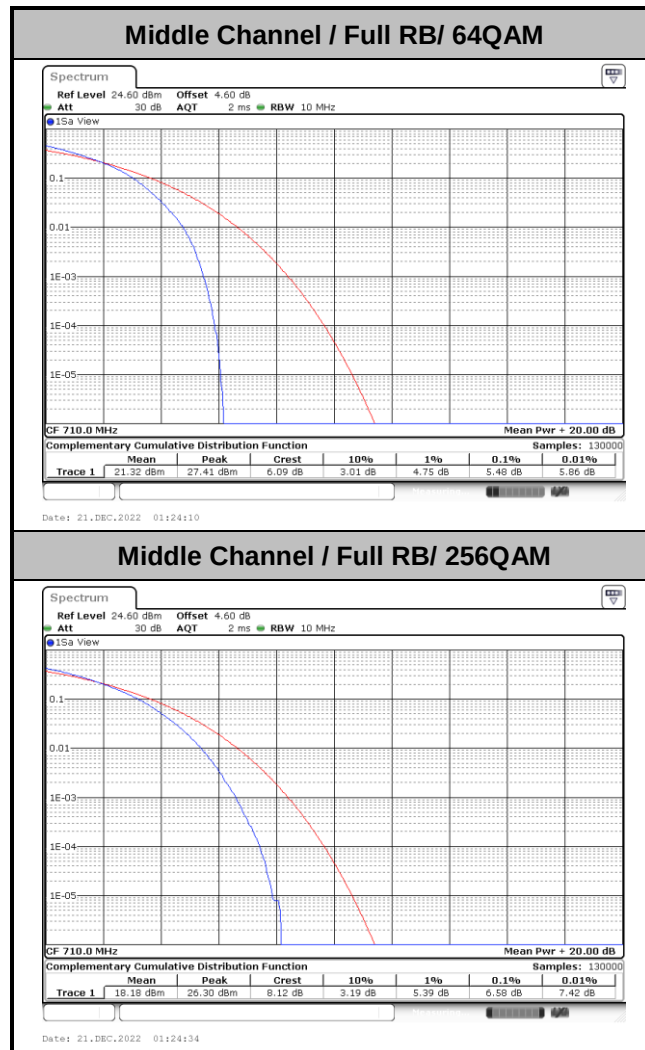


LTE Band 17

Peak-to-Average Ratio

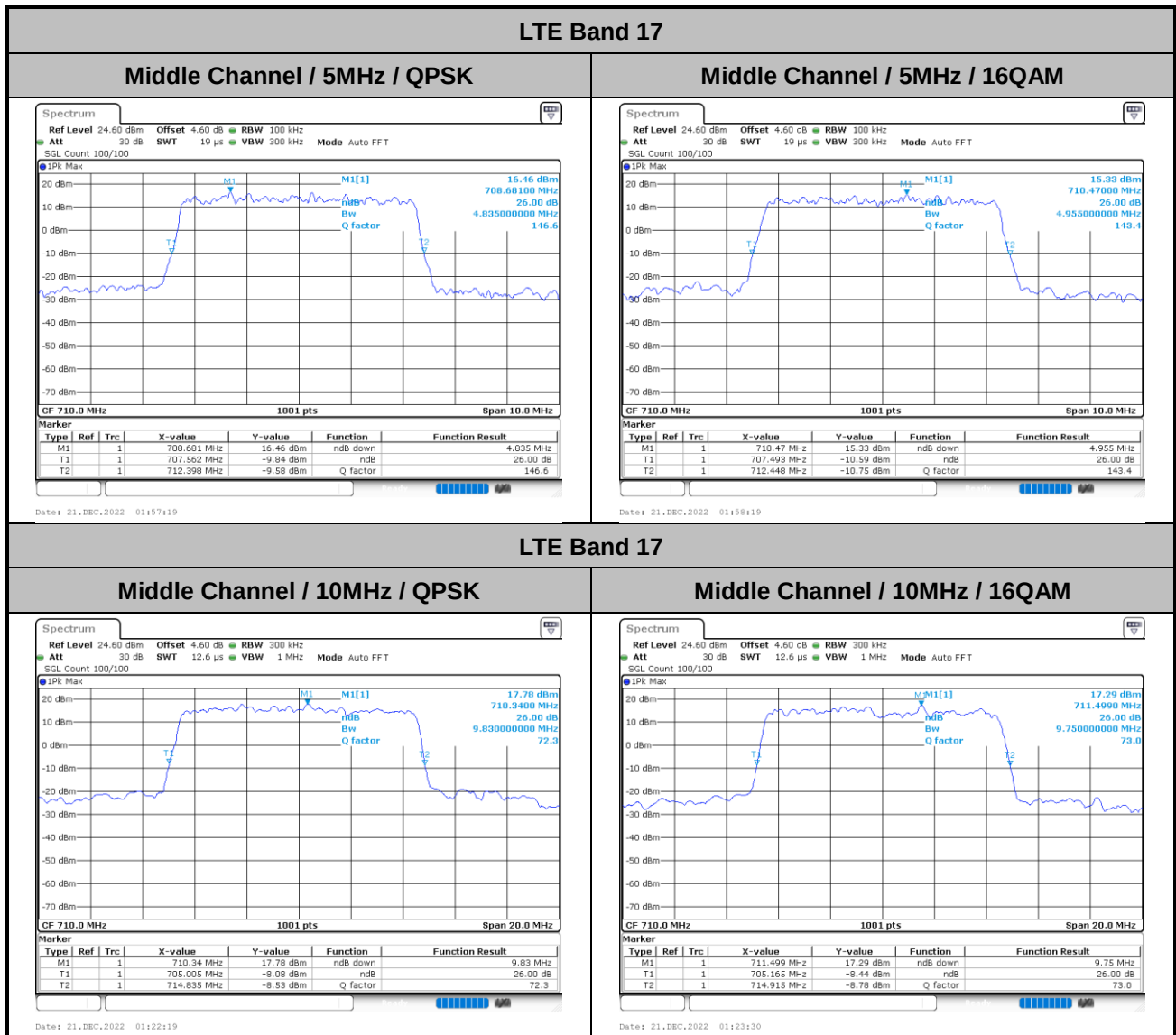
Mode	LTE Band 17 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.52	5.45	5.48	6.58	PASS





**26dB Bandwidth**

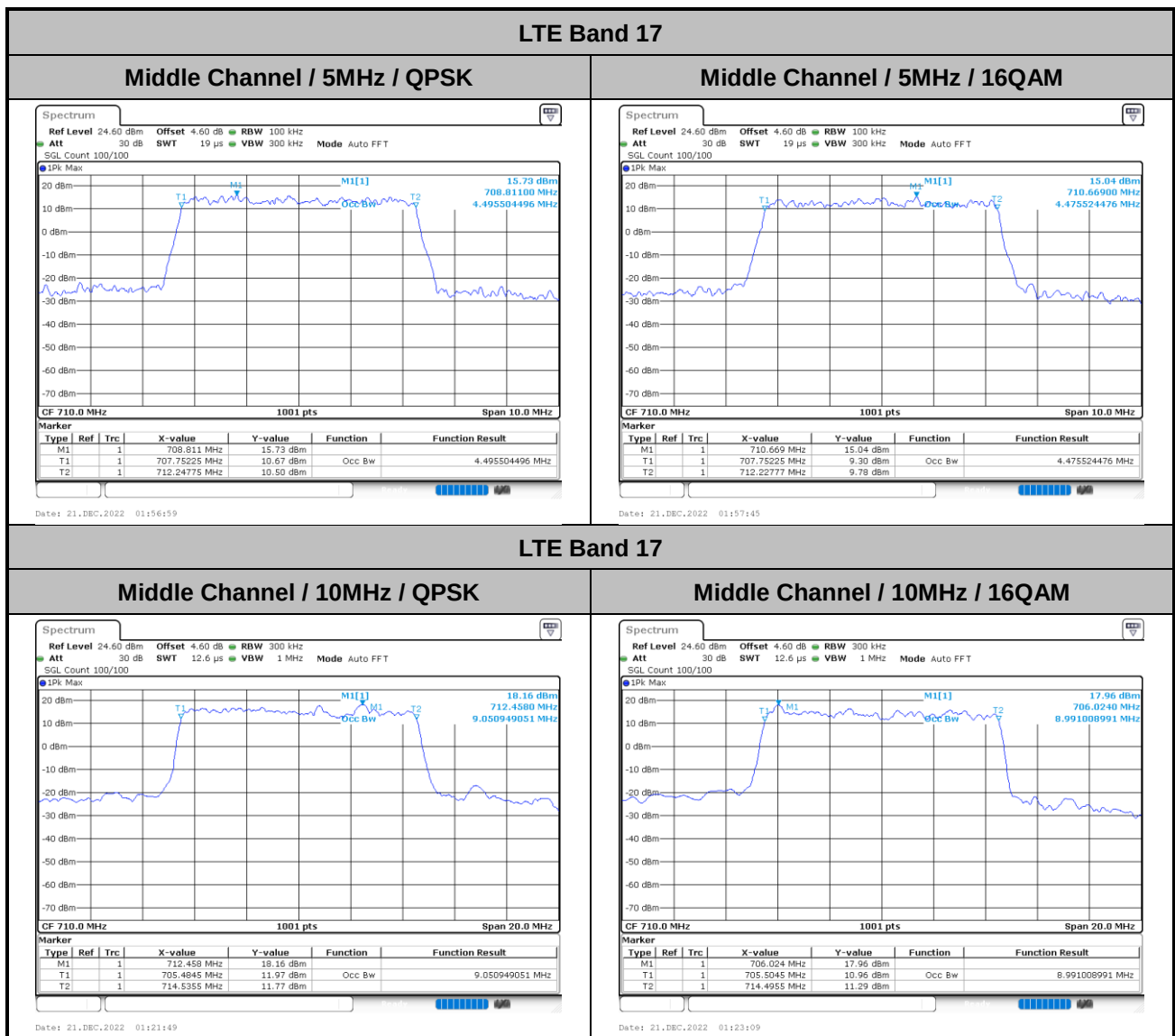
Mode	LTE Band 17 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.835	4.955
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.83	9.75





Occupied Bandwidth

Mode	LTE Band 17 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.496	4.476
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.051	8.991

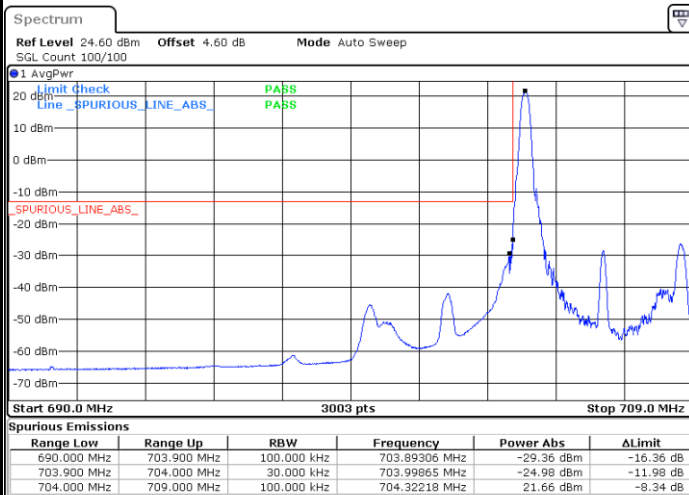




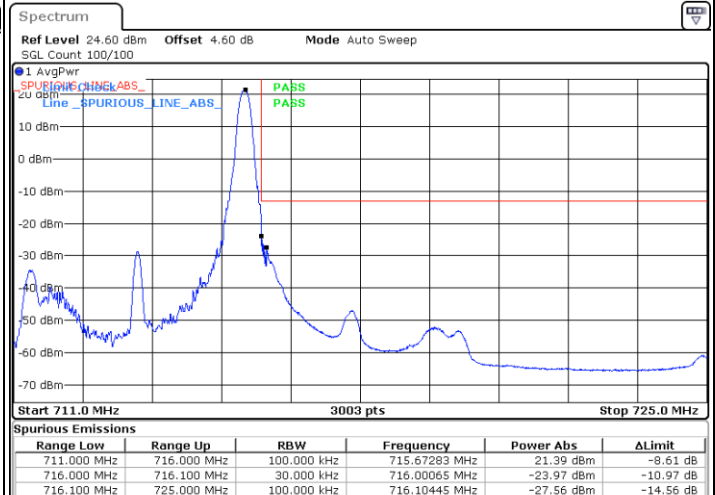
Conducted Band Edge

LTE Band 17 / 5MHz / QPSK

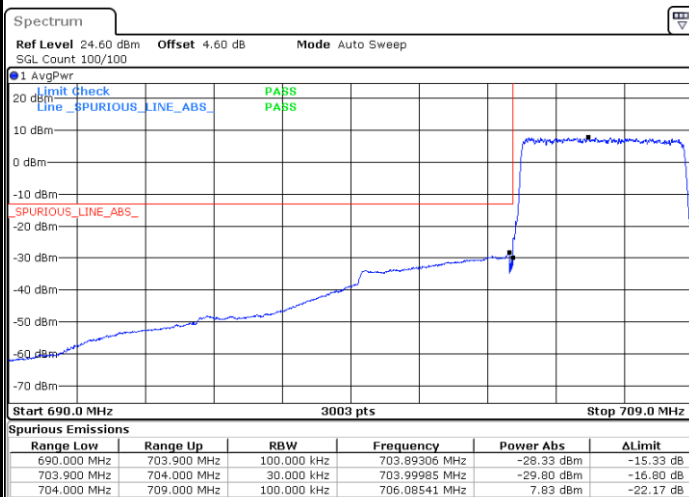
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

