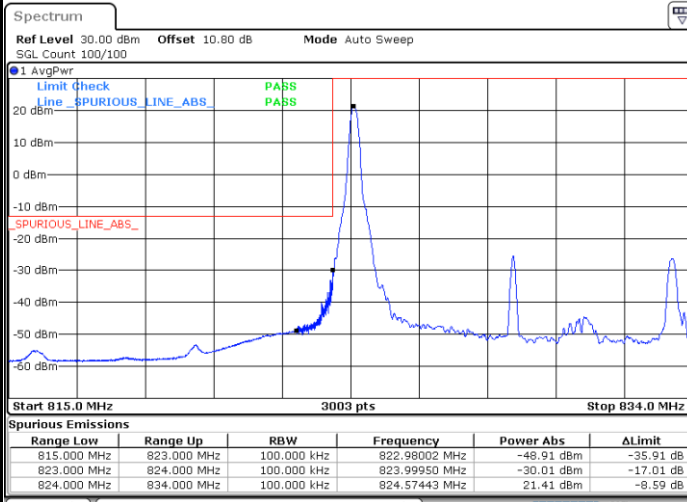




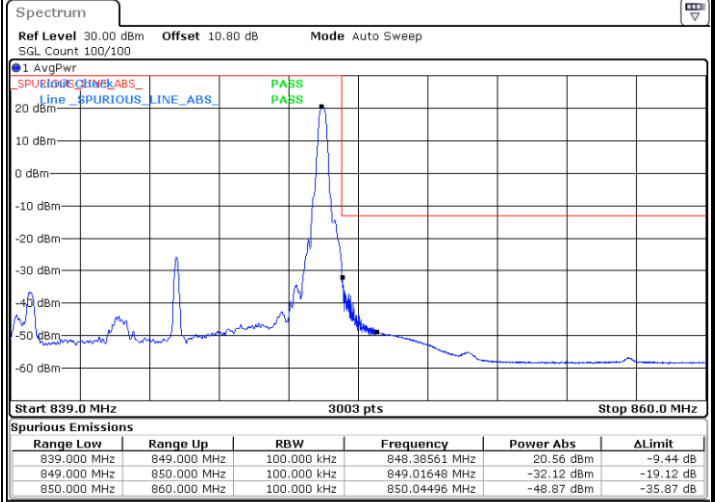
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



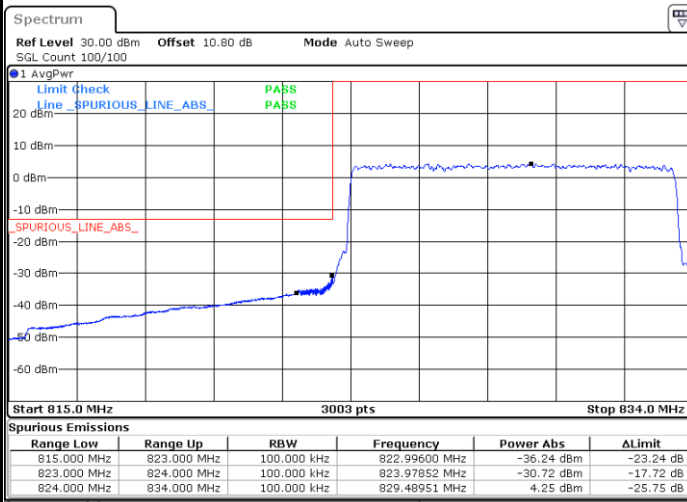
Date: 30.OCT.2021 06:33:44

Highest Band Edge / 1 RB



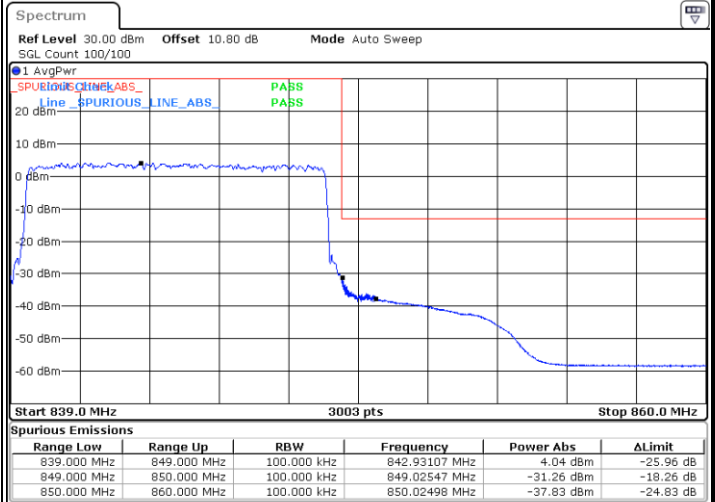
Date: 30.OCT.2021 06:42:21

Lowest Band Edge / Full RB



Date: 30.OCT.2021 06:37:26

Highest Band Edge / Full RB



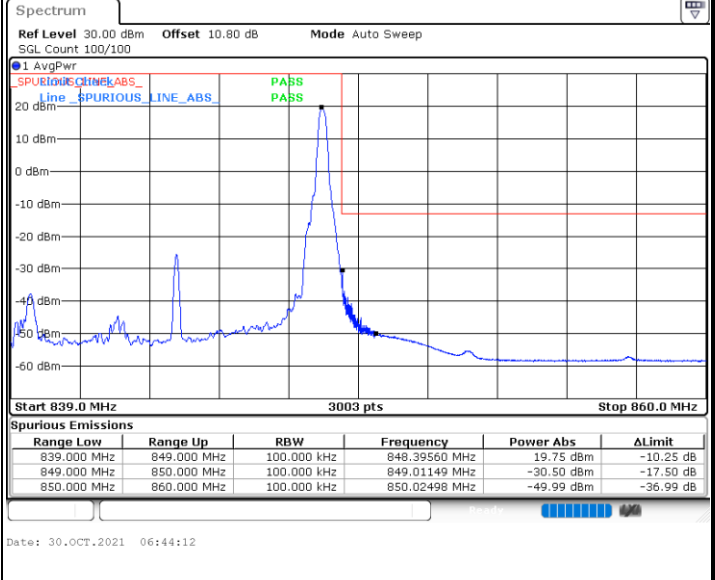
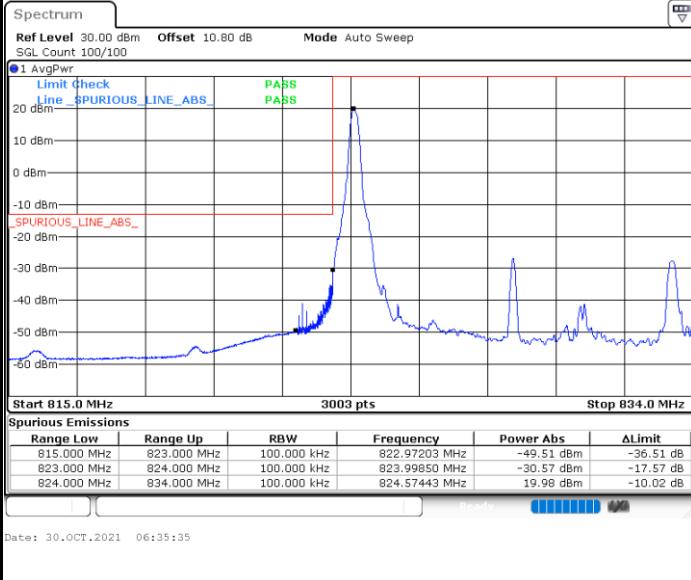
Date: 30.OCT.2021 06:46:03



LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



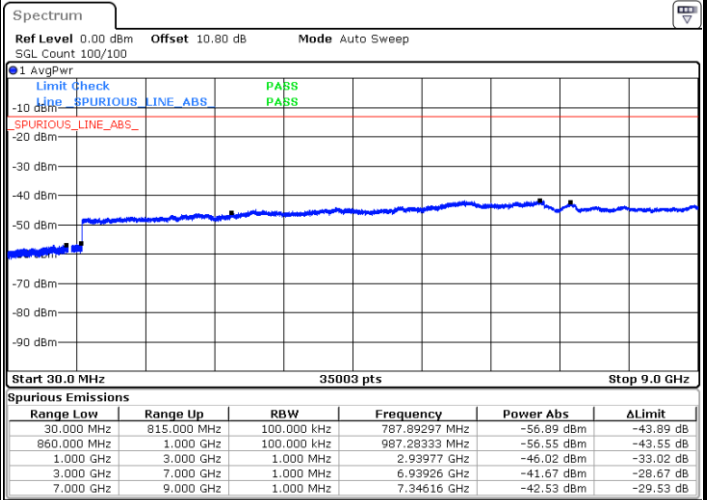
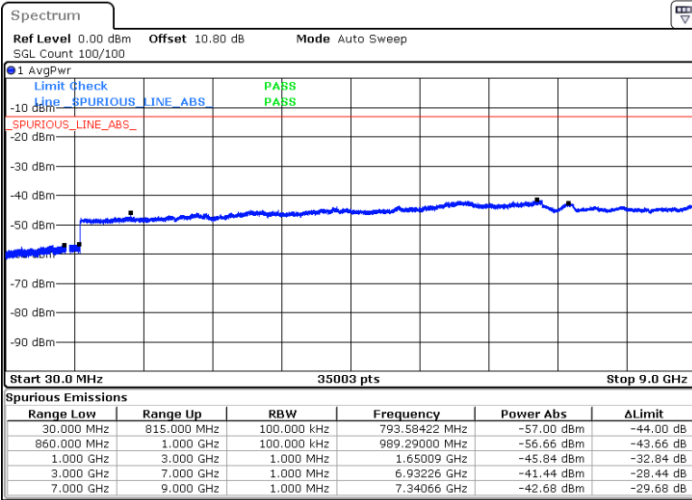


Conducted Spurious Emission

LTE Band 5 / 1.4MHz

Lowest Channel / QPSK

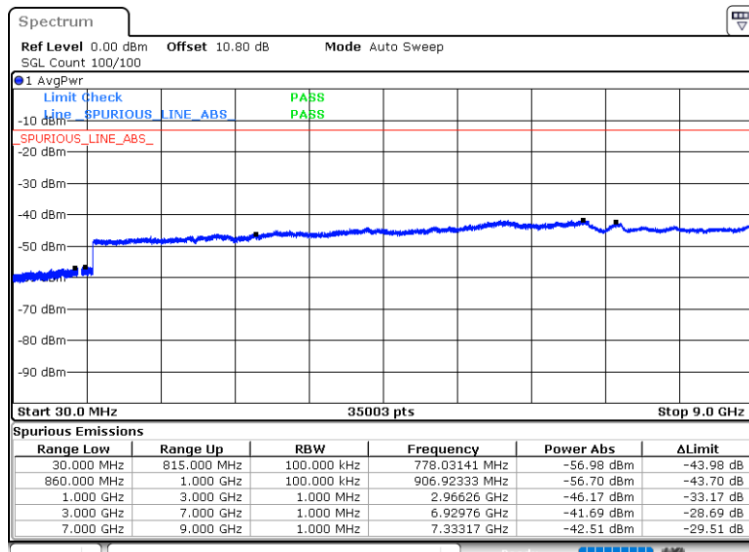
Middle Channel / QPSK



Date: 30.OCT.2021 05:41:11

Date: 30.OCT.2021 05:43:46

Highest Channel / QPSK



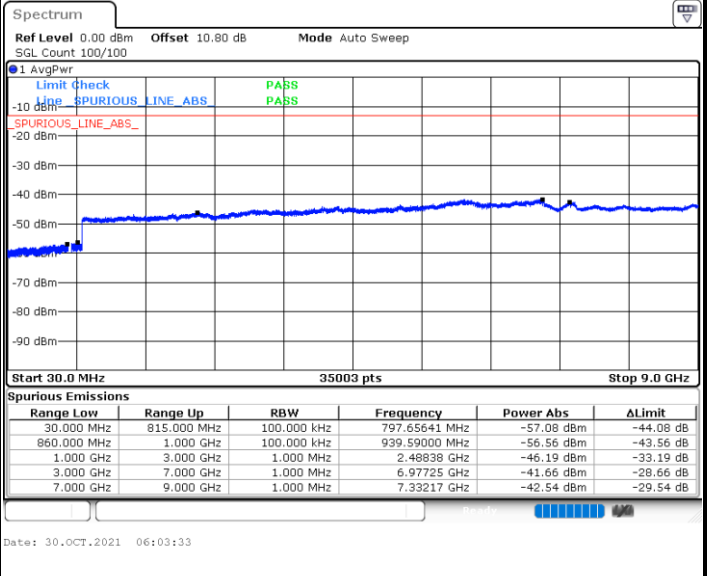
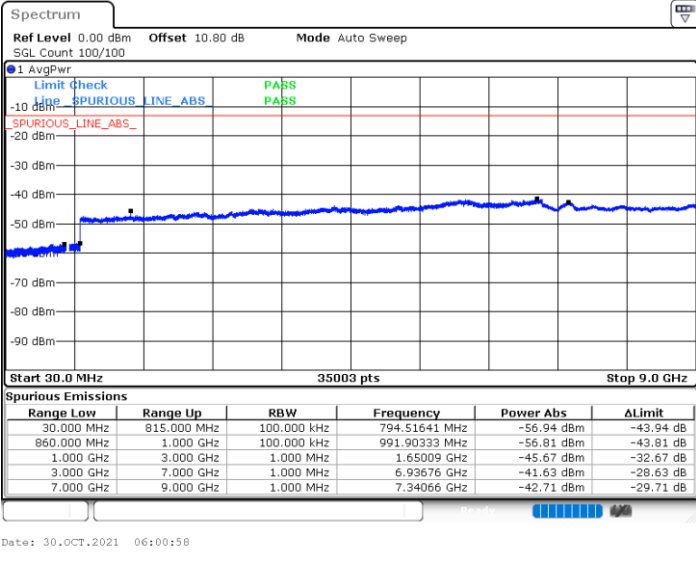
Date: 30.OCT.2021 05:52:21



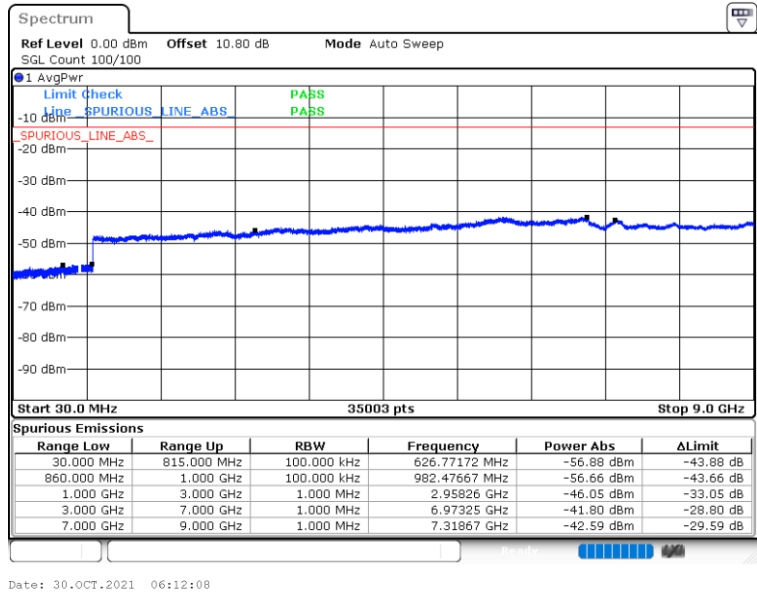
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

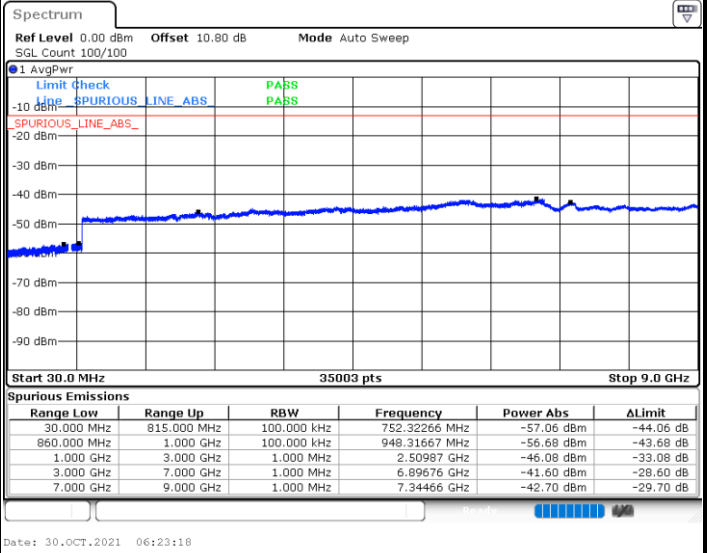
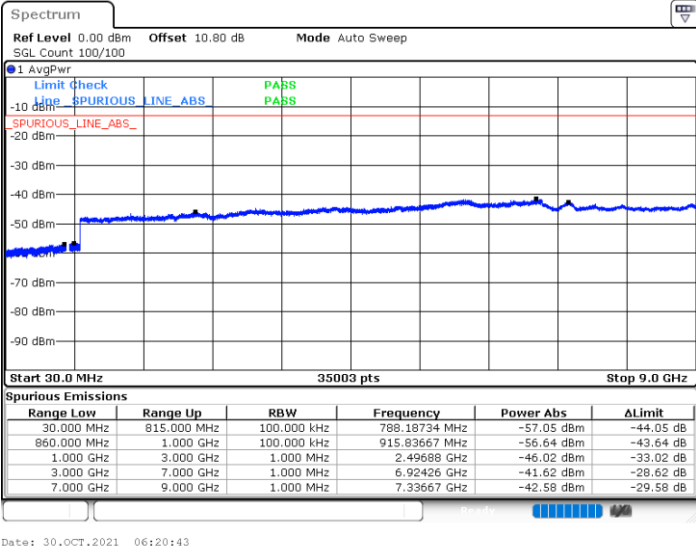




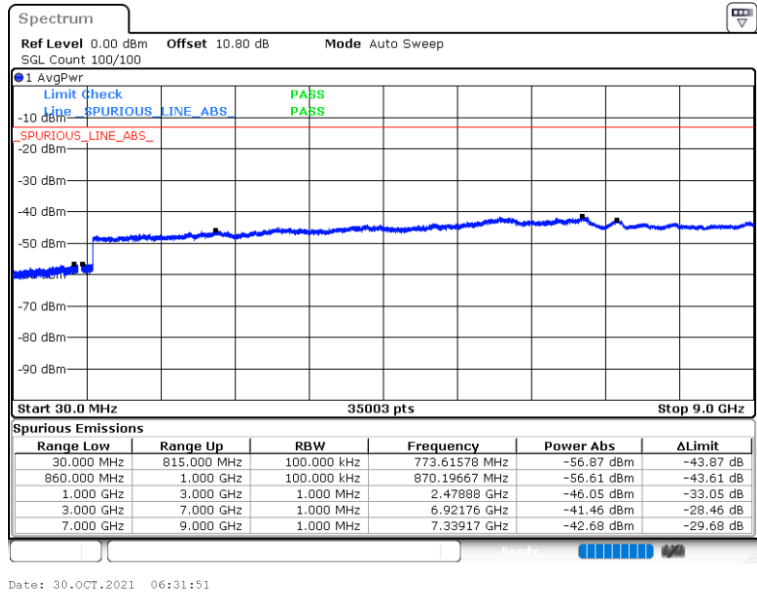
LTE Band 5 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

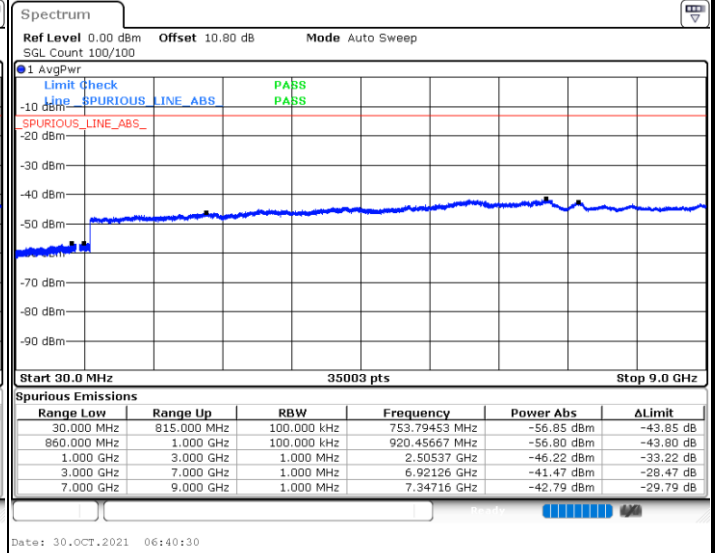
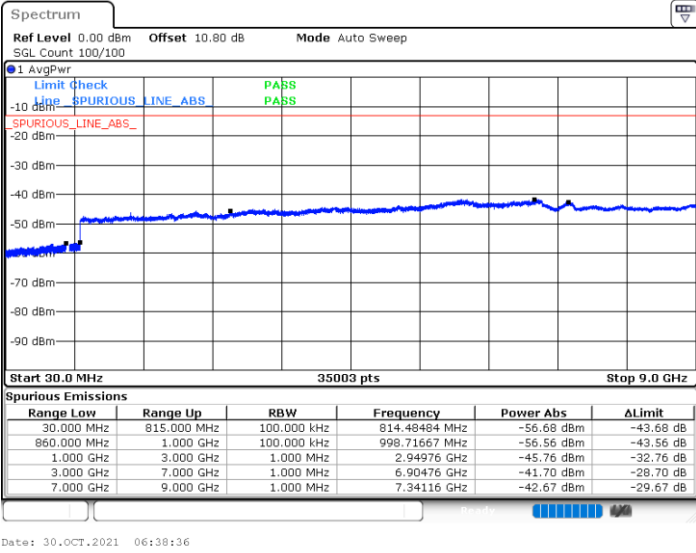




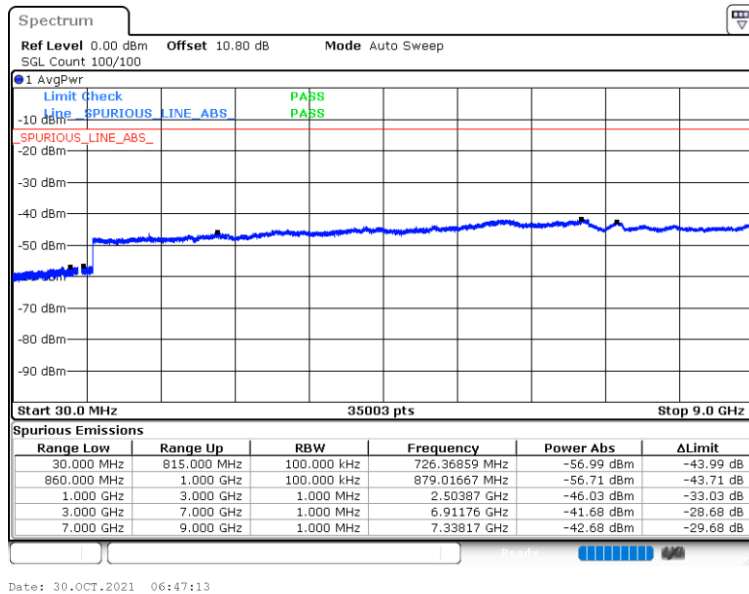
LTE Band 5 / 10MHz

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	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0115	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0154	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0085	
0	Normal Voltage	0.0048	
-10	Normal Voltage	0.0118	
-20	Normal Voltage	0.0088	
-30	Normal Voltage	0.0066	
20	Maximum Voltage	0.0032	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0030	

Note:

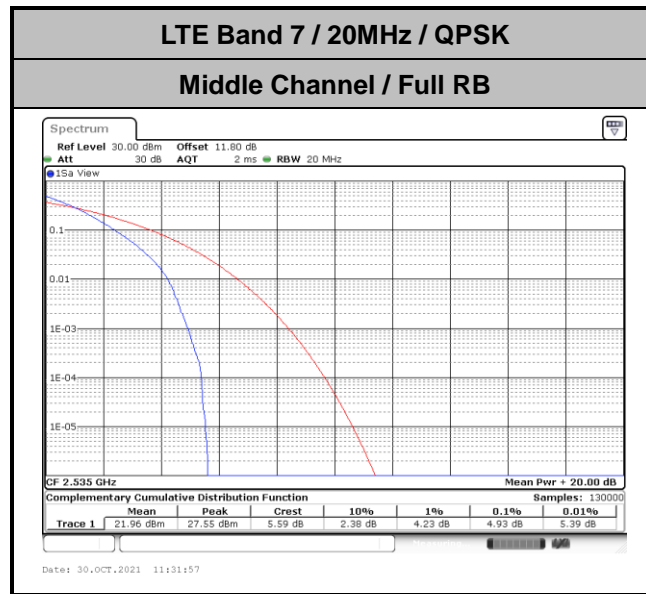
- 1. Normal Voltage =12.00 V. ; Battery End Point (BEP) =8.00 V. ; Maximum Voltage =40.00 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7

Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz	
Mod.	QPSK	Limit: 13dB
RB Size	Full RB	Result
Middle CH	4.93	PASS





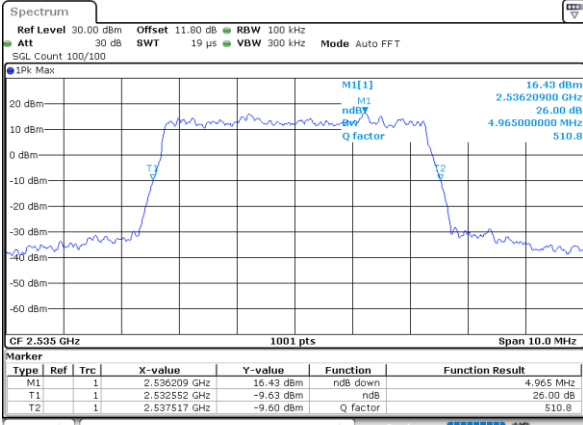
26dB Bandwidth

Mode	LTE Band 7 : 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	-	-	-	-	4.97	4.99	9.69	-	14.45	-	18.82	-
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	-	-	-	-	-	-	-	-



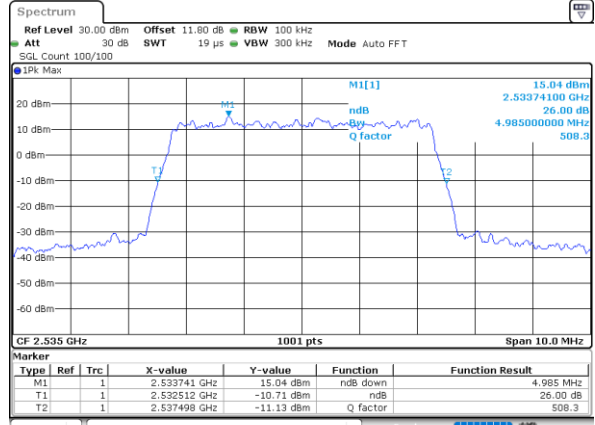
LTE Band 7

Middle Channel / 5MHz / QPSK



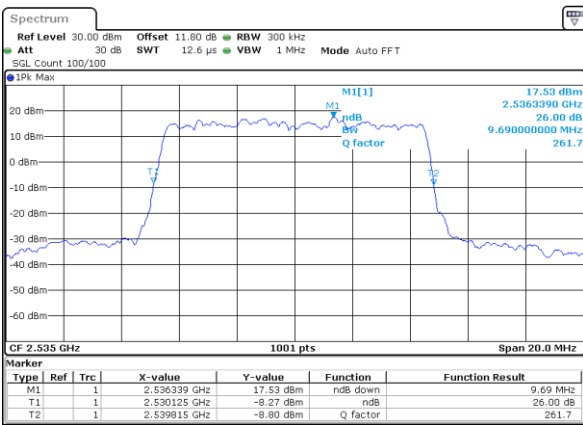
Date: 30.OCT.2021 10:59:33

Middle Channel / 5MHz / 16QAM



Date: 30.OCT.2021 10:59:54

Middle Channel / 10MHz / QPSK

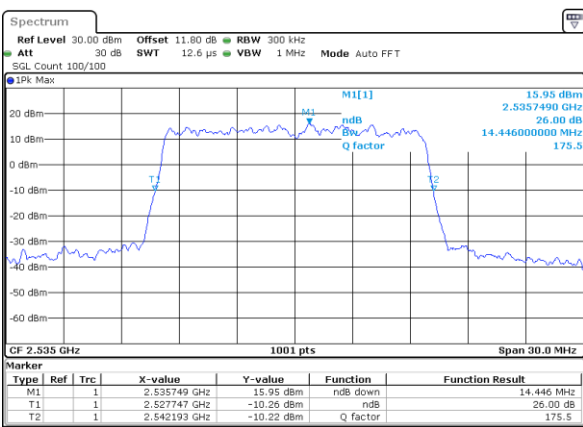


Date: 30.OCT.2021 11:09:31

Middle Channel / 10MHz / 16QAM

N/A

Middle Channel / 15MHz / QPSK



Date: 30.OCT.2021 11:18:19

Middle Channel / 15MHz / 16QAM

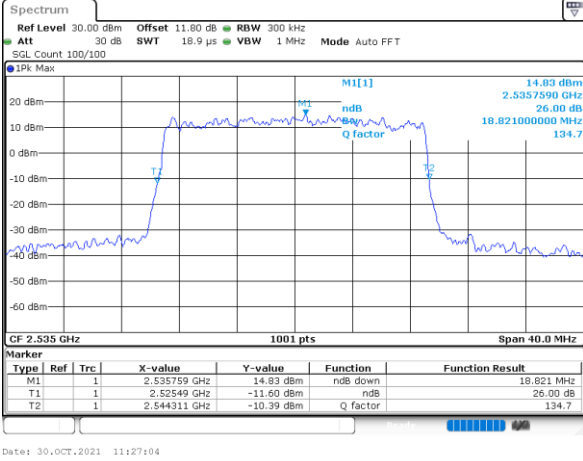
N/A



LTE Band 7

Middle Channel / 20MHz / QPSK

Middle Channel / 20MHz / 16QAM



N/A



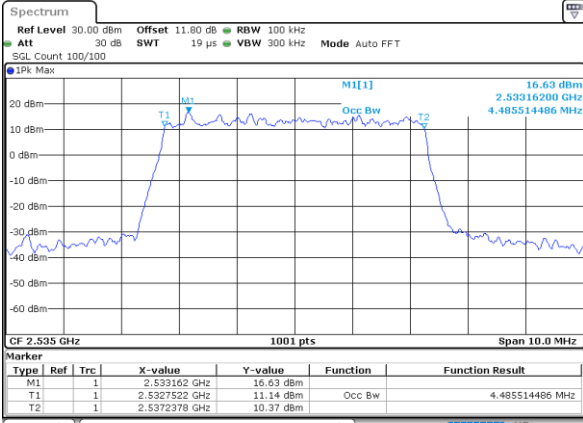
Occupied Bandwidth

Mode	LTE Band 7 : 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	9.01	-	13.37	-	17.82	-
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	-	-	-	-	-	-	-	-



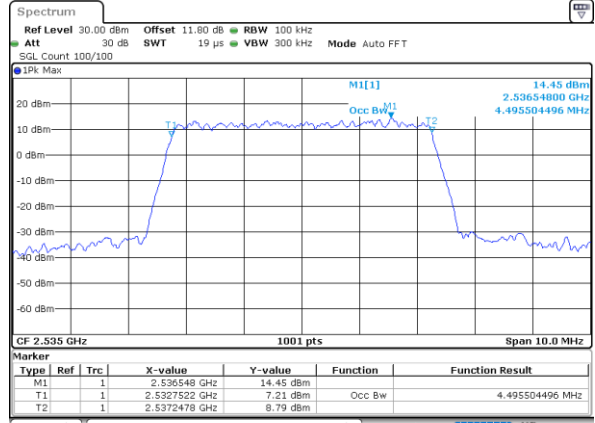
LTE Band 7

Middle Channel / 5MHz / QPSK



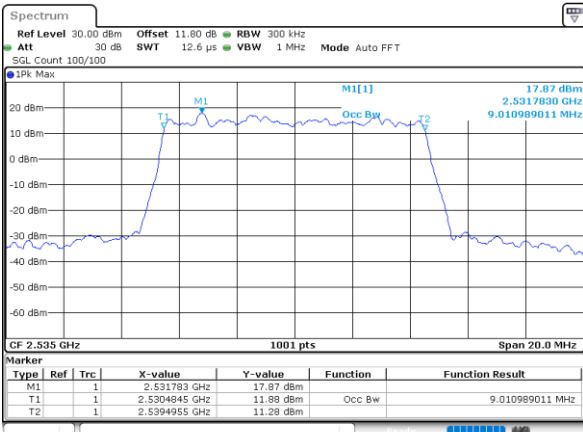
Date: 30.OCT.2021 10:58:51

Middle Channel / 5MHz / 16QAM



Date: 30.OCT.2021 10:59:12

Middle Channel / 10MHz / QPSK

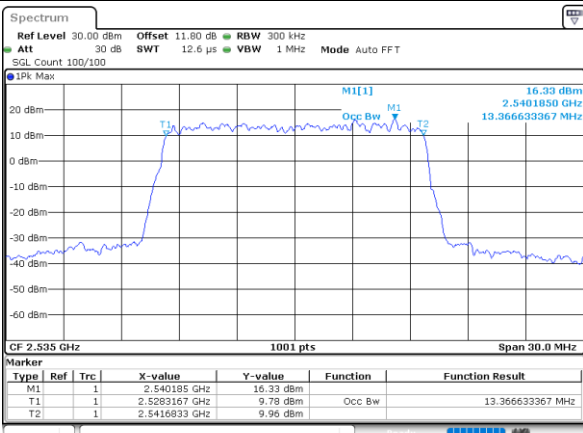


Date: 30.OCT.2021 11:09:11

Middle Channel / 10MHz / 16QAM

N/A

Middle Channel / 15MHz / QPSK



Date: 30.OCT.2021 11:17:58

Middle Channel / 15MHz / 16QAM

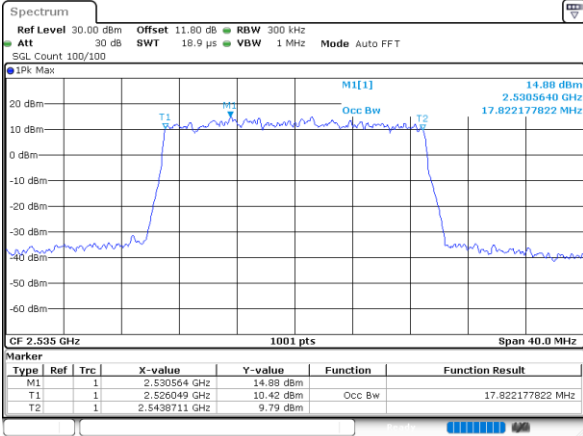
N/A



LTE Band 7

Middle Channel / 20MHz / QPSK

Middle Channel / 20MHz / 16QAM



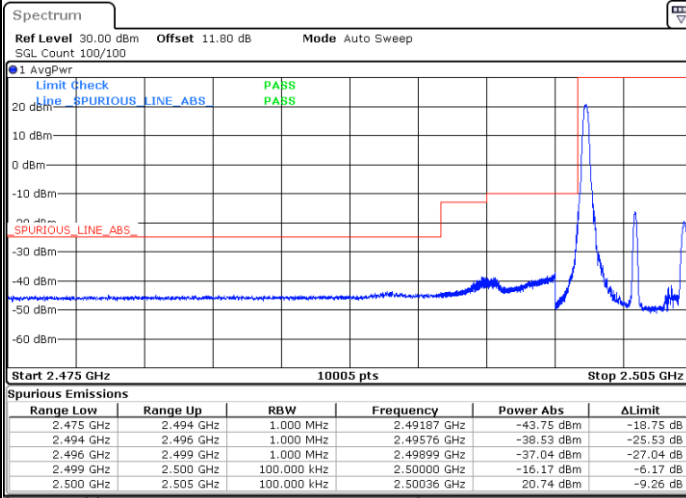
N/A



Conducted Band Edge

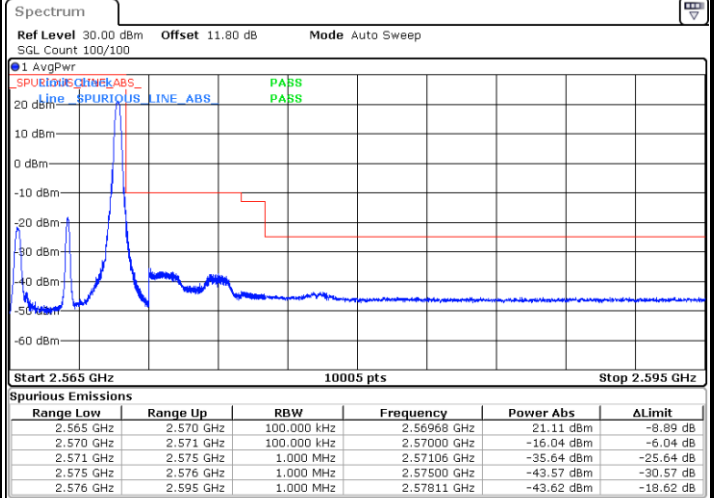
LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



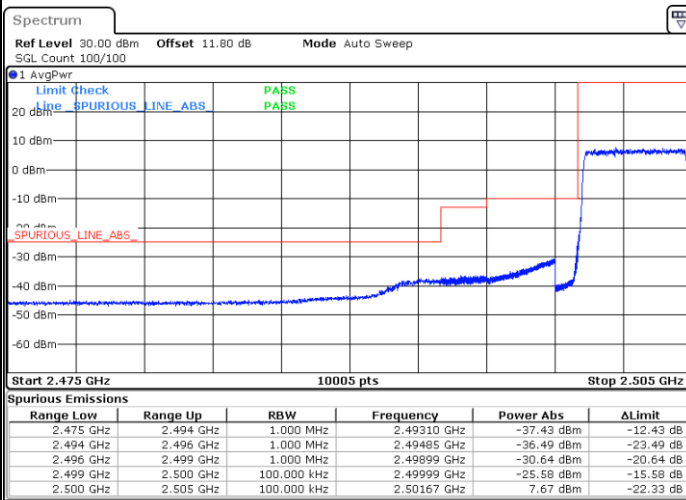
Date: 30.OCT.2021 10:54:54

Highest Band Edge / 1 RB



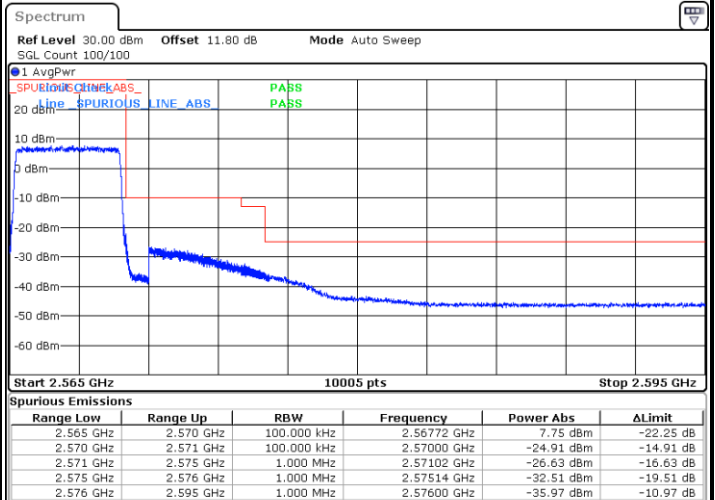
Date: 30.OCT.2021 11:01:44

Lowest Band Edge / Full RB



Date: 30.OCT.2021 10:56:38

Highest Band Edge / Full RB

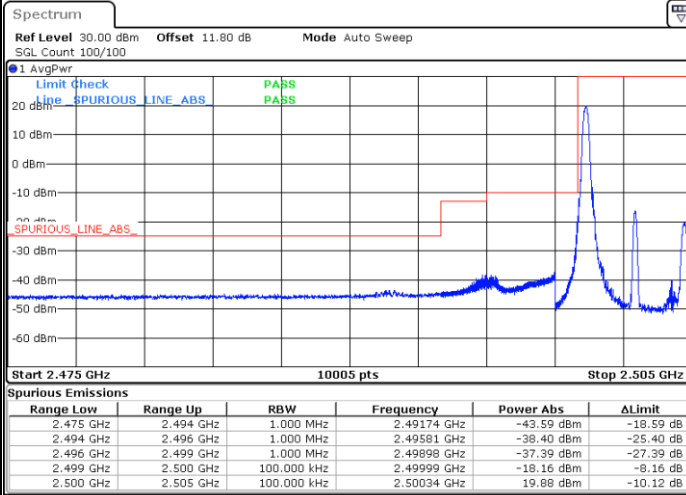


Date: 30.OCT.2021 11:03:26



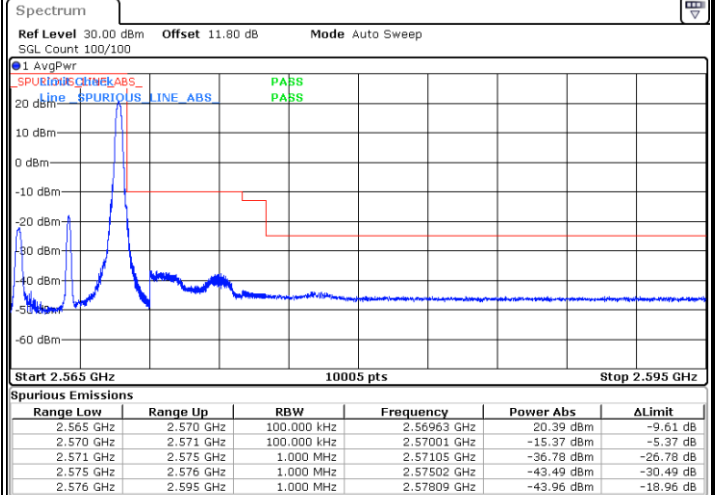
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



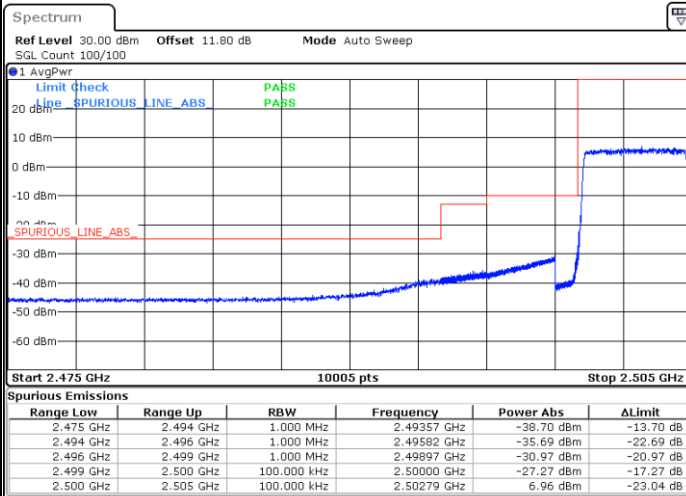
Date: 30.OCT.2021 10:55:46

Highest Band Edge / 1 RB



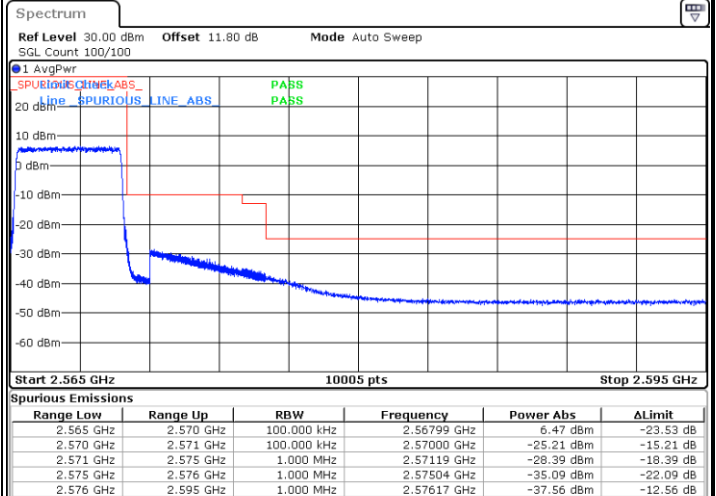
Date: 30.OCT.2021 11:02:35

Lowest Band Edge / Full RB



Date: 30.OCT.2021 10:57:29

Highest Band Edge / Full RB

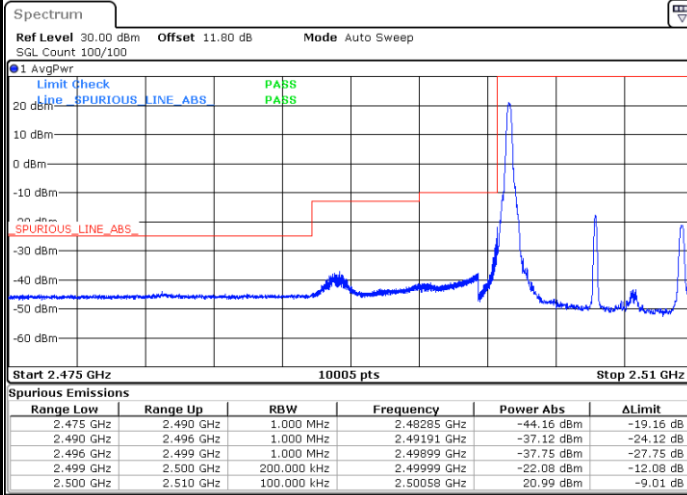


Date: 30.OCT.2021 11:04:16



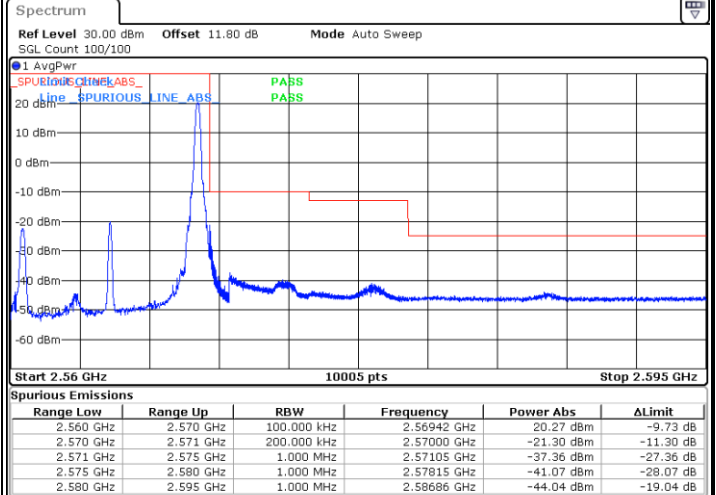
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB



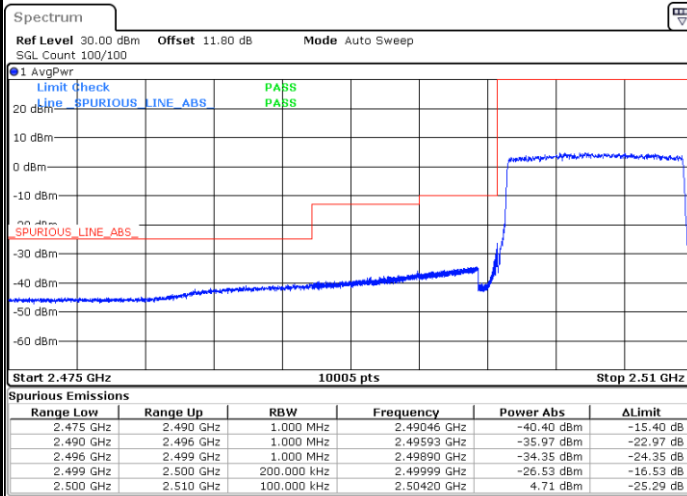
Date: 30.OCT.2021 11:06:08

Highest Band Edge / 1 RB



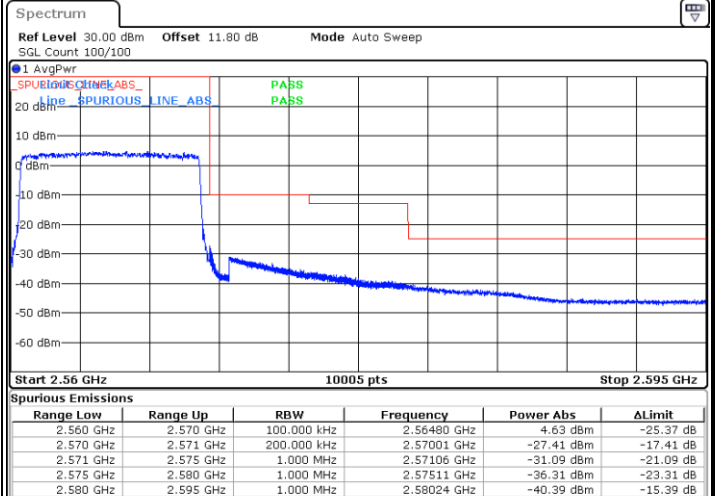
Date: 30.OCT.2021 11:11:21

Lowest Band Edge / Full RB



Date: 30.OCT.2021 11:07:49

Highest Band Edge / Full RB



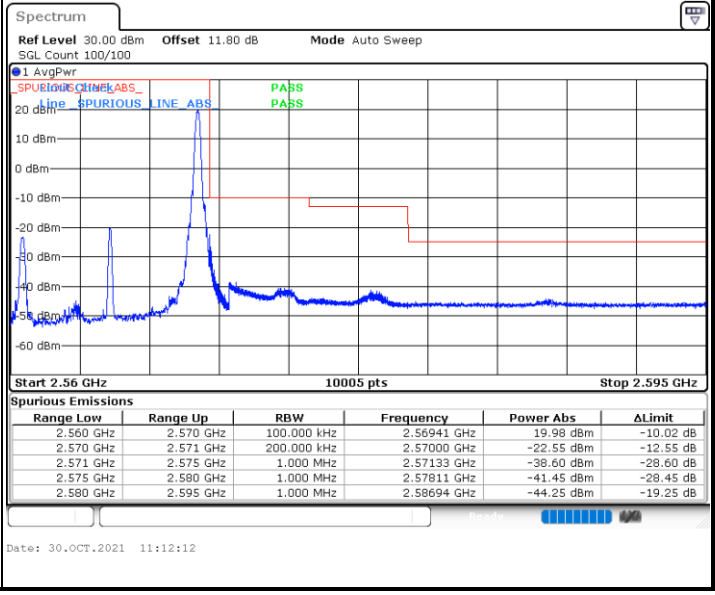
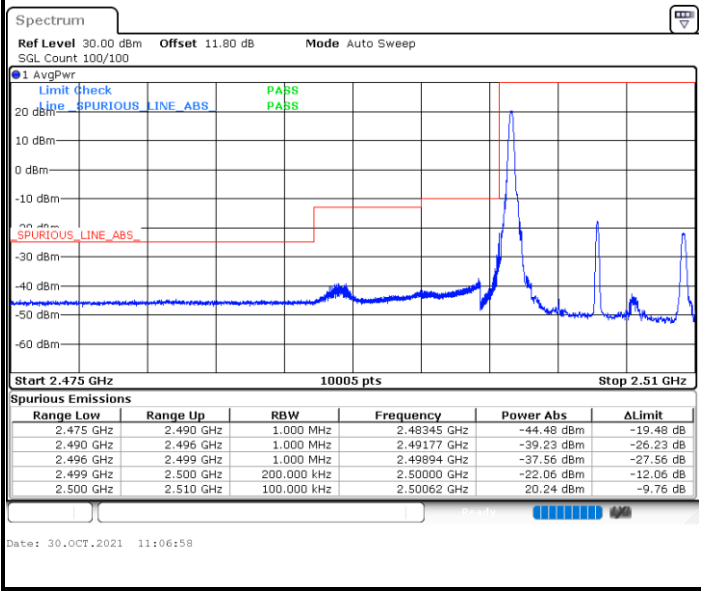
Date: 30.OCT.2021 11:13:02



LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

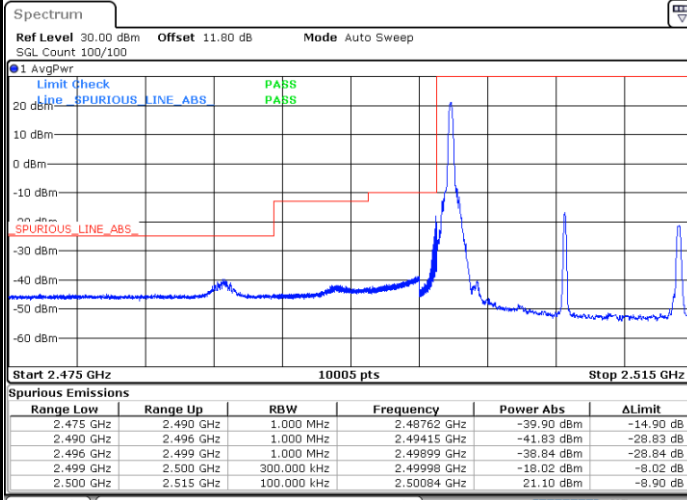
Highest Band Edge / 1 RB





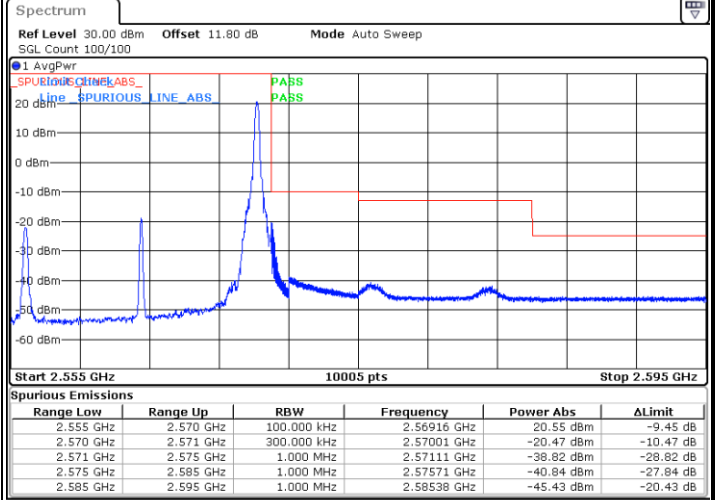
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



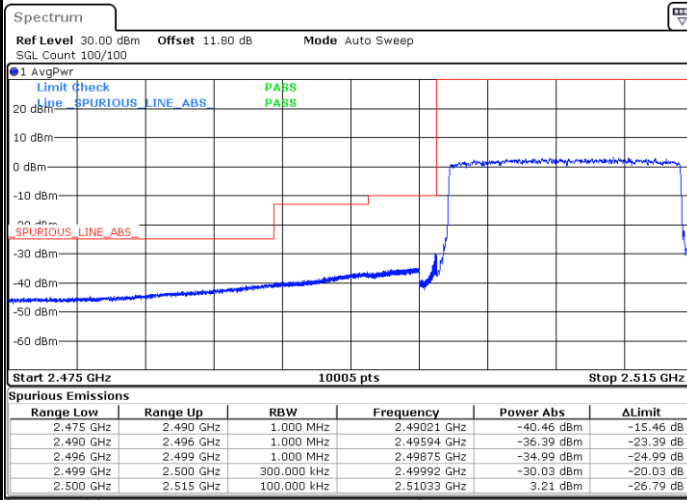
Date: 30.OCT.2021 11:14:55

Highest Band Edge / 1 RB



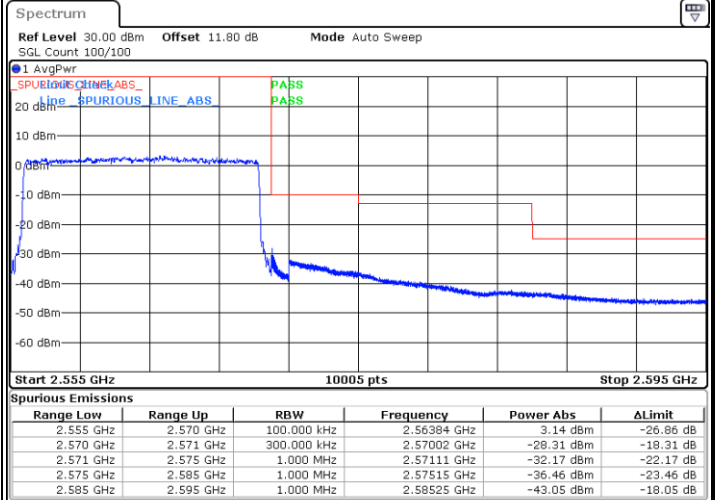
Date: 30.OCT.2021 11:20:08

Lowest Band Edge / Full RB



Date: 30.OCT.2021 11:16:37

Highest Band Edge / Full RB



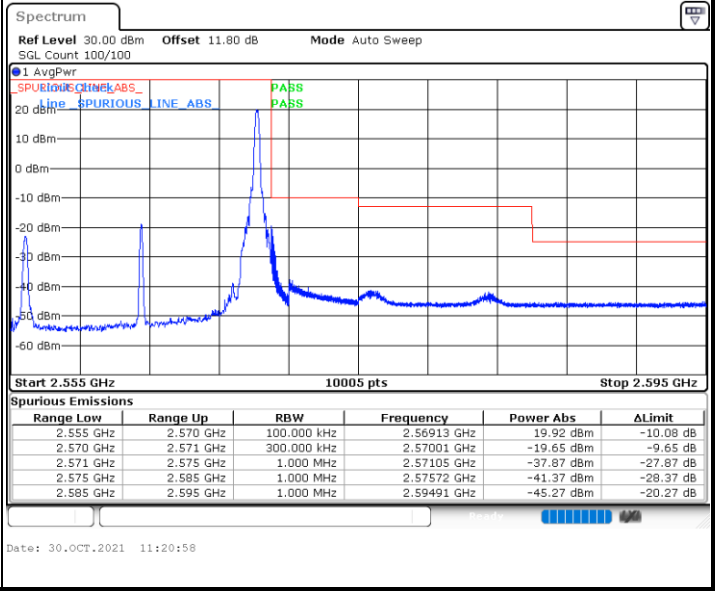
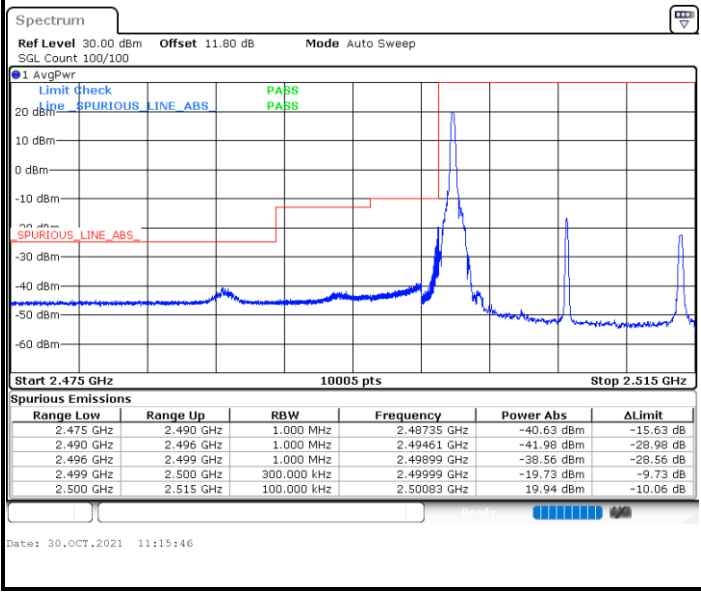
Date: 30.OCT.2021 11:21:49



LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB

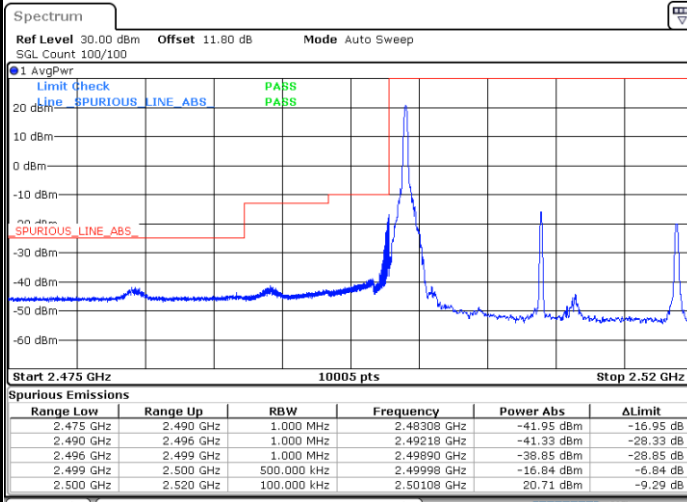
Highest Band Edge / 1 RB





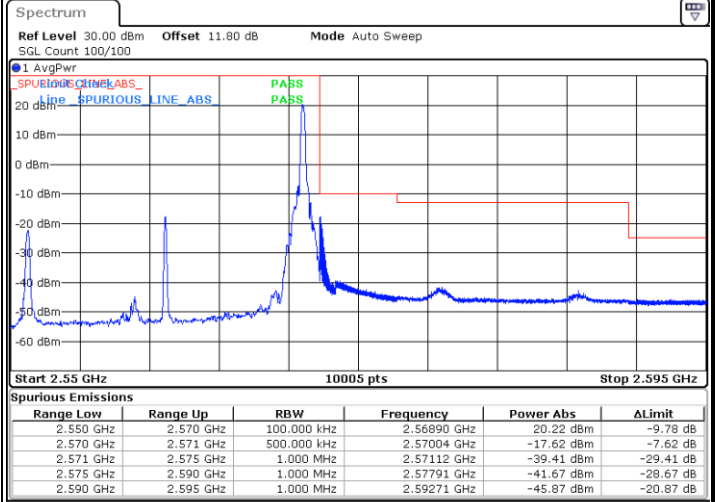
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



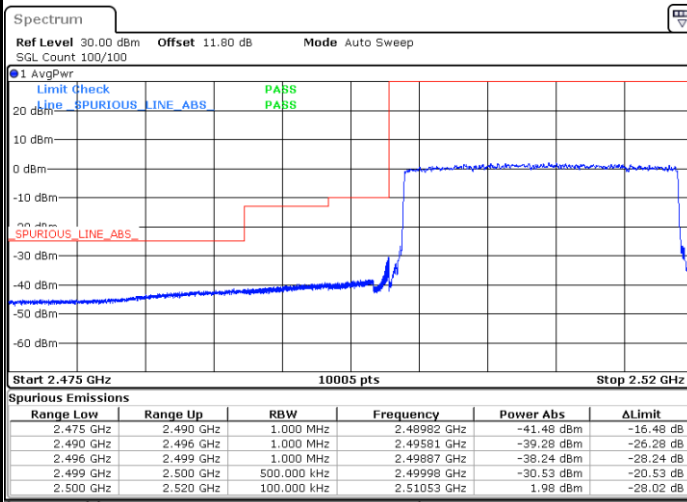
Date: 30.OCT.2021 11:23:41

Highest Band Edge / 1 RB



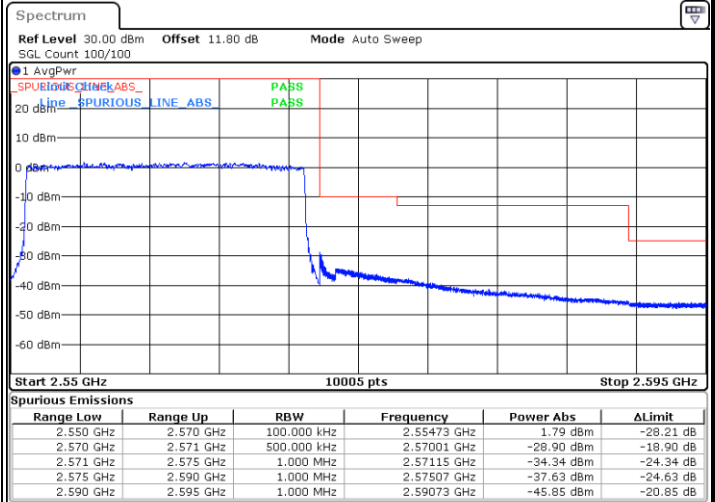
Date: 30.OCT.2021 11:28:53

Lowest Band Edge / Full RB



Date: 30.OCT.2021 11:25:22

Highest Band Edge / Full RB



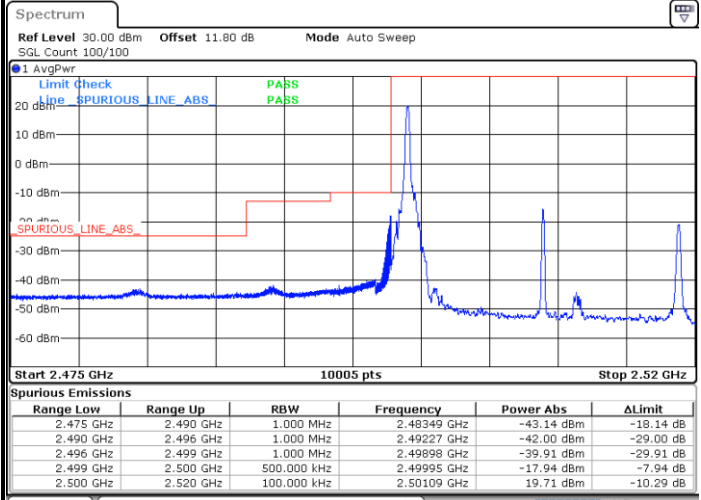
Date: 30.OCT.2021 11:30:35



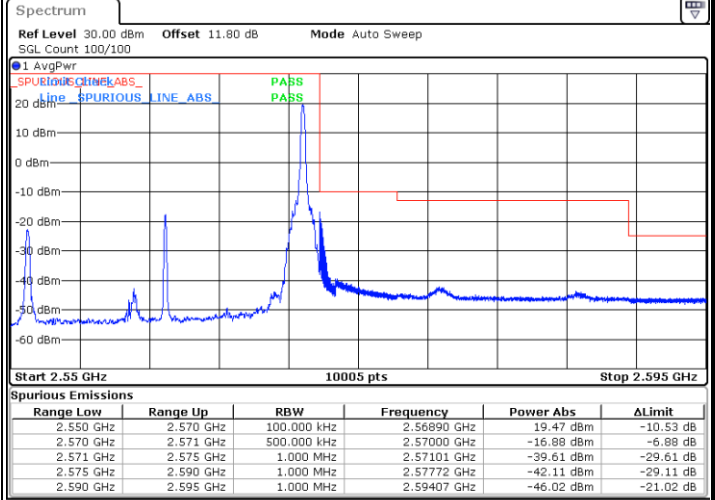
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Date: 30.OCT.2021 11:24:31



Date: 30.OCT.2021 11:29:44

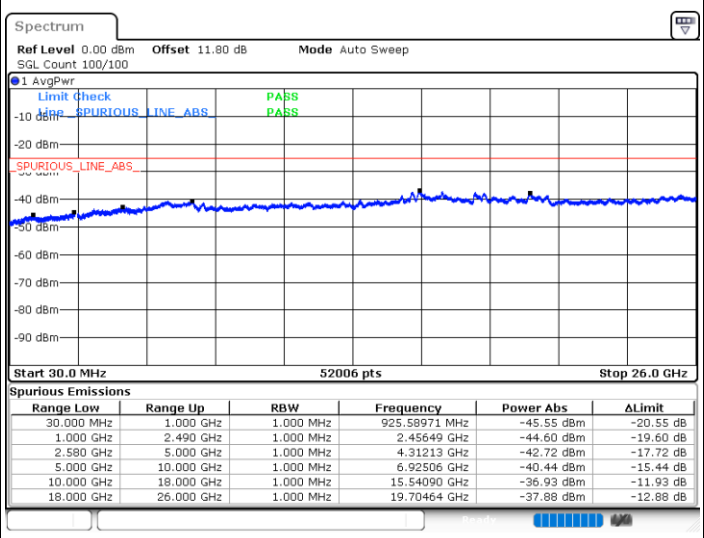
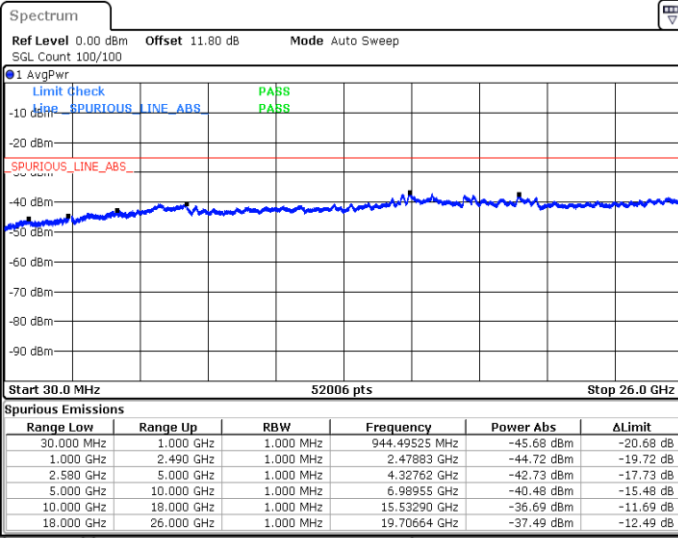


Conducted Spurious Emission

LTE Band 7 / 5MHz

Lowest Channel / QPSK

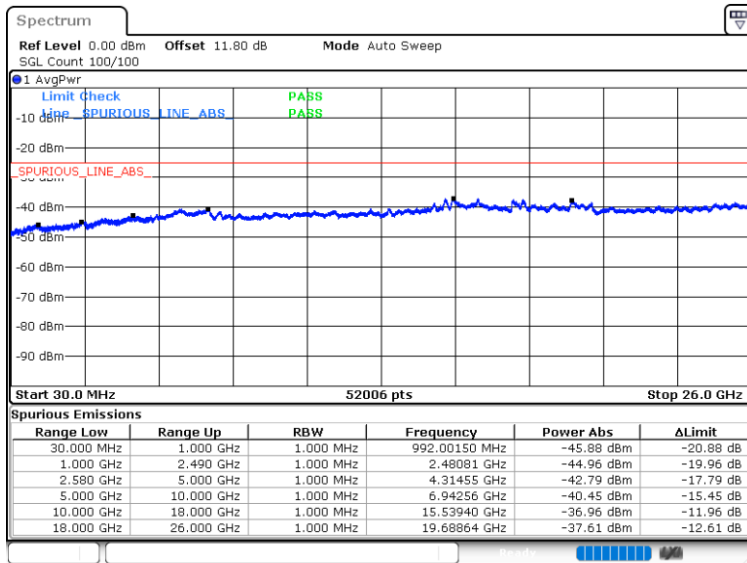
Middle Channel / QPSK



Date: 1.NOV.2021 13:15:49

Date: 1.NOV.2021 13:17:00

Highest Channel / QPSK



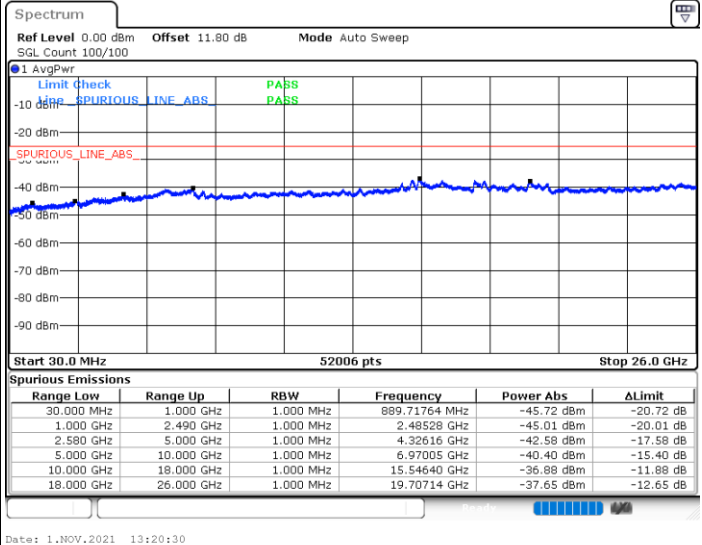
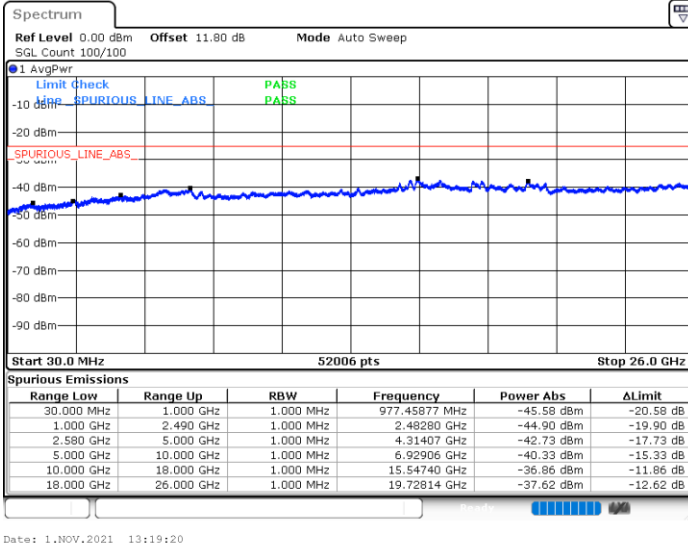
Date: 1.NOV.2021 13:18:09



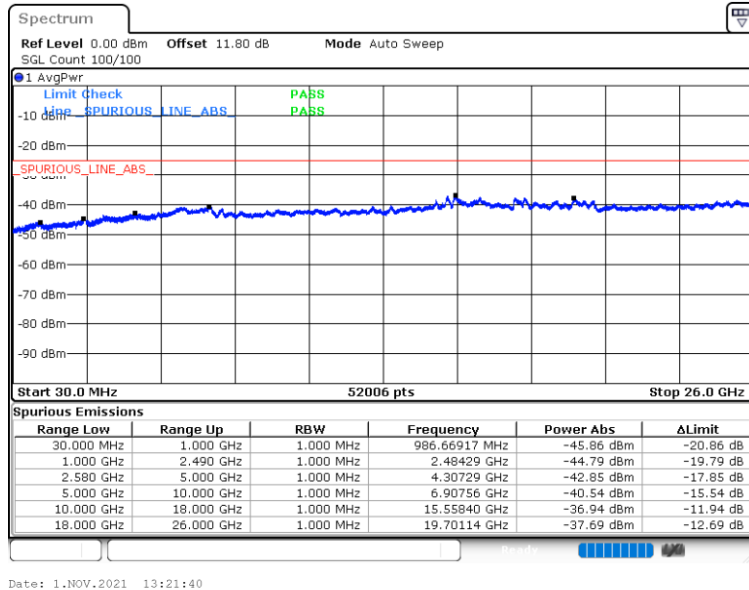
LTE Band 7 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

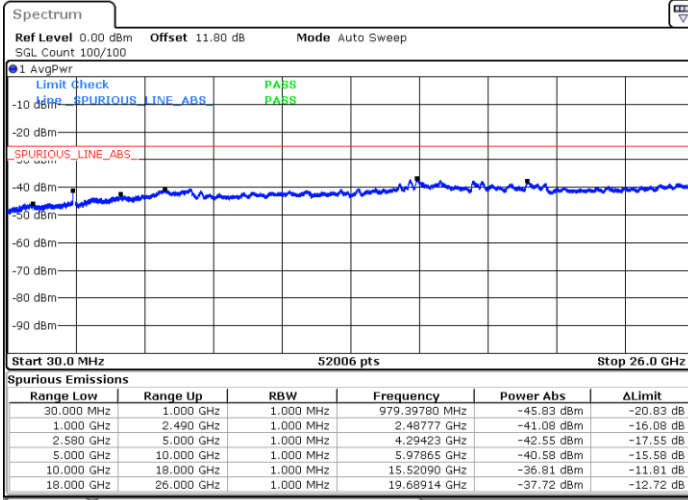




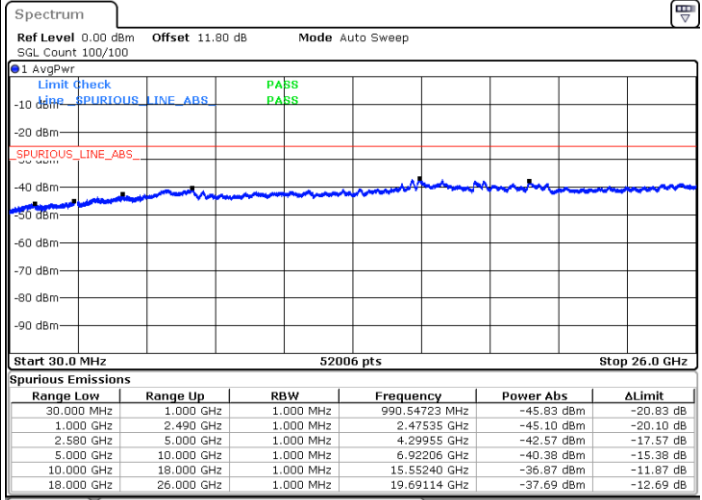
LTE Band 7 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK

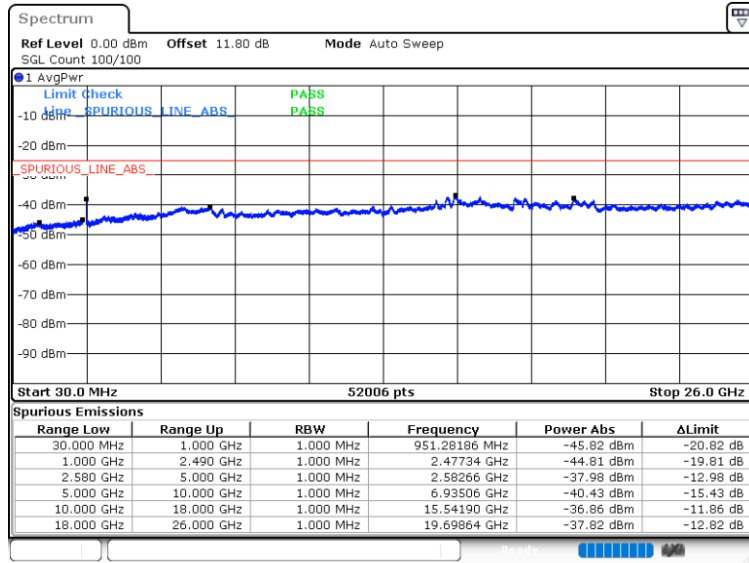


Date: 1.NOV.2021 13:22:51



Date: 1.NOV.2021 13:24:01

Highest Channel / QPSK



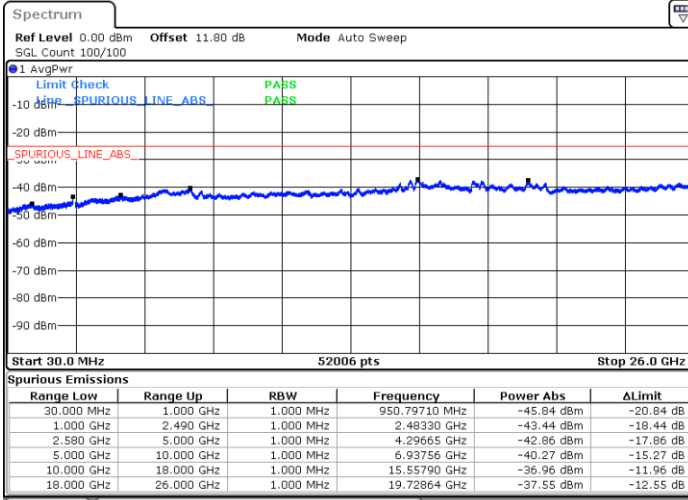
Date: 1.NOV.2021 13:25:12



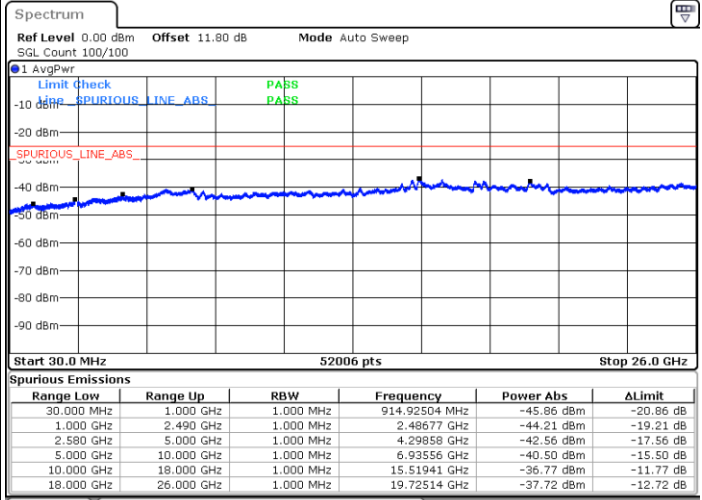
LTE Band 7 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK

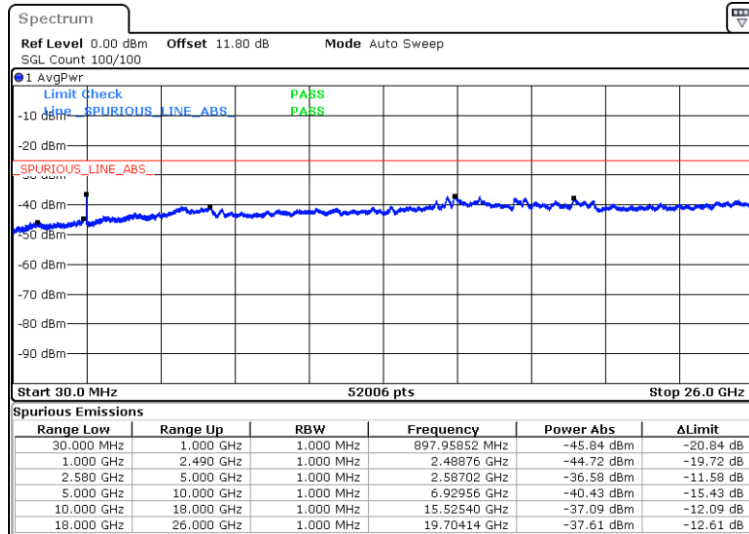


Date: 1.NOV.2021 13:26:23



Date: 1.NOV.2021 13:27:33

Highest Channel / QPSK



Date: 1.NOV.2021 13:28:42



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	0.0032	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0032	
-20	Normal Voltage	0.0034	
-30	Normal Voltage	0.0032	
20	Maximum Voltage	0.0031	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

Note:

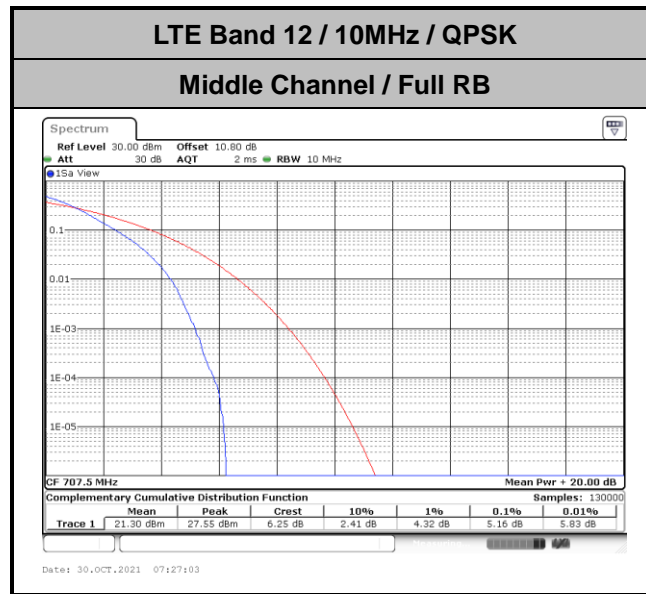
1. Normal Voltage =12.00 V. ; Battery End Point (BEP) =8.00 V. ; Maximum Voltage =40.00 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz	
Mod.	QPSK	Limit: 13dB
RB Size	Full RB	Result
Middle CH	5.16	PASS





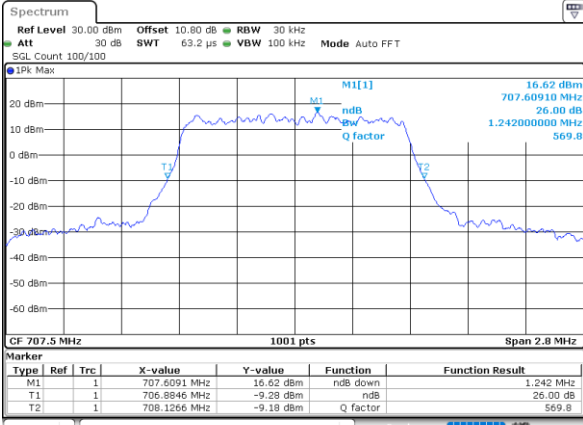
26dB Bandwidth

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	1.24	1.27	2.99	3.01	4.98	4.98	9.79	-	-	-	-	-
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	-	-	-	-	-	-	-	-



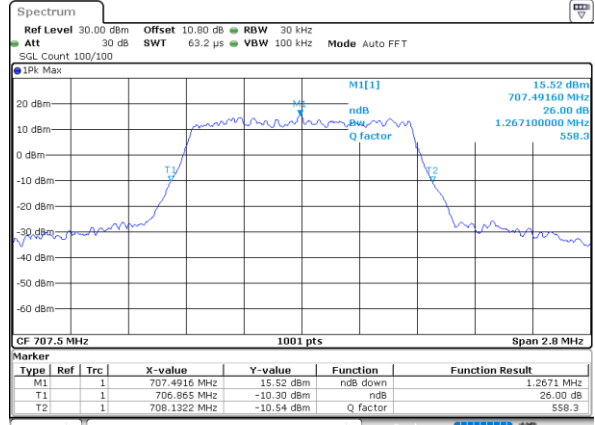
LTE Band 12

Middle Channel / 1.4MHz / QPSK



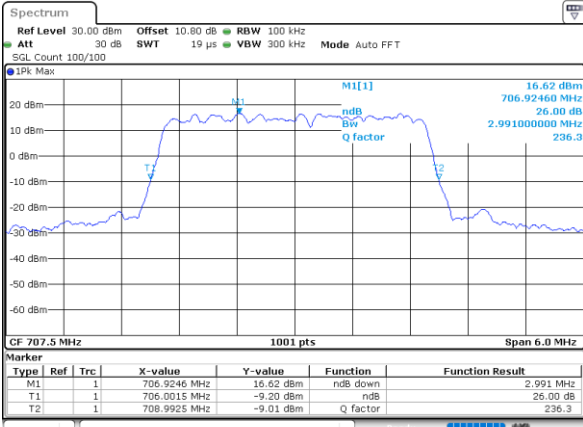
Date: 30.OCT.2021 06:55:29

Middle Channel / 1.4MHz / 16QAM



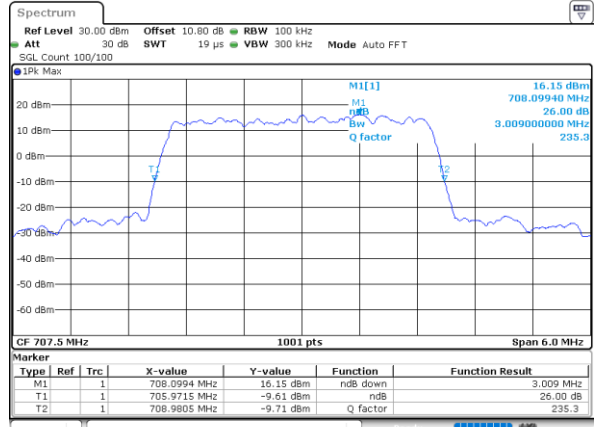
Date: 30.OCT.2021 06:55:50

Middle Channel / 3MHz / QPSK



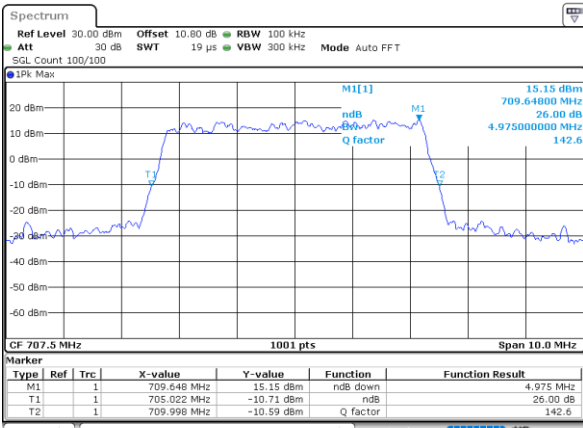
Date: 30.OCT.2021 07:04:57

Middle Channel / 3MHz / 16QAM



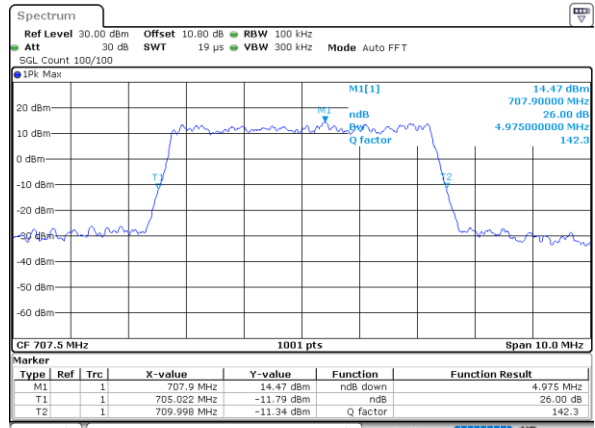
Date: 30.OCT.2021 07:05:18

Middle Channel / 5MHz / QPSK

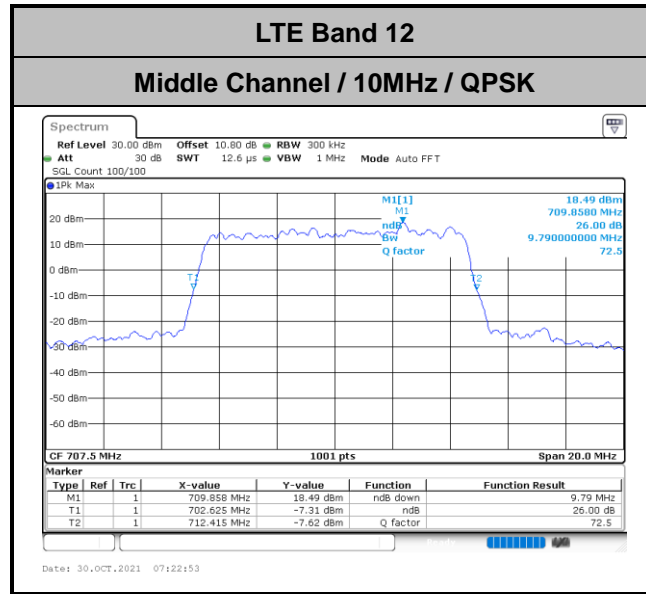


Date: 30.OCT.2021 07:14:26

Middle Channel / 5MHz / 16QAM



Date: 30.OCT.2021 07:14:47





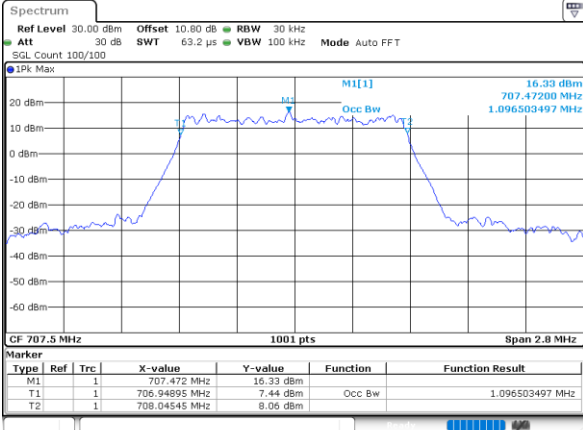
Occupied Bandwidth

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	1.10	1.09	2.70	2.72	4.49	4.50	8.95	-	-	-	-	-
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	-	-	-	-	-	-	-	-



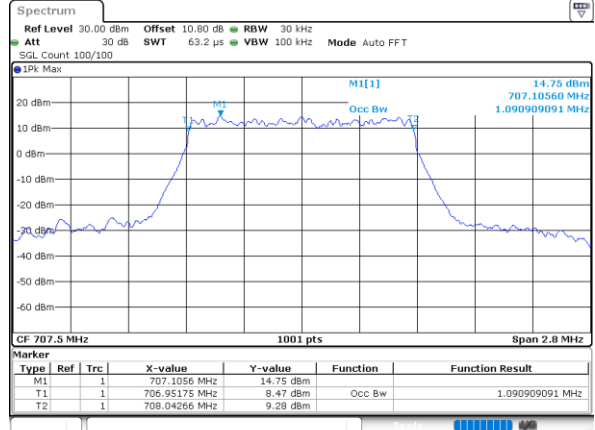
LTE Band 12

Middle Channel / 1.4MHz / QPSK



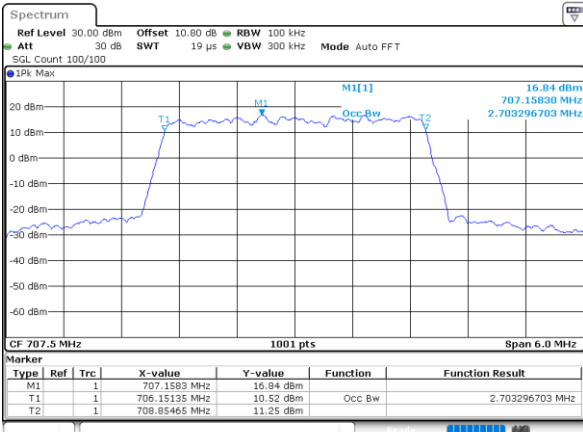
Date: 30.OCT.2021 06:55:09

Middle Channel / 1.4MHz / 16QAM



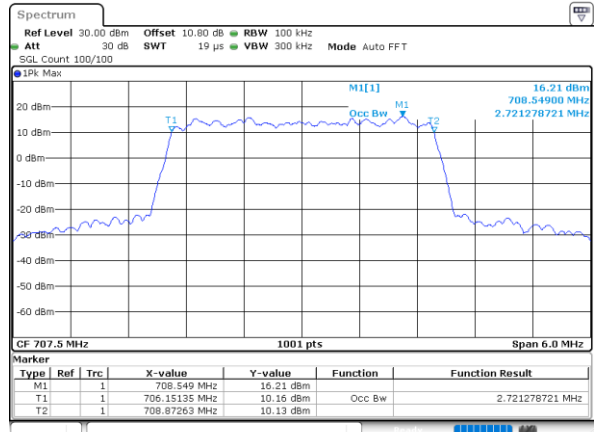
Date: 30.OCT.2021 06:54:47

Middle Channel / 3MHz / QPSK



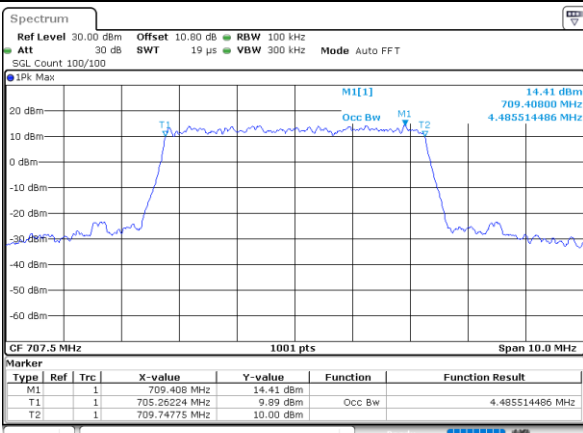
Date: 30.OCT.2021 07:04:36

Middle Channel / 3MHz / 16QAM



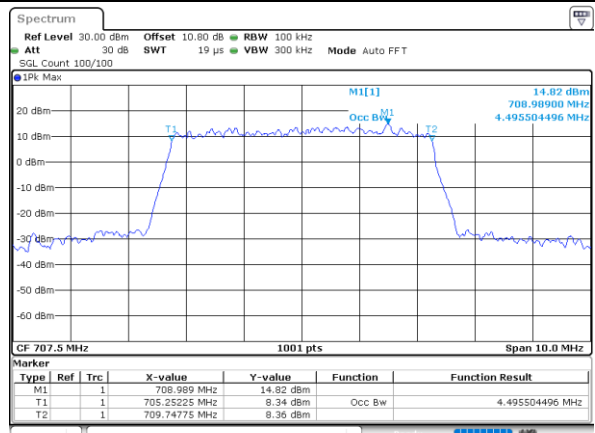
Date: 30.OCT.2021 07:04:15

Middle Channel / 5MHz / QPSK

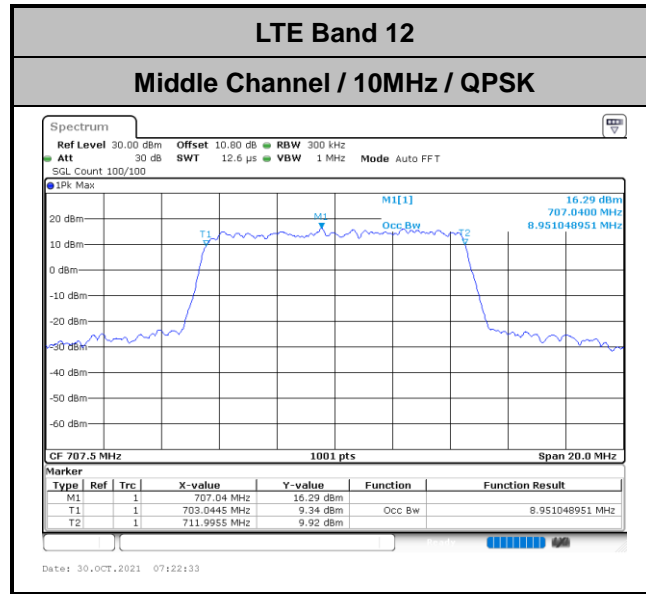


Date: 30.OCT.2021 07:14:05

Middle Channel / 5MHz / 16QAM

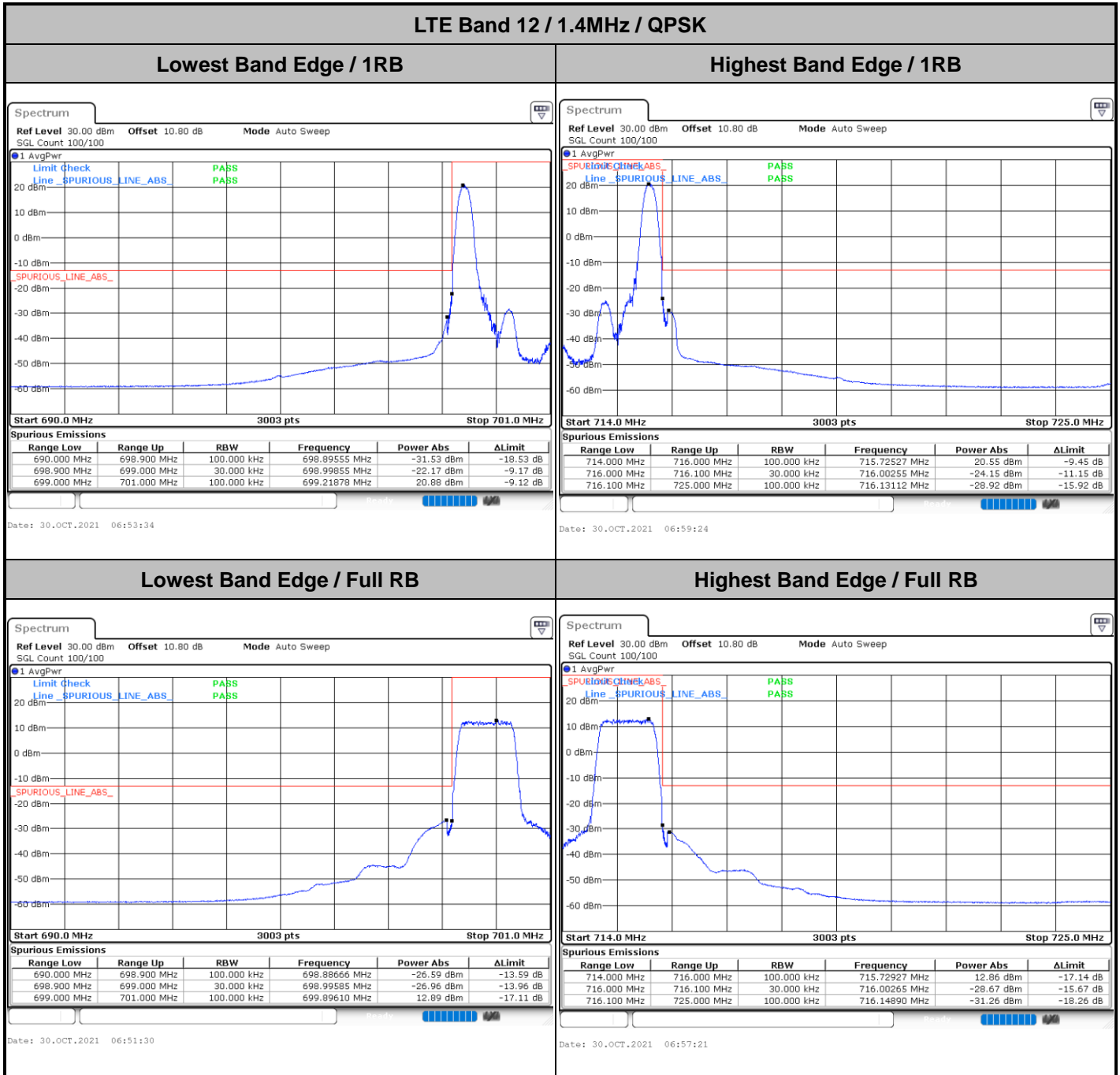


Date: 30.OCT.2021 07:13:44





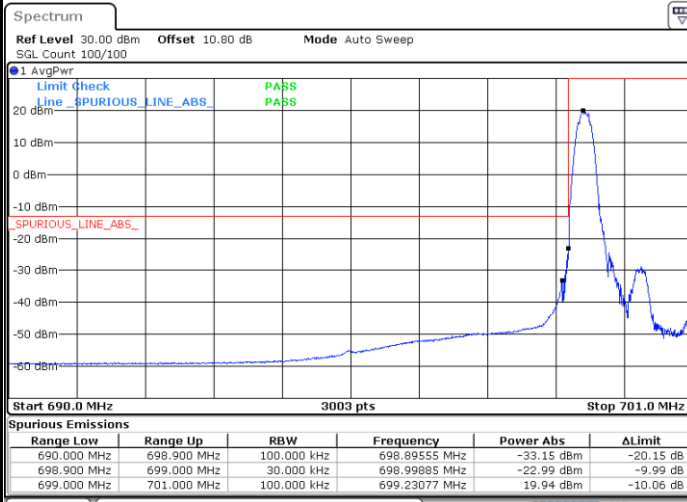
Conducted Band Edge





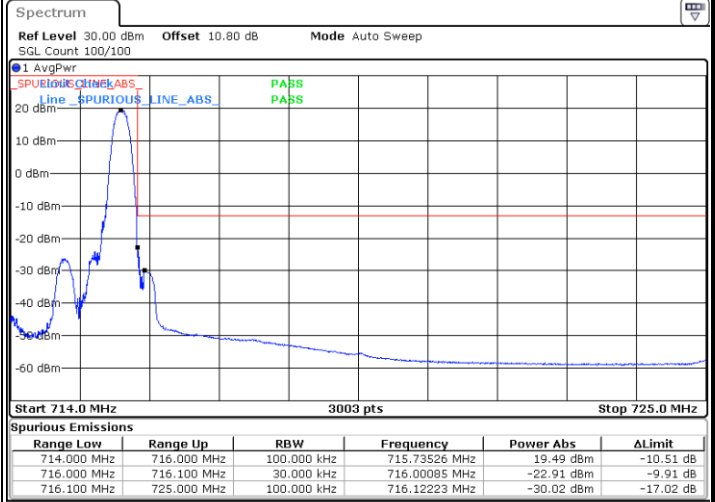
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



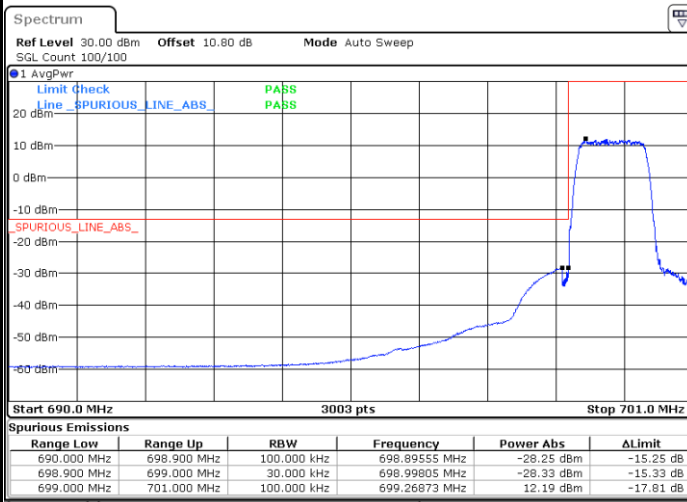
Date: 30.OCT.2021 06:52:53

Highest Band Edge / 1 RB



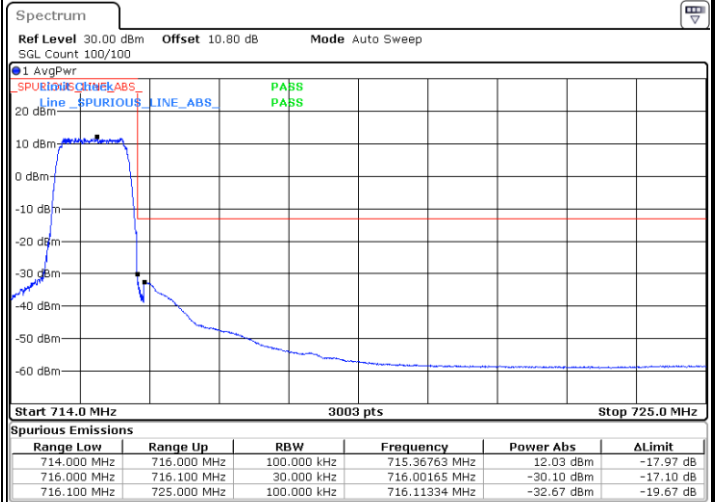
Date: 30.OCT.2021 06:58:43

Lowest Band Edge / Full RB



Date: 30.OCT.2021 06:52:11

Highest Band Edge / Full RB

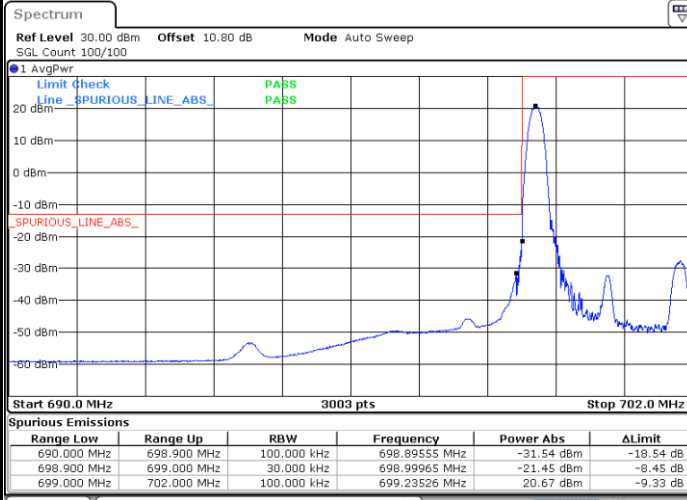


Date: 30.OCT.2021 06:58:02



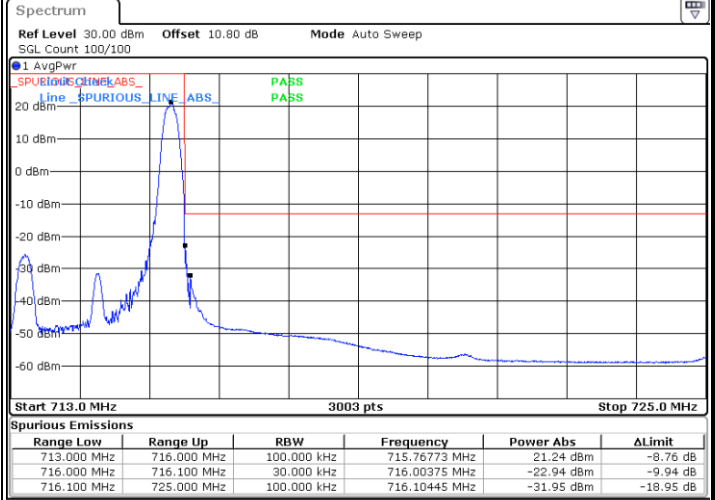
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



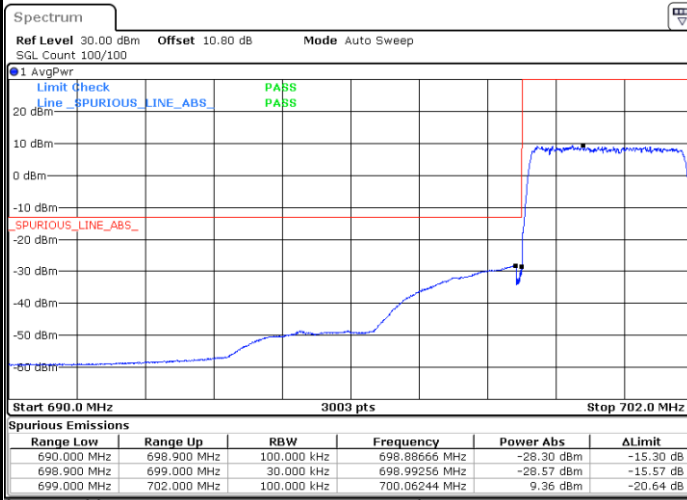
Date: 30.OCT.2021 07:03:02

Highest Band Edge / 1 RB



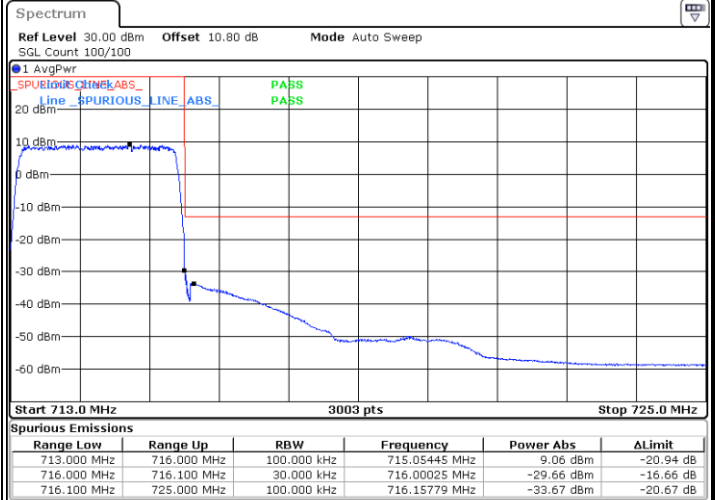
Date: 30.OCT.2021 07:08:53

Lowest Band Edge / Full RB



Date: 30.OCT.2021 07:00:58

Highest Band Edge / Full RB

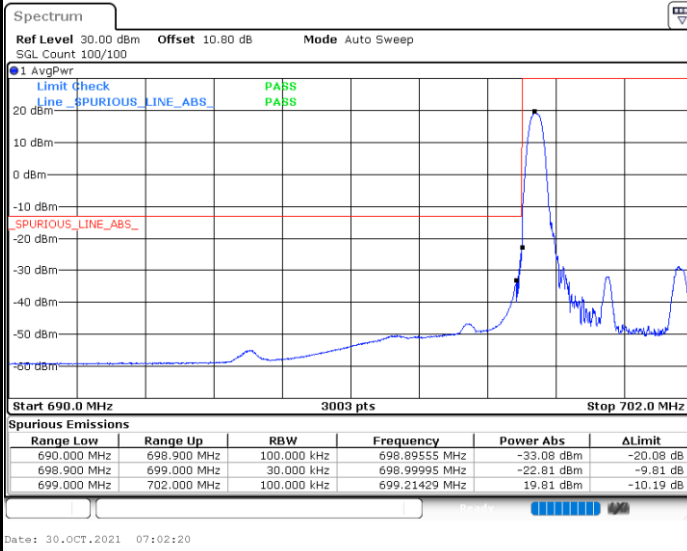


Date: 30.OCT.2021 07:06:50

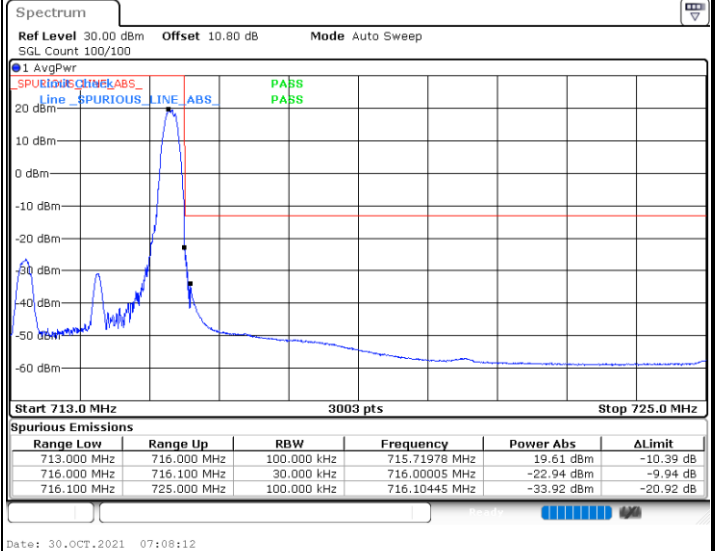


LTE Band 12 / 3MHz / 16QAM

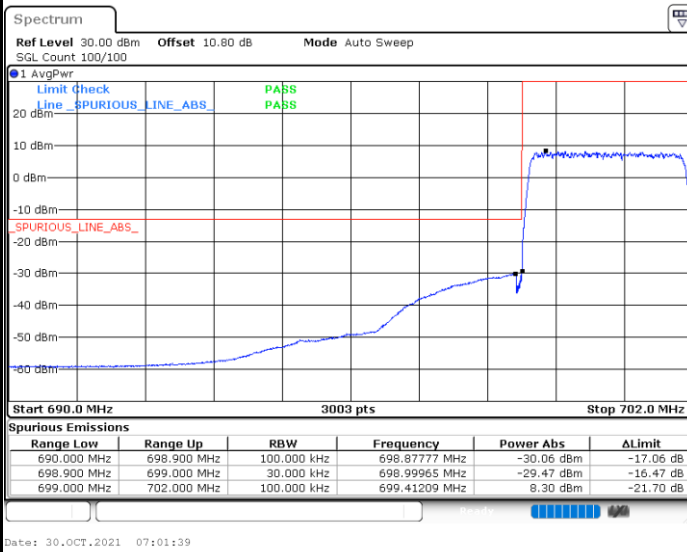
Lowest Band Edge / 1 RB



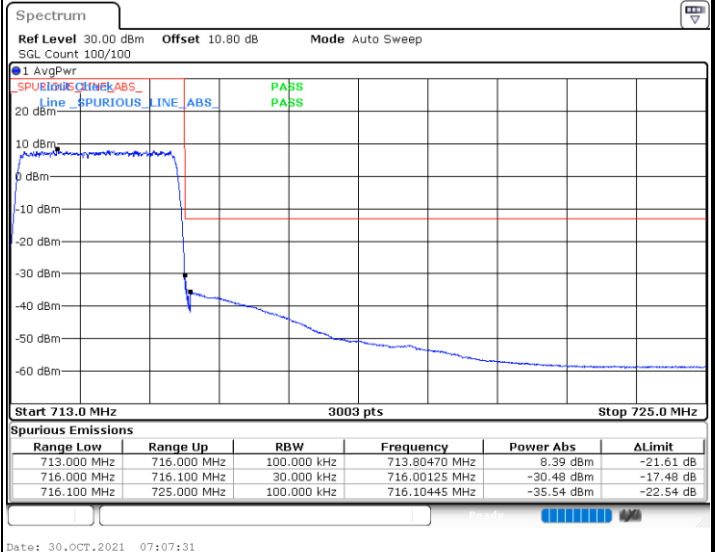
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



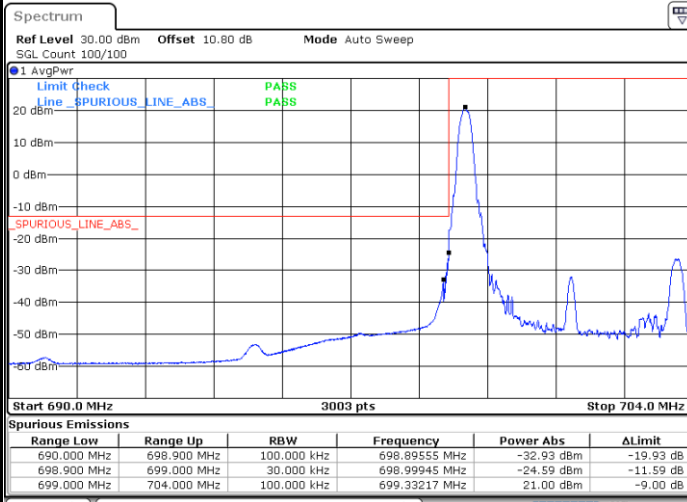
Highest Band Edge / Full RB





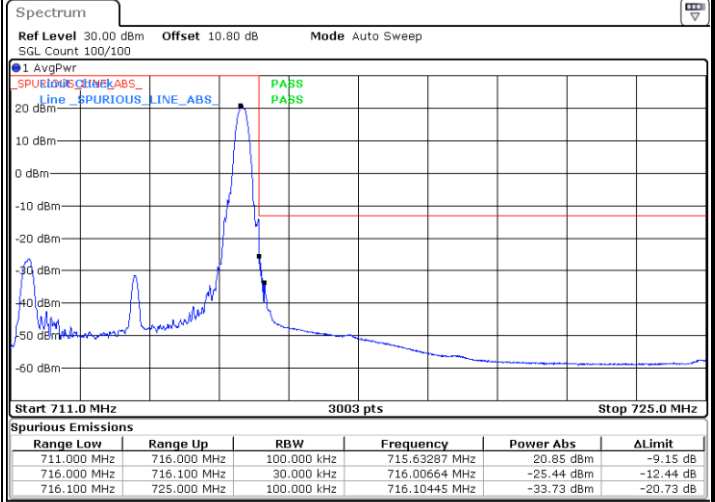
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



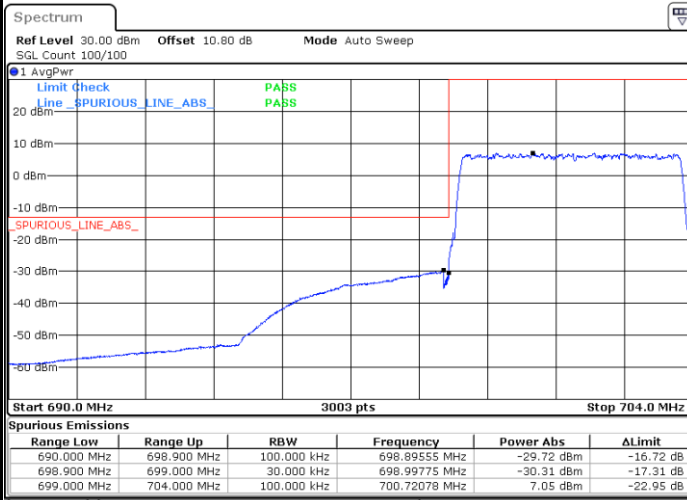
Date: 30.OCT.2021 07:12:31

Highest Band Edge / 1 RB



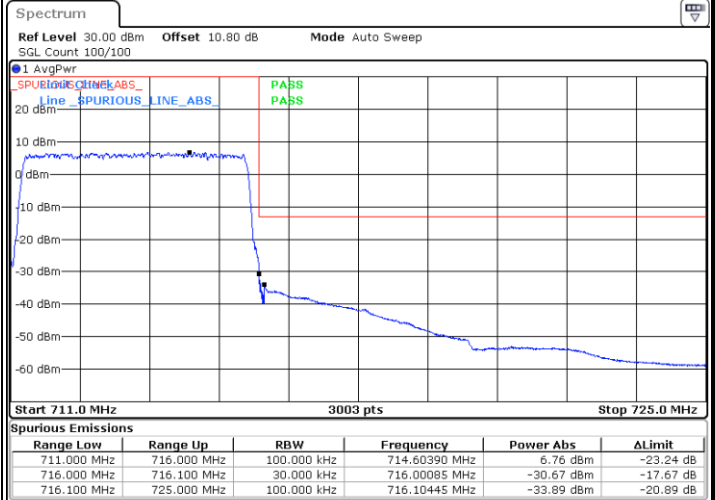
Date: 30.OCT.2021 07:17:41

Lowest Band Edge / Full RB



Date: 30.OCT.2021 07:10:26

Highest Band Edge / Full RB



Date: 30.OCT.2021 07:16:19