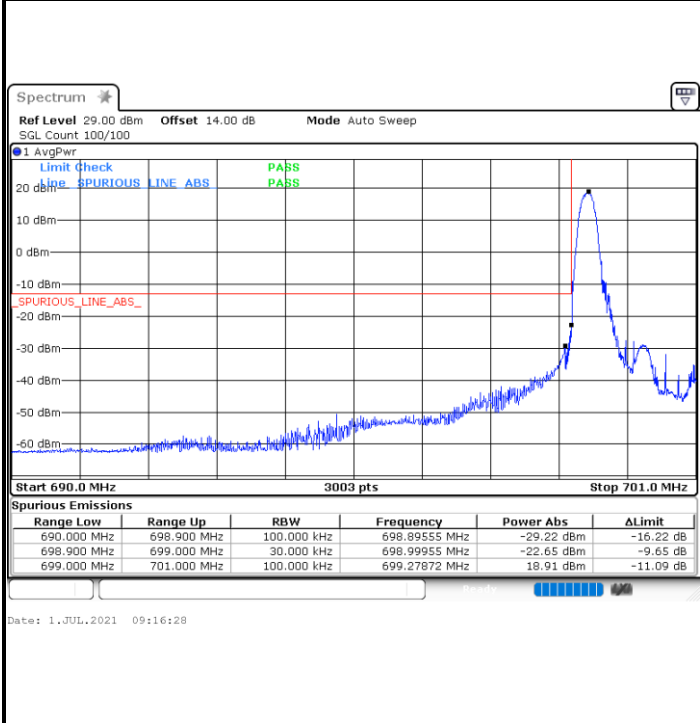


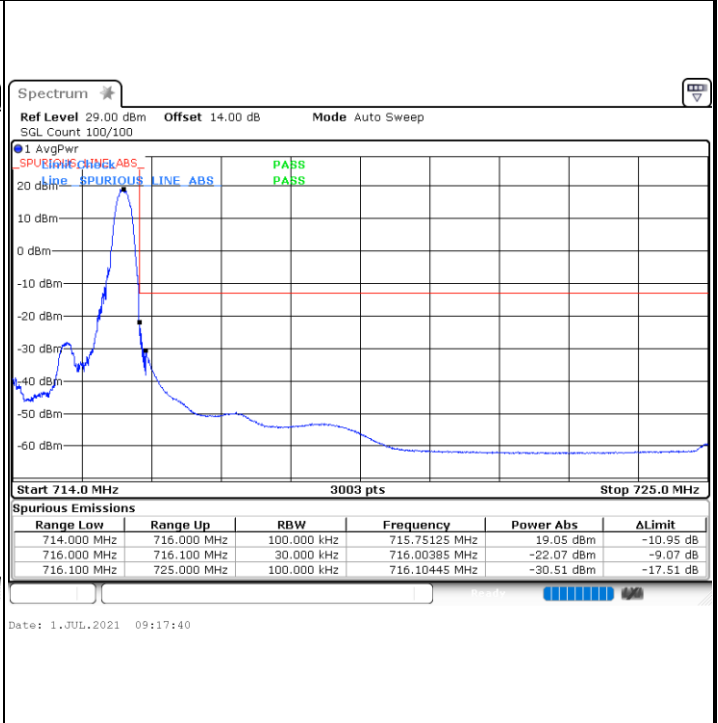


LTE Band 12 / 1.4MHz / 64QAM

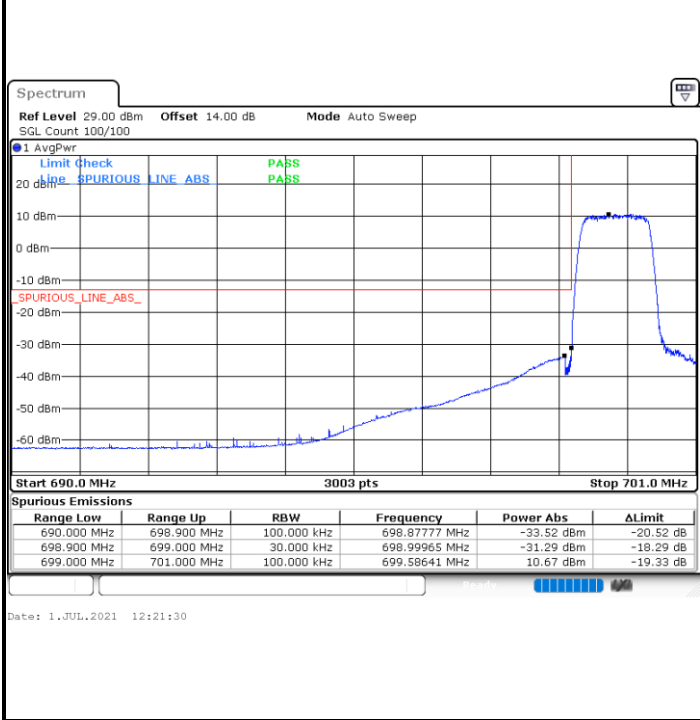
Lowest Band Edge / 1 RB



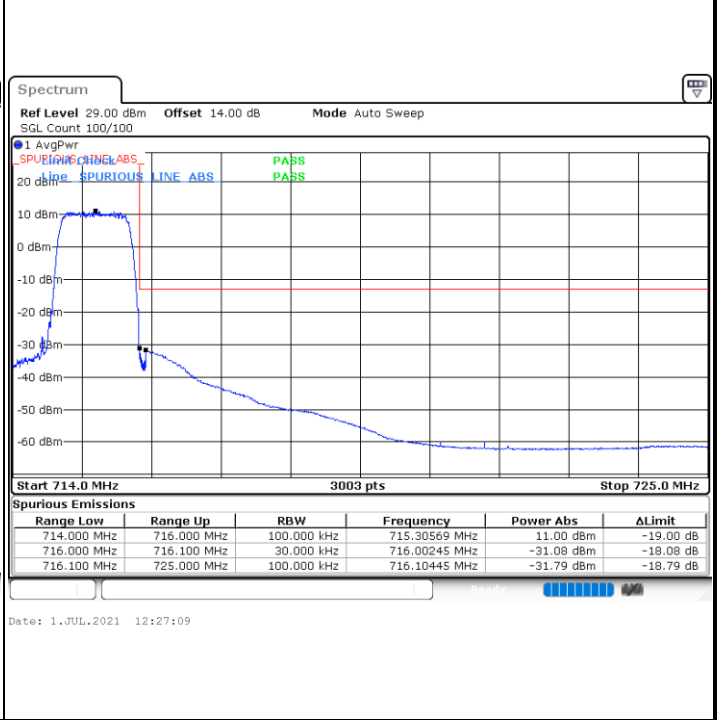
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



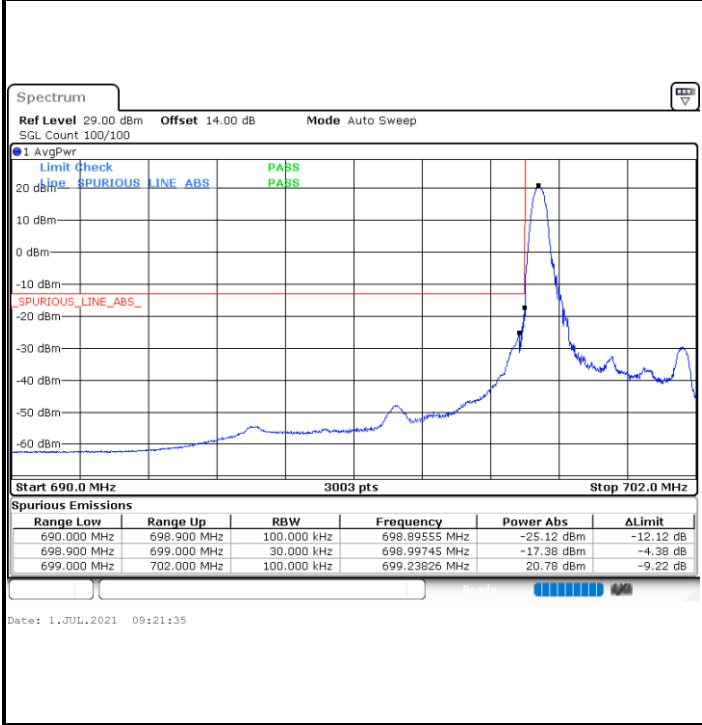
Highest Band Edge / Full RB



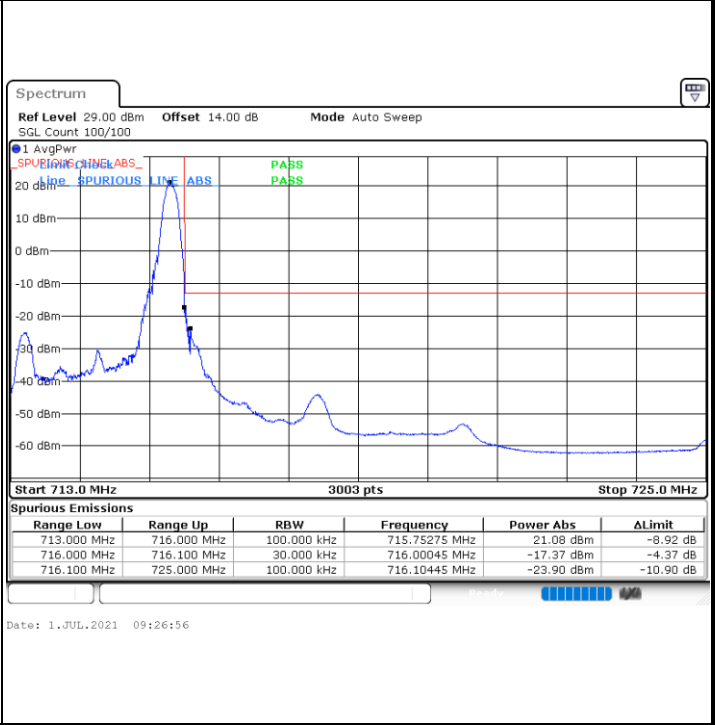


LTE Band 12 / 3MHz / QPSK

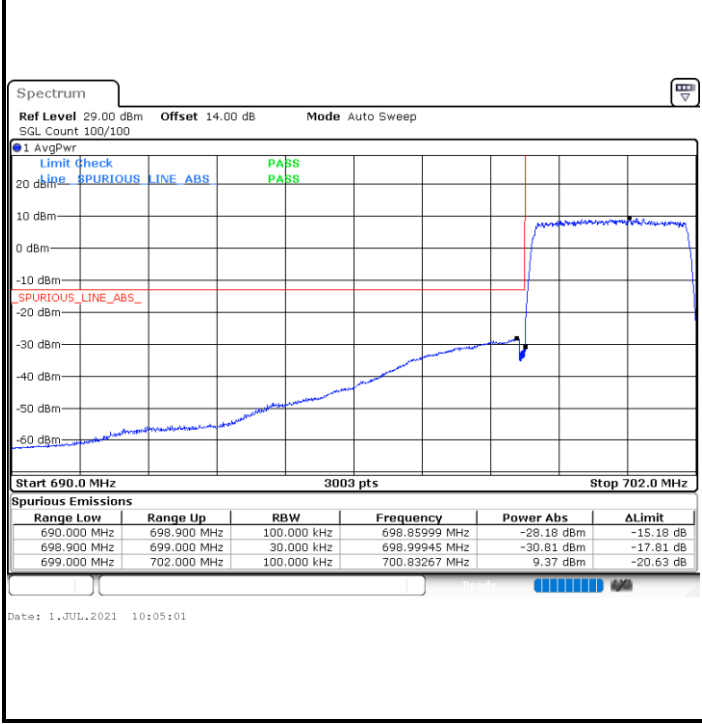
Lowest Band Edge / 1RB



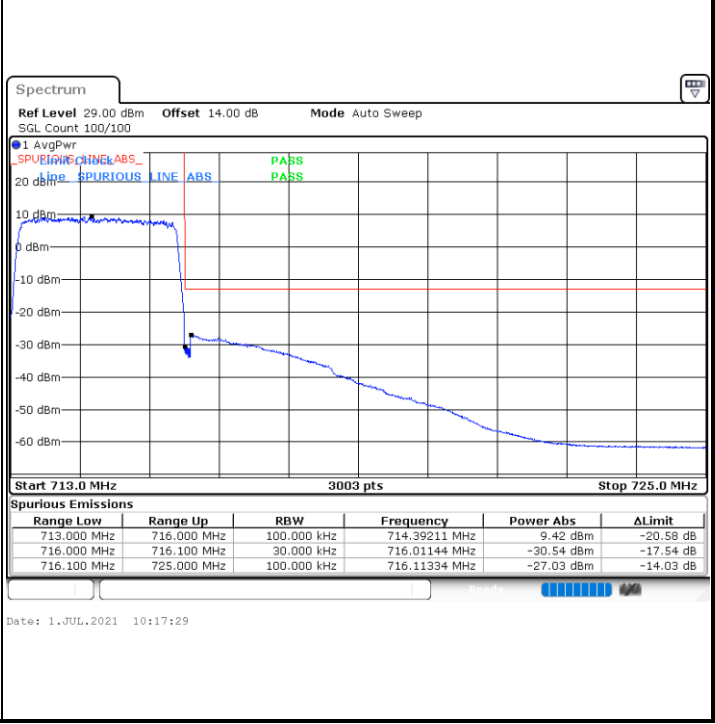
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



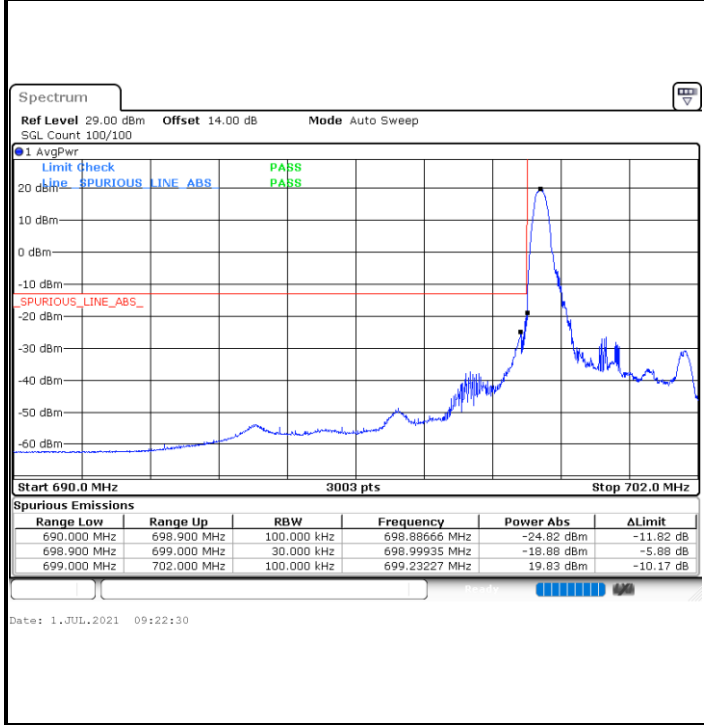
Highest Band Edge / Full RB





LTE Band 12 / 3MHz / 16QAM

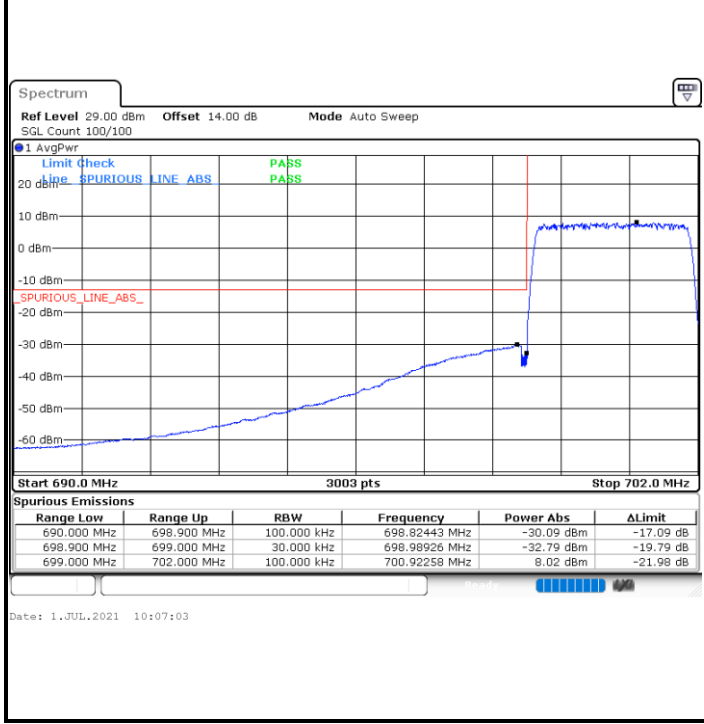
Lowest Band Edge / 1 RB



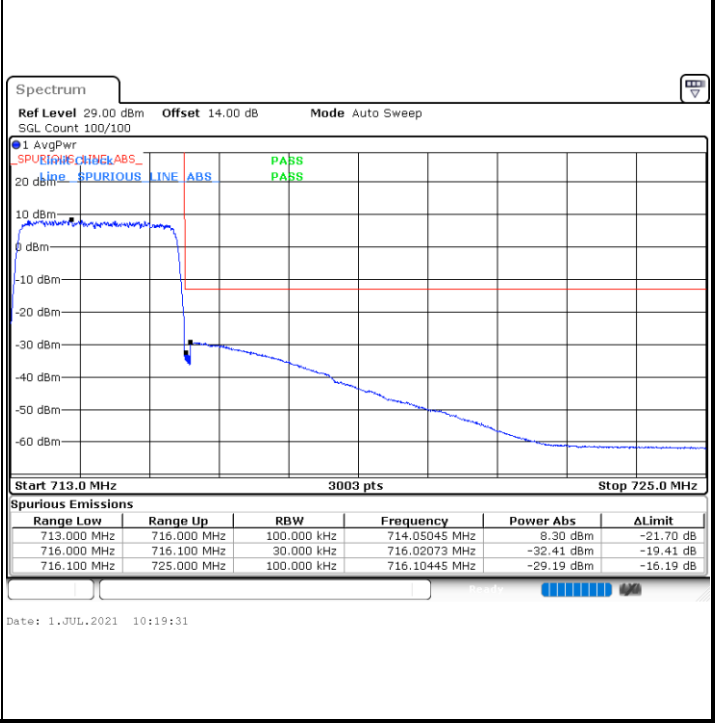
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



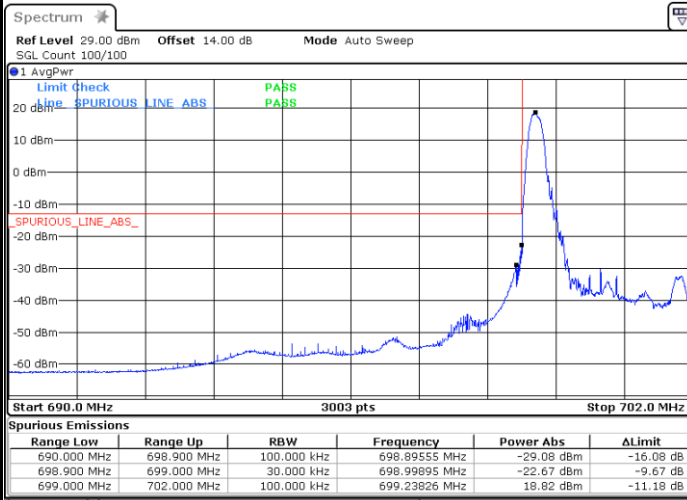
Highest Band Edge / Full RB





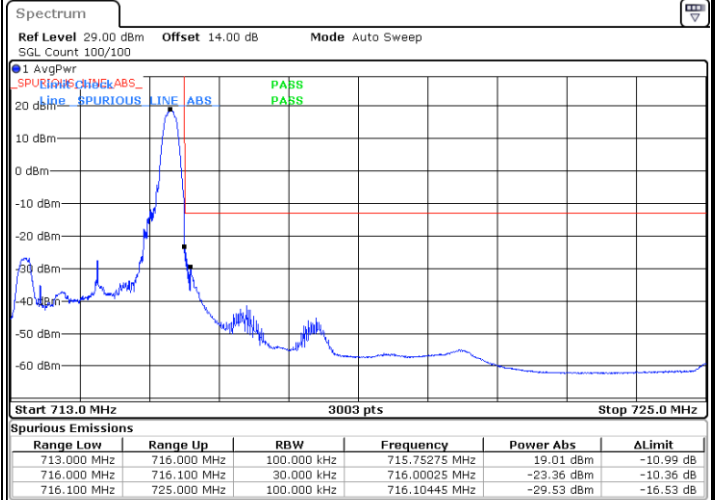
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



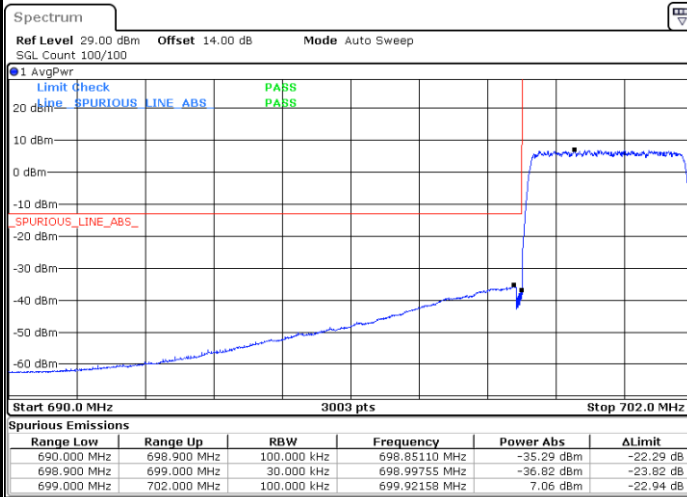
Date: 1.JUL.2021 09:23:49

Highest Band Edge / 1 RB



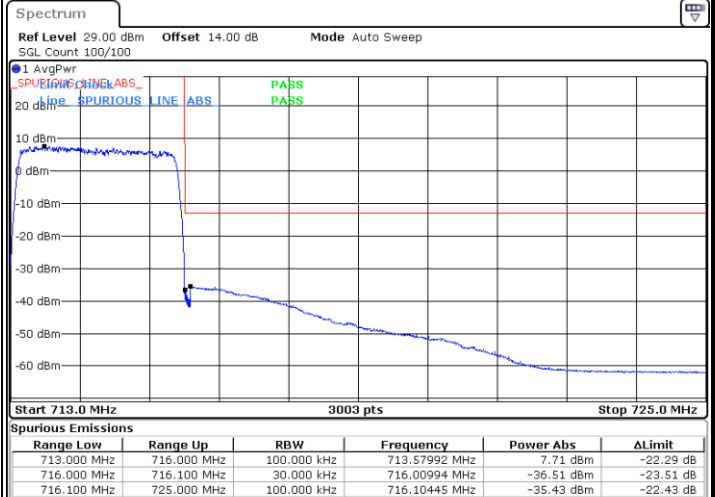
Date: 1.JUL.2021 09:24:40

Lowest Band Edge / Full RB



Date: 1.JUL.2021 11:52:23

Highest Band Edge / Full RB



Date: 1.JUL.2021 11:58:01



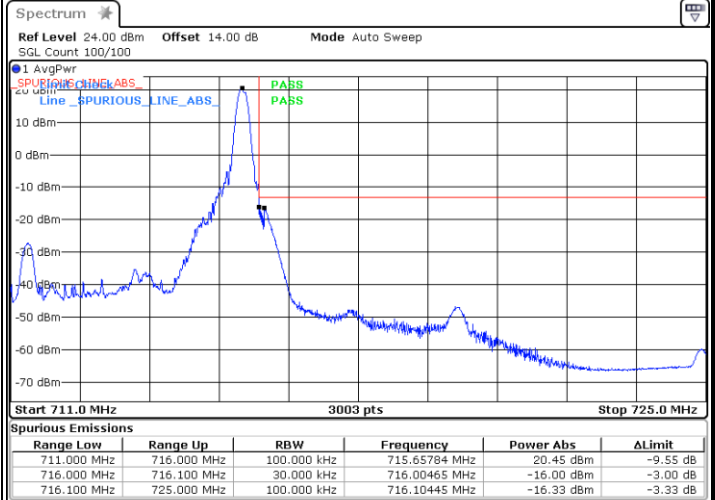
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



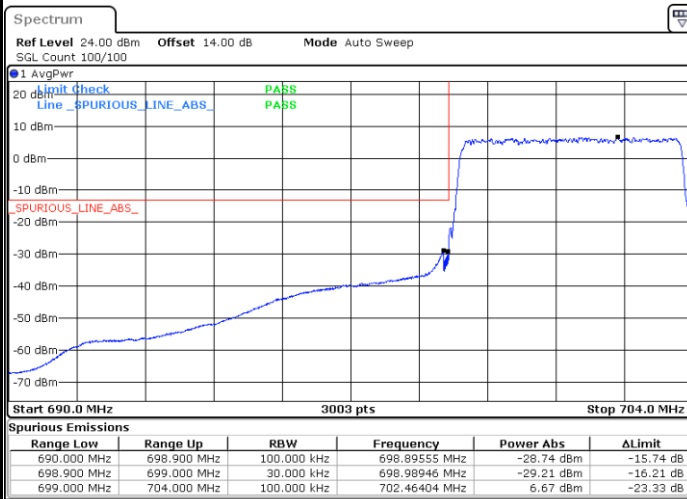
Date: 1.JUL.2021 09:41:15

Highest Band Edge / 1 RB



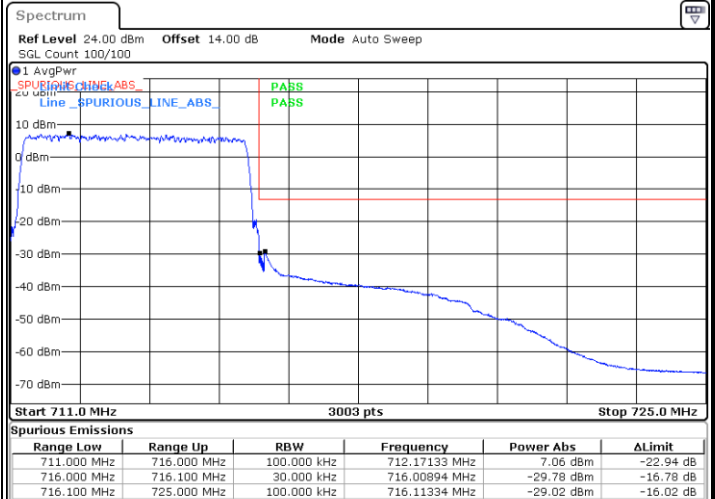
Date: 1.JUL.2021 09:52:57

Lowest Band Edge / Full RB



Date: 1.JUL.2021 10:40:19

Highest Band Edge / Full RB



Date: 1.JUL.2021 10:54:24



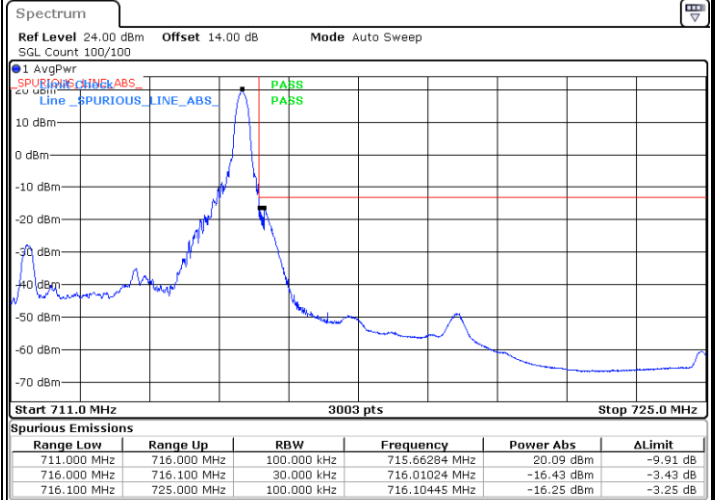
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



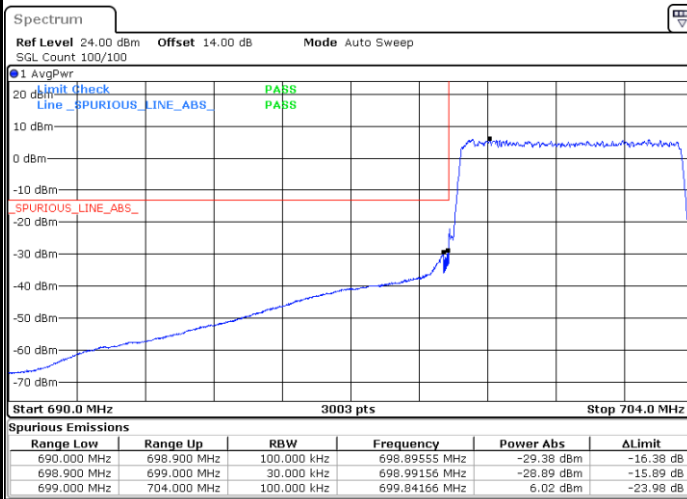
Date: 1.JUL.2021 09:47:31

Highest Band Edge / 1 RB



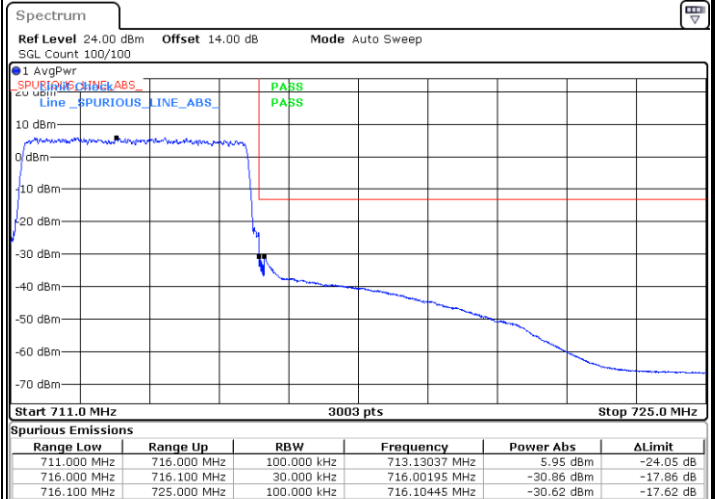
Date: 1.JUL.2021 09:50:36

Lowest Band Edge / Full RB



Date: 1.JUL.2021 10:42:21

Highest Band Edge / Full RB

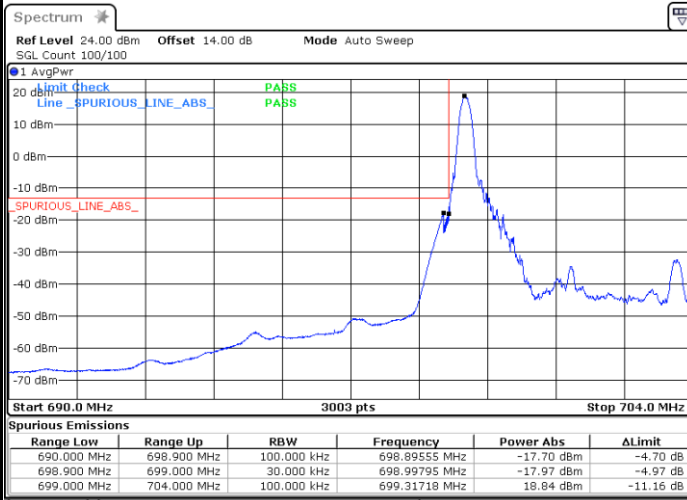


Date: 1.JUL.2021 10:56:27



LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



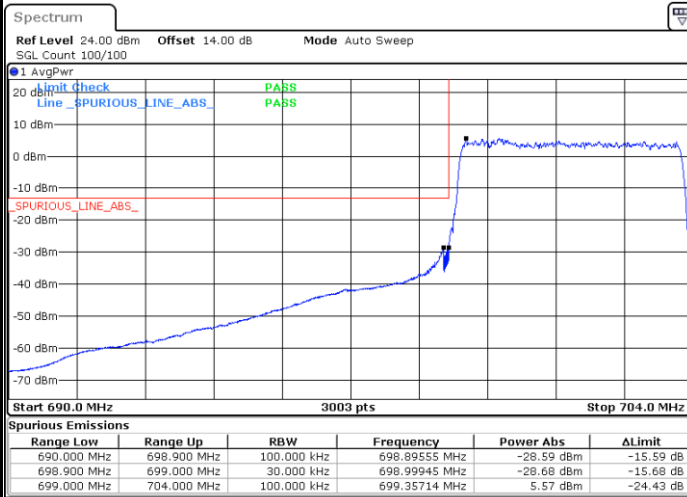
Date: 1.JUL.2021 09:48:55

Highest Band Edge / 1 RB



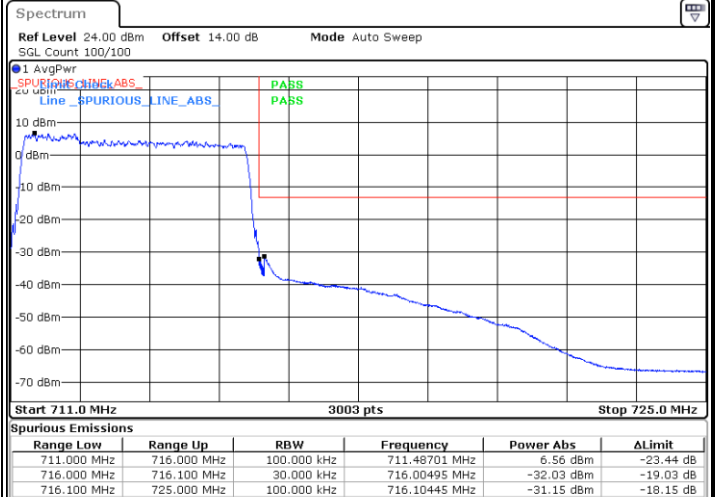
Date: 1.JUL.2021 09:51:31

Lowest Band Edge / Full RB



Date: 1.JUL.2021 12:01:51

Highest Band Edge / Full RB

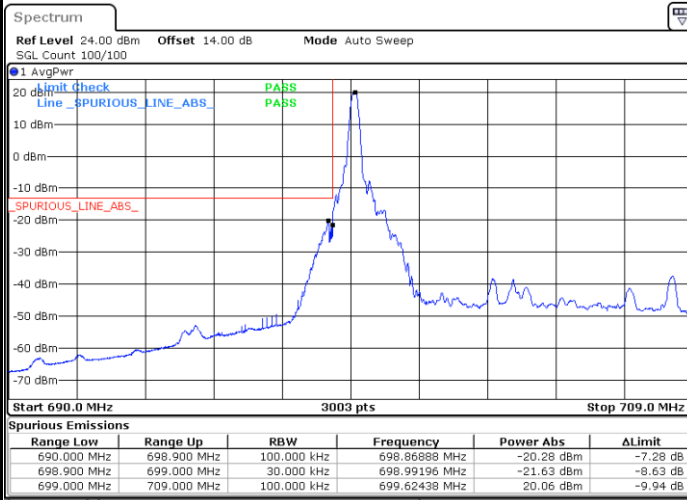


Date: 1.JUL.2021 12:08:13



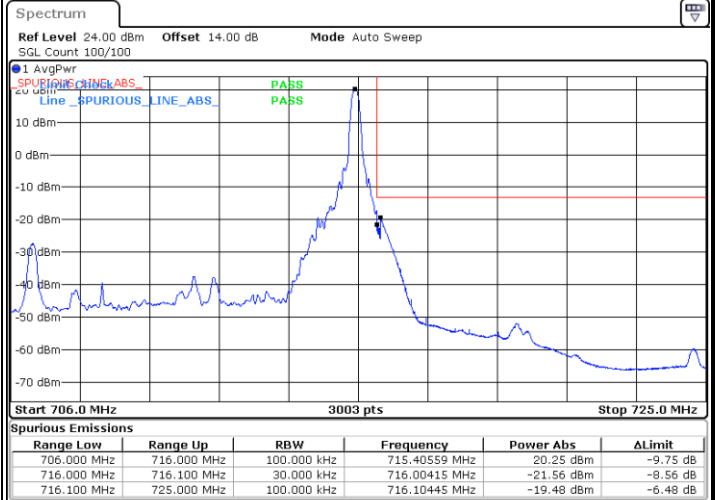
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



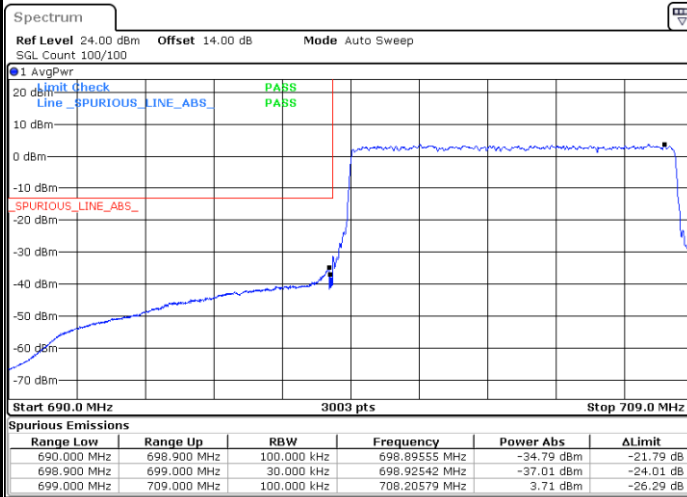
Date: 1.JUL.2021 09:53:54

Highest Band Edge / 1 RB



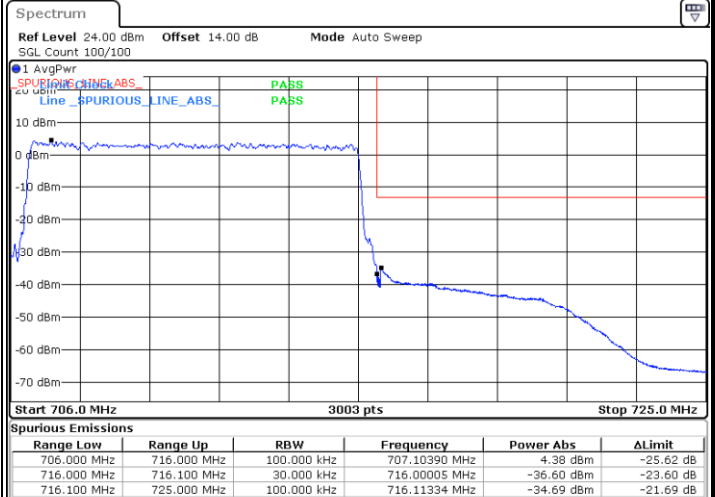
Date: 1.JUL.2021 09:58:49

Lowest Band Edge / Full RB



Date: 1.JUL.2021 11:02:18

Highest Band Edge / Full RB

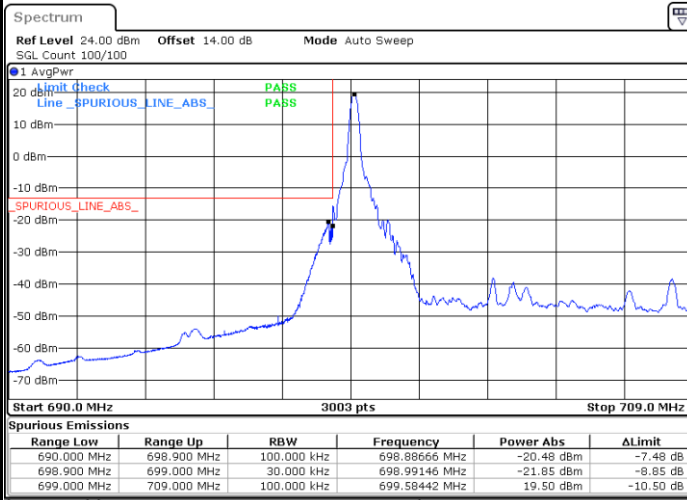


Date: 1.JUL.2021 11:14:02



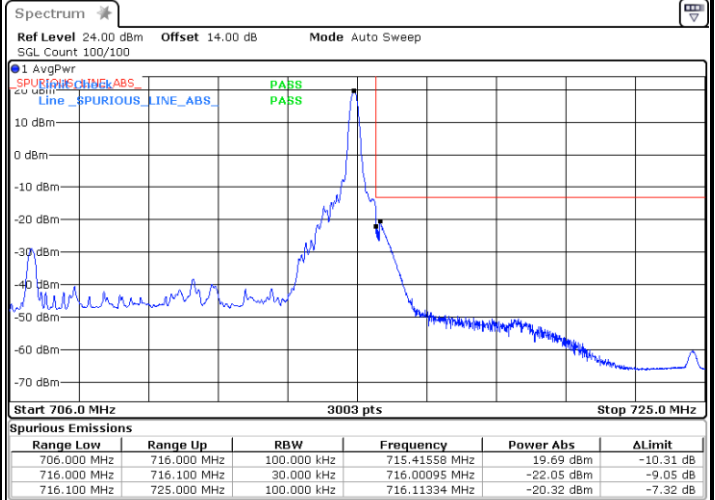
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



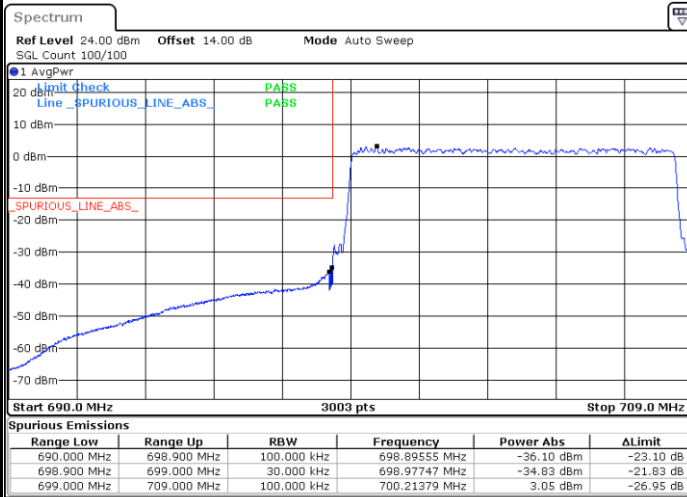
Date: 1.JUL.2021 09:54:43

Highest Band Edge / 1 RB



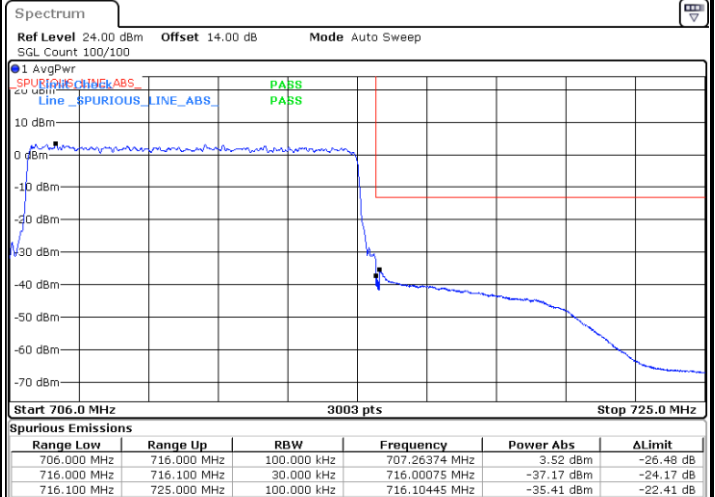
Date: 1.JUL.2021 09:57:59

Lowest Band Edge / Full RB



Date: 1.JUL.2021 11:04:20

Highest Band Edge / Full RB

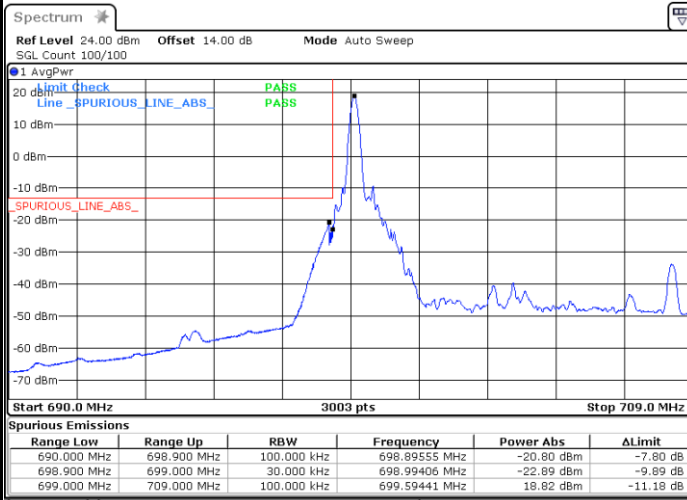


Date: 1.JUL.2021 11:16:05



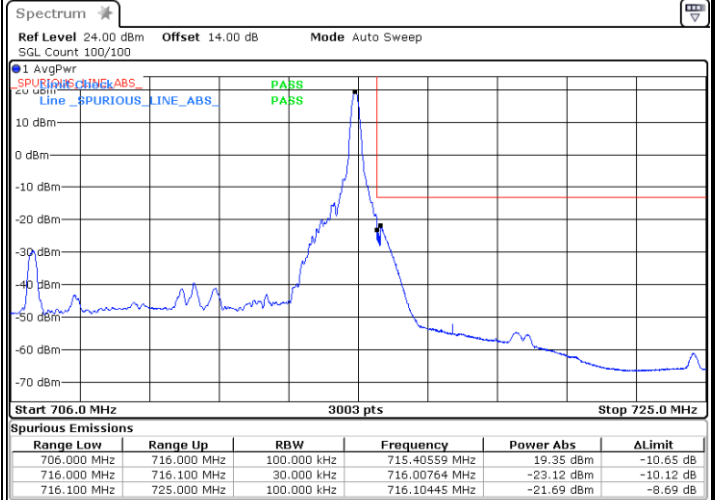
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



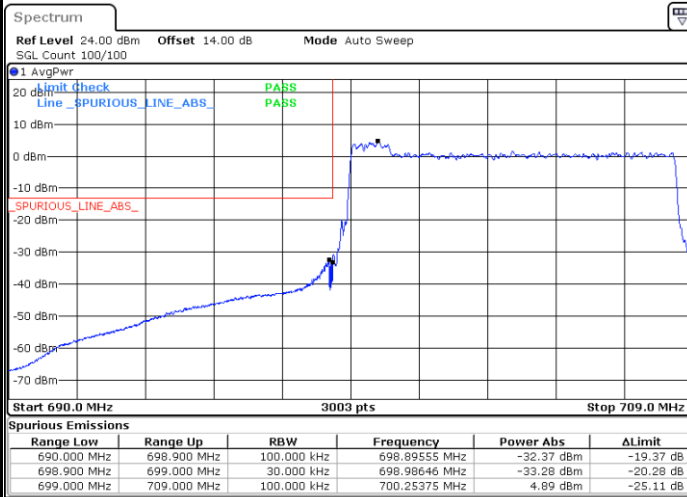
Date: 1.JUL.2021 09:55:51

Highest Band Edge / 1 RB



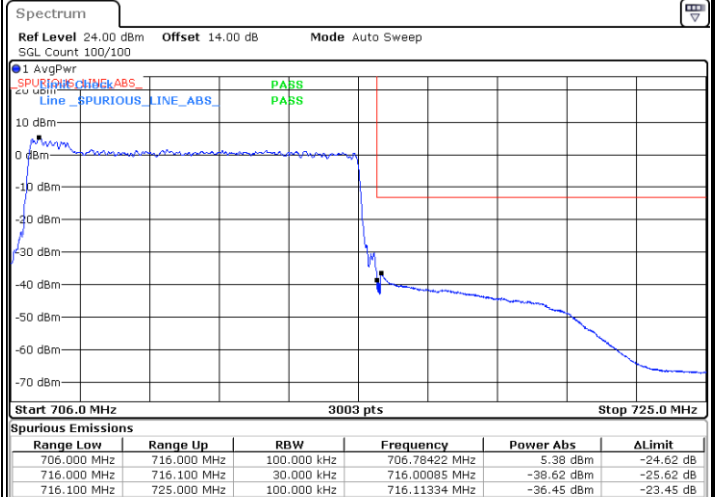
Date: 1.JUL.2021 09:56:45

Lowest Band Edge / Full RB



Date: 1.JUL.2021 12:12:03

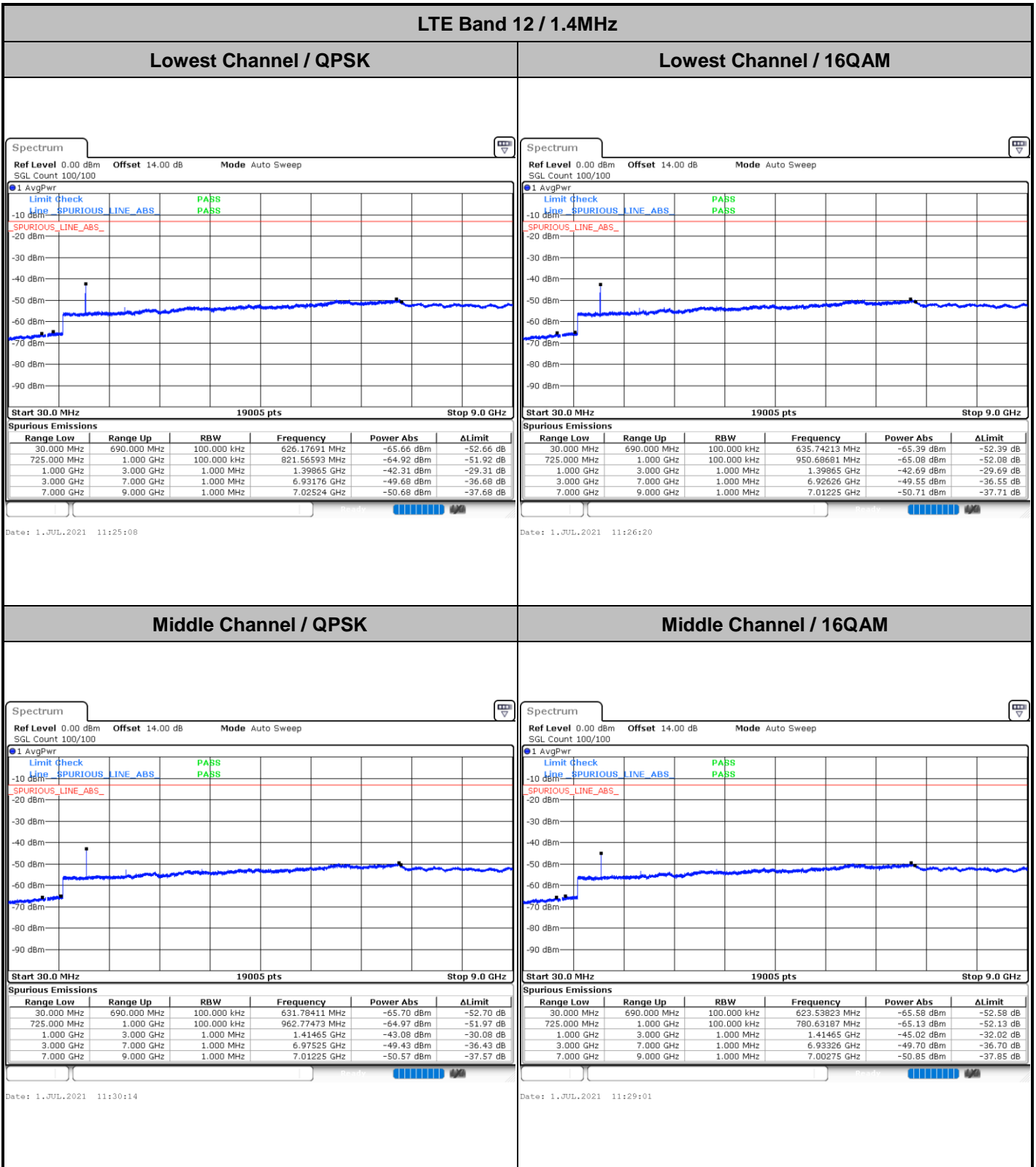
Highest Band Edge / Full RB



Date: 1.JUL.2021 12:17:42



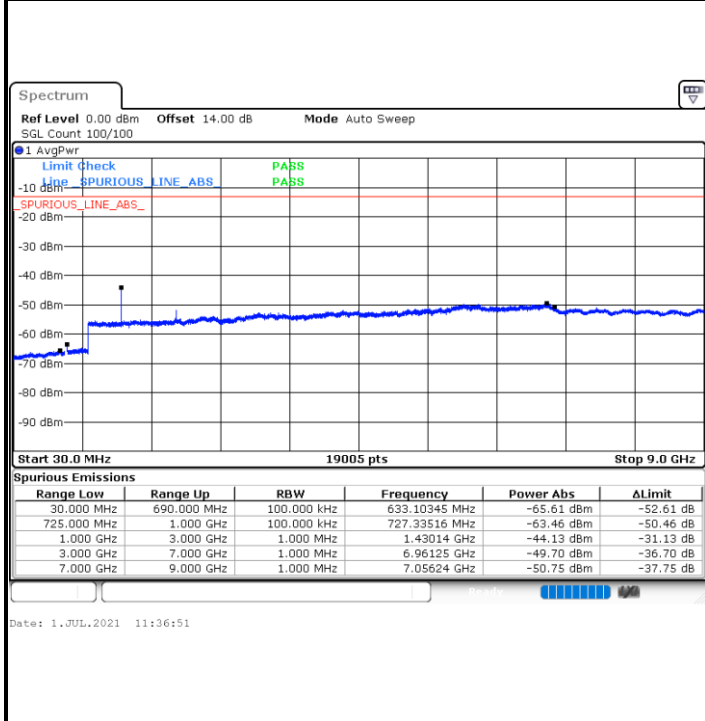
Conducted Spurious Emission



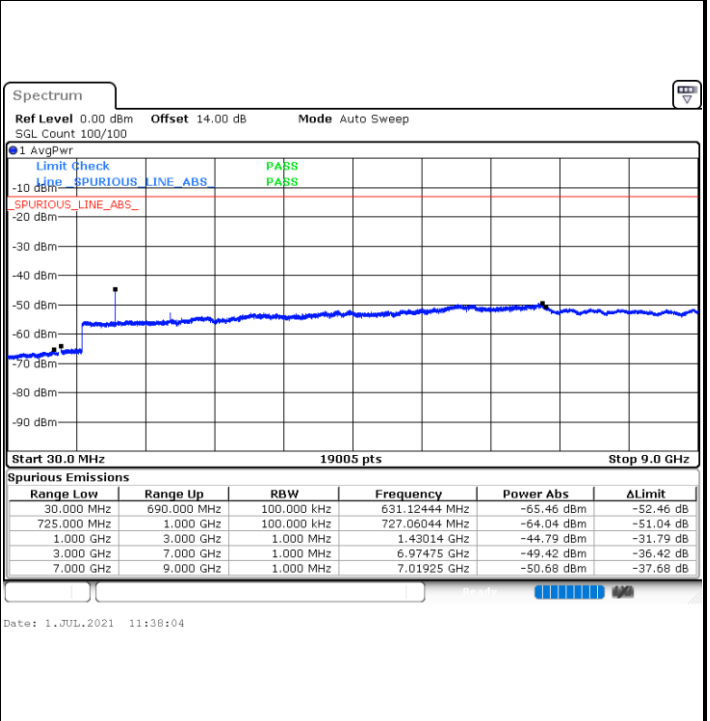


LTE Band 12 / 1.4MHz

Highest Channel / QPSK

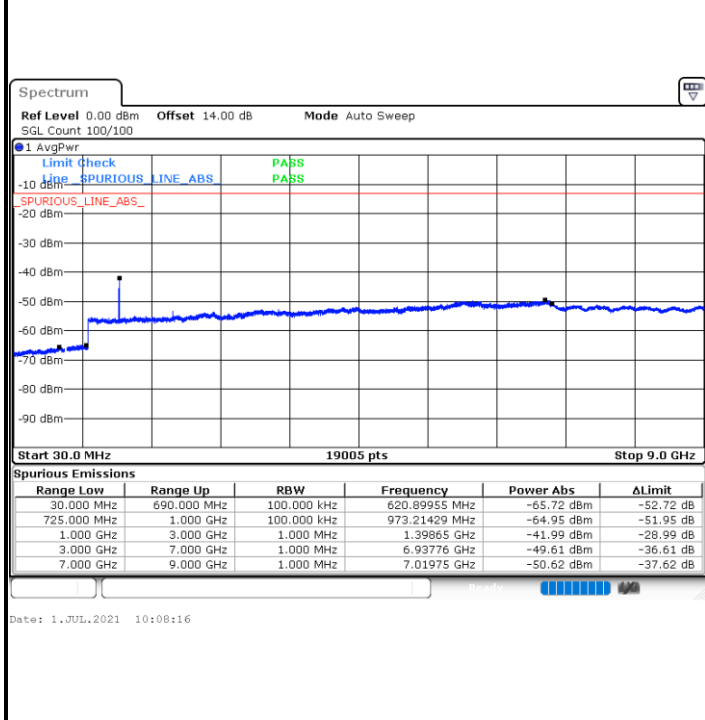


Highest Channel / 16QAM

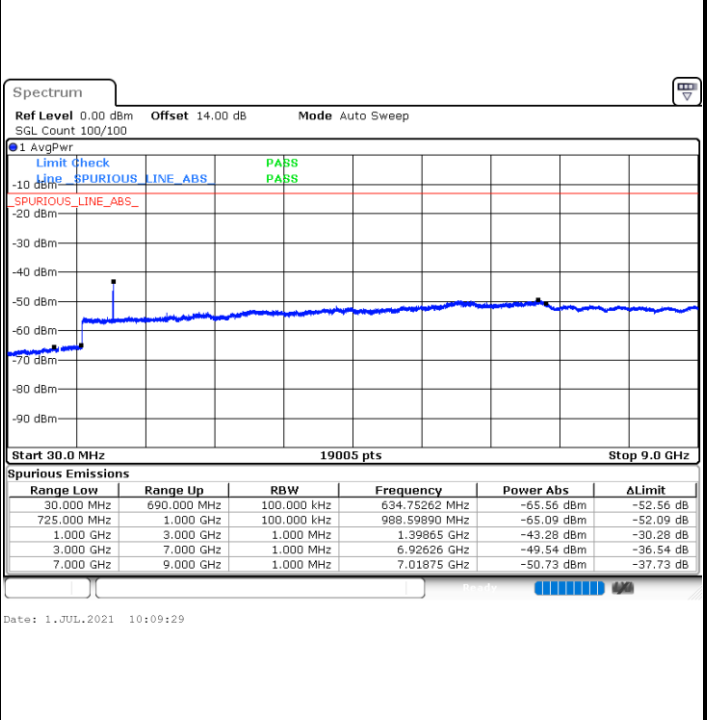


LTE Band 12 / 3MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

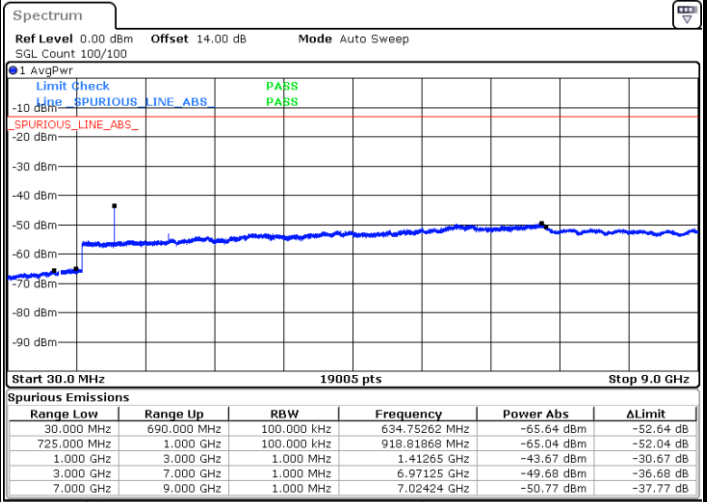
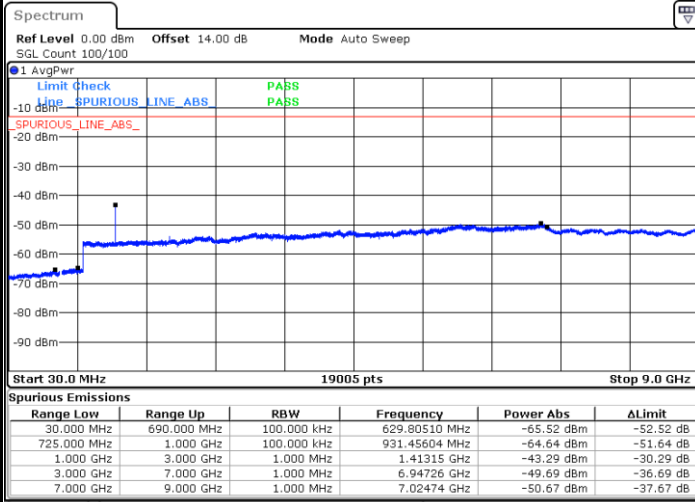




LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

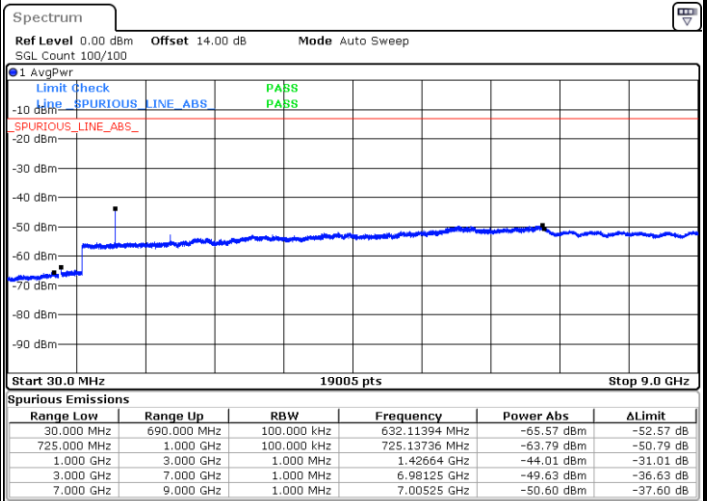
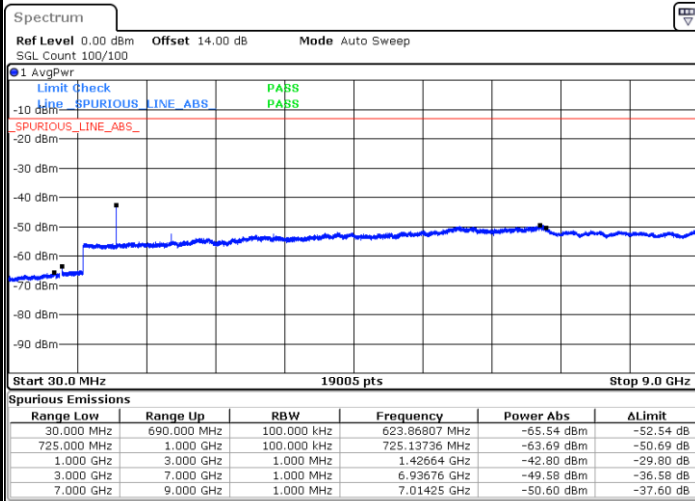


Date: 1.JUL.2021 10:13:23

Date: 1.JUL.2021 10:12:10

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.JUL.2021 10:20:44

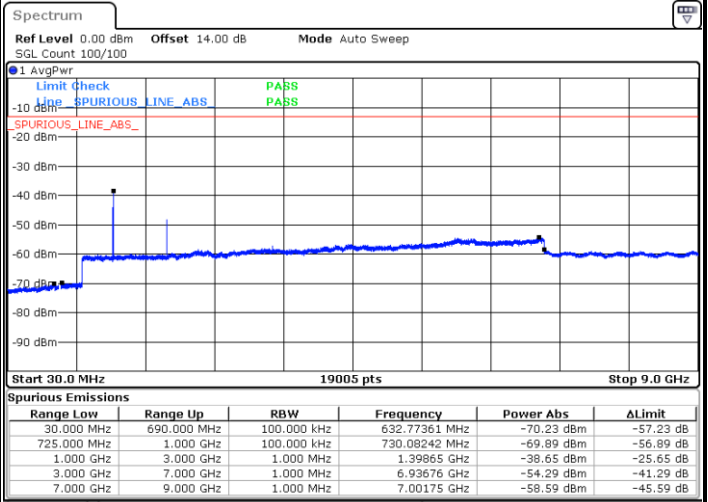
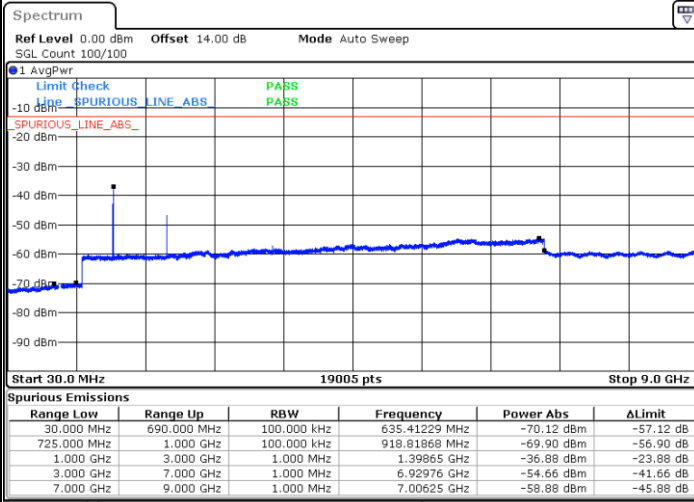
Date: 1.JUL.2021 10:36:54



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

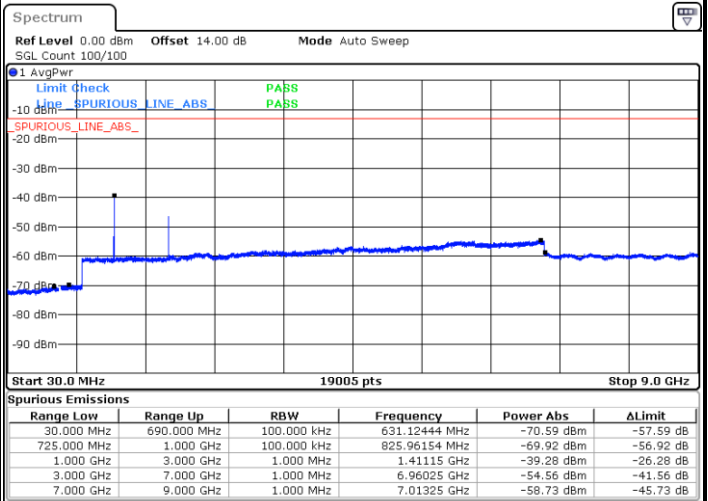
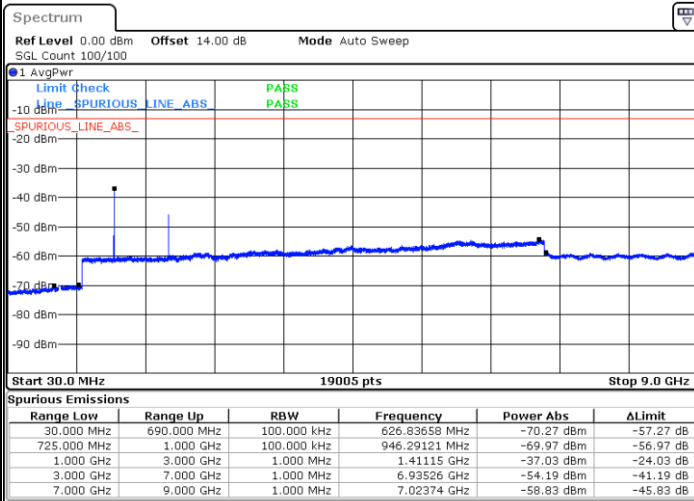


Date: 1.JUL.2021 10:43:34

Date: 1.JUL.2021 10:44:47

Middle Channel / QPSK

Middle Channel / 16QAM



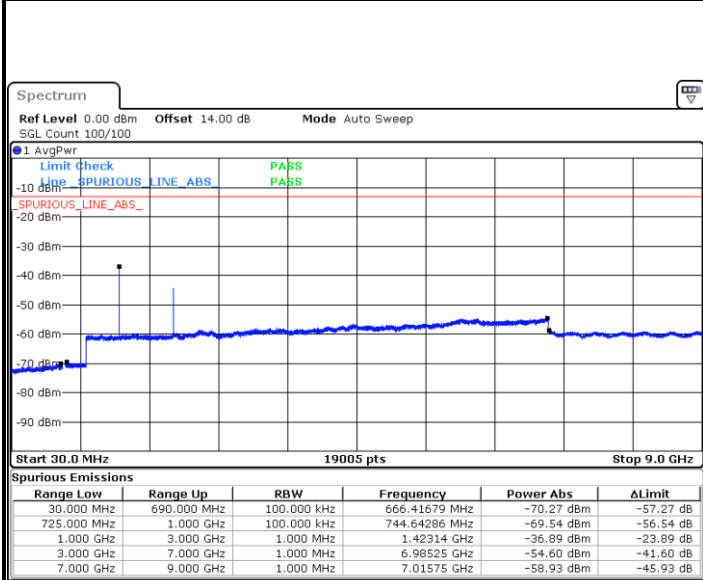
Date: 1.JUL.2021 10:48:40

Date: 1.JUL.2021 10:47:28



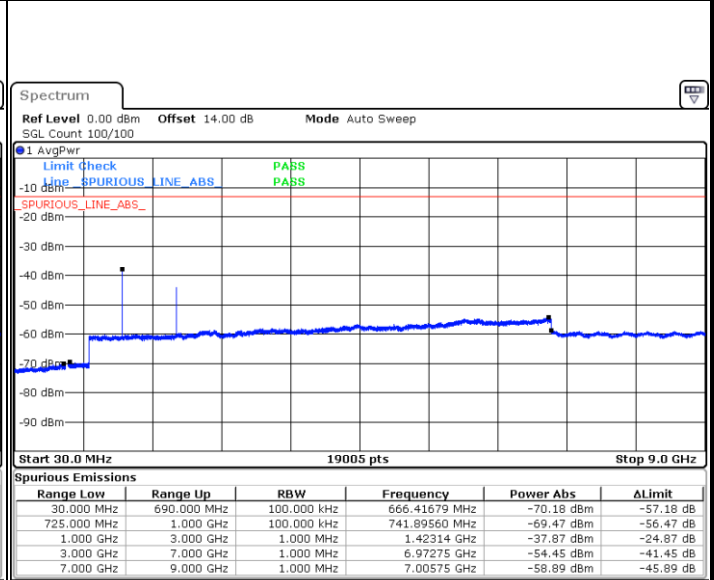
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 1.JUL.2021 10:58:52

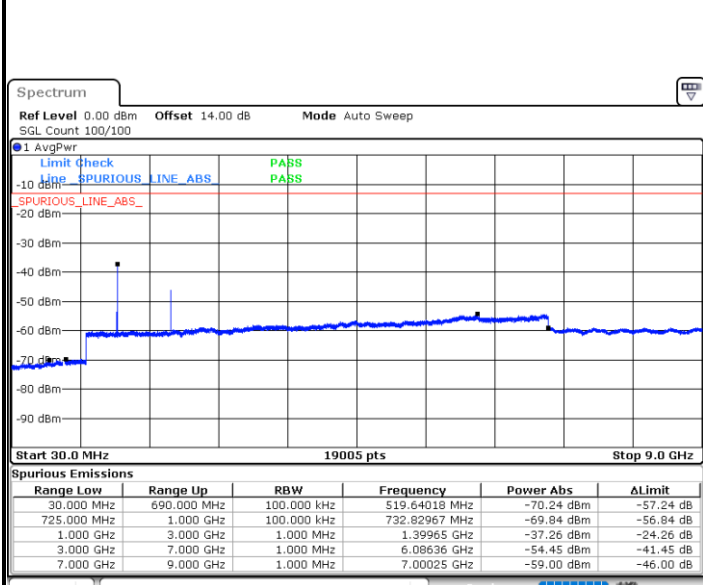
Highest Channel / 16QAM



Date: 1.JUL.2021 10:57:39

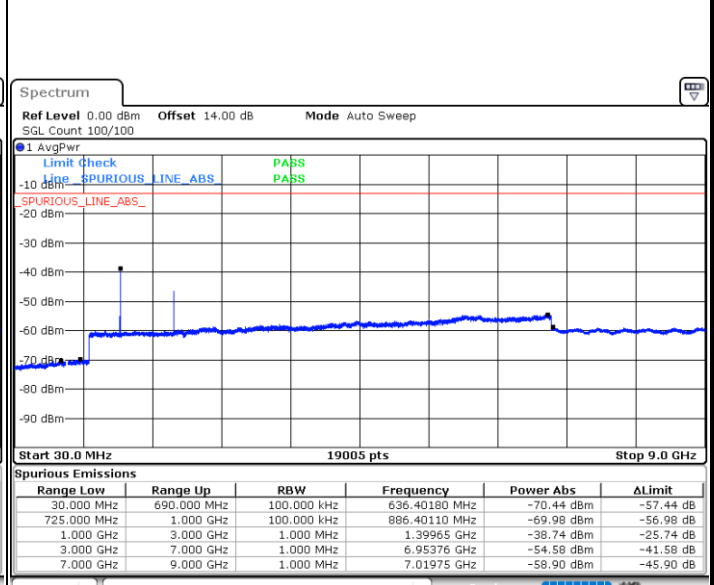
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 1.JUL.2021 11:05:33

Lowest Channel / 16QAM



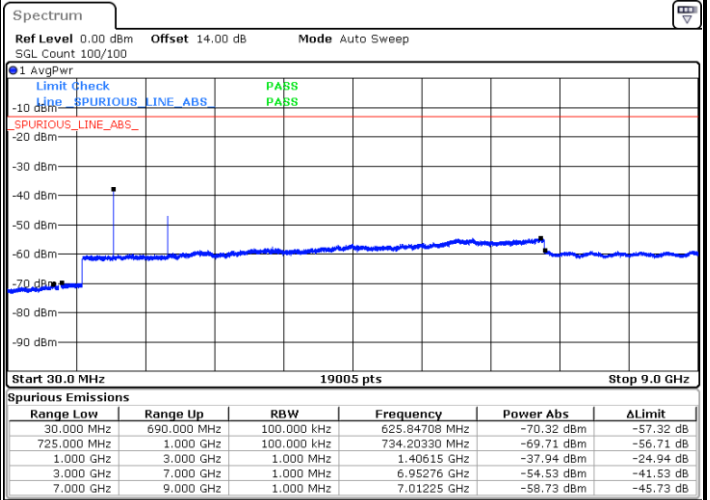
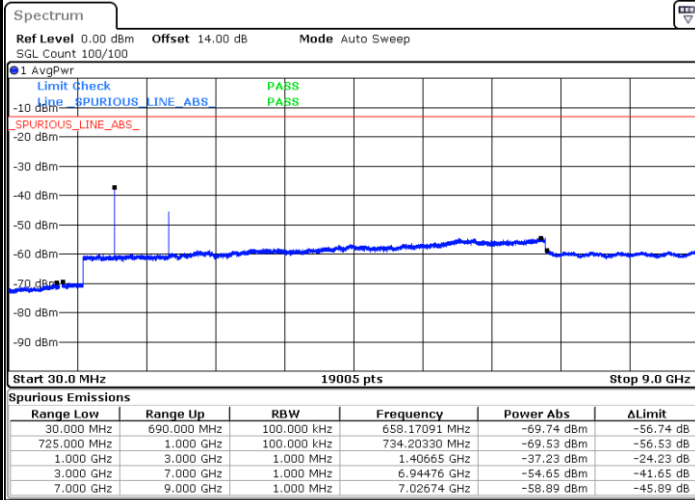
Date: 1.JUL.2021 11:06:46



LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

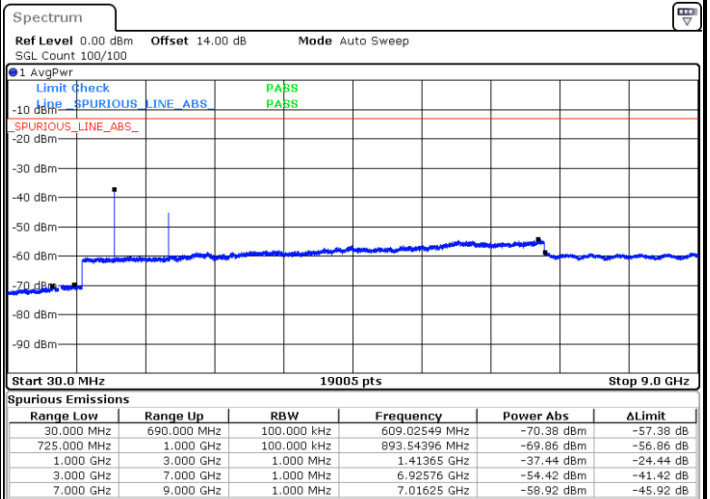
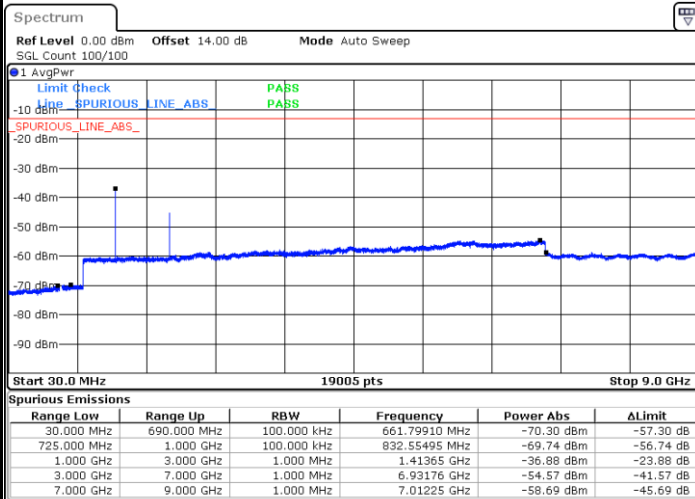


Date: 1.JUL.2021 11:10:40

Date: 1.JUL.2021 11:09:27

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.JUL.2021 11:17:17

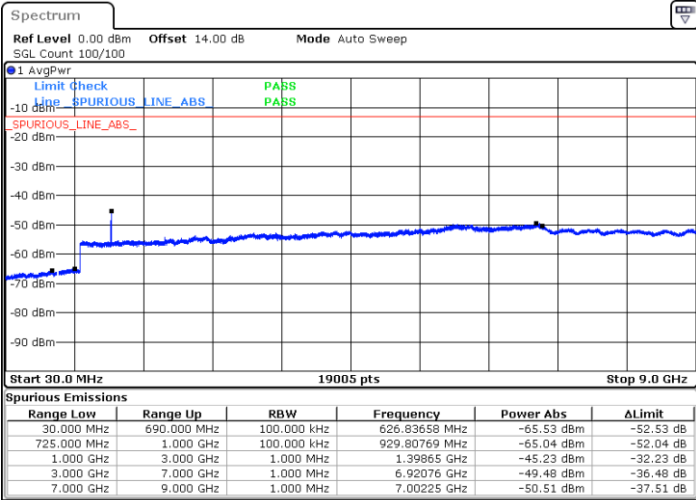
Date: 1.JUL.2021 11:18:30



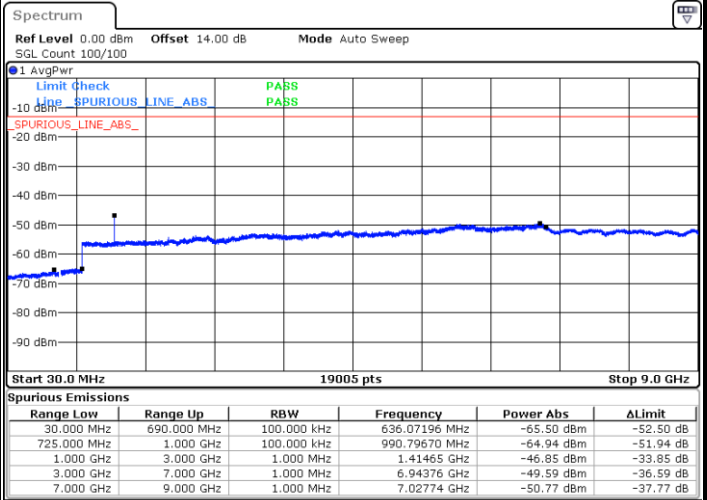
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

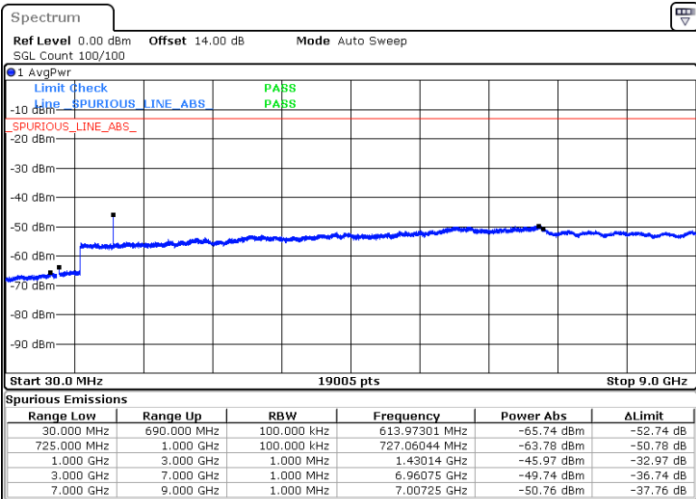


Date: 1.JUL.2021 12:22:42



Date: 1.JUL.2021 12:24:35

Highest Channel / 64QAM



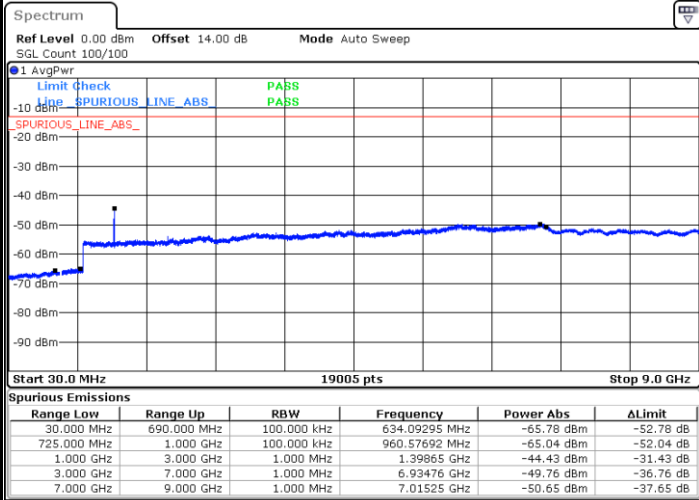
Date: 1.JUL.2021 12:28:21



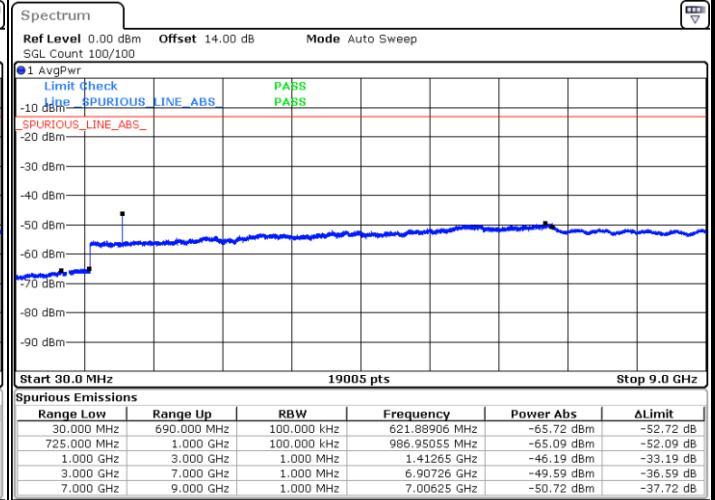
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

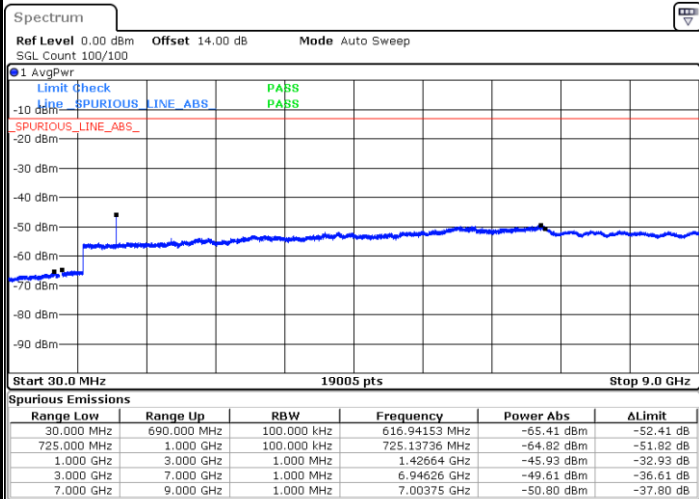


Date: 1.JUL.2021 11:53:35



Date: 1.JUL.2021 11:55:28

Highest Channel / 64QAM



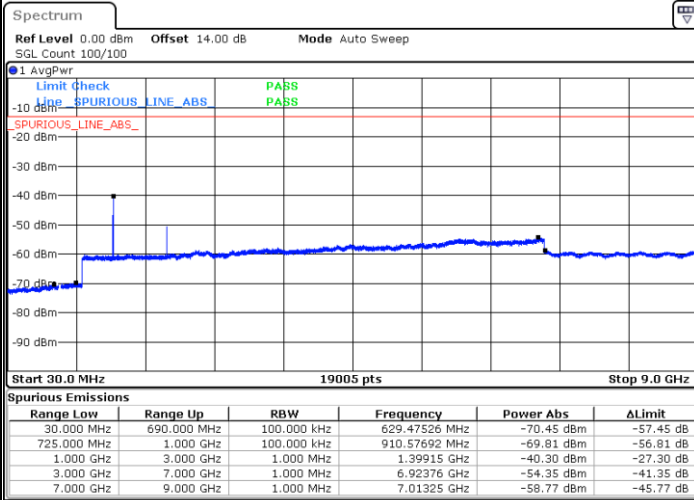
Date: 1.JUL.2021 11:59:14



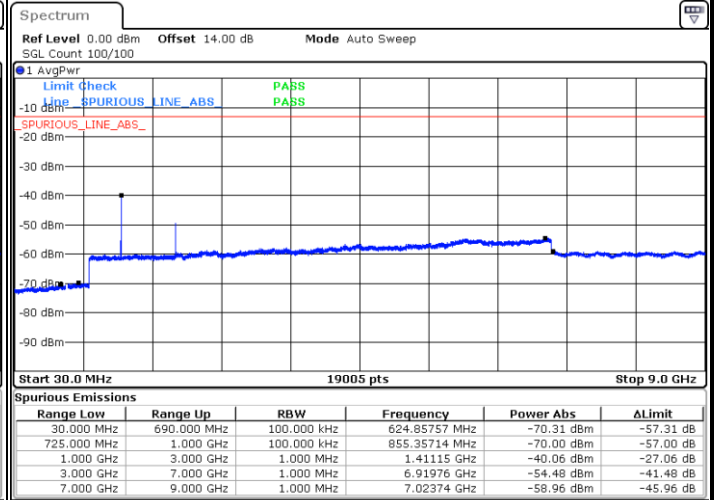
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

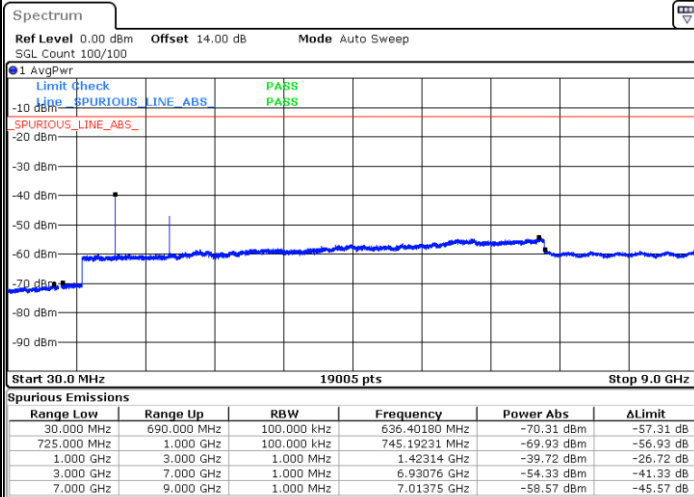


Date: 1.JUL.2021 12:03:03



Date: 1.JUL.2021 12:05:40

Highest Channel / 64QAM



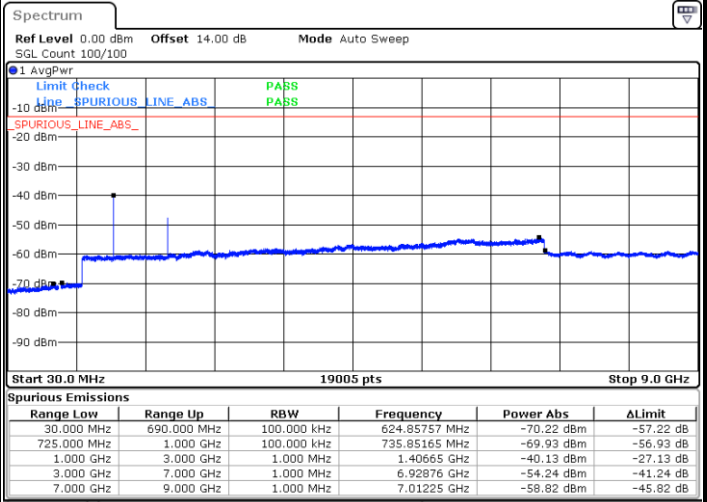
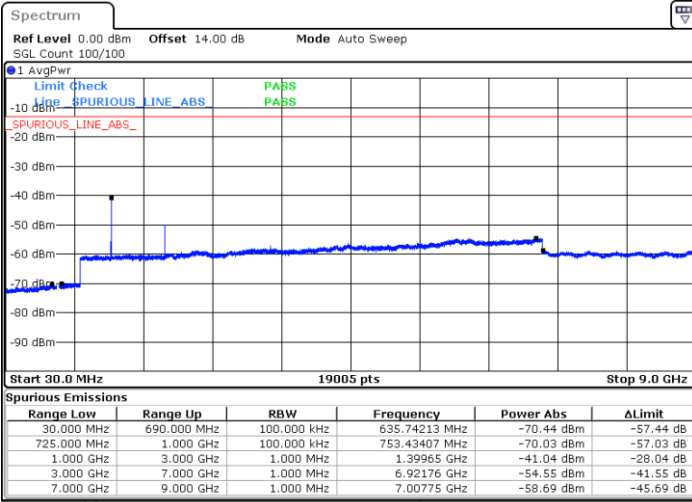
Date: 1.JUL.2021 12:09:26



LTE Band 12 / 10MHz

Lowest Channel / 64QAM

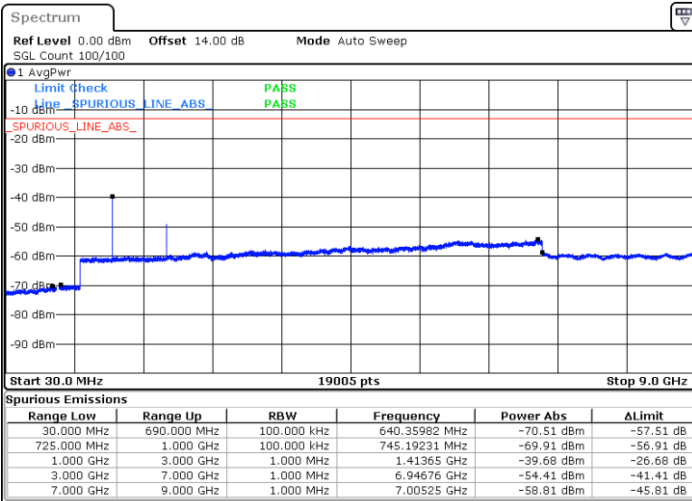
Middle Channel / 64QAM



Date: 1.JUL.2021 12:13:16

Date: 1.JUL.2021 12:15:08

Highest Channel / 64QAM



Date: 1.JUL.2021 12:18:55



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	0.0014	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0027	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0030	
20	Maximum Voltage	0.0028	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

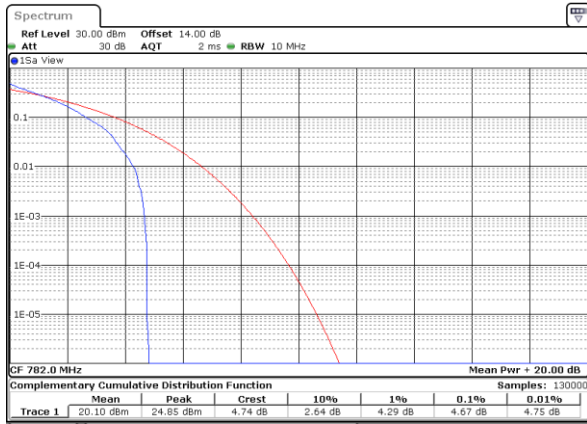
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.67	5.28	5.80	6.06	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.06	6.38	-	-	
Highest CH	-	-	-	-	



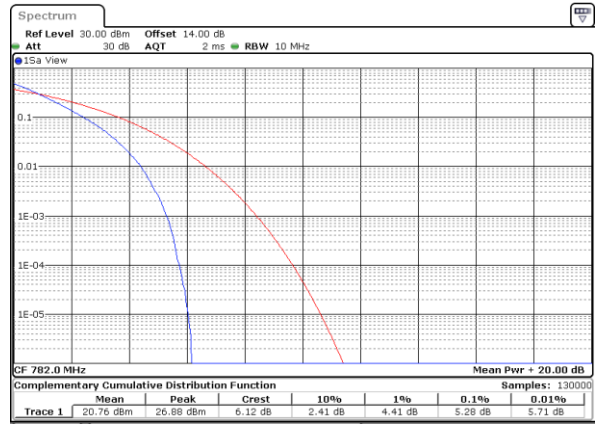
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 1..JUL.2021 15:45:38

Middle Channel / Full RB



Date: 1..JUL.2021 15:42:56

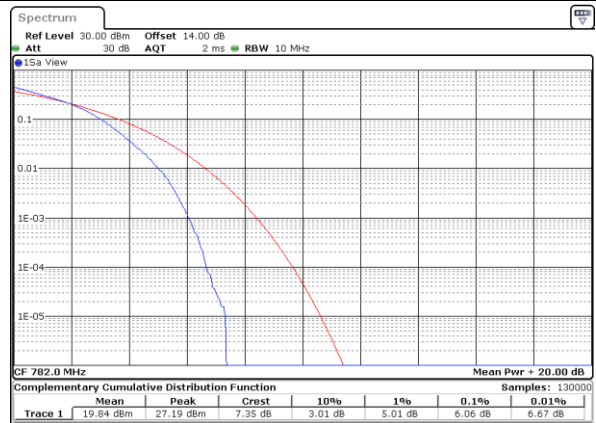
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 1..JUL.2021 15:46:06

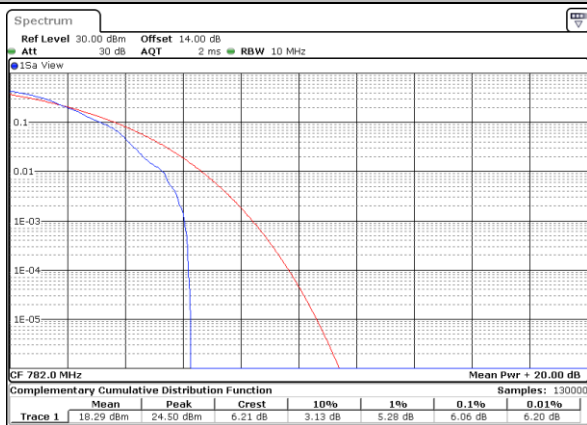
Middle Channel / Full RB



Date: 1..JUL.2021 15:43:23

LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 1..JUL.2021 15:46:33

Middle Channel / Full RB



Date: 1..JUL.2021 15:43:50



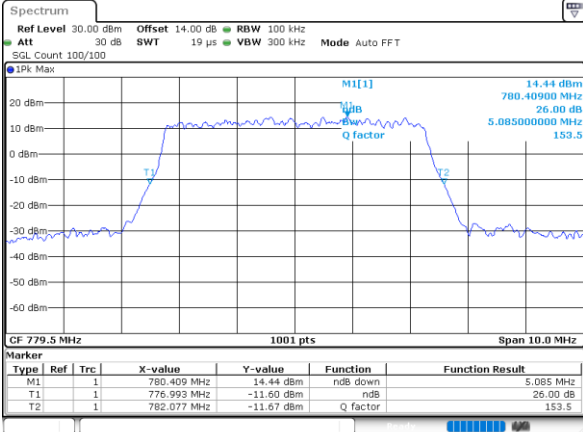
26dB Bandwidth

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
Lowest CH	-	-	-	-	5.09	5.00	-	-	-	-	-	-
Middle CH	-	-	-	-	4.96	4.98	9.93	9.85	-	-	-	-
Highest CH	-	-	-	-	5.10	5.01	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	5.09	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.90	-	9.69	-	-	-	-	-
Highest CH	-	-	-	-	5.13	-	-	-	-	-	-	-



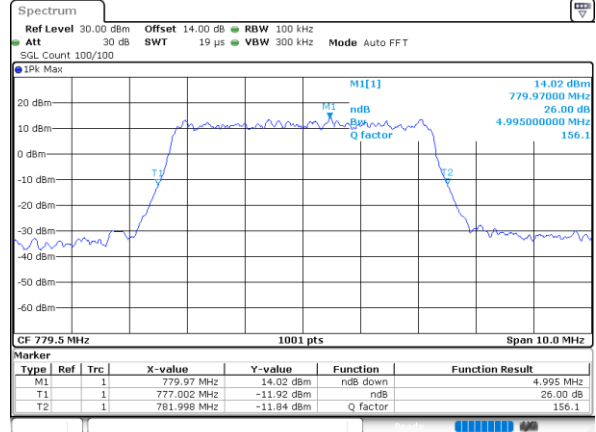
LTE Band 13

Lowest Channel / 5MHz / QPSK



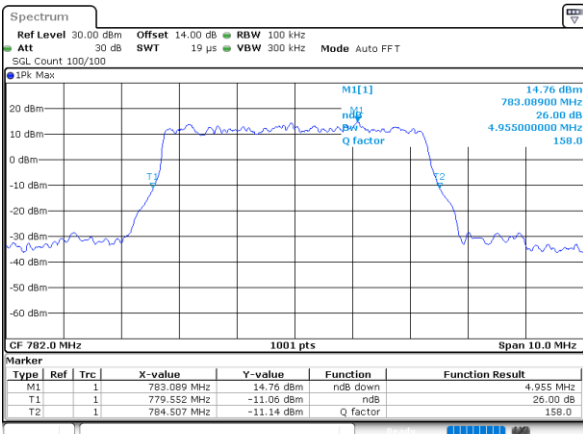
Date: 1.JUL.2021 15:08:04

Lowest Channel / 5MHz / 16QAM



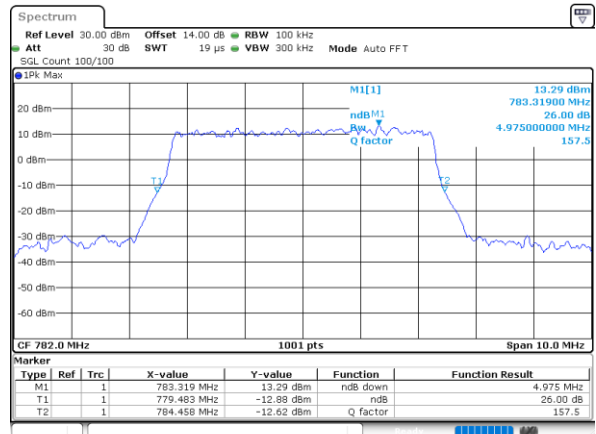
Date: 1.JUL.2021 15:08:27

Middle Channel / 5MHz / QPSK



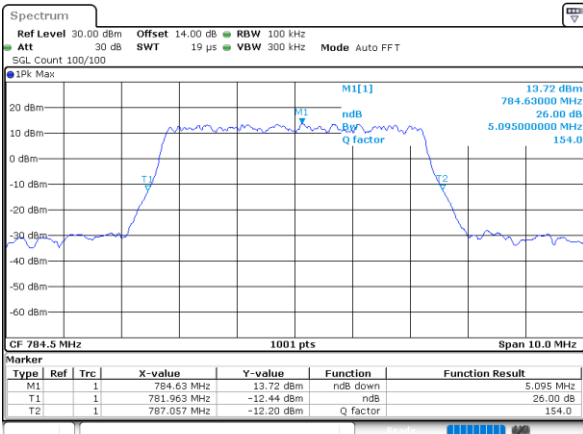
Date: 1.JUL.2021 15:07:40

Middle Channel / 5MHz / 16QAM



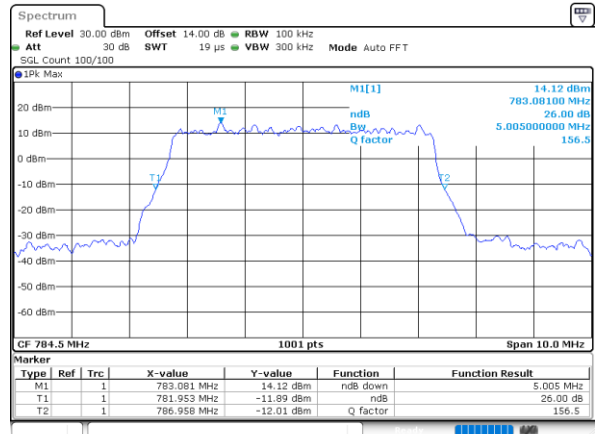
Date: 1.JUL.2021 15:07:16

Highest Channel / 5MHz / QPSK



Date: 1.JUL.2021 15:05:42

Highest Channel / 5MHz / 16QAM

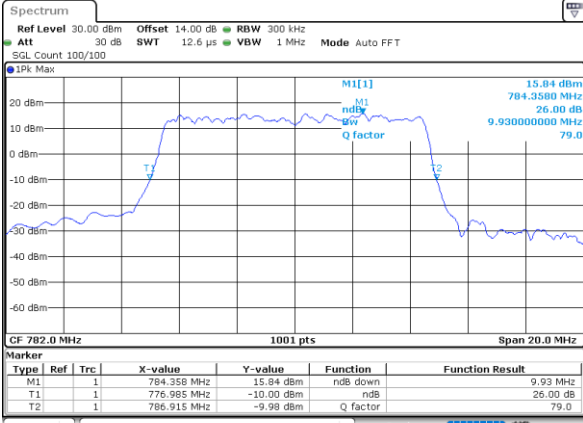


Date: 1.JUL.2021 15:06:06



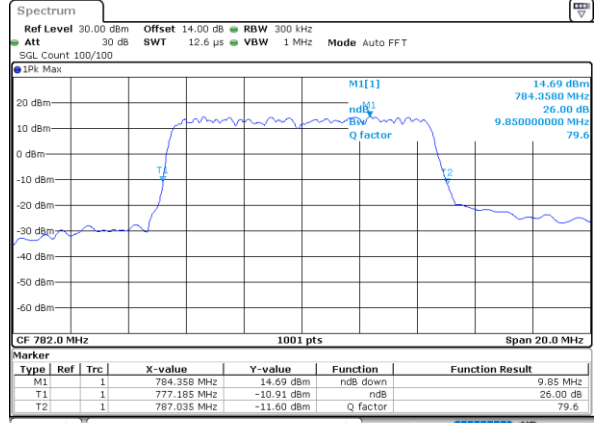
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 1.JUL.2021 16:01:42

Middle Channel / 10MHz / 16QAM

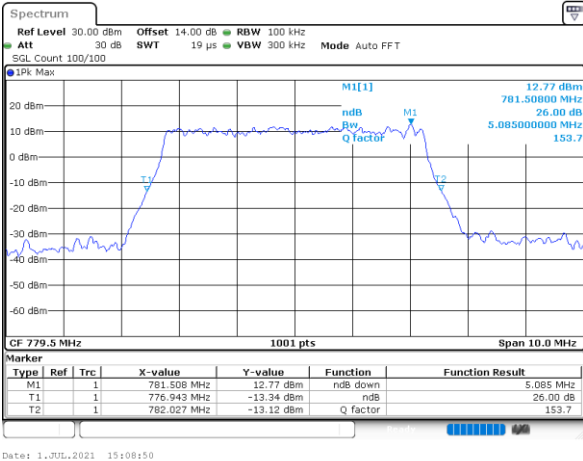


Date: 1.JUL.2021 16:02:06



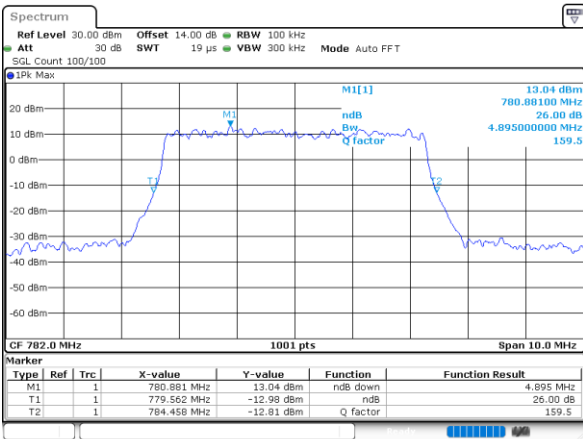
LTE Band 13

Lowest Channel / 5MHz / 64QAM



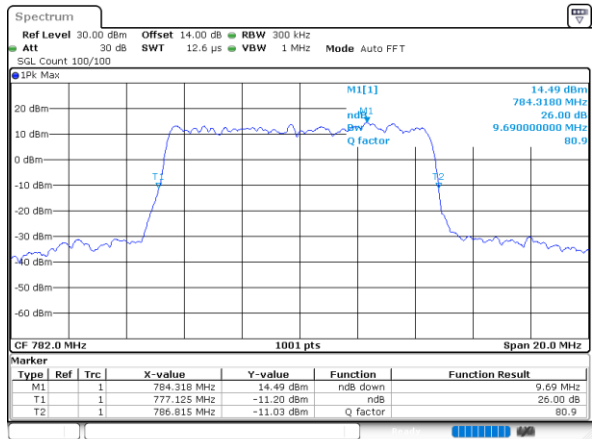
Date: 1.JUL.2021 15:08:50

Middle Channel / 5MHz / 64QAM



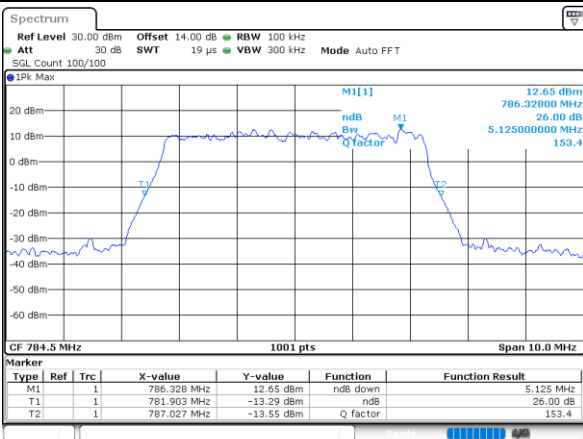
Date: 1.JUL.2021 15:06:53

Middle Channel / 10MHz / 64QAM



Date: 1.JUL.2021 16:02:29

Highest Channel / 5MHz / 64QAM



Date: 1.JUL.2021 15:06:29



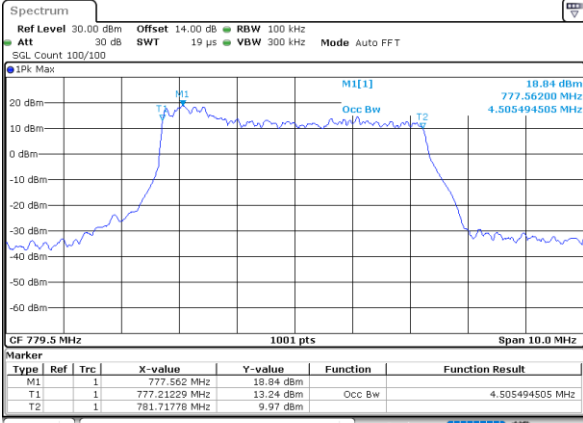
Occupied Bandwidth

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
Lowest CH	-	-	-	-	4.51	4.46	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	4.52	9.01	9.03	-	-	-	-
Highest CH	-	-	-	-	4.50	4.51	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	9.03	-	-	-	-	-
Highest CH	-	-	-	-	4.51	-	-	-	-	-	-	-



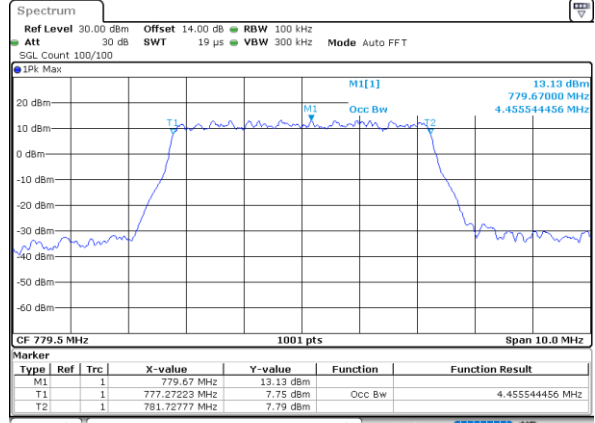
LTE Band 13

Lowest Channel / 5MHz / QPSK



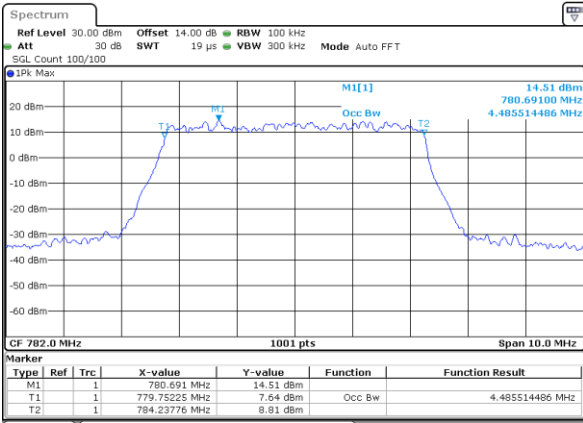
Date: 1.JUL.2021 15:12:35

Lowest Channel / 5MHz / 16QAM



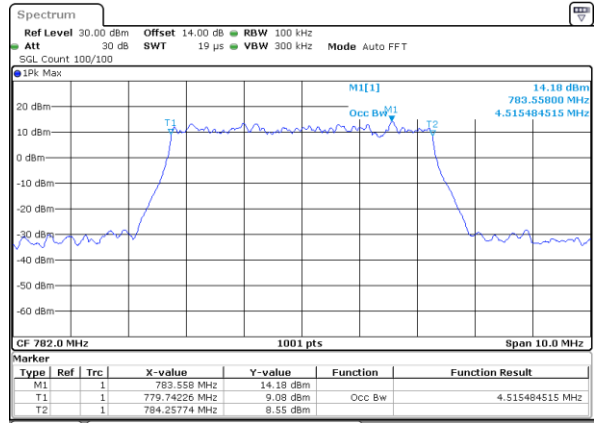
Date: 1.JUL.2021 15:12:10

Middle Channel / 5MHz / QPSK



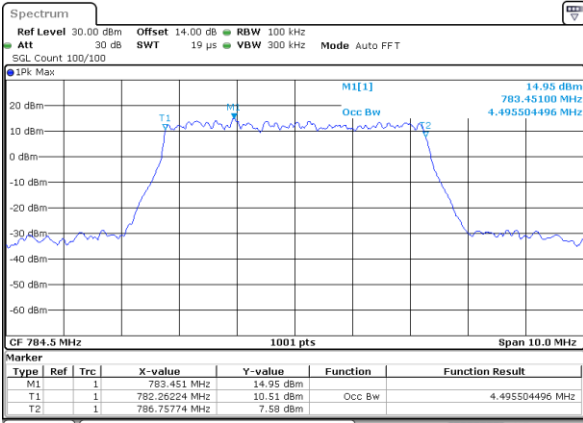
Date: 1.JUL.2021 15:10:30

Middle Channel / 5MHz / 16QAM



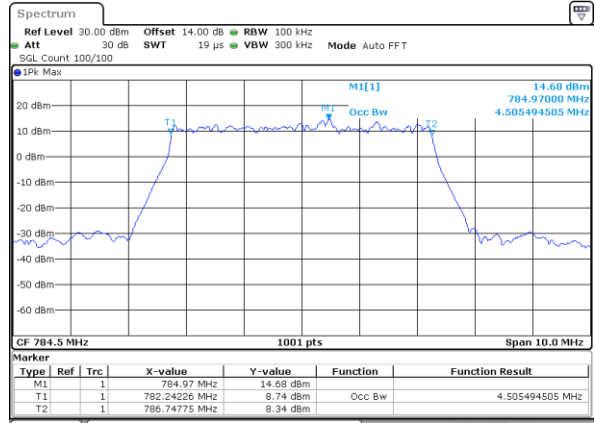
Date: 1.JUL.2021 15:10:55

Highest Channel / 5MHz / QPSK



Date: 1.JUL.2021 15:10:04

Highest Channel / 5MHz / 16QAM

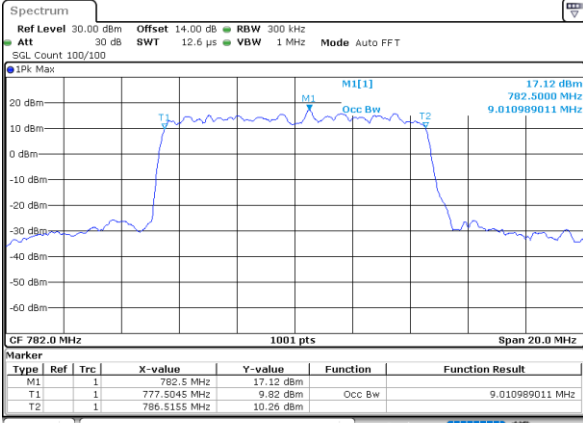


Date: 1.JUL.2021 15:09:39



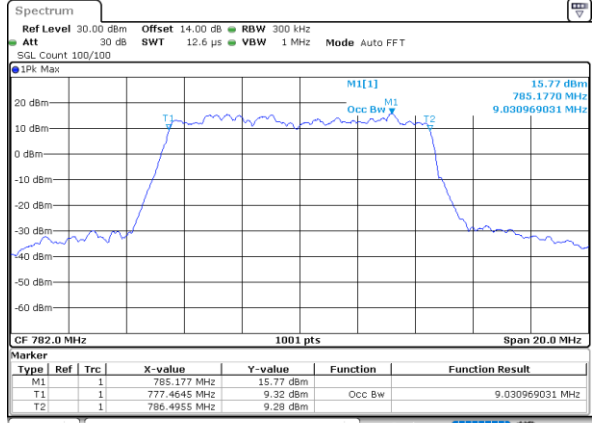
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 1.JUL.2021 16:03:34

Middle Channel / 10MHz / 16QAM

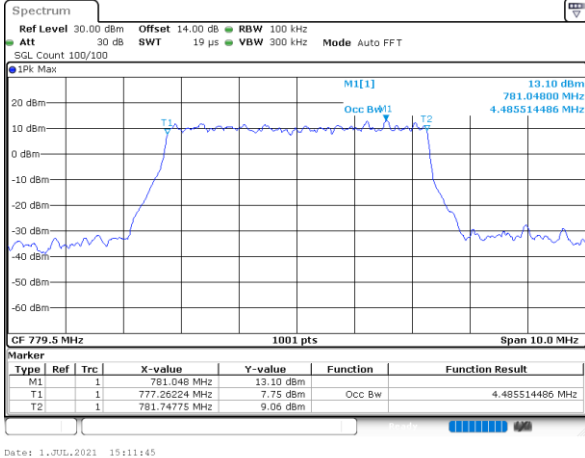


Date: 1.JUL.2021 16:03:09



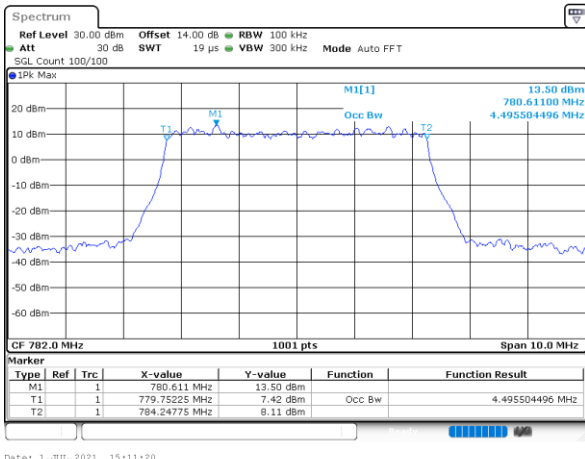
LTE Band 13

Lowest Channel / 5MHz / 64QAM



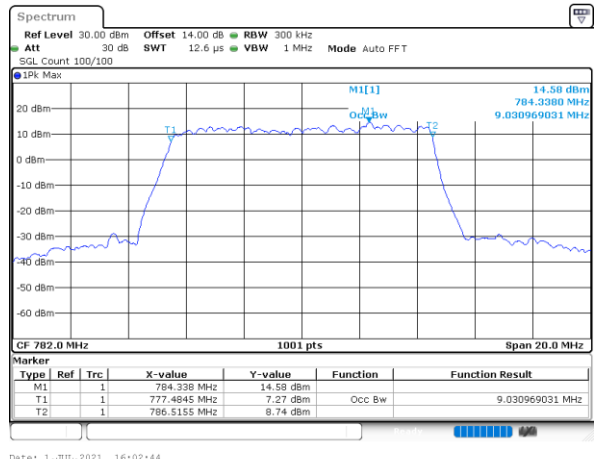
Date: 1.JUL.2021 15:11:45

Middle Channel / 5MHz / 64QAM



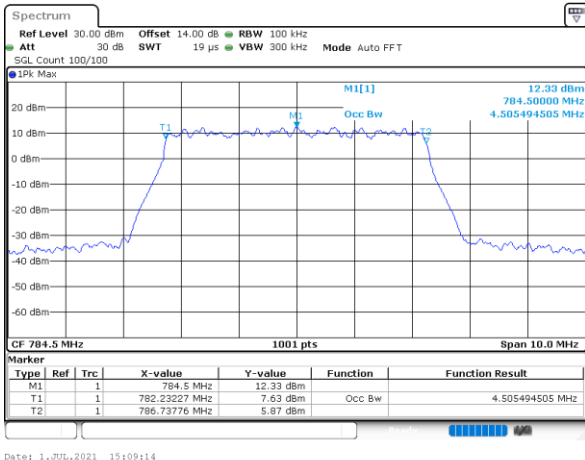
Date: 1.JUL.2021 15:11:20

Middle Channel / 10MHz / 64QAM



Date: 1.JUL.2021 16:02:44

Highest Channel / 5MHz / 64QAM



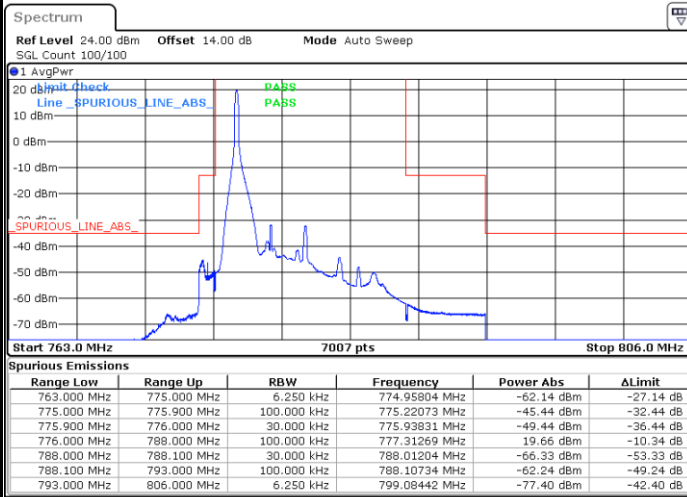
Date: 1.JUL.2021 15:10:14



Conducted Band Edge

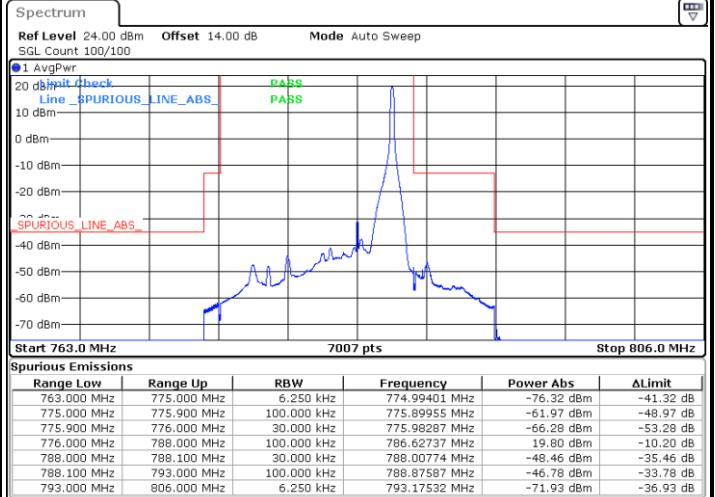
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



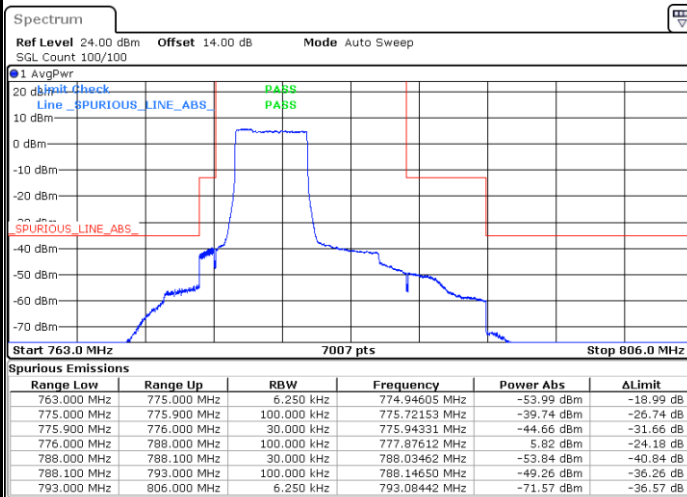
Date: 1.JUL.2021 14:27:37

Highest Band Edge / 1 RB



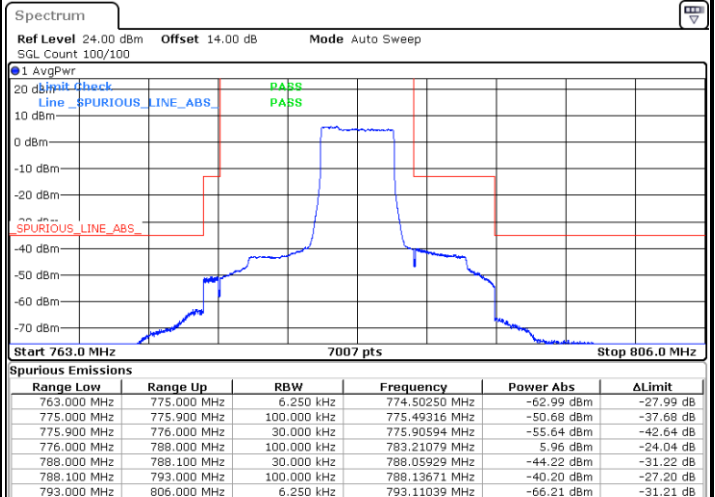
Date: 1.JUL.2021 14:43:56

Lowest Band Edge / Full RB



Date: 1.JUL.2021 15:27:42

Highest Band Edge / Full RB



Date: 1.JUL.2021 15:29:35