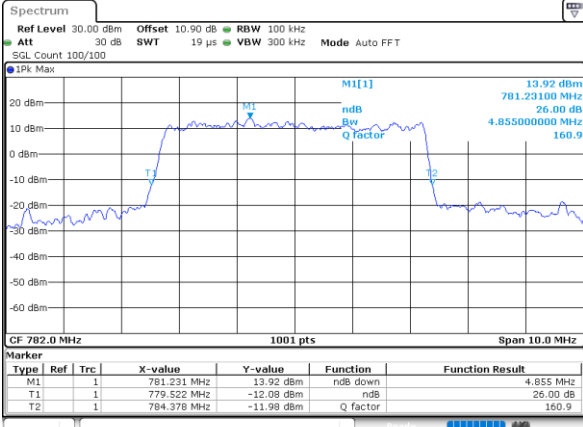




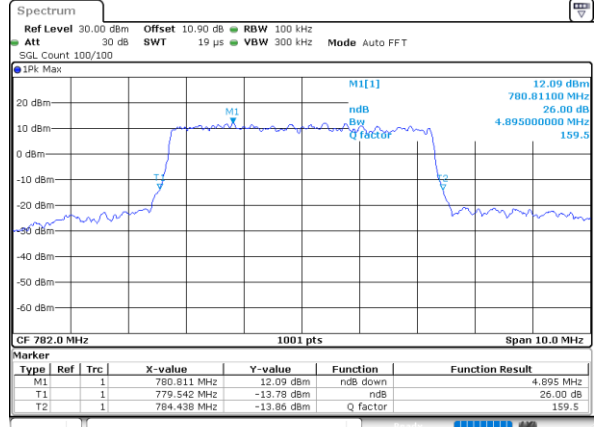
LTE Band 13

Middle Channel / 5MHz / QPSK



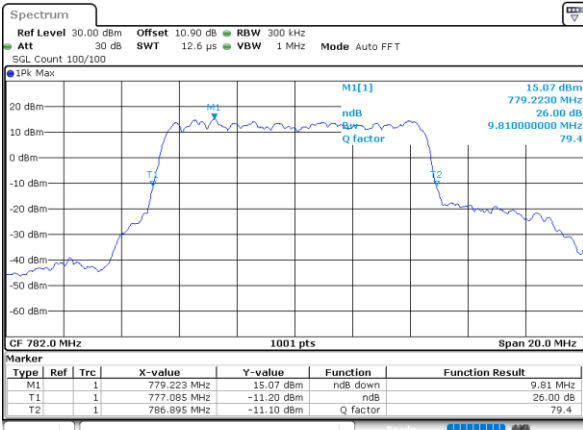
Date: 3.FEB.2021 11:22:02

Middle Channel / 5MHz / 16QAM



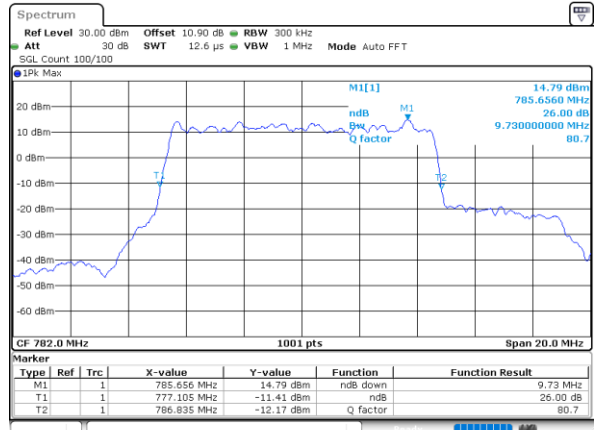
Date: 3.FEB.2021 11:22:16

Middle Channel / 10MHz / QPSK



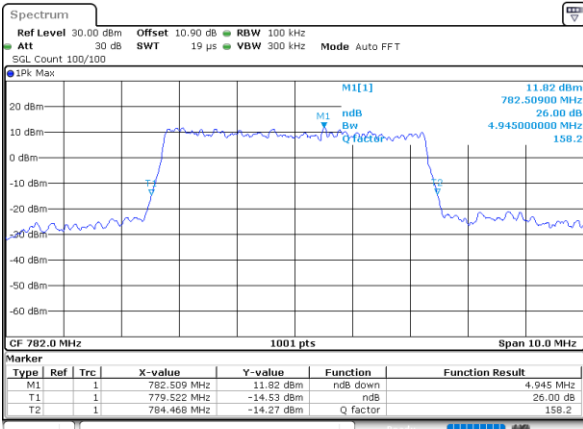
Date: 3.FEB.2021 11:38:50

Middle Channel / 10MHz / 16QAM



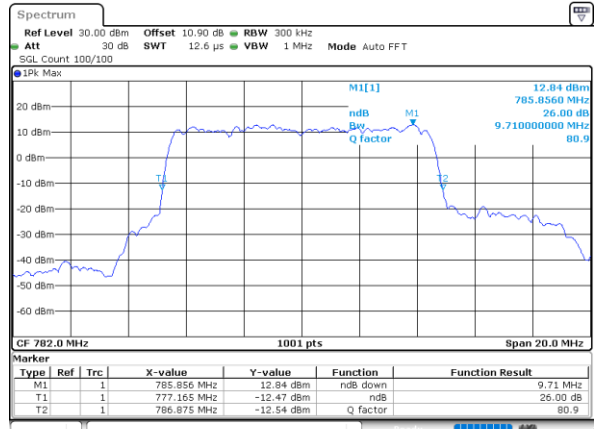
Date: 3.FEB.2021 11:38:57

Middle Channel / 5MHz / 64QAM



Date: 3.FEB.2021 11:34:16

Middle Channel / 10MHz / 64QAM



Date: 3.FEB.2021 11:50:32



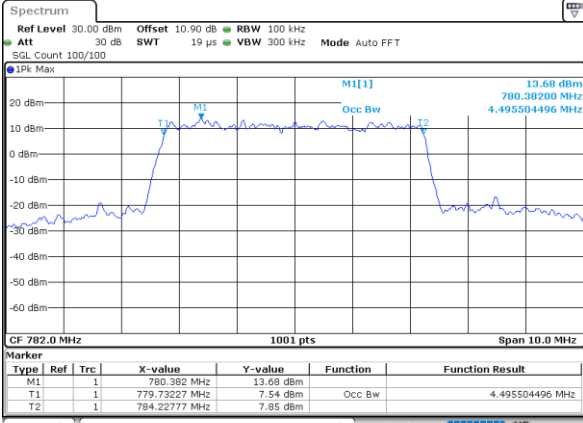
Occupied Bandwidth

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	-	-	-	-	4.50	4.50	9.05	9.01	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-
Middle CH	-	-	-	-	4.51	-	9.03	-	-	-	-	-



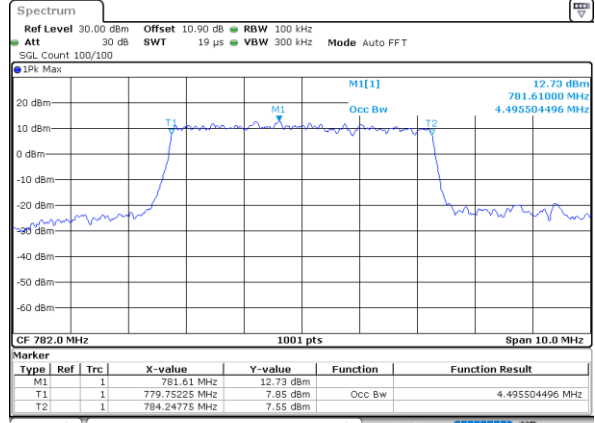
LTE Band 13

Middle Channel / 5MHz / QPSK



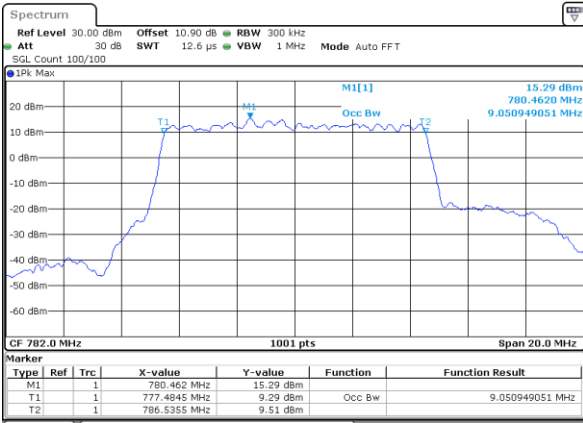
Date: 3.FEB.2021 11:22:44

Middle Channel / 5MHz / 16QAM



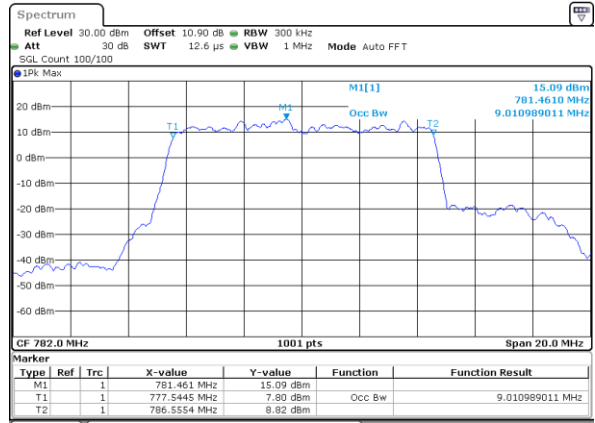
Date: 3.FEB.2021 11:22:30

Middle Channel / 10MHz / QPSK



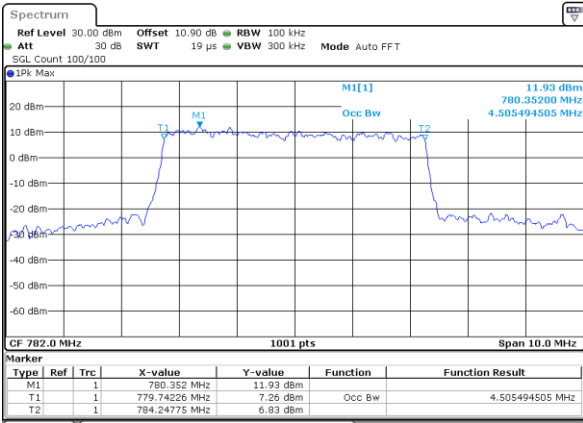
Date: 3.FEB.2021 11:38:09

Middle Channel / 10MHz / 16QAM



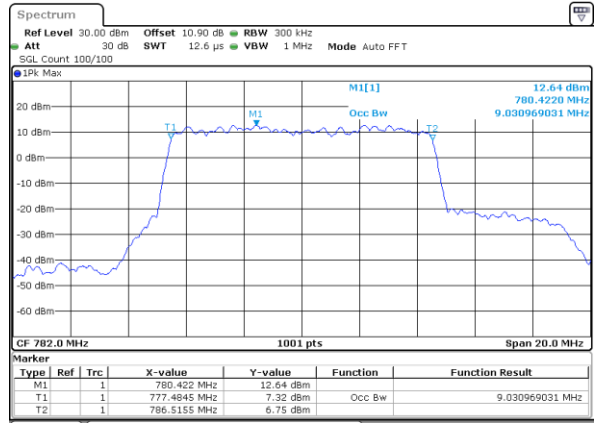
Date: 3.FEB.2021 11:38:23

Middle Channel / 5MHz / 64QAM



Date: 3.FEB.2021 11:34:30

Middle Channel / 10MHz / 64QAM



Date: 3.FEB.2021 11:50:19

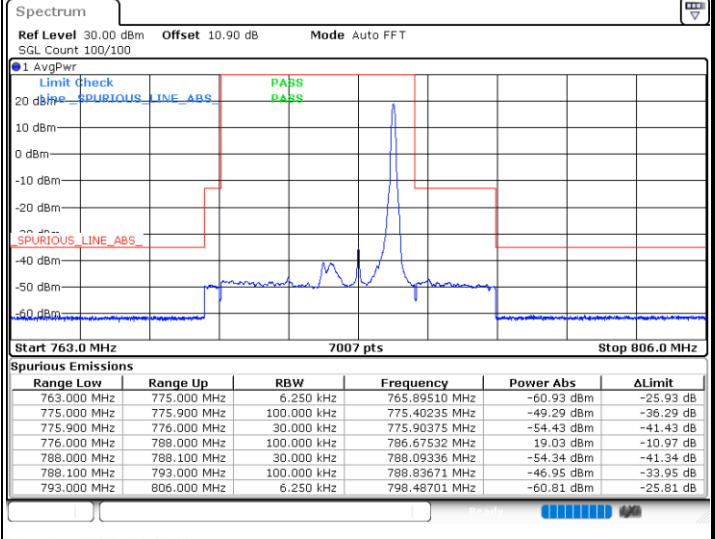
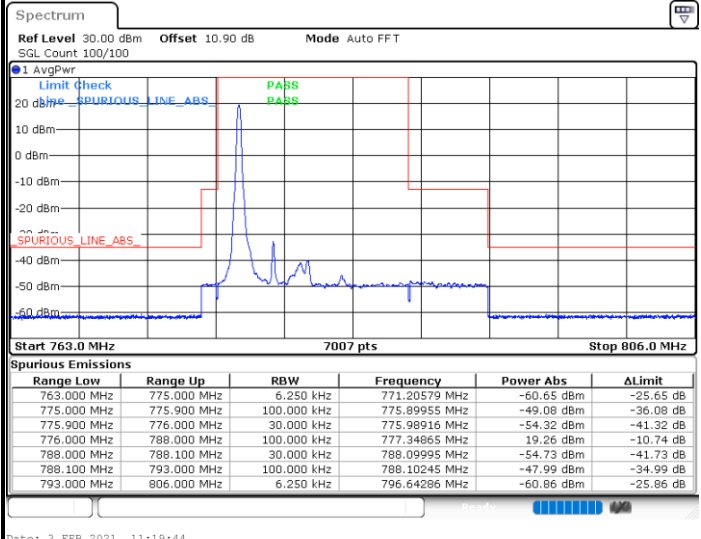


Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

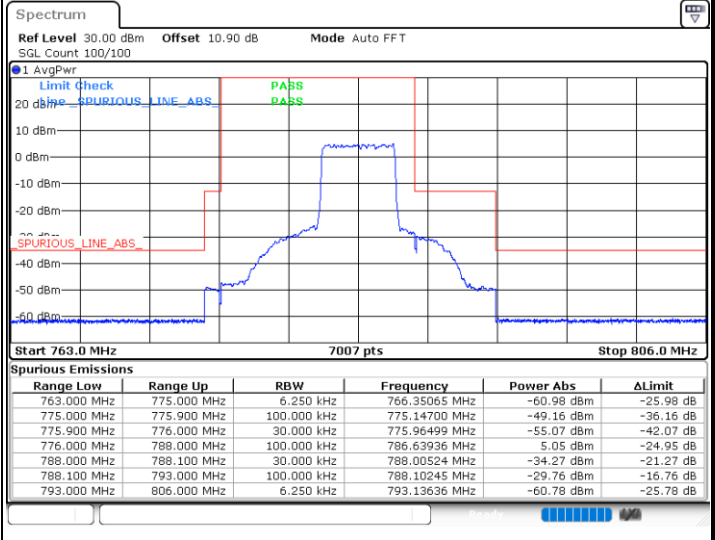
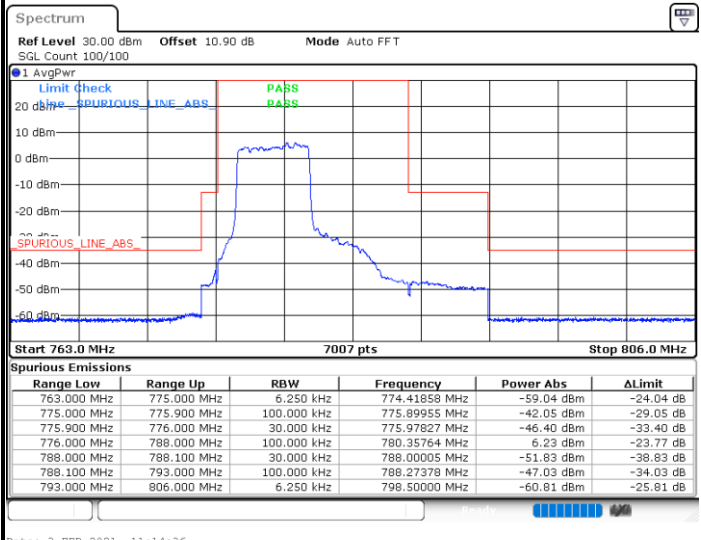
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

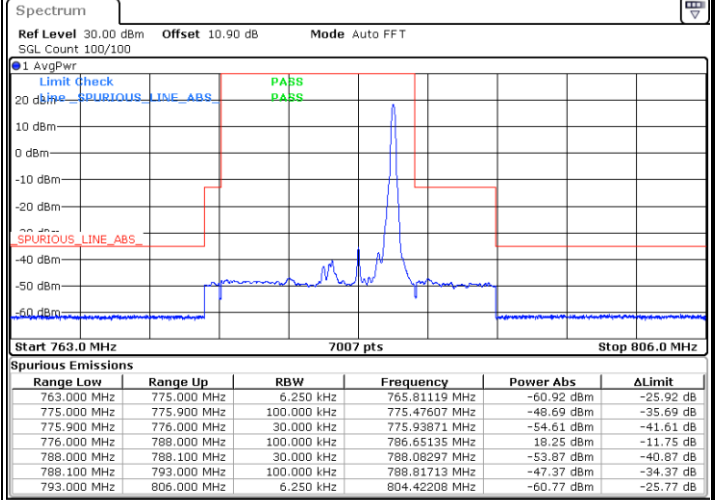
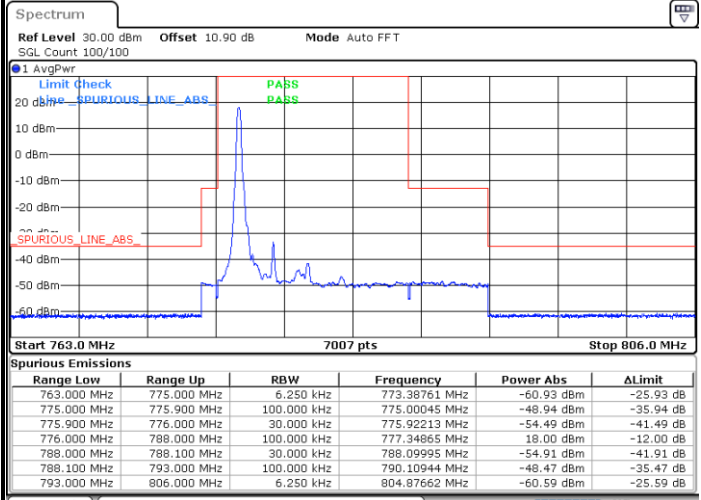




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

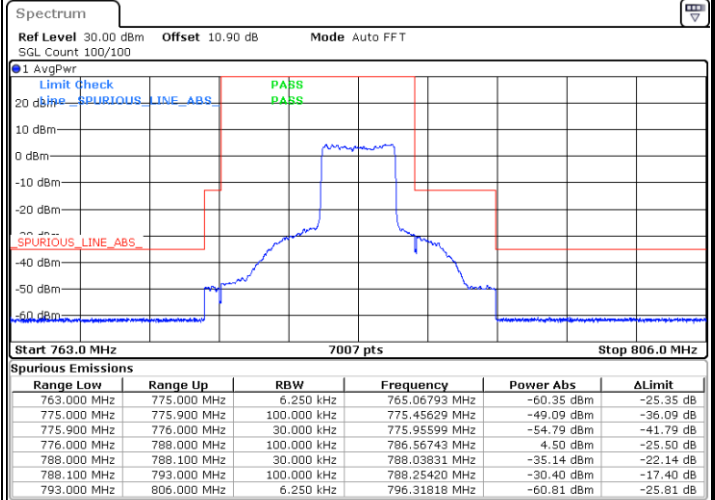
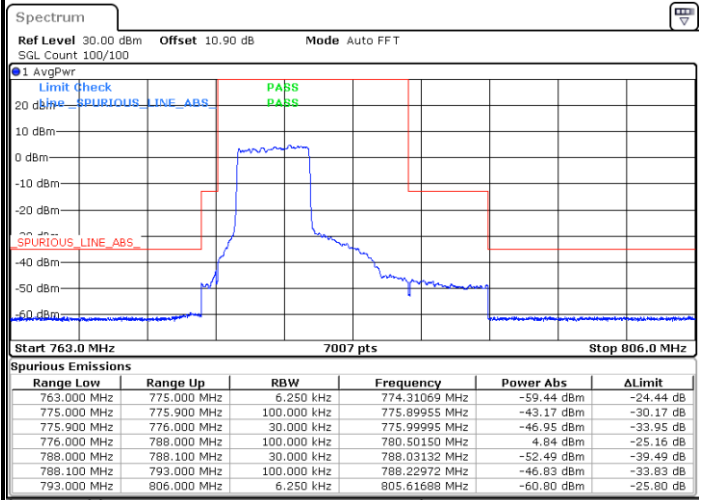


Date: 3.FEB.2021 11:18:02

Date: 3.FEB.2021 11:27:51

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



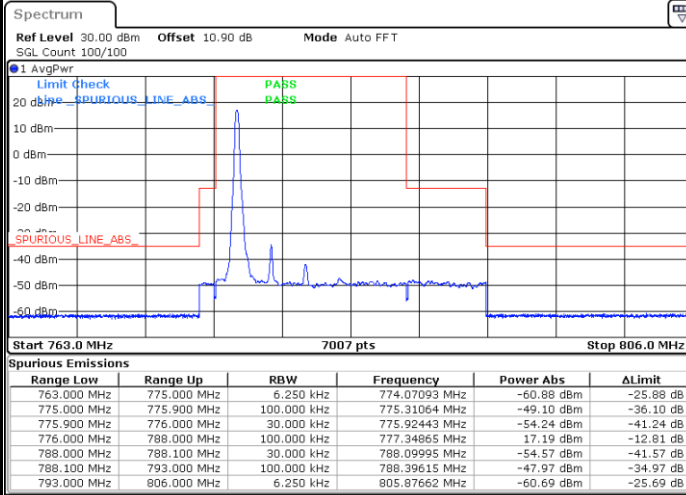
Date: 3.FEB.2021 11:16:19

Date: 3.FEB.2021 11:26:09



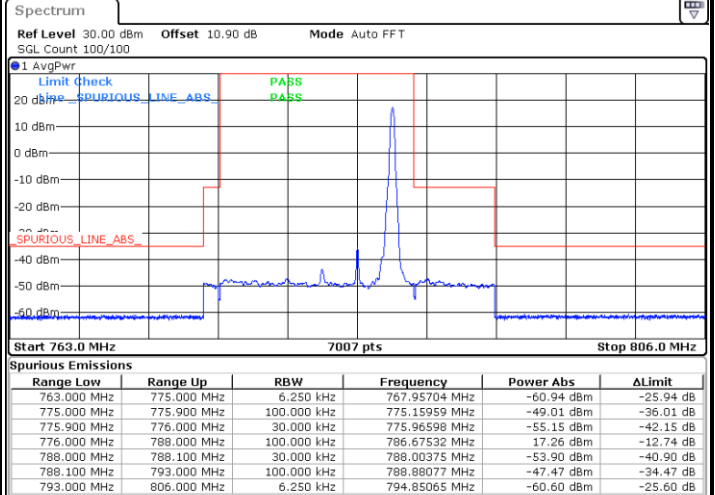
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



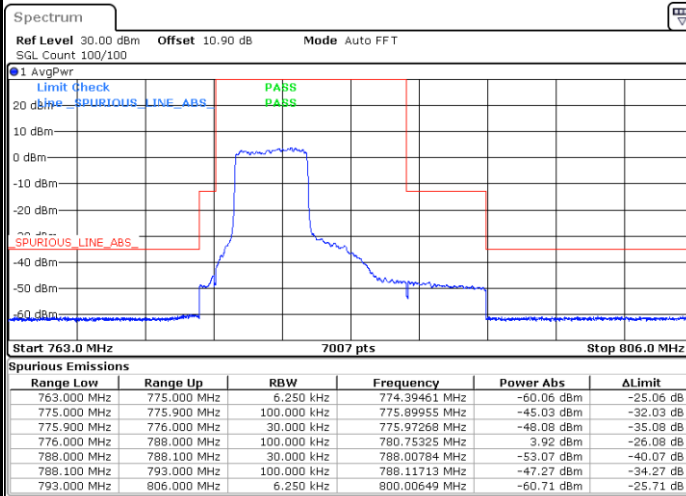
Date: 3.FEB.2021 11:34:02

Highest Band Edge / 1 RB



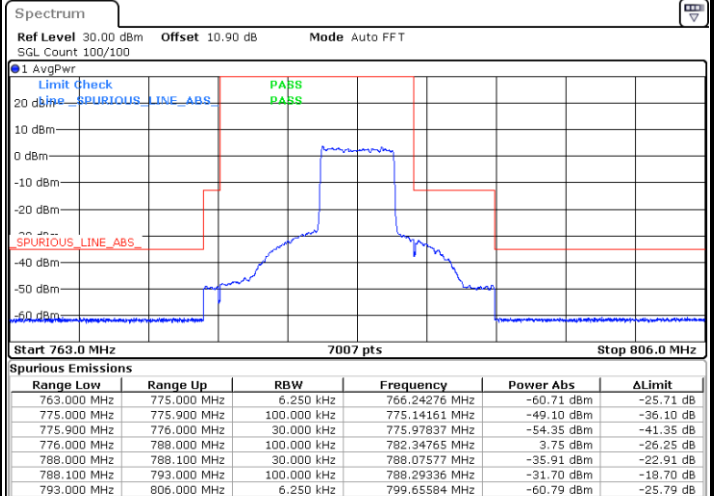
Date: 3.FEB.2021 11:37:55

Lowest Band Edge / Full RB



Date: 3.FEB.2021 11:32:19

Highest Band Edge / Full RB



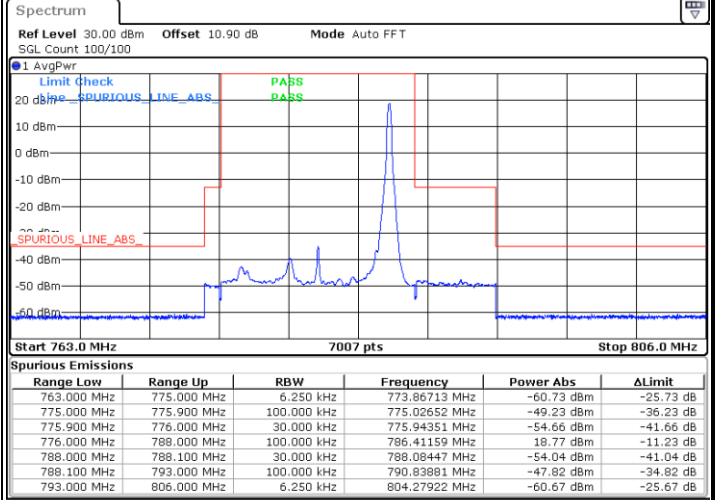
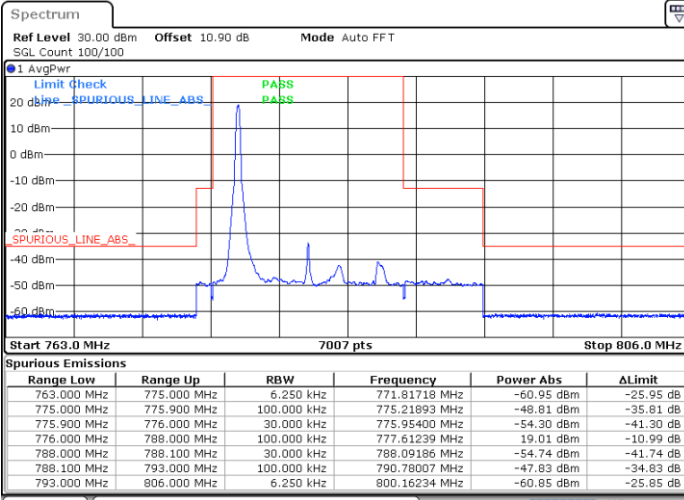
Date: 3.FEB.2021 11:36:12



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

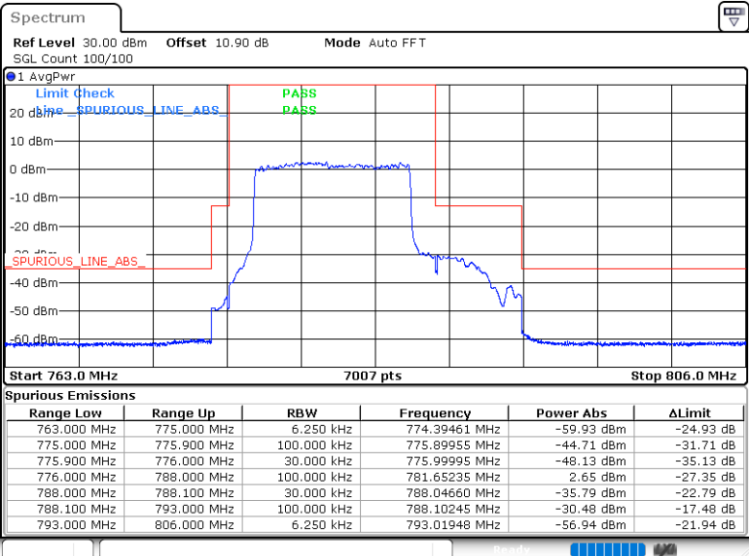
Highest Band Edge / 1 RB



Date: 3.FEB.2021 11:45:39

Date: 3.FEB.2021 11:47:21

Band Edge / Full RB

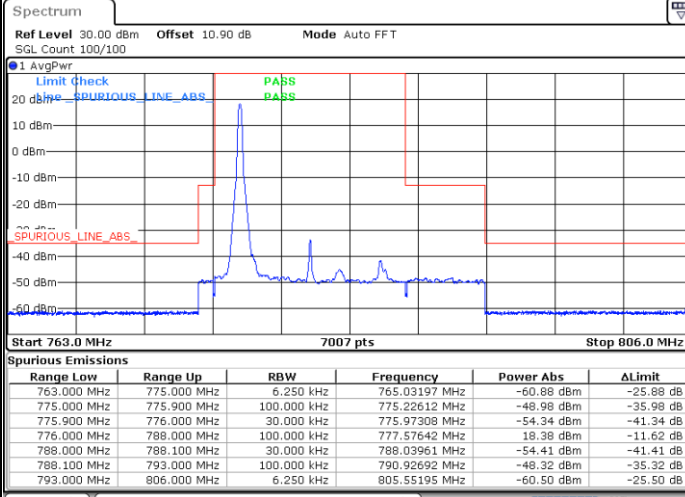


Date: 3.FEB.2021 11:40:33



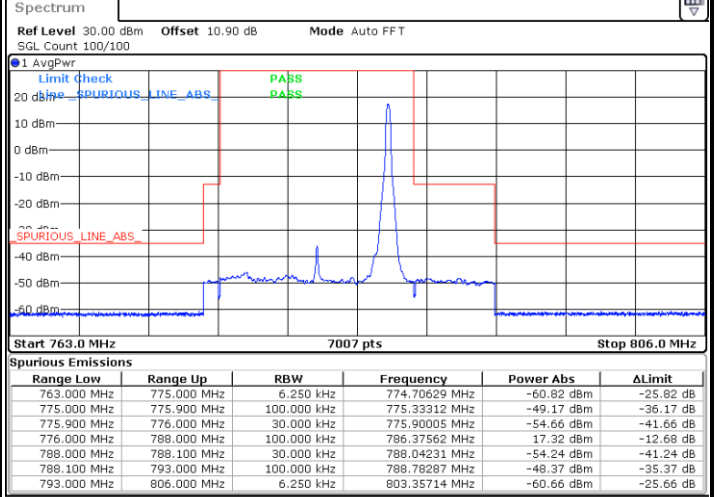
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



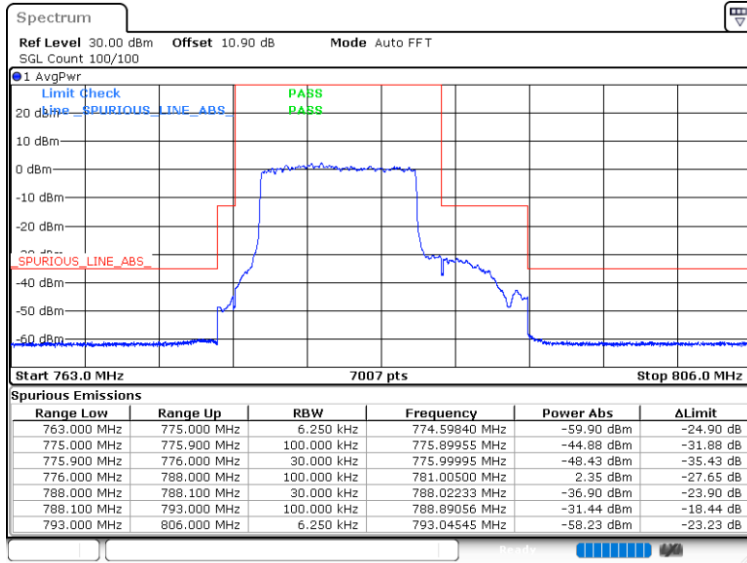
Date: 3.FEB.2021 11:43:57

Highest Band Edge / 1 RB



Date: 3.FEB.2021 11:49:03

Band Edge / Full RB

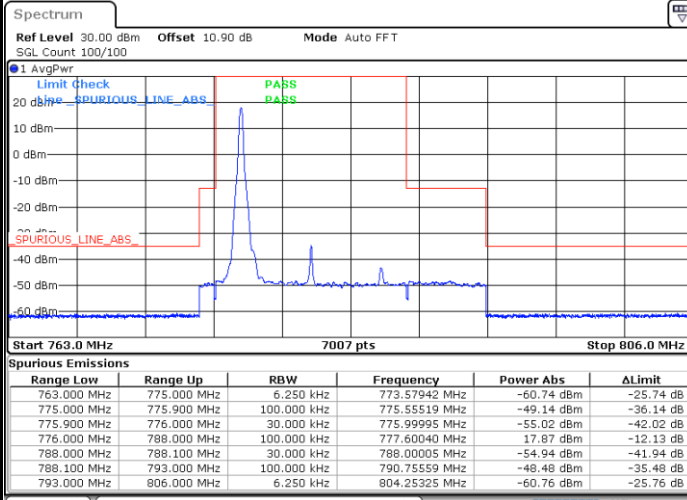


Date: 3.FEB.2021 11:42:15



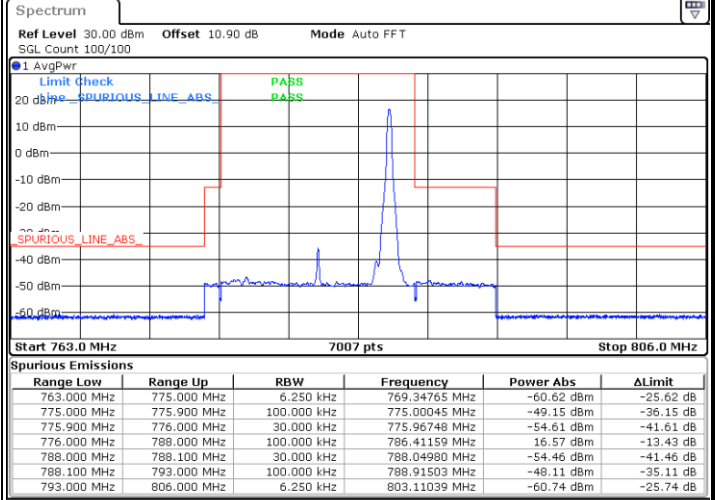
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



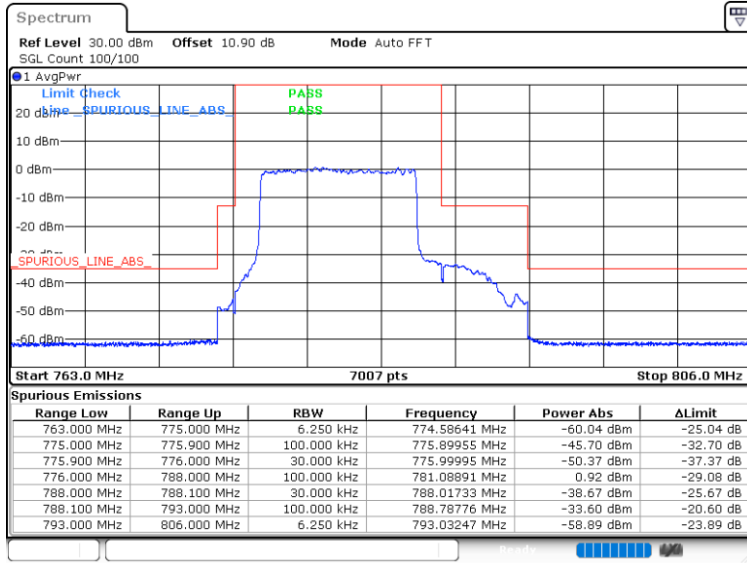
Date: 3.FEB.2021 11:53:57

Highest Band Edge / 1 RB



Date: 3.FEB.2021 11:55:39

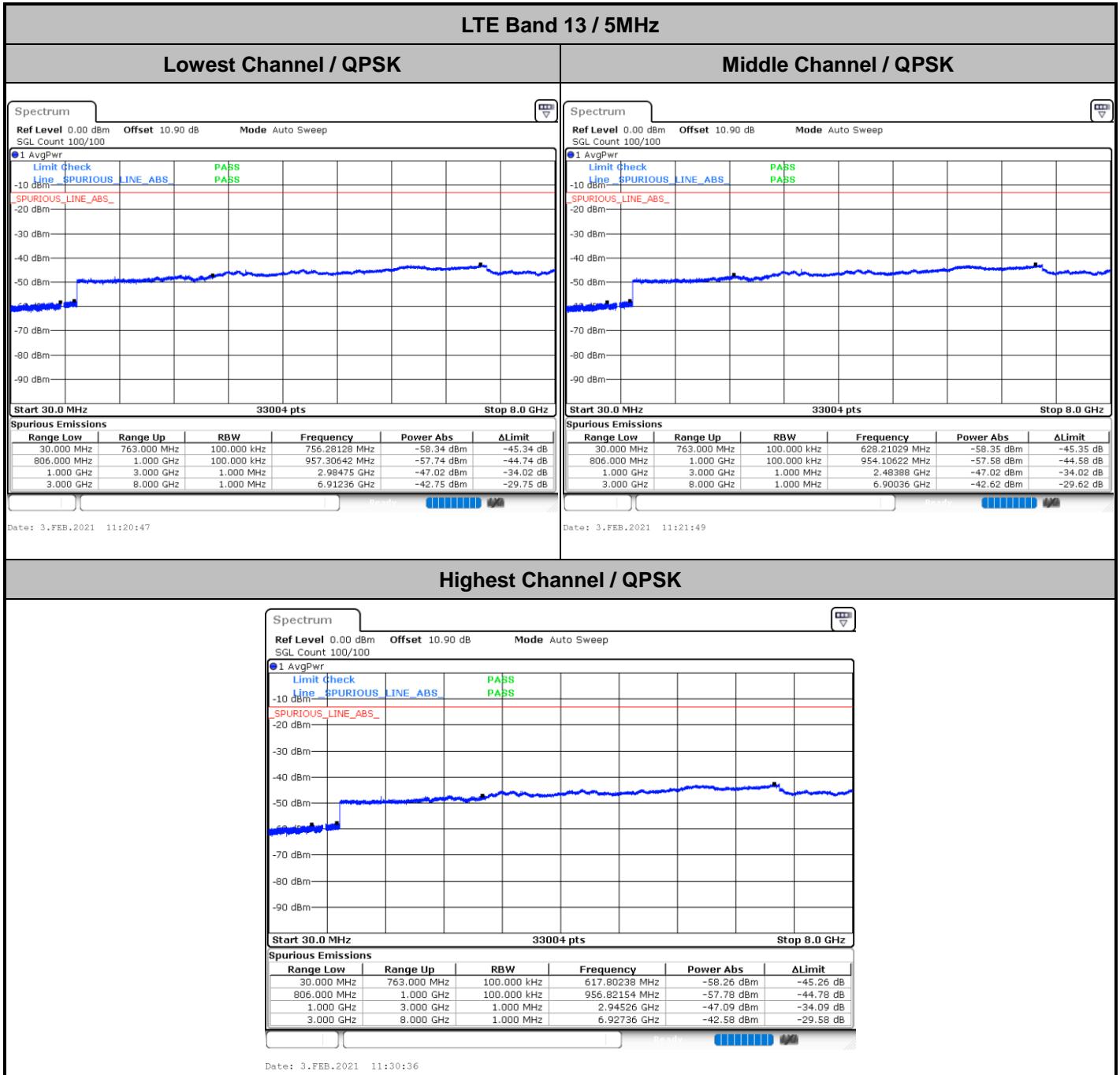
Band Edge / Full RB



Date: 3.FEB.2021 11:52:14



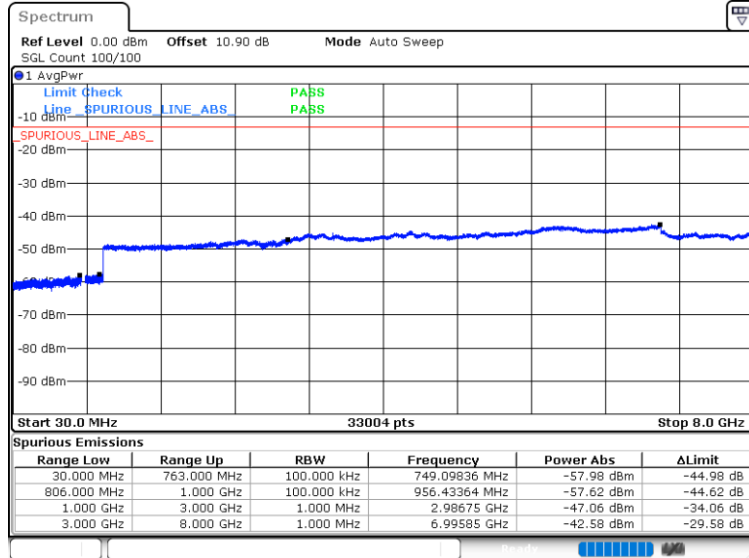
Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 3.FEB.2021 11:50:05



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	0.0180	PASS
40	Normal Voltage	0.0240	
30	Normal Voltage	0.0121	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0219	
0	Normal Voltage	0.0036	
-10	Normal Voltage	0.0046	
-20	Normal Voltage	0.0074	
-30	Normal Voltage	0.0009	
20	Maximum Voltage	0.0046	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0129	

Note:

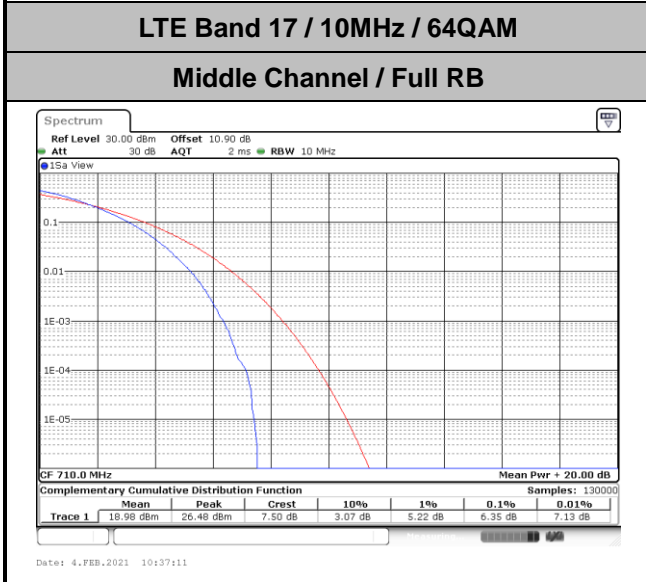
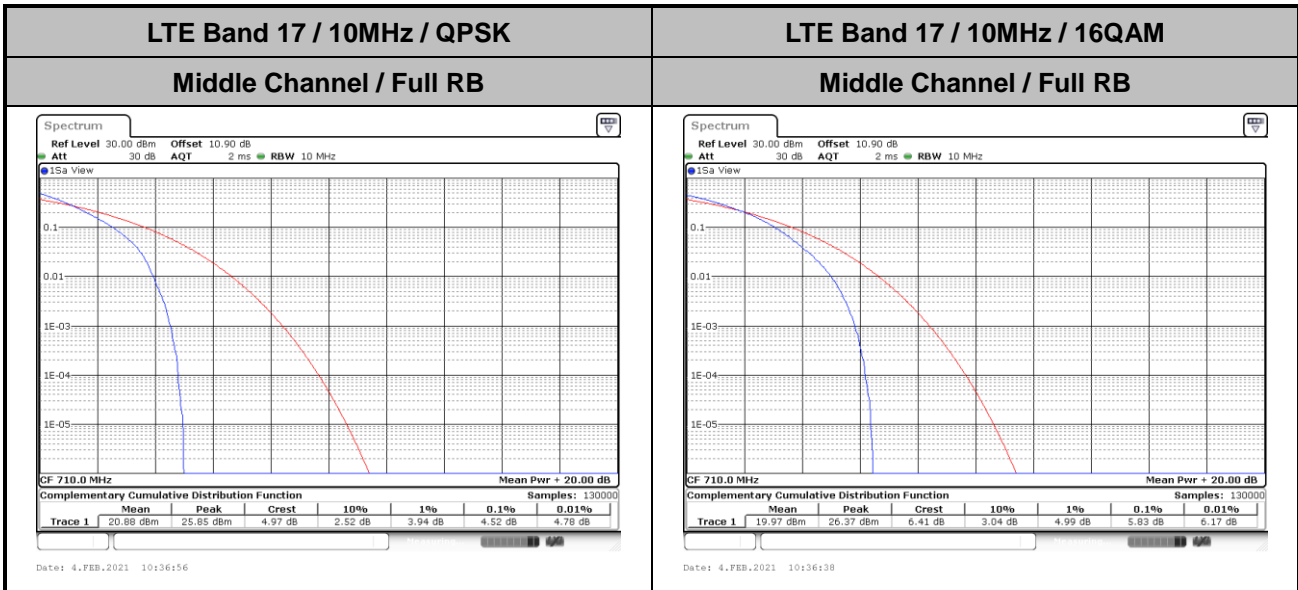
- 1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 17

Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.52	5.83	6.35	PASS





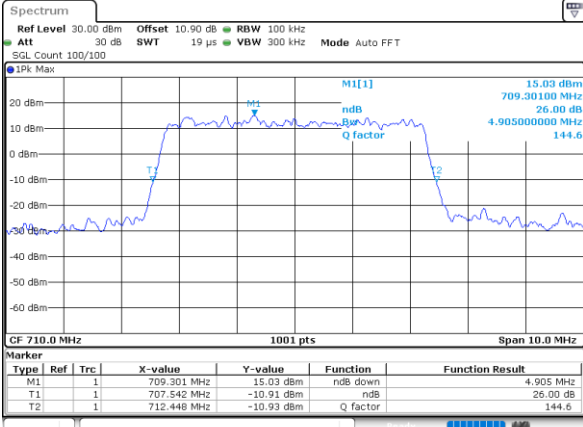
26dB Bandwidth

Mode	LTE Band 17 : 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	4.89	9.75	9.71	-	-	-	-
Mode	LTE Band 17 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-
Middle CH	-	-	-	-	4.86	-	9.75	-	-	-	-	-



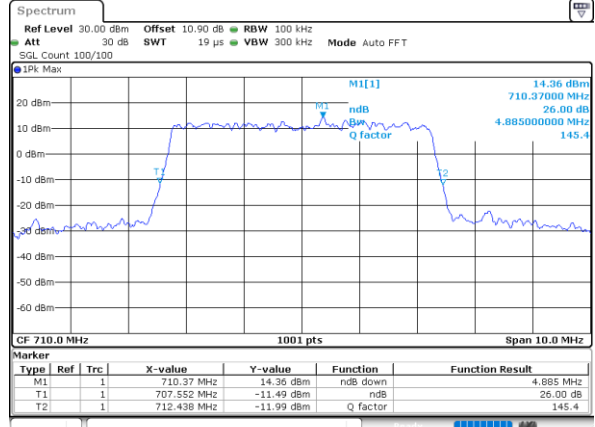
LTE Band 17

Middle Channel / 5MHz / QPSK



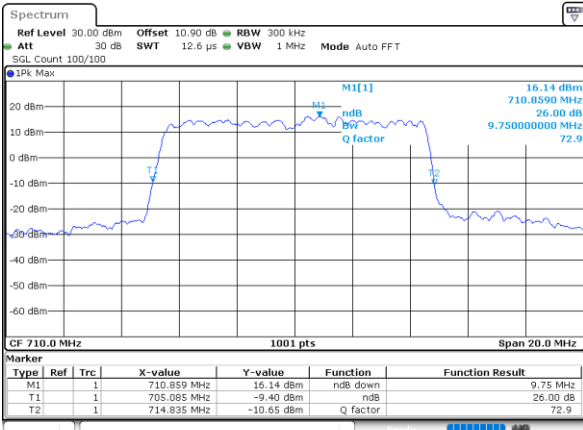
Date: 4.FEB.2021 10:13:57

Middle Channel / 5MHz / 16QAM



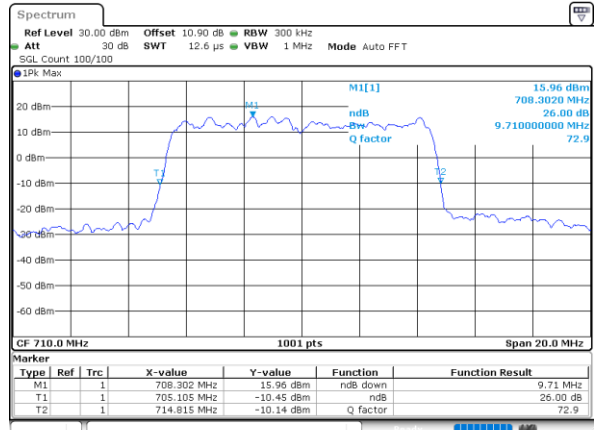
Date: 4.FEB.2021 10:14:11

Middle Channel / 10MHz / QPSK



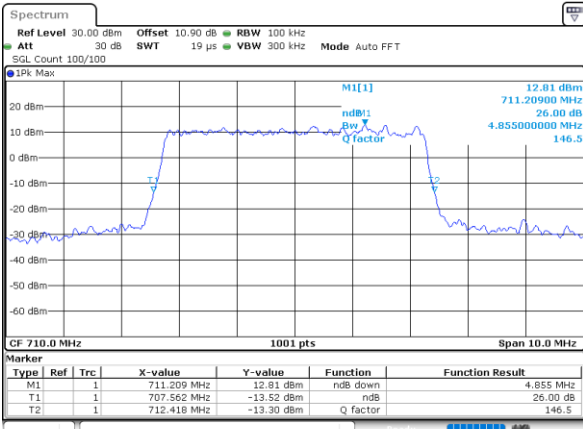
Date: 4.FEB.2021 10:23:47

Middle Channel / 10MHz / 16QAM



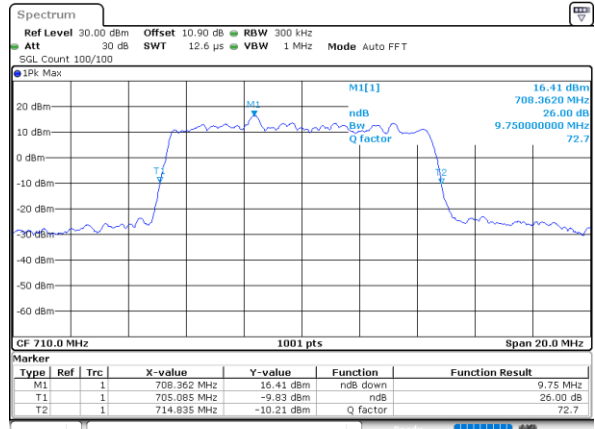
Date: 4.FEB.2021 10:24:01

Middle Channel / 5MHz / 64QAM



Date: 4.FEB.2021 10:30:51

Middle Channel / 10MHz / 64QAM



Date: 4.FEB.2021 10:34:12



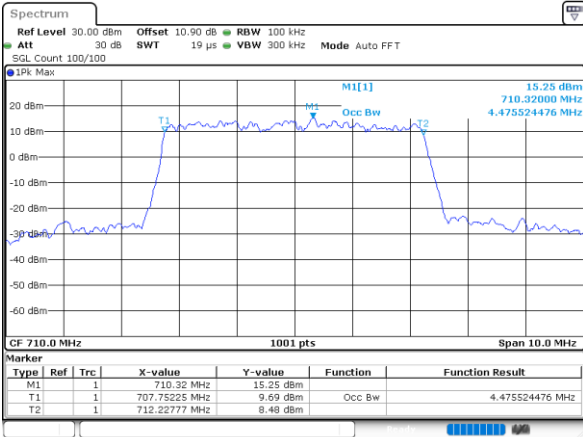
Occupied Bandwidth

Mode	LTE Band 17 : 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	-	-	-	-	4.48	4.49	9.01	8.93	-	-	-	-
Mode	LTE Band 17 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-
Middle CH	-	-	-	-	4.49	-	9.01	-	-	-	-	-



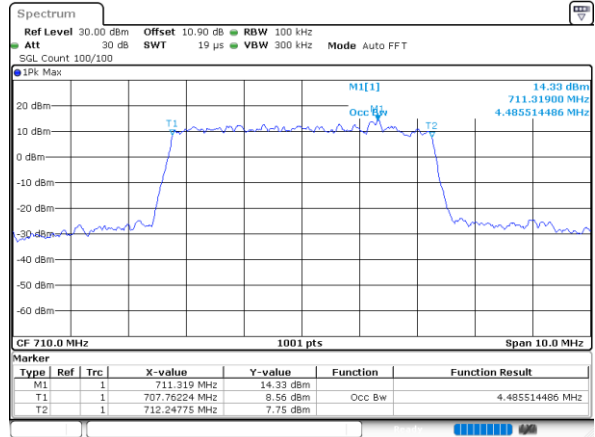
LTE Band 17

Middle Channel / 5MHz / QPSK



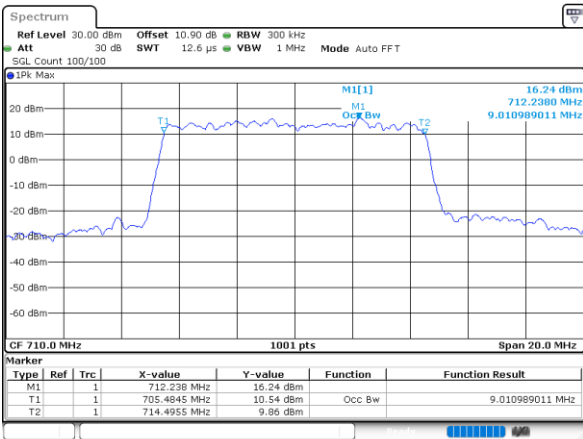
Date: 4.FEB.2021 10:13:30

Middle Channel / 5MHz / 16QAM



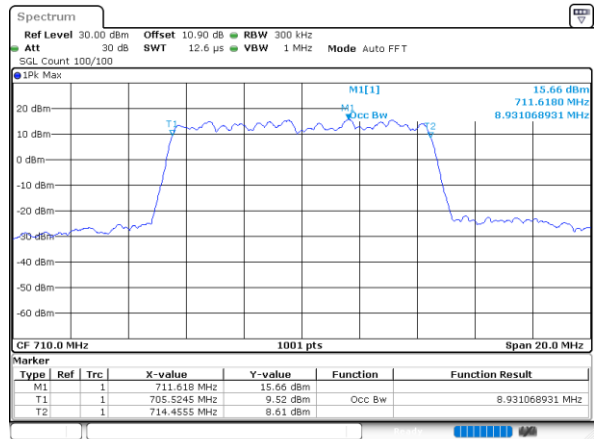
Date: 4.FEB.2021 10:13:43

Middle Channel / 10MHz / QPSK



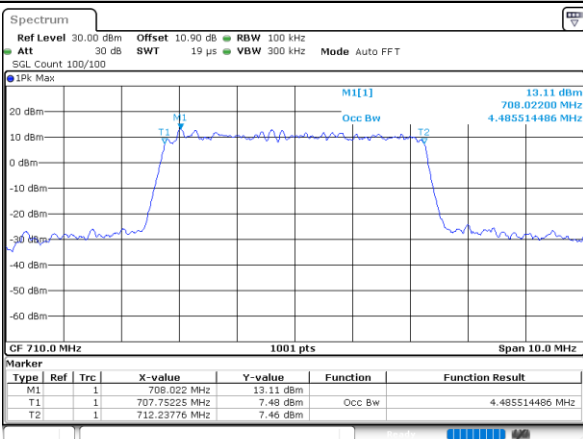
Date: 4.FEB.2021 10:23:19

Middle Channel / 10MHz / 16QAM



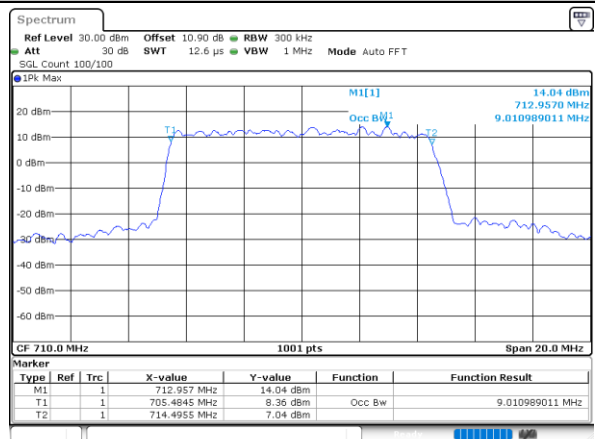
Date: 4.FEB.2021 10:23:33

Middle Channel / 5MHz / 64QAM



Date: 4.FEB.2021 10:30:37

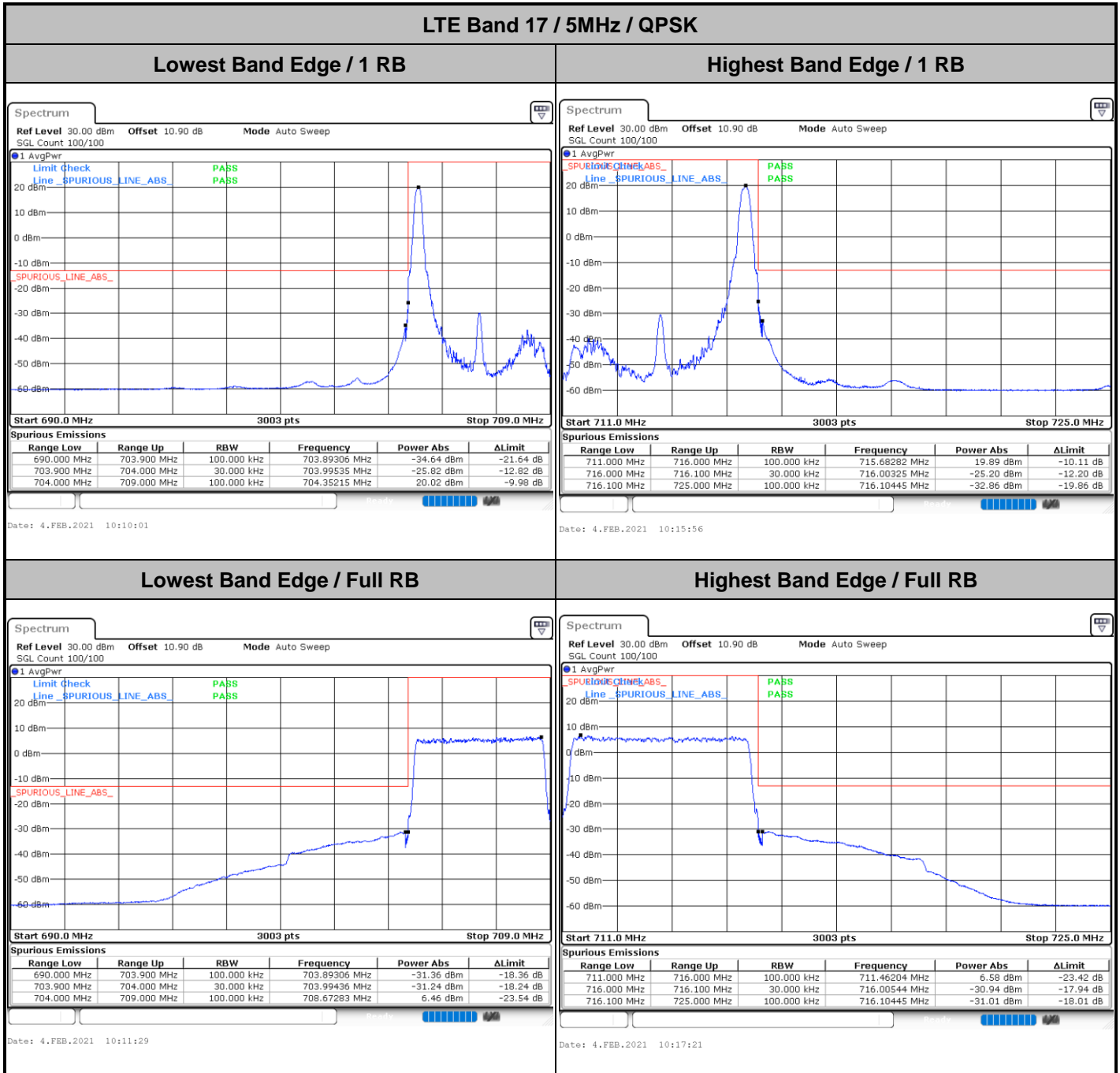
Middle Channel / 10MHz / 64QAM



Date: 4.FEB.2021 10:33:58



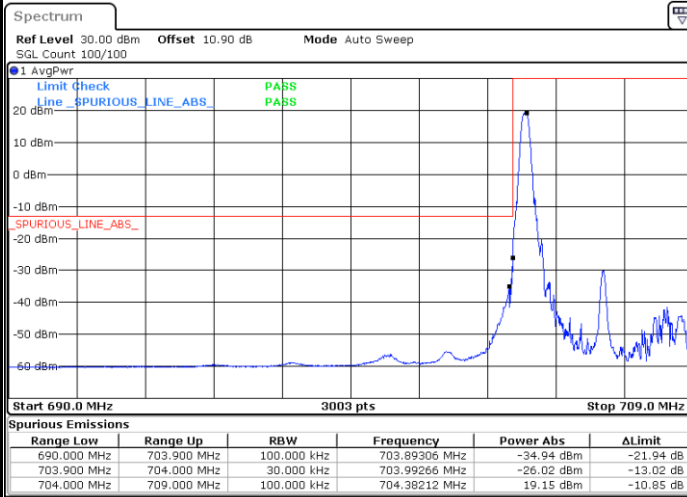
Conducted Band Edge





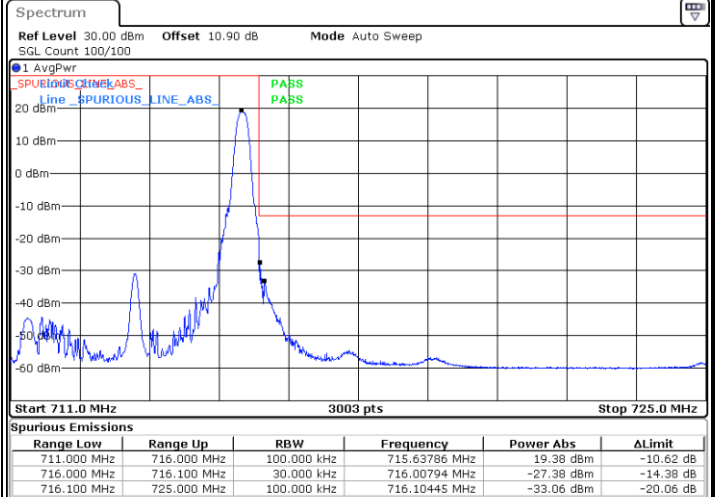
LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



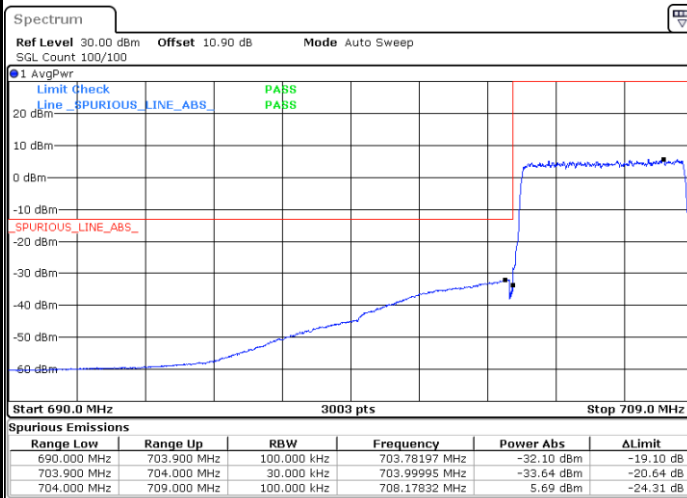
Date: 4.FEB.2021 10:10:45

Highest Band Edge / 1 RB



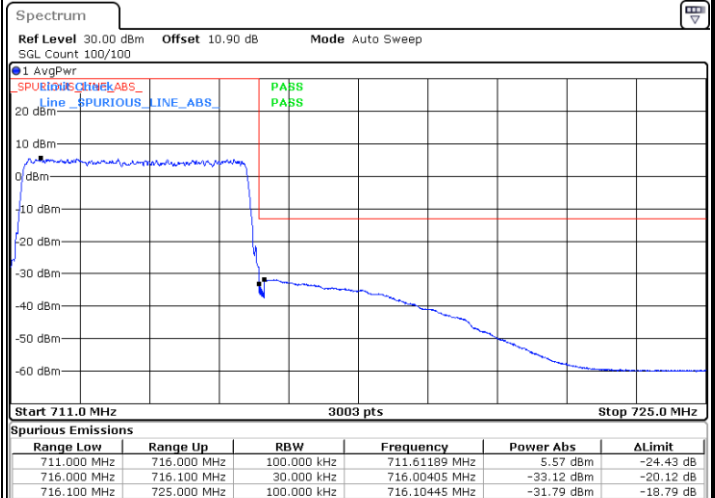
Date: 4.FEB.2021 10:16:38

Lowest Band Edge / Full RB



Date: 4.FEB.2021 10:12:13

Highest Band Edge / Full RB

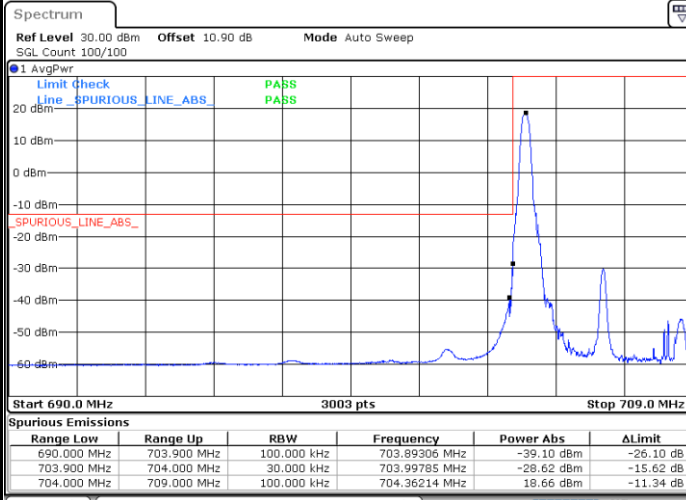


Date: 4.FEB.2021 10:18:03



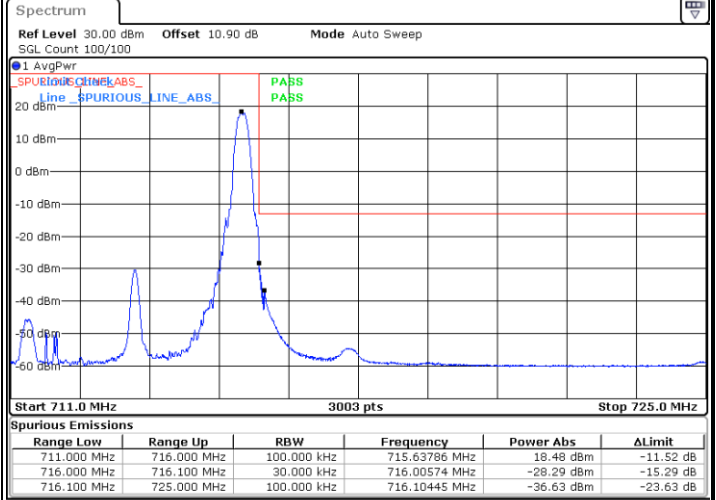
LTE Band 17 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



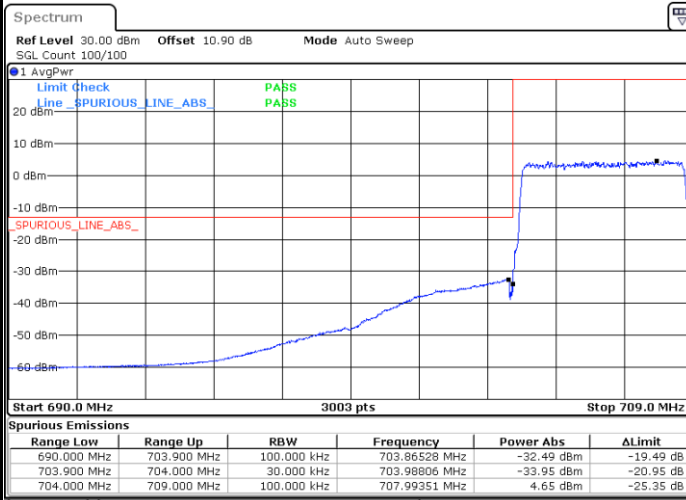
Date: 4.FEB.2021 10:29:39

Highest Band Edge / 1 RB



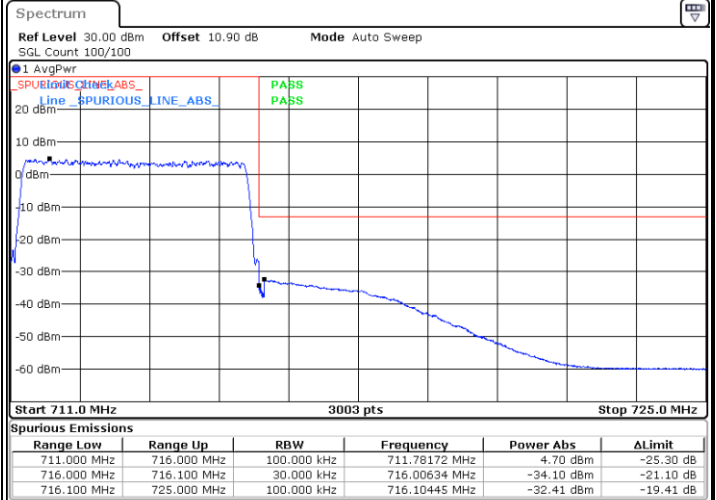
Date: 4.FEB.2021 10:31:34

Lowest Band Edge / Full RB



Date: 4.FEB.2021 10:30:23

Highest Band Edge / Full RB

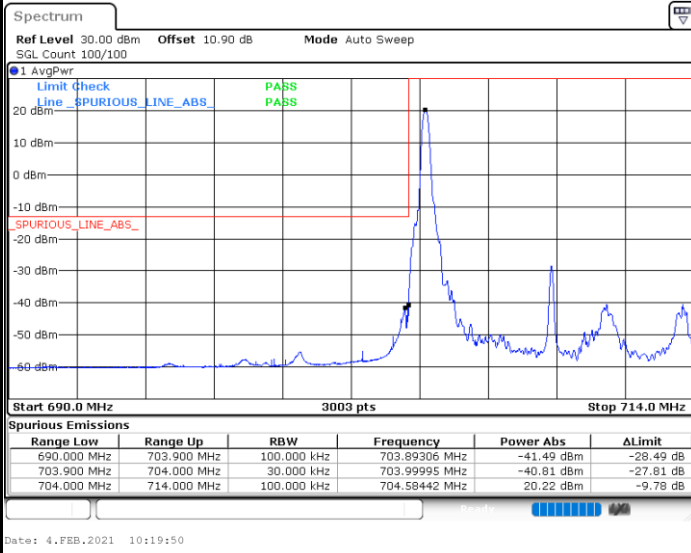


Date: 4.FEB.2021 10:32:16

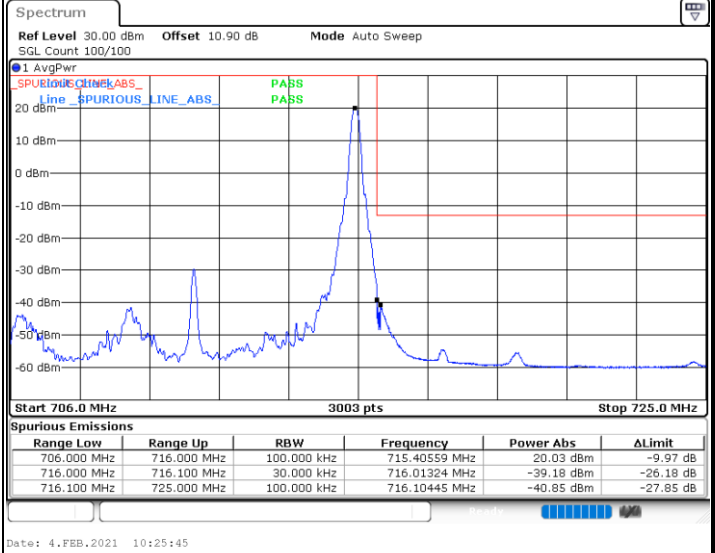


LTE Band 17 / 10MHz / QPSK

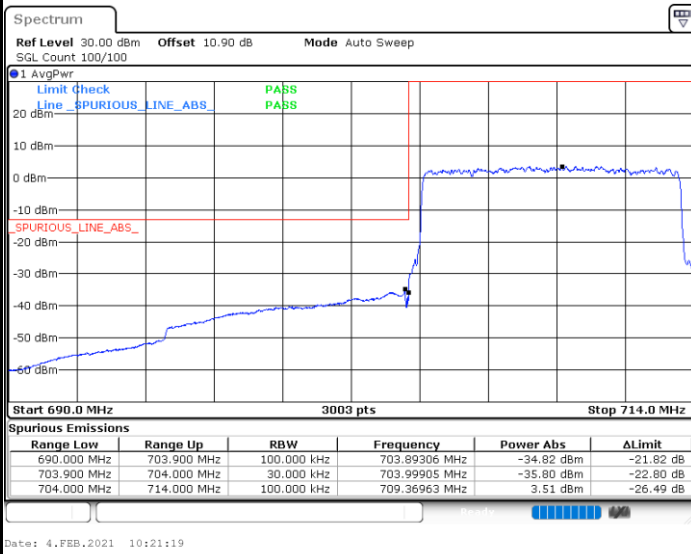
Lowest Band Edge / 1 RB



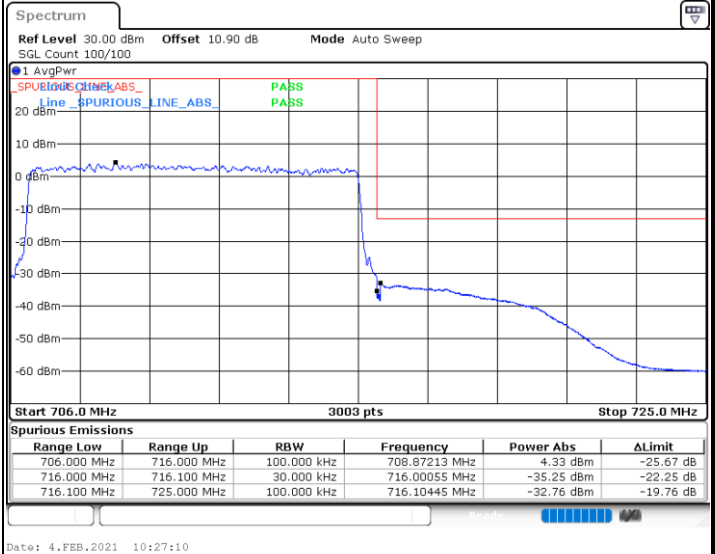
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



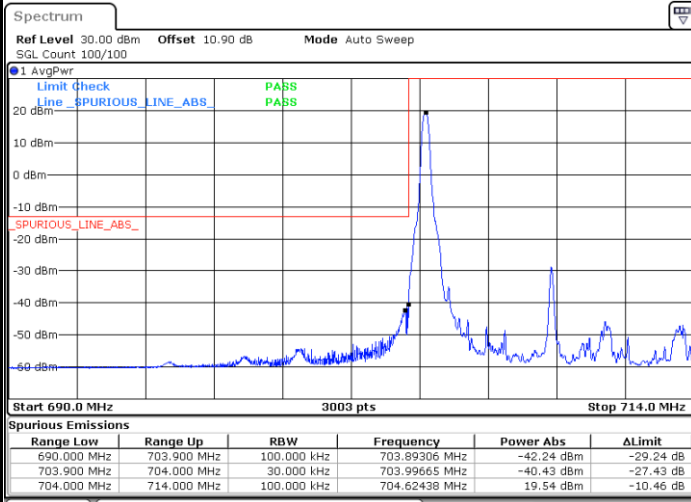
Highest Band Edge / Full RB





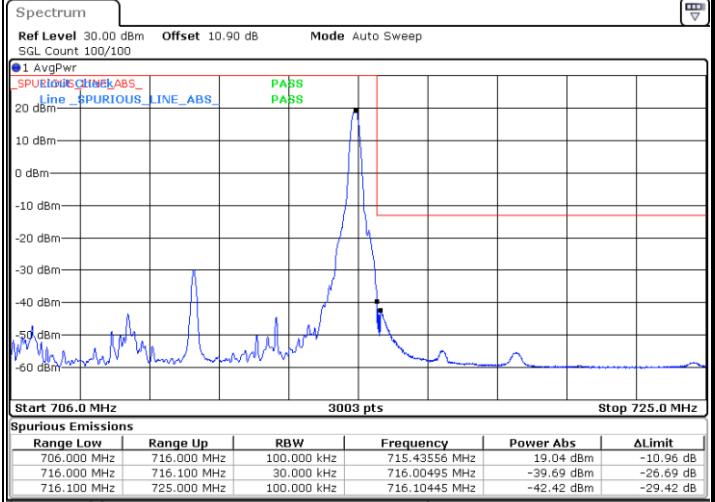
LTE Band 17 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



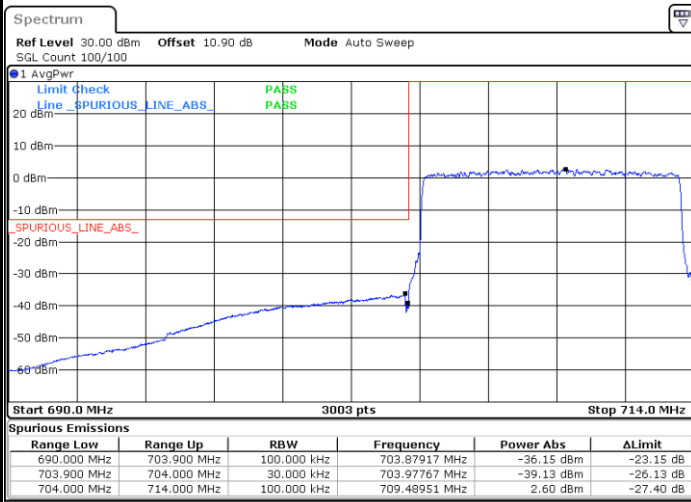
Date: 4.FEB.2021 10:20:34

Highest Band Edge / 1 RB



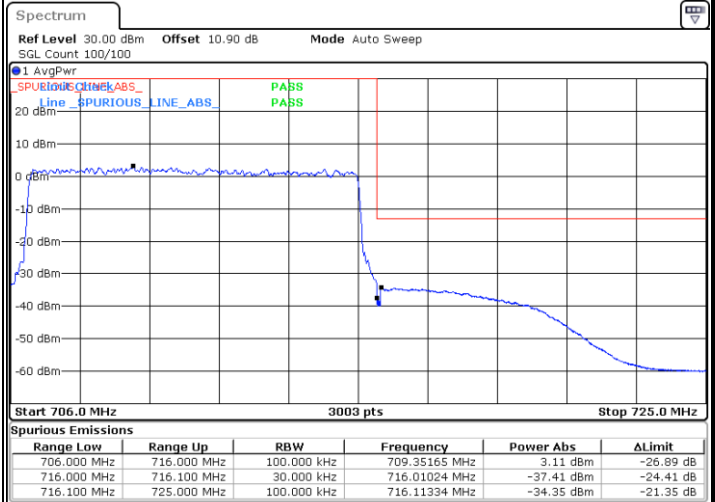
Date: 4.FEB.2021 10:26:27

Lowest Band Edge / Full RB



Date: 4.FEB.2021 10:22:03

Highest Band Edge / Full RB

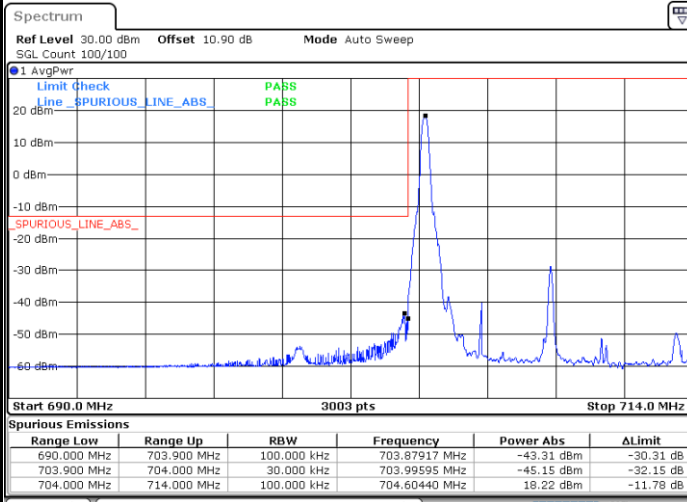


Date: 4.FEB.2021 10:27:52



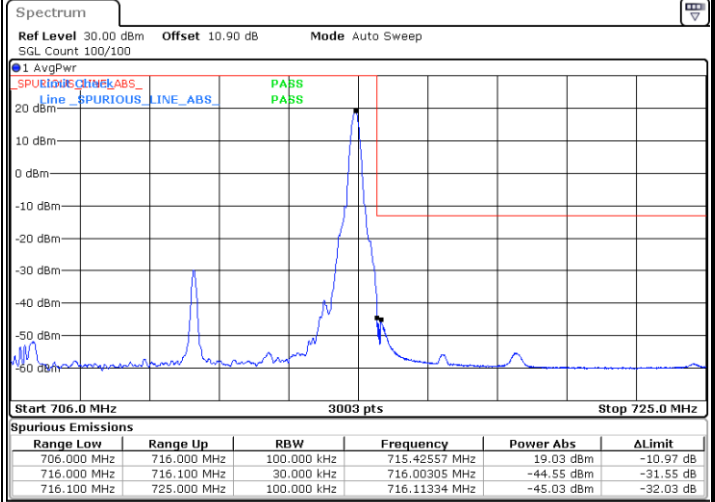
LTE Band 17 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



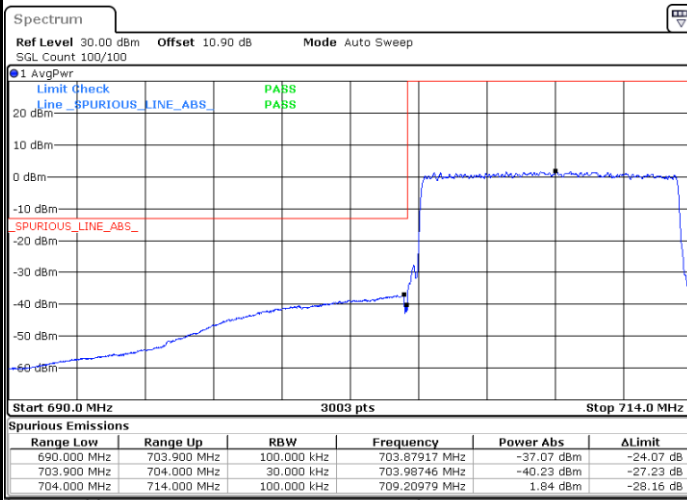
Date: 4.FEB.2021 10:33:01

Highest Band Edge / 1 RB



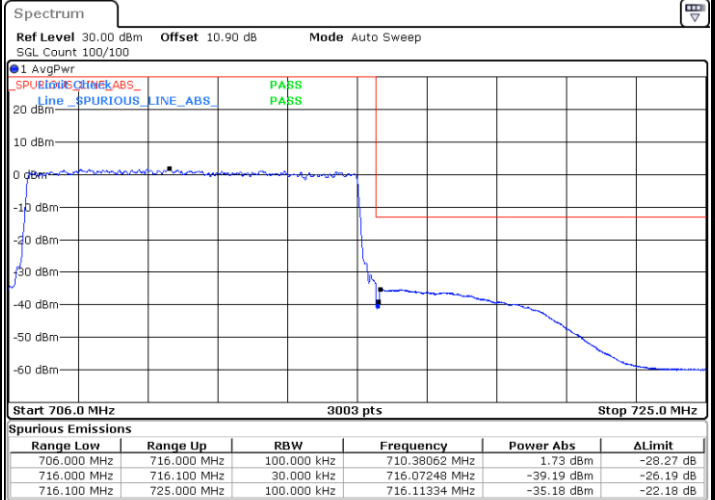
Date: 4.FEB.2021 10:34:55

Lowest Band Edge / Full RB



Date: 4.FEB.2021 10:33:45

Highest Band Edge / Full RB



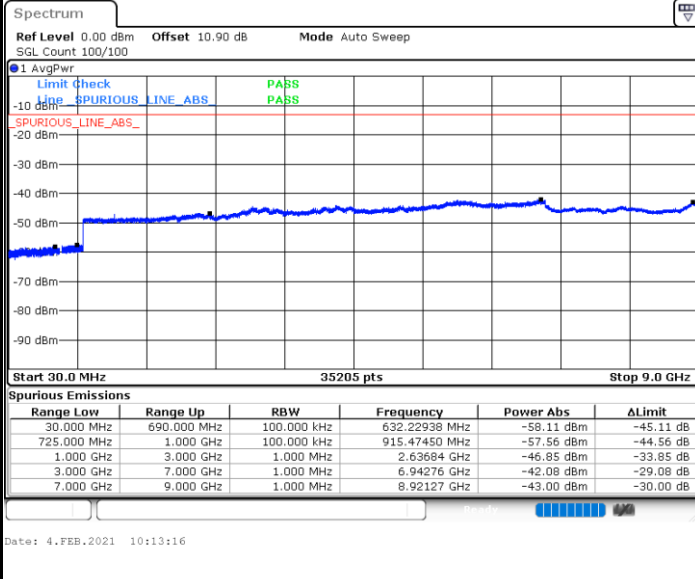
Date: 4.FEB.2021 10:35:37



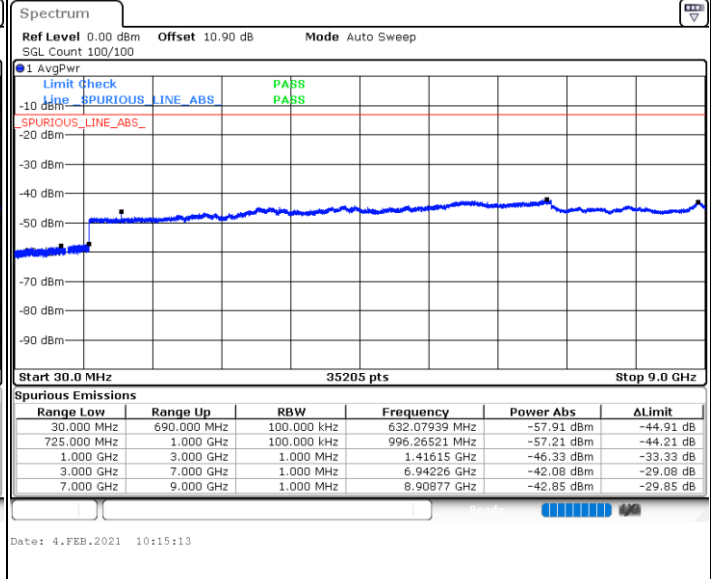
Conducted Spurious Emission

LTE Band 17 / 5MHz

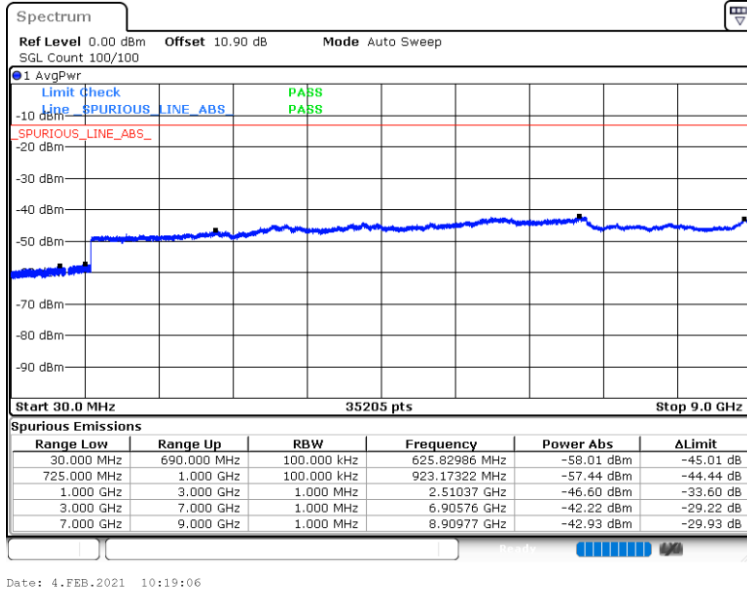
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK

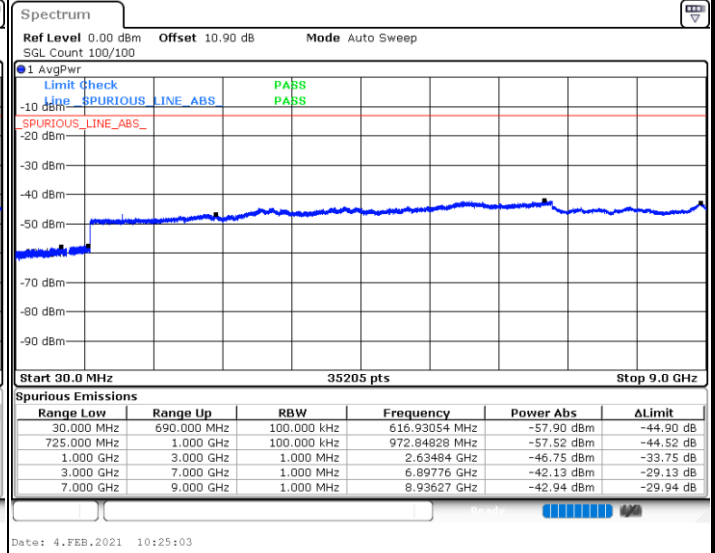
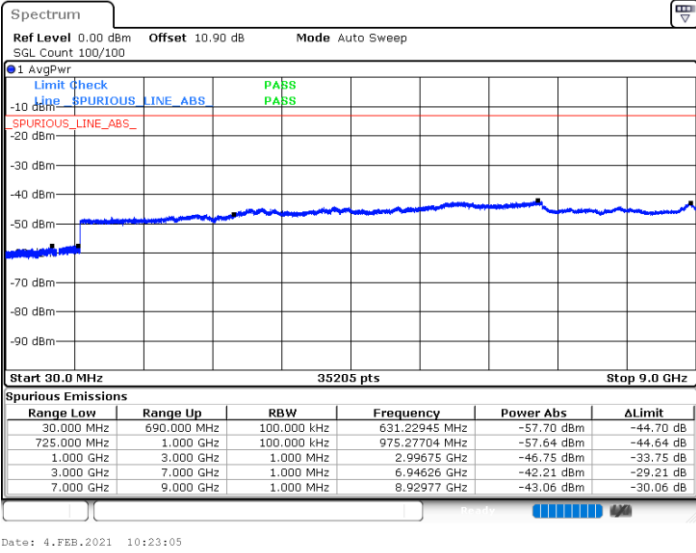




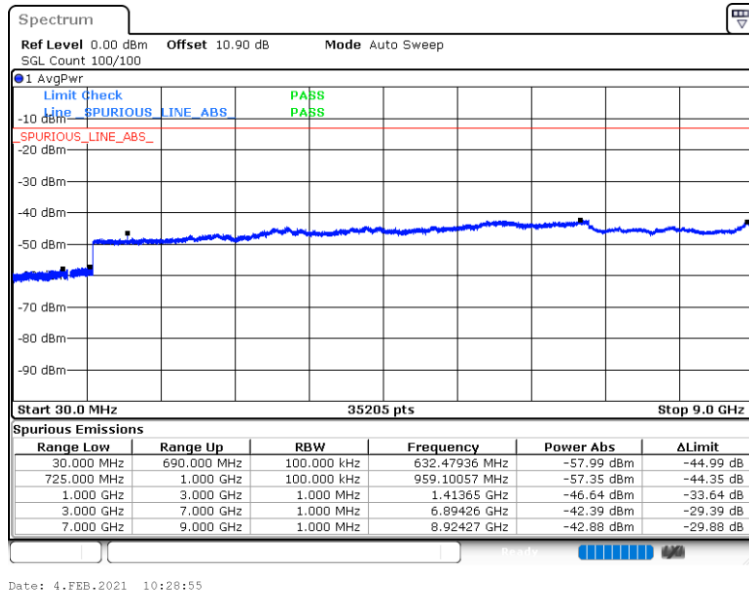
LTE Band 17 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





Frequency Stability

Test Conditions		LTE Band 17 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0146	PASS
40	Normal Voltage	0.0044	
30	Normal Voltage	0.0031	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0090	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0032	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0192	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0132	

Note:

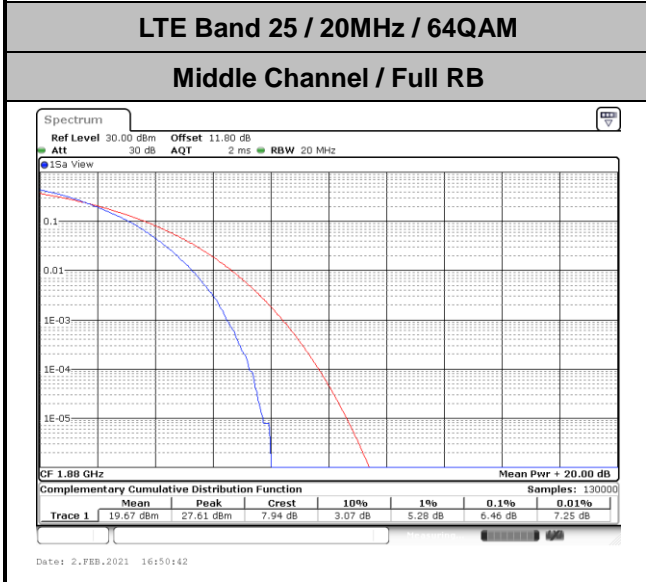
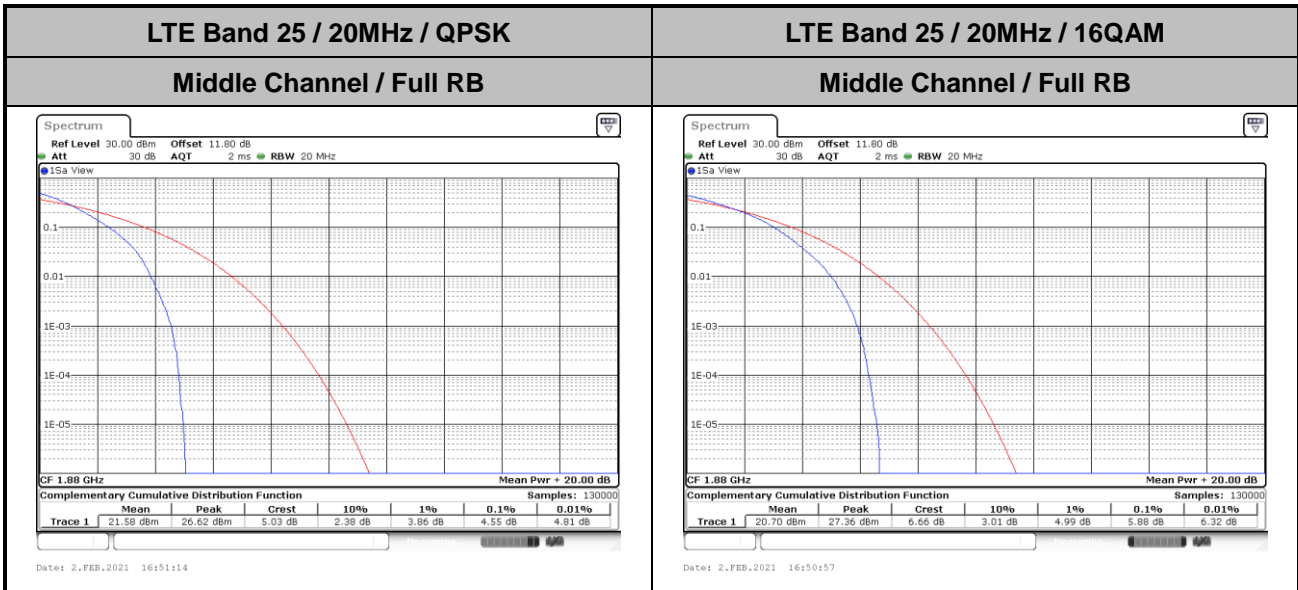
- 1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 25

Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.55	5.88	6.46	PASS





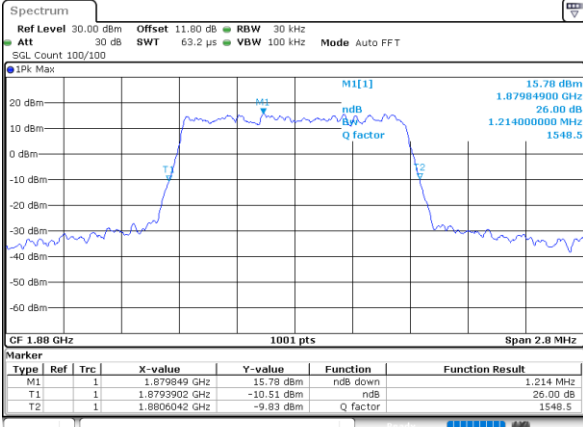
26dB Bandwidth

Mode	LTE Band 25 : 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	1.21	1.24	2.95	3.03	4.89	4.82	9.87	9.81	14.45	14.33	19.06	19.06
Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-
Middle CH	1.22	-	3.05	-	4.94	-	9.79	-	14.21	-	18.66	-



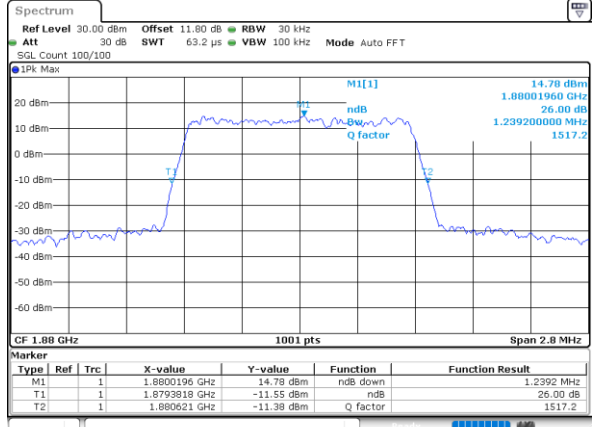
LTE Band 25

Middle Channel / 1.4MHz / QPSK



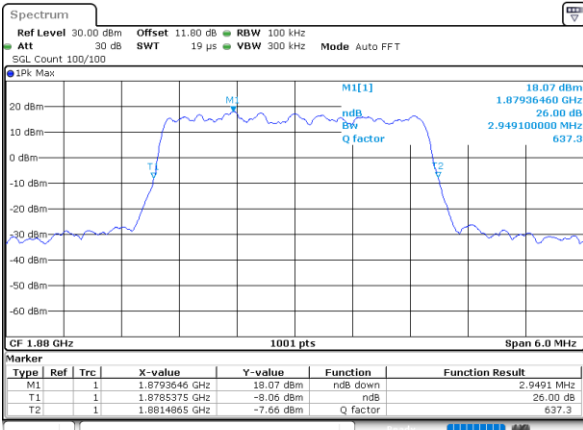
Date: 2.FEB.2021 15:17:18

Middle Channel / 1.4MHz / 16QAM



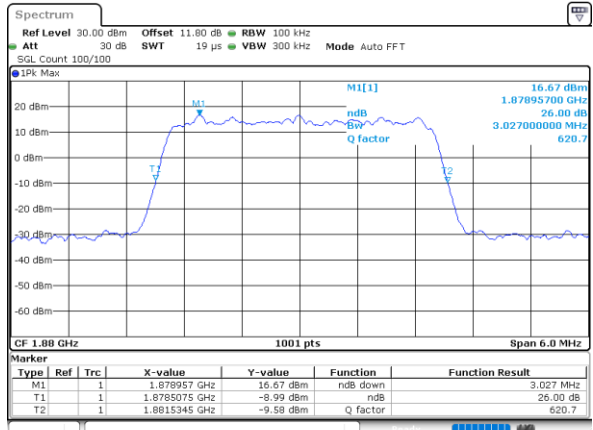
Date: 2.FEB.2021 15:17:32

Middle Channel / 3MHz / QPSK



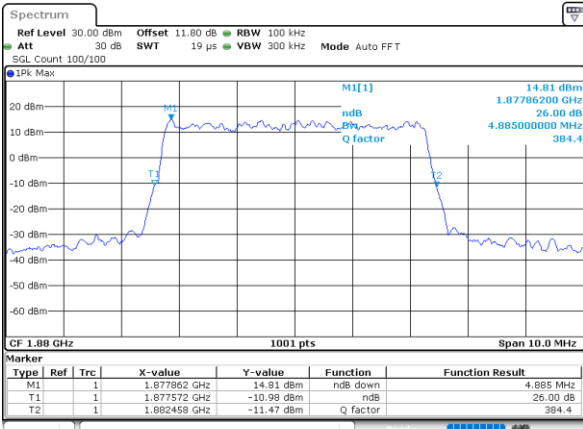
Date: 2.FEB.2021 15:31:01

Middle Channel / 3MHz / 16QAM



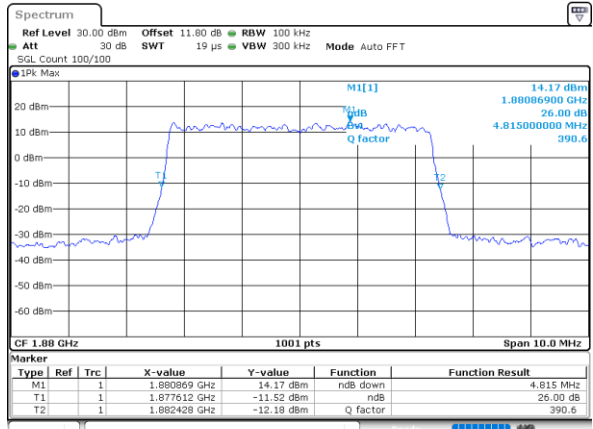
Date: 2.FEB.2021 15:31:16

Middle Channel / 5MHz / QPSK



Date: 2.FEB.2021 15:39:27

Middle Channel / 5MHz / 16QAM

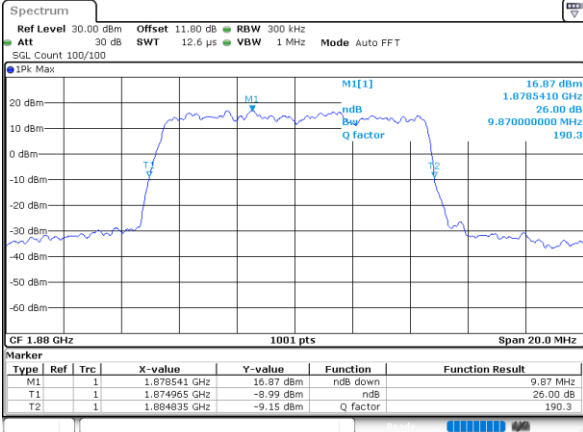


Date: 2.FEB.2021 15:39:42



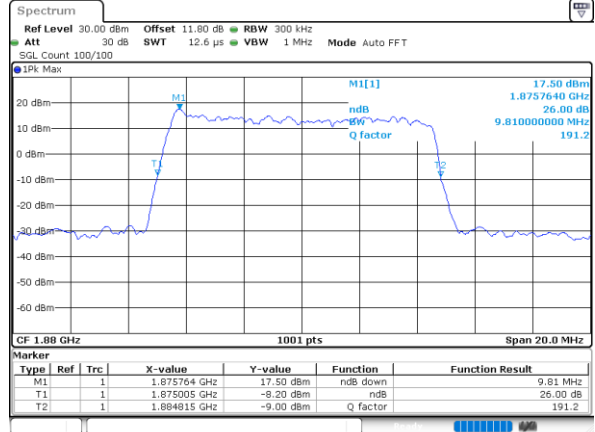
LTE Band 25

Middle Channel / 10MHz / QPSK



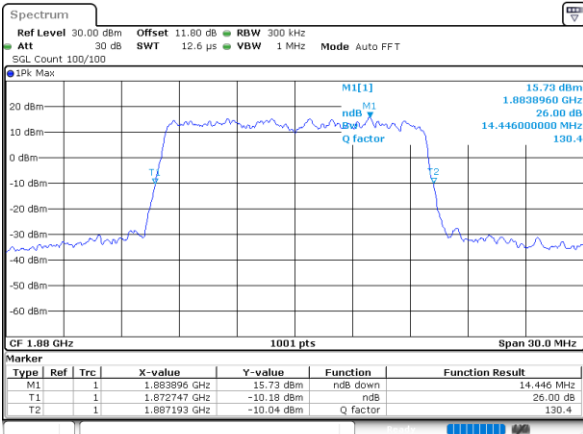
Date: 2.FEB.2021 15:50:32

Middle Channel / 10MHz / 16QAM



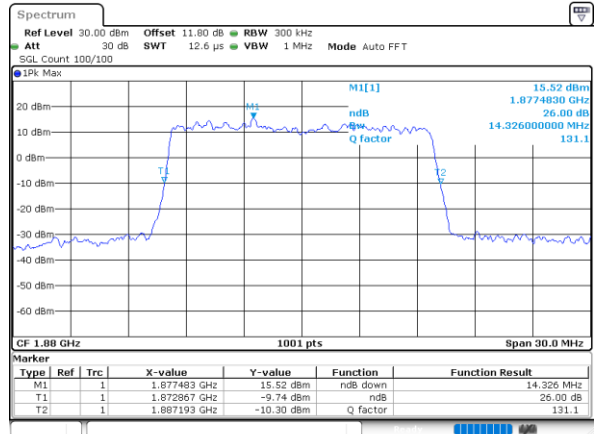
Date: 2.FEB.2021 15:50:47

Middle Channel / 15MHz / QPSK



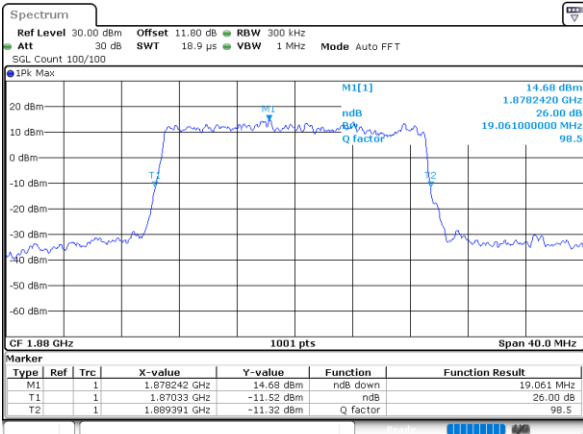
Date: 2.FEB.2021 16:04:15

Middle Channel / 15MHz / 16QAM



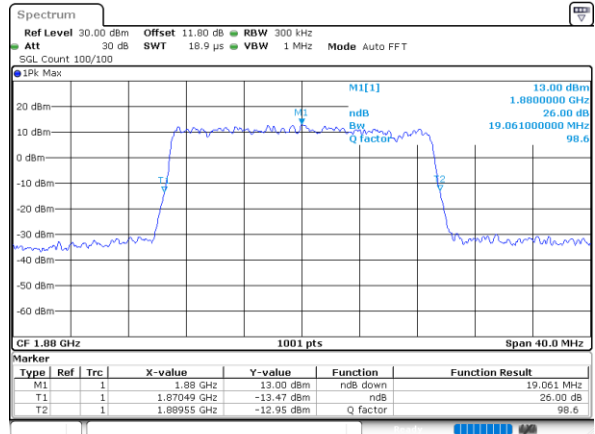
Date: 2.FEB.2021 16:04:30

Middle Channel / 20MHz / QPSK



Date: 2.FEB.2021 16:43:16

Middle Channel / 20MHz / 16QAM

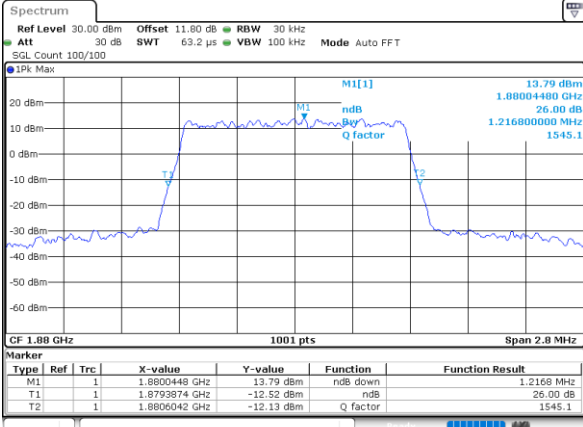


Date: 2.FEB.2021 16:43:31



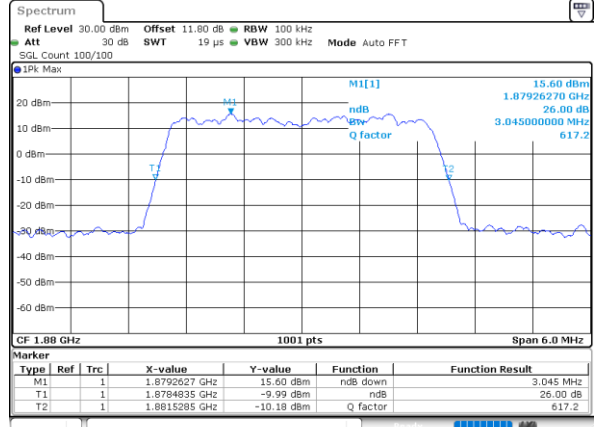
LTE Band 25

Middle Channel / 1.4MHz / 64QAM



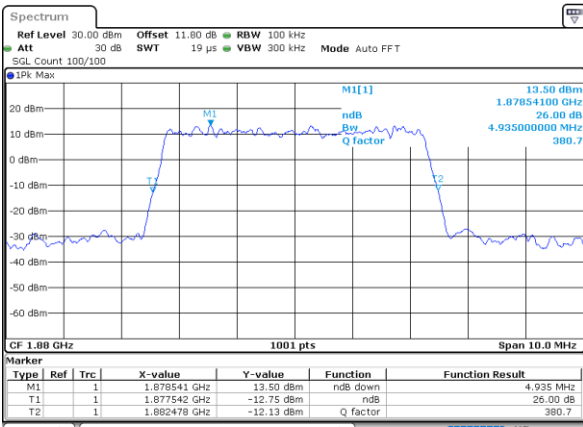
Date: 2.FEB.2021 15:23:21

Middle Channel / 3MHz / 64QAM



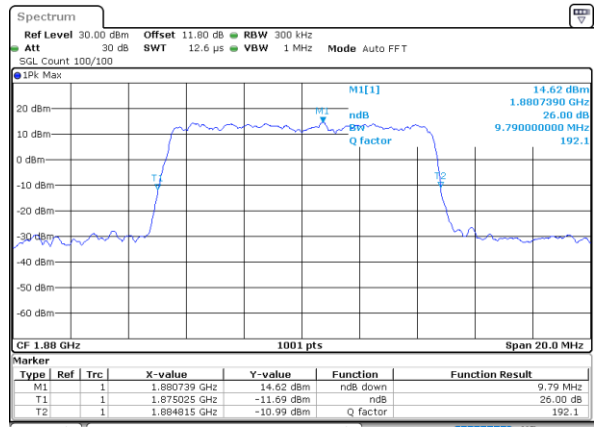
Date: 2.FEB.2021 15:26:00

Middle Channel / 5MHz / 64QAM



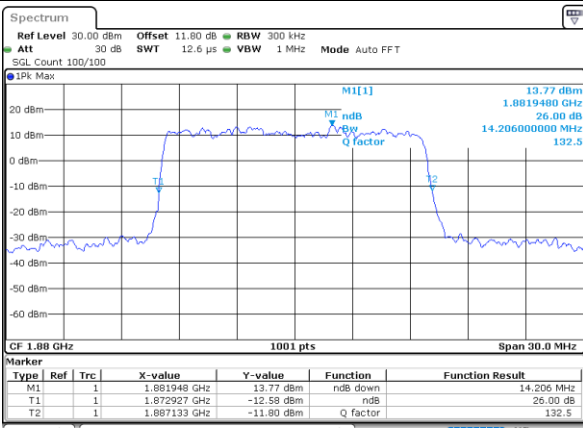
Date: 2.FEB.2021 15:45:31

Middle Channel / 10MHz / 64QAM



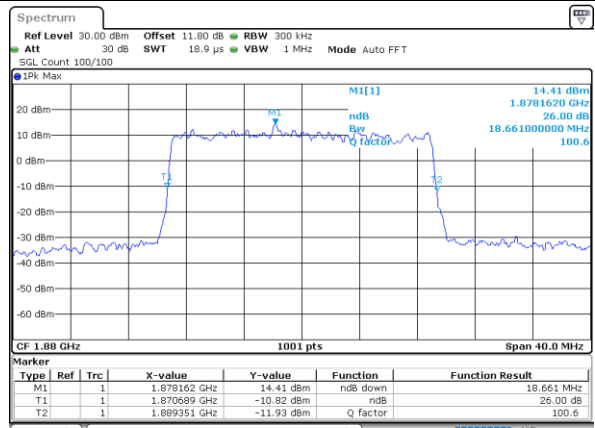
Date: 2.FEB.2021 15:56:35

Middle Channel / 15MHz / 64QAM



Date: 2.FEB.2021 15:59:14

Middle Channel / 20MHz / 64QAM



Date: 2.FEB.2021 16:49:20



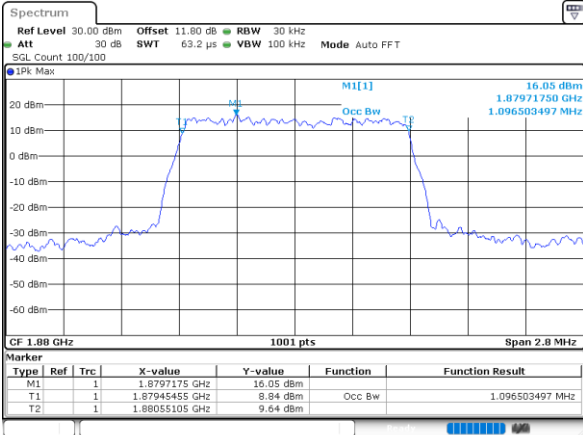
Occupied Bandwidth

Mode	LTE Band 25 : 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	2.72	2.72	4.52	4.53	8.97	9.05	13.40	13.49	17.82	17.94
Mode	LTE Band 25 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-
Middle CH	1.09	-	2.73	-	4.50	-	9.05	-	13.40	-	17.86	-



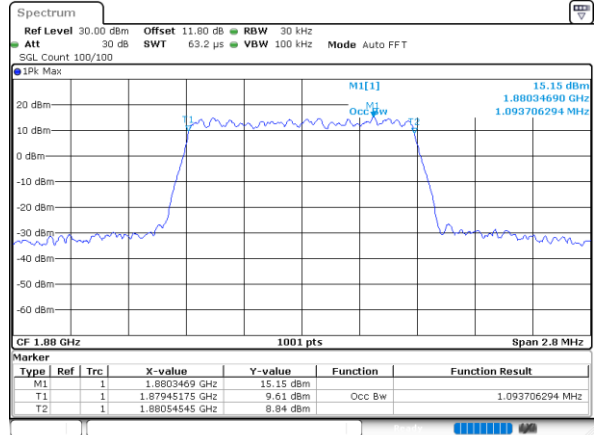
LTE Band 25

Middle Channel / 1.4MHz / QPSK



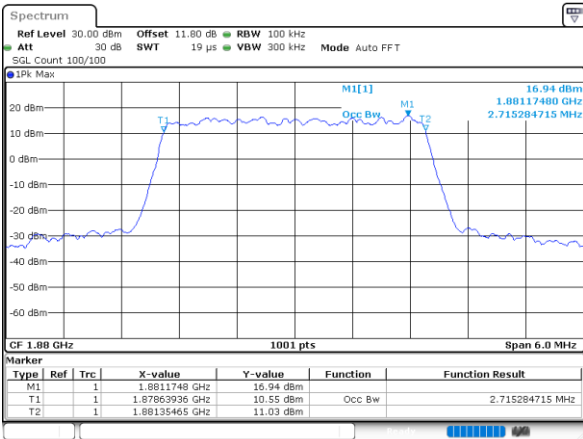
Date: 2.FEB.2021 15:16:49

Middle Channel / 1.4MHz / 16QAM



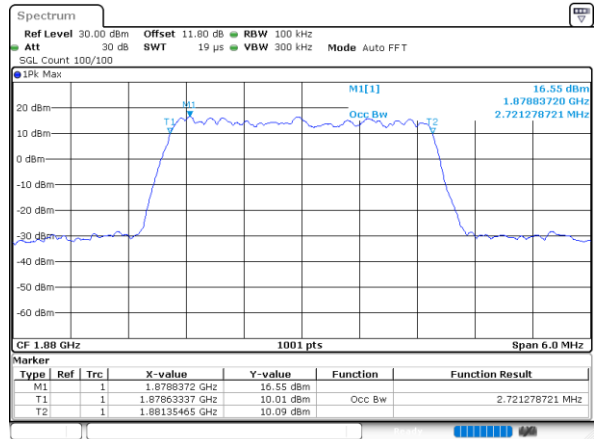
Date: 2.FEB.2021 15:17:03

Middle Channel / 3MHz / QPSK



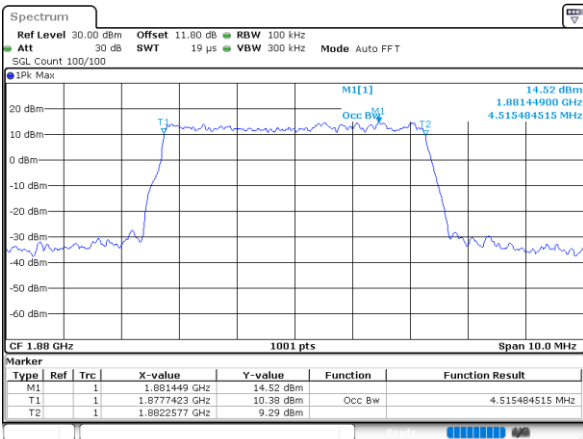
Date: 2.FEB.2021 15:30:32

Middle Channel / 3MHz / 16QAM



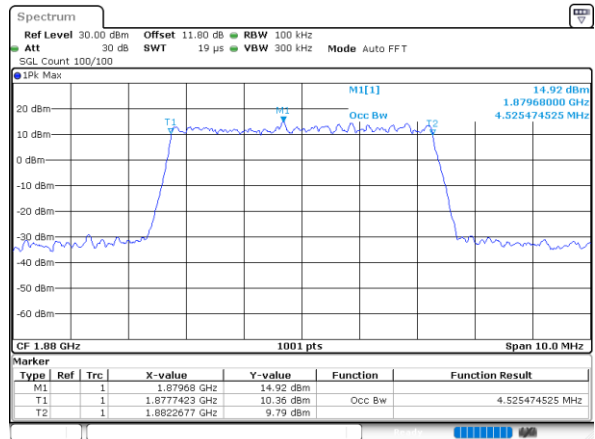
Date: 2.FEB.2021 15:30:47

Middle Channel / 5MHz / QPSK



Date: 2.FEB.2021 15:38:59

Middle Channel / 5MHz / 16QAM



Date: 2.FEB.2021 15:39:13