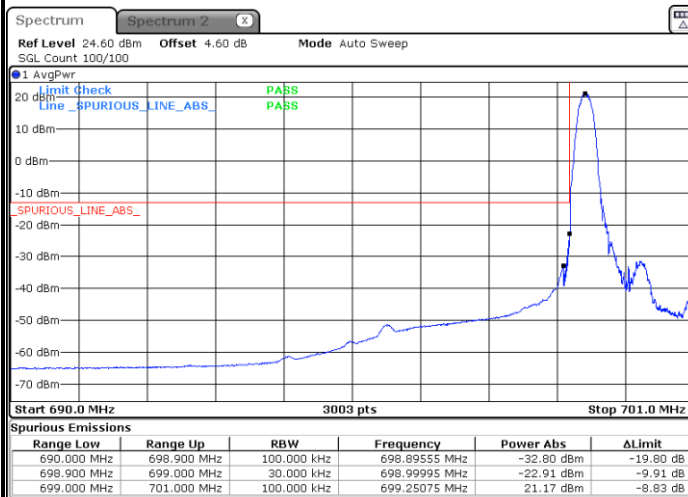




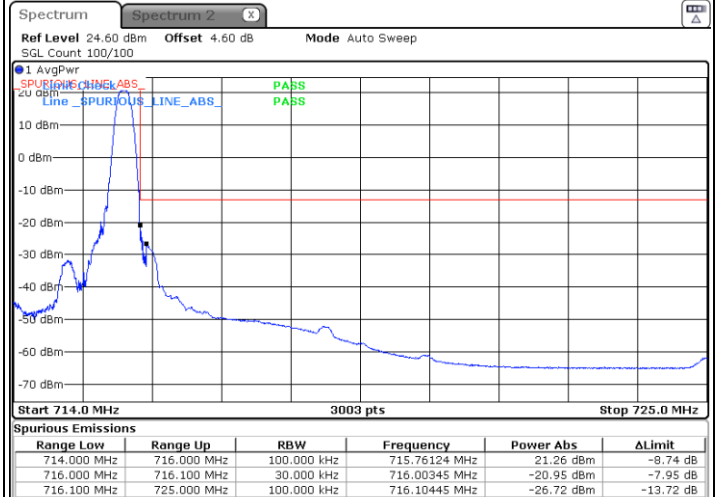
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

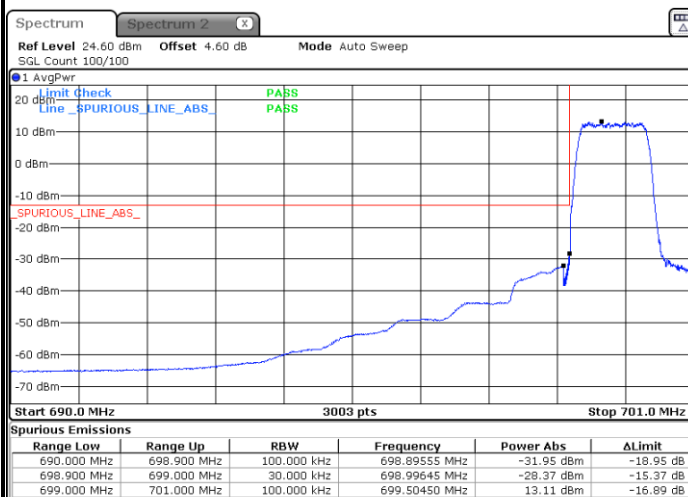
Lowest Band Edge / 1RB



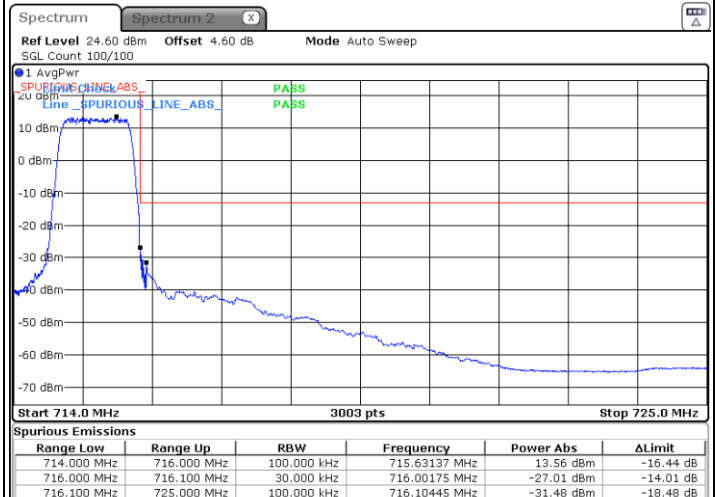
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



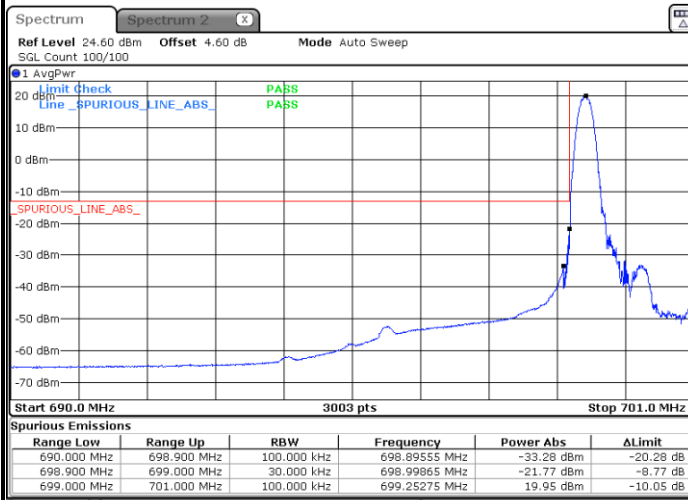
Highest Band Edge / Full RB



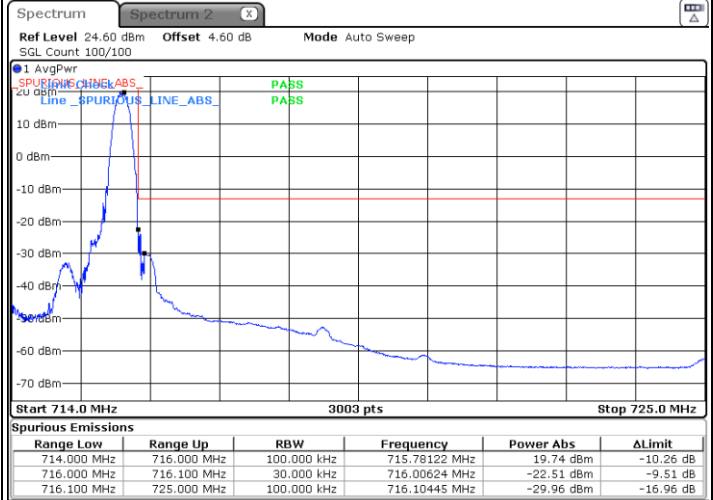


LTE Band 12 / 1.4MHz / 16QAM

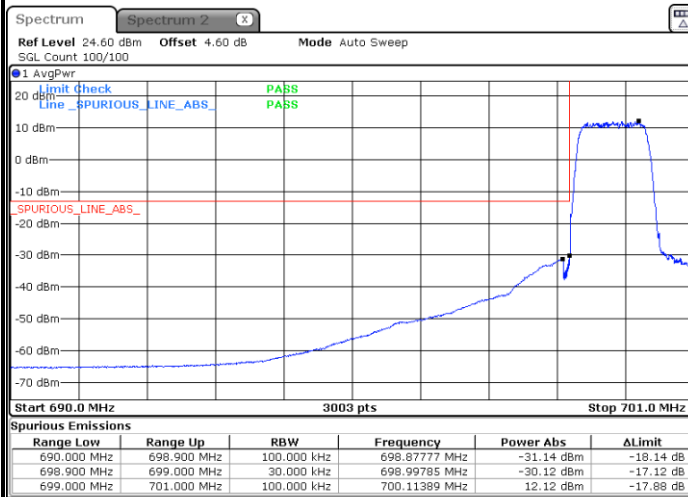
Lowest Band Edge / 1 RB



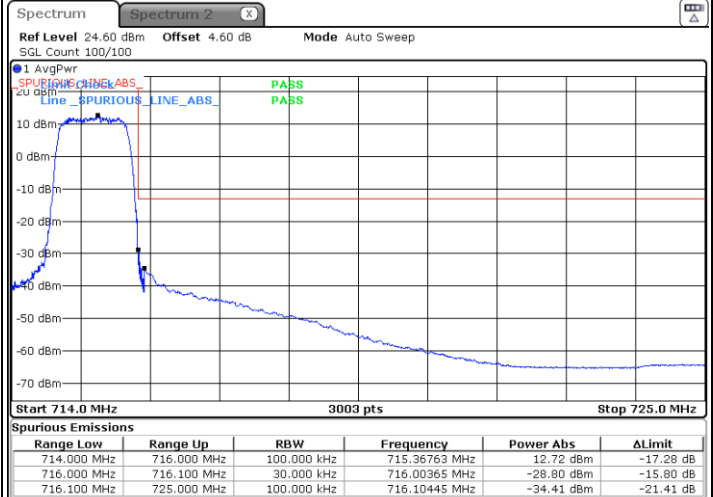
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



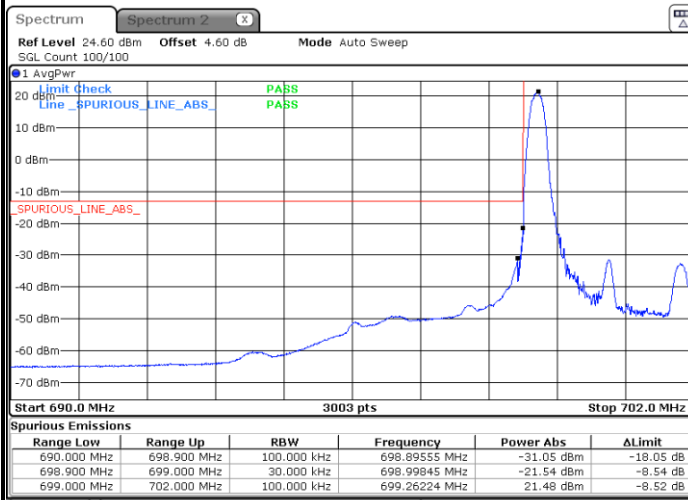
Highest Band Edge / Full RB



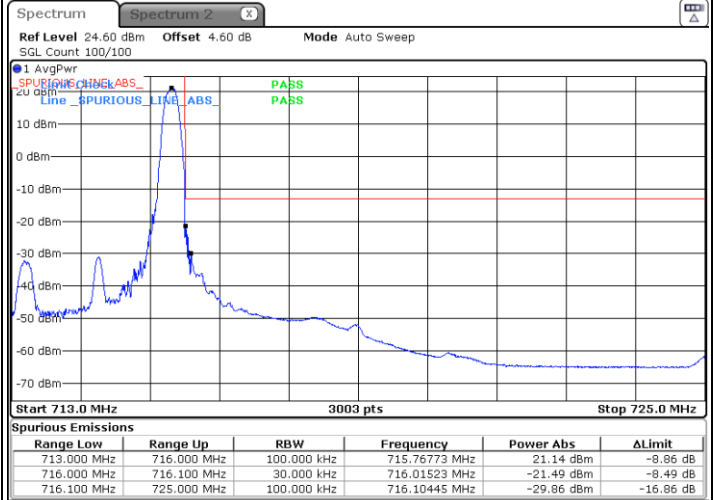


LTE Band 12 / 3MHz / QPSK

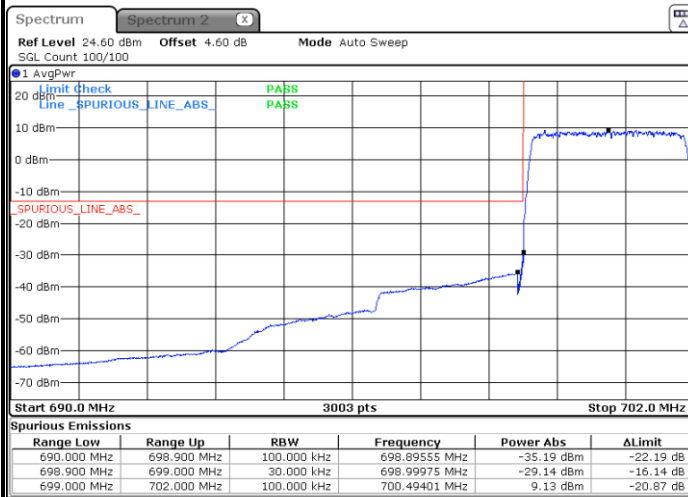
Lowest Band Edge / 1RB



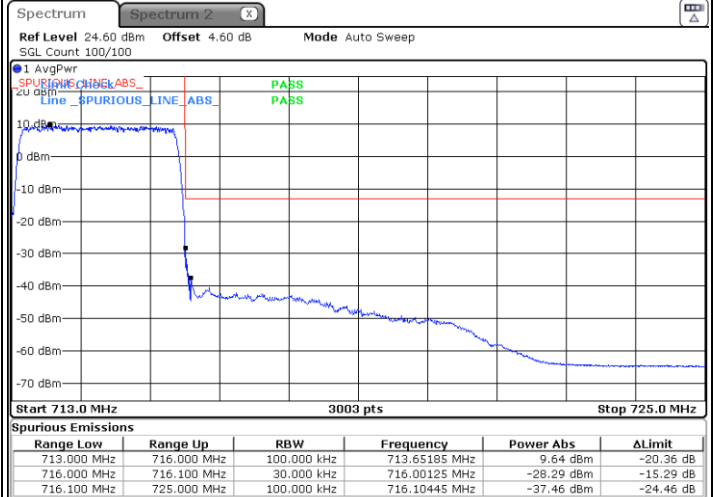
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



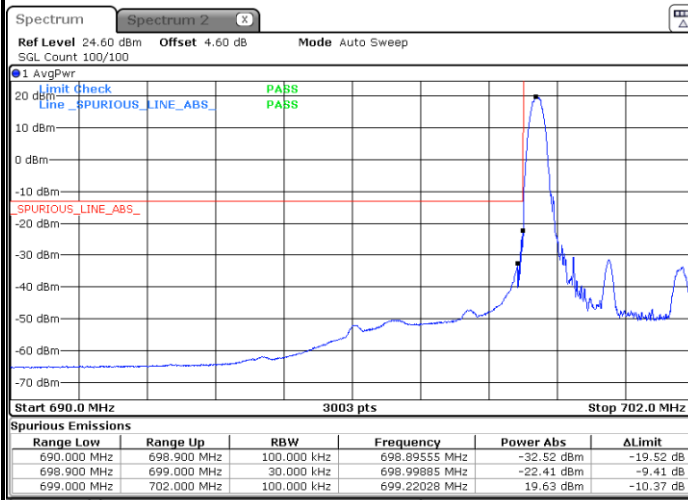
Highest Band Edge / Full RB



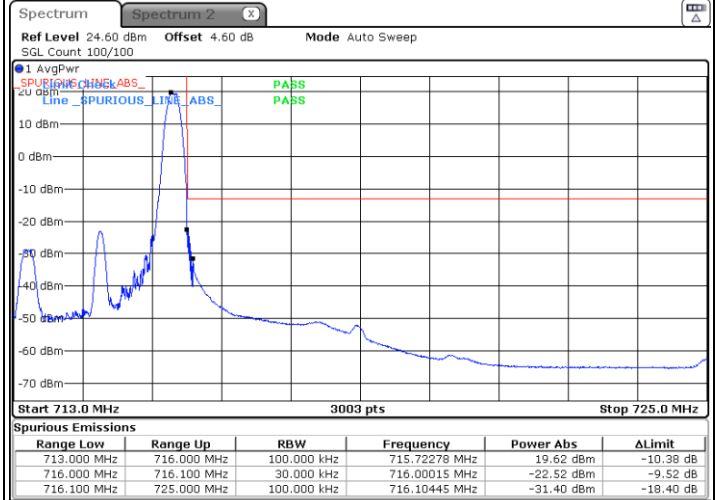


LTE Band 12 / 3MHz / 16QAM

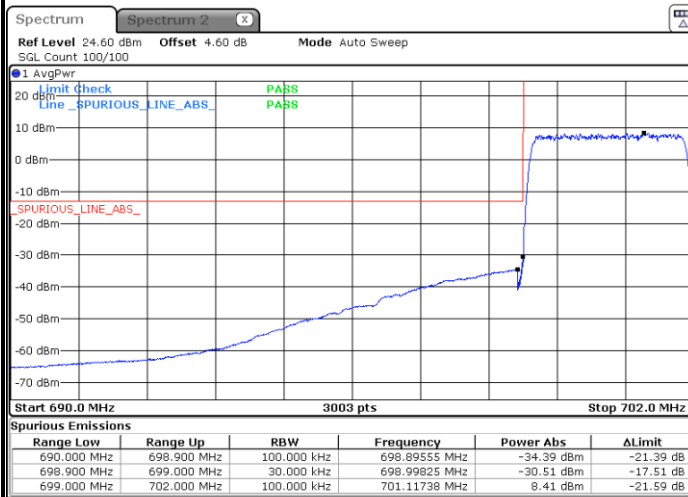
Lowest Band Edge / 1 RB



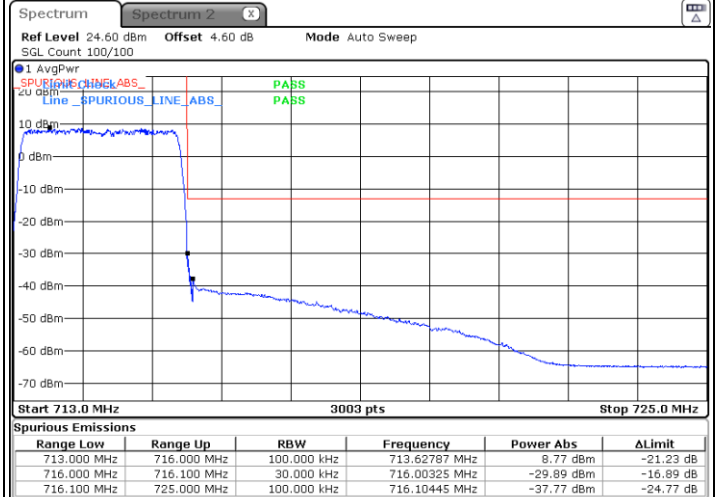
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



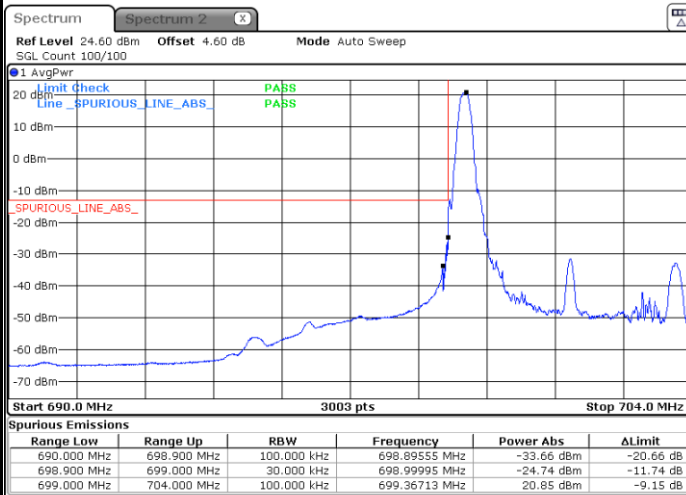
Highest Band Edge / Full RB



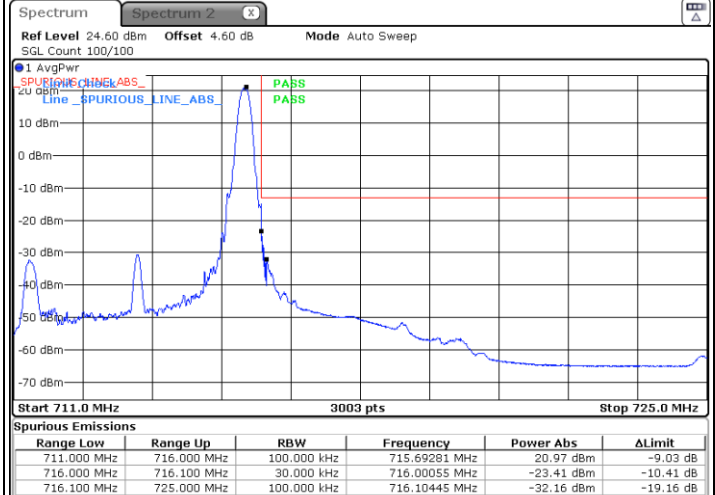


LTE Band 12 / 5MHz / QPSK

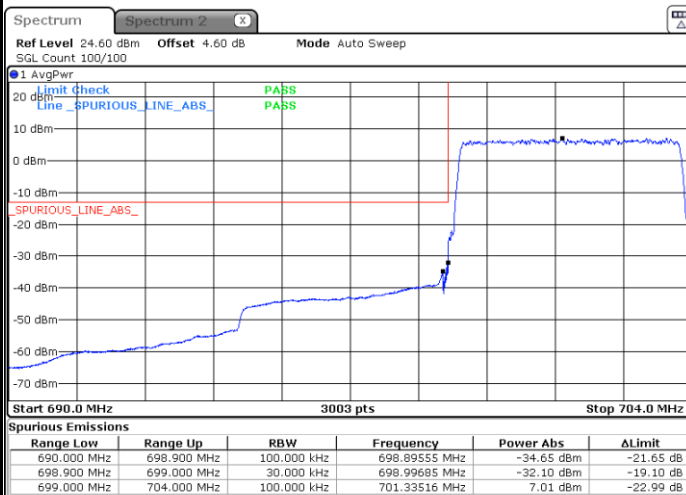
Lowest Band Edge / 1 RB



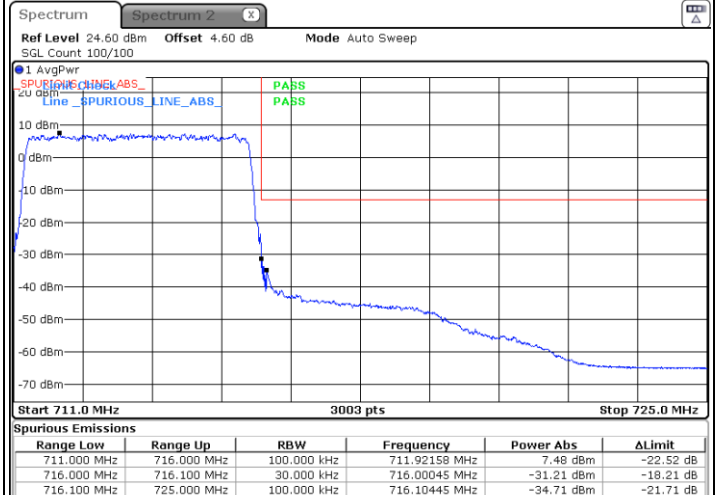
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



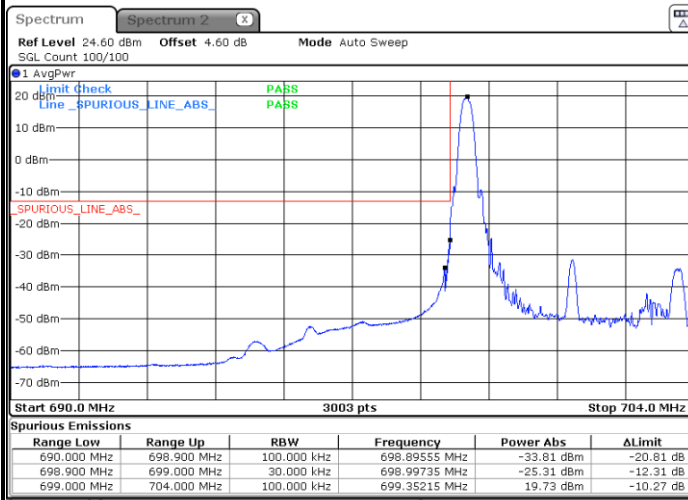
Highest Band Edge / Full RB



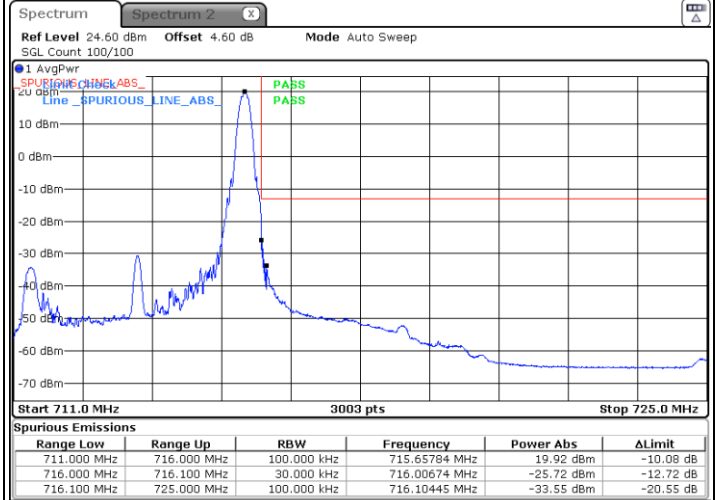


LTE Band 12 / 5MHz / 16QAM

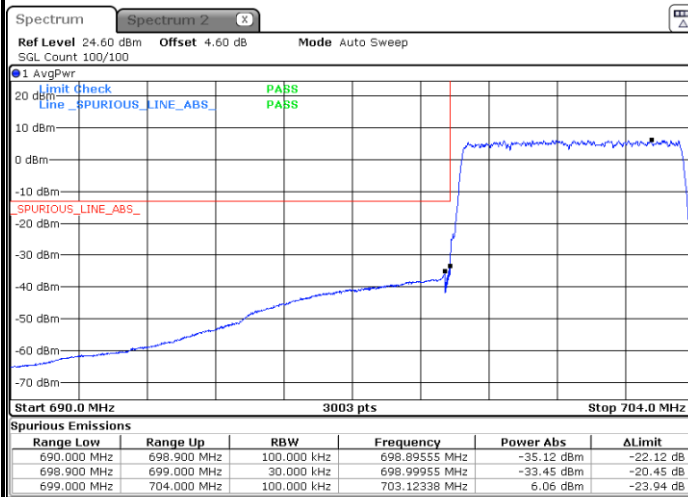
Lowest Band Edge / 1RB



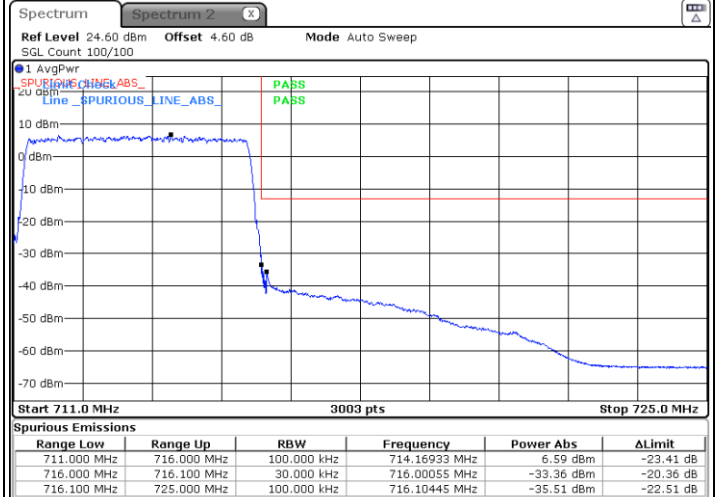
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



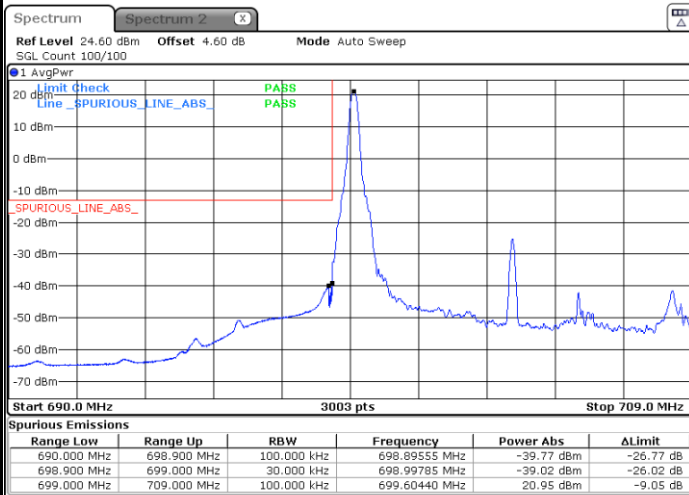
Highest Band Edge / Full RB



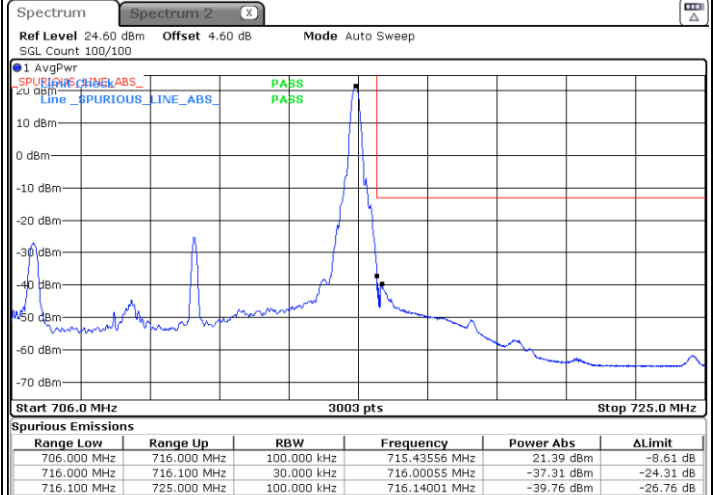


LTE Band 12 / 10MHz / QPSK

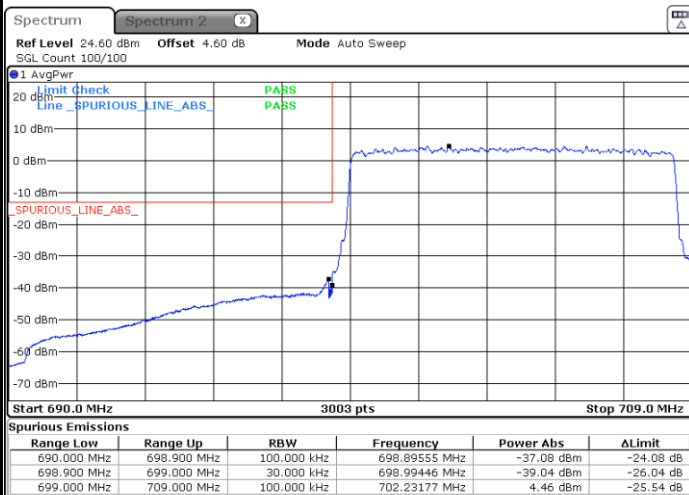
Lowest Band Edge / 1 RB



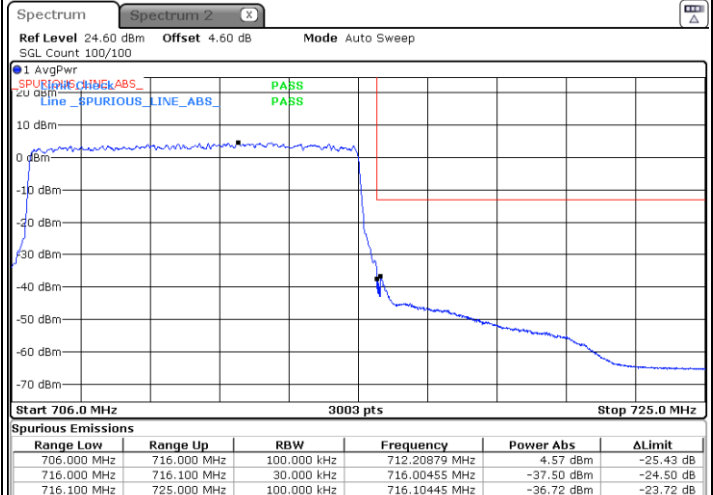
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



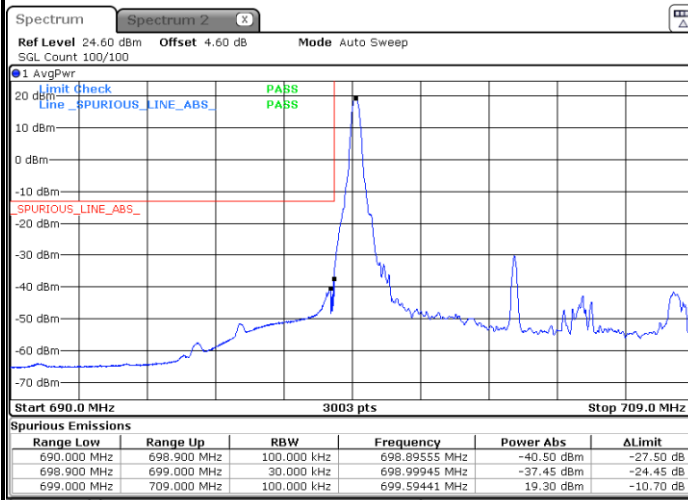
Highest Band Edge / Full RB



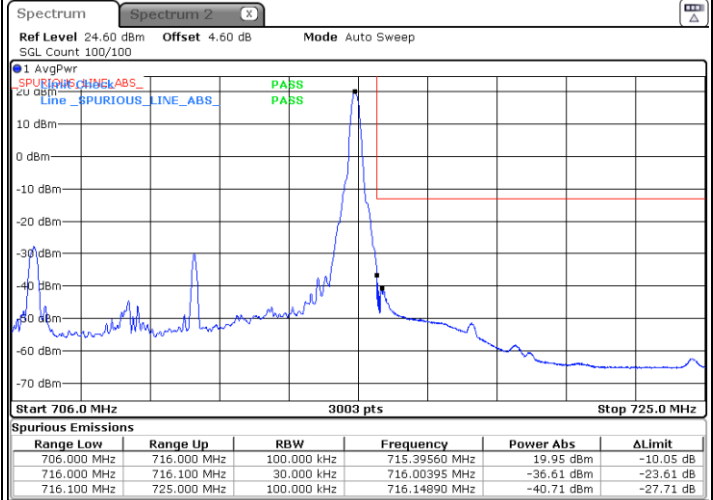


LTE Band 12 / 10MHz / 16QAM

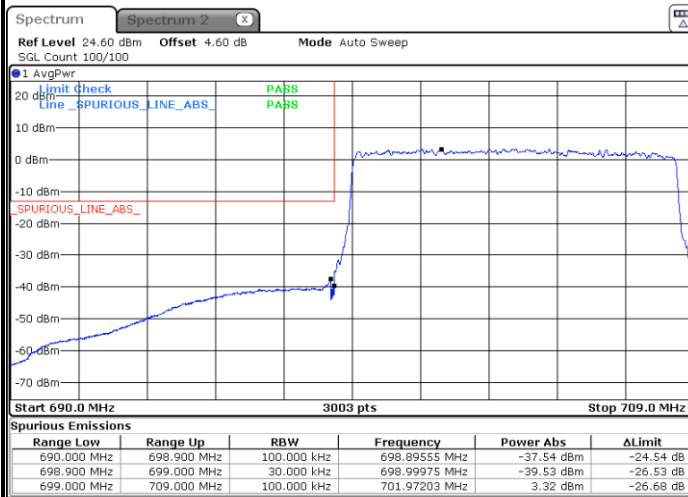
Lowest Band Edge / 1 RB



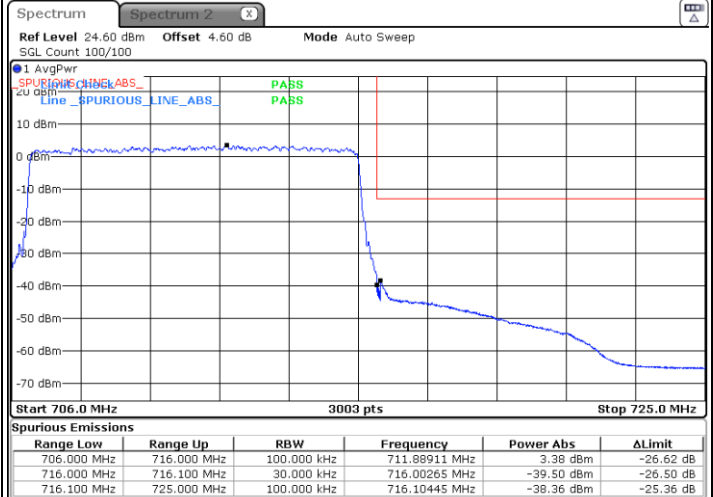
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

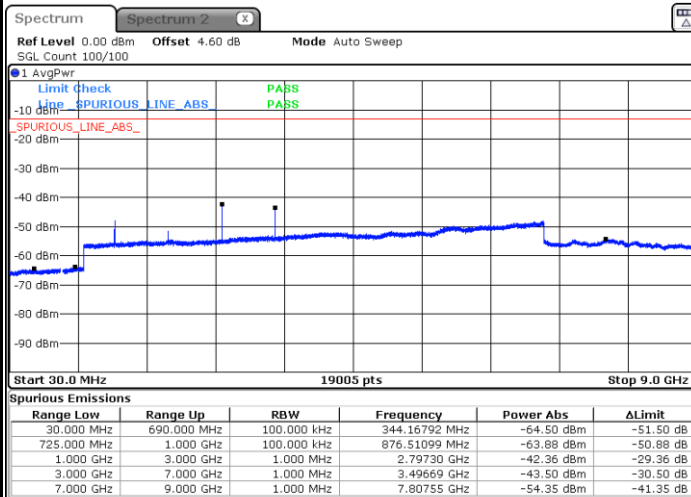




Conducted Spurious Emission

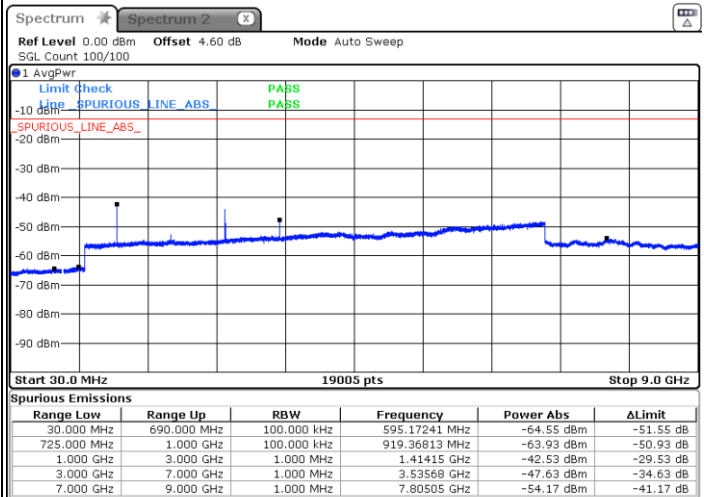
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



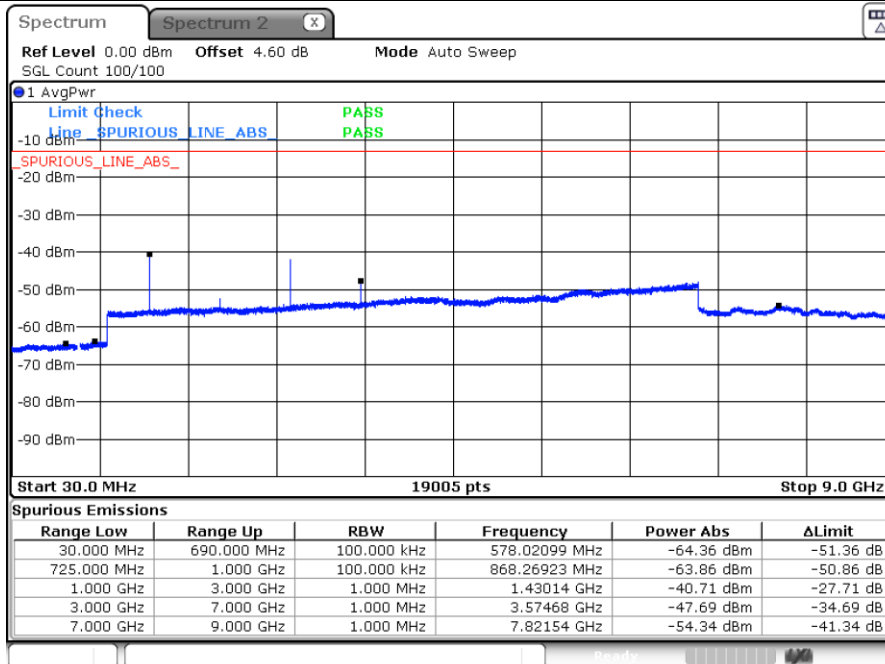
Date: 26.OCT.2022 03:24:19

Middle Channel / QPSK



Date: 26.OCT.2022 03:34:14

Highest Channel / QPSK

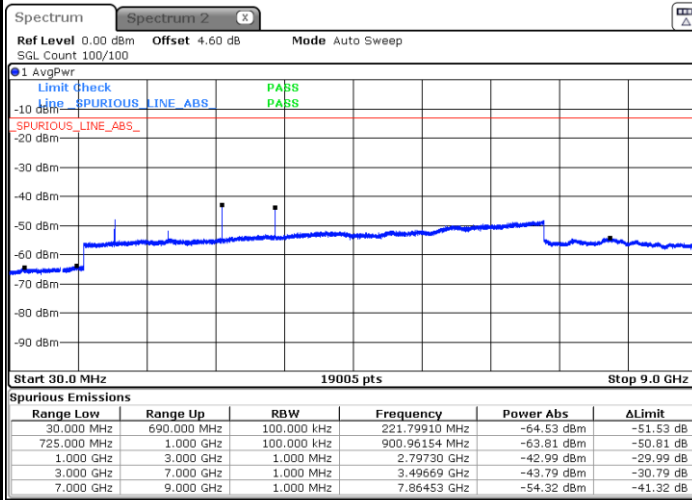


Date: 26.OCT.2022 03:35:42



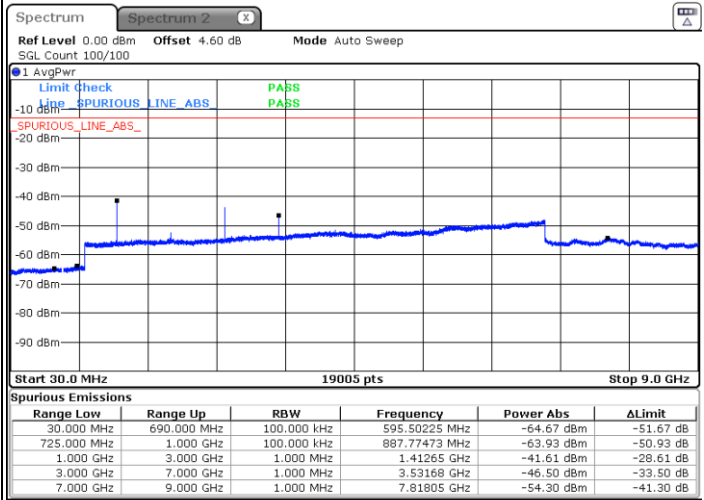
LTE Band 12 / 3MHz

Lowest Channel / QPSK



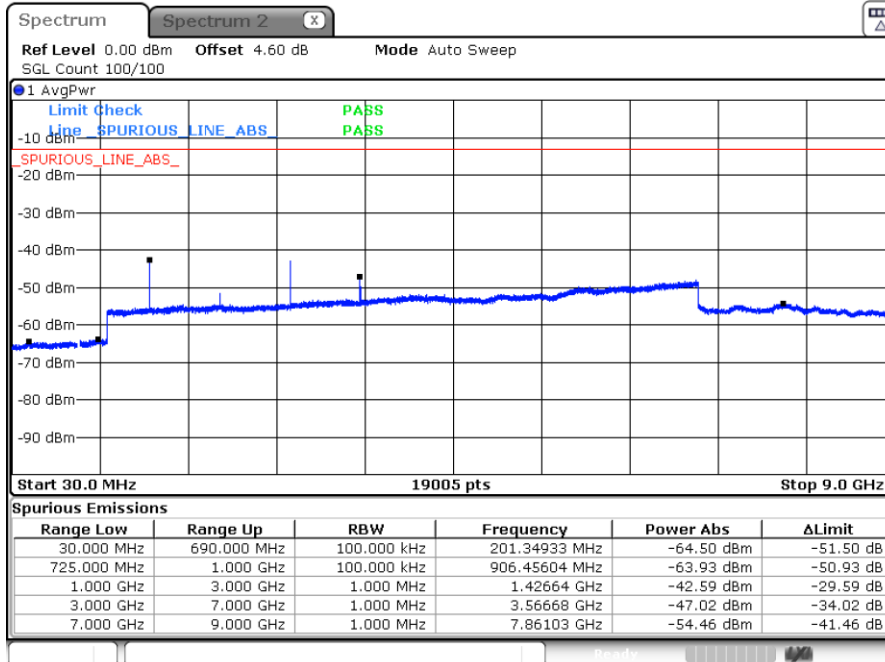
Date: 26.OCT.2022 03:44:03

Middle Channel / QPSK



Date: 26.OCT.2022 03:53:58

Highest Channel / QPSK

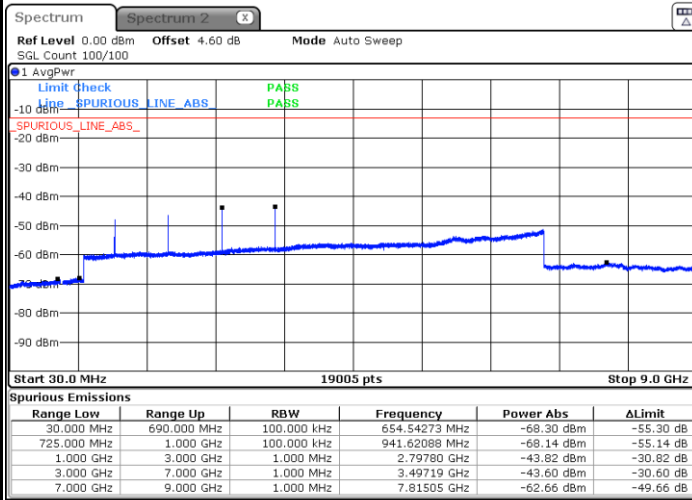


Date: 26.OCT.2022 03:57:33



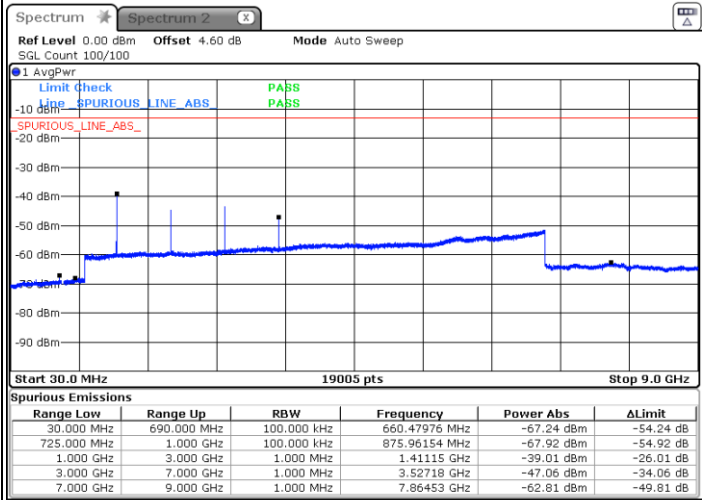
LTE Band 12 / 5MHz

Lowest Channel / QPSK



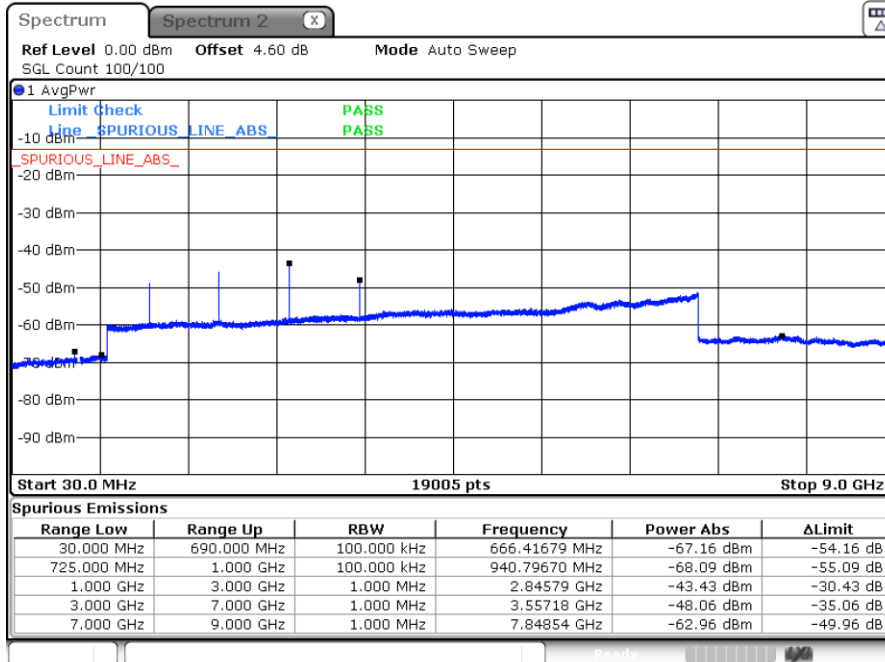
Date: 26.OCT.2022 04:05:54

Middle Channel / QPSK



Date: 26.OCT.2022 04:34:15

Highest Channel / QPSK

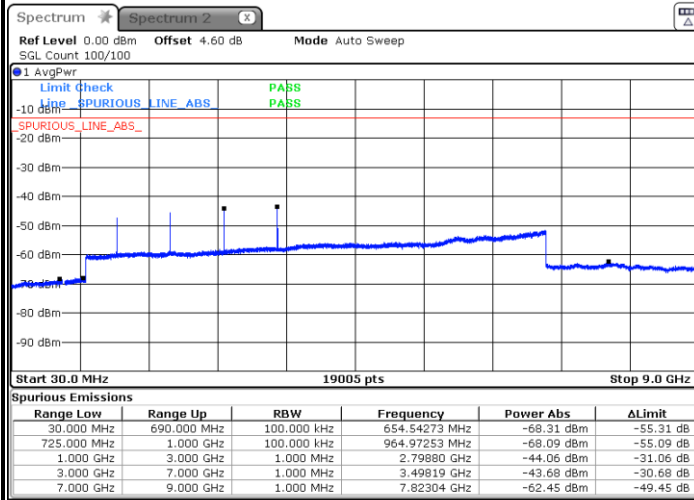


Date: 26.OCT.2022 04:17:20



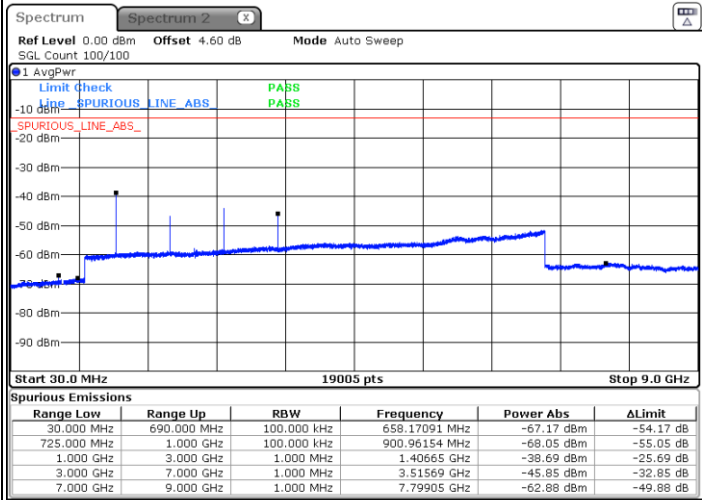
LTE Band 12 / 10MHz

Lowest Channel / QPSK



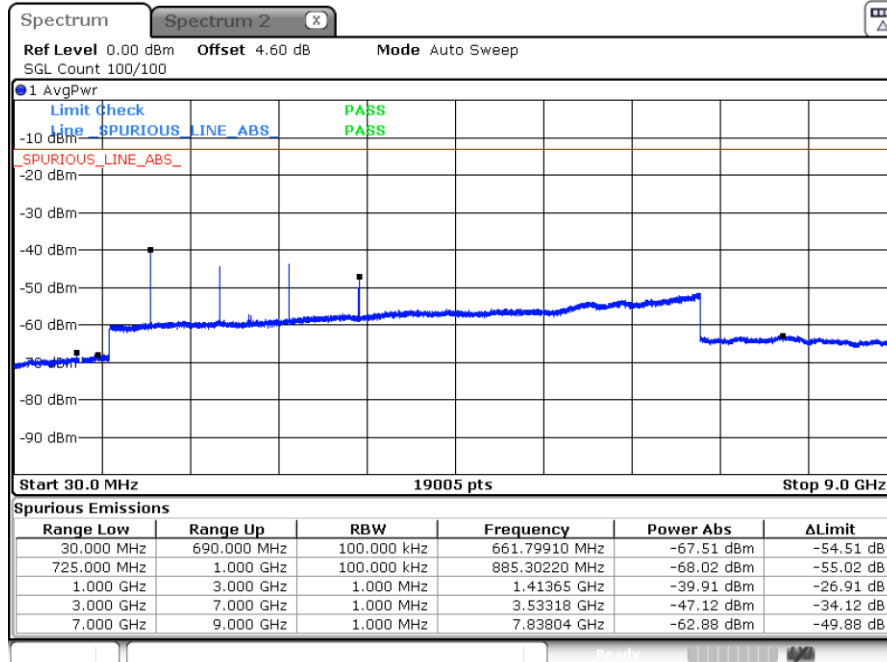
Date: 26.OCT.2022 04:35:45

Middle Channel / QPSK



Date: 26.OCT.2022 04:38:56

Highest Channel / QPSK



Date: 26.OCT.2022 04:40:24

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	0.0021	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0012	

Note:

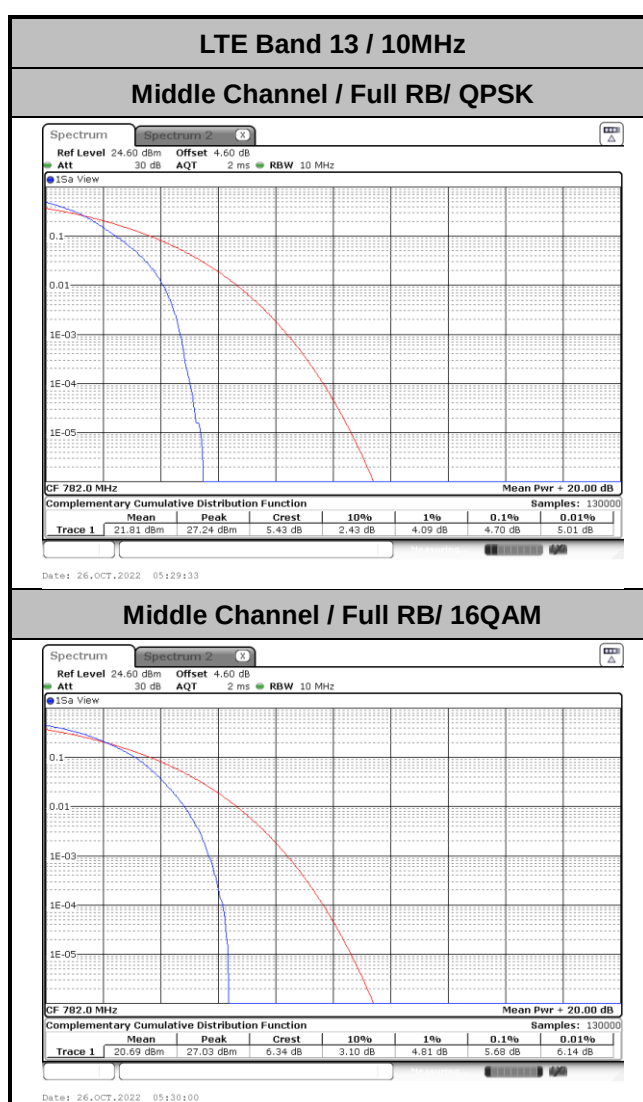
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

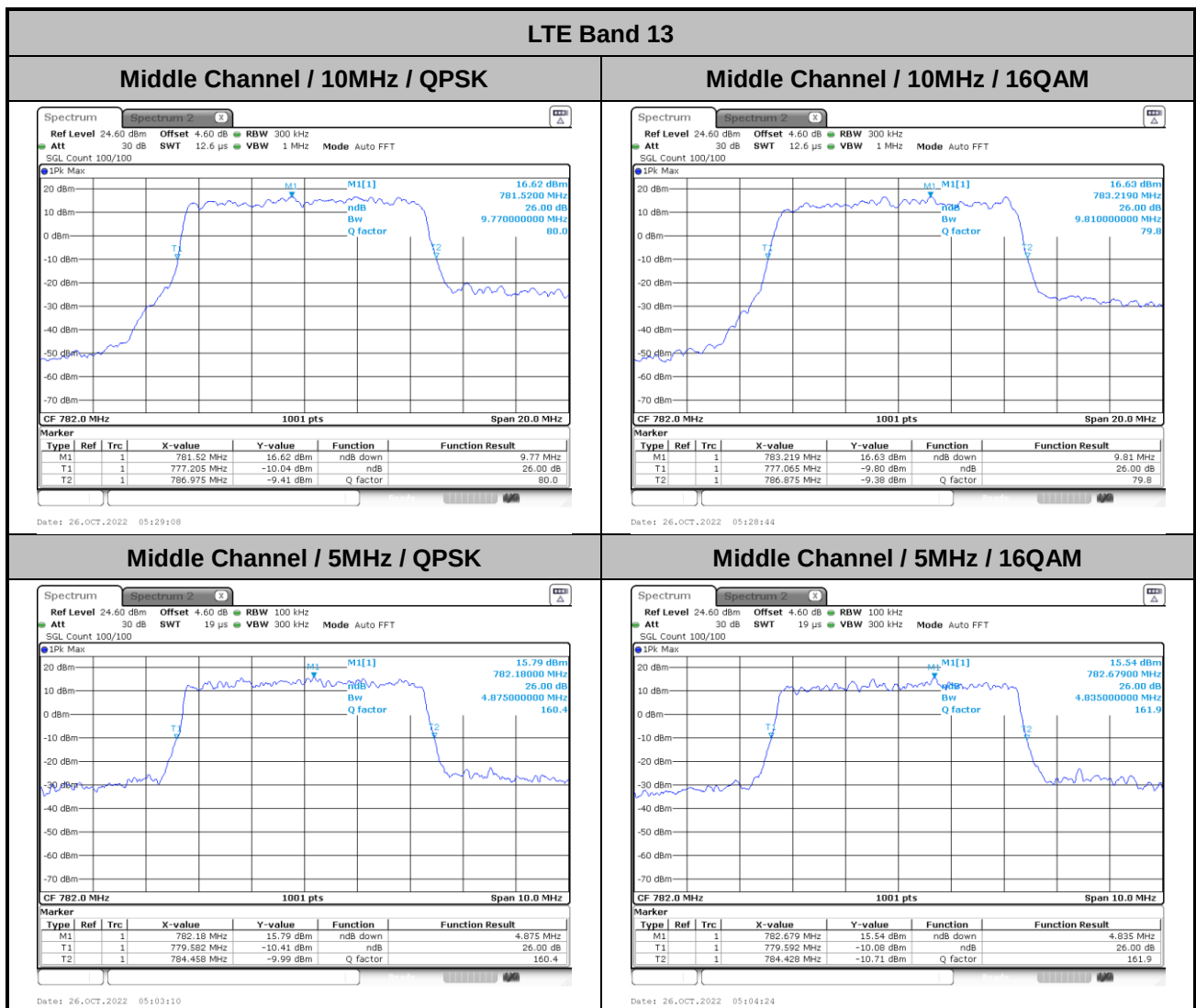
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	4.70	5.68	PASS



**26dB Bandwidth**

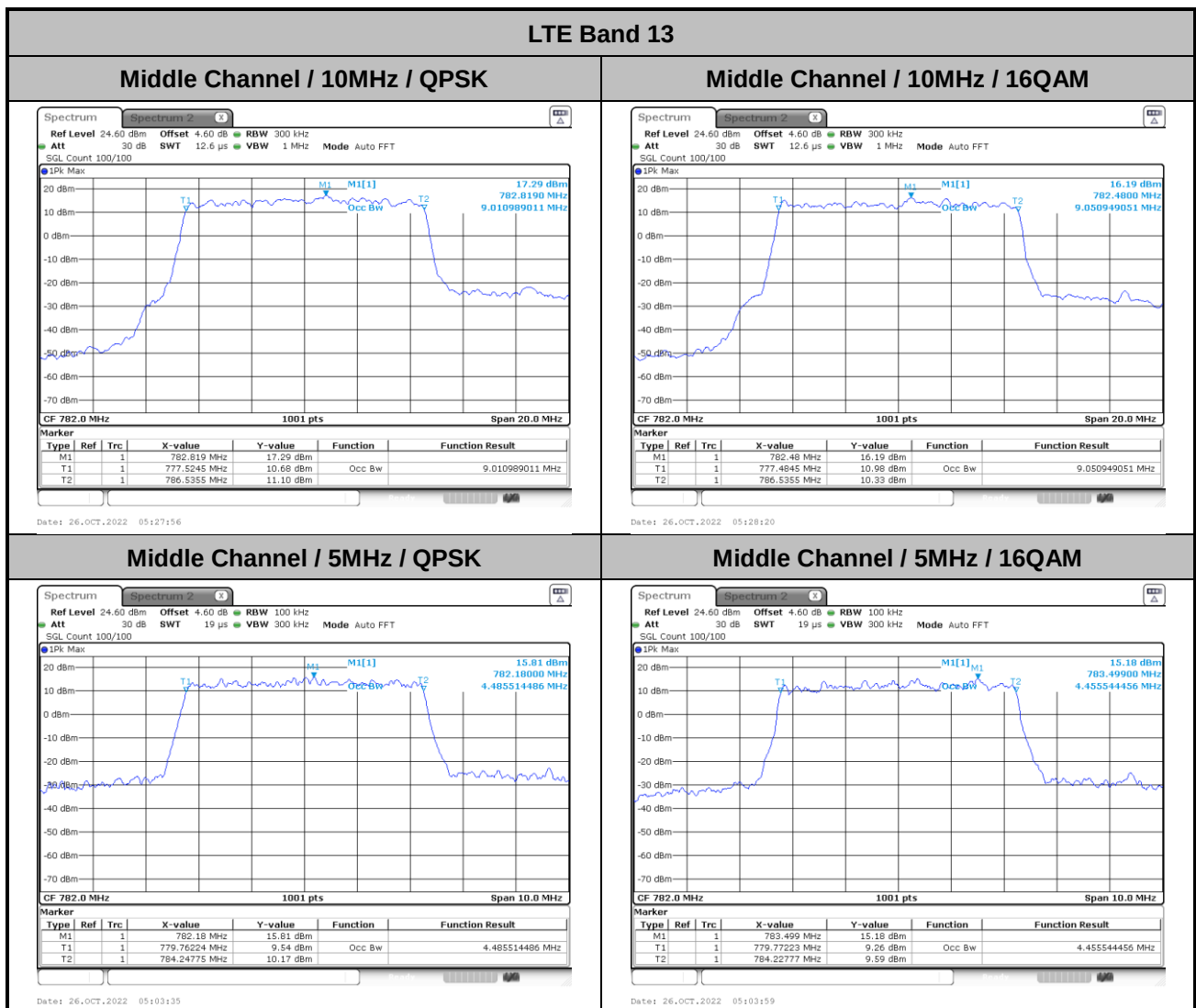
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.77	9.81
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.88	4.84





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.05
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.46

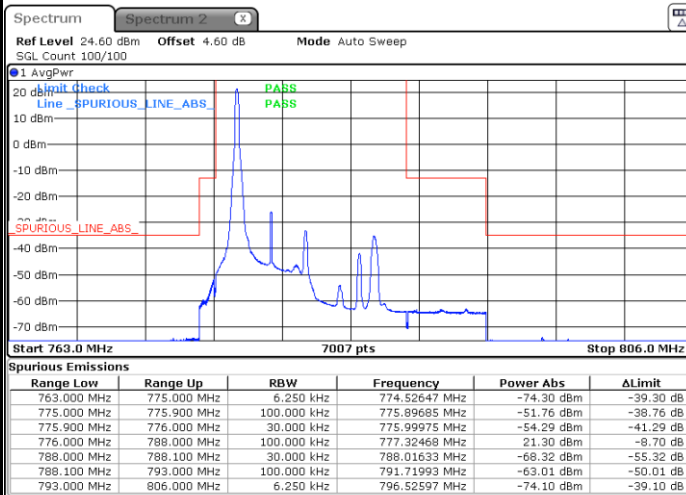




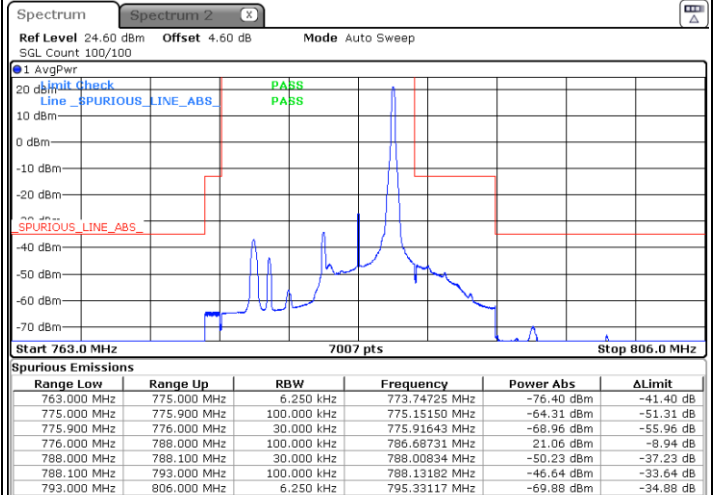
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

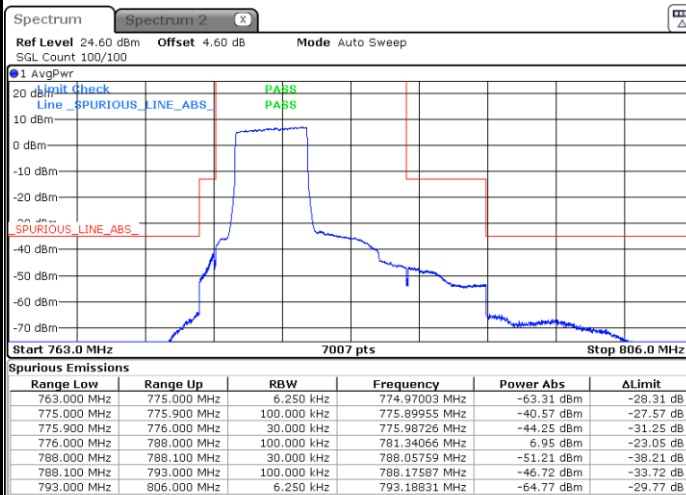
Lowest Band Edge / 1 RB



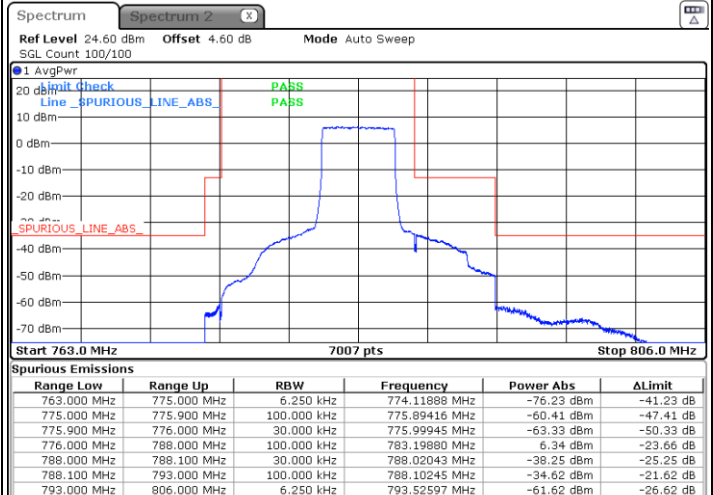
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



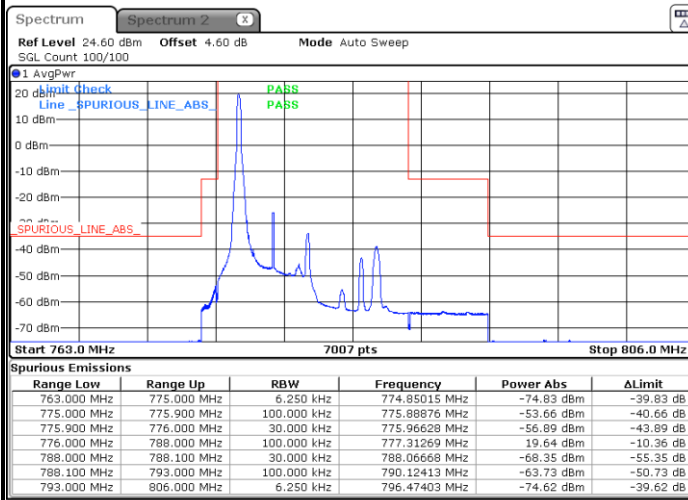
Highest Band Edge / Full RB



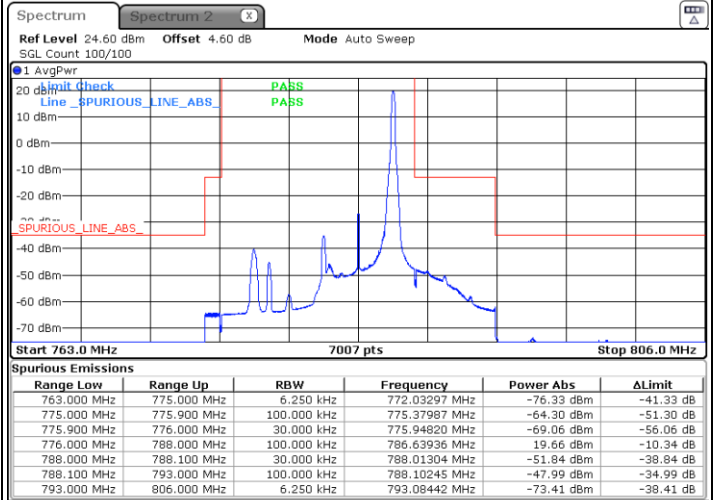


LTE Band 13 / 5MHz / 16QAM

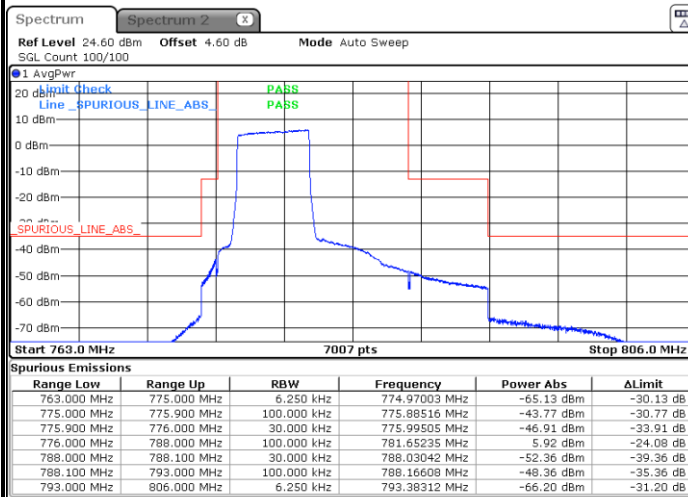
Lowest Band Edge / 1RB



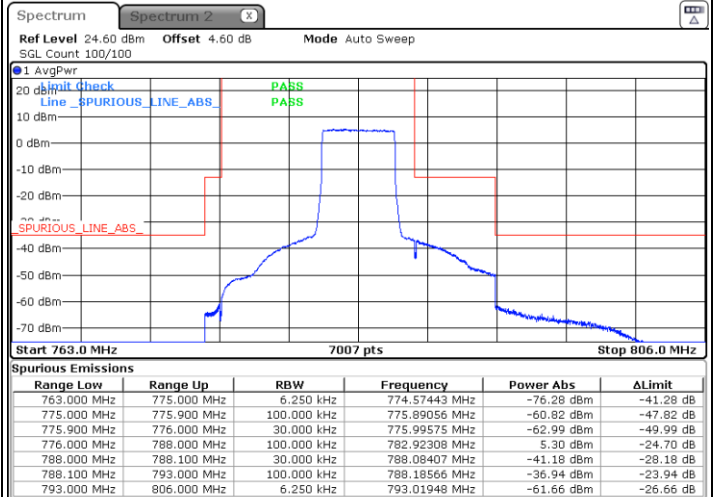
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



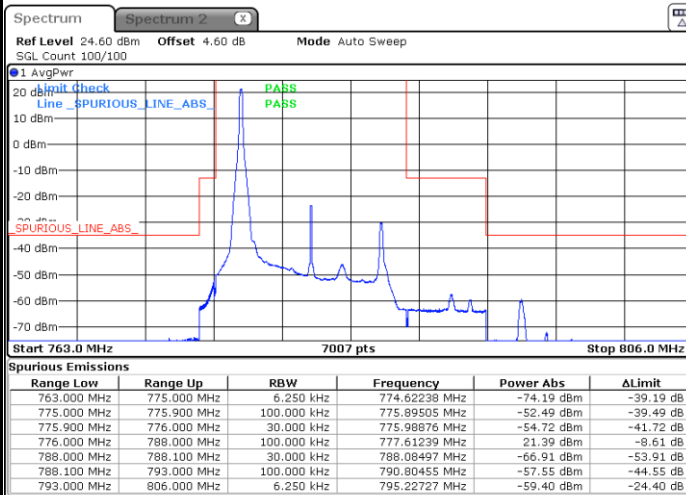
Highest Band Edge / Full RB





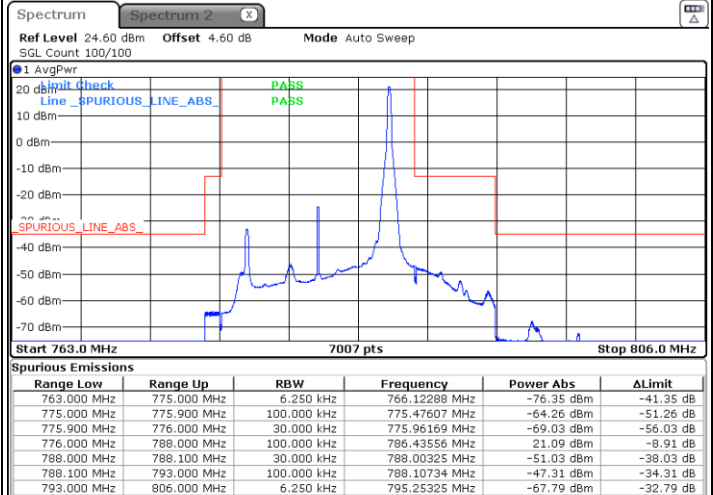
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



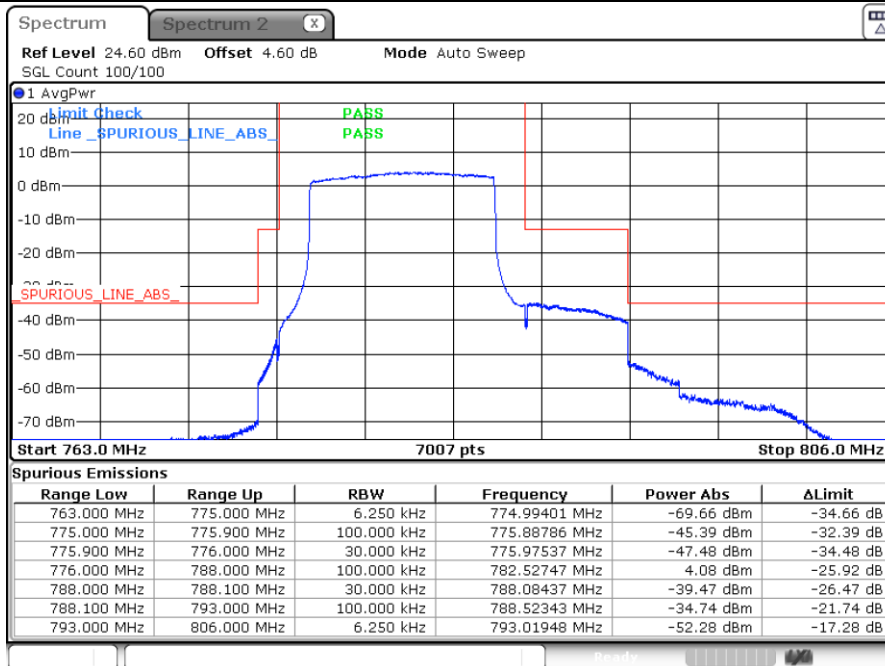
Date: 26.OCT.2022 05:18:09

middle Band Edge / 1 RB



Date: 26.OCT.2022 05:23:47

Middle Band Edge / Full RB

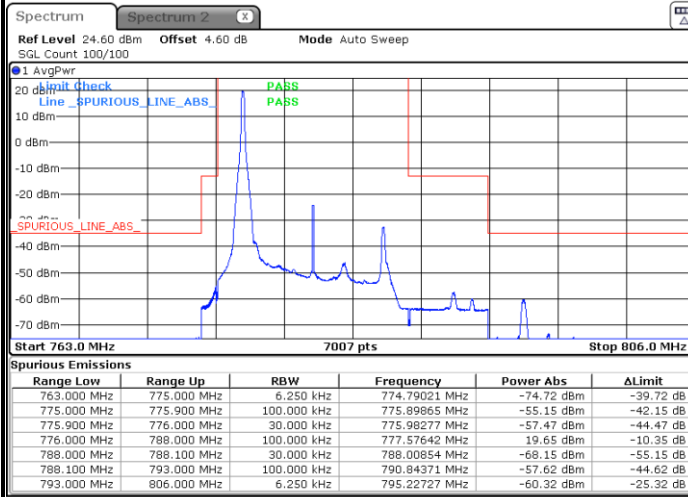


Date: 26.OCT.2022 05:25:39



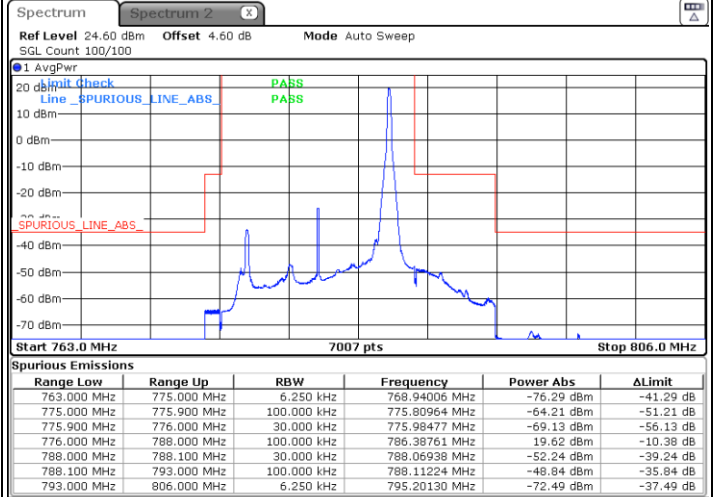
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



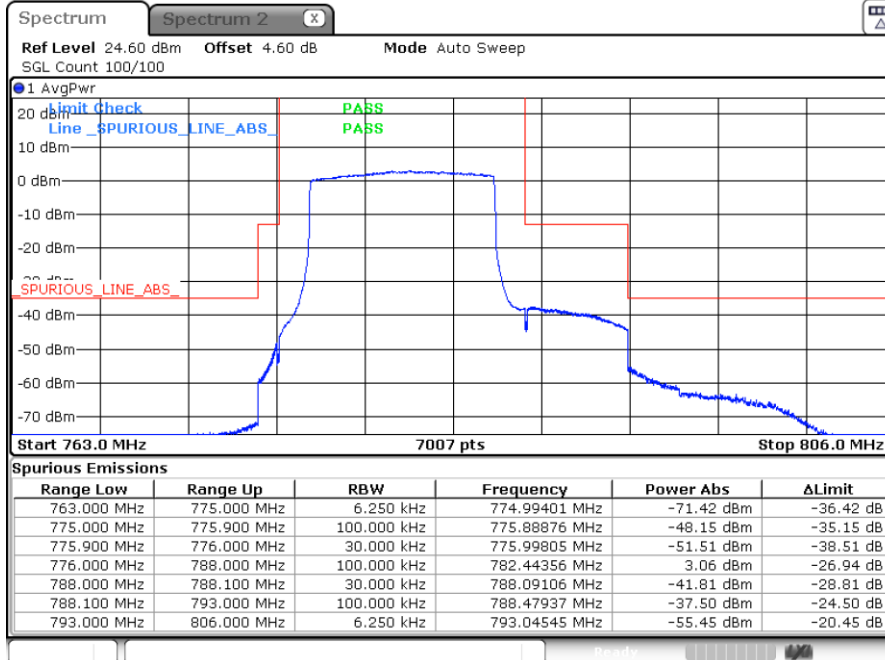
Date: 26.OCT.2022 05:20:01

middle Band Edge / 1 RB



Date: 26.OCT.2022 05:21:54

middle Band Edge / Full RB



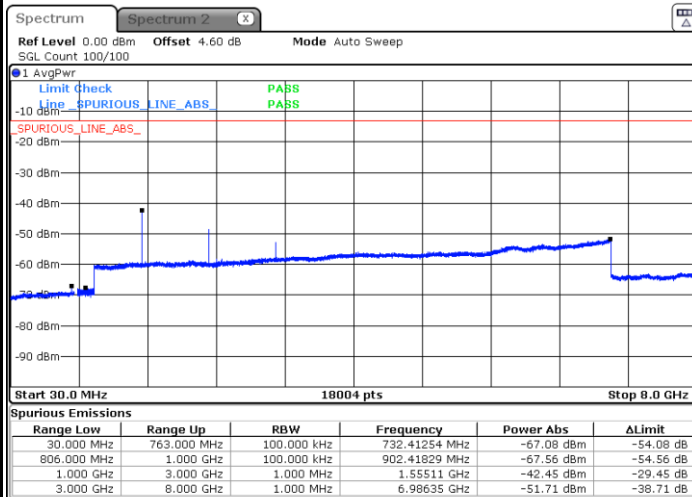
Date: 26.OCT.2022 05:27:32



Conducted Spurious Emission

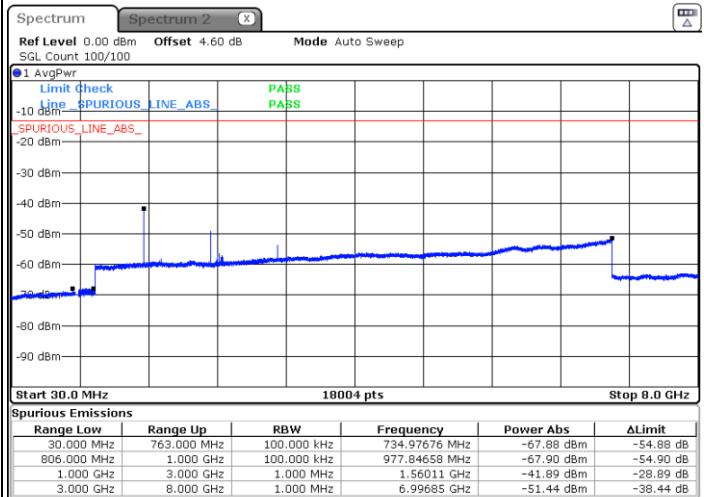
LTE Band 13 / 5MHz

Lowest Channel / QPSK



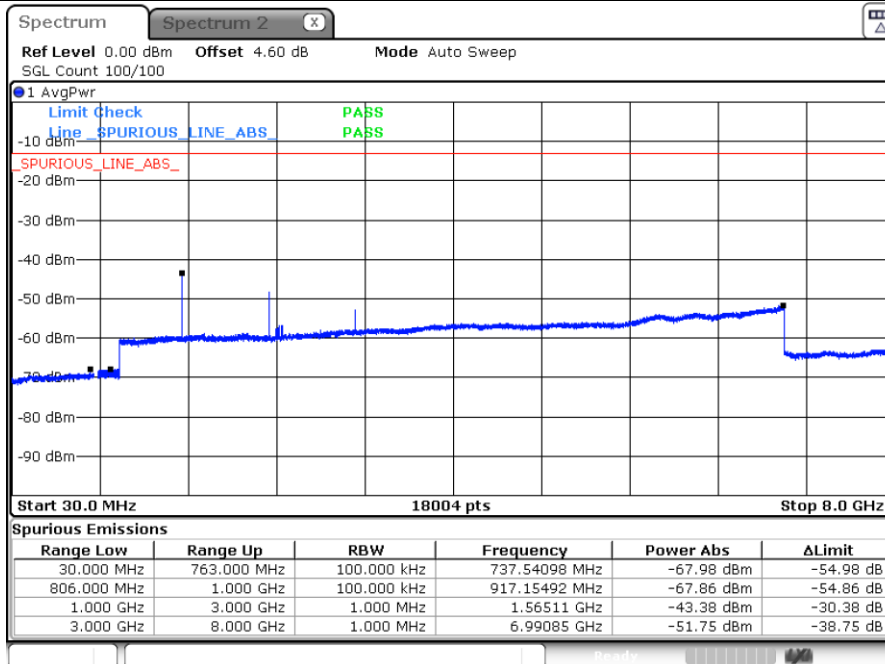
Date: 26.OCT.2022 04:55:13

Middle Channel / QPSK



Date: 26.OCT.2022 05:05:50

Highest Channel / QPSK

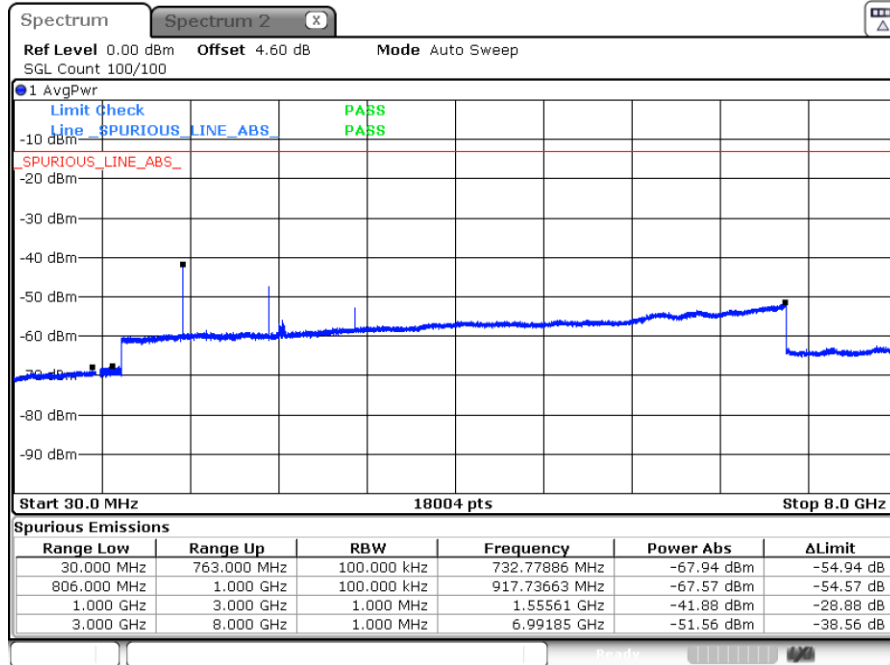


Date: 26.OCT.2022 05:07:16



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 26.OCT.2022 05:16:16

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	0.0019	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0026	
-30	Normal Voltage	0.0031	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0015	

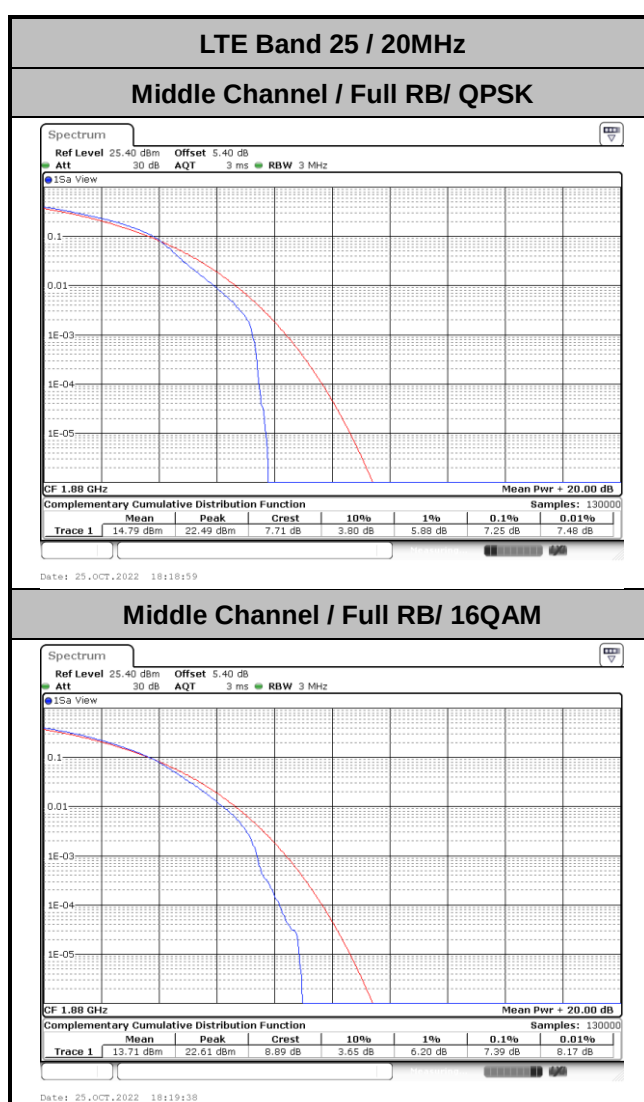
Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 25

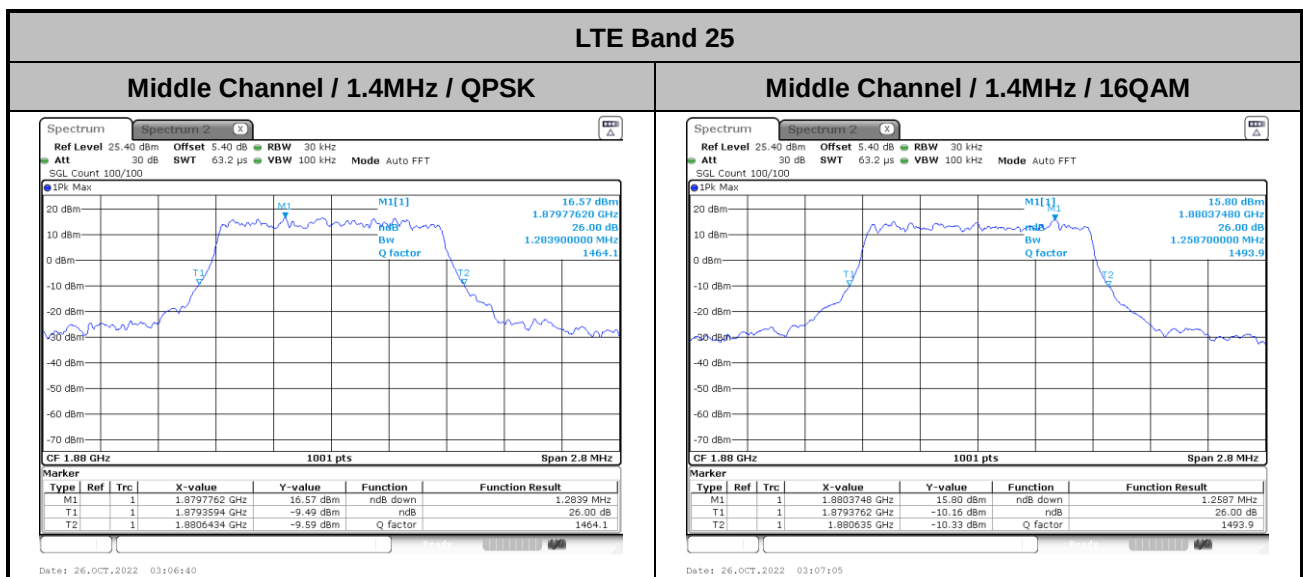
Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	7.25	7.39	PASS



**26dB Bandwidth**

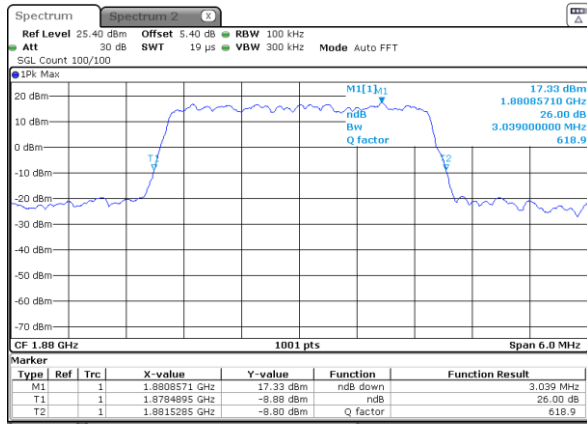
Mode	LTE Band 25 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.28	1.26
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3.04	2.95
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.90	4.89
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.83	9.83
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.51	14.54
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	20.3	20.14





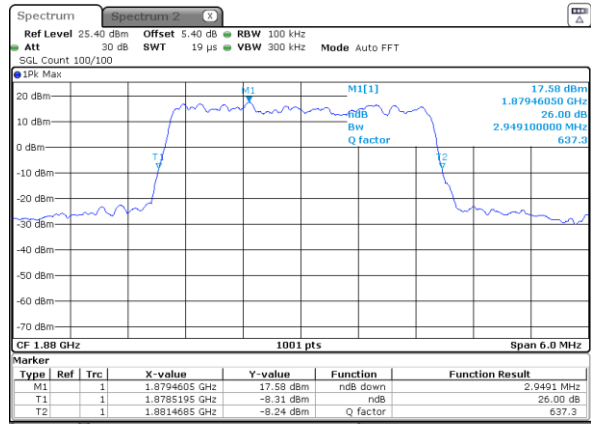
LTE Band 25

Middle Channel / 3MHz / QPSK



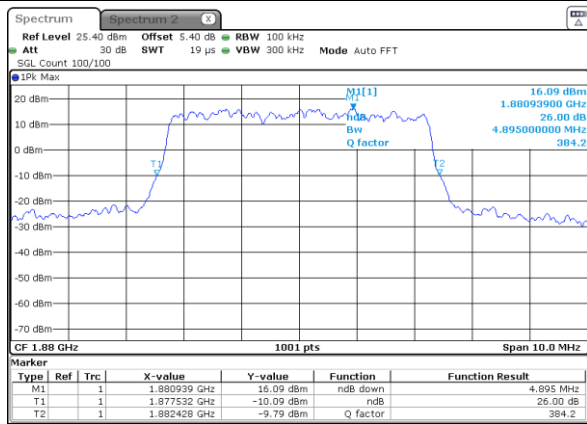
Date: 26.OCT.2022 03:08:19

Middle Channel / 3MHz / 16QAM



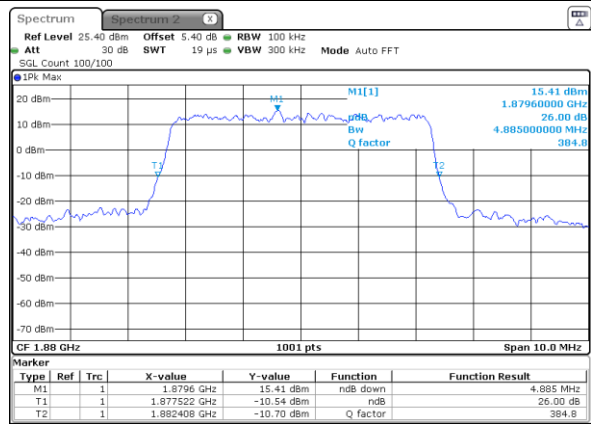
Date: 26.OCT.2022 03:08:44

Middle Channel / 5MHz / QPSK



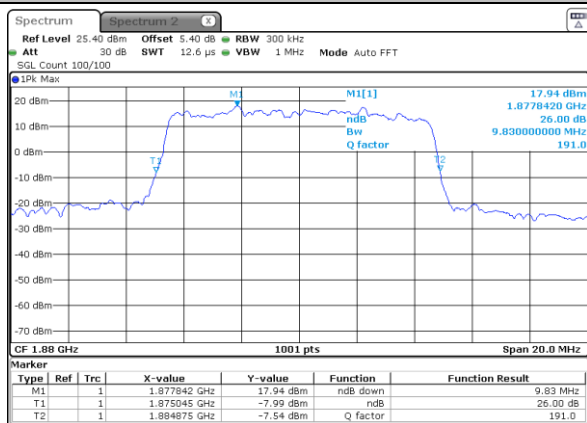
Date: 26.OCT.2022 03:09:58

Middle Channel / 5MHz / 16QAM



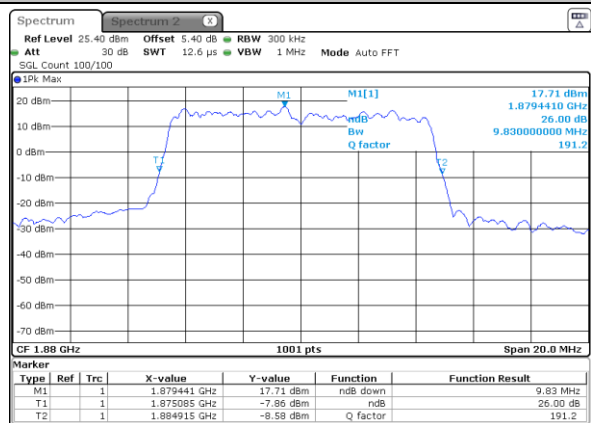
Date: 26.OCT.2022 03:10:23

Middle Channel / 10MHz / QPSK



Date: 26.OCT.2022 03:11:37

Middle Channel / 10MHz / 16QAM

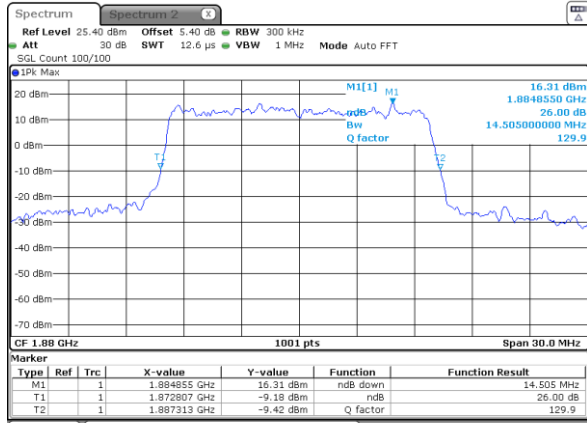


Date: 26.OCT.2022 03:12:01



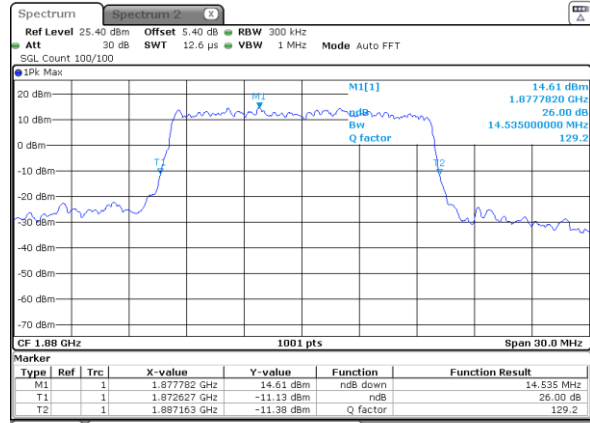
LTE Band 25

Middle Channel / 15MHz / QPSK



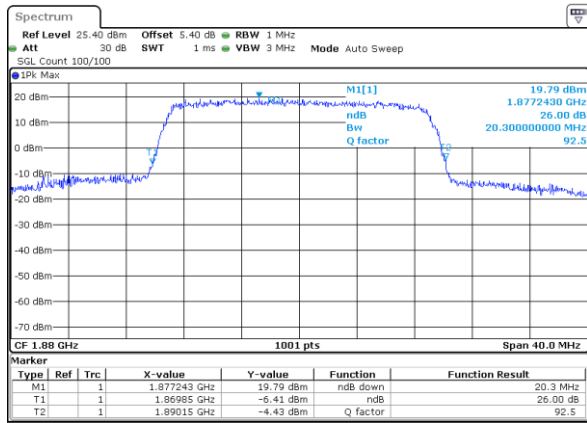
Date: 26.OCT.2022 03:13:15

Middle Channel / 15MHz / 16QAM



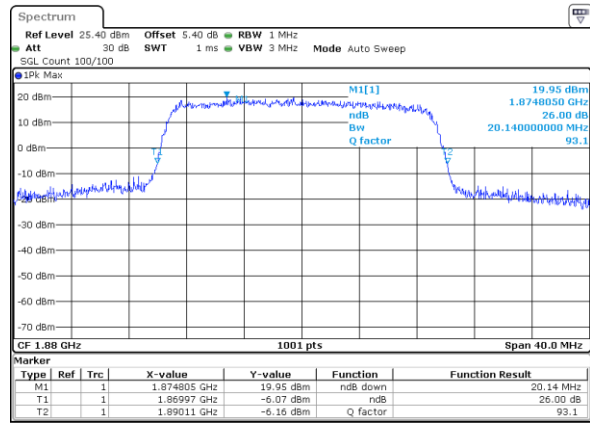
Date: 26.OCT.2022 03:13:40

Middle Channel / 20MHz / QPSK



Date: 25.OCT.2022 18:18:12

Middle Channel / 20MHz / 16QAM

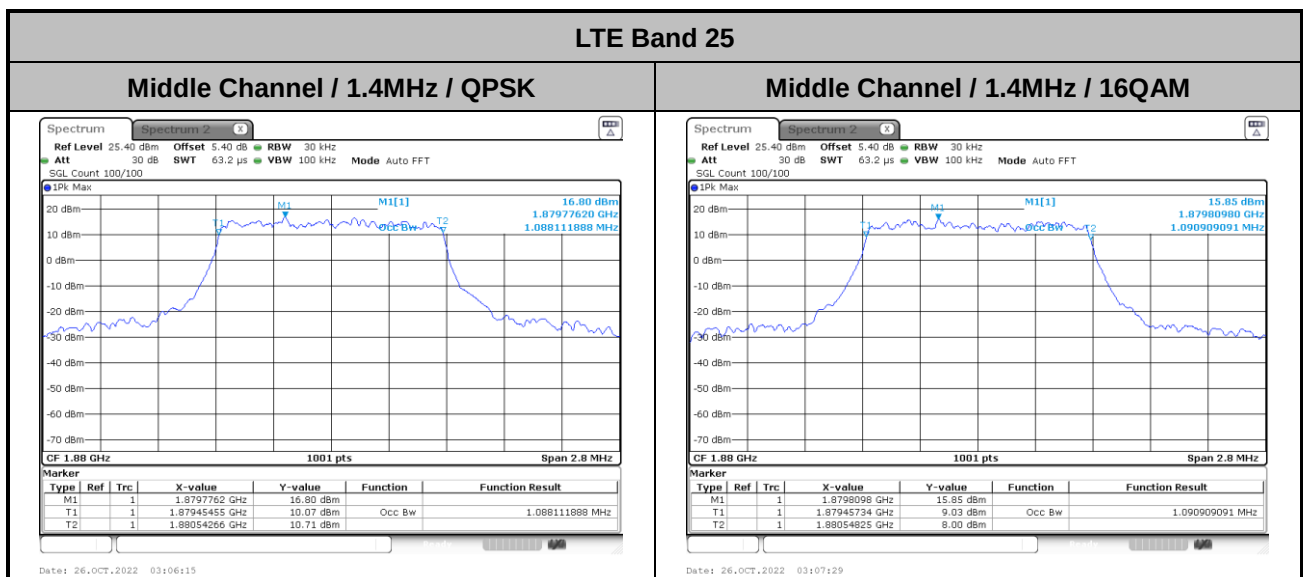


Date: 25.OCT.2022 18:30:15



Occupied Bandwidth

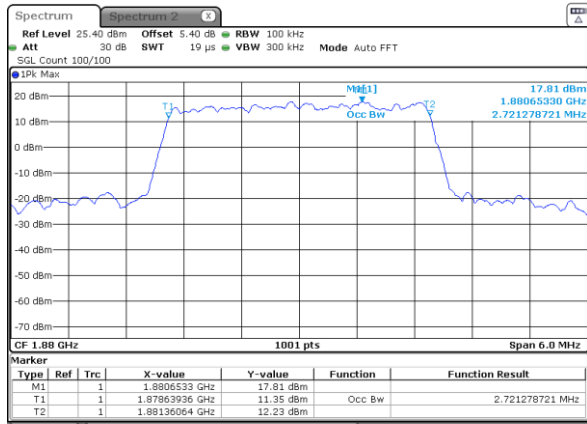
Mode	LTE Band 25 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.09
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.72	2.72
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.51	4.48
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	8.99
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.37	13.37
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.38	18.38



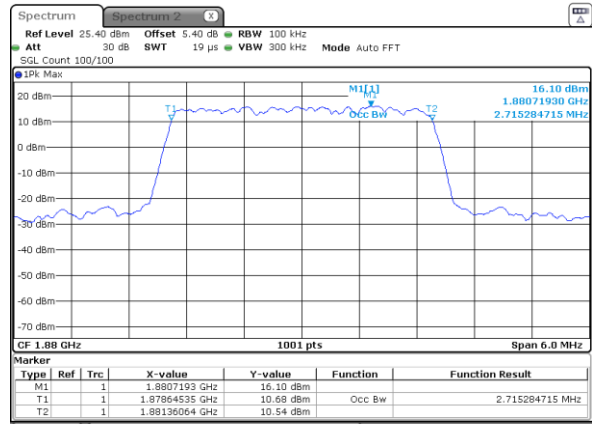


LTE Band 25

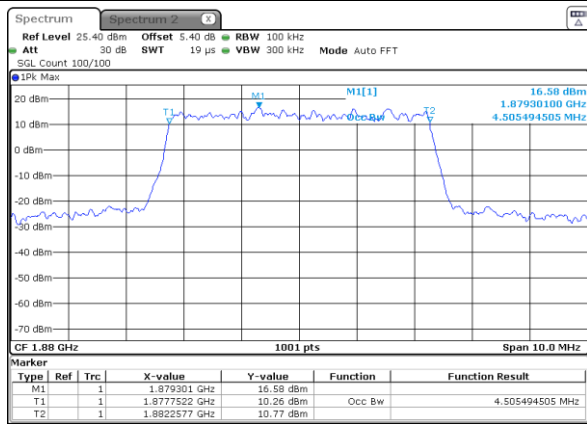
Middle Channel / 3MHz / QPSK



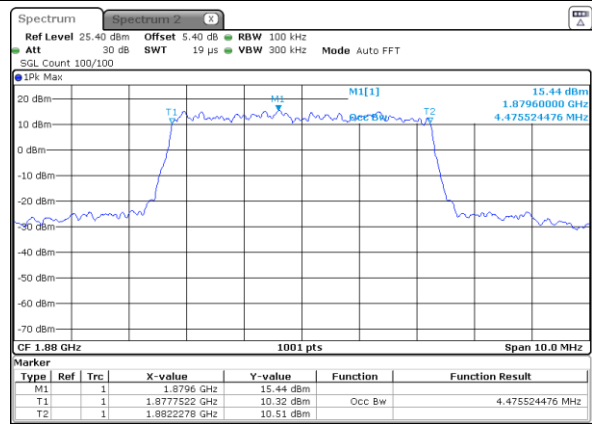
Middle Channel / 3MHz / 16QAM



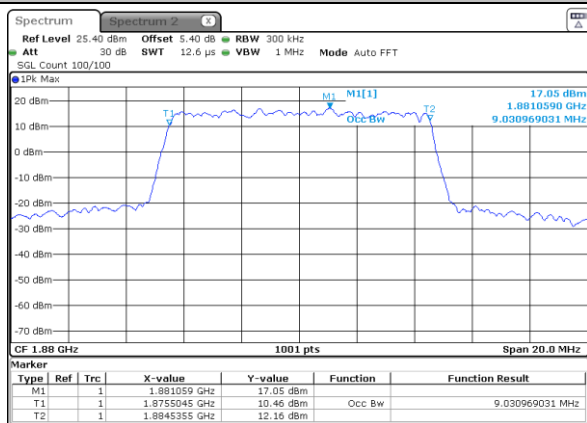
Middle Channel / 5MHz / QPSK



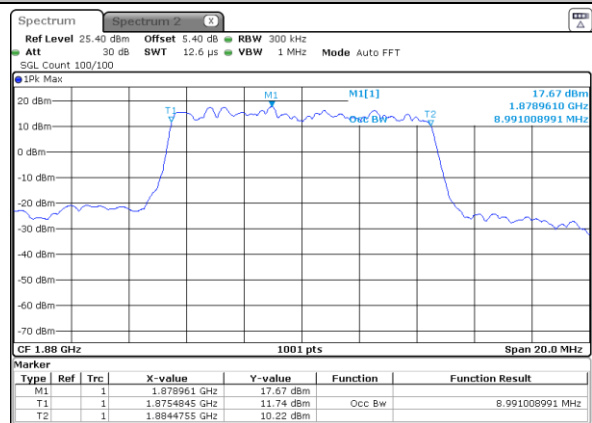
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



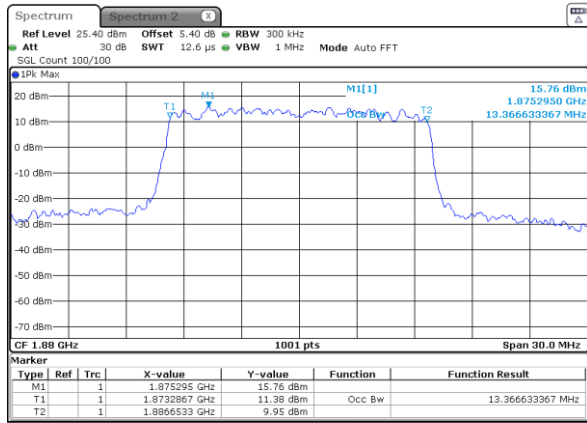
Middle Channel / 10MHz / 16QAM





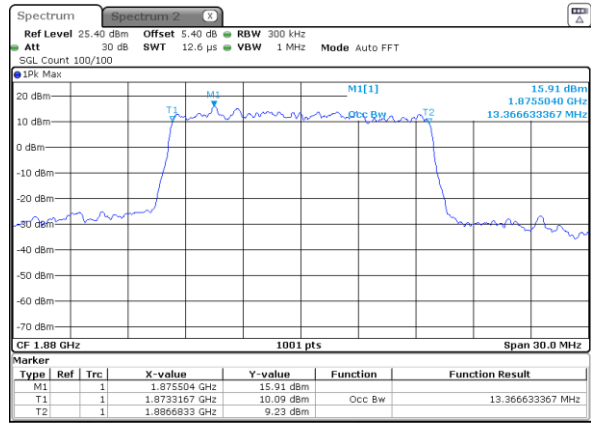
LTE Band 25

Middle Channel / 15MHz / QPSK



Date: 26.OCT.2022 03:12:51

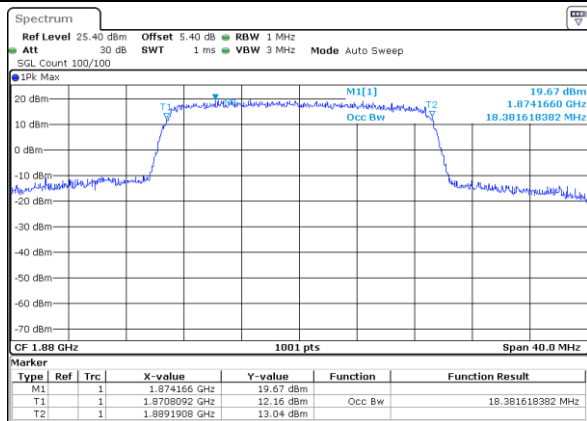
Middle Channel / 15MHz / 16QAM



Date: 26.OCT.2022 03:14:04

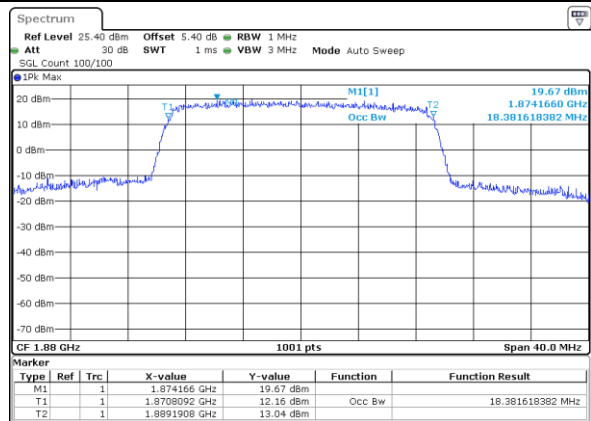
LTE Band 25

Middle Channel / 20MHz / QPSK



Date: 25.OCT.2022 18:17:47

Middle Channel / 20MHz / 16QAM



Date: 25.OCT.2022 18:17:47