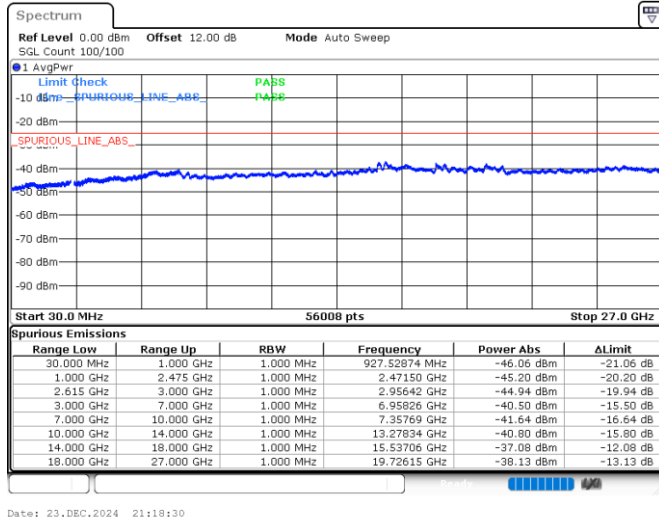




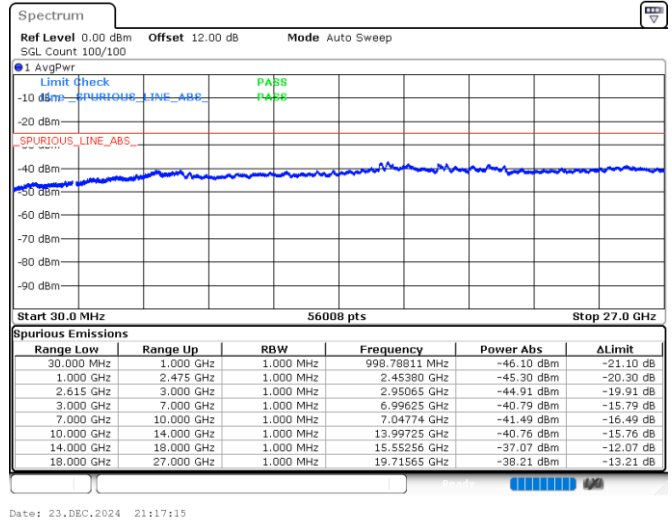
LTE Band 7C / 20MHz+15MHz

QPSK

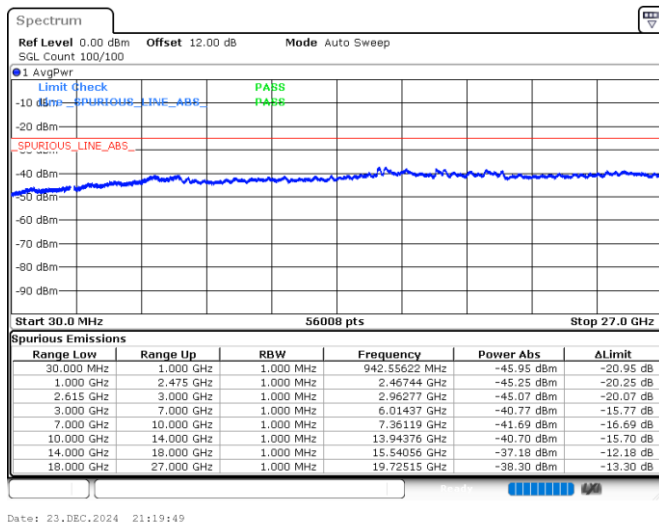
Lowest Channel / 1RB0 and 1RB74



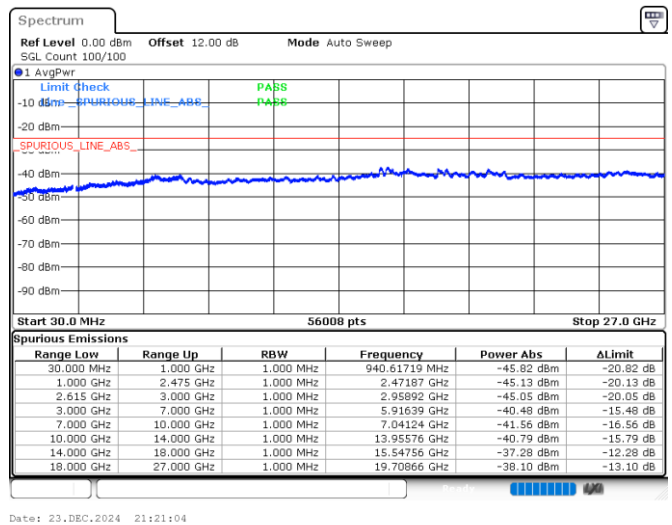
Lowest Channel / 1RB99 and 1RB0



Middle Channel / 1RB0 and 1RB74



Middle Channel / 1RB99 and 1RB0



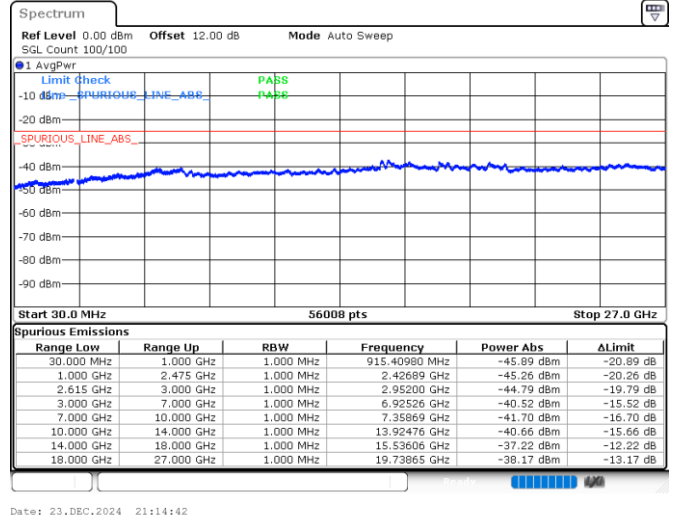
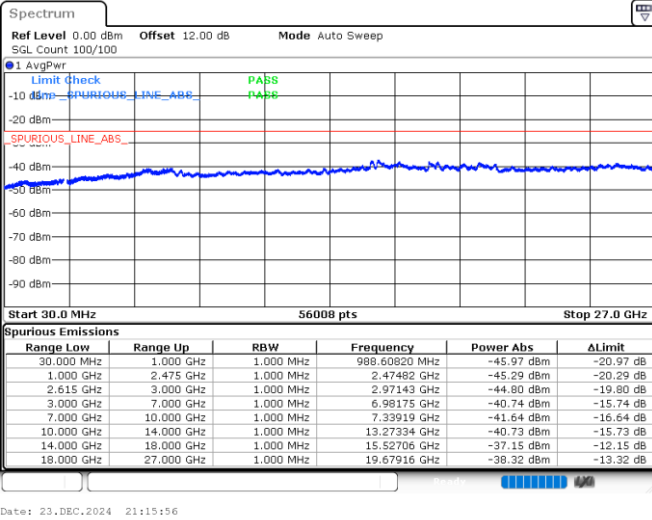


LTE Band 7C / 20MHz+15MHz

QPSK

Highest Channel / 1RB0 and 1RB74

Highest Channel / 1RB99 and 1RB0

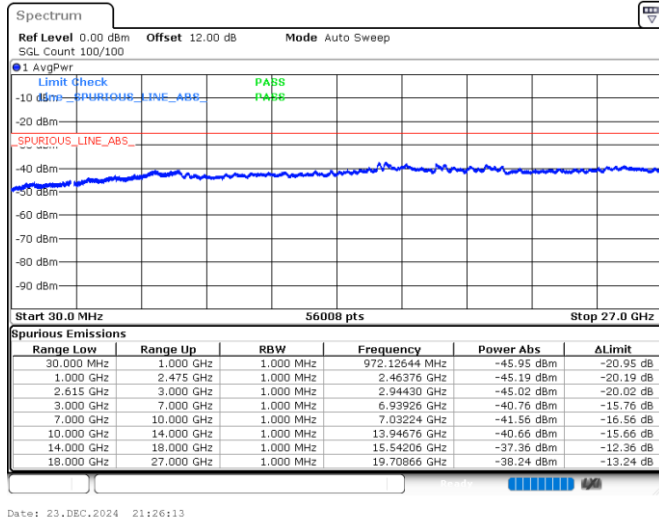




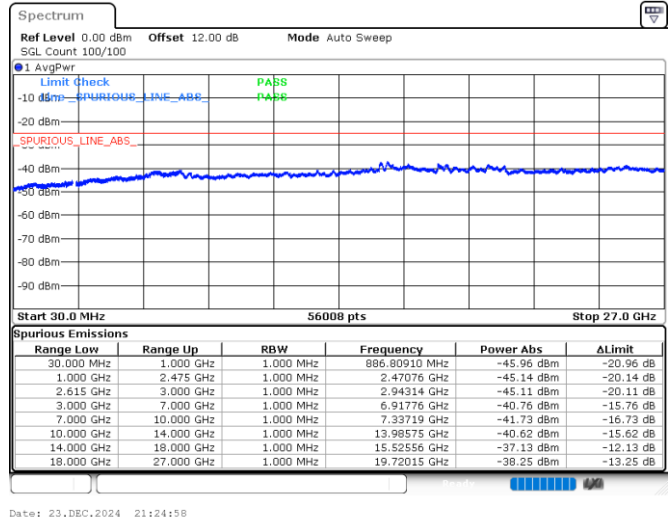
LTE Band 7C / 20MHz+20MHz

QPSK

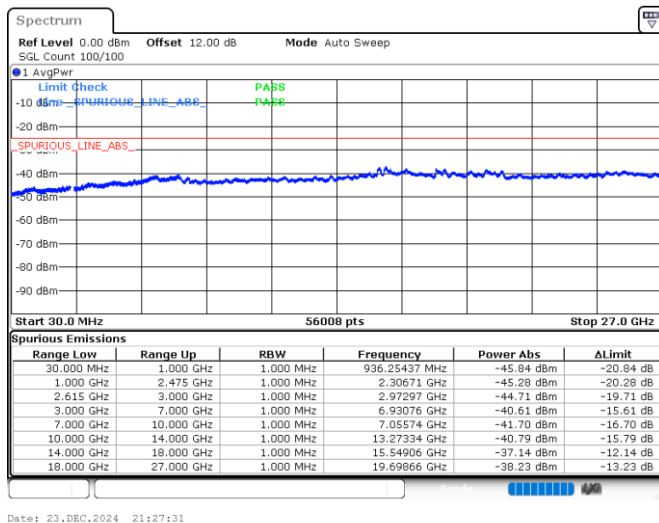
Lowest Channel / 1RB0 and 1RB99



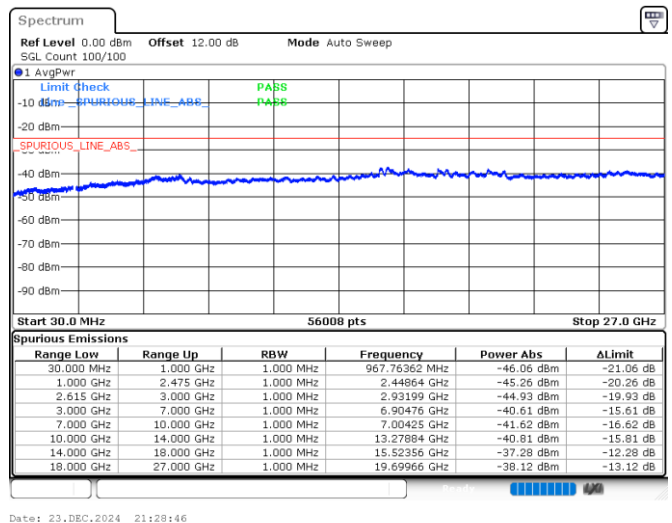
Lowest Channel / 1RB99 and 1RB0



MiddleChannel / 1RB0 and 1RB99



Middle Channel / 1RB99 and 1RB0



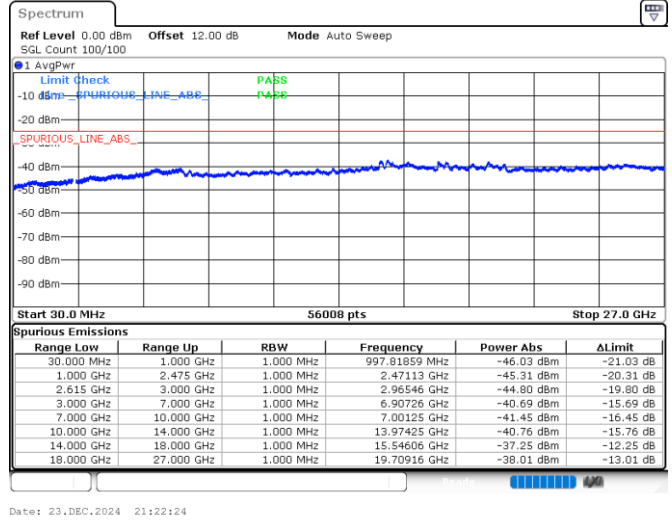
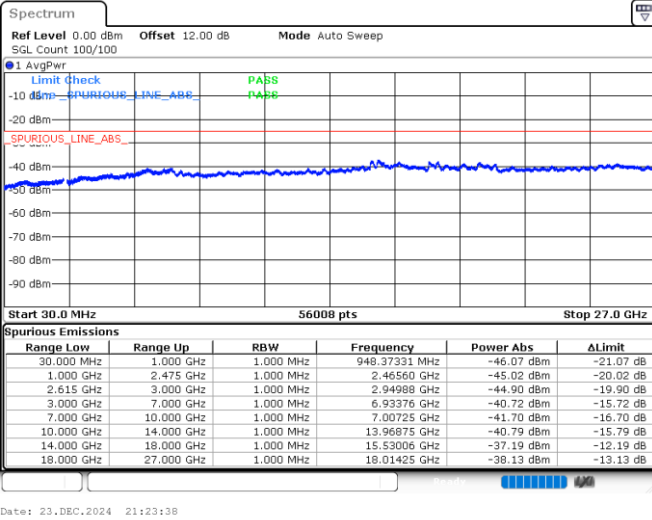


LTE Band 7C / 20MHz+20MHz

QPSK

Highest Channel / 1RB0 and 1RB99

Highest Channel / 1RB99 and 1RB0





LTE Band 12

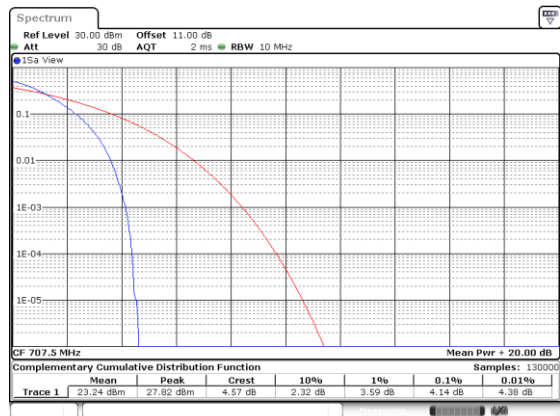
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.14	4.99	5.62	6.35	PASS



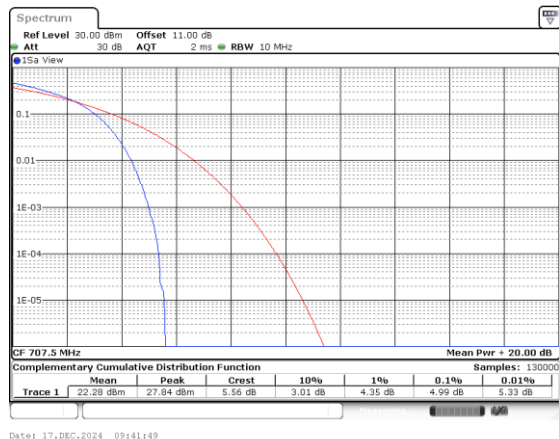
LTE Band 12 / 10MHz / QPSK

Middle Channel / Full RB



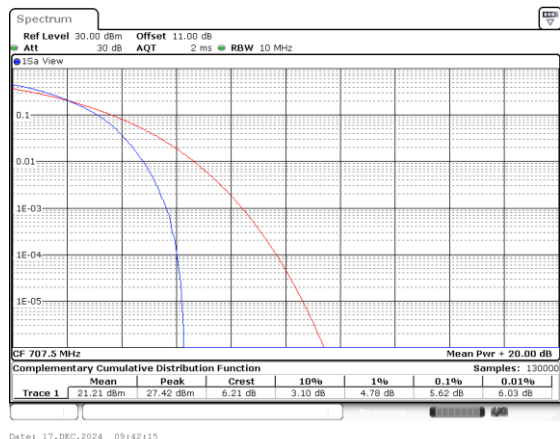
LTE Band 12 / 10MHz / 16QAM

Middle Channel / Full RB



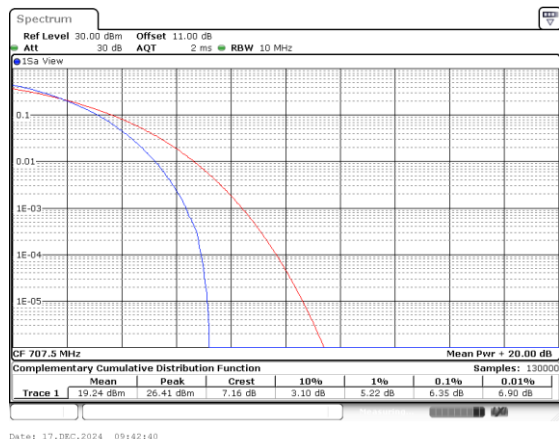
LTE Band 12 / 10MHz / 64QAM

Middle Channel / Full RB



LTE Band 12 / 10MHz / 256QAM

Middle Channel / Full RB



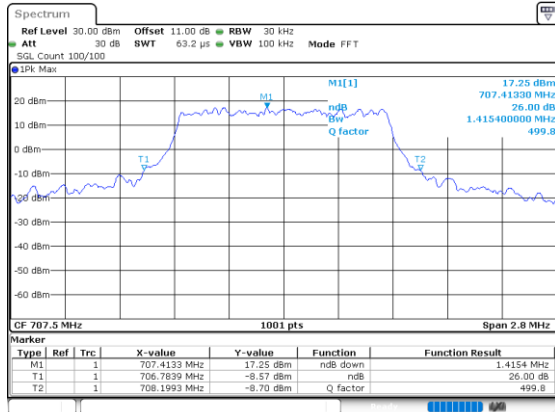
**26dB Bandwidth**

Mode	LTE Band 12 : 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	1.41	1.43	3.13	3.09	5.21	4.97	9.65	10.10	-	-	-	-
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	1.32	1.34	3.09	3.08	5.01	5.10	9.99	10.02	-	-	-	-

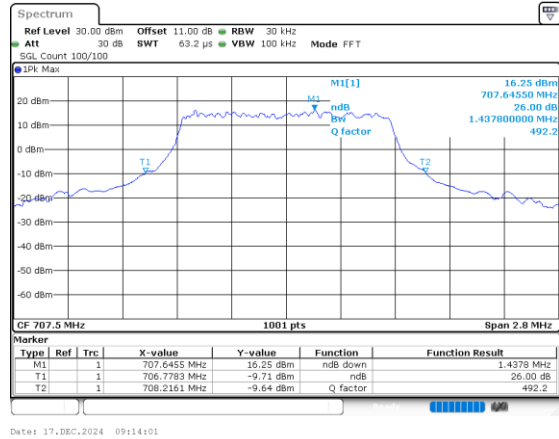


LTE Band 12

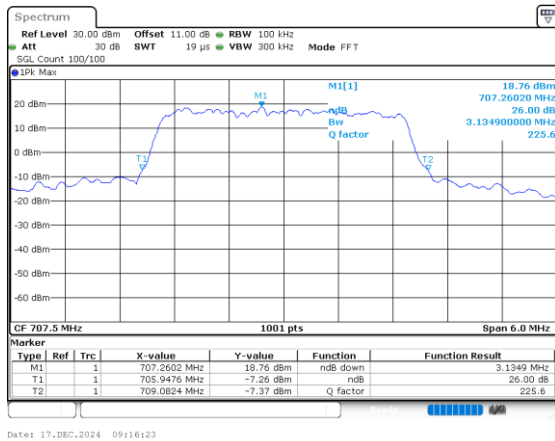
Middle Channel / 1.4MHz / QPSK



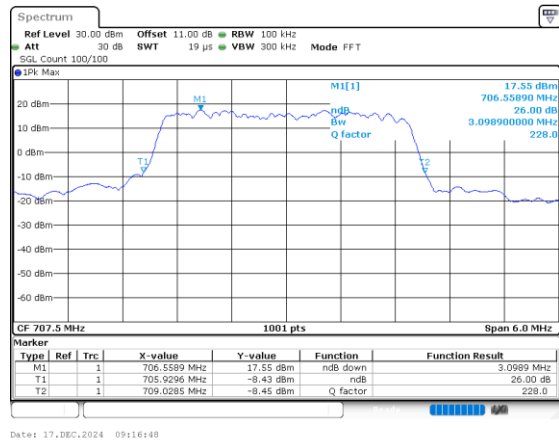
Middle Channel / 1.4MHz / 16QAM



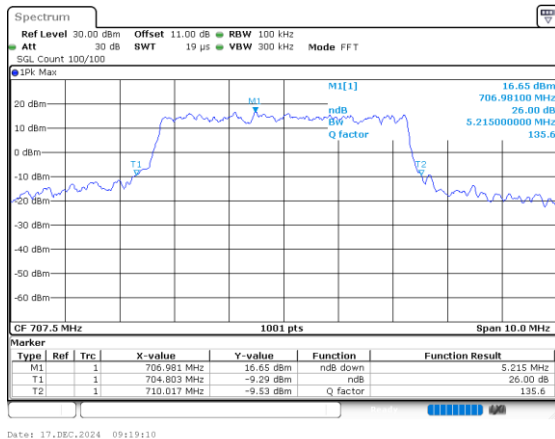
Middle Channel / 3MHz / QPSK



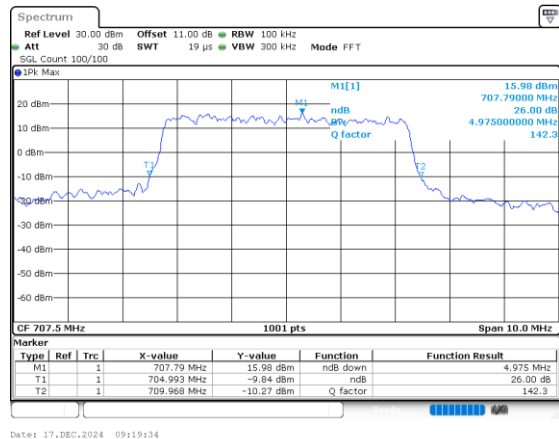
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



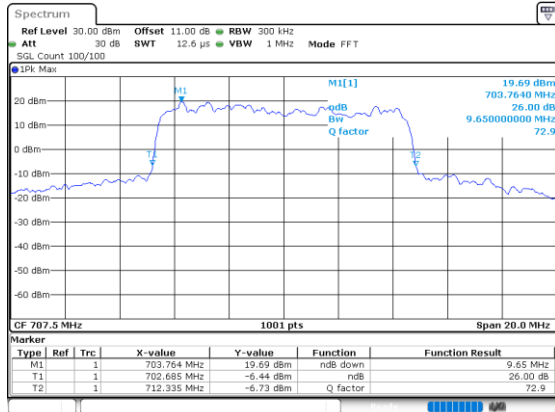
Middle Channel / 5MHz / 16QAM



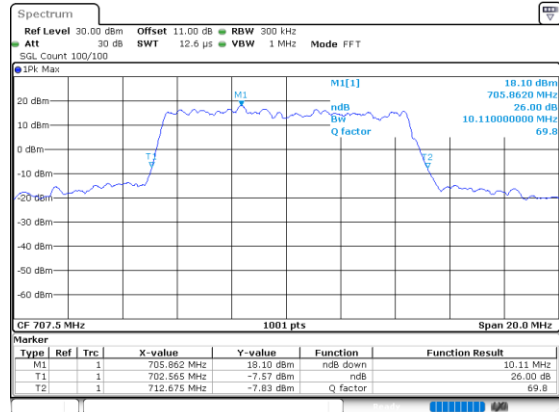


LTE Band 12

Middle Channel / 10MHz / QPSK

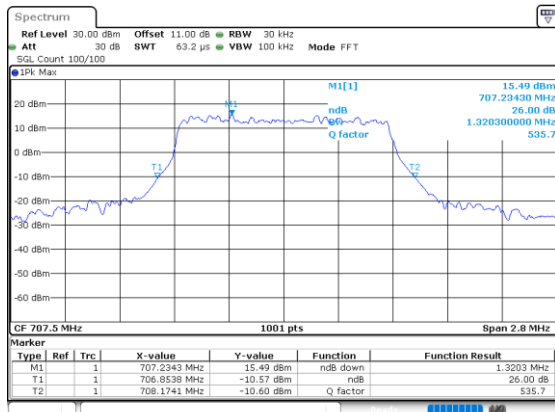


Middle Channel / 10MHz / 16QAM

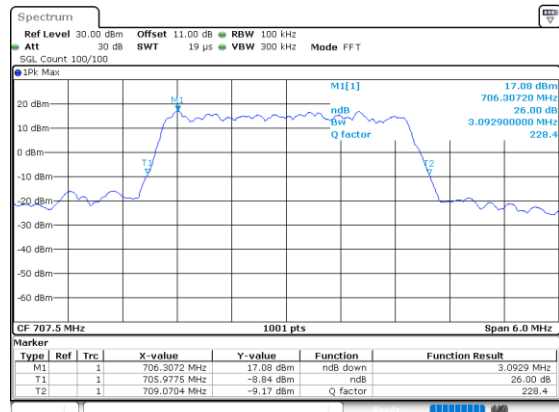


LTE Band 12

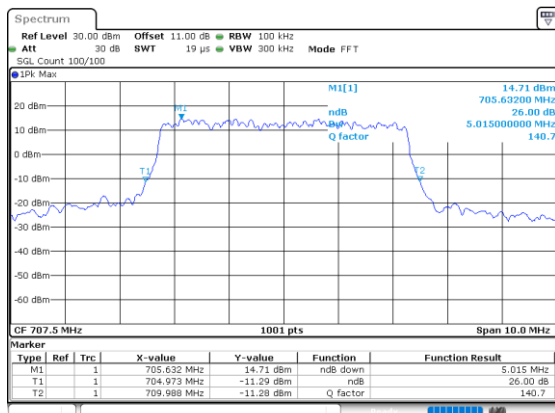
Middle Channel / 1.4MHz / 64QAM



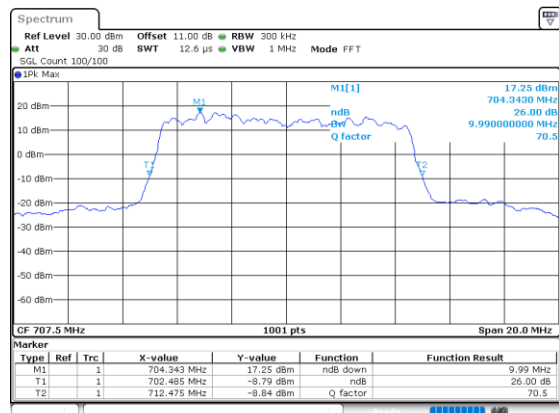
Middle Channel / 3MHz / 64QAM



Middle Channel / 5MHz / 64QAM



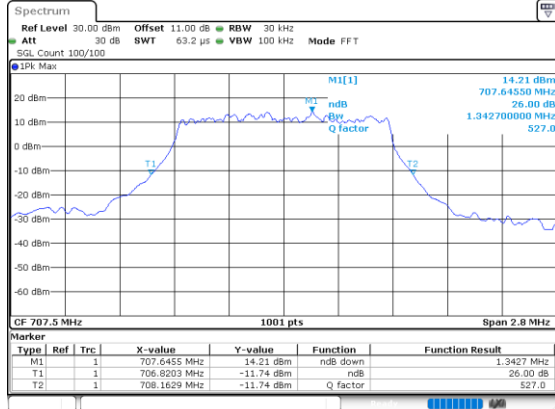
Middle Channel / 10MHz / 64QAM



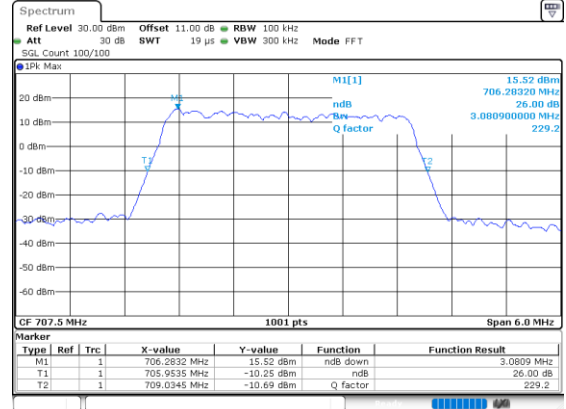


LTE Band 12

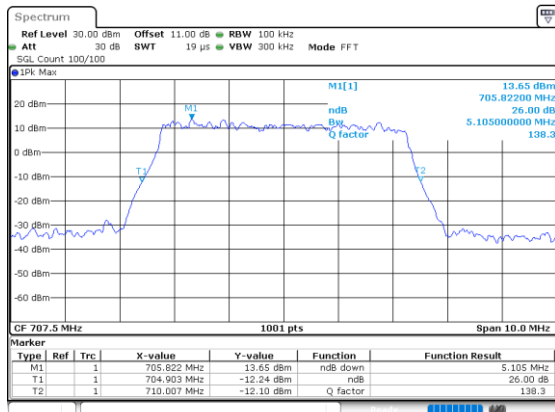
Middle Channel / 1.4MHz / 256QAM



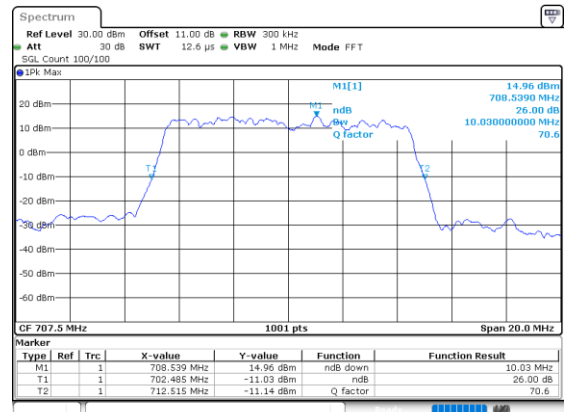
Middle Channel / 3MHz / 256QAM



Middle Channel / 5MHz / 256QAM



Middle Channel / 10MHz / 256QAM



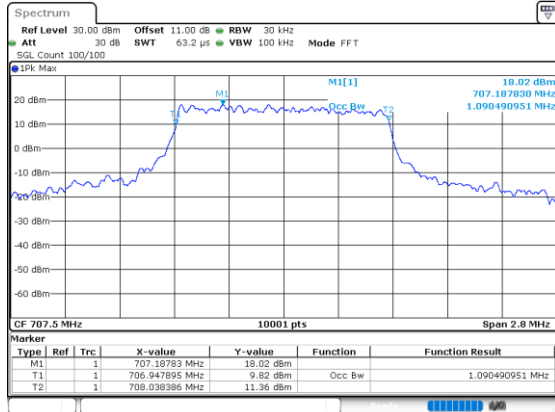
**Occupied Bandwidth**

Mode	LTE Band 12 : 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	1.09	1.09	2.71	2.77	4.50	4.51	9.03	9.00	-	-	-	-
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	1.09	1.09	2.74	2.72	4.48	4.48	9.01	8.97	-	-	-	-

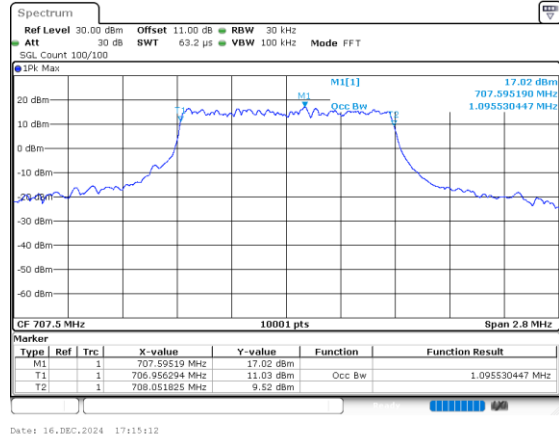


LTE Band 12

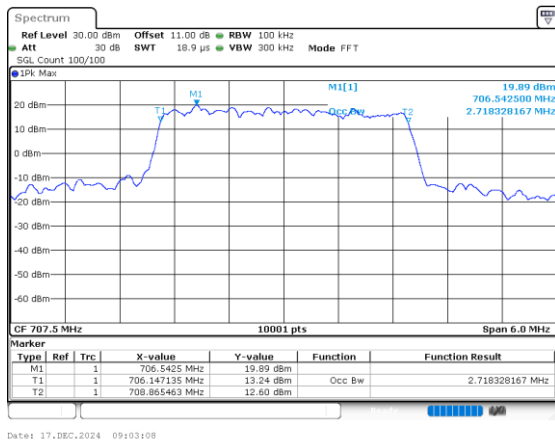
Middle Channel / 1.4MHz / QPSK



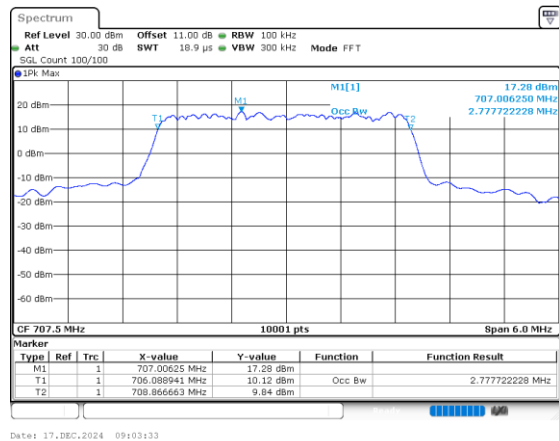
Middle Channel / 1.4MHz / 16QAM



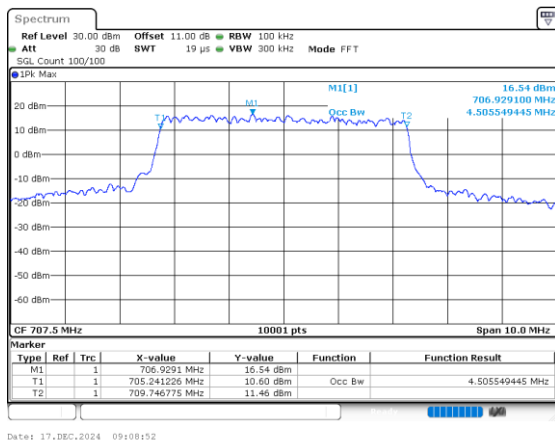
Middle Channel / 3MHz / QPSK



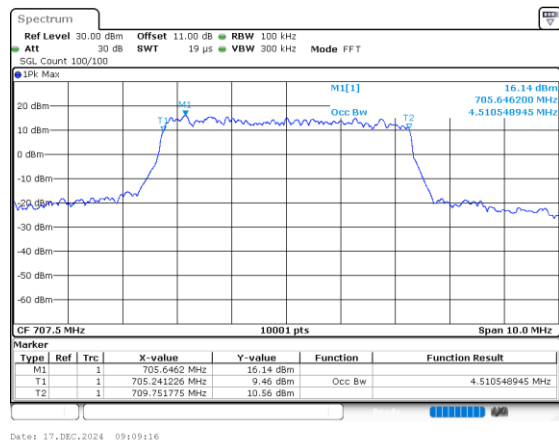
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



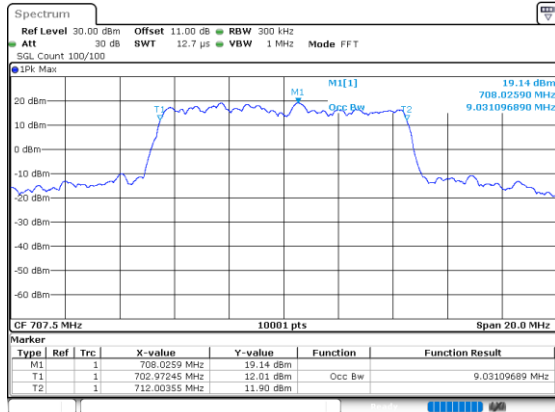
Middle Channel / 5MHz / 16QAM



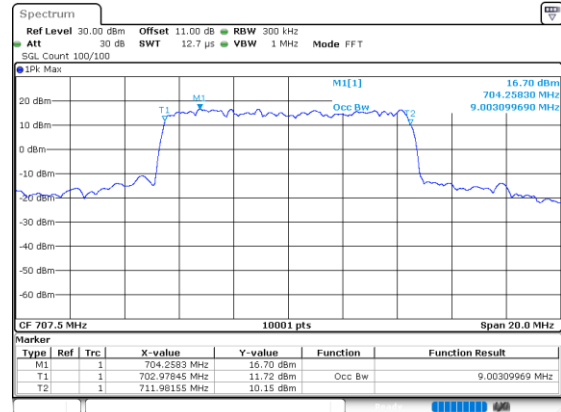


LTE Band 12

Middle Channel / 10MHz / QPSK

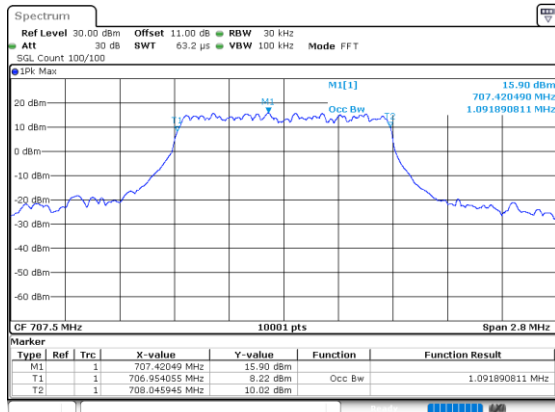


Middle Channel / 10MHz / 16QAM

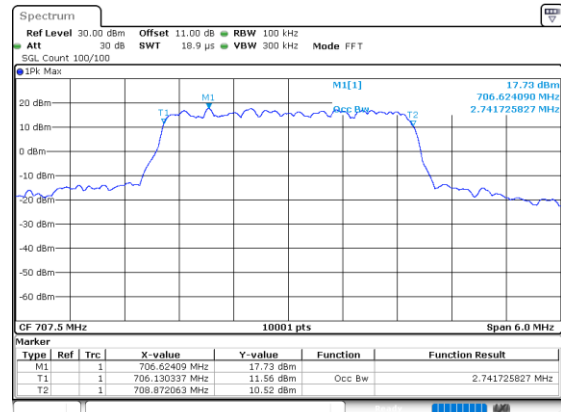


LTE Band 12

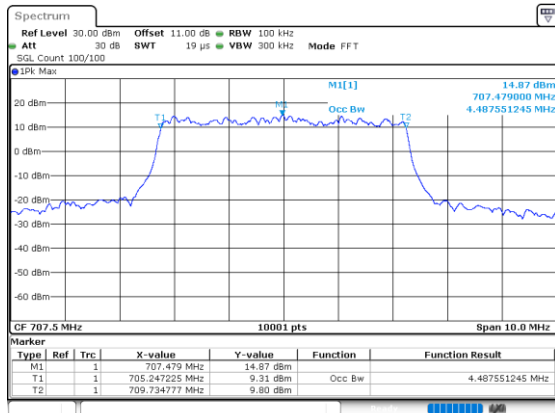
Middle Channel / 1.4MHz / 64QAM



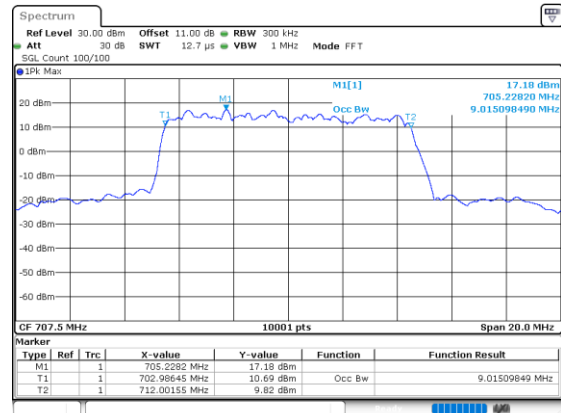
Middle Channel / 3MHz / 64QAM



Middle Channel / 5MHz / 64QAM



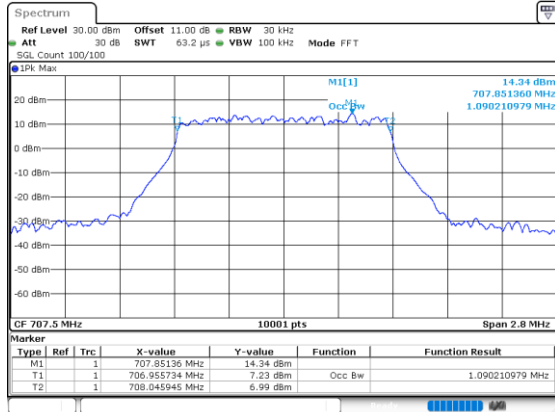
Middle Channel / 10MHz / 64QAM



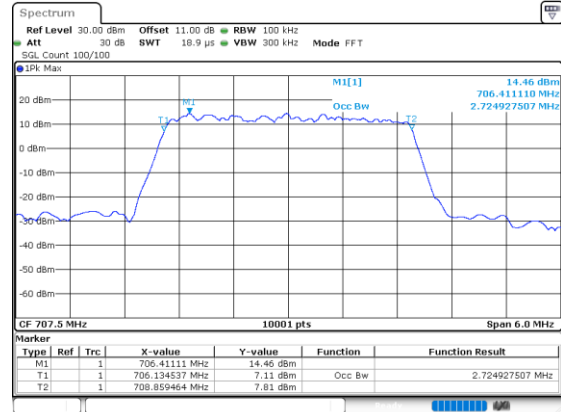


LTE Band 12

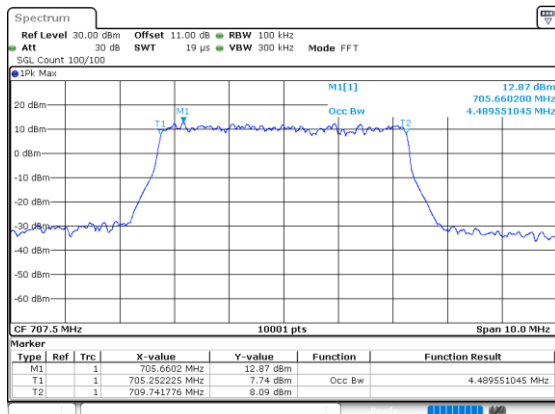
Middle Channel / 1.4MHz / 256QAM



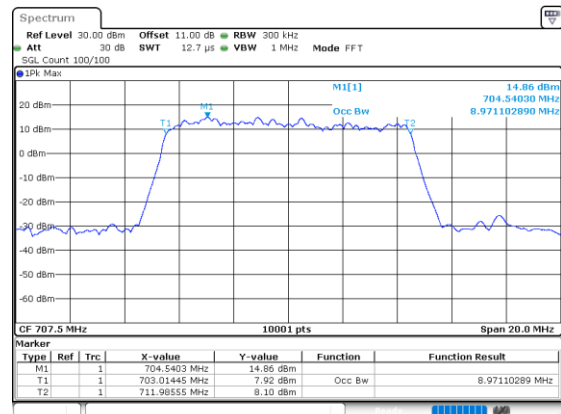
Middle Channel / 3MHz / 256QAM



Middle Channel / 5MHz / 256QAM



Middle Channel / 10MHz / 256QAM

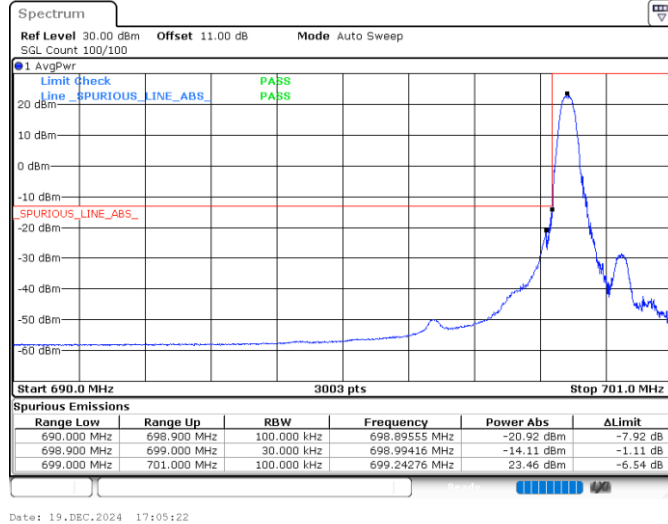




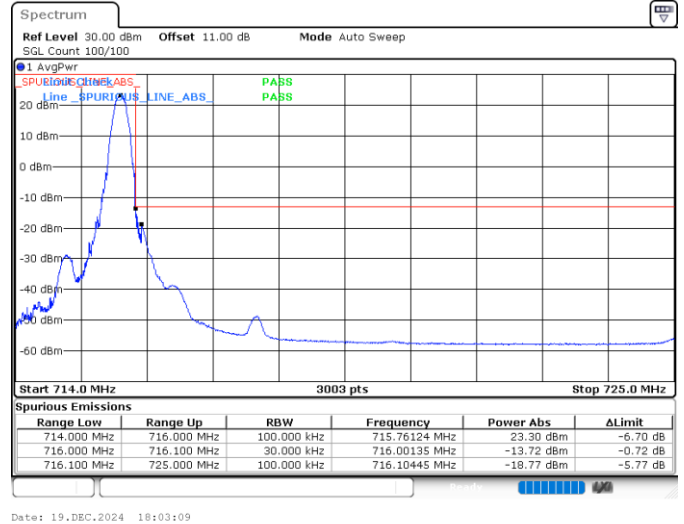
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

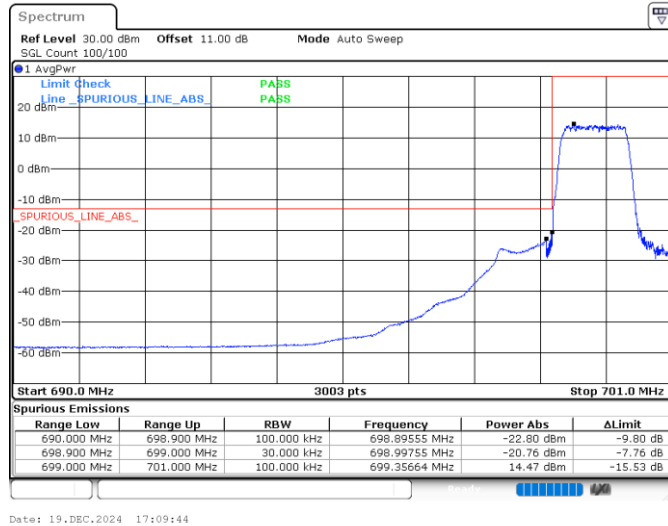
Lowest Band Edge / 1RB



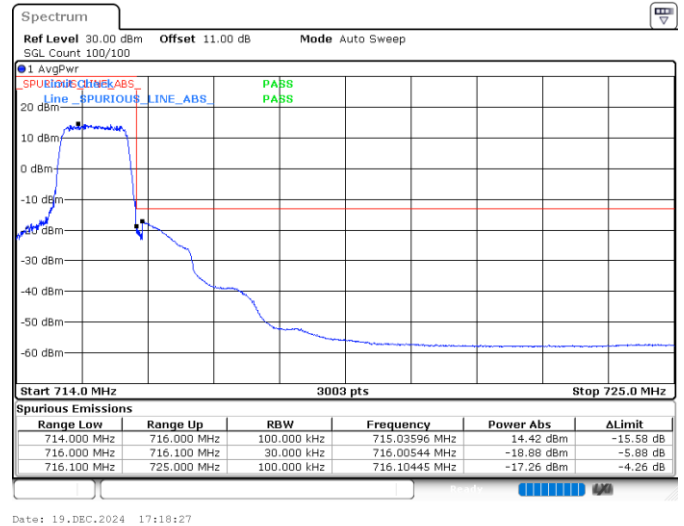
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

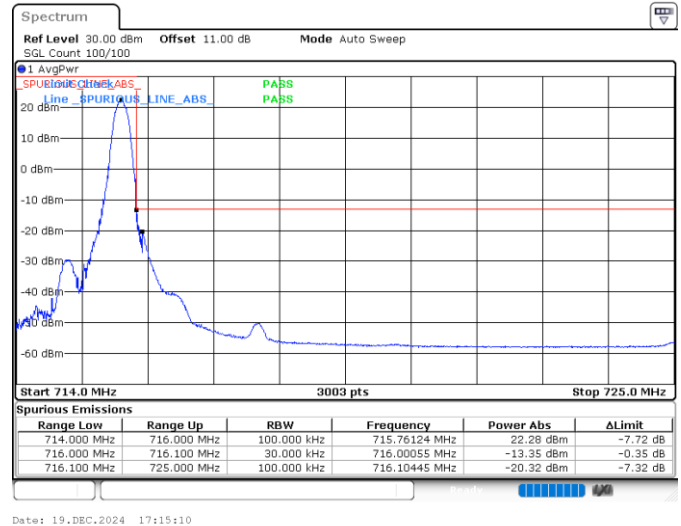
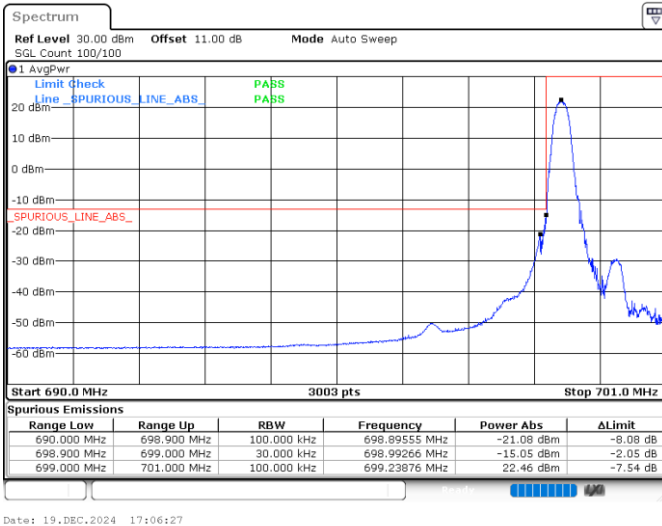




LTE Band 12 / 1.4MHz / 16QAM

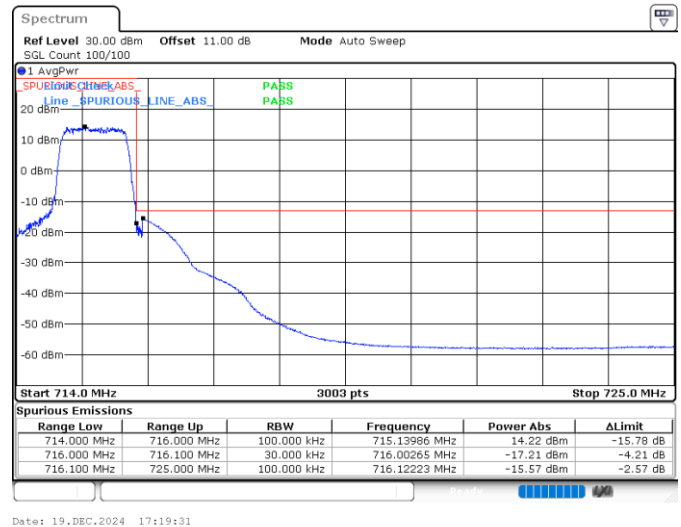
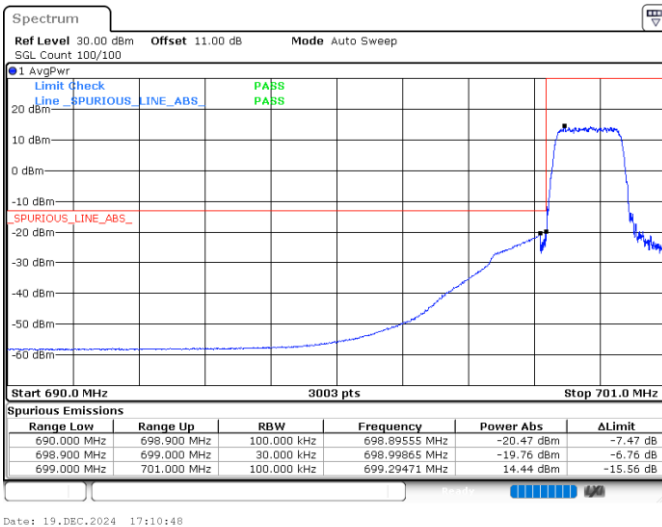
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

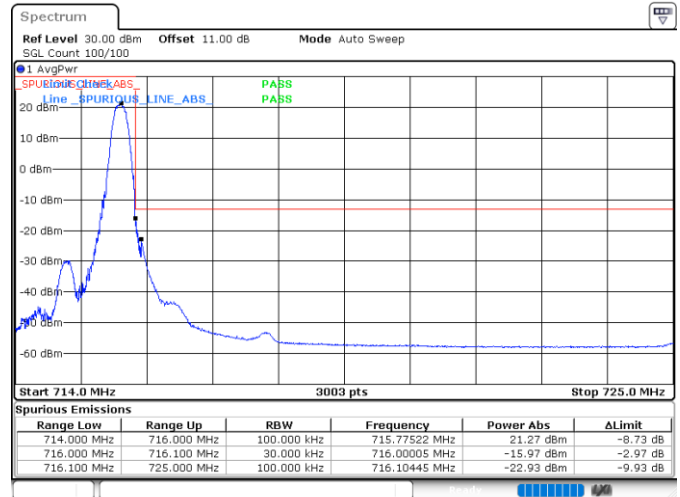
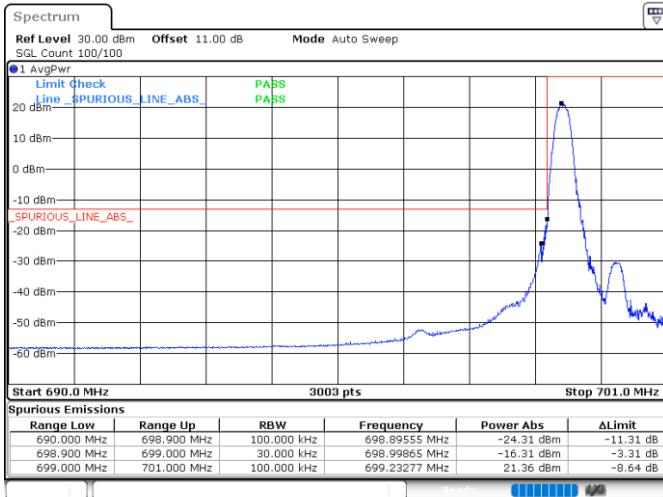




LTE Band 12 / 1.4MHz / 64QAM

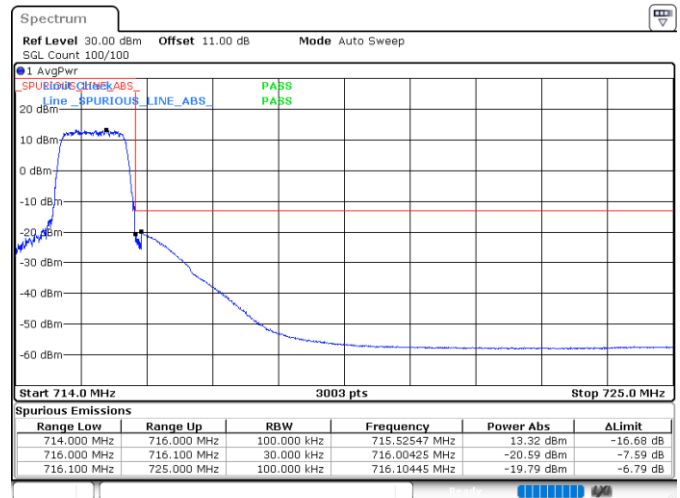
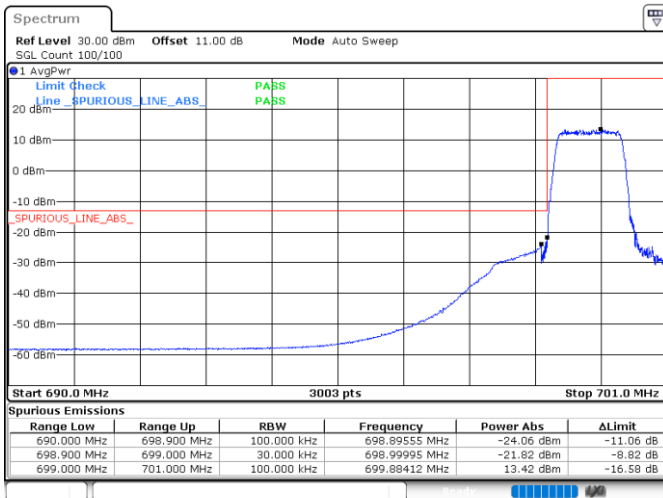
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

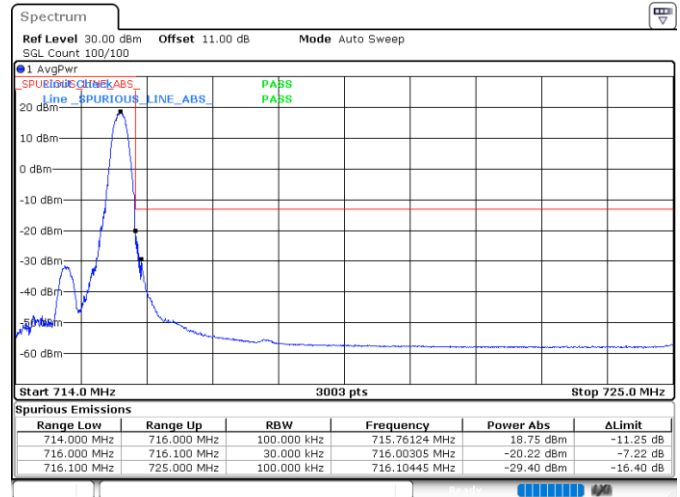
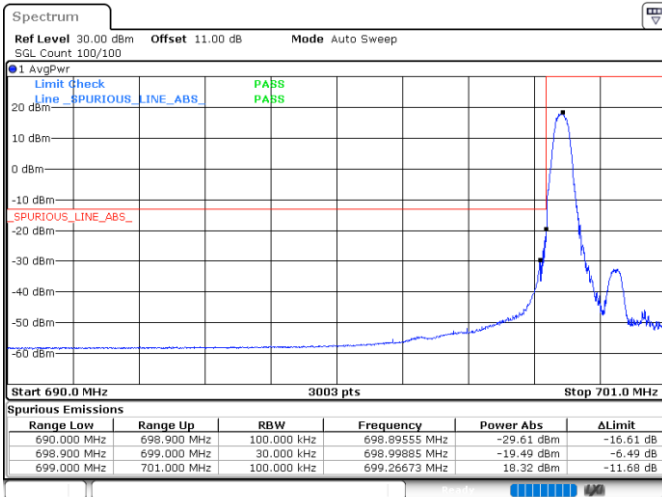




LTE Band 12 / 1.4MHz / 256QAM

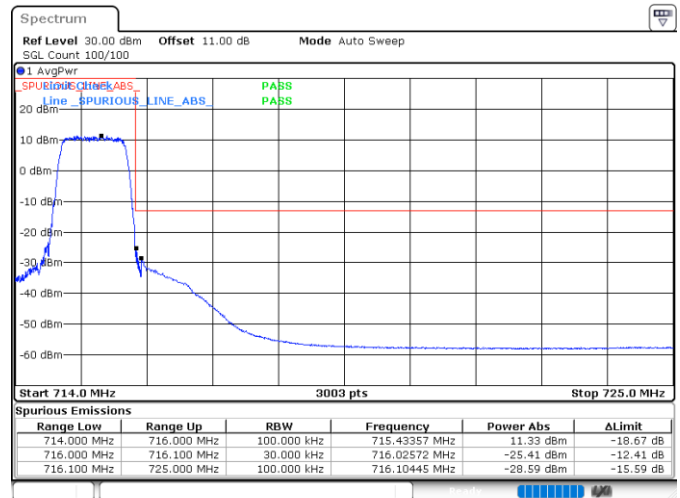
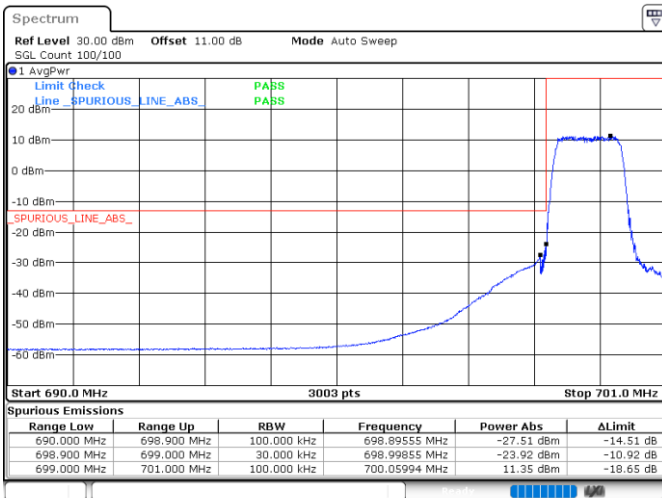
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

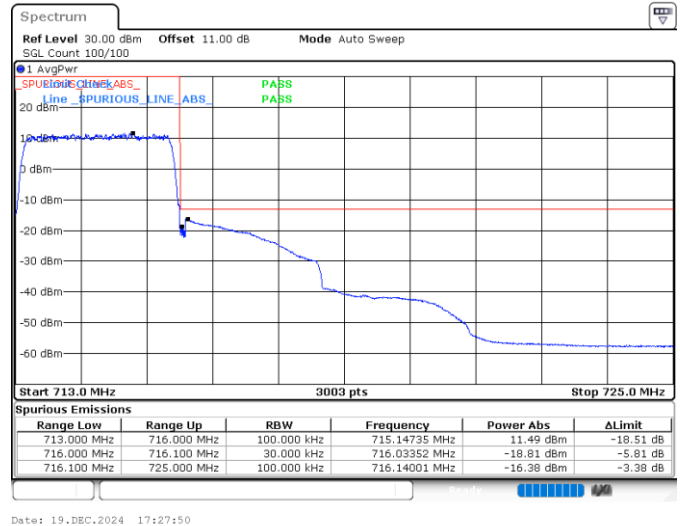
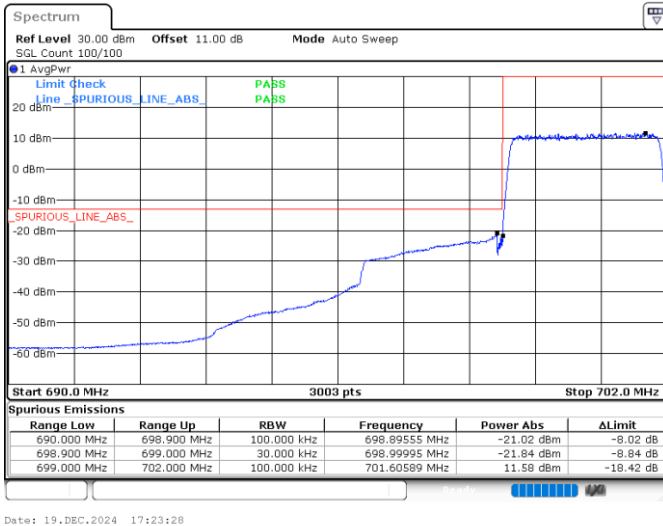




LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / Full RB

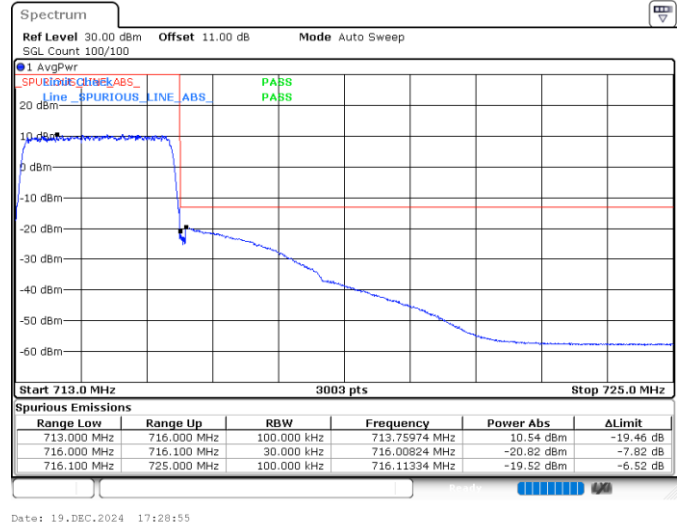
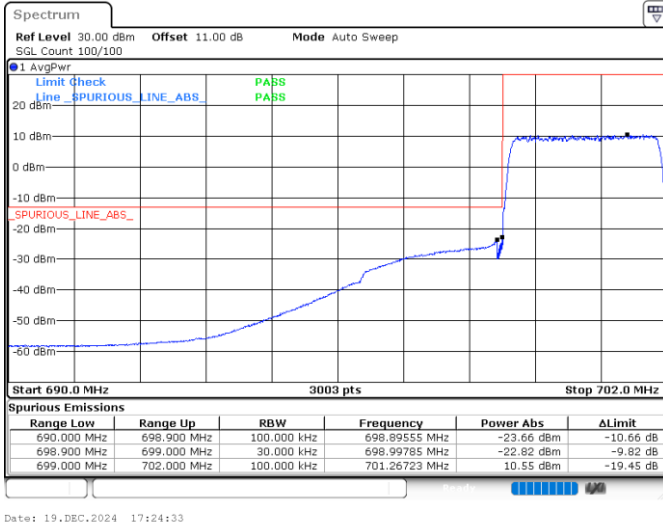
Highest Band Edge / Full RB



LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

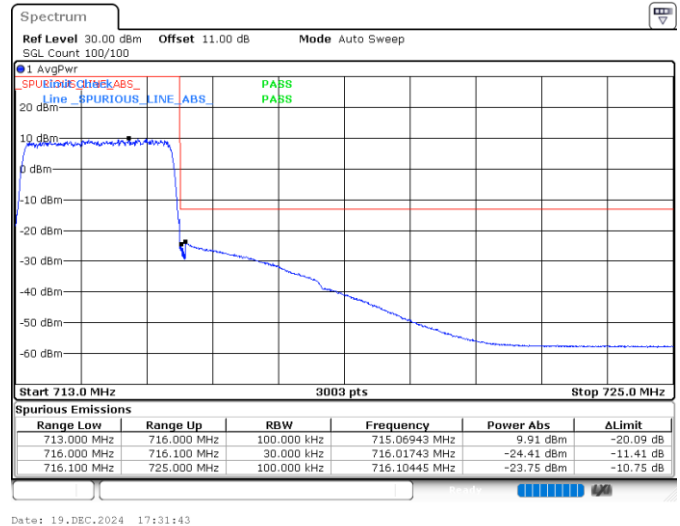
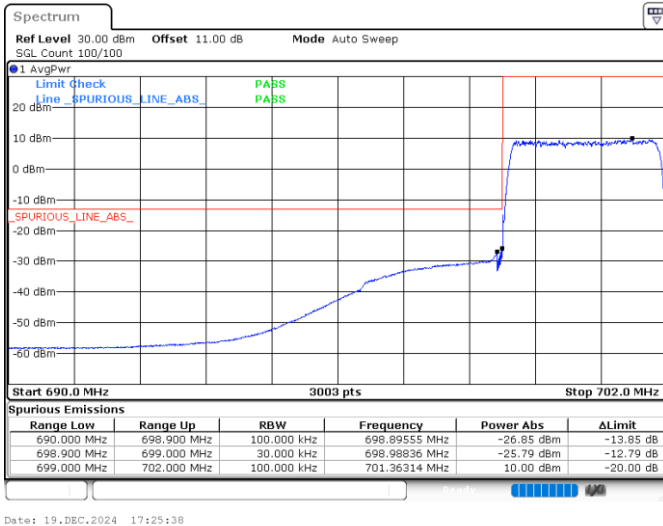




LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / Full RB

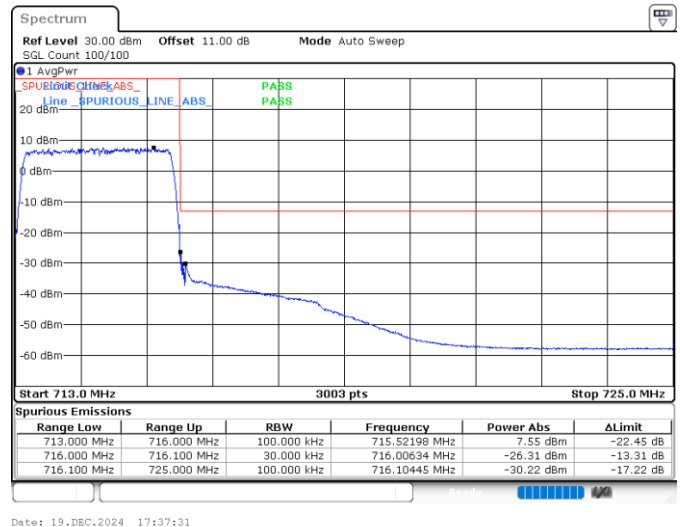
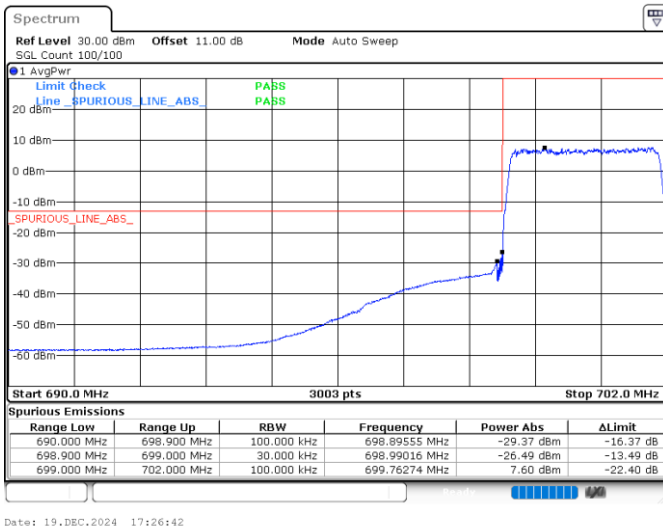
Highest Band Edge / Full RB



LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

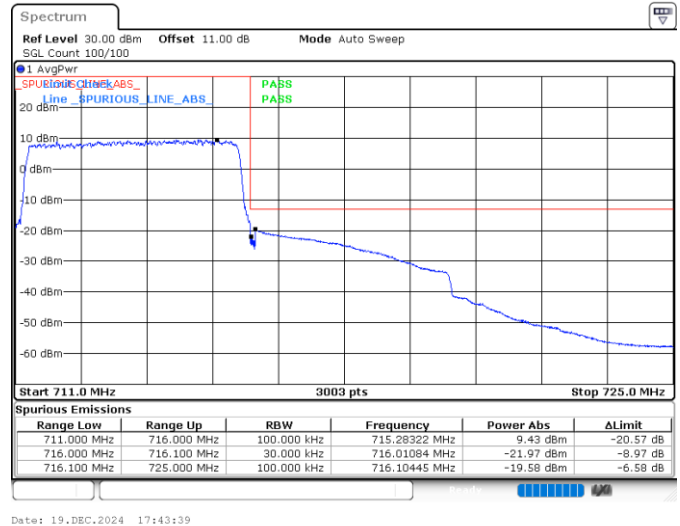
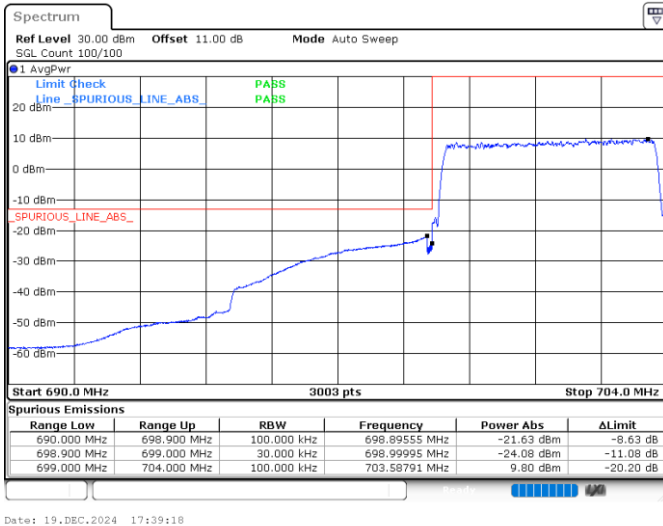




LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / Full RB

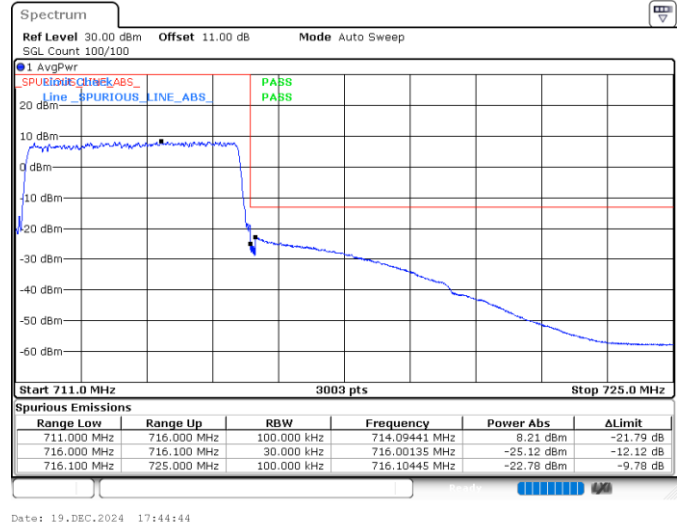
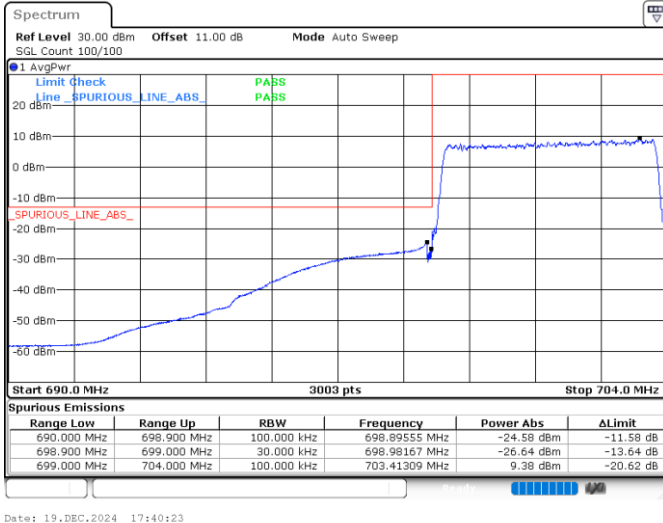
Highest Band Edge / Full RB



LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

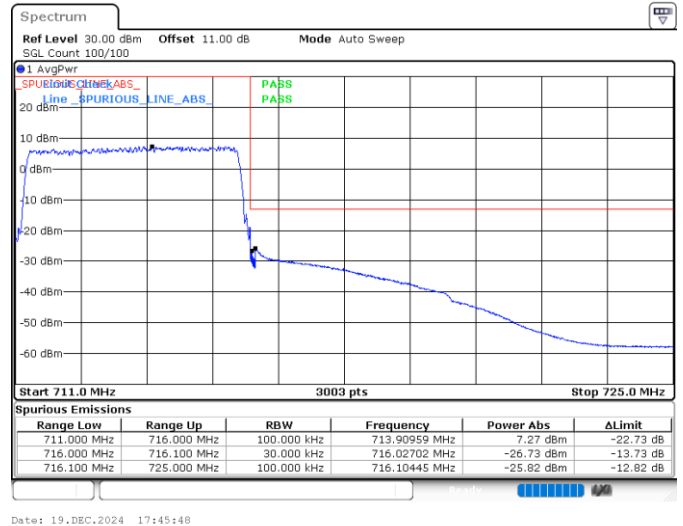
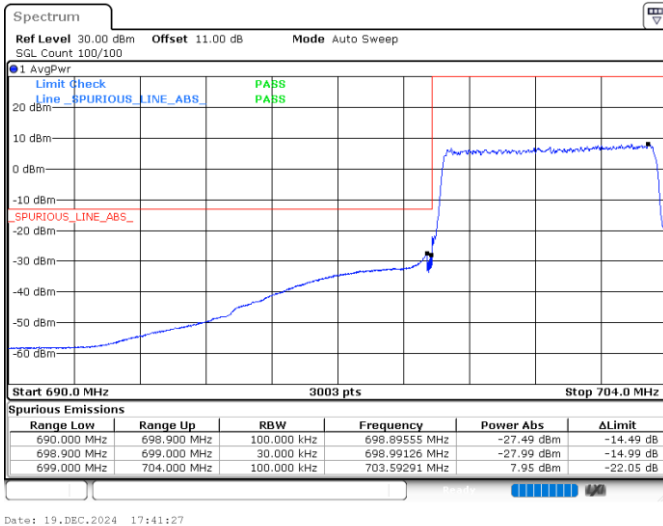




LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / Full RB

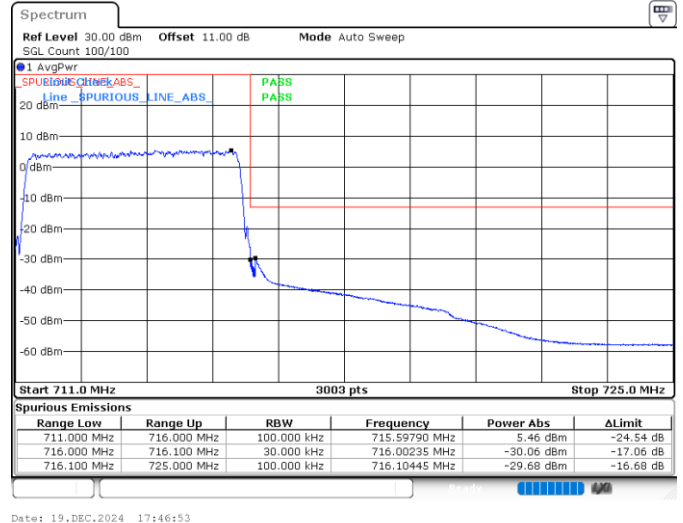
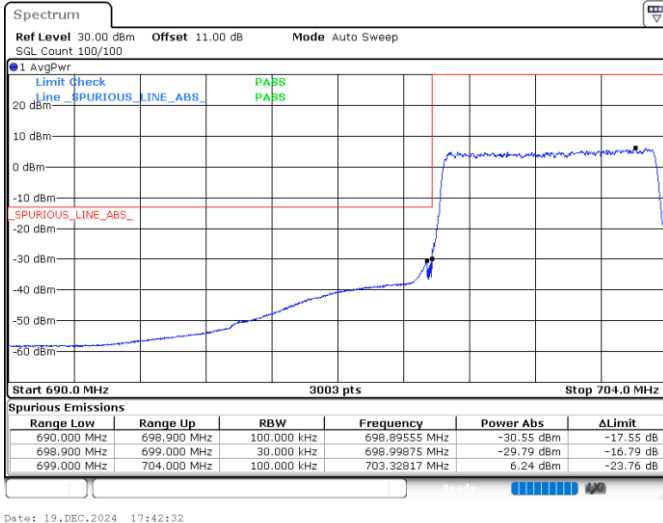
Highest Band Edge / Full RB



LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

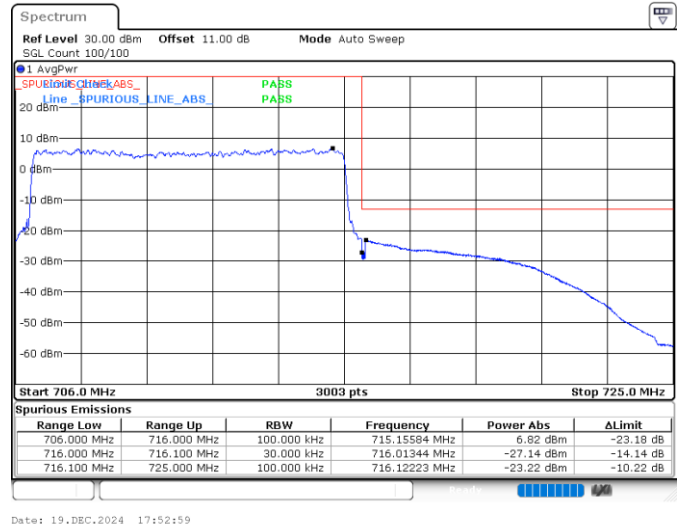
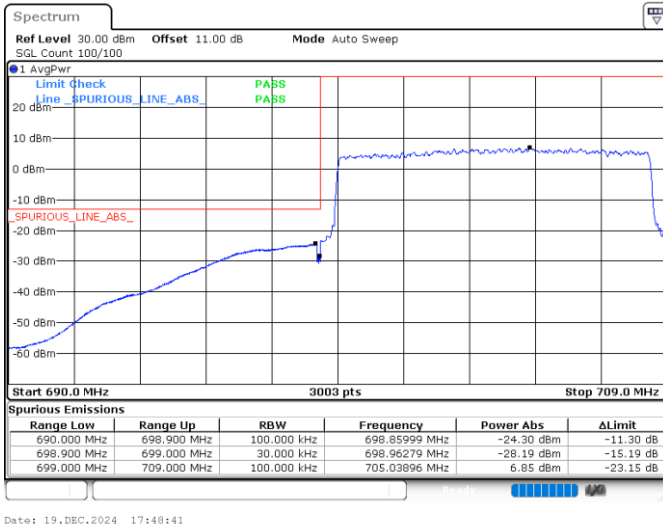




LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / Full RB

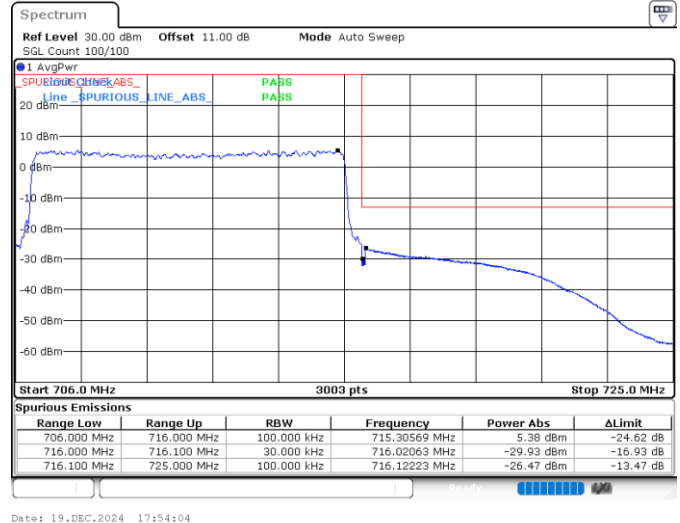
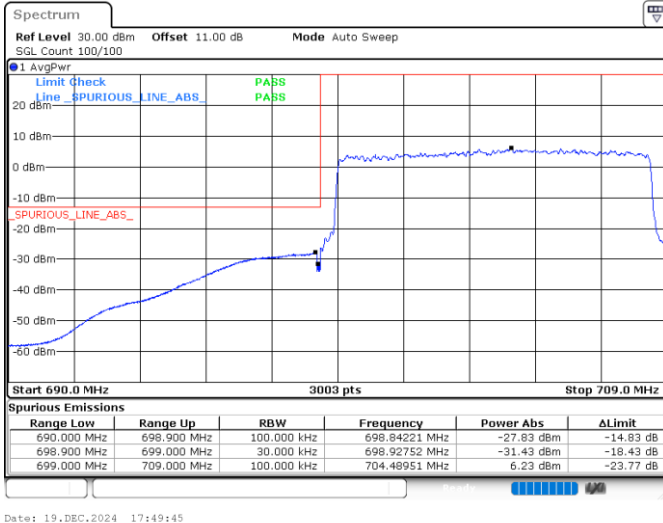
Highest Band Edge / Full RB



LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

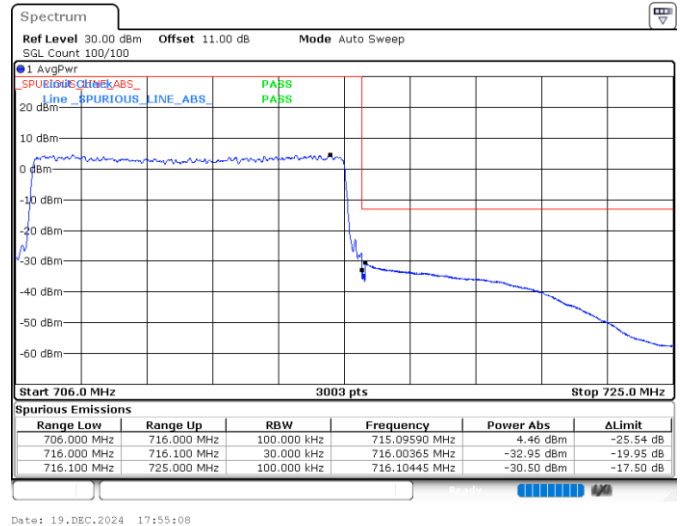
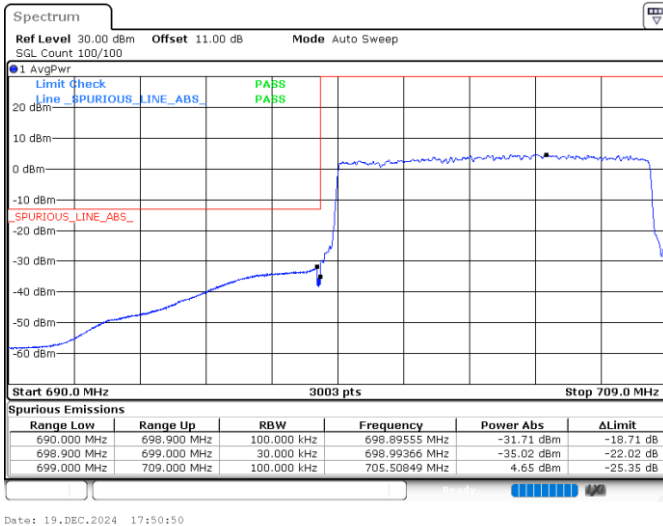




LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / Full RB

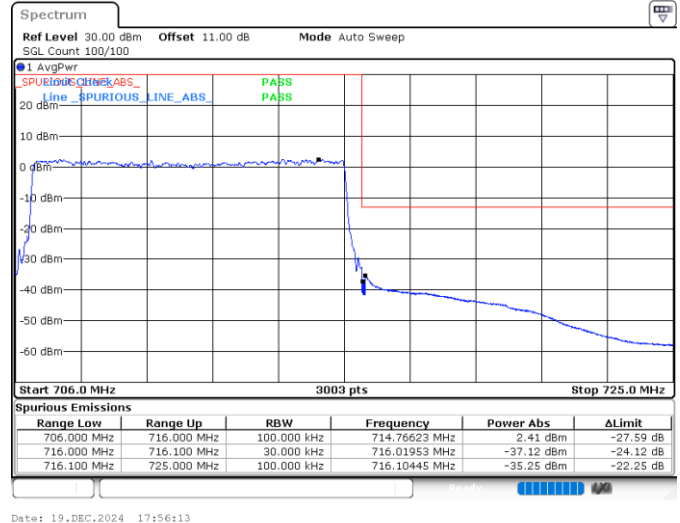
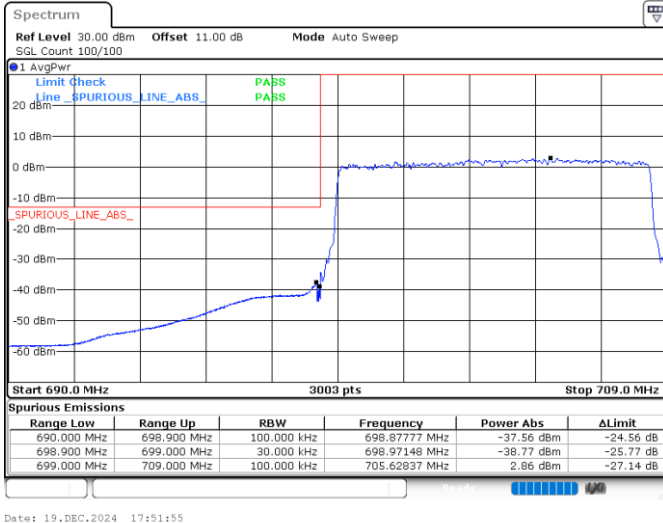
Highest Band Edge / Full RB



LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

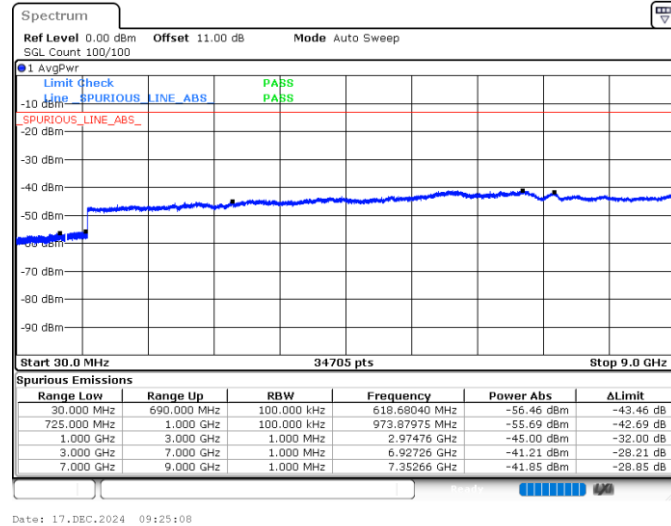




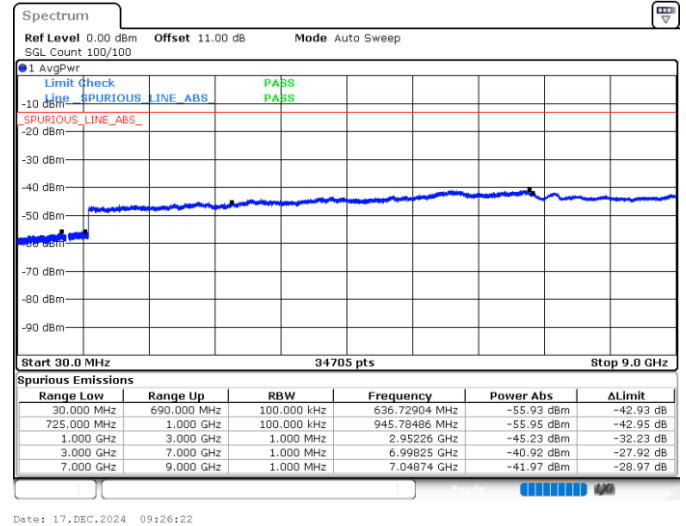
Conducted Spurious Emission

LTE Band 12 / 1.4MHz

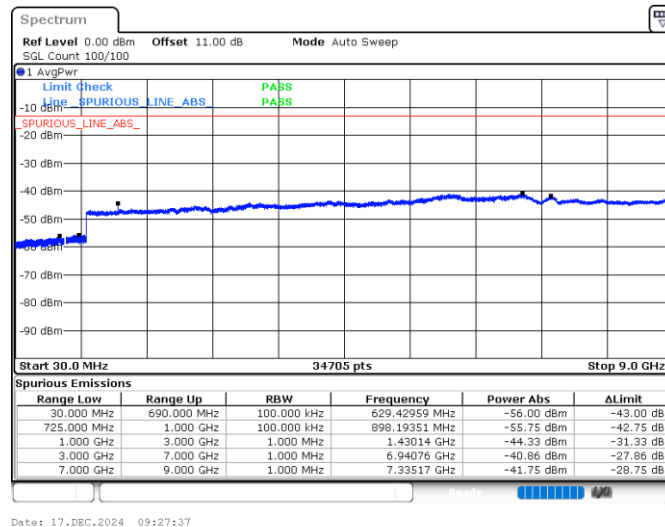
Lowest Channel / QPSK



Middle Channel / QPSK



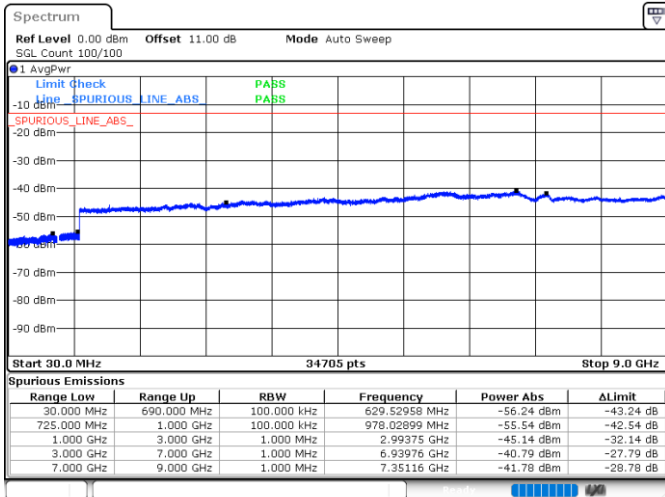
Highest Channel / QPSK



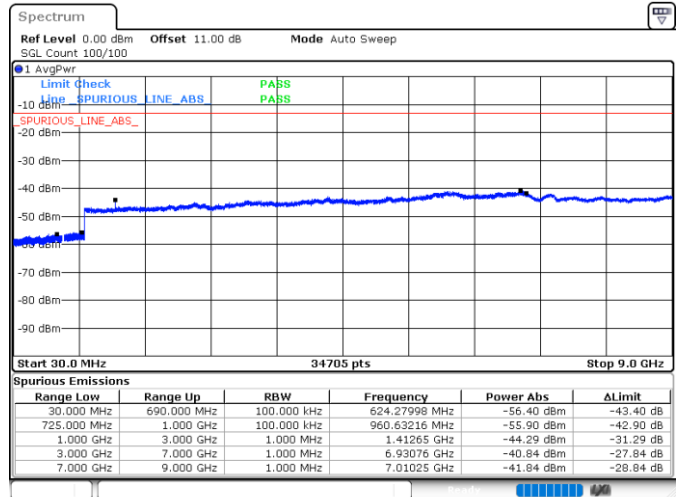


LTE Band 12 / 3MHz

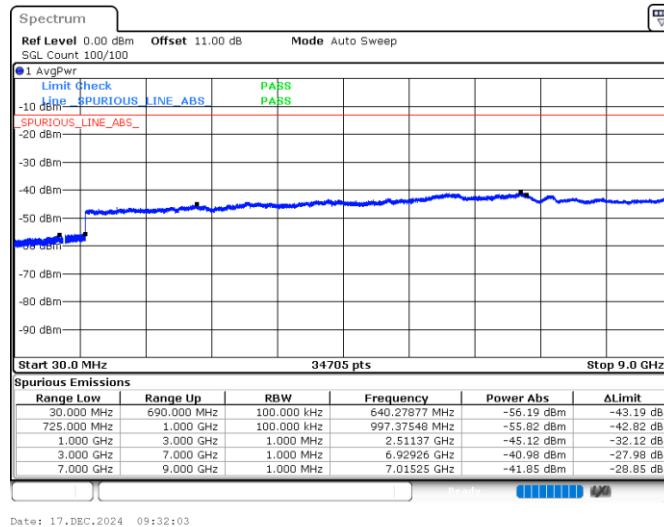
Lowest Channel / QPSK



Middle Channel / QPSK



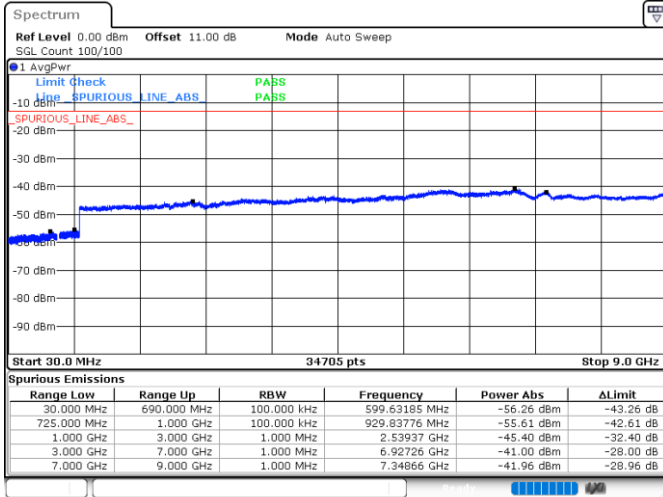
Highest Channel / QPSK



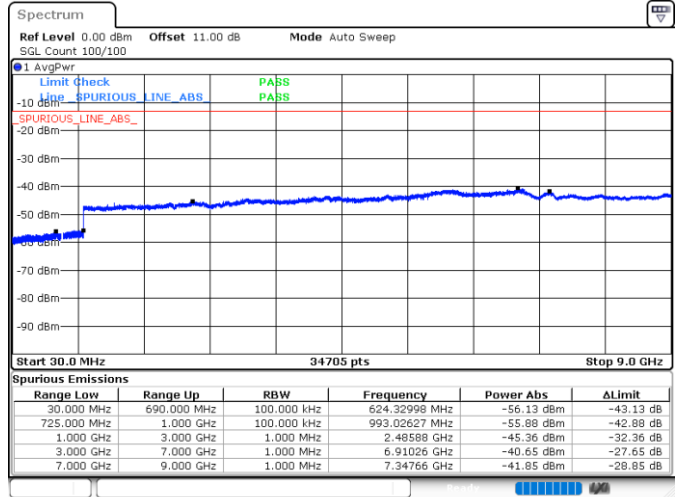


LTE Band 12 / 5MHz

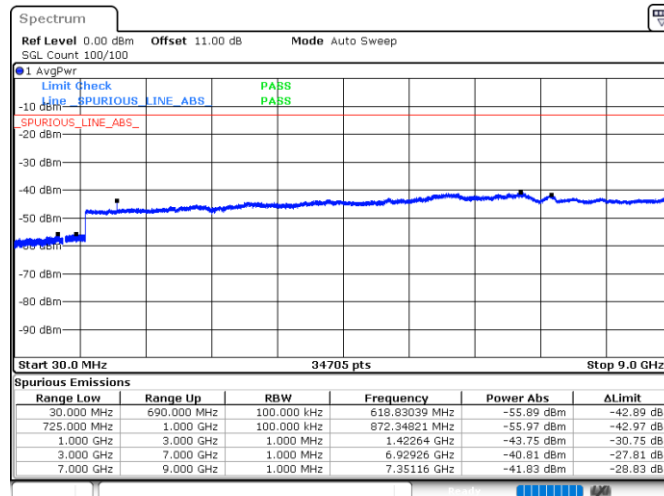
Lowest Channel / QPSK



Middle Channel / QPSK



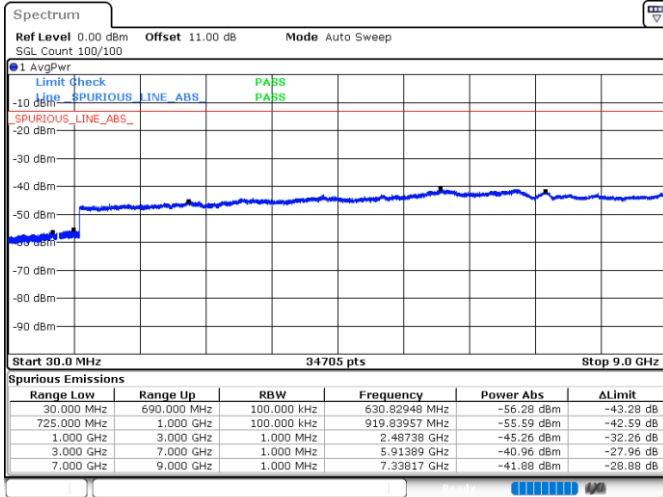
Highest Channel / QPSK



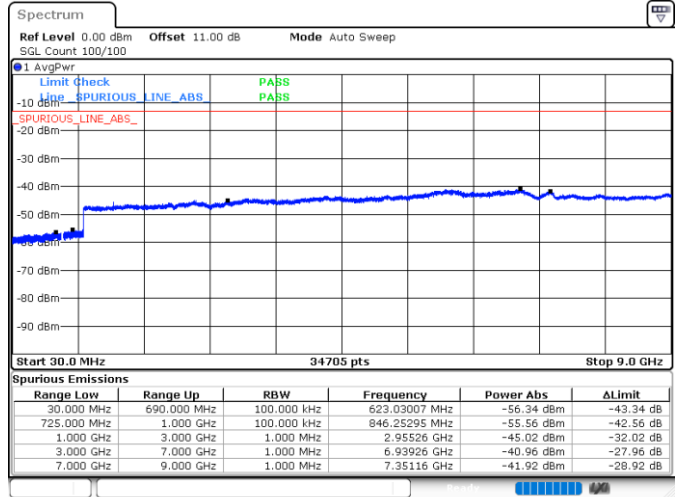


LTE Band 12 / 10MHz

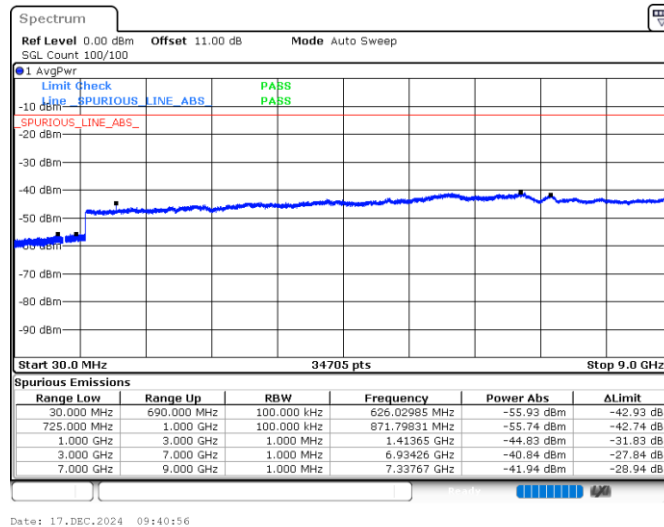
Lowest Channel / QPSK



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
50	Normal Voltage	0.0049	PASS
40	Normal Voltage	0.0126	
30	Normal Voltage	0.0134	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0065	
0	Normal Voltage	0.0199	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0075	
20	Maximum Voltage	0.0062	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0049	

Note:

1. Normal Voltage = 3.8 V. ; Minimum Voltage = 3.6 V. ; Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

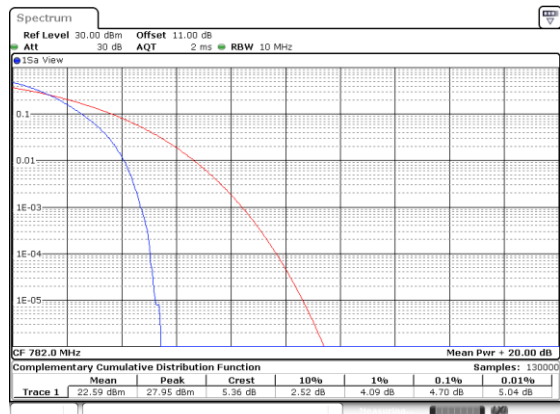
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.70	5.65	6.23	6.58	PASS



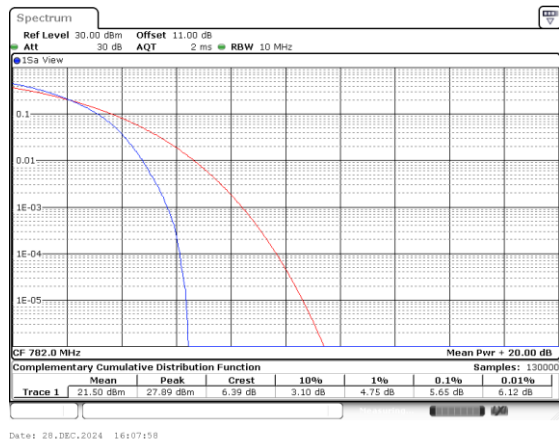
LTE Band 13 / 10MHz / QPSK

Middle Channel / Full RB



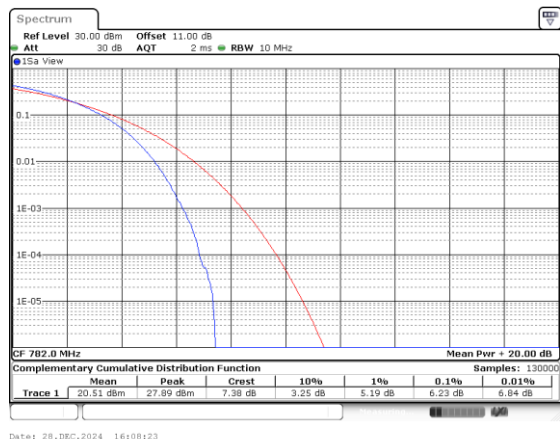
LTE Band 13 / 10MHz / 16QAM

Middle Channel / Full RB



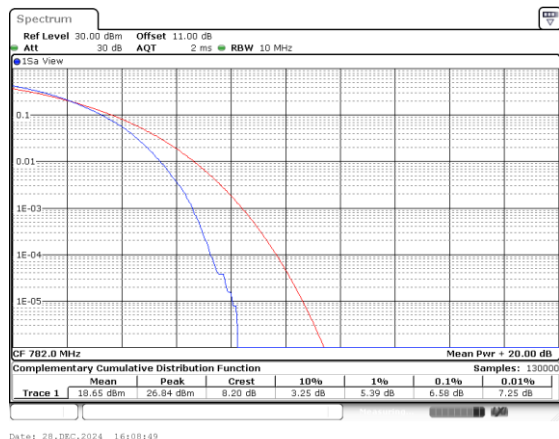
LTE Band 13 / 10MHz / 64QAM

Middle Channel / Full RB



LTE Band 13 / 10MHz / 256QAM

Middle Channel / Full RB



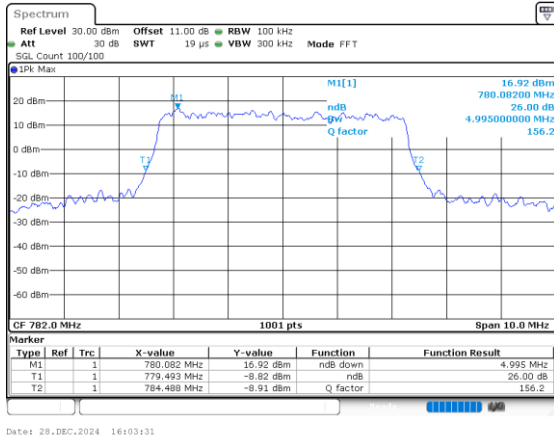
**26dB Bandwidth**

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	-	-	-	-	4.99	4.83	10.10	10.05	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	5.11	5.01	9.94	9.94	-	-	-	-

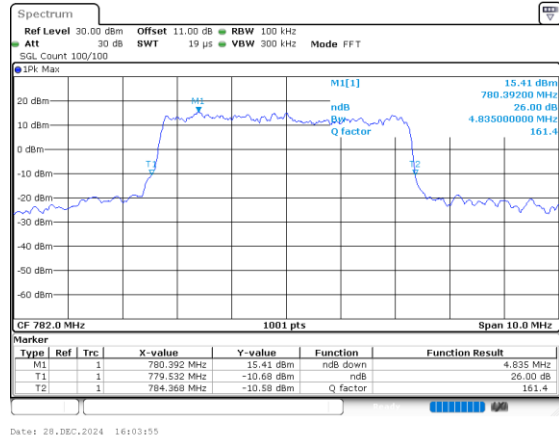


LTE Band 13

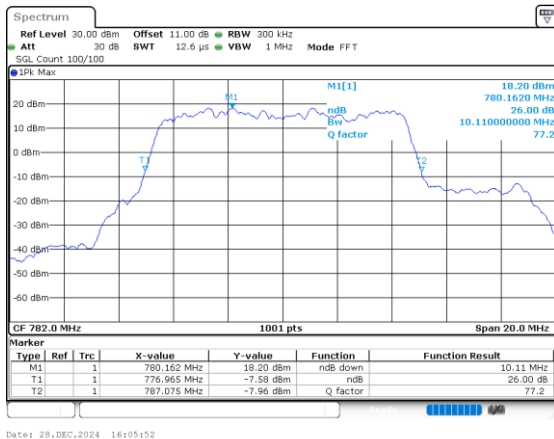
Middle Channel / 5MHz / QPSK



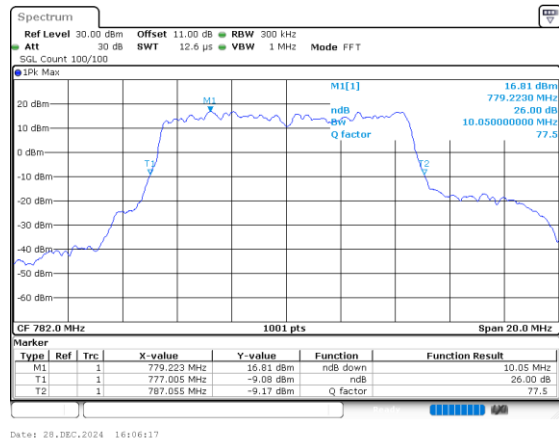
Middle Channel / 5MHz / 16QAM



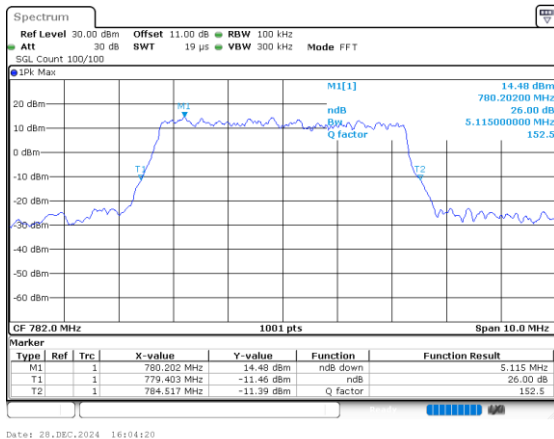
Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM

