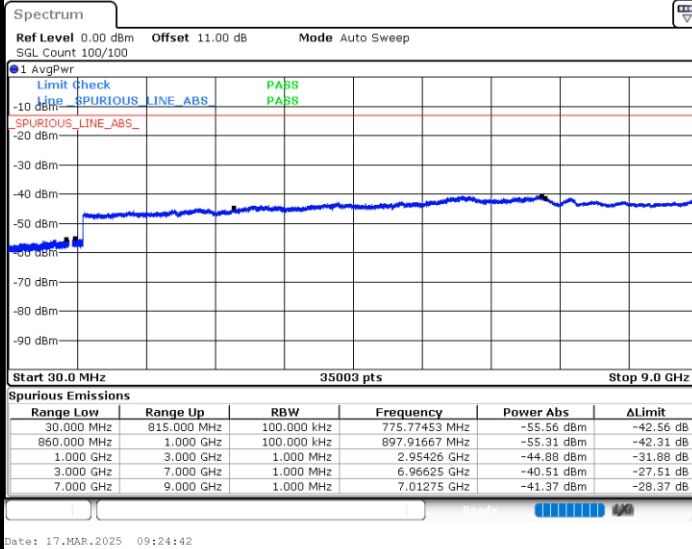


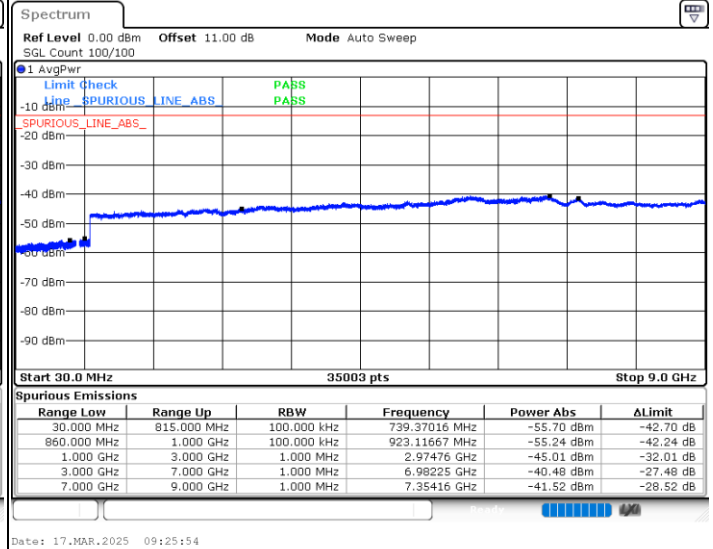


LTE Band 5 / 10MHz

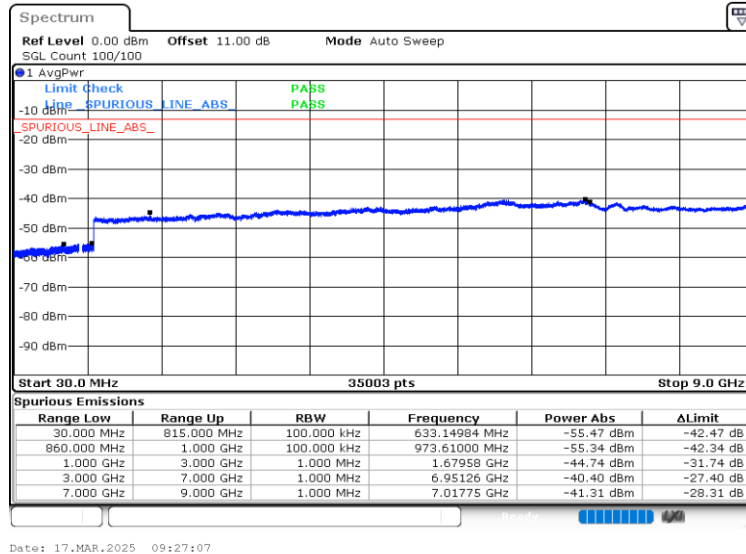
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK



**Frequency Stability**

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0086	PASS
40	Normal Voltage	0.0067	
30	Normal Voltage	0.0127	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0152	
0	Normal Voltage	0.0044	
-10	Normal Voltage	0.0054	
-20	Normal Voltage	0.0105	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0056	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0041	

Note: Normal Voltage = 3.8 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 4.4 V.



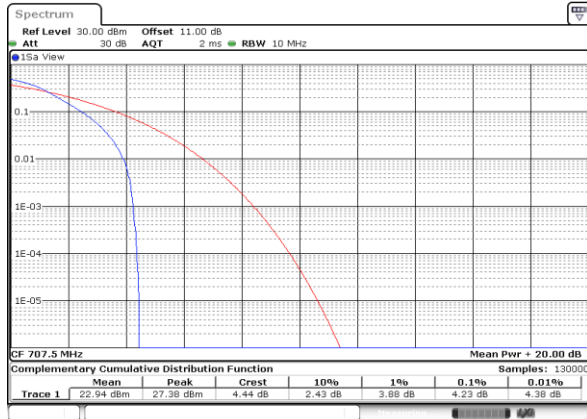
LTE Band 12

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	4.23	5.39	5.97	6.43	PASS

LTE Band 12 / 10MHz / QPSK

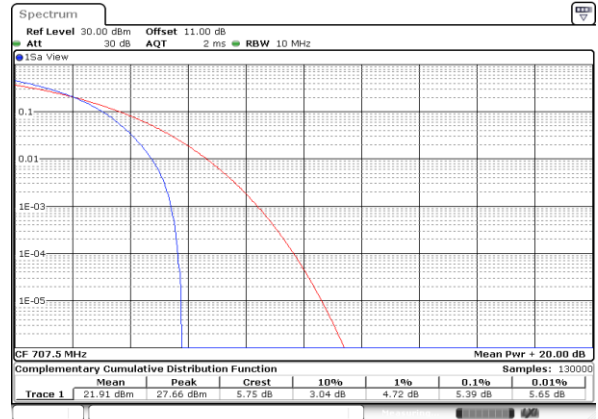
Middle Channel / Full RB



Date: 17.MAR.2025 11:41:27

LTE Band 12 / 10MHz / 16QAM

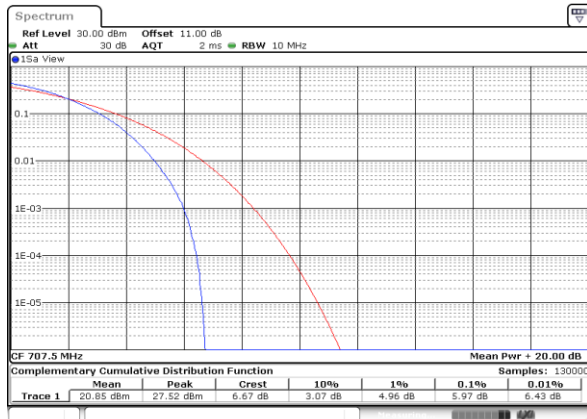
Middle Channel / Full RB



Date: 17.MAR.2025 11:41:51

LTE Band 12 / 10MHz / 64QAM

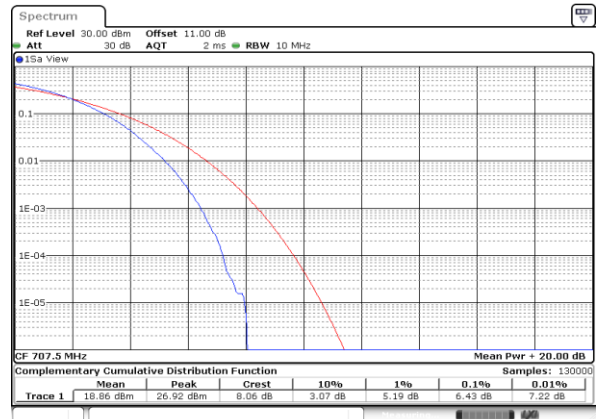
Middle Channel / Full RB



Date: 17.MAR.2025 11:42:15

LTE Band 12 / 10MHz / 256QAM

Middle Channel / Full RB



Date: 17.MAR.2025 11:42:38

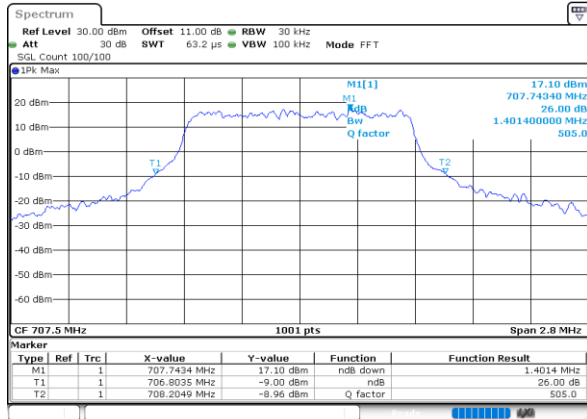
**26dB Bandwidth**

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	1.40	1.35	3.08	3.08	4.85	5.14	9.89	9.60	-	-	-	-
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	1.31	1.34	3.00	3.06	5.02	5.04	9.65	9.76	-	-	-	-

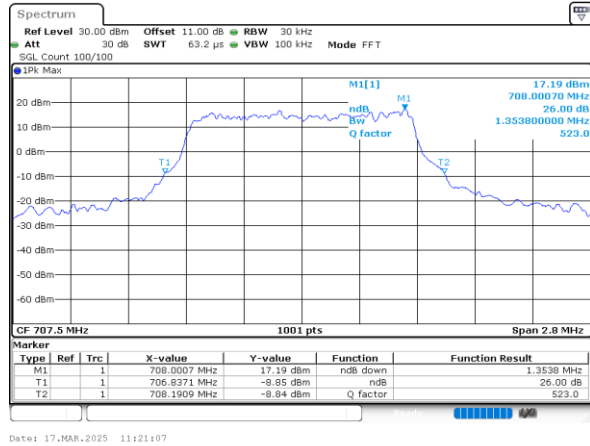


LTE Band 12

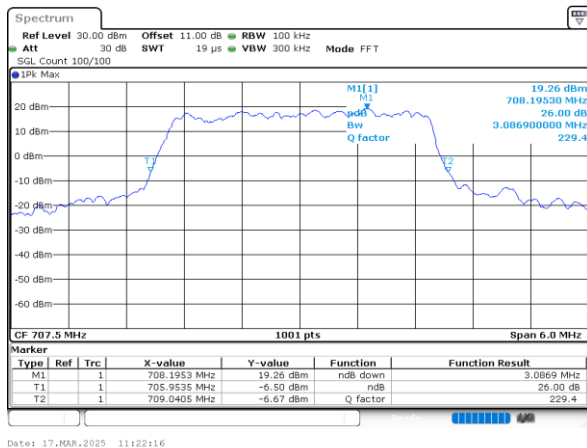
Middle Channel / 1.4MHz / QPSK



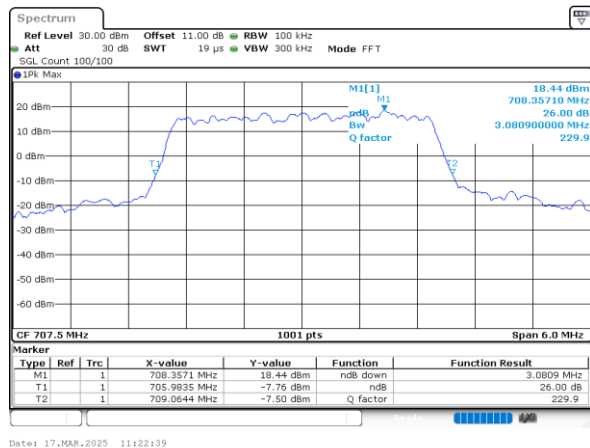
Middle Channel / 1.4MHz / 16QAM



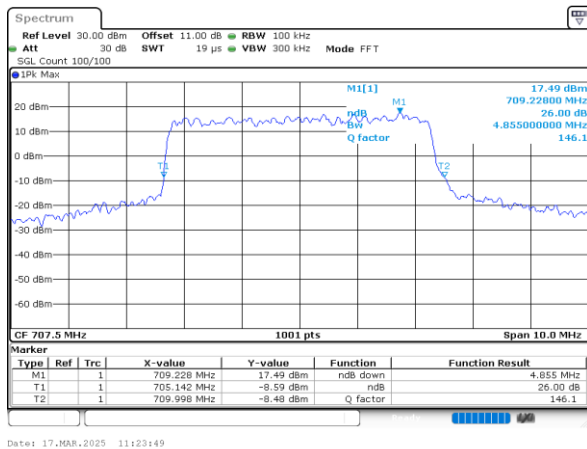
Middle Channel / 3MHz / QPSK



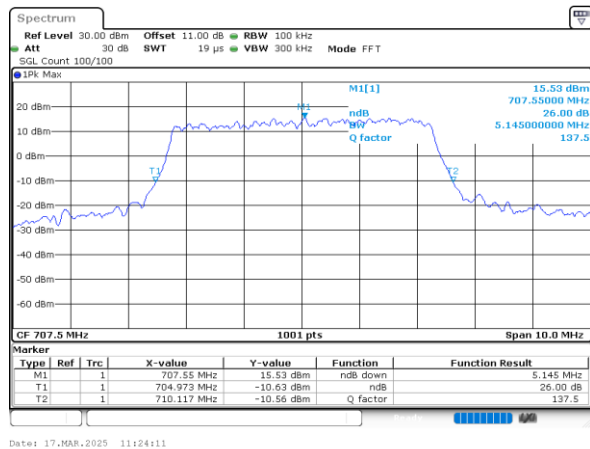
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



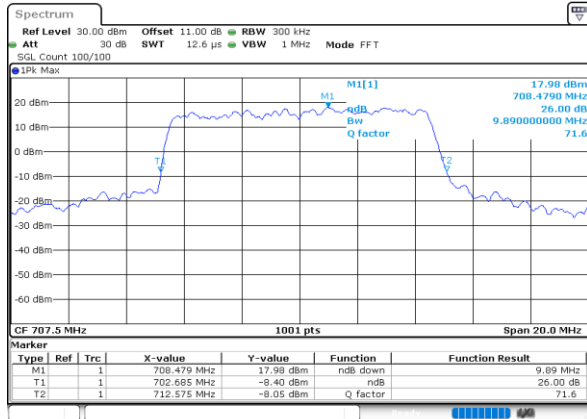
Middle Channel / 5MHz / 16QAM



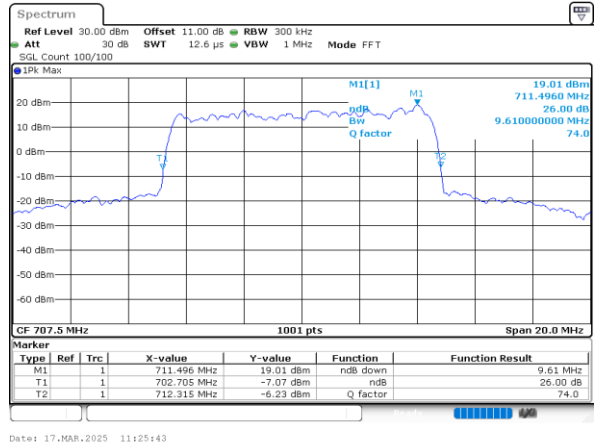


LTE Band 12

Middle Channel / 10MHz / QPSK

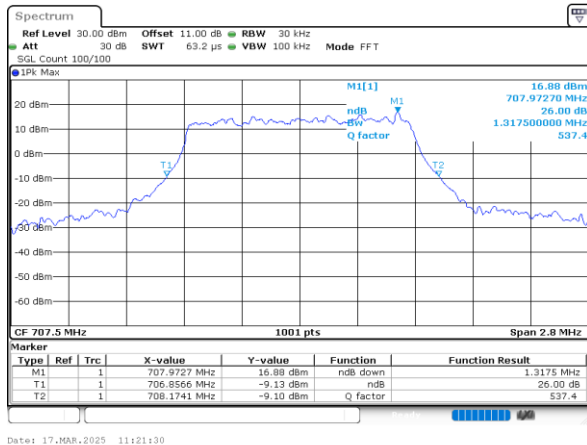


Middle Channel / 10MHz / 16QAM

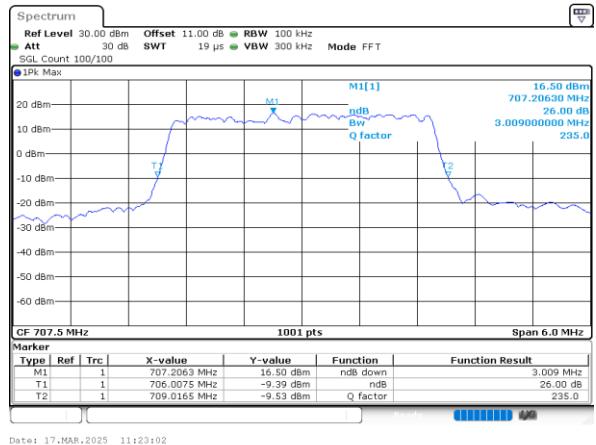


LTE Band 12

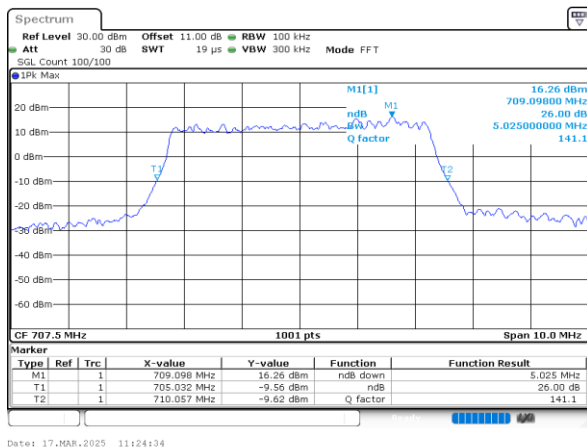
Middle Channel / 1.4MHz / 64QAM



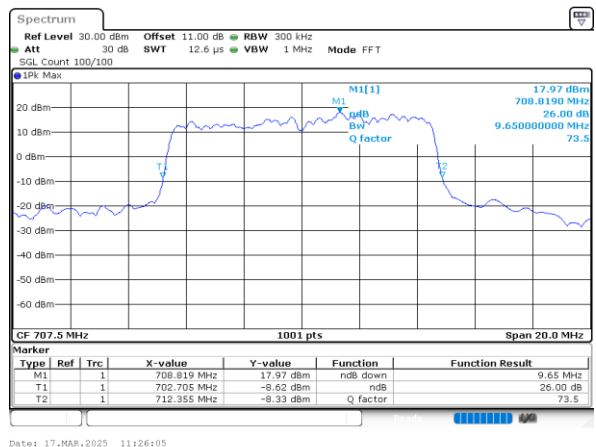
Middle Channel / 3MHz / 64QAM



Middle Channel / 5MHz / 64QAM



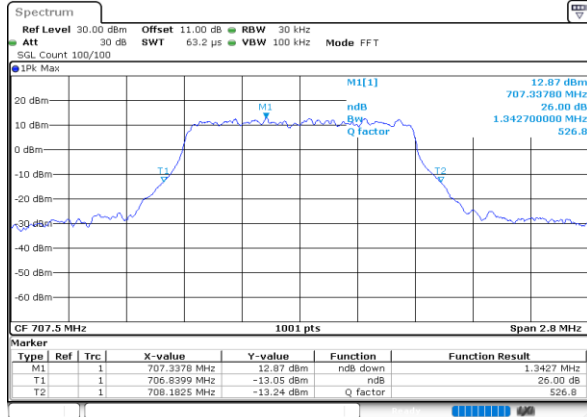
Middle Channel / 10MHz / 64QAM



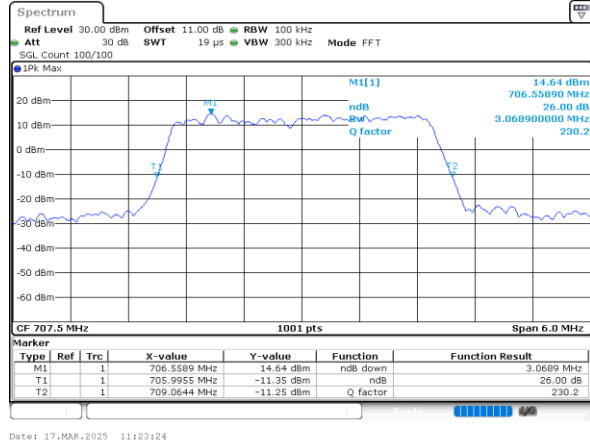


LTE Band 12

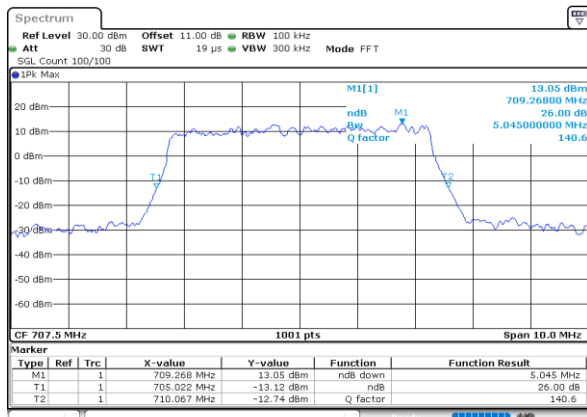
Middle Channel / 1.4MHz / 256QAM



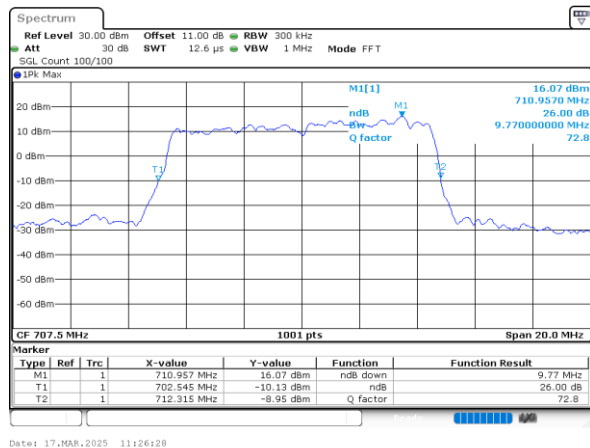
Middle Channel / 3MHz / 256QAM



Middle Channel / 5MHz / 256QAM



Middle Channel / 10MHz / 256QAM



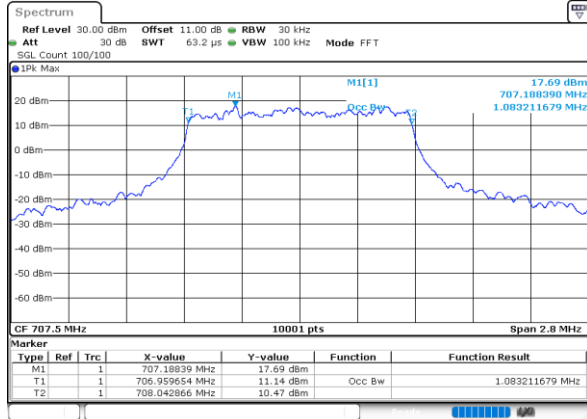
**Occupied Bandwidth**

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	1.08	1.10	2.71	2.71	4.49	4.50	9.00	9.04	-	-	-	-
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	1.11	1.10	2.73	2.71	4.47	4.47	9.04	9.07	-	-	-	-

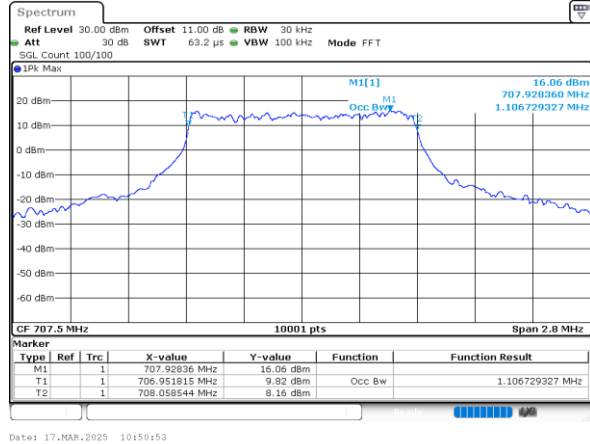


LTE Band 12

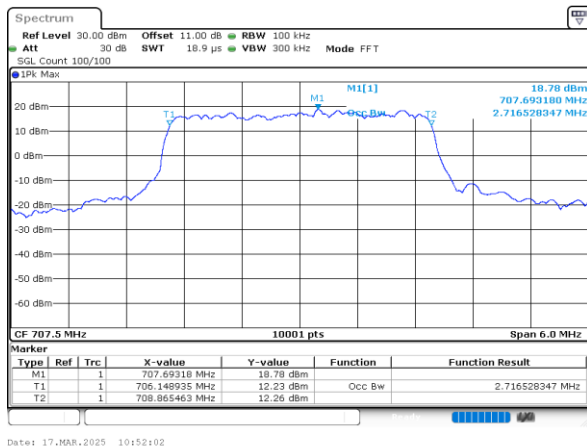
Middle Channel / 1.4MHz / QPSK



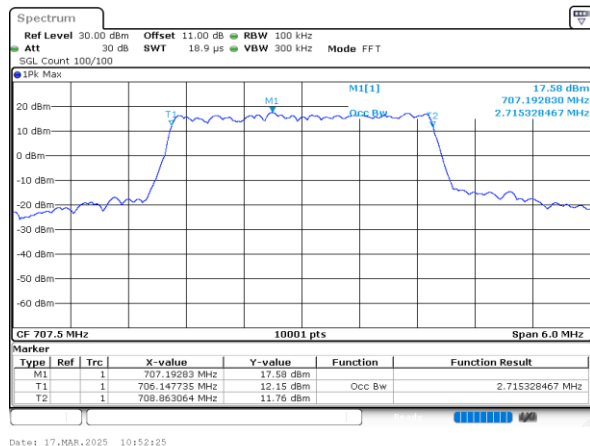
Middle Channel / 1.4MHz / 16QAM



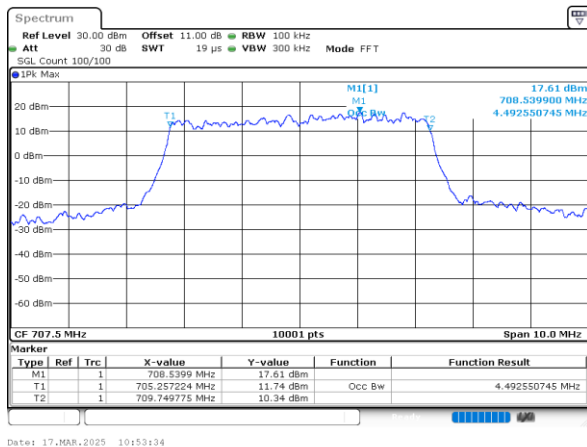
Middle Channel / 3MHz / QPSK



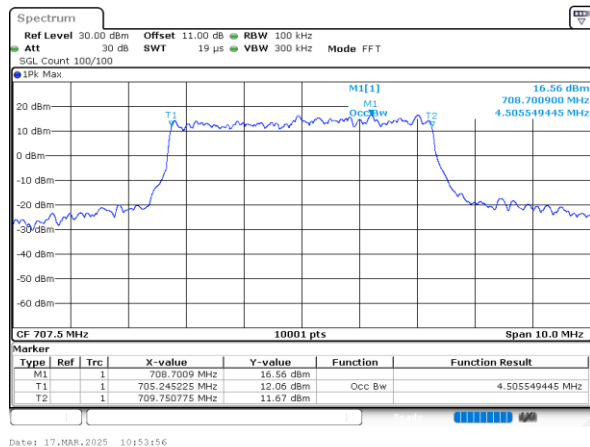
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



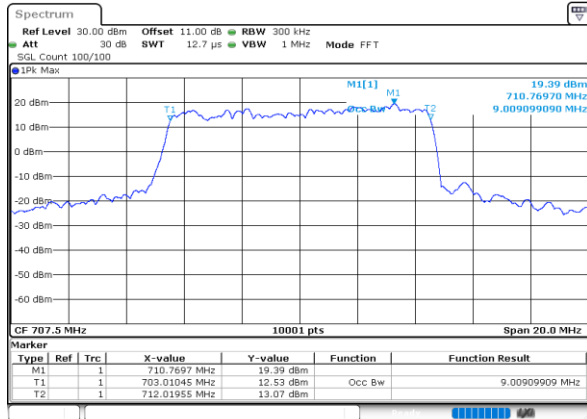
Middle Channel / 5MHz / 16QAM



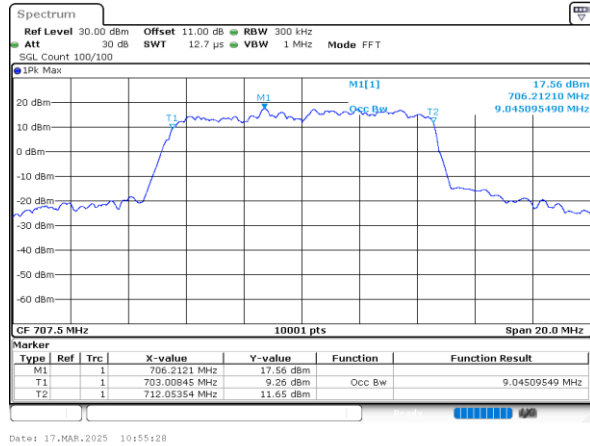


LTE Band 12

Middle Channel / 10MHz / QPSK

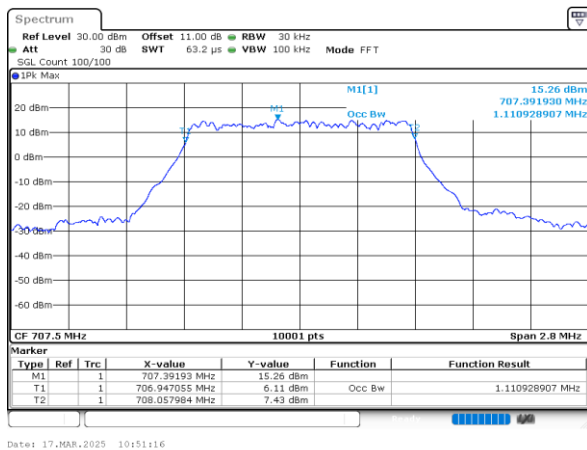


Middle Channel / 10MHz / 16QAM

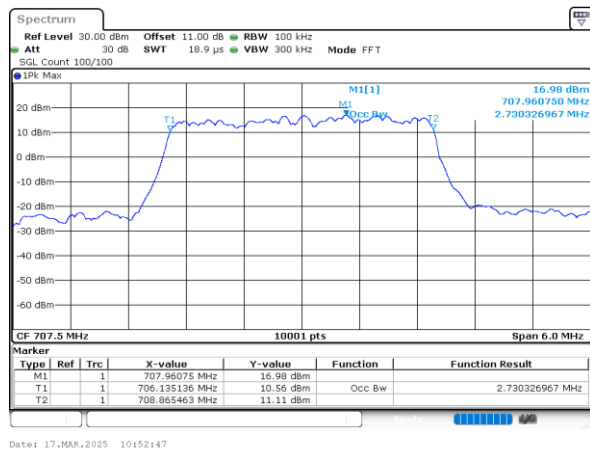


LTE Band 12

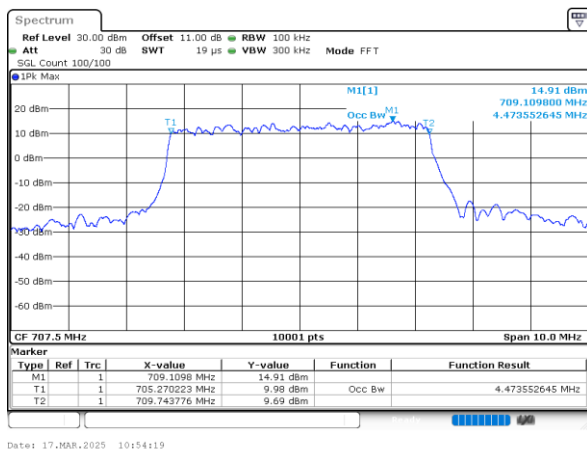
Middle Channel / 1.4MHz / 64QAM



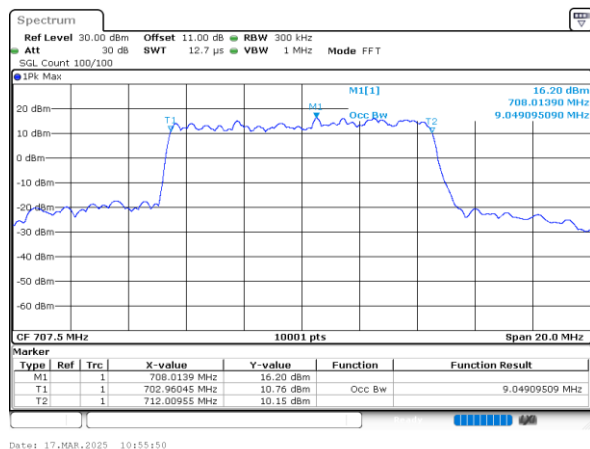
Middle Channel / 3MHz / 64QAM



Middle Channel / 5MHz / 64QAM



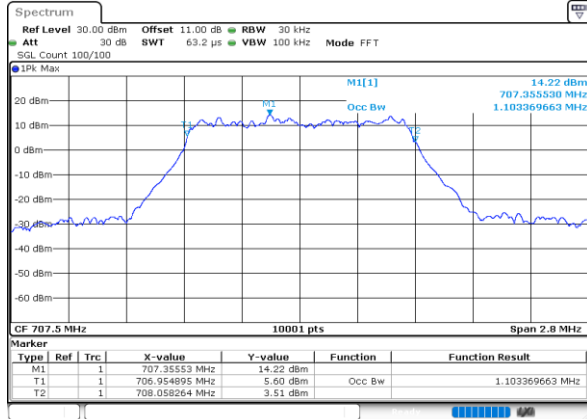
Middle Channel / 10MHz / 64QAM



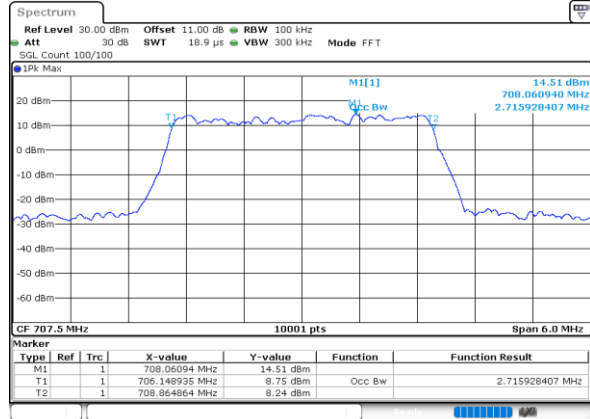


LTE Band 12

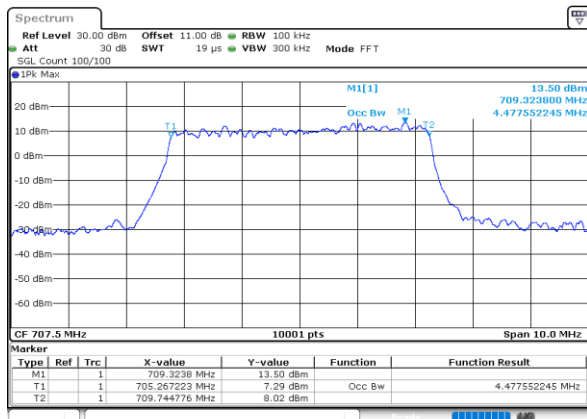
Middle Channel / 1.4MHz / 256QAM



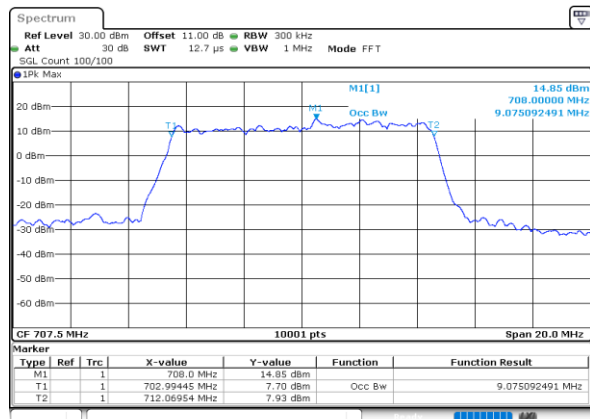
Middle Channel / 3MHz / 256QAM



Middle Channel / 5MHz / 256QAM



Middle Channel / 10MHz / 256QAM

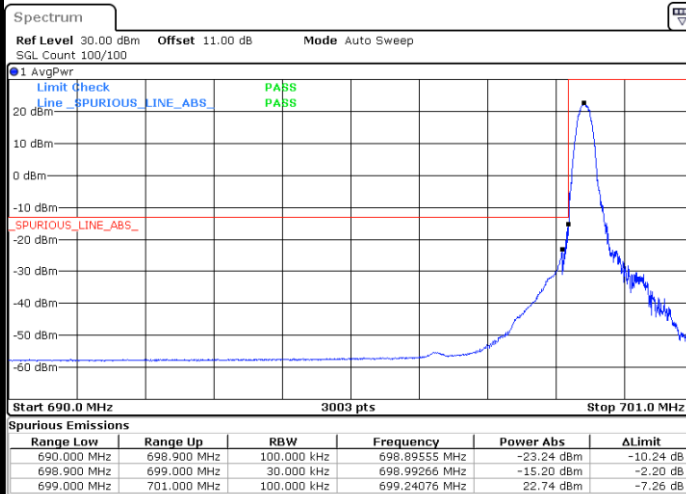




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

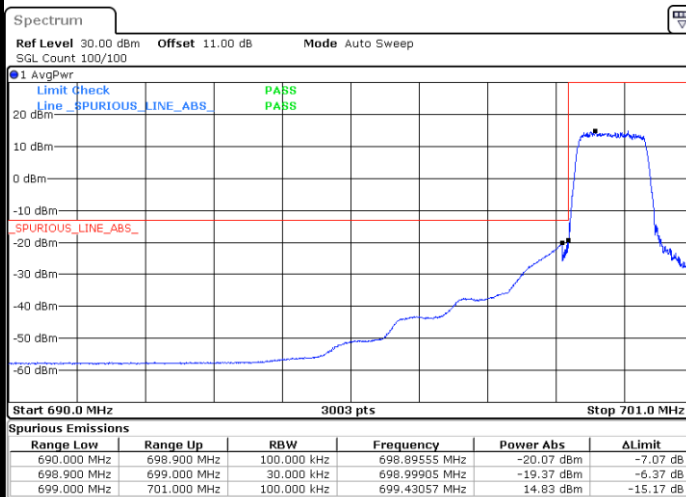
Lowest Band Edge / 1RB



Highest Band Edge / 1RB



Lowest Band Edge / Full RB



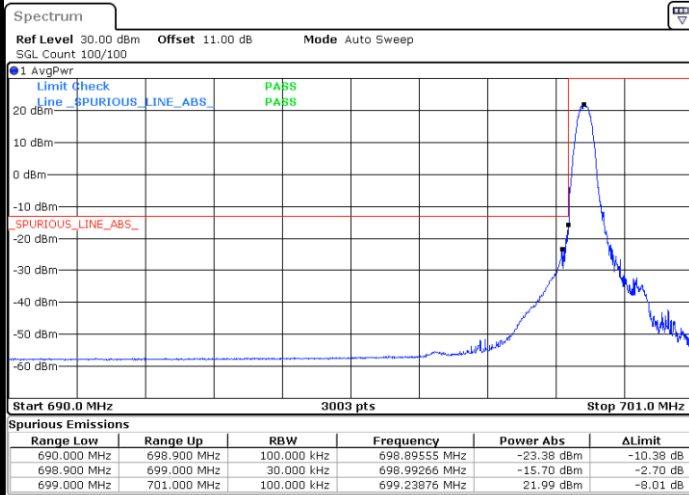
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 16QAM

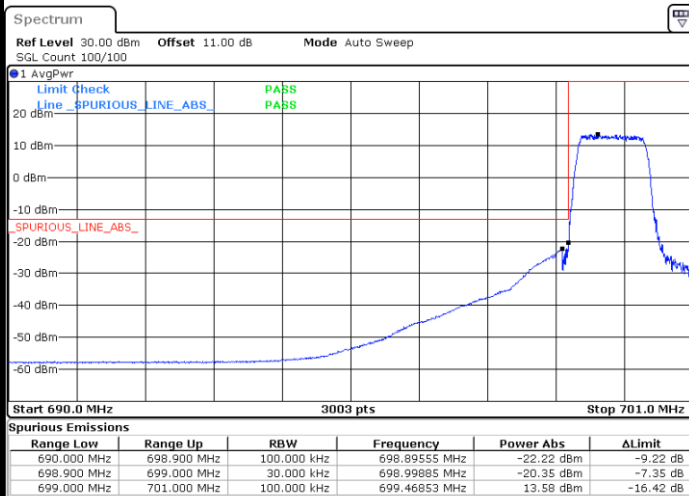
Lowest Band Edge / 1 RB



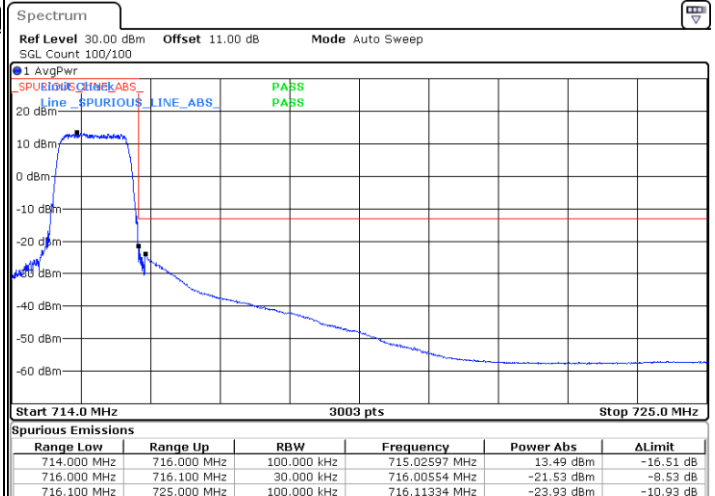
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



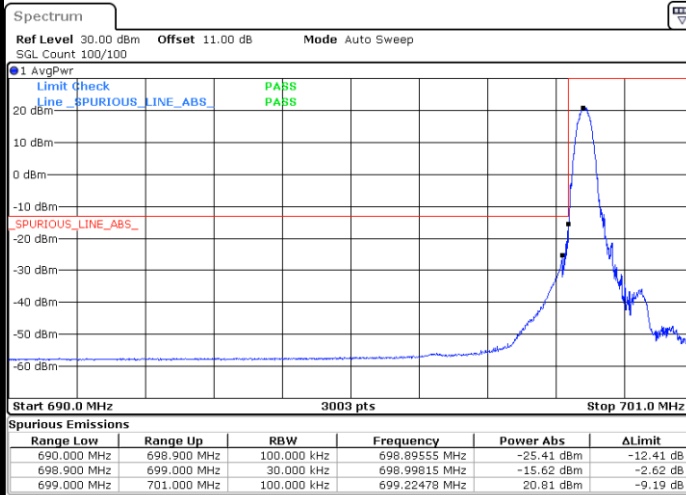
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 64QAM

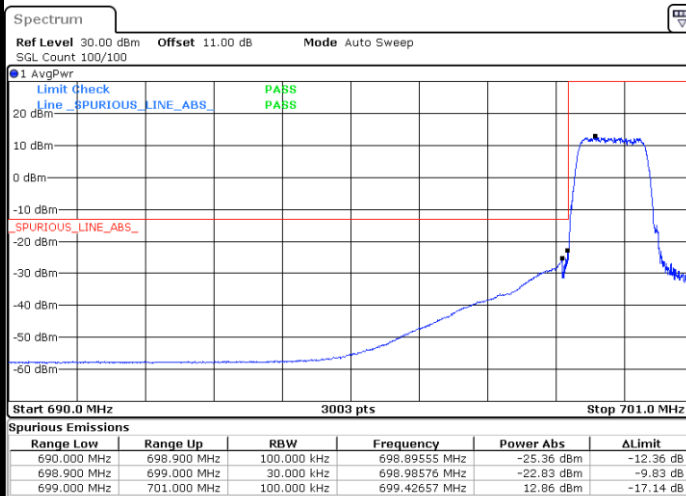
Lowest Band Edge / 1 RB



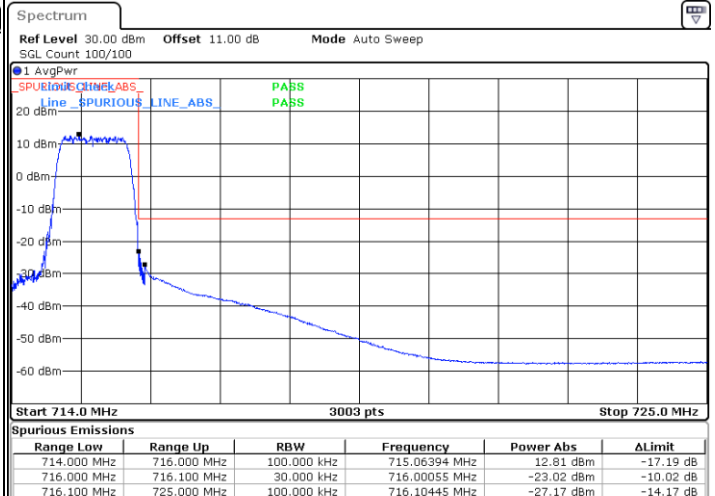
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



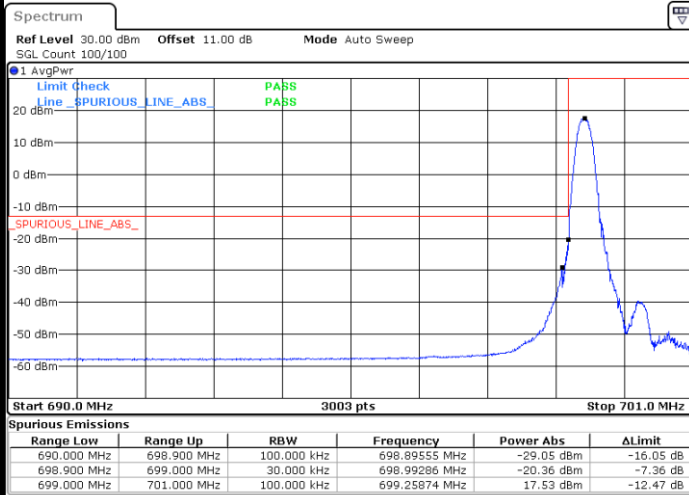
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 256QAM

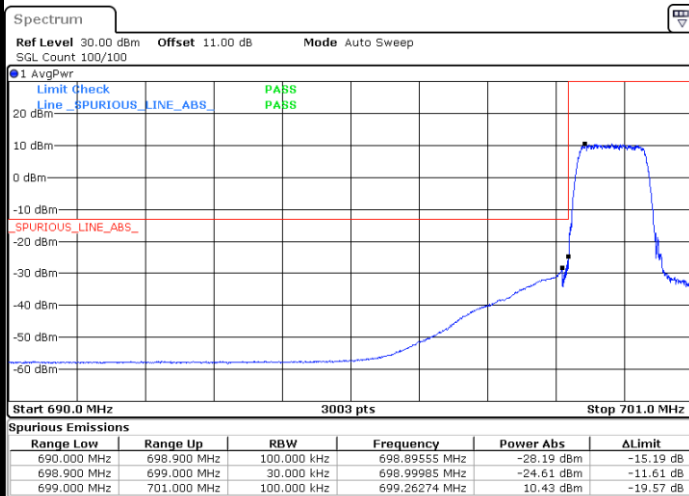
Lowest Band Edge / 1 RB



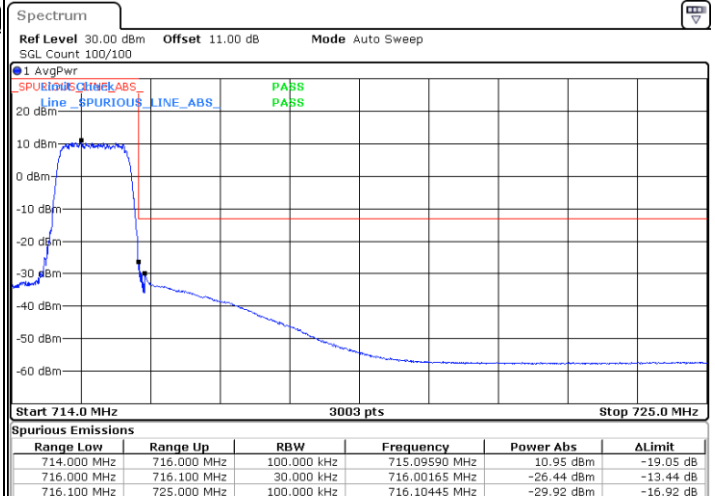
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



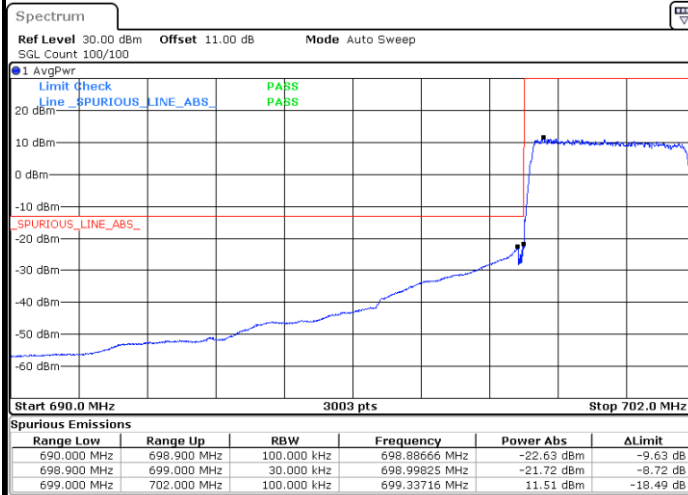
Highest Band Edge / Full RB





LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / Full RB

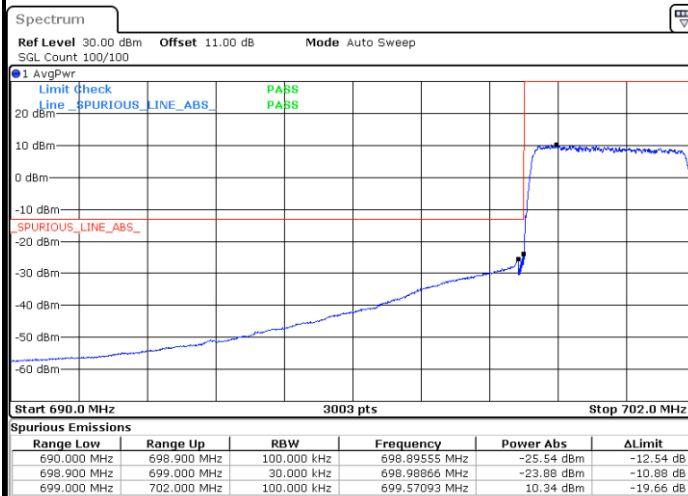


Highest Band Edge / Full RB



LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / Full RB



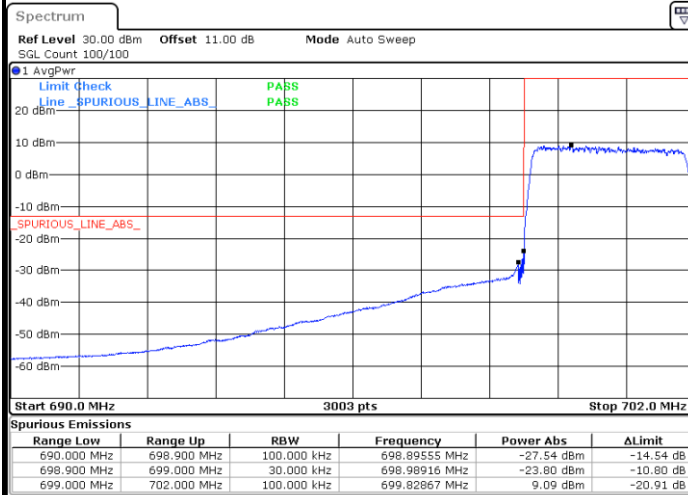
Highest Band Edge / Full RB



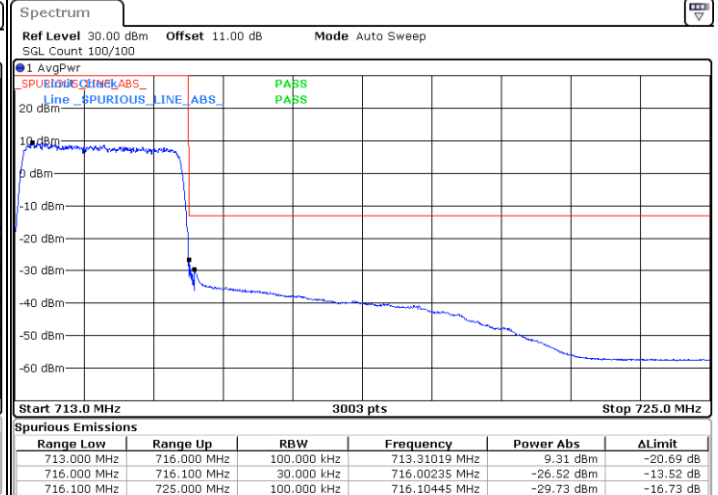


LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / Full RB

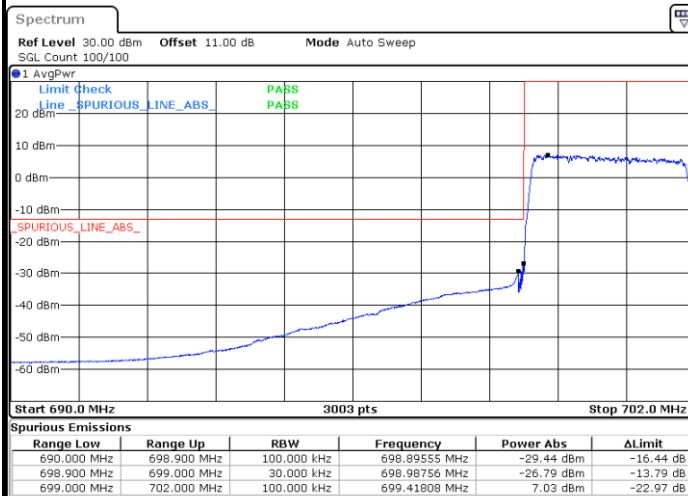


Highest Band Edge / Full RB

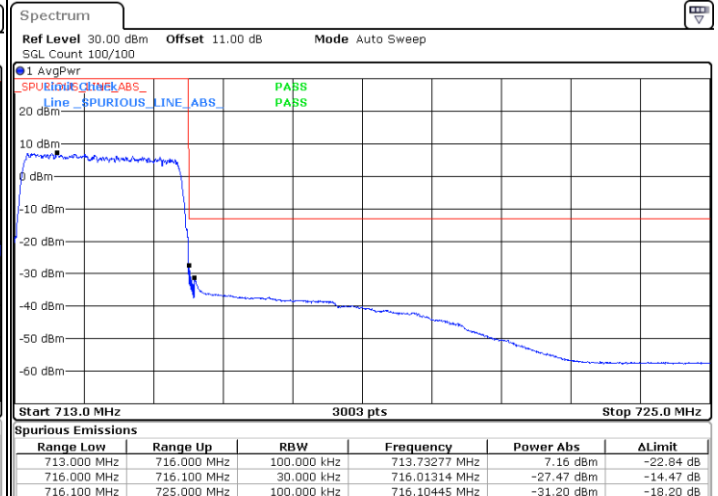


LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / Full RB



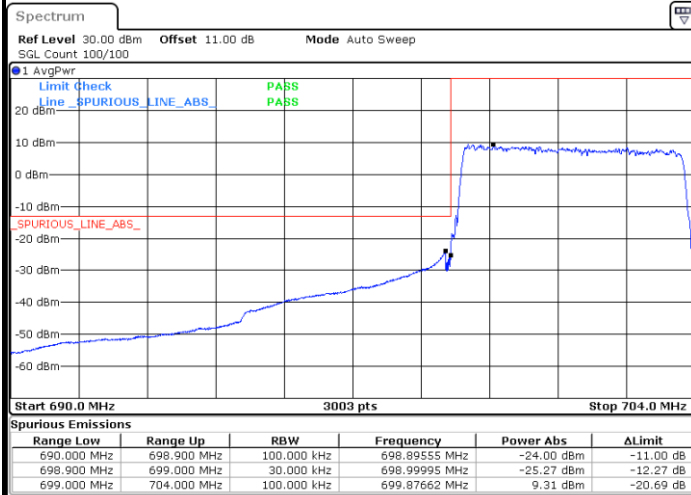
Highest Band Edge / Full RB



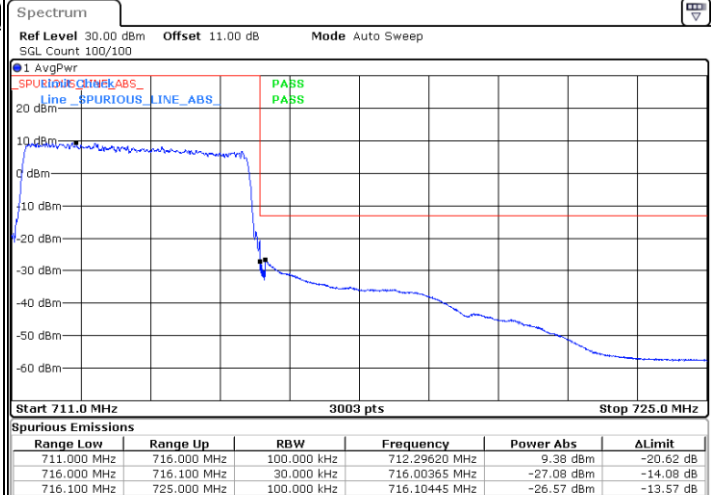


LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / Full RB

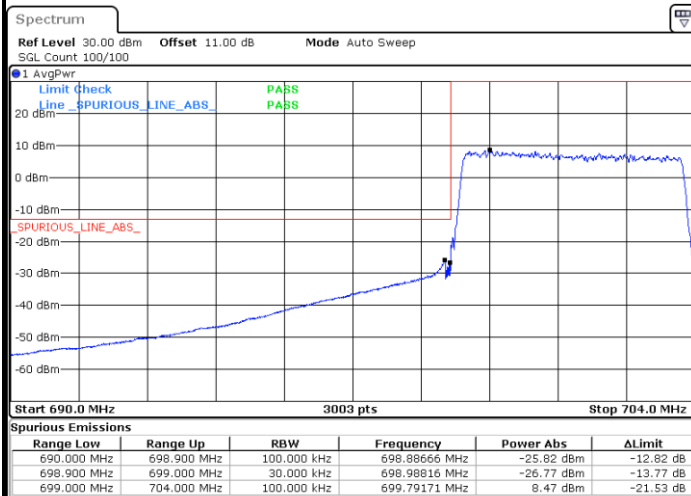


Highest Band Edge / Full RB

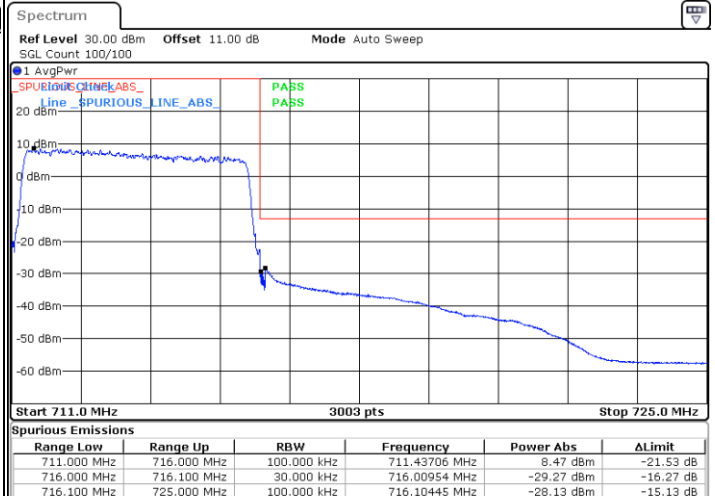


LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / Full RB



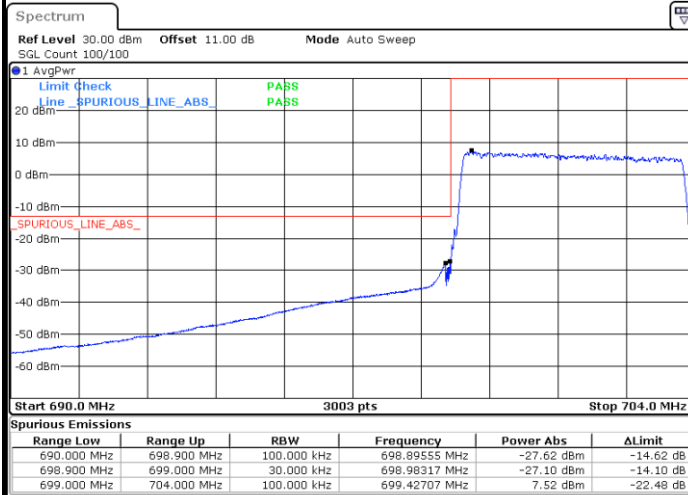
Highest Band Edge / Full RB



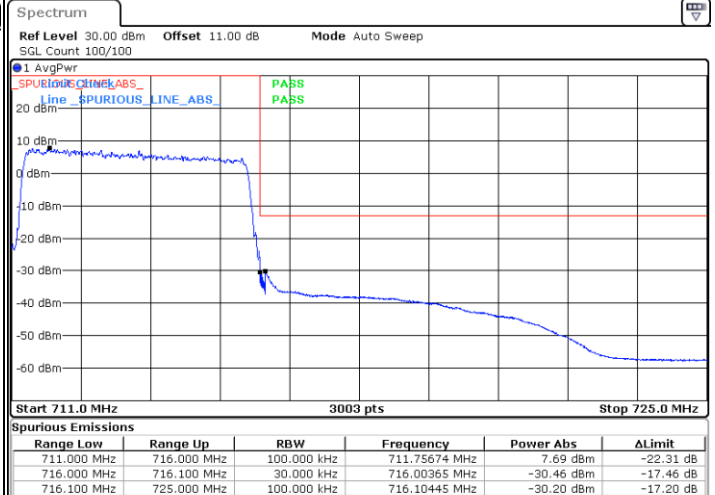


LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / Full RB

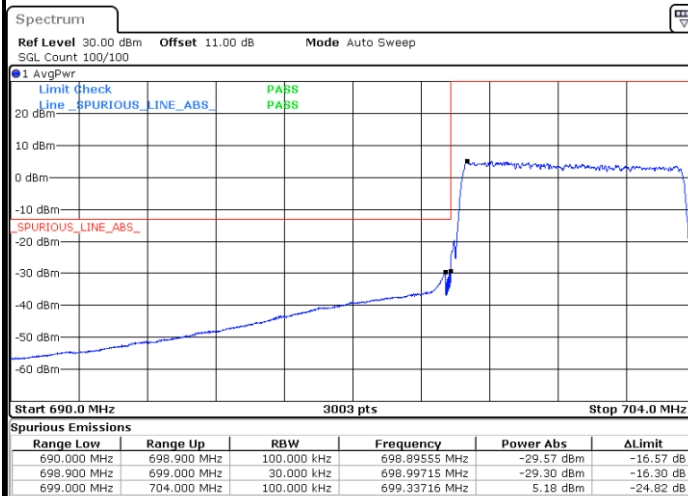


Highest Band Edge / Full RB

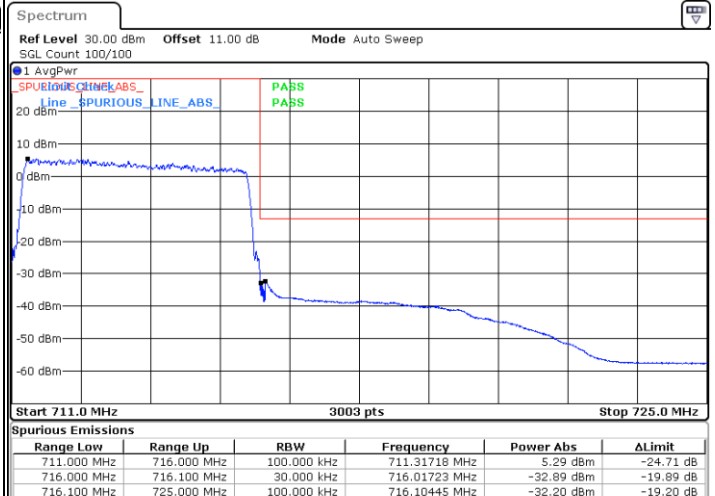


LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / Full RB



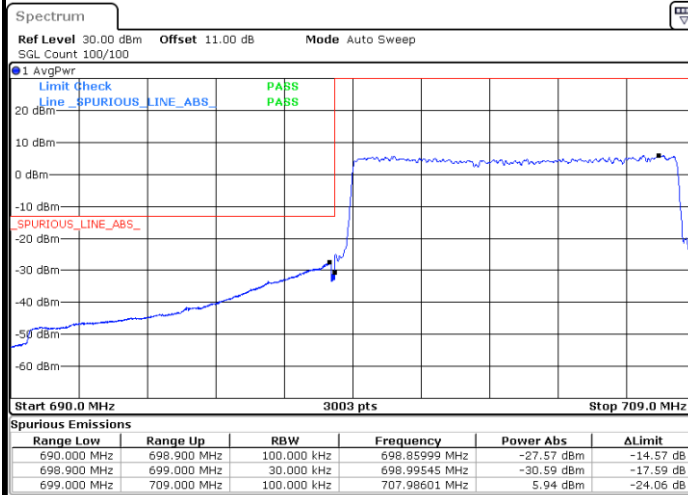
Highest Band Edge / Full RB



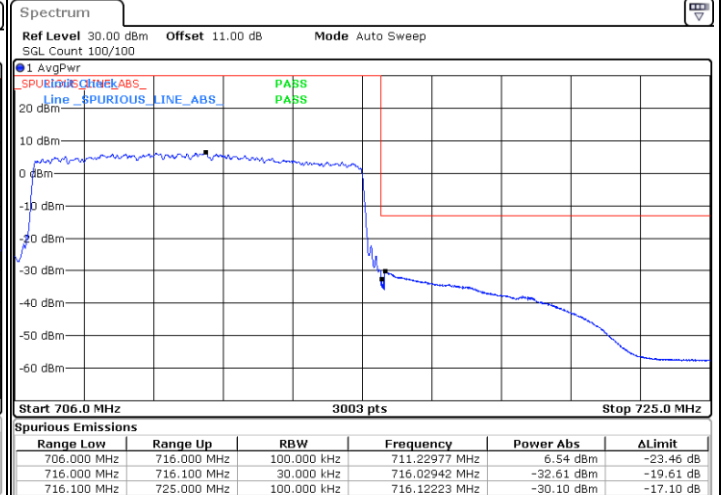


LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / Full RB

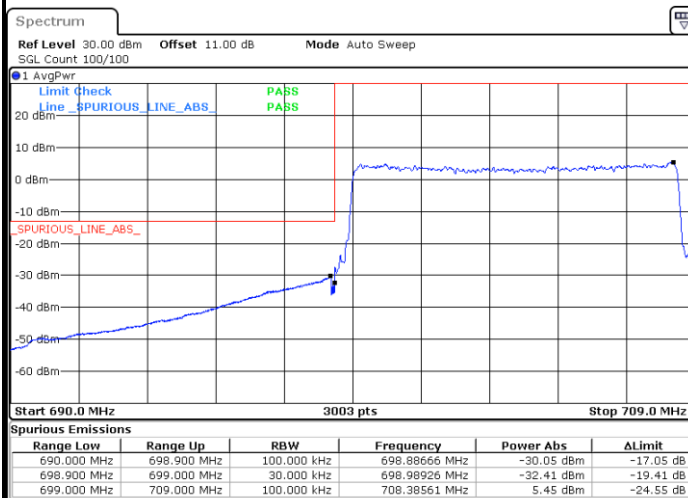


Highest Band Edge / Full RB

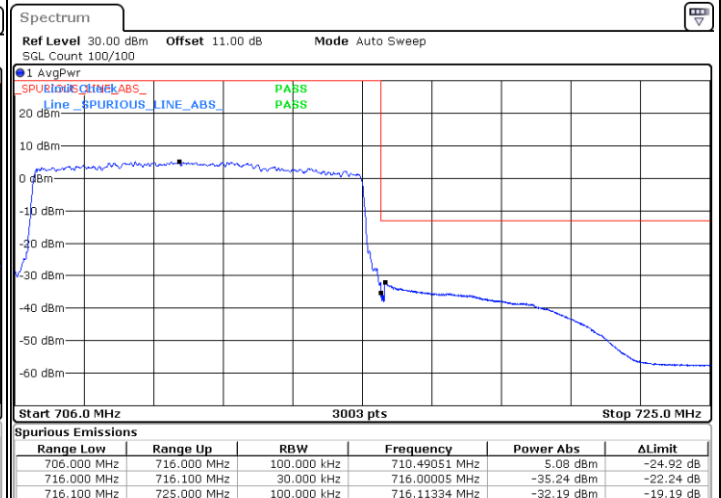


LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / Full RB



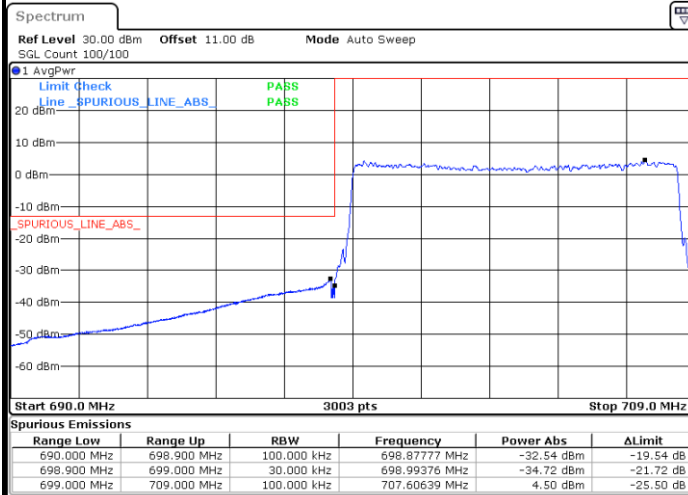
Highest Band Edge / Full RB



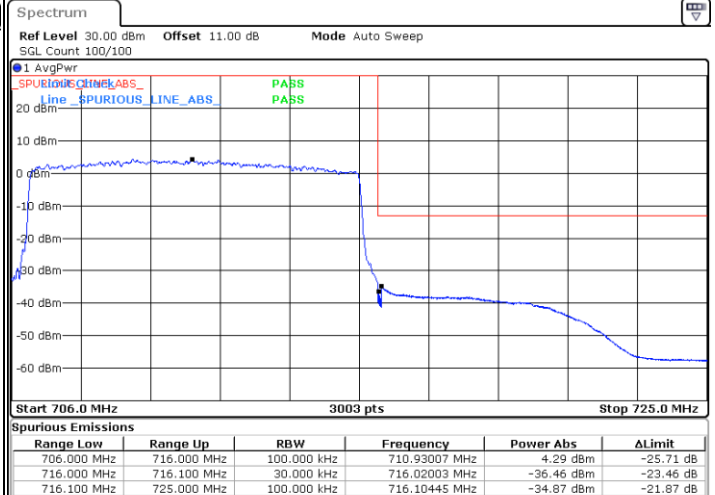


LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / Full RB

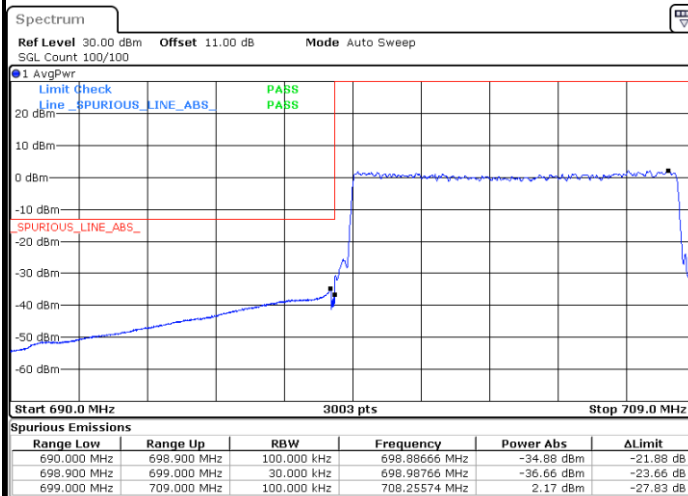


Highest Band Edge / Full RB

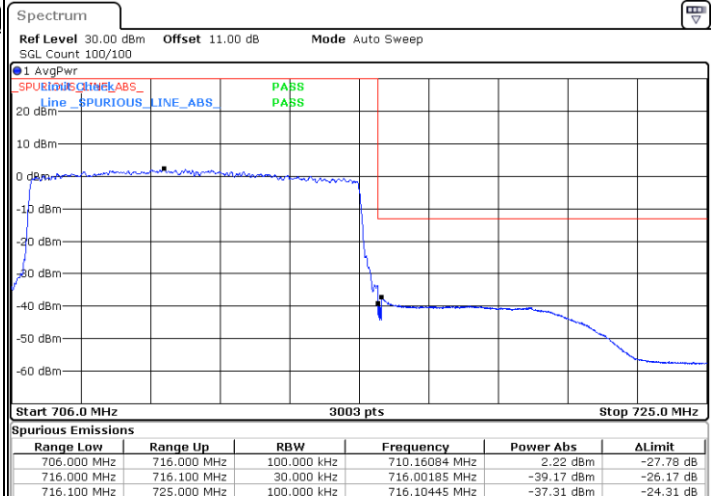


LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

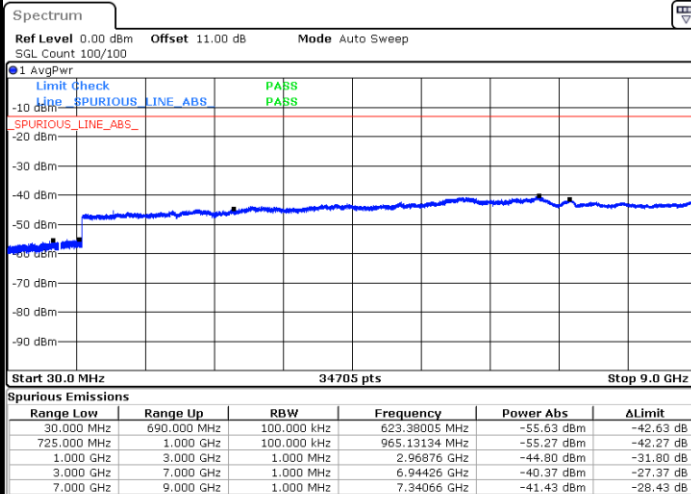




Conducted Spurious Emission

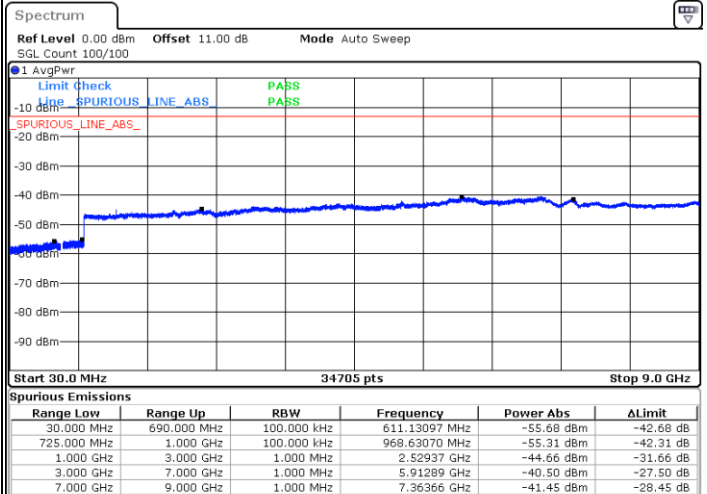
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



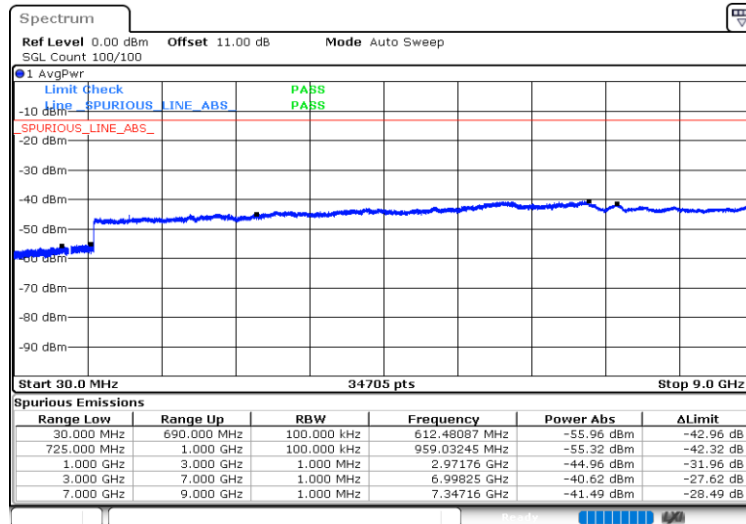
Date: 17.MAR.2025 11:27:41

Middle Channel / QPSK



Date: 17.MAR.2025 11:28:53

Highest Channel / QPSK

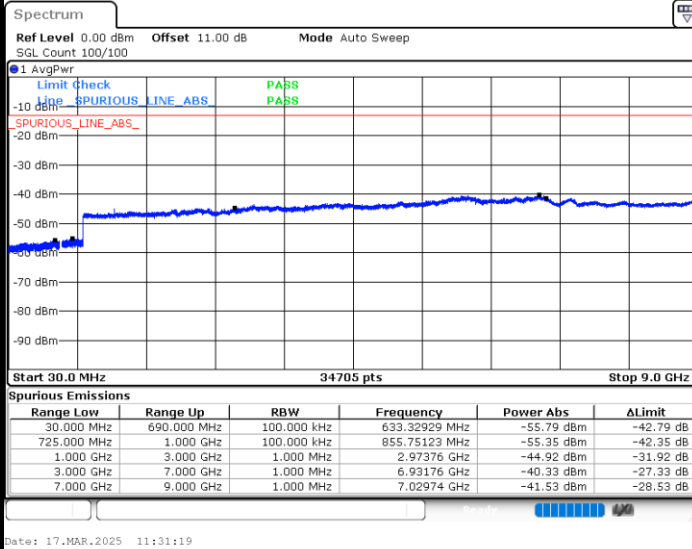


Date: 17.MAR.2025 11:30:05

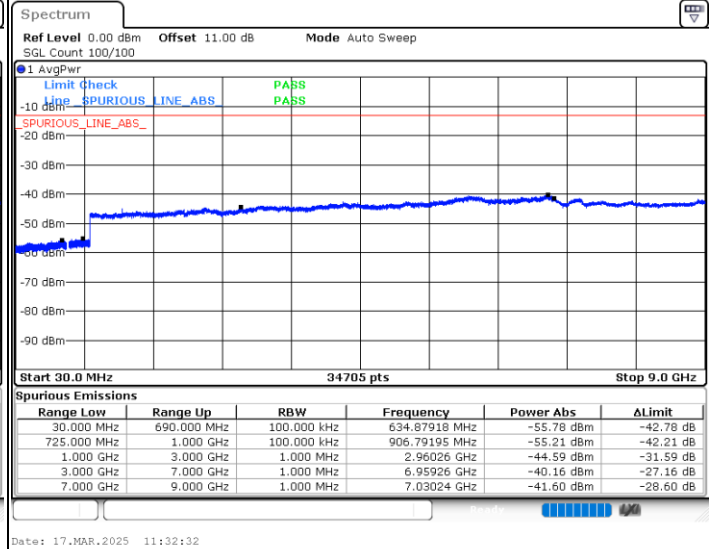


LTE Band 12 / 3MHz

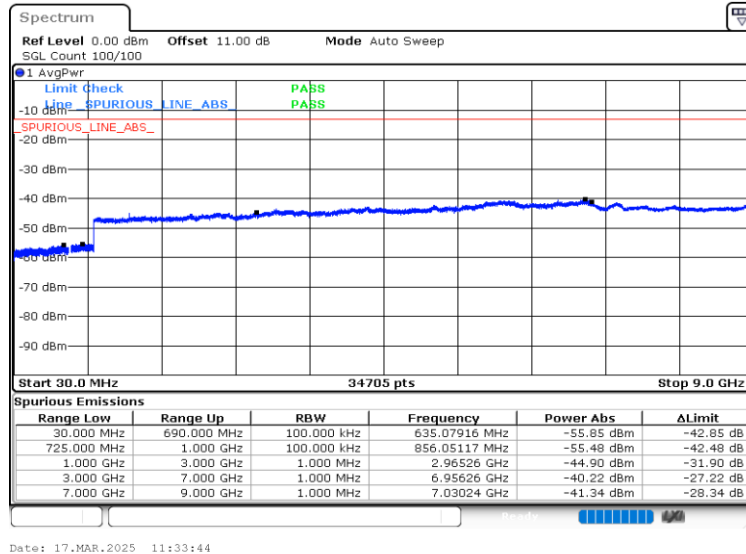
Lowest Channel / QPSK



Middle Channel / QPSK



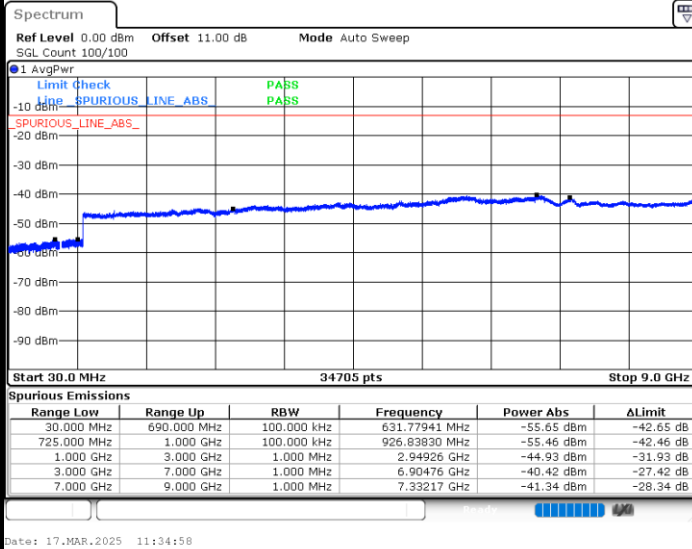
Highest Channel / QPSK



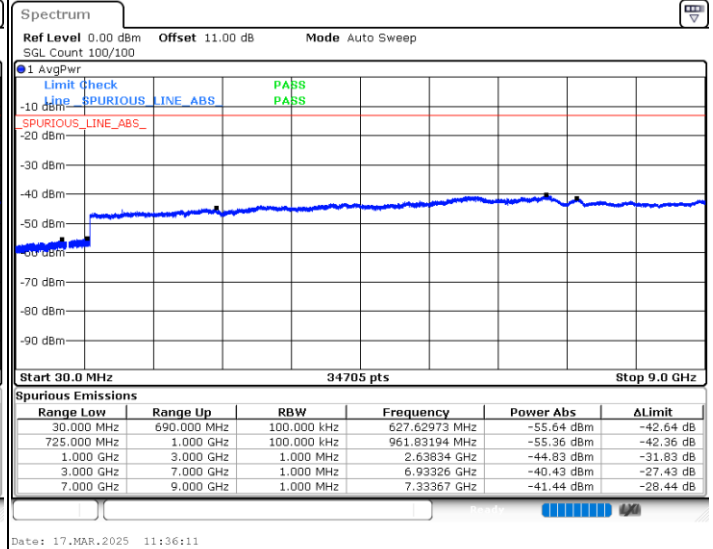


LTE Band 12 / 5MHz

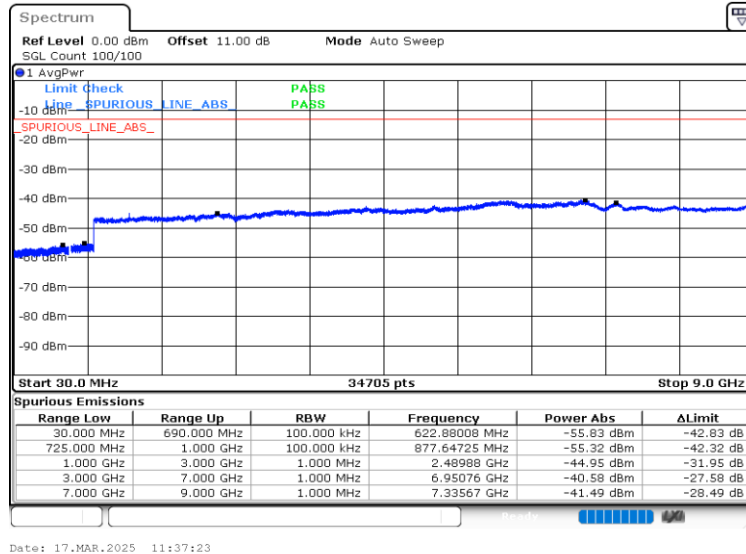
Lowest Channel / QPSK



Middle Channel / QPSK



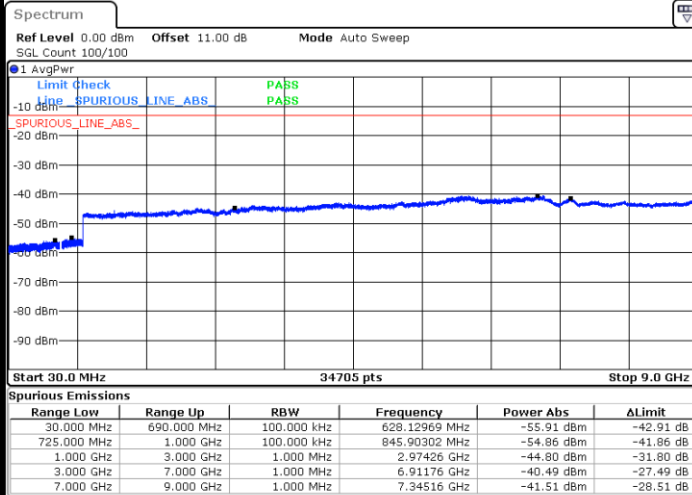
Highest Channel / QPSK





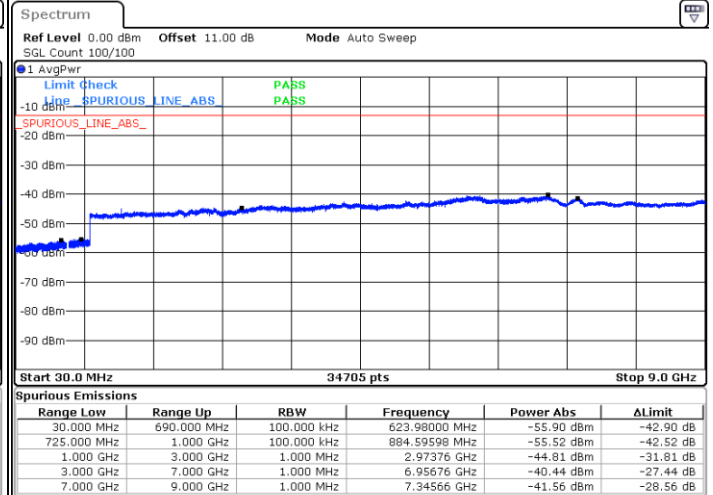
LTE Band 12 / 10MHz

Lowest Channel / QPSK



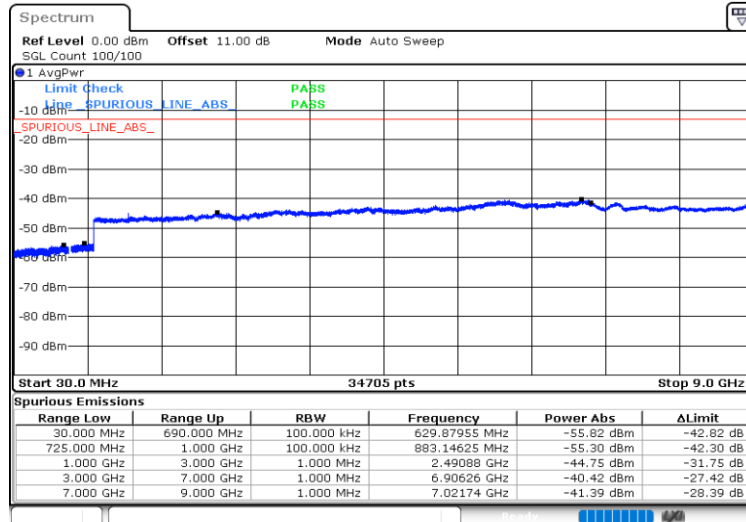
Date: 17.MAR.2025 11:38:37

Middle Channel / QPSK



Date: 17.MAR.2025 11:39:50

Highest Channel / QPSK



Date: 17.MAR.2025 11:41:02

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	0.0061	PASS
40	Normal Voltage	0.0071	
30	Normal Voltage	0.0081	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0021	
0	Normal Voltage	0.0107	
-10	Normal Voltage	0.0189	
-20	Normal Voltage	0.0054	
-30	Normal Voltage	0.0069	
20	Maximum Voltage	0.0137	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0189	

Note:

1. Normal Voltage = 3.8 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



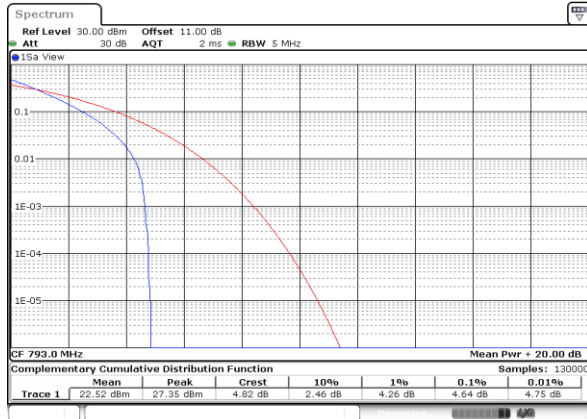
LTE Band 14

Peak-to-Average Ratio

Mode	LTE Band 14 / 5MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.64	5.83	6.61	6.58	PASS
Mode	LTE Band 14 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.75	5.97	6.43	6.55	PASS

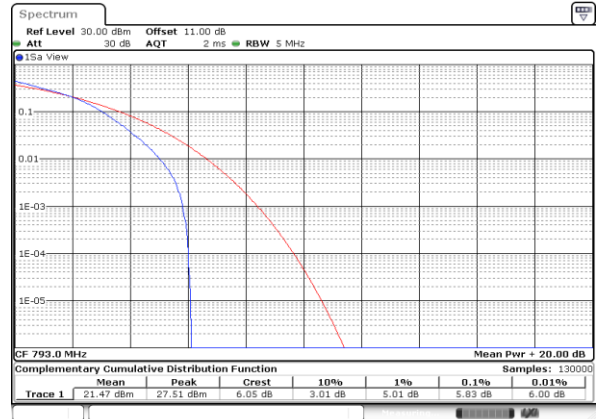
LTE Band 14 / 5MHz / QPSK

Middle Channel / Full RB



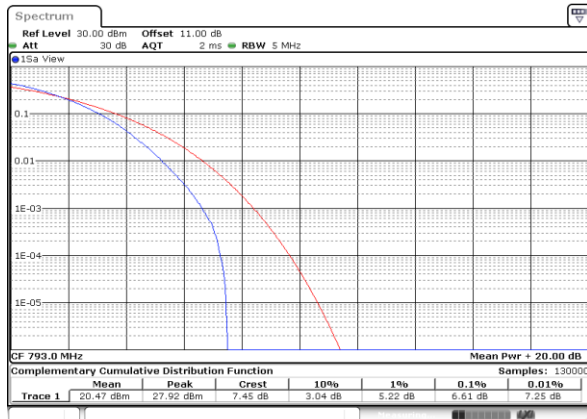
LTE Band 14 / 5MHz / 16QAM

Middle Channel / Full RB



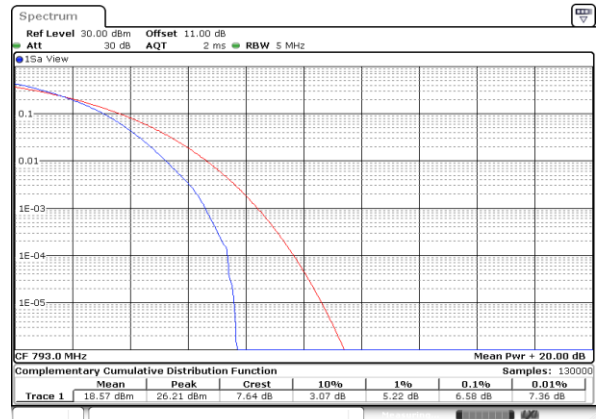
LTE Band 14 / 5MHz / 64QAM

Middle Channel / Full RB



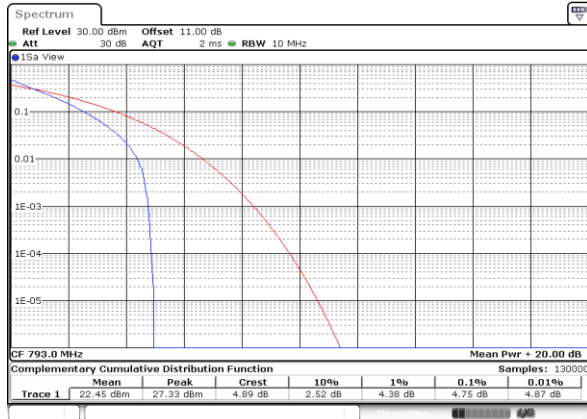
LTE Band 14 / 5MHz / 256QAM

Middle Channel / Full RB



LTE Band 14 / 10MHz / QPSK

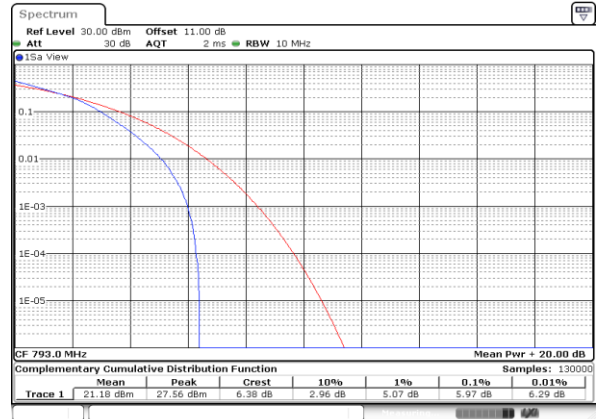
Middle Channel / Full RB



Date: 17.MAR.2025 13:58:11

LTE Band 14 / 10MHz / 16QAM

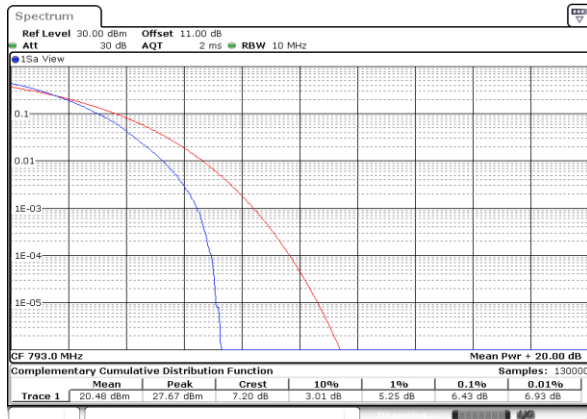
Middle Channel / Full RB



Date: 17.MAR.2025 13:58:34

LTE Band 14 / 10MHz / 64QAM

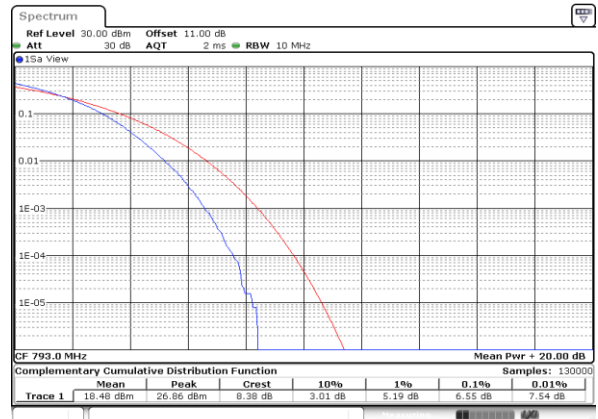
Middle Channel / Full RB



Date: 17.MAR.2025 13:58:50

LTE Band 14 / 10MHz / 256QAM

Middle Channel / Full RB



Date: 17.MAR.2025 13:59:21

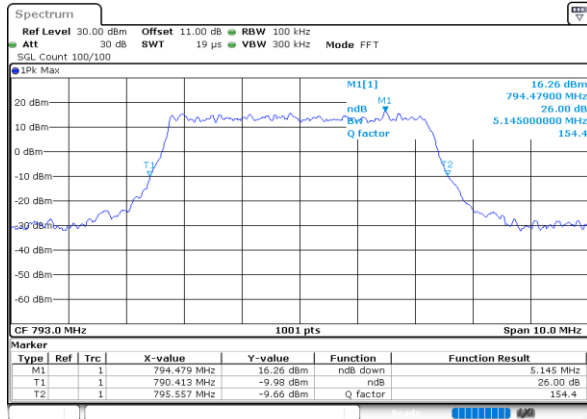
**26dB Bandwidth**

Mode	LTE Band 14 : 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	-	-	-	-	5.14	4.89	10.00	10.00	-	-	-	-
Mode	LTE Band 14 : 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	-	-	-	-	5.02	5.02	10.18	10.08	-	-	-	-

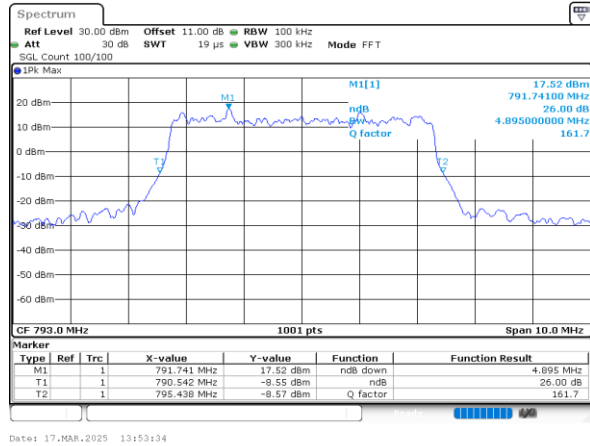


LTE Band 14

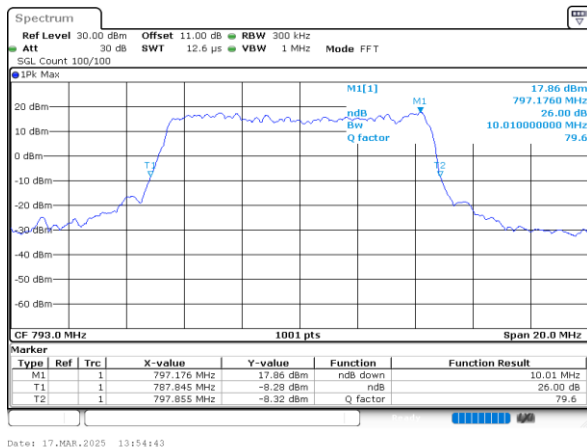
Middle Channel / 5MHz / QPSK



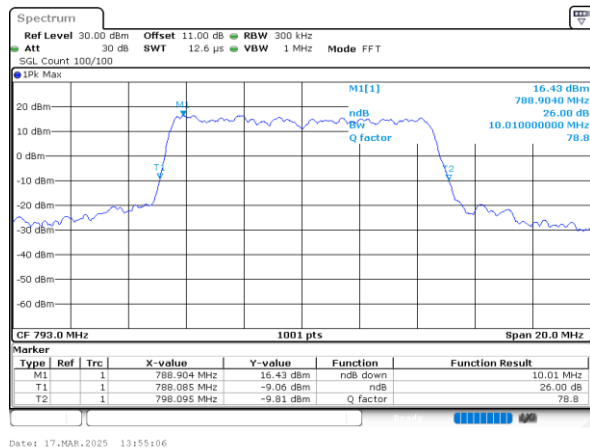
Middle Channel / 5MHz / 16QAM



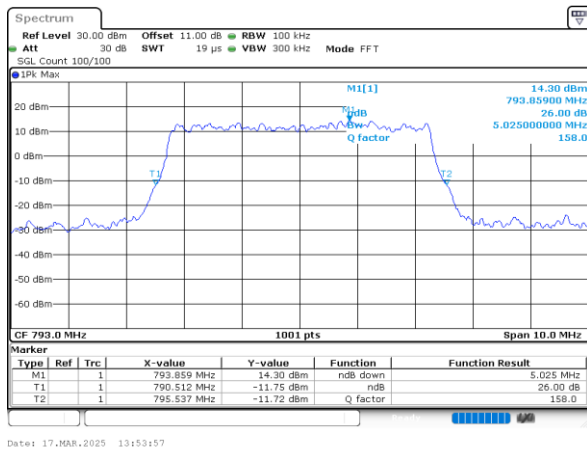
Middle Channel / 10MHz / QPSK



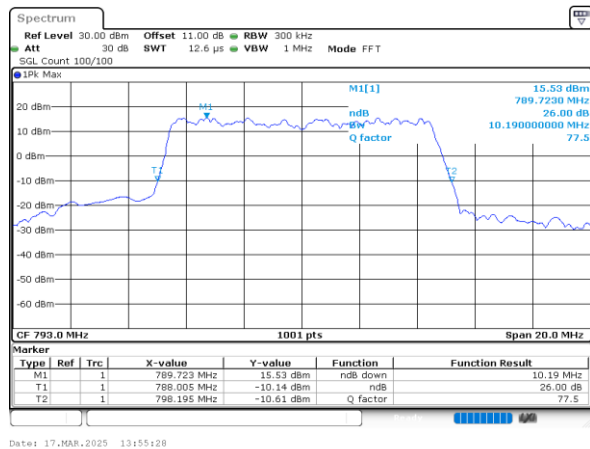
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



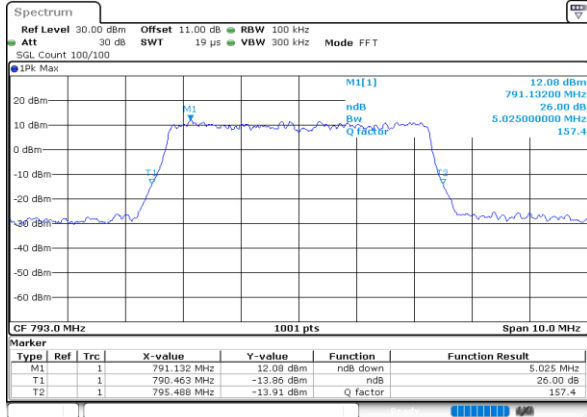
Middle Channel / 10MHz / 64QAM



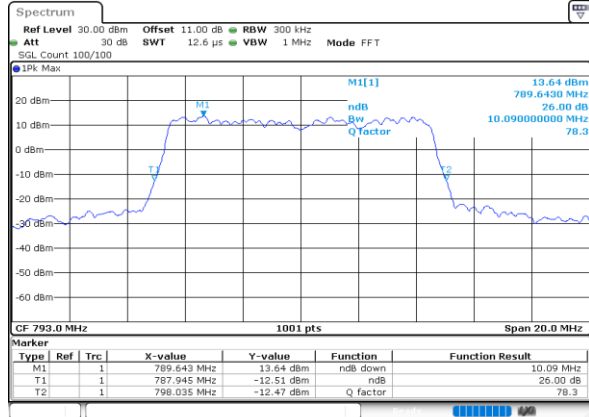


LTE Band 14

Middle Channel / 5MHz / 256QAM



Middle Channel / 10MHz / 256QAM



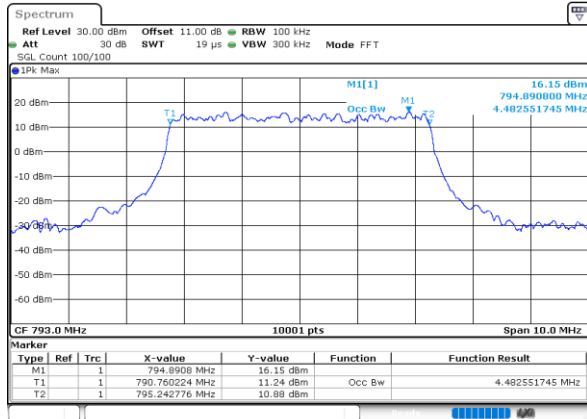
**Occupied Bandwidth**

Mode	LTE Band 14 : 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	-	-	-	-	4.48	4.51	9.06	9.04	-	-	-	-
Mode	LTE Band 14 : 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	-	-	-	-	4.52	4.50	9.07	9.02	-	-	-	-

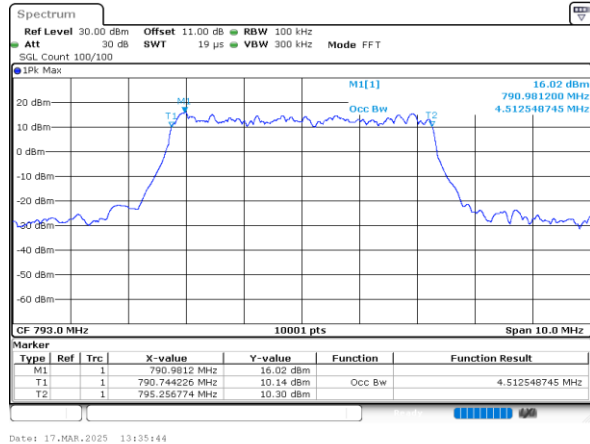


LTE Band 14

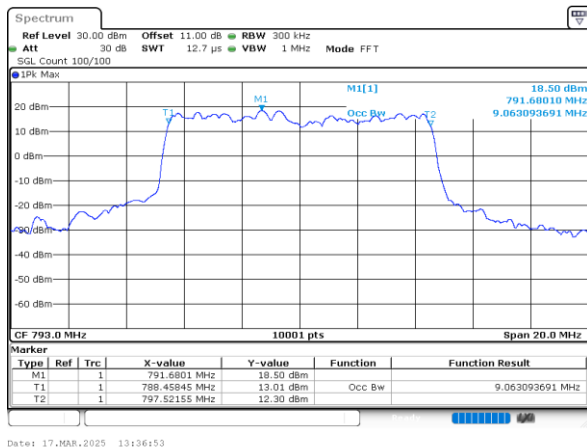
Middle Channel / 5MHz / QPSK



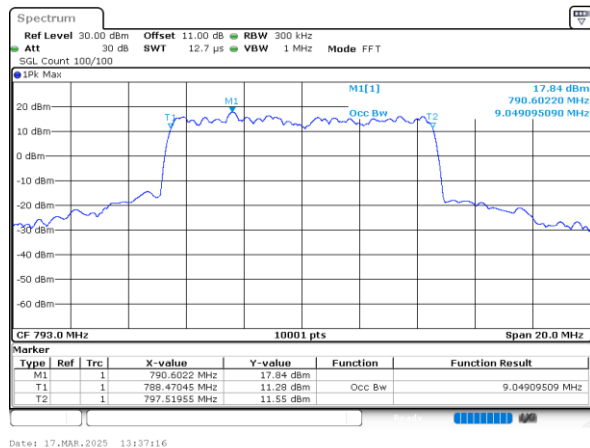
Middle Channel / 5MHz / 16QAM



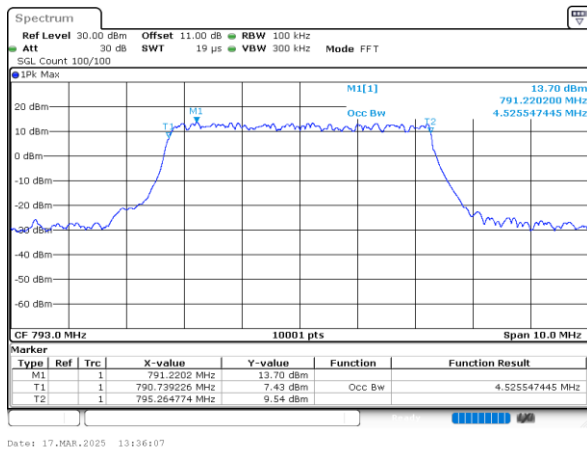
Middle Channel / 10MHz / QPSK



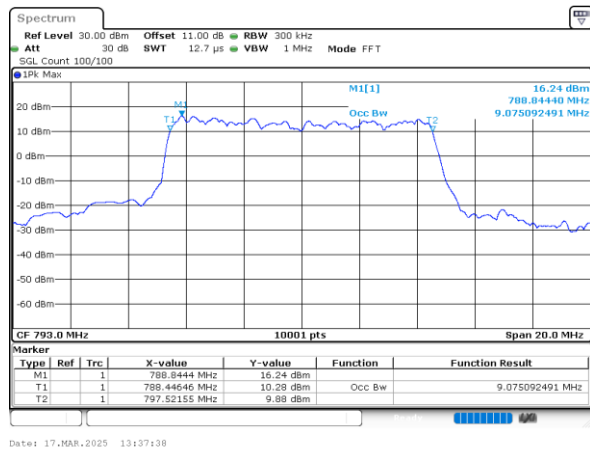
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM

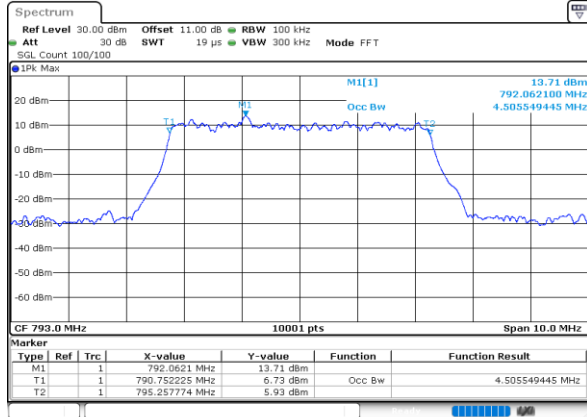


Middle Channel / 10MHz / 64QAM



LTE Band 14

Middle Channel / 5MHz / 256QAM



Middle Channel / 10MHz / 256QAM

