



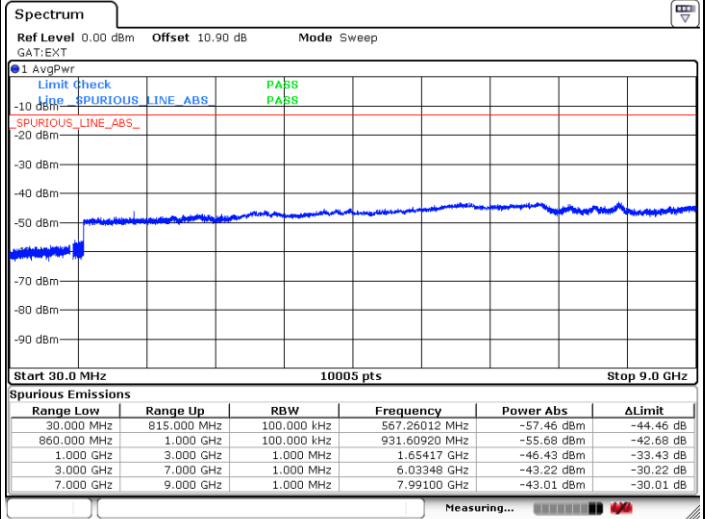
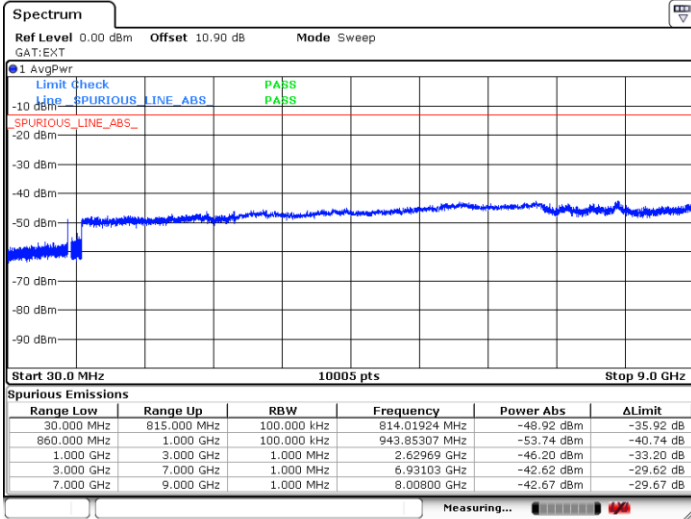
Conducted Spurious Emission

LTE Band 5B / 3MHz+5MHz

QPSK

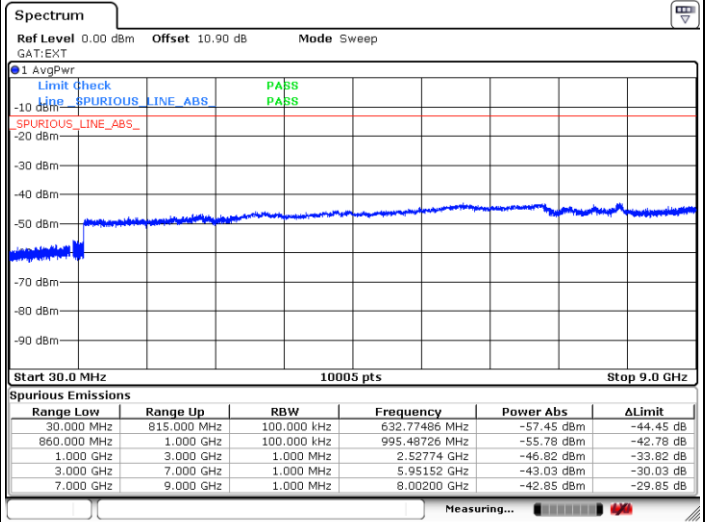
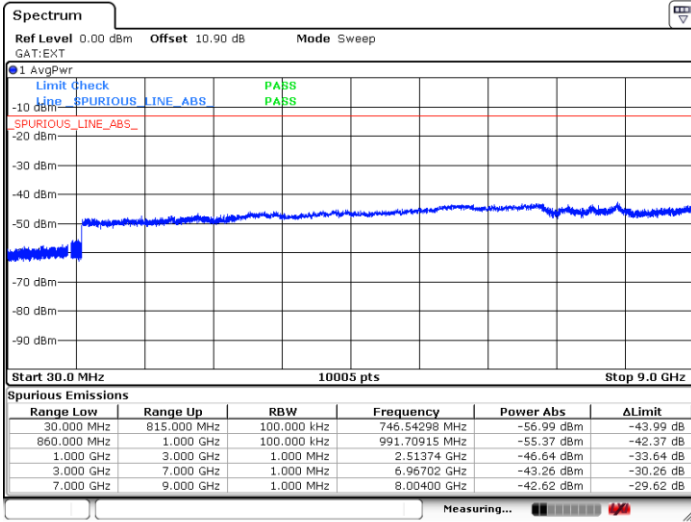
Lowest Channel / 1RB0 and 1RB24

Lowest Channel / 1RB14 and 1RB0



MiddleChannel / 1RB0 and 1RB24

Middle Channel / 1RB14 and 1RB0



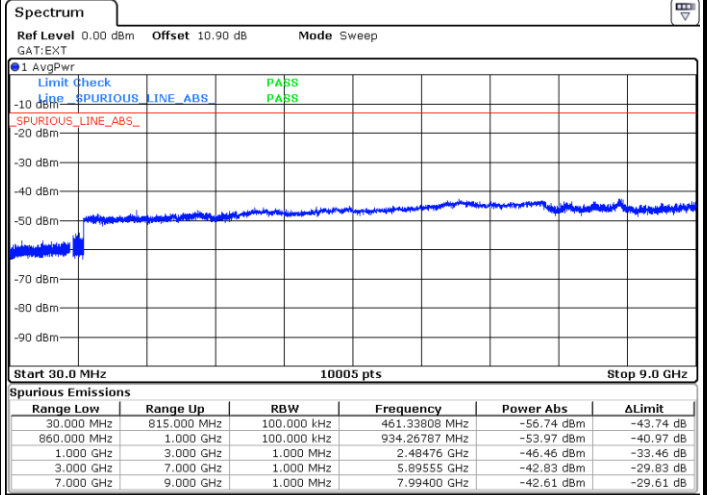
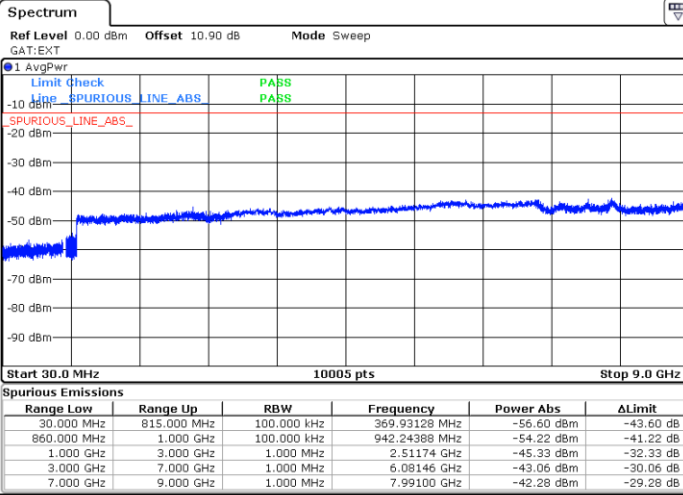


LTE Band 5B / 3MHz+5MHz

QPSK

Highest Channel / 1RB0 and 1RB24

Highest Channel / 1RB14 and 1RB0



Date: 26.MAR.2021 16:54:01

Date: 26.MAR.2021 16:58:00

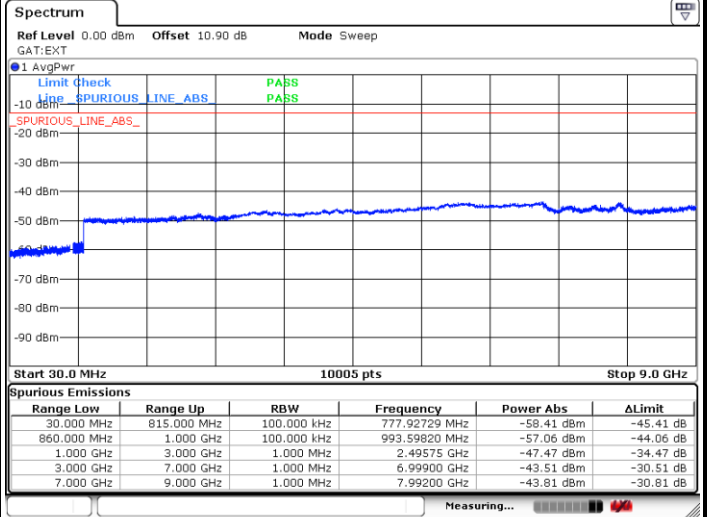
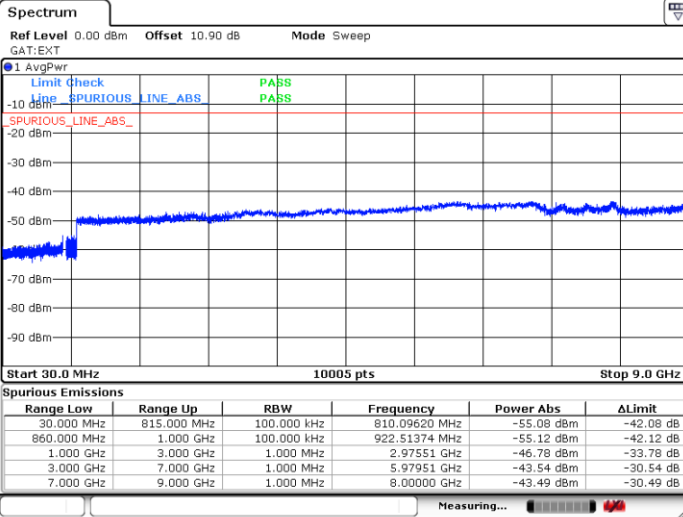


LTE Band 5B / 5MHz+3MHz

QPSK

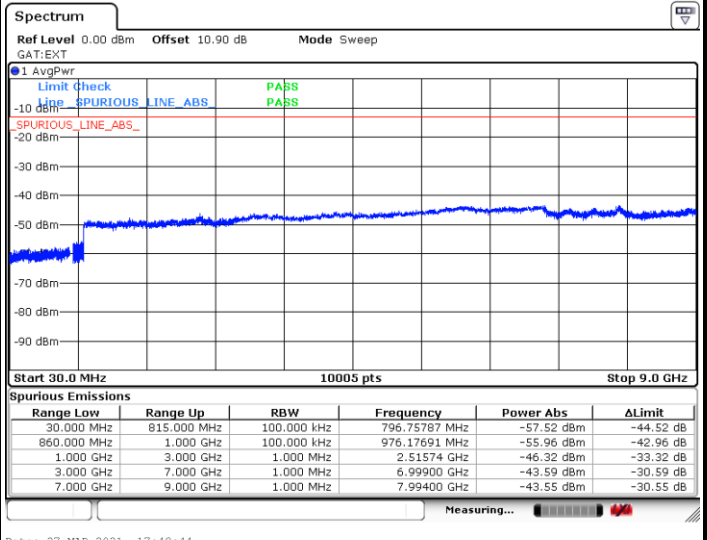
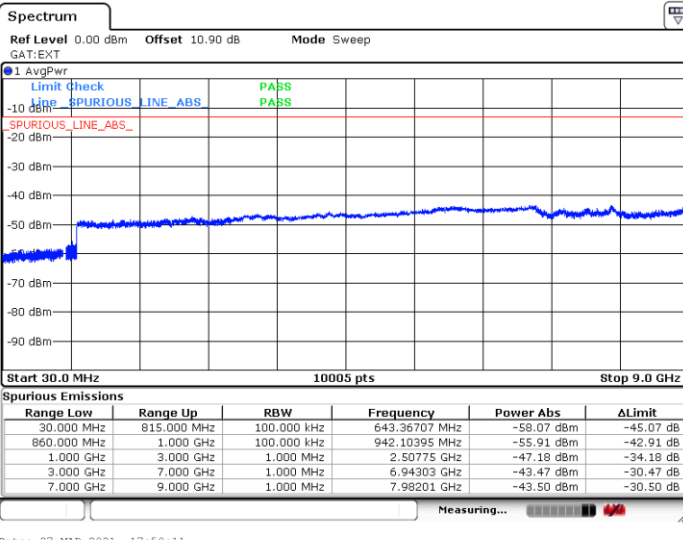
Lowest Channel / 1RB0 and 1RB14

Lowest Channel / 1RB24 and 1RB0



Middle Channel / 1RB0 and 1RB14

Middle Channel / 1RB24 and 1RB0



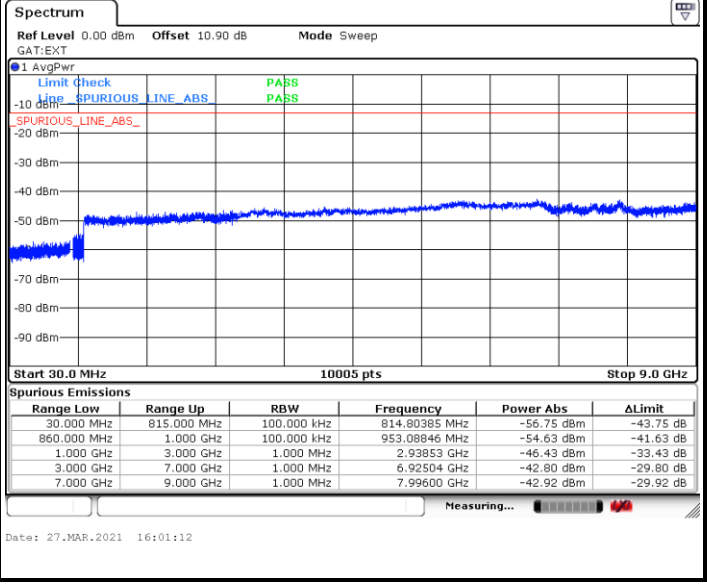
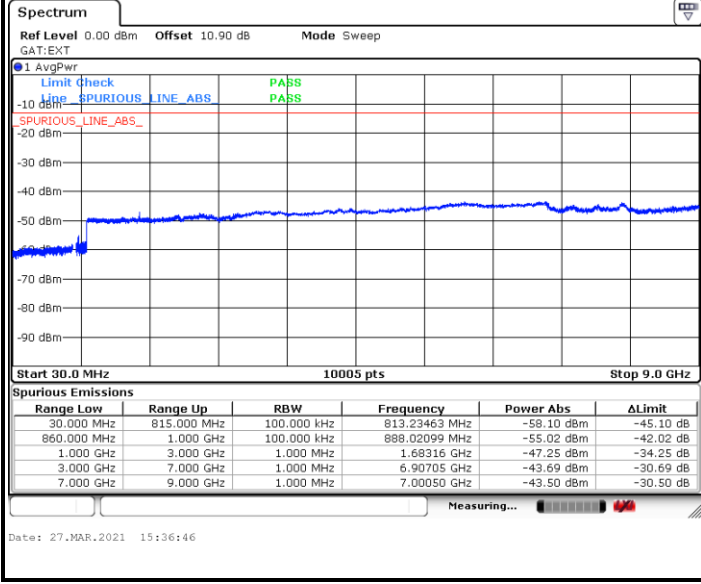


LTE Band 5B / 5MHz+3MHz

QPSK

Highest Channel / 1RB0 and 1RB14

Highest Channel / 1RB24 and 1RB0



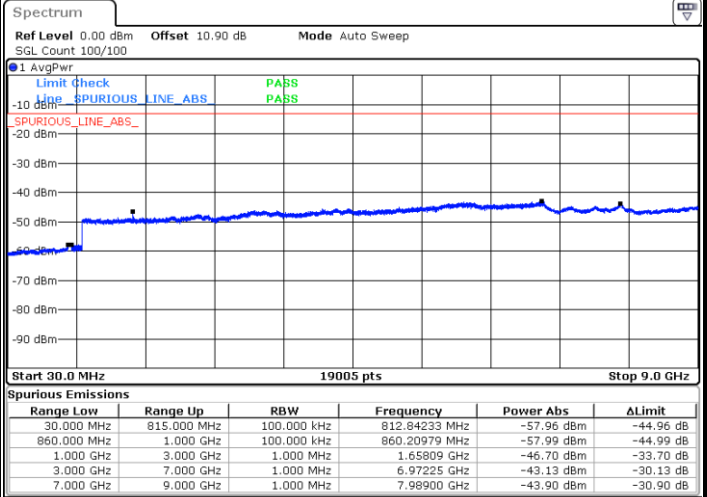
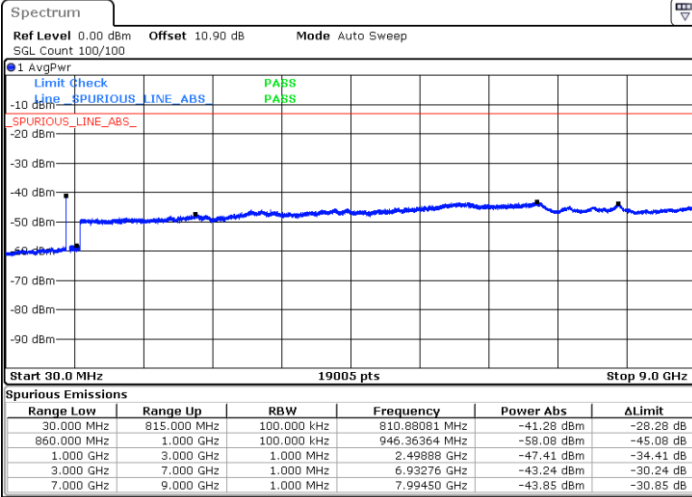


LTE Band 5B / 5MHz+10MHz

QPSK

Lowest Channel / 1RB0 and 1RB49

Lowest Channel / 1RB24 and 1RB0

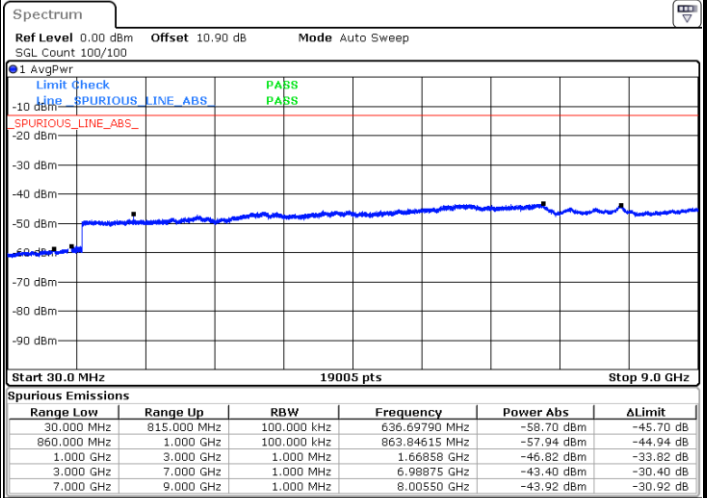
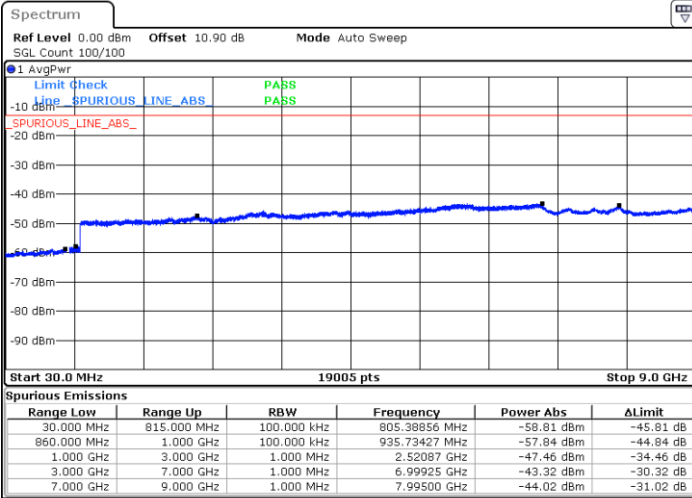


Date: 7.MAR.2021 11:50:55

Date: 7.MAR.2021 11:50:17

Middle Channel / 1RB0 and 1RB49

Middle Channel / 1RB24 and 1RB0



Date: 7.MAR.2021 13:13:56

Date: 7.MAR.2021 13:14:33

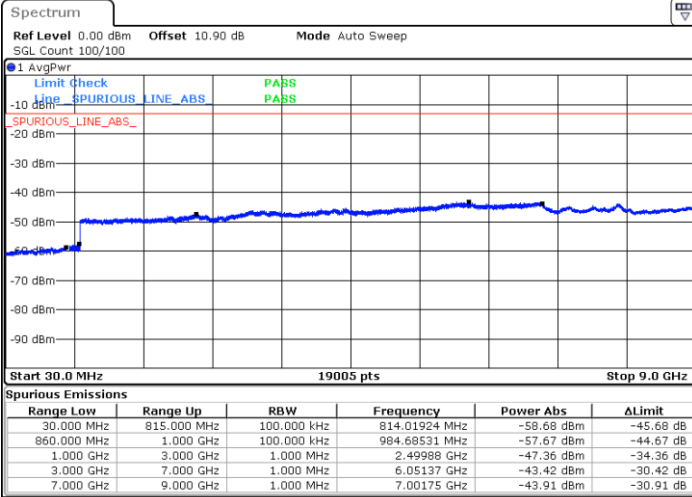


LTE Band 5B / 5MHz+10MHz

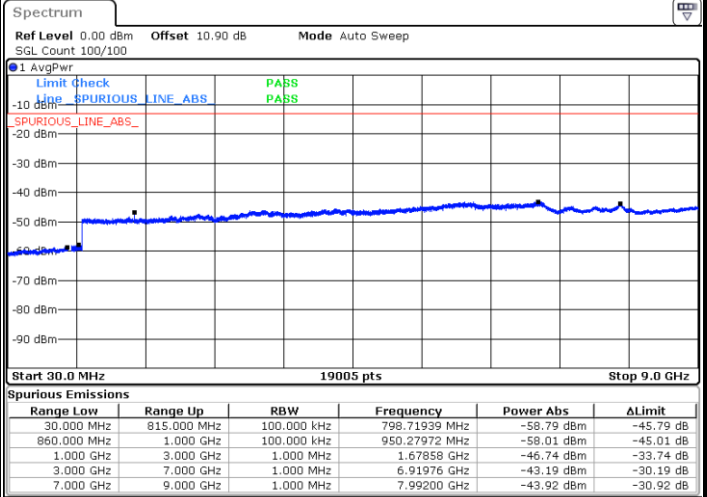
QPSK

Highest Channel / 1RB0 and 1RB49

Highest Channel / 1RB24 and 1RB0



Date: 7.MAR.2021 13:33:37



Date: 7.MAR.2021 13:33:00

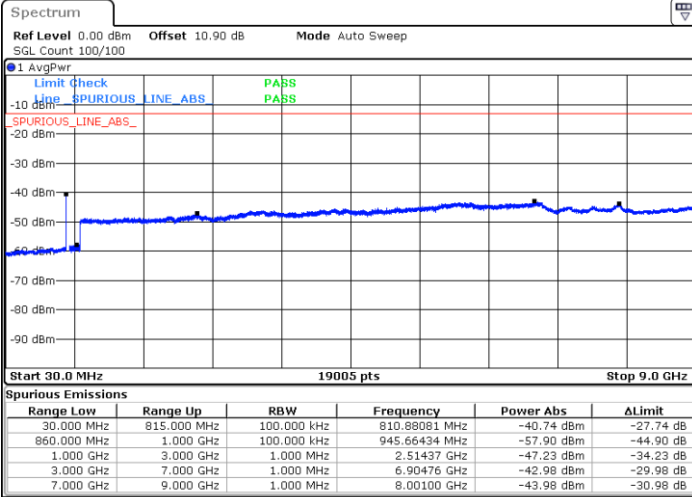


LTE Band 5B / 10MHz+5MHz

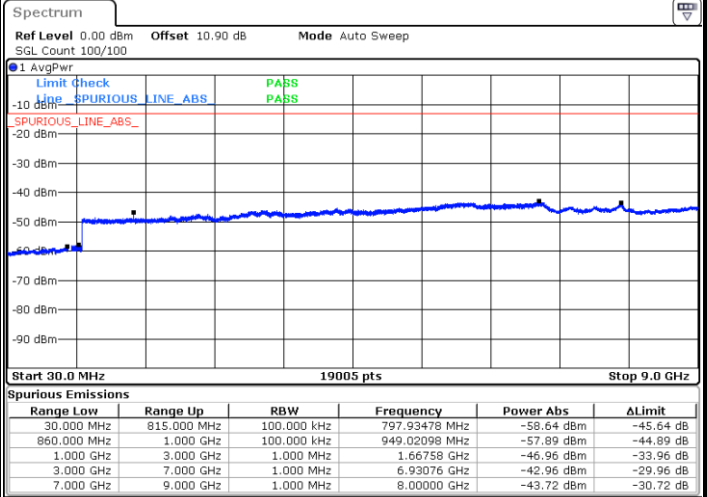
QPSK

Lowest Channel / 1RB0 and 1RB24

Lowest Channel / 1RB49 and 1RB0



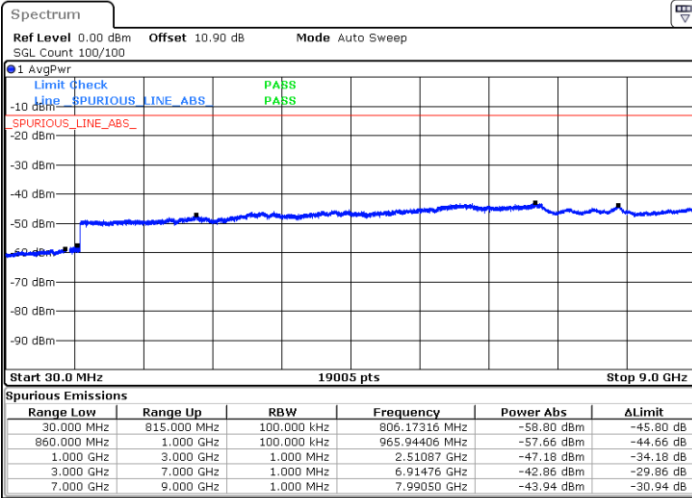
Date: 7.MAR.2021 13:57:21



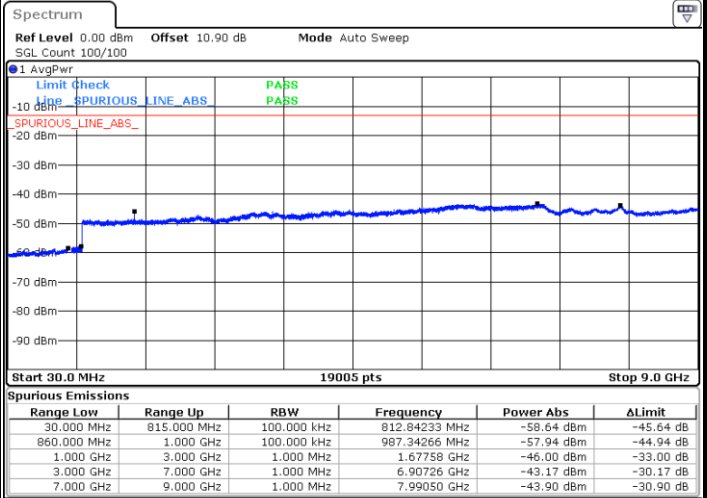
Date: 7.MAR.2021 13:56:44

Middle Channel / 1RB0 and 1RB24

Middle Channel / 1RB49 and 1RB0



Date: 7.MAR.2021 14:02:48



Date: 7.MAR.2021 14:03:25

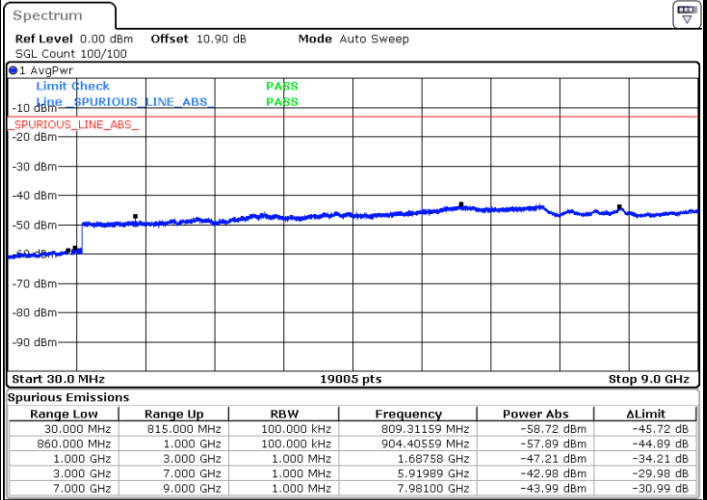
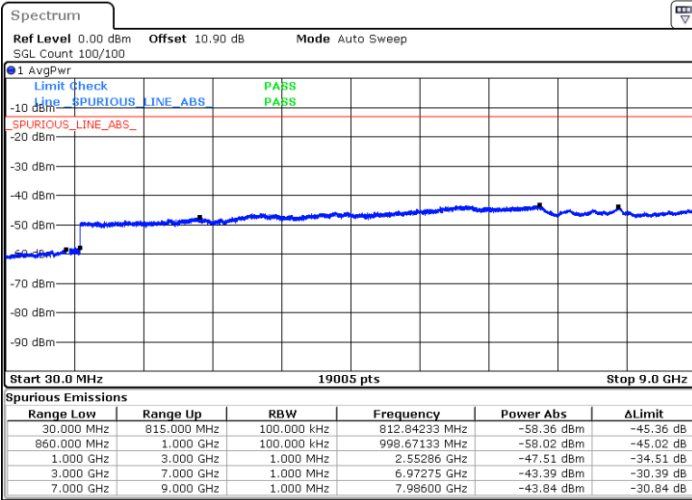


LTE Band 5B / 10MHz+5MHz

QPSK

Highest Channel / 1RB0 and 1RB24

Highest Channel / 1RB49 and 1RB0



Date: 7.MAR.2021 14:22:24

Date: 7.MAR.2021 14:21:47

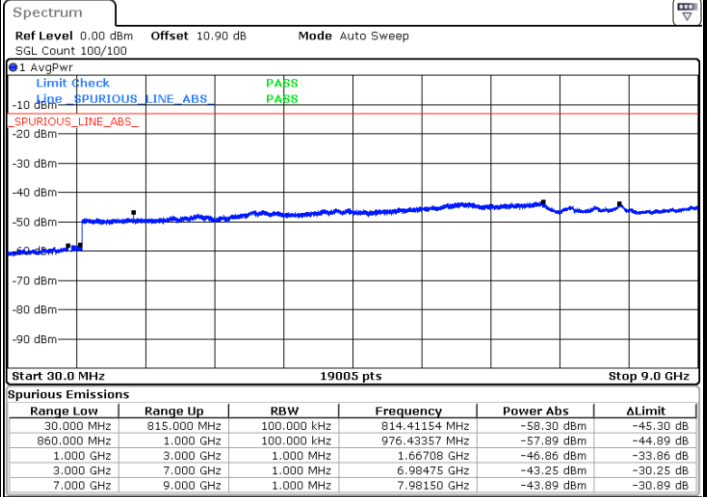
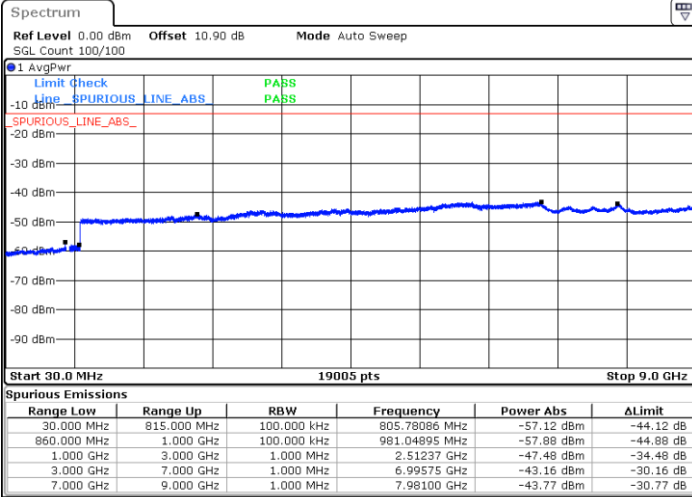


LTE Band 5B / 10MHz+10MHz

QPSK

Lowest Channel / 1RB0 and 1RB49

Lowest Channel / 1RB49 and 1RB0

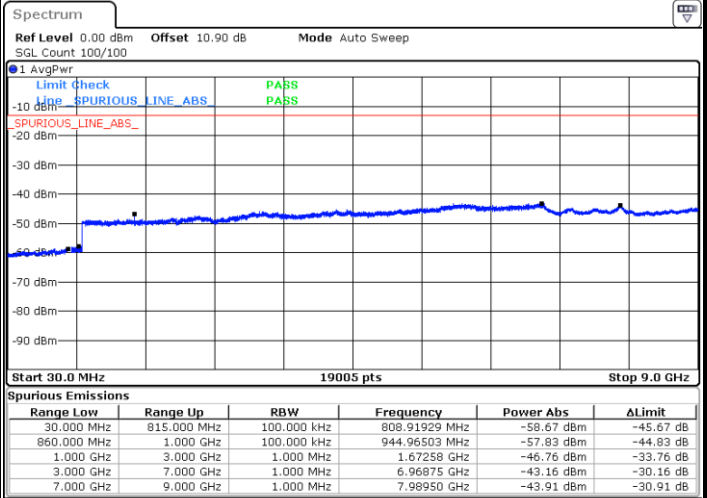
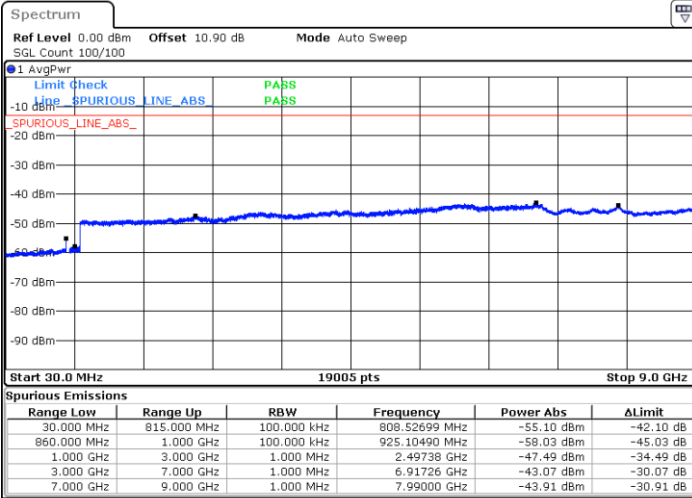


Date: 7.MAR.2021 14:41:31

Date: 7.MAR.2021 14:40:54

Middle Channel / 1RB0 and 1RB49

Middle Channel / 1RB49 and 1RB0



Date: 7.MAR.2021 14:45:28

Date: 7.MAR.2021 14:46:05

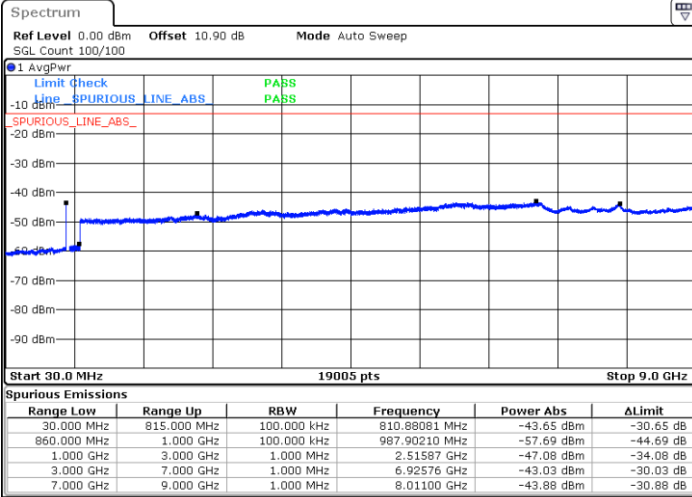


LTE Band 5B / 10MHz+10MHz

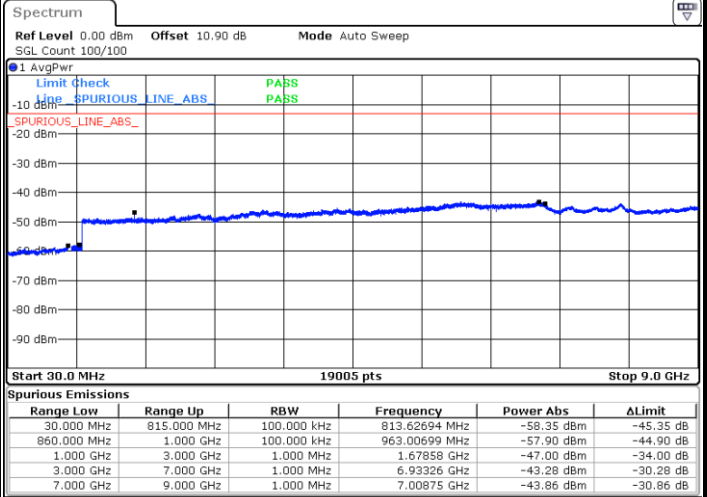
QPSK

Highest Channel / 1RB0 and 1RB49

Highest Channel / 1RB49 and 1RB0



Date: 7.MAR.2021 15:09:36



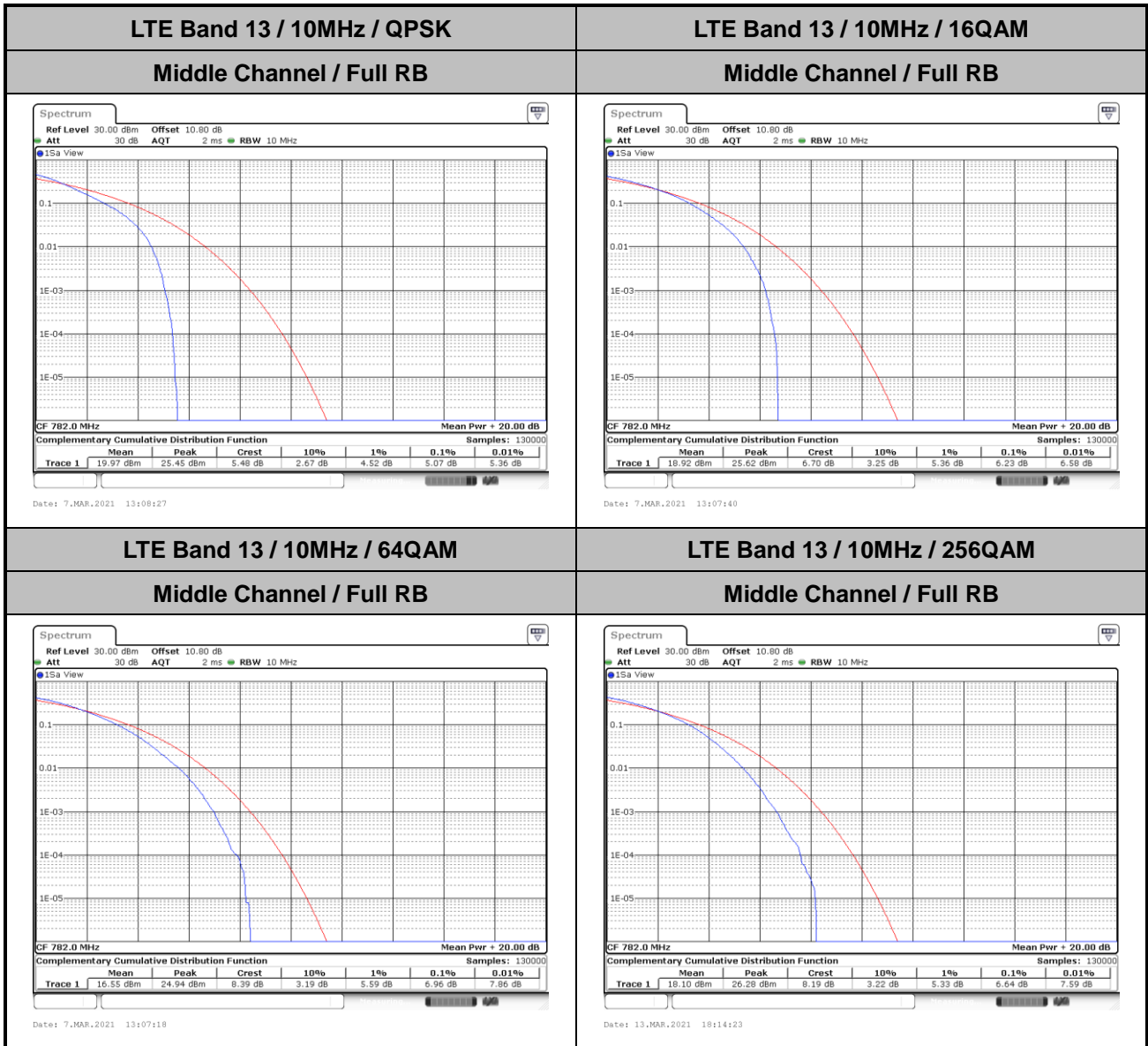
Date: 7.MAR.2021 15:08:59



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	5.07	6.23	6.96	6.64	PASS





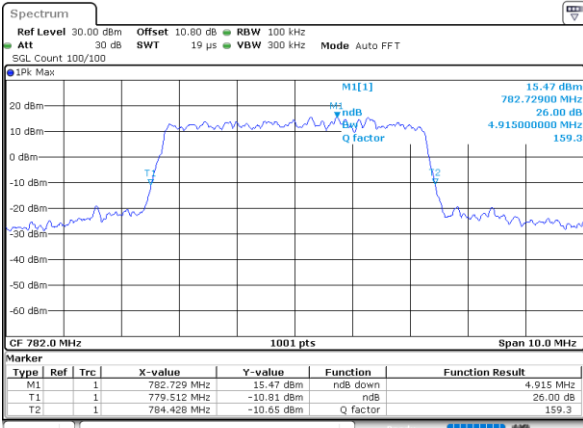
26dB Bandwidth

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	-	-	-	-	4.92	4.96	9.73	9.77	-	-	-	-
Mode	LTE Band 13 : 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	-	-	-	-	4.85	4.90	9.81	9.79	-	-	-	-



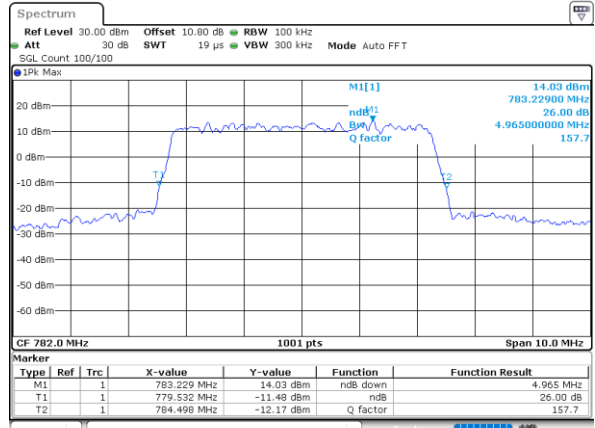
LTE Band 13

Middle Channel / 5MHz / QPSK



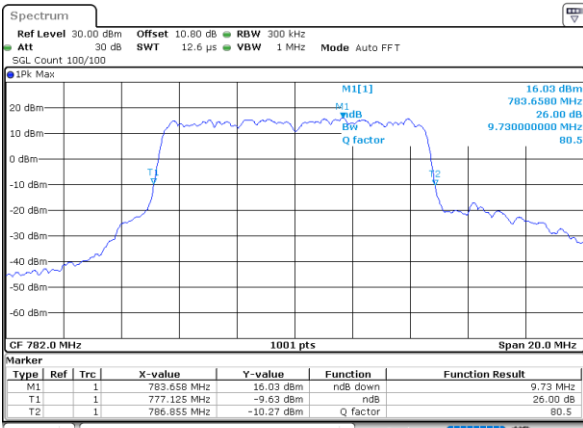
Date: 7.MAR.2021 11:59:15

Middle Channel / 5MHz / 16QAM



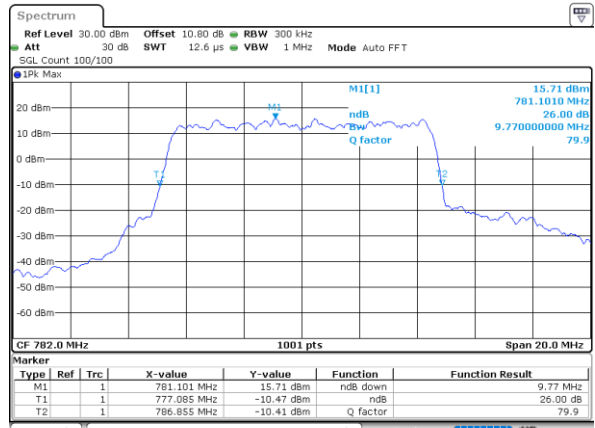
Date: 7.MAR.2021 11:59:27

Middle Channel / 10MHz / QPSK



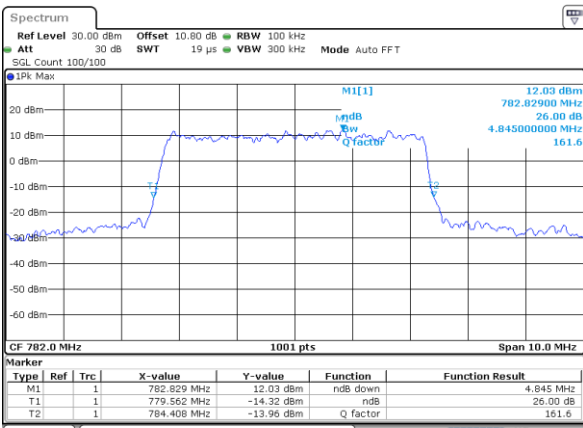
Date: 7.MAR.2021 12:15:11

Middle Channel / 10MHz / 16QAM



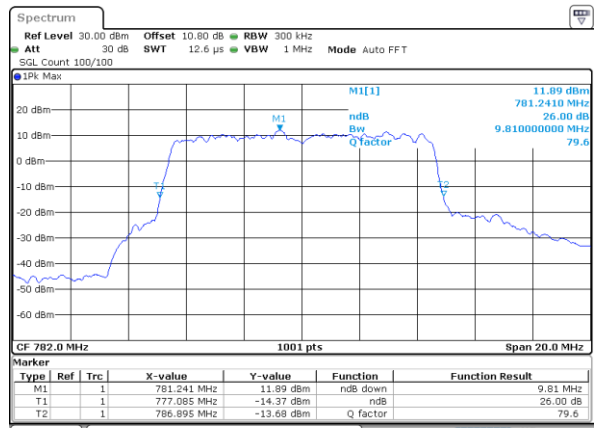
Date: 7.MAR.2021 12:14:59

Middle Channel / 5MHz / 64QAM



Date: 7.MAR.2021 12:10:46

Middle Channel / 10MHz / 64QAM

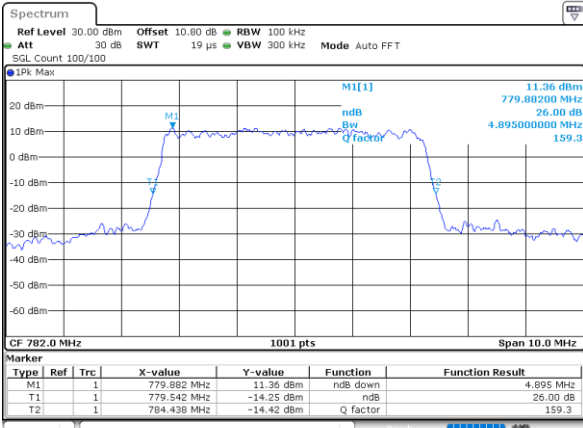


Date: 7.MAR.2021 12:26:14



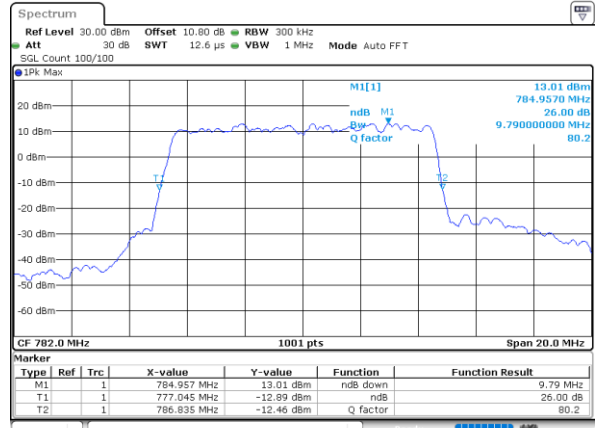
LTE Band 13

Middle Channel / 5MHz / 256QAM



Date: 13_MAR_2021 18:10:57

Middle Channel / 10MHz / 256QAM



Date: 13_MAR_2021 18:14:16



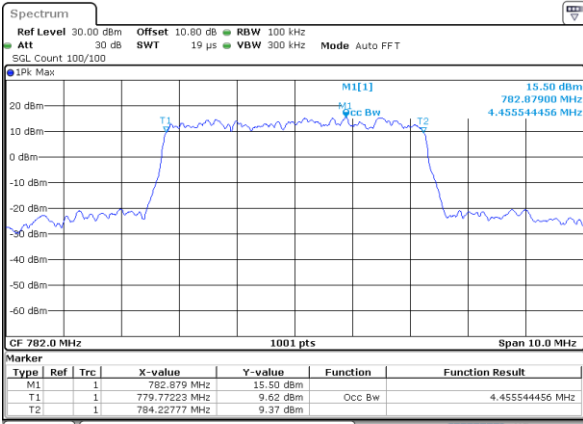
Occupied Bandwidth

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	-	-	-	-	4.46	4.49	8.95	9.07	-	-	-	-
Mode	LTE Band 13 : 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	-	-	-	-	4.49	4.49	8.97	9.01	-	-	-	-



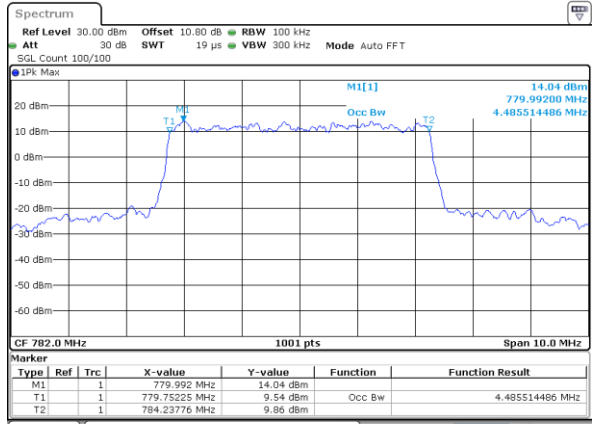
LTE Band 13

Middle Channel / 5MHz / QPSK



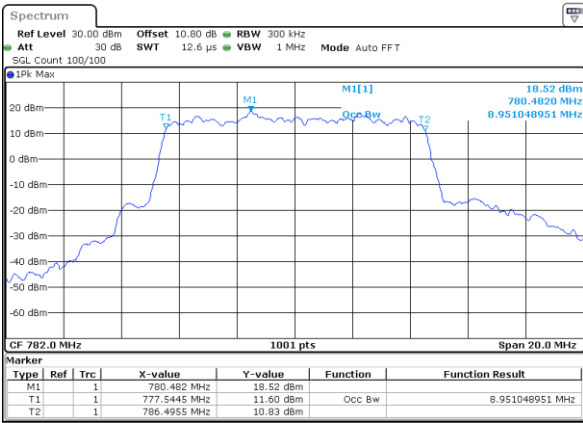
Date: 7.MAR.2021 11:59:50

Middle Channel / 5MHz / 16QAM



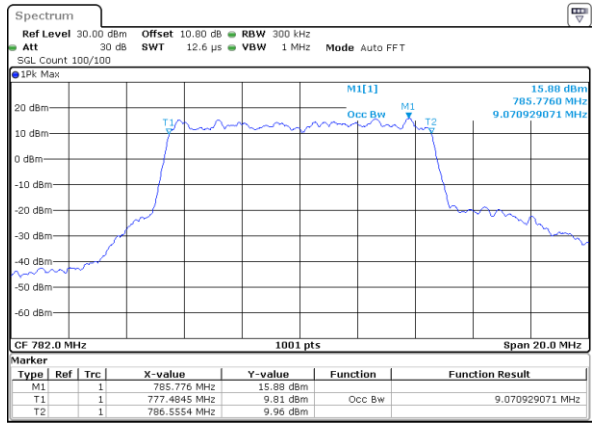
Date: 7.MAR.2021 11:59:38

Middle Channel / 10MHz / QPSK



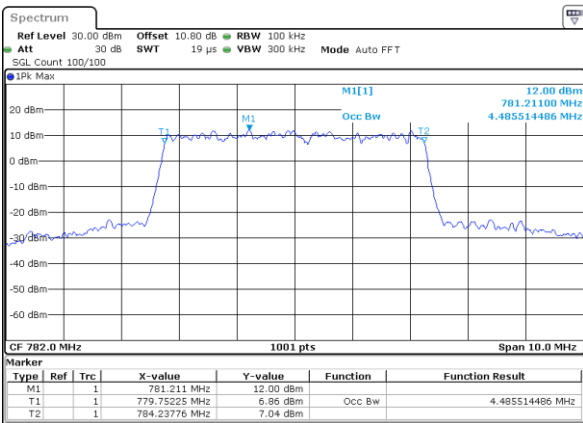
Date: 7.MAR.2021 12:14:36

Middle Channel / 10MHz / 16QAM



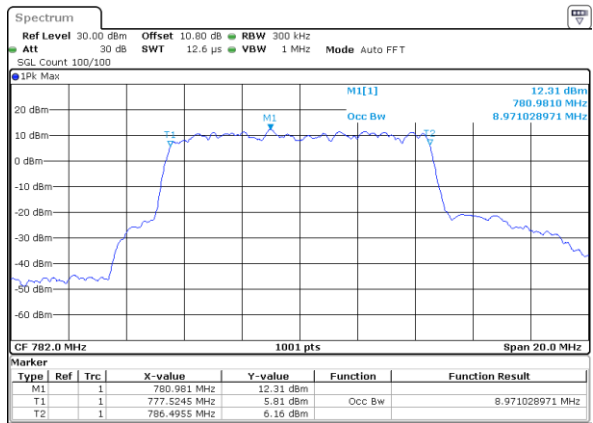
Date: 7.MAR.2021 12:14:48

Middle Channel / 5MHz / 64QAM



Date: 7.MAR.2021 12:10:58

Middle Channel / 10MHz / 64QAM

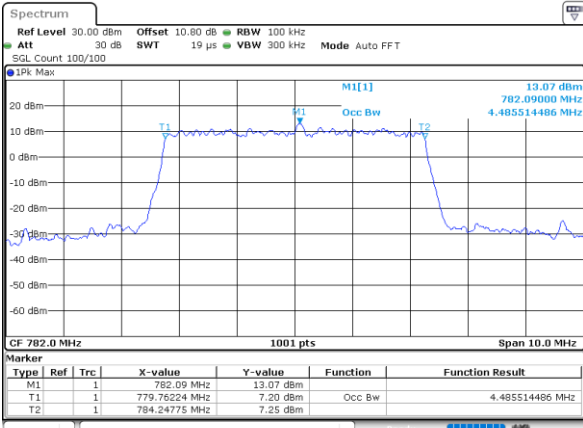


Date: 7.MAR.2021 12:26:02



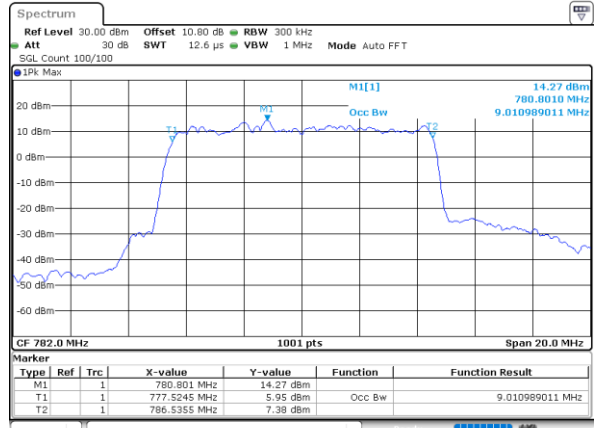
LTE Band 13

Middle Channel / 5MHz / 256QAM



Date: 13.MAR.2021 18:10:50

Middle Channel / 10MHz / 256QAM



Date: 13.MAR.2021 18:14:08

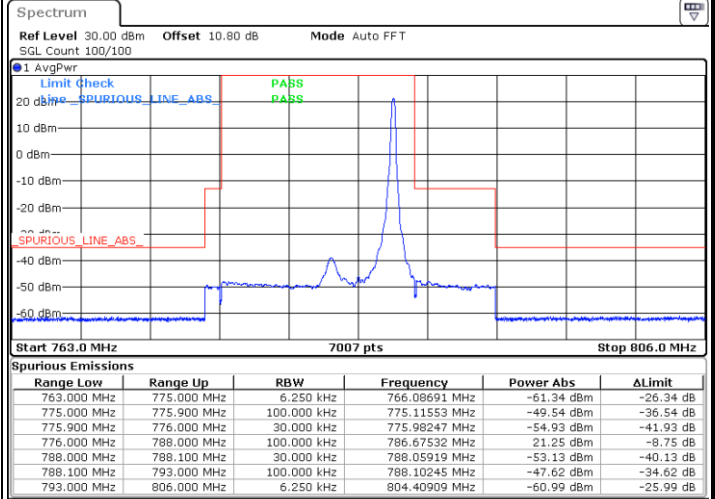
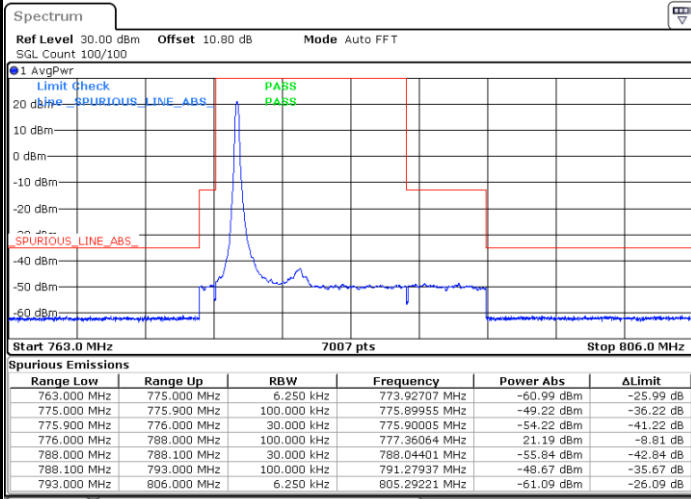


Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

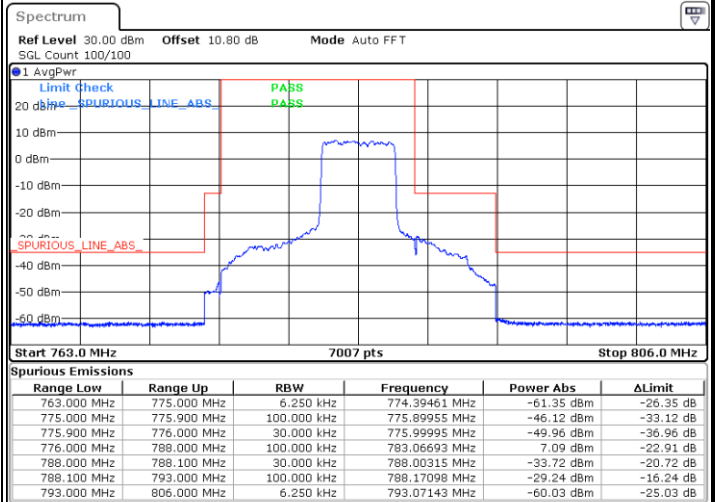
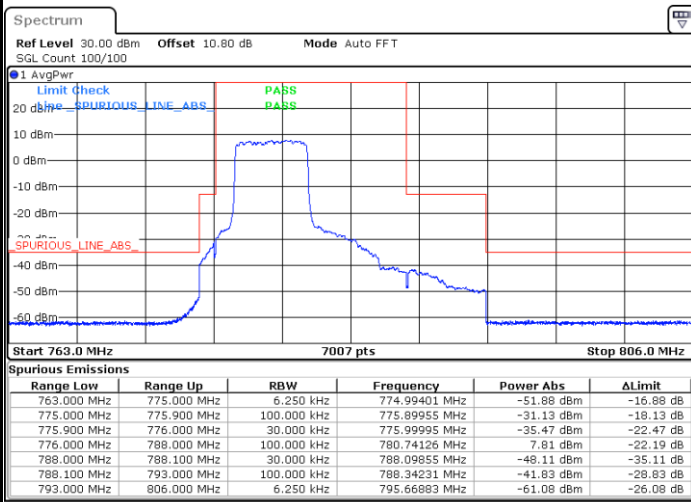


Date: 7.MAR.2021 11:58:07

Date: 7.MAR.2021 12:06:39

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 7.MAR.2021 10:21:37

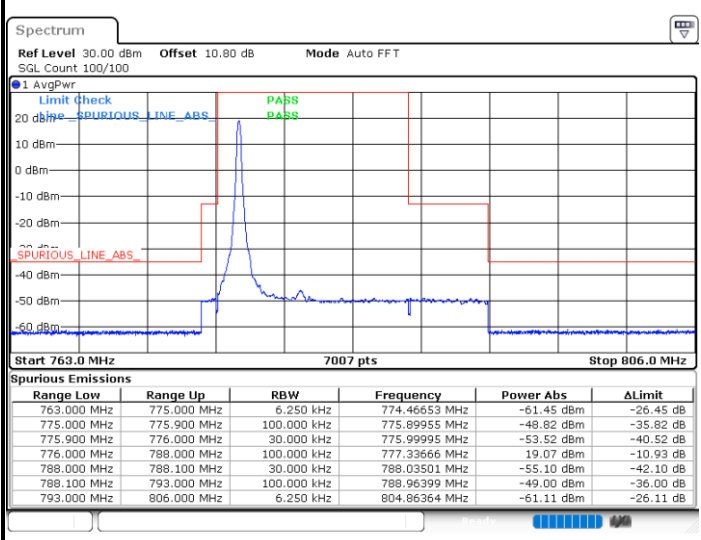
Date: 7.MAR.2021 12:01:31



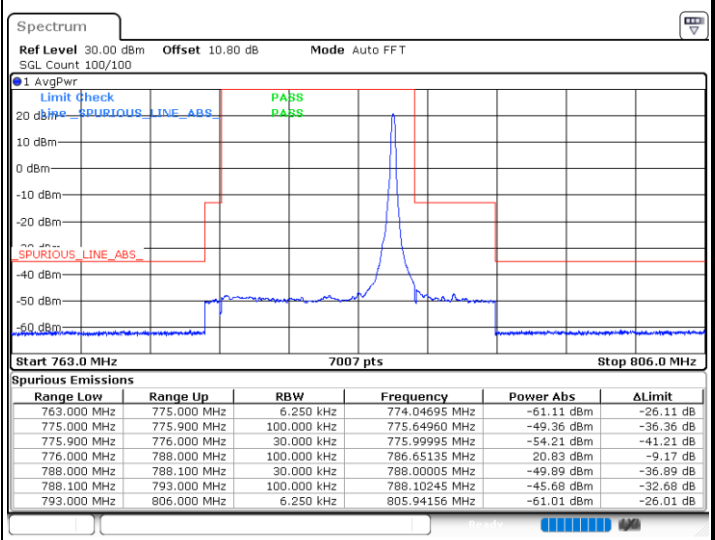
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



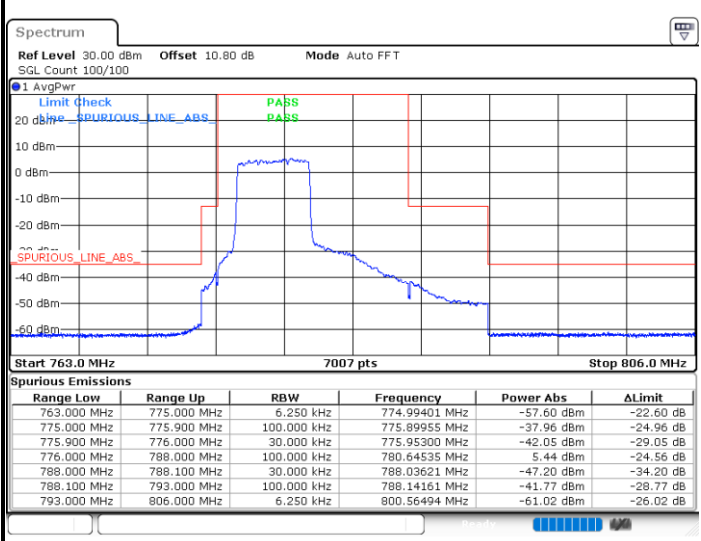
Date: 7.MAR.2021 11:56:24



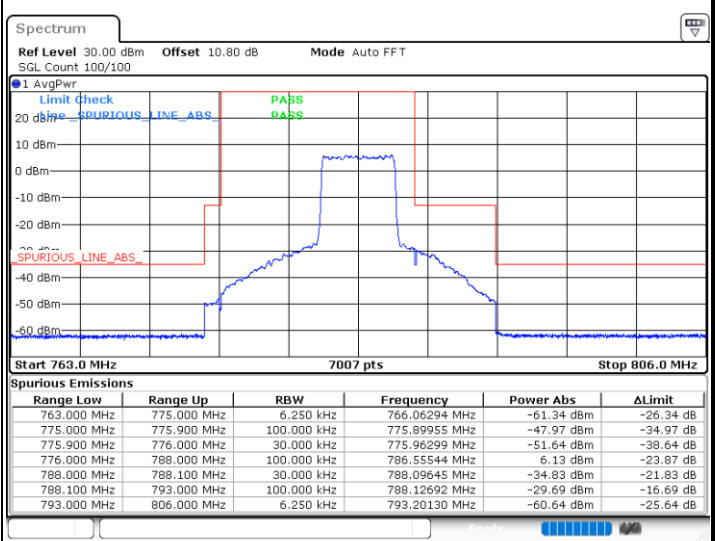
Date: 7.MAR.2021 12:04:57

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 7.MAR.2021 11:54:41



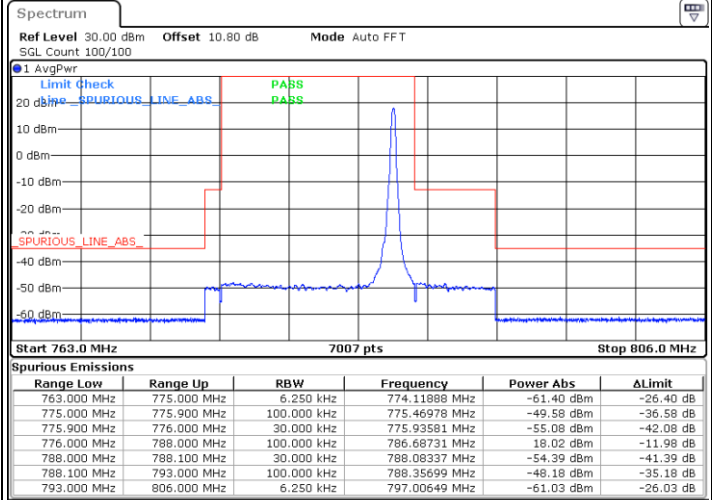
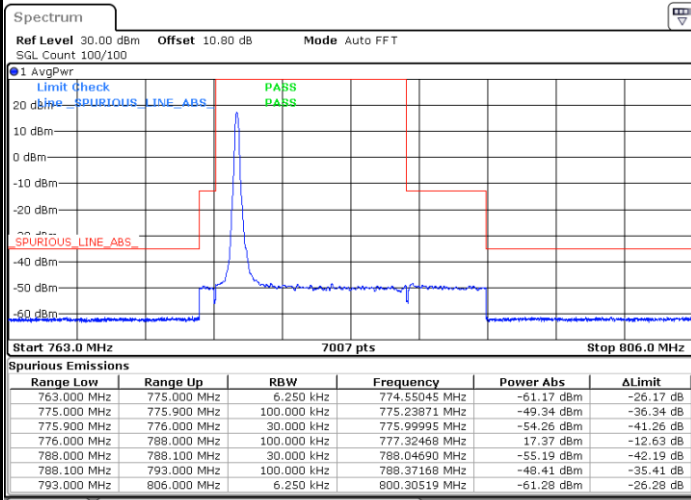
Date: 7.MAR.2021 12:03:14



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

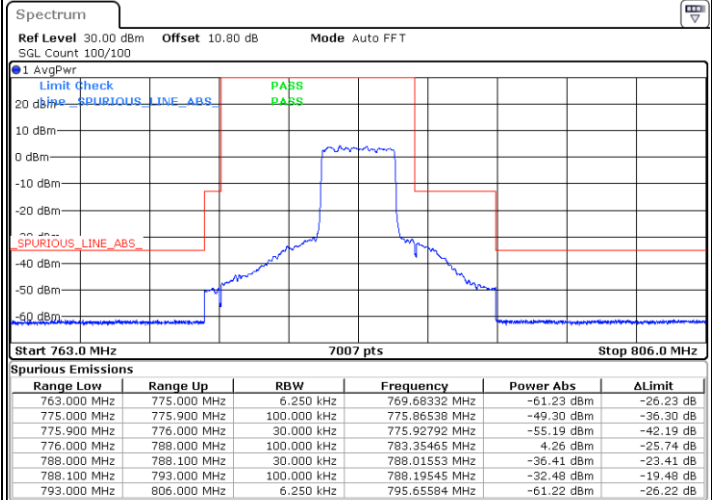
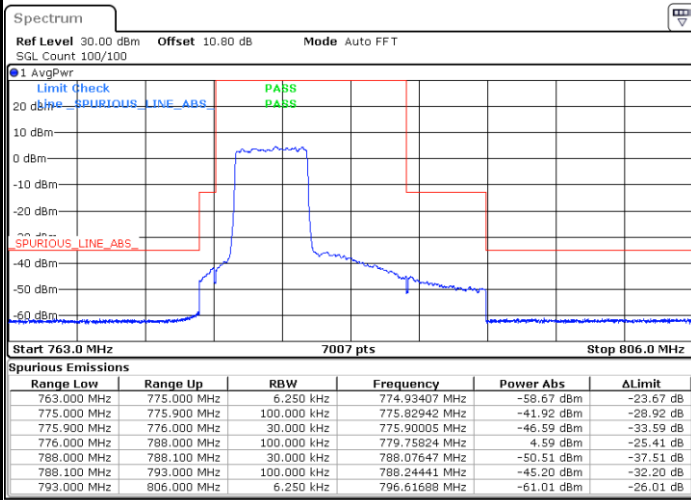


Date: 7.MAR.2021 12:10:33

Date: 7.MAR.2021 12:14:21

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 7.MAR.2021 12:08:50

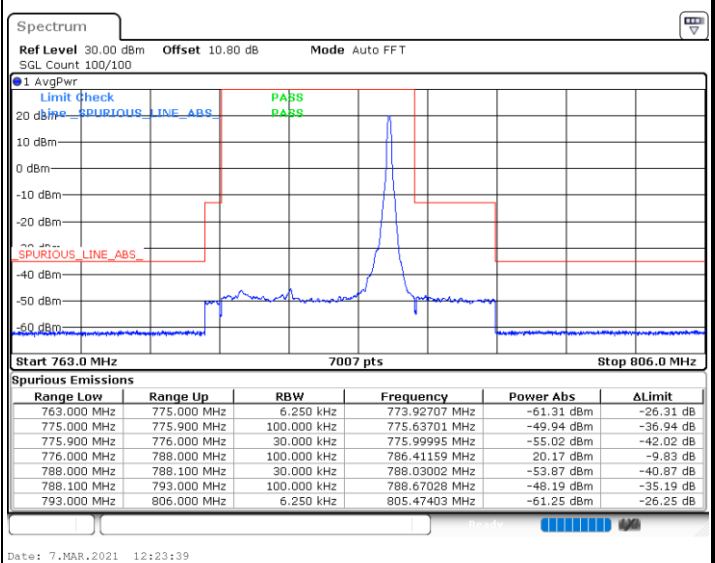
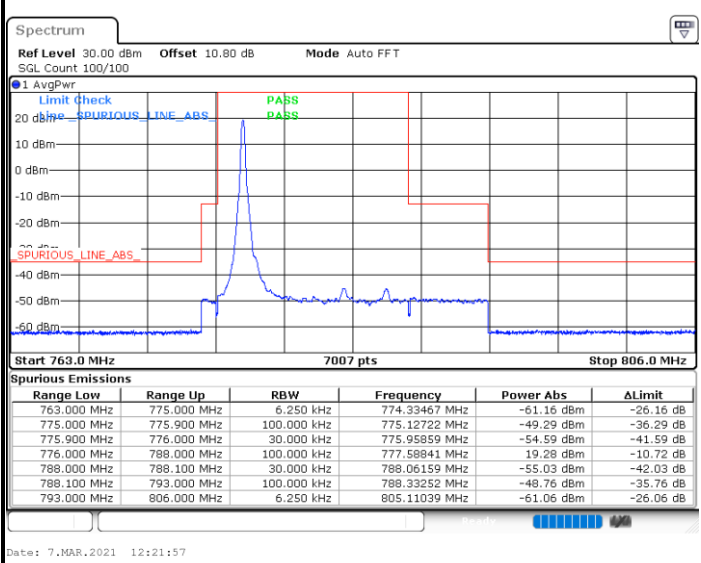
Date: 7.MAR.2021 12:12:38



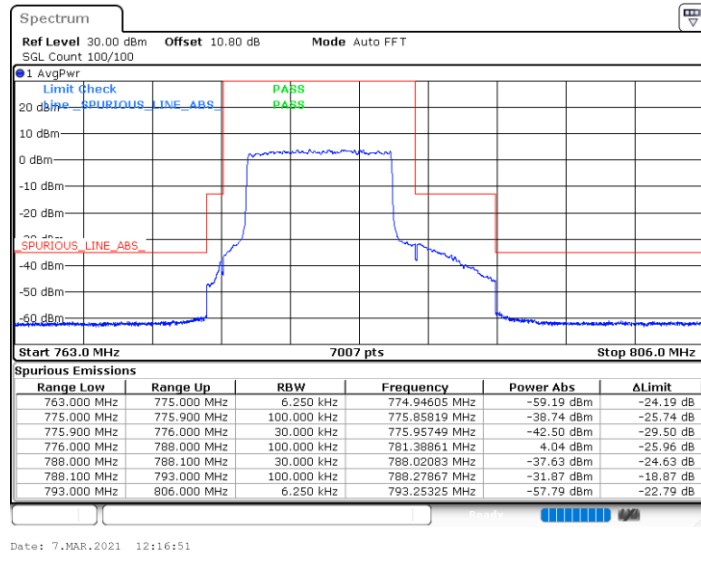
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Band Edge / Full RB

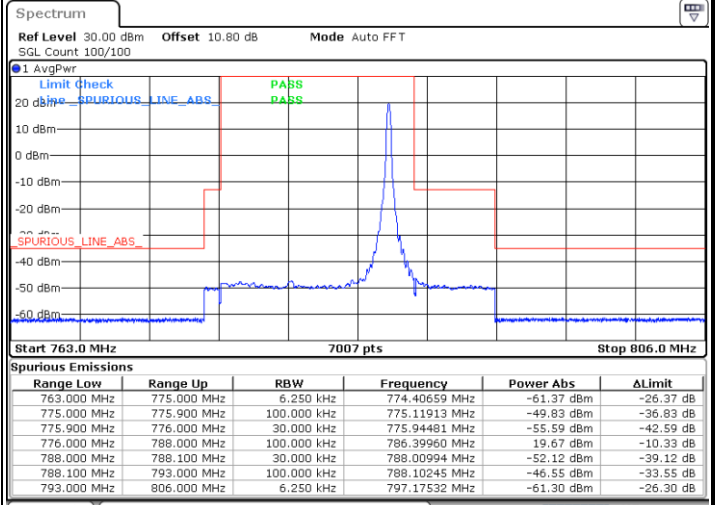
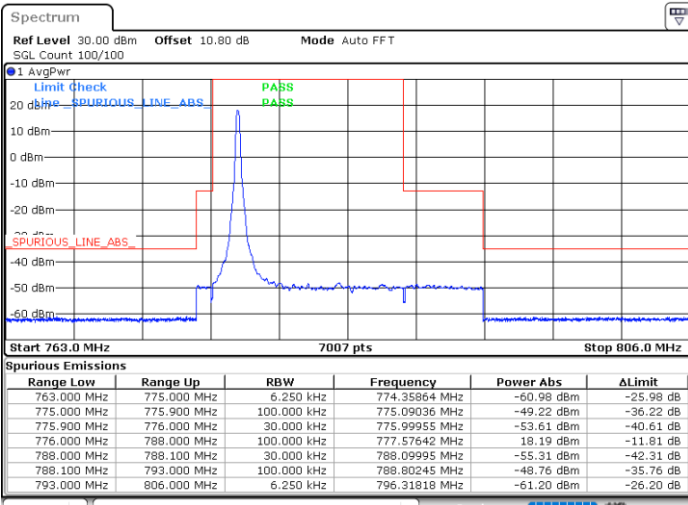




LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

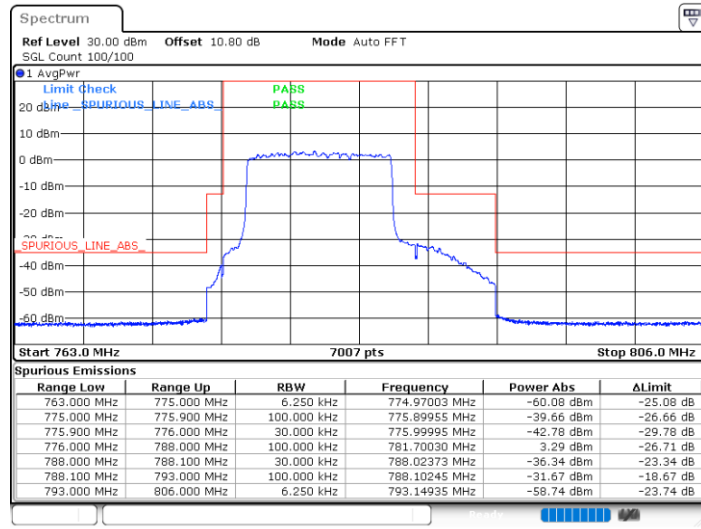
Highest Band Edge / 1 RB



Date: 7.MAR.2021 12:20:15

Date: 7.MAR.2021 12:25:22

Band Edge / Full RB



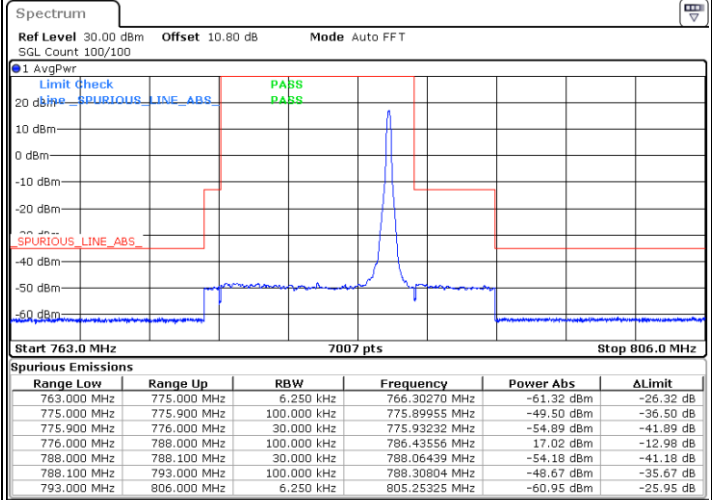
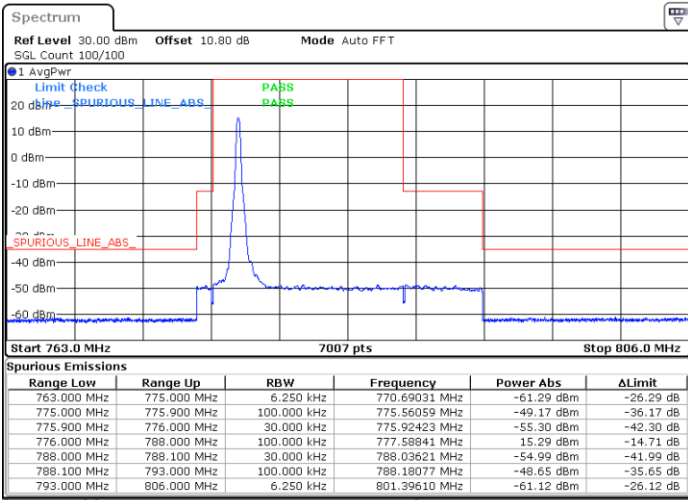
Date: 7.MAR.2021 12:18:33



LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

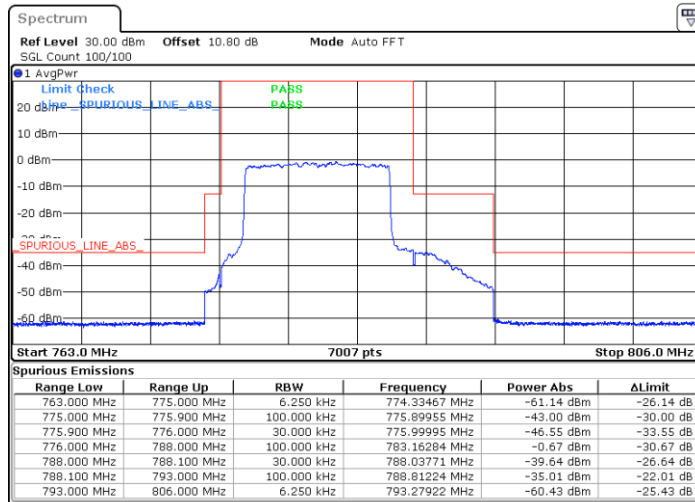
Highest Band Edge / 1 RB



Date: 7.MAR.2021 12:29:36

Date: 7.MAR.2021 12:31:18

Band Edge / Full RB



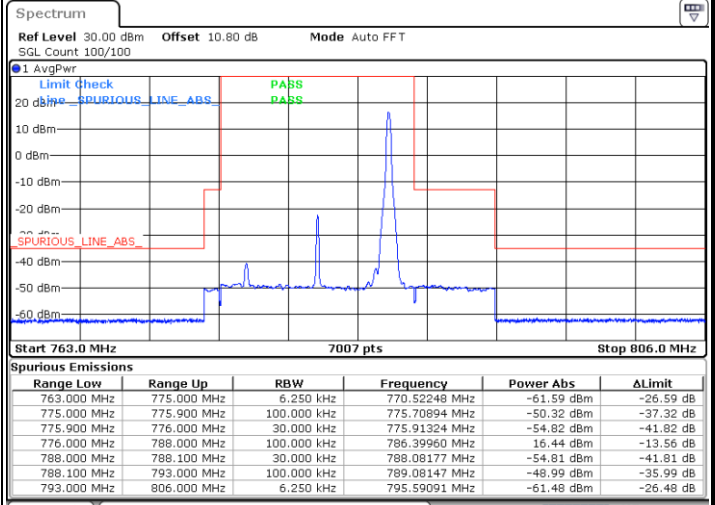
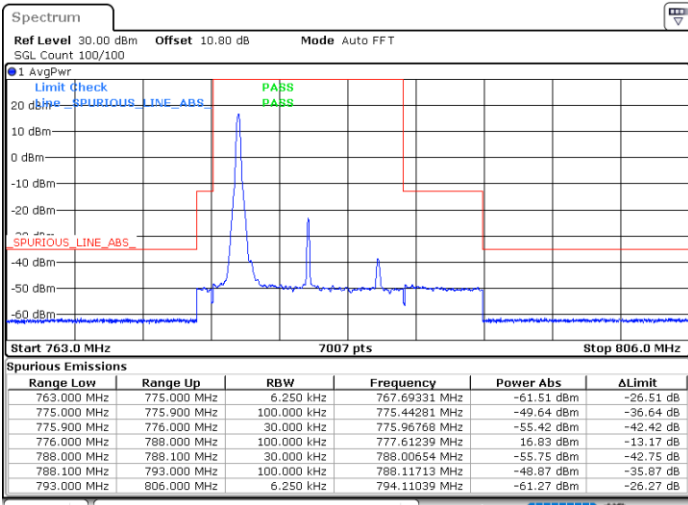
Date: 7.MAR.2021 12:27:54



LTE Band 13 / 10MHz / 256QAM

Lowest Band Edge / 1 RB

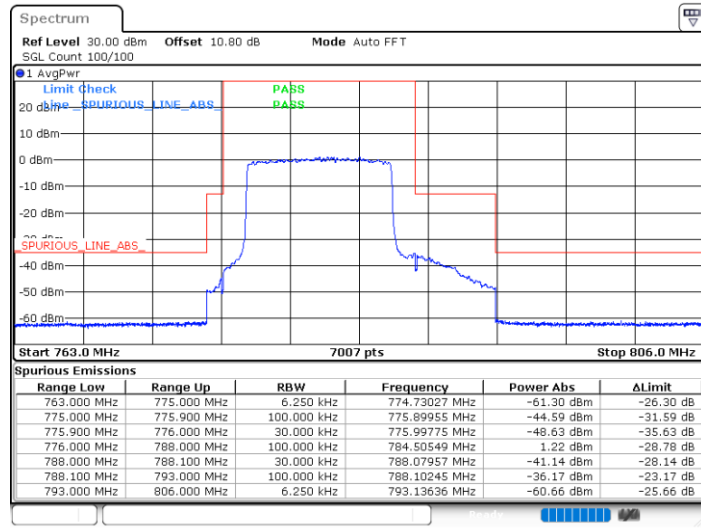
Highest Band Edge / 1 RB



Date: 13.MAR.2021 18:14:57

Date: 13.MAR.2021 18:15:16

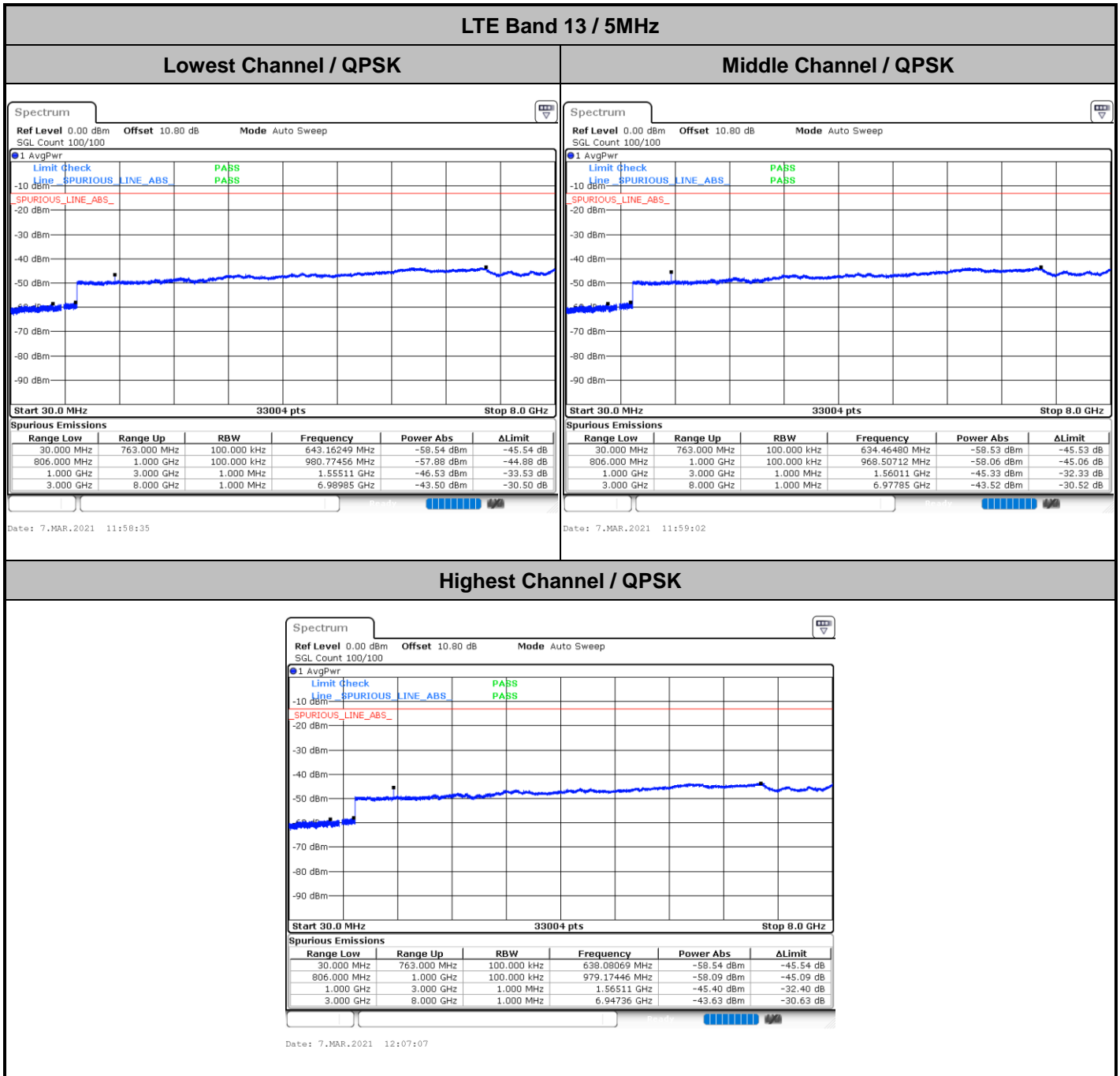
Band Edge / Full RB



Date: 13.MAR.2021 18:14:37



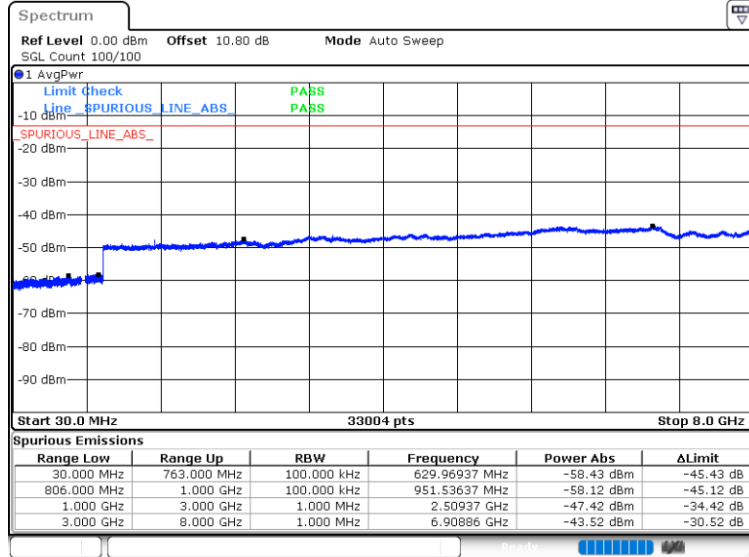
Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 7.MAR.2021 12:25:49



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	0.0150	PASS
40	Normal Voltage	0.0129	
30	Normal Voltage	0.0026	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0159	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0161	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0063	
20	Maximum Voltage	0.0110	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0008	

Note:

- 1. Normal Voltage =12 V. : Battery End Point (BEP) =11.6 V. : Maximum Voltage =12.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 66

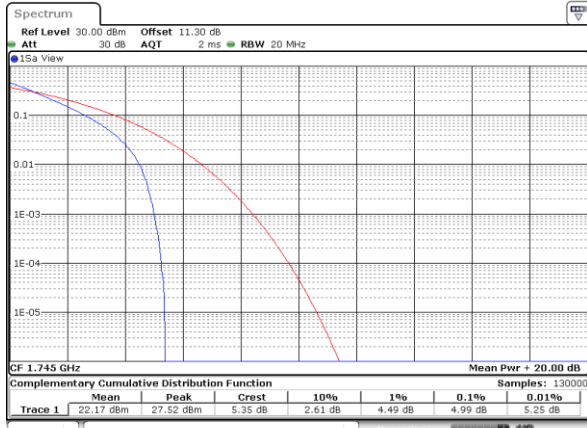
Peak-to-Average Ratio

Mode	LTE Band 66 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.99	6.09	6.67	6.61	PASS



LTE Band 66 / 20MHz / QPSK

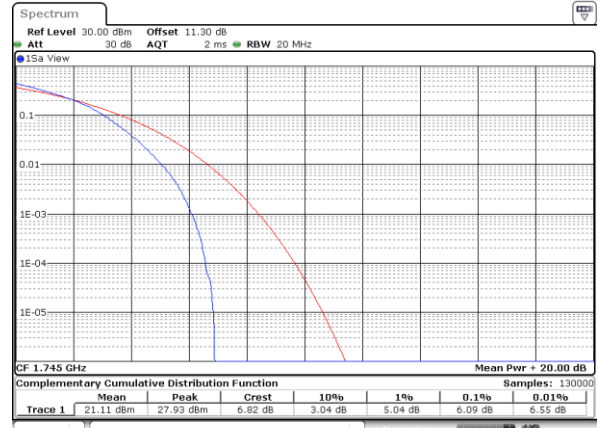
Middle Channel / Full RB



Date: 7.MAR.2021 15:56:50

LTE Band 66 / 20MHz / 16QAM

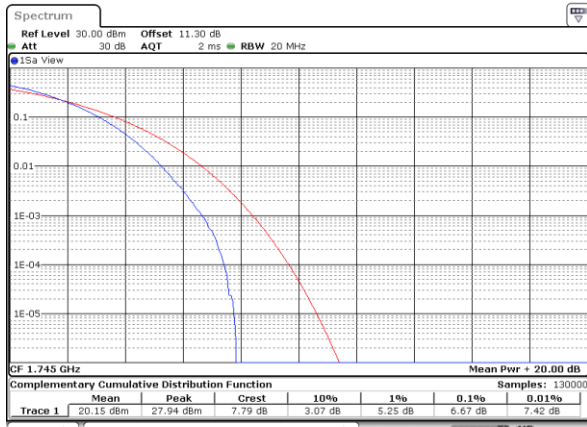
Middle Channel / Full RB



Date: 7.MAR.2021 15:56:36

LTE Band 66 / 20MHz / 64QAM

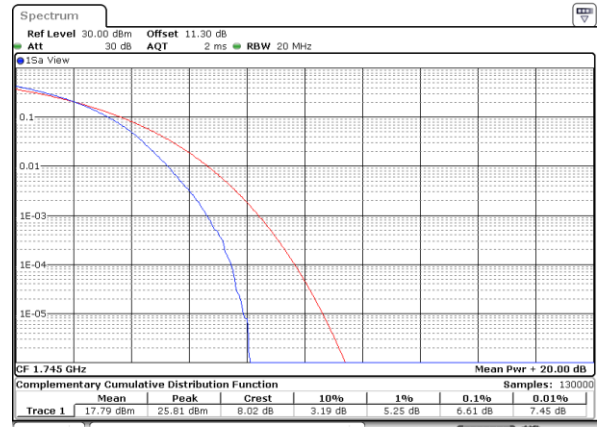
Middle Channel / Full RB



Date: 7.MAR.2021 15:57:03

LTE Band 66 / 20MHz / 256QAM

Middle Channel / Full RB



Date: 13.MAR.2021 18:40:35



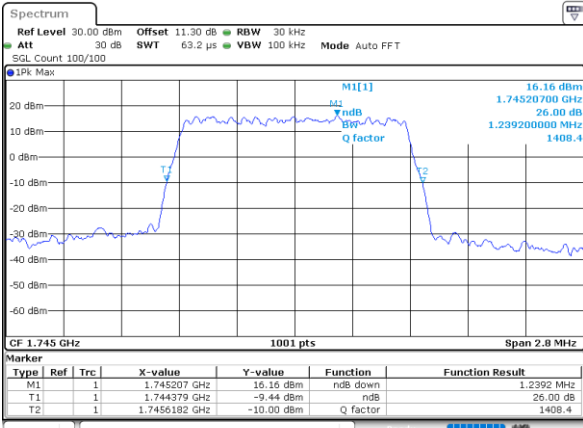
26dB Bandwidth

Mode	LTE Band 66 : 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	1.23	3.05	3.06	4.95	4.85	9.73	9.77	14.33	14.54	18.82	19.10
Mode	LTE Band 66 : 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	1.22	1.23	2.99	2.99	4.90	4.91	9.67	9.73	14.63	14.27	18.98	19.10



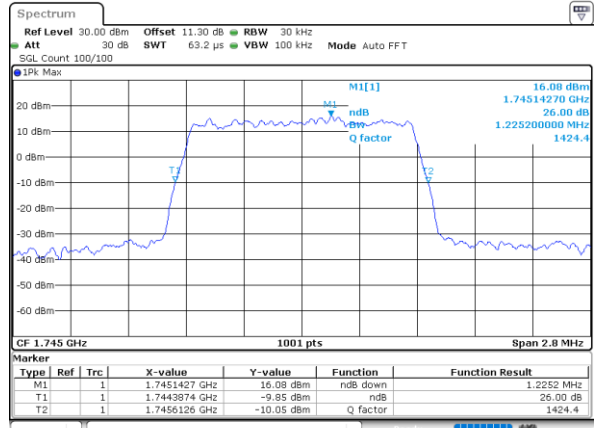
LTE Band 66

Middle Channel / 1.4MHz / QPSK



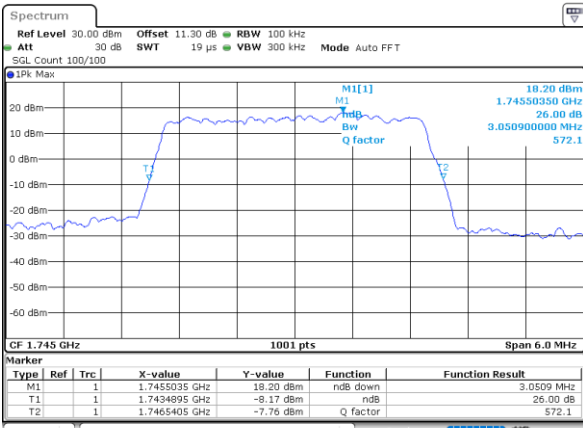
Date: 7.MAR.2021 15:13:13

Middle Channel / 1.4MHz / 16QAM



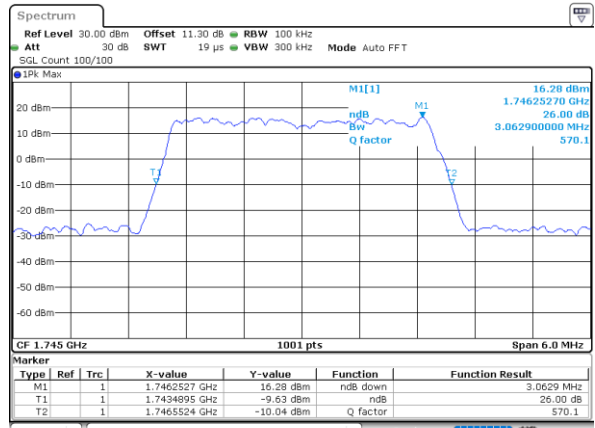
Date: 7.MAR.2021 15:13:25

Middle Channel / 3MHz / QPSK



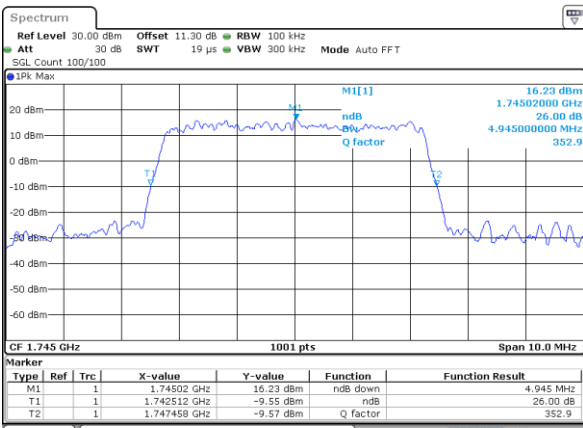
Date: 7.MAR.2021 15:19:54

Middle Channel / 3MHz / 16QAM



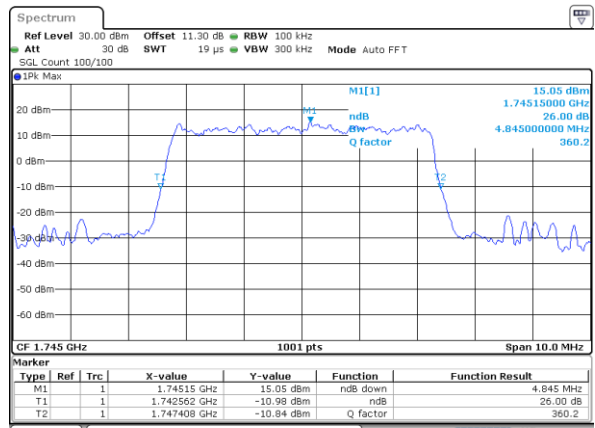
Date: 7.MAR.2021 15:20:06

Middle Channel / 5MHz / QPSK



Date: 7.MAR.2021 15:28:06

Middle Channel / 5MHz / 16QAM

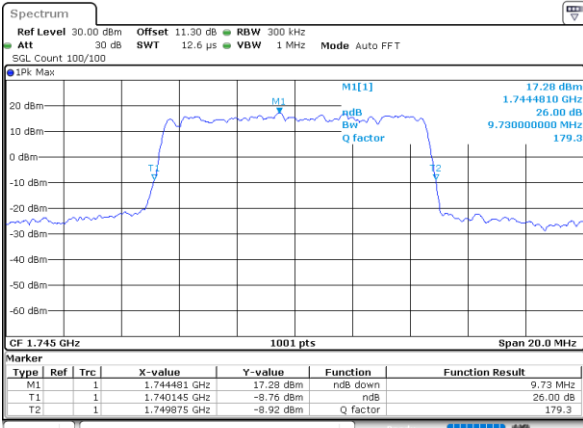


Date: 7.MAR.2021 15:28:18



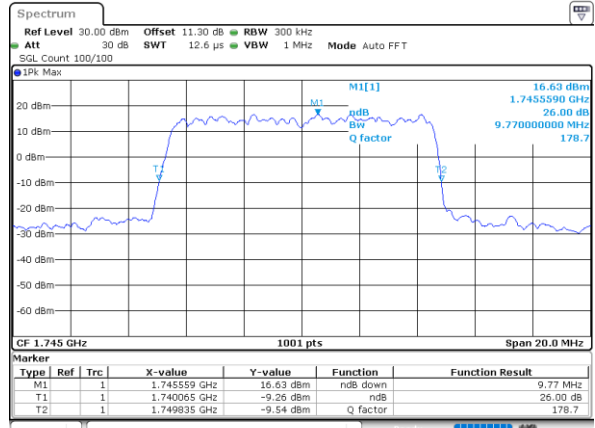
LTE Band 66

Middle Channel / 10MHz / QPSK



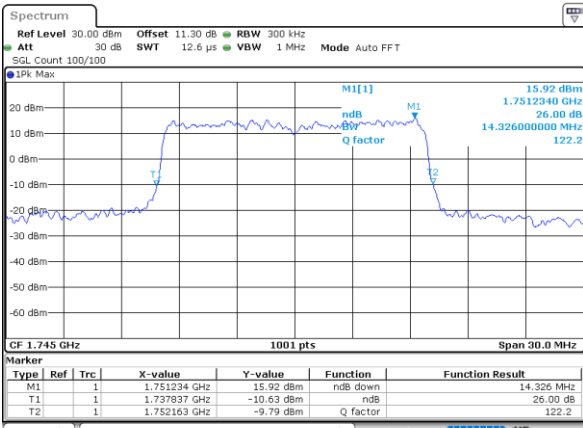
Date: 7.MAR.2021 15:33:28

Middle Channel / 10MHz / 16QAM



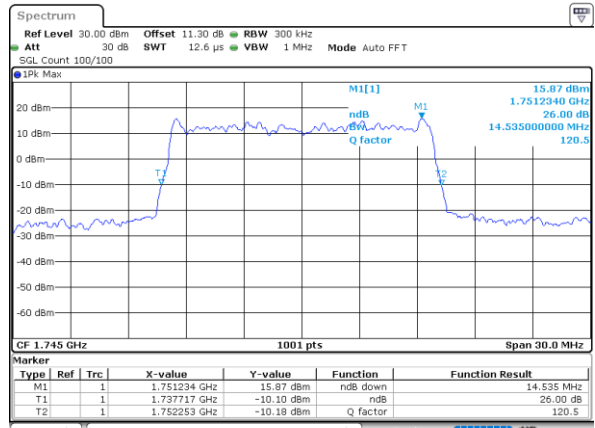
Date: 7.MAR.2021 15:33:40

Middle Channel / 15MHz / QPSK



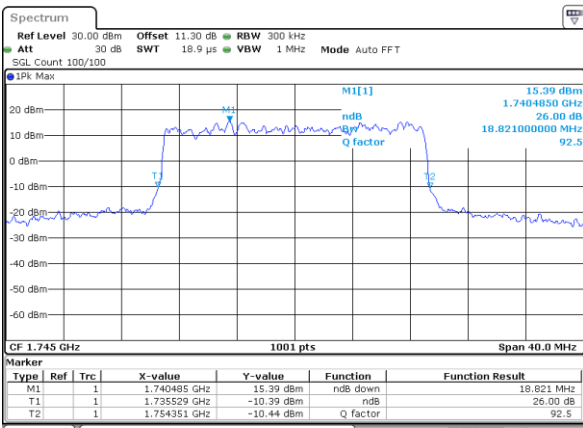
Date: 7.MAR.2021 15:41:39

Middle Channel / 15MHz / 16QAM



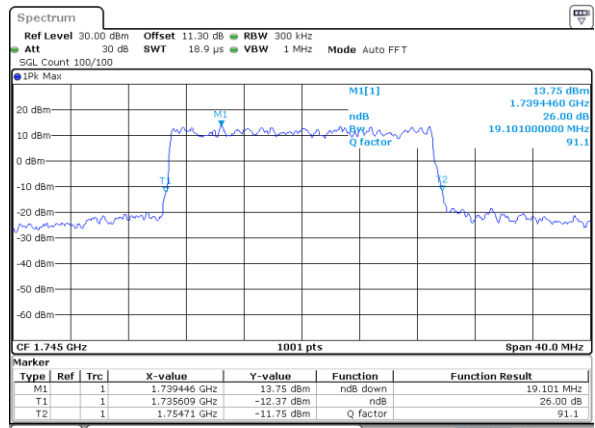
Date: 7.MAR.2021 15:41:51

Middle Channel / 20MHz / QPSK



Date: 7.MAR.2021 15:47:02

Middle Channel / 20MHz / 16QAM



Date: 7.MAR.2021 15:47:14