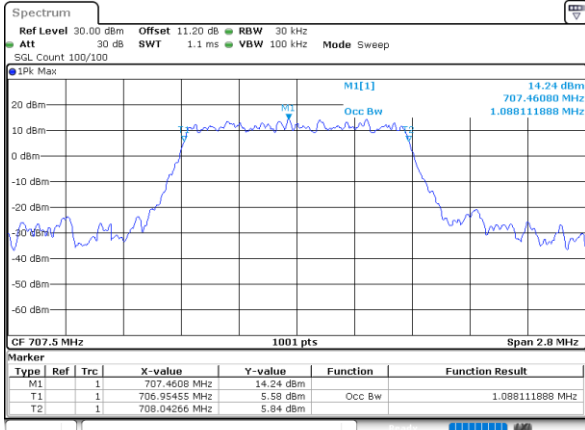




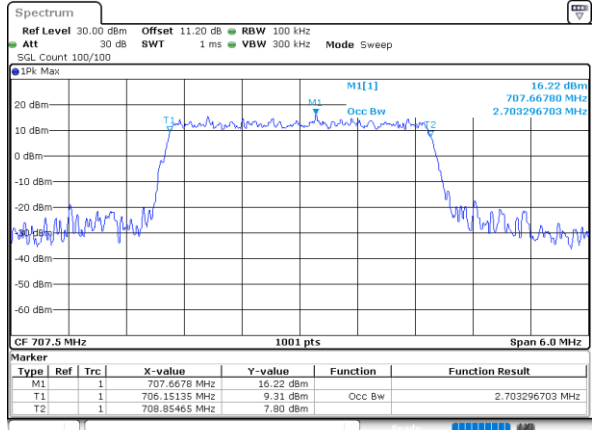
LTE Band 12

Middle Channel / 1.4MHz / 256QAM



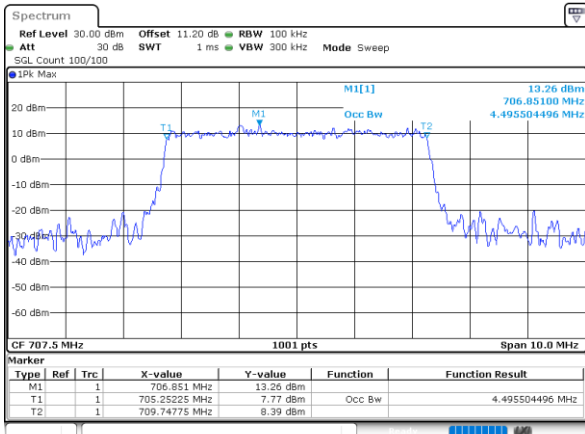
Date: 13.MAY.2024 11:32:49

Middle Channel / 3MHz / 256QAM



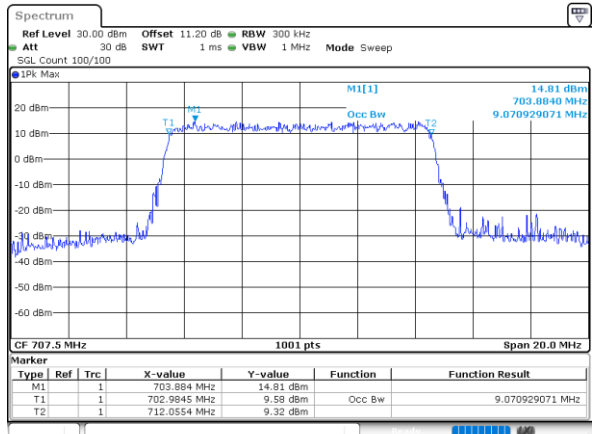
Date: 13.MAY.2024 11:54:55

Middle Channel / 5MHz / 256QAM



Date: 13.MAY.2024 12:17:01

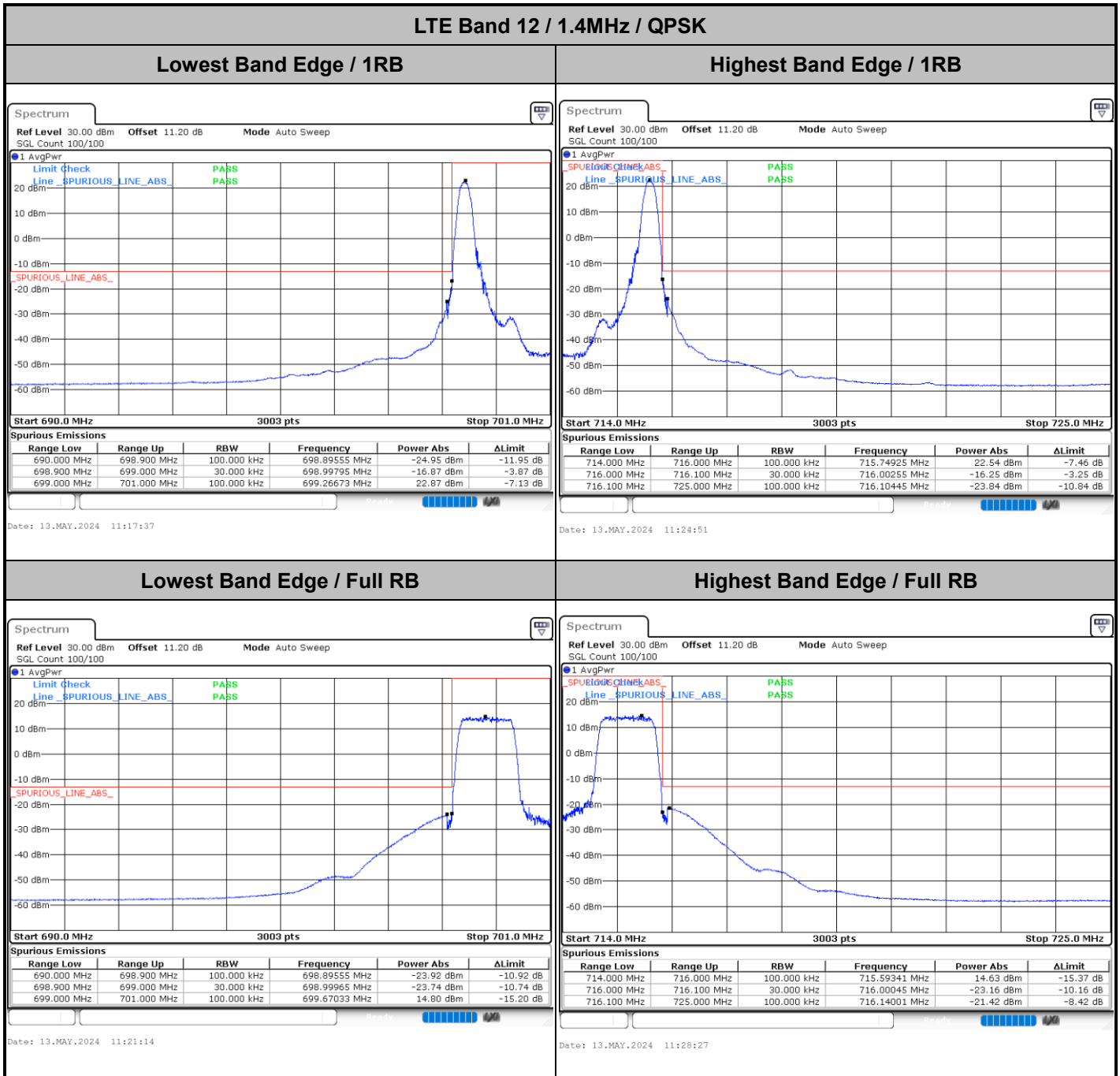
Middle Channel / 10MHz / 256QAM



Date: 13.MAY.2024 12:18:07



# Conducted Band Edge





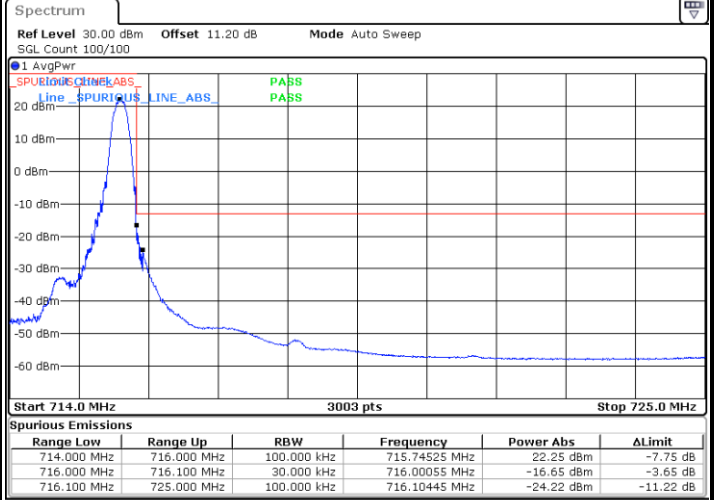
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



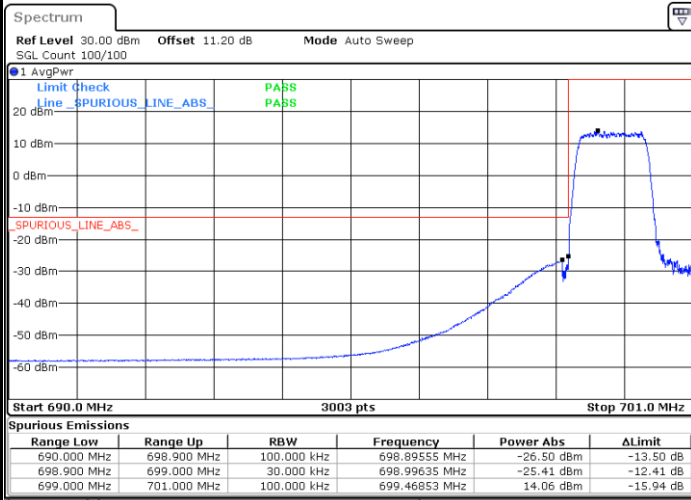
Date: 13.MAY.2024 11:18:31

Highest Band Edge / 1 RB



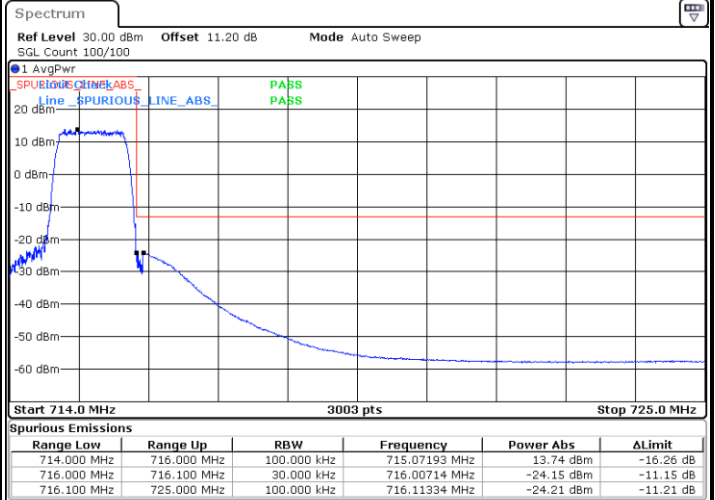
Date: 13.MAY.2024 11:25:45

Lowest Band Edge / Full RB



Date: 13.MAY.2024 11:22:08

Highest Band Edge / Full RB

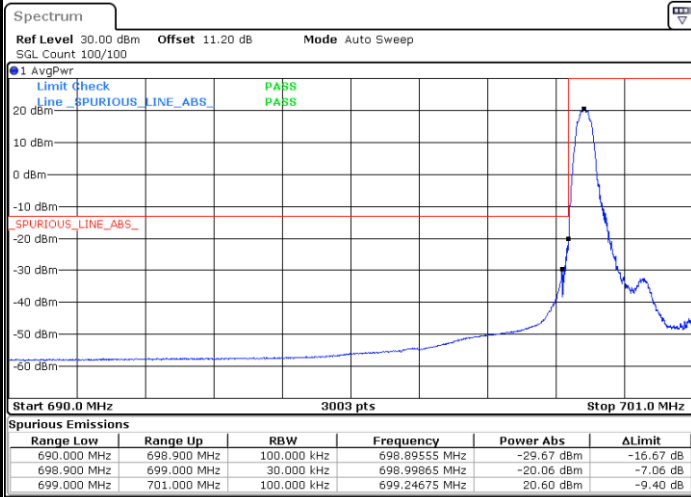


Date: 13.MAY.2024 11:29:21



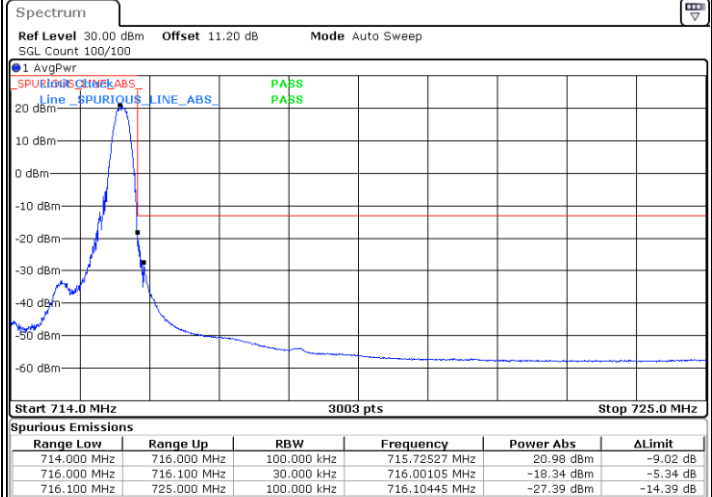
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



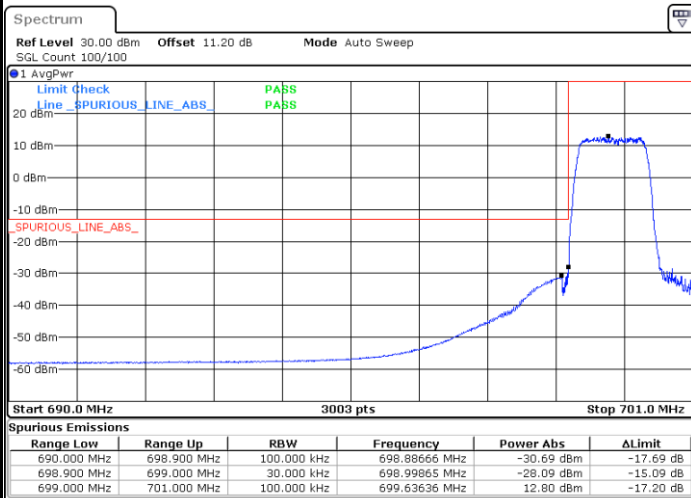
Date: 13.MAY.2024 11:19:26

Highest Band Edge / 1 RB



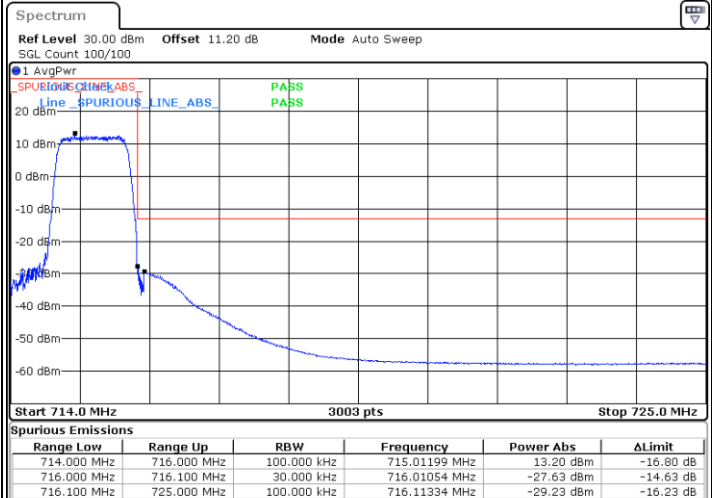
Date: 13.MAY.2024 11:26:39

Lowest Band Edge / Full RB



Date: 13.MAY.2024 11:23:02

Highest Band Edge / Full RB

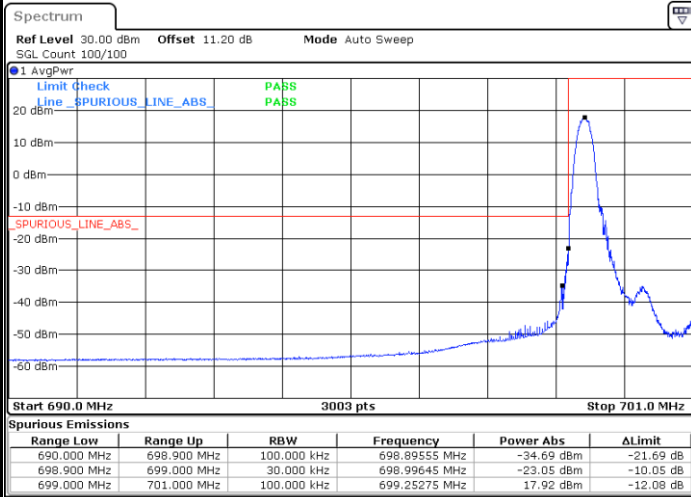


Date: 13.MAY.2024 11:30:15



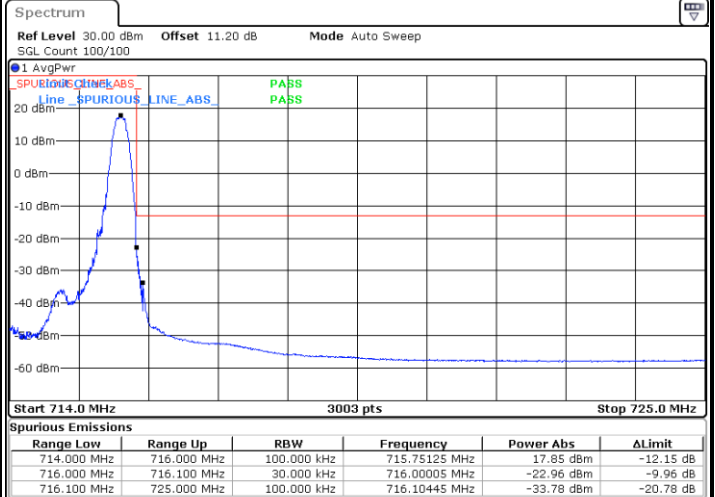
LTE Band 12 / 1.4MHz / 256QAM

Lowest Band Edge / 1 RB



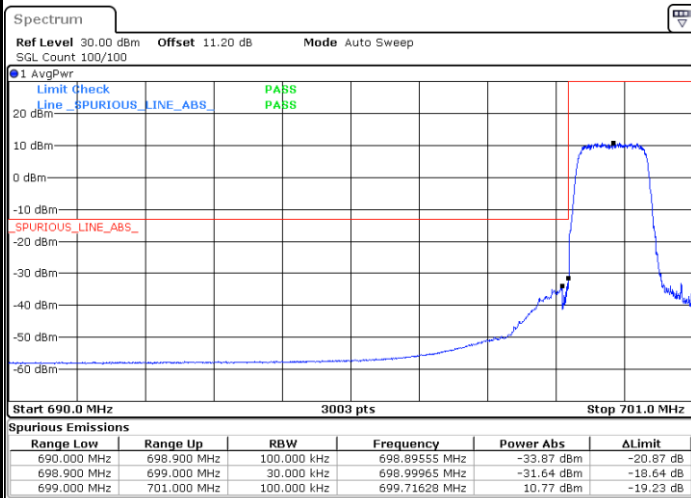
Date: 13.MAY.2024 11:20:20

Highest Band Edge / 1 RB



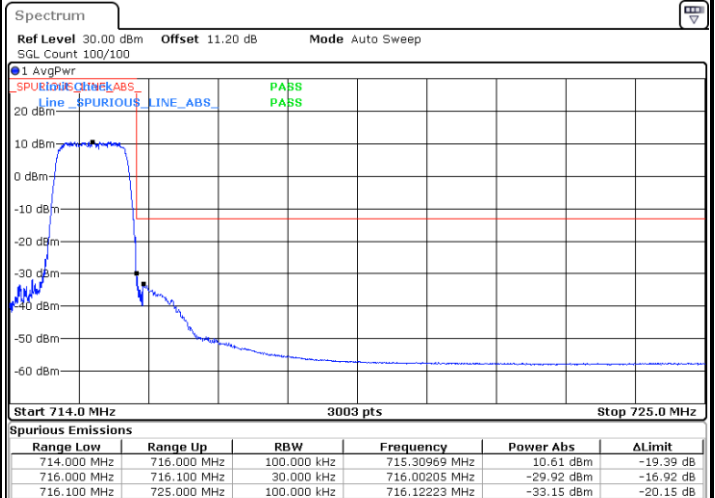
Date: 13.MAY.2024 11:27:33

Lowest Band Edge / Full RB



Date: 13.MAY.2024 11:23:56

Highest Band Edge / Full RB

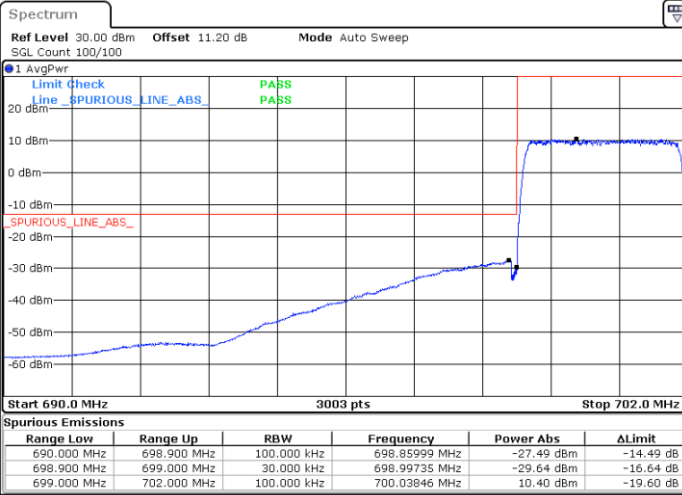


Date: 13.MAY.2024 11:31:10



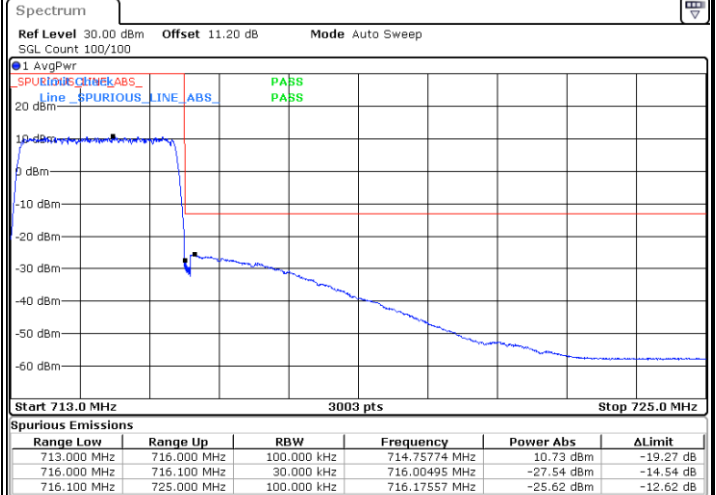
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / Full RB



Date: 13.MAY.2024 11:43:20

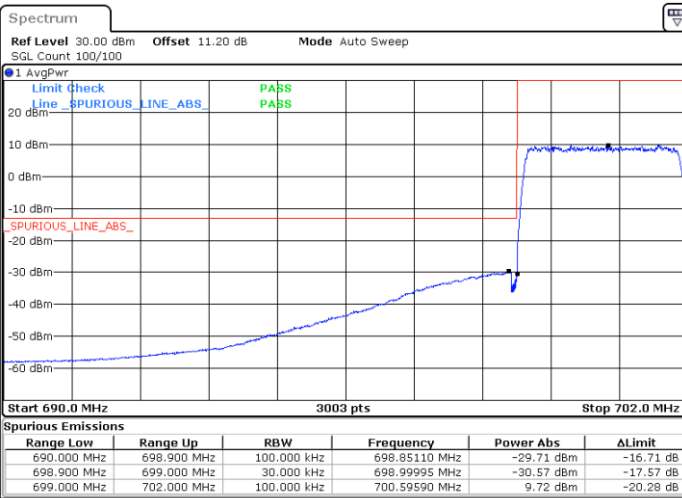
Highest Band Edge / Full RB



Date: 13.MAY.2024 11:50:34

LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / Full RB



Date: 13.MAY.2024 11:44:14

Highest Band Edge / Full RB

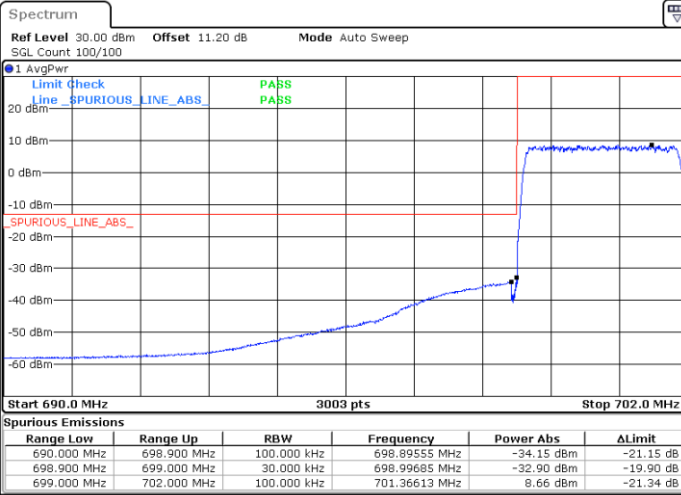


Date: 13.MAY.2024 11:51:28



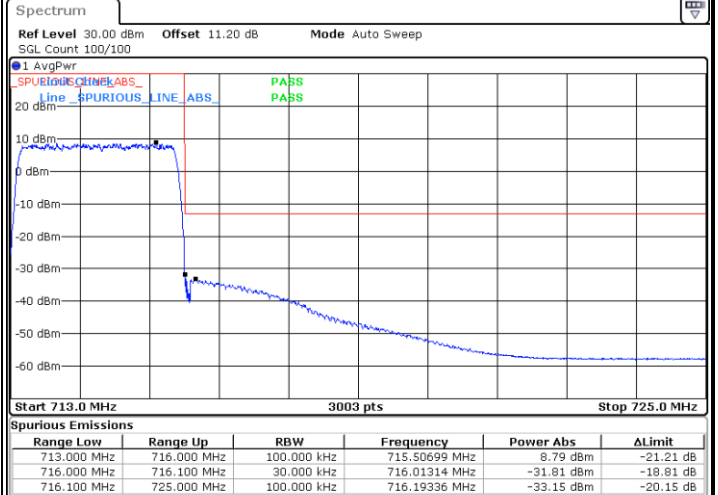
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / Full RB



Date: 13.MAY.2024 11:45:08

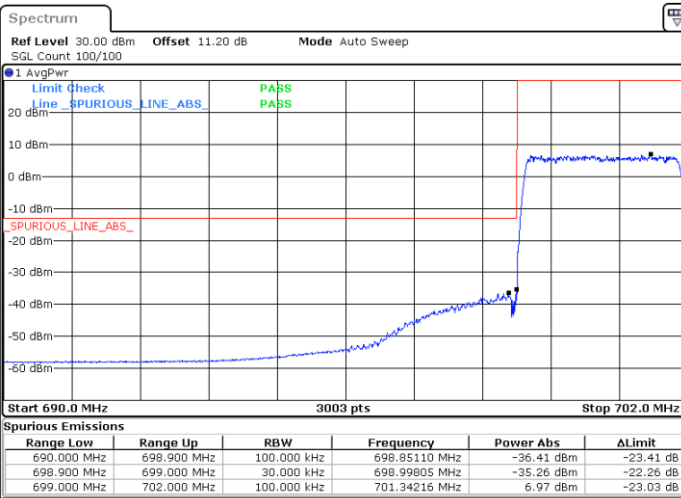
Highest Band Edge / Full RB



Date: 13.MAY.2024 11:52:22

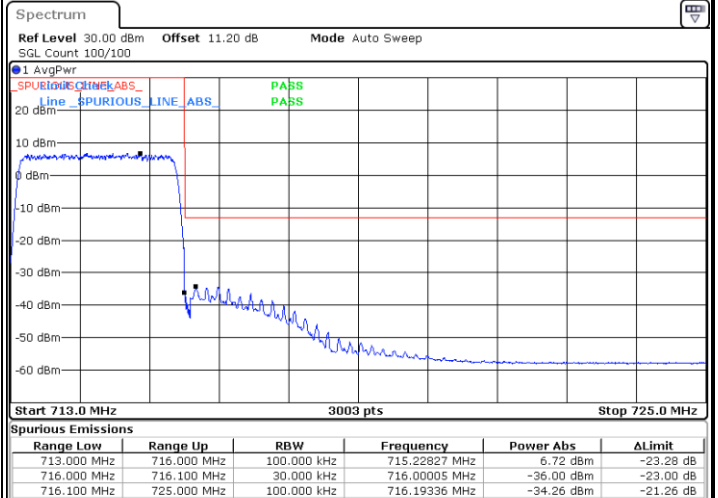
LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / Full RB



Date: 13.MAY.2024 11:46:02

Highest Band Edge / Full RB

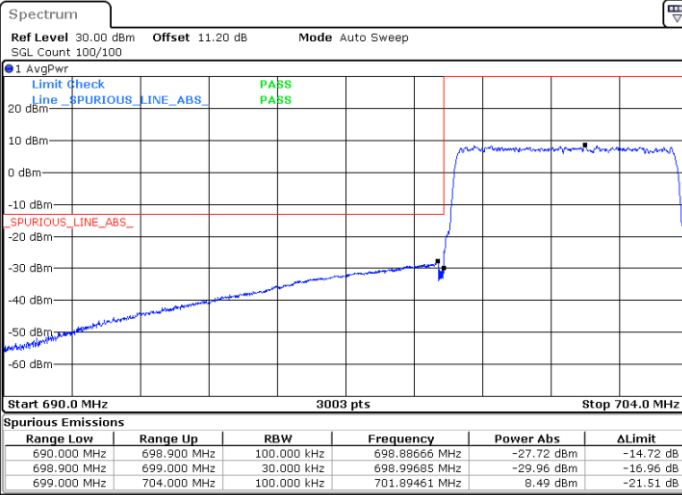


Date: 13.MAY.2024 11:53:16



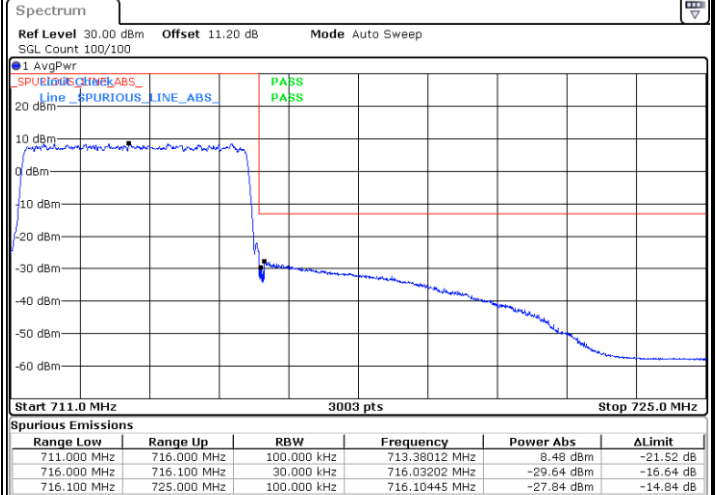
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:05:26

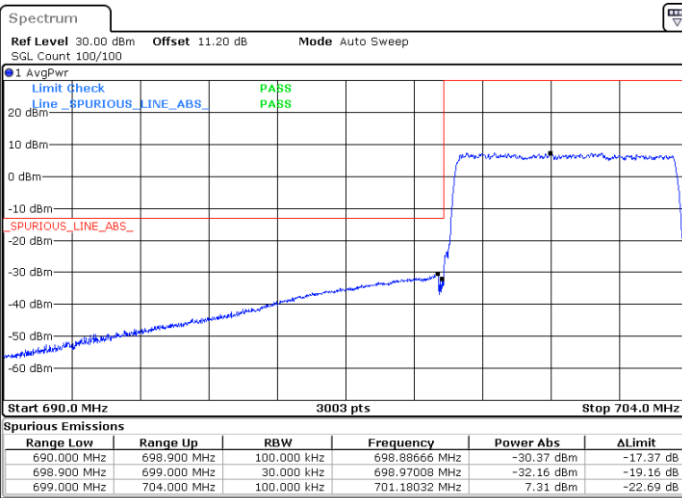
Highest Band Edge / Full RB



Date: 13.MAY.2024 12:12:39

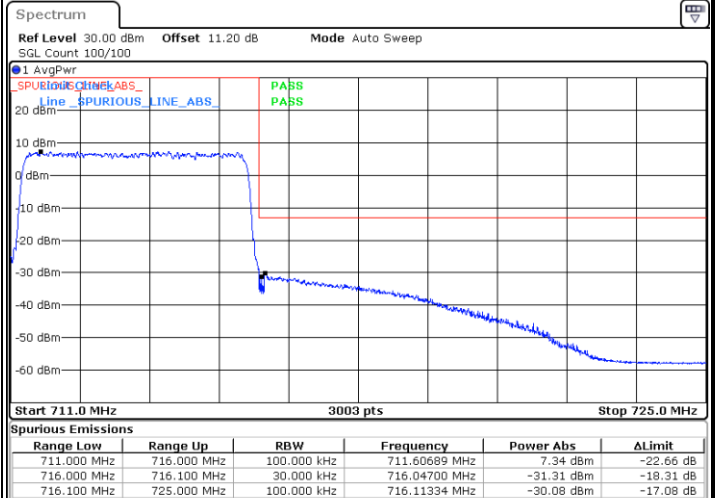
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:06:20

Highest Band Edge / Full RB



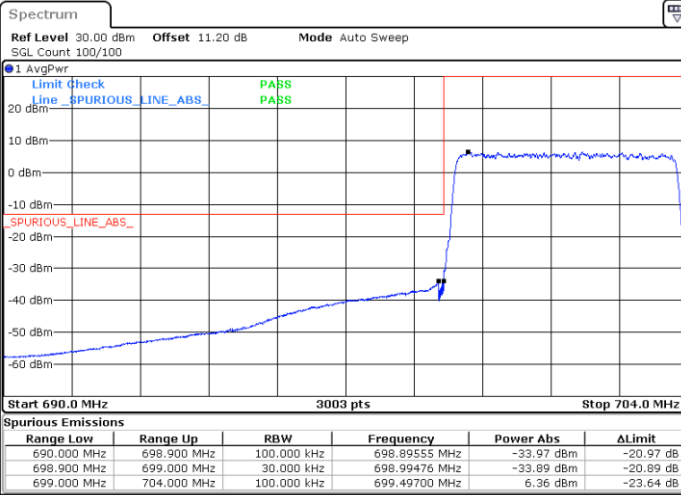
Date: 13.MAY.2024 12:13:33





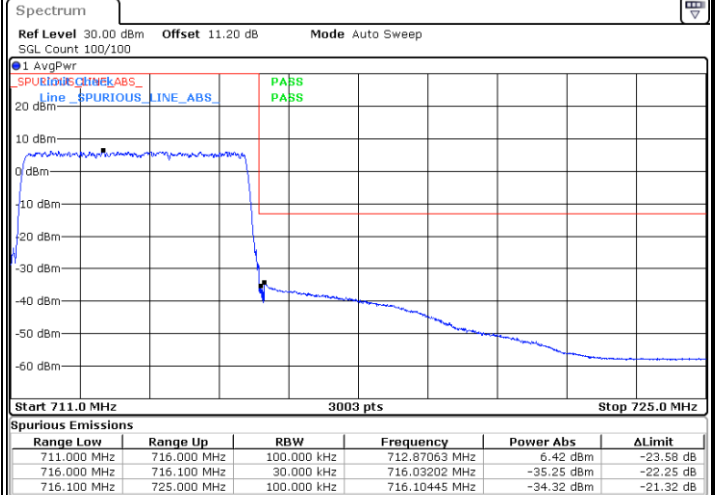
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:07:14

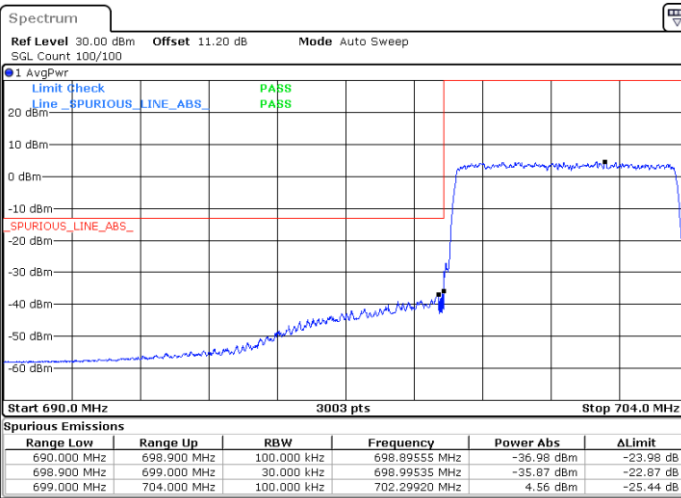
Highest Band Edge / Full RB



Date: 13.MAY.2024 12:14:27

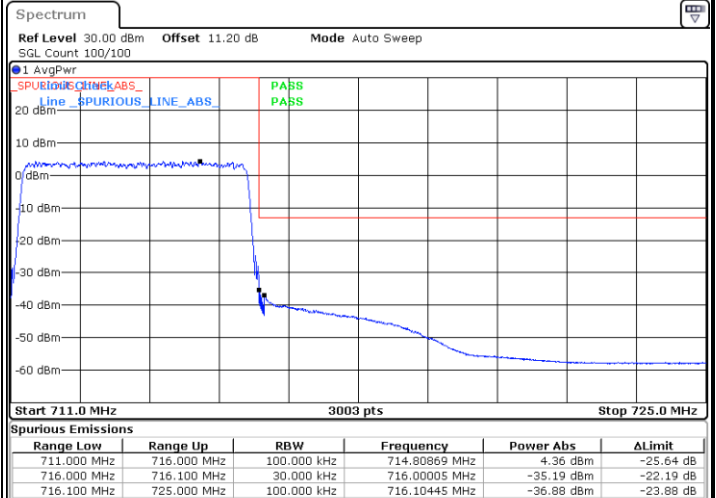
LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:08:08

Highest Band Edge / Full RB

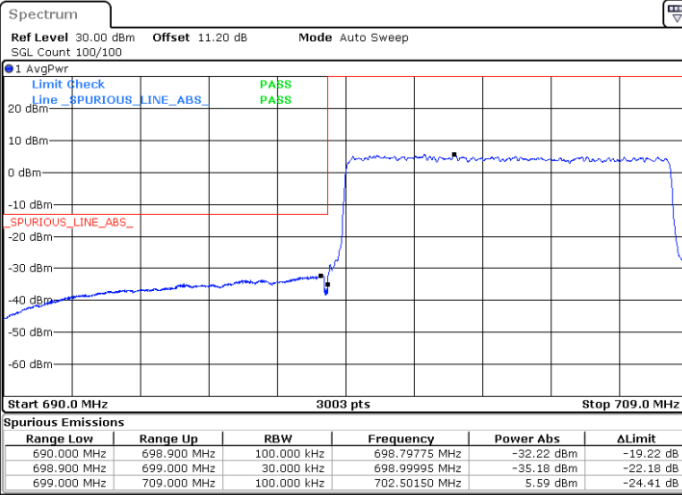


Date: 13.MAY.2024 12:15:22



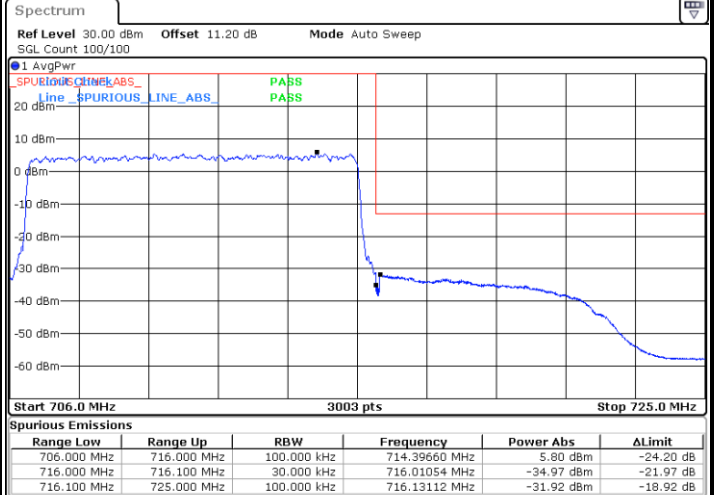
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:27:32

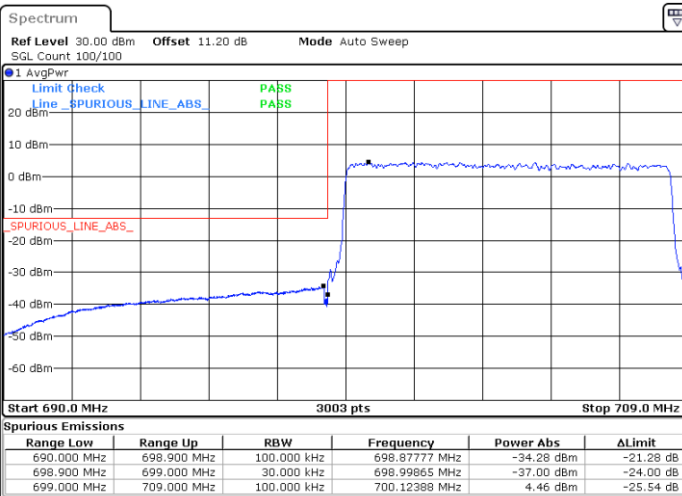
Highest Band Edge / Full RB



Date: 13.MAY.2024 12:34:46

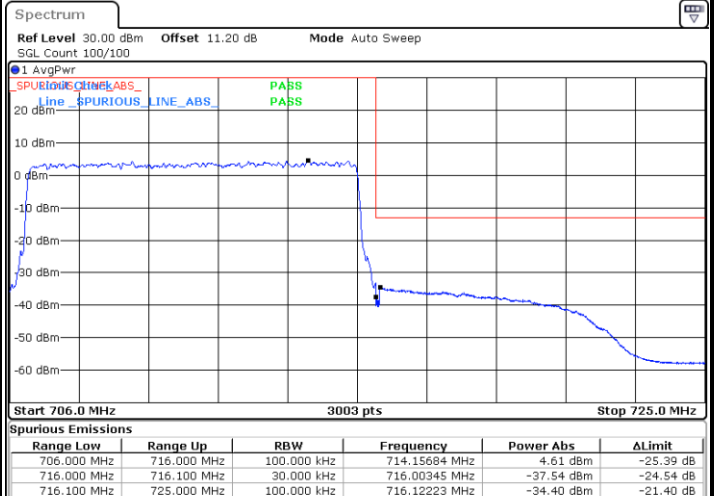
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:28:26

Highest Band Edge / Full RB

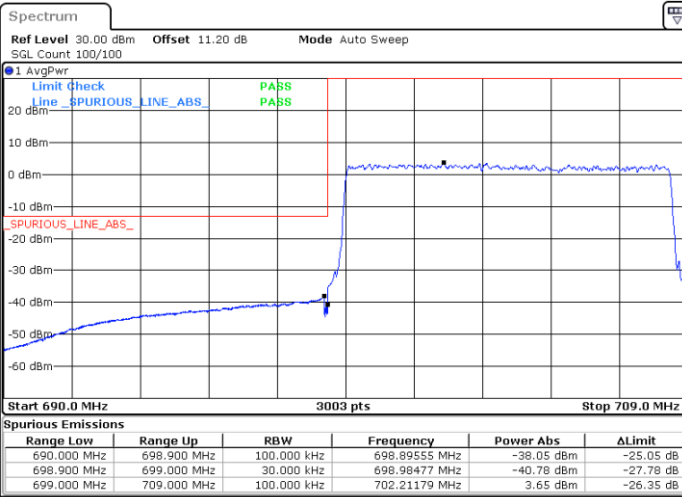


Date: 13.MAY.2024 12:35:40



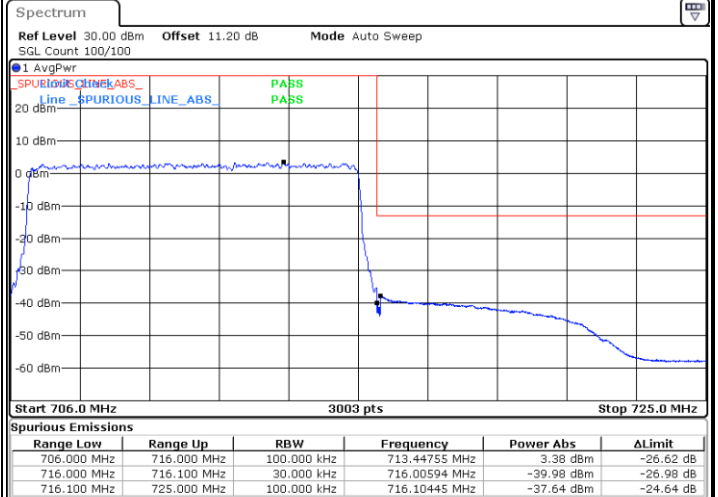
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:29:20

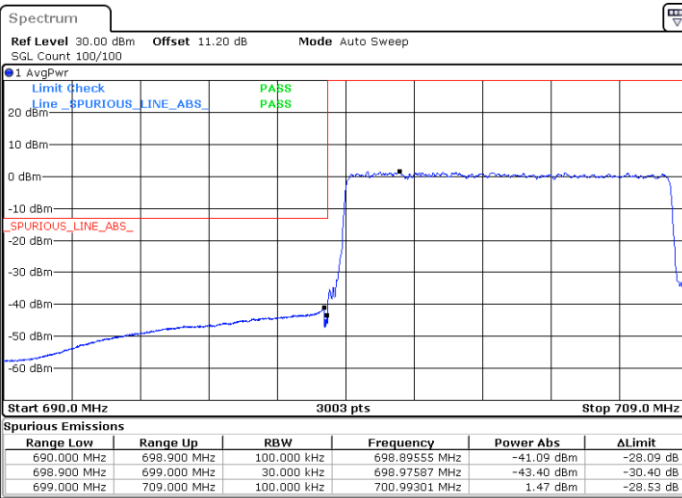
Highest Band Edge / Full RB



Date: 13.MAY.2024 12:36:34

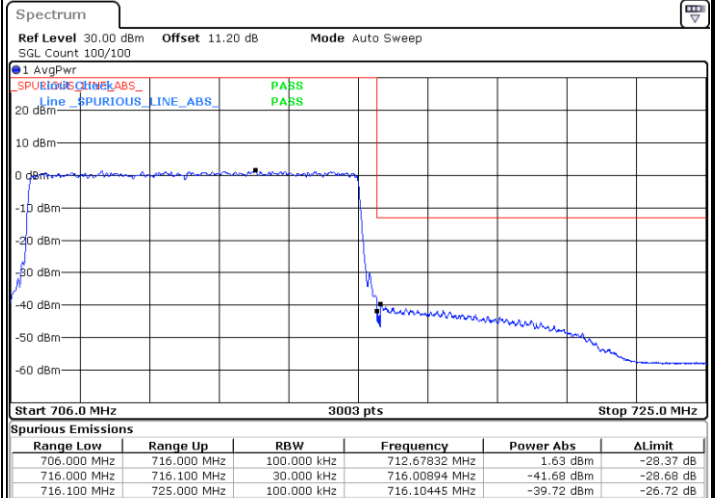
LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:30:14

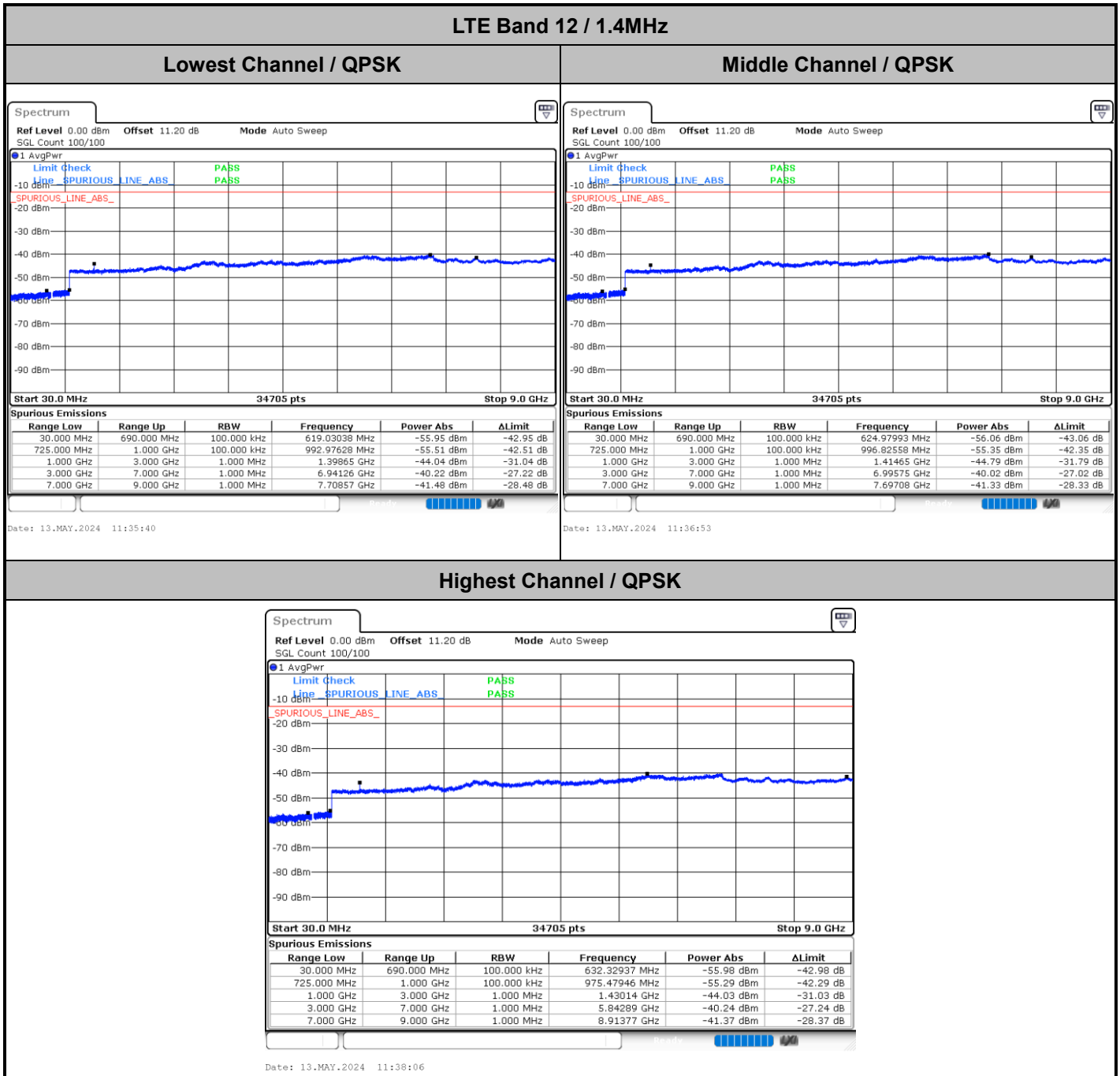
Highest Band Edge / Full RB



Date: 13.MAY.2024 12:37:28



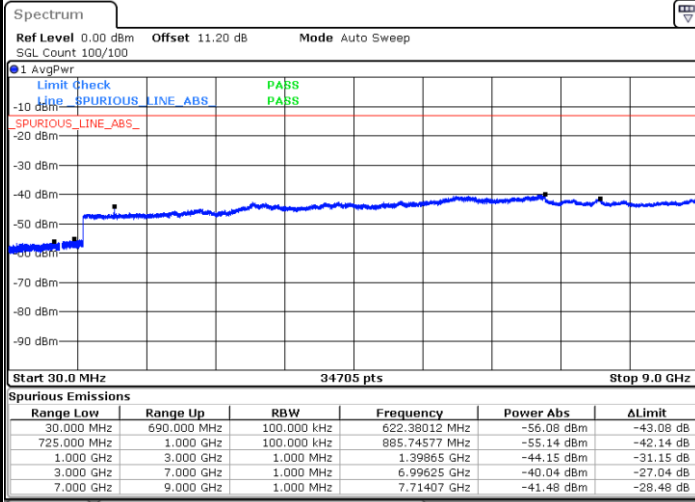
# Conducted Spurious Emission





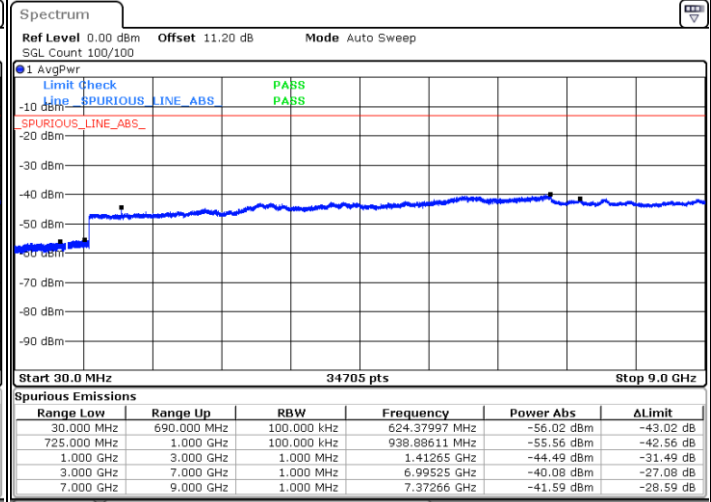
LTE Band 12 / 3MHz

Lowest Channel / QPSK



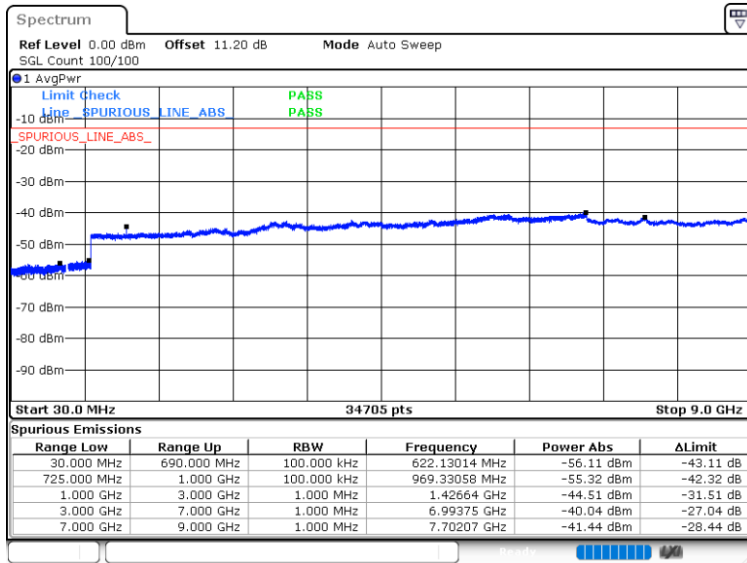
Date: 13.MAY.2024 11:57:46

Middle Channel / QPSK



Date: 13.MAY.2024 11:58:59

Highest Channel / QPSK

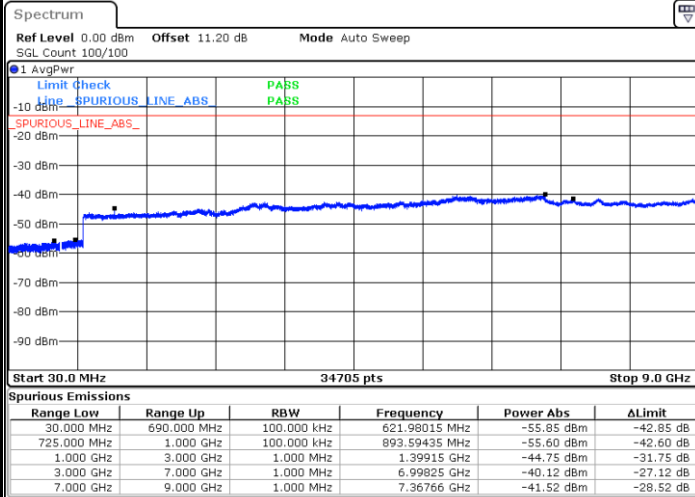


Date: 13.MAY.2024 12:00:12



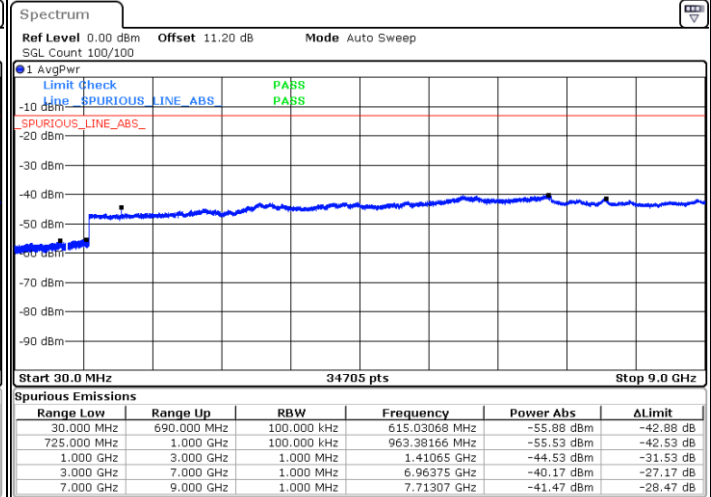
LTE Band 12 / 5MHz

Lowest Channel / QPSK



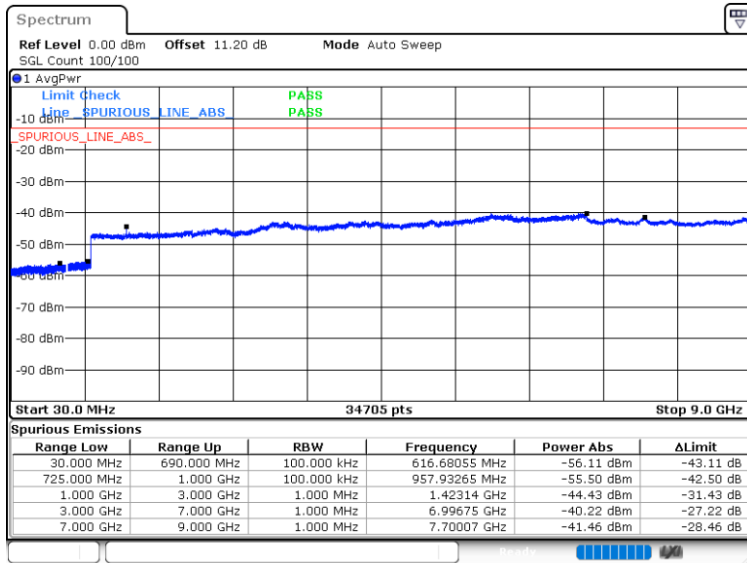
Date: 13.MAY.2024 12:19:52

Middle Channel / QPSK



Date: 13.MAY.2024 12:21:05

Highest Channel / QPSK

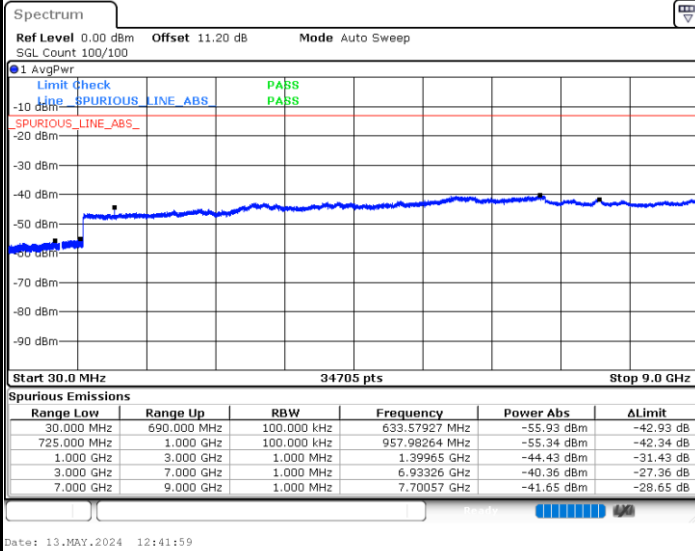


Date: 13.MAY.2024 12:22:18

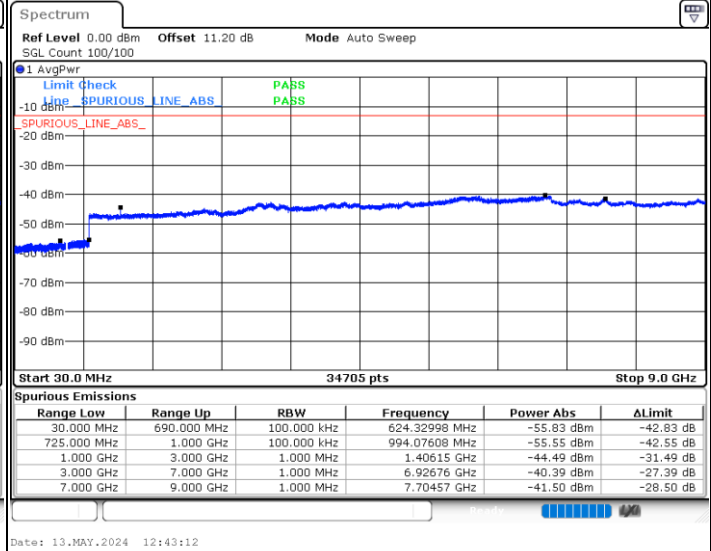


LTE Band 12 / 10MHz

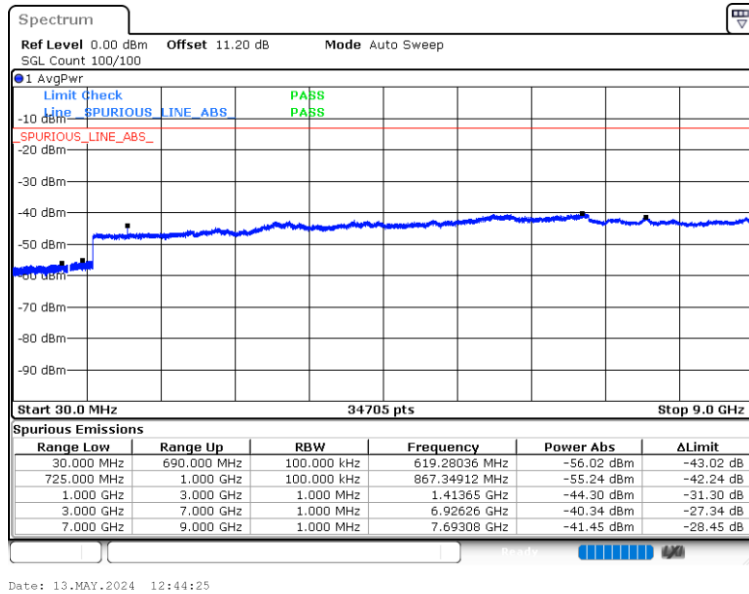
Lowest Channel / QPSK



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	0.0131	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0250	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0249	
0	Normal Voltage	0.0153	
-10	Normal Voltage	0.0198	
-20	Normal Voltage	0.0163	
-30	Normal Voltage	0.0205	
20	Maximum Voltage	0.0157	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0057	

Note:

1. Normal Voltage = 3.3 V. ; Battery End Point (BEP) = 3.135 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

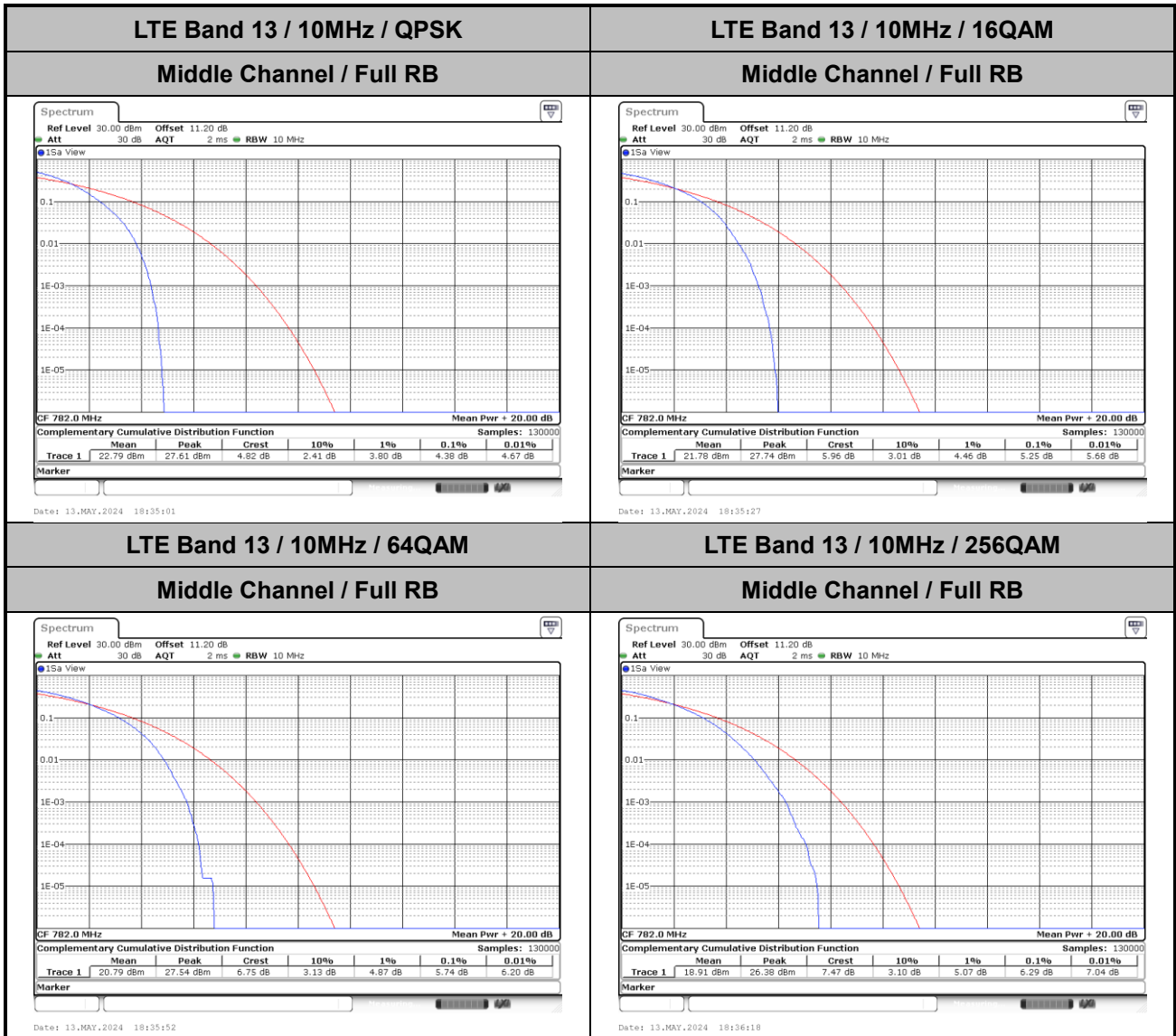




## LTE Band 13

### Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.38	5.25	5.74	6.29	<b>PASS</b>





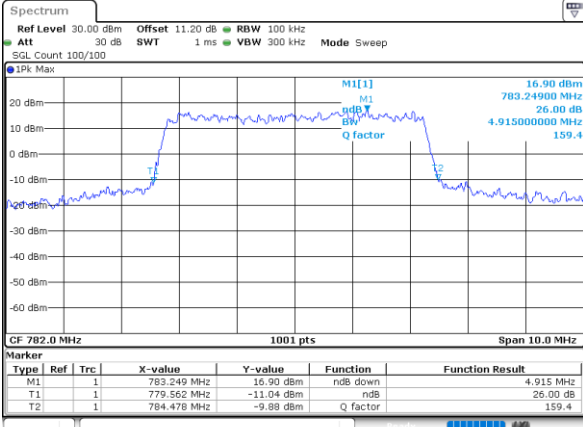
**26dB Bandwidth**

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	-	-	-	-	4.91	4.77	9.81	9.66	-	-	-	-
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	-	-	-	-	4.83	4.84	9.92	9.84	-	-	-	-



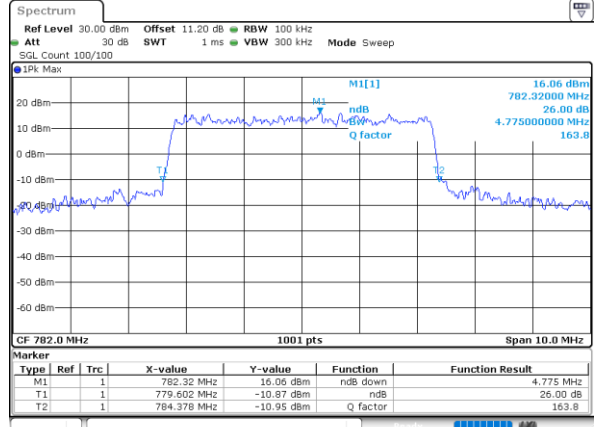
LTE Band 13

Middle Channel / 5MHz / QPSK



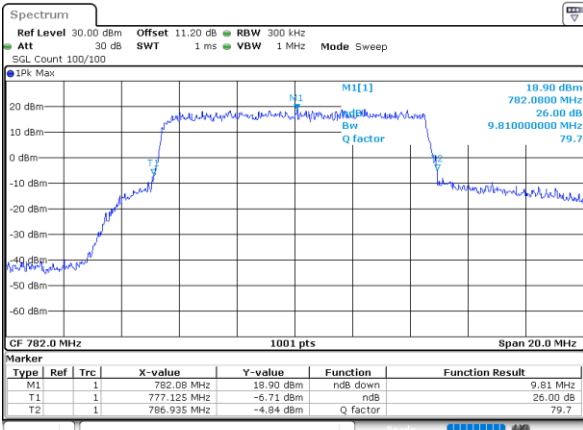
Date: 13.MAY.2024 18:22:07

Middle Channel / 5MHz / 16QAM



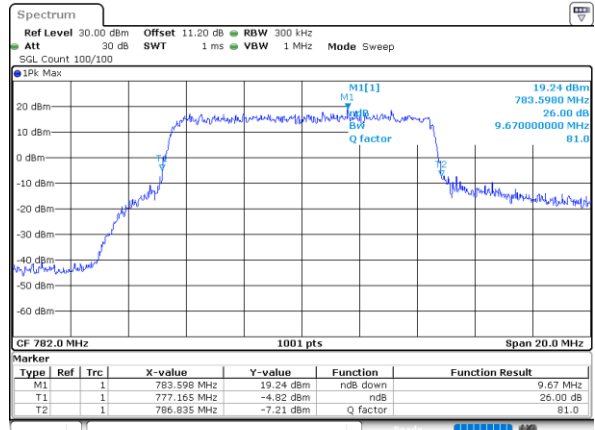
Date: 13.MAY.2024 18:22:132

Middle Channel / 10MHz / QPSK



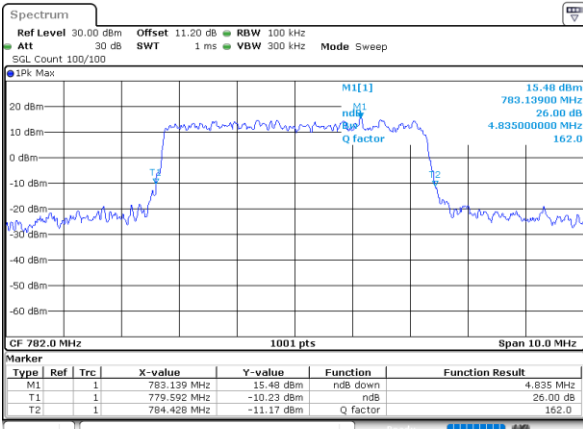
Date: 13.MAY.2024 18:33:21

Middle Channel / 10MHz / 16QAM



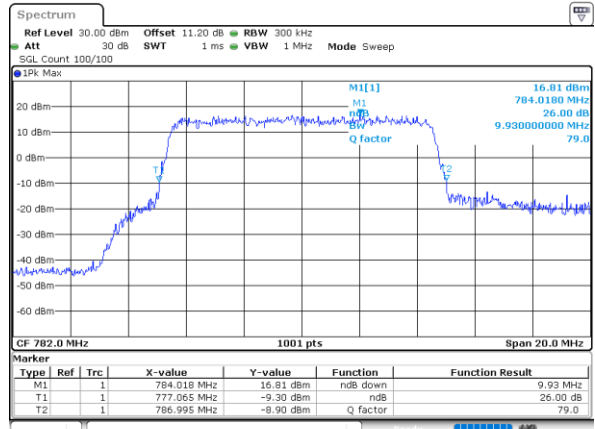
Date: 13.MAY.2024 18:33:46

Middle Channel / 5MHz / 64QAM



Date: 13.MAY.2024 18:22:56

Middle Channel / 10MHz / 64QAM



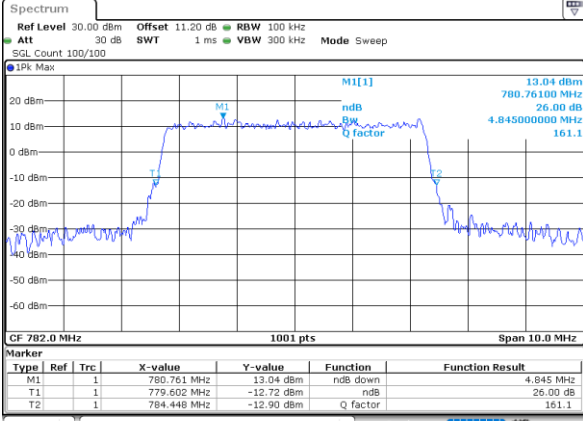
Date: 13.MAY.2024 18:34:11



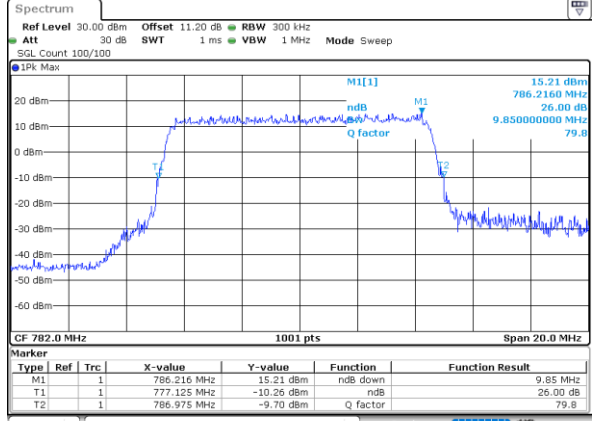
LTE Band 13

Middle Channel / 5MHz / 256QAM

Middle Channel / 10MHz / 256QAM



Date: 13.MAY.2024 18:23:21



Date: 13.MAY.2024 18:34:35



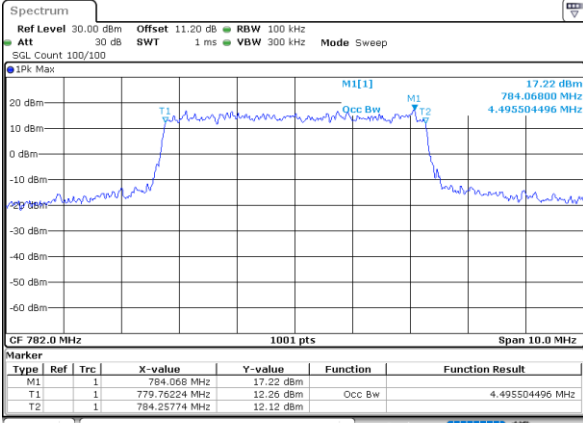
**Occupied Bandwidth**

Mode	LTE Band 13 : 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	-	-	-	-	4.49	4.50	9.07	8.99	-	-	-	-
Mode	LTE Band 13 : 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	-	-	-	-	4.51	4.48	9.03	9.01	-	-	-	-



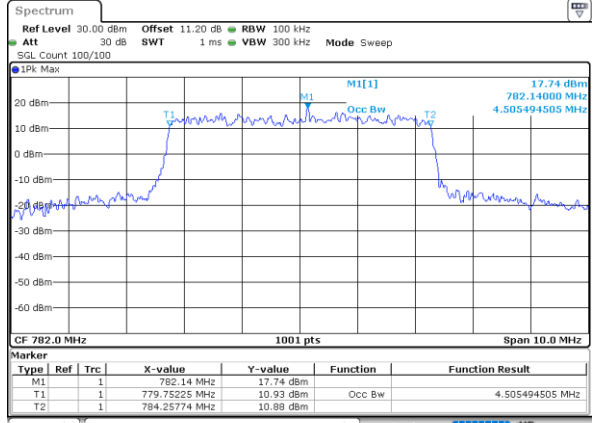
LTE Band 13

Middle Channel / 5MHz / QPSK



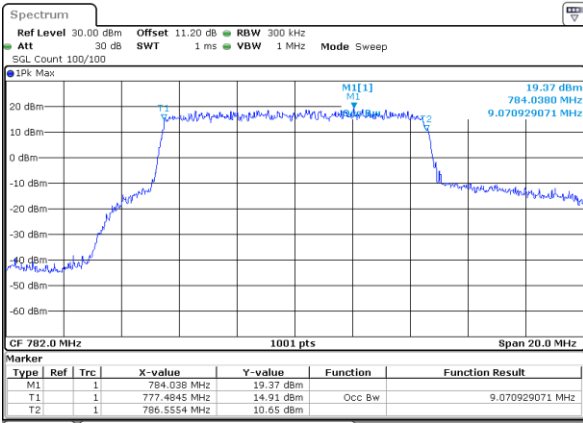
Date: 13.MAY.2024 18:20:28

Middle Channel / 5MHz / 16QAM



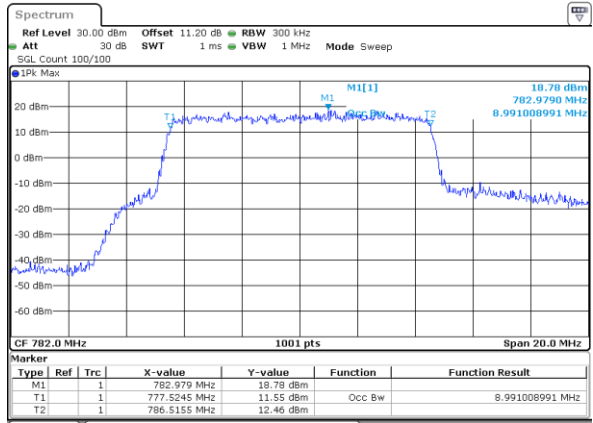
Date: 13.MAY.2024 18:20:53

Middle Channel / 10MHz / QPSK



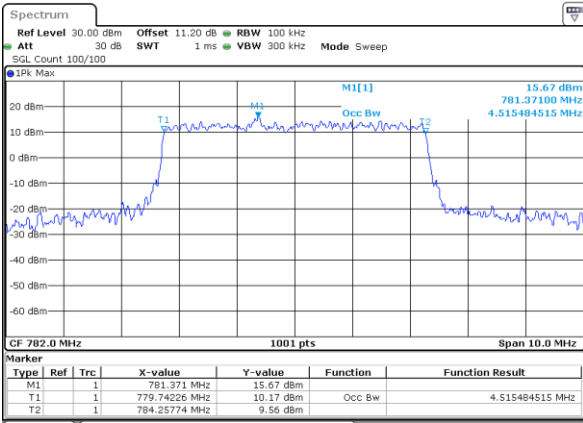
Date: 13.MAY.2024 18:31:42

Middle Channel / 10MHz / 16QAM



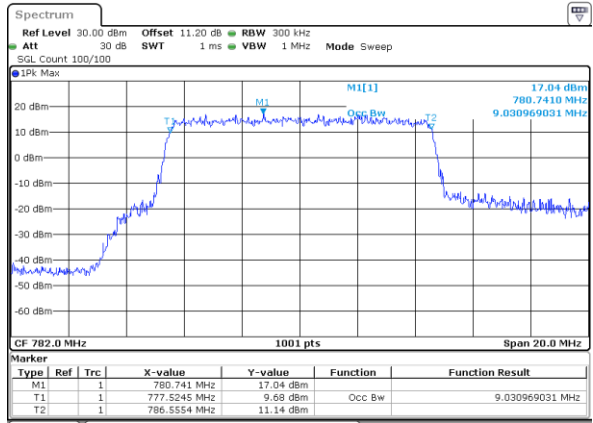
Date: 13.MAY.2024 18:32:07

Middle Channel / 5MHz / 64QAM



Date: 13.MAY.2024 18:21:18

Middle Channel / 10MHz / 64QAM

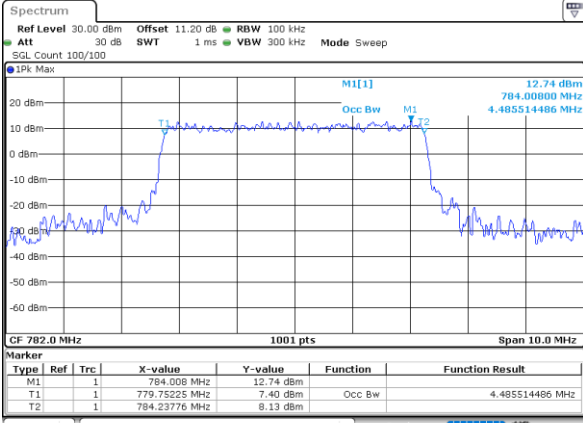


Date: 13.MAY.2024 18:32:32



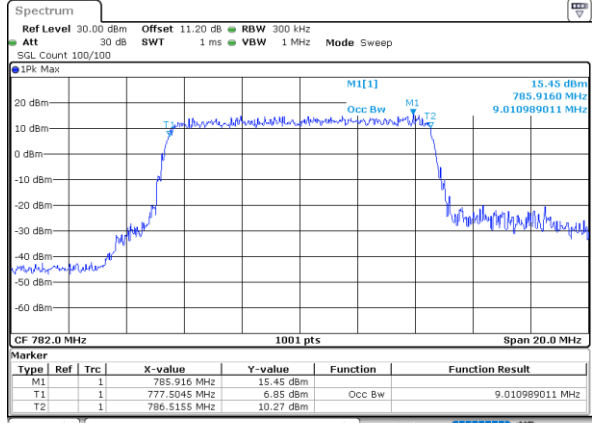
LTE Band 13

Middle Channel / 5MHz / 256QAM



Date: 13.MAY.2024 18:21:42

Middle Channel / 10MHz / 256QAM



Date: 13.MAY.2024 18:32:57



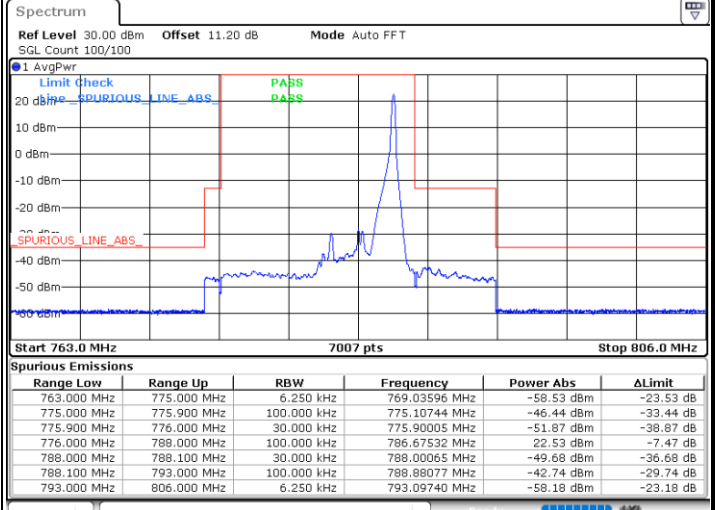
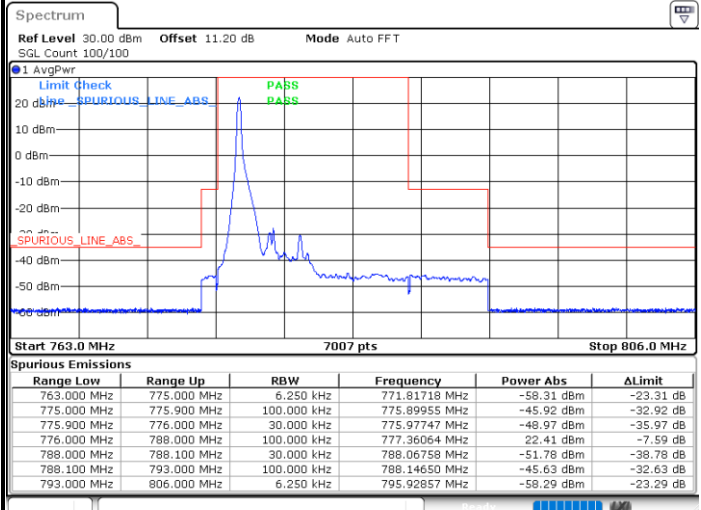


# Conducted Band Edge

## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB

### Highest Band Edge / 1 RB

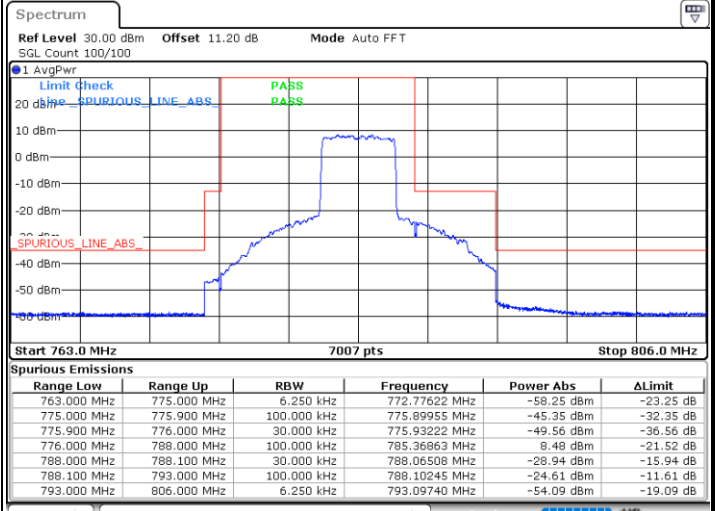
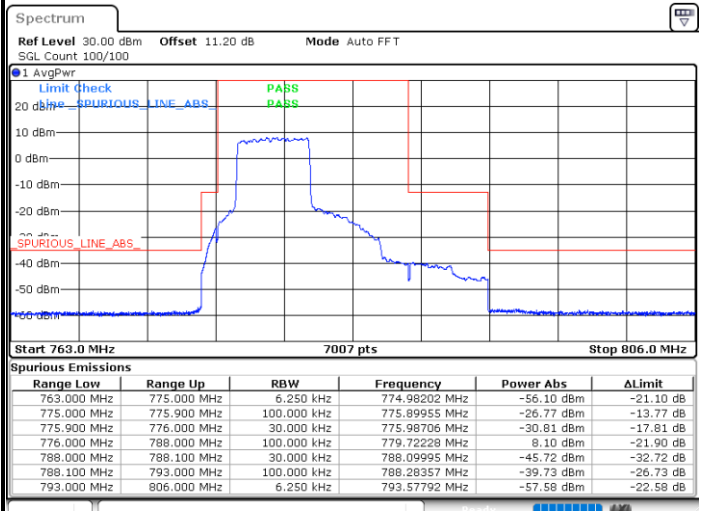


Date: 13.MAY.2024 18:09:22

Date: 13.MAY.2024 18:17:20

### Lowest Band Edge / Full RB

### Highest Band Edge / Full RB



Date: 13.MAY.2024 12:47:46

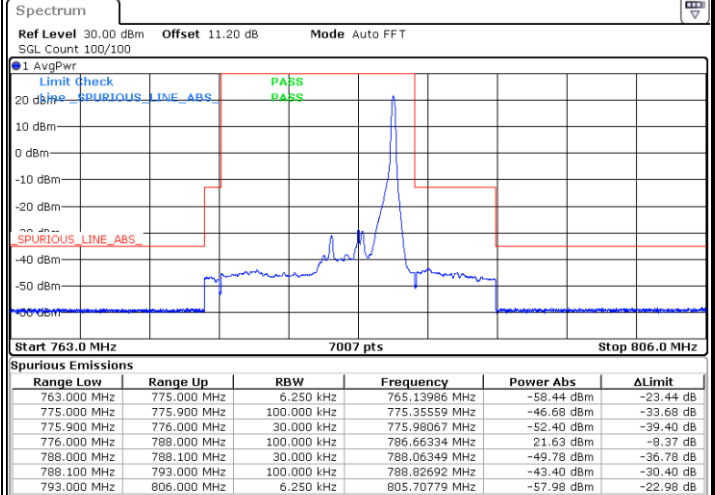
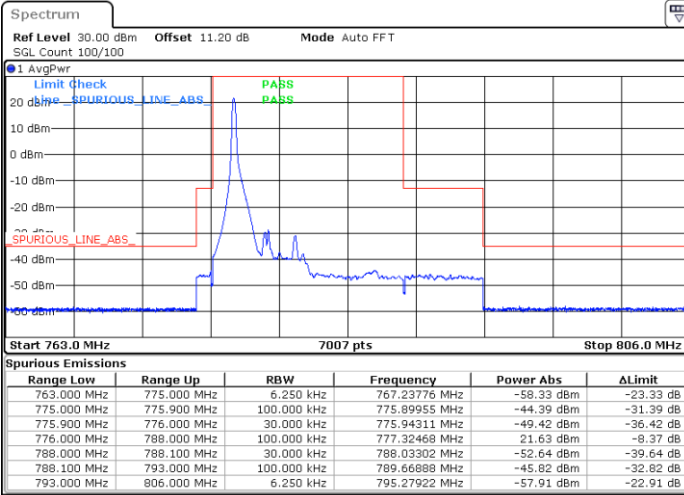
Date: 13.MAY.2024 18:13:43



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

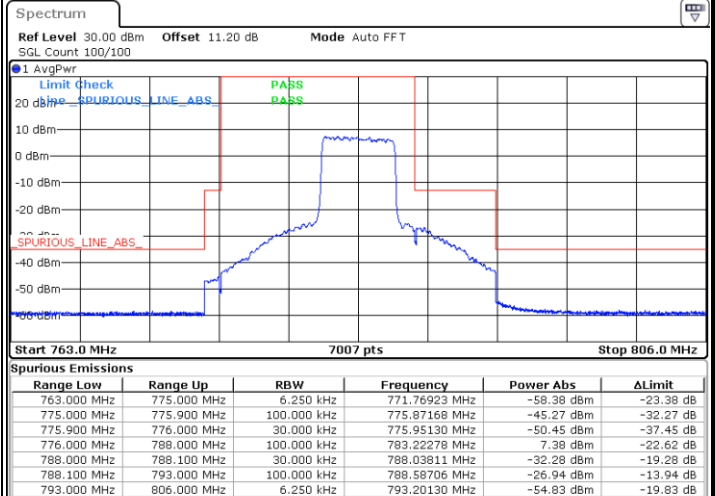
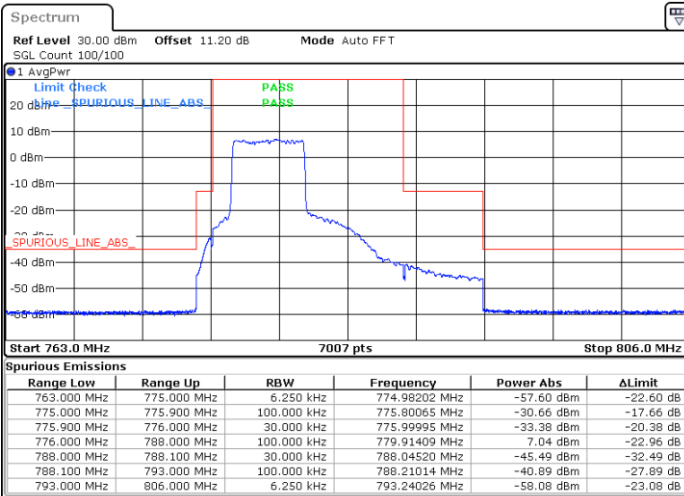


Date: 13.MAY.2024 18:10:16

Date: 13.MAY.2024 18:18:14

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 13.MAY.2024 12:48:40

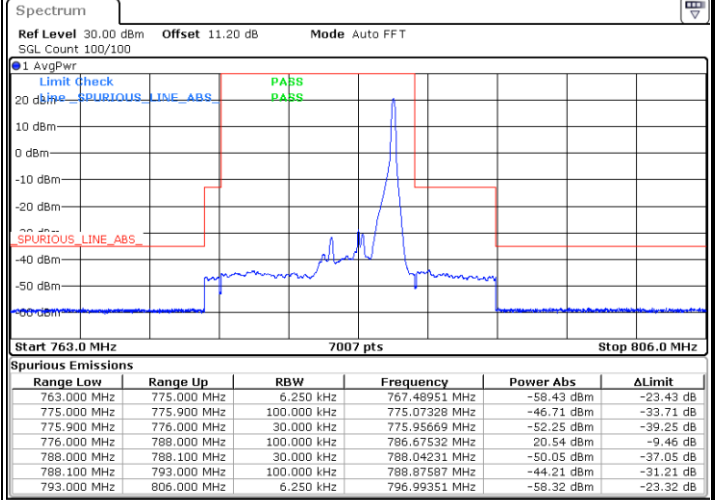
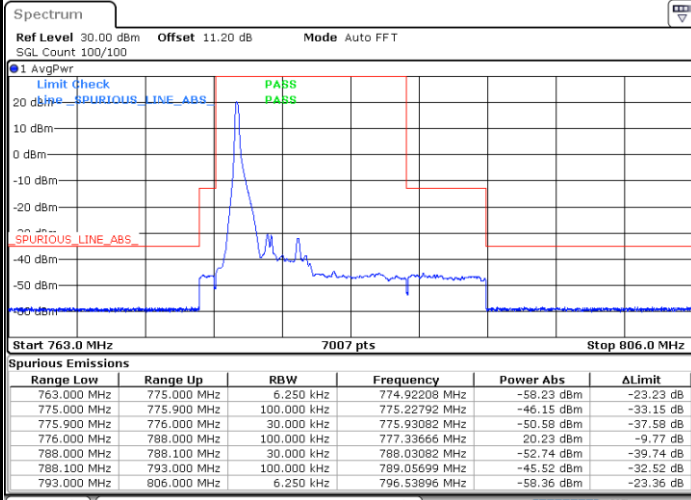
Date: 13.MAY.2024 18:14:37



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

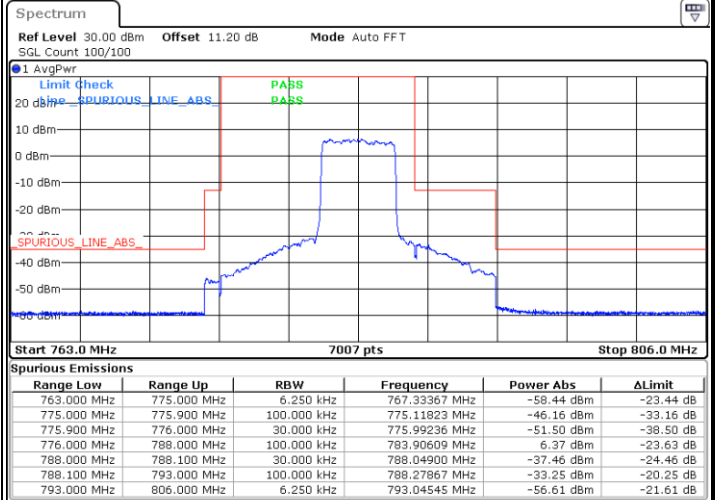
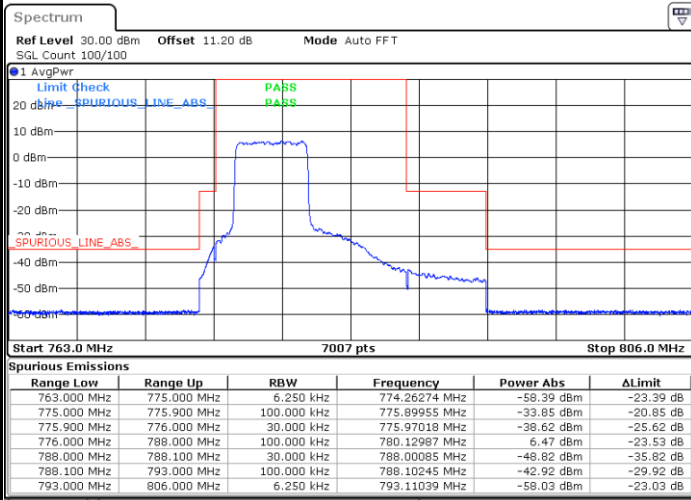


Date: 13.MAY.2024 18:11:11

Date: 13.MAY.2024 18:19:08

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 13.MAY.2024 18:07:34

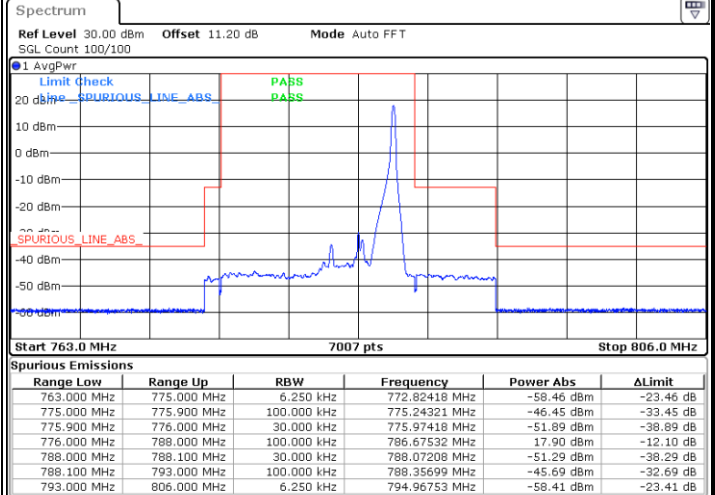
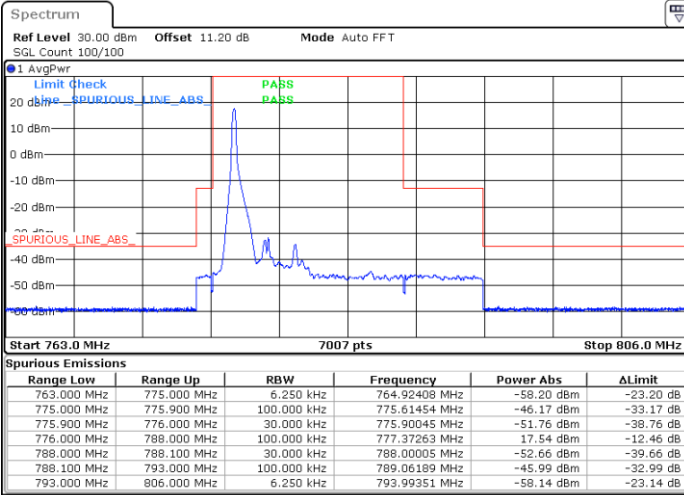
Date: 13.MAY.2024 18:15:31



LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

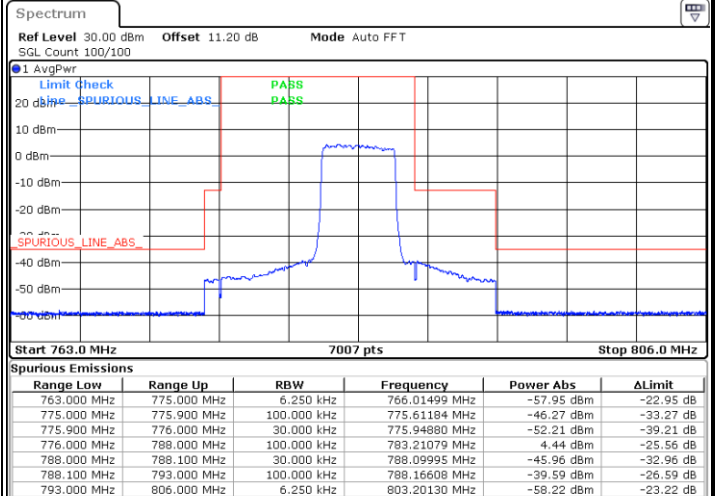
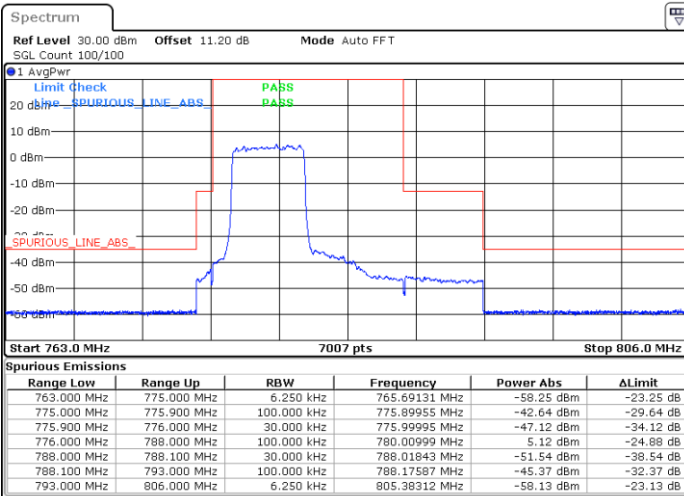


Date: 13.MAY.2024 18:12:05

Date: 13.MAY.2024 18:20:03

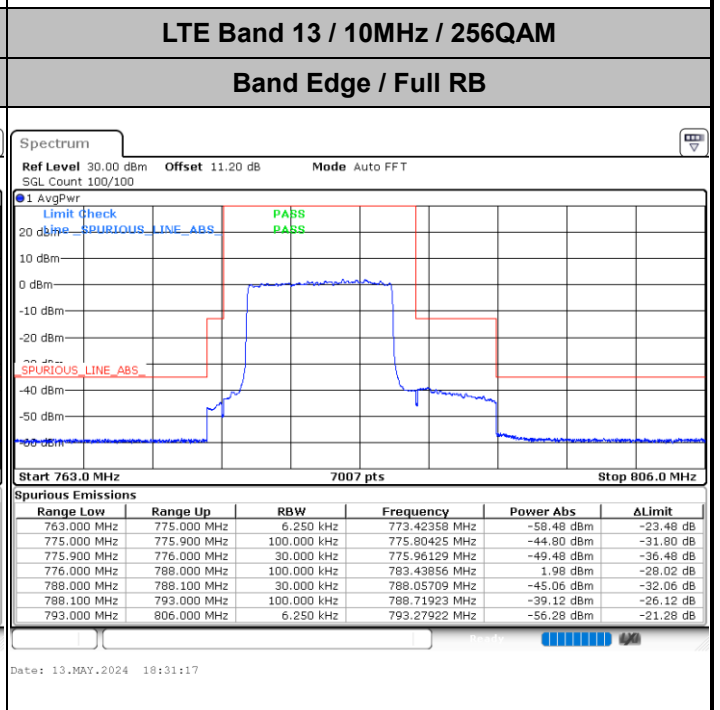
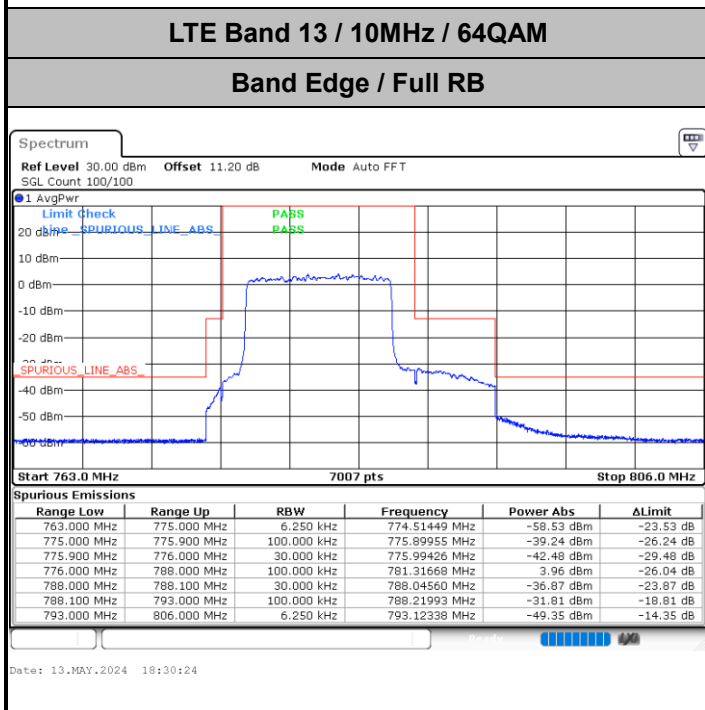
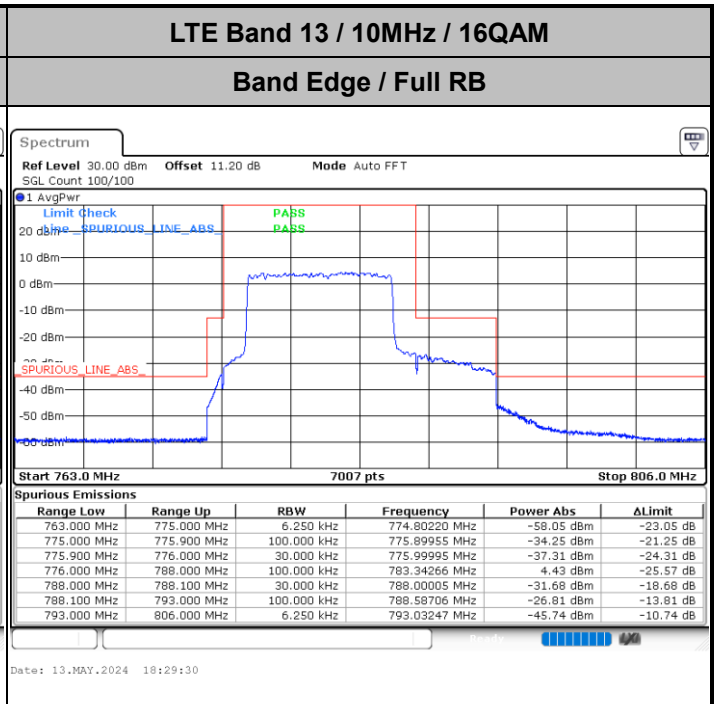
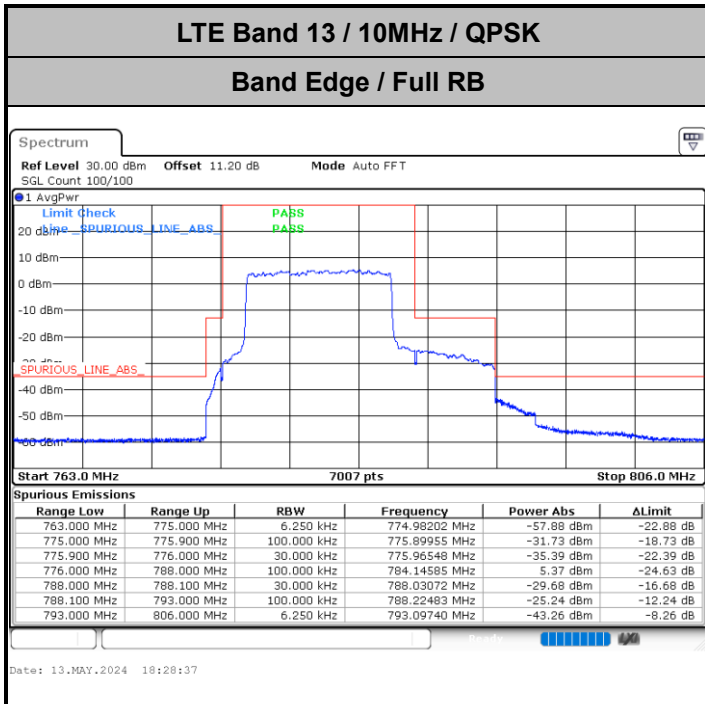
Lowest Band Edge / Full RB

Highest Band Edge / Full RB



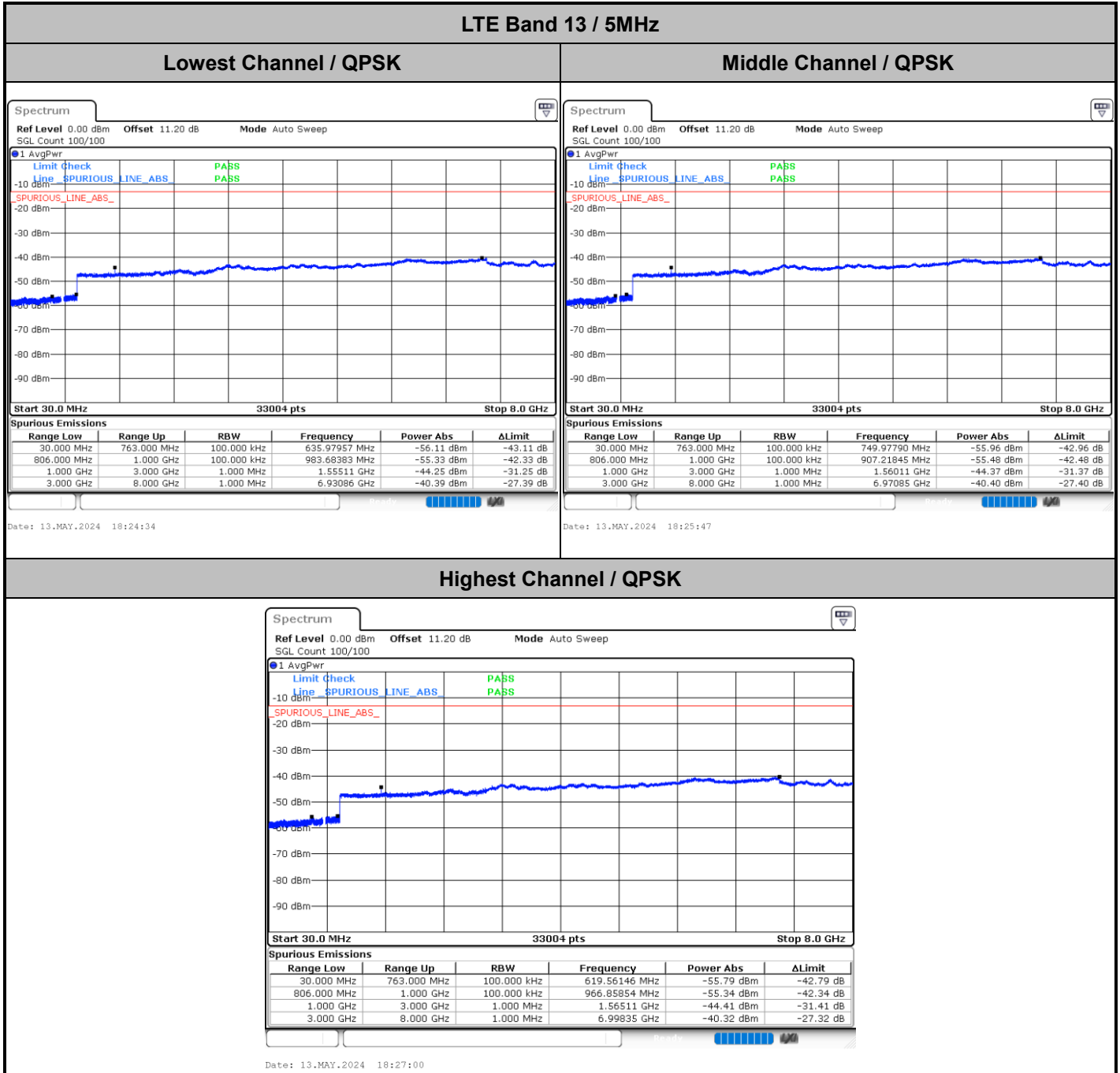
Date: 13.MAY.2024 18:08:28

Date: 13.MAY.2024 18:16:26





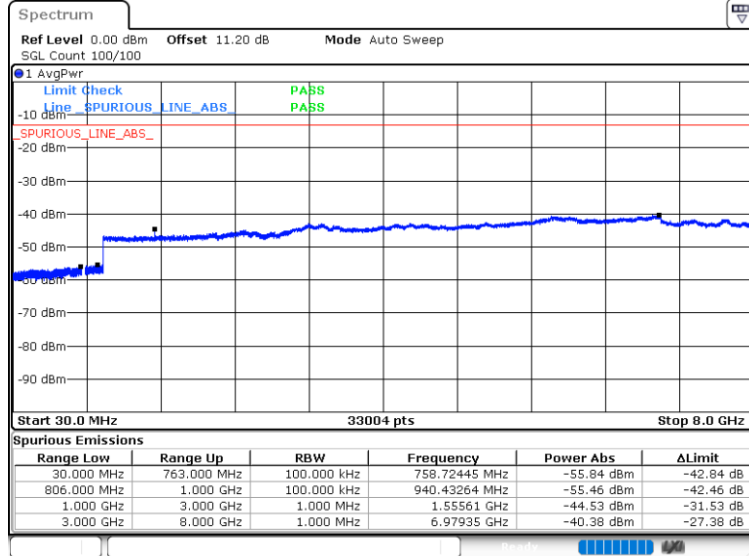
# Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 13.MAY.2024 18:37:31



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	0.0113	PASS
40	Normal Voltage	0.0040	
30	Normal Voltage	0.0132	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0097	
0	Normal Voltage	0.0051	
-10	Normal Voltage	0.0105	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0119	
20	Maximum Voltage	0.0109	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0066	

Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =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	4.06	4.93	5.57	6.23	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	4.03	4.99	5.59	6.26	PASS