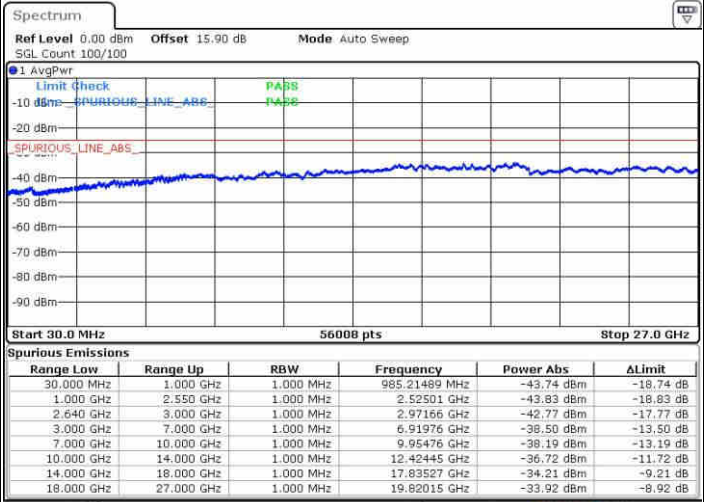
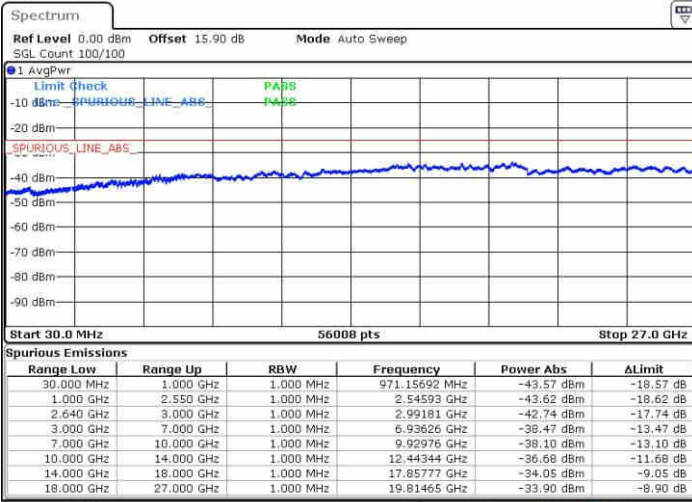




LTE Band 38 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

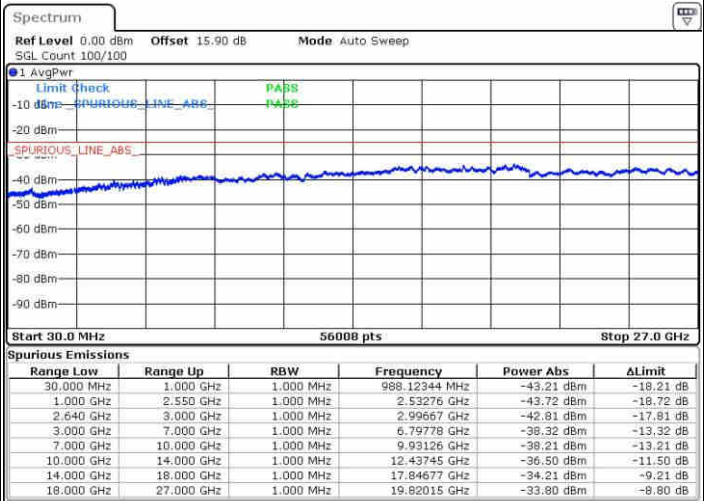
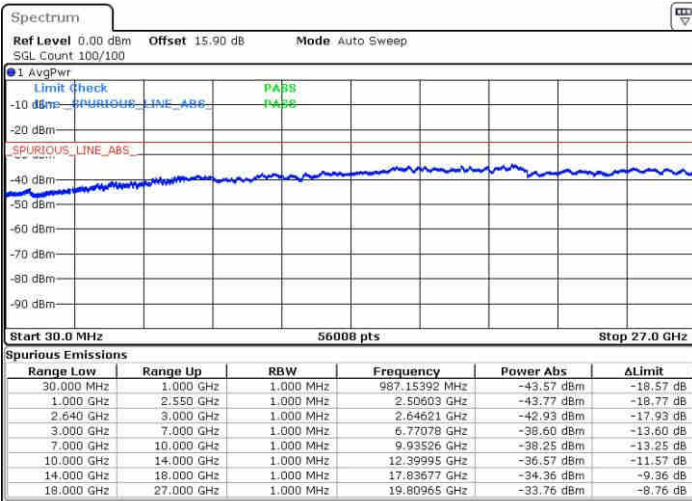


Date: 2.MAY.2019 15:15:20

Date: 2.MAY.2019 15:16:05

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2.MAY.2019 15:16:52

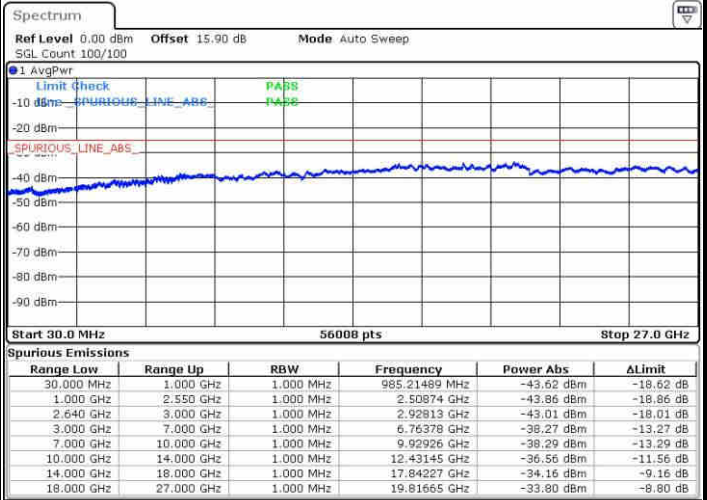
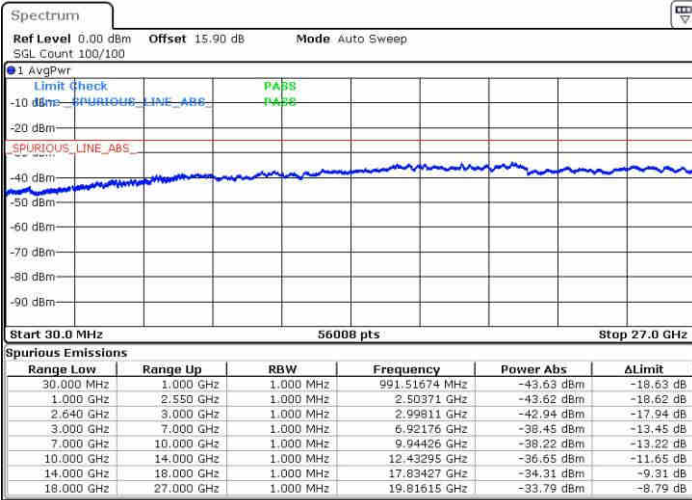
Date: 2.MAY.2019 15:17:37



LTE Band 38 / 5MHz

Lowest Channel / 64QAM

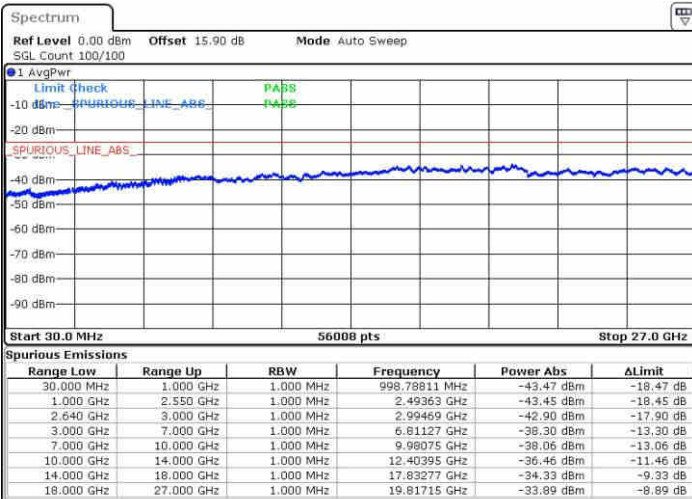
Middle Channel / 64QAM



Date: 2 MAY 2019 14:53:11

Date: 2 MAY 2019 14:53:56

Highest Channel / 64QAM



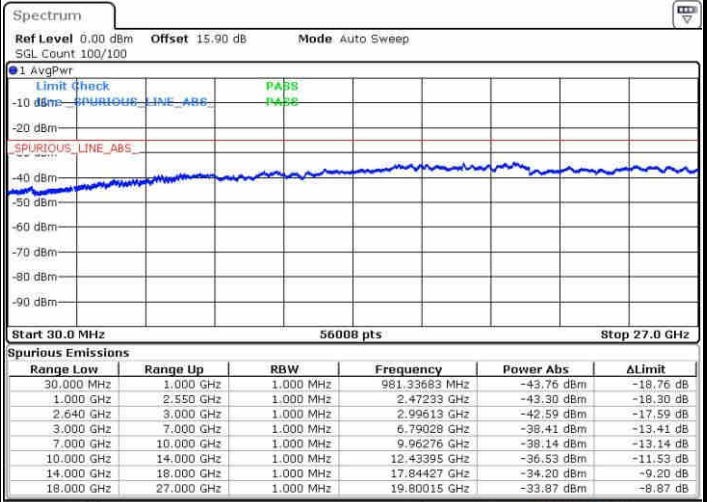
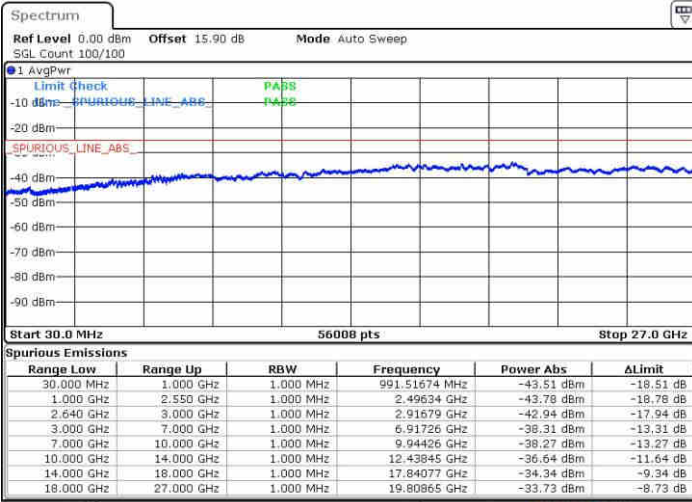
Date: 2 MAY 2019 14:54:42



LTE Band 38 / 10MHz

Lowest Channel / 64QAM

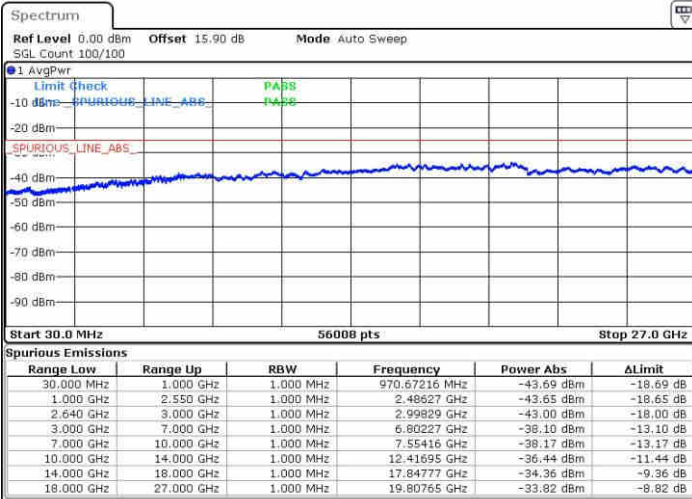
Middle Channel / 64QAM



Date: 2.MAY.2019 15:00:04

Date: 2.MAY.2019 15:00:49

Highest Channel / 64QAM



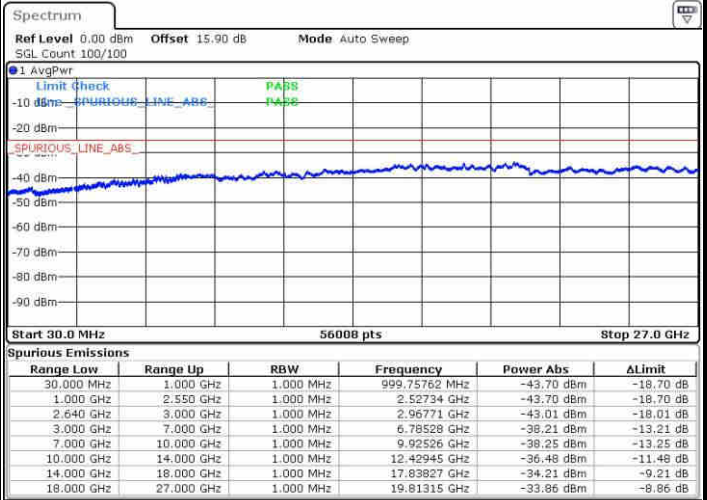
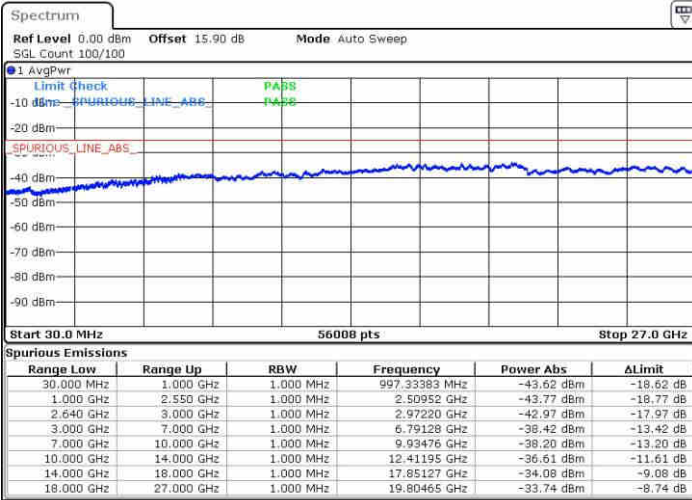
Date: 2.MAY.2019 15:01:35



LTE Band 38 / 15MHz

Lowest Channel / 64QAM

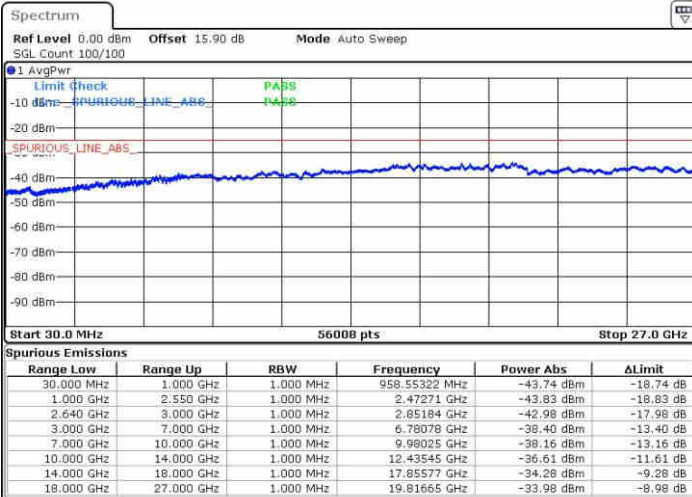
Middle Channel / 64QAM



Date: 2.MAY.2019 15:11:31

Date: 2.MAY.2019 15:12:16

Highest Channel / 64QAM



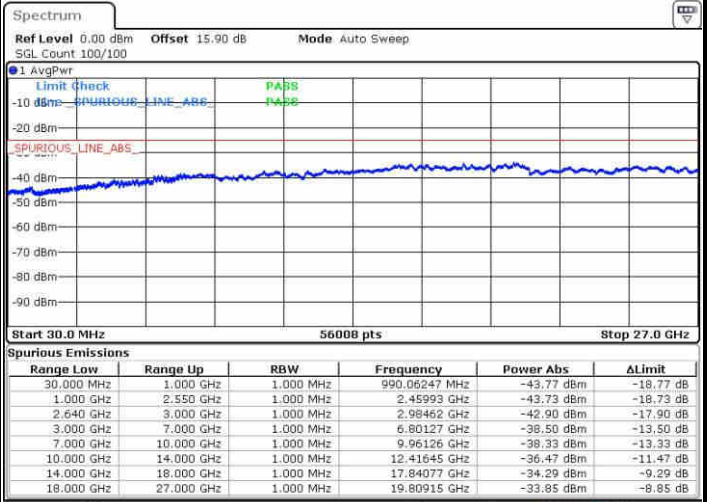
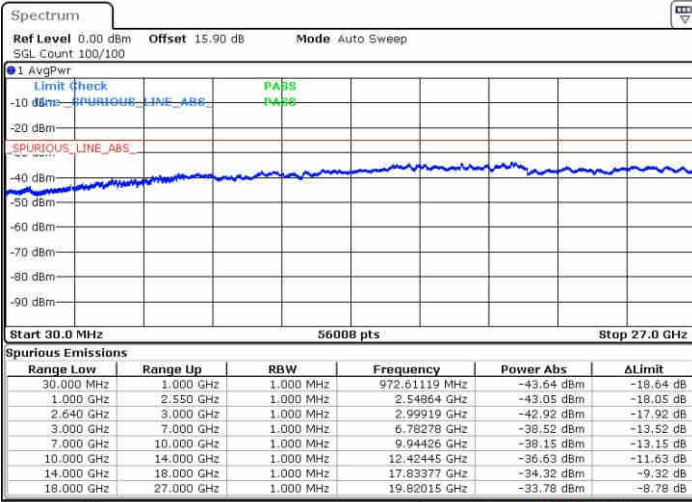
Date: 2.MAY.2019 15:13:02



LTE Band 38 / 20MHz

Lowest Channel / 64QAM

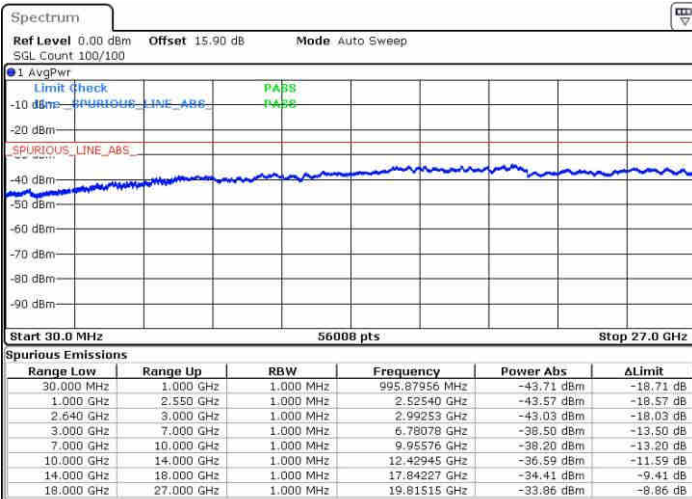
Middle Channel / 64QAM



Date: 2.MAY.2019 15:18:23

Date: 2.MAY.2019 15:19:08

Highest Channel / 64QAM



Date: 2.MAY.2019 15:19:55



Frequency Stability

Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Note:

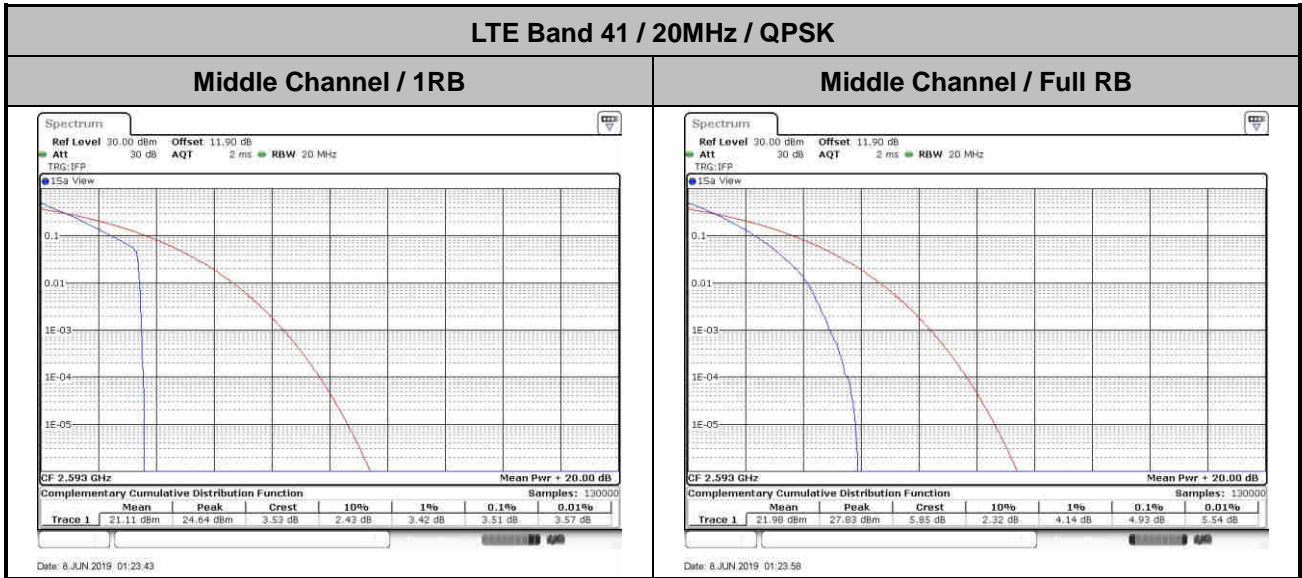
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 41

## Peak-to-Average Ratio

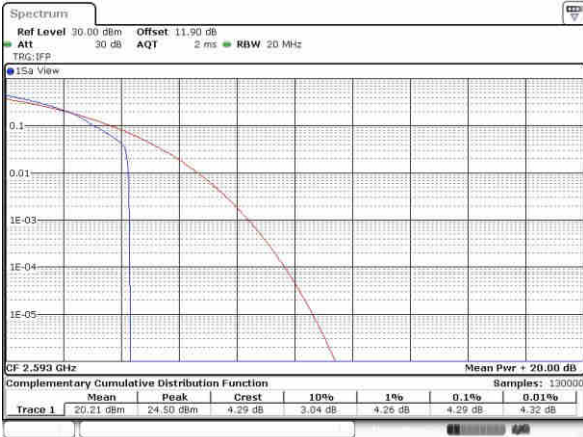
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.48	4.93	4.55	5.88	PASS
Middle CH	3.51	4.93	4.29	5.83	
Highest CH	3.51	4.96	4.70	5.88	
Mode	LTE Band 41 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.25	6.38	-	-	PASS
Middle CH	5.33	6.26	-	-	
Highest CH	5.45	6.38	-	-	





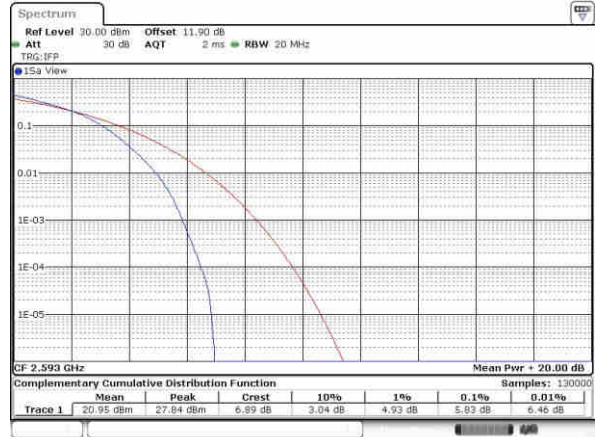
LTE Band 41 / 20MHz / 16QAM

Middle Channel / 1RB



Date: 8 JUN 2019 01:21:26

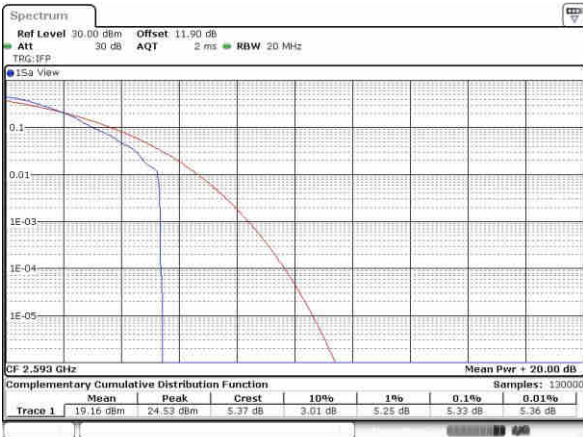
Middle Channel / Full RB



Date: 8 JUN 2019 01:21:41

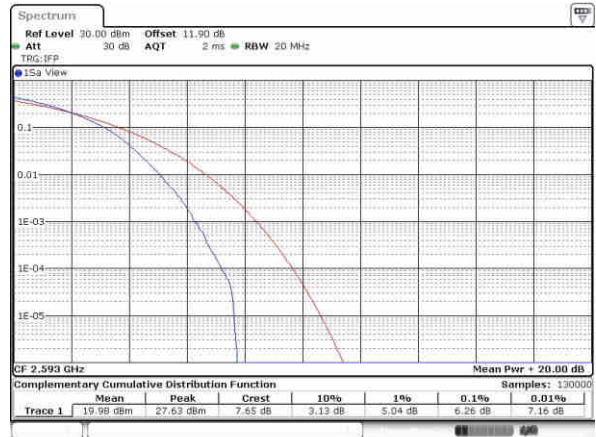
LTE Band 41 / 20MHz / 64QAM

Middle Channel / 1RB



Date: 8 JUN 2019 01:18:27

Middle Channel / Full RB



Date: 8 JUN 2019 01:18:50





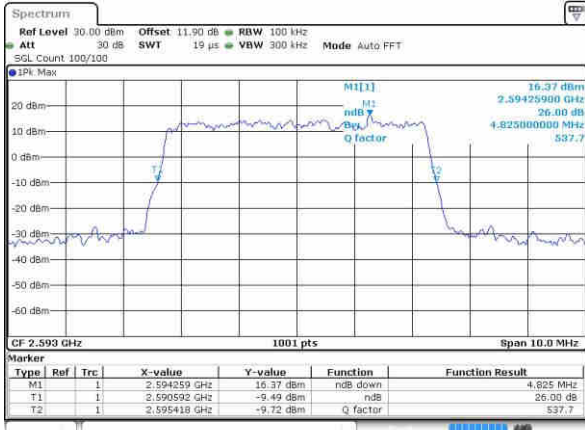
**26dB Bandwidth**

Mode	LTE Band 41 : 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	-	-	-	-	4.91	4.88	9.81	9.95	14.39	14.15	19.02	18.90
Middle CH	-	-	-	-	4.83	4.82	9.65	9.77	14.21	14.33	19.14	18.94
Highest CH	-	-	-	-	4.88	4.80	9.77	9.67	14.27	14.56	18.90	18.90
Mode	LTE Band 41 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.86	-	9.69	-	14.36	-	18.66	-
Middle CH	-	-	-	-	4.78	-	10.01	-	14.21	-	18.78	-
Highest CH	-	-	-	-	4.79	-	9.73	-	14.51	-	18.86	-



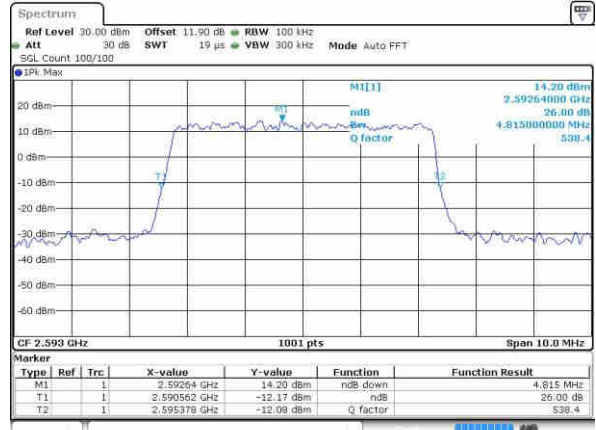
LTE Band 41

Middle Channel / 5MHz / QPSK



Date: 8 JUN 2019 00:54:05

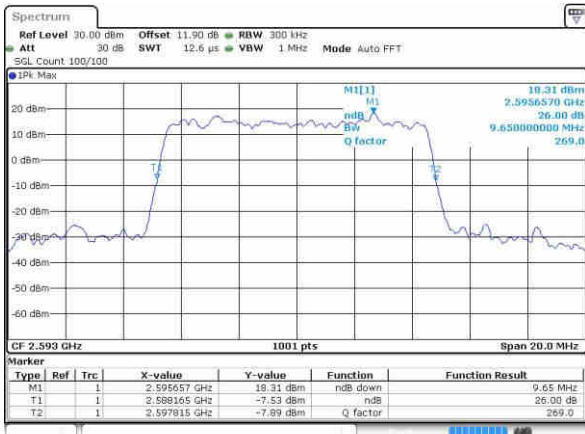
Middle Channel / 5MHz / 16QAM



Date: 8 JUN 2019 00:54:17

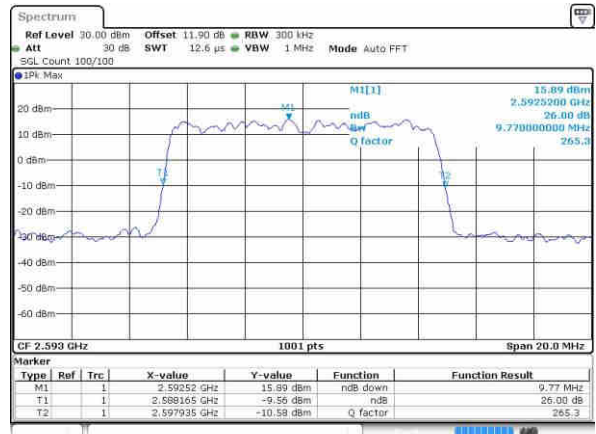
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 8 JUN 2019 00:57:30

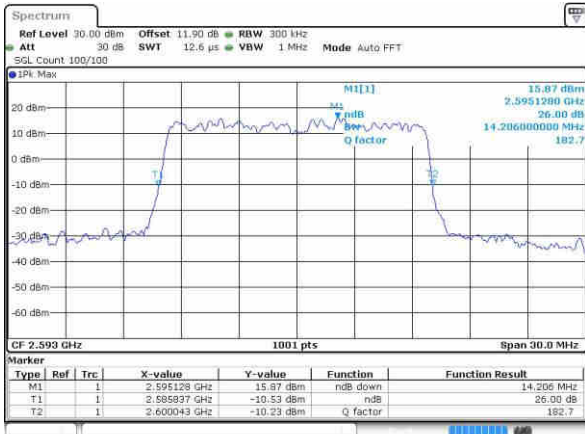
Middle Channel / 10MHz / 16QAM



Date: 8 JUN 2019 00:57:42

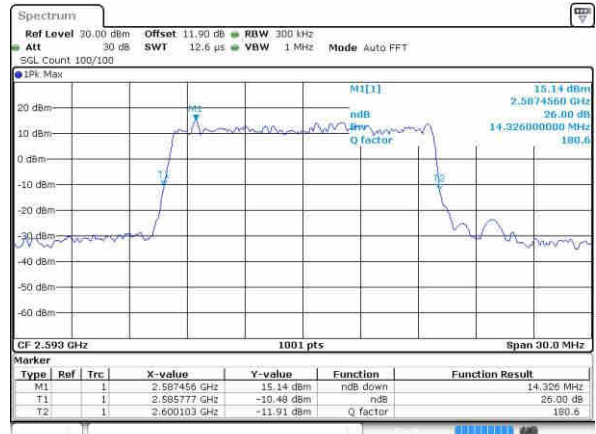
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 8 JUN 2019 01:02:16

Middle Channel / 15MHz / 16QAM

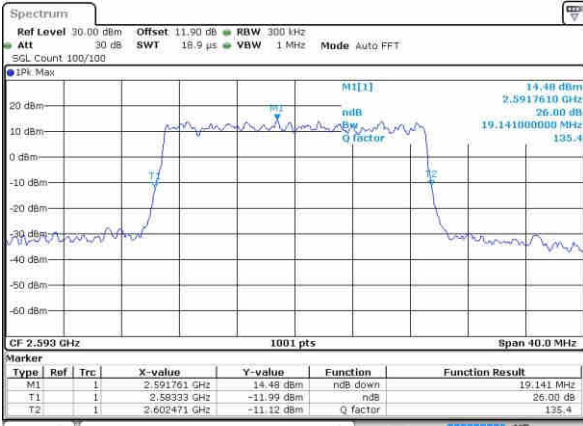


Date: 8 JUN 2019 01:02:28



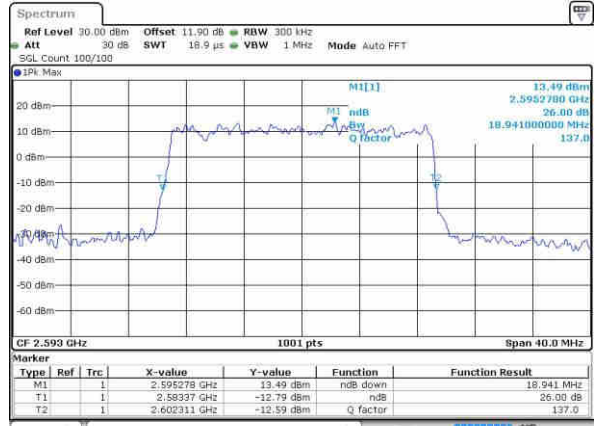
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 8 JUN 2019 01:05:35

Middle Channel / 20MHz / 16QAM

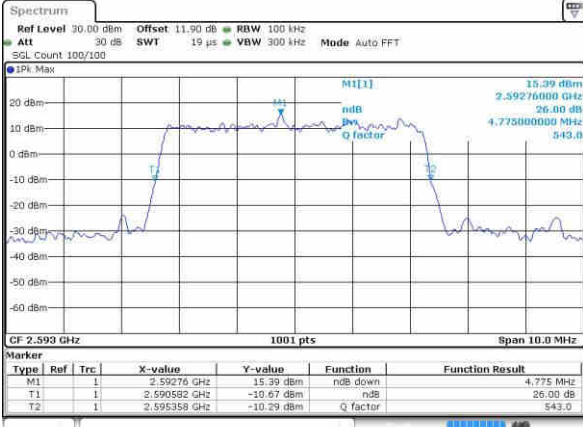


Date: 8 JUN 2019 01:05:47



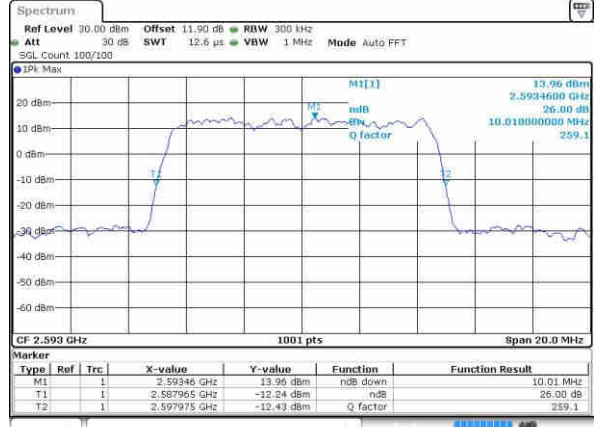
LTE Band 41

Middle Channel / 5MHz / 64QAM



Date: 8 JUN 2019 01:09:12

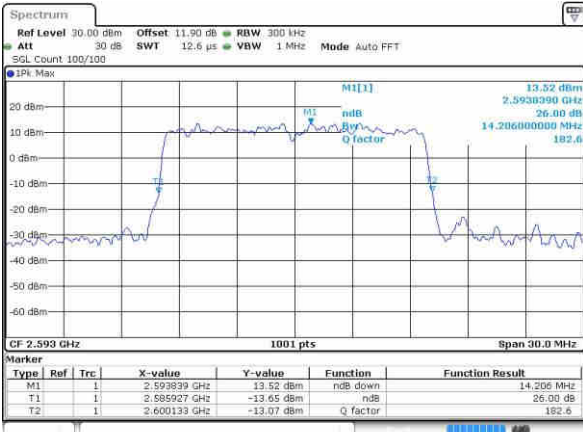
Middle Channel / 10MHz / 64QAM



Date: 8 JUN 2019 01:11:21

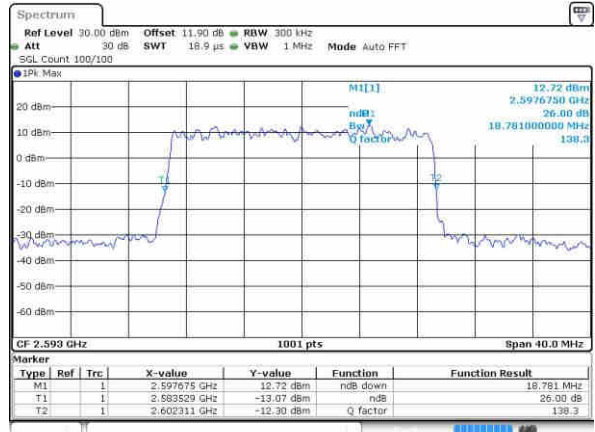
LTE Band 41

Middle Channel / 15MHz / 64QAM



Date: 8 JUN 2019 01:13:17

Middle Channel / 20MHz / 64QAM



Date: 8 JUN 2019 01:15:40



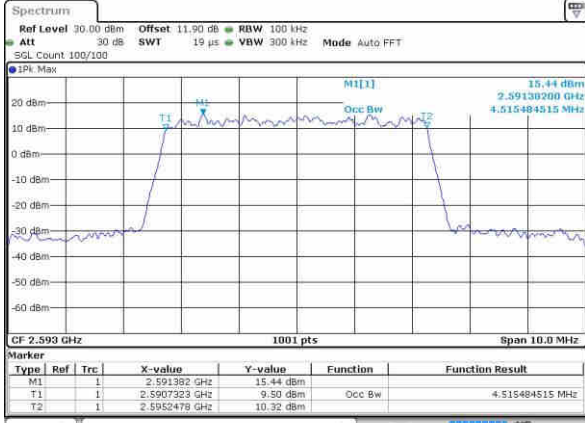
**Occupied Bandwidth**

Mode	LTE Band 41 : 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	9.07	8.99	13.43	13.46	17.82	17.90
Middle CH	-	-	-	-	4.51	4.50	9.07	9.09	13.40	13.46	17.82	17.82
Highest CH	-	-	-	-	4.54	4.49	9.01	9.03	13.43	13.40	17.90	17.90
Mode	LTE Band 41 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.48	-	9.03	-	13.46	-	17.90	-
Middle CH	-	-	-	-	4.50	-	9.01	-	13.40	-	17.90	-
Highest CH	-	-	-	-	4.50	-	9.03	-	13.43	-	17.90	-



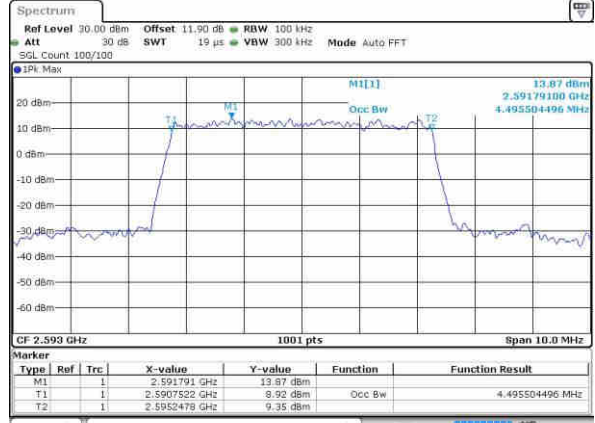
LTE Band 41

Middle Channel / 5MHz / QPSK



Date: 8 JUN 2019 00:53:42

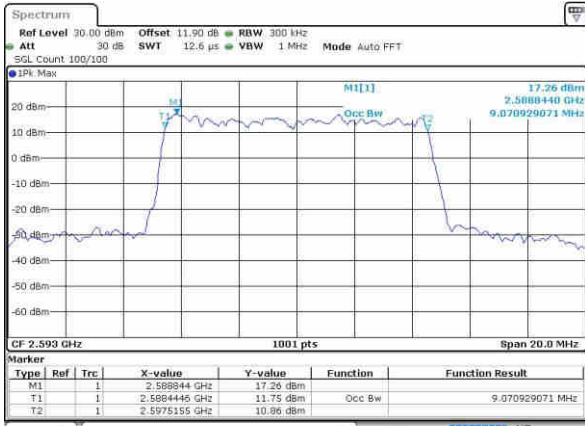
Middle Channel / 5MHz / 16QAM



Date: 8 JUN 2019 00:53:53

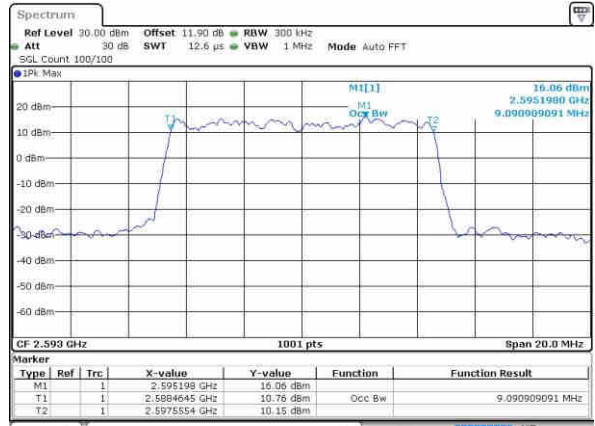
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 8 JUN 2019 00:57:06

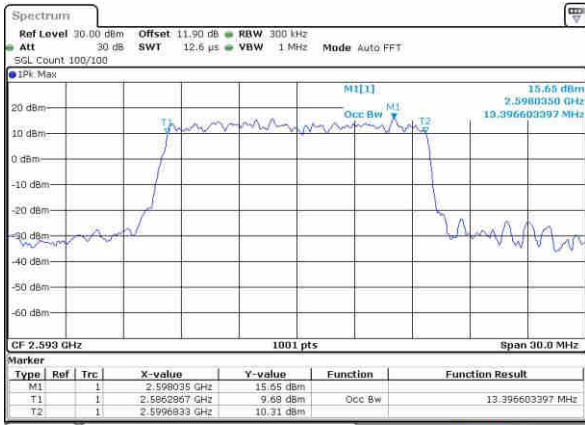
Middle Channel / 10MHz / 16QAM



Date: 8 JUN 2019 00:57:18

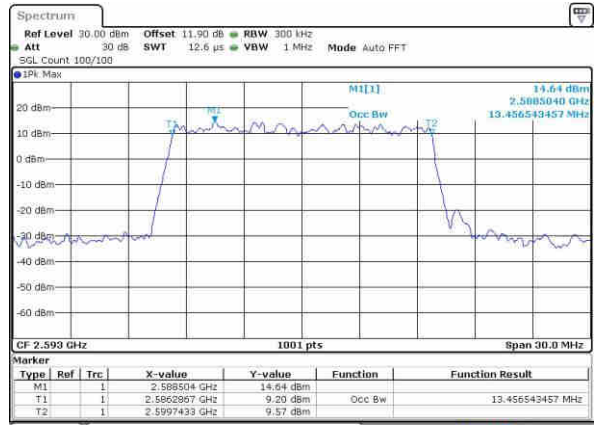
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 8 JUN 2019 01:01:41

Middle Channel / 15MHz / 16QAM

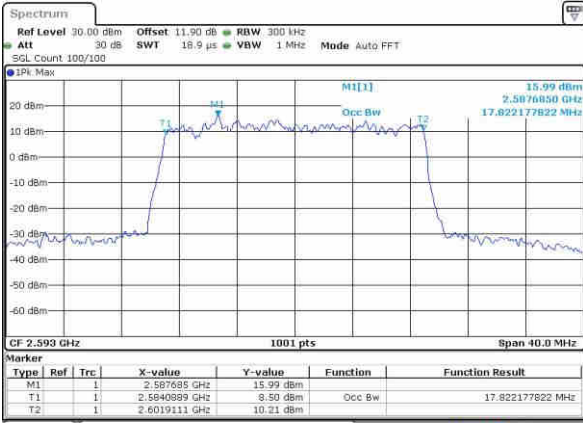


Date: 8 JUN 2019 01:02:05



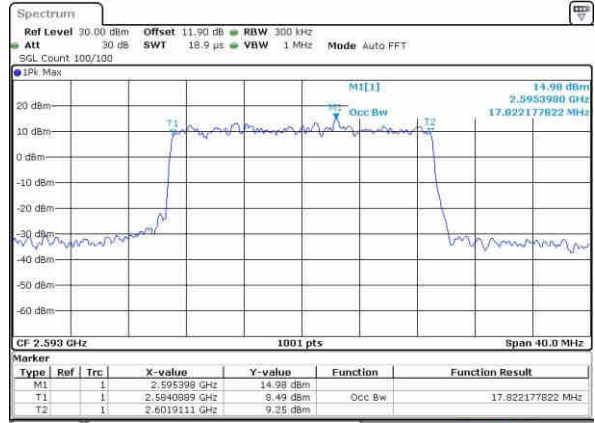
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 8 JUN 2019 01:05:11

Middle Channel / 20MHz / 16QAM

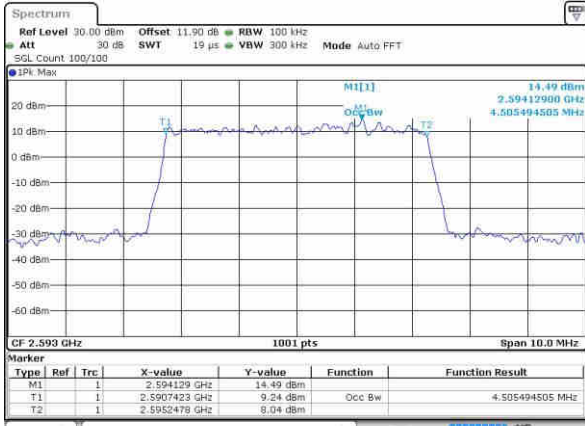


Date: 8 JUN 2019 01:05:23



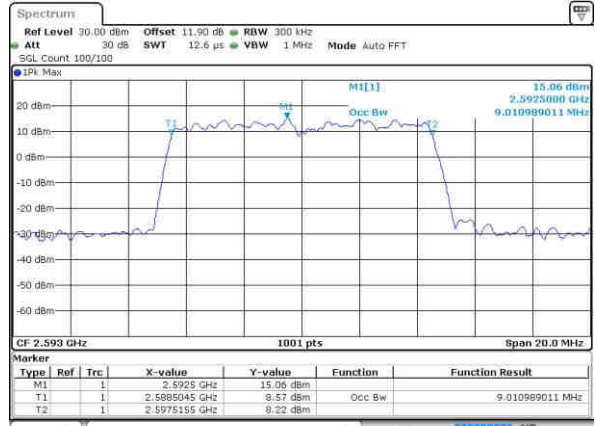
LTE Band 41

Middle Channel / 5MHz / 64QAM



Date: 8 JUN 2019 01:09:01

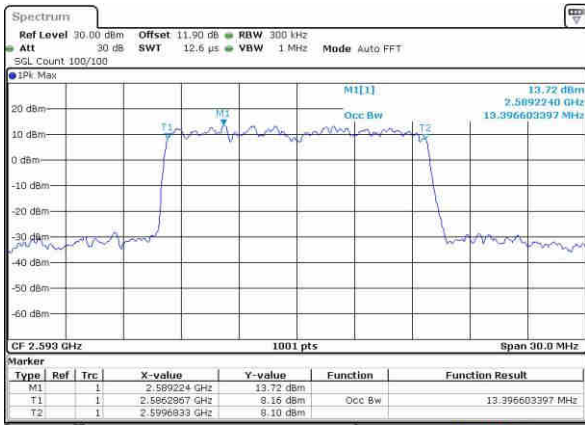
Middle Channel / 10MHz / 64QAM



Date: 8 JUN 2019 01:11:10

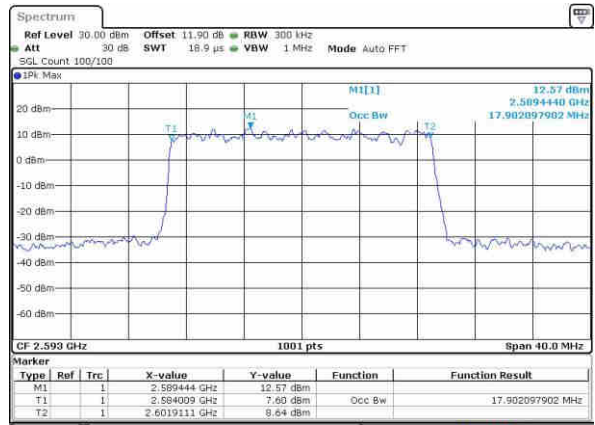
LTE Band 41

Middle Channel / 15MHz / 64QAM



Date: 8 JUN 2019 01:13:05

Middle Channel / 20MHz / 64QAM



Date: 8 JUN 2019 01:15:29

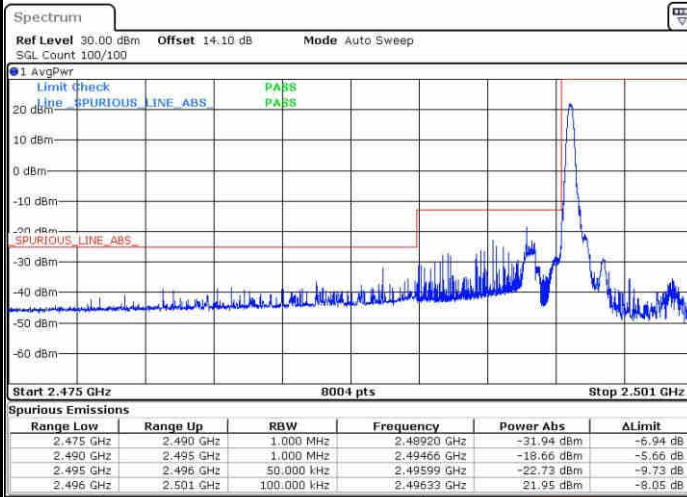




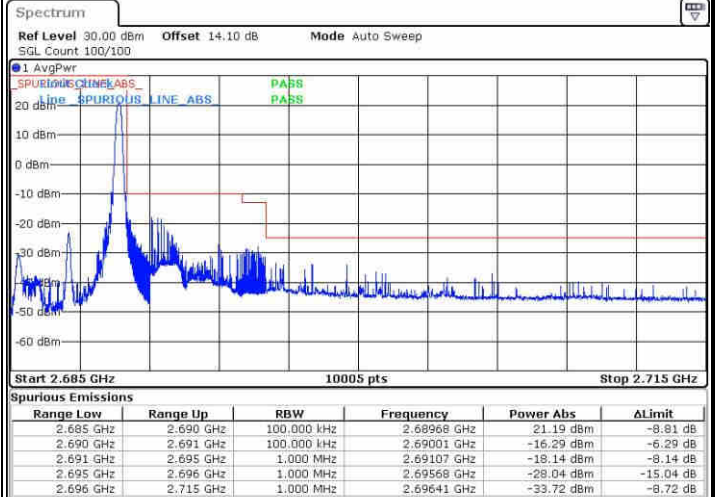
# Conducted Band Edge

## LTE Band 41 / 5MHz / QPSK

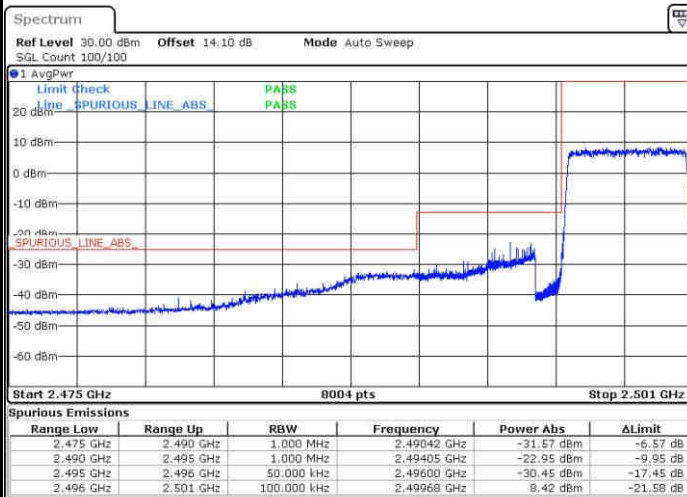
### Lowest Band Edge / 1 RB



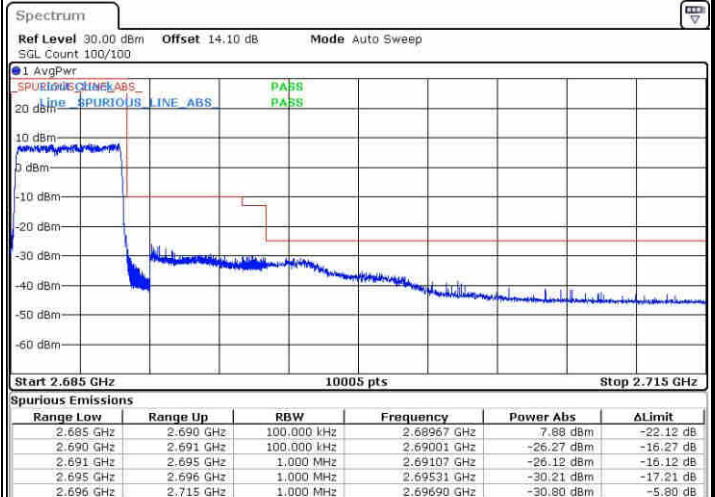
### Highest Band Edge / 1 RB



### Lowest Band Edge / Full RB



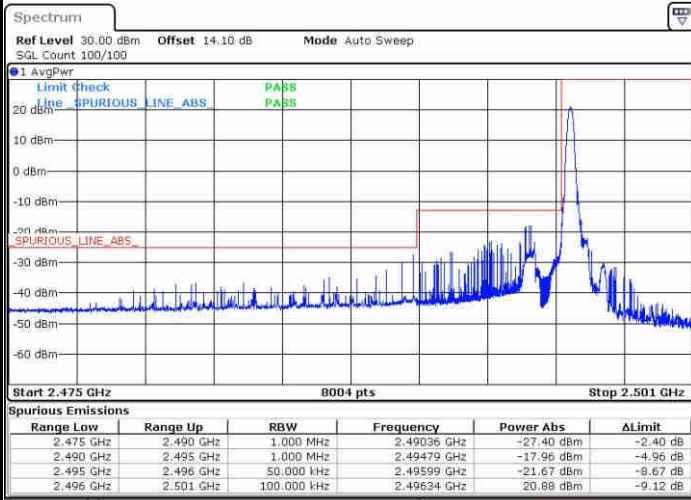
### Highest Band Edge / Full RB





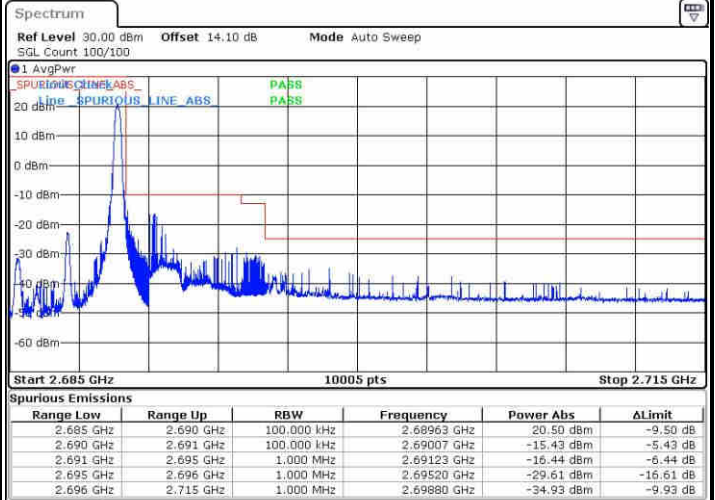
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



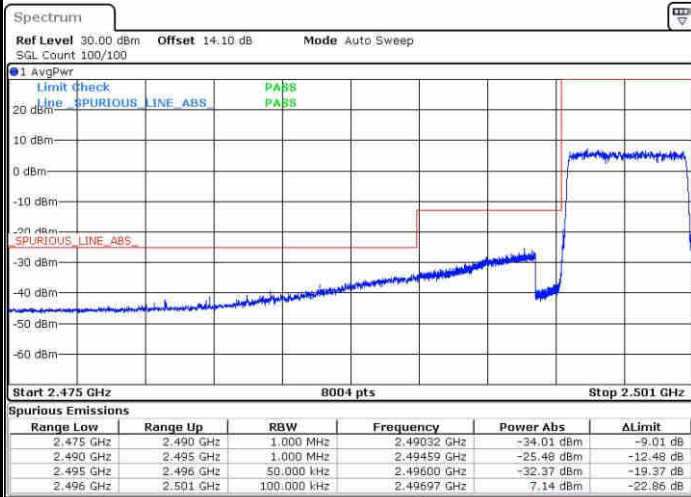
Date: 7 JUN 2019 23:01:41

Highest Band Edge / 1 RB



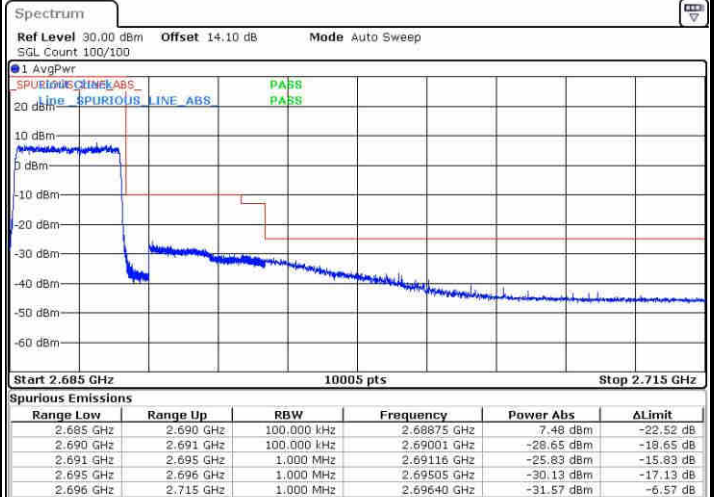
Date: 7 JUN 2019 23:04:45

Lowest Band Edge / Full RB



Date: 7 JUN 2019 23:03:15

Highest Band Edge / Full RB

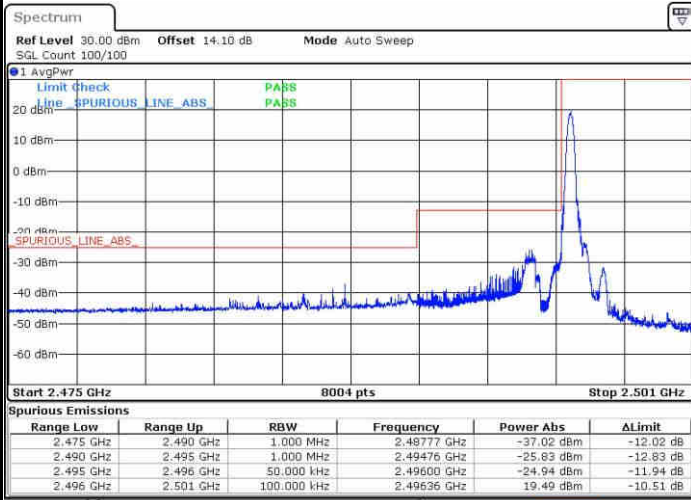


Date: 7 JUN 2019 23:06:20



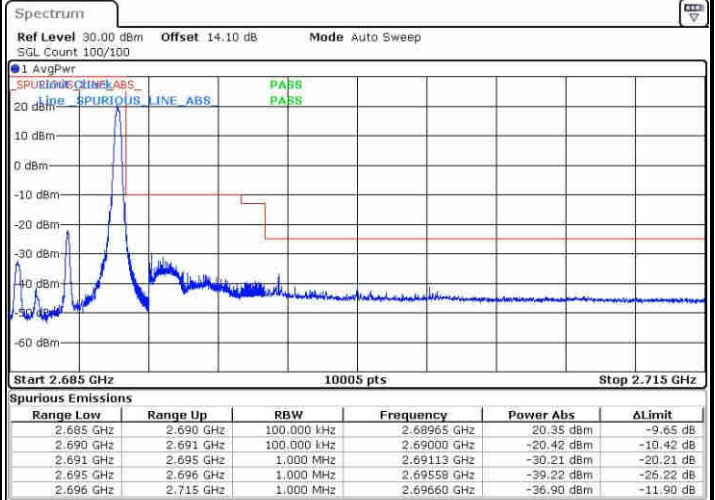
LTE Band 41 / 5MHz / 64QAM

Lowest Band Edge / 1RB



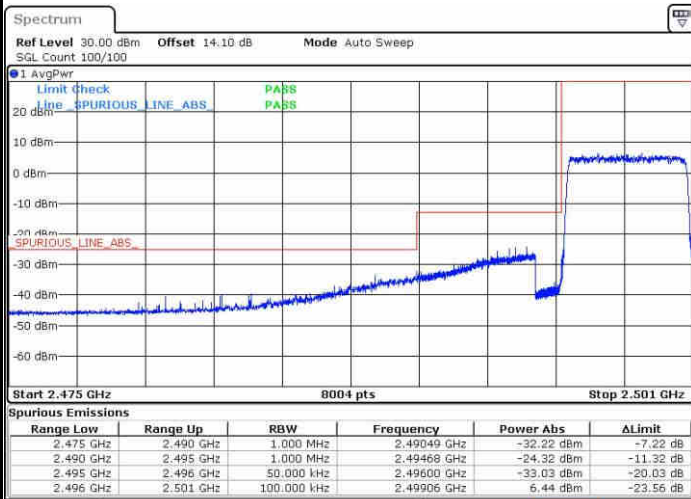
Date: 7 JUN 2019 23:50:24

Highest Band Edge / 1 RB



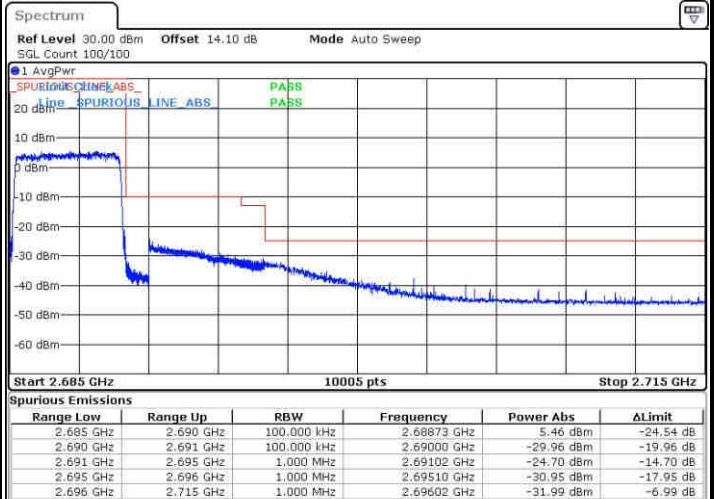
Date: 7 JUN 2019 23:51:42

Lowest Band Edge / Full RB



Date: 7 JUN 2019 23:51:06

Highest Band Edge / Full RB

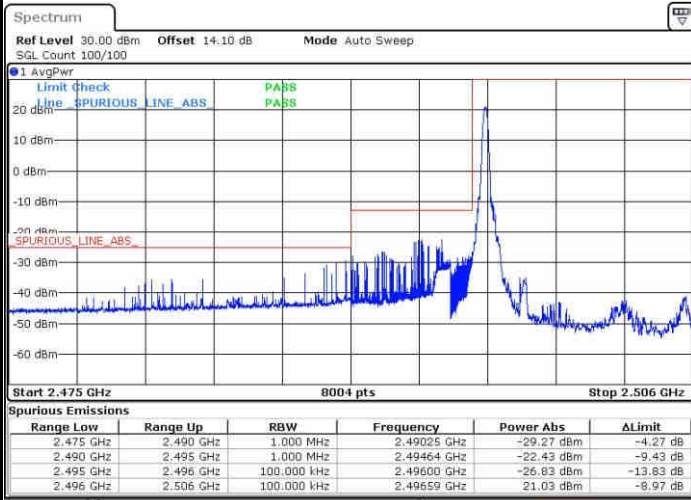


Date: 7 JUN 2019 23:52:23



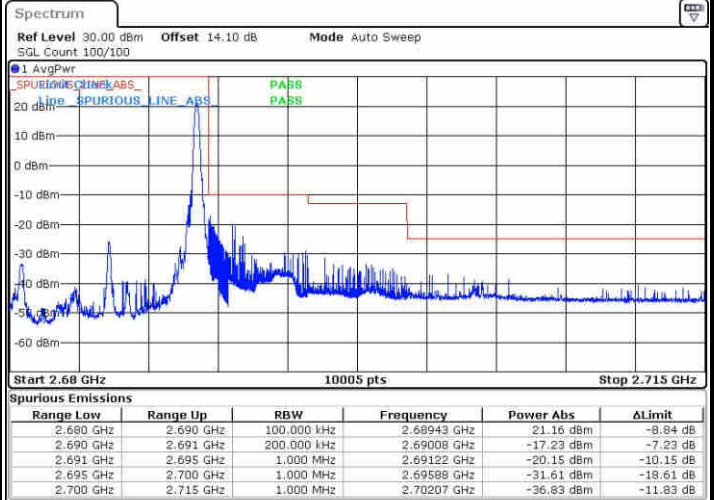
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



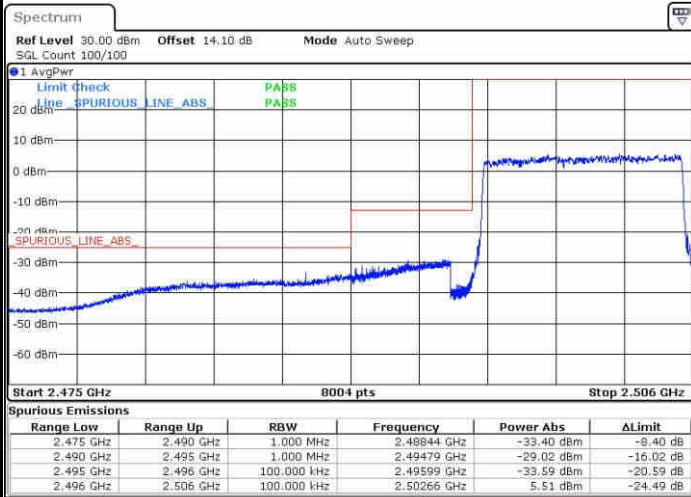
Date: 7 JUN 2019 23:17:58

Highest Band Edge / 1 RB



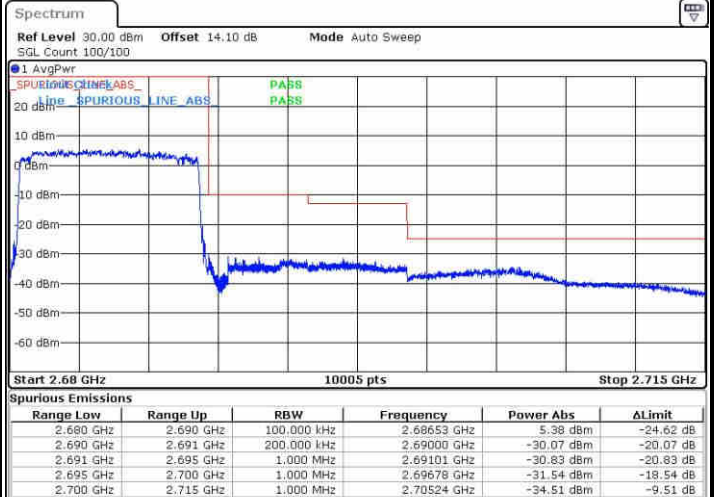
Date: 7 JUN 2019 23:30:51

Lowest Band Edge / Full RB



Date: 8 JUN 2019 00:43:18

Highest Band Edge / Full RB

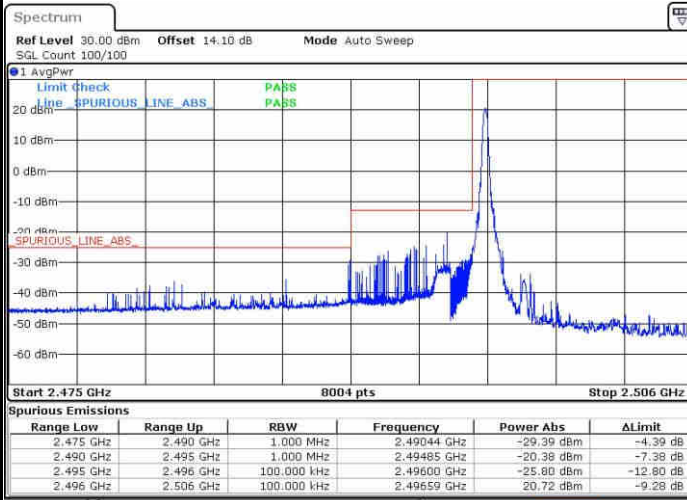


Date: 7 JUN 2019 23:32:12



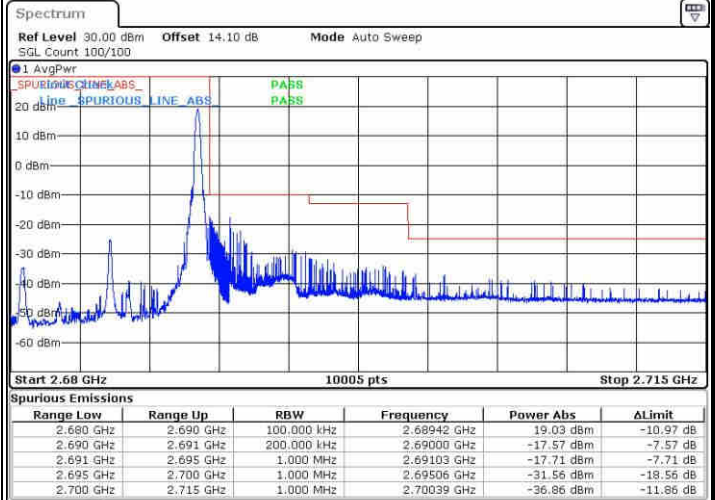
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



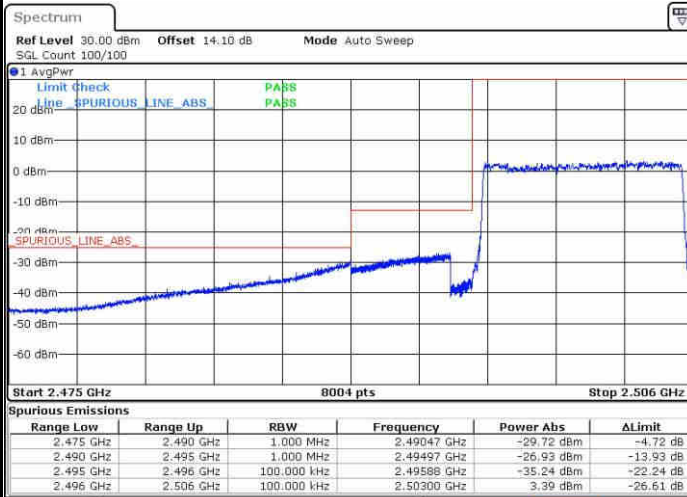
Date: 7 JUN 2019 23:18:35

Highest Band Edge / 1 RB



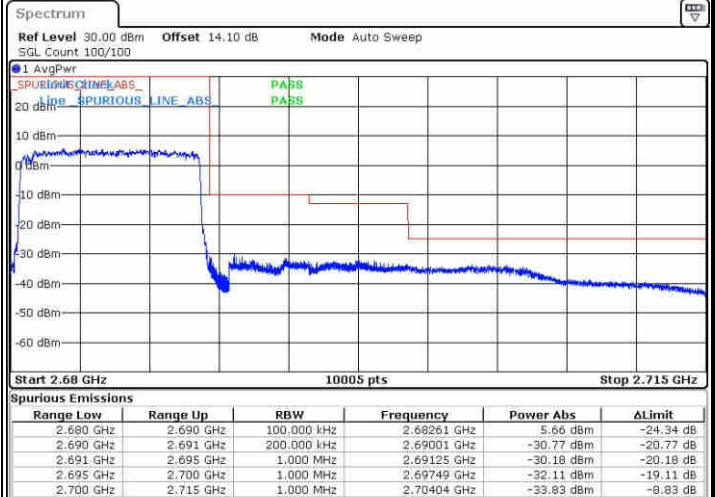
Date: 7 JUN 2019 23:31:32

Lowest Band Edge / Full RB



Date: 7 JUN 2019 23:21:46

Highest Band Edge / Full RB

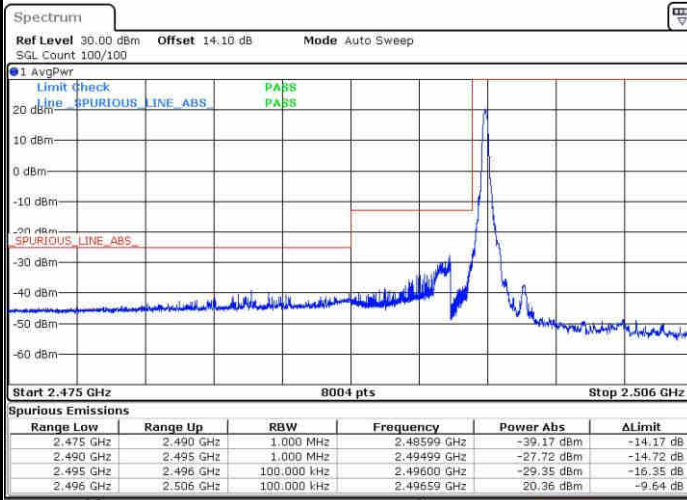


Date: 8 JUN 2019 00:47:59



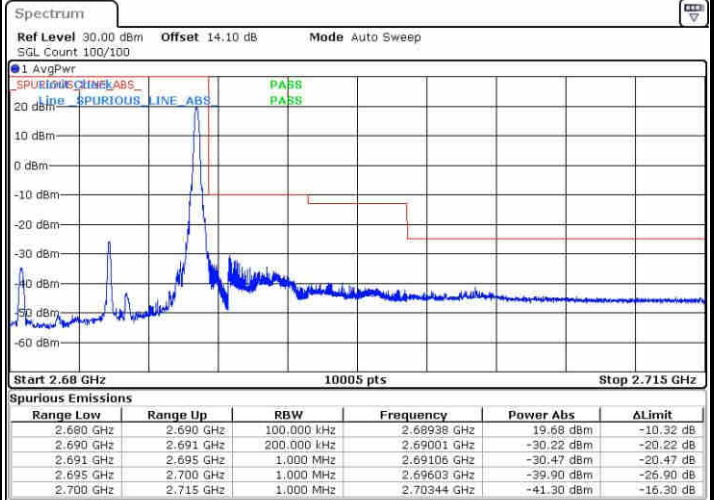
LTE Band 41 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



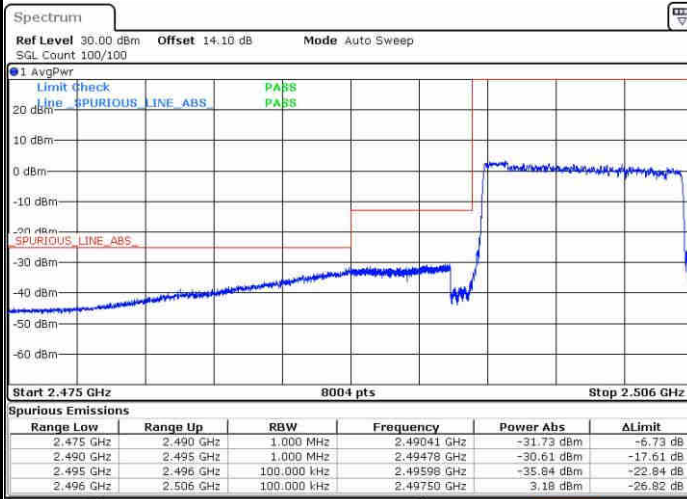
Date: 7 JUN 2019 23:53:32

Highest Band Edge / 1 RB



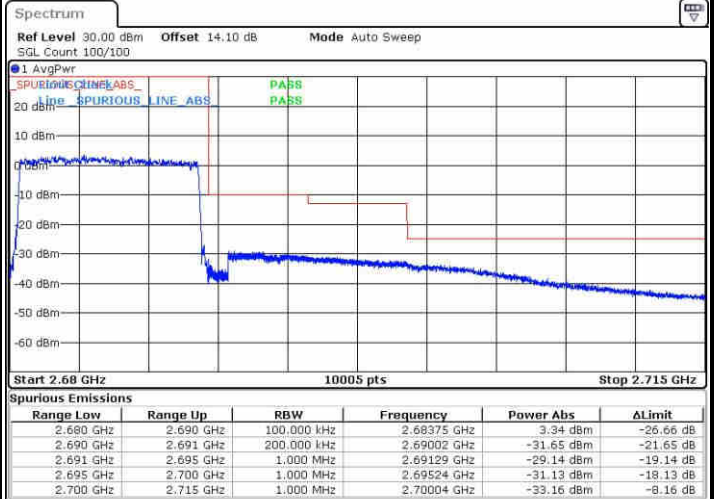
Date: 7 JUN 2019 23:55:14

Lowest Band Edge / Full RB



Date: 7 JUN 2019 23:54:09

Highest Band Edge / Full RB

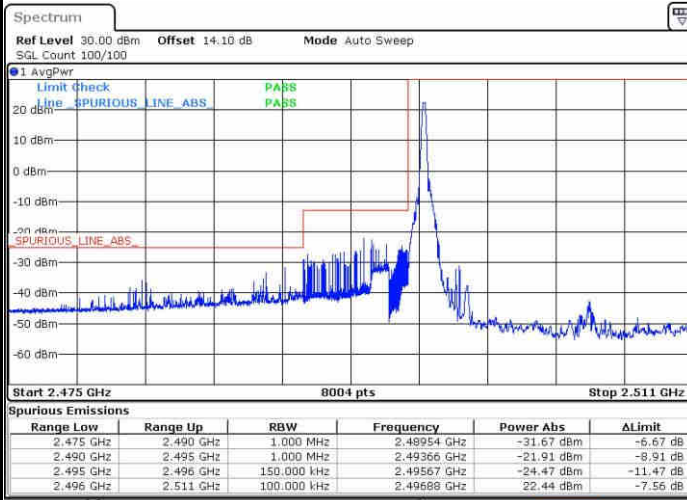


Date: 7 JUN 2019 23:55:55



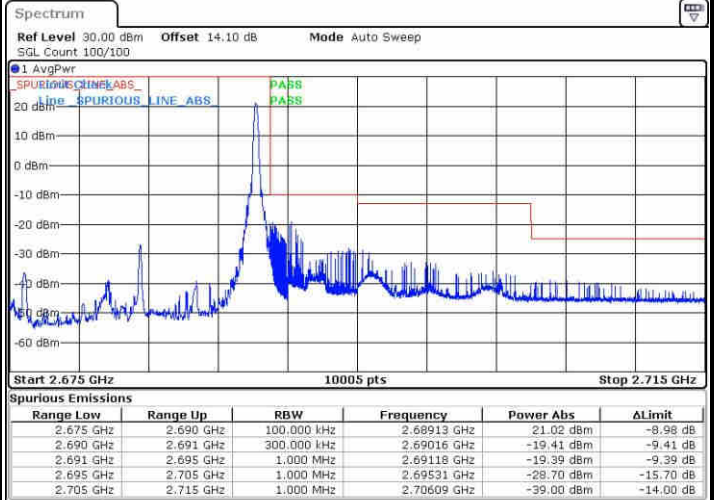
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB



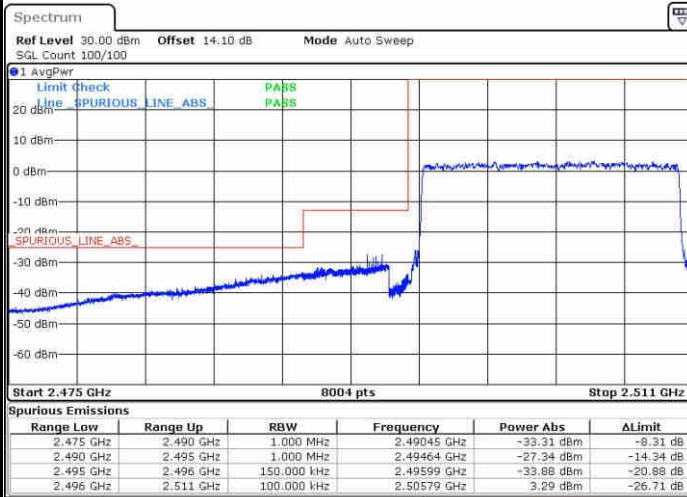
Date: 7 JUN 2019 23:33:25

Highest Band Edge / 1 RB



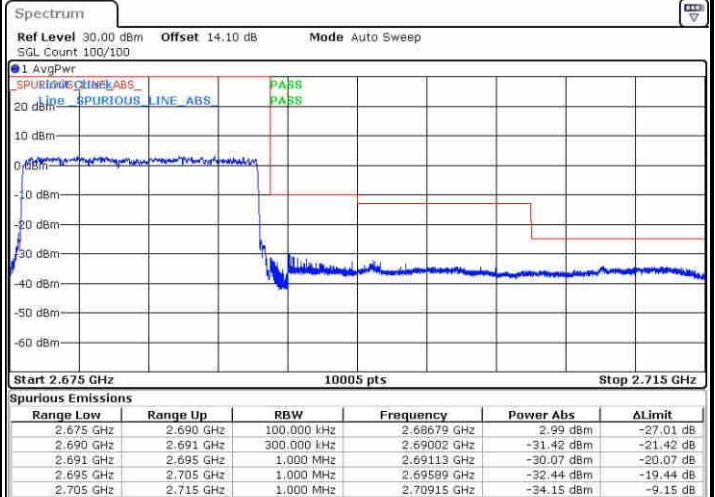
Date: 7 JUN 2019 23:40:04

Lowest Band Edge / Full RB



Date: 7 JUN 2019 23:38:27

Highest Band Edge / Full RB

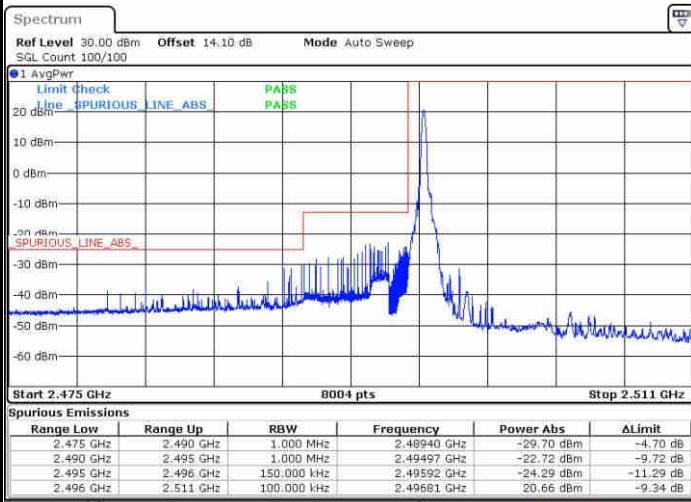


Date: 7 JUN 2019 23:41:23



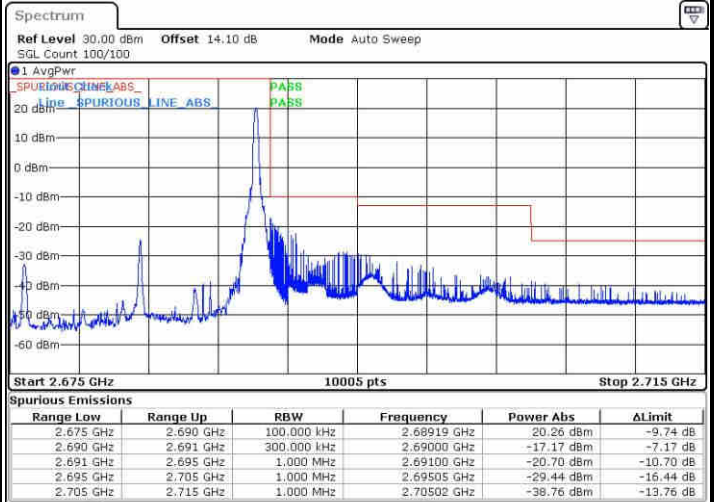
LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



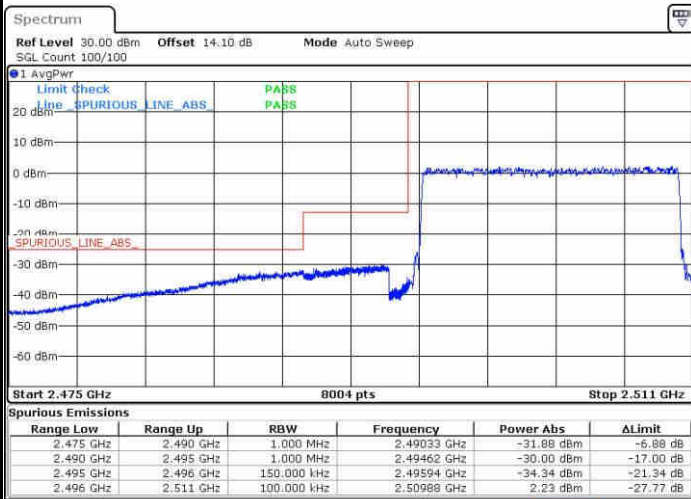
Date: 8 JUN 2019 00:50:20

Highest Band Edge / 1 RB



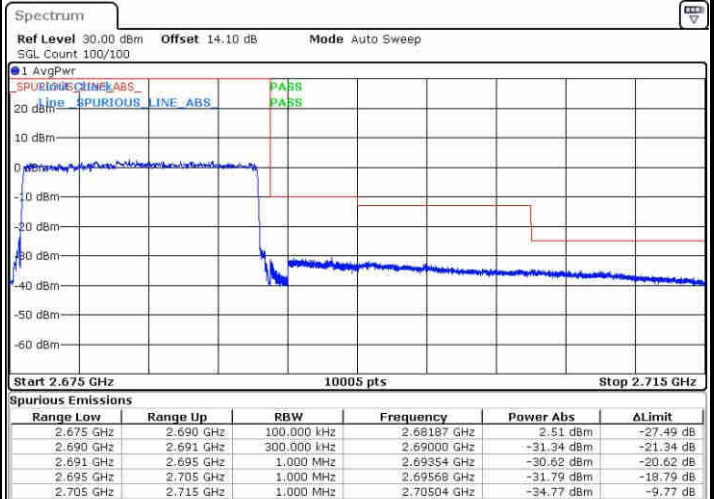
Date: 7 JUN 2019 23:40:42

Lowest Band Edge / Full RB



Date: 7 JUN 2019 23:37:04

Highest Band Edge / Full RB



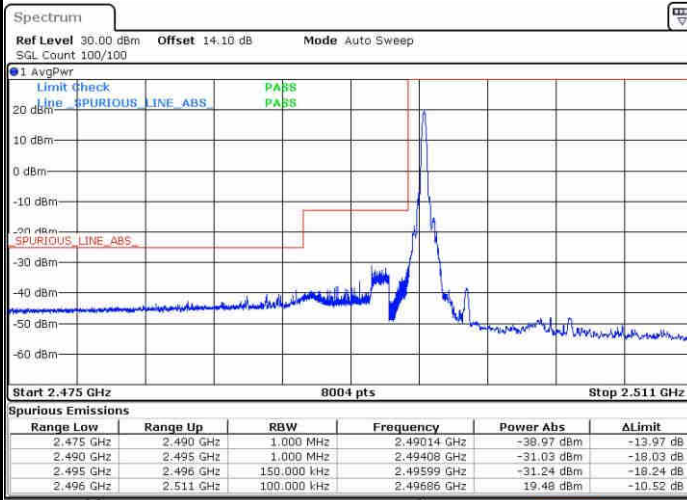
Date: 7 JUN 2019 23:41:59





LTE Band 41 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



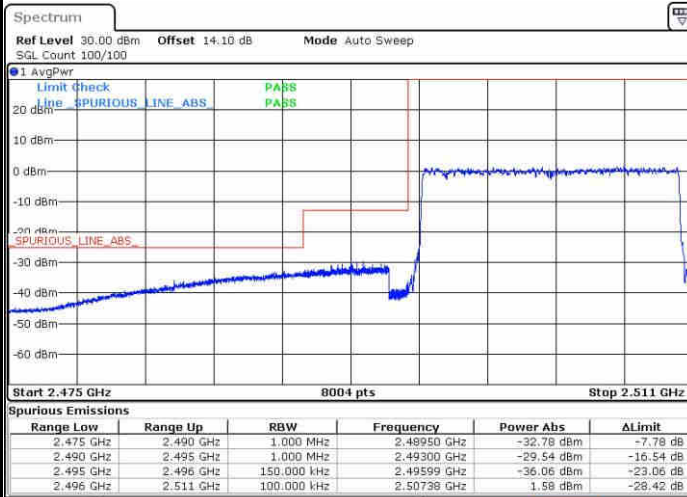
Date: 7 JUN 2019 23:56:36

Highest Band Edge / 1 RB



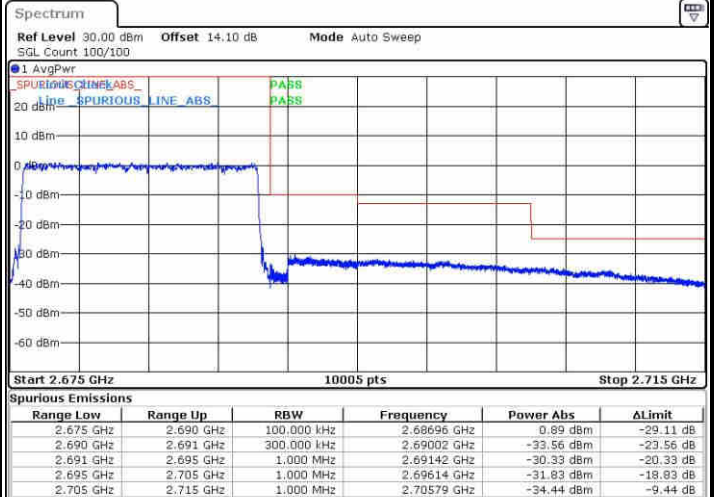
Date: 7 JUN 2019 23:58:13

Lowest Band Edge / Full RB



Date: 7 JUN 2019 23:57:17

Highest Band Edge / Full RB

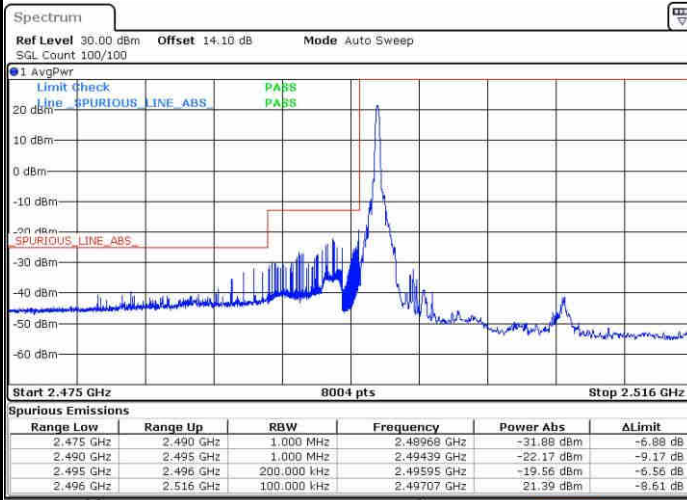


Date: 7 JUN 2019 23:58:51



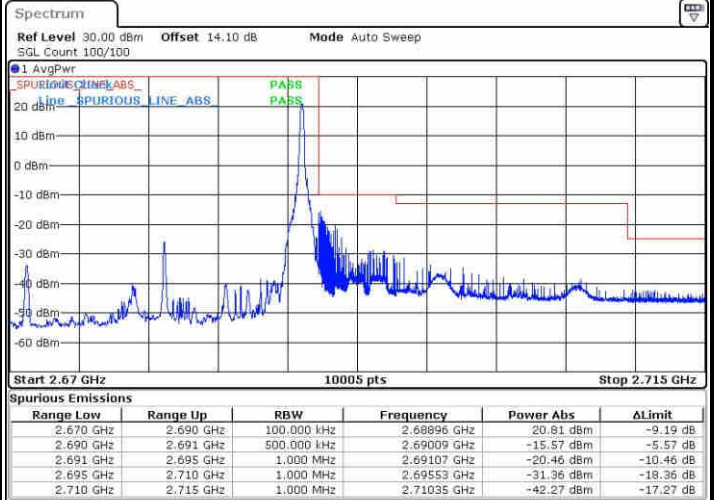
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB



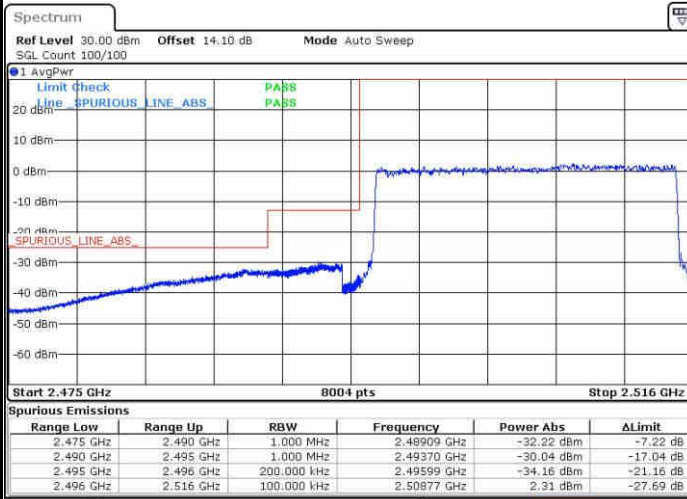
Date: 7 JUN 2019 23:42:36

Highest Band Edge / 1 RB



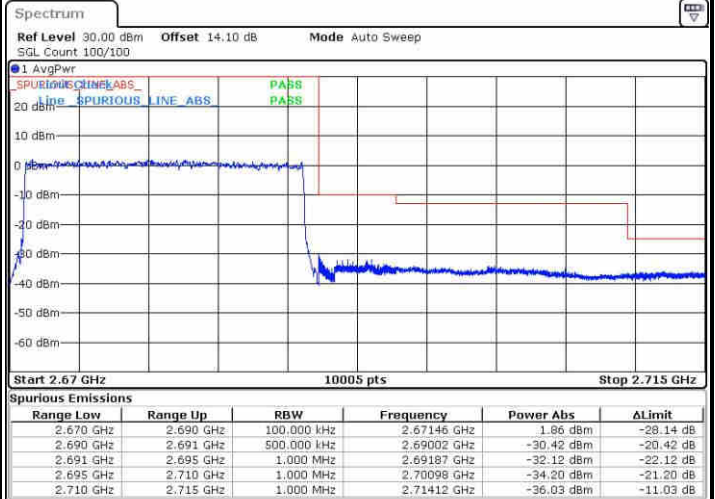
Date: 7 JUN 2019 23:47:20

Lowest Band Edge / Full RB



Date: 7 JUN 2019 23:45:05

Highest Band Edge / Full RB

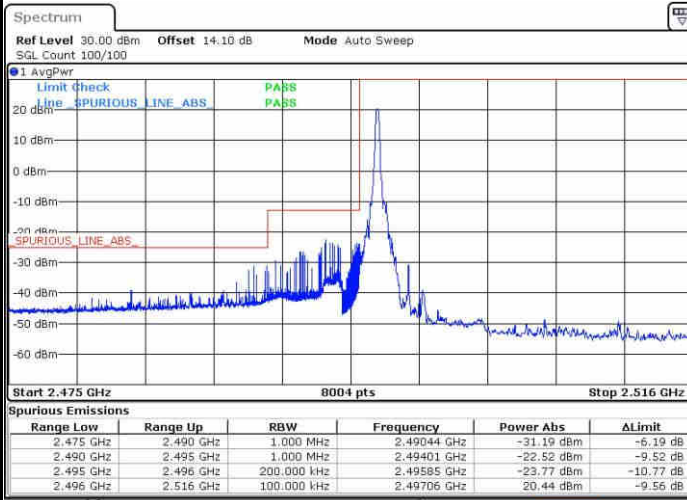


Date: 7 JUN 2019 23:48:42



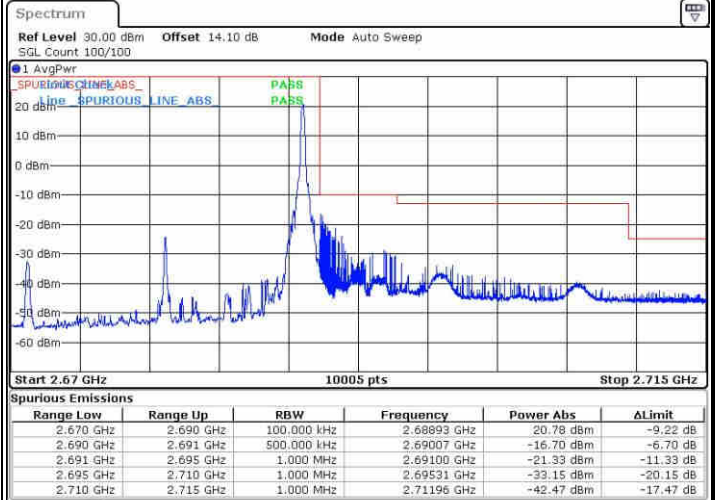
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



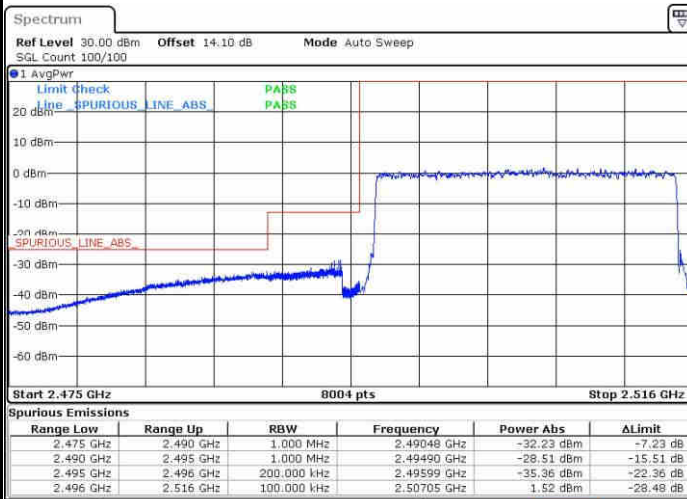
Date: 7 JUN 2019 23:44:28

Highest Band Edge / 1 RB



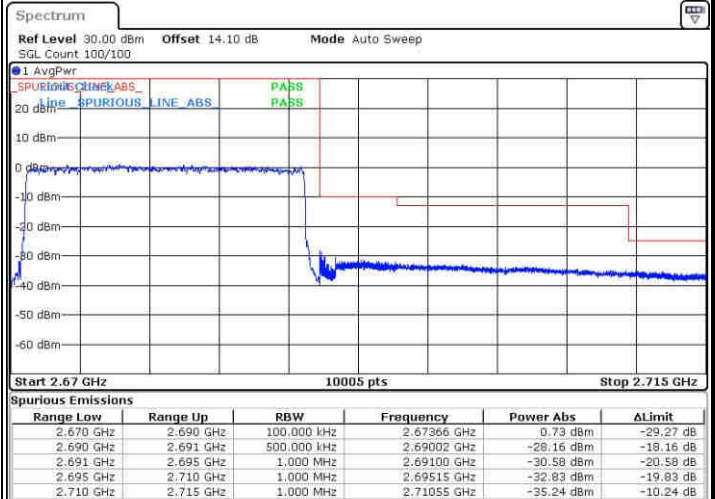
Date: 7 JUN 2019 23:48:12

Lowest Band Edge / Full RB



Date: 7 JUN 2019 23:45:42

Highest Band Edge / Full RB

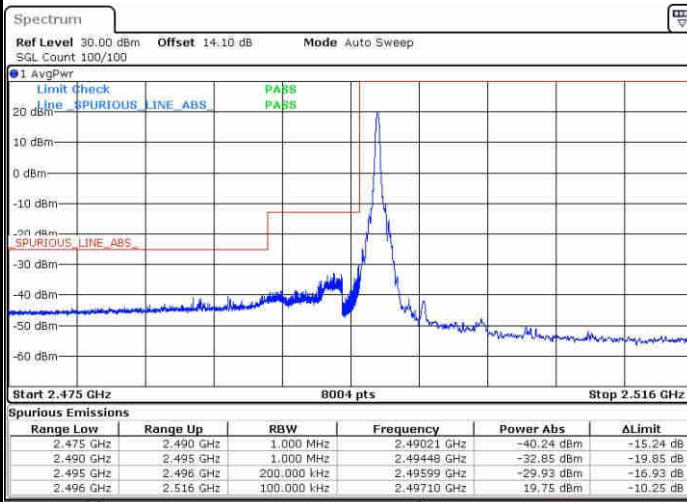


Date: 7 JUN 2019 23:49:06



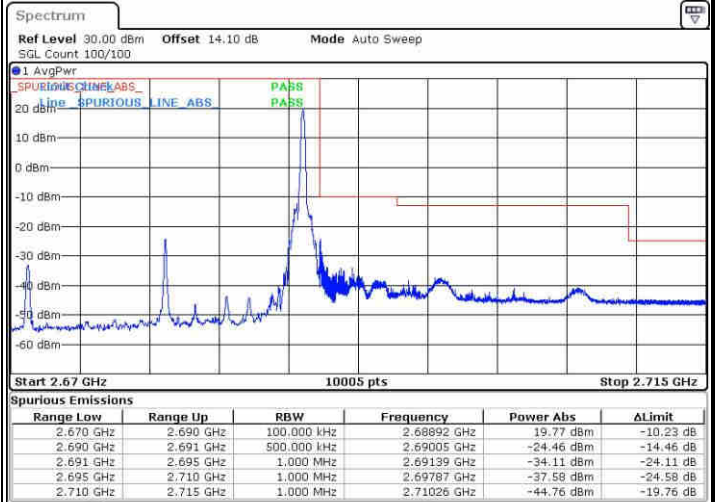
LTE Band 41 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



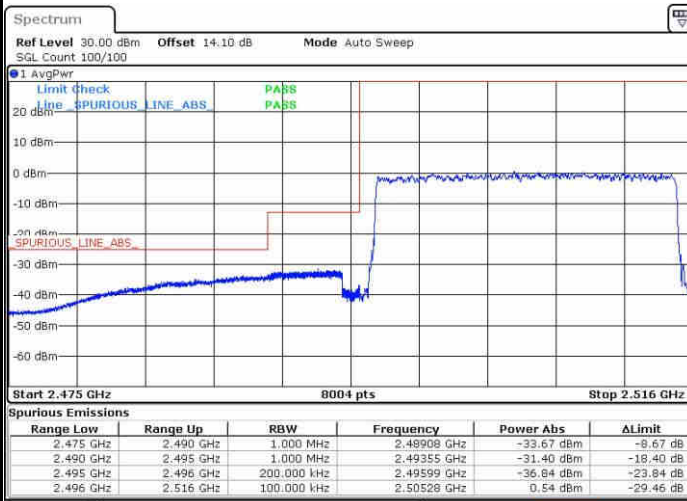
Date: 8 JUN 2019 00:00:12

Highest Band Edge / 1 RB



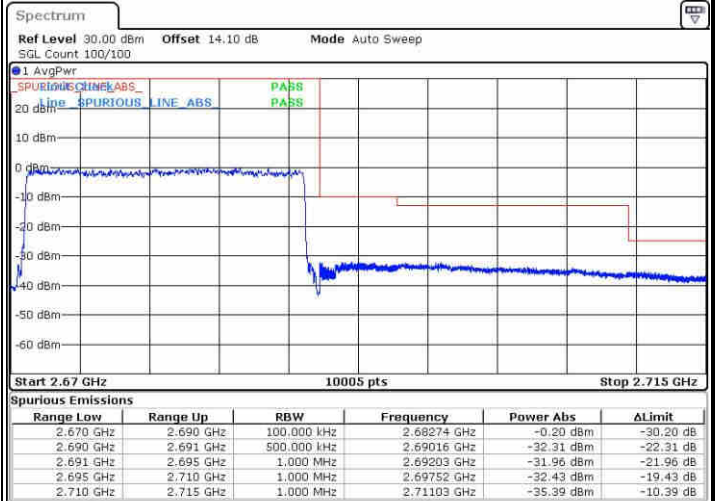
Date: 8 JUN 2019 00:02:02

Lowest Band Edge / Full RB



Date: 8 JUN 2019 00:01:21

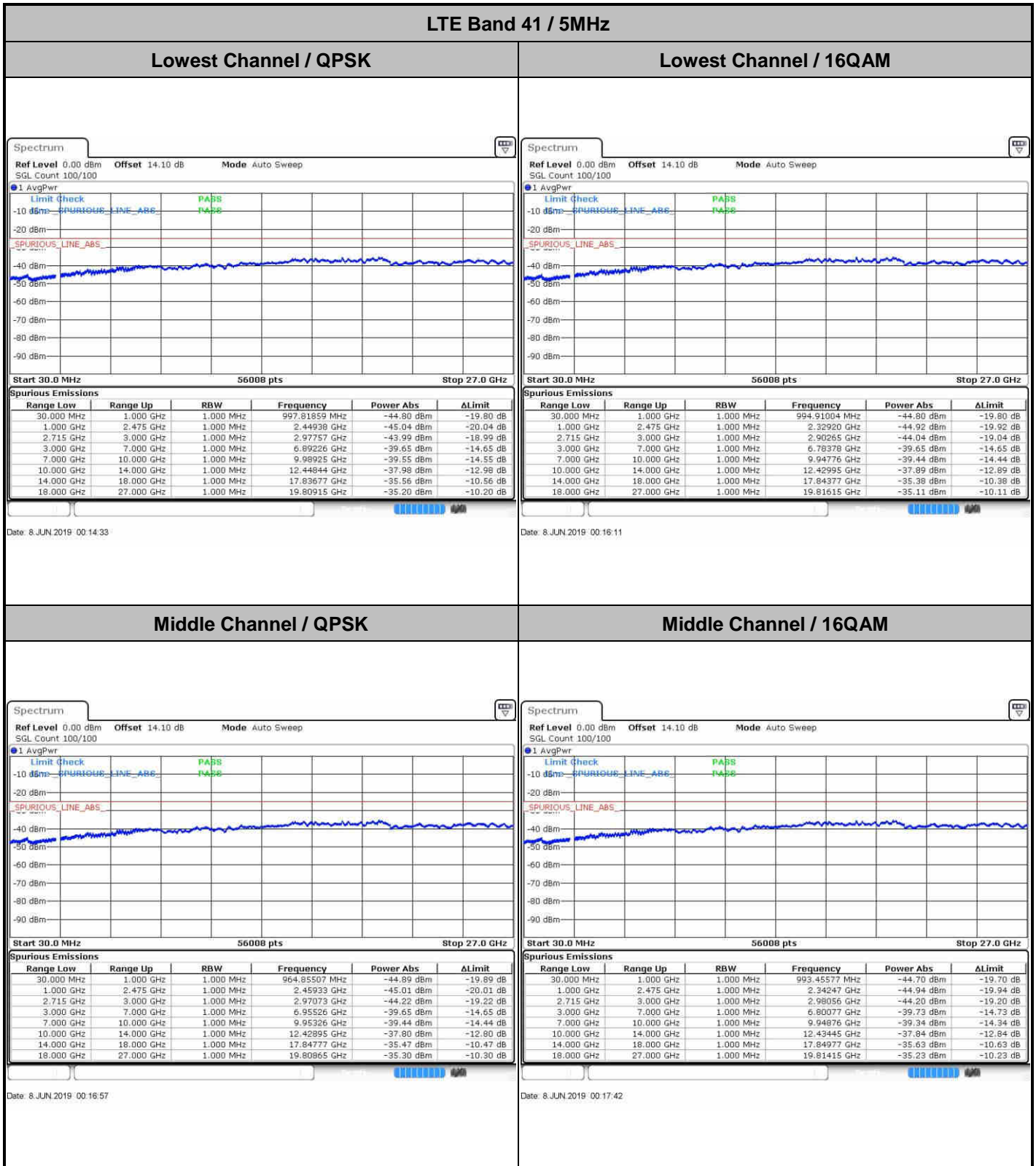
Highest Band Edge / Full RB



Date: 8 JUN 2019 00:02:42



# Conducted Spurious Emission

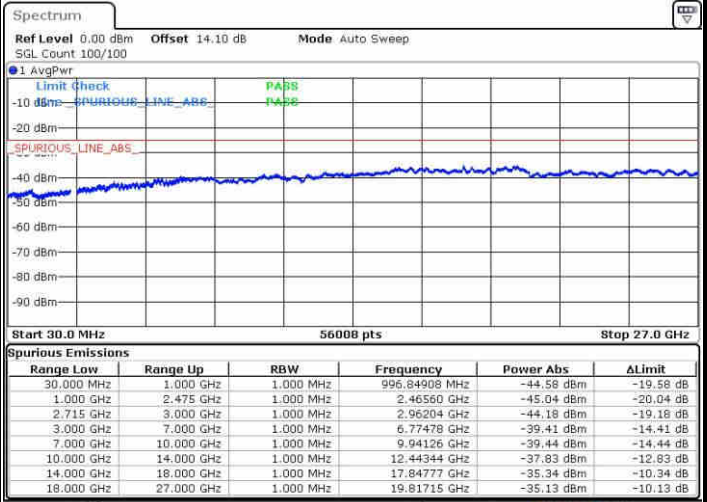
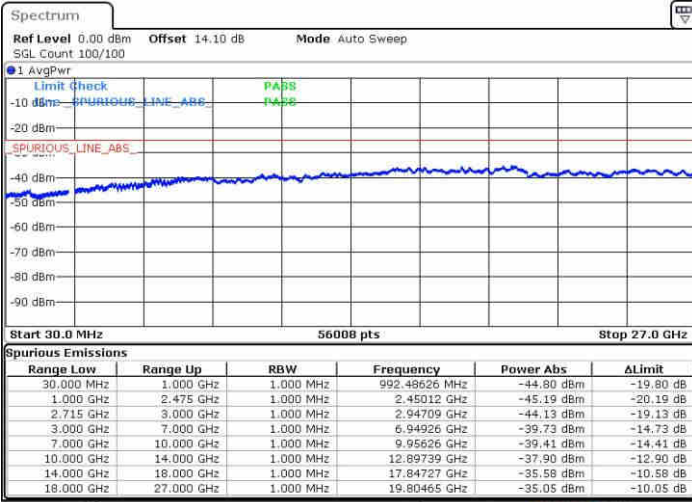




LTE Band 41 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



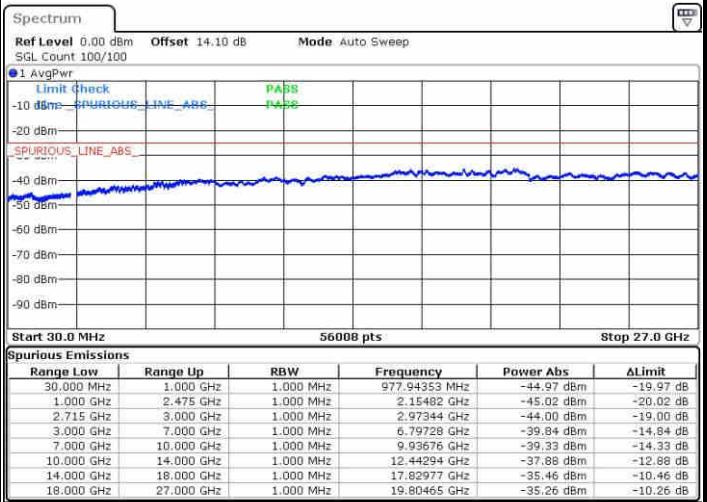
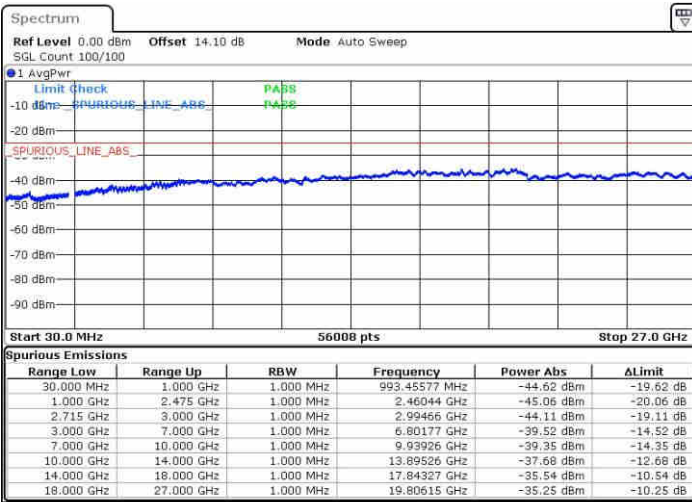
Date: 8 JUN 2019 00:18:27

Date: 8 JUN 2019 00:19:17

LTE Band 41 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 8 JUN 2019 00:20:03

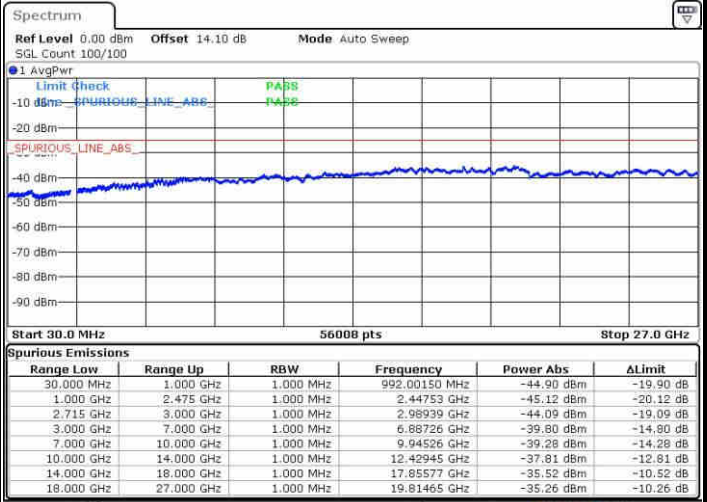
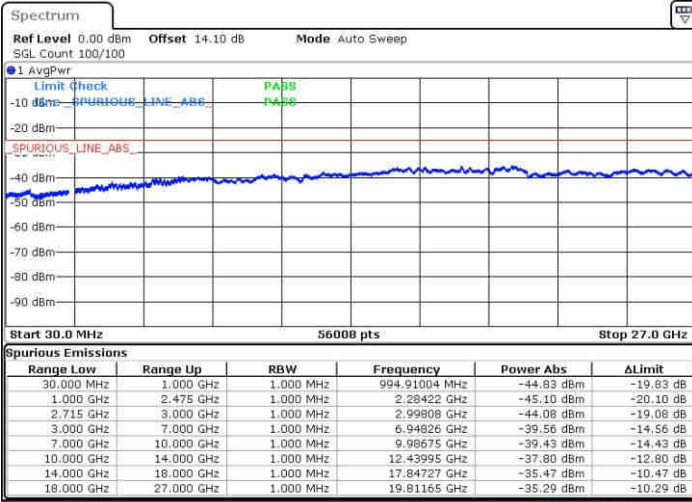
Date: 8 JUN 2019 00:21:31



LTE Band 41 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

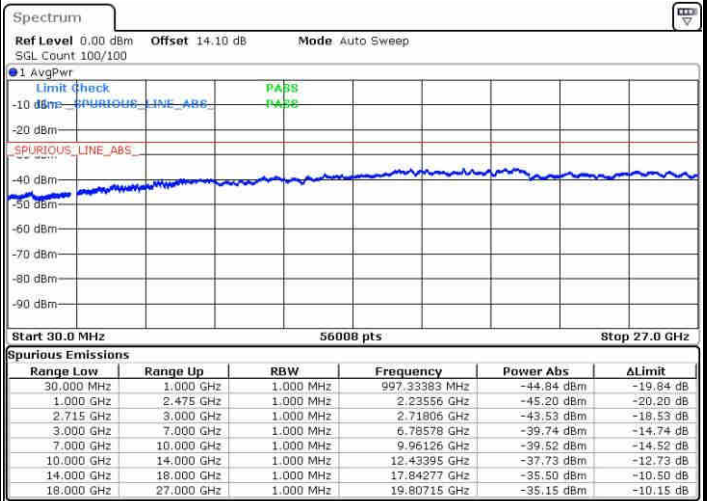
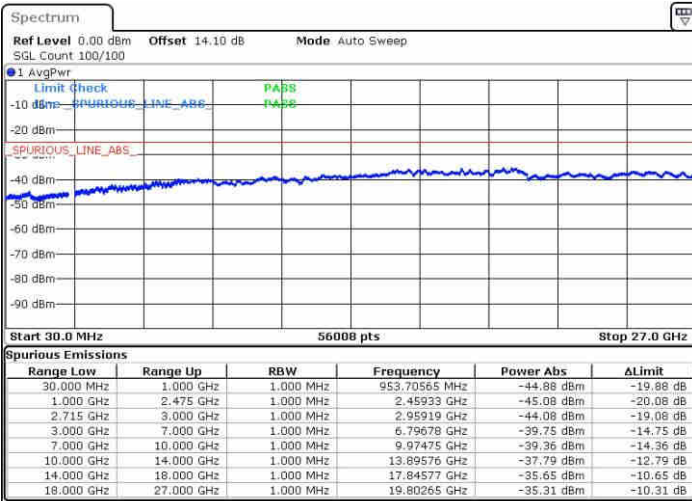


Date: 8 JUN 2019 00:23:07

Date: 8 JUN 2019 00:23:52

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 8 JUN 2019 00:25:43

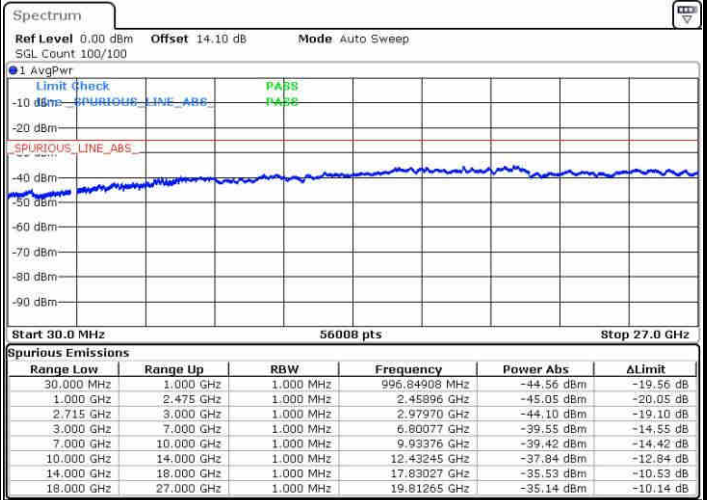
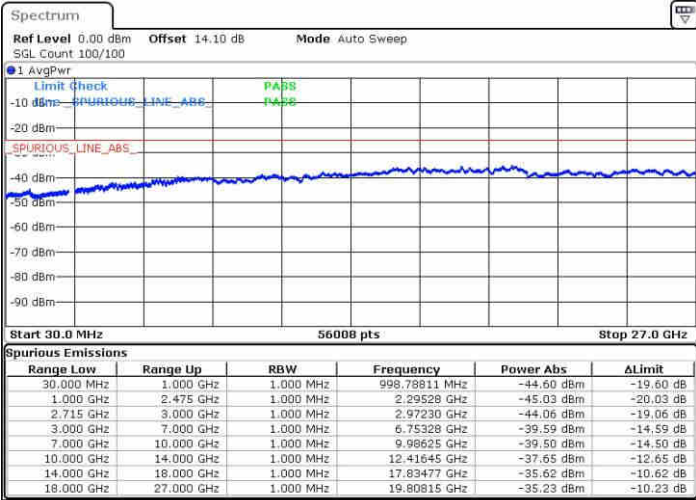
Date: 8 JUN 2019 00:26:29



LTE Band 41 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

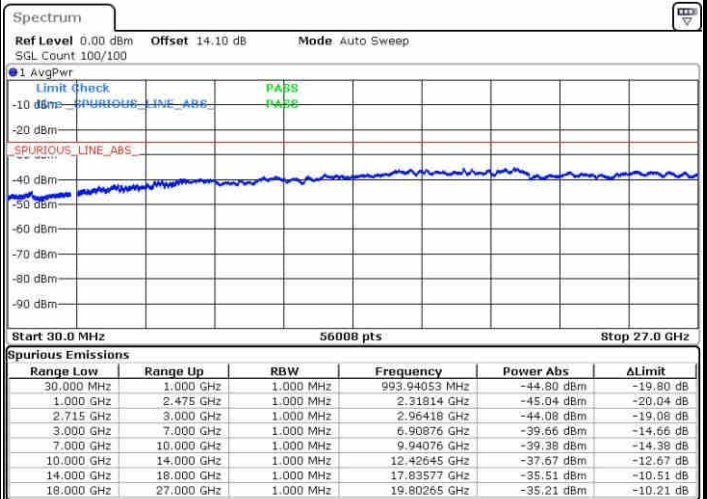
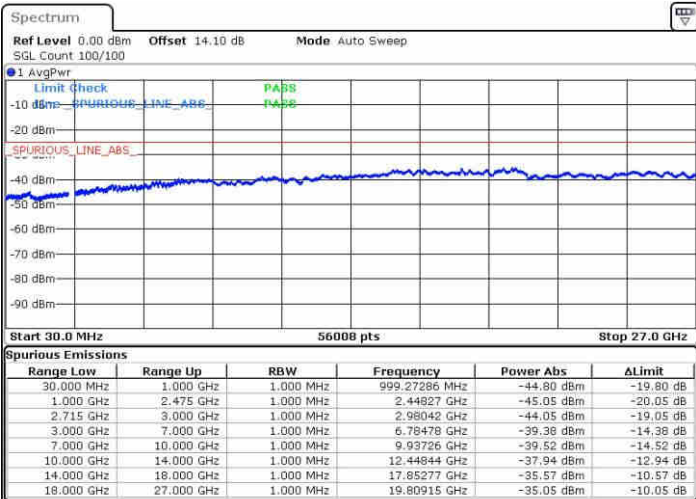


Date: 8 JUN 2019 00:28:12

Date: 8 JUN 2019 00:30:34

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 8 JUN 2019 00:31:19

Date: 8 JUN 2019 00:32:04

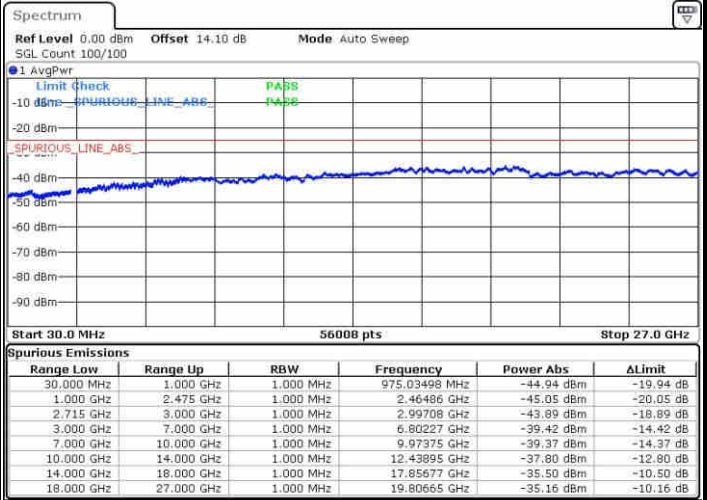
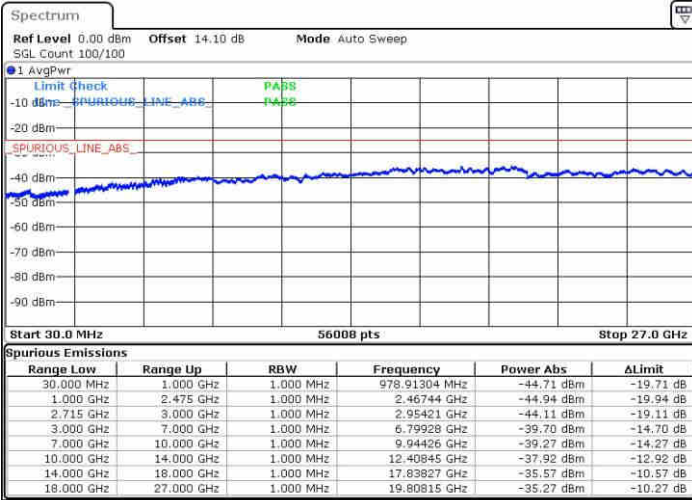




LTE Band 41 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



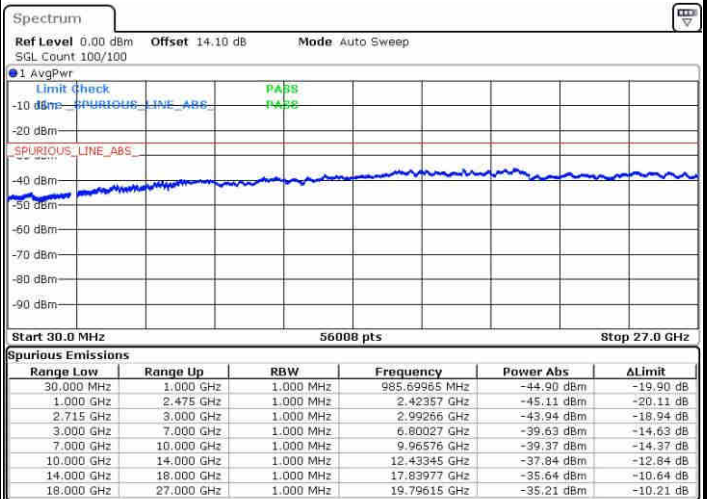
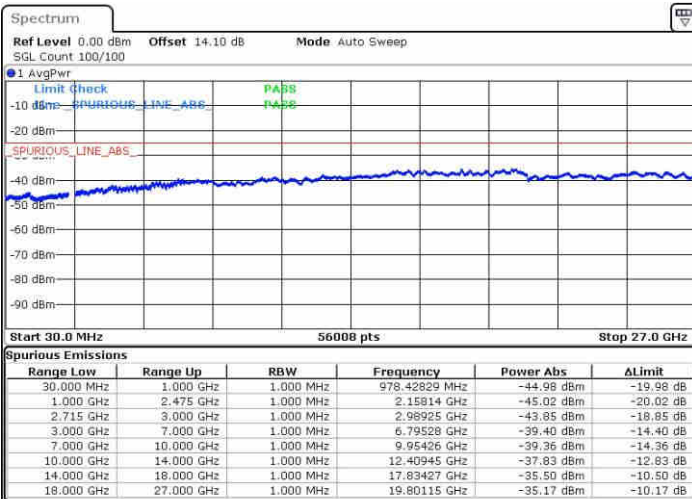
Date: 8 JUN 2019 00:33:37

Date: 8 JUN 2019 00:34:22

LTE Band 41 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 8 JUN 2019 00:35:34

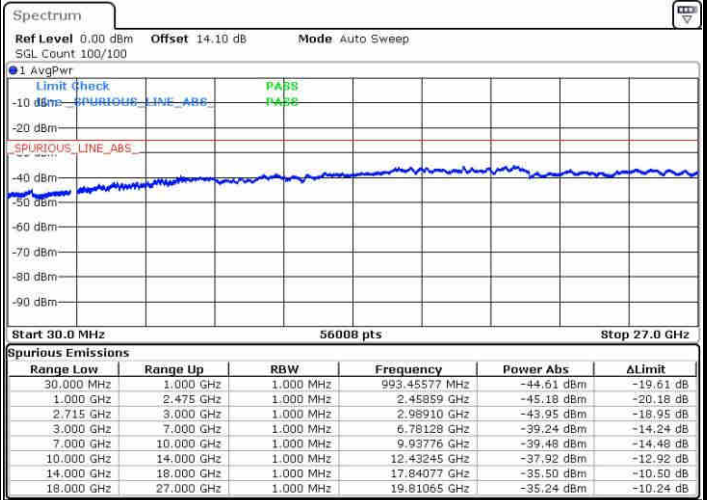
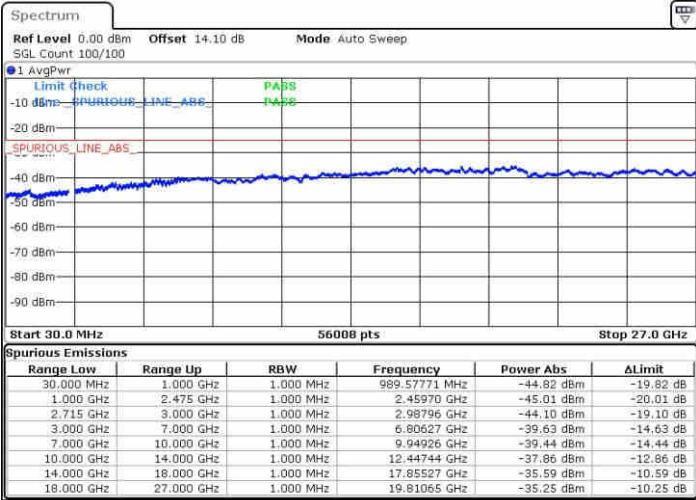
Date: 8 JUN 2019 00:36:49



LTE Band 41 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

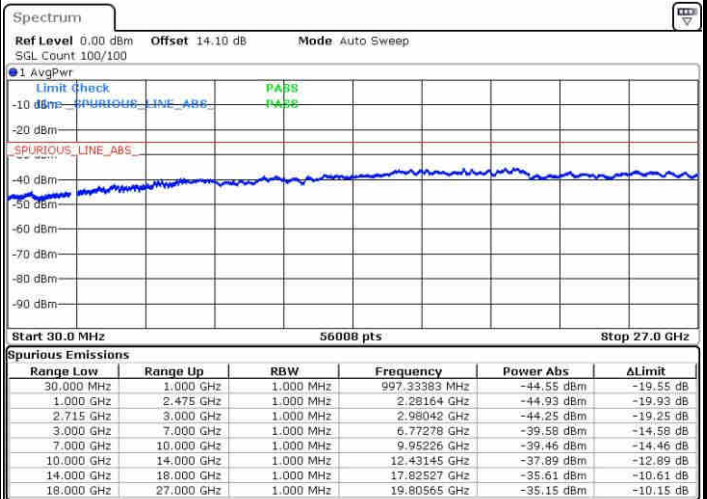
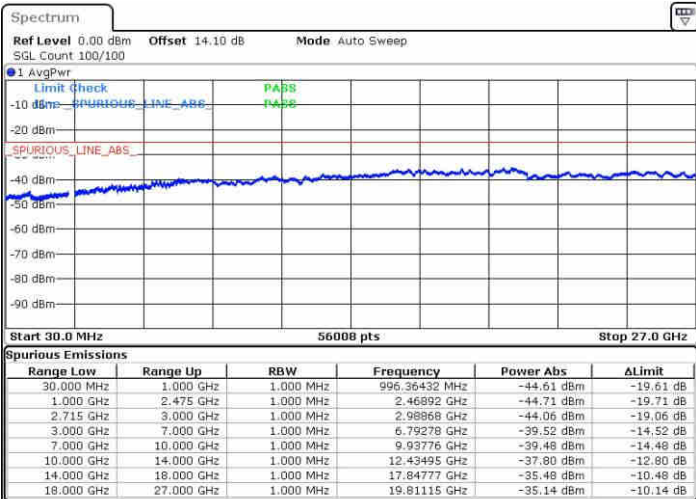


Date: 8 JUN 2019 00:37:34

Date: 8 JUN 2019 00:38:19

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 8 JUN 2019 00:39:05

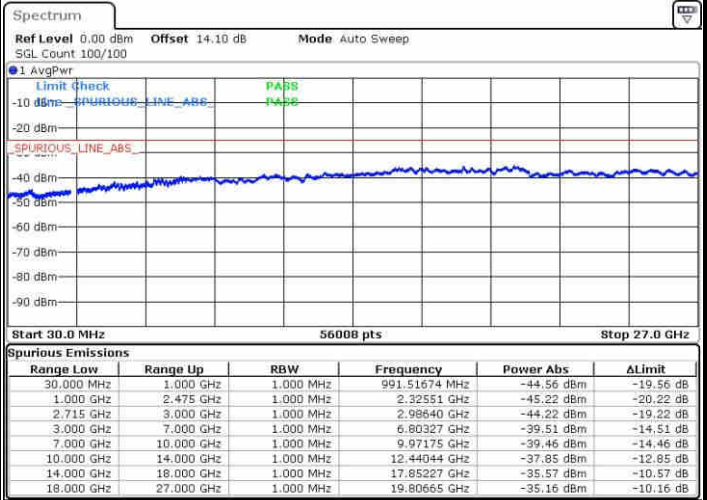
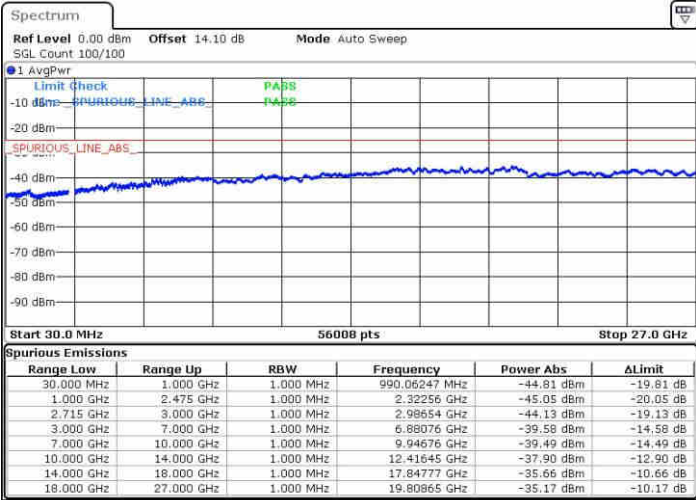
Date: 8 JUN 2019 00:40:12



LTE Band 41 / 5MHz

Lowest Channel / 64QAM

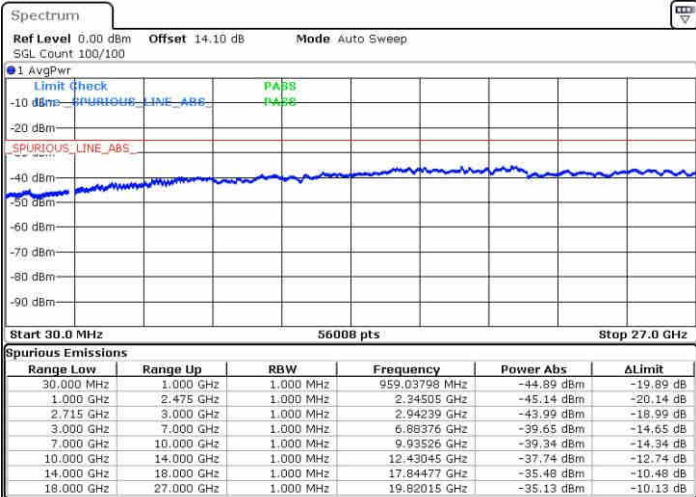
Middle Channel / 64QAM



Date: 8 JUN 2019 00:03:55

Date: 8 JUN 2019 00:04:42

Highest Channel / 64QAM



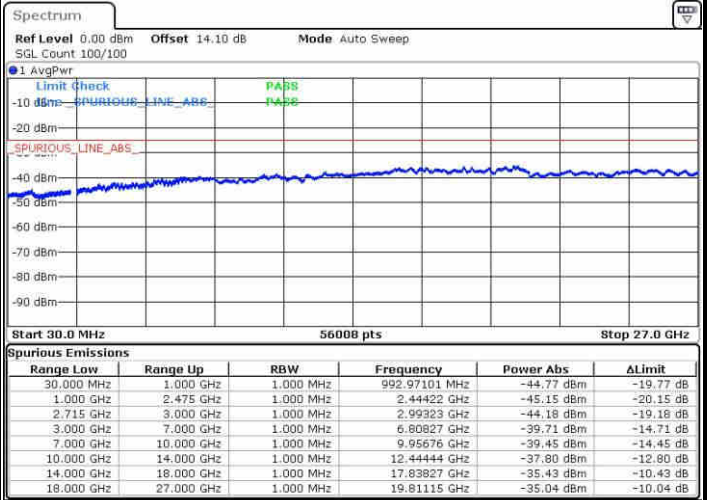
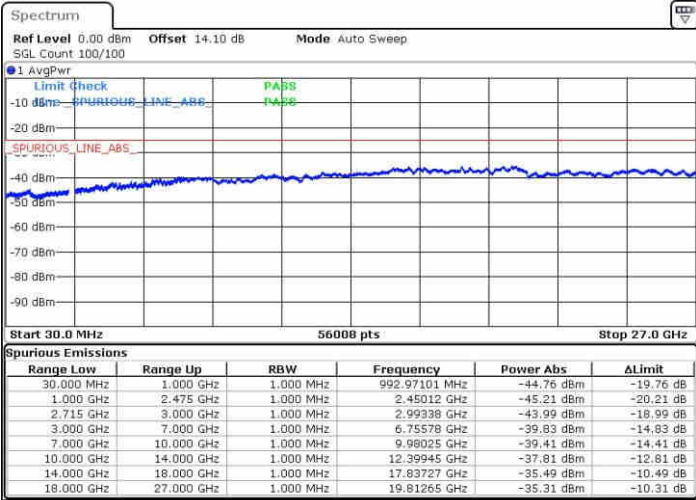
Date: 8 JUN 2019 00:05:27



LTE Band 41 / 10MHz

Lowest Channel / 64QAM

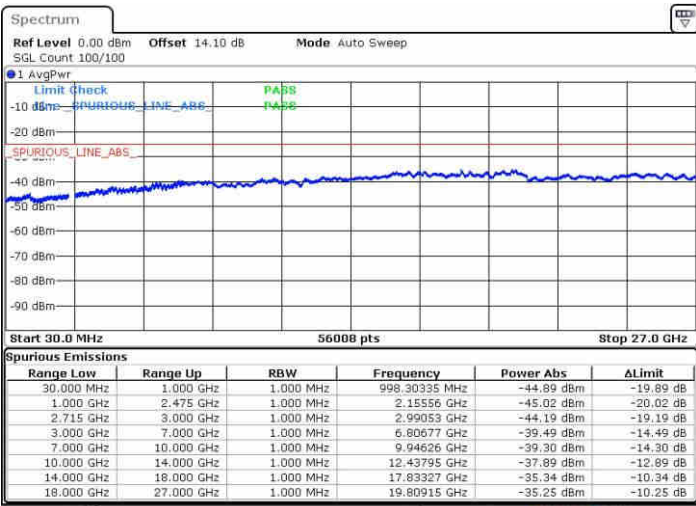
Middle Channel / 64QAM



Date: 8 JUN 2019 00:06:49

Date: 8 JUN 2019 00:07:35

Highest Channel / 64QAM



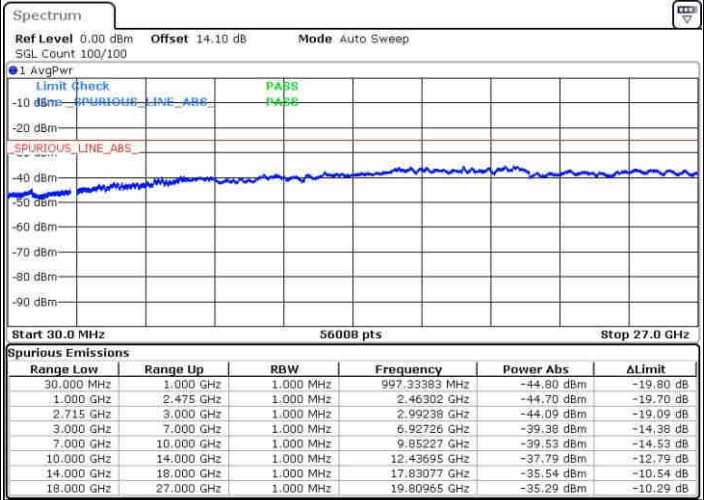
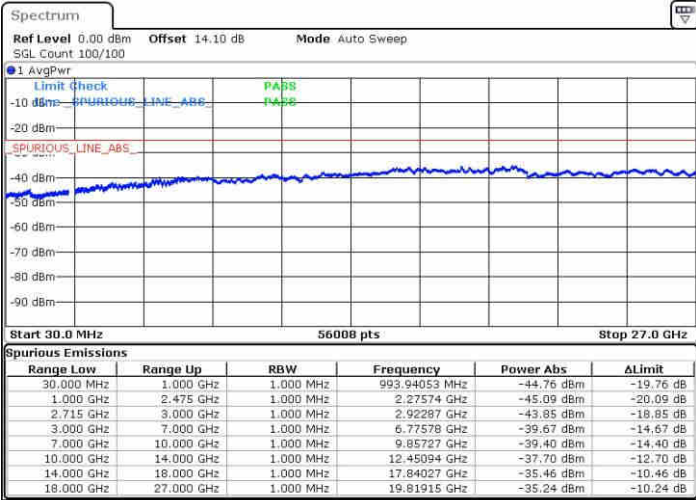
Date: 8 JUN 2019 00:08:20



LTE Band 41 / 15MHz

Lowest Channel / 64QAM

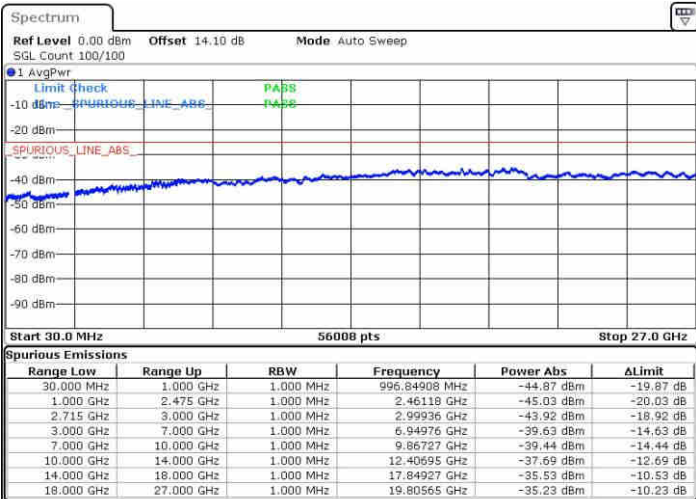
Middle Channel / 64QAM



Date: 8 JUN 2019 00:09:05

Date: 8 JUN 2019 00:09:52

Highest Channel / 64QAM



Date: 8 JUN 2019 00:10:37