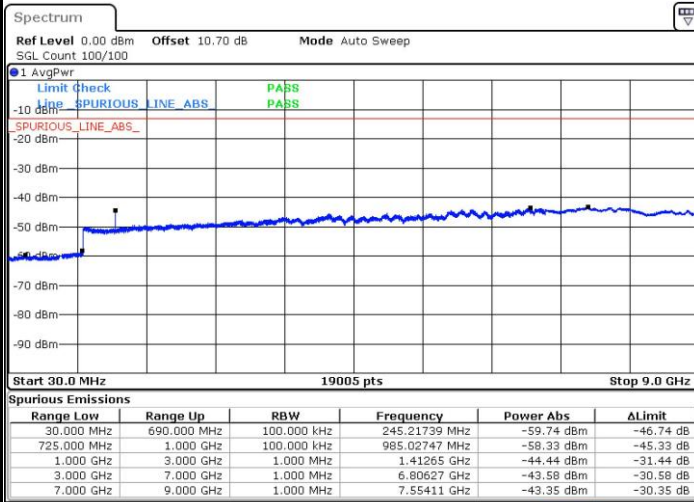




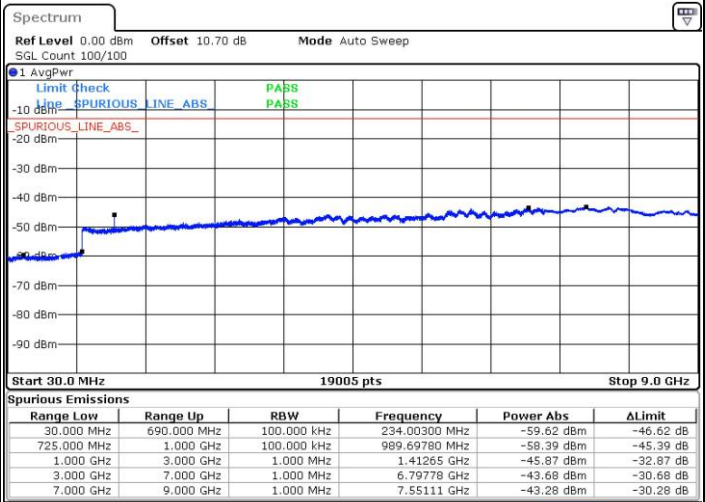
LTE Band 12 / 3MHz

Middle Channel / QPSK



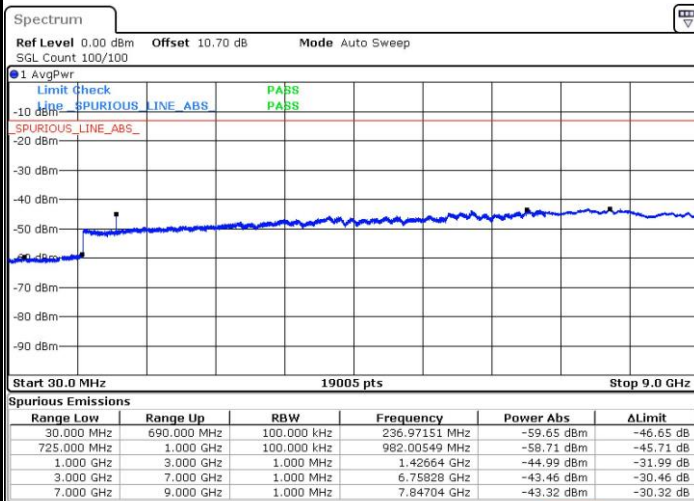
Date: 20 FEB 2019 00:02:16

Middle Channel / 16QAM



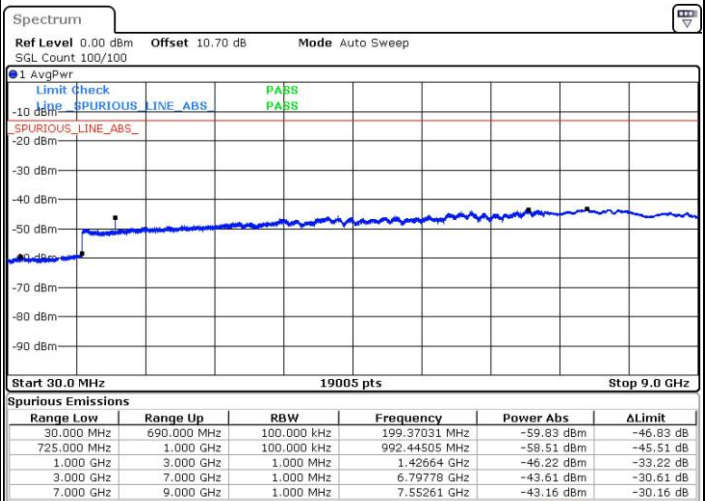
Date: 20 FEB 2019 00:01:21

Highest Channel / QPSK



Date: 20 FEB 2019 00:07:57

Highest Channel / 16QAM

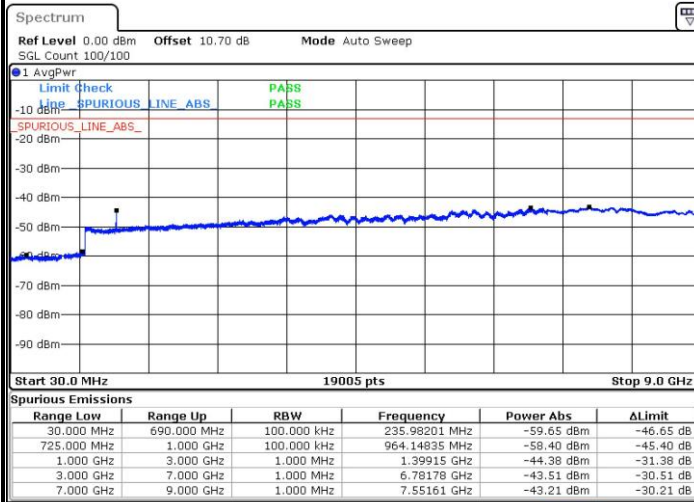


Date: 20 FEB 2019 00:08:52



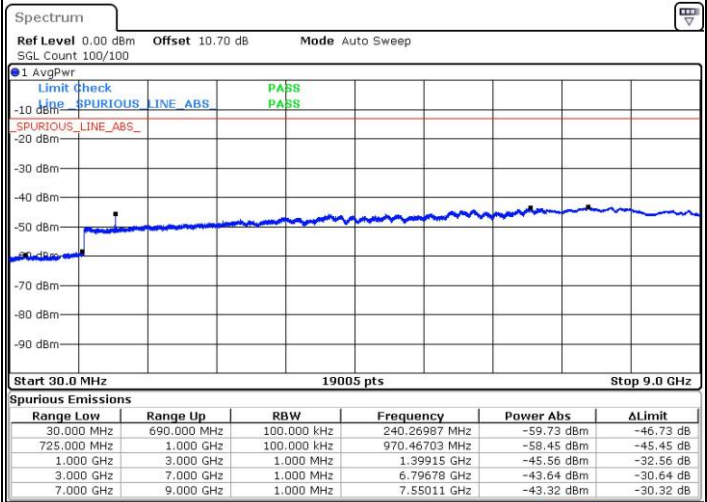
LTE Band 12 / 5MHz

Lowest Channel / QPSK



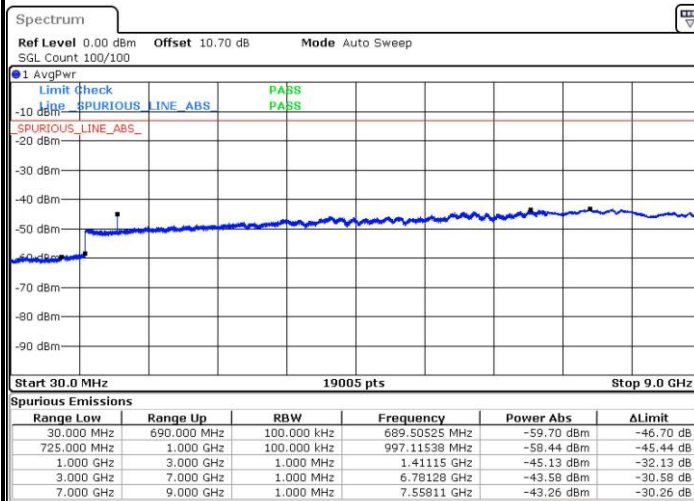
Date: 20 FEB 2019 00:14:34

Lowest Channel / 16QAM



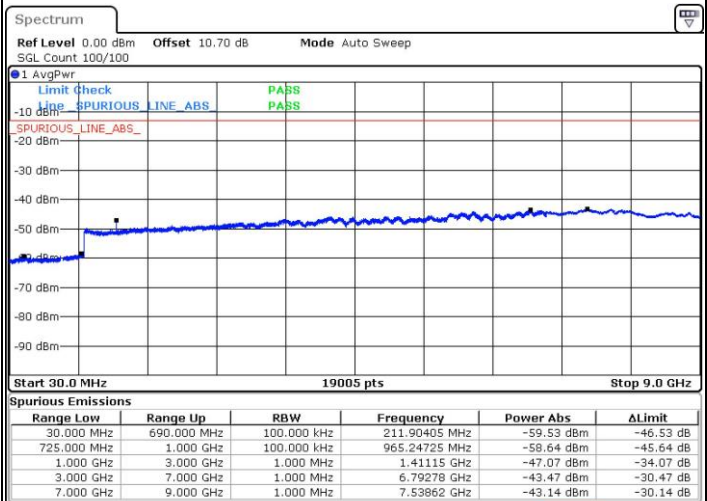
Date: 20 FEB 2019 00:15:29

Middle Channel / QPSK



Date: 20 FEB 2019 00:18:05

Middle Channel / 16QAM

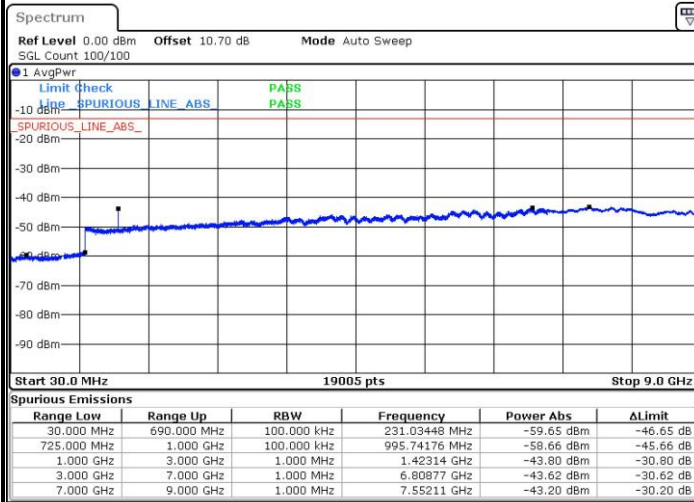


Date: 20 FEB 2019 00:17:10



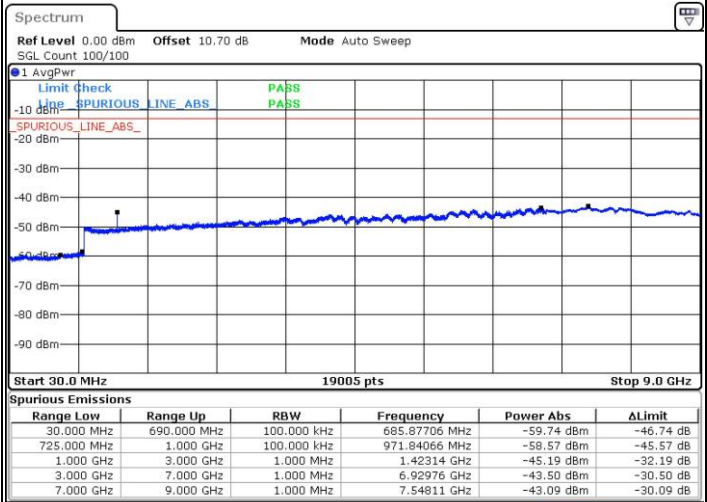
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 20 FEB 2019 00:24:41

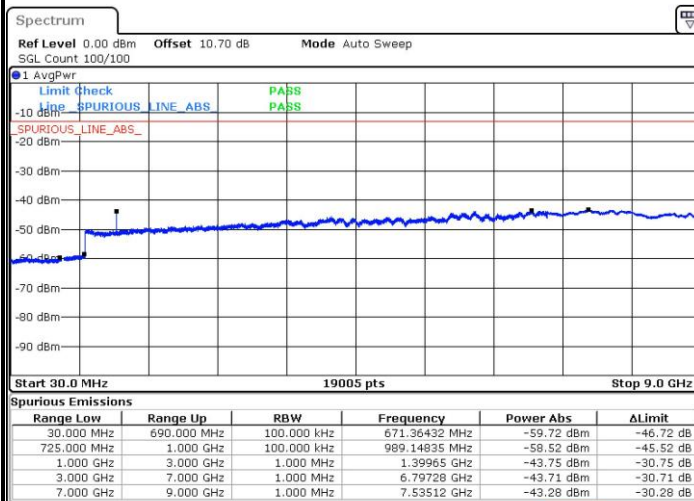
Highest Channel / 16QAM



Date: 20 FEB 2019 00:23:46

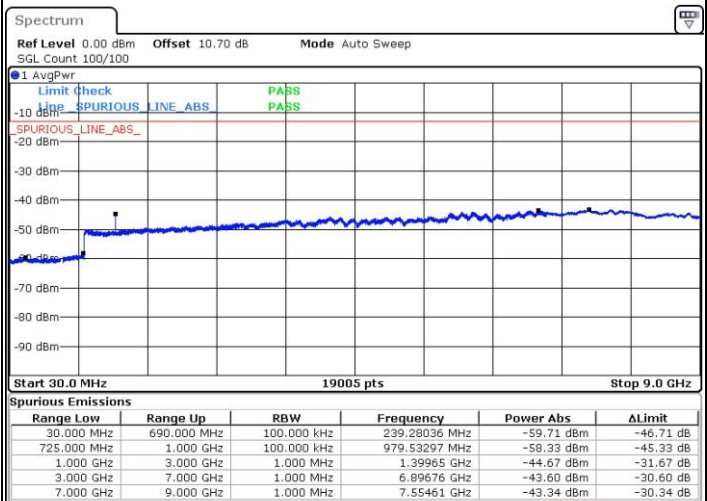
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 20 FEB 2019 00:30:22

Lowest Channel / 16QAM

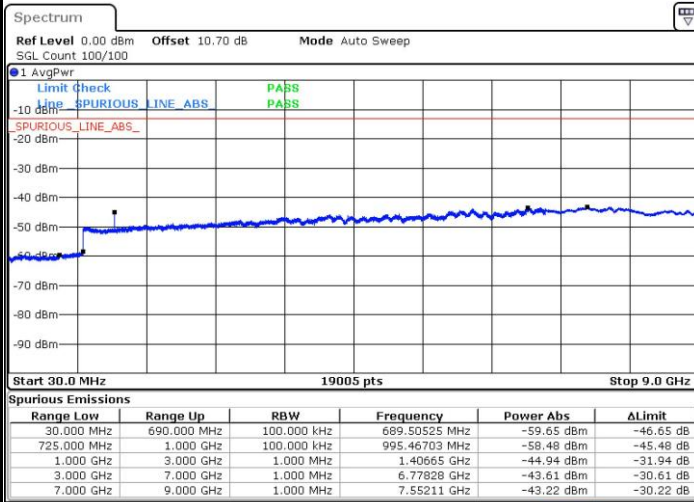


Date: 20 FEB 2019 00:31:17



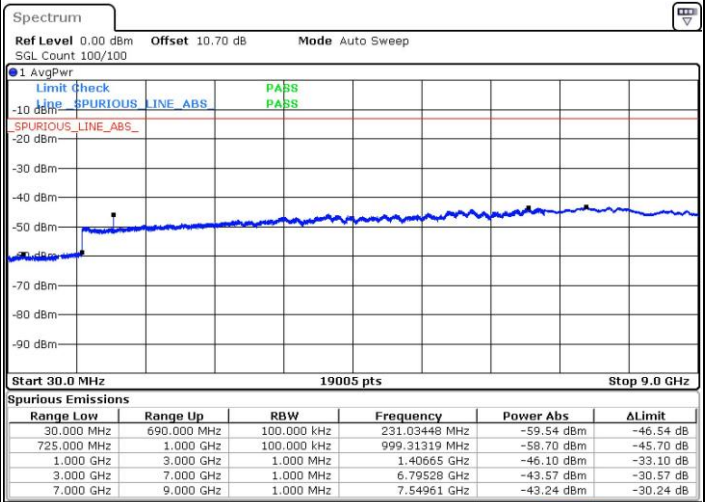
LTE Band 12 / 10MHz

Middle Channel / QPSK



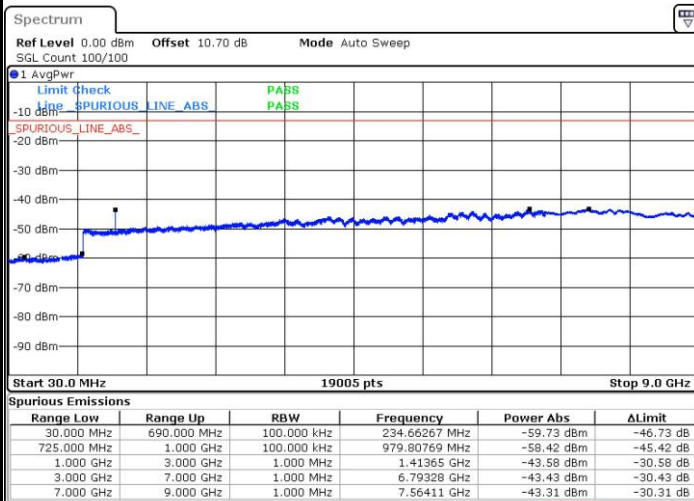
Date: 20 FEB 2019 00:33:53

Middle Channel / 16QAM



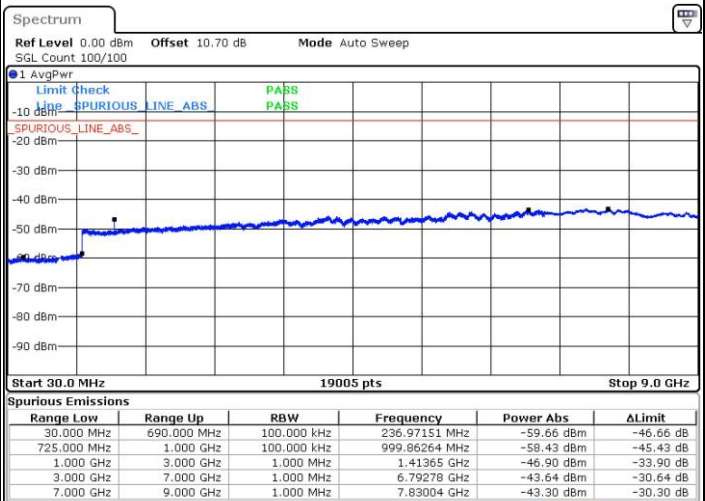
Date: 20 FEB 2019 00:32:58

Highest Channel / QPSK



Date: 20 FEB 2019 00:47:12

Highest Channel / 16QAM

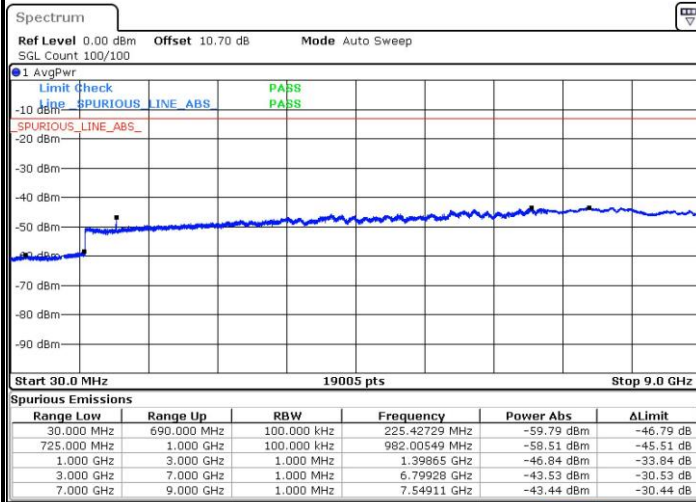


Date: 20 FEB 2019 00:48:07



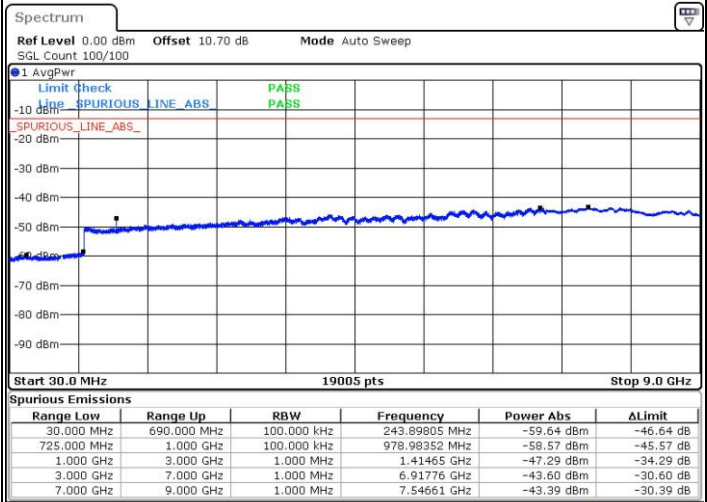
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



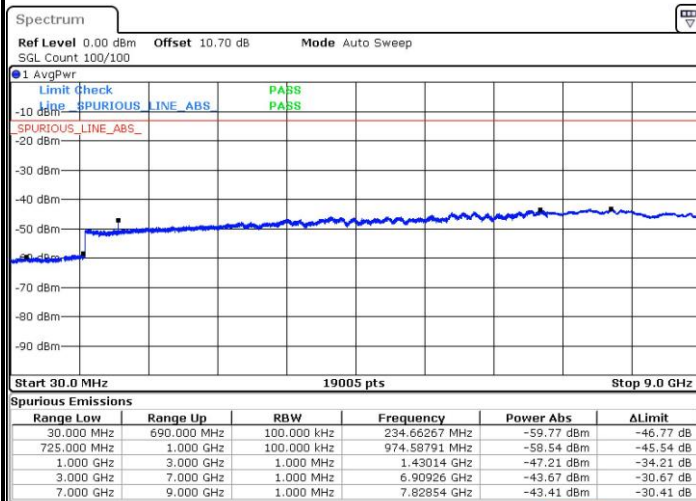
Date: 20 FEB 2019 01:30:56

Middle Channel / 64QAM



Date: 20 FEB 2019 01:32:14

Highest Channel / 64QAM

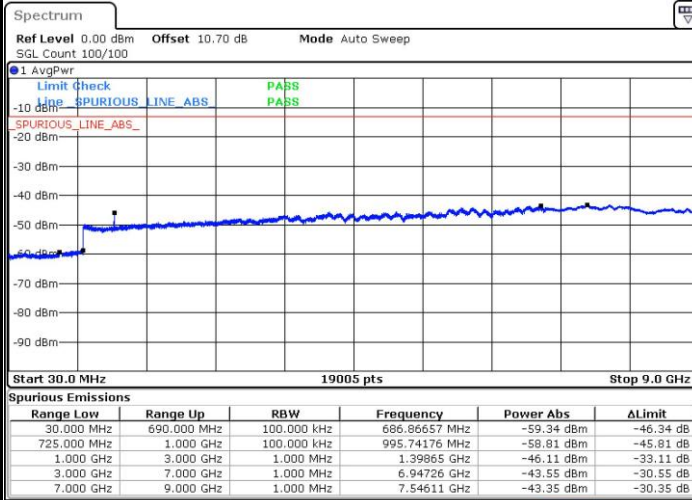


Date: 20 FEB 2019 01:35:32



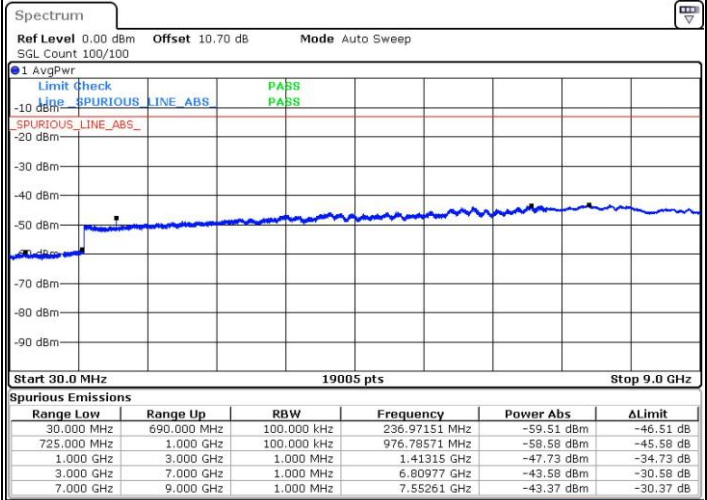
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



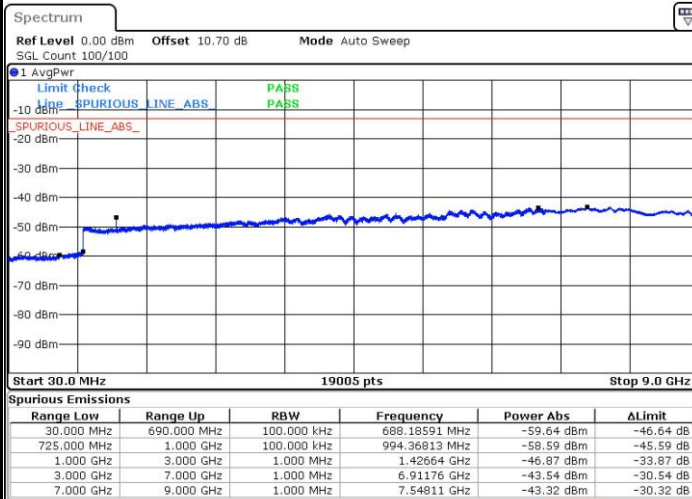
Date: 20 FEB 2019 01:07:13

Middle Channel / 64QAM



Date: 20 FEB 2019 01:08:31

Highest Channel / 64QAM

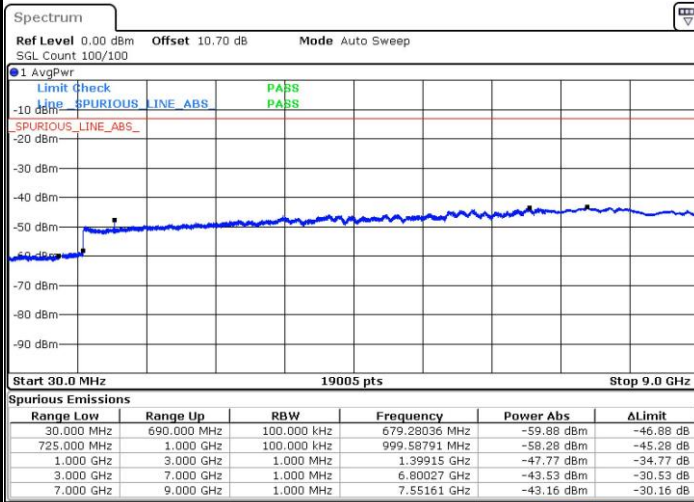


Date: 20 FEB 2019 01:11:49



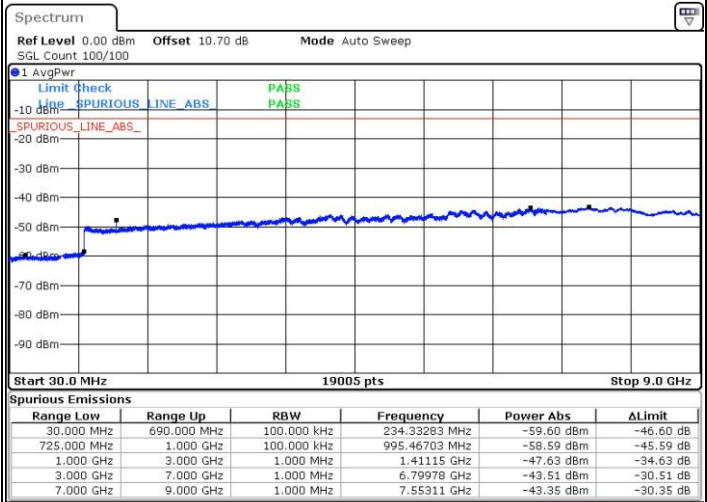
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



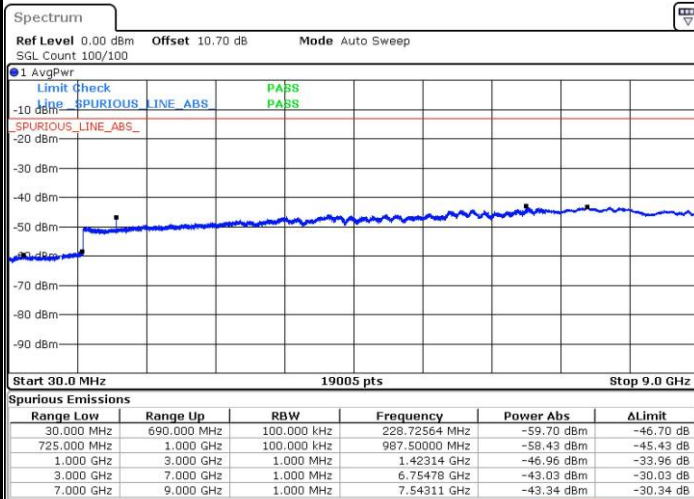
Date: 20 FEB 2019 01:15:07

Middle Channel / 64QAM



Date: 20 FEB 2019 01:16:25

Highest Channel / 64QAM

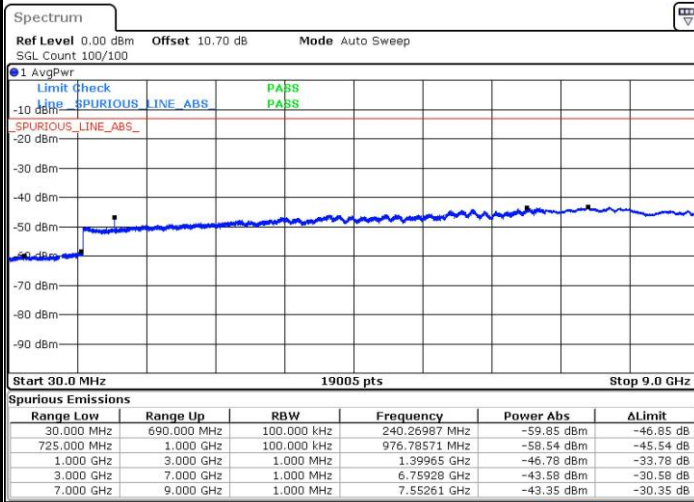


Date: 20 FEB 2019 01:19:44



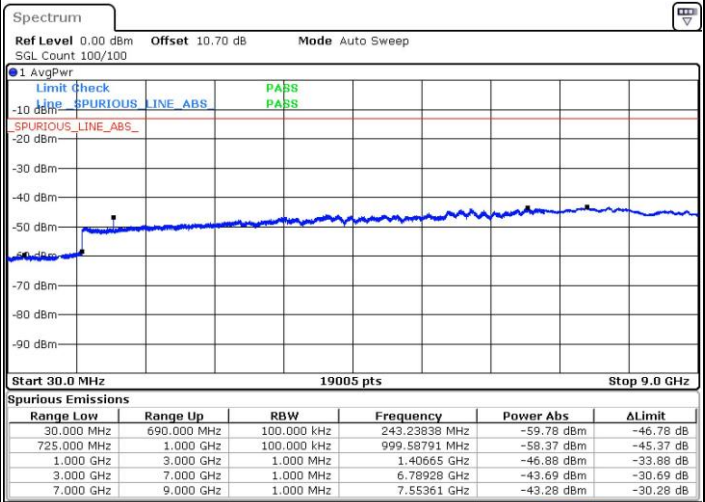
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



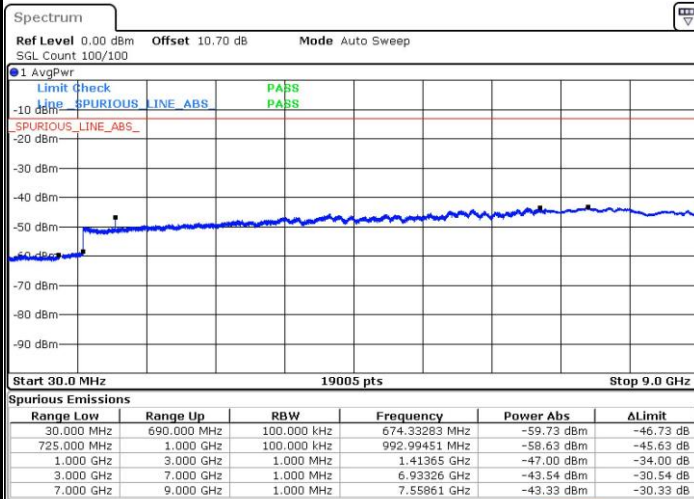
Date: 20 FEB 2019 01:23:02

Middle Channel / 64QAM



Date: 20 FEB 2019 01:24:20

Highest Channel / 64QAM



Date: 20 FEB 2019 01:27:38

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	0.0024	PASS
40	Normal Voltage	0.0020	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0038	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0100	
20	Maximum Voltage	0.0034	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0040	

Note:

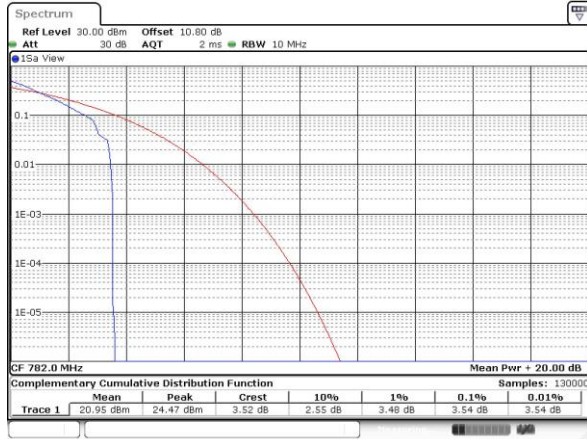
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



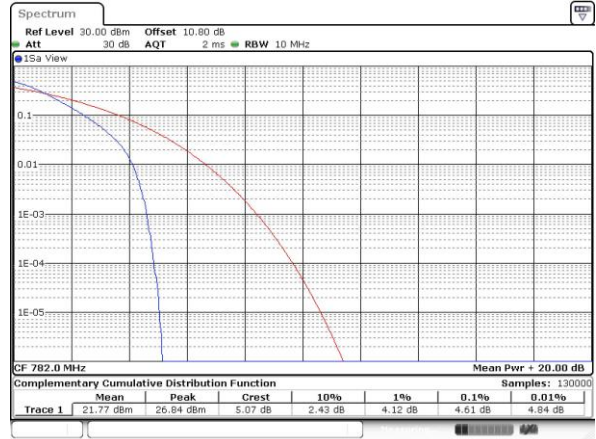
LTE Band 13

Peak-to-Average Ratio

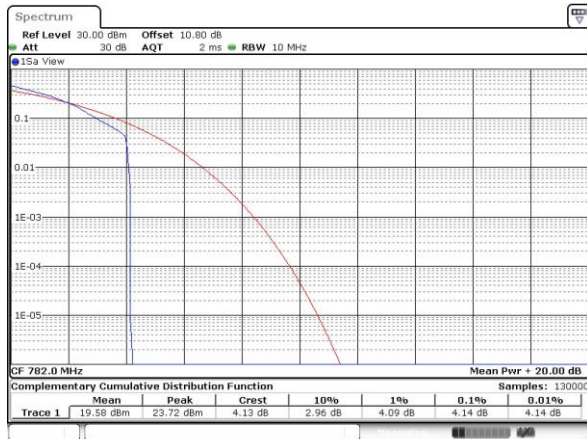
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.54	4.61	4.14	5.42	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.14	5.48	-	-	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK
Middle Channel / 1RB


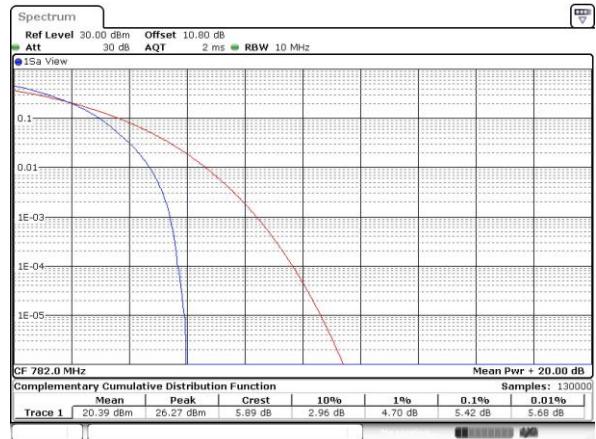
Date: 22 FEB 2019 11:09:16

Middle Channel / Full RB


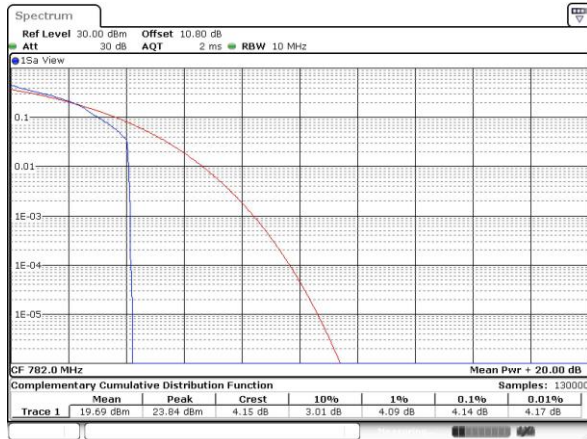
Date: 22 FEB 2019 11:09:27

LTE Band 13 / 10MHz / 16QAM
Middle Channel / 1RB


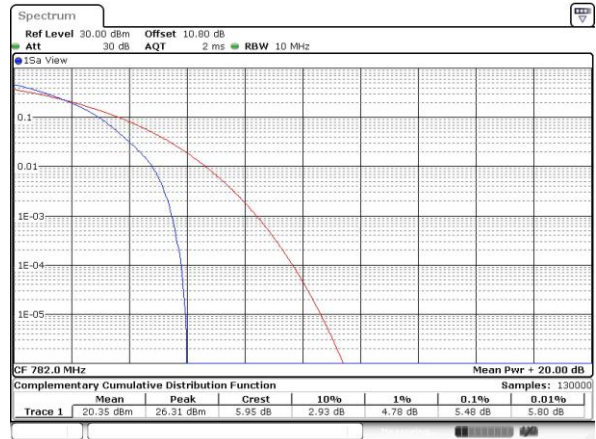
Date: 22 FEB 2019 11:08:55

Middle Channel / Full RB


Date: 22 FEB 2019 11:09:06

LTE Band 13 / 10MHz / 64QAM
Middle Channel / 1RB


Date: 22 FEB 2019 11:08:33

Middle Channel / Full RB


Date: 22 FEB 2019 11:08:44

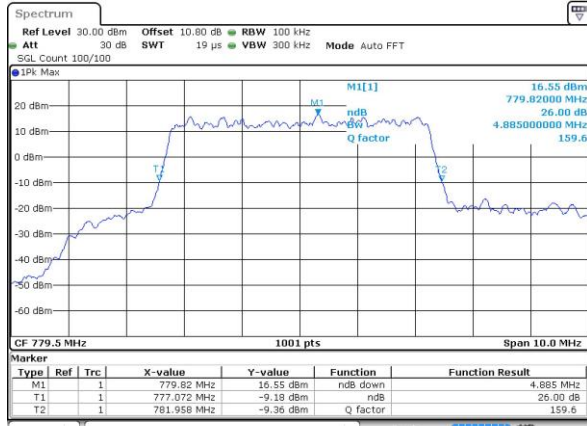
**26dB Bandwidth**

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	-	-	-	-	4.89	4.86	-	-	-	-	-	-
Middle CH	-	-	-	-	4.94	4.96	9.69	9.93	-	-	-	-
Highest CH	-	-	-	-	4.90	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	-	-	-	-	4.91	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.92	-	9.73	-	-	-	-	-
Highest CH	-	-	-	-	4.79	-	-	-	-	-	-	-



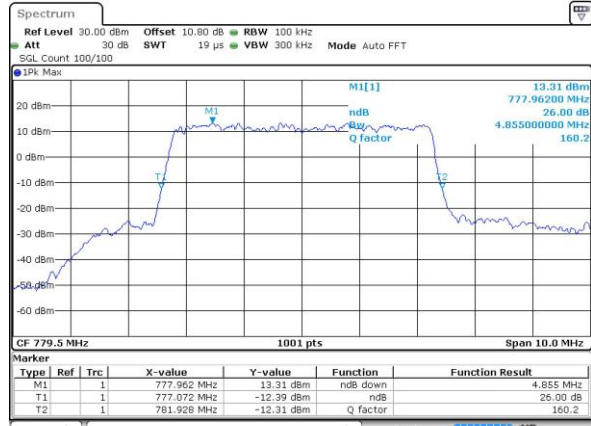
LTE Band 13

Lowest Channel / 5MHz / QPSK



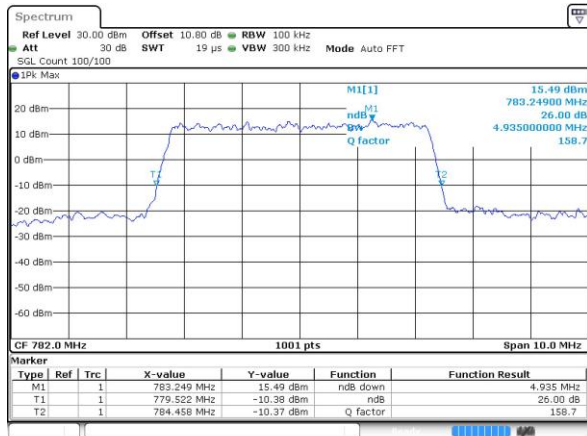
Date: 22 FEB 2019 09:56:03

Lowest Channel / 5MHz / 16QAM



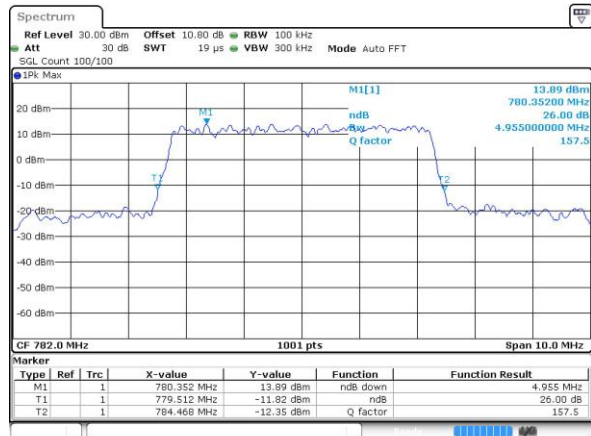
Date: 22 FEB 2019 09:55:52

Middle Channel / 5MHz / QPSK



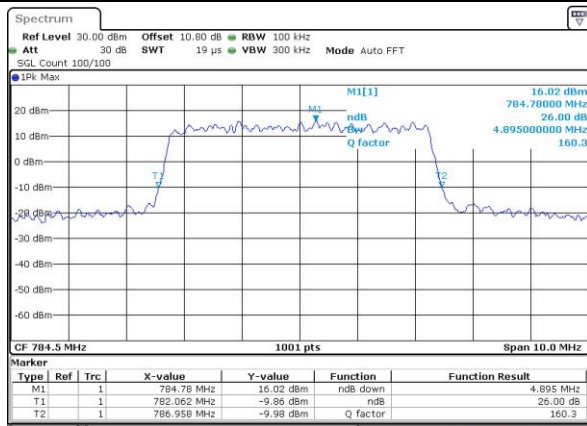
Date: 22 FEB 2019 10:06:17

Middle Channel / 5MHz / 16QAM



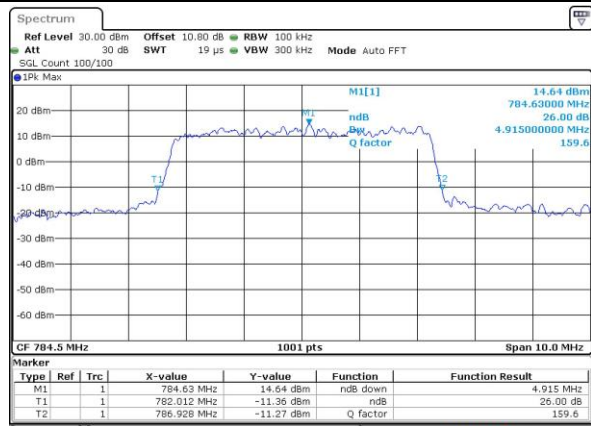
Date: 22 FEB 2019 10:06:28

Highest Channel / 5MHz / QPSK



Date: 22 FEB 2019 10:07:37

Highest Channel / 5MHz / 16QAM

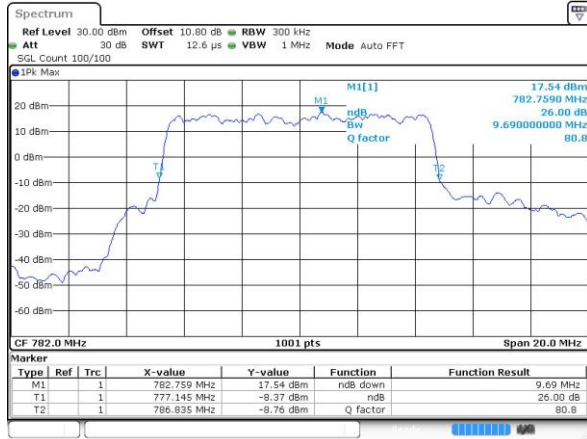


Date: 22 FEB 2019 10:07:26



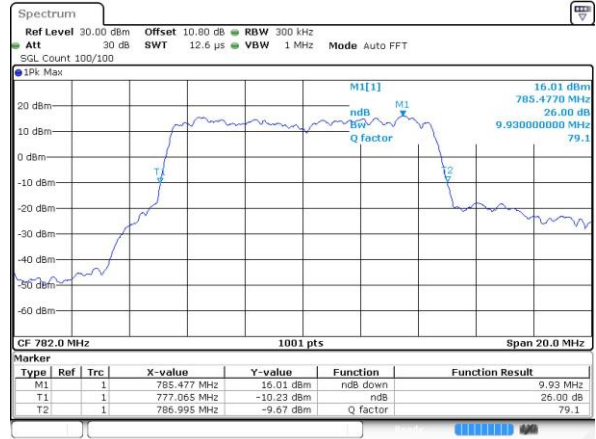
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 22 FEB 2019 10:27:05

Middle Channel / 10MHz / 16QAM

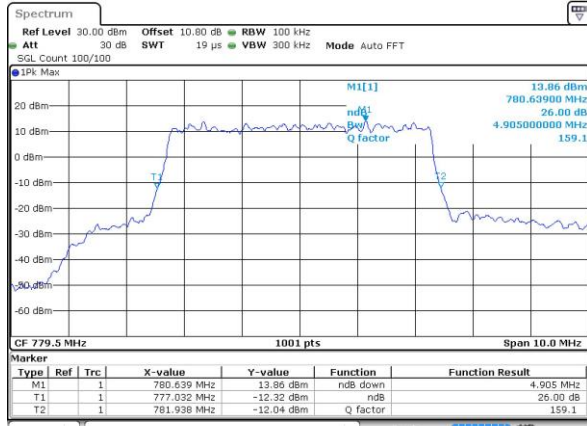


Date: 22 FEB 2019 10:26:54

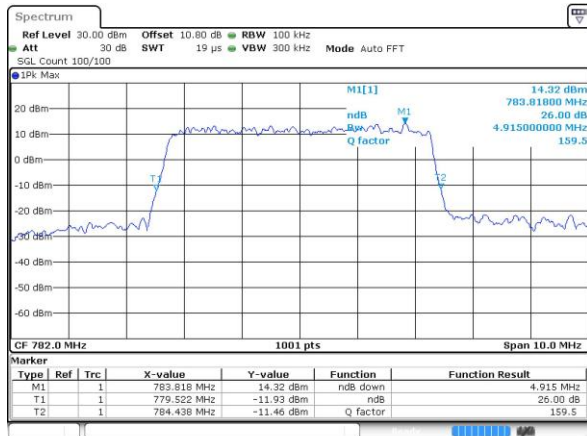


LTE Band 13

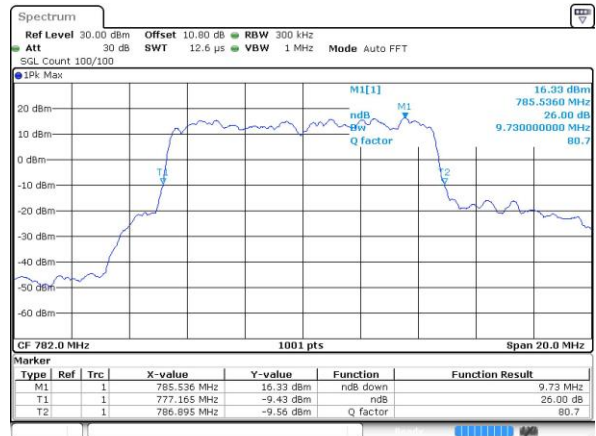
Lowest Channel / 5MHz / 64QAM



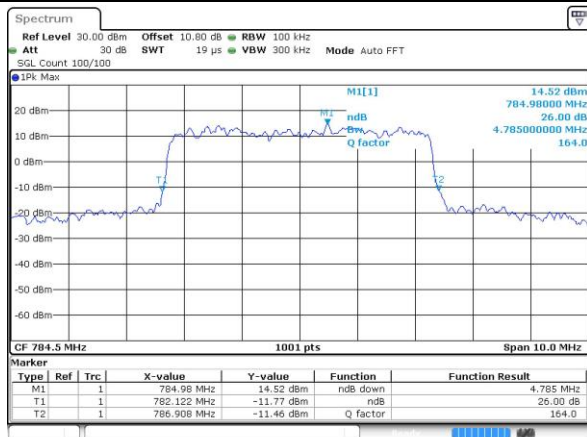
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



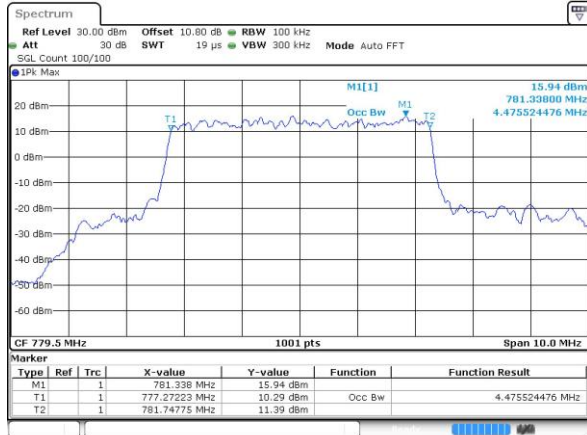
**Occupied Bandwidth**

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	-	-	-	-	4.48	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.52	4.49	9.01	8.97	-	-	-	-
Highest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-
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	-	-	-	-	4.47	-	9.07	-	-	-	-	-
Highest CH	-	-	-	-	4.52	-	-	-	-	-	-	-



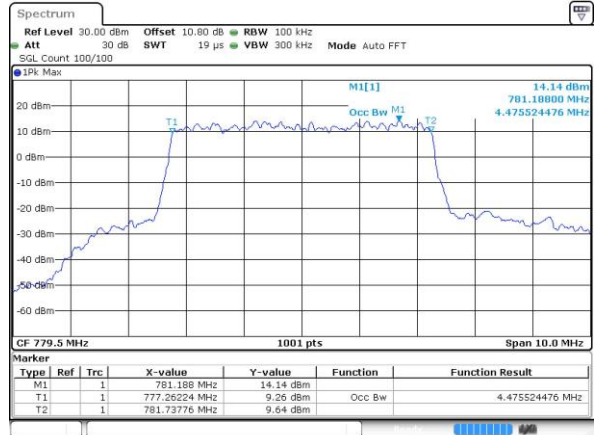
LTE Band 13

Lowest Channel / 5MHz / QPSK



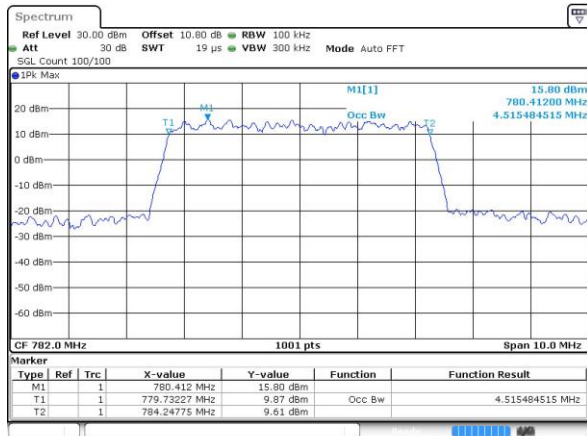
Date: 22 FEB 2019 09:55:29

Lowest Channel / 5MHz / 16QAM



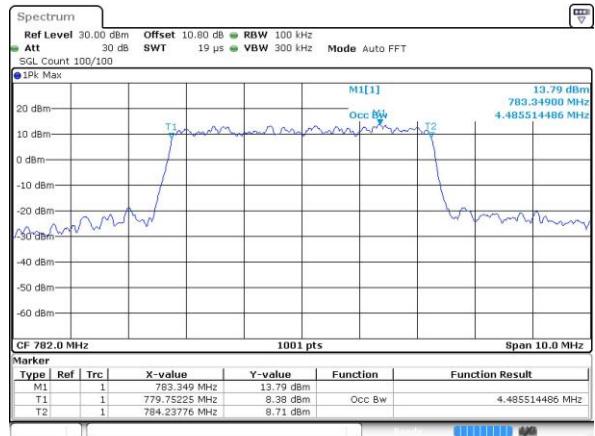
Date: 22 FEB 2019 09:55:41

Middle Channel / 5MHz / QPSK



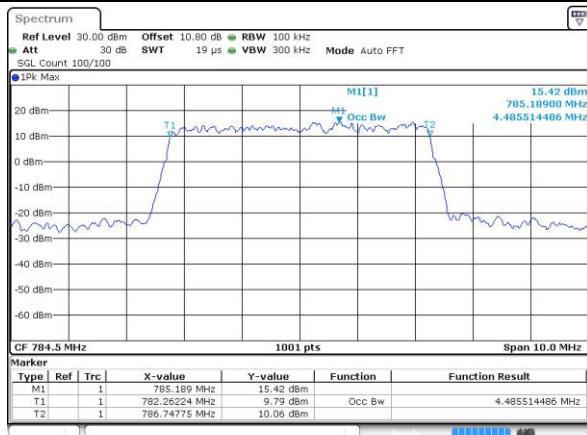
Date: 22 FEB 2019 10:06:51

Middle Channel / 5MHz / 16QAM



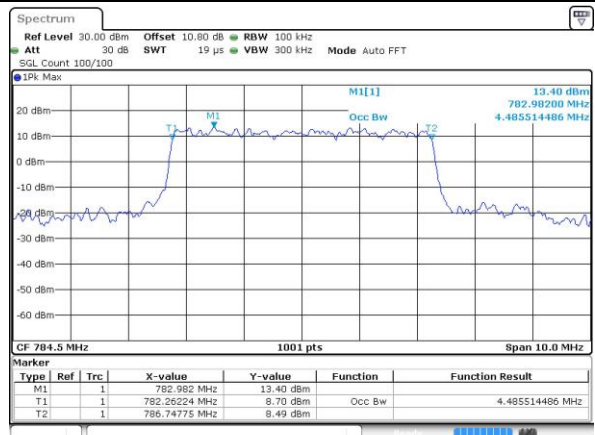
Date: 22 FEB 2019 10:06:40

Highest Channel / 5MHz / QPSK



Date: 22 FEB 2019 10:07:03

Highest Channel / 5MHz / 16QAM

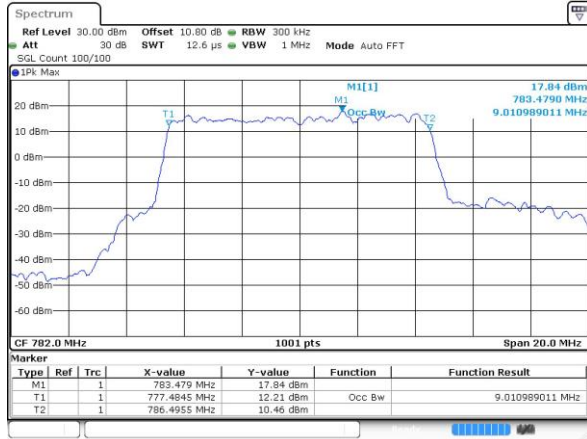


Date: 22 FEB 2019 10:07:14



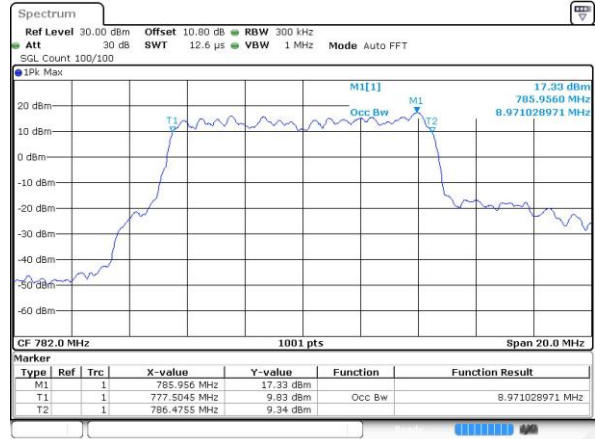
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 22 FEB 2019 10:26:31

Middle Channel / 10MHz / 16QAM

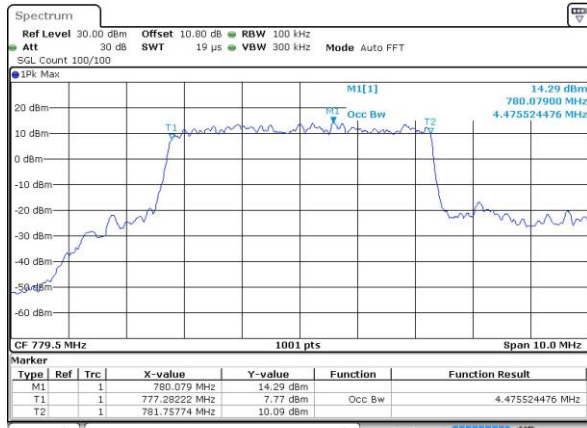


Date: 22 FEB 2019 10:26:42

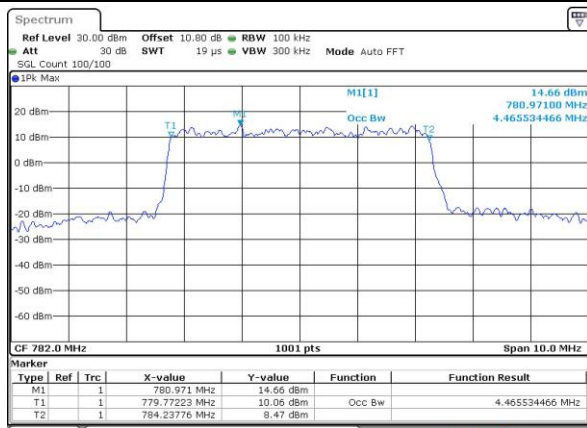


LTE Band 13

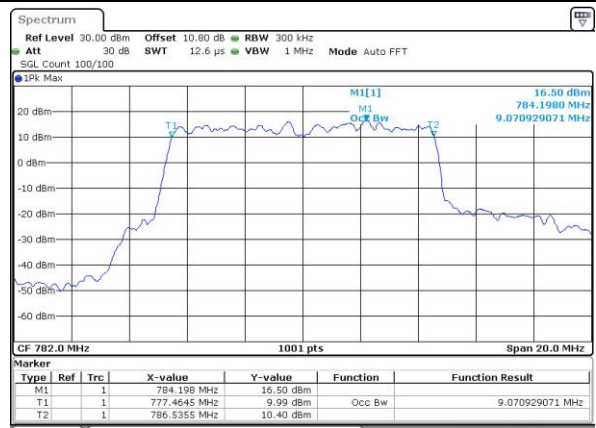
Lowest Channel / 5MHz / 64QAM



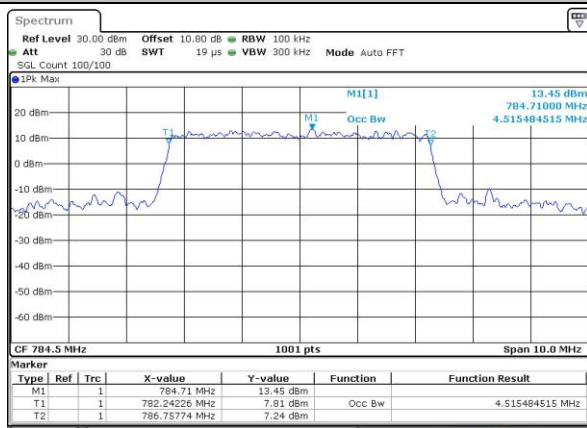
Middle Channel / 5MHz / 64QAM

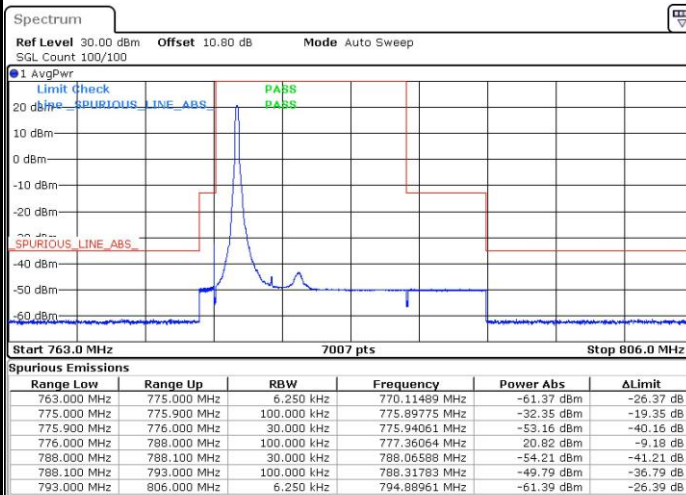


Middle Channel / 10MHz / 64QAM

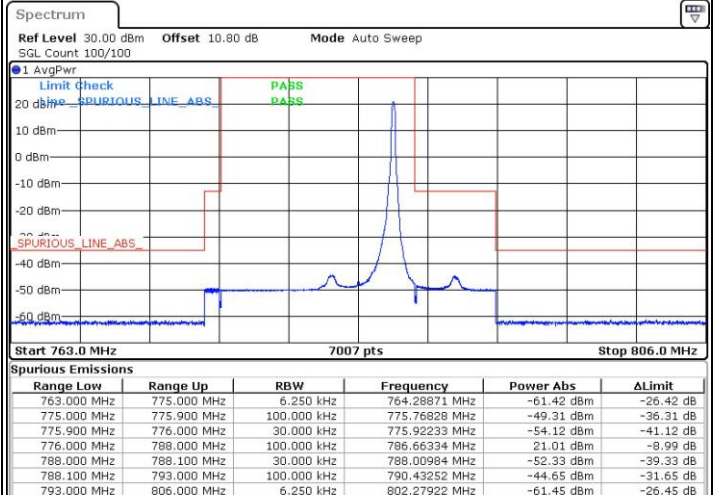


Highest Channel / 5MHz / 64QAM

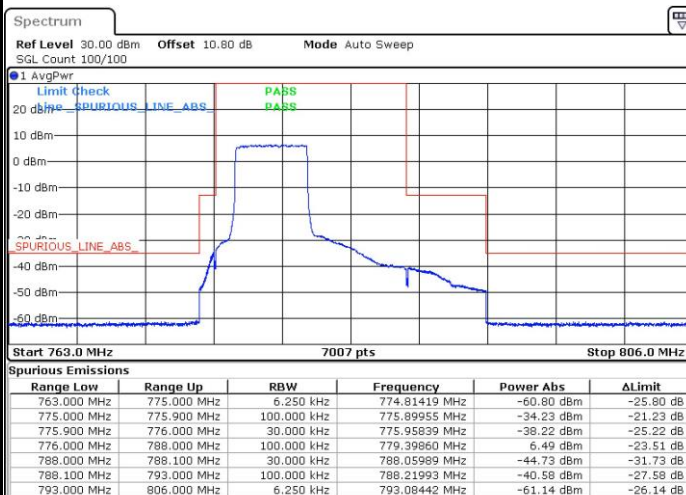


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB**

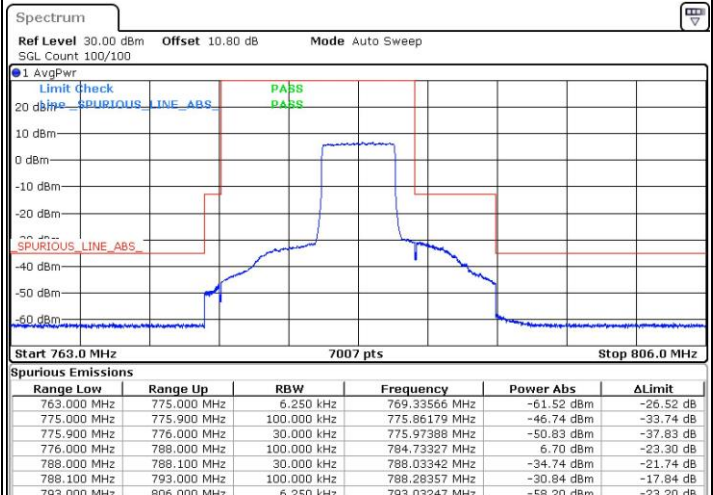
Date: 22 FEB 2019 10:02:45

Highest Band Edge / 1 RB

Date: 22 FEB 2019 10:14:18

Lowest Band Edge / Full RB

Date: 22 FEB 2019 09:57:44

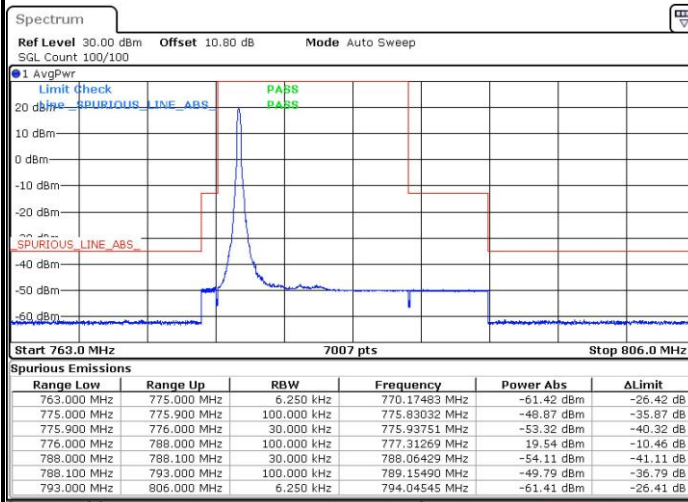
Highest Band Edge / Full RB

Date: 22 FEB 2019 10:09:17



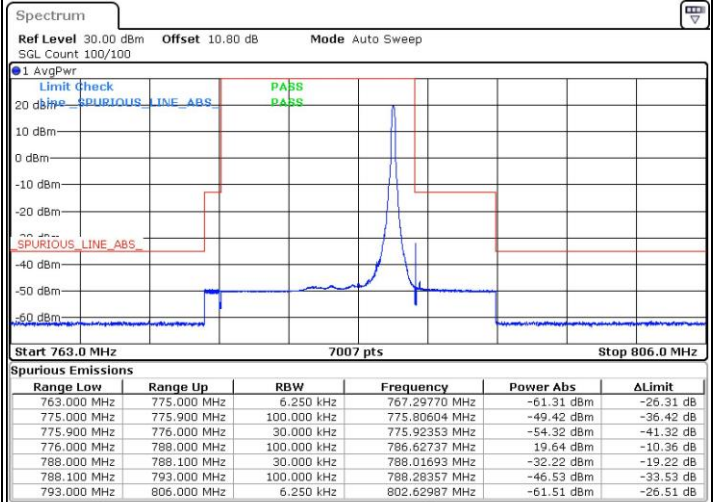
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



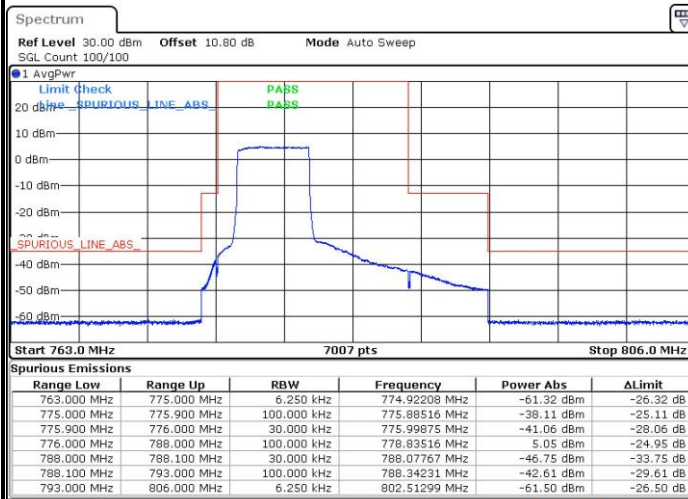
Date: 22.FEB.2019 10:01:05

Highest Band Edge / 1 RB



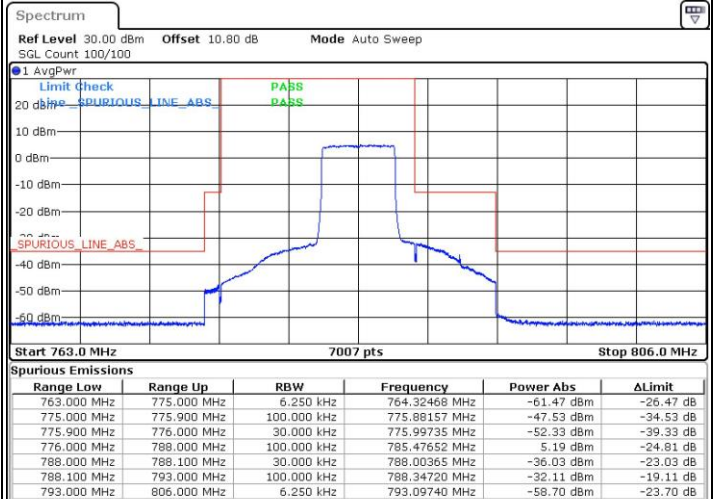
Date: 22.FEB.2019 10:12:38

Lowest Band Edge / Full RB



Date: 22.FEB.2019 09:59:24

Highest Band Edge / Full RB

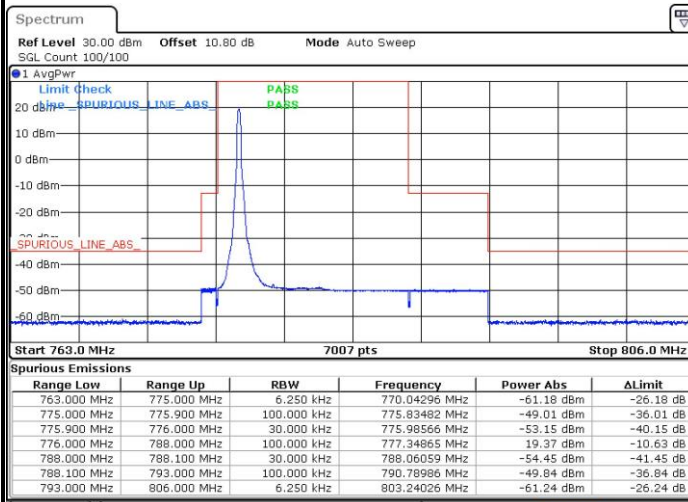


Date: 22.FEB.2019 10:10:57

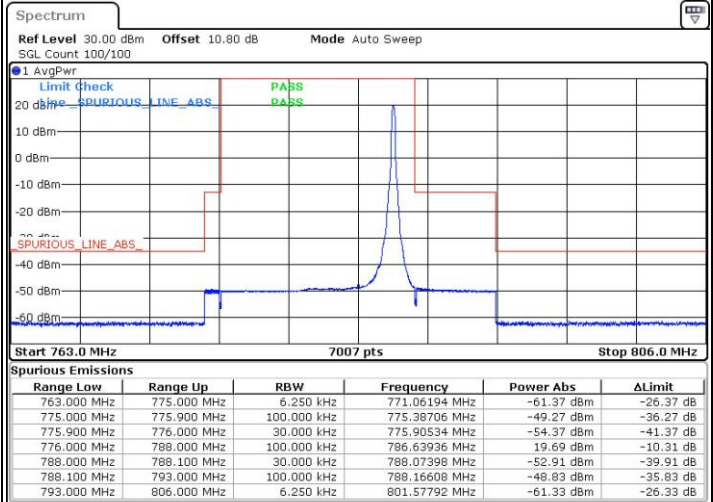


LTE Band 13 / 5MHz / 64QAM

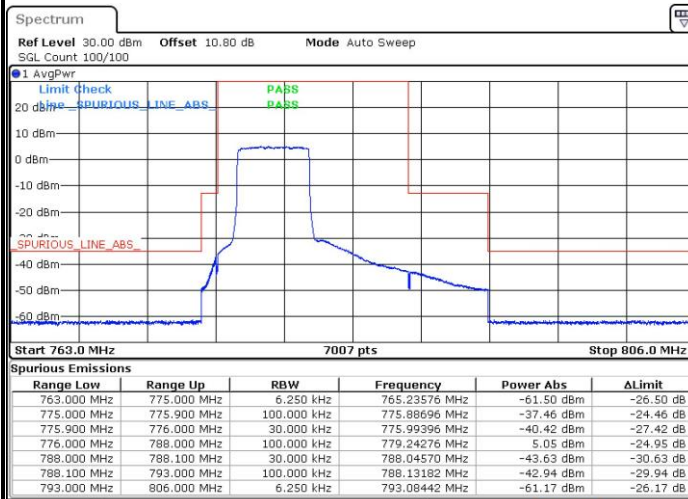
Lowest Band Edge / 1 RB



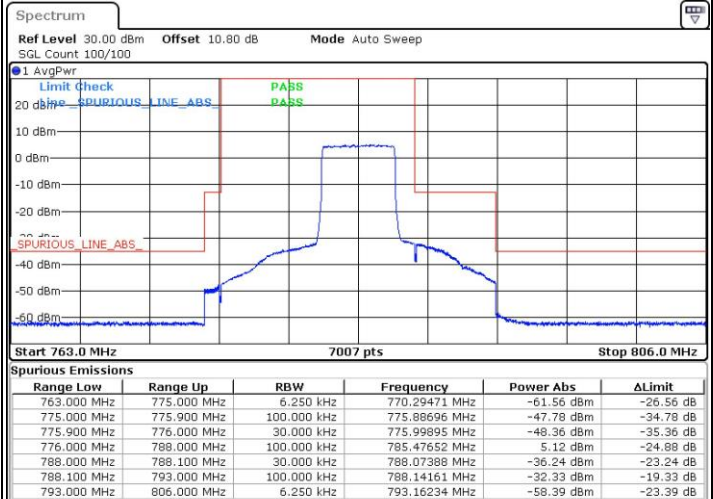
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



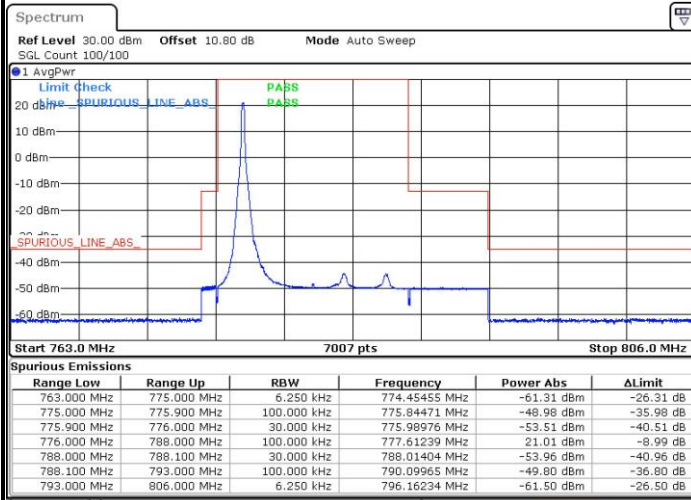
Highest Band Edge / Full RB





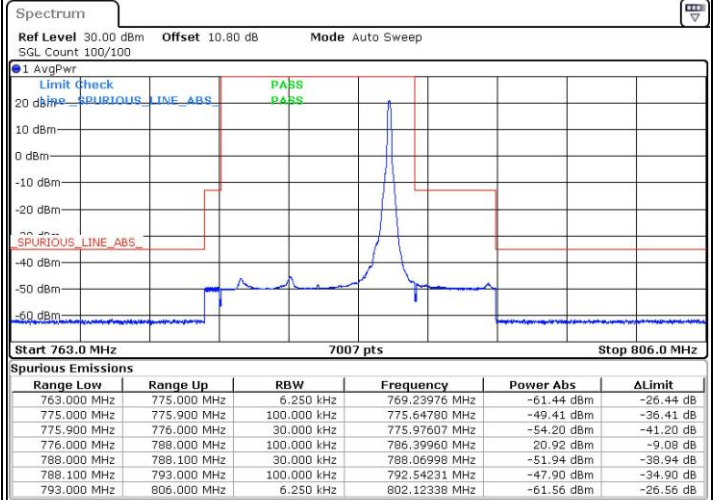
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



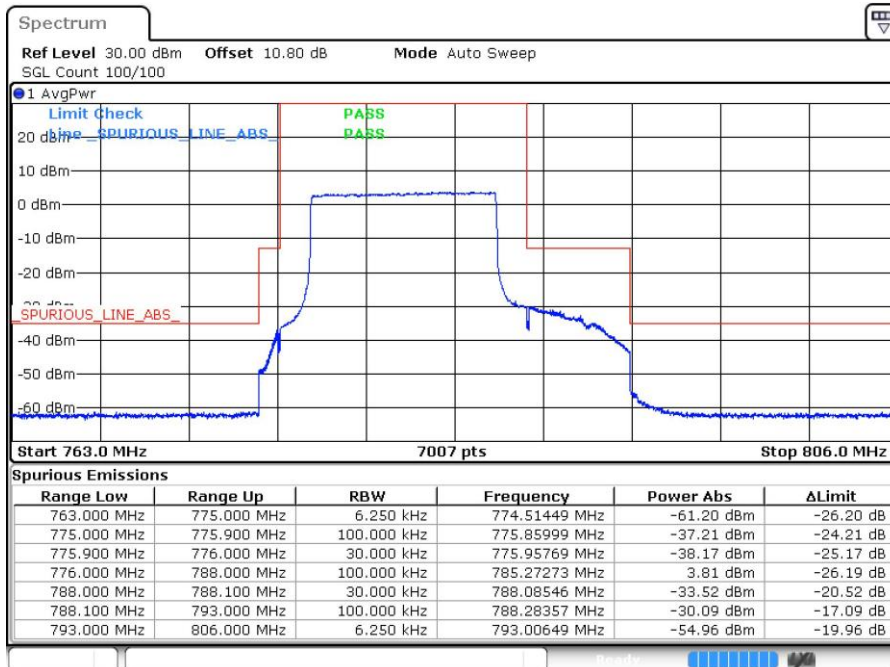
Date: 22.FEB.2019 10:33:46

Highest Band Edge / 1 RB



Date: 22.FEB.2019 10:35:27

Band Edge / Full RB

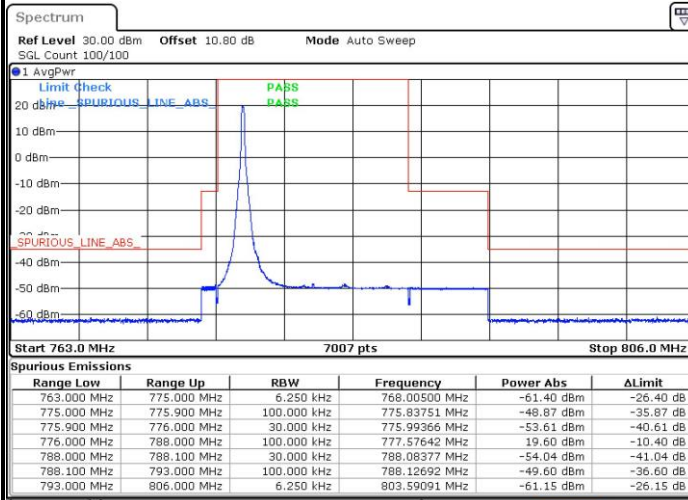


Date: 22.FEB.2019 10:28:45



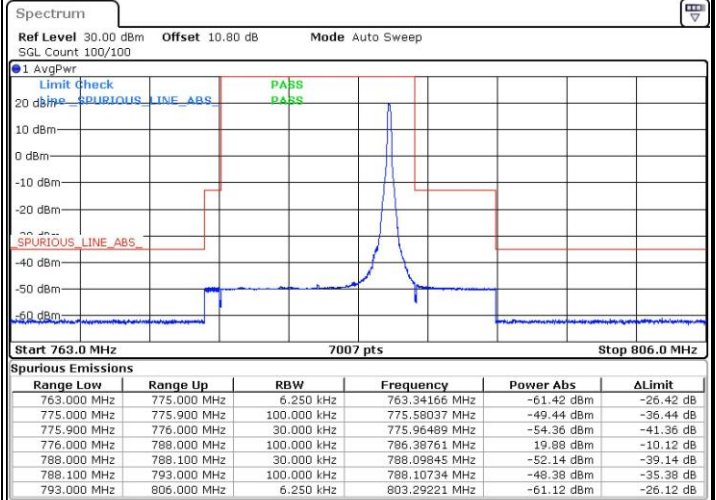
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



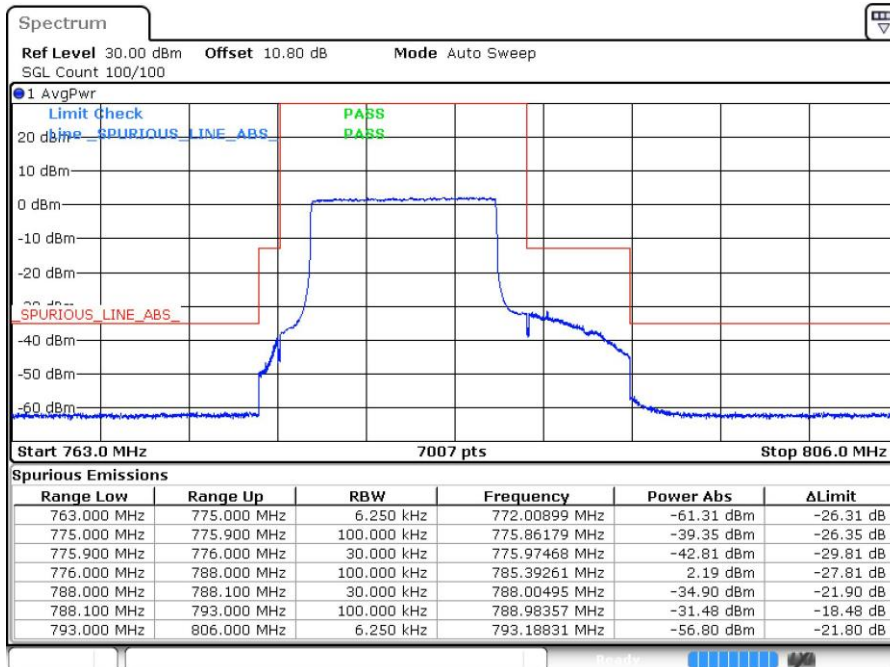
Date: 22.FEB.2019 10:32:06

Highest Band Edge / 1 RB



Date: 22.FEB.2019 10:37:07

Band Edge / Full RB

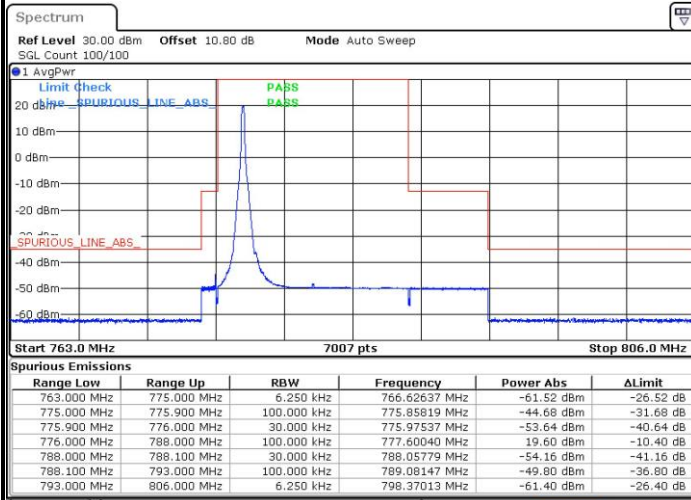


Date: 22.FEB.2019 10:30:26



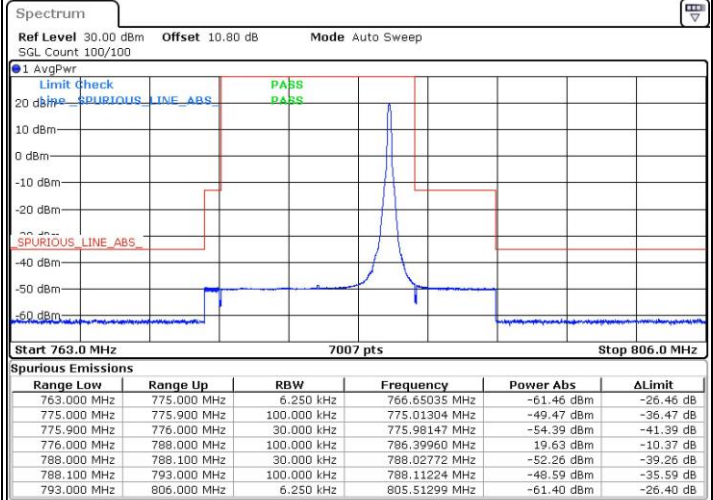
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



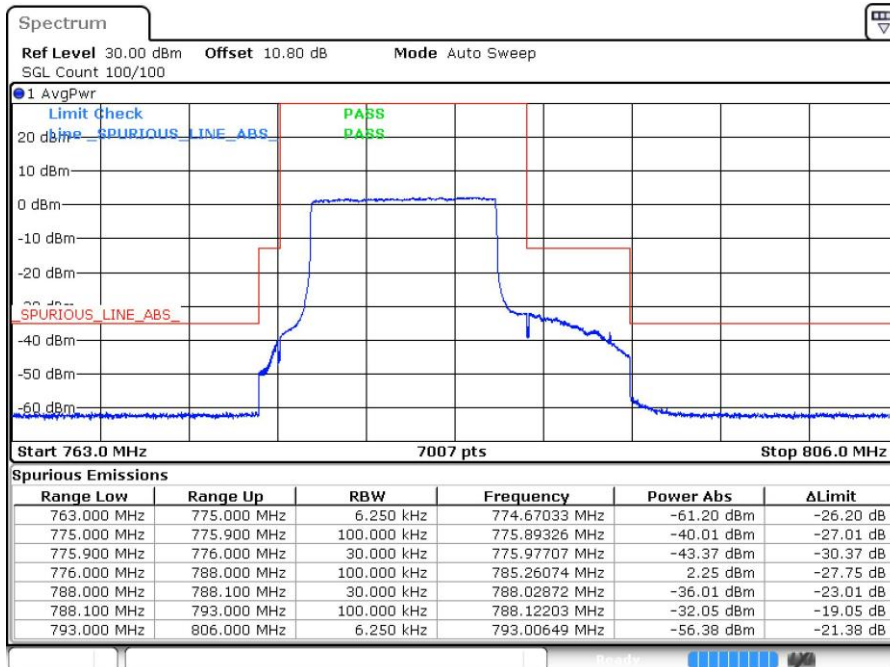
Date: 22.FEB.2019 10:42:31

Highest Band Edge / 1 RB



Date: 22.FEB.2019 10:44:11

Band Edge / Full RB



Date: 22.FEB.2019 10:40:50