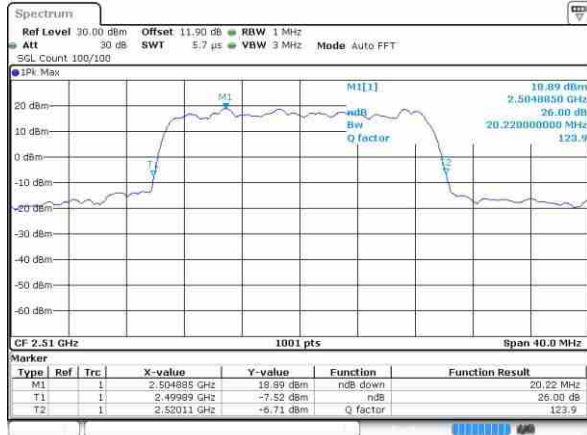


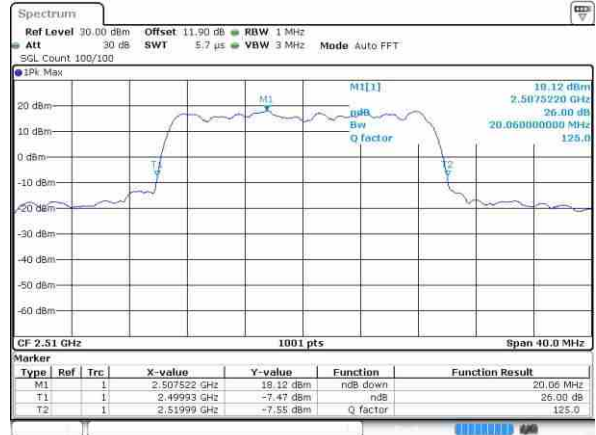


LTE Band 7

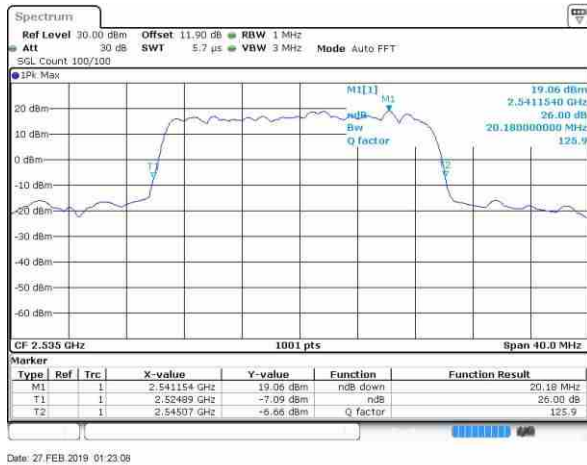
Lowest Channel / 20MHz / QPSK



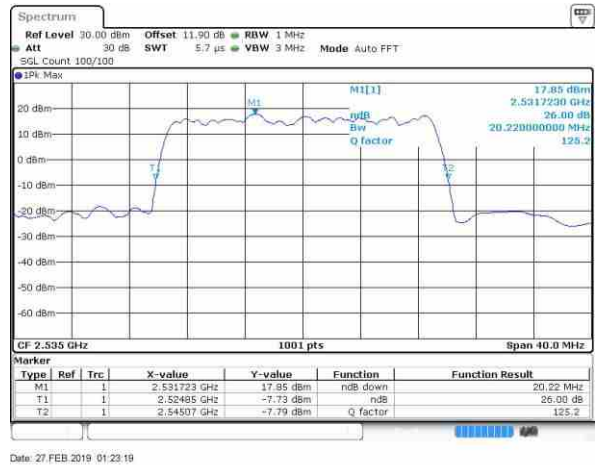
Lowest Channel / 20MHz / 16QAM



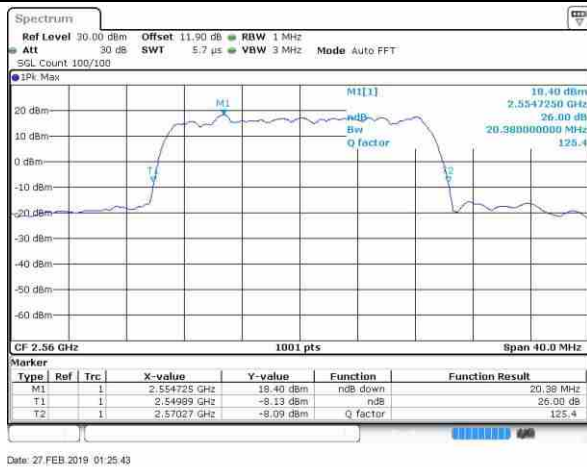
Middle Channel / 20MHz / QPSK



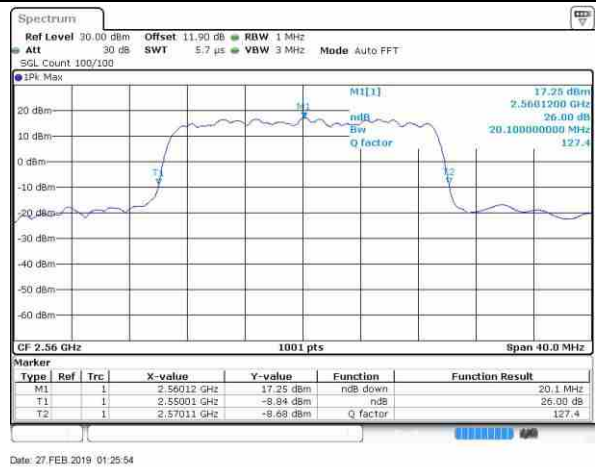
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



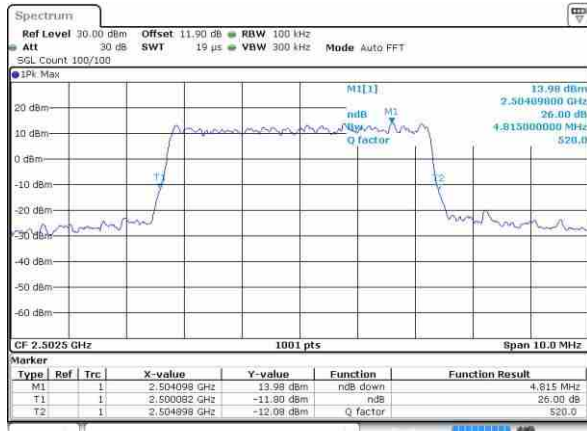
Highest Channel / 20MHz / 16QAM





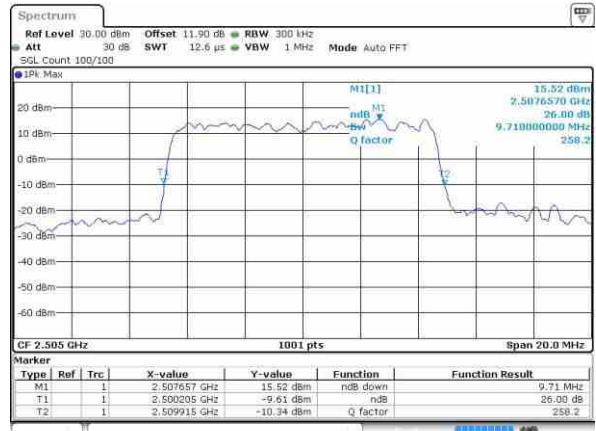
LTE Band 7

Lowest Channel / 5MHz / 64QAM



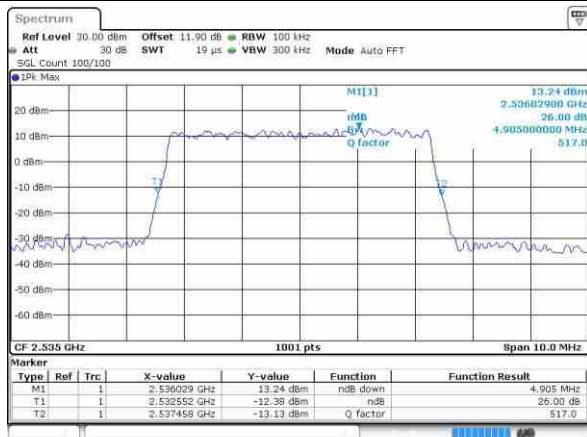
Date: 27 FEB 2019 00:31:29

Lowest Channel / 10MHz / 64QAM



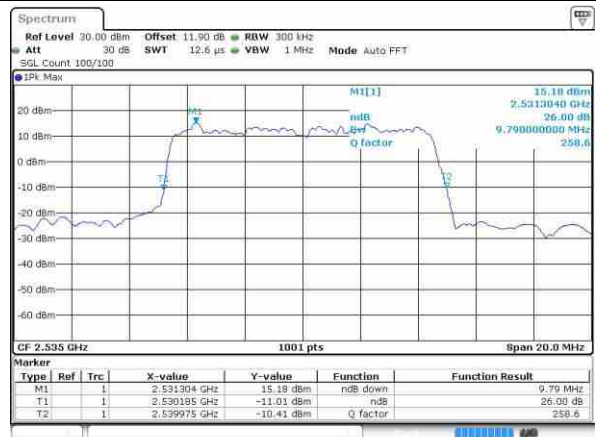
Date: 27 FEB 2019 00:51:15

Middle Channel / 5MHz / 64QAM



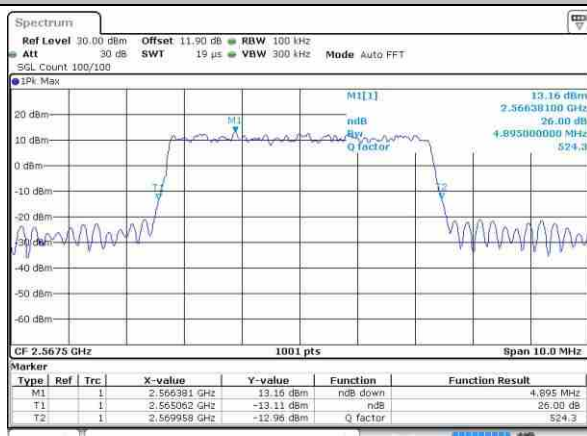
Date: 27 FEB 2019 00:34:07

Middle Channel / 10MHz / 64QAM



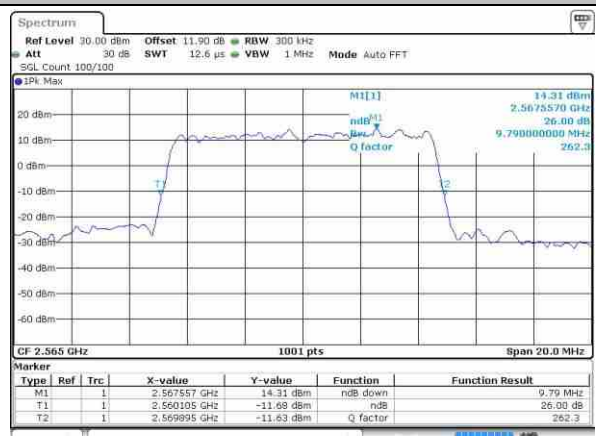
Date: 27 FEB 2019 00:53:54

Highest Channel / 5MHz / 64QAM



Date: 27 FEB 2019 00:35:25

Highest Channel / 10MHz / 64QAM

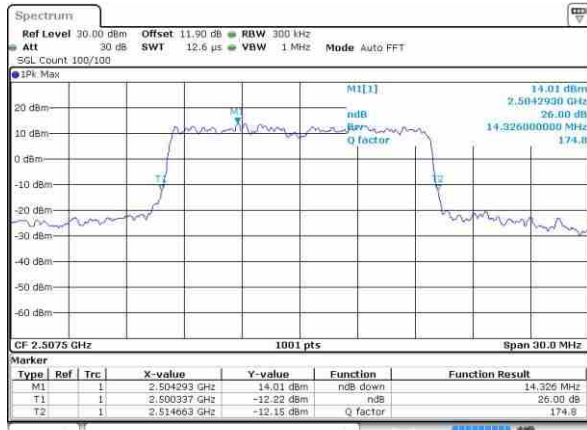


Date: 27 FEB 2019 00:55:11

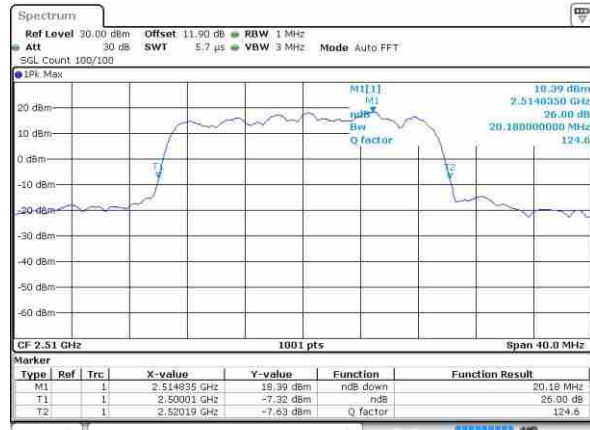


LTE Band 7

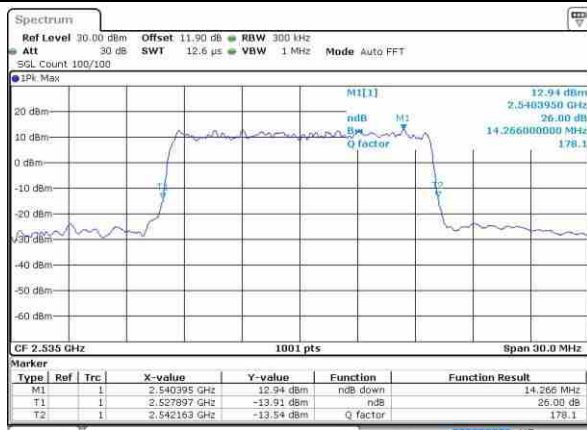
Lowest Channel / 15MHz / 64QAM



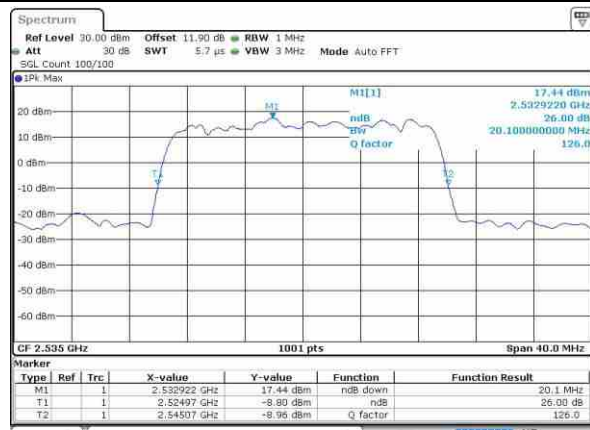
Lowest Channel / 20MHz / 64QAM



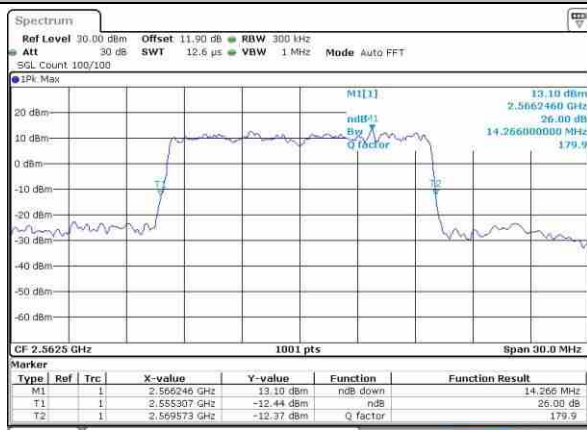
Middle Channel / 15MHz / 64QAM



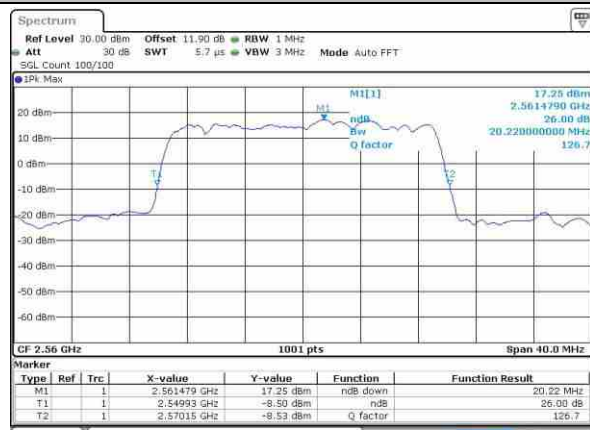
Middle Channel / 20MHz / 64QAM



Highest Channel / 15MHz / 64QAM



Highest Channel / 20MHz / 64QAM



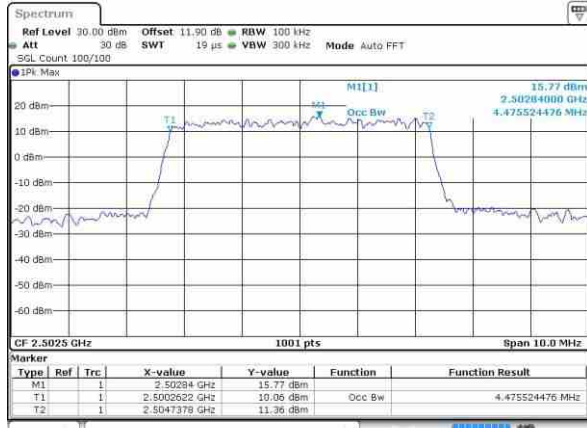
**Occupied Bandwidth**

Mode	LTE Band 7 : 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	4.49	9.07	8.97	13.43	13.43	18.26	18.38
Middle CH	-	-	-	-	4.46	4.48	9.05	9.03	13.49	13.52	18.42	18.22
Highest CH	-	-	-	-	4.47	4.49	9.03	9.07	13.43	13.43	18.46	18.38
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	9.03	-	13.37	-	18.34	-
Middle CH	-	-	-	-	4.50	-	9.01	-	13.43	-	18.34	-
Highest CH	-	-	-	-	4.49	-	9.03	-	13.40	-	18.26	-



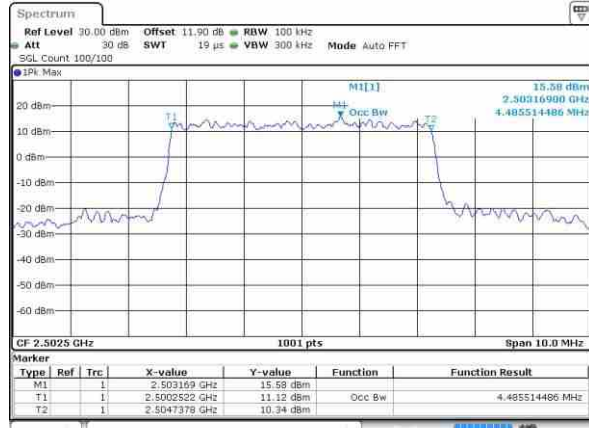
LTE Band 7

Lowest Channel / 5MHz / QPSK



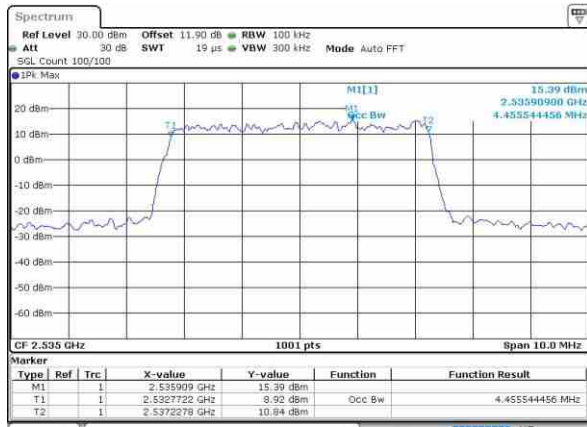
Date: 27 FEB 2019 00:11:35

Lowest Channel / 5MHz / 16QAM



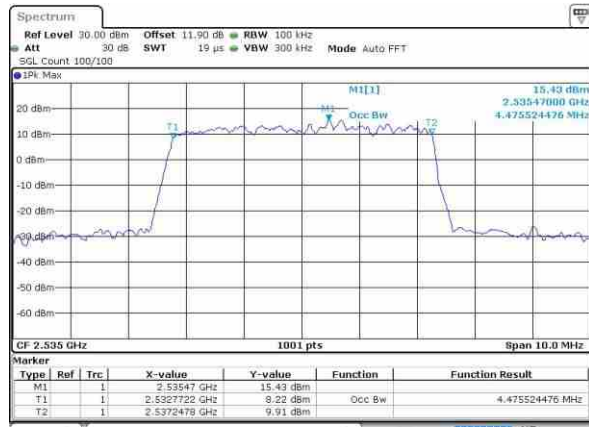
Date: 27 FEB 2019 00:11:47

Middle Channel / 5MHz / QPSK



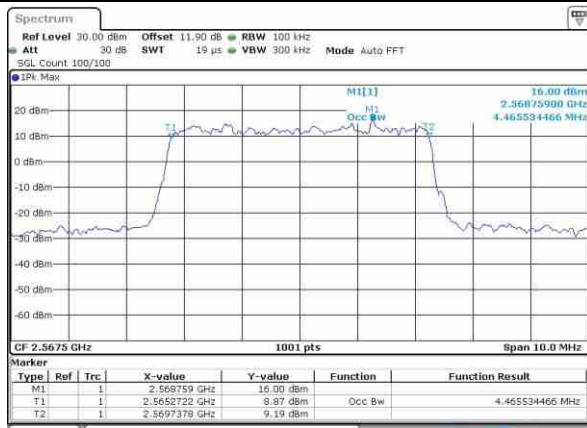
Date: 27 FEB 2019 00:21:03

Middle Channel / 5MHz / 16QAM



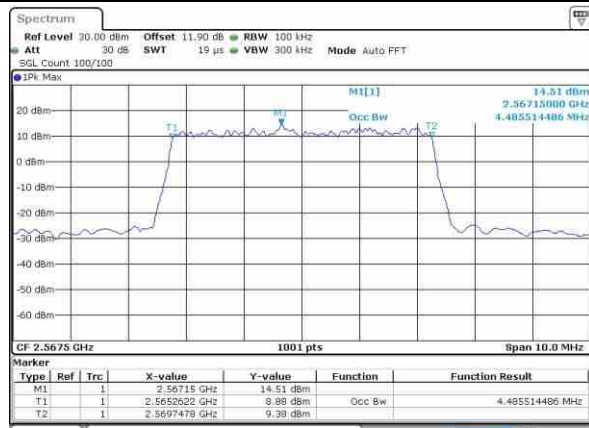
Date: 27 FEB 2019 00:21:15

Highest Channel / 5MHz / QPSK



Date: 27 FEB 2019 00:23:48

Highest Channel / 5MHz / 16QAM

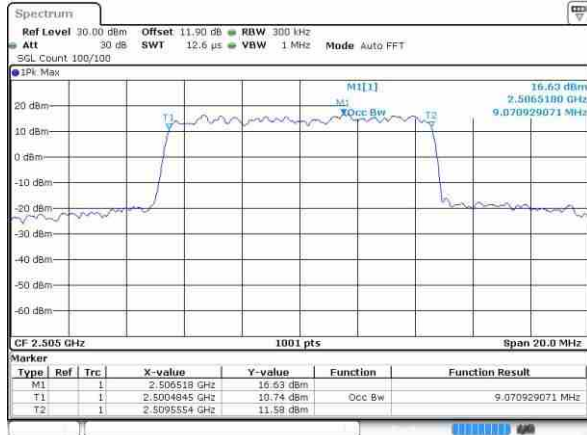


Date: 27 FEB 2019 00:24:00



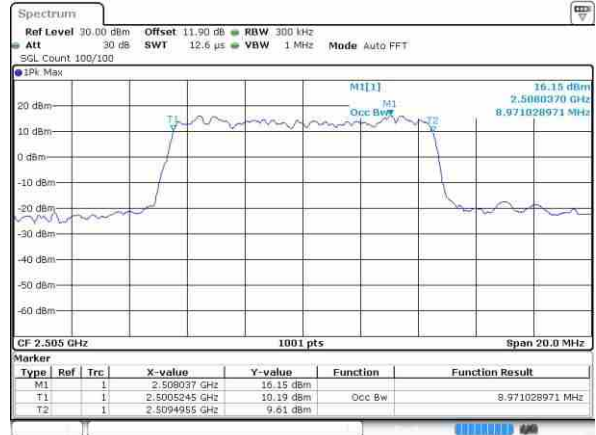
LTE Band 7

Lowest Channel / 10MHz / QPSK



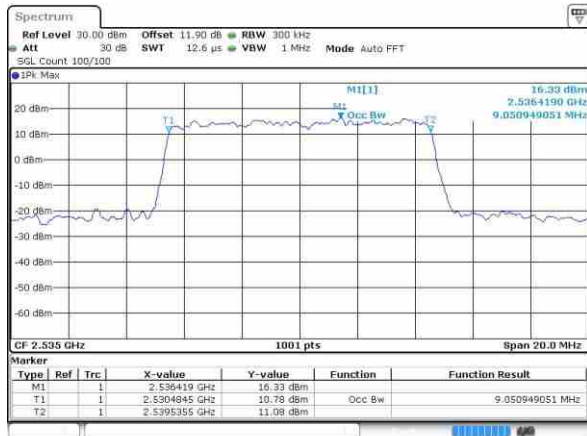
Date: 27 FEB 2019 00:37:53

Lowest Channel / 10MHz / 16QAM



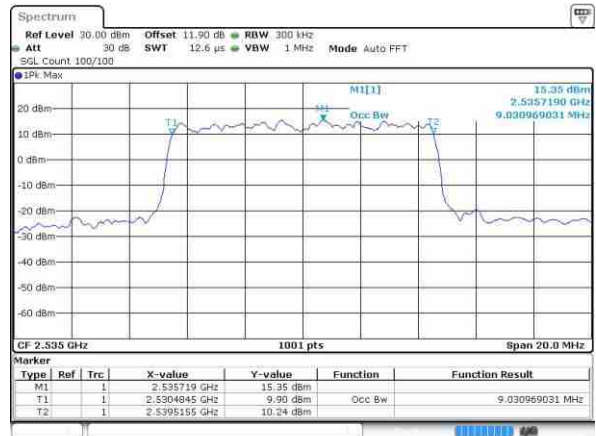
Date: 27 FEB 2019 00:38:04

Middle Channel / 10MHz / QPSK



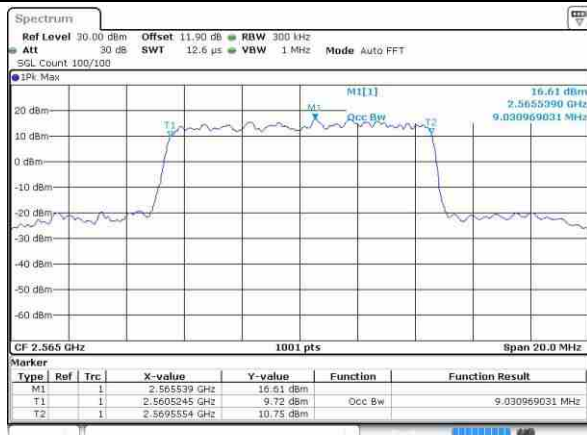
Date: 27 FEB 2019 00:43:11

Middle Channel / 10MHz / 16QAM



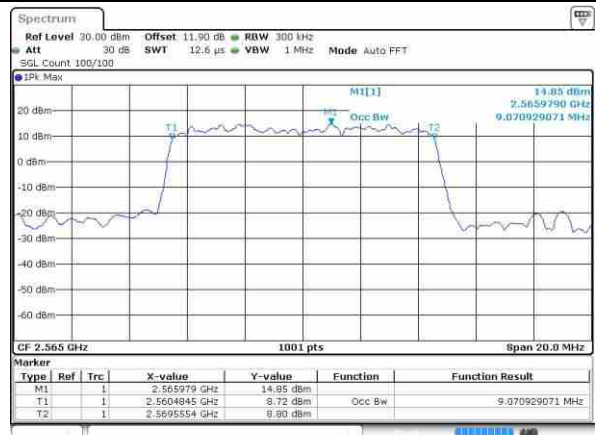
Date: 27 FEB 2019 00:43:22

Highest Channel / 10MHz / QPSK



Date: 27 FEB 2019 00:45:45

Highest Channel / 10MHz / 16QAM

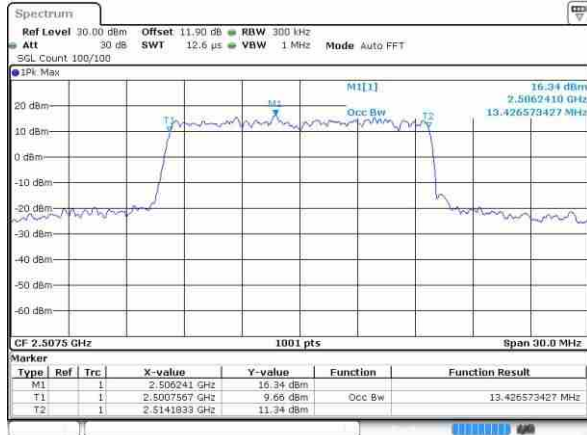


Date: 27 FEB 2019 00:45:57



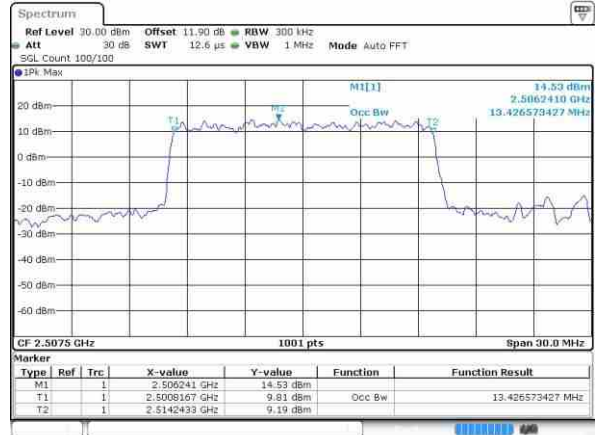
LTE Band 7

Lowest Channel / 15MHz / QPSK



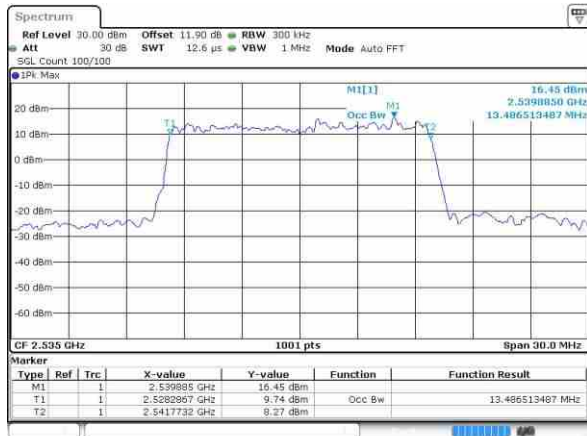
Date: 27 FEB 2019 00:57:39

Lowest Channel / 15MHz / 16QAM



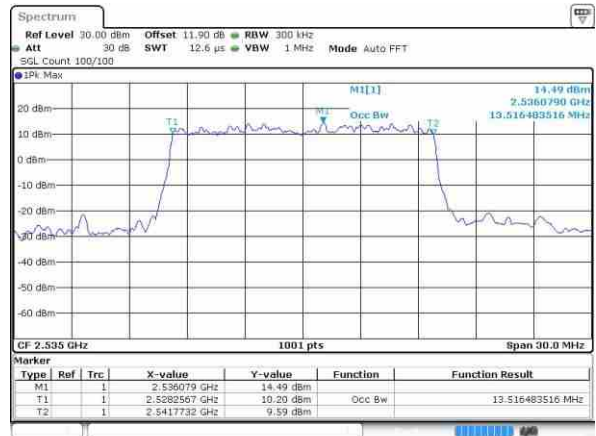
Date: 27 FEB 2019 00:57:50

Middle Channel / 15MHz / QPSK



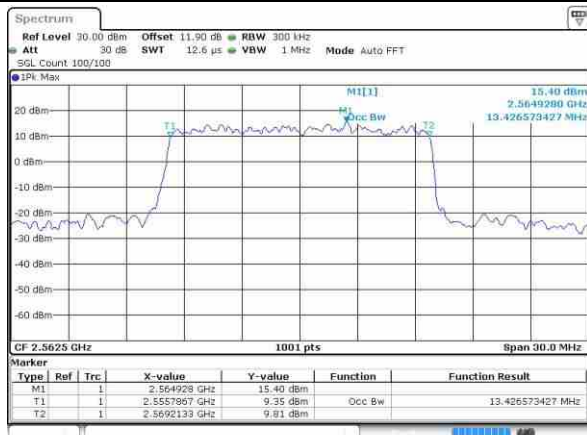
Date: 27 FEB 2019 01:02:57

Middle Channel / 15MHz / 16QAM



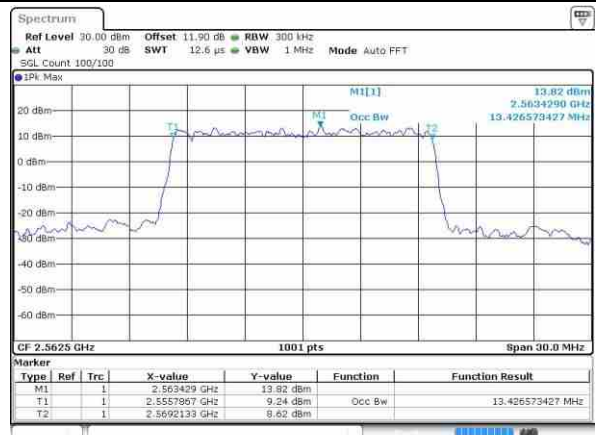
Date: 27 FEB 2019 01:03:08

Highest Channel / 15MHz / QPSK



Date: 27 FEB 2019 01:05:32

Highest Channel / 15MHz / 16QAM

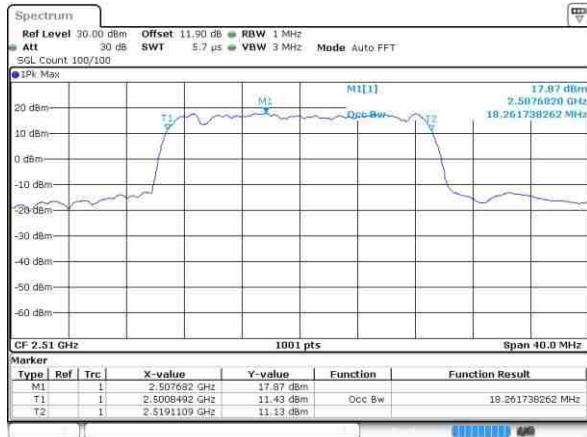


Date: 27 FEB 2019 01:05:43



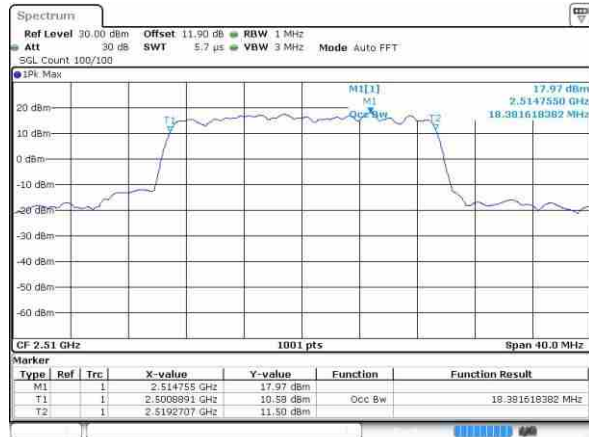
LTE Band 7

Lowest Channel / 20MHz / QPSK



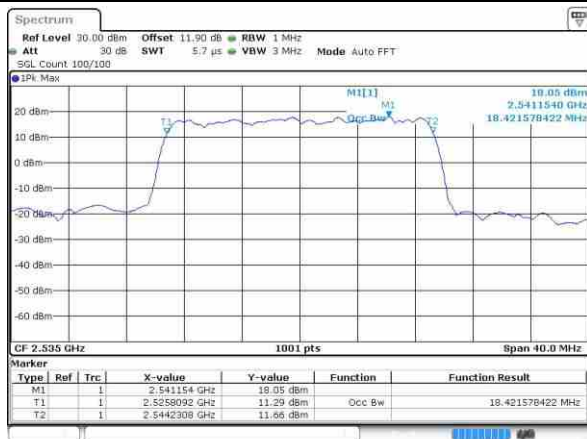
Date: 27 FEB 2019 01:17:27

Lowest Channel / 20MHz / 16QAM



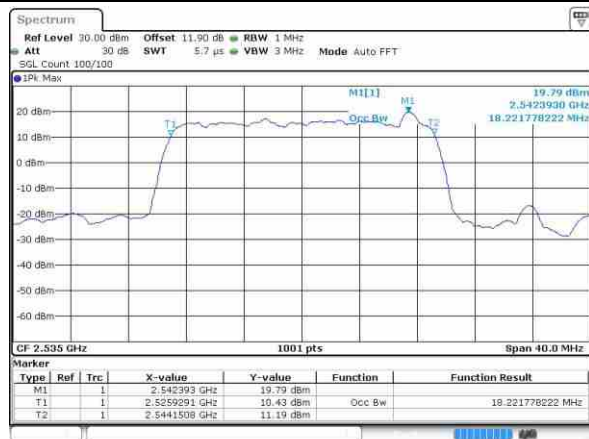
Date: 27 FEB 2019 01:17:39

Middle Channel / 20MHz / QPSK



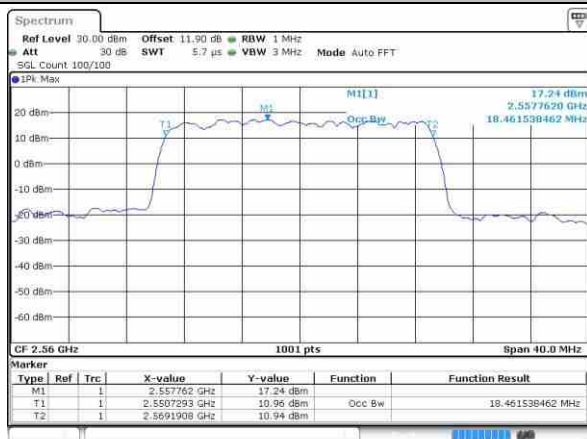
Date: 27 FEB 2019 01:22:45

Middle Channel / 20MHz / 16QAM



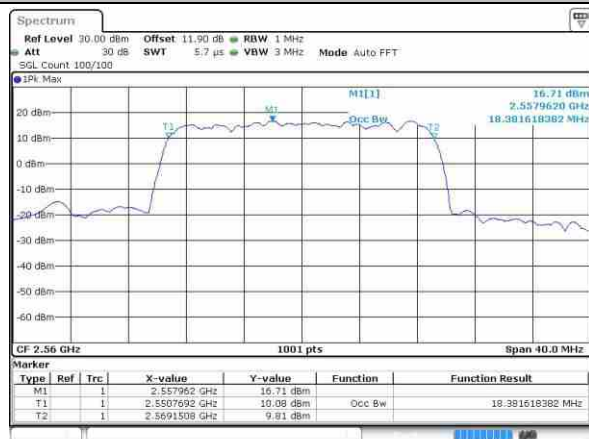
Date: 27 FEB 2019 01:22:56

Highest Channel / 20MHz / QPSK



Date: 27 FEB 2019 01:25:20

Highest Channel / 20MHz / 16QAM

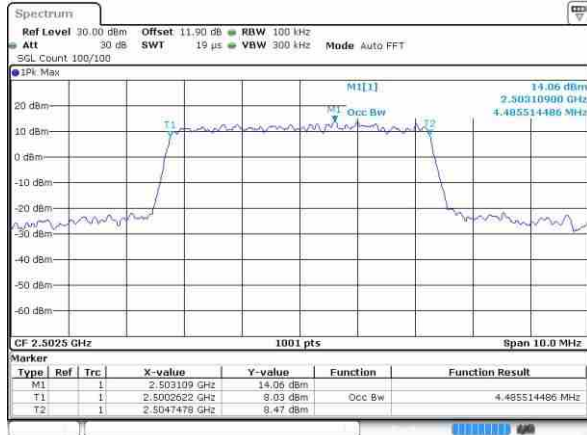


Date: 27 FEB 2019 01:25:31

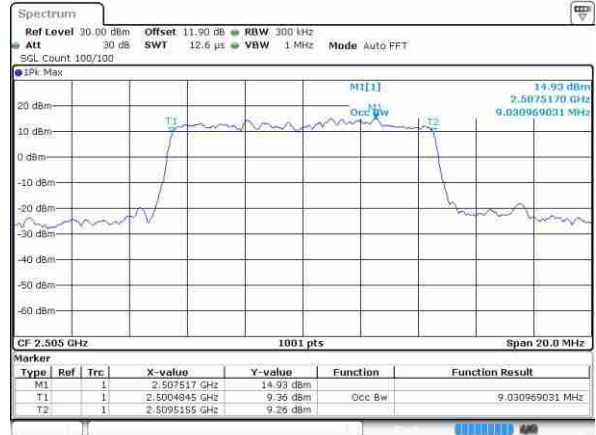


LTE Band 7

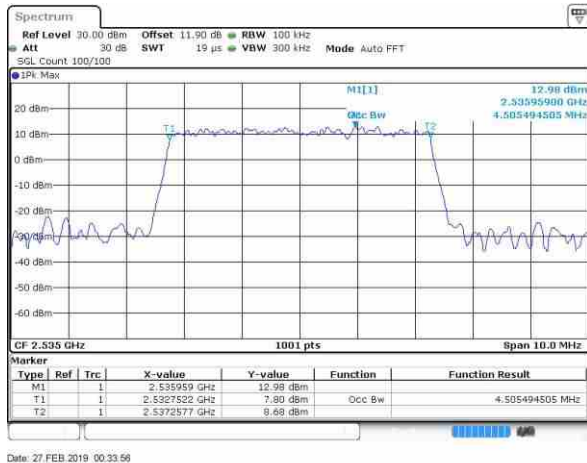
Lowest Channel / 5MHz / 64QAM



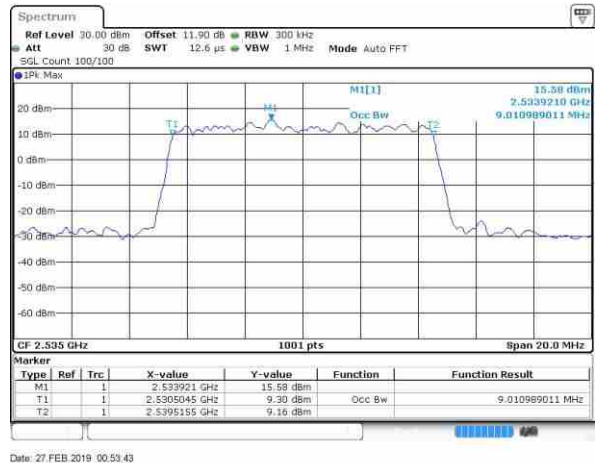
Lowest Channel / 10MHz / 64QAM



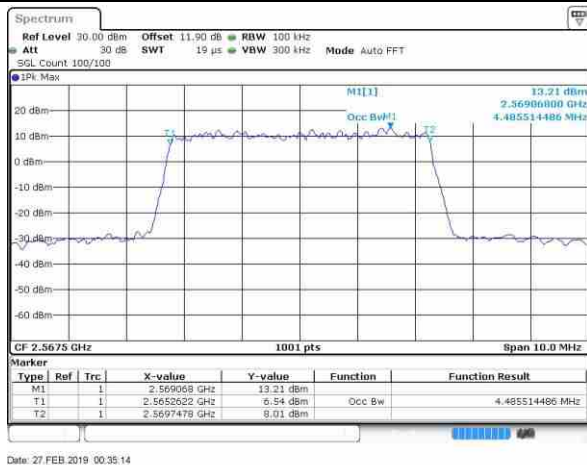
Middle Channel / 5MHz / 64QAM



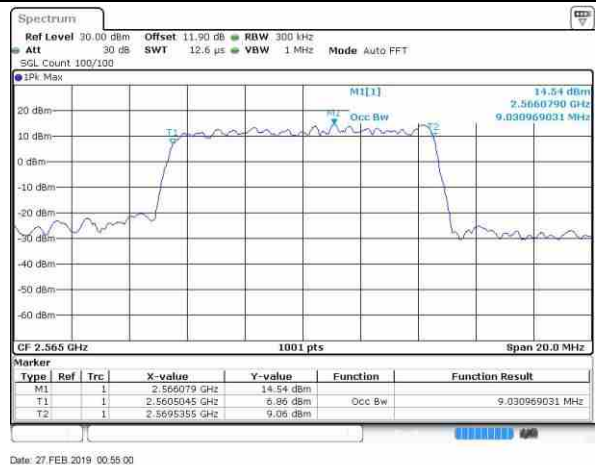
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



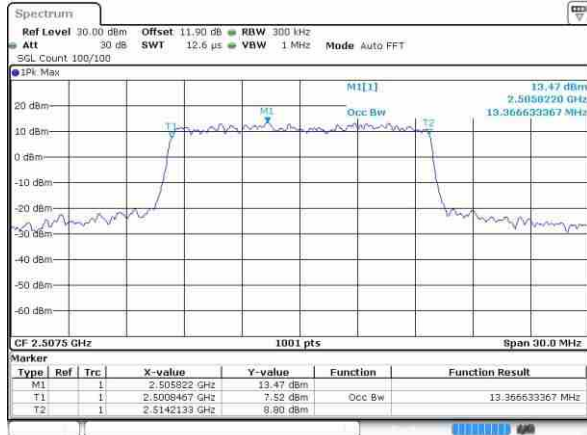
Highest Channel / 10MHz / 64QAM



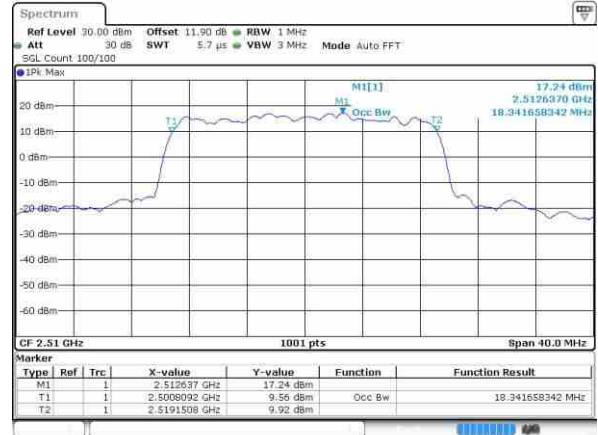


LTE Band 7

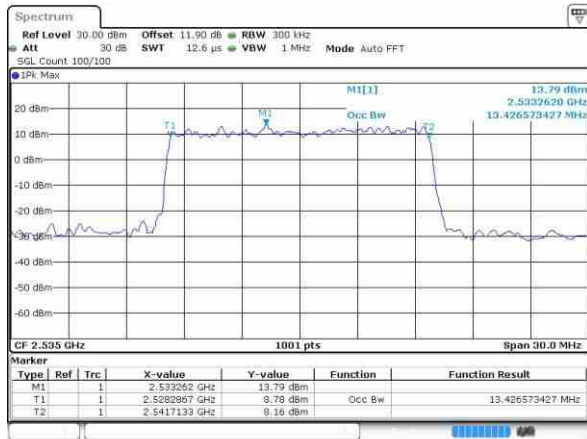
Lowest Channel / 15MHz / 64QAM



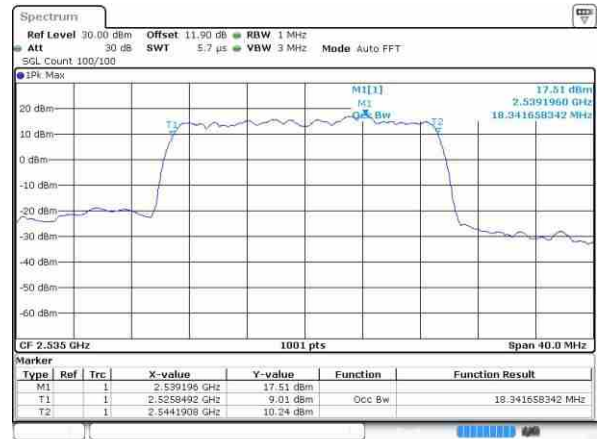
Lowest Channel / 20MHz / 64QAM



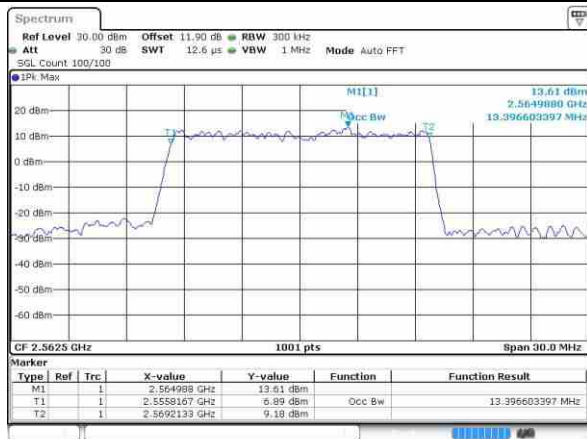
Middle Channel / 15MHz / 64QAM



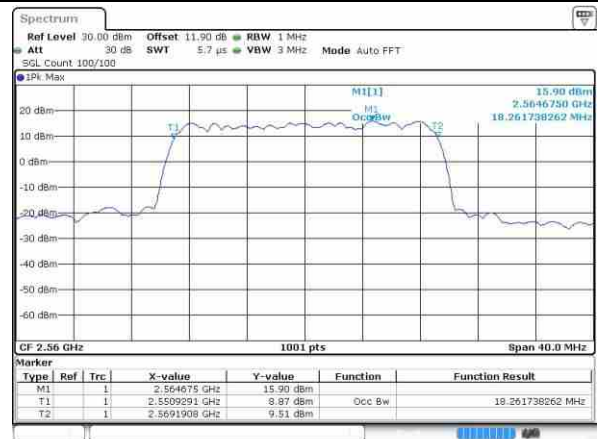
Middle Channel / 20MHz / 64QAM

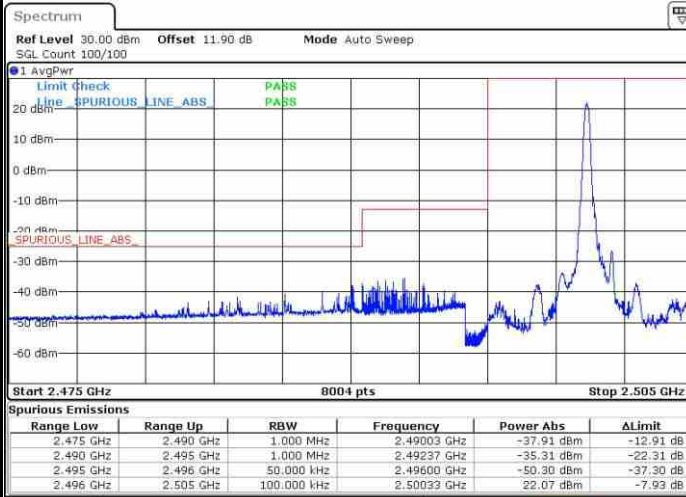
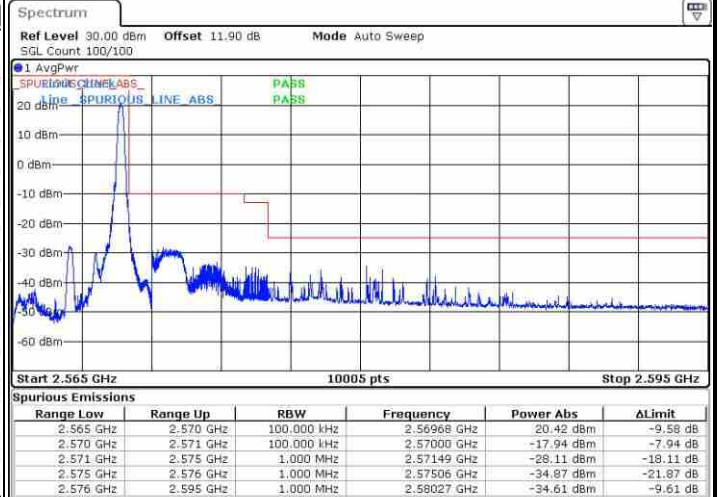
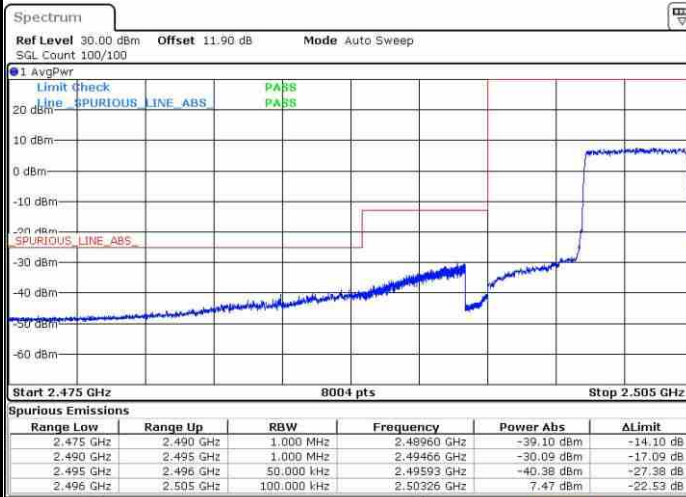
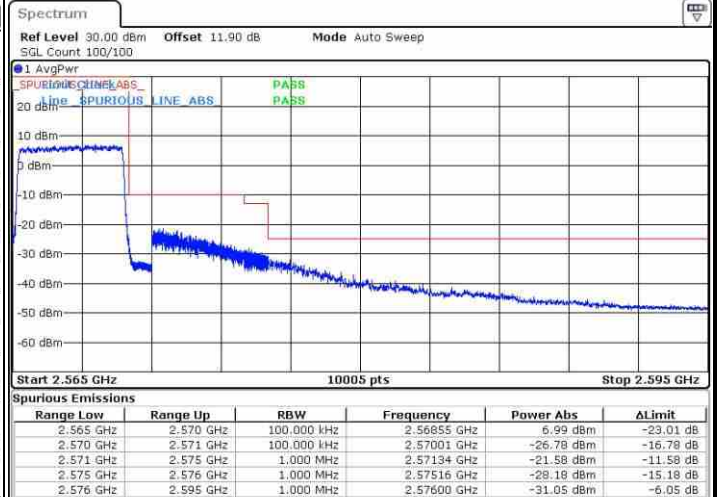


Highest Channel / 15MHz / 64QAM



Highest Channel / 20MHz / 64QAM

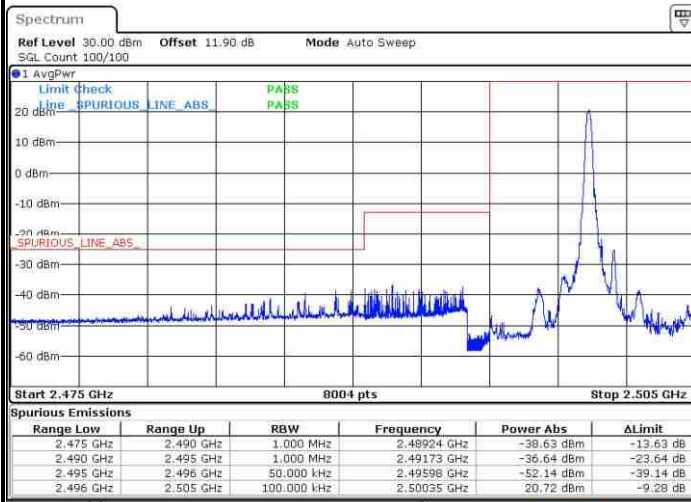


**Conducted Band Edge****LTE Band 7 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

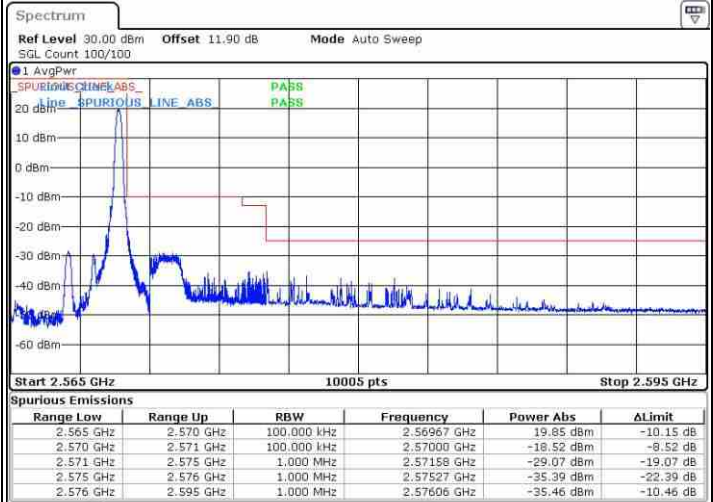


LTE Band 7 / 5MHz / 16QAM

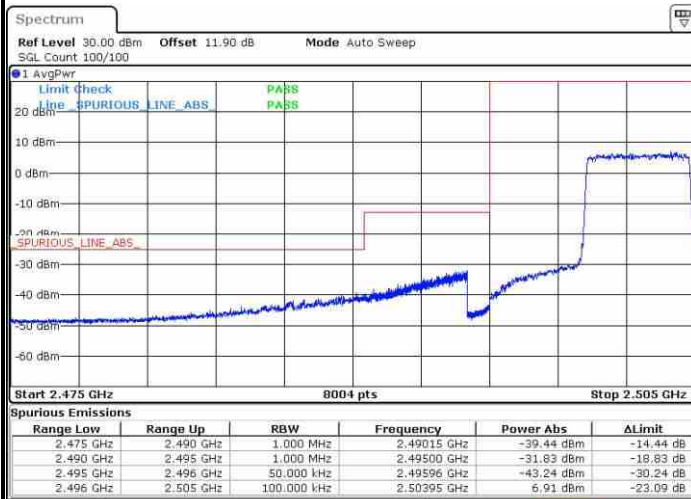
Lowest Band Edge / 1 RB



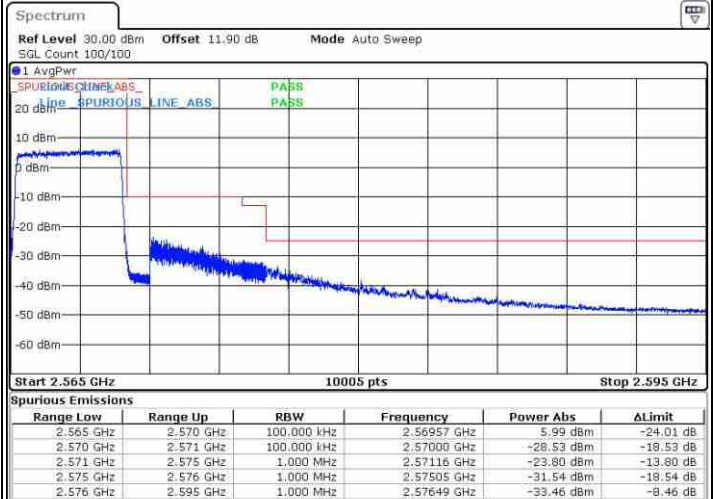
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



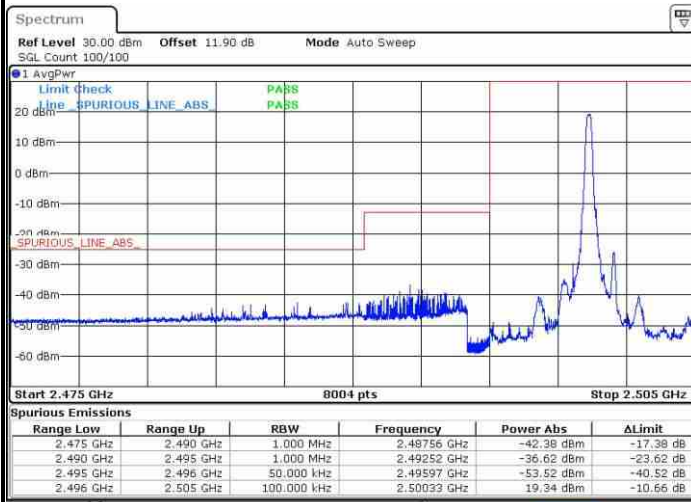
Highest Band Edge / Full RB



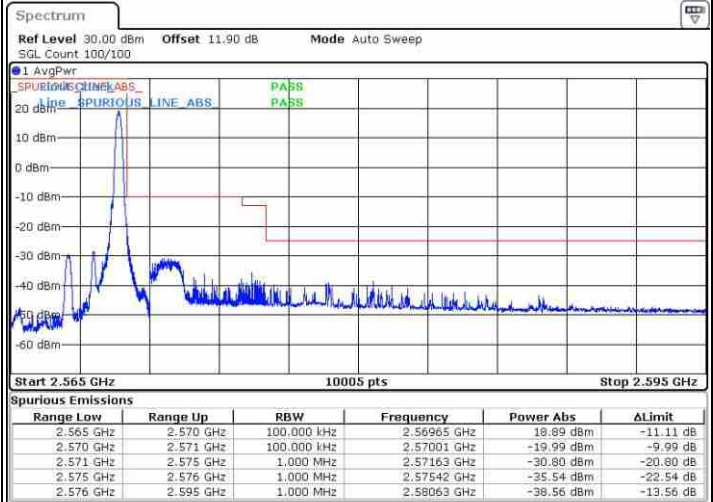


LTE Band 7 / 5MHz / 64QAM

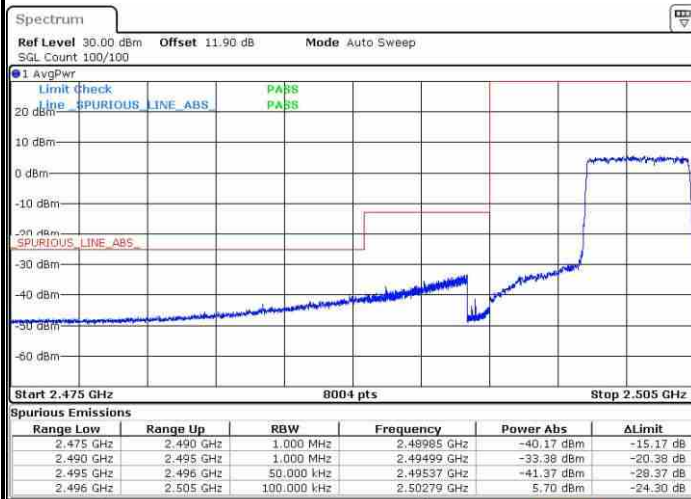
Lowest Band Edge / 1RB



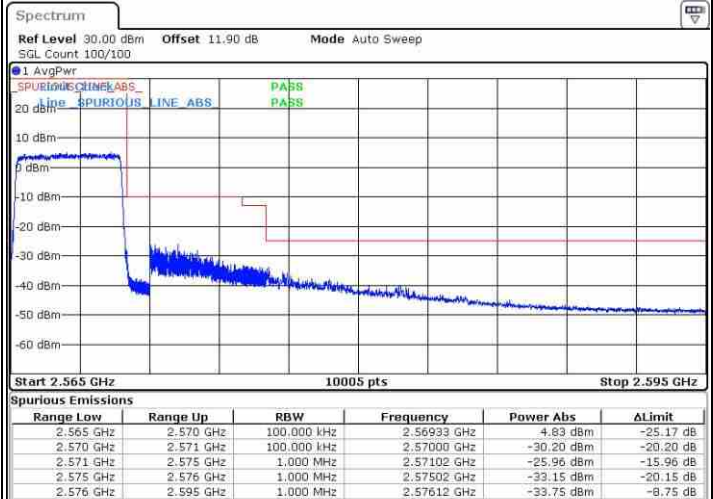
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



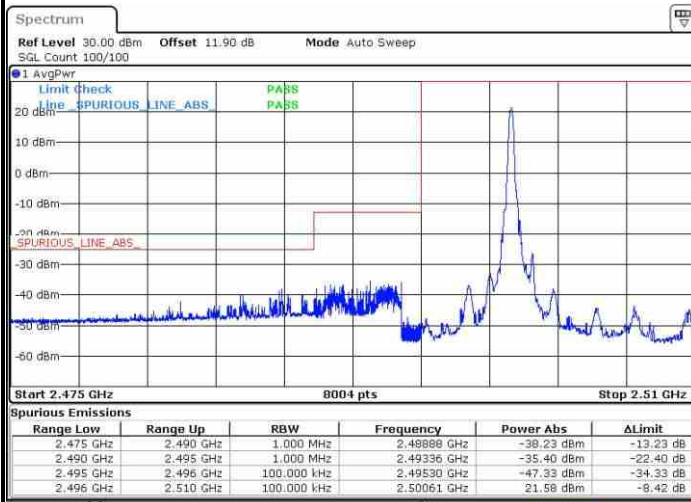
Highest Band Edge / Full RB



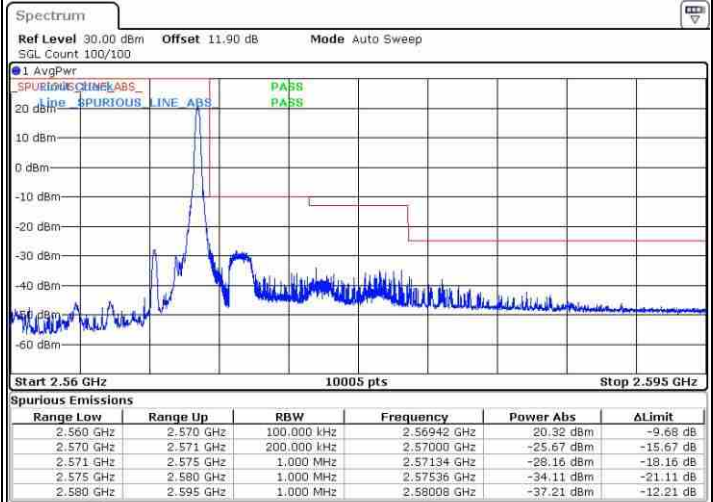


LTE Band 7 / 10MHz / QPSK

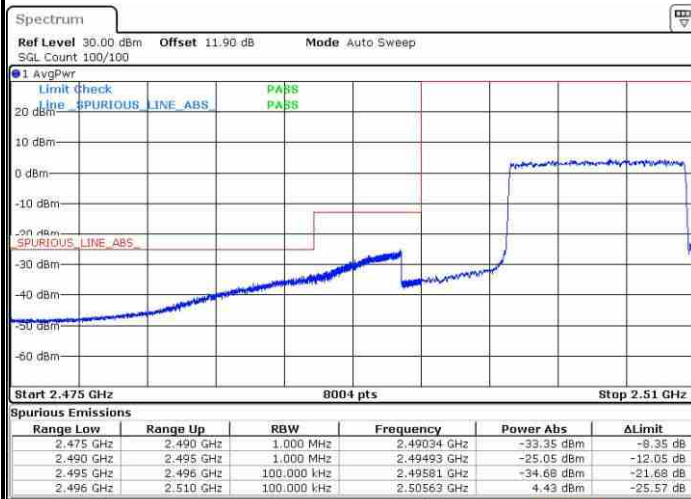
Lowest Band Edge / 1 RB



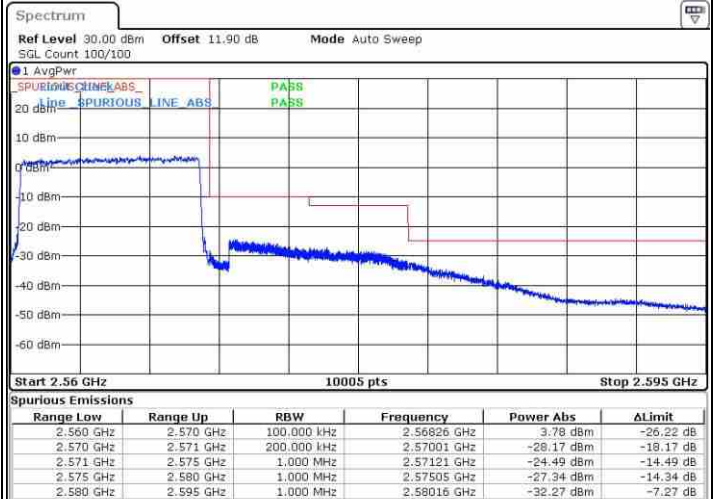
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



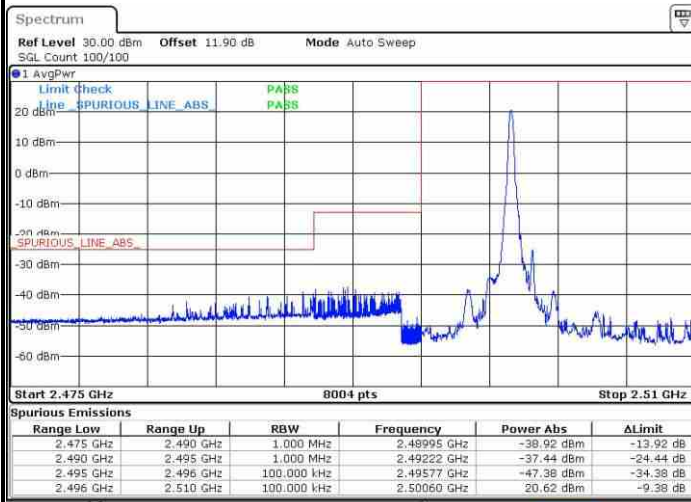
Highest Band Edge / Full RB



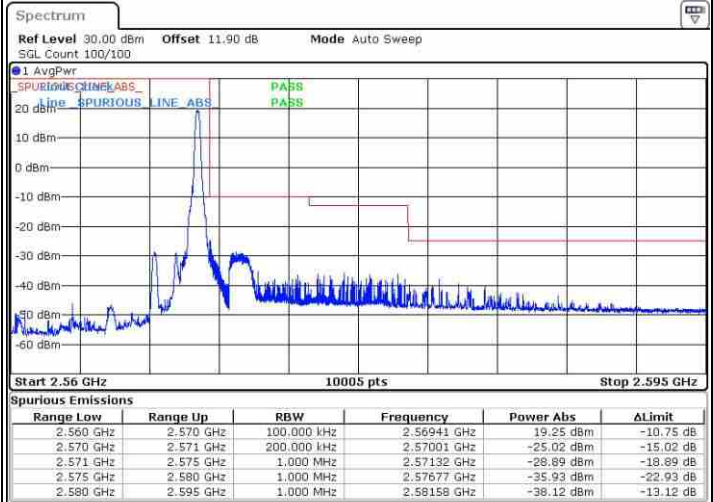


LTE Band 7 / 10MHz / 16QAM

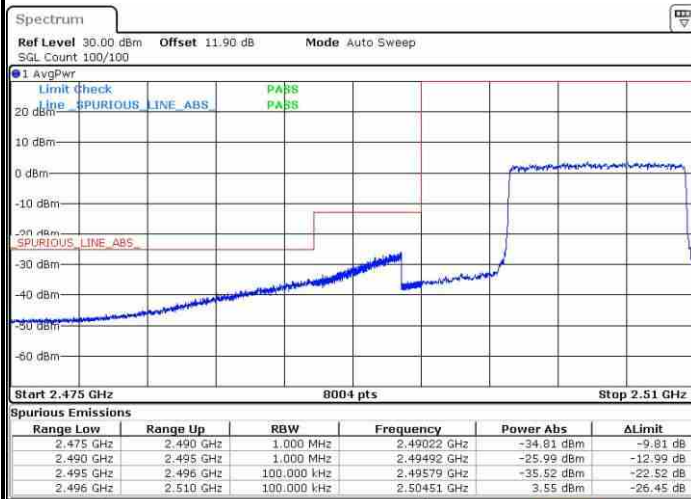
Lowest Band Edge / 1 RB



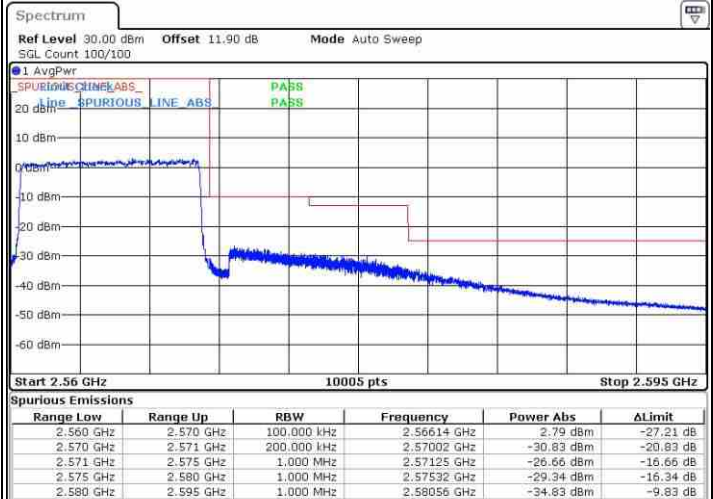
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



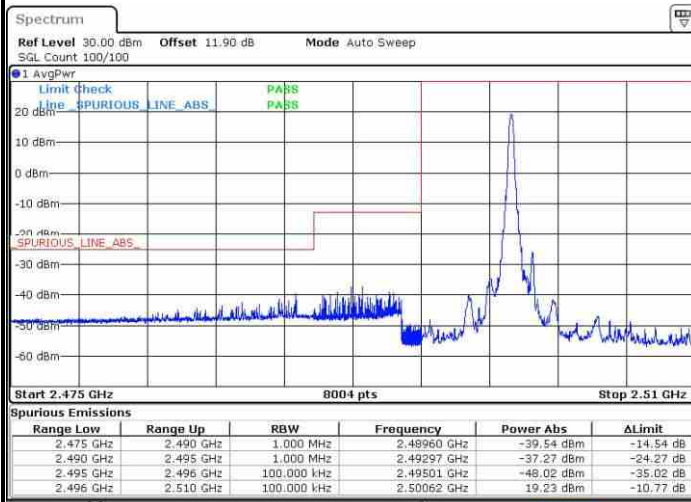
Highest Band Edge / Full RB



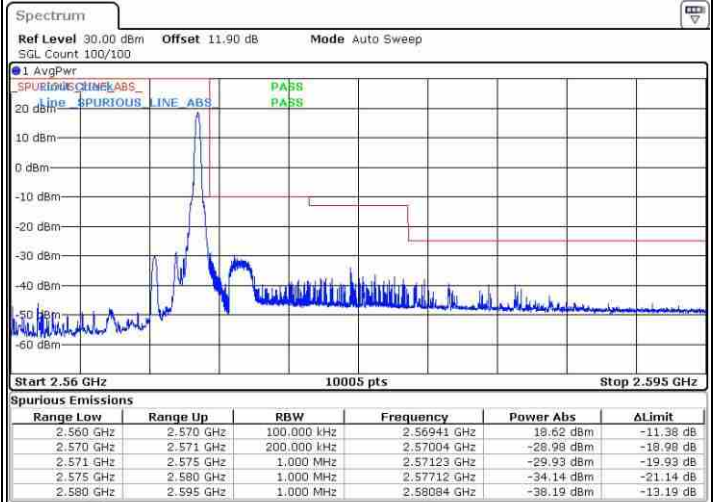


LTE Band 7 / 10MHz / 64QAM

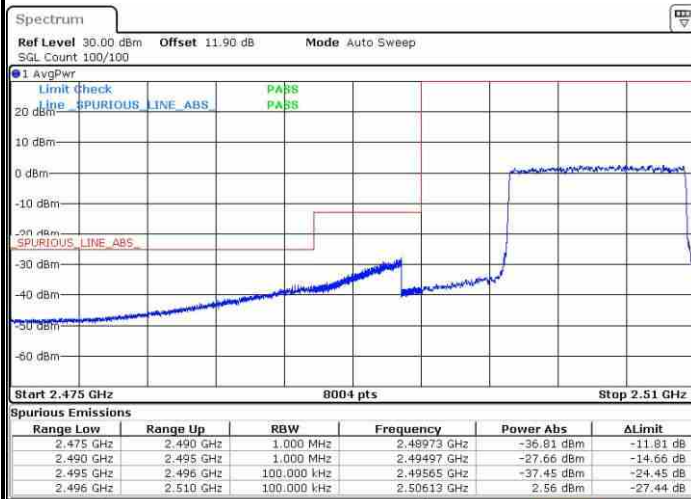
Lowest Band Edge / 1 RB



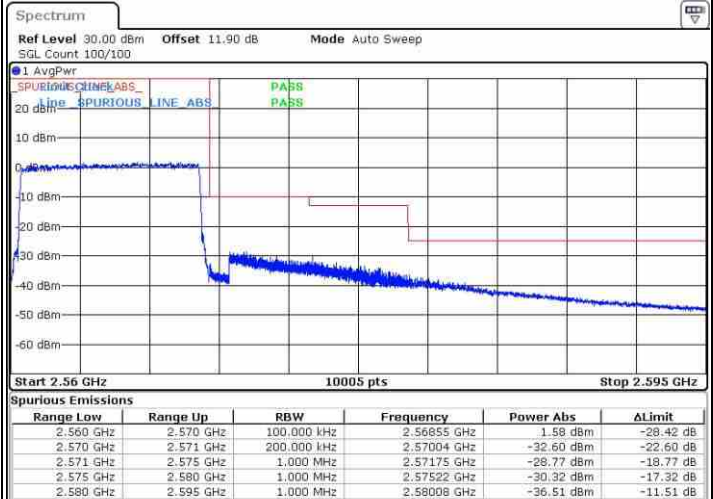
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



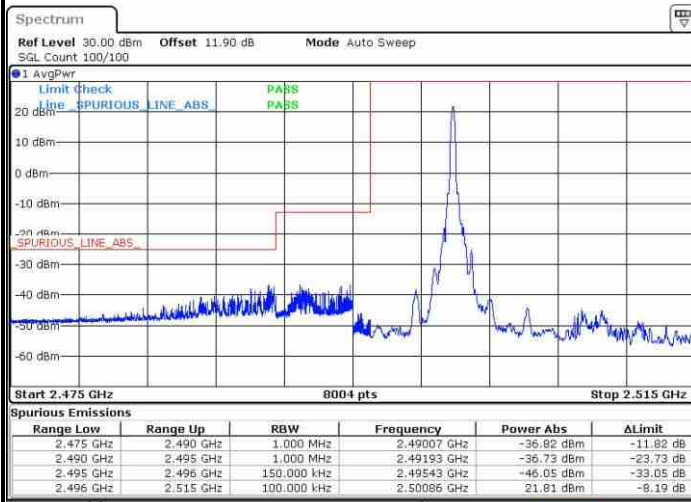
Highest Band Edge / Full RB



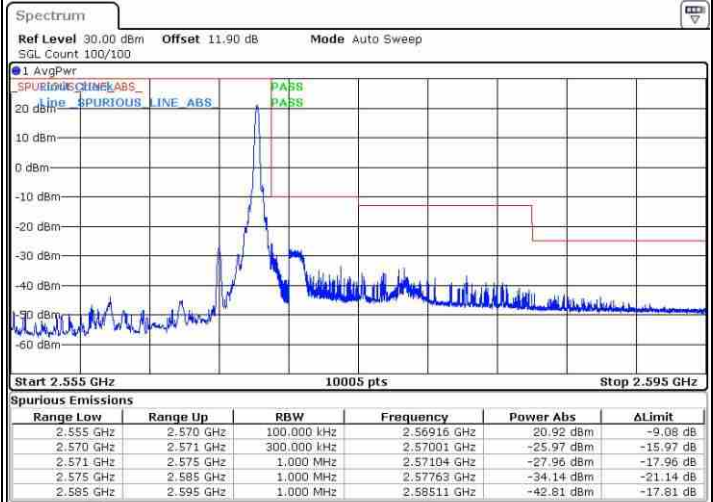


LTE Band 7 / 15MHz / QPSK

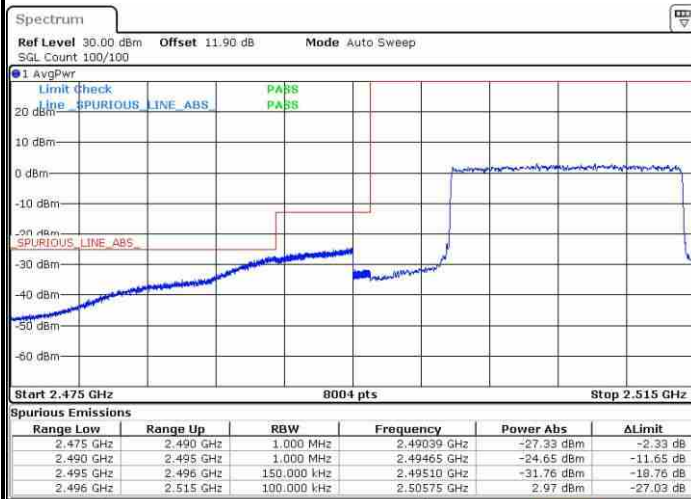
Lowest Band Edge / 1 RB



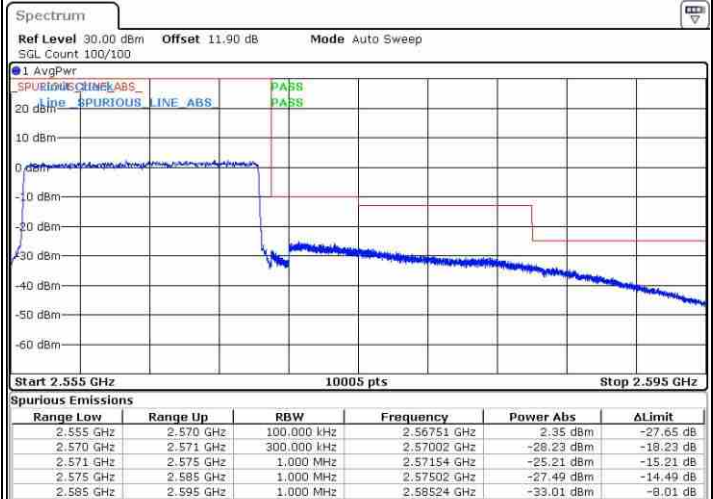
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



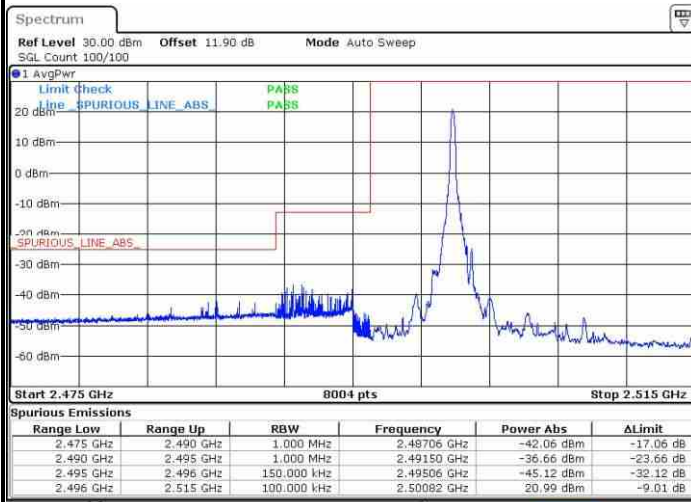
Highest Band Edge / Full RB



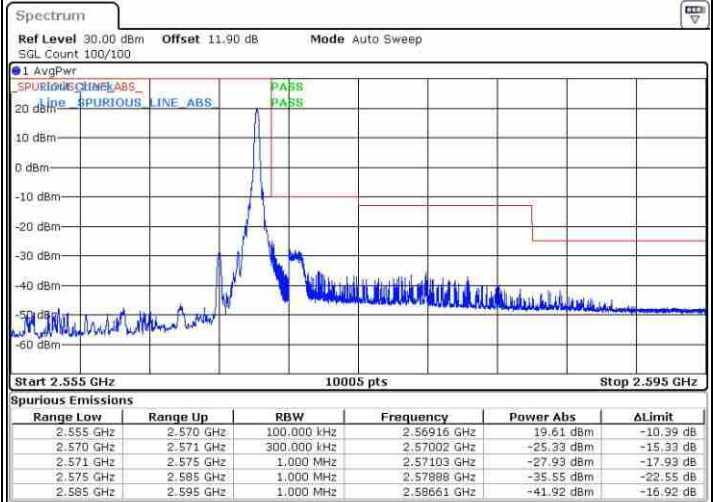


LTE Band 7 / 15MHz / 16QAM

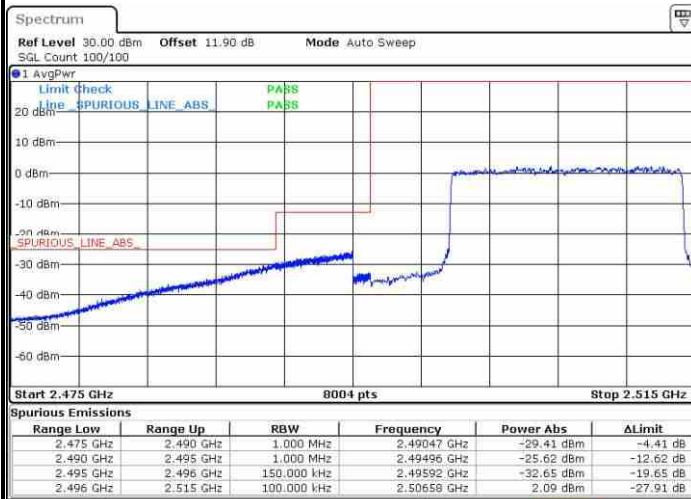
Lowest Band Edge / 1 RB



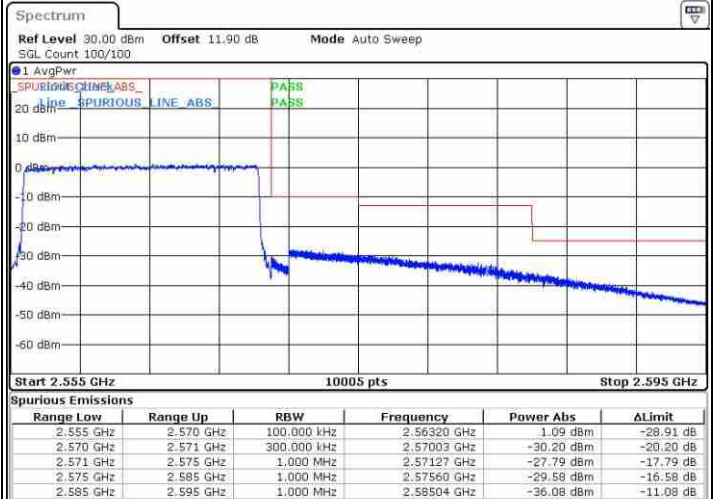
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



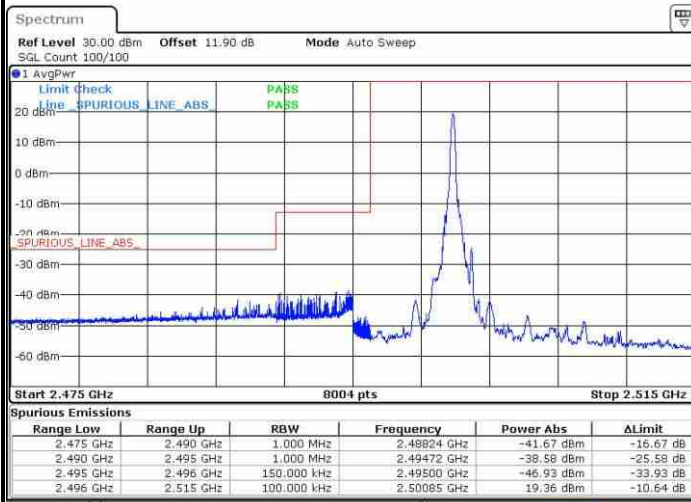
Highest Band Edge / Full RB



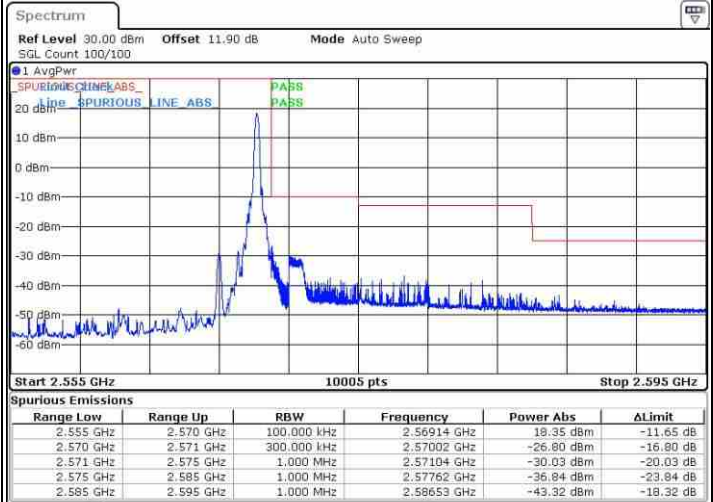


LTE Band 7 / 15MHz / 64QAM

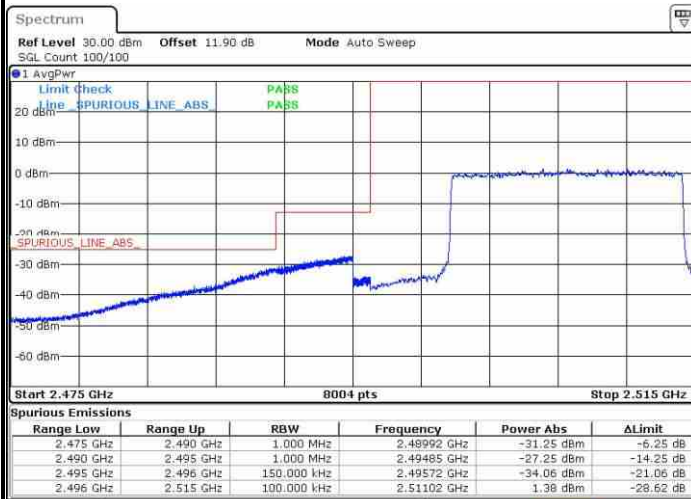
Lowest Band Edge / 1 RB



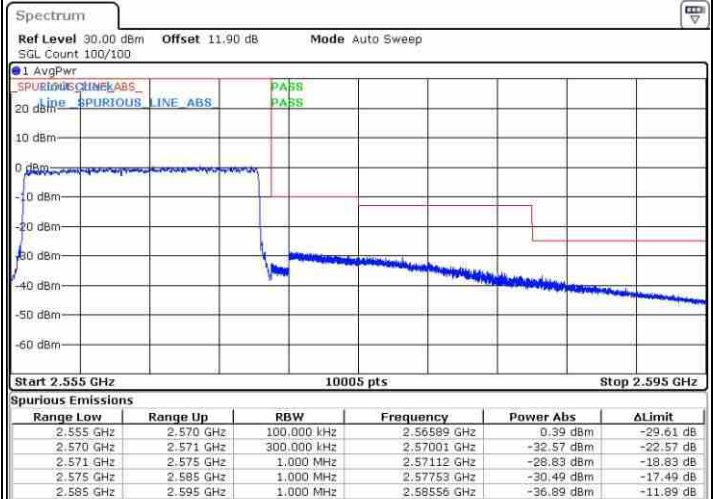
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



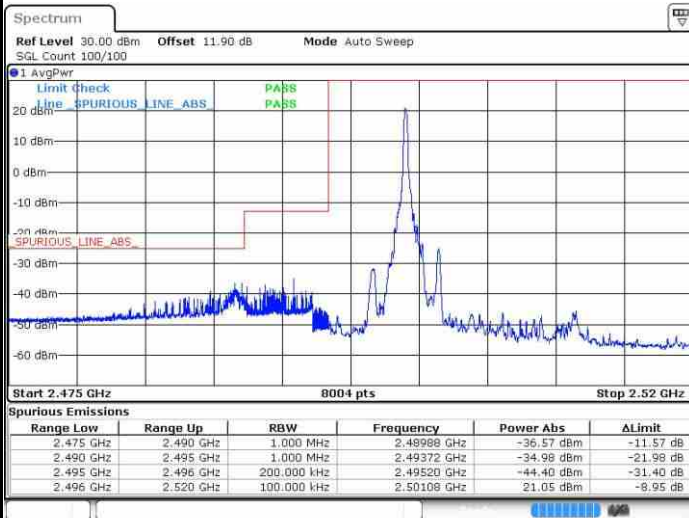
Highest Band Edge / Full RB



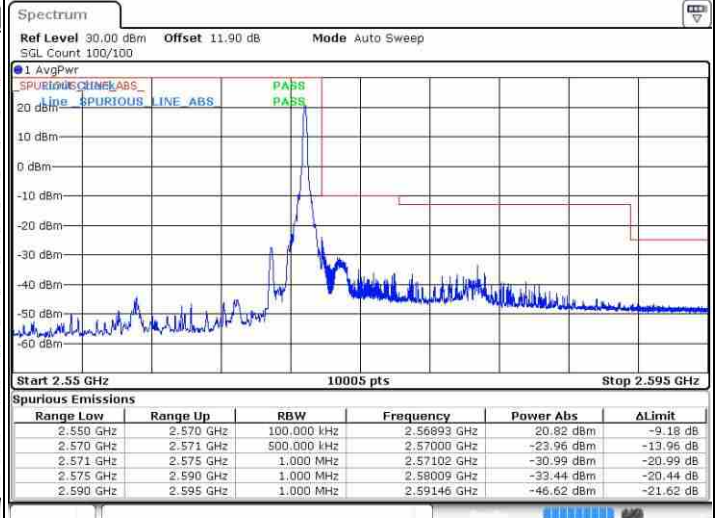


LTE Band 7 / 20MHz / QPSK

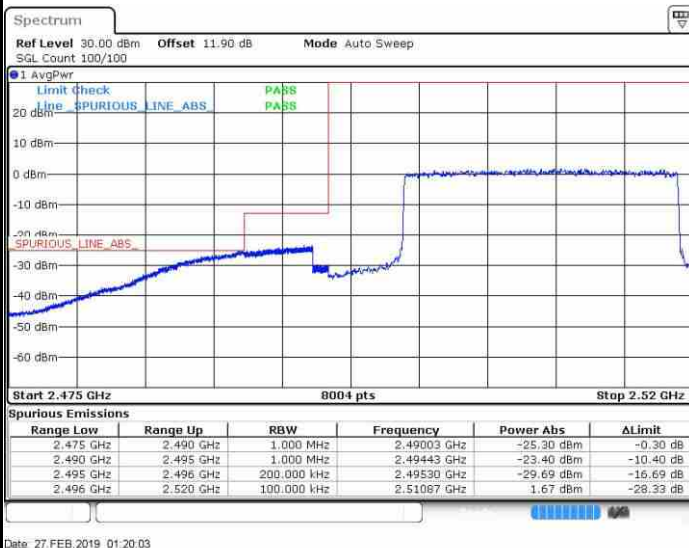
Lowest Band Edge / 1 RB



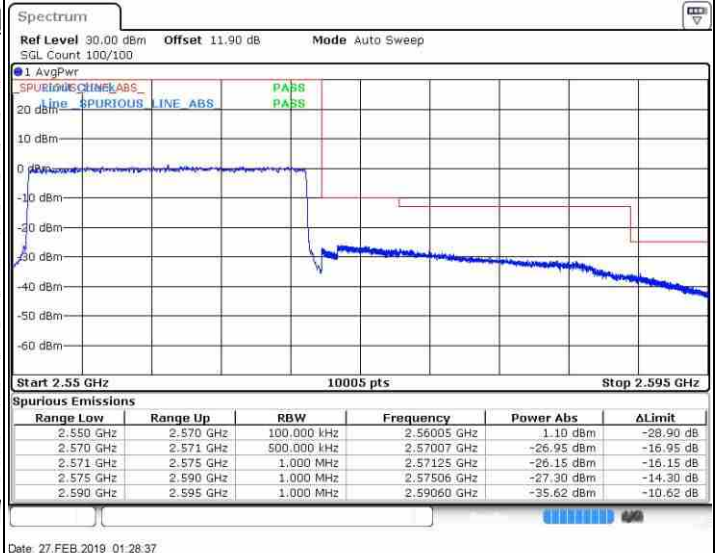
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



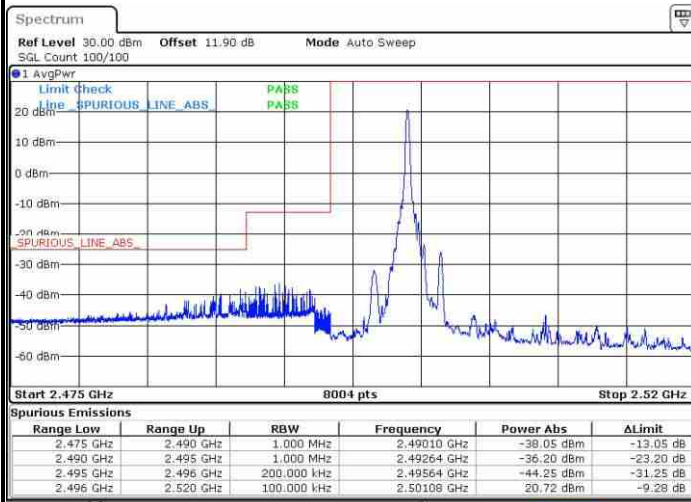
Highest Band Edge / Full RB



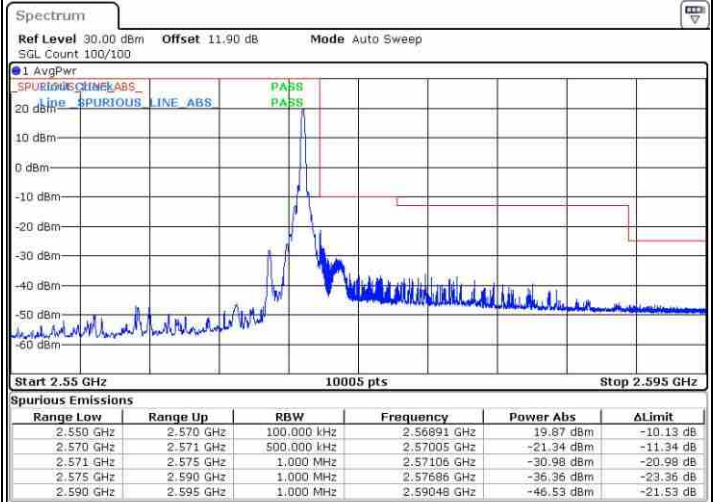


LTE Band 7 / 20MHz / 16QAM

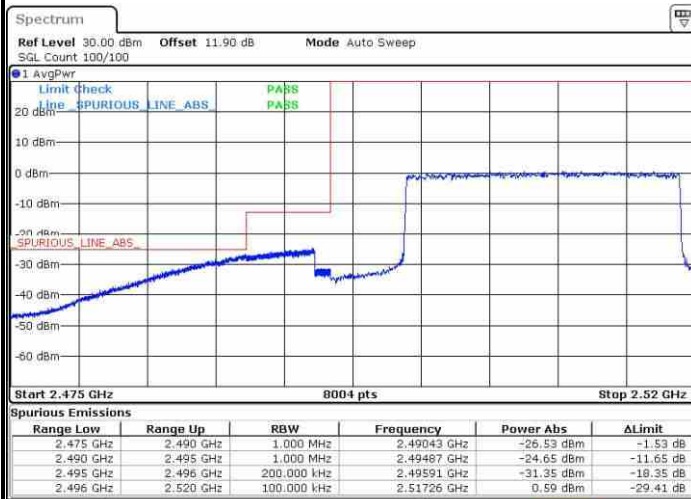
Lowest Band Edge / 1 RB



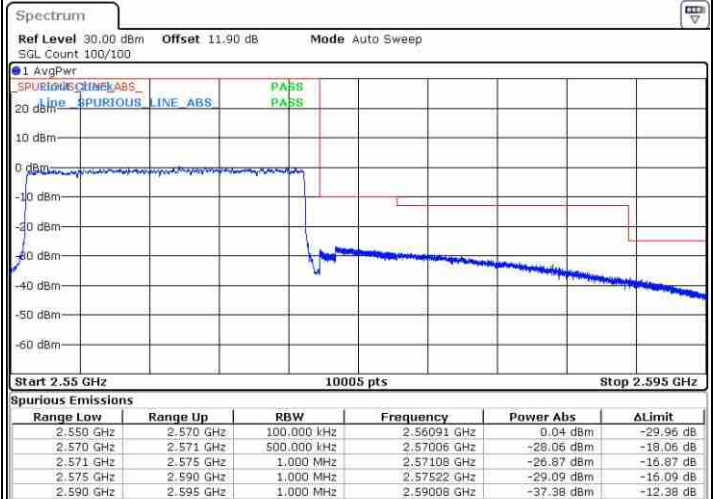
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



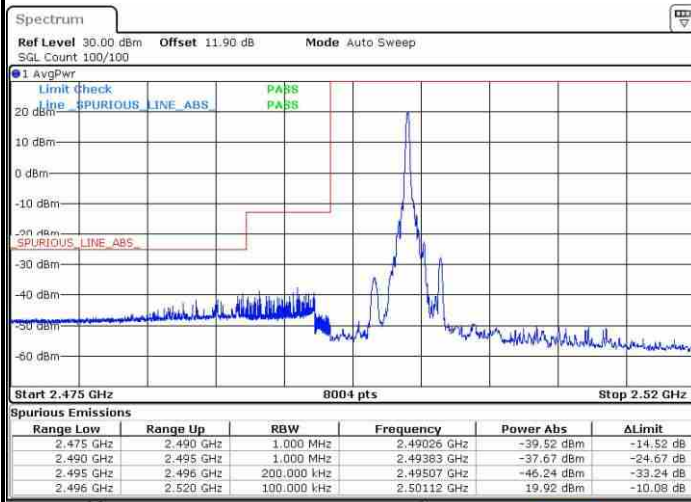
Highest Band Edge / Full RB



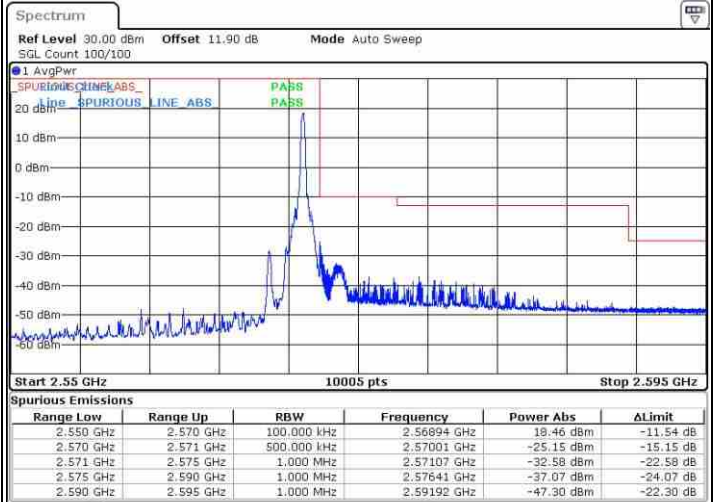


LTE Band 7 / 20MHz / 64QAM

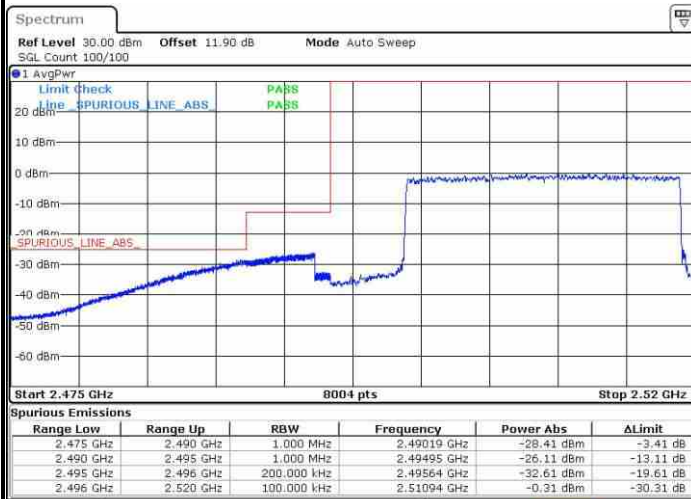
Lowest Band Edge / 1 RB



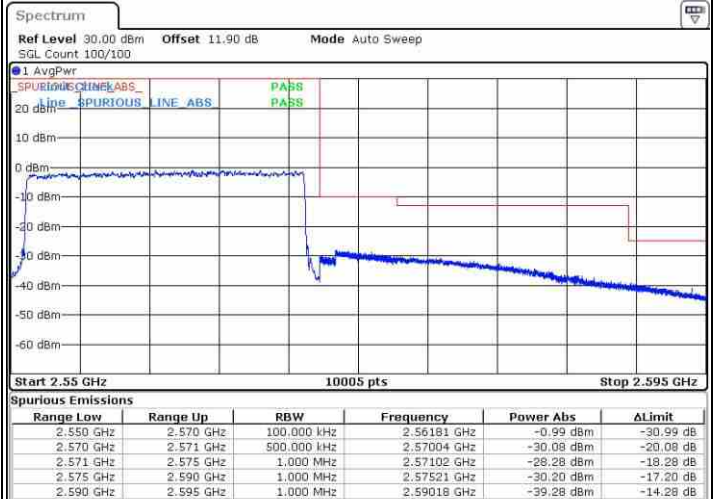
Highest Band Edge / 1 RB

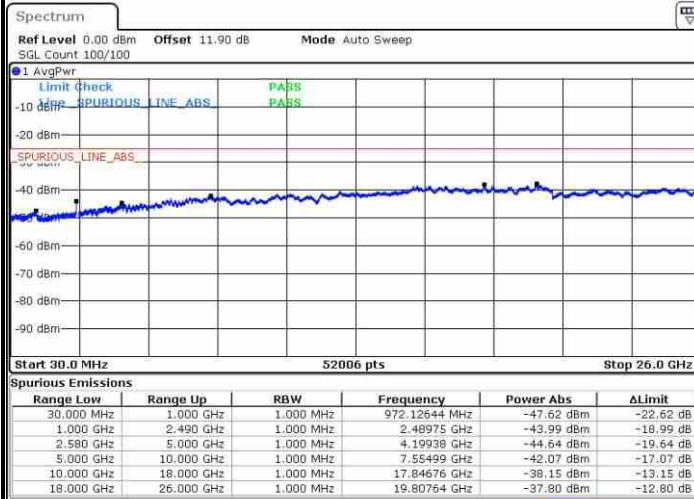


Lowest Band Edge / Full RB

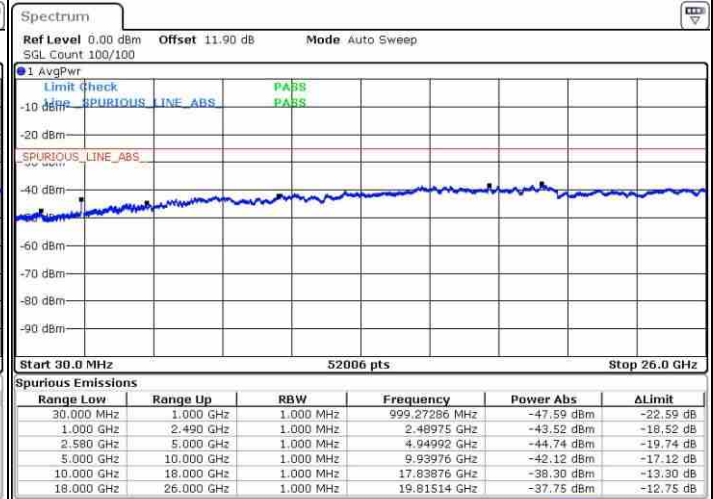


Highest Band Edge / Full RB

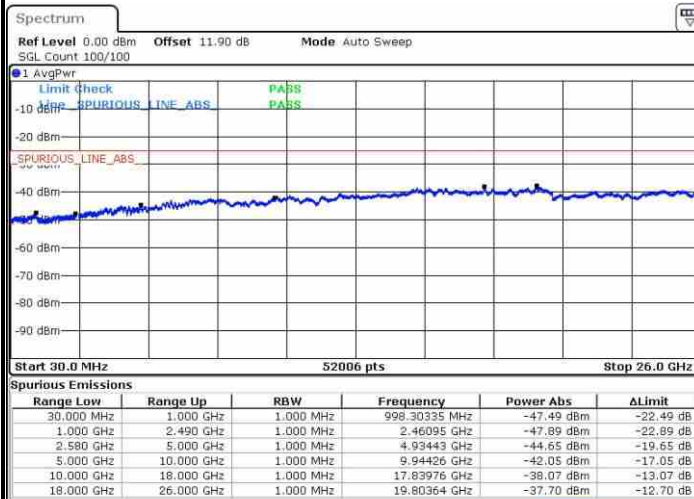


**Conducted Spurious Emission****LTE Band 7 / 5MHz****Lowest Channel / QPSK**

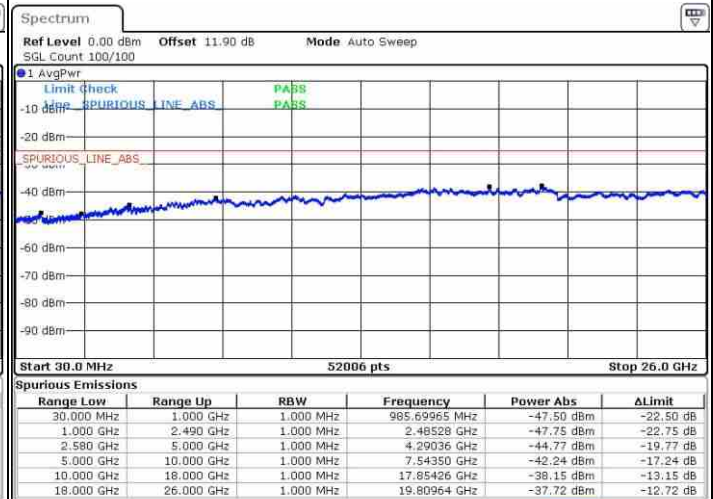
Date: 27.FEB.2019 00:19:52

Lowest Channel / 16QAM

Date: 27.FEB.2019 00:20:51

Middle Channel / QPSK

Date: 27.FEB.2019 00:23:37

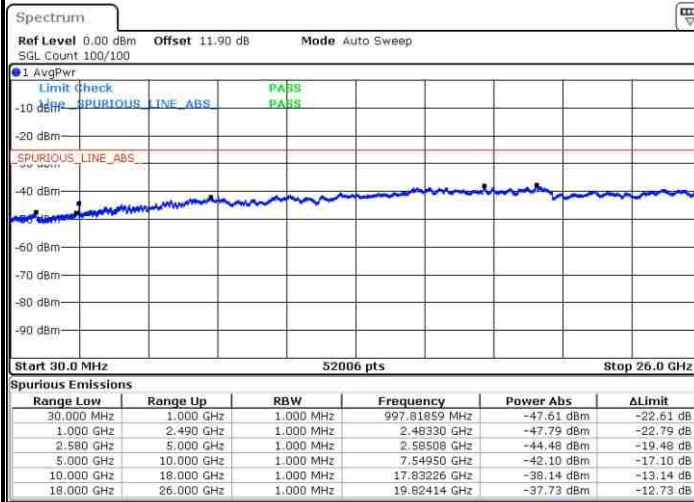
Middle Channel / 16QAM

Date: 27.FEB.2019 00:23:37



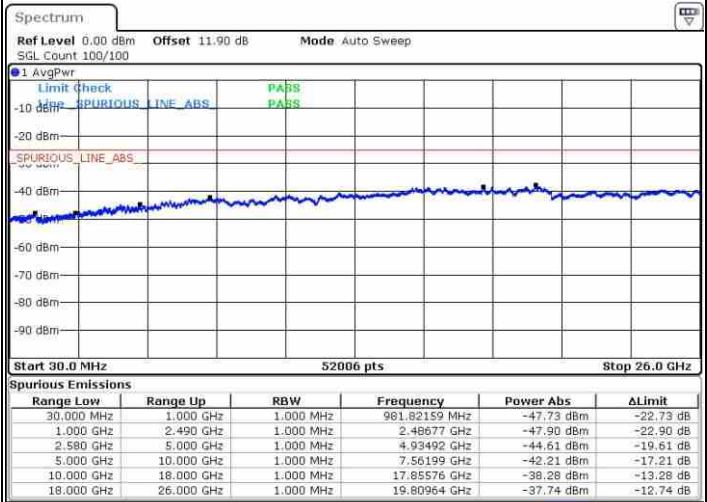
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 27.FEB 2019 00:30:11

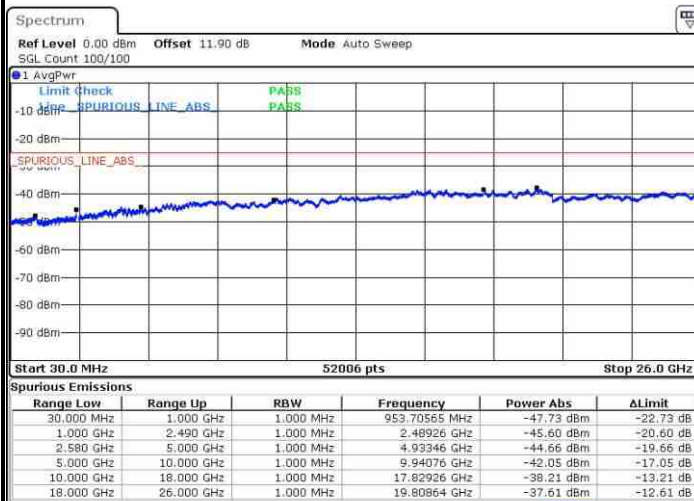
Highest Channel / 16QAM



Date: 27.FEB 2019 00:31:06

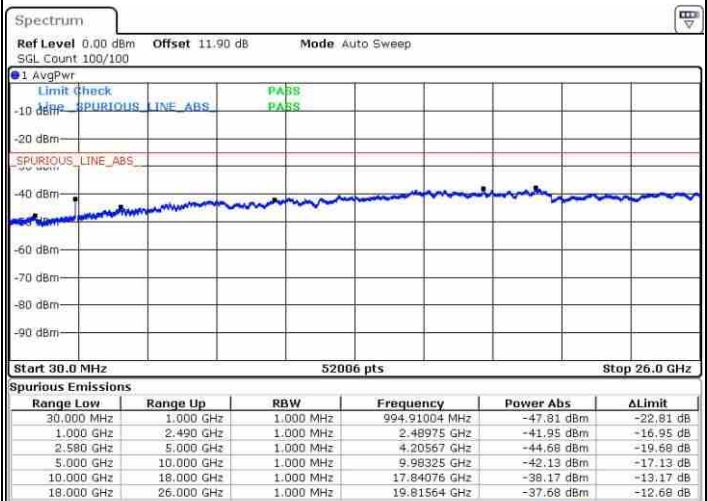
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 27.FEB 2019 00:42:04

Lowest Channel / 16QAM

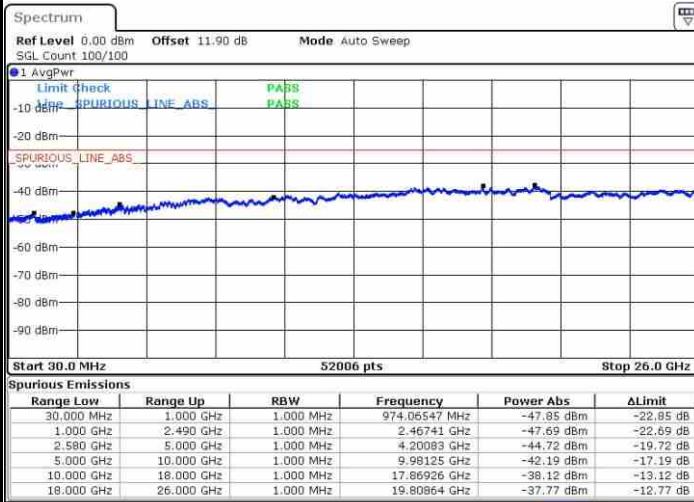


Date: 27.FEB 2019 00:42:59



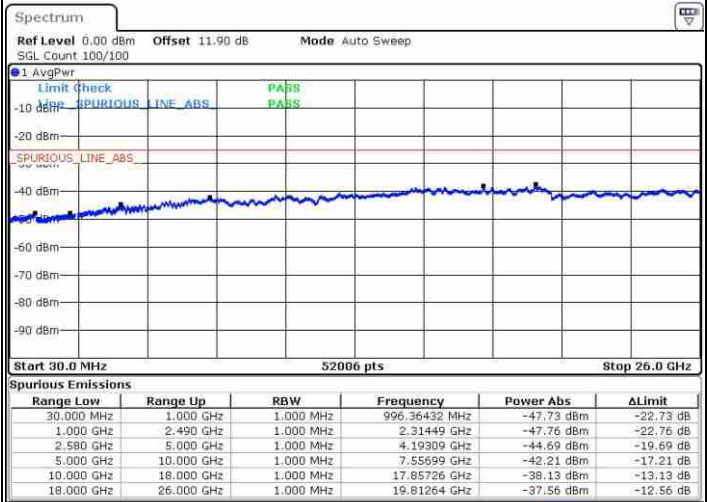
LTE Band 7 / 10MHz

Middle Channel / QPSK



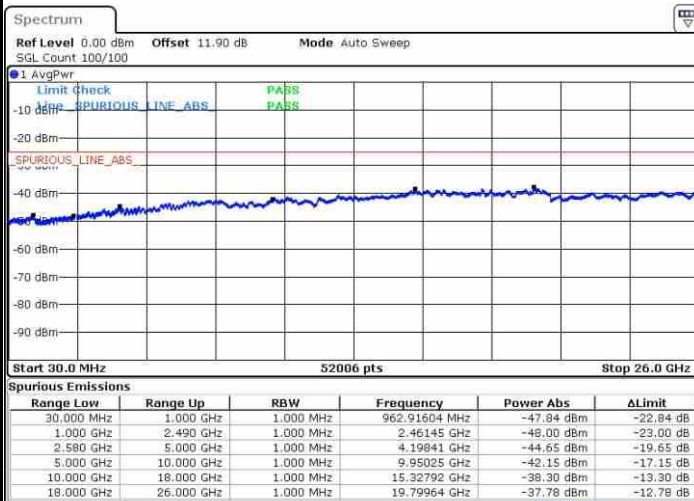
Date: 27.FEB 2019 00:44:39

Middle Channel / 16QAM



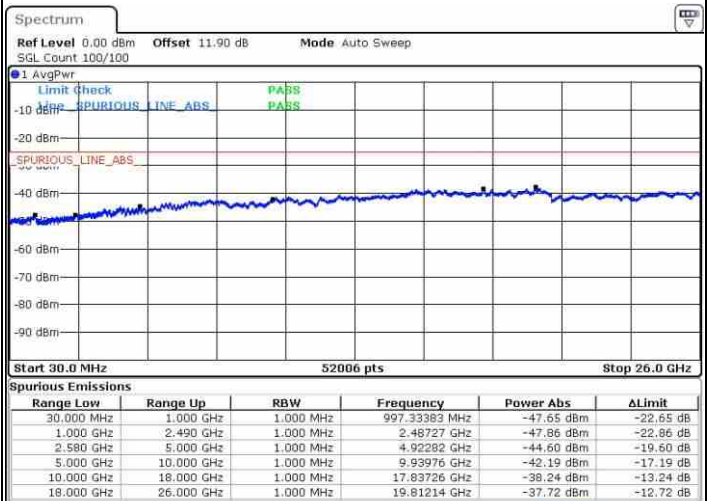
Date: 27.FEB 2019 00:45:34

Highest Channel / QPSK



Date: 27.FEB 2019 00:49:58

Highest Channel / 16QAM

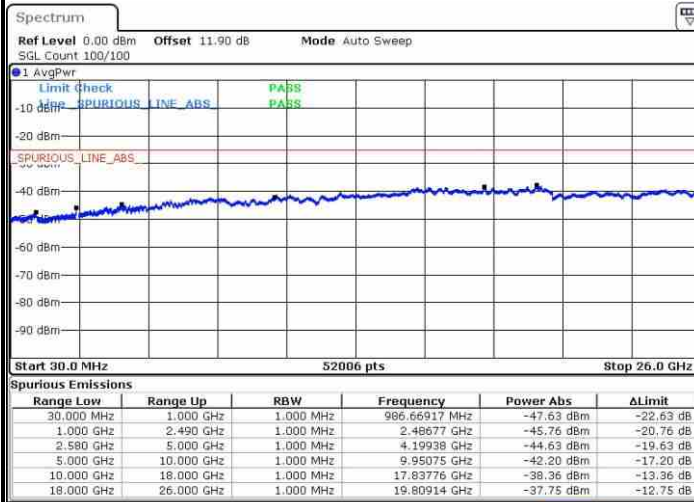


Date: 27.FEB 2019 00:50:52



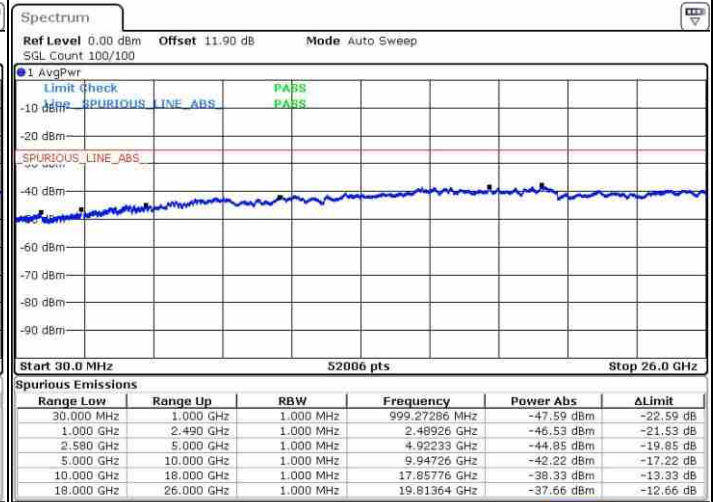
LTE Band 7 / 15MHz

Lowest Channel / QPSK



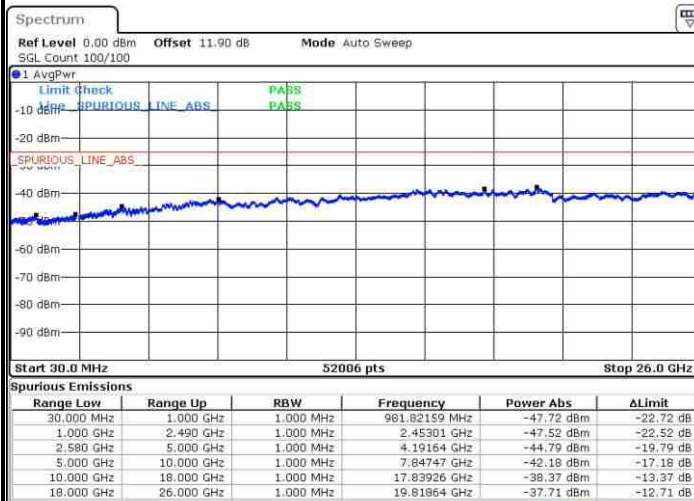
Date: 27.FEB 2019 01:01:51

Lowest Channel / 16QAM



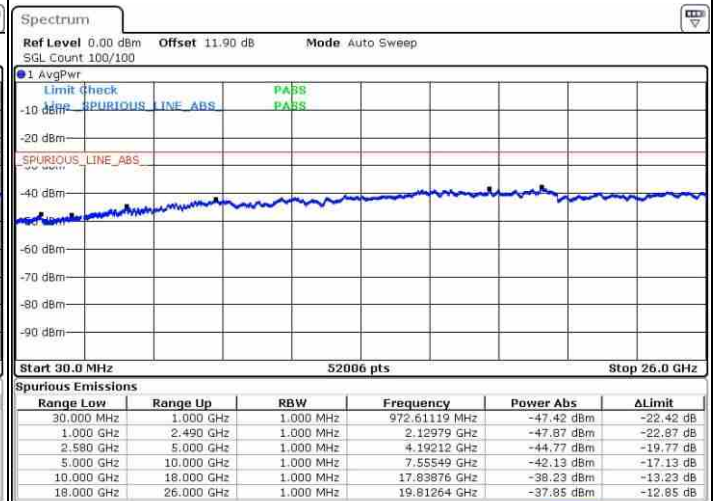
Date: 27.FEB 2019 01:02:45

Middle Channel / QPSK



Date: 27.FEB 2019 01:04:25

Middle Channel / 16QAM

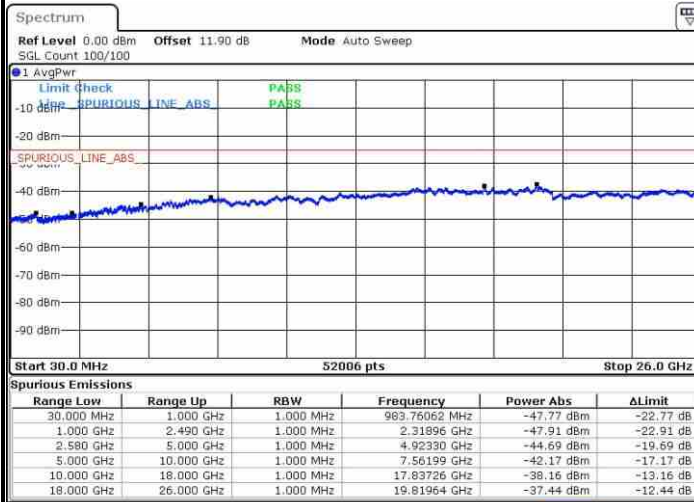


Date: 27.FEB 2019 01:05:20



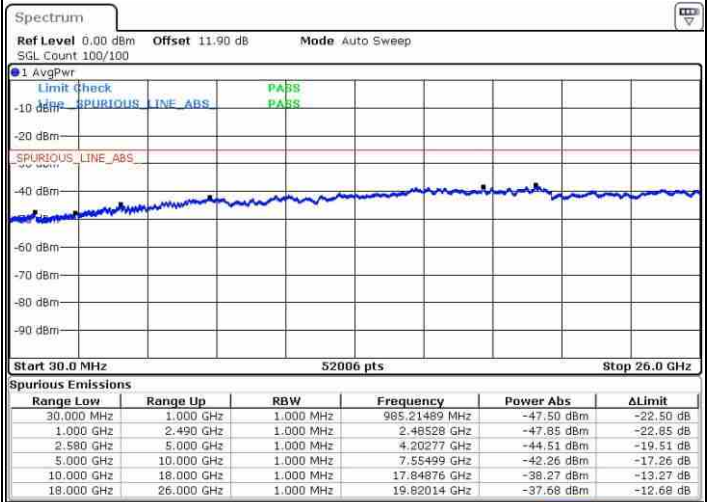
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 27.FEB 2019 01:09:44

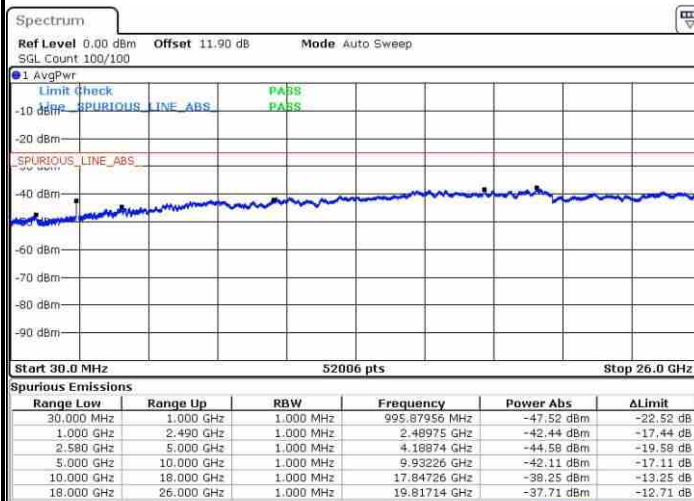
Highest Channel / 16QAM



Date: 27.FEB 2019 01:10:38

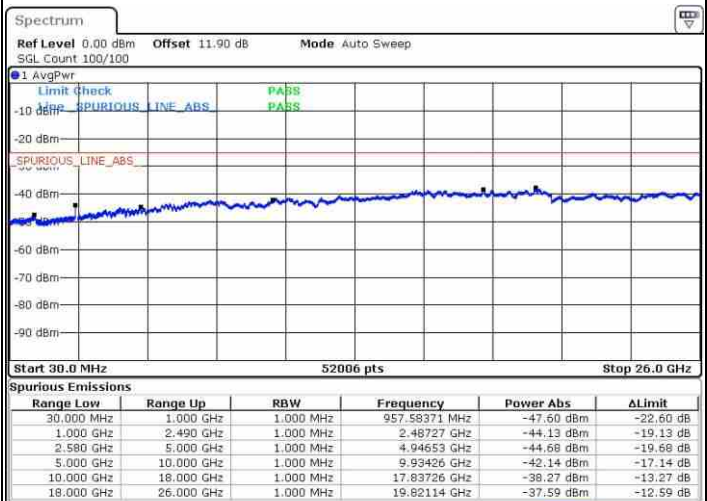
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 27.FEB 2019 01:21:39

Lowest Channel / 16QAM

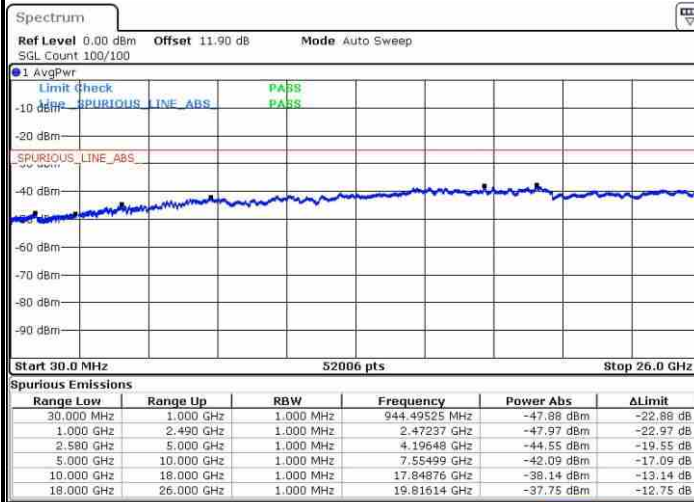


Date: 27.FEB 2019 01:22:33



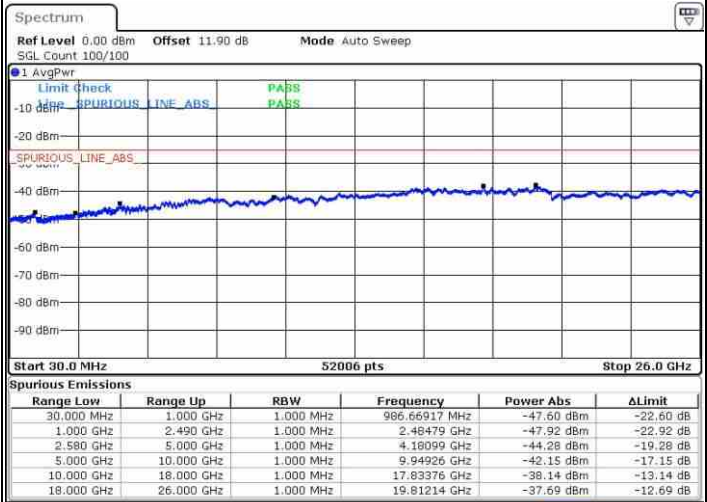
LTE Band 7 / 20MHz

Middle Channel / QPSK



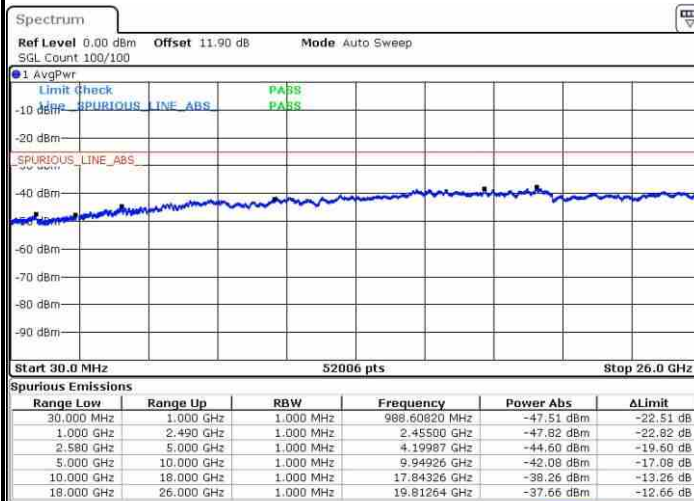
Date: 27.FEB 2019 01:24:14

Middle Channel / 16QAM



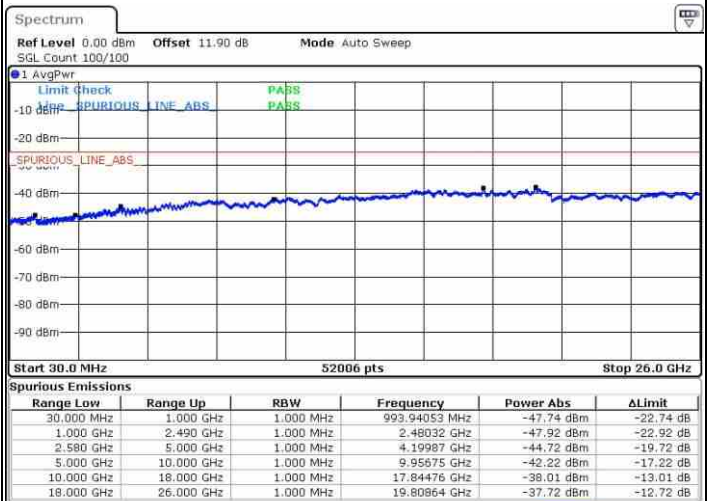
Date: 27.FEB 2019 01:25:08

Highest Channel / QPSK



Date: 27.FEB 2019 01:29:32

Highest Channel / 16QAM

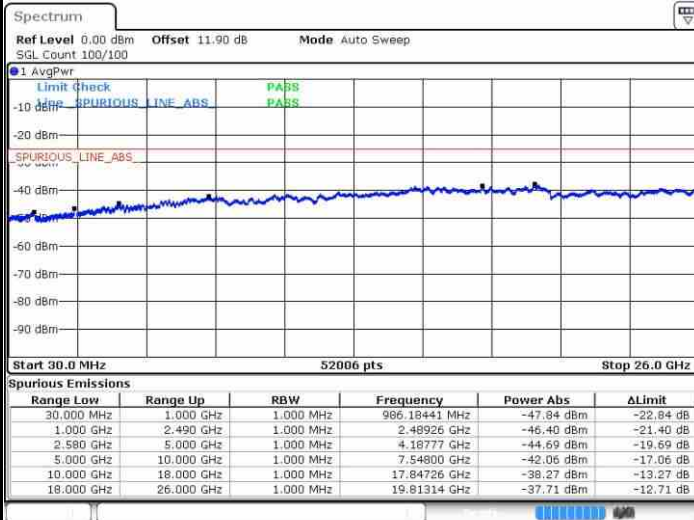


Date: 27.FEB 2019 01:30:26



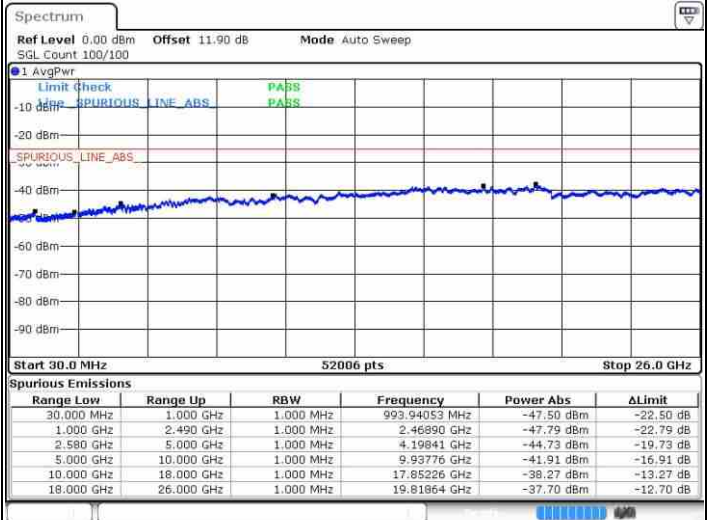
LTE Band 7 / 5MHz

Lowest Channel / 64QAM



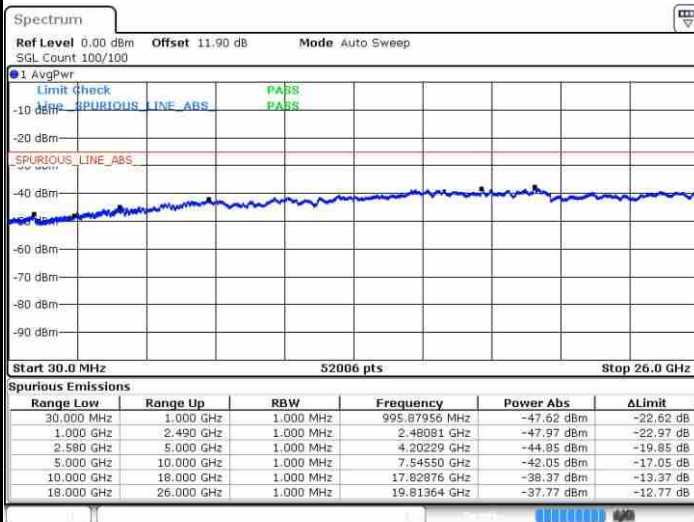
Date: 27.FEB 2019 00:33:45

Middle Channel / 64QAM



Date: 27.FEB 2019 00:35:02

Highest Channel / 64QAM

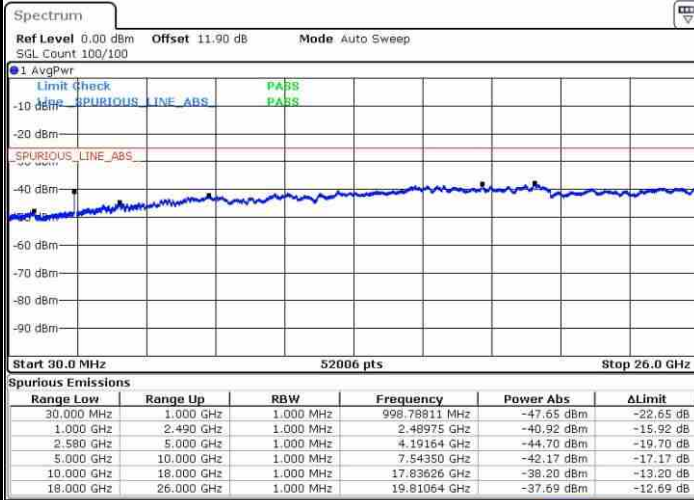


Date: 27.FEB 2019 00:37:41



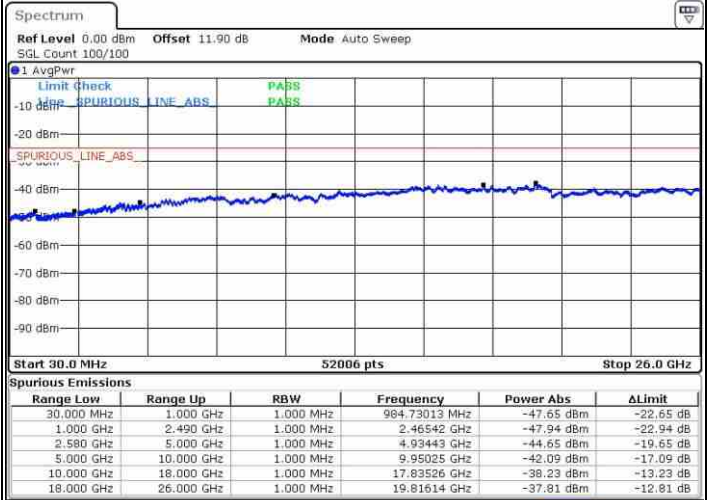
LTE Band 7 / 10MHz

Lowest Channel / 64QAM



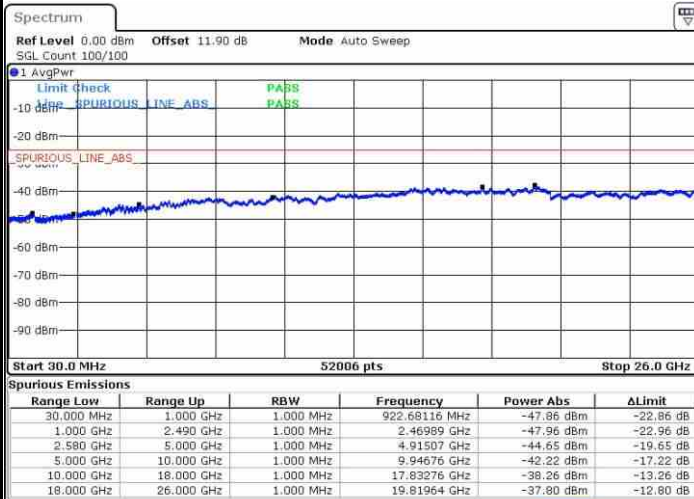
Date: 27.FEB 2019 00:53:31

Middle Channel / 64QAM



Date: 27.FEB 2019 00:54:48

Highest Channel / 64QAM

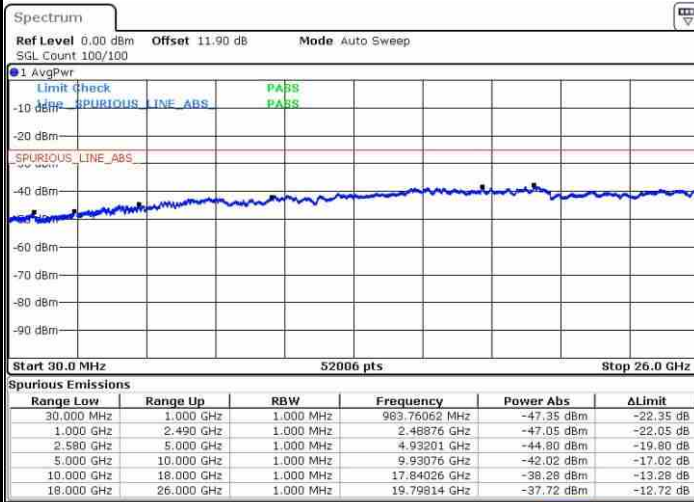


Date: 27.FEB 2019 00:57:27



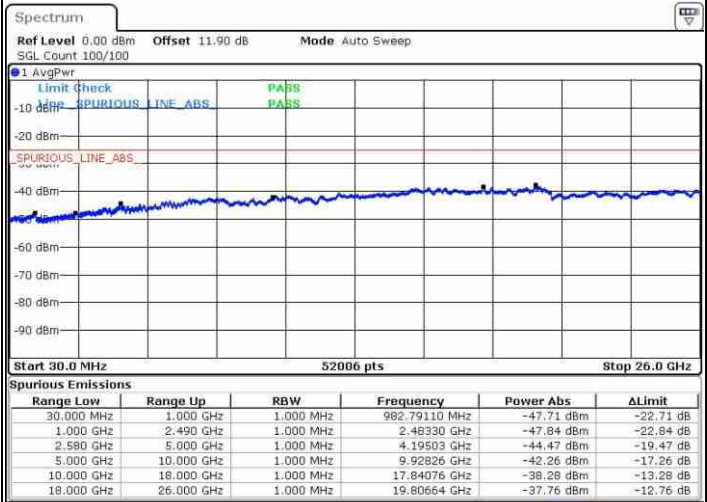
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



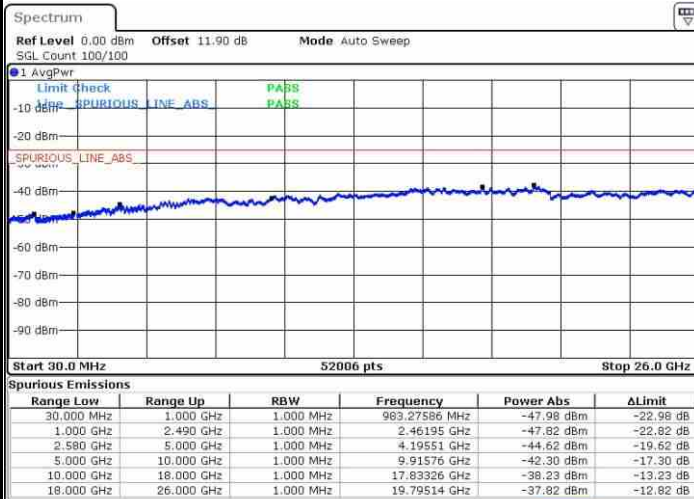
Date: 27.FEB 2019 01:13:19

Middle Channel / 64QAM



Date: 27.FEB 2019 01:14:37

Highest Channel / 64QAM

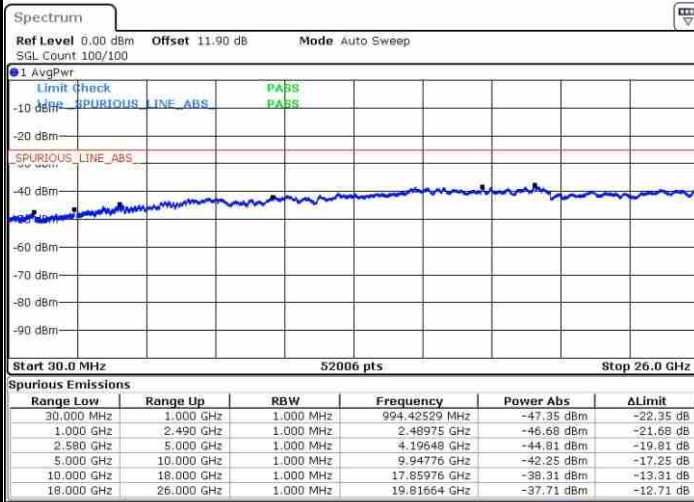


Date: 27.FEB 2019 01:17:16



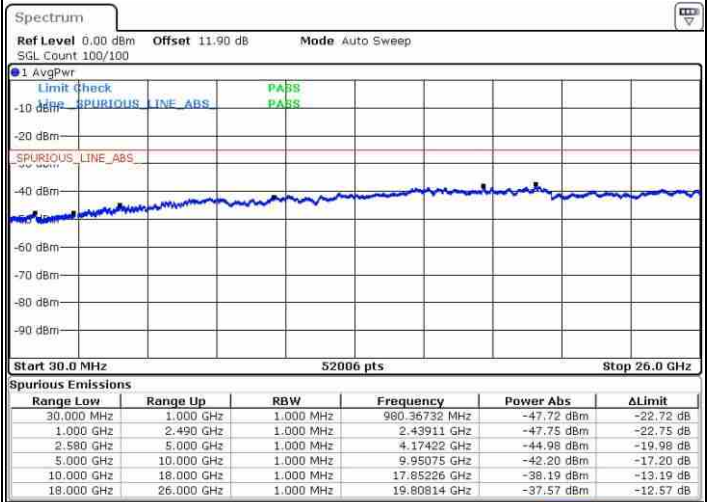
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



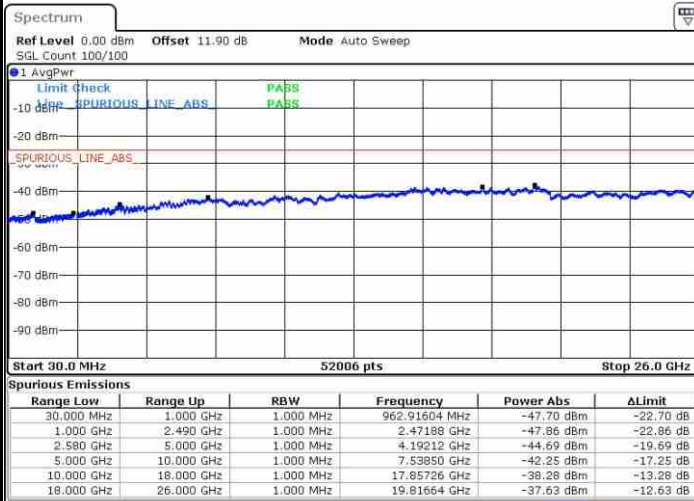
Date: 27.FEB 2019 01:33:05

Middle Channel / 64QAM



Date: 27.FEB 2019 01:34:23

Highest Channel / 64QAM



Date: 27.FEB 2019 01:37:02

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0068	PASS
40	Normal Voltage	0.0062	
30	Normal Voltage	0.0064	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0063	
20	Maximum Voltage	0.0010	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0000	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 7_CA

26dB Bandwidth

Mode	LTE Band 7 : 26dB BW(MHz)			
QPSK				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	29.79	-	25.12	30.63
Middle CH	29.97	-	25.27	30.57
Highest CH	29.85	-	25.27	30.51
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	34.83	29.97	35.17	39.88
Middle CH	34.97	30.03	34.83	39.80
Highest CH	34.76	29.97	35.17	39.80

Mode	LTE Band 7 : 26dB BW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	29.79	-	25.12	30.63
Middle CH	29.91	-	25.12	30.51
Highest CH	29.91	-	25.07	30.51
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	34.90	30.03	34.90	39.88
Middle CH	34.76	30.27	34.83	39.96
Highest CH	34.90	29.97	34.90	40.04

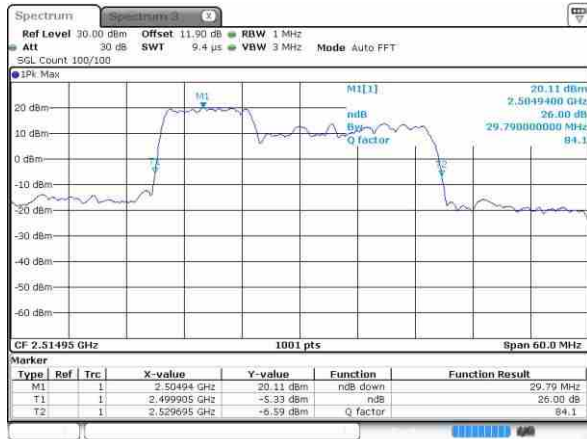
Mode	LTE Band 7 : 26dB BW(MHz)			
64QAM				
BW	10MHz+20MHz	15MHz+5MHz	15MHz+10MHz	15MHz+15MHz
Lowest CH	29.79	-	25.18	30.33
Middle CH	29.79	-	25.18	30.51
Highest CH	29.85	-	25.32	30.51
BW	15MHz+20MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Lowest CH	34.76	30.15	35.03	39.80
Middle CH	34.83	30.09	34.90	39.80
Highest CH	34.76	29.97	34.90	39.80



LTE Band 7

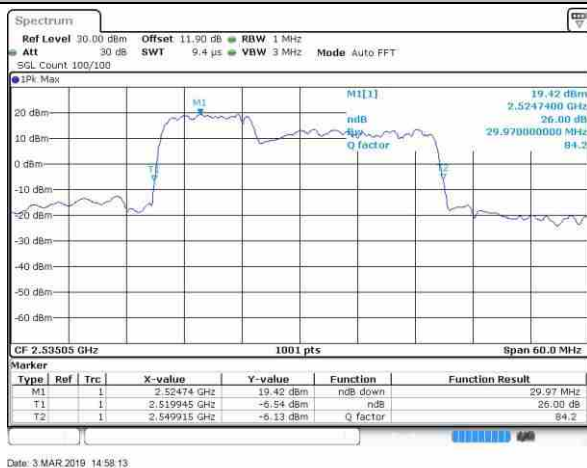
QPSK

Lowest Channel / 10MHz+20MHz



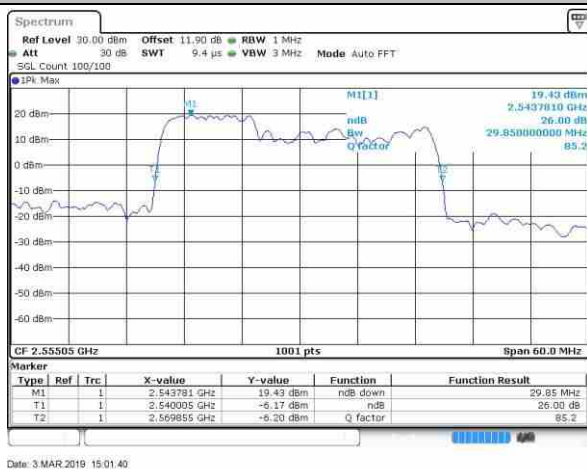
Lowest Channel / 15MHz+5MHz

Middle Channel / 10MHz+20MHz



Middle Channel / 15MHz+5MHz

Highest Channel / 10MHz+20MHz



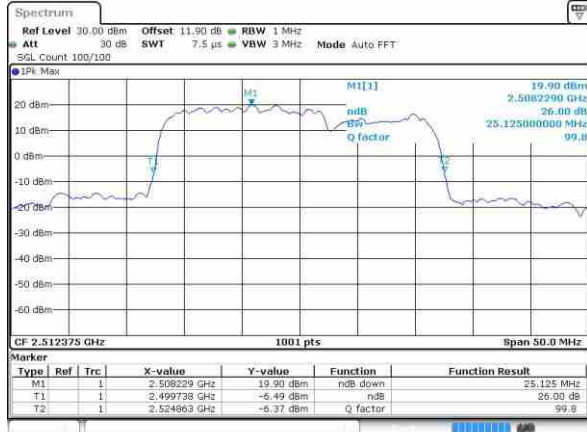
Highest Channel / 15MHz+5MHz



LTE Band 7

QPSK

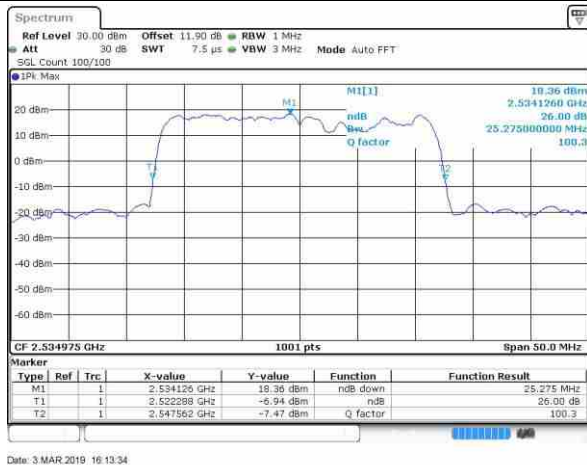
Lowest Channel / 15MHz+10MHz



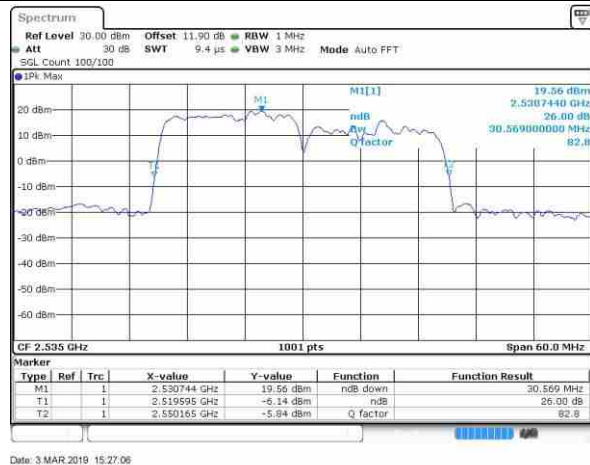
Lowest Channel / 15MHz+15MHz



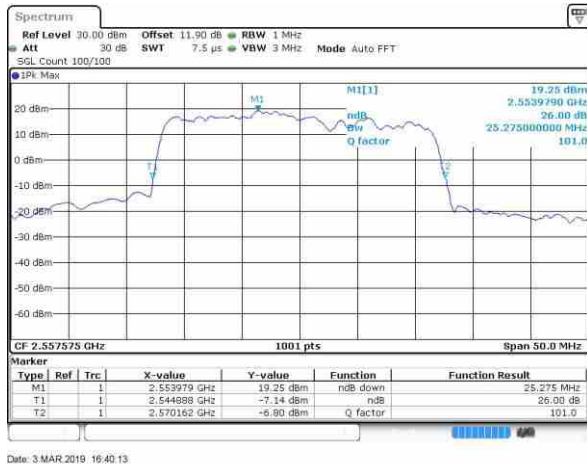
Middle Channel / 15MHz+10MHz



Middle Channel / 15MHz+15MHz



Highest Channel / 15MHz+10MHz



Highest Channel / 15MHz+15MHz

