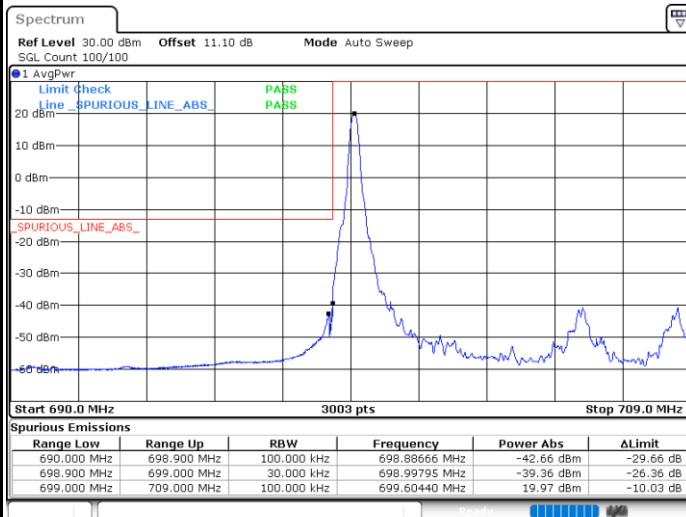


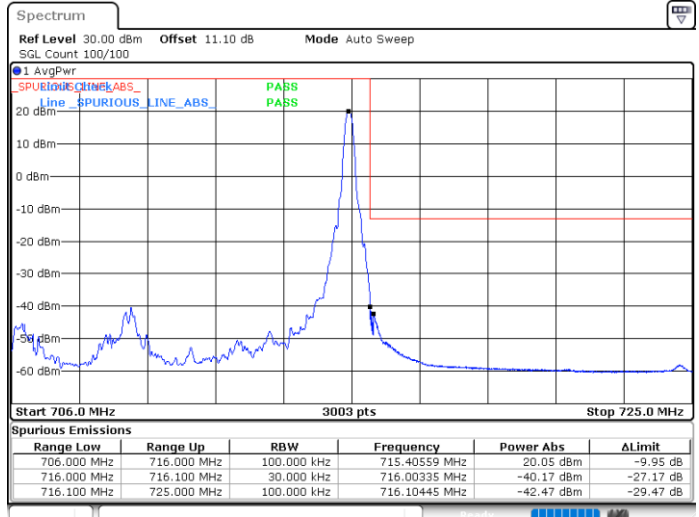


LTE Band 12 / 10MHz / QPSK

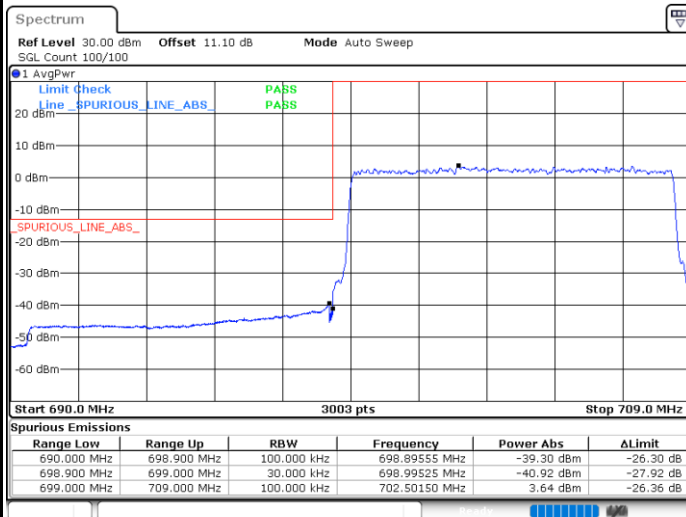
Lowest Band Edge / 1 RB



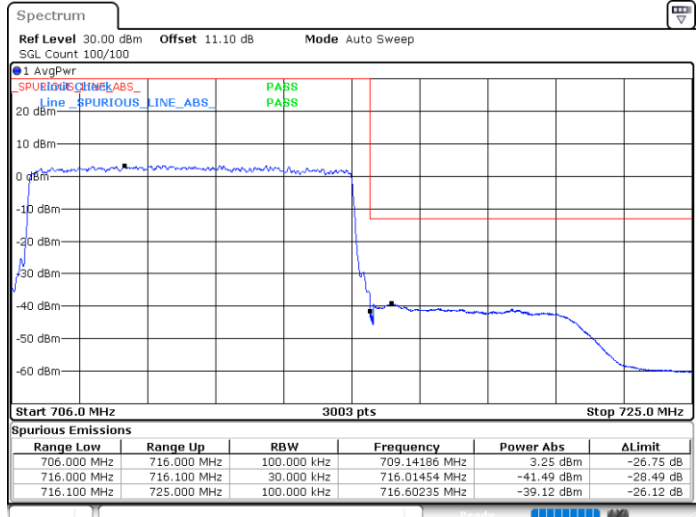
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



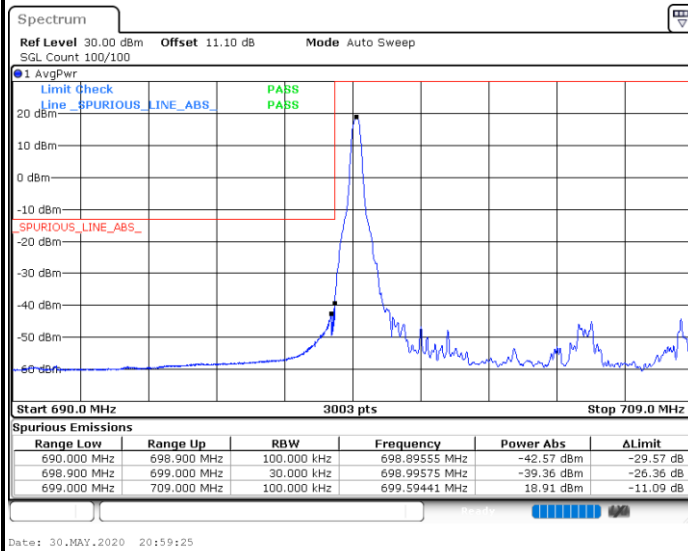
Highest Band Edge / Full RB



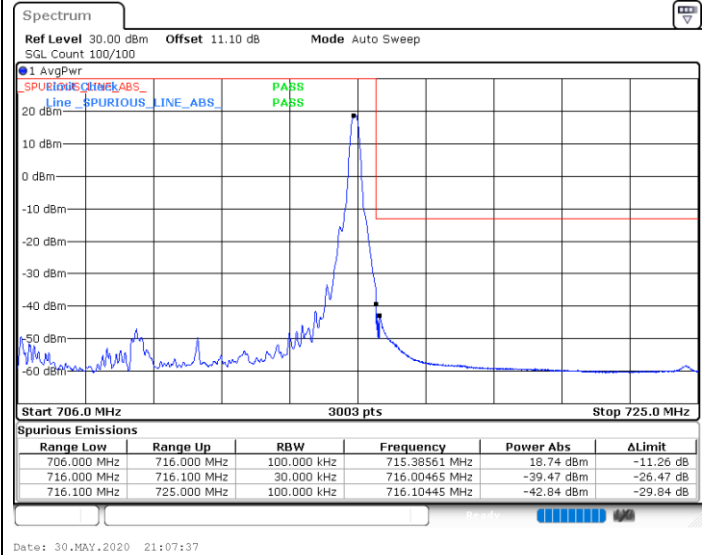


LTE Band 12 / 10MHz / 16QAM

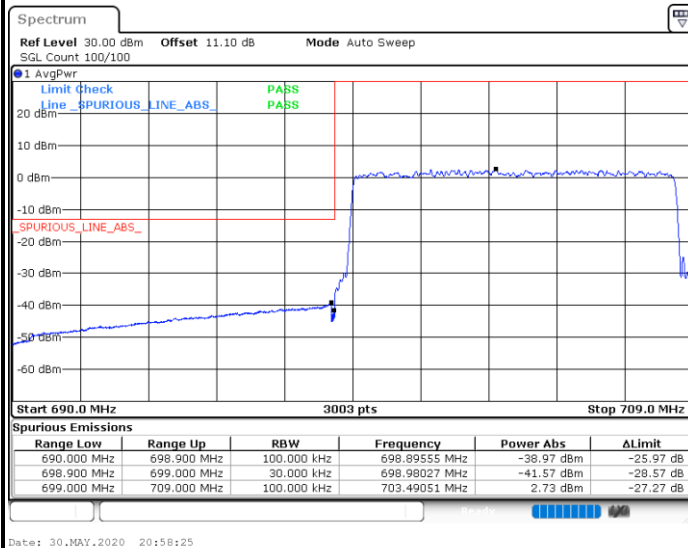
Lowest Band Edge / 1 RB



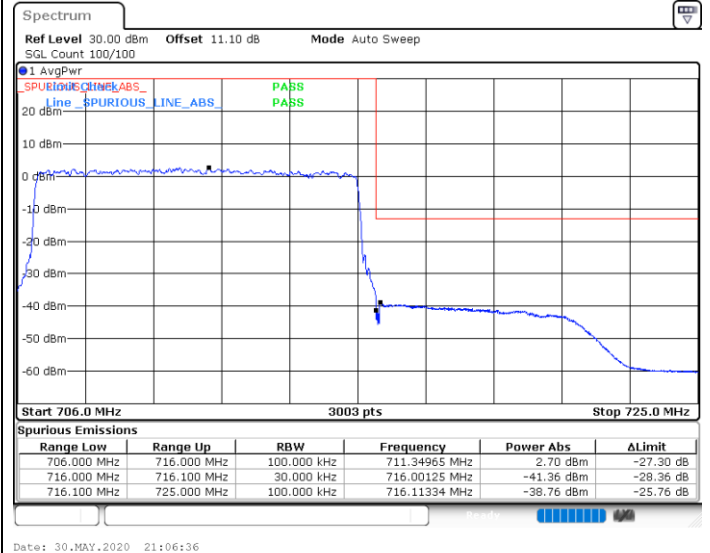
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



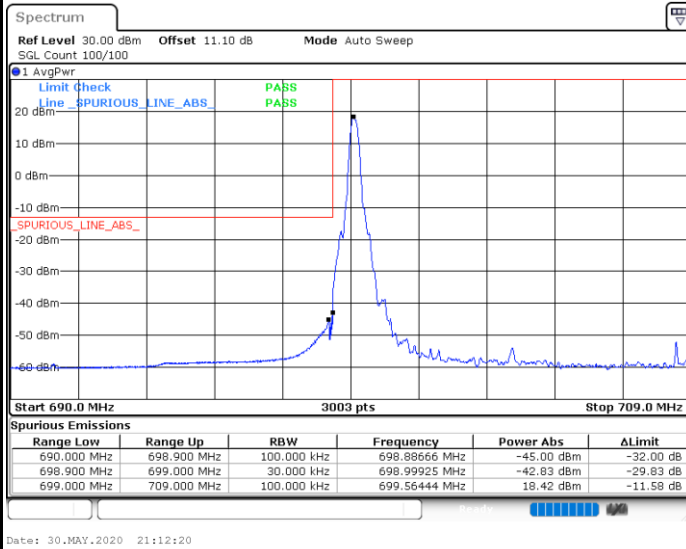
Highest Band Edge / Full RB



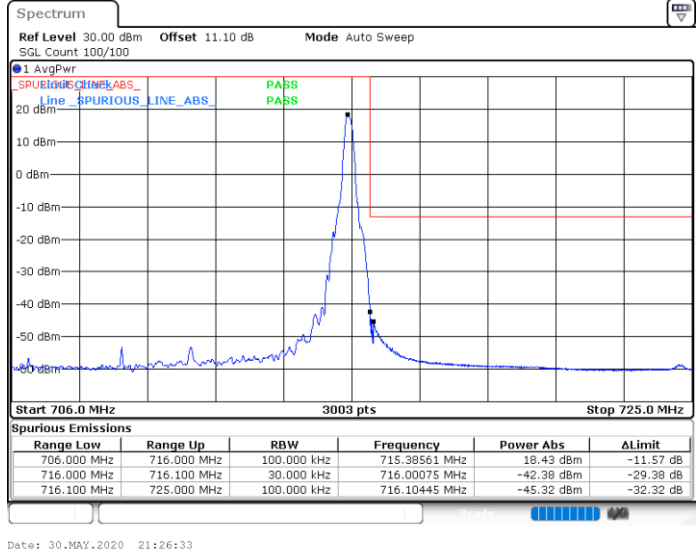


LTE Band 12 / 10MHz / 64QAM

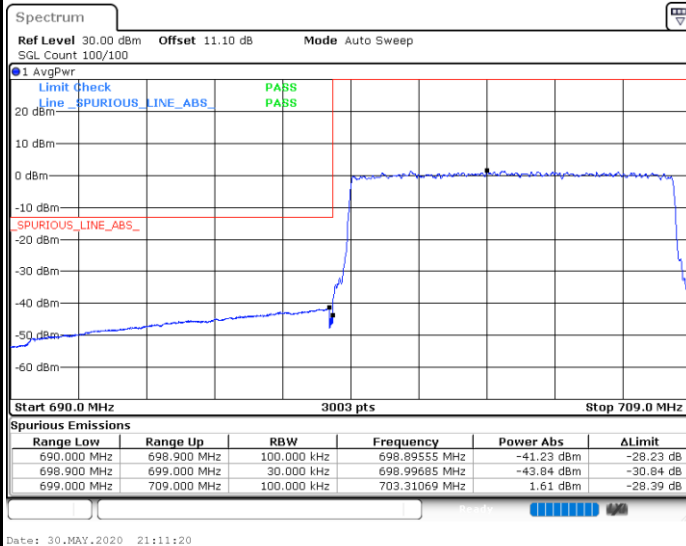
Lowest Band Edge / 1 RB



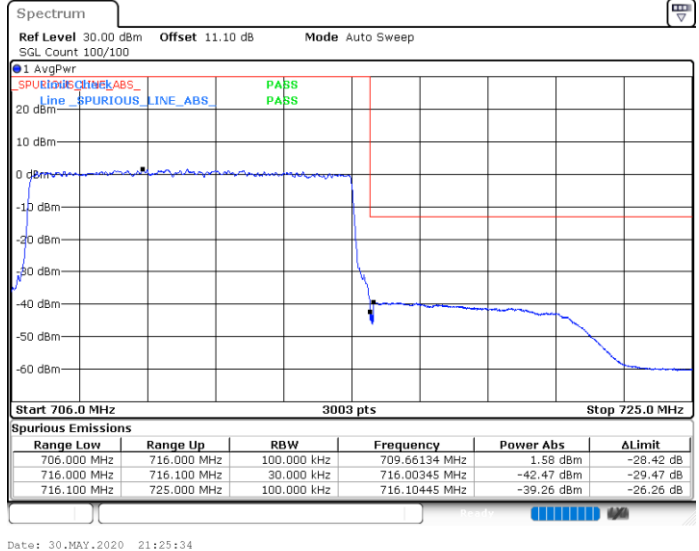
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

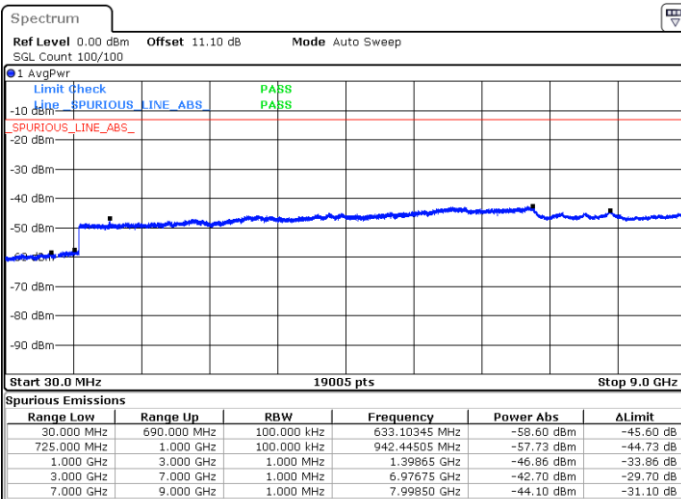




Conducted Spurious Emission

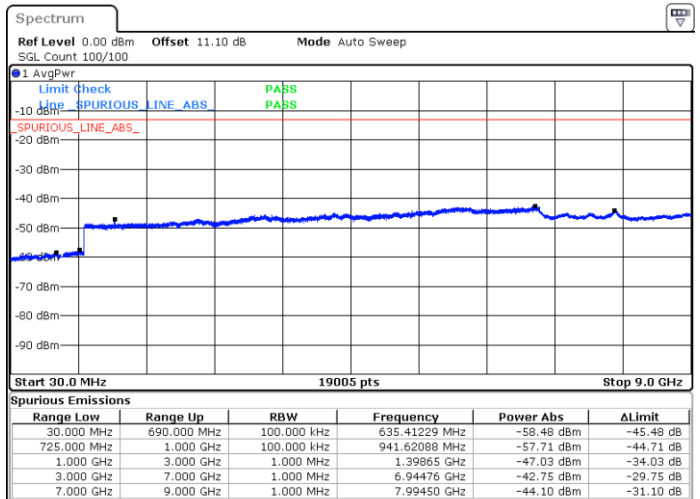
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



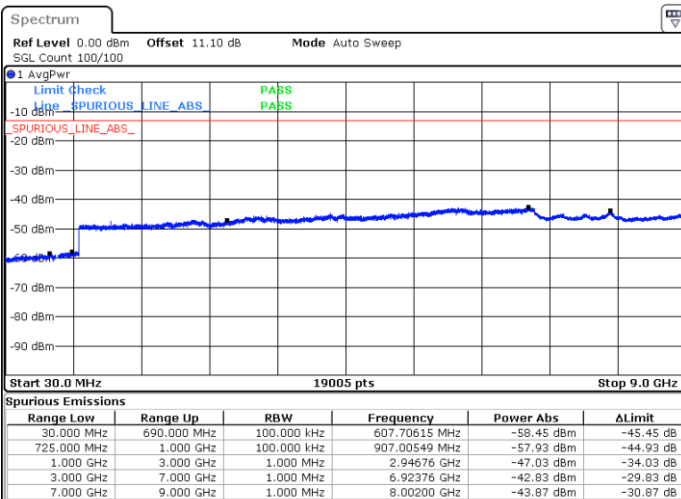
Date: 30.MAY.2020 21:32:42

Lowest Channel / 16QAM



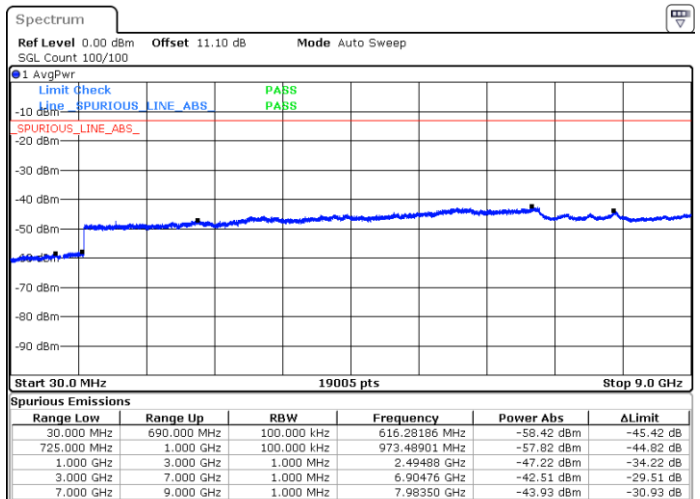
Date: 30.MAY.2020 21:33:22

Middle Channel / QPSK



Date: 30.MAY.2020 21:35:27

Middle Channel / 16QAM



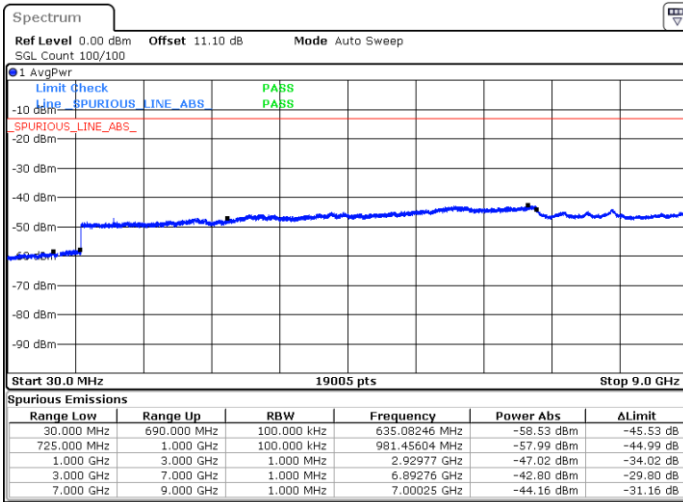
Date: 30.MAY.2020 21:34:47



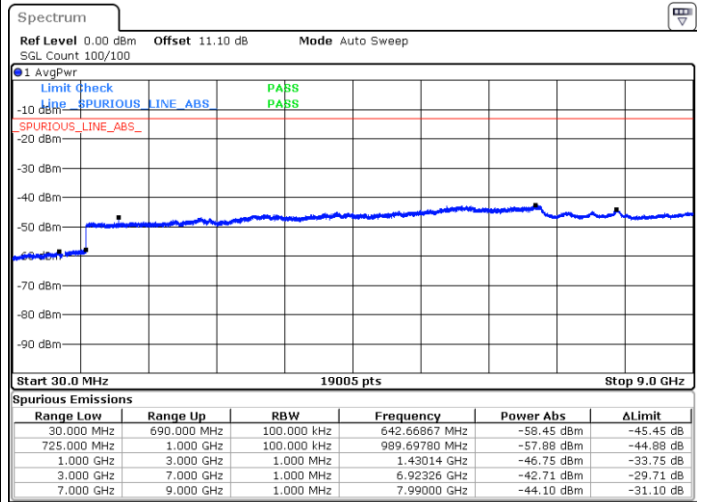
LTE Band 12 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30.MAY.2020 21:40:54

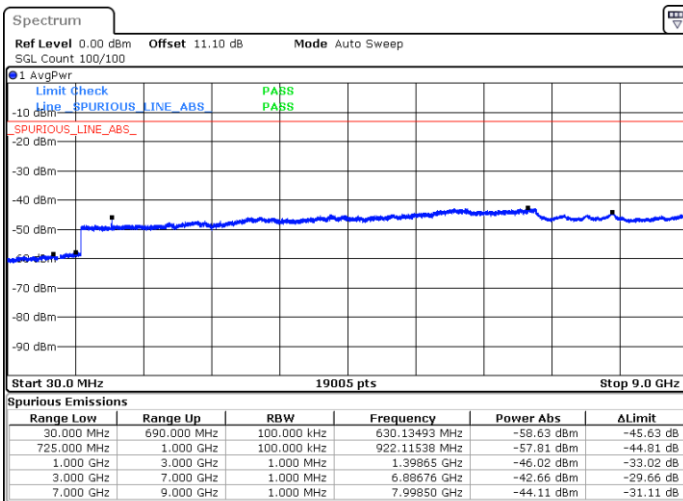


Date: 30.MAY.2020 21:41:34

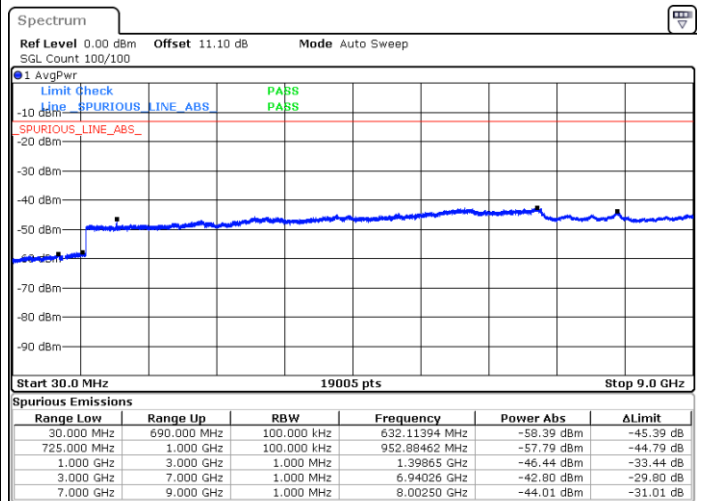
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 30.MAY.2020 20:18:10



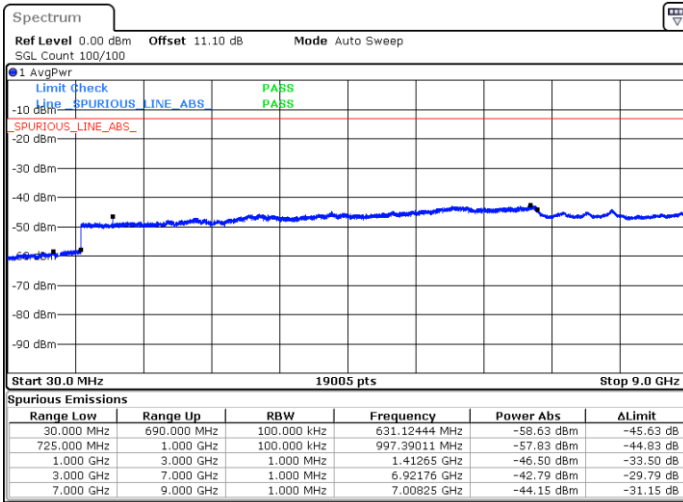
Date: 30.MAY.2020 20:18:50



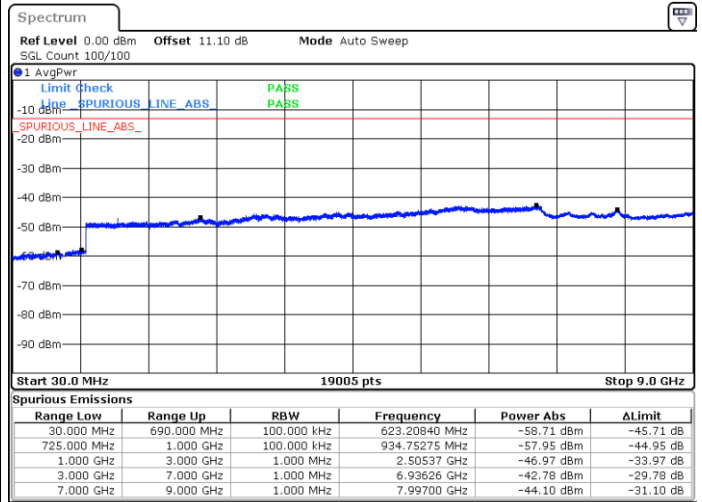
LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



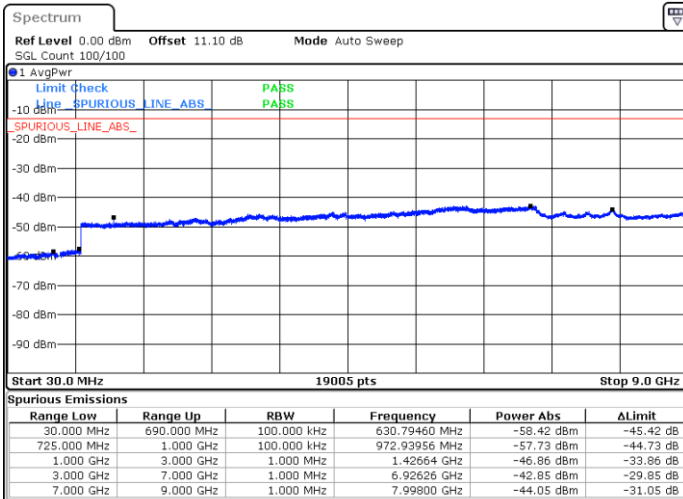
Date: 30.MAY.2020 20:20:54



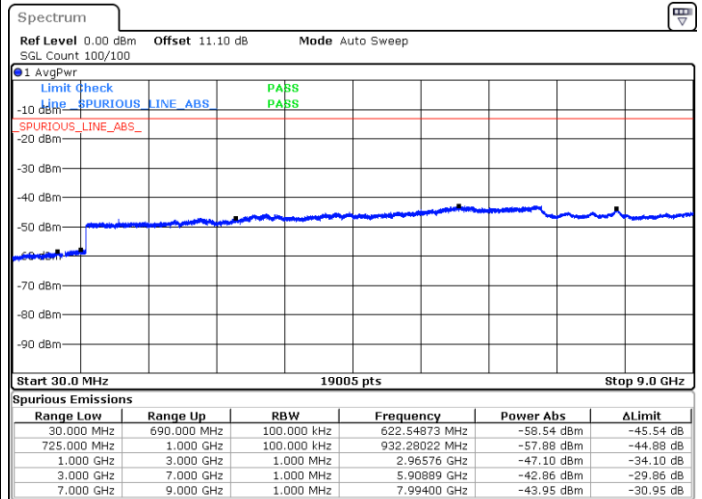
Date: 30.MAY.2020 20:20:15

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30.MAY.2020 20:26:21

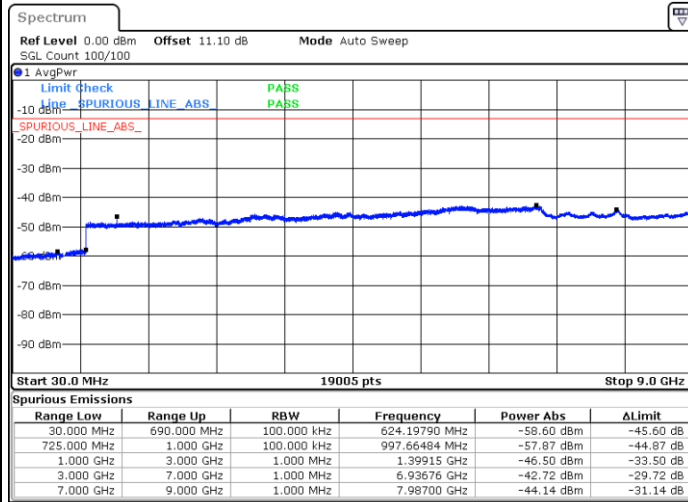


Date: 30.MAY.2020 20:27:01



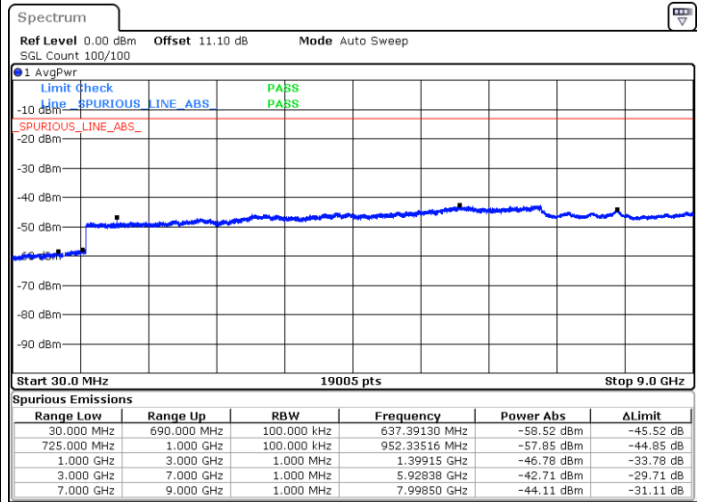
LTE Band 12 / 5MHz

Lowest Channel / QPSK



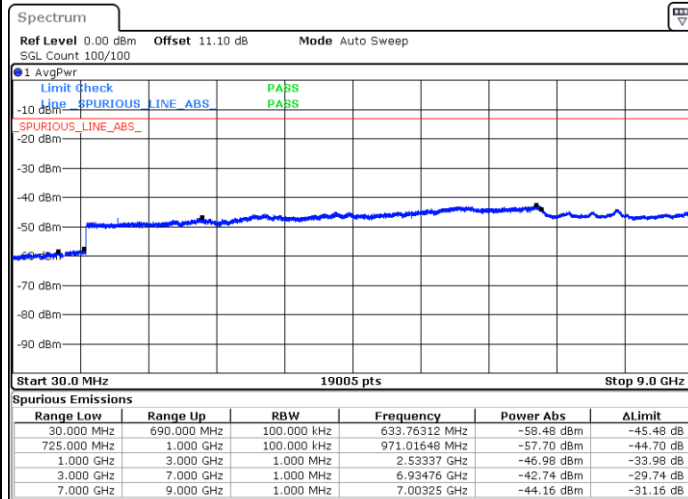
Date: 30.MAY.2020 20:46:46

Lowest Channel / 16QAM



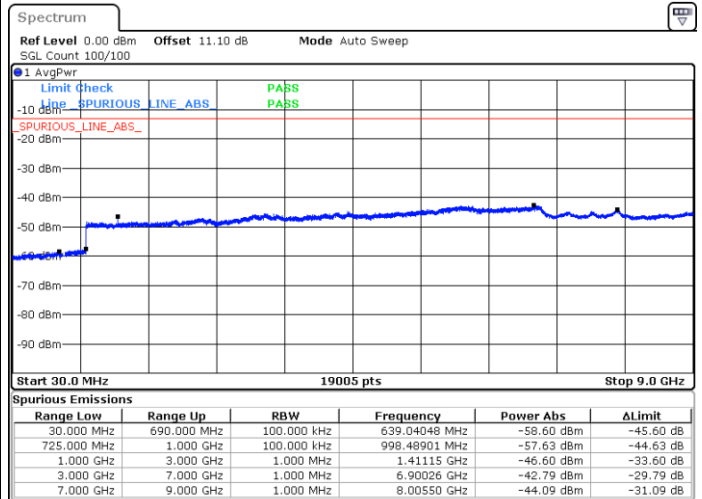
Date: 30.MAY.2020 20:47:26

Middle Channel / QPSK



Date: 30.MAY.2020 20:49:31

Middle Channel / 16QAM



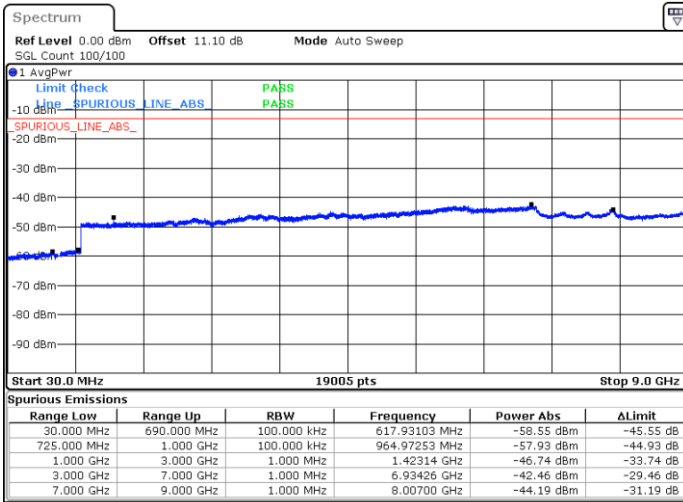
Date: 30.MAY.2020 20:48:51



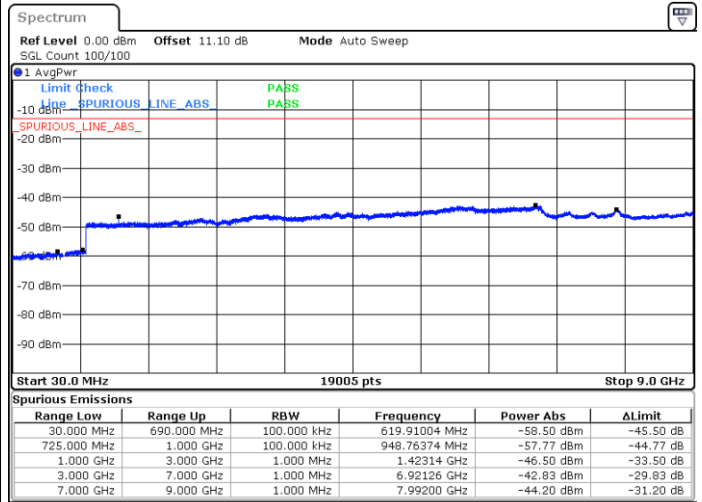
LTE Band 12 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30.MAY.2020 20:55:37

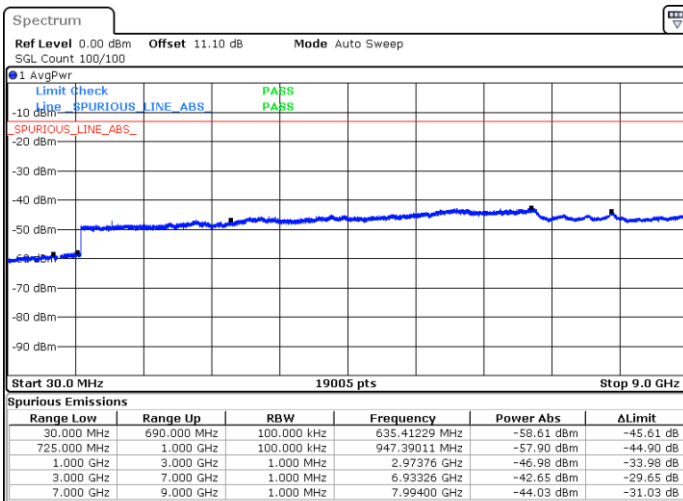


Date: 30.MAY.2020 20:54:57

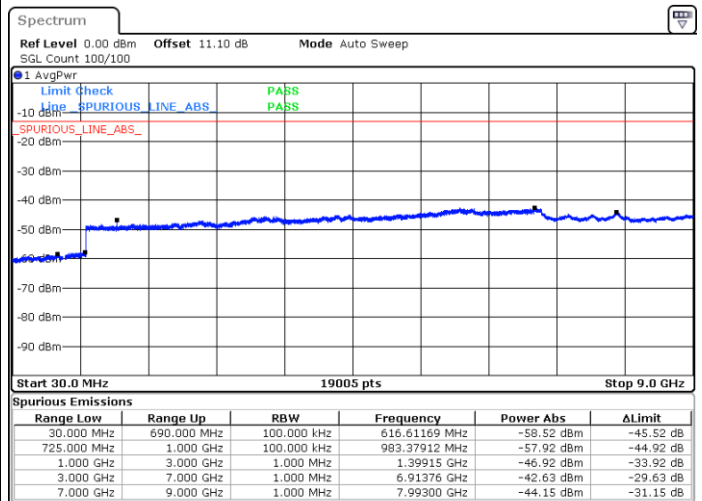
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 30.MAY.2020 21:01:05

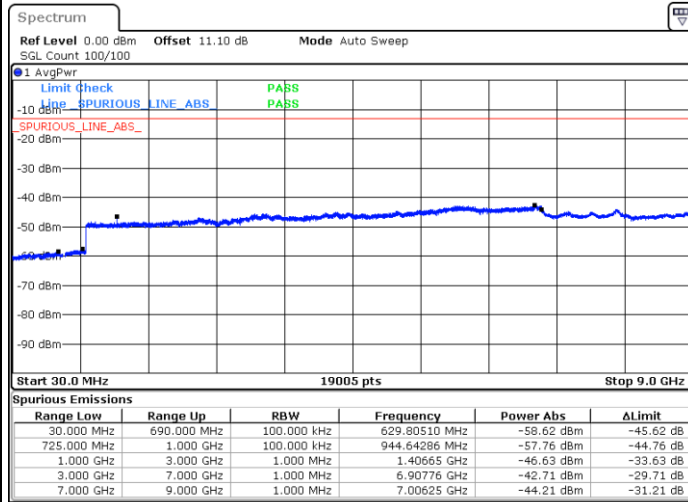


Date: 30.MAY.2020 21:01:45



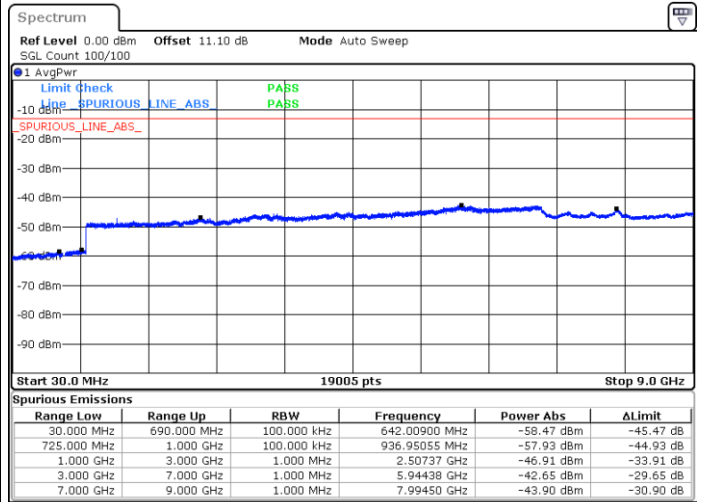
LTE Band 12 / 10MHz

Middle Channel / QPSK



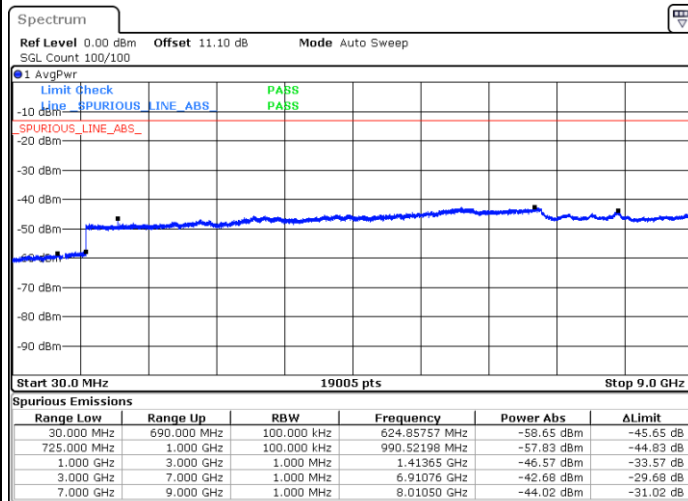
Date: 30.MAY.2020 21:03:50

Middle Channel / 16QAM



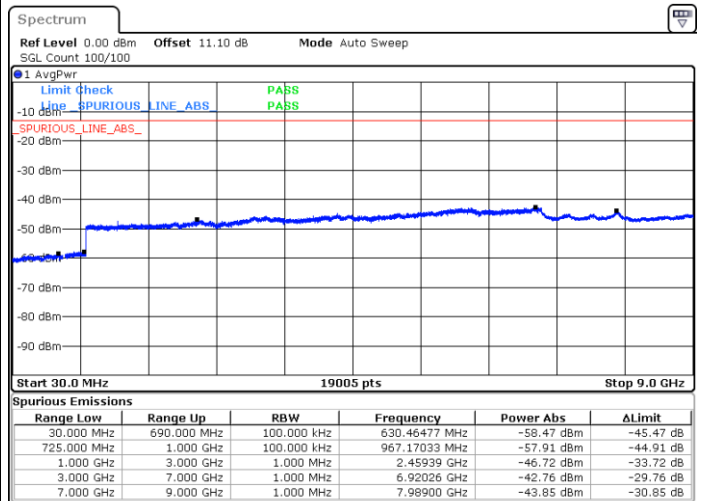
Date: 30.MAY.2020 21:03:10

Highest Channel / QPSK



Date: 30.MAY.2020 21:09:17

Highest Channel / 16QAM



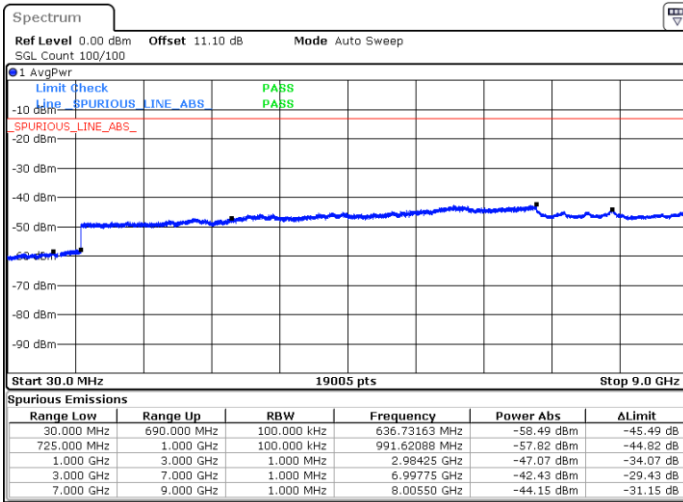
Date: 30.MAY.2020 21:09:57



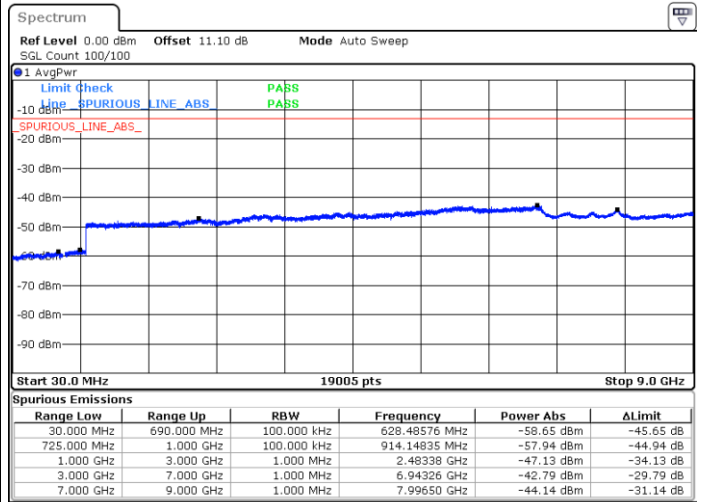
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

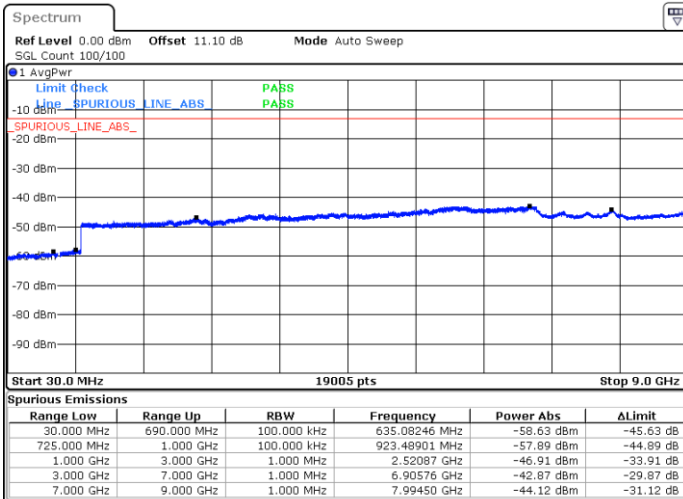


Date: 30.MAY.2020 21:44:38



Date: 30.MAY.2020 21:45:40

Highest Channel / 64QAM



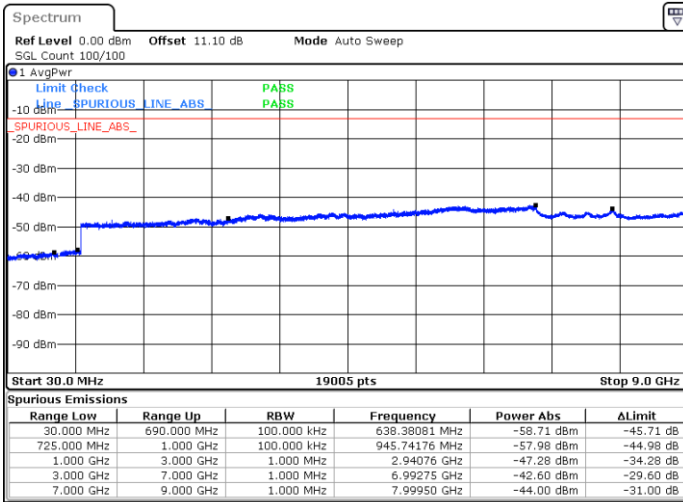
Date: 30.MAY.2020 21:48:44



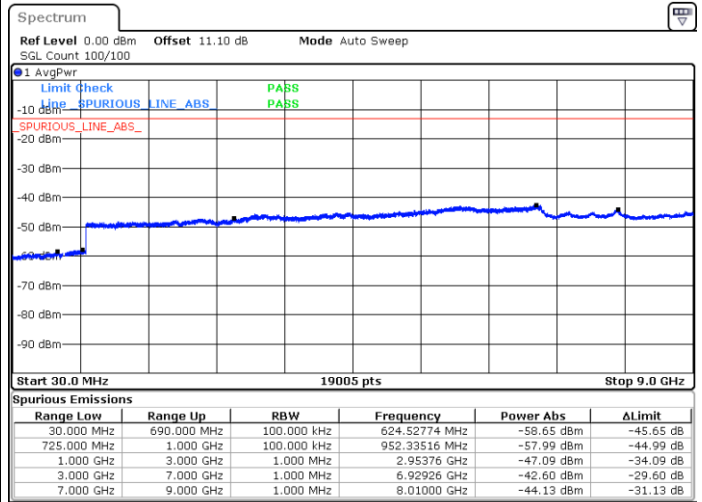
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

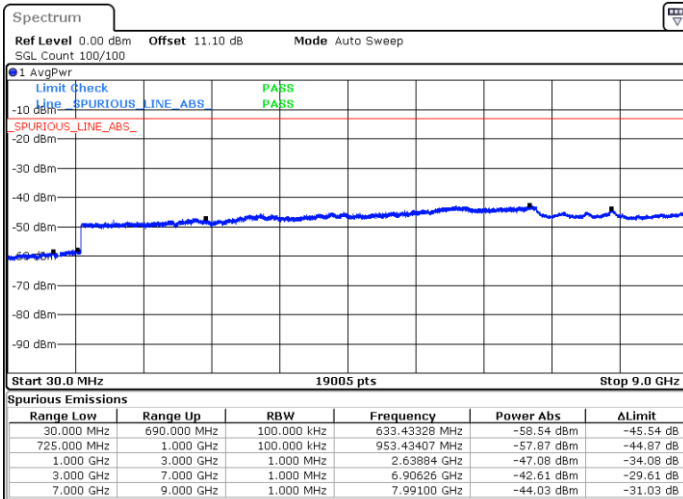


Date: 30.MAY.2020 20:30:04



Date: 30.MAY.2020 20:31:06

Highest Channel / 64QAM



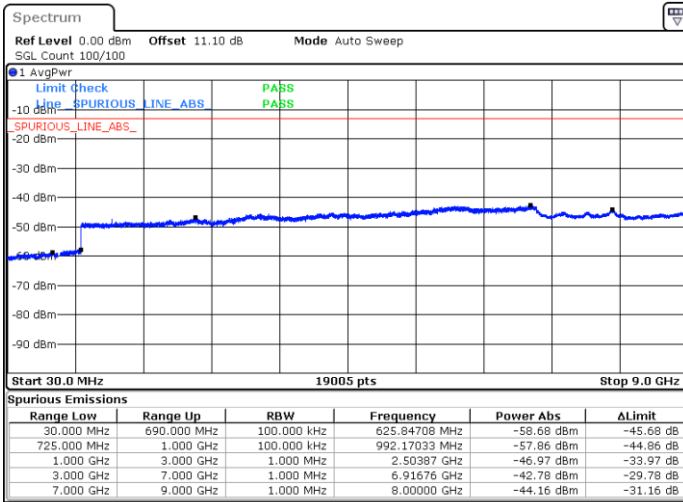
Date: 30.MAY.2020 20:34:09



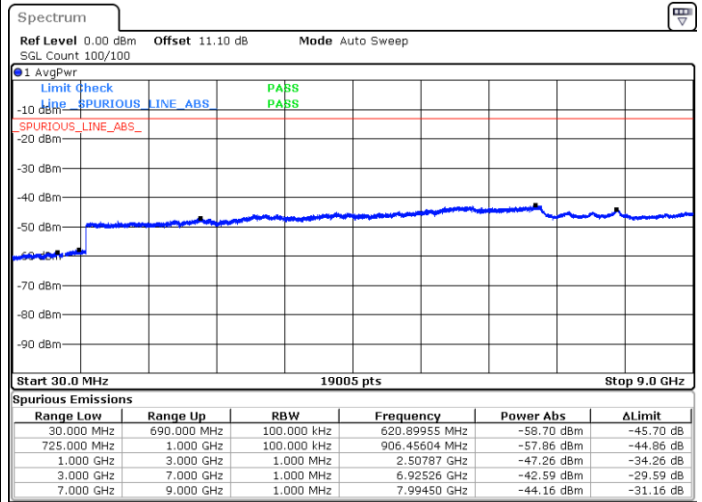
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

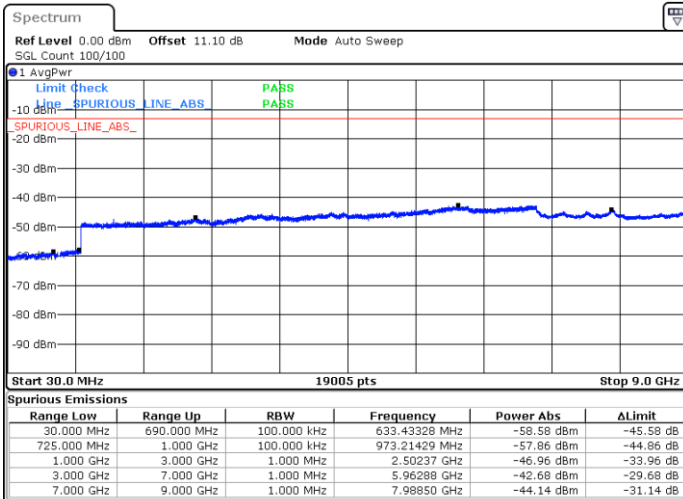


Date: 30.MAY.2020 20:37:14



Date: 30.MAY.2020 20:38:16

Highest Channel / 64QAM



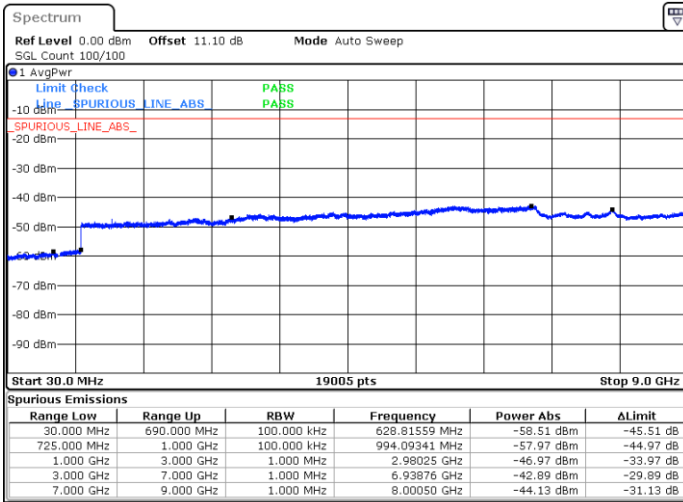
Date: 30.MAY.2020 20:41:19



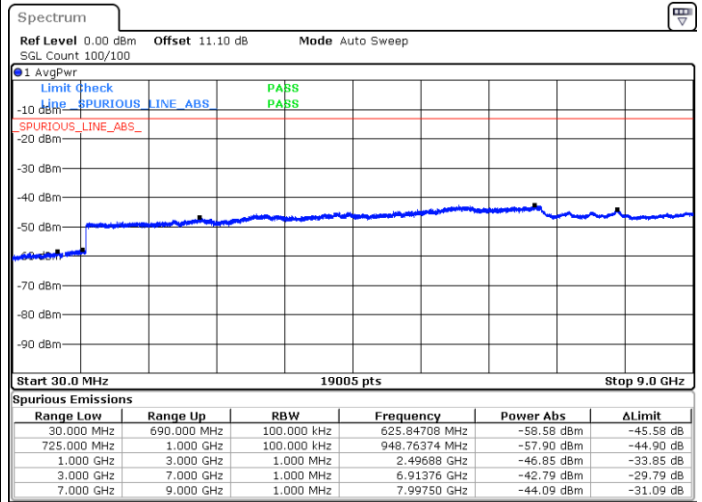
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

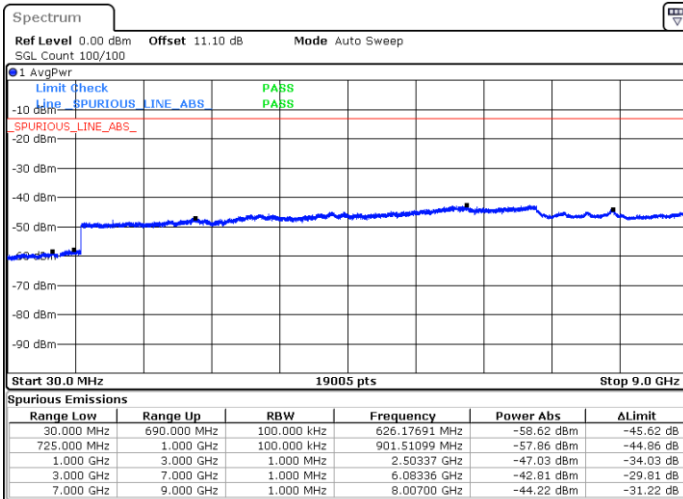


Date: 30.MAY.2020 21:13:00



Date: 30.MAY.2020 21:14:03

Highest Channel / 64QAM



Date: 30.MAY.2020 21:27:14

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	0.0013	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0021	

Note:

1. Normal Voltage =4.0 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

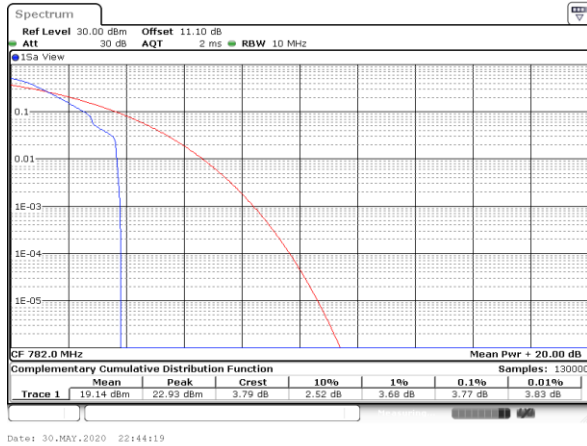
LTE Band 13

Peak-to-Average Ratio

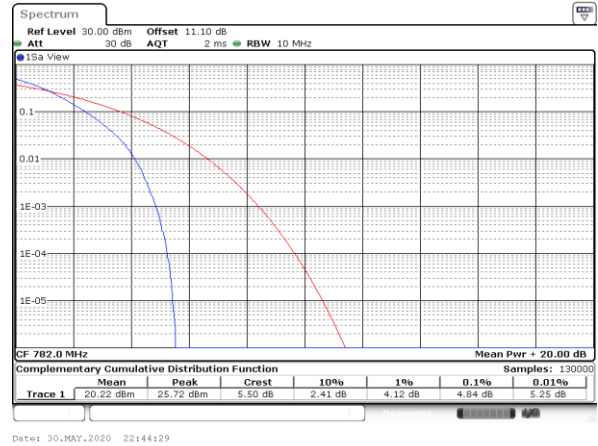
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.77	4.84	4.93	5.83	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.23	6.35	-	-	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB

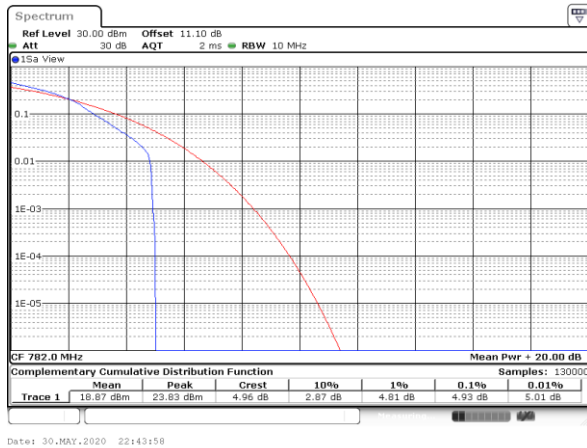


Middle Channel / Full RB

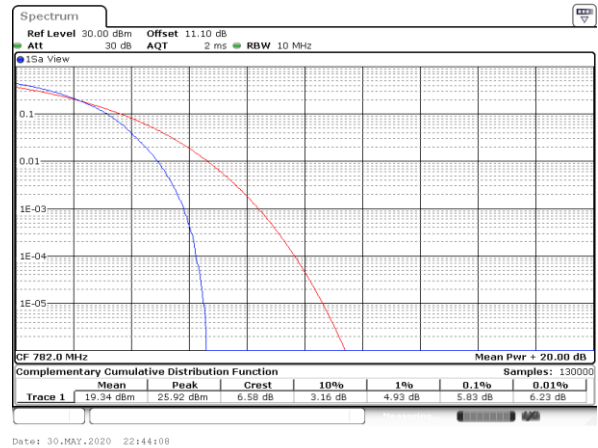


LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB

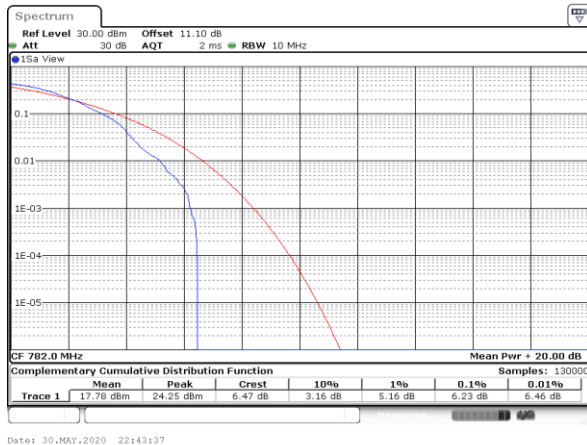


Middle Channel / Full RB

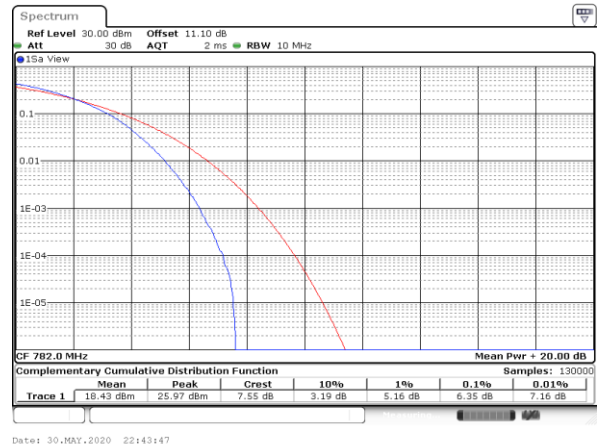


LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Middle Channel / Full RB



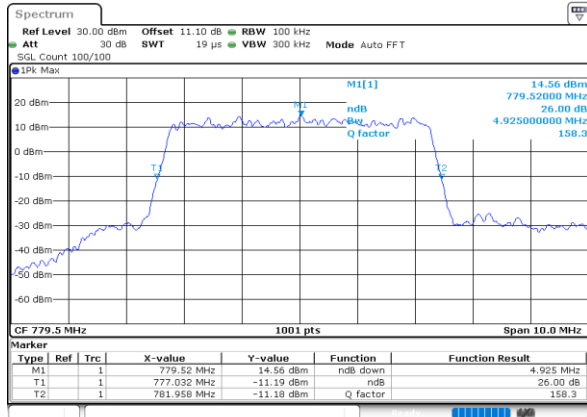
**26dB Bandwidth**

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	-	-	-	-	4.93	4.80	-	-	-	-	-	-
Middle CH	-	-	-	-	4.87	4.88	9.67	9.69	-	-	-	-
Highest CH	-	-	-	-	4.97	4.92	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.86	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.86	-	9.81	-	-	-	-	-
Highest CH	-	-	-	-	4.89	-	-	-	-	-	-	-

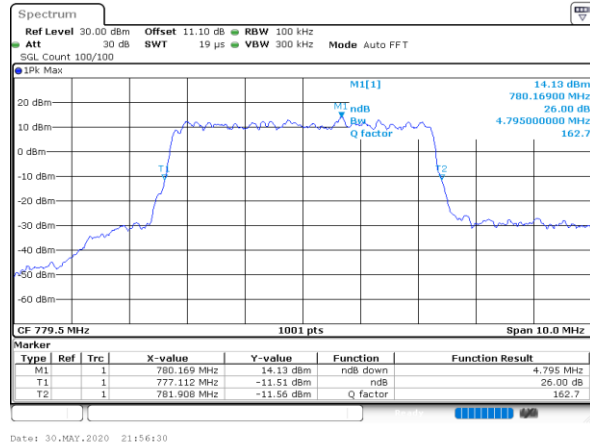


LTE Band 13

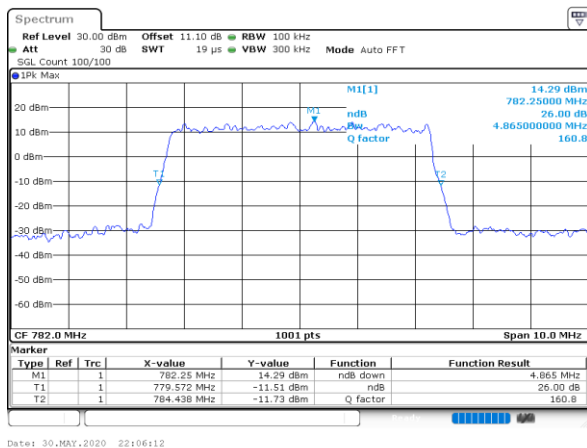
Lowest Channel / 5MHz / QPSK



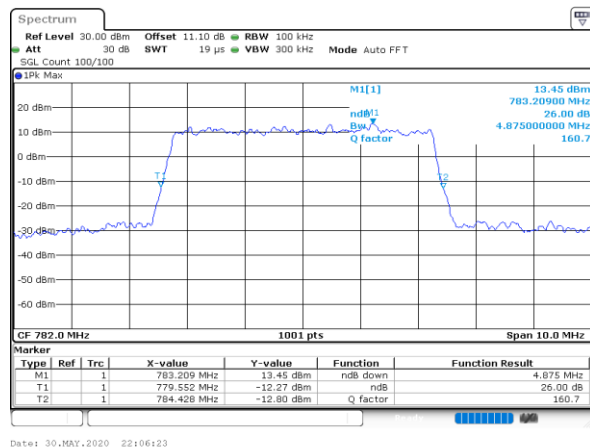
Lowest Channel / 5MHz / 16QAM



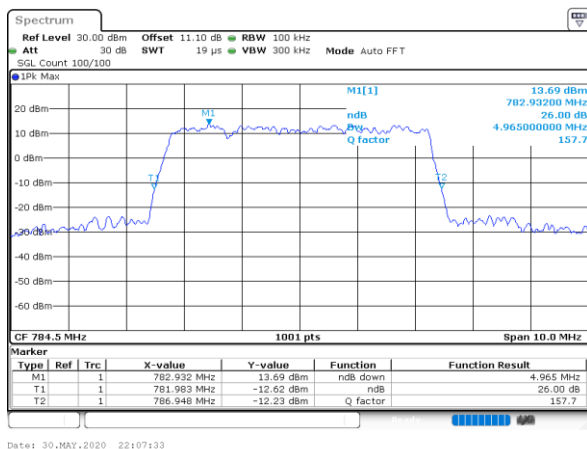
Middle Channel / 5MHz / QPSK



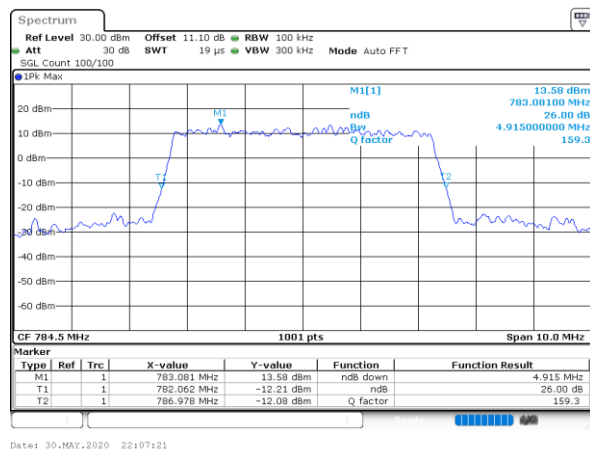
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



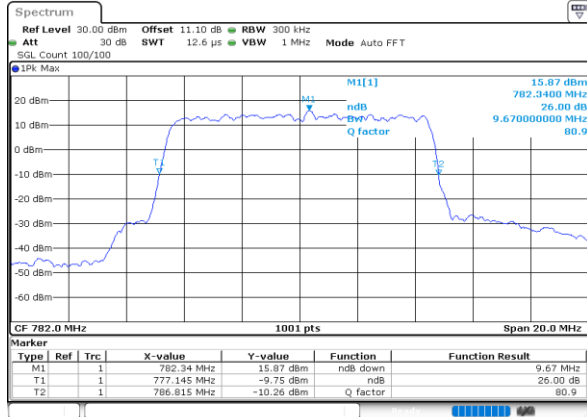
Highest Channel / 5MHz / 16QAM





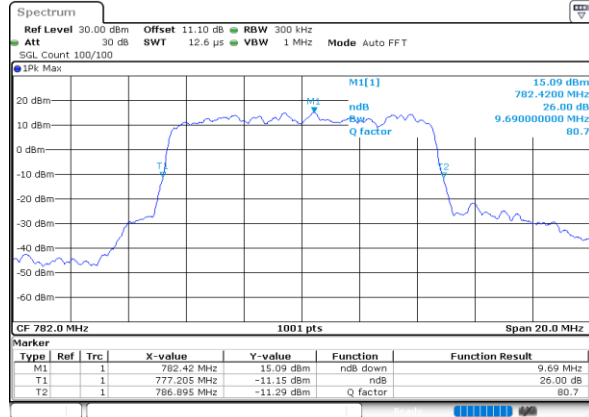
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 30.MAY.2020 22:26:09

Middle Channel / 10MHz / 16QAM

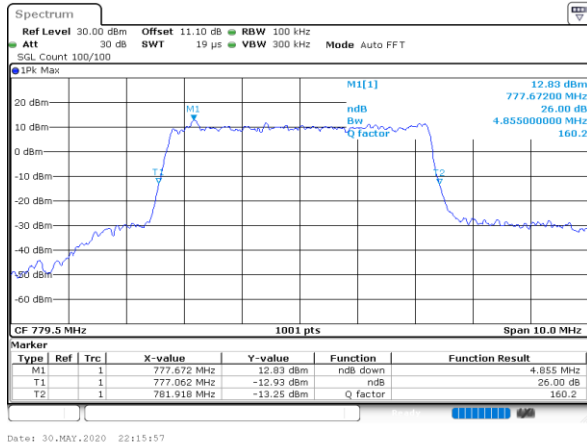


Date: 30.MAY.2020 22:25:58

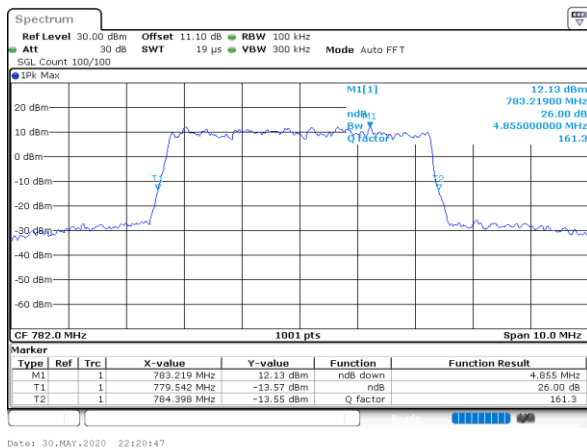


LTE Band 13

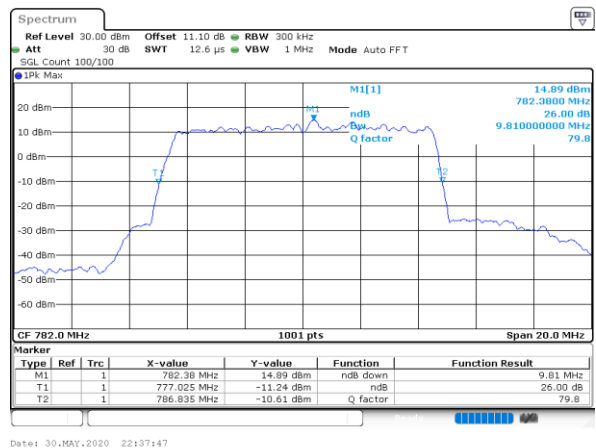
Lowest Channel / 5MHz / 64QAM



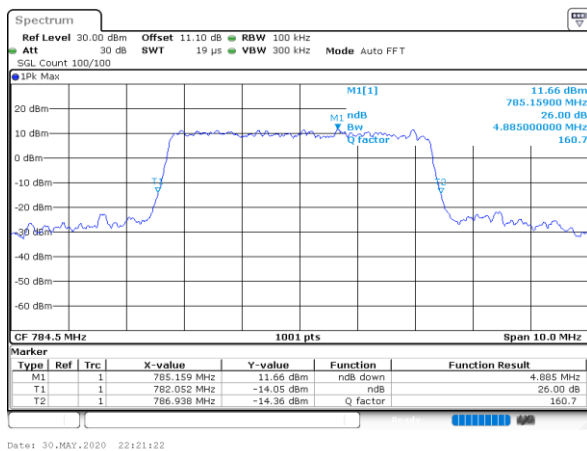
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



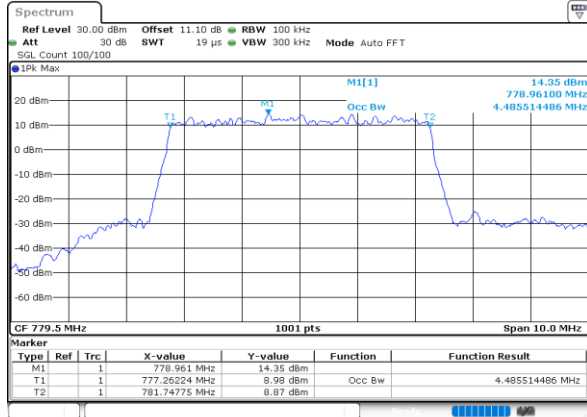
**Occupied Bandwidth**

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	-	-	-	-	4.49	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.52	4.48	8.95	9.01	-	-	-	-
Highest CH	-	-	-	-	4.51	4.50	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.48	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	-	9.05	-	-	-	-	-
Highest CH	-	-	-	-	4.49	-	-	-	-	-	-	-

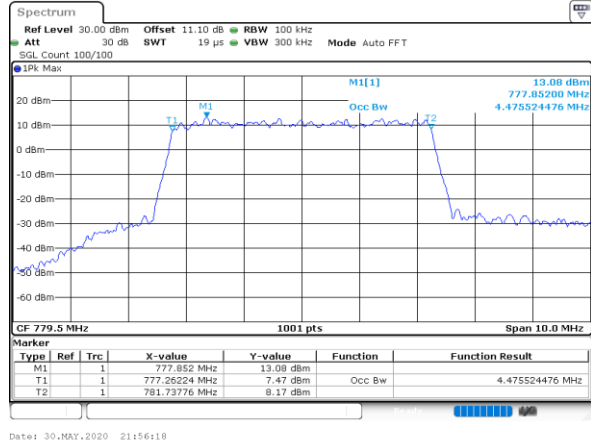


LTE Band 13

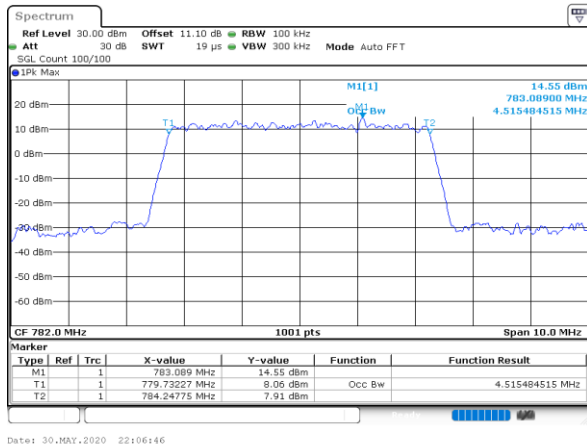
Lowest Channel / 5MHz / QPSK



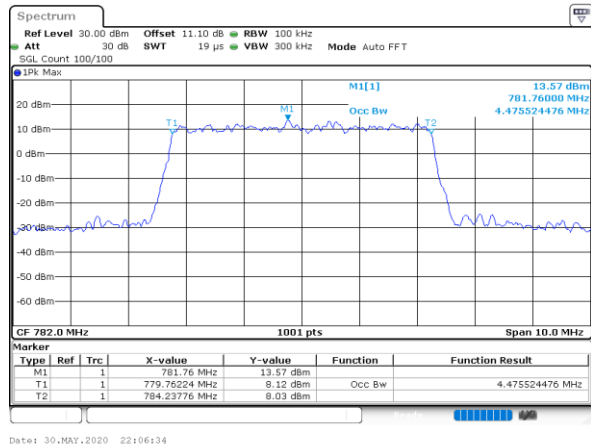
Lowest Channel / 5MHz / 16QAM



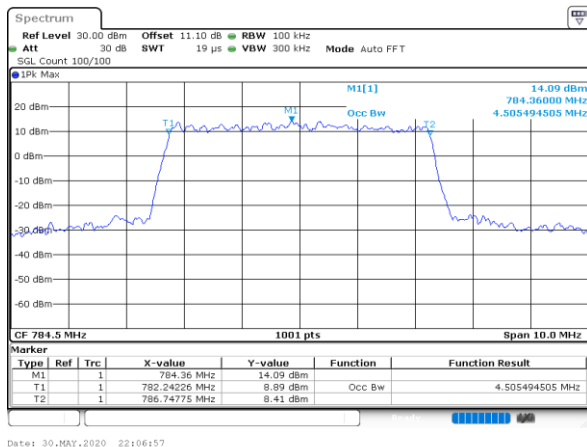
Middle Channel / 5MHz / QPSK



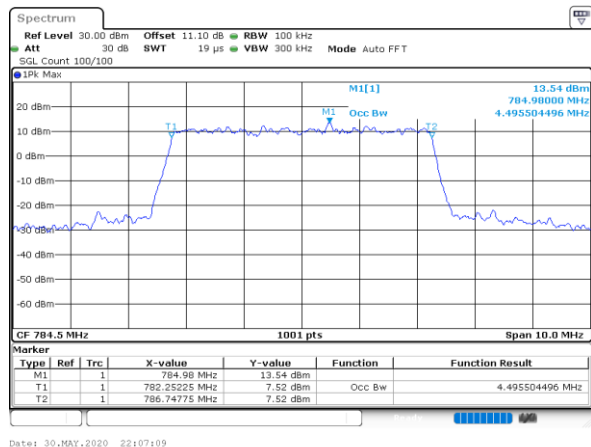
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



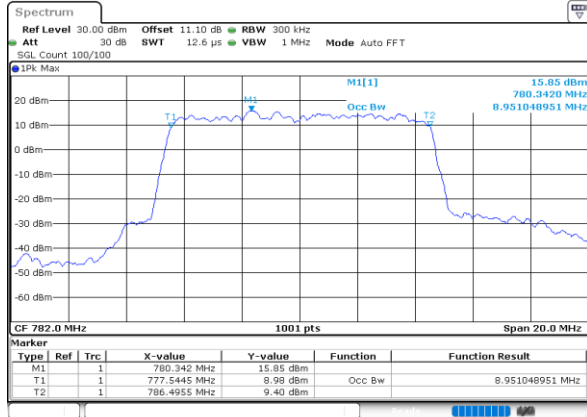
Highest Channel / 5MHz / 16QAM



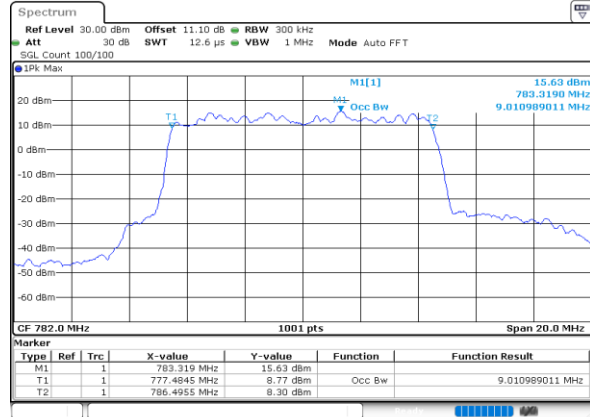


LTE Band 13

Middle Channel / 10MHz / QPSK



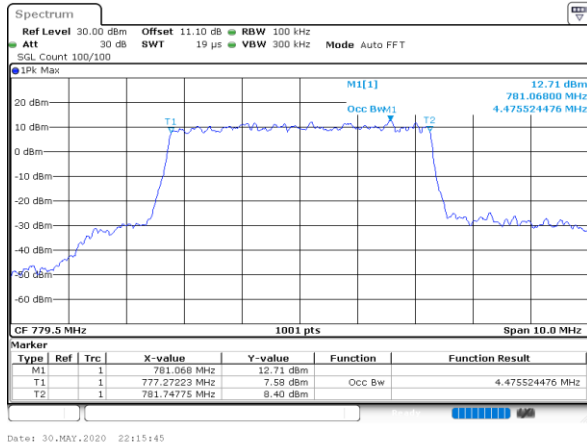
Middle Channel / 10MHz / 16QAM



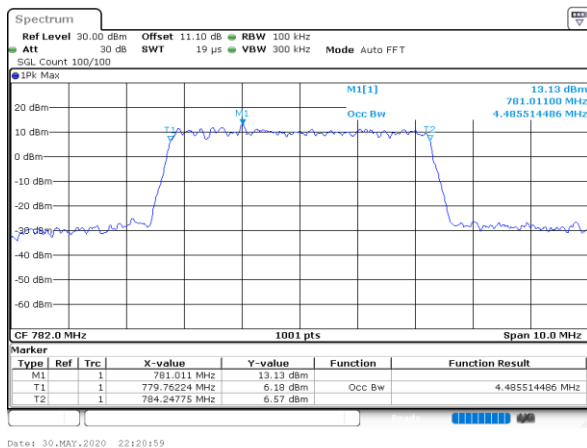


LTE Band 13

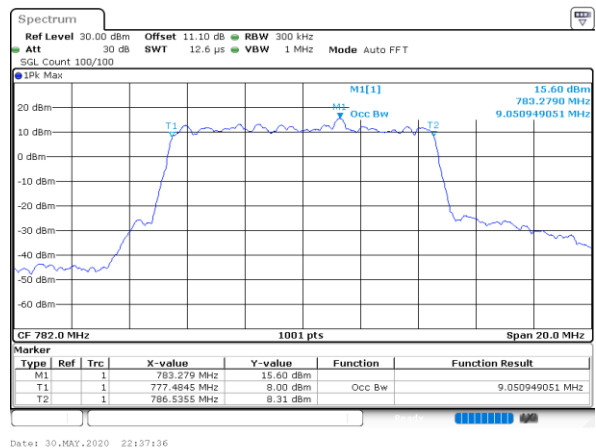
Lowest Channel / 5MHz / 64QAM



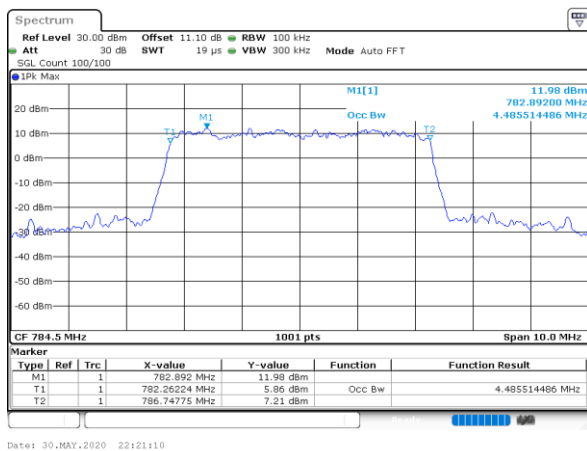
Middle Channel / 5MHz / 64QAM

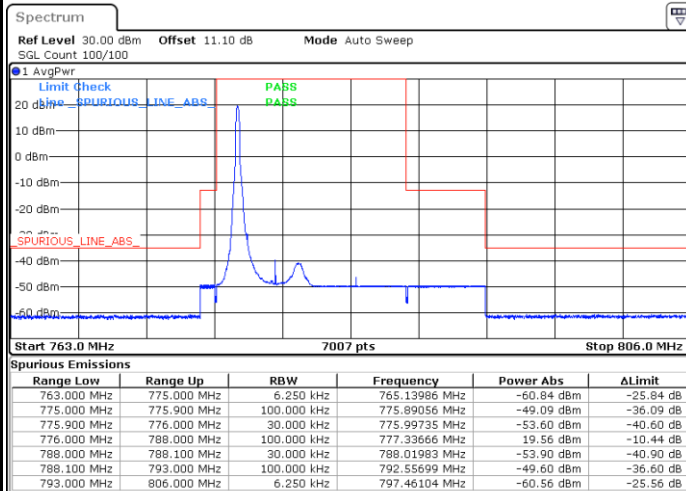
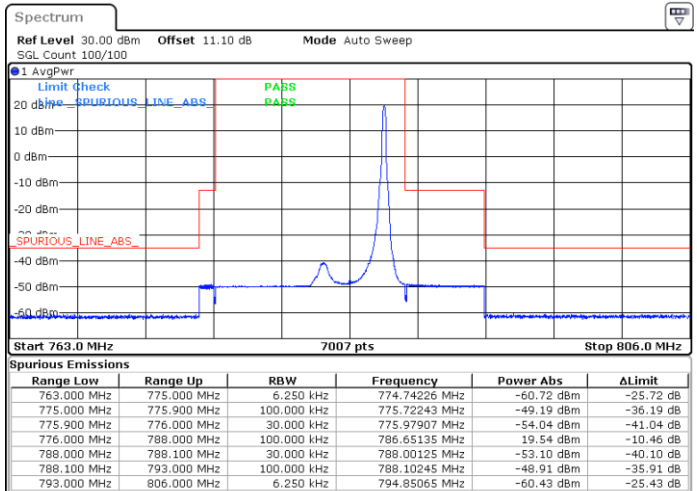
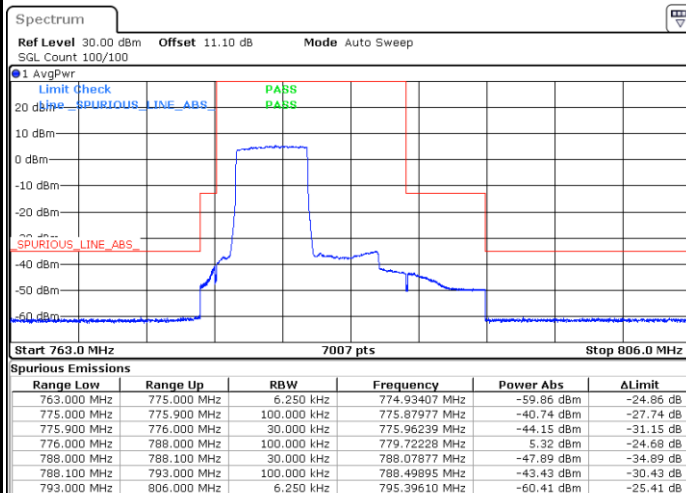
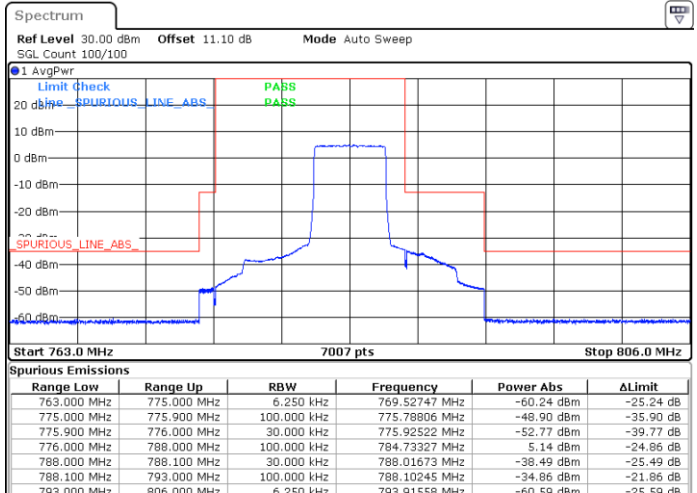


Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

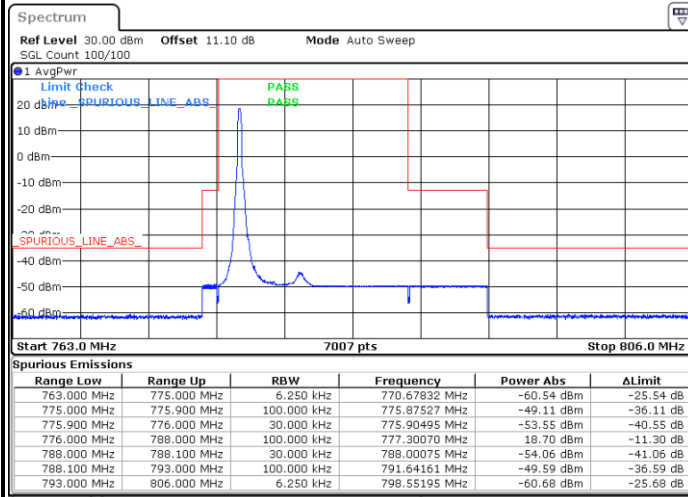


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



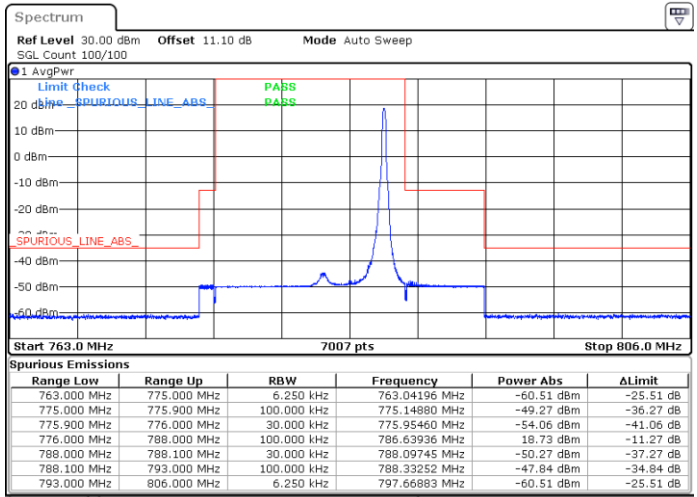
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



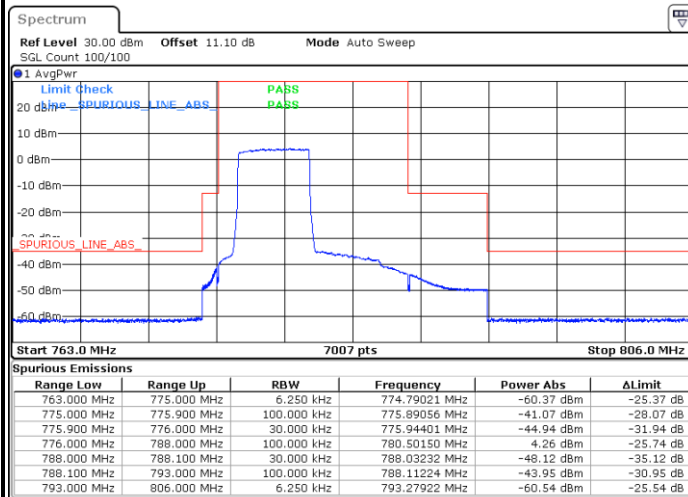
Date: 30.MAY.2020 22:01:42

Highest Band Edge / 1 RB



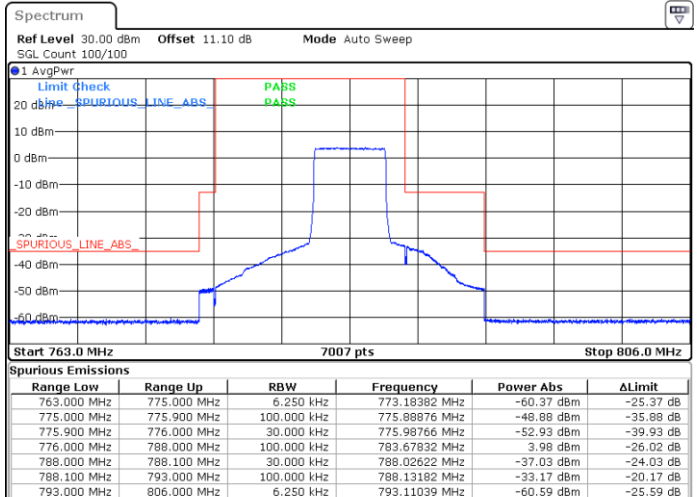
Date: 30.MAY.2020 22:12:33

Lowest Band Edge / Full RB



Date: 30.MAY.2020 22:00:02

Highest Band Edge / Full RB

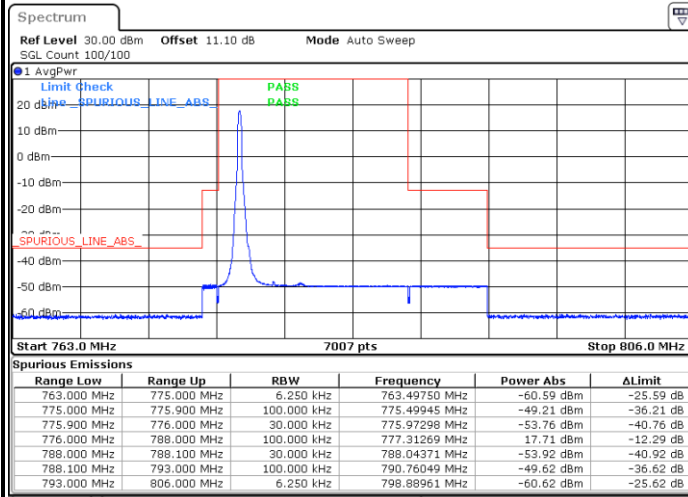


Date: 30.MAY.2020 22:10:53

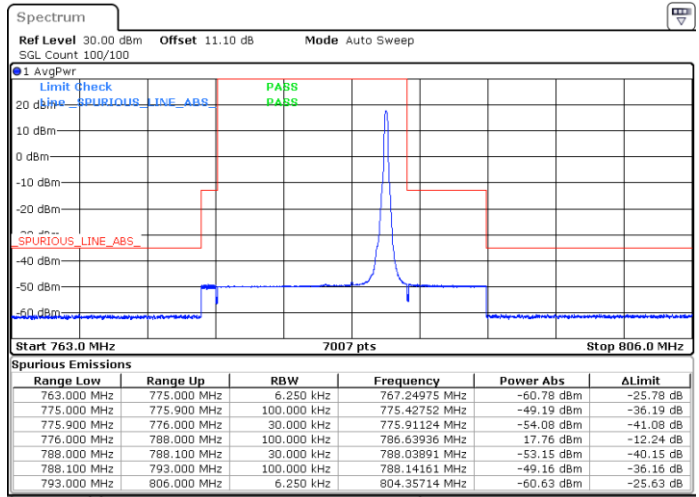


LTE Band 13 / 5MHz / 64QAM

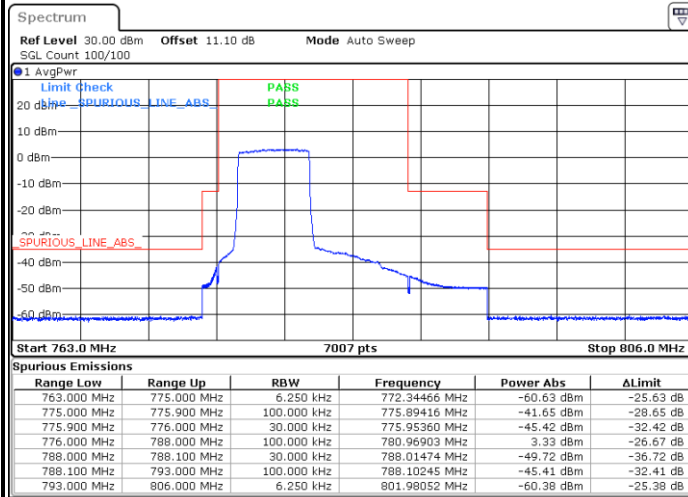
Lowest Band Edge / 1 RB



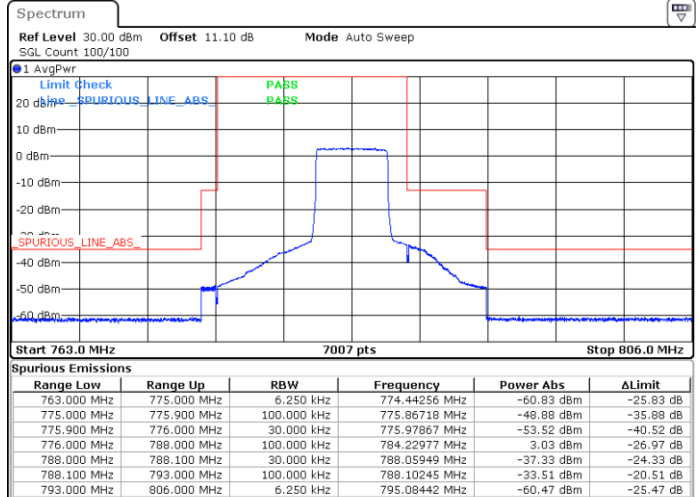
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



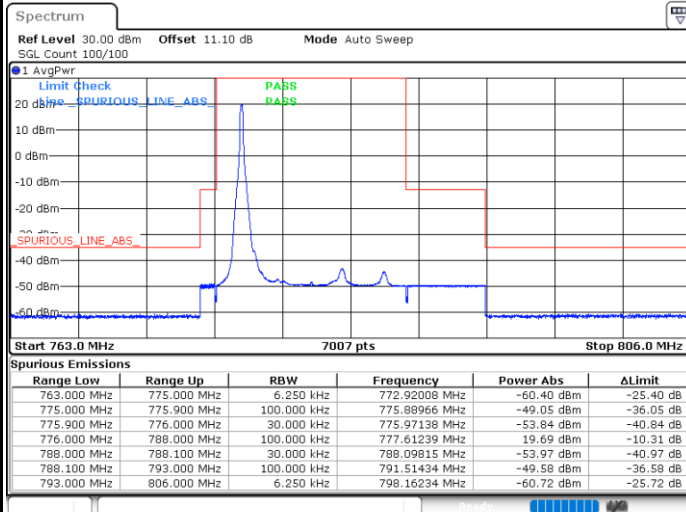
Highest Band Edge / Full RB



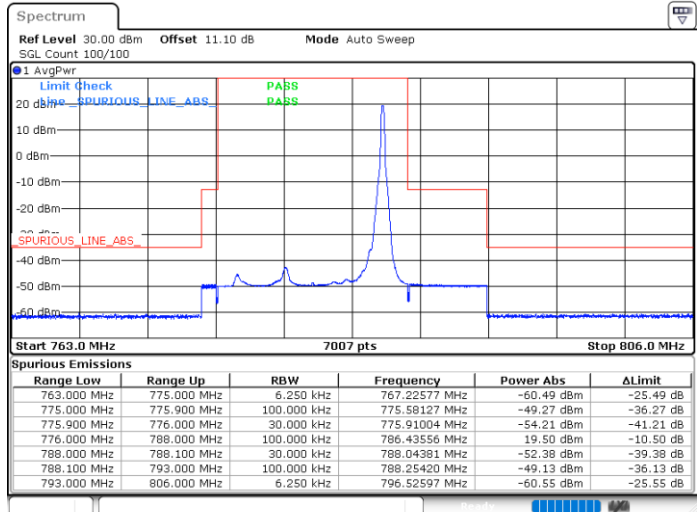


LTE Band 13 / 10MHz / QPSK

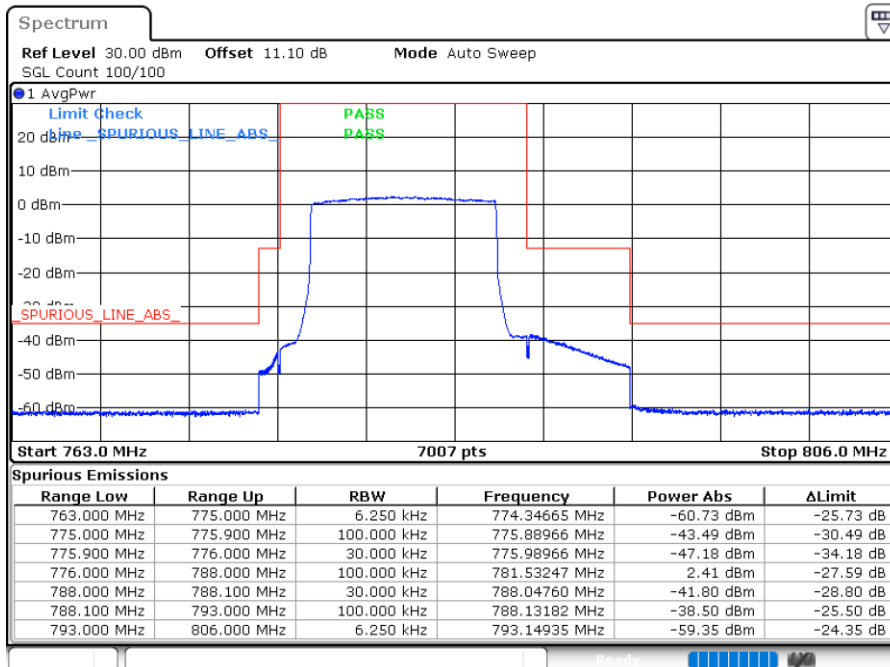
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



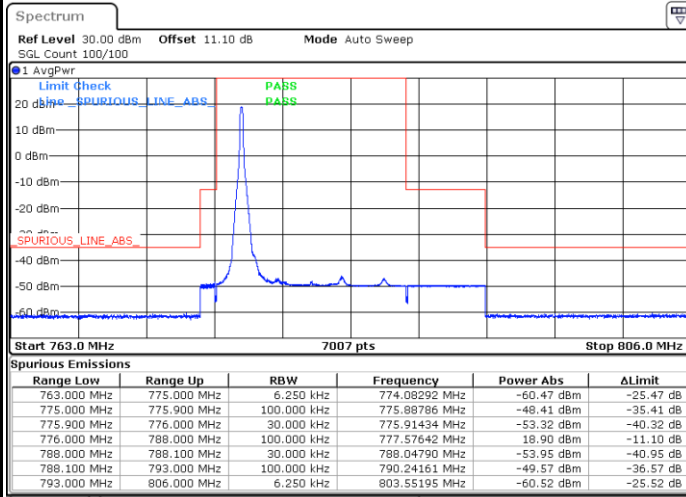
Band Edge / Full RB





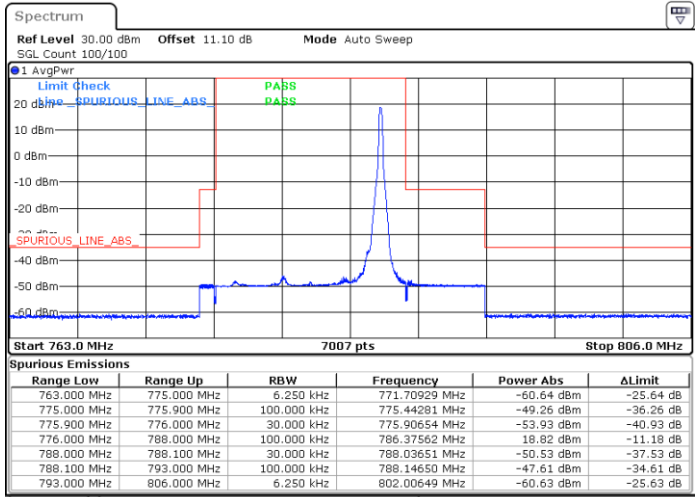
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



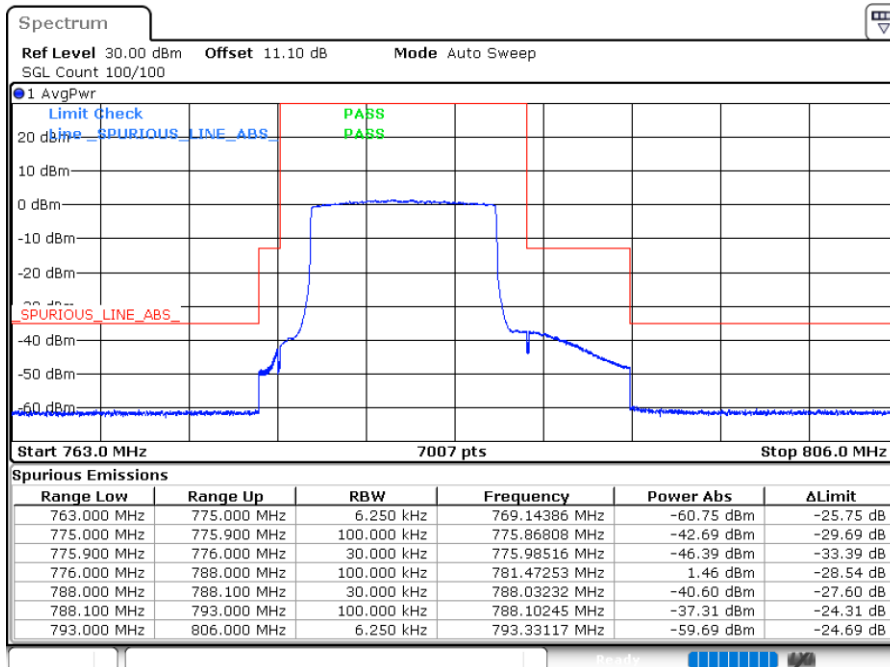
Date: 30.MAY.2020 22:31:07

Highest Band Edge / 1 RB



Date: 30.MAY.2020 22:36:05

Band Edge / Full RB

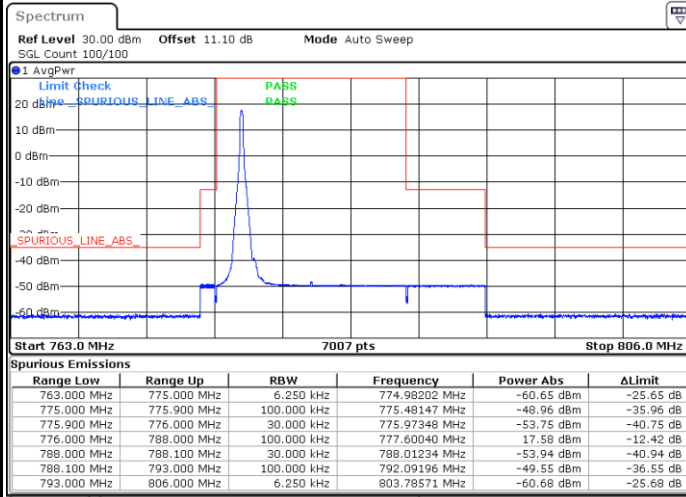


Date: 30.MAY.2020 22:29:27



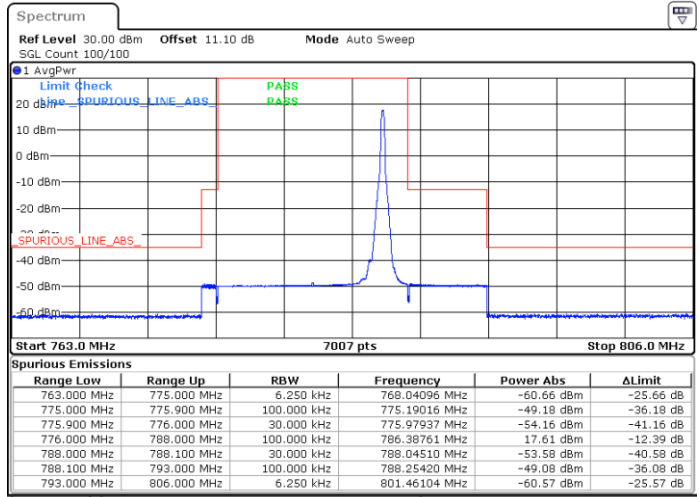
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



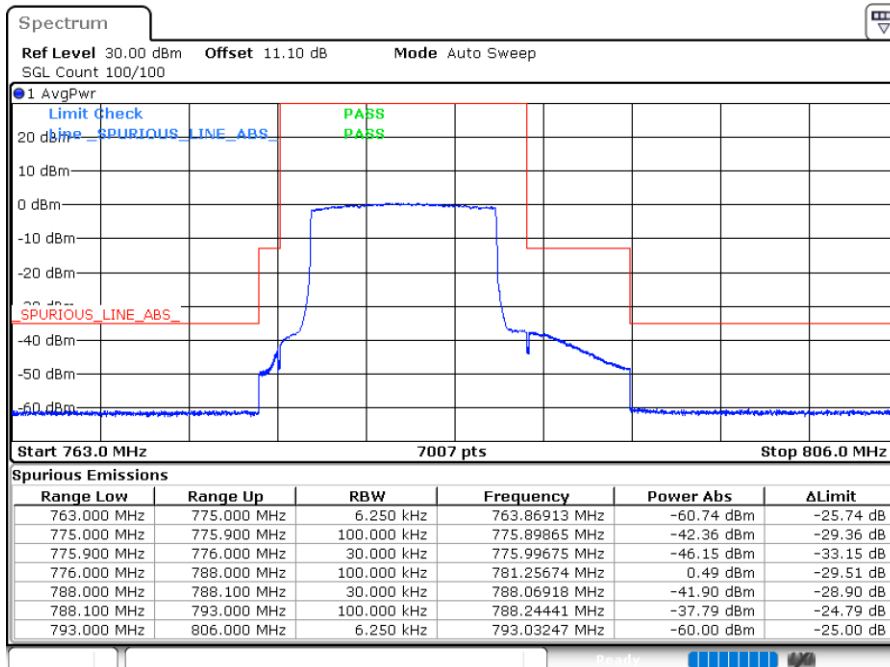
Date: 30.MAY.2020 22:41:06

Highest Band Edge / 1 RB



Date: 30.MAY.2020 22:42:45

Band Edge / Full RB



Date: 30.MAY.2020 22:39:26