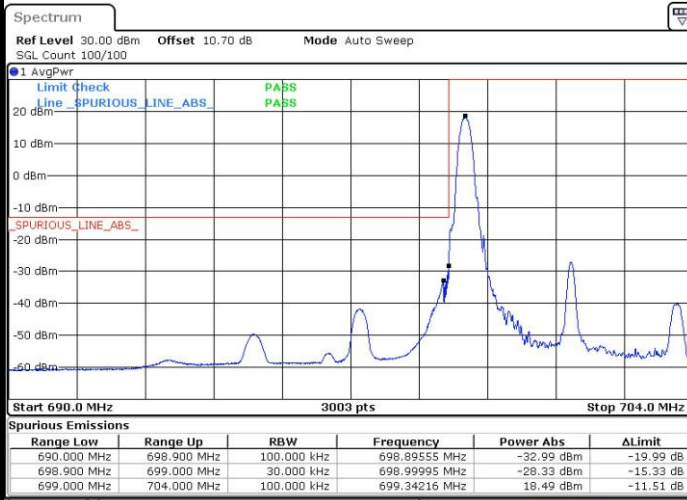




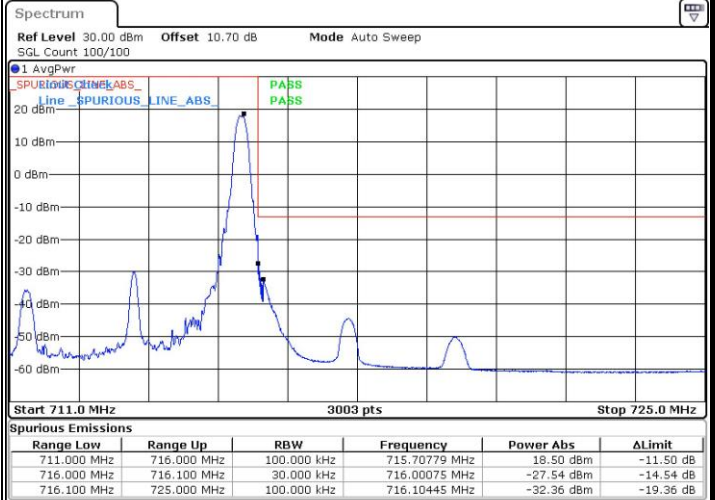
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



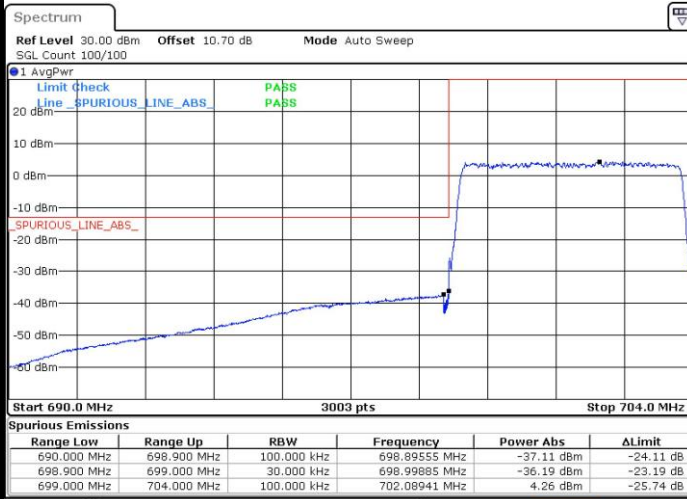
Date: 14.FEB.2019 23:44:41

Highest Band Edge / 1 RB



Date: 14.FEB.2019 23:49:07

Lowest Band Edge / Full RB



Date: 14.FEB.2019 23:43:46

Highest Band Edge / Full RB

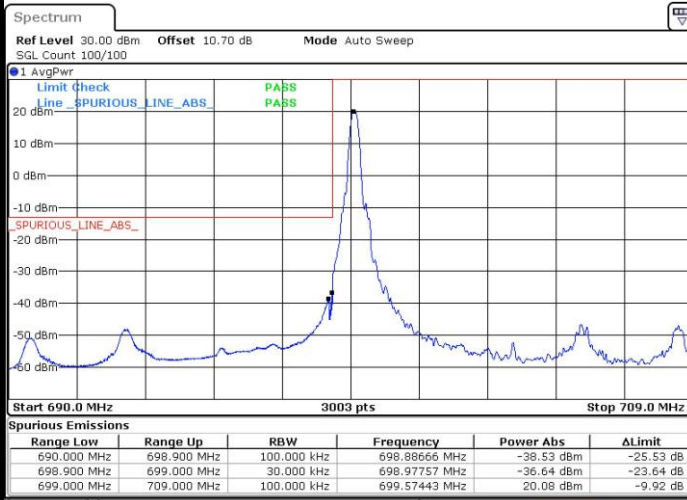


Date: 14.FEB.2019 23:48:12



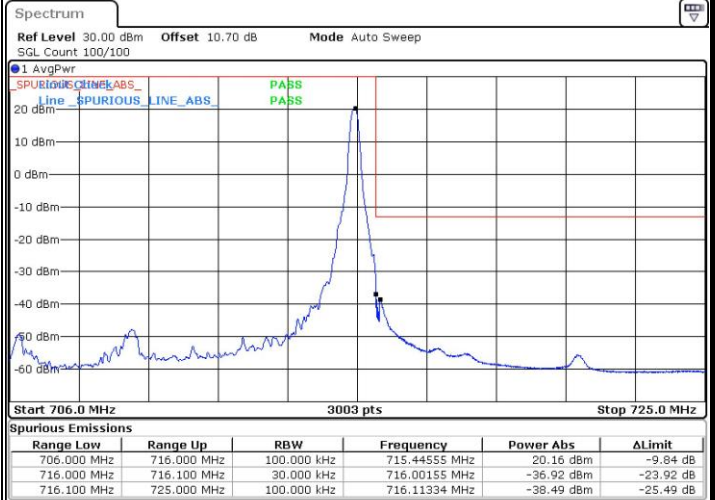
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



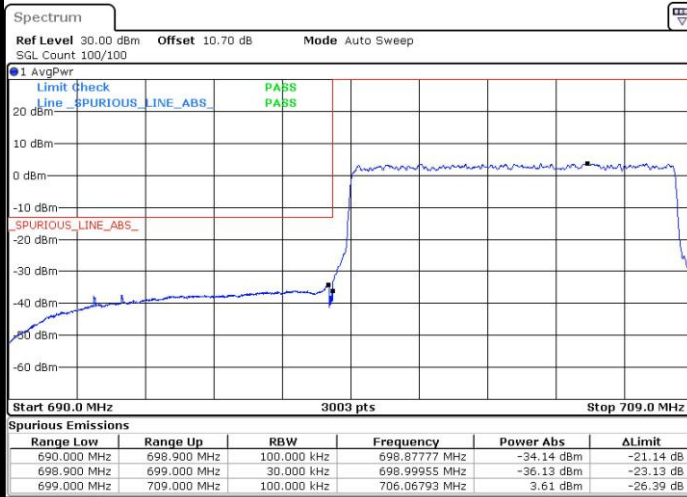
Date: 14.FEB.2019 23:09:05

Highest Band Edge / 1 RB



Date: 14.FEB.2019 23:17:57

Lowest Band Edge / Full RB



Date: 14.FEB.2019 23:06:20

Highest Band Edge / Full RB

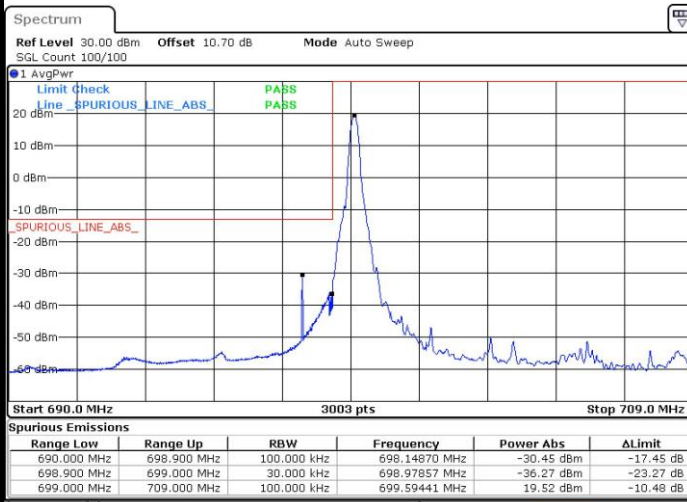


Date: 14.FEB.2019 23:15:12



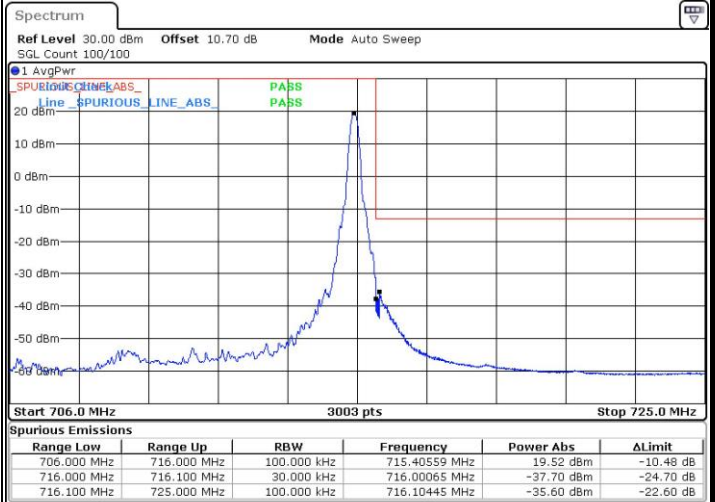
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



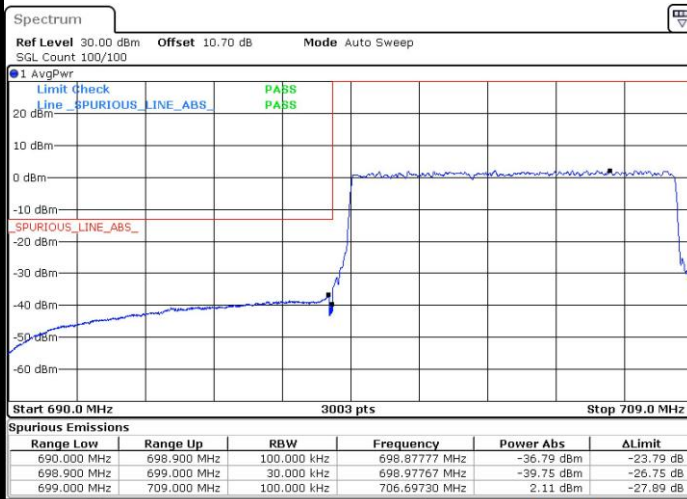
Date: 14.FEB.2019 23:08:10

Highest Band Edge / 1 RB



Date: 14.FEB.2019 23:17:02

Lowest Band Edge / Full RB



Date: 14.FEB.2019 23:07:15

Highest Band Edge / Full RB

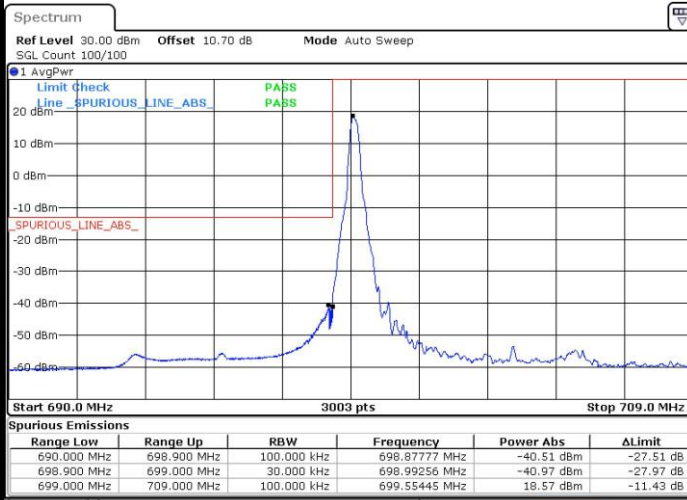


Date: 14.FEB.2019 23:16:07



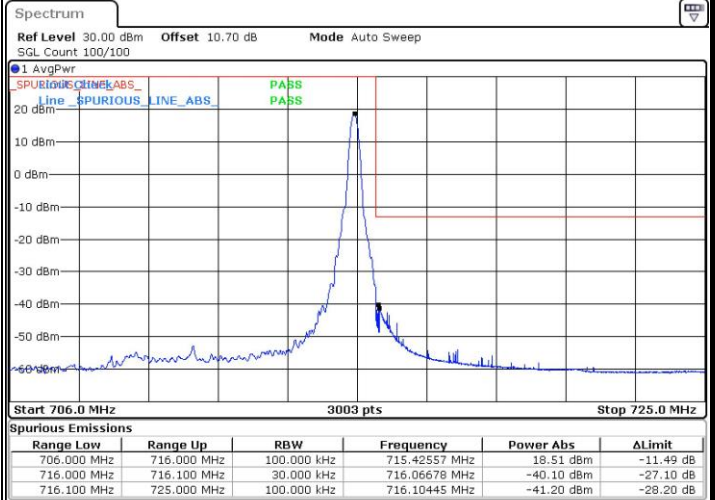
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



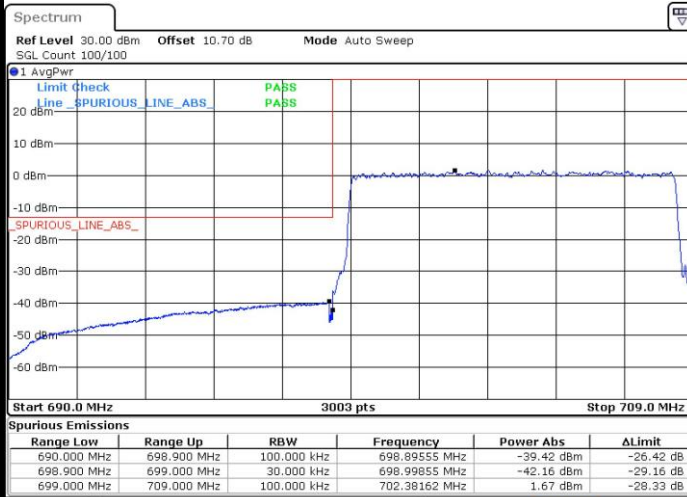
Date: 14.FEB.2019 23:52:15

Highest Band Edge / 1 RB



Date: 14.FEB.2019 23:57:44

Lowest Band Edge / Full RB



Date: 14.FEB.2019 23:51:20

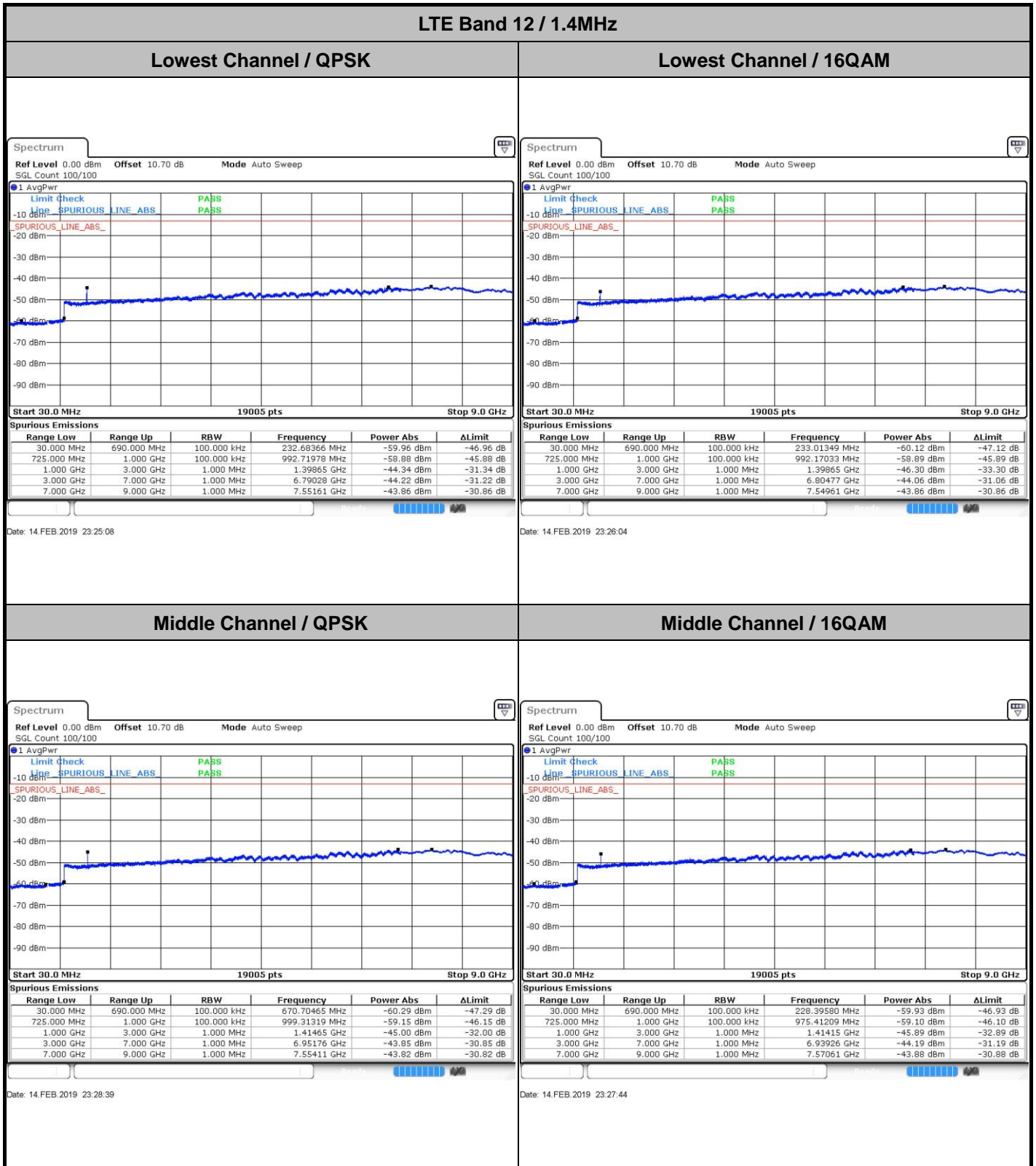
Highest Band Edge / Full RB



Date: 14.FEB.2019 23:56:49



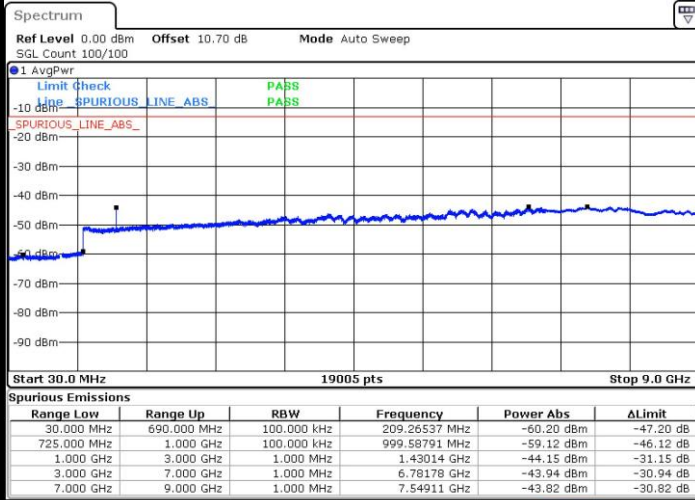
Conducted Spurious Emission





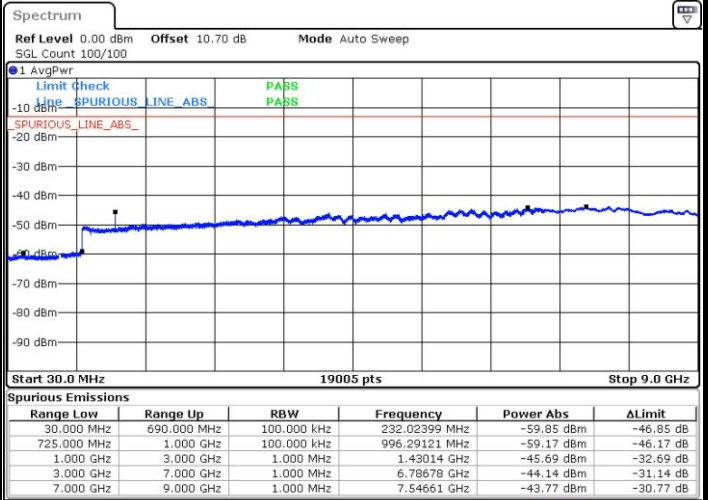
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 14.FEB.2019 23:34:00

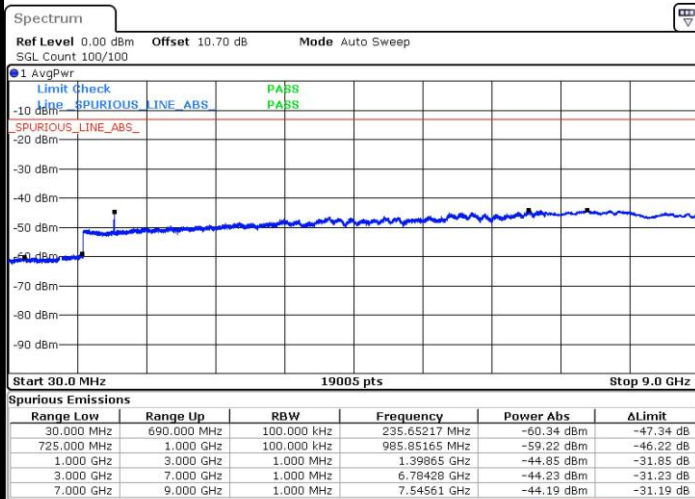
Highest Channel / 16QAM



Date: 14.FEB.2019 23:34:55

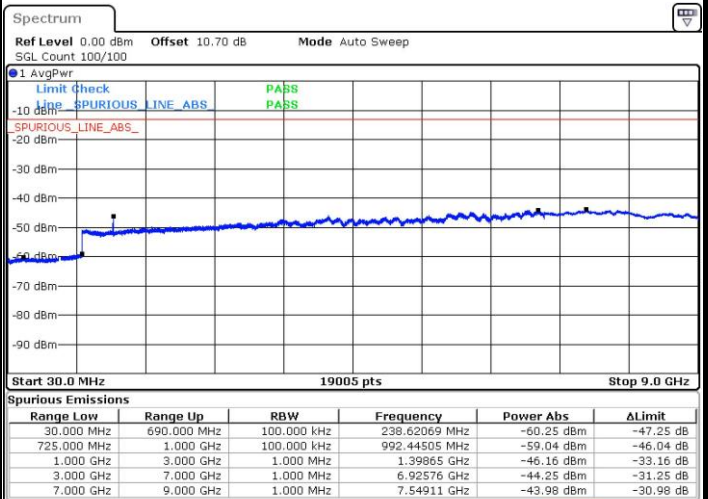
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 14.FEB.2019 22:39:45

Lowest Channel / 16QAM



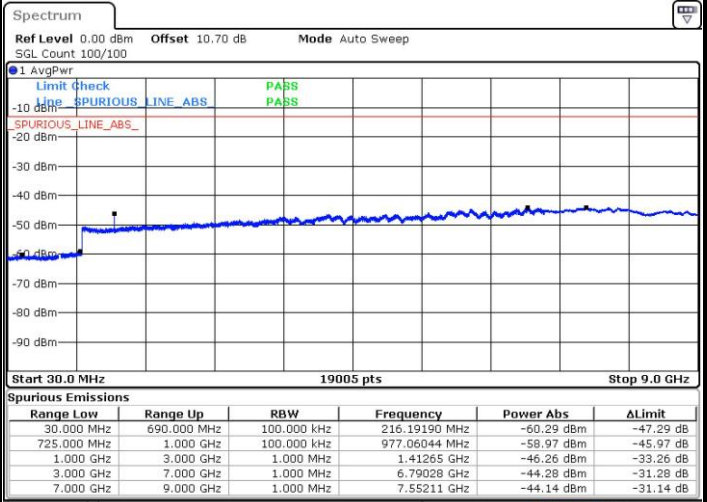
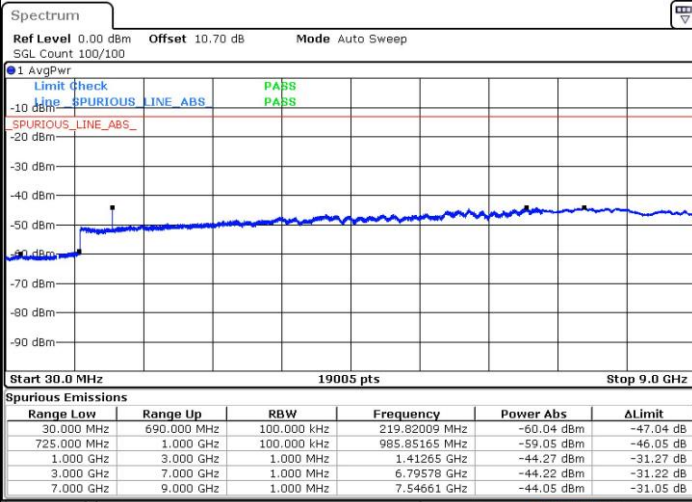
Date: 14.FEB.2019 22:40:40



LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

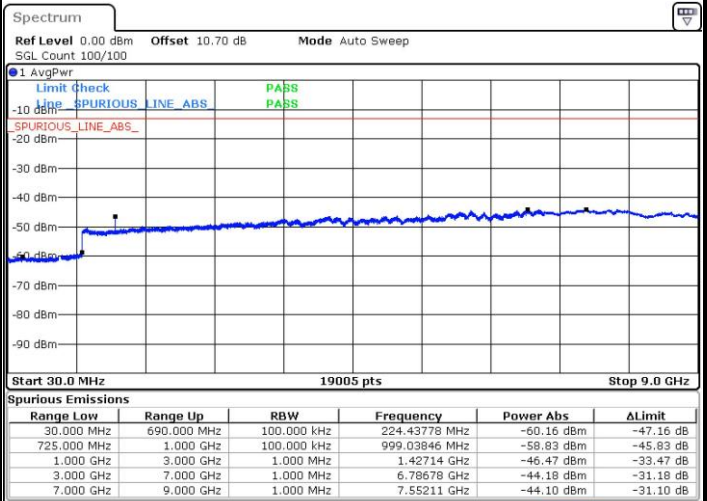
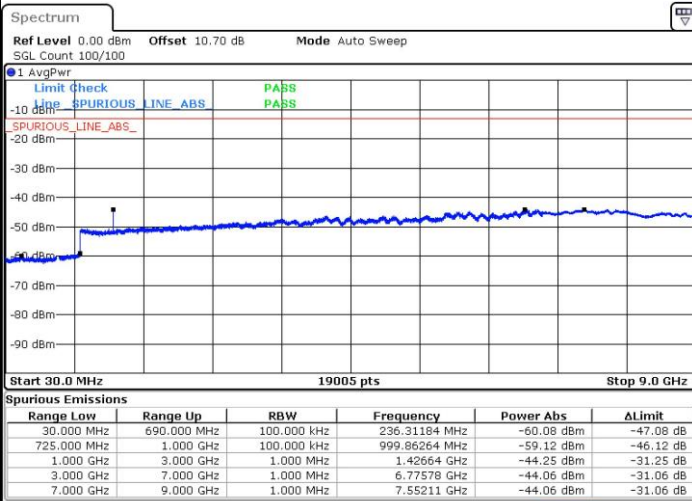


Date: 14.FEB.2019 22:43:16

Date: 14.FEB.2019 22:42:21

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 14.FEB.2019 22:48:37

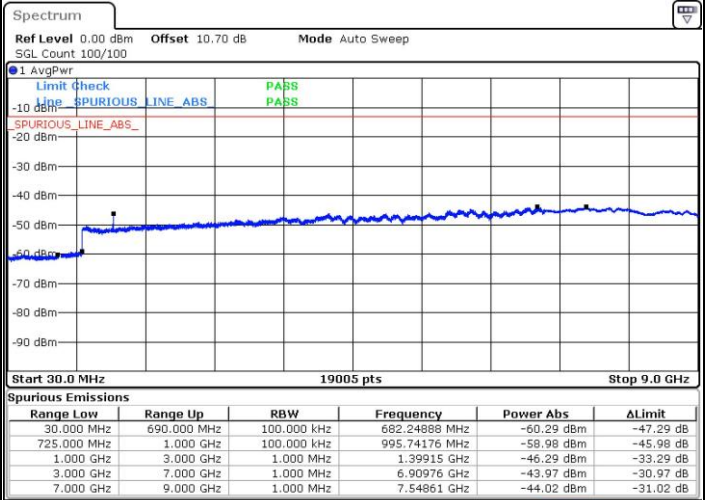
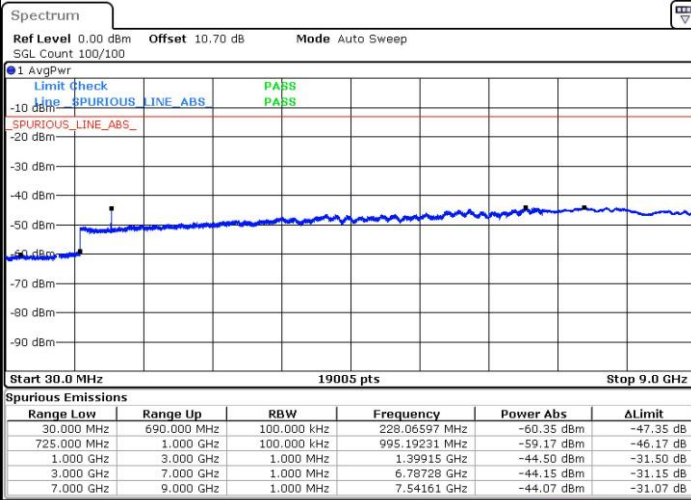
Date: 14.FEB.2019 22:49:32



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

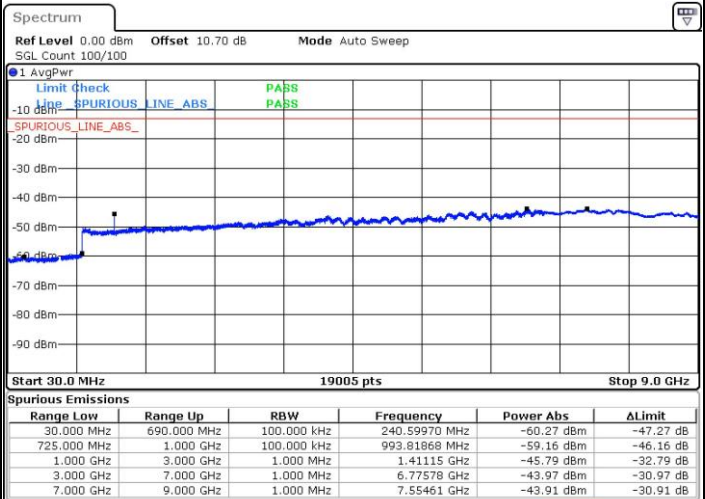
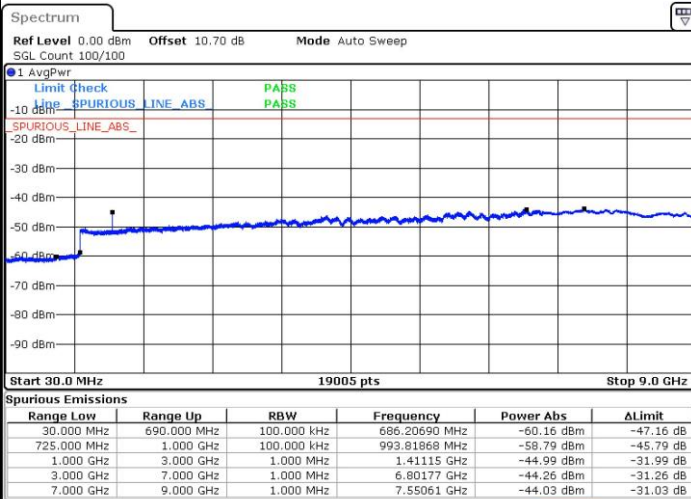


Date: 14.FEB.2019 22:54:53

Date: 14.FEB.2019 22:55:48

Middle Channel / QPSK

Middle Channel / 16QAM



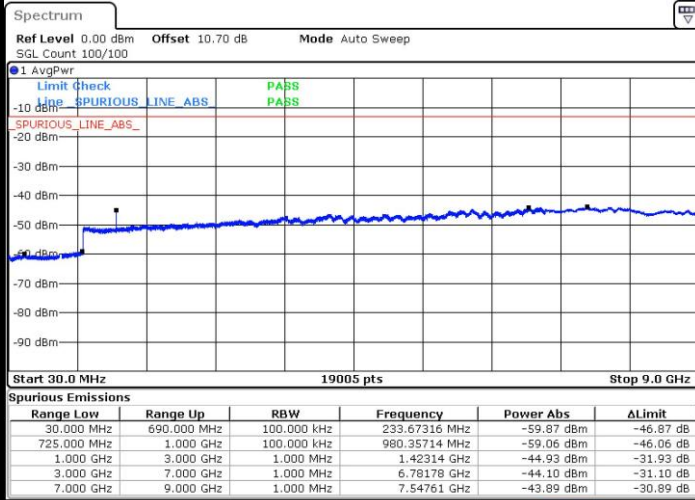
Date: 14.FEB.2019 22:58:24

Date: 14.FEB.2019 22:57:29



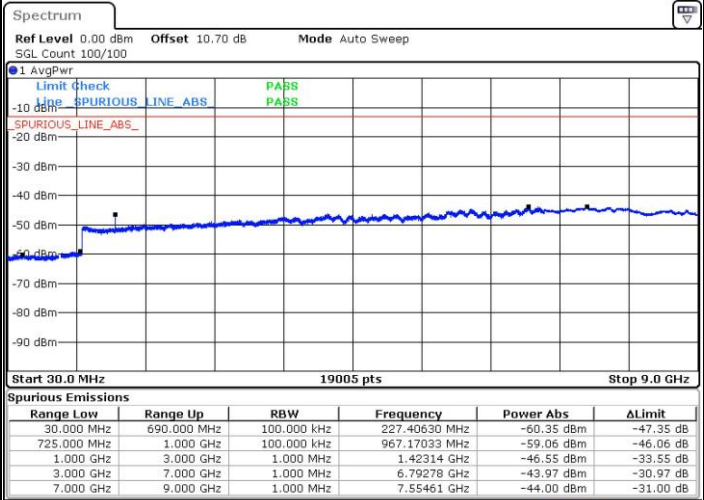
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 14.FEB.2019 23:04:40

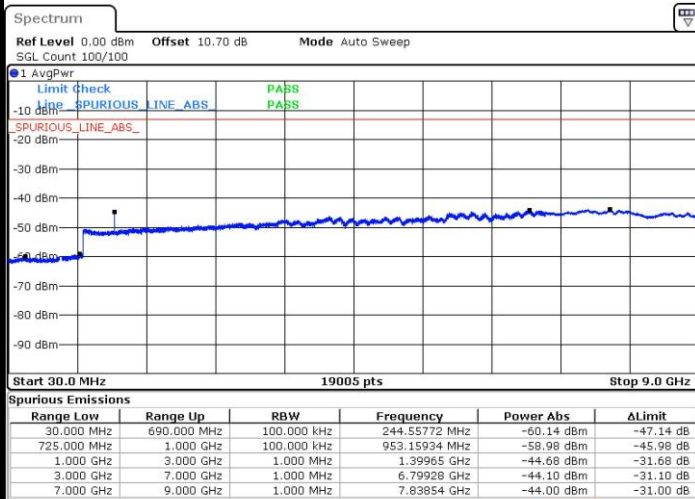
Highest Channel / 16QAM



Date: 14.FEB.2019 23:03:45

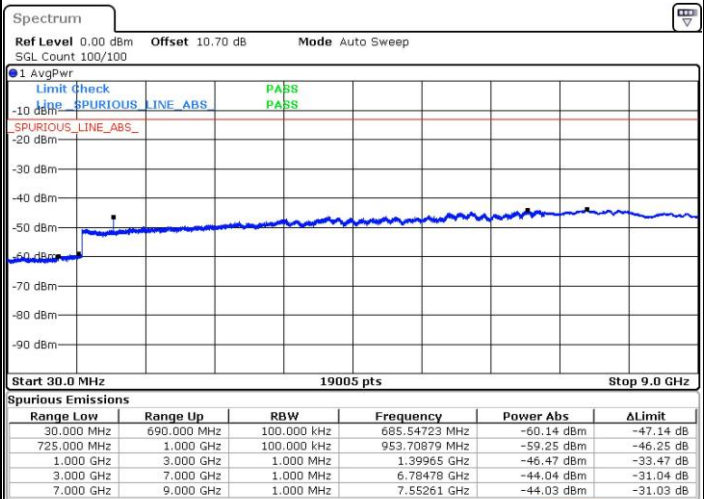
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 14.FEB.2019 23:10:01

Lowest Channel / 16QAM

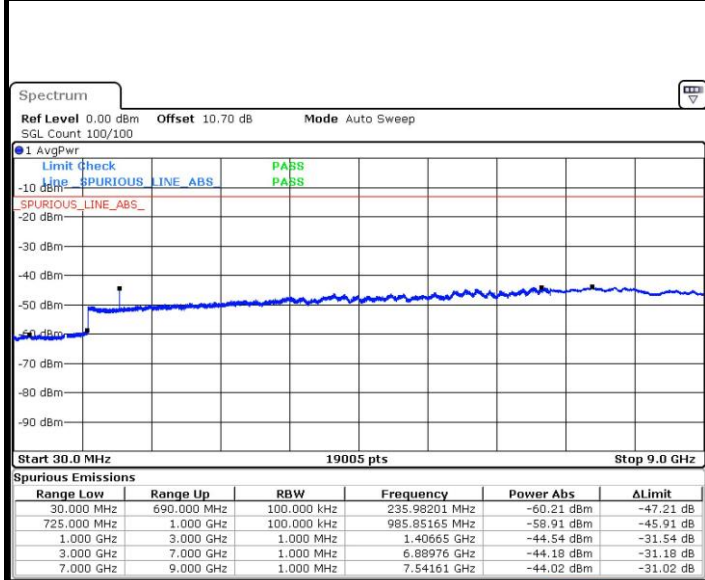


Date: 14.FEB.2019 23:10:56



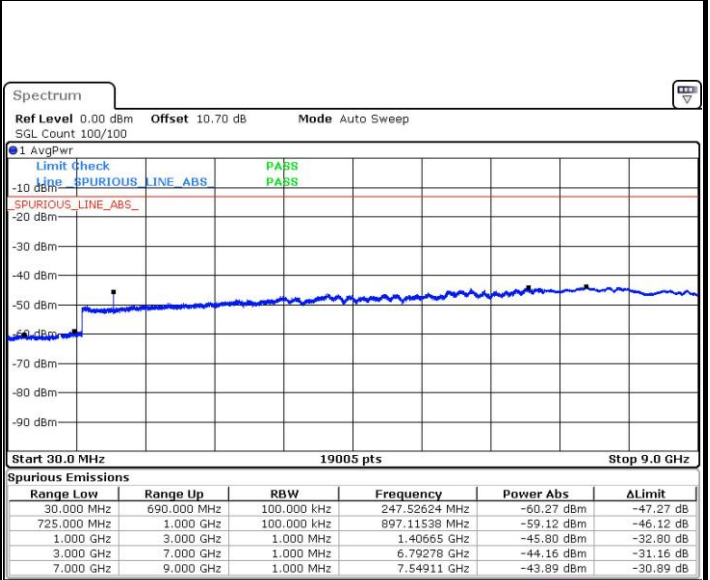
LTE Band 12 / 10MHz

Middle Channel / QPSK



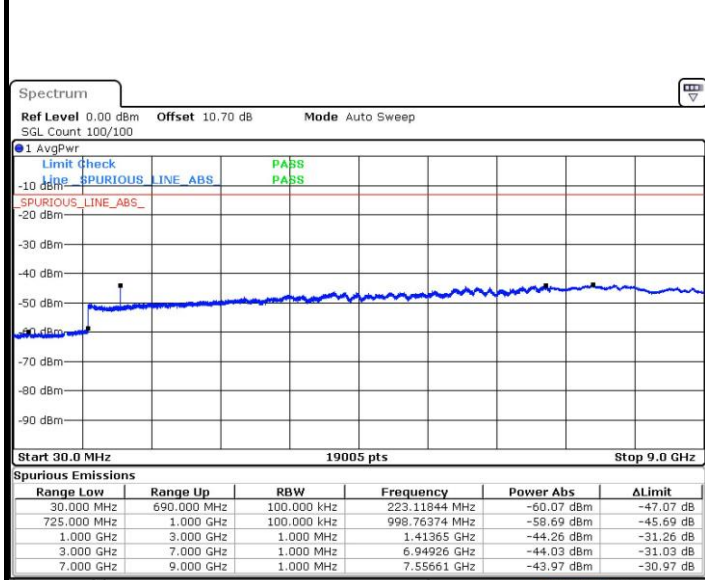
Date: 14.FEB.2019 23:13:32

Middle Channel / 16QAM



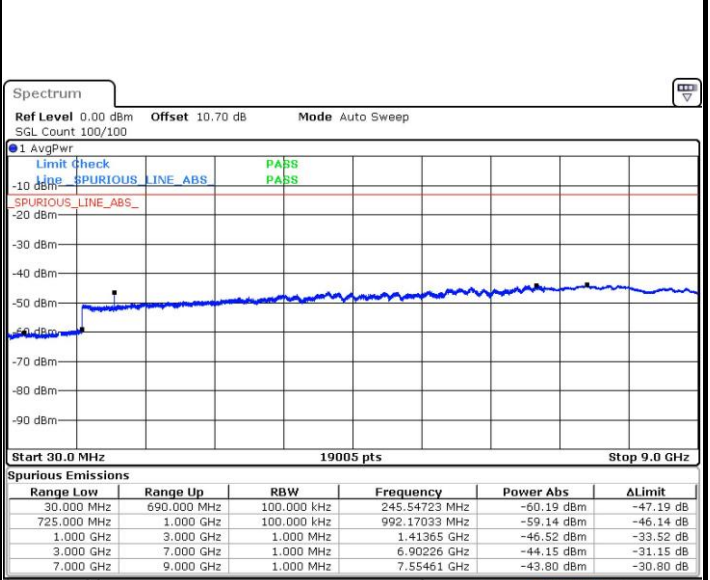
Date: 14.FEB.2019 23:12:37

Highest Channel / QPSK



Date: 14.FEB.2019 23:18:53

Highest Channel / 16QAM



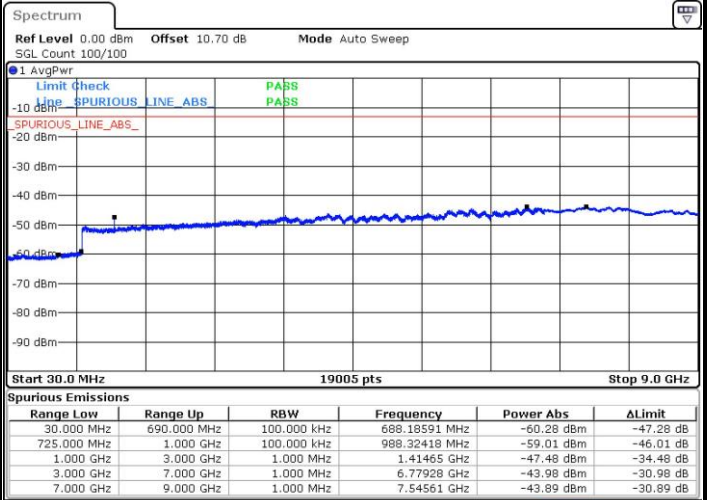
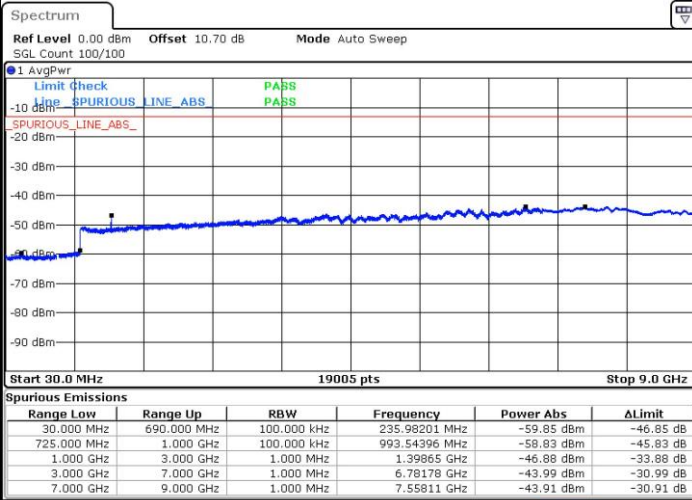
Date: 14.FEB.2019 23:19:48



LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

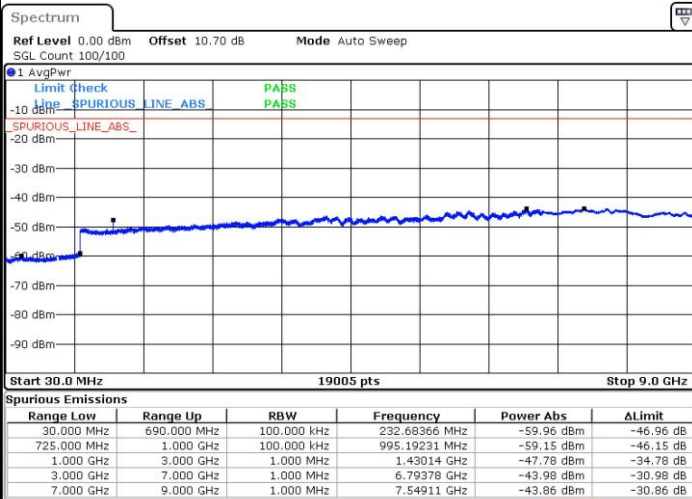
Middle Channel / 64QAM



Date: 15.FEB.2019 00:01:48

Date: 15.FEB.2019 00:03:06

Highest Channel / 64QAM



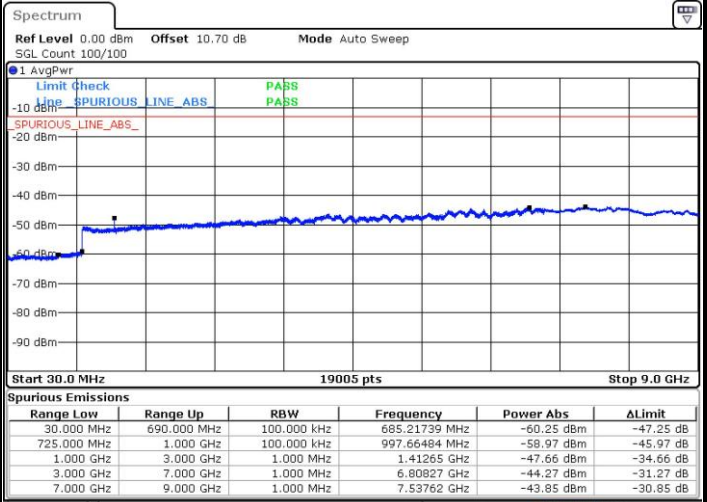
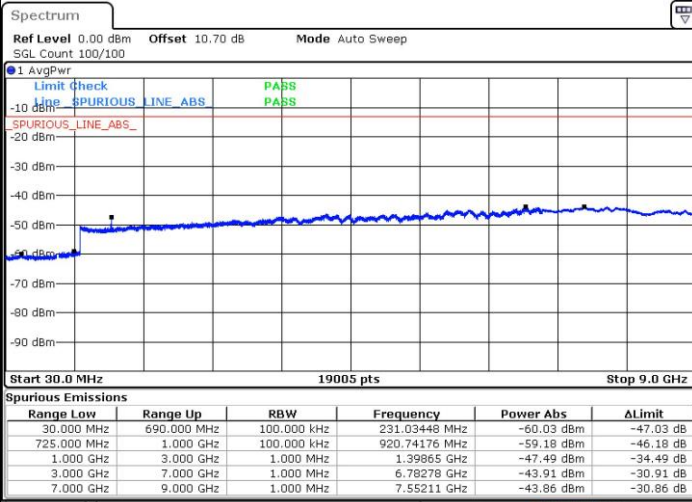
Date: 15.FEB.2019 00:06:14



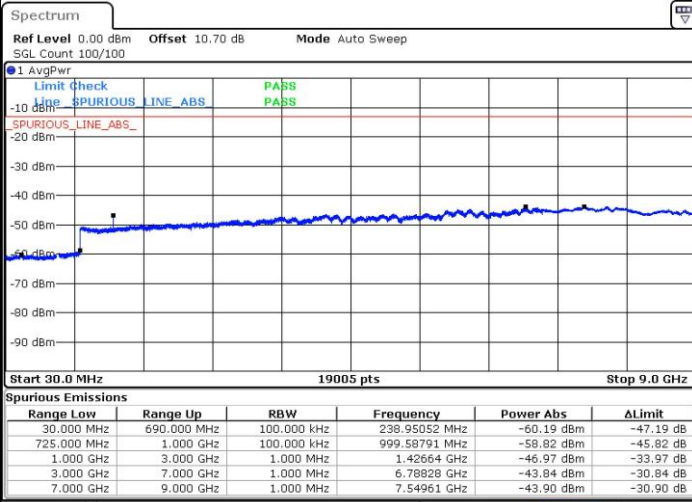
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM



Highest Channel / 64QAM

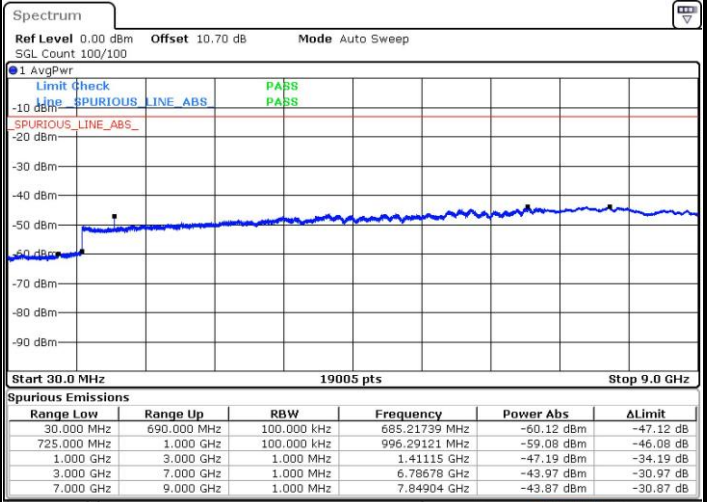
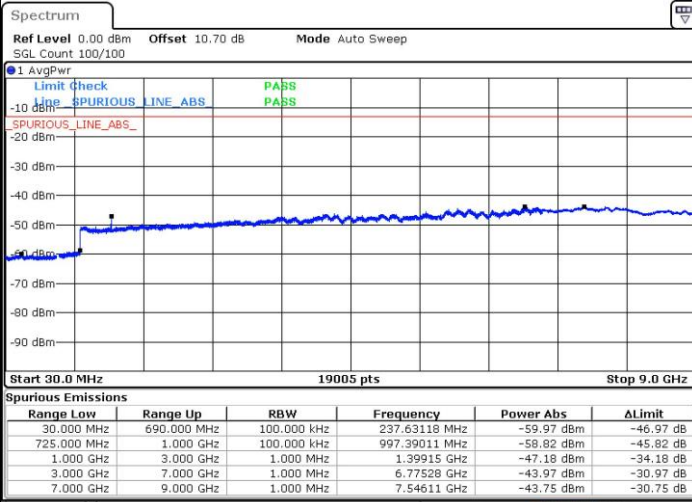




LTE Band 12 / 5MHz

Lowest Channel / 64QAM

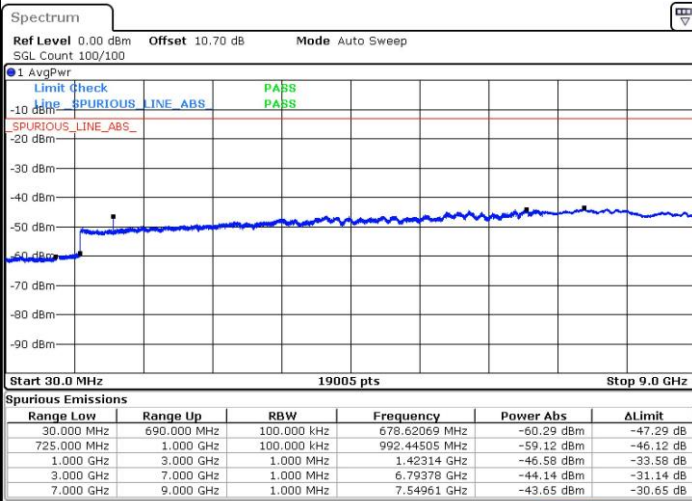
Middle Channel / 64QAM



Date: 14.FEB.2019 23:45:37

Date: 14.FEB.2019 23:46:55

Highest Channel / 64QAM



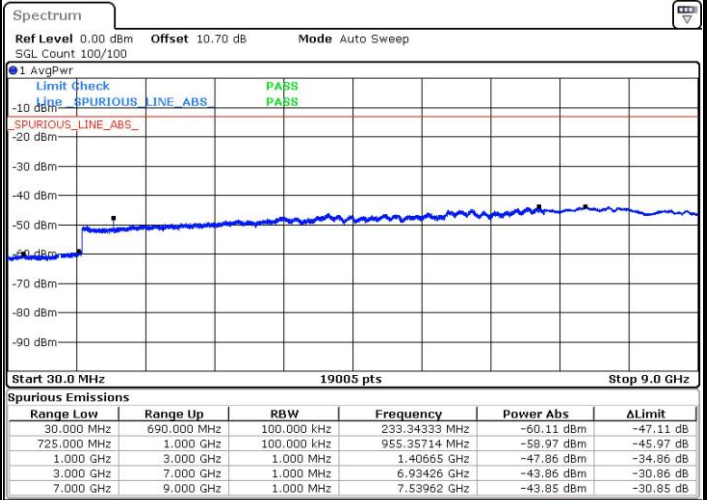
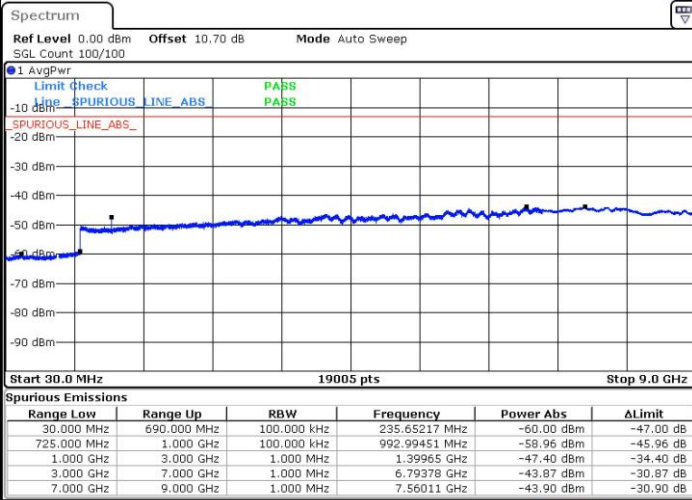
Date: 14.FEB.2019 23:50:03



LTE Band 12 / 10MHz

Lowest Channel / 64QAM

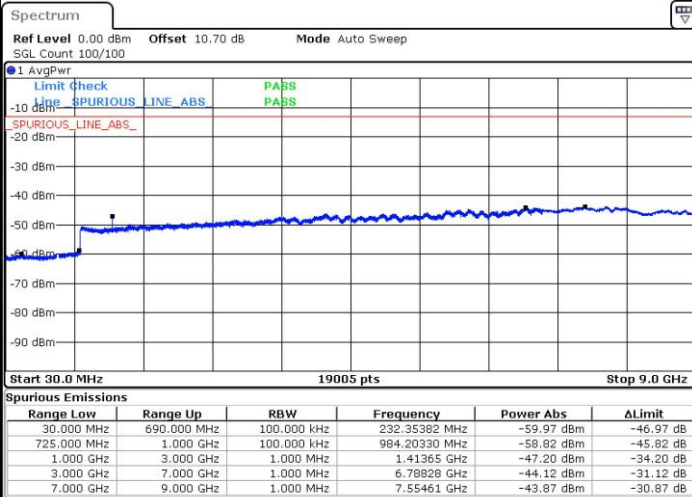
Middle Channel / 64QAM



Date: 14.FEB.2019 23:53:11

Date: 14.FEB.2019 23:54:29

Highest Channel / 64QAM



Date: 14.FEB.2019 23:58:40



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	0.0020	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0083	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0064	
0	Normal Voltage	0.0098	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0079	
-30	Normal Voltage	0.0090	
20	Maximum Voltage	0.0098	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0100	

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

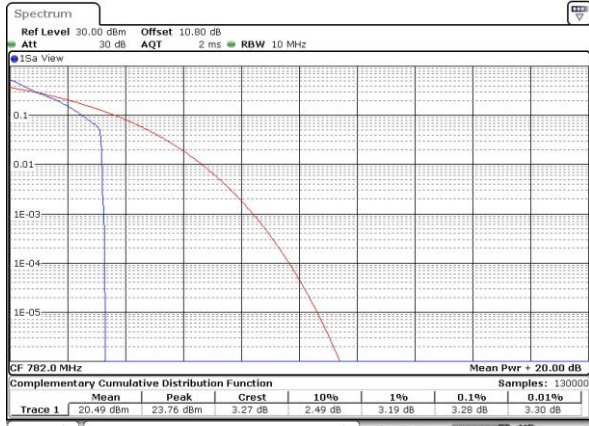
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.28	4.52	4.09	5.45	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	5.07	5.88	-	-	
Highest CH	-	-	-	-	



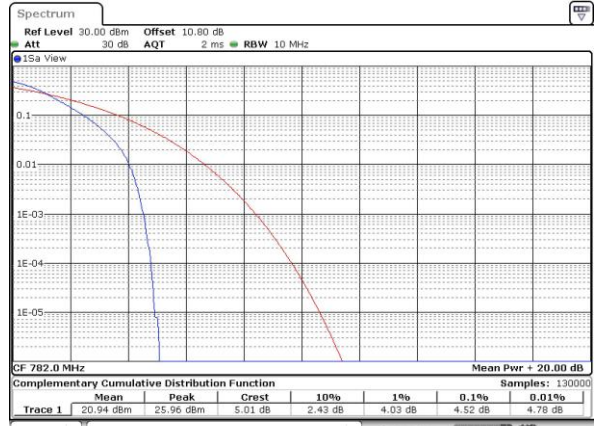
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 15.FEB.2019 17:41:19

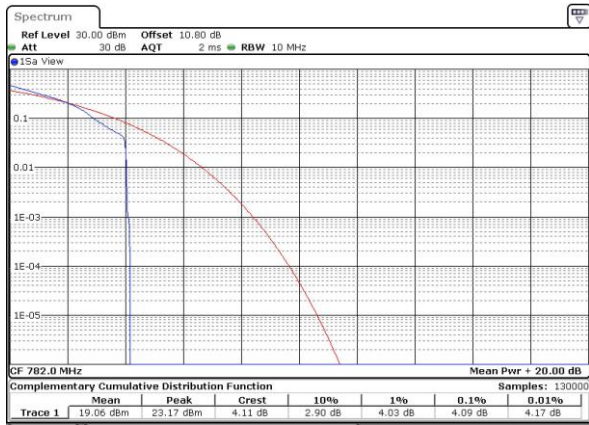
Middle Channel / Full RB



Date: 15.FEB.2019 17:41:30

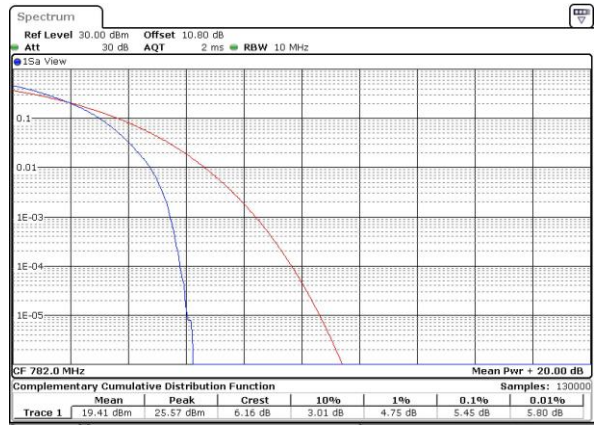
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 15.FEB.2019 17:40:57

Middle Channel / Full RB



Date: 15.FEB.2019 17:41:08

LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 15.FEB.2019 17:40:32

Middle Channel / Full RB



Date: 15.FEB.2019 17:40:46



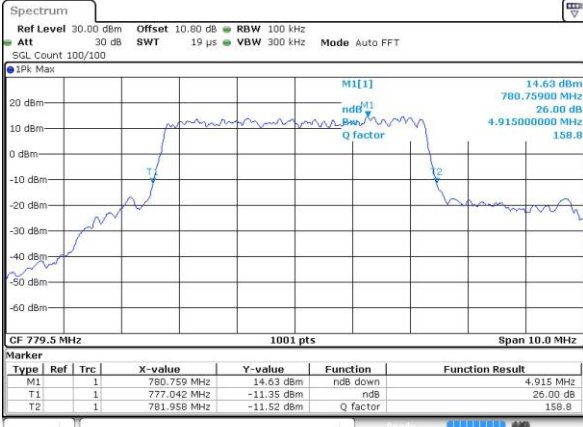
26dB Bandwidth

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	-	-	-	-	4.92	4.88	-	-	-	-	-	-
Middle CH	-	-	-	-	4.92	5.07	9.79	9.67	-	-	-	-
Highest CH	-	-	-	-	4.88	4.91	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.88	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.85	-	9.91	-	-	-	-	-
Highest CH	-	-	-	-	4.88	-	-	-	-	-	-	-



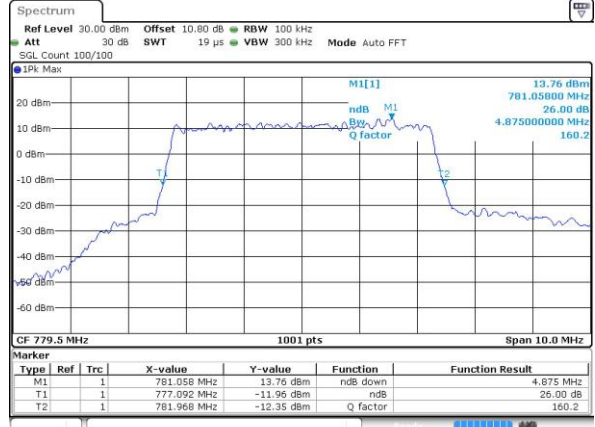
LTE Band 13

Lowest Channel / 5MHz / QPSK



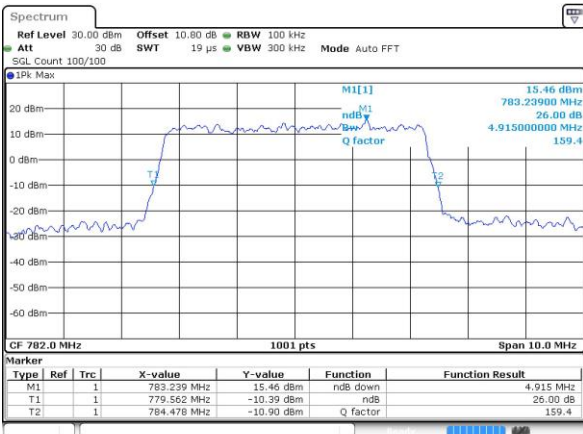
Date: 15 FEB 2019 16:53:00

Lowest Channel / 5MHz / 16QAM



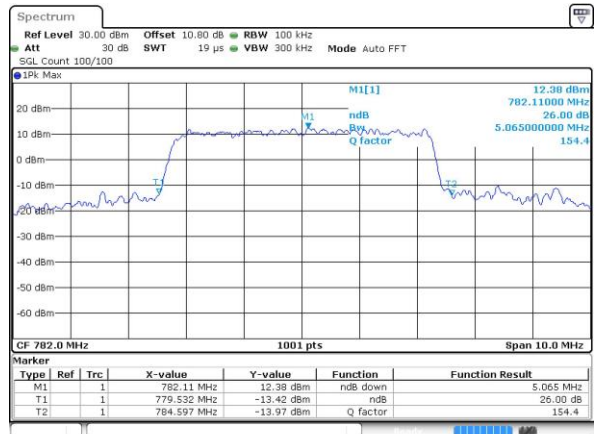
Date: 15 FEB 2019 16:52:49

Middle Channel / 5MHz / QPSK



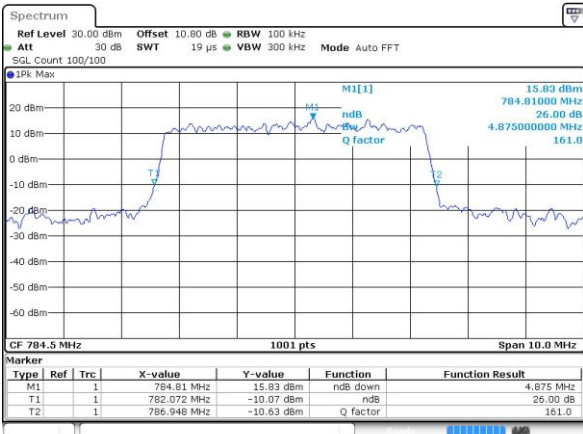
Date: 15 FEB 2019 17:02:32

Middle Channel / 5MHz / 16QAM



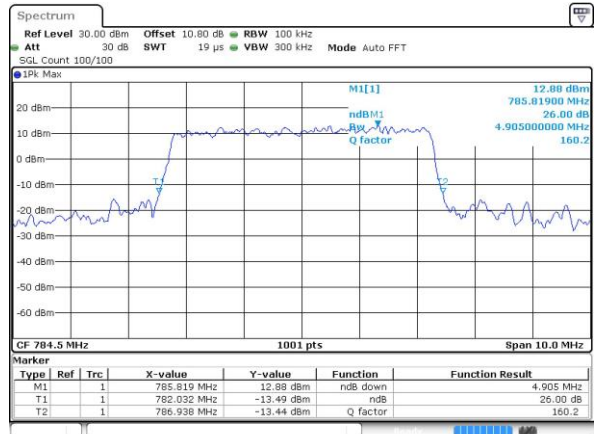
Date: 15 FEB 2019 17:02:44

Highest Channel / 5MHz / QPSK



Date: 15 FEB 2019 17:03:52

Highest Channel / 5MHz / 16QAM

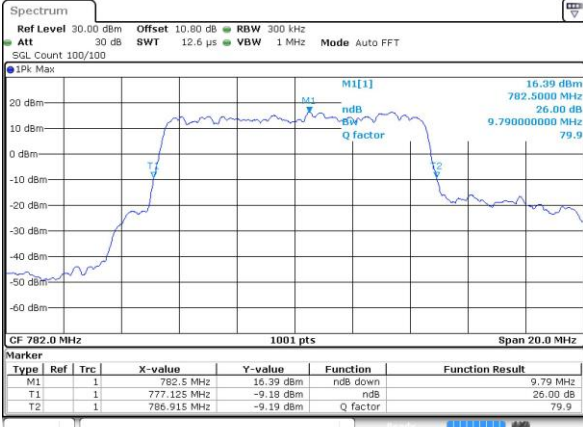


Date: 15 FEB 2019 17:03:40



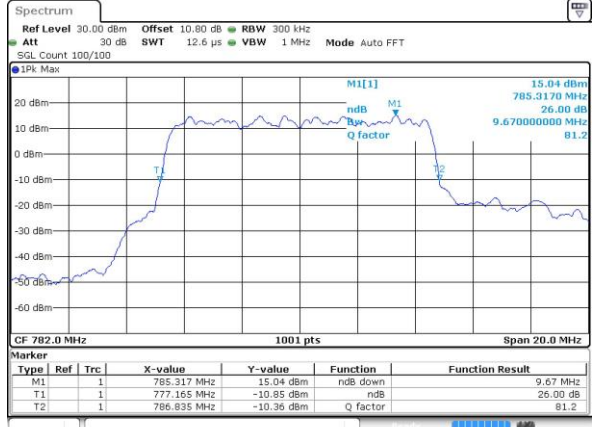
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 15 FEB 2019 17:22:28

Middle Channel / 10MHz / 16QAM

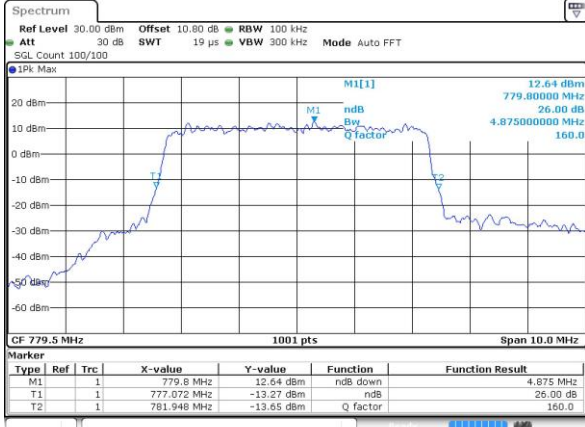


Date: 15 FEB 2019 17:22:17



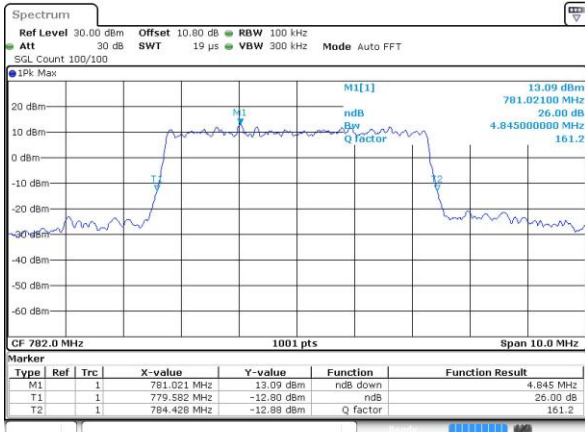
LTE Band 13

Lowest Channel / 5MHz / 64QAM



Date: 15.FEB.2019 17:12:16

Middle Channel / 5MHz / 64QAM



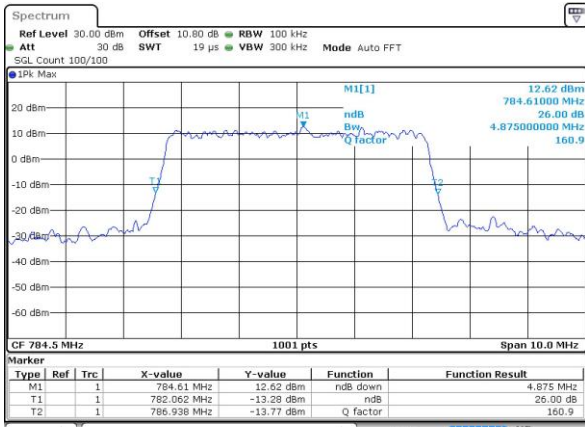
Date: 15.FEB.2019 17:17:08

Middle Channel / 10MHz / 64QAM



Date: 15.FEB.2019 17:34:13

Highest Channel / 5MHz / 64QAM



Date: 15.FEB.2019 17:17:42