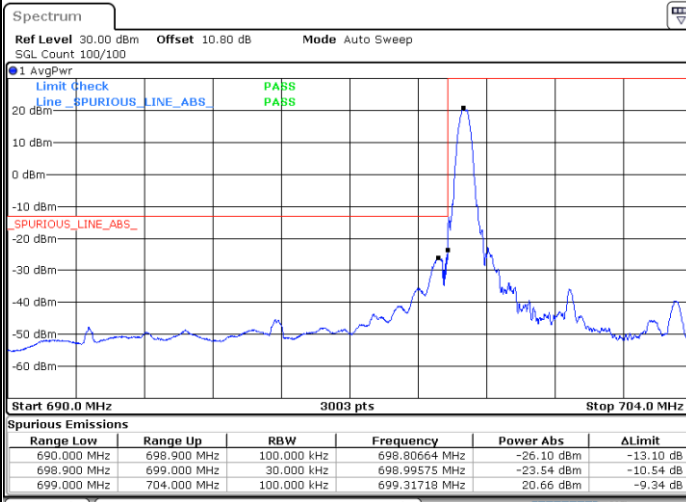




LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



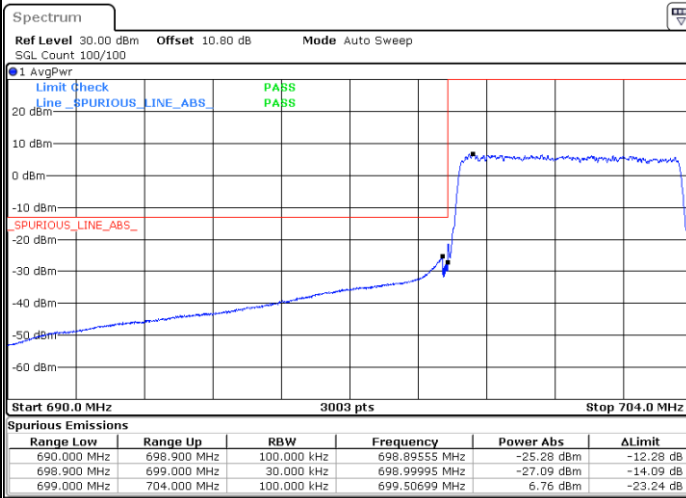
Date: 23.SEP.2022 03:39:23

Highest Band Edge / 1 RB



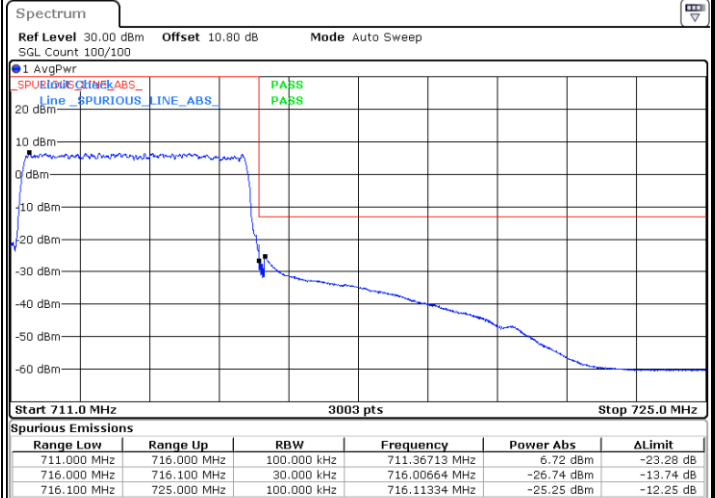
Date: 23.SEP.2022 09:23:05

Lowest Band Edge / Full RB



Date: 23.SEP.2022 09:19:25

Highest Band Edge / Full RB

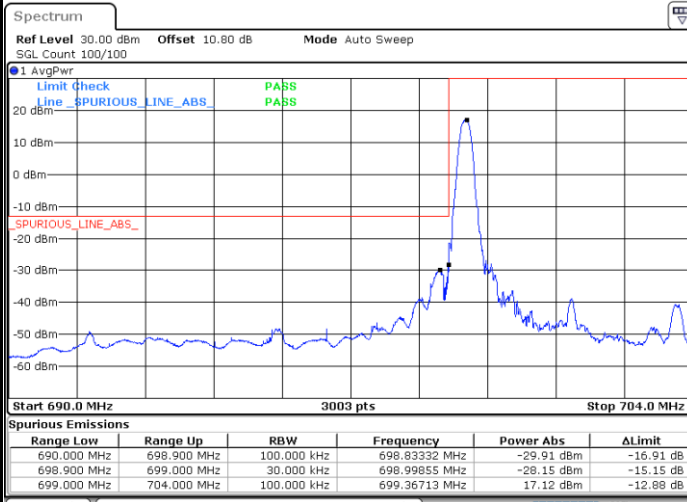


Date: 23.SEP.2022 03:41:05



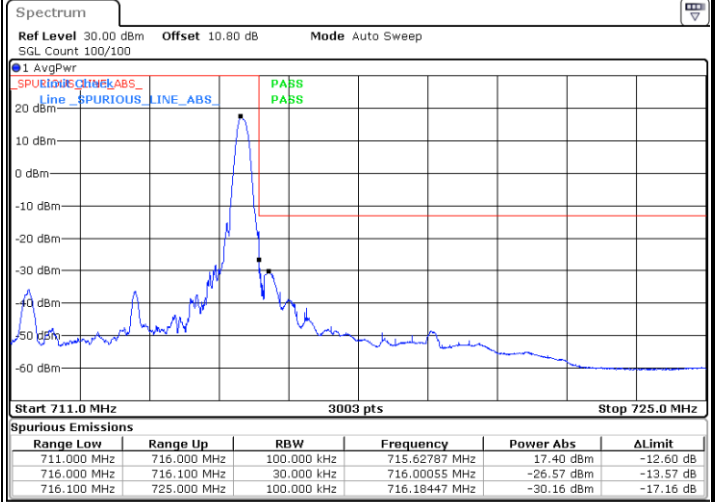
LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / 1RB



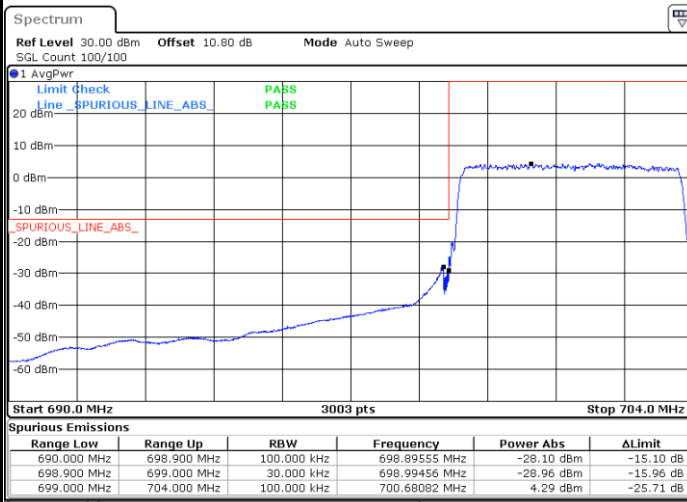
Date: 23.SEP.2022 10:08:11

Highest Band Edge / 1 RB



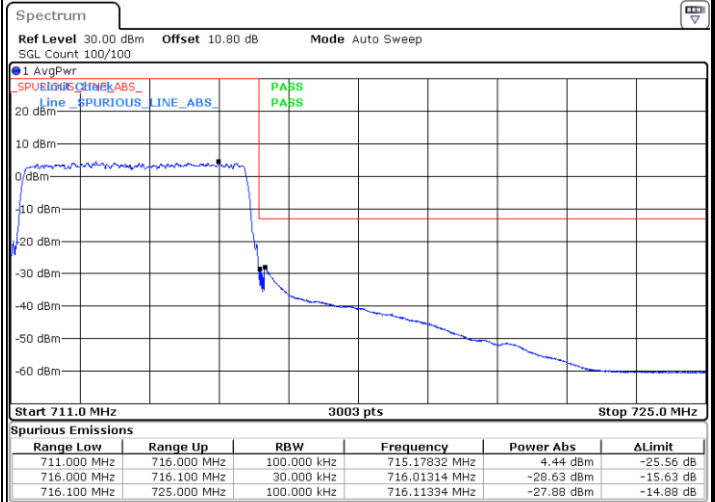
Date: 23.SEP.2022 10:10:55

Lowest Band Edge / Full RB



Date: 23.SEP.2022 10:07:12

Highest Band Edge / Full RB

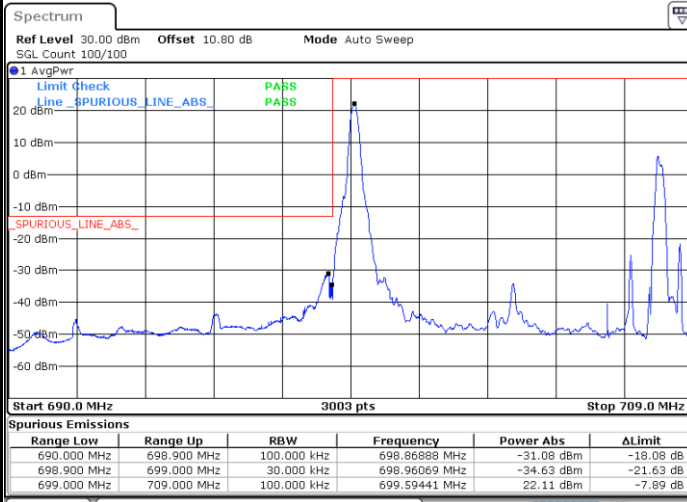


Date: 23.SEP.2022 10:09:53



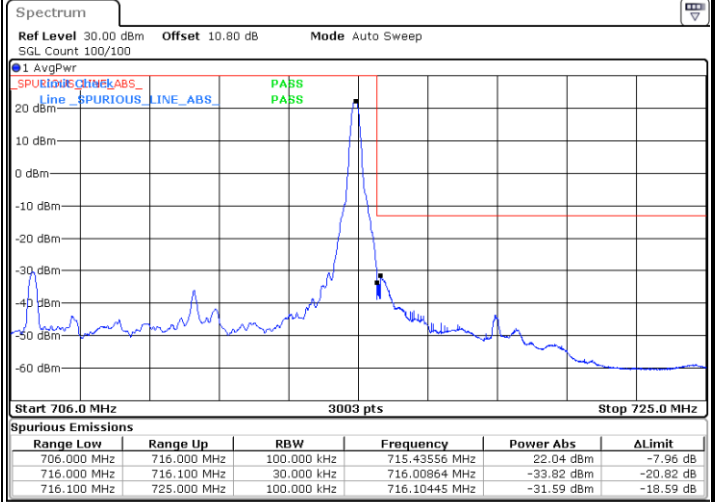
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



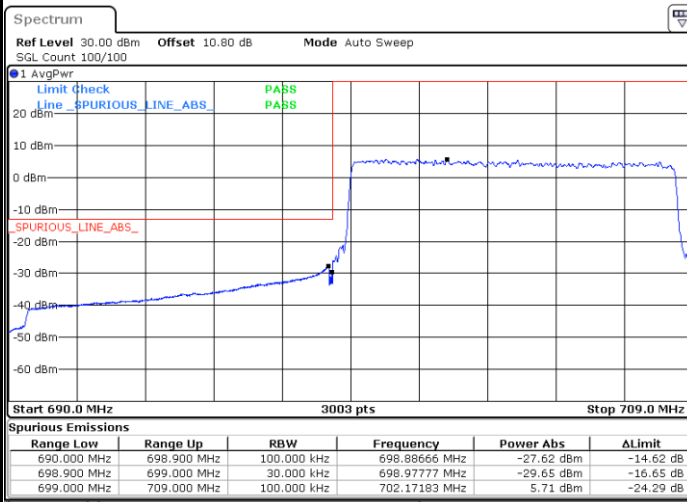
Date: 23.SEP.2022 09:40:47

Highest Band Edge / 1 RB



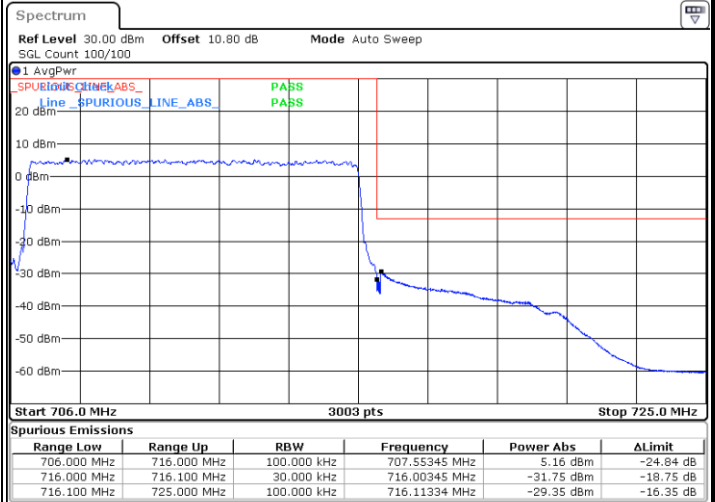
Date: 23.SEP.2022 09:49:04

Lowest Band Edge / Full RB



Date: 23.SEP.2022 09:37:50

Highest Band Edge / Full RB

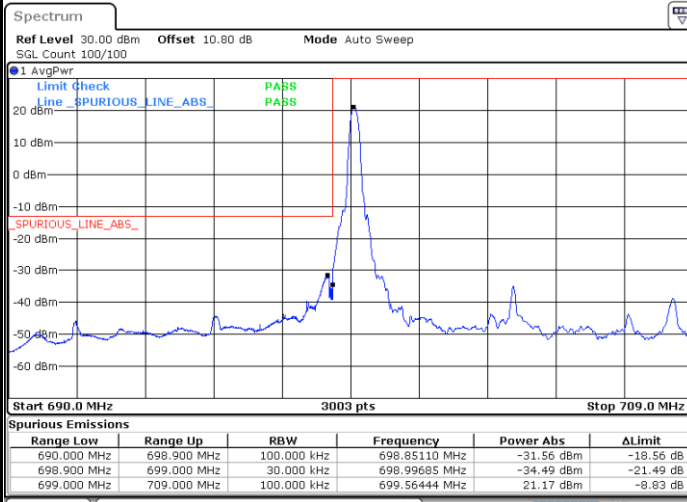


Date: 23.SEP.2022 09:46:08



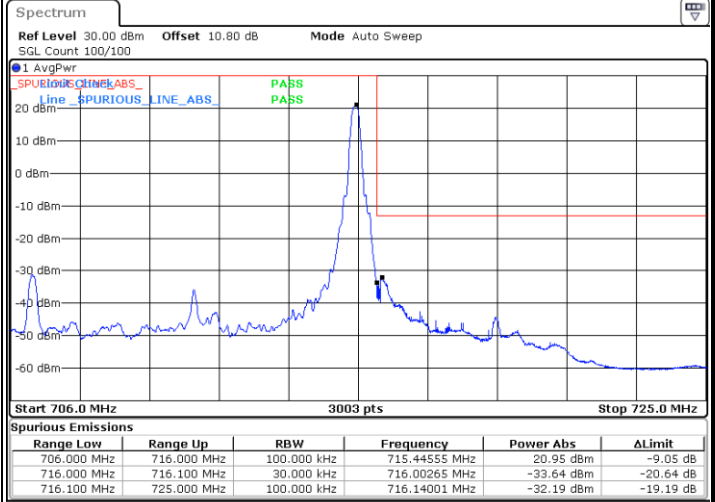
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



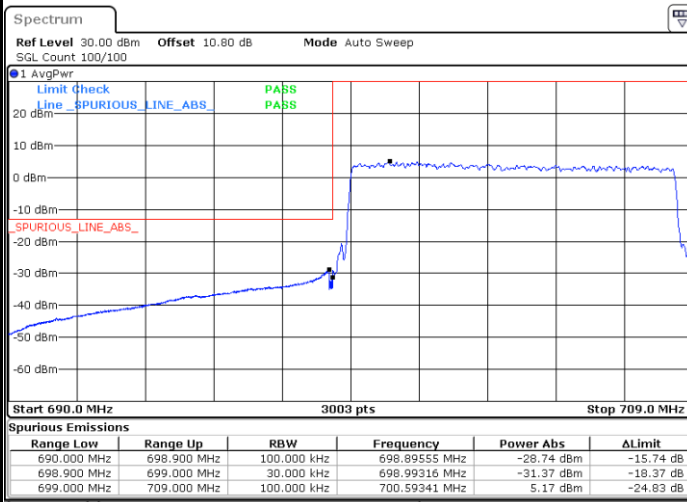
Date: 23.SEP.2022 09:39:48

Highest Band Edge / 1 RB



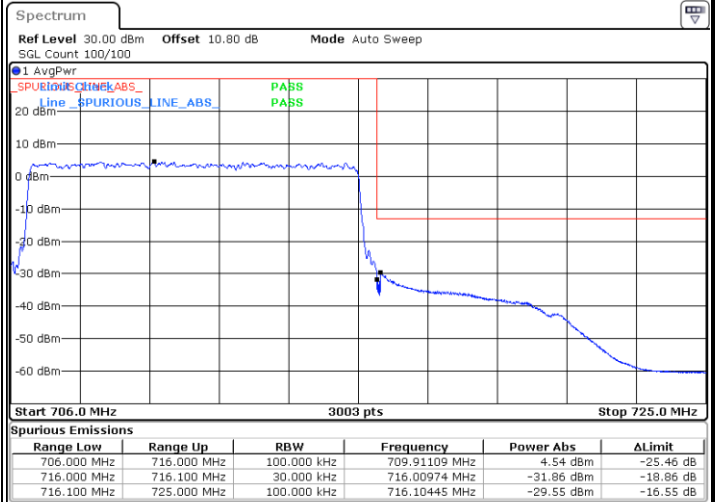
Date: 23.SEP.2022 09:48:05

Lowest Band Edge / Full RB



Date: 23.SEP.2022 09:38:49

Highest Band Edge / Full RB

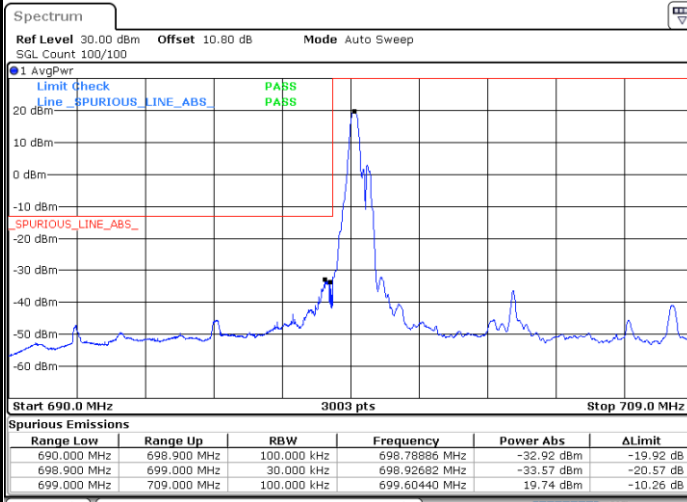


Date: 23.SEP.2022 09:47:06



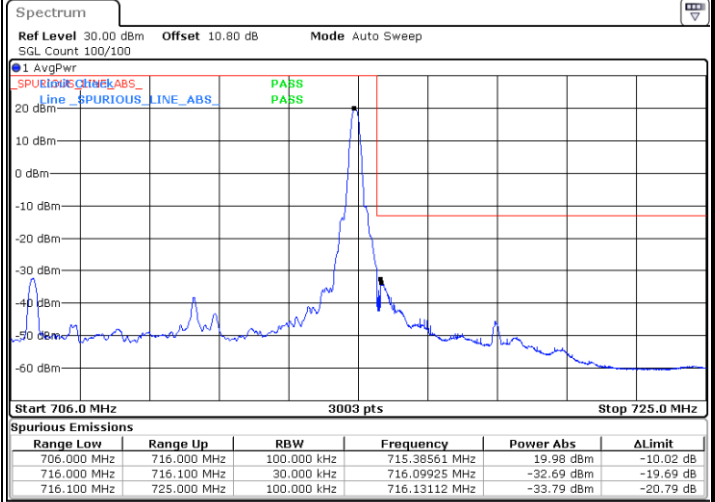
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



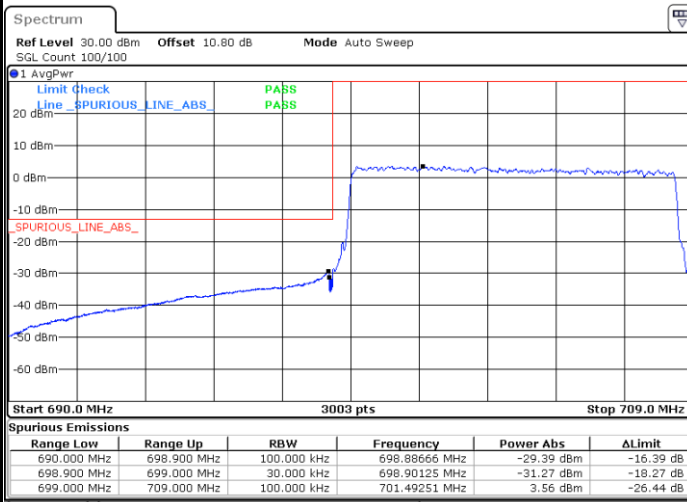
Date: 23.SEP.2022 09:52:30

Highest Band Edge / 1 RB



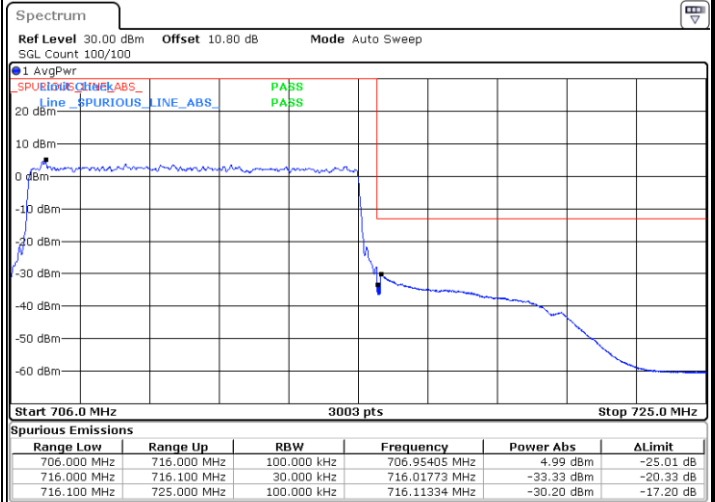
Date: 23.SEP.2022 09:55:11

Lowest Band Edge / Full RB



Date: 23.SEP.2022 09:51:31

Highest Band Edge / Full RB

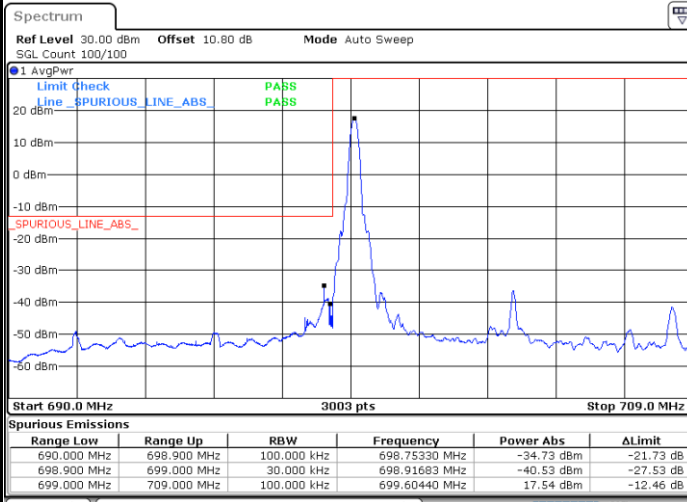


Date: 23.SEP.2022 09:54:12



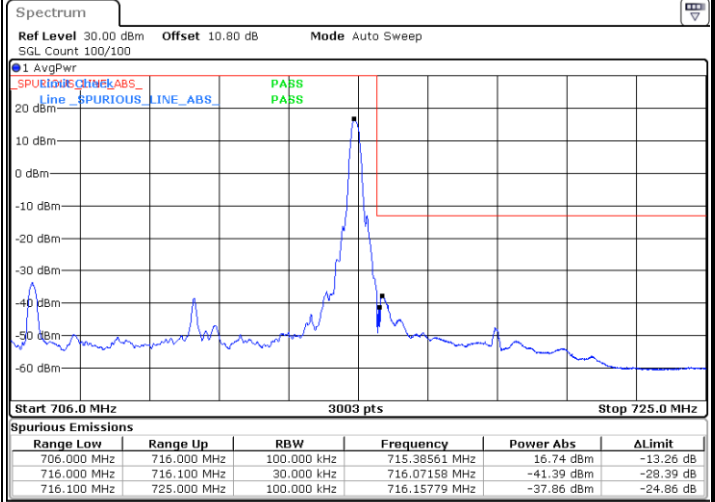
LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / 1 RB



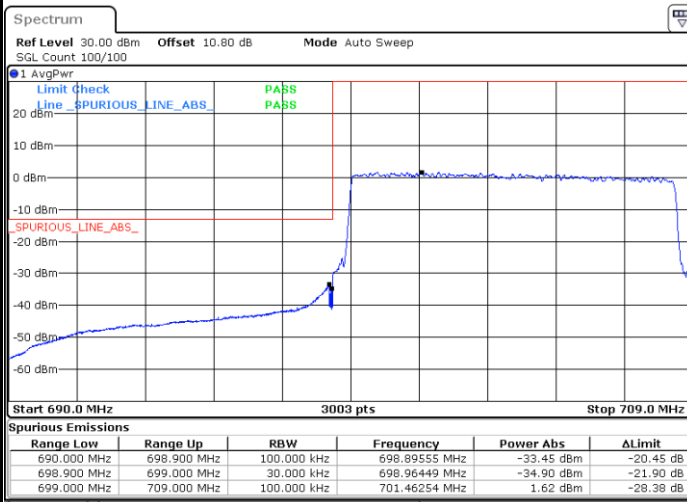
Date: 23.SEP.2022 10:12:58

Highest Band Edge / 1 RB



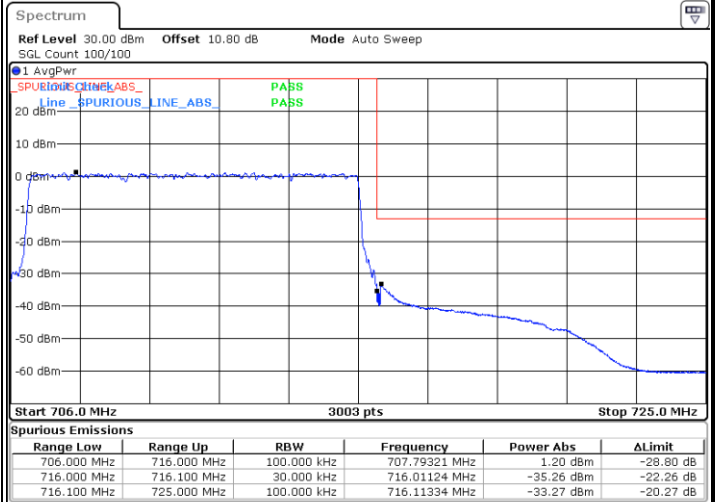
Date: 23.SEP.2022 10:15:39

Lowest Band Edge / Full RB



Date: 23.SEP.2022 10:11:59

Highest Band Edge / Full RB



Date: 23.SEP.2022 10:14:39



Conducted Spurious Emission

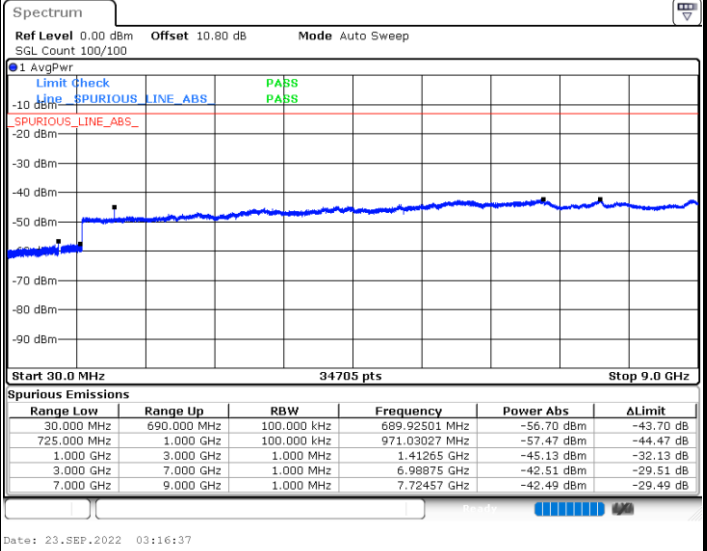
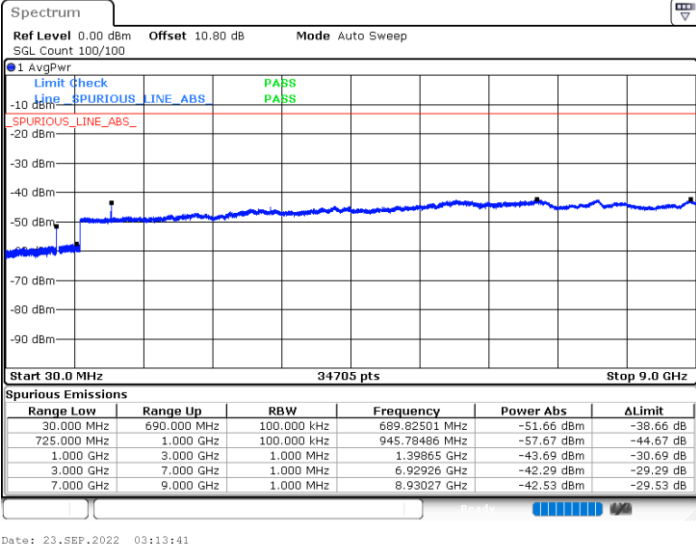




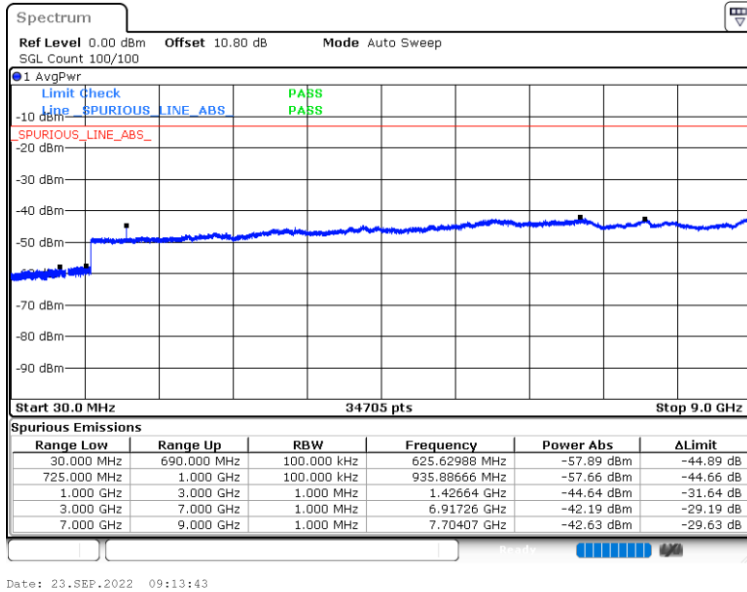
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

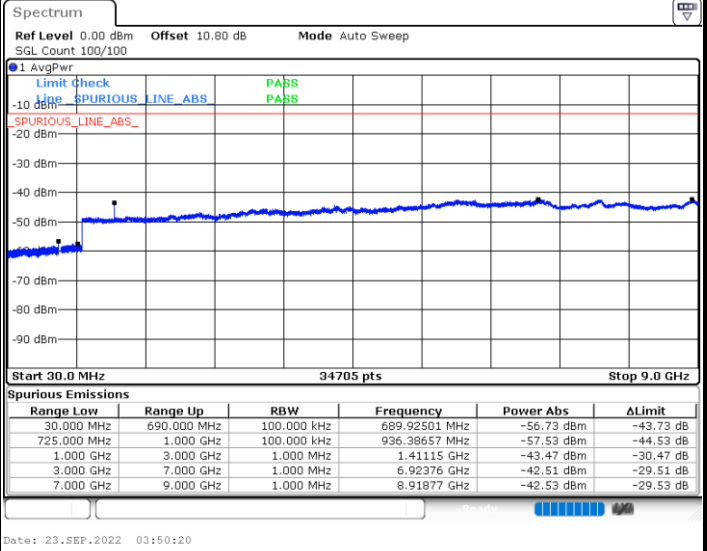
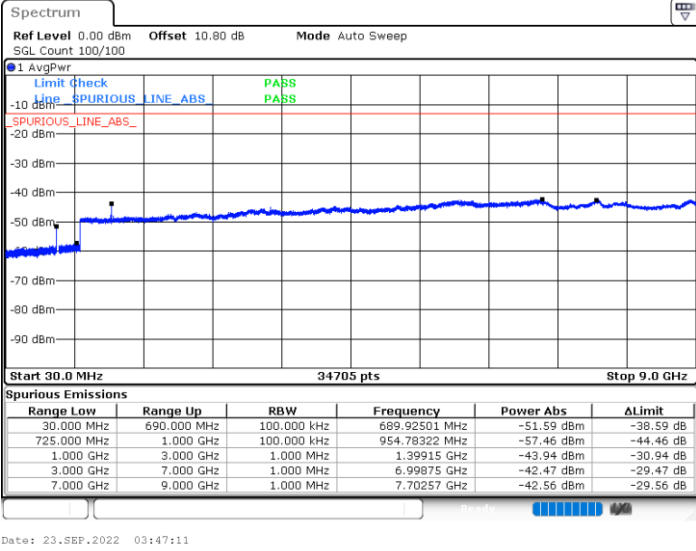




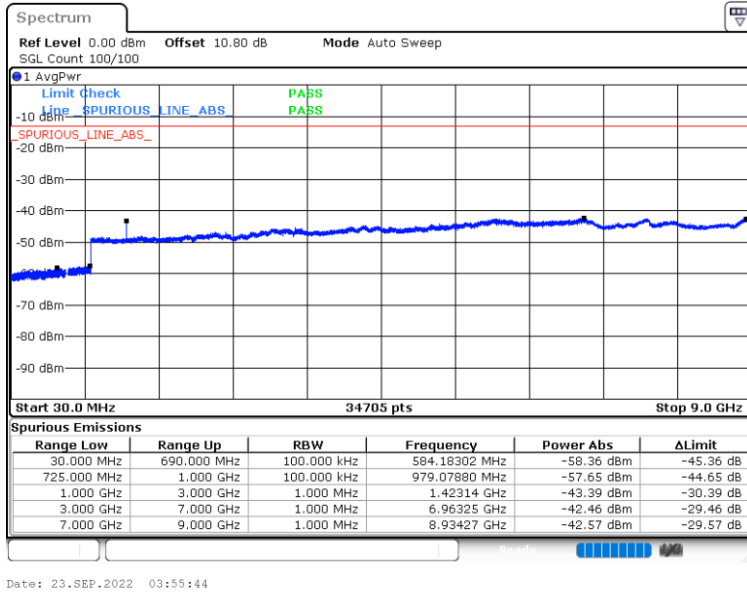
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

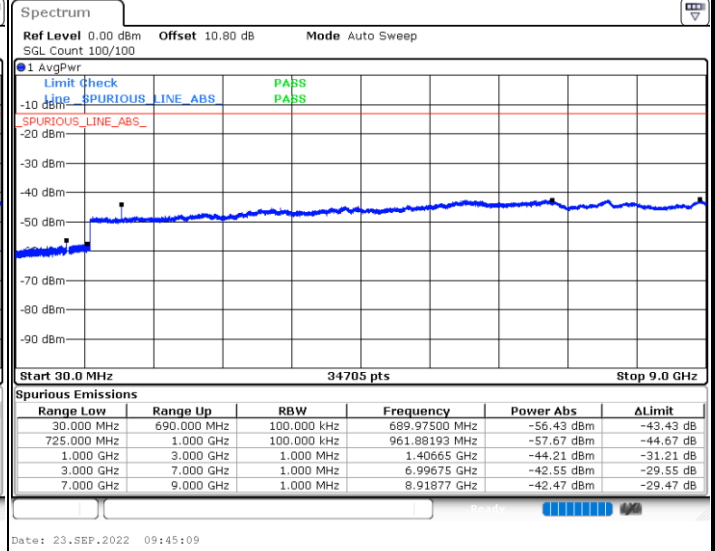
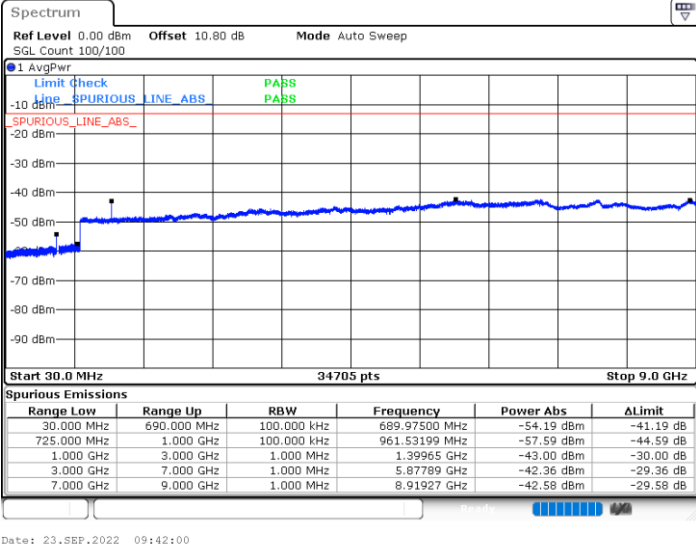




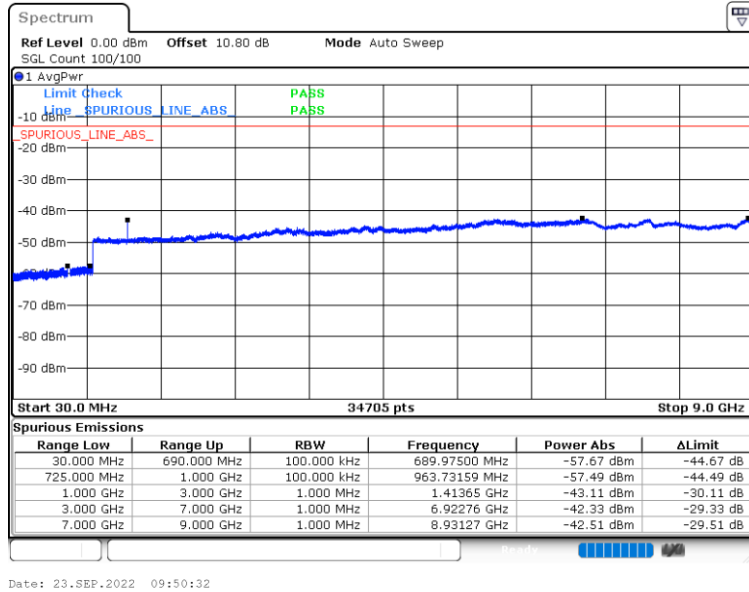
LTE Band 12 / 10MHz

Lowest Channel / QPSK

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	0.0021	PASS
40	Normal Voltage	0.0174	
30	Normal Voltage	0.0122	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0027	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0073	
-20	Normal Voltage	0.0061	
-30	Normal Voltage	0.0099	
20	Maximum Voltage	0.0117	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0065	

Note:

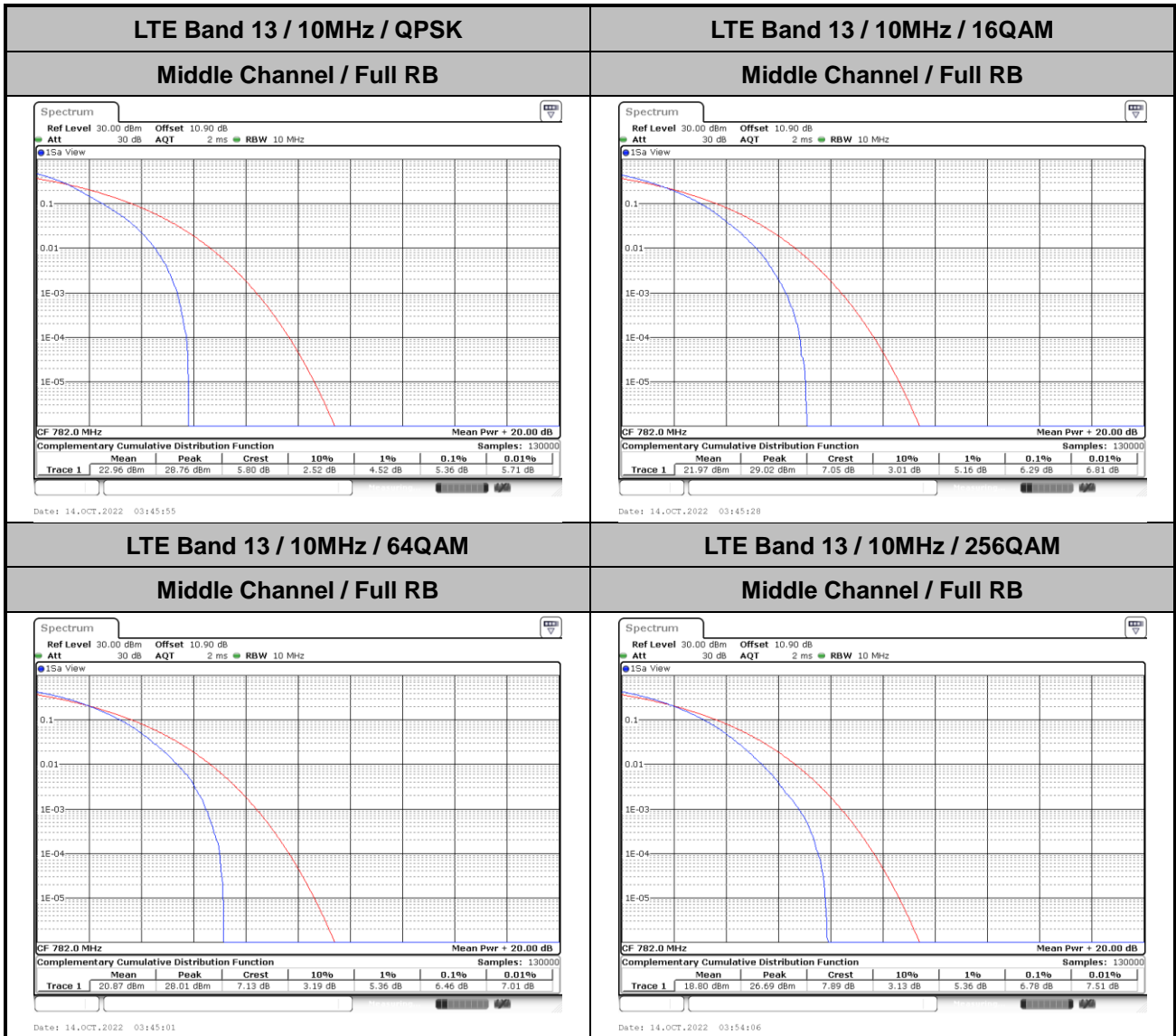
1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) = 3.60 V. ; Maximum Voltage = 4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



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	5.36	6.29	6.46	6.78	PASS





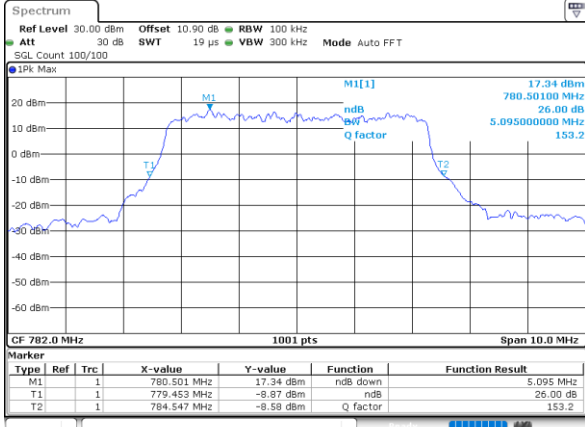
26dB Bandwidth

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	-	-	-	-	5.10	5.17	9.79	9.91	-	-	-	-
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	-	-	-	-	5.13	5.12	9.95	10.19	-	-	-	-



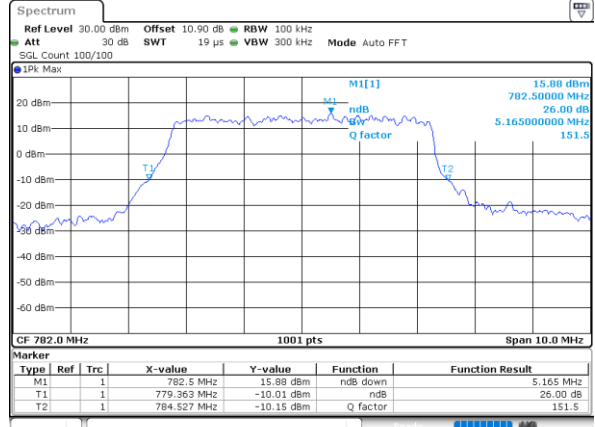
LTE Band 13

Middle Channel / 5MHz / QPSK



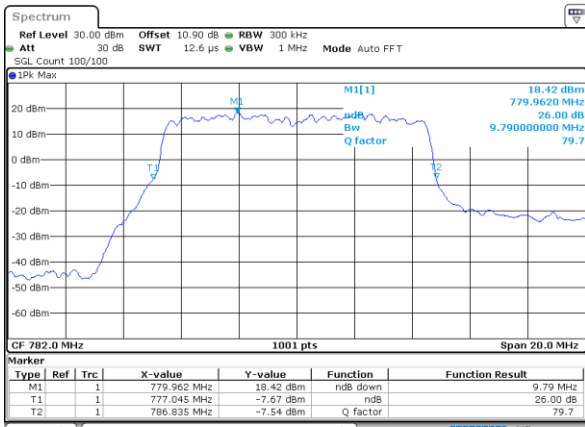
Date: 14.OCT.2022 03:22:42

Middle Channel / 5MHz / 16QAM



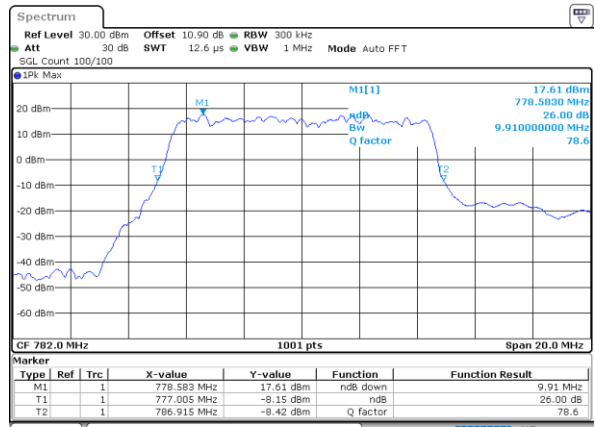
Date: 14.OCT.2022 03:23:08

Middle Channel / 10MHz / QPSK



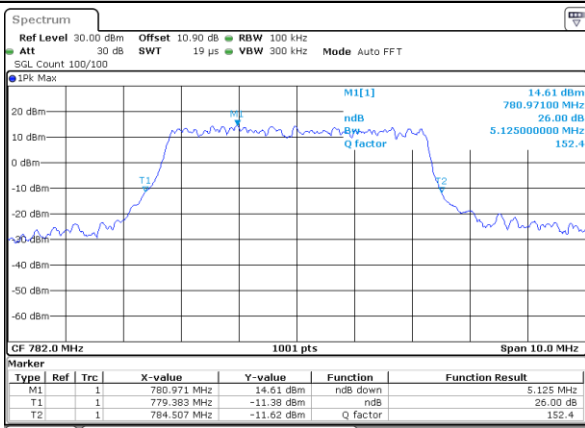
Date: 14.OCT.2022 03:34:45

Middle Channel / 10MHz / 16QAM



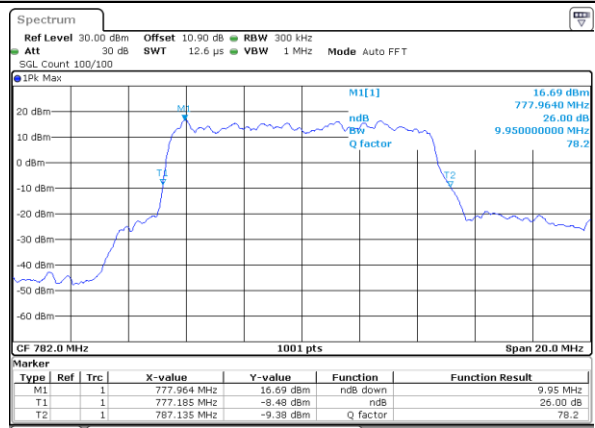
Date: 14.OCT.2022 03:34:19

Middle Channel / 5MHz / 64QAM



Date: 14.OCT.2022 03:31:05

Middle Channel / 10MHz / 64QAM



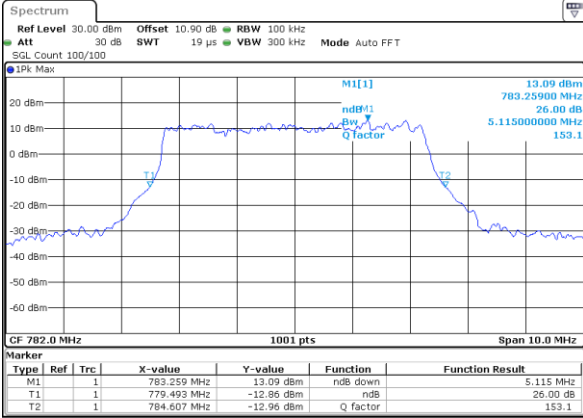
Date: 14.OCT.2022 03:42:00



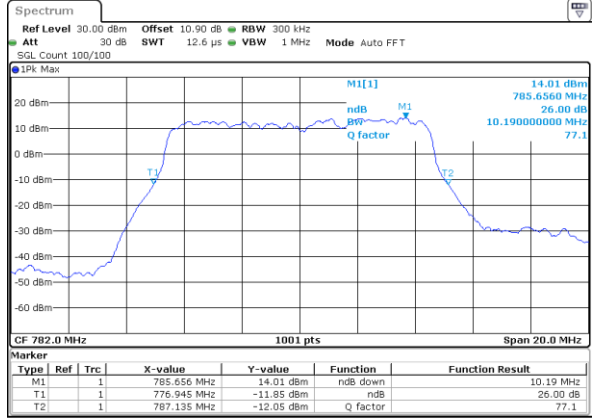
LTE Band 13

Middle Channel / 5MHz / 256QAM

Middle Channel / 10MHz / 256QAM



Date: 14.OCT.2022 03:48:16



Date: 14.OCT.2022 03:51:05



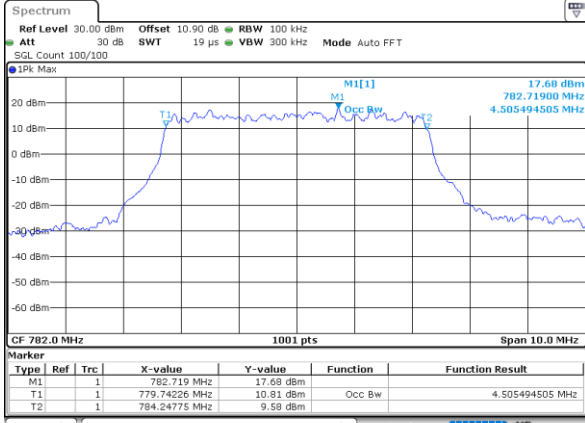
Occupied Bandwidth

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	-	-	-	-	4.51	4.50	9.05	9.01	-	-	-	-
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	-	-	-	-	4.49	4.51	8.99	9.03	-	-	-	-



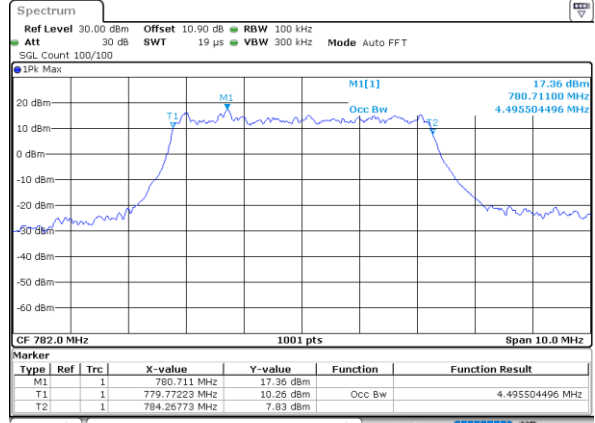
LTE Band 13

Middle Channel / 5MHz / QPSK



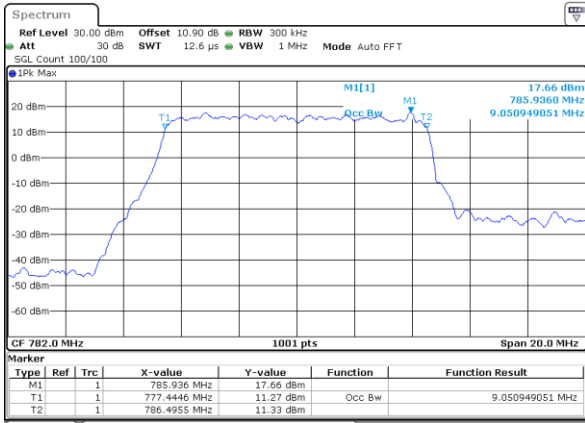
Date: 14.OCT.2022 03:23:48

Middle Channel / 5MHz / 16QAM



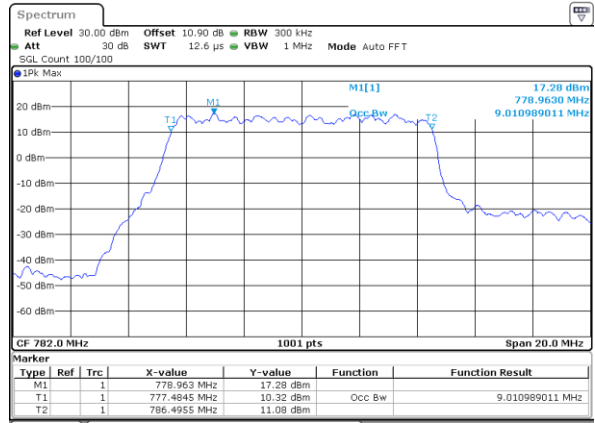
Date: 14.OCT.2022 03:23:22

Middle Channel / 10MHz / QPSK



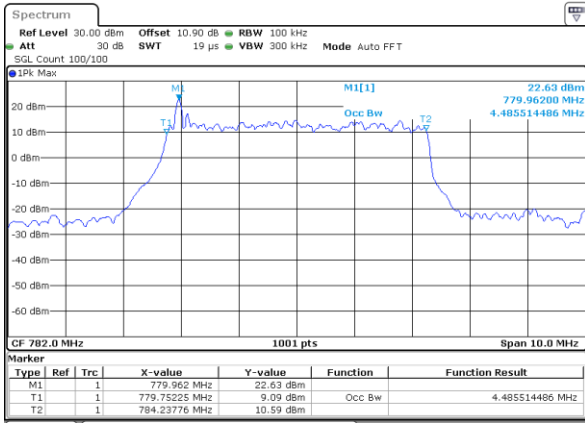
Date: 14.OCT.2022 03:33:39

Middle Channel / 10MHz / 16QAM



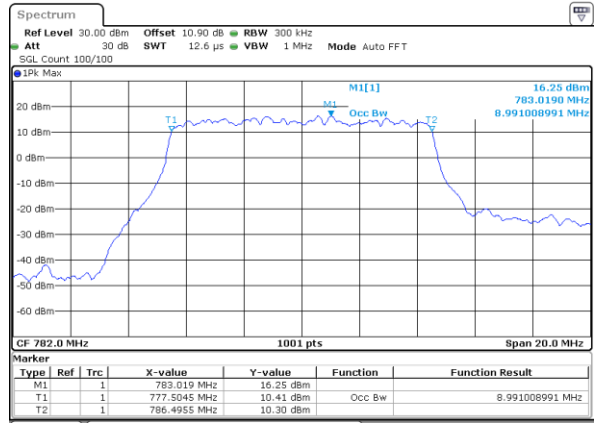
Date: 14.OCT.2022 03:34:05

Middle Channel / 5MHz / 64QAM



Date: 14.OCT.2022 03:31:19

Middle Channel / 10MHz / 64QAM



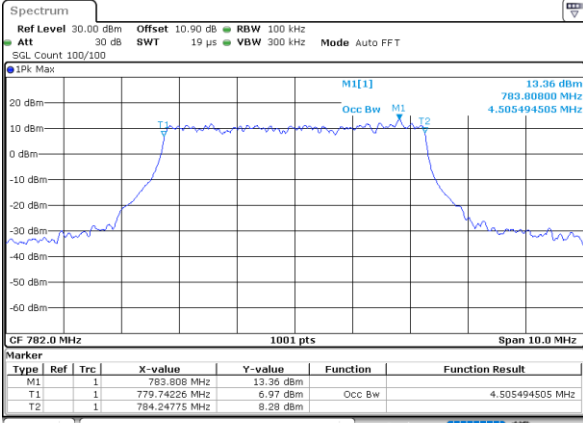
Date: 14.OCT.2022 03:41:46



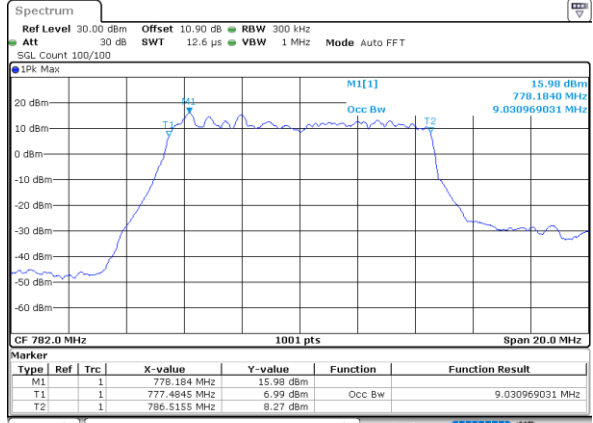
LTE Band 13

Middle Channel / 5MHz / 256QAM

Middle Channel / 10MHz / 256QAM



Date: 14.OCT.2022 03:48:30



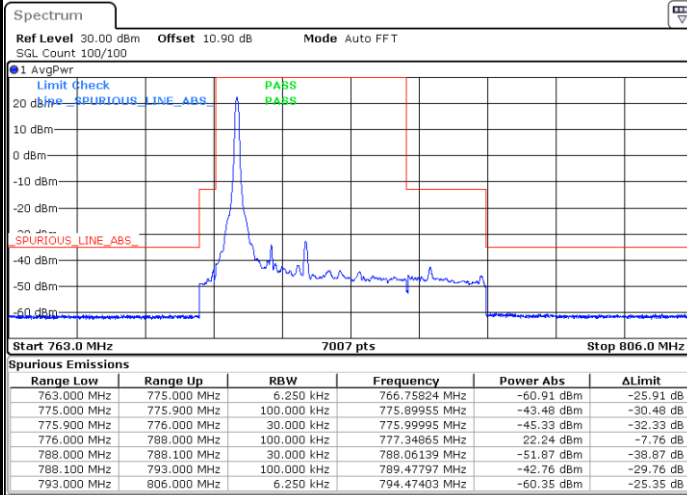
Date: 14.OCT.2022 03:50:51



Conducted Band Edge

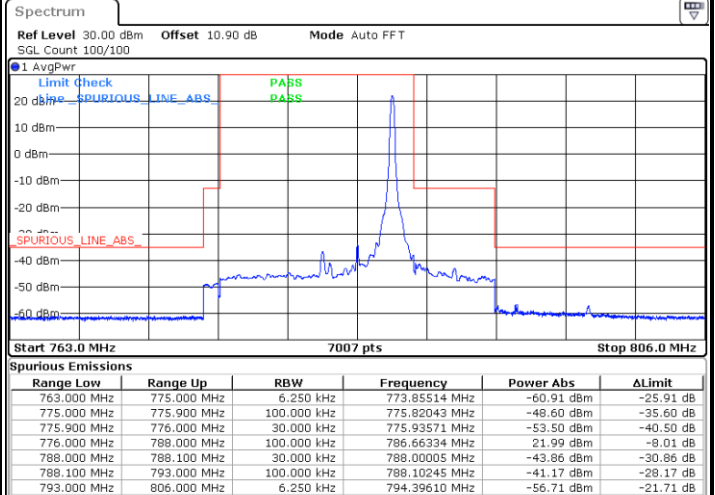
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



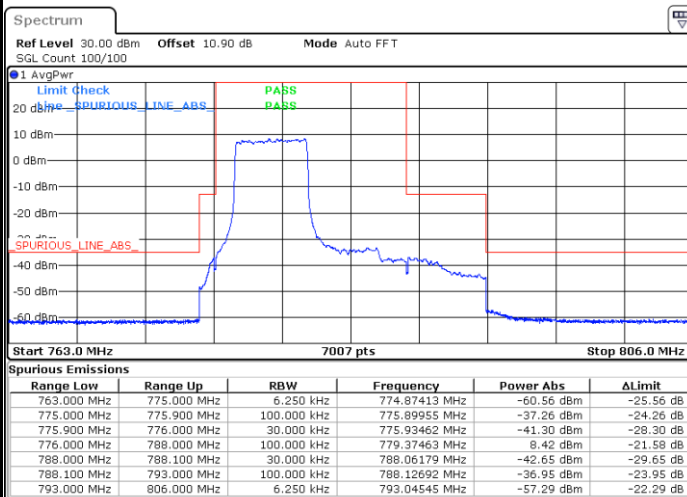
Date: 14.OCT.2022 03:19:57

Highest Band Edge / 1 RB



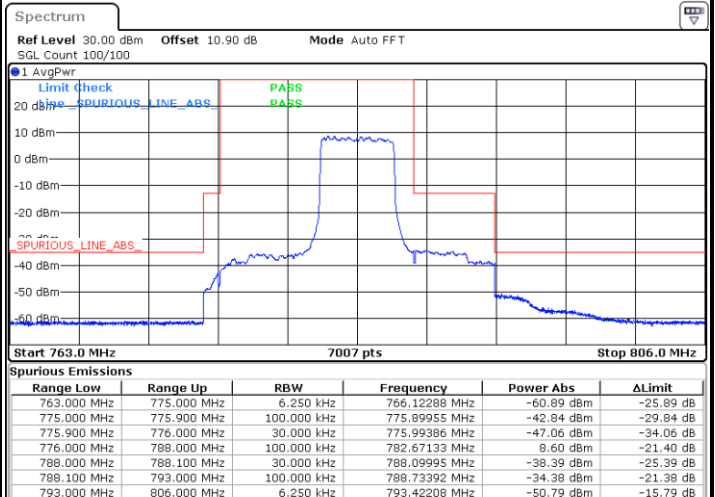
Date: 14.OCT.2022 03:27:31

Lowest Band Edge / Full RB



Date: 14.OCT.2022 03:17:09

Highest Band Edge / Full RB



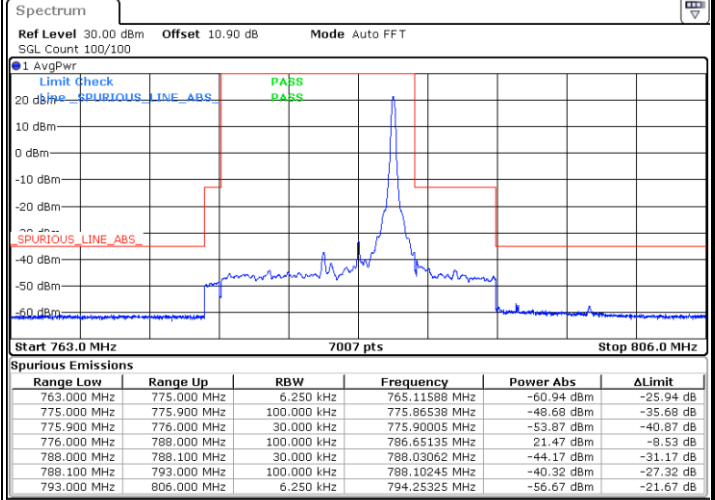
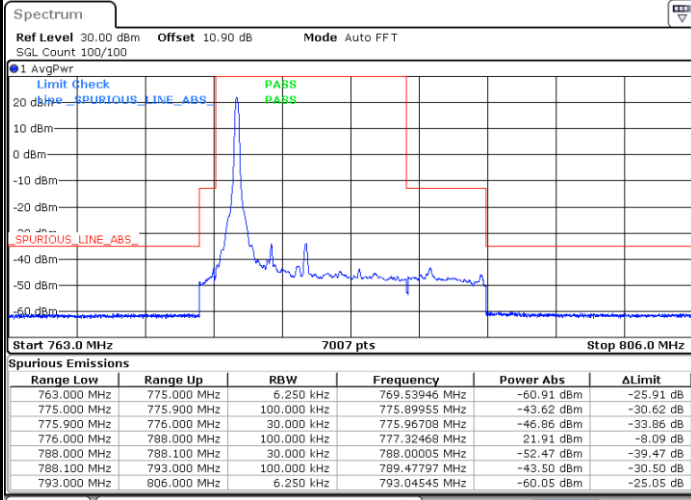
Date: 14.OCT.2022 03:24:43



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

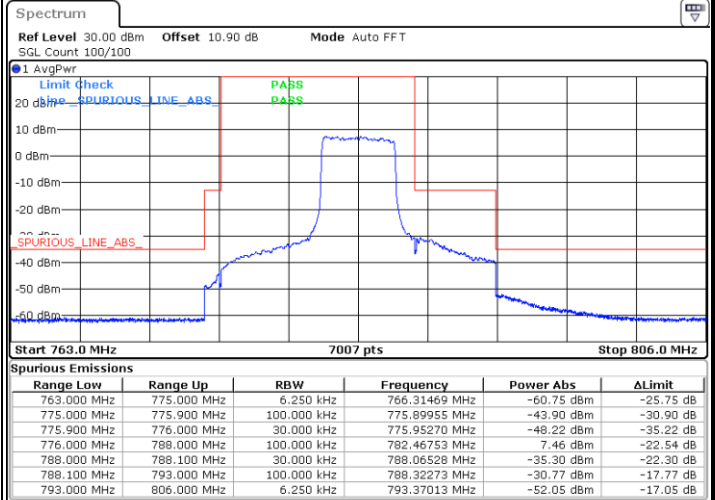
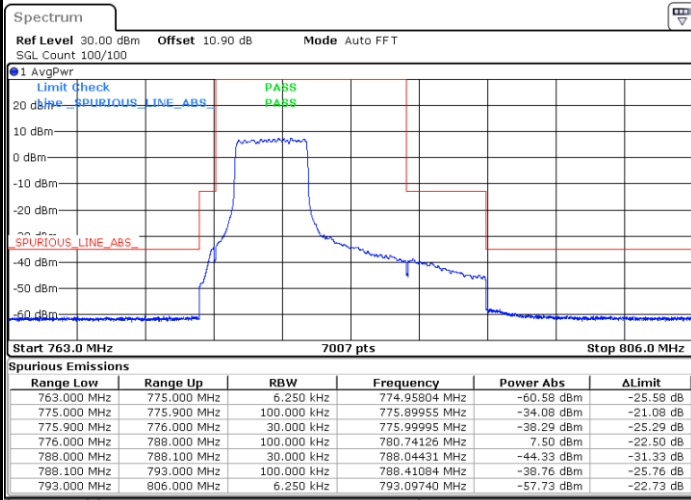


Date: 14.OCT.2022 03:19:02

Date: 14.OCT.2022 03:26:35

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.OCT.2022 03:18:06

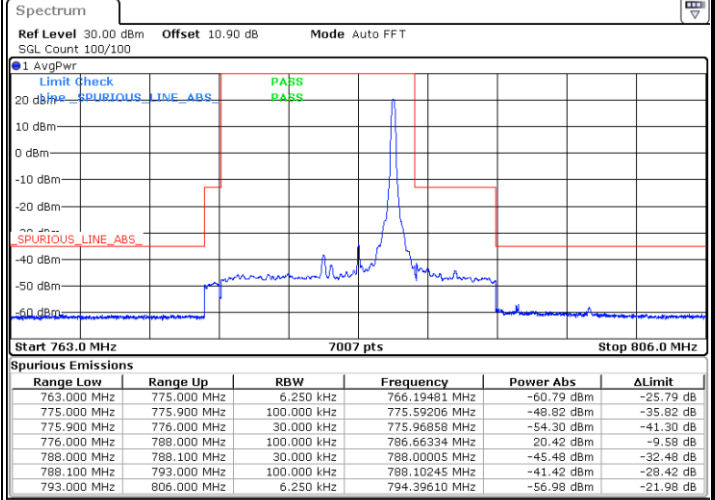
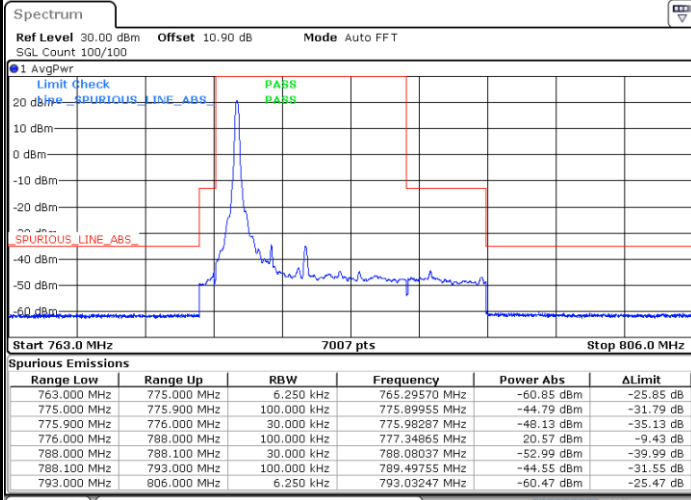
Date: 14.OCT.2022 03:25:39



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

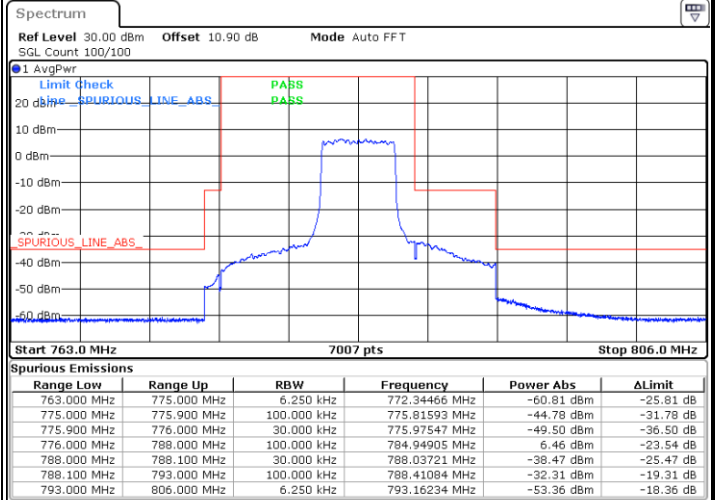
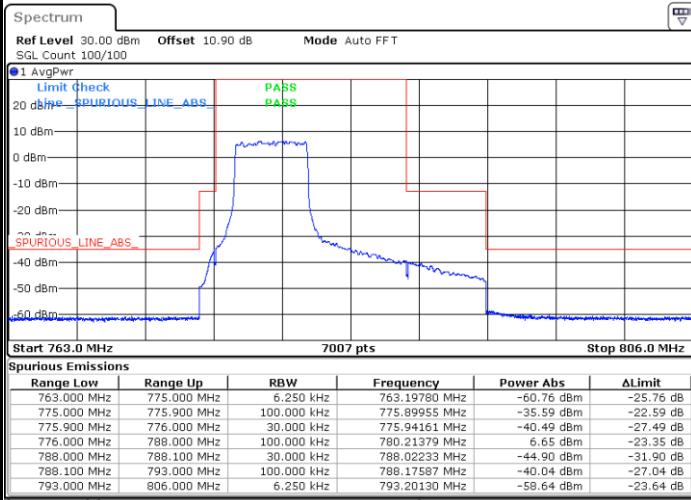


Date: 14.OCT.2022 03:30:38

Date: 14.OCT.2022 03:33:10

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.OCT.2022 03:29:42

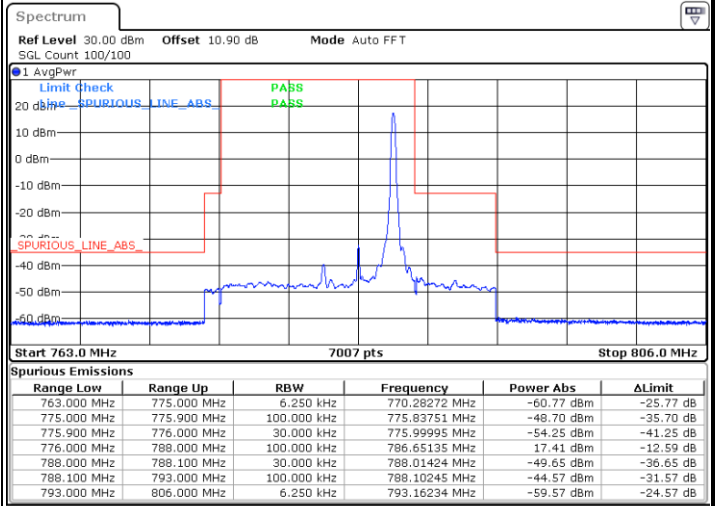
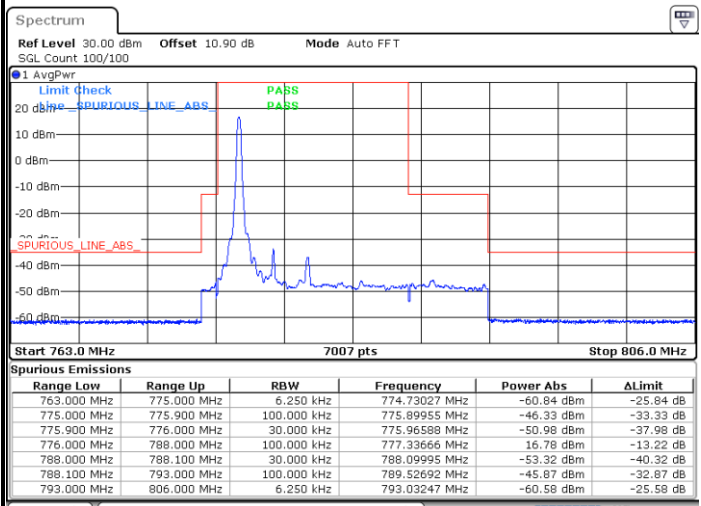
Date: 14.OCT.2022 03:32:14



LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

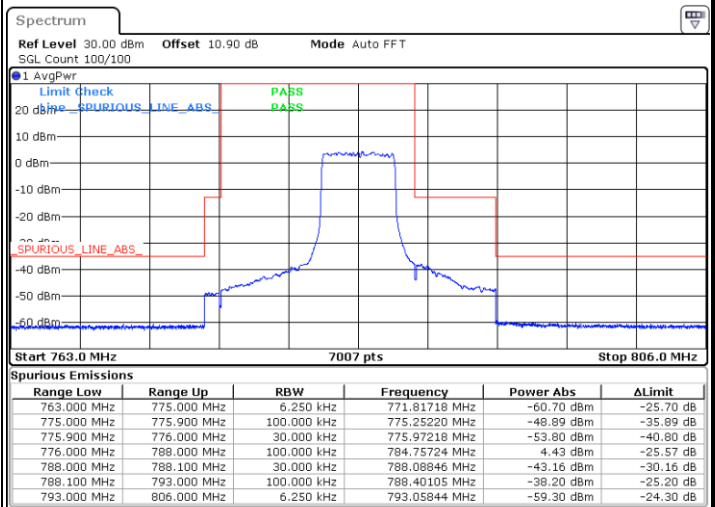
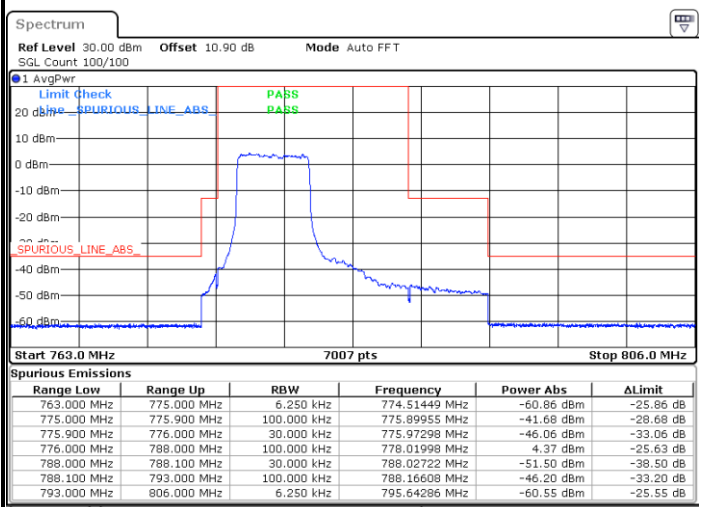


Date: 14.OCT.2022 03:47:50

Date: 14.OCT.2022 03:50:22

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.OCT.2022 03:46:54

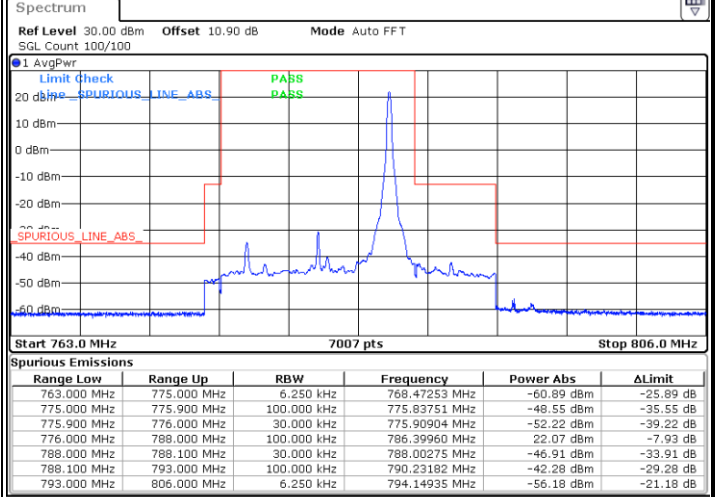
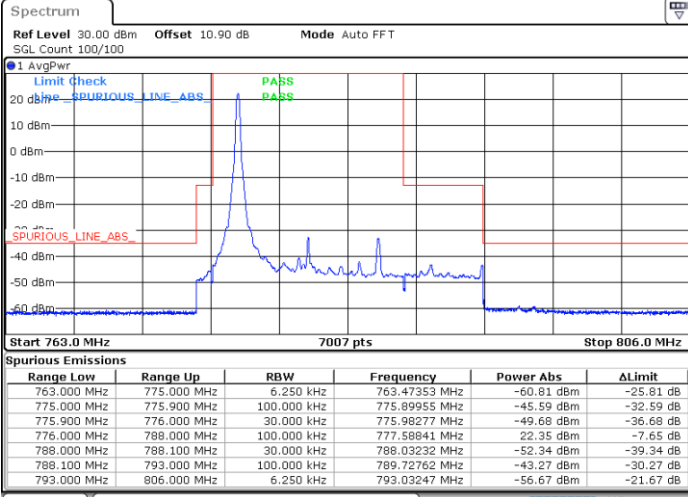
Date: 14.OCT.2022 03:49:25



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

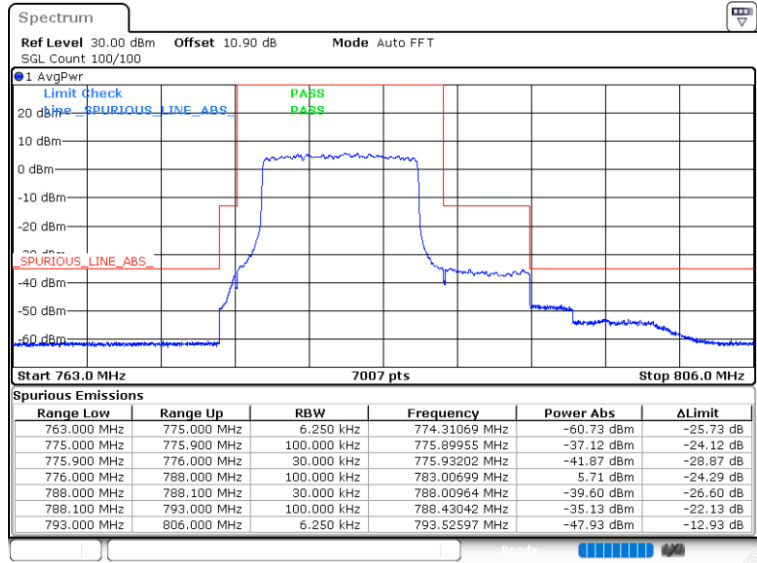
Highest Band Edge / 1 RB



Date: 14.OCT.2022 03:38:14

Date: 14.OCT.2022 03:39:09

Band Edge / Full RB



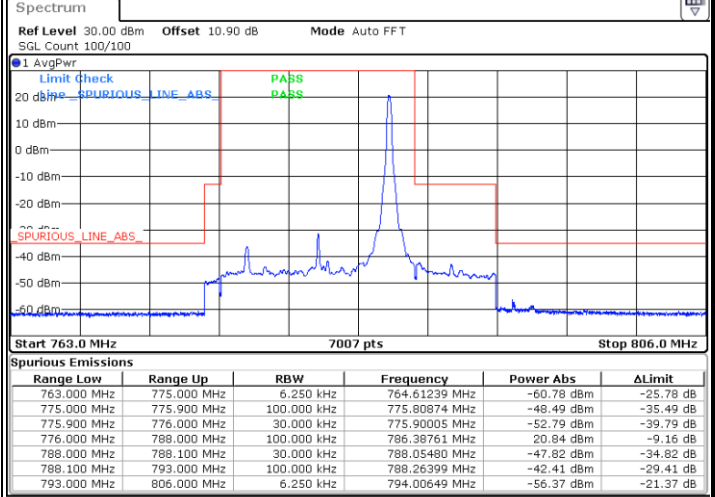
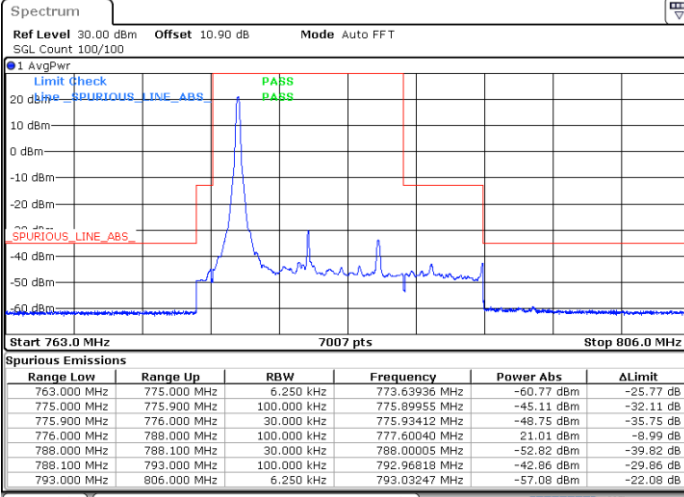
Date: 14.OCT.2022 03:35:28



LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

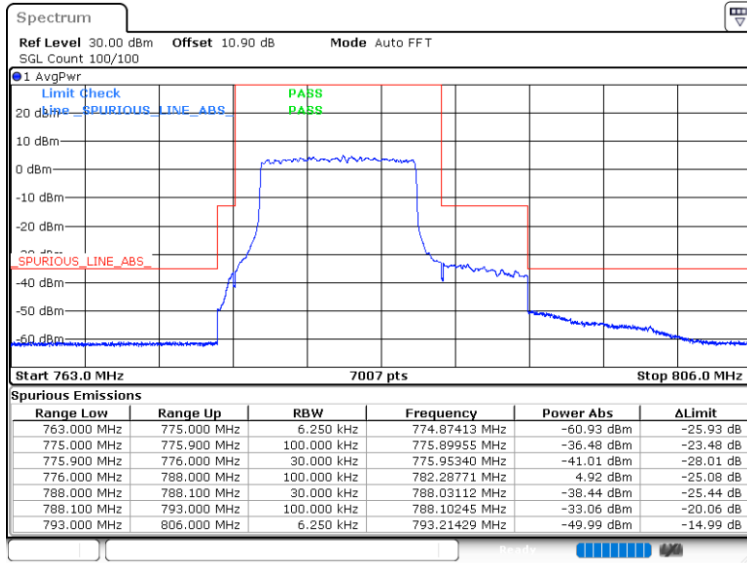
Highest Band Edge / 1 RB



Date: 14.OCT.2022 03:37:19

Date: 14.OCT.2022 03:40:05

Band Edge / Full RB

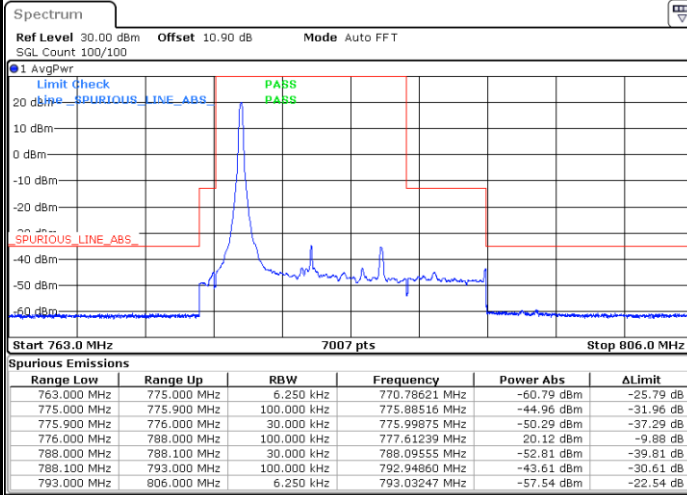


Date: 14.OCT.2022 03:36:24



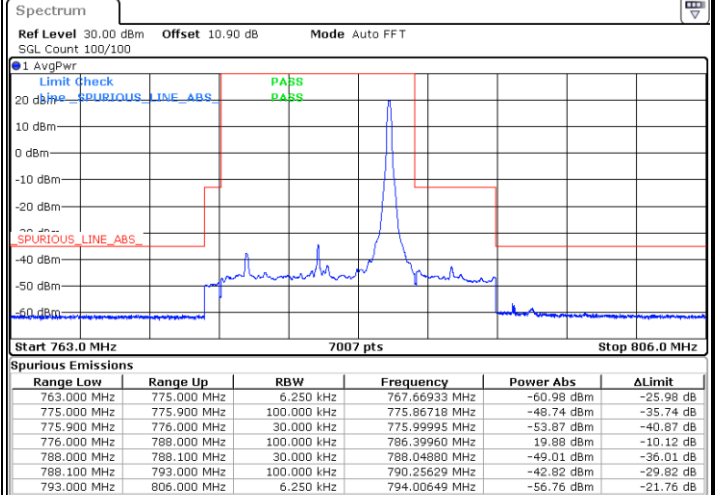
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



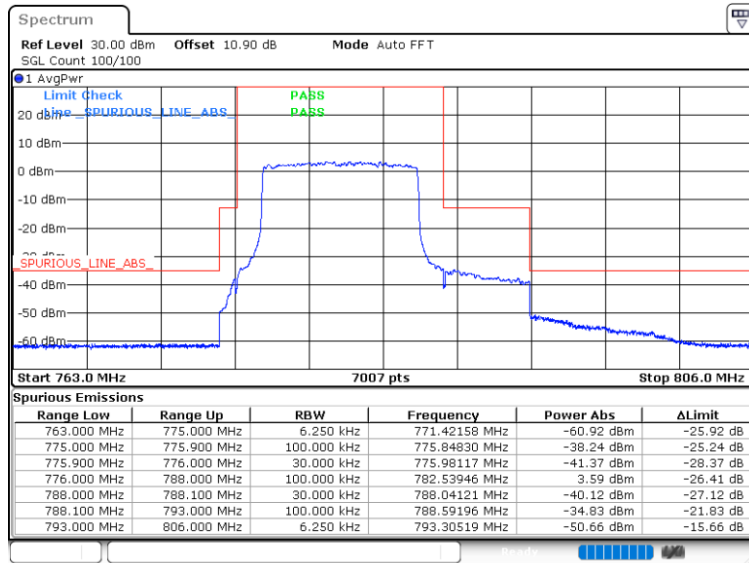
Date: 14.OCT.2022 03:43:38

Highest Band Edge / 1 RB



Date: 14.OCT.2022 03:44:34

Band Edge / Full RB



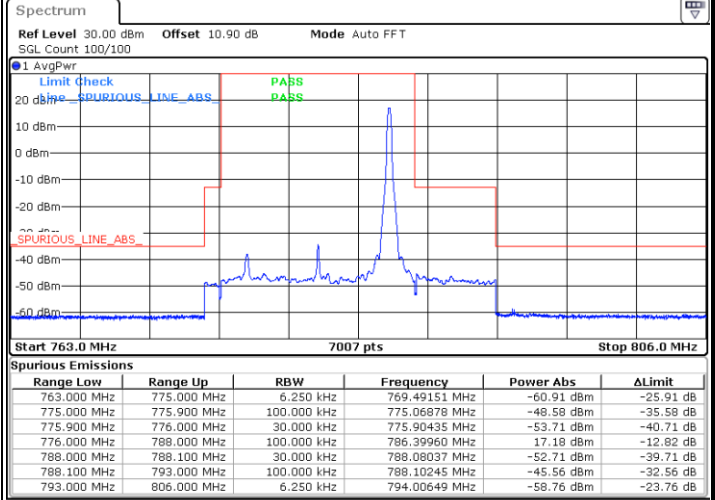
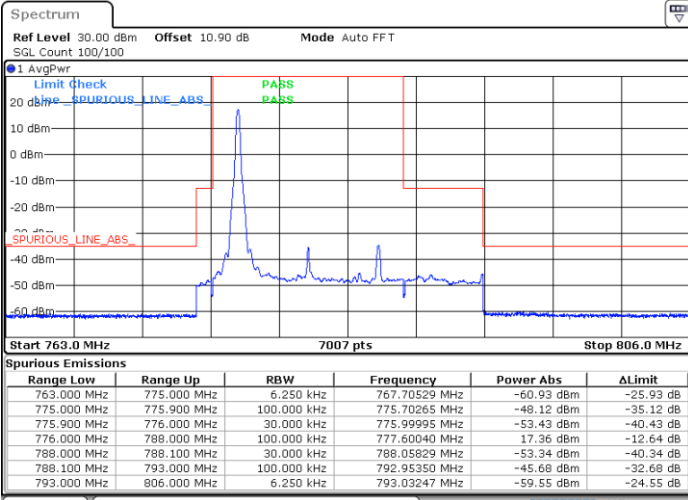
Date: 14.OCT.2022 03:42:43



LTE Band 13 / 10MHz / 256QAM

Lowest Band Edge / 1 RB

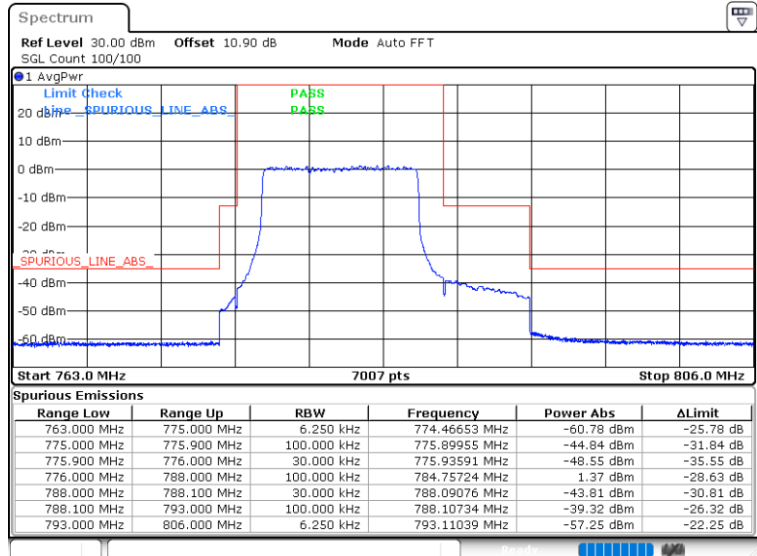
Highest Band Edge / 1 RB



Date: 14.OCT.2022 03:52:43

Date: 14.OCT.2022 03:53:38

Band Edge / Full RB

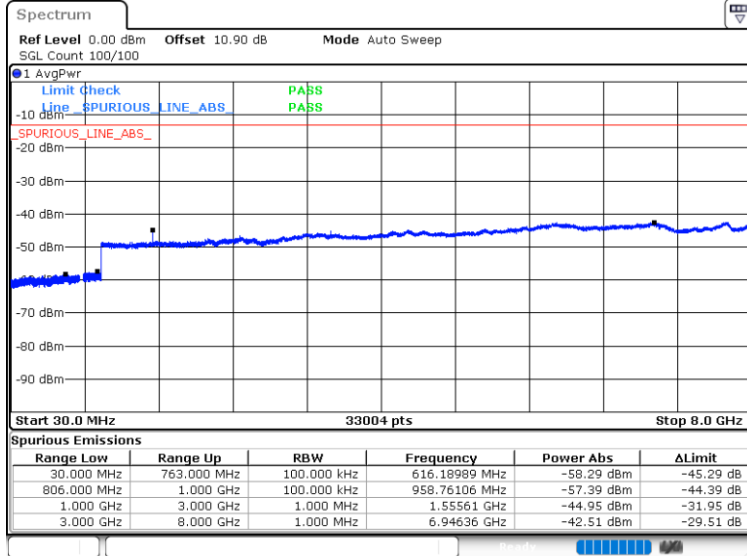


Date: 14.OCT.2022 03:51:48



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 14.OCT.2022 03:41:19



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	0.0033	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0152	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0121	
-20	Normal Voltage	0.0132	
-30	Normal Voltage	0.0051	
20	Maximum Voltage	0.0198	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

Note:

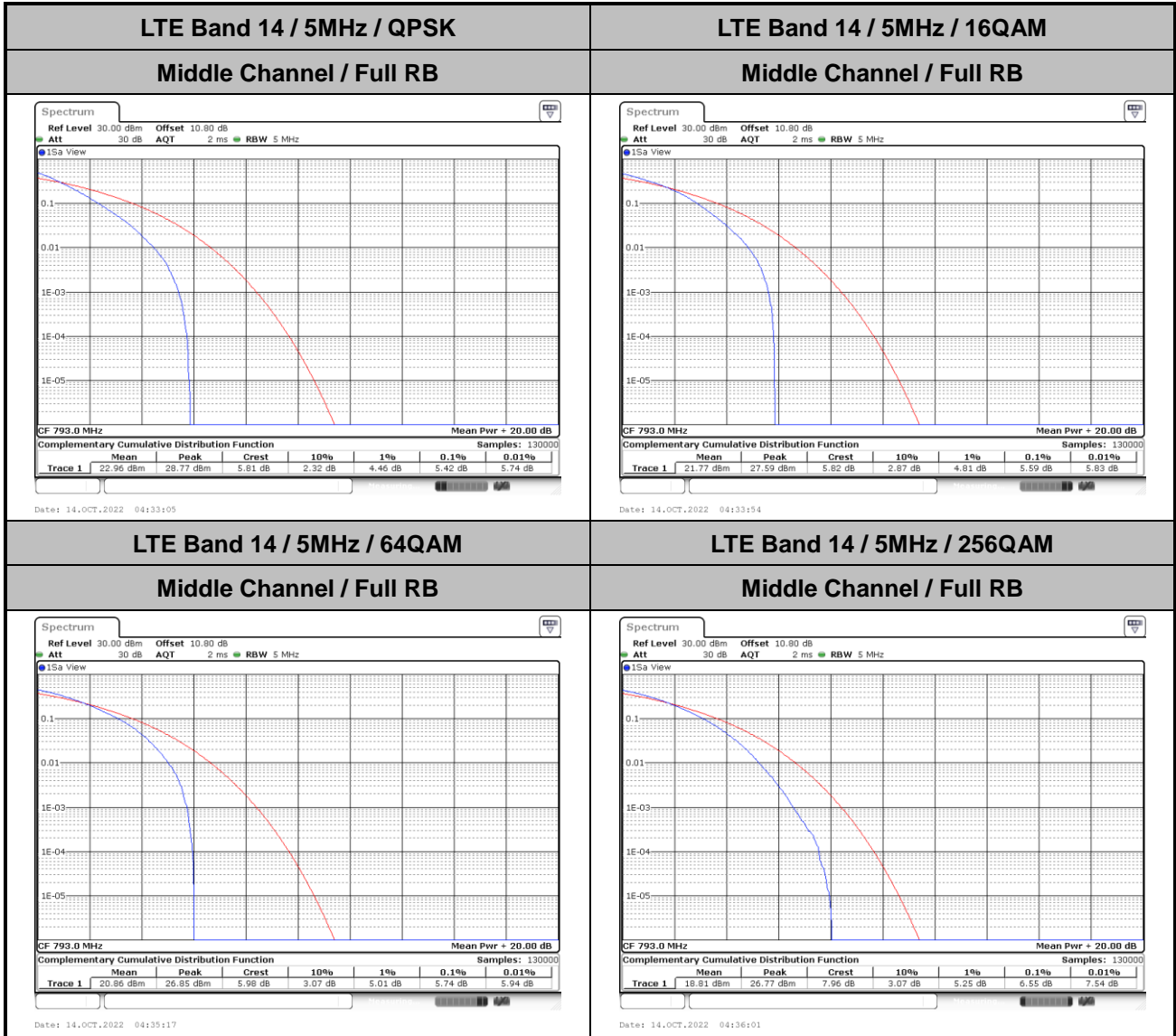
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.60 V. ; Maximum Voltage =4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

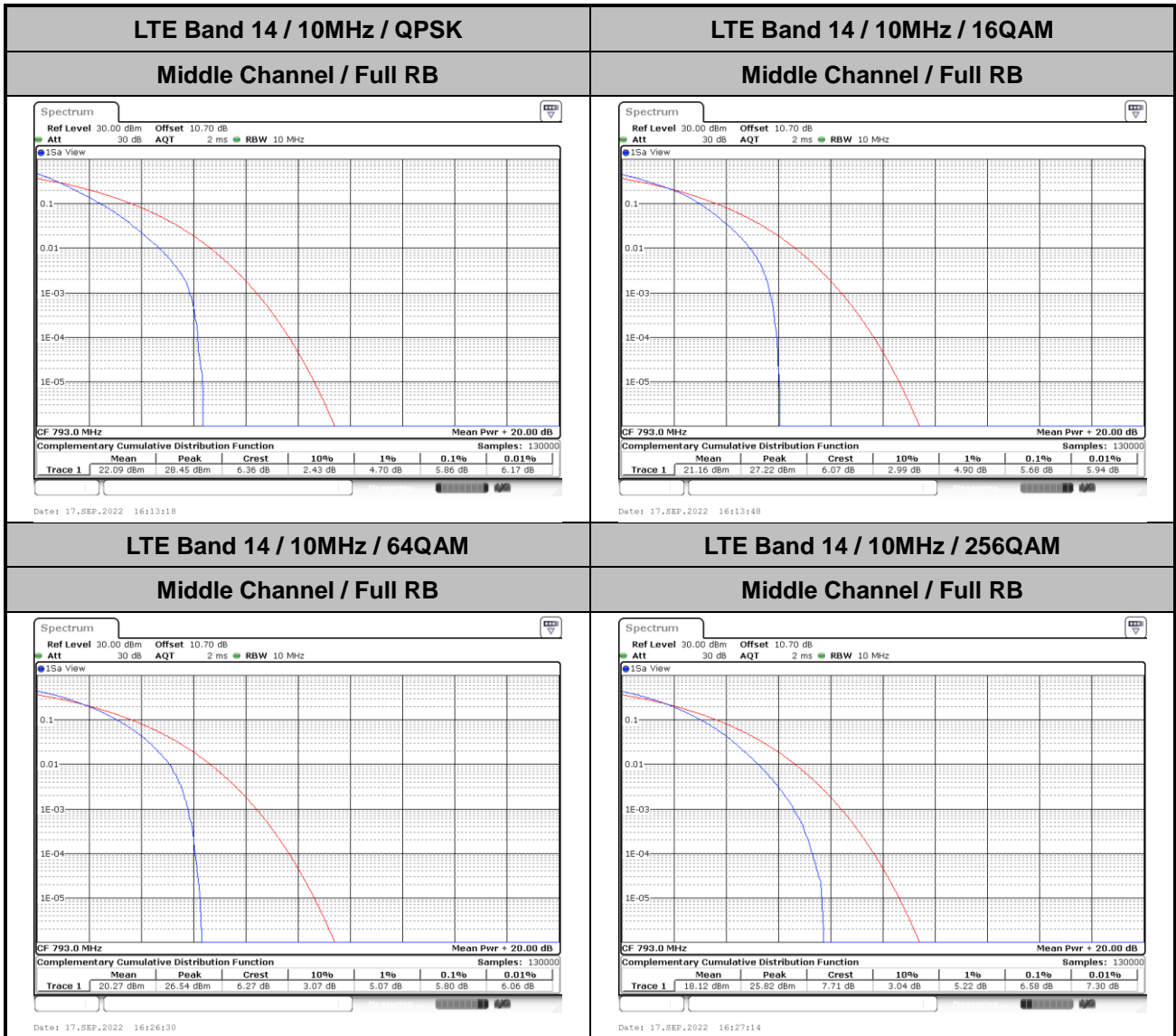


LTE Band 14

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	5.42	5.59	5.74	6.55	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	5.86	5.68	5.80	6.58	PASS







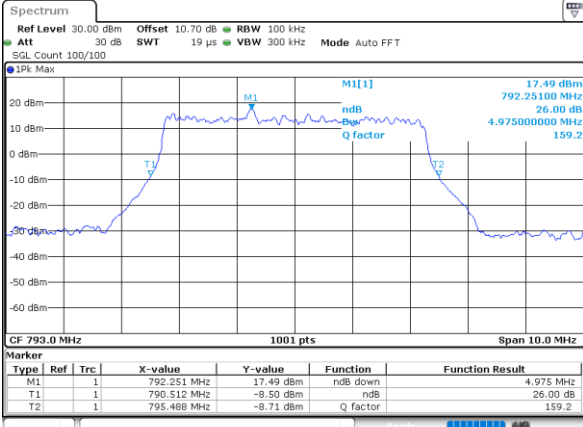
26dB Bandwidth

Mode	LTE Band 14 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.98	5.16	10.11	10.13	-	-	-	-
Mode	LTE Band 14 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	5.24	4.96	10.05	10.19	-	-	-	-



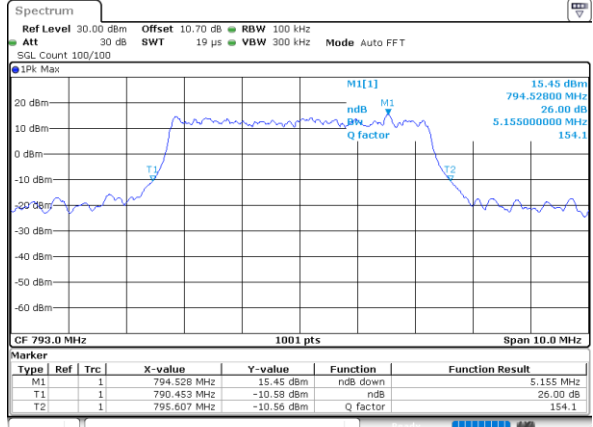
LTE Band 14

Middle Channel / 5MHz / QPSK



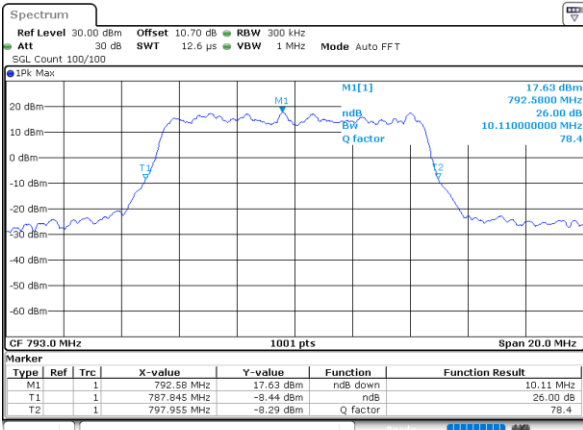
Date: 17_SEP.2022 15:39:00

Middle Channel / 5MHz / 16QAM



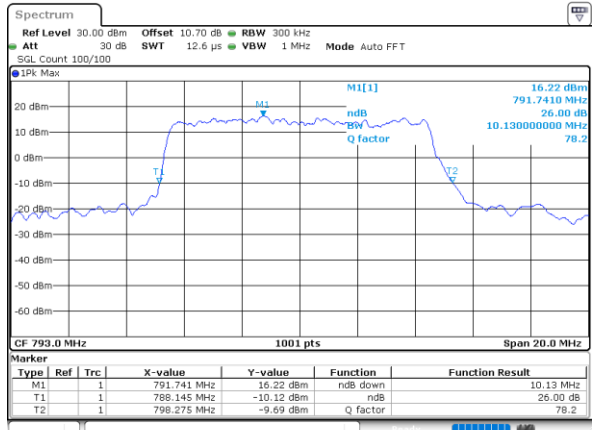
Date: 17_SEP.2022 15:39:29

Middle Channel / 10MHz / QPSK



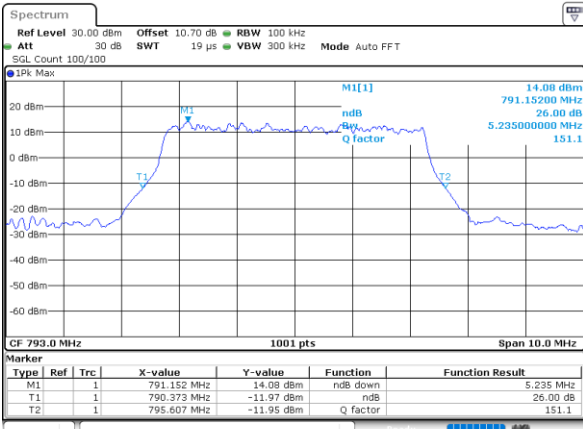
Date: 17_SEP.2022 16:13:02

Middle Channel / 10MHz / 16QAM



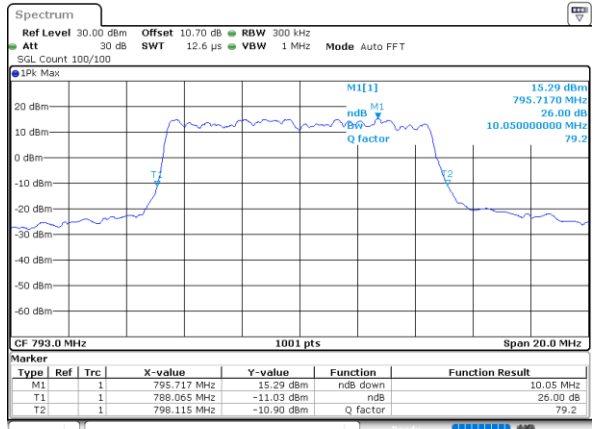
Date: 17_SEP.2022 16:14:17

Middle Channel / 5MHz / 64QAM



Date: 17_SEP.2022 15:40:26

Middle Channel / 10MHz / 64QAM



Date: 17_SEP.2022 16:26:44