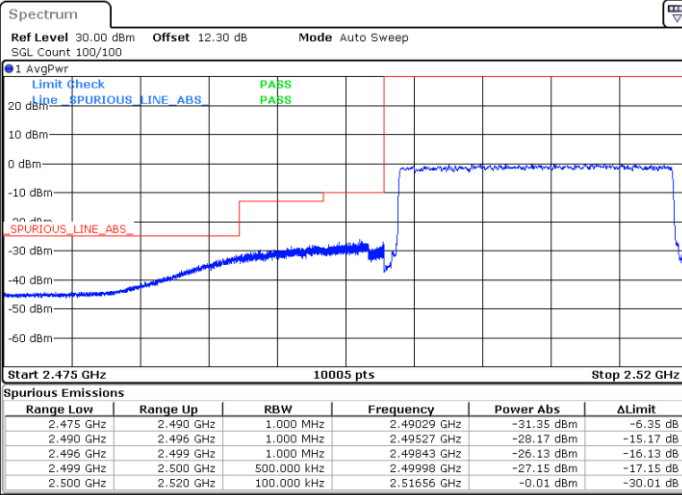




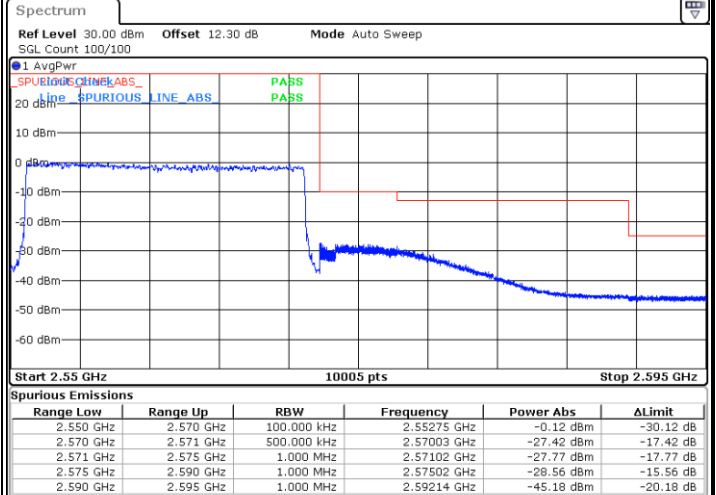
LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / Full RB



Date: 8.NOV.2024 20:19:32

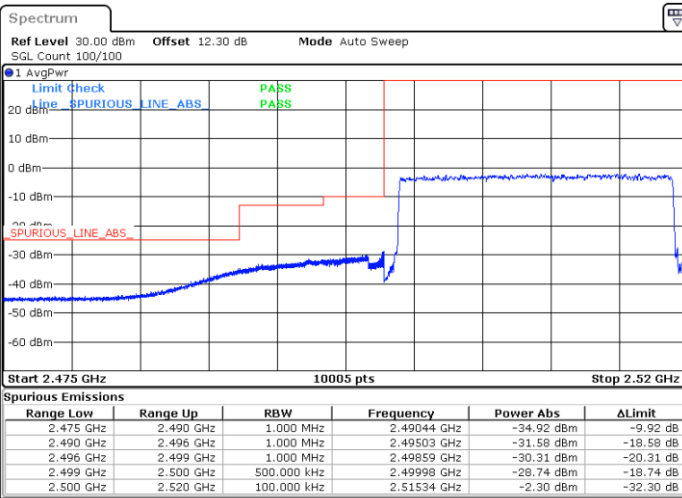
Highest Band Edge / Full RB



Date: 8.NOV.2024 20:23:46

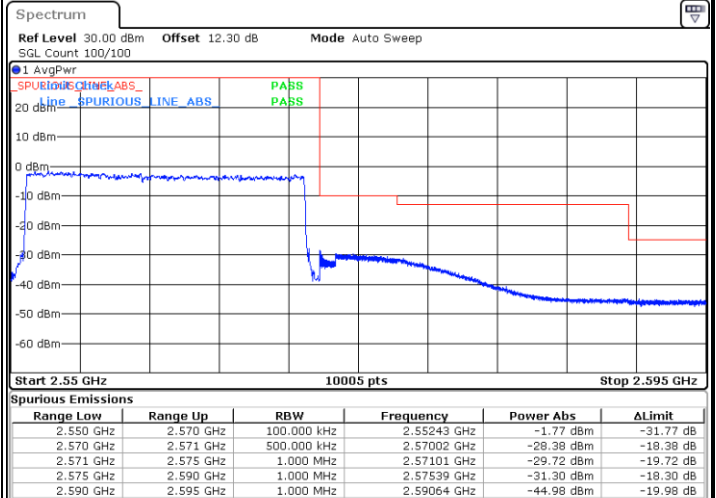
LTE Band 7 / 20MHz / 256QAM

Lowest Band Edge / Full RB



Date: 8.NOV.2024 20:20:34

Highest Band Edge / Full RB



Date: 8.NOV.2024 20:24:49

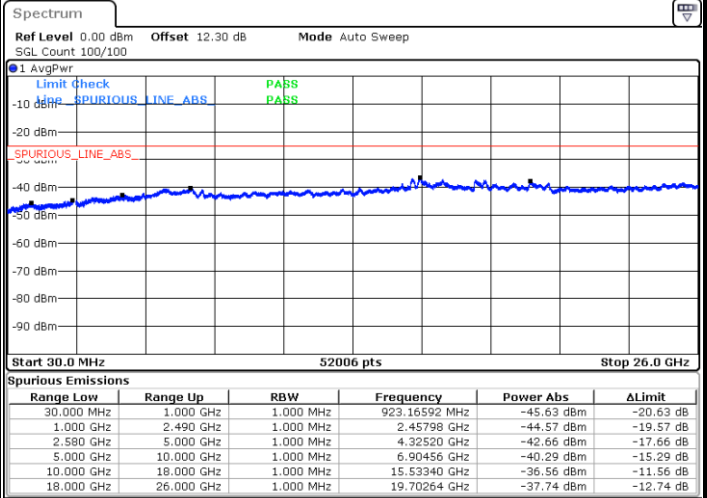
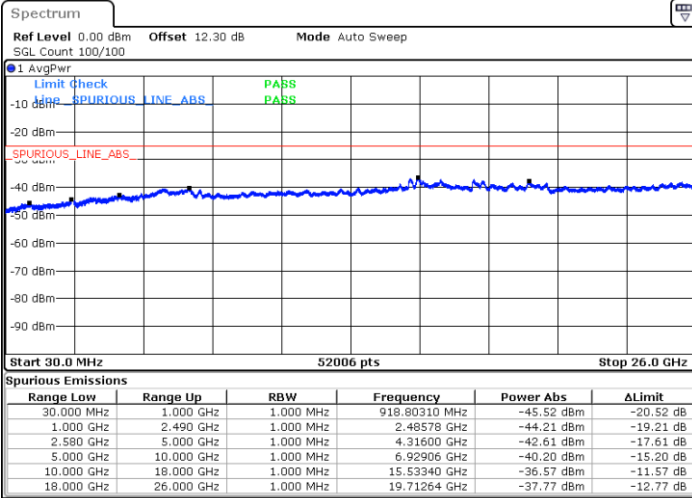


Conducted Spurious Emission

LTE Band 7 / 5MHz

Lowest Channel / QPSK

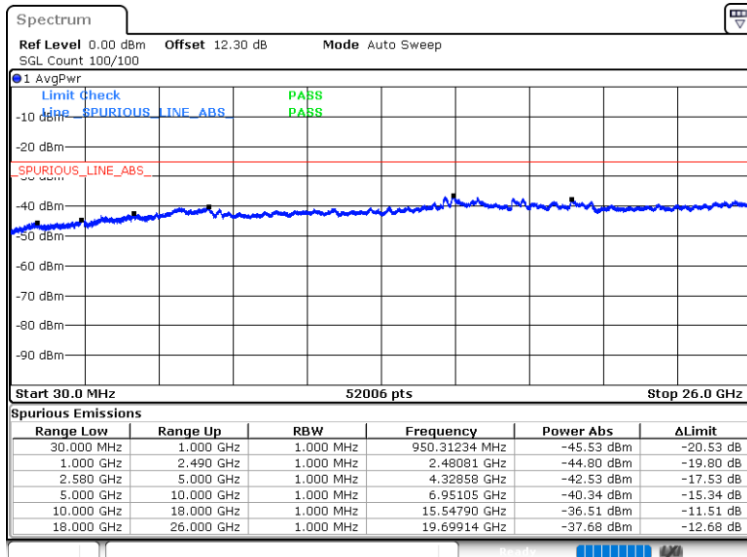
Middle Channel / QPSK



Date: 8.NOV.2024 20:45:13

Date: 8.NOV.2024 20:46:25

Highest Channel / QPSK



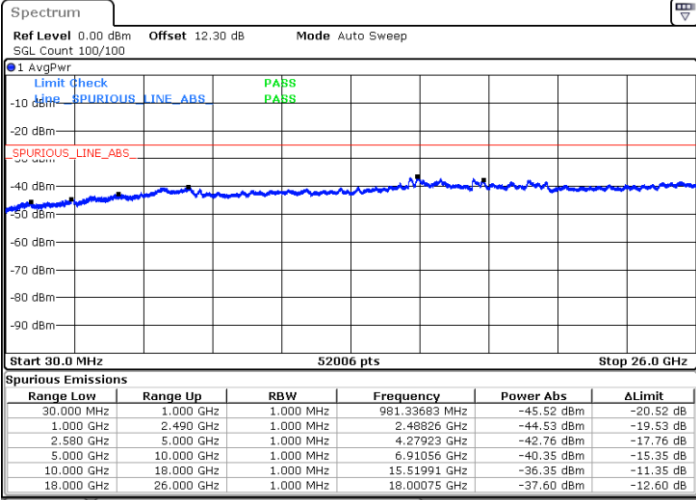
Date: 8.NOV.2024 20:47:37



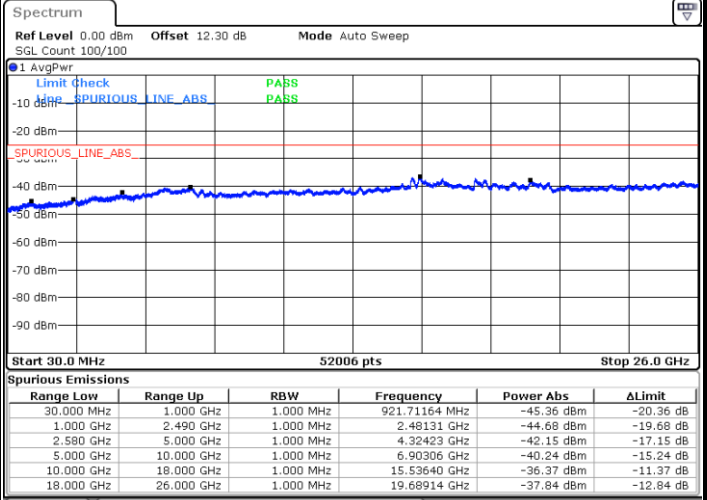
LTE Band 7 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

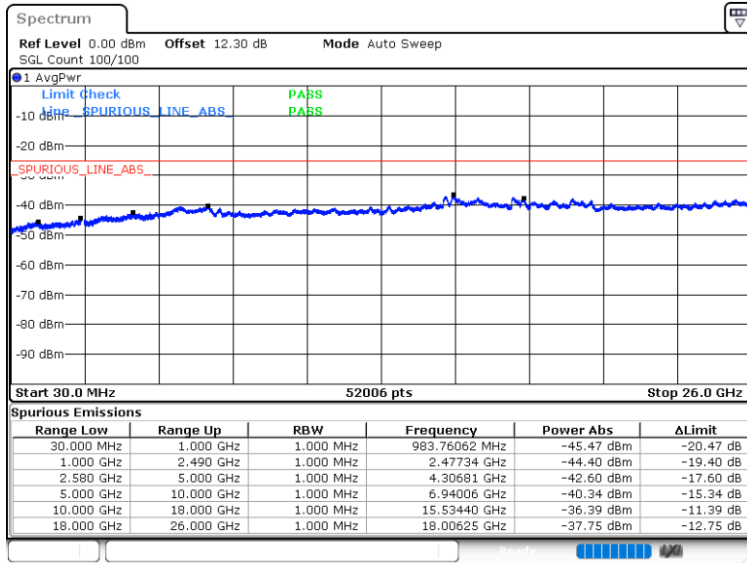


Date: 8.NOV.2024 20:48:51



Date: 8.NOV.2024 20:50:03

Highest Channel / QPSK



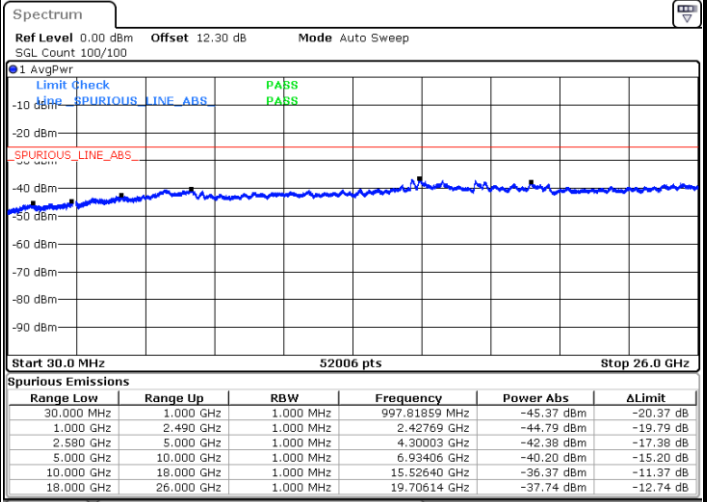
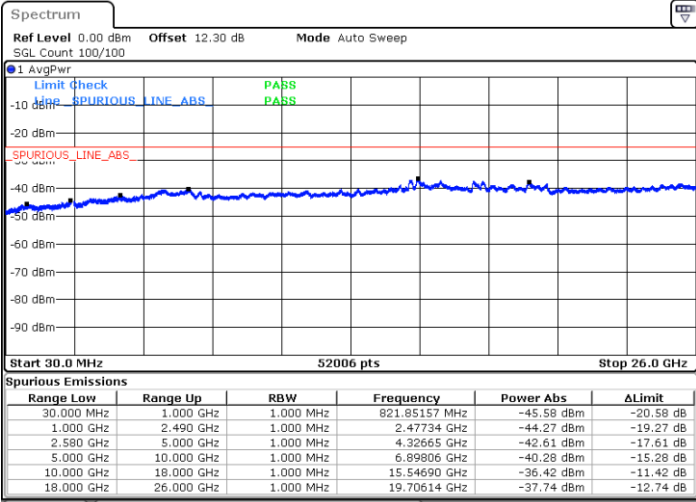
Date: 8.NOV.2024 20:51:15



LTE Band 7 / 15MHz

Lowest Channel / QPSK

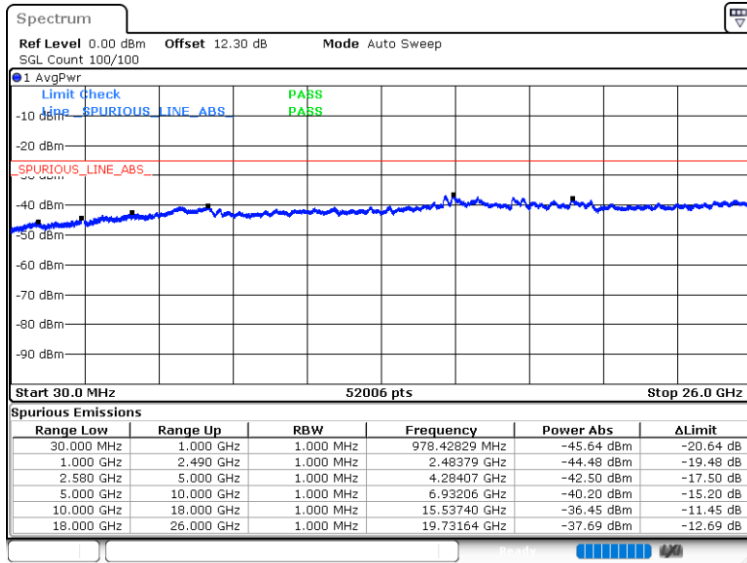
Middle Channel / QPSK



Date: 8.NOV.2024 20:52:29

Date: 8.NOV.2024 20:53:41

Highest Channel / QPSK

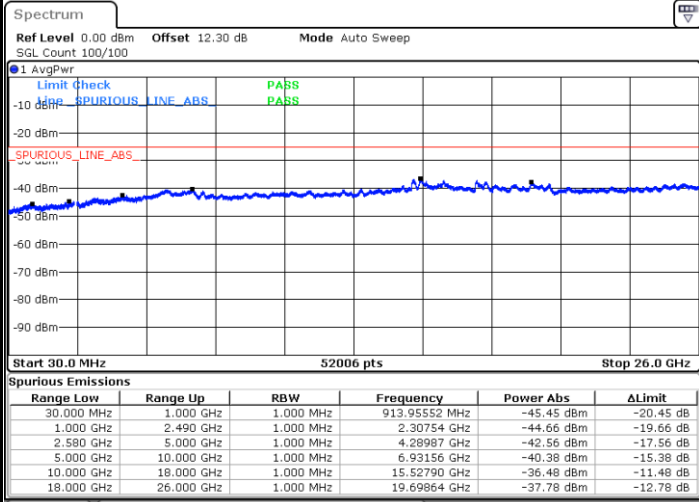


Date: 8.NOV.2024 20:54:53



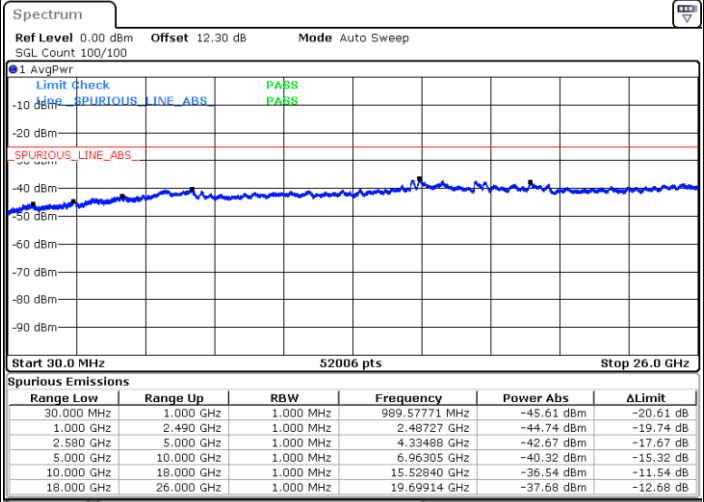
LTE Band 7 / 20MHz

Lowest Channel / QPSK



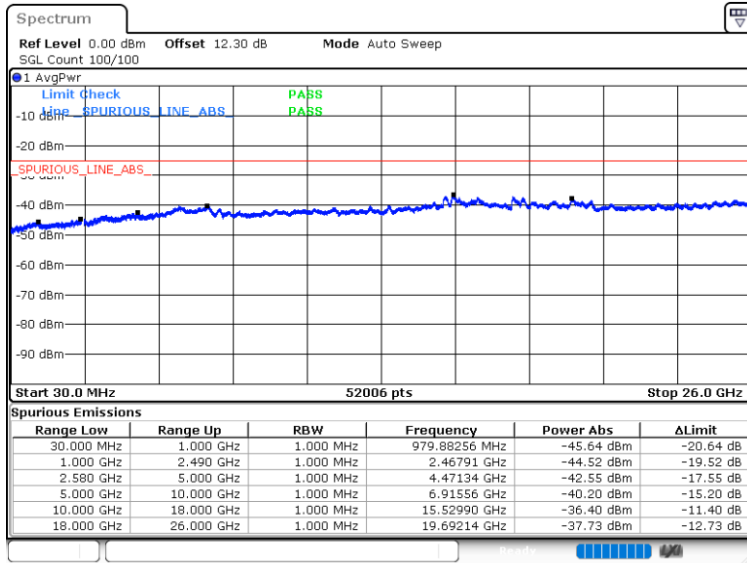
Date: 8.NOV.2024 20:56:08

Middle Channel / QPSK



Date: 8.NOV.2024 20:57:20

Highest Channel / QPSK



Date: 8.NOV.2024 20:58:32



Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0067	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0012	

Note:

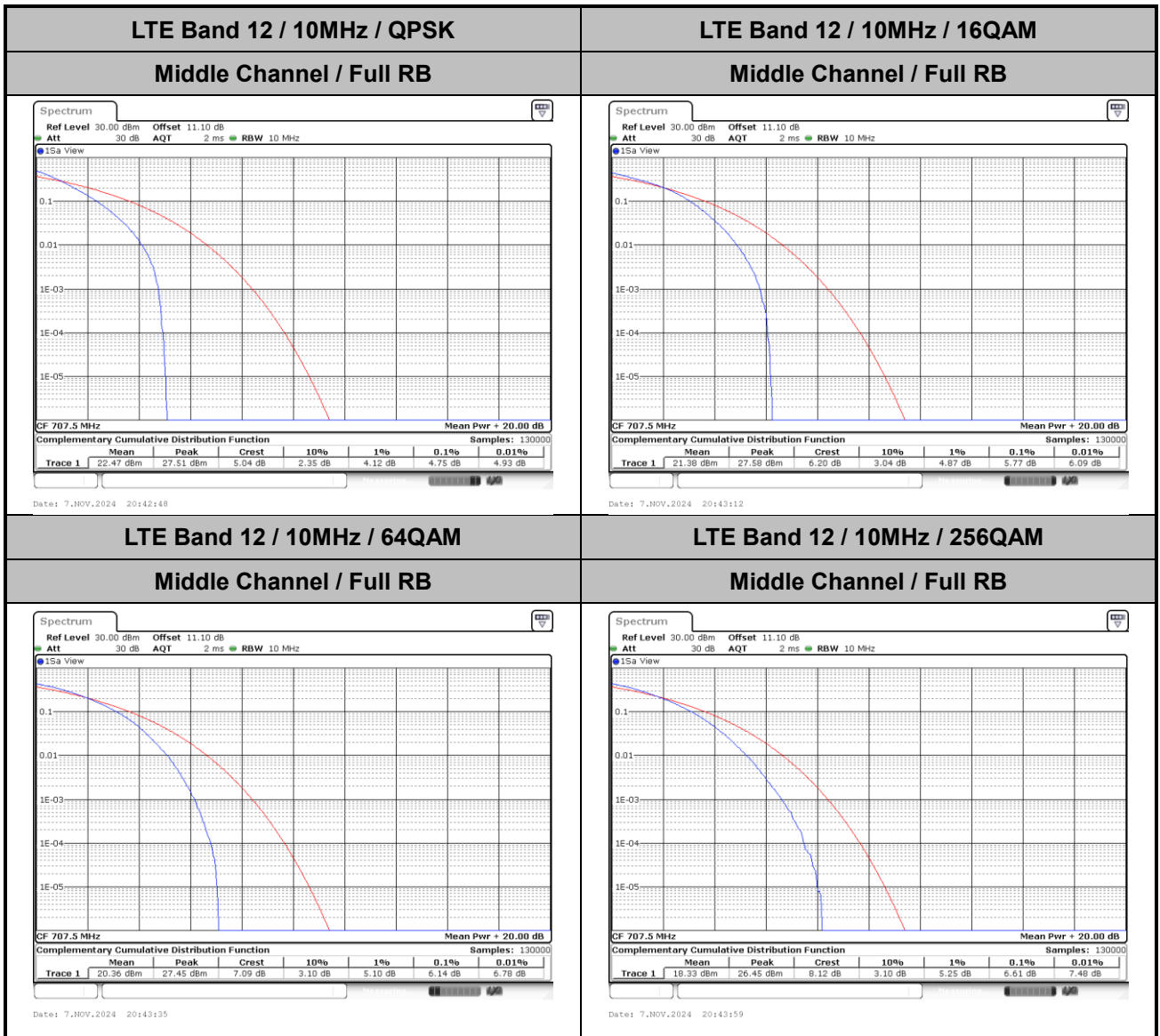
1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 3.465 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



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	4.75	5.77	6.14	6.61	PASS





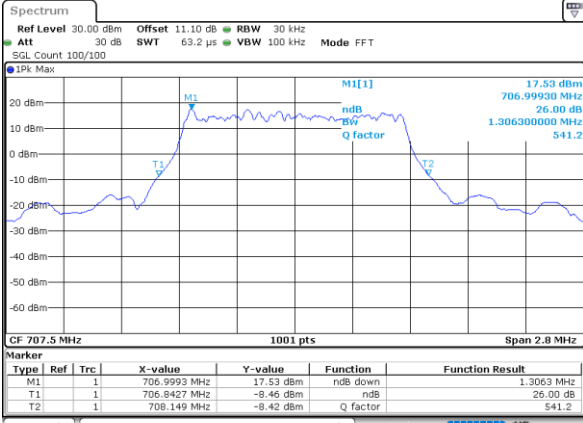
26dB Bandwidth

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	1.30	1.42	3.08	3.10	5.02	5.00	9.89	10.02	-	-	-	-
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	1.34	1.34	3.12	3.13	4.99	4.92	9.75	9.97	-	-	-	-



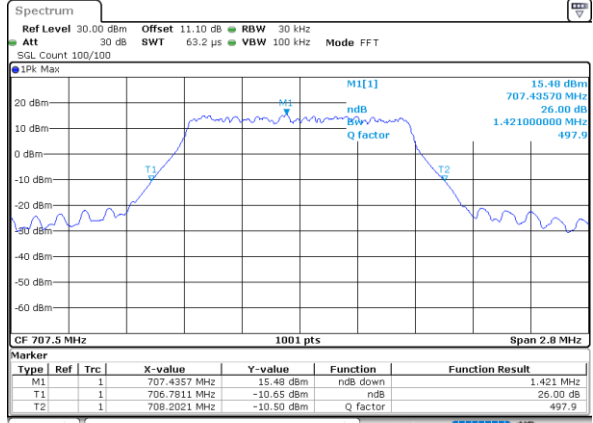
LTE Band 12

Middle Channel / 1.4MHz / QPSK



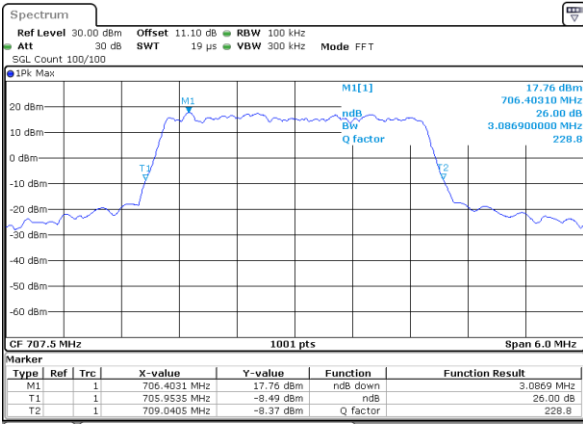
Date: 7.NOV.2024 20:22:16

Middle Channel / 1.4MHz / 16QAM



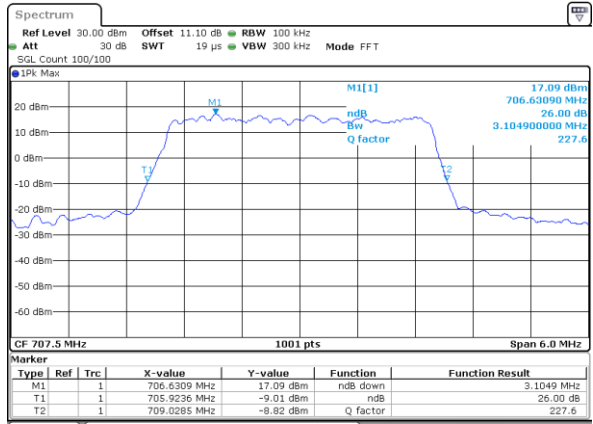
Date: 7.NOV.2024 20:22:19

Middle Channel / 3MHz / QPSK



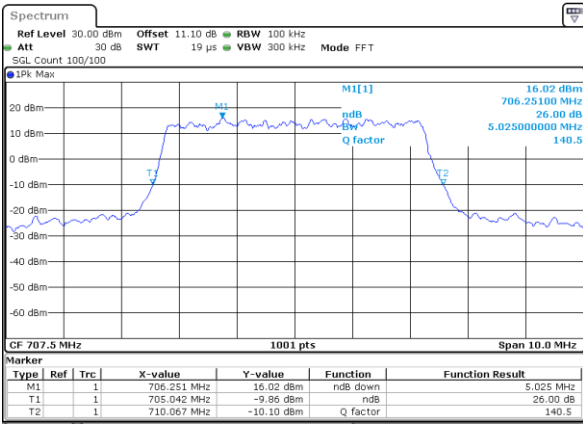
Date: 7.NOV.2024 20:23:46

Middle Channel / 3MHz / 16QAM



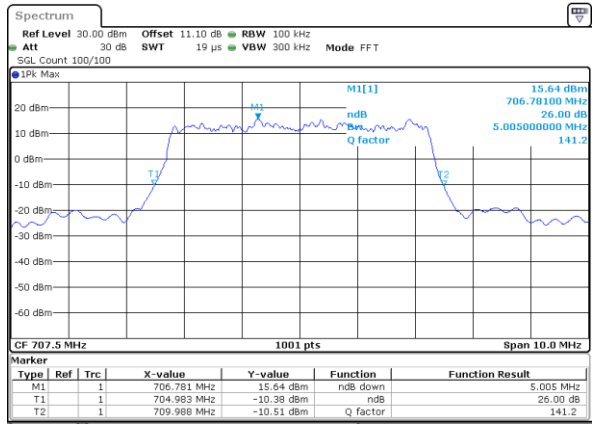
Date: 7.NOV.2024 20:24:09

Middle Channel / 5MHz / QPSK



Date: 7.NOV.2024 20:25:16

Middle Channel / 5MHz / 16QAM

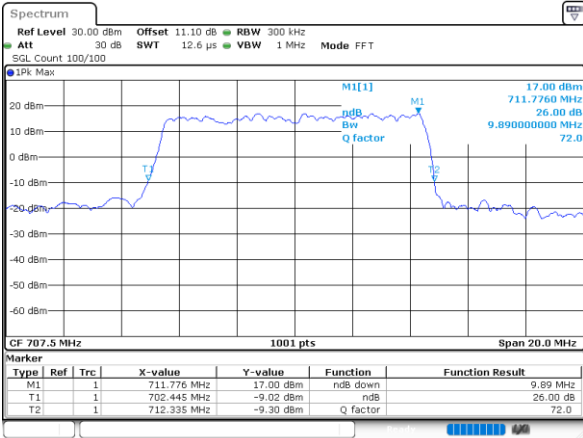


Date: 7.NOV.2024 20:25:39



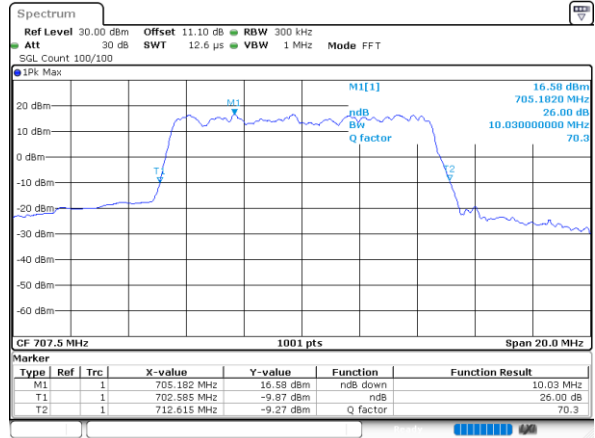
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 7.NOV.2024 20:26:47

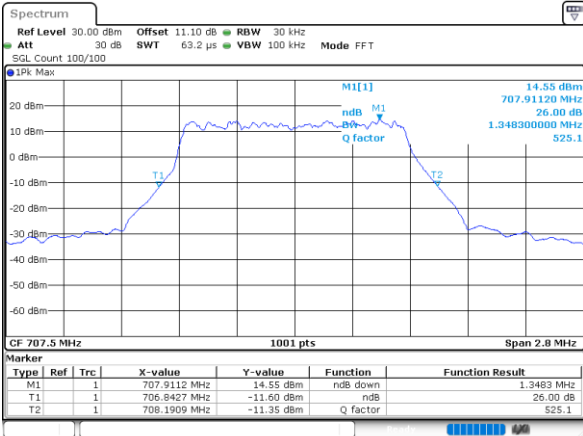
Middle Channel / 10MHz / 16QAM



Date: 7.NOV.2024 20:27:09

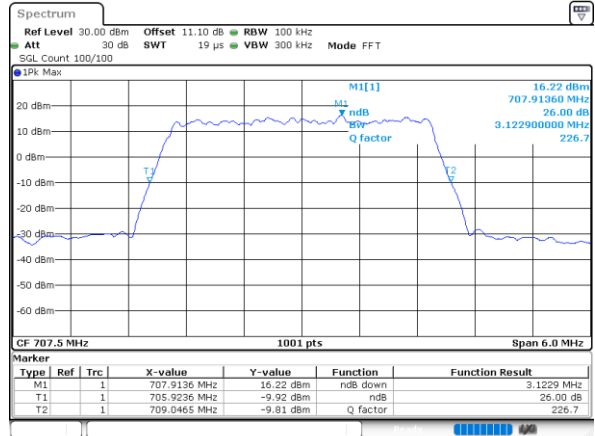
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



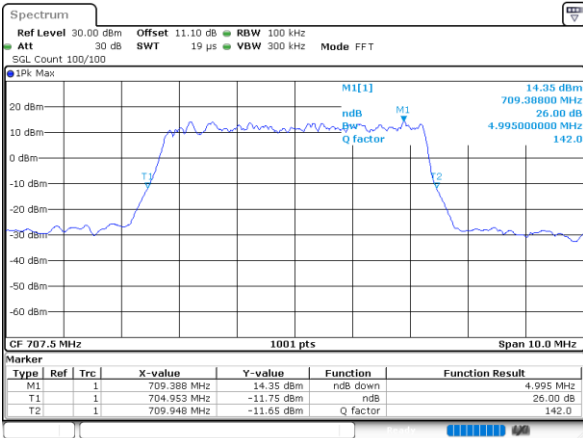
Date: 7.NOV.2024 20:23:01

Middle Channel / 3MHz / 64QAM



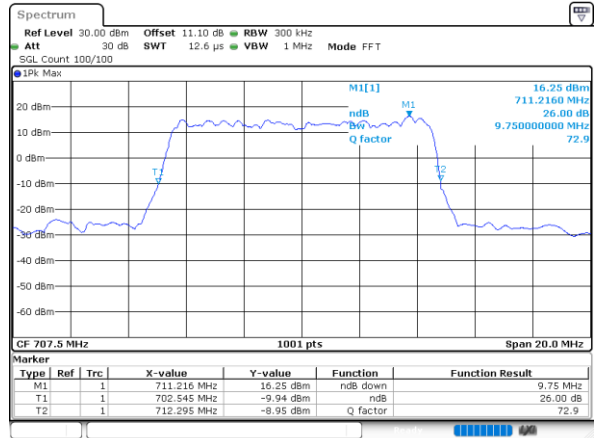
Date: 7.NOV.2024 20:24:31

Middle Channel / 5MHz / 64QAM



Date: 7.NOV.2024 20:26:01

Middle Channel / 10MHz / 64QAM

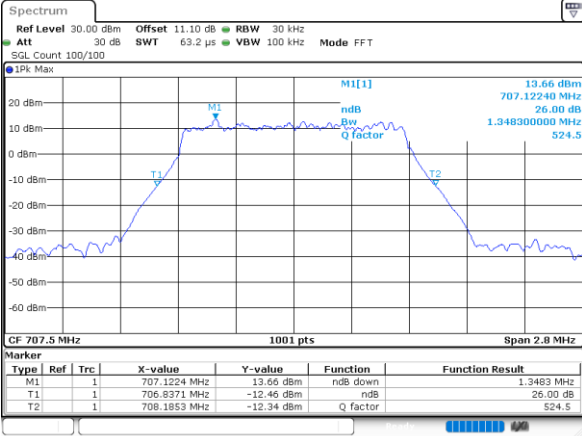


Date: 7.NOV.2024 20:27:32



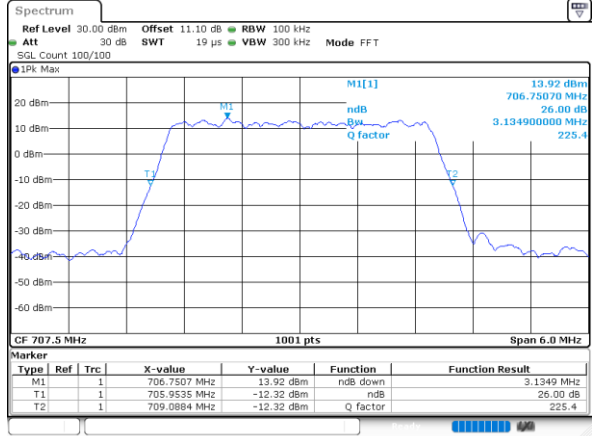
LTE Band 12

Middle Channel / 1.4MHz / 256QAM



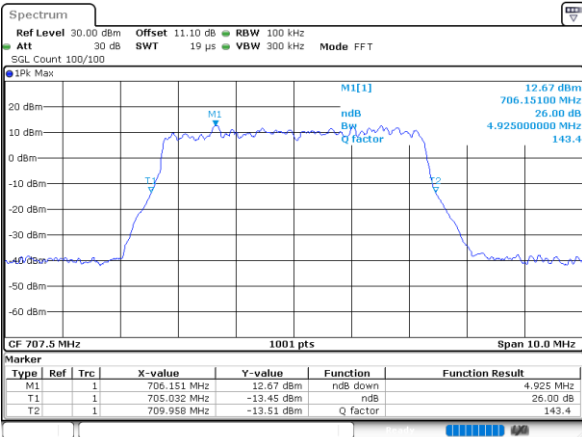
Date: 7.NOV.2024 20:23:23

Middle Channel / 3MHz / 256QAM



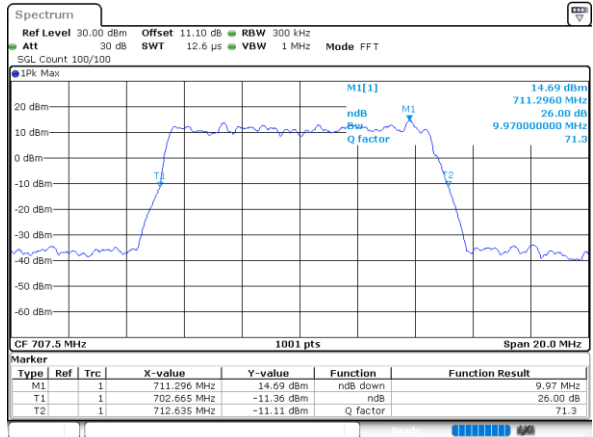
Date: 7.NOV.2024 20:24:53

Middle Channel / 5MHz / 256QAM



Date: 7.NOV.2024 20:26:23

Middle Channel / 10MHz / 256QAM



Date: 7.NOV.2024 20:27:54



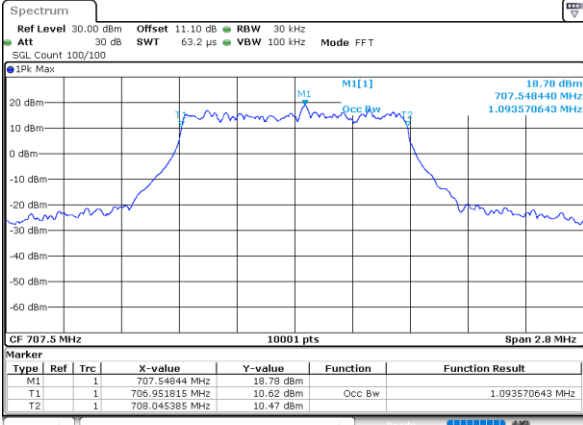
Occupied Bandwidth

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	1.10	2.74	2.74	4.47	4.47	9.03	9.03	-	-	-	-
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	1.10	2.73	2.72	4.49	4.48	9.07	9.06	-	-	-	-



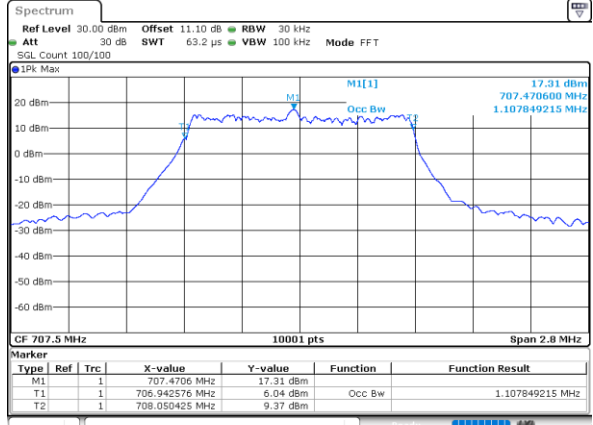
LTE Band 12

Middle Channel / 1.4MHz / QPSK



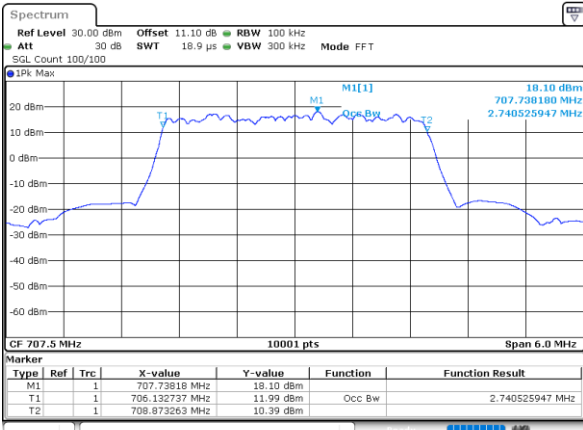
Date: 7.NOV.2024 20:16:14

Middle Channel / 1.4MHz / 16QAM



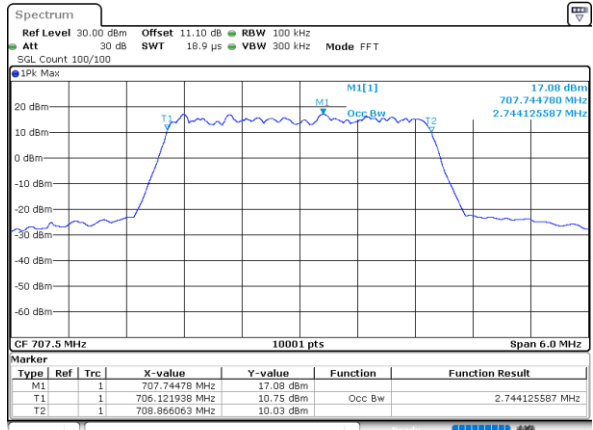
Date: 7.NOV.2024 20:16:37

Middle Channel / 3MHz / QPSK



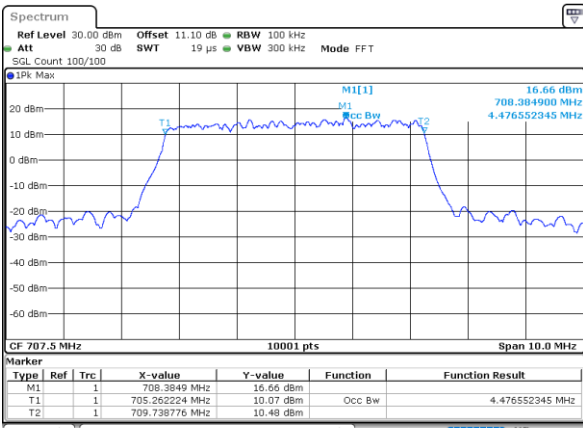
Date: 7.NOV.2024 20:17:45

Middle Channel / 3MHz / 16QAM



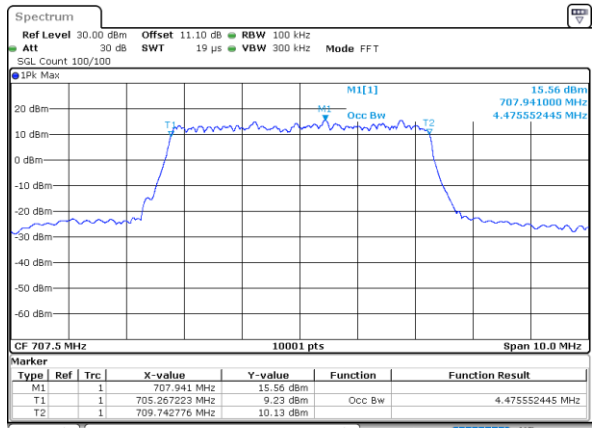
Date: 7.NOV.2024 20:18:08

Middle Channel / 5MHz / QPSK



Date: 7.NOV.2024 20:19:16

Middle Channel / 5MHz / 16QAM

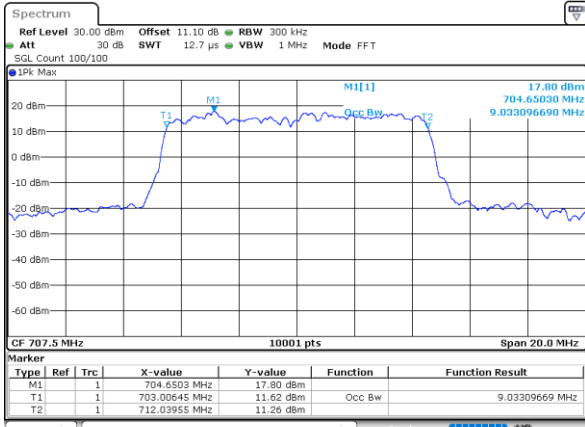


Date: 7.NOV.2024 20:19:38



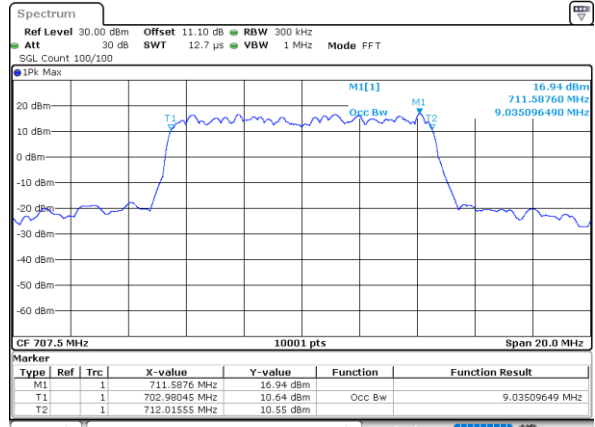
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 7.NOV.2024 20:20:46

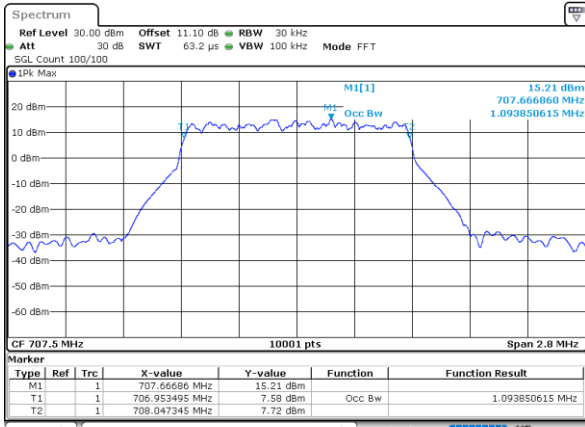
Middle Channel / 10MHz / 16QAM



Date: 7.NOV.2024 20:21:09

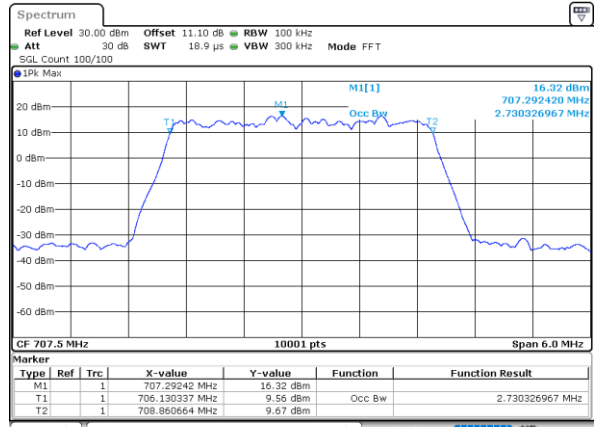
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



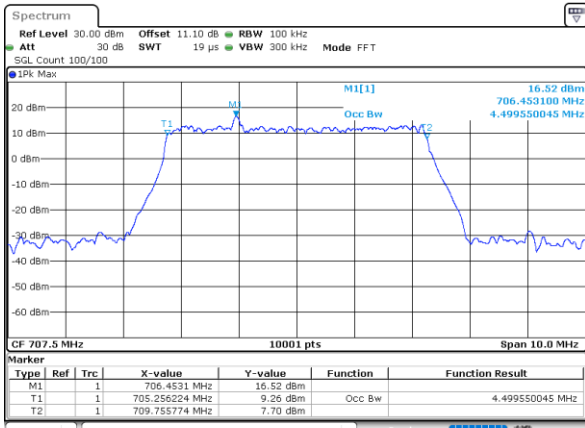
Date: 7.NOV.2024 20:16:59

Middle Channel / 3MHz / 64QAM



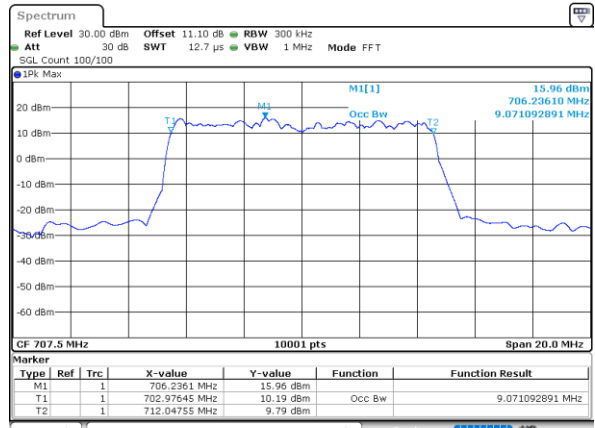
Date: 7.NOV.2024 20:18:30

Middle Channel / 5MHz / 64QAM



Date: 7.NOV.2024 20:20:01

Middle Channel / 10MHz / 64QAM

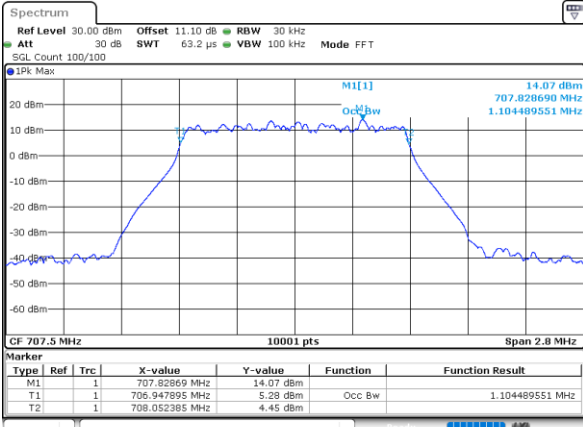


Date: 7.NOV.2024 20:21:31



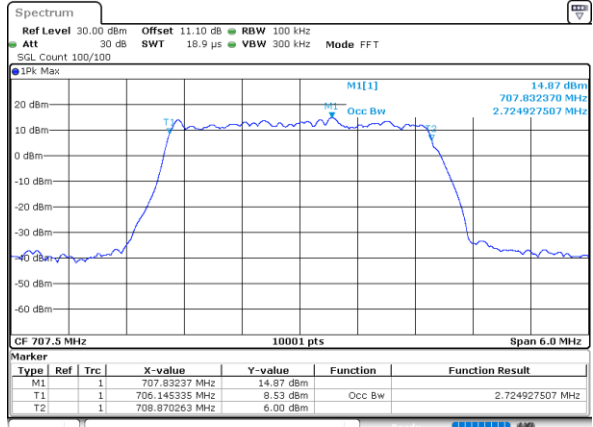
LTE Band 12

Middle Channel / 1.4MHz / 256QAM



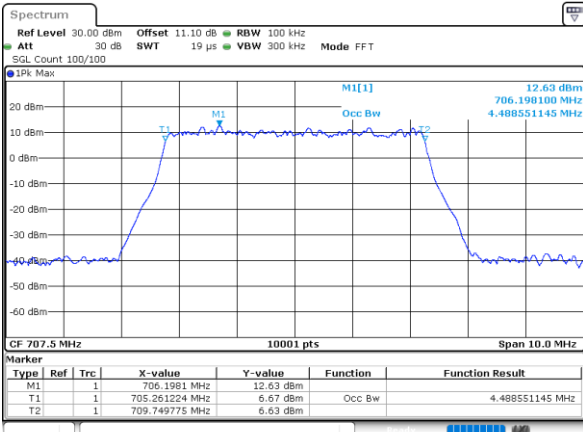
Date: 7.NOV.2024 20:17:22

Middle Channel / 3MHz / 256QAM



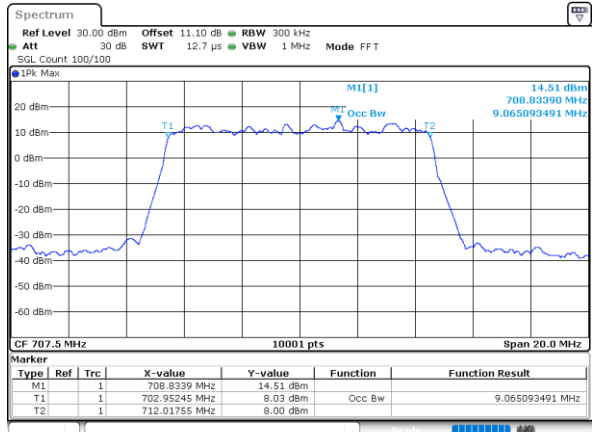
Date: 7.NOV.2024 20:18:53

Middle Channel / 5MHz / 256QAM



Date: 7.NOV.2024 20:20:23

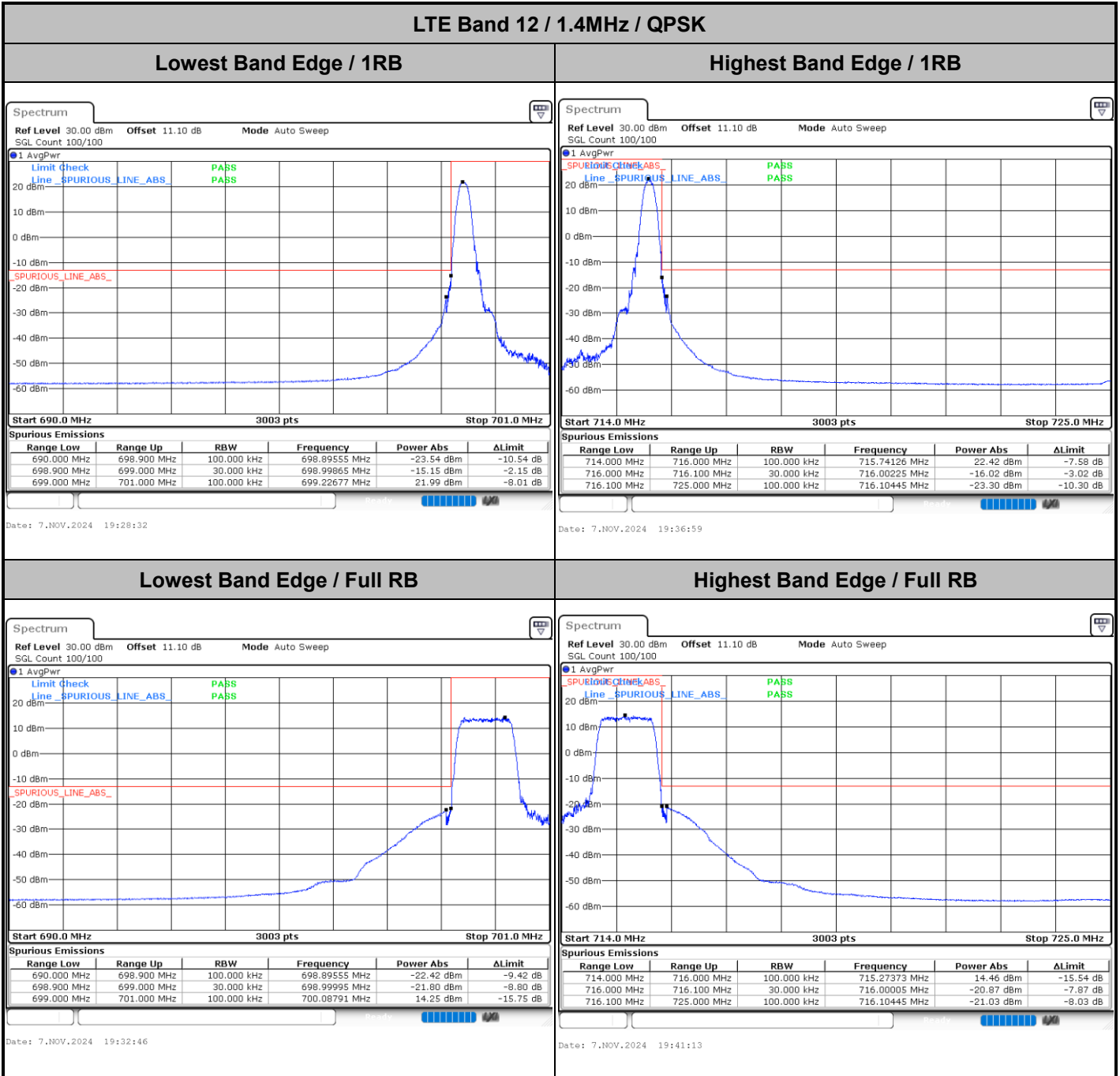
Middle Channel / 10MHz / 256QAM



Date: 7.NOV.2024 20:21:53



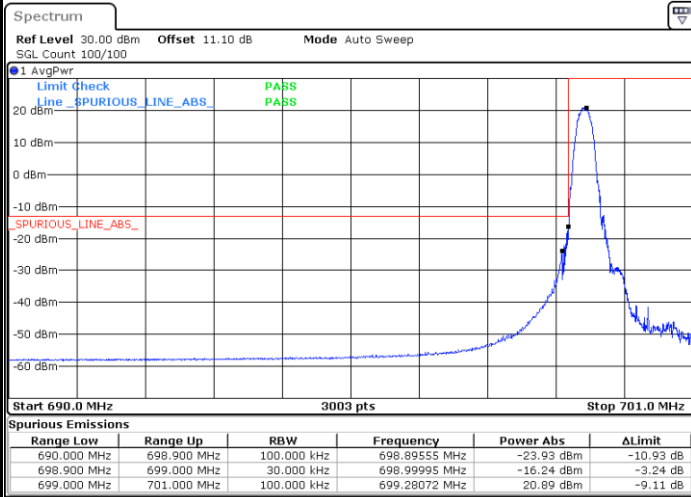
Conducted Band Edge





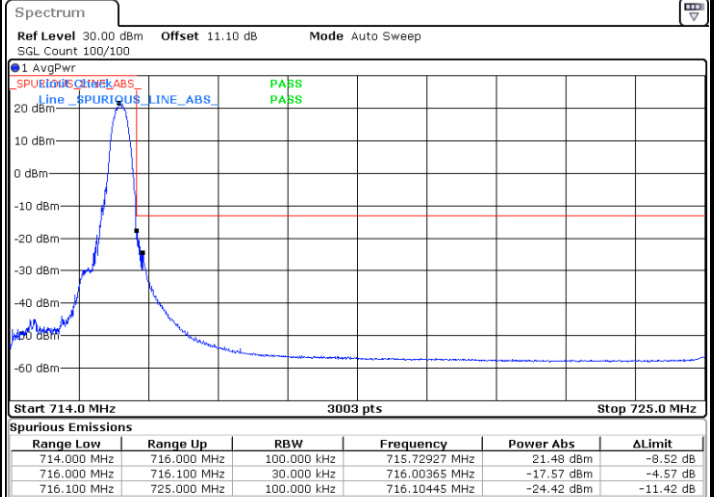
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



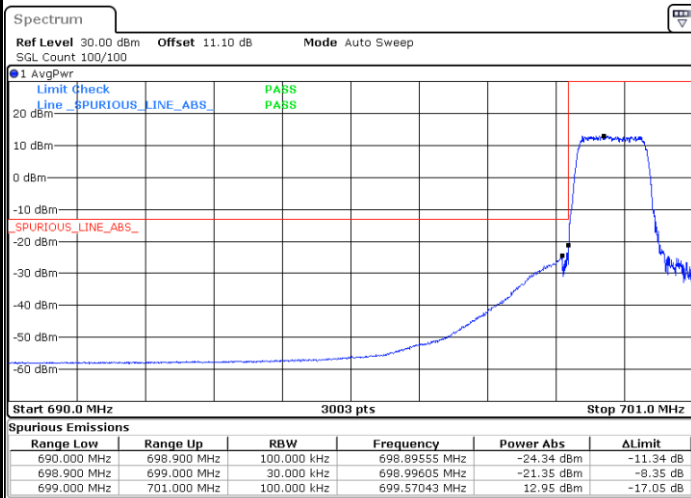
Date: 7.NOV.2024 19:29:35

Highest Band Edge / 1 RB



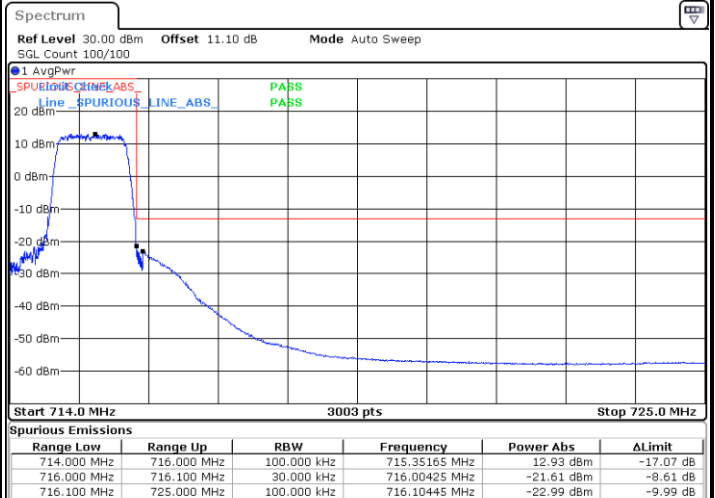
Date: 7.NOV.2024 19:38:02

Lowest Band Edge / Full RB



Date: 7.NOV.2024 19:33:48

Highest Band Edge / Full RB

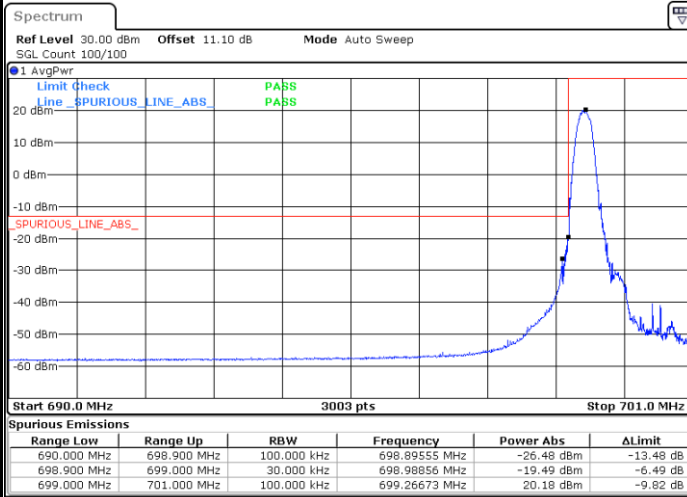


Date: 7.NOV.2024 19:42:16



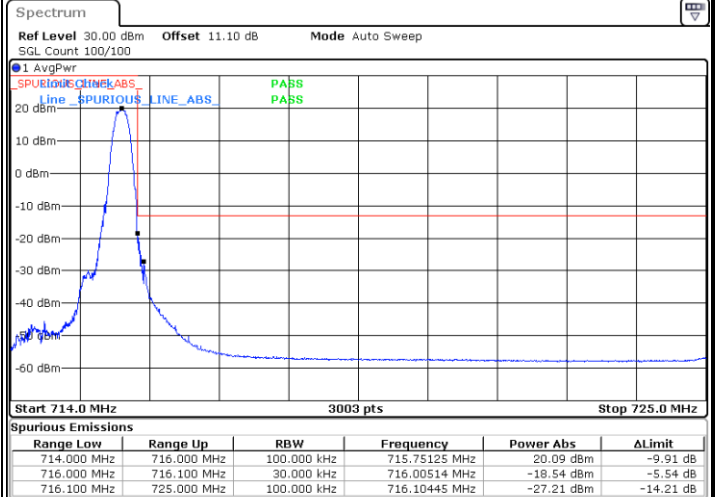
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



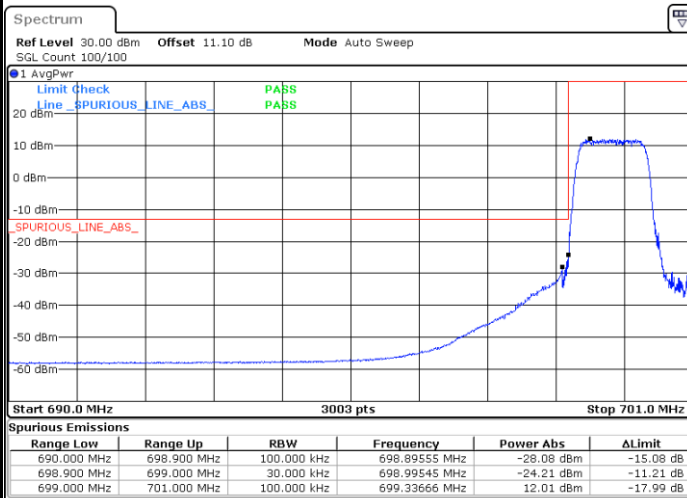
Date: 7.NOV.2024 19:30:37

Highest Band Edge / 1 RB



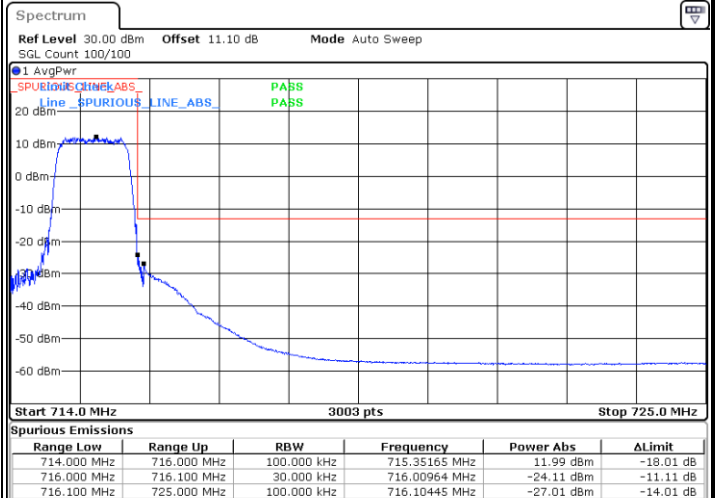
Date: 7.NOV.2024 19:39:05

Lowest Band Edge / Full RB



Date: 7.NOV.2024 19:34:51

Highest Band Edge / Full RB

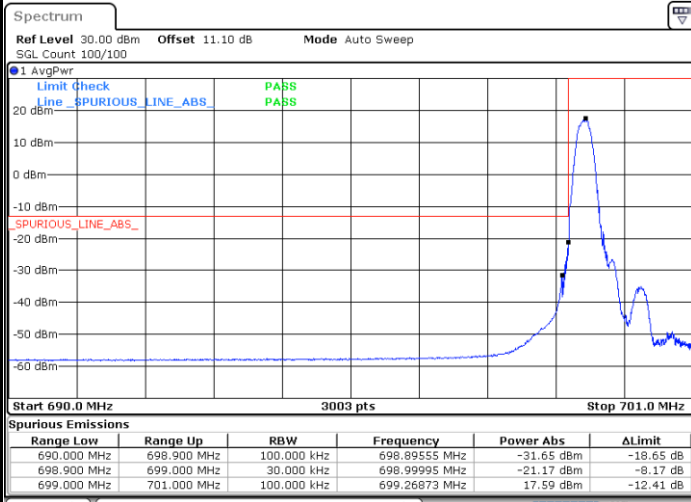


Date: 7.NOV.2024 19:43:19



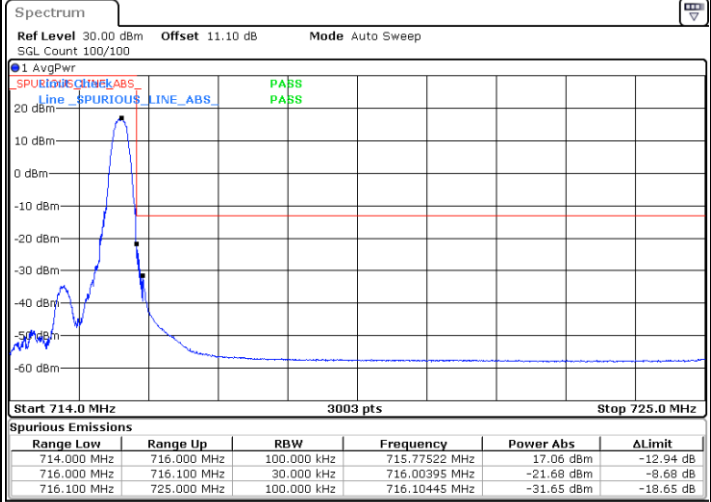
LTE Band 12 / 1.4MHz / 256QAM

Lowest Band Edge / 1 RB



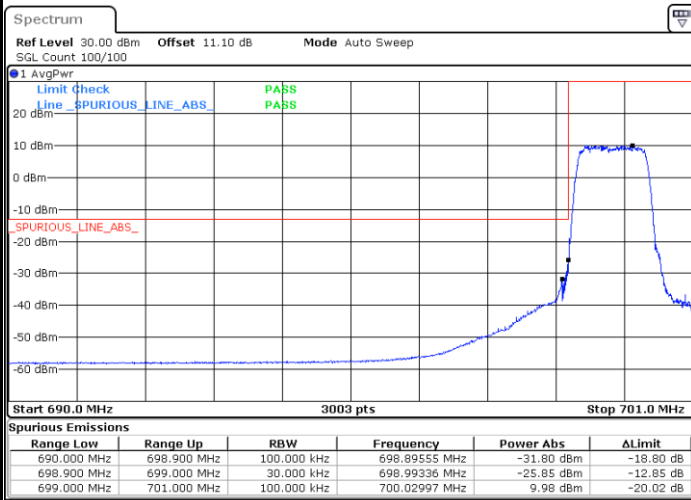
Date: 7.NOV.2024 19:31:40

Highest Band Edge / 1 RB



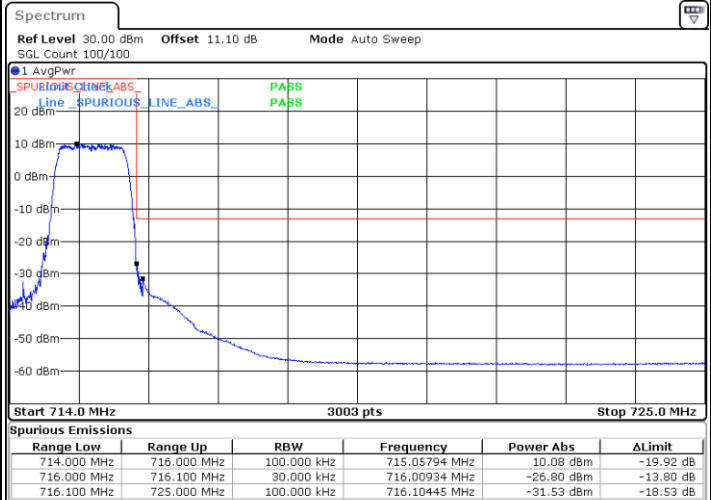
Date: 7.NOV.2024 19:40:07

Lowest Band Edge / Full RB



Date: 7.NOV.2024 19:35:54

Highest Band Edge / Full RB

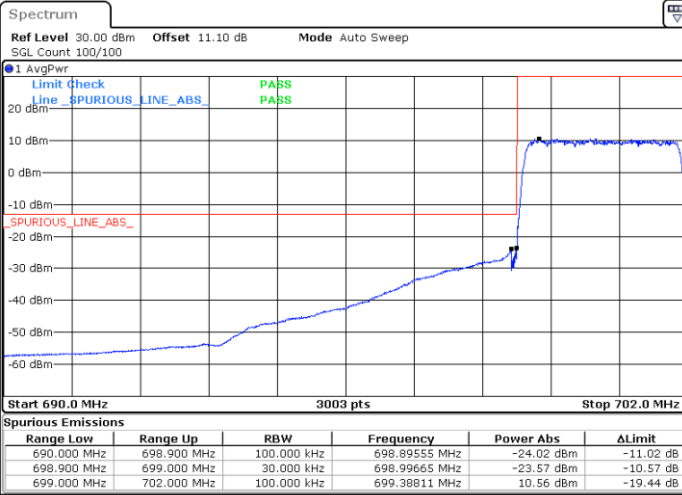


Date: 7.NOV.2024 19:44:21



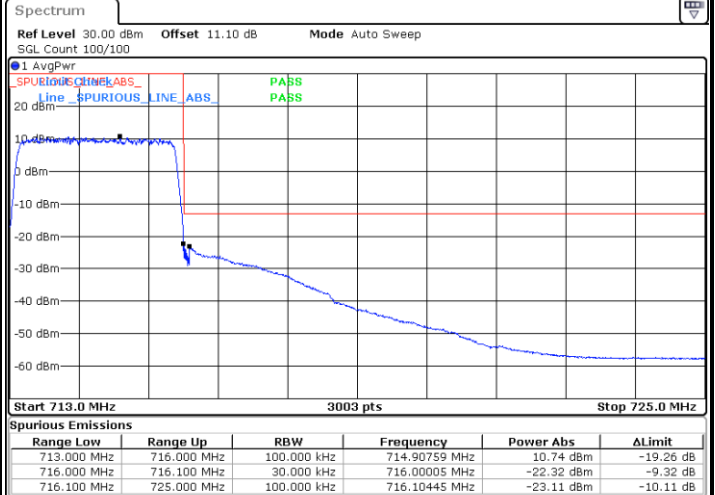
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / Full RB



Date: 7.NOV.2024 19:49:21

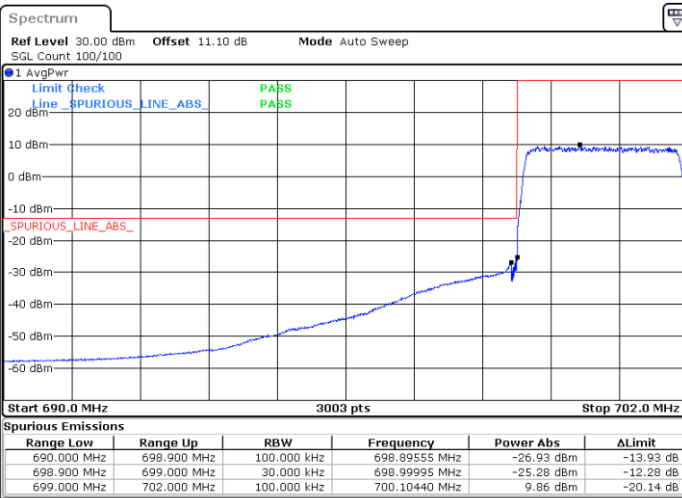
Highest Band Edge / Full RB



Date: 7.NOV.2024 19:54:33

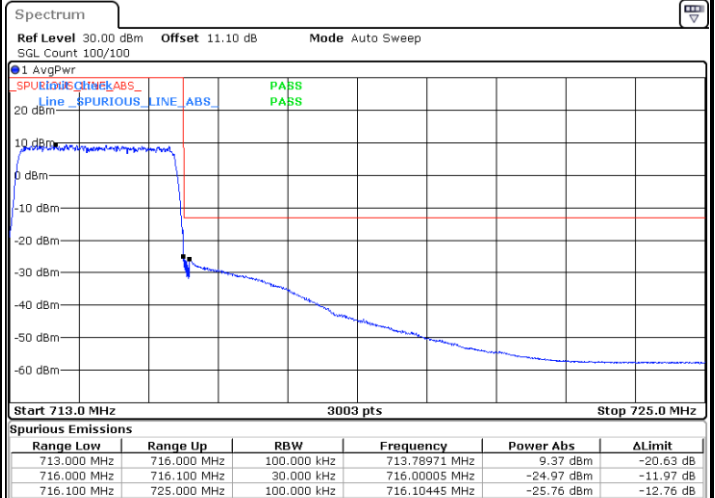
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / Full RB



Date: 7.NOV.2024 19:51:22

Highest Band Edge / Full RB

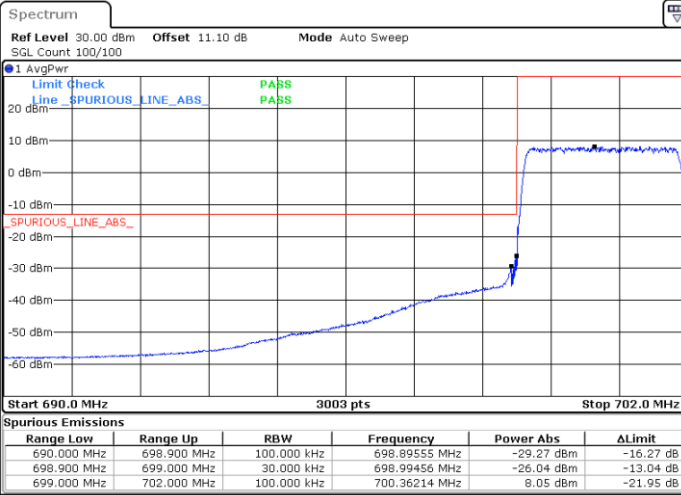


Date: 7.NOV.2024 19:55:35



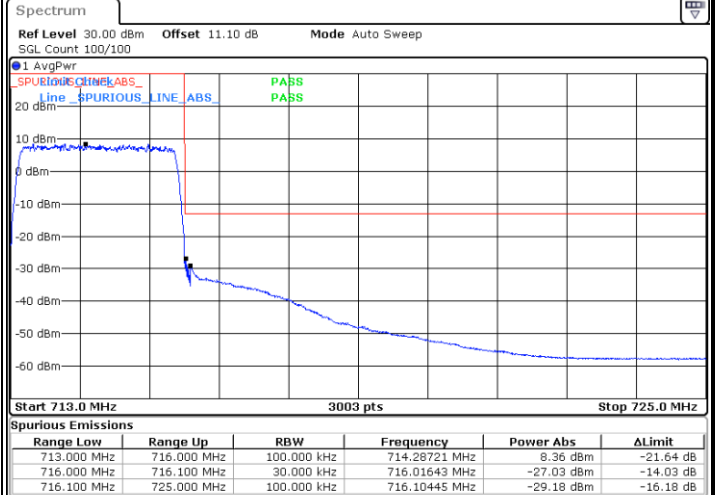
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / Full RB



Date: 7.NOV.2024 19:52:24

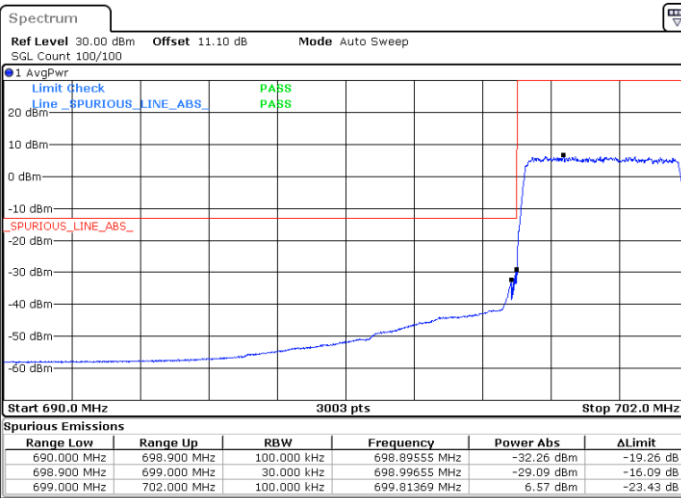
Highest Band Edge / Full RB



Date: 7.NOV.2024 19:56:38

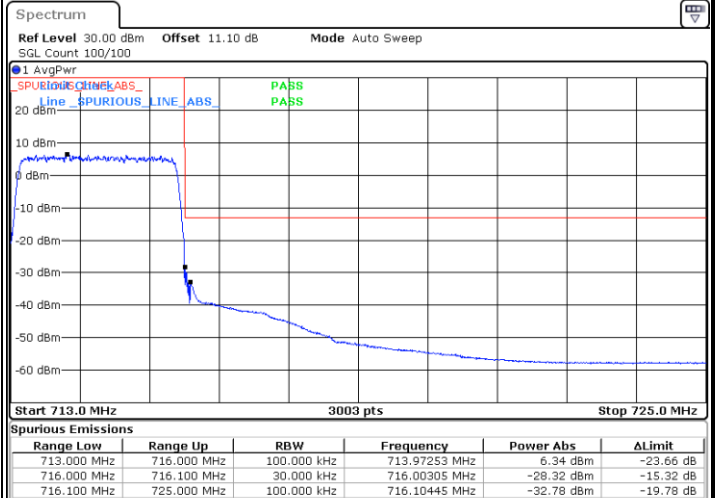
LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / Full RB



Date: 7.NOV.2024 19:53:27

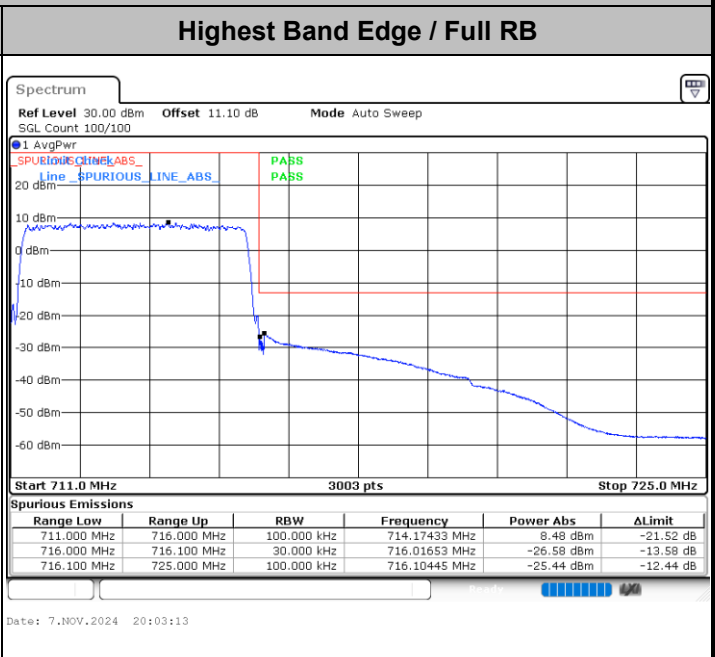
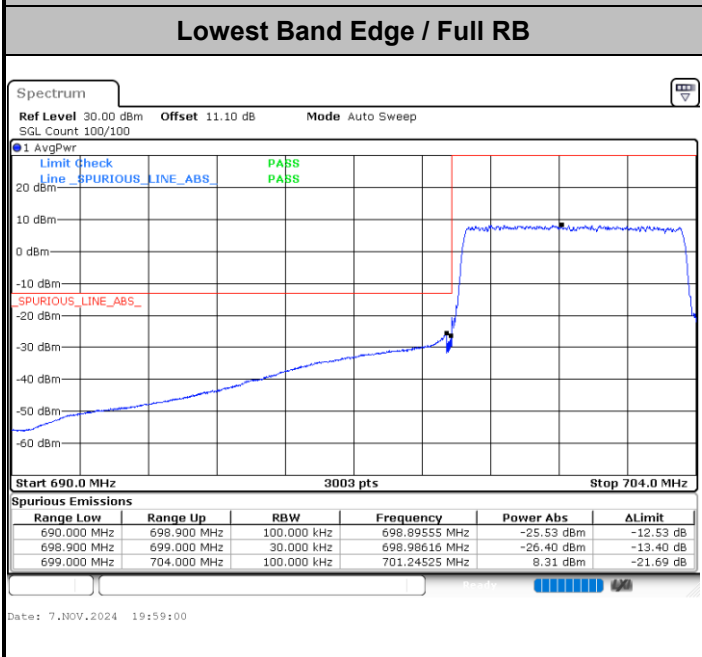
Highest Band Edge / Full RB



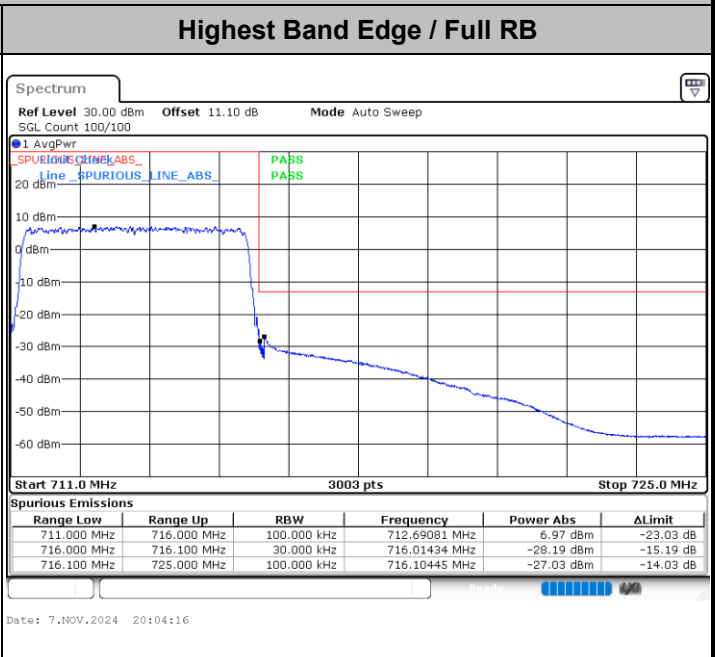
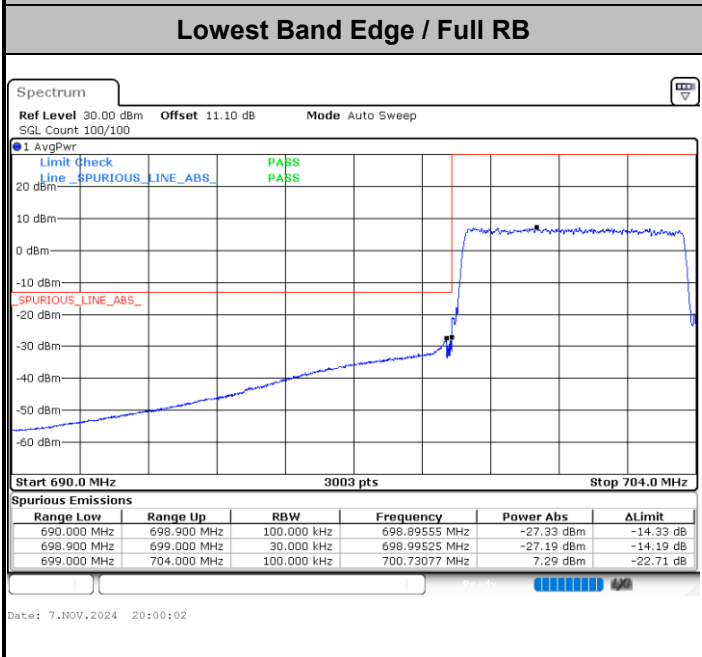
Date: 7.NOV.2024 19:57:40



LTE Band 12 / 5MHz / QPSK



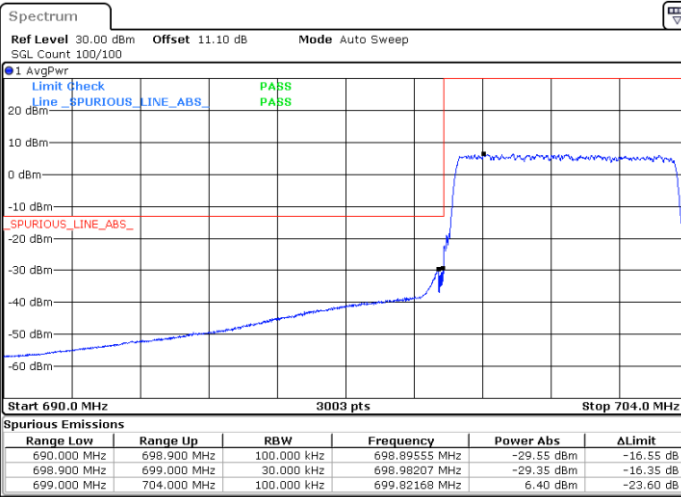
LTE Band 12 / 5MHz / 16QAM





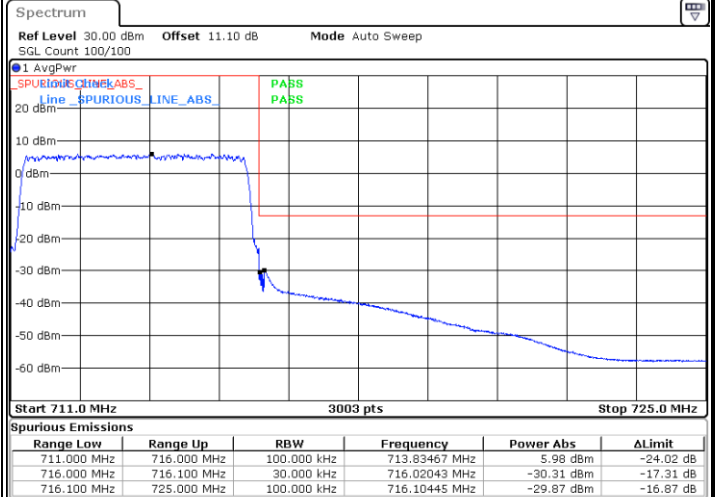
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / Full RB



Date: 7.NOV.2024 20:01:05

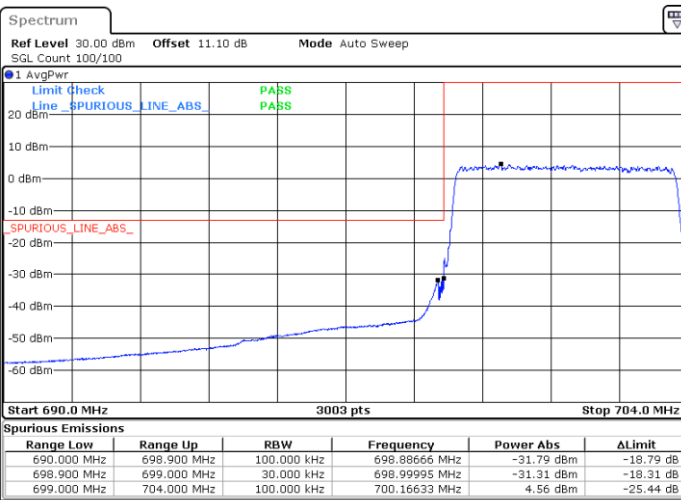
Highest Band Edge / Full RB



Date: 7.NOV.2024 20:05:18

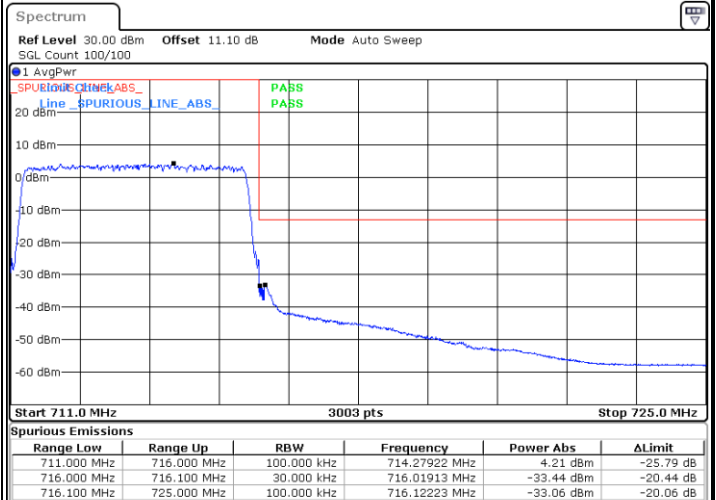
LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / Full RB



Date: 7.NOV.2024 20:02:07

Highest Band Edge / Full RB

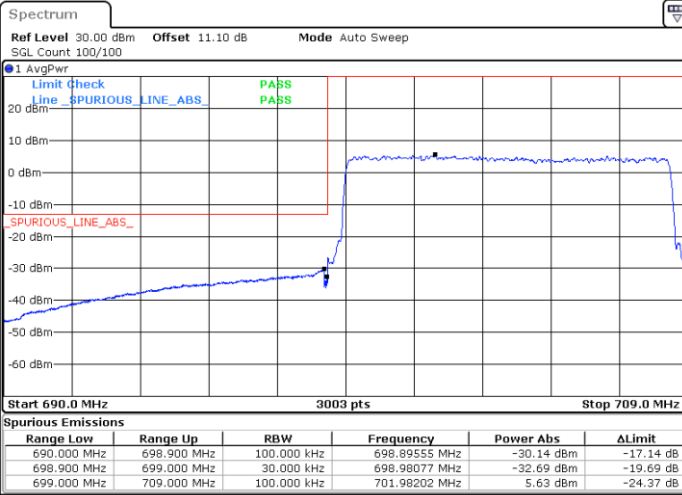


Date: 7.NOV.2024 20:06:21



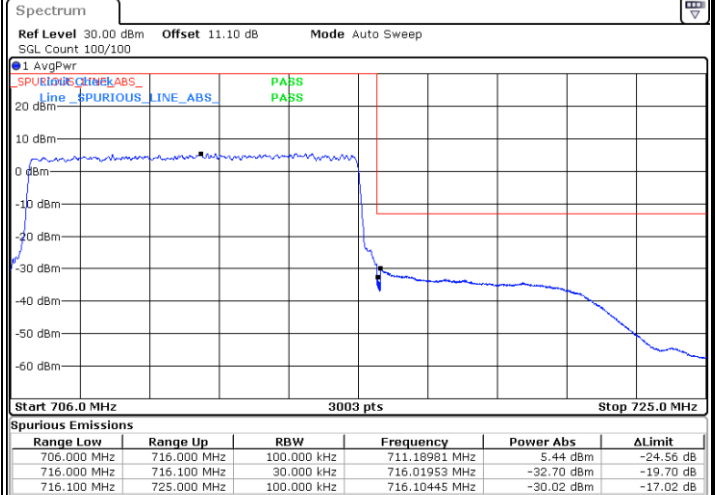
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 7.NOV.2024 20:08:12

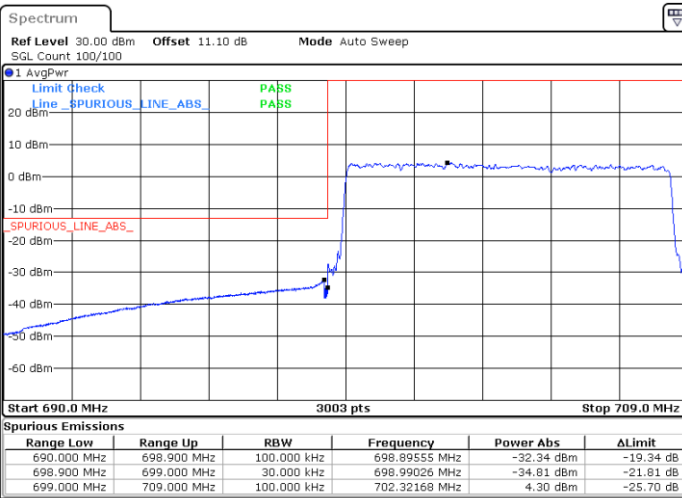
Highest Band Edge / Full RB



Date: 7.NOV.2024 20:12:26

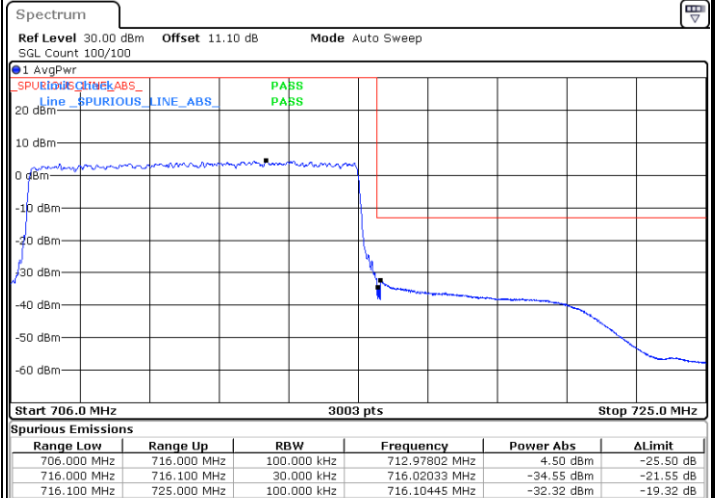
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / Full RB



Date: 7.NOV.2024 20:09:14

Highest Band Edge / Full RB

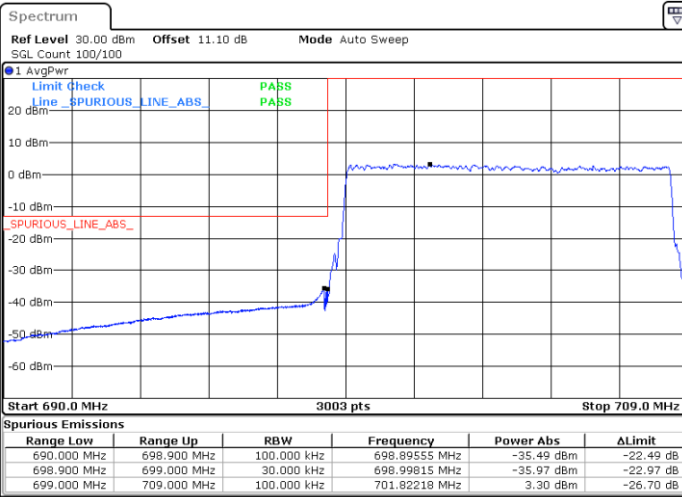


Date: 7.NOV.2024 20:13:28



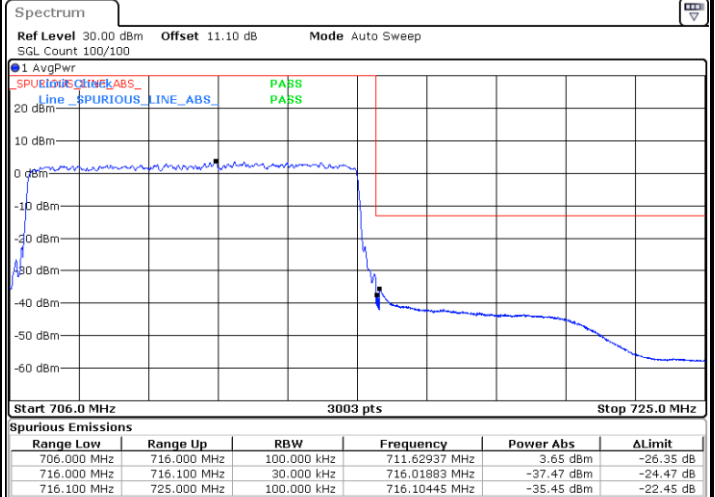
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / Full RB



Date: 7.NOV.2024 20:10:17

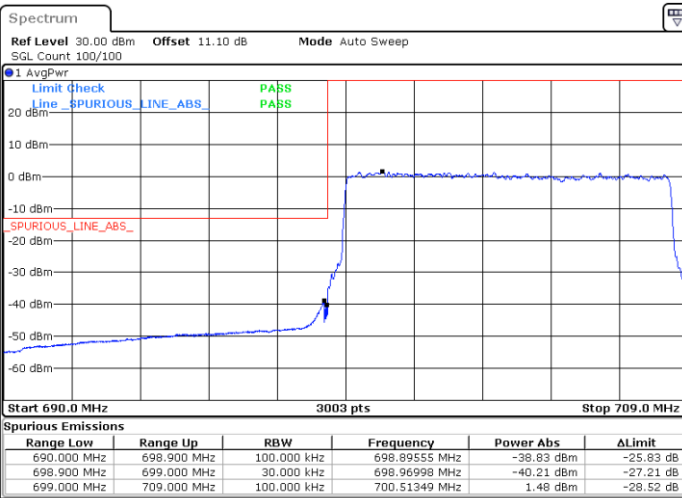
Highest Band Edge / Full RB



Date: 7.NOV.2024 20:14:31

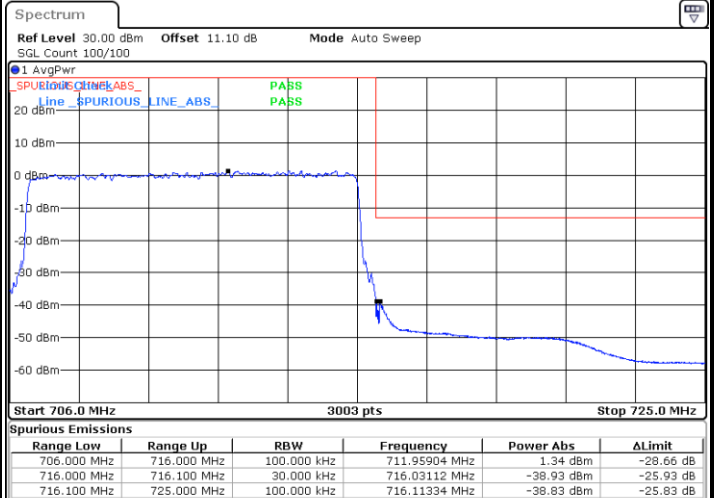
LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / Full RB



Date: 7.NOV.2024 20:11:20

Highest Band Edge / Full RB



Date: 7.NOV.2024 20:15:33



Conducted Spurious Emission

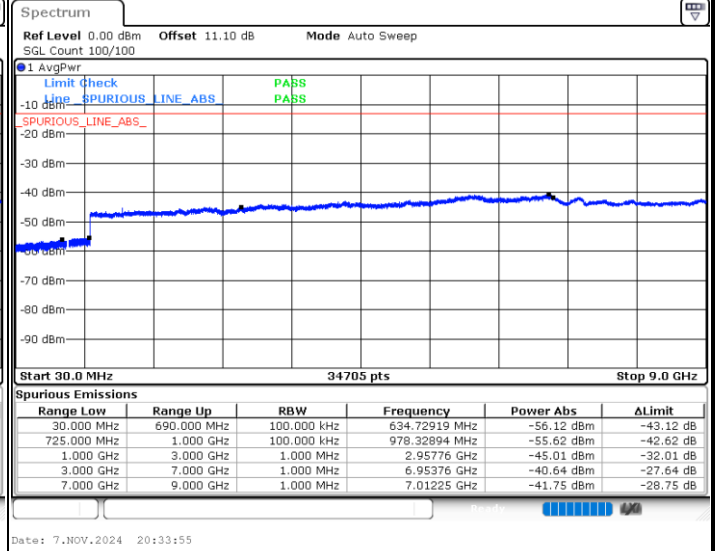
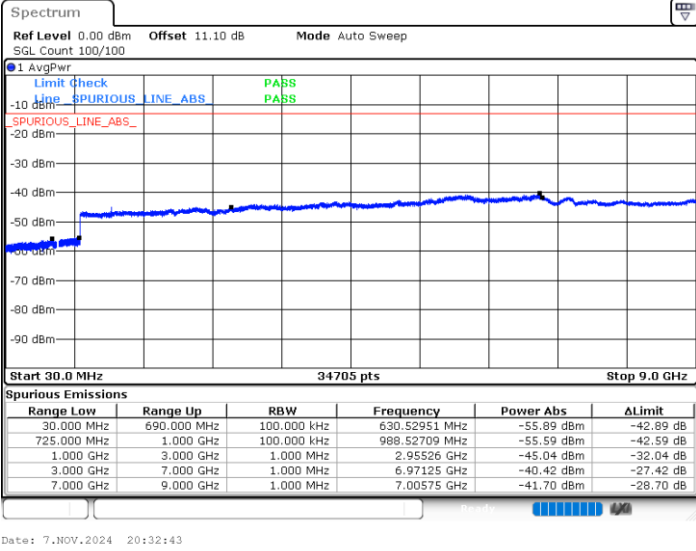




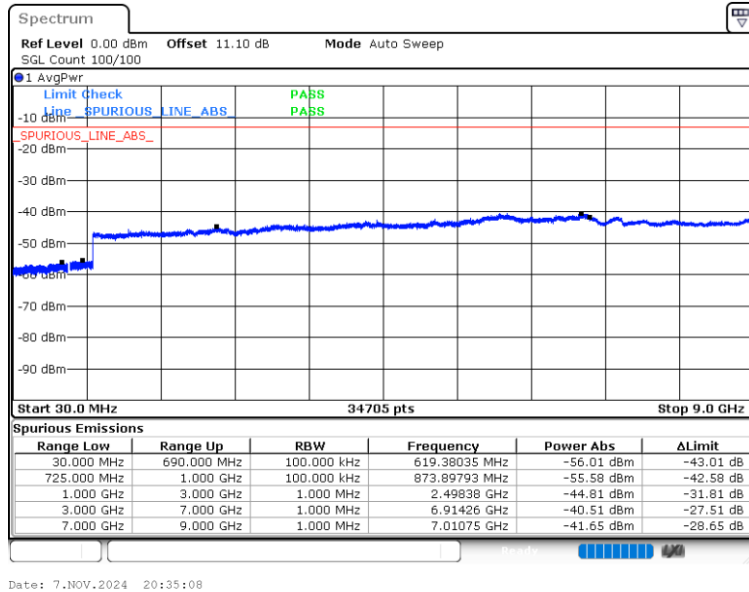
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



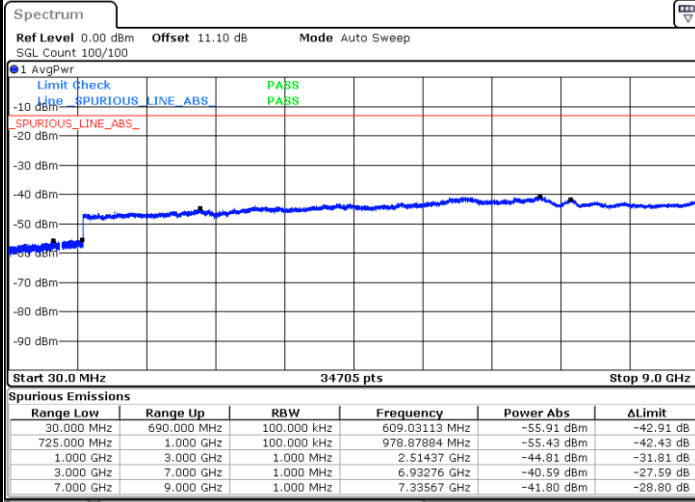
Highest Channel / QPSK





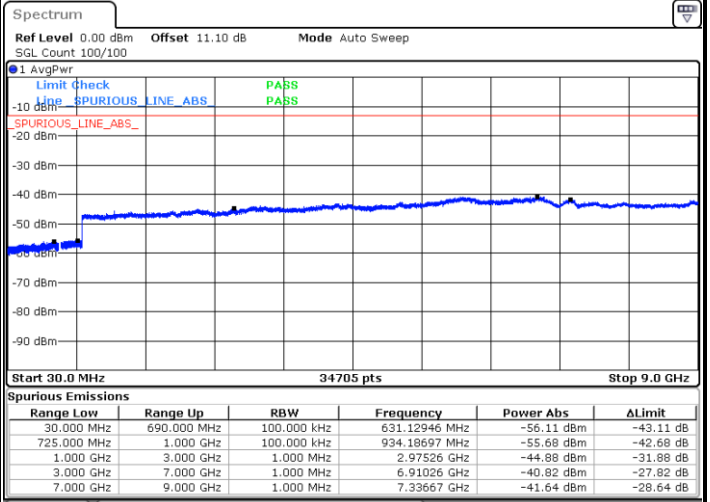
LTE Band 12 / 5MHz

Lowest Channel / QPSK



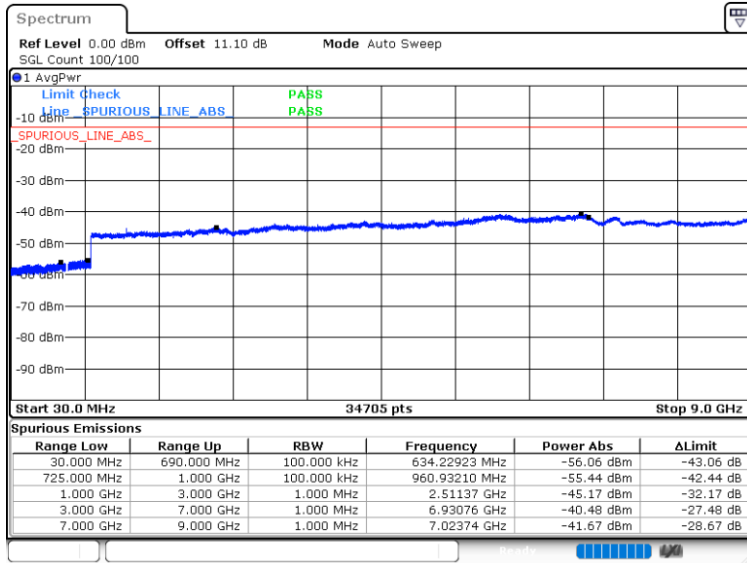
Date: 7.NOV.2024 20:36:21

Middle Channel / QPSK



Date: 7.NOV.2024 20:37:33

Highest Channel / QPSK



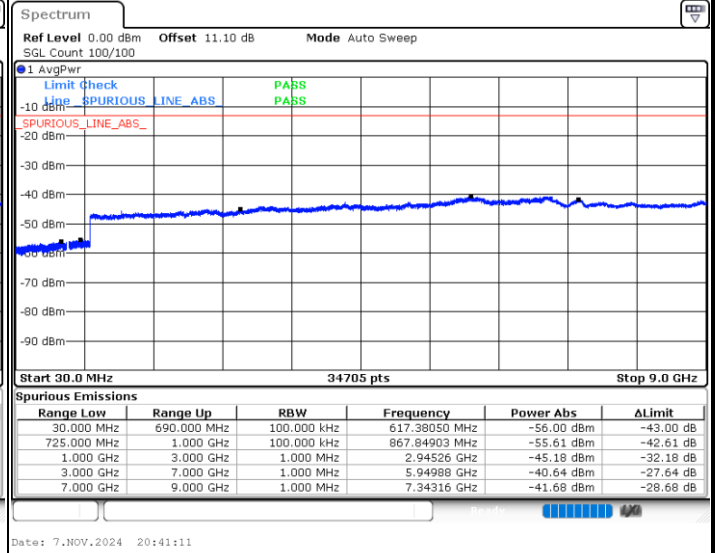
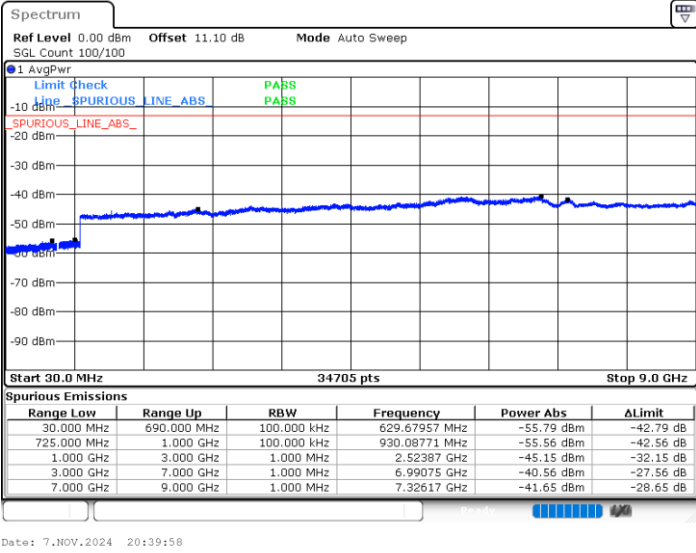
Date: 7.NOV.2024 20:38:45



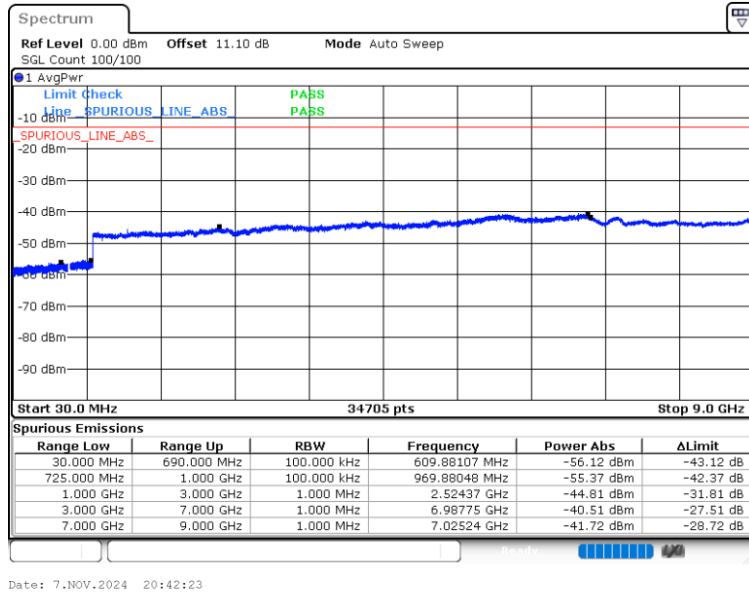
LTE Band 12 / 10MHz

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	0.0064	PASS
40	Normal Voltage	0.0052	
30	Normal Voltage	0.0114	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0047	
0	Normal Voltage	0.0030	
-10	Normal Voltage	0.0090	
-20	Normal Voltage	0.0150	
-30	Normal Voltage	0.0144	
20	Maximum Voltage	0.0147	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0061	

Note:

1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 3.465 V.
2. The frequency fundamental emissions stay within the authorized frequency block.