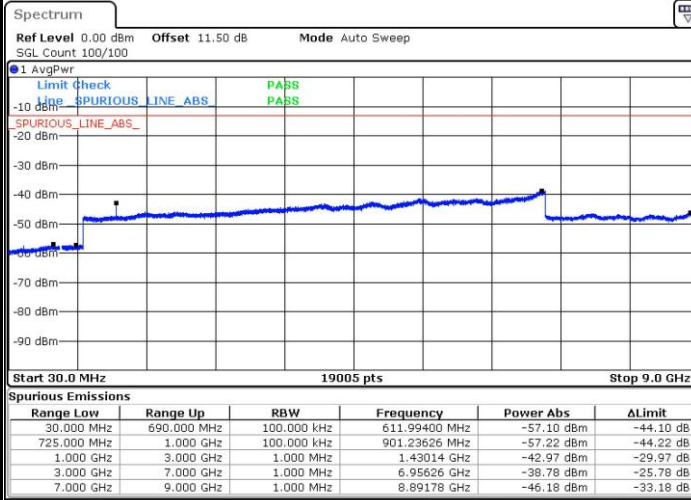




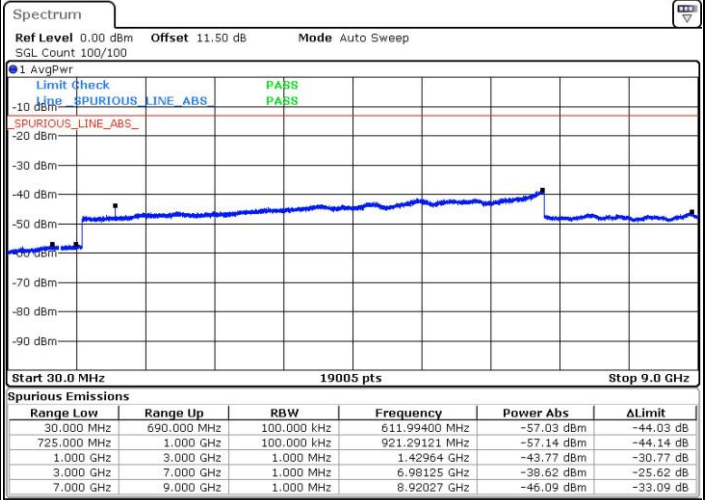
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 1.JUL.2019 01:04:02

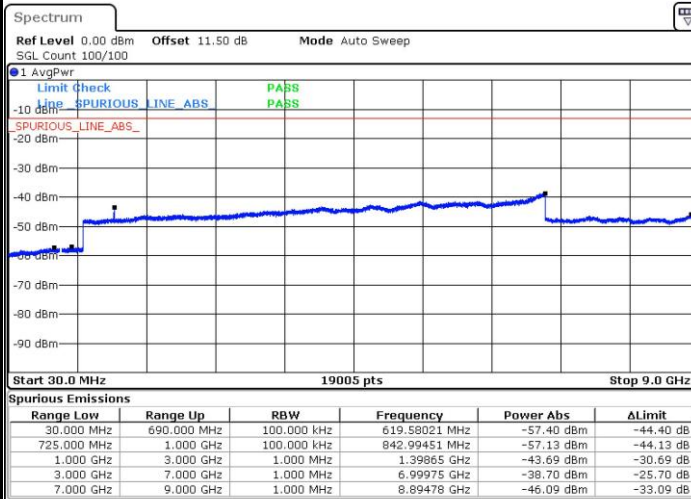
Highest Channel / 16QAM



Date: 1.JUL.2019 01:05:05

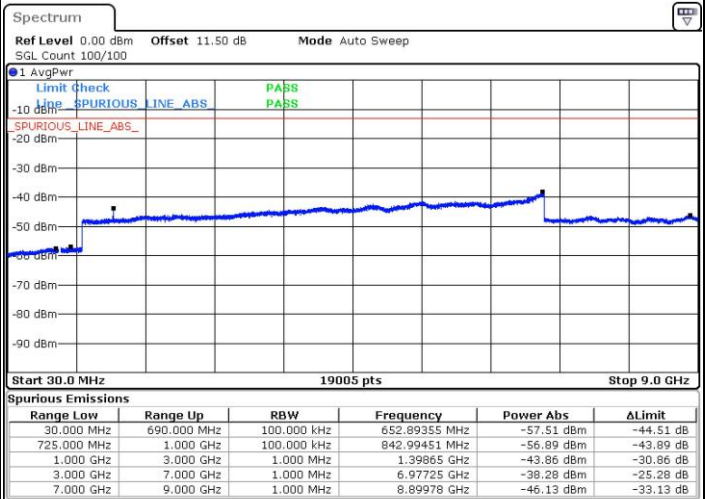
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 1.JUL.2019 01:19:46

Lowest Channel / 16QAM



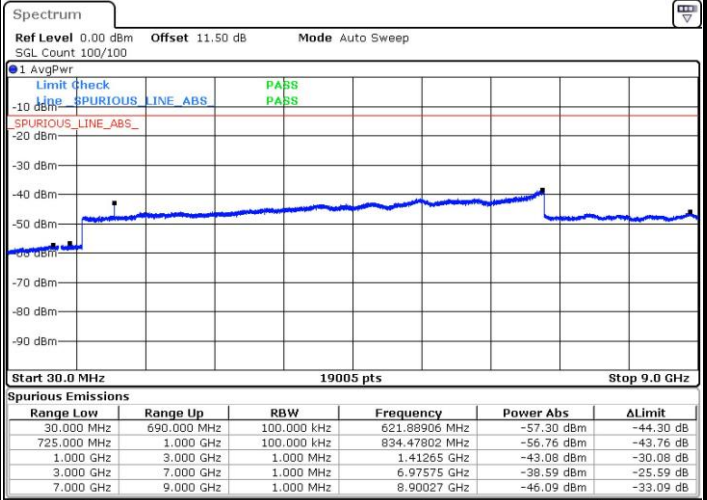
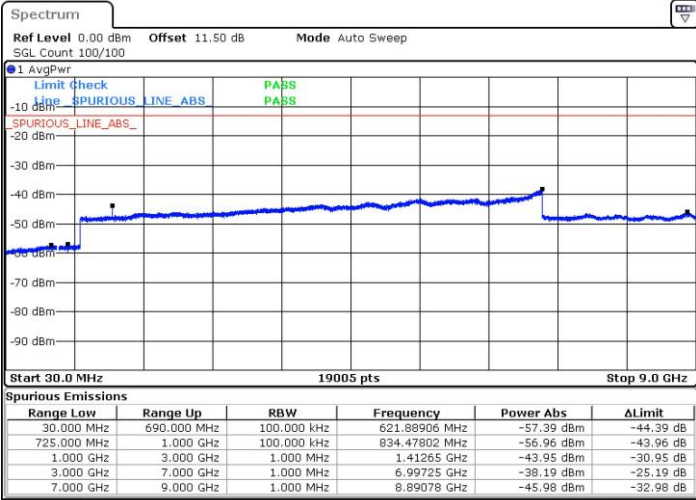
Date: 1.JUL.2019 01:20:48



LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

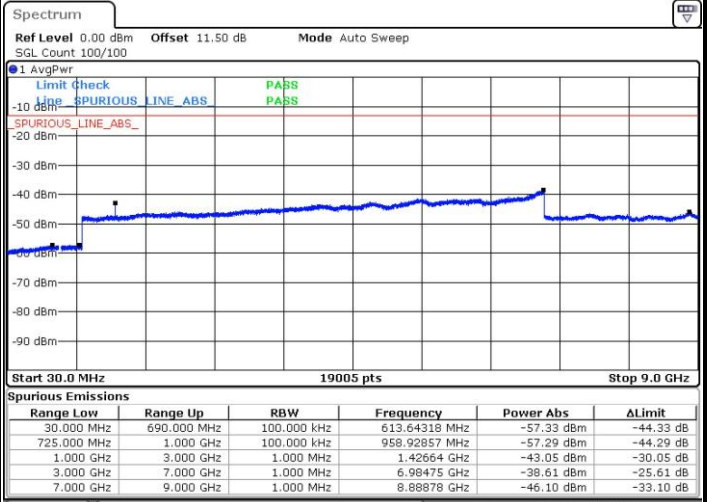
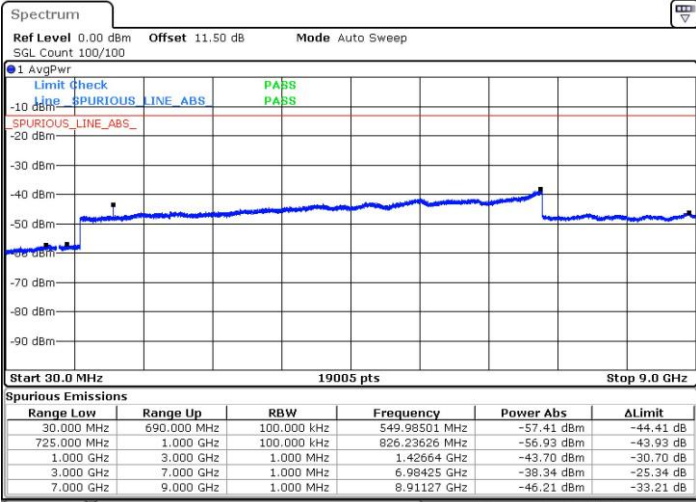


Date: 1.JUL.2019 01:23:40

Date: 1.JUL.2019 01:22:37

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.JUL.2019 01:29:45

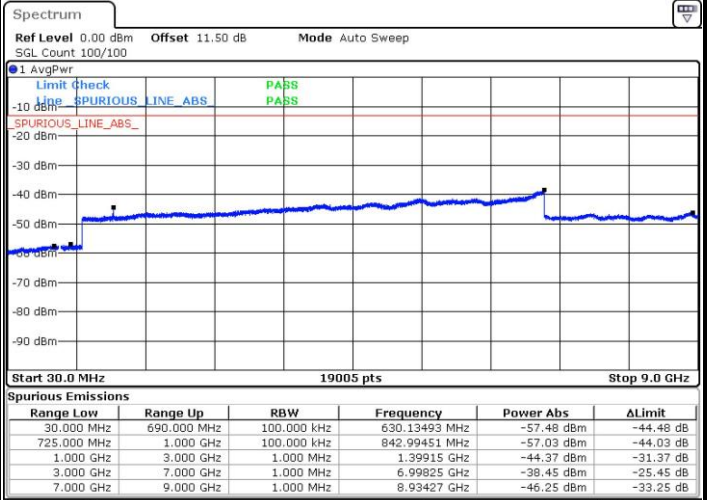
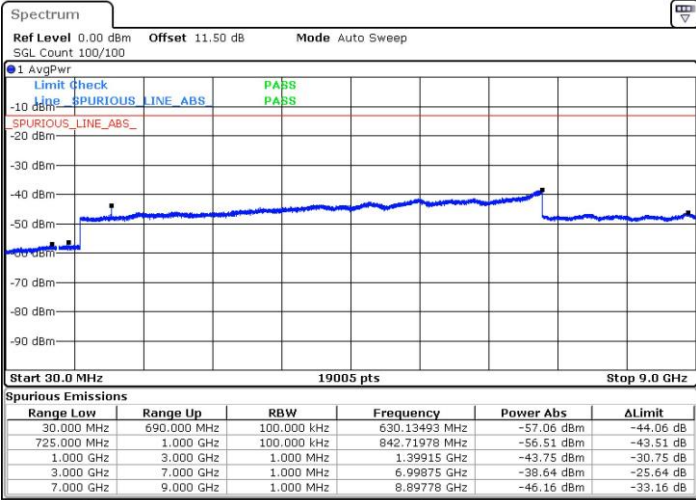
Date: 1.JUL.2019 01:30:48



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

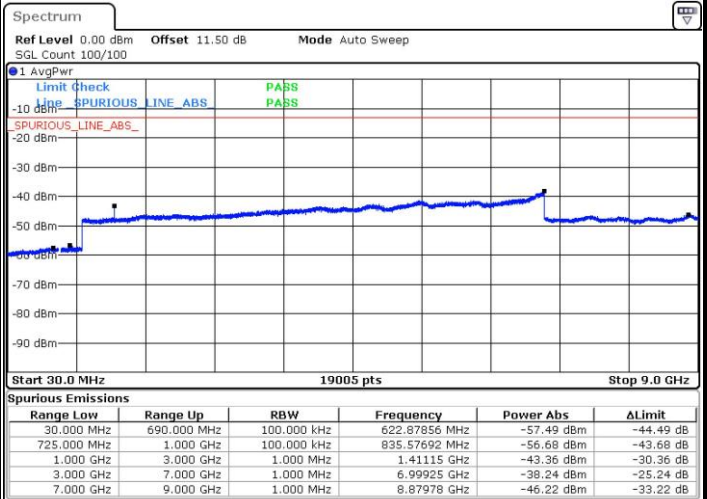
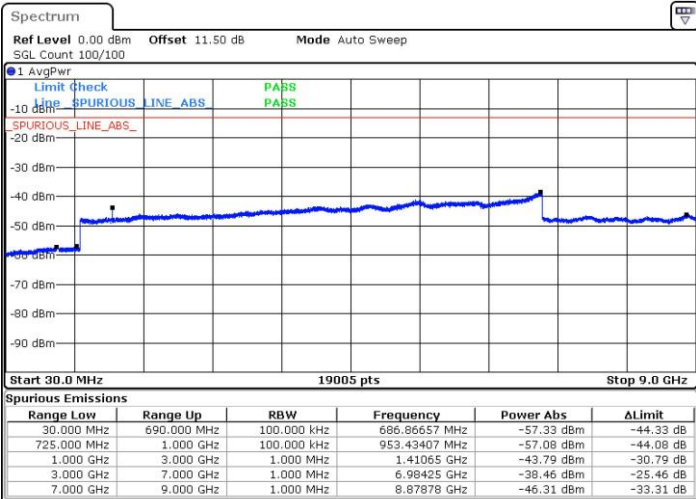


Date: 1.JUL.2019 01:54:14

Date: 1.JUL.2019 01:55:17

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 1.JUL.2019 01:56:09

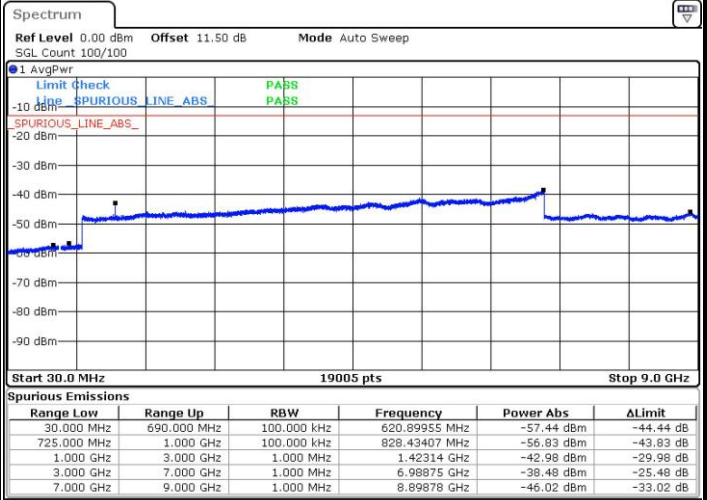
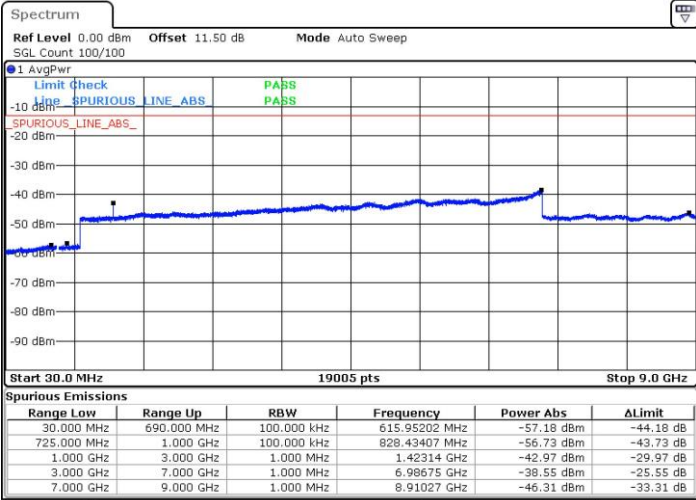
Date: 1.JUL.2019 01:57:06



LTE Band 12 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



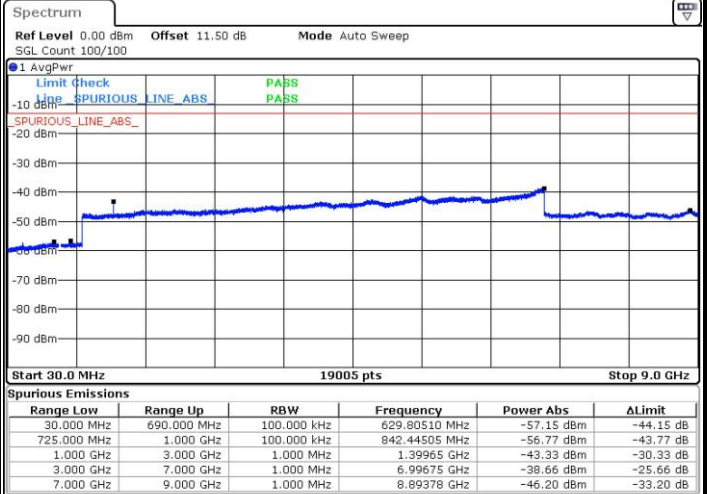
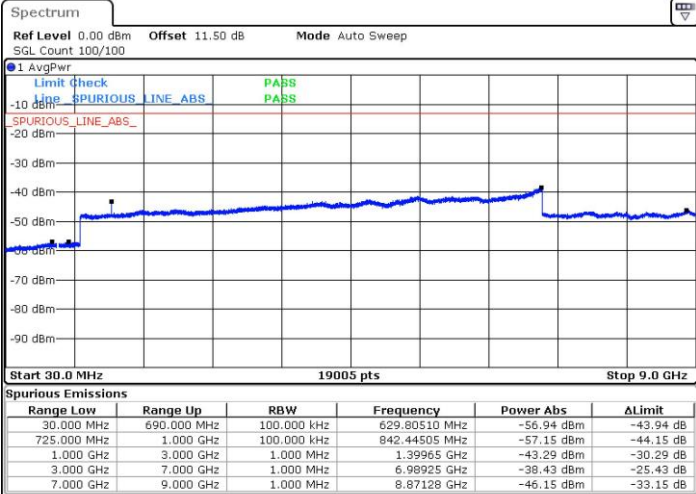
Date: 1.JUL.2019 02:44:54

Date: 1.JUL.2019 02:43:52

LTE Band 12 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 1.JUL.2019 02:50:59

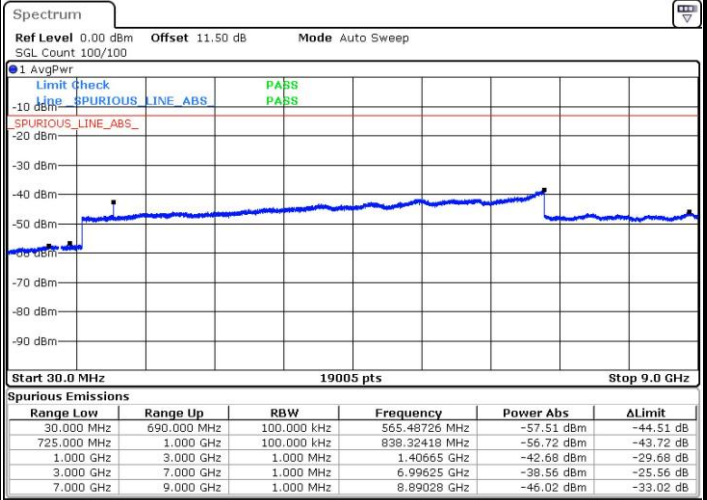
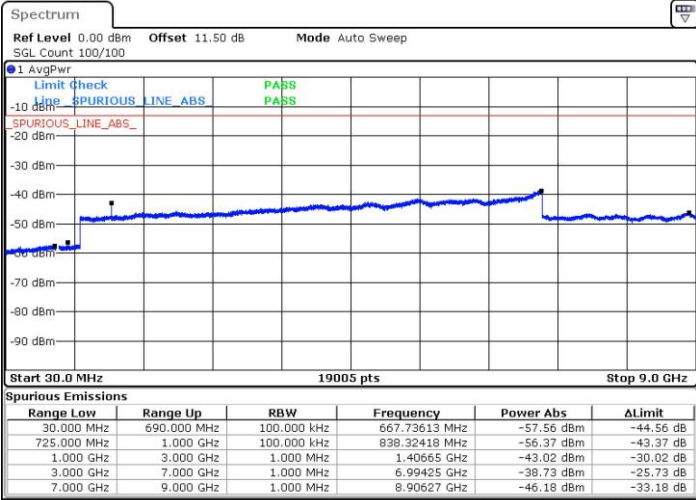
Date: 1.JUL.2019 02:52:02



LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

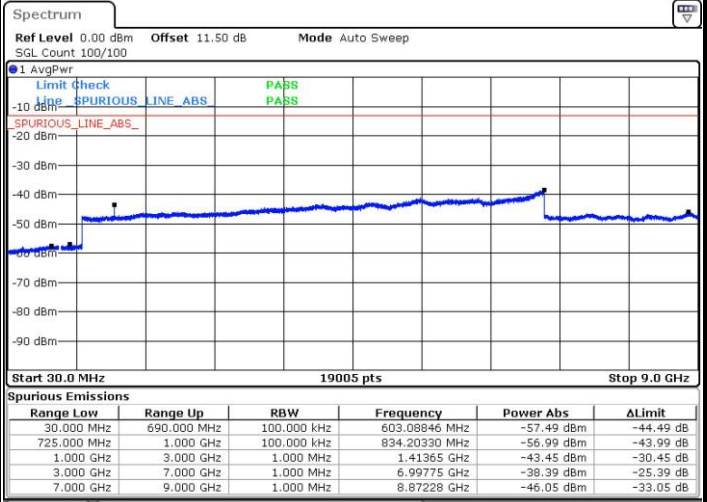
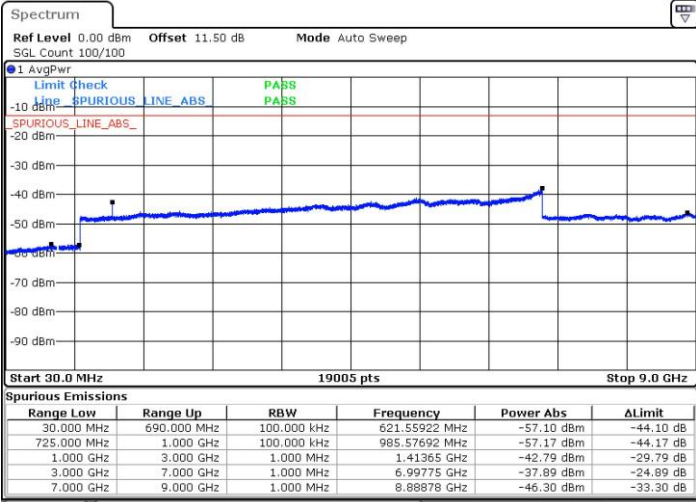


Date: 1.JUL.2019 02:54:54

Date: 1.JUL.2019 02:53:51

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.JUL.2019 03:01:00

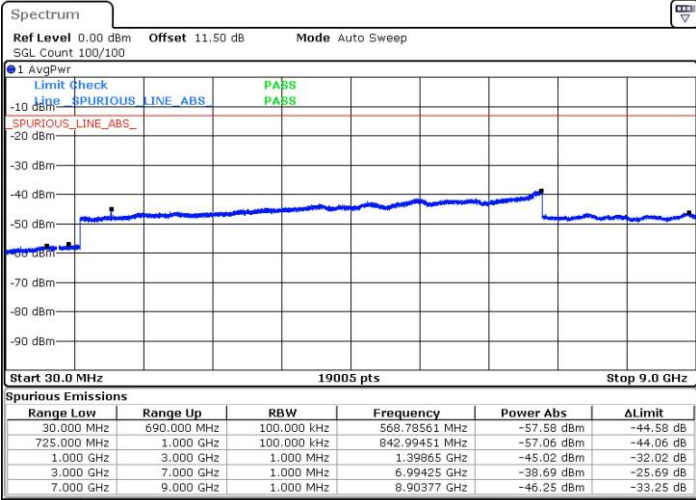
Date: 1.JUL.2019 03:02:03



LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

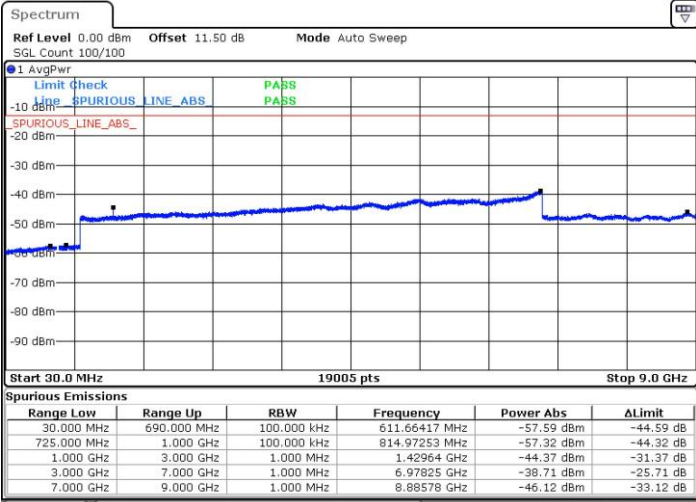
Middle Channel / 64QAM



Date: 1.JUL.2019 01:08:39

Date: 1.JUL.2019 01:10:06

Highest Channel / 64QAM



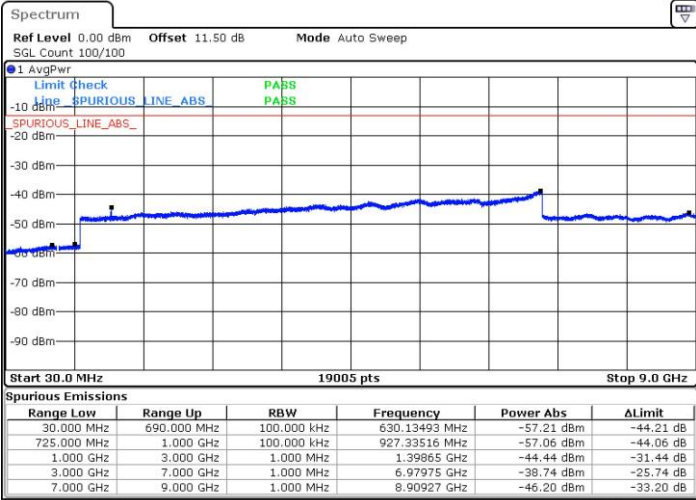
Date: 1.JUL.2019 01:13:40



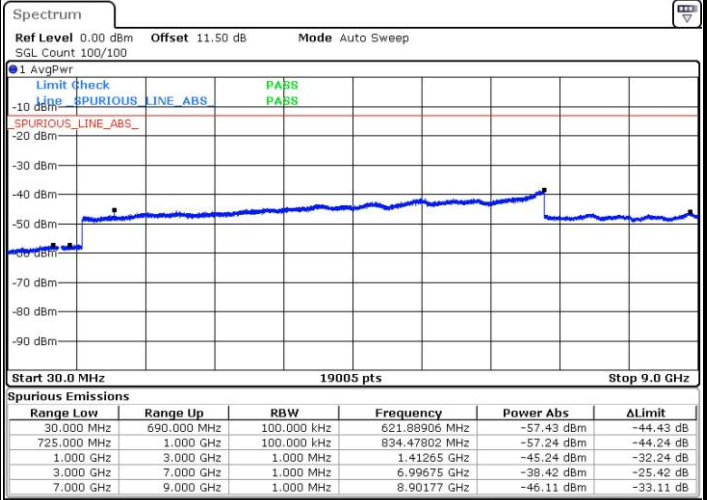
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

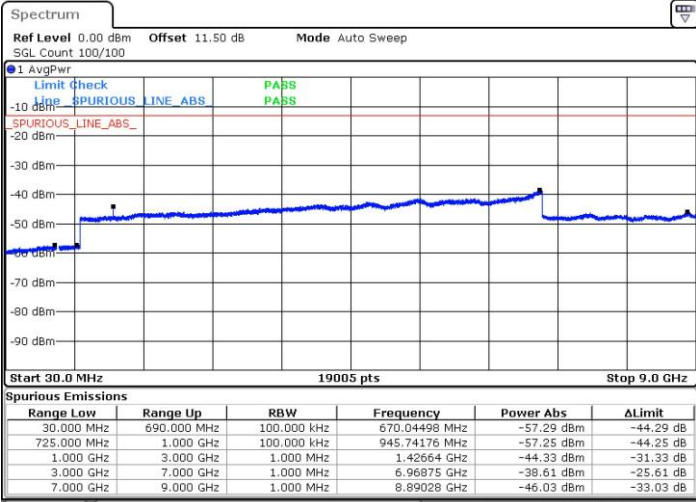


Date: 1.JUL.2019 01:34:22



Date: 1.JUL.2019 01:35:48

Highest Channel / 64QAM



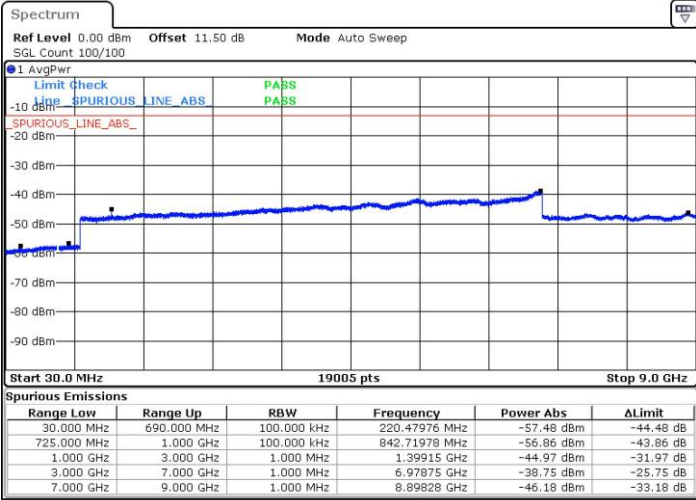
Date: 1.JUL.2019 01:39:33



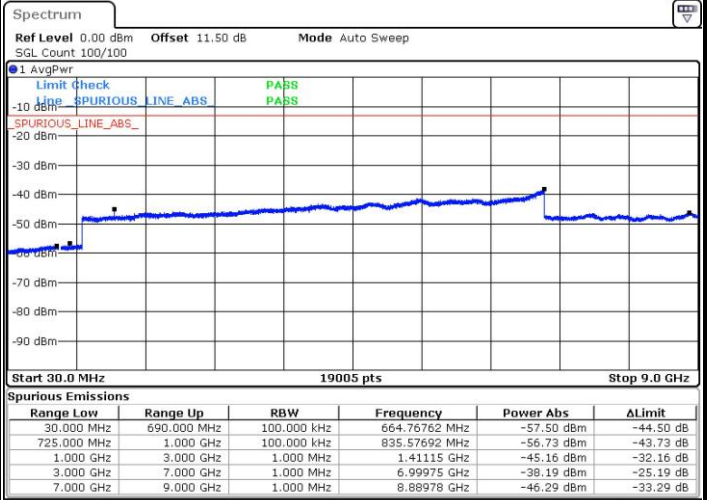
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

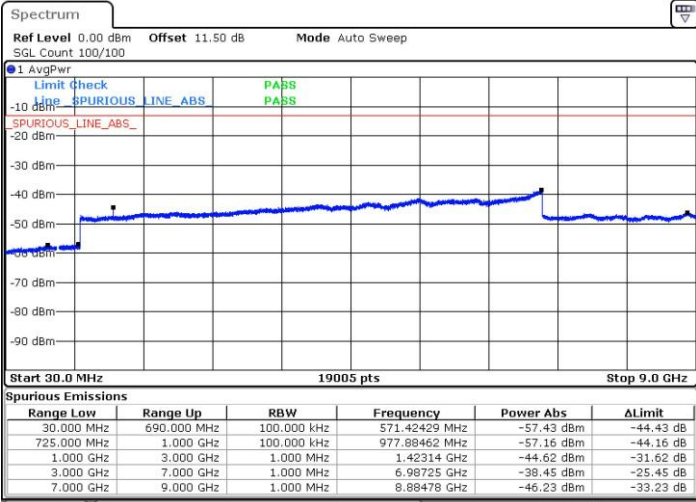


Date: 1.JUL.2019 01:43:07



Date: 1.JUL.2019 01:44:33

Highest Channel / 64QAM



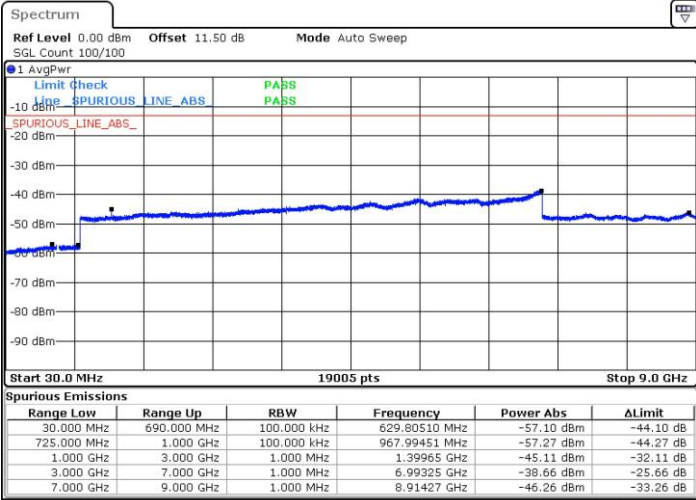
Date: 1.JUL.2019 01:48:08



LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

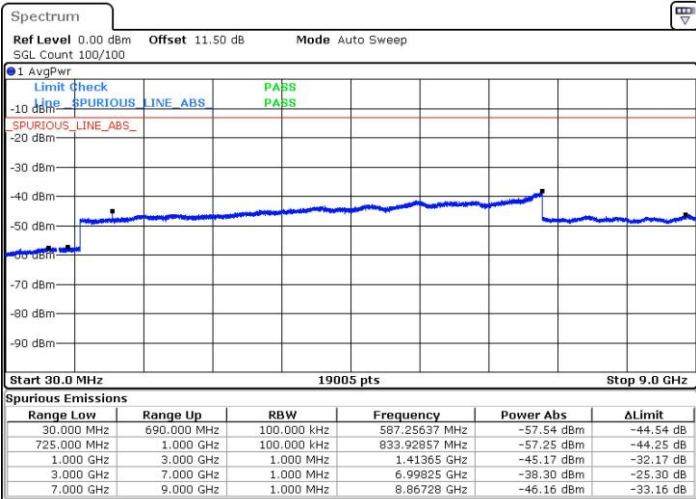


Date: 1.JUL.2019 03:05:37



Date: 1.JUL.2019 03:07:03

Highest Channel / 64QAM



Date: 1.JUL.2019 02:19:30



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	0.0011	PASS
40	Normal Voltage	0.0117	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0052	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0051	

Note:

1. Normal Voltage =3.8 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 13

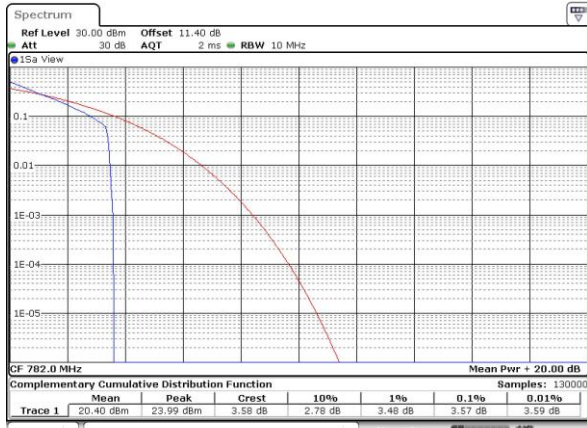
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.57	4.67	5.16	5.94	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.38	6.41	-	-	
Highest CH	-	-	-	-	



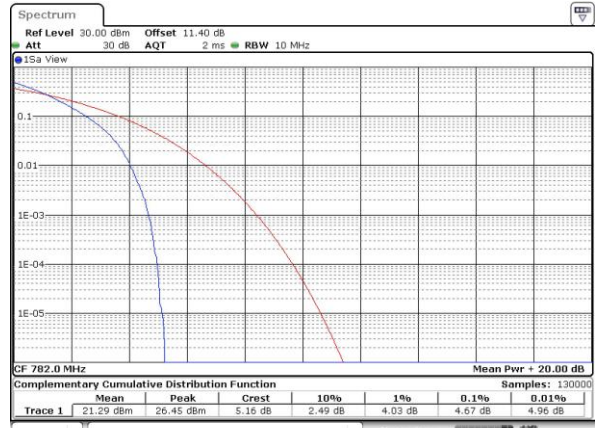
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 28_JUN.2019 00:32:33

Middle Channel / Full RB



Date: 28_JUN.2019 00:32:46

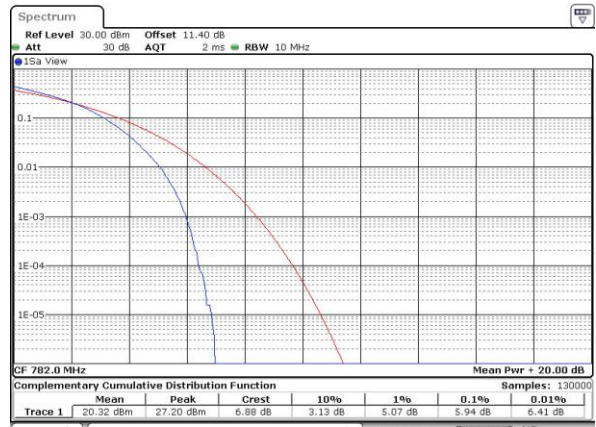
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 28_JUN.2019 00:32:10

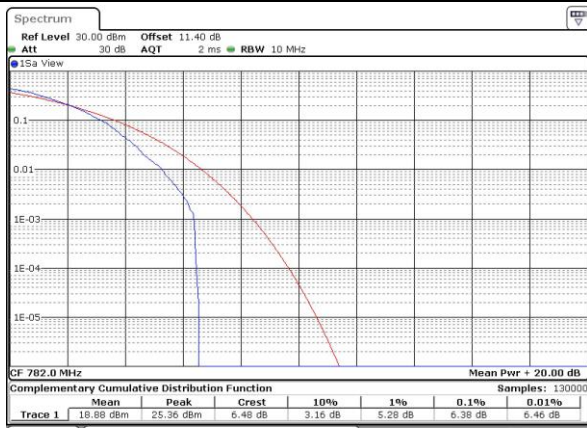
Middle Channel / Full RB



Date: 28_JUN.2019 00:32:21

LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 28_JUN.2019 00:31:42

Middle Channel / Full RB



Date: 28_JUN.2019 00:31:58



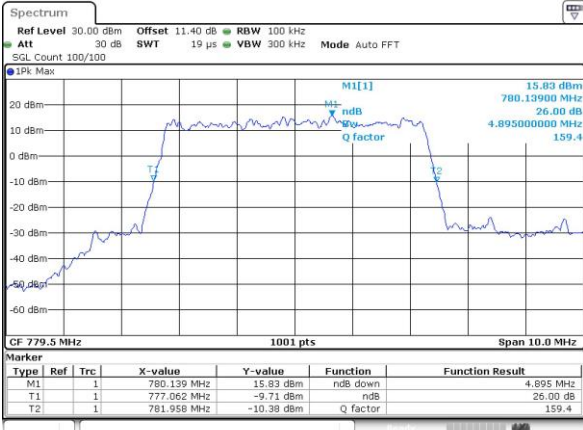
26dB Bandwidth

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	-	-	-	-	4.90	4.98	-	-	-	-	-	-
Middle CH	-	-	-	-	4.92	4.90	9.77	9.79	-	-	-	-
Highest CH	-	-	-	-	4.81	4.90	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.84	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.94	-	9.85	-	-	-	-	-
Highest CH	-	-	-	-	4.80	-	-	-	-	-	-	-



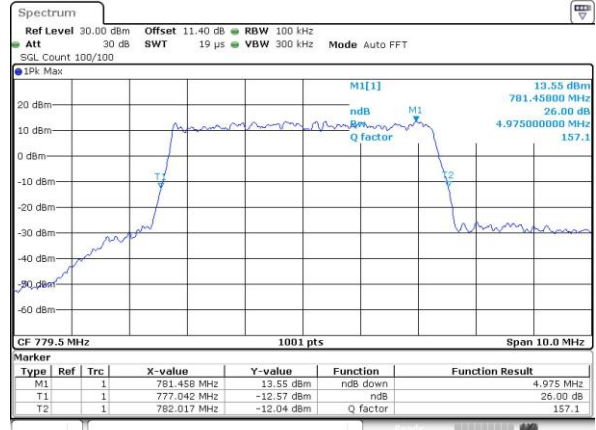
LTE Band 13

Lowest Channel / 5MHz / QPSK



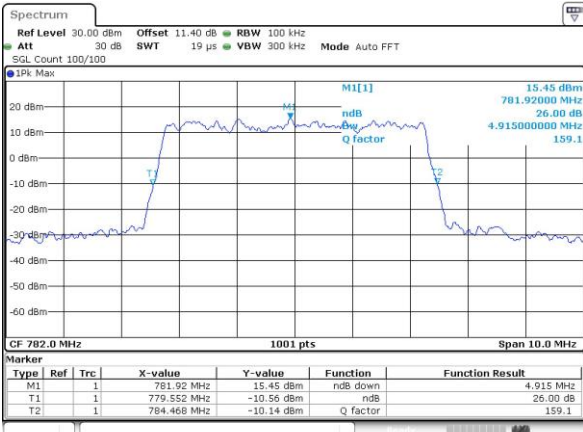
Date: 27 JUN 2019 23:40:41

Lowest Channel / 5MHz / 16QAM



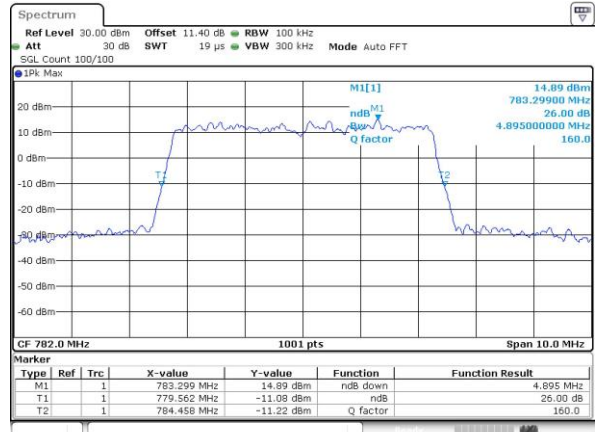
Date: 27 JUN 2019 23:40:29

Middle Channel / 5MHz / QPSK



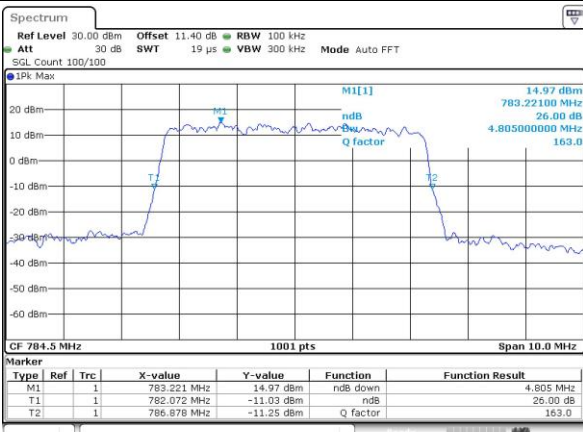
Date: 27 JUN 2019 23:51:33

Middle Channel / 5MHz / 16QAM



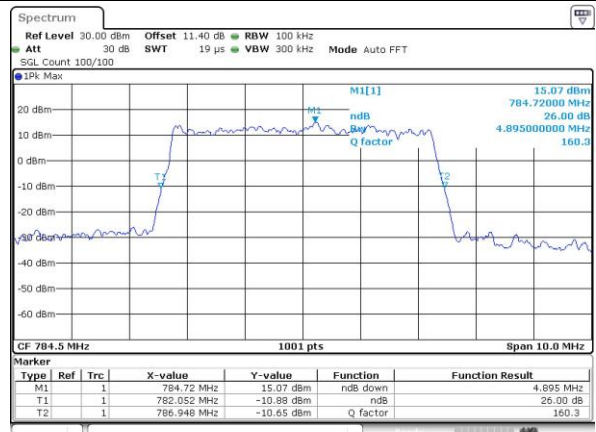
Date: 27 JUN 2019 23:51:45

Highest Channel / 5MHz / QPSK



Date: 27 JUN 2019 23:52:54

Highest Channel / 5MHz / 16QAM

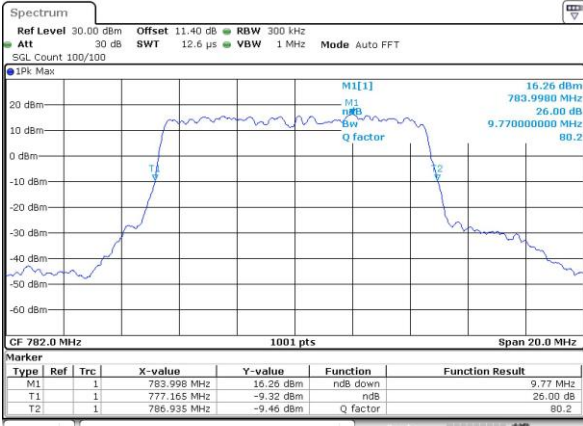


Date: 27 JUN 2019 23:52:43



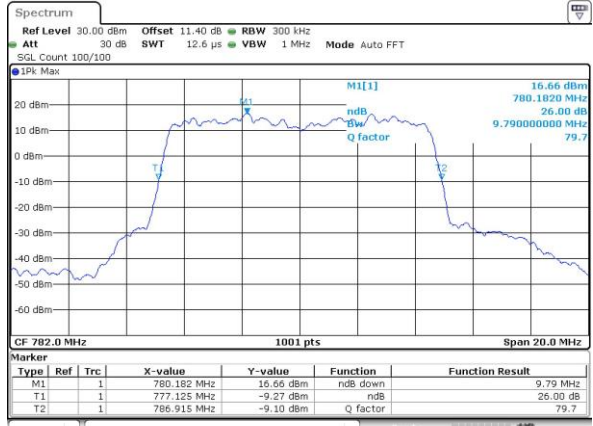
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 28 JUN 2019 00:13:09

Middle Channel / 10MHz / 16QAM

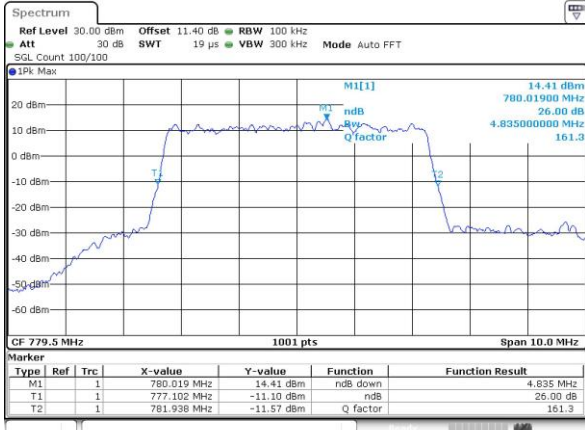


Date: 28 JUN 2019 00:12:58

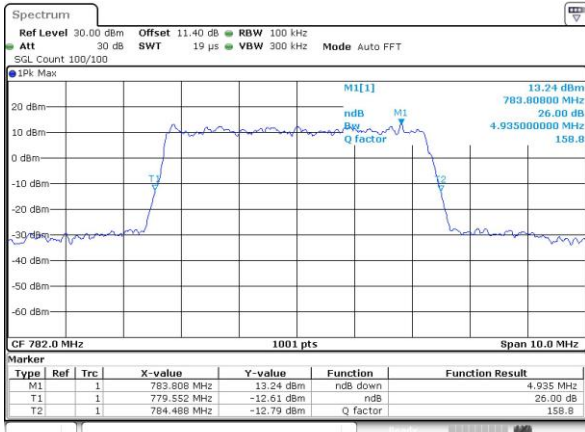


LTE Band 13

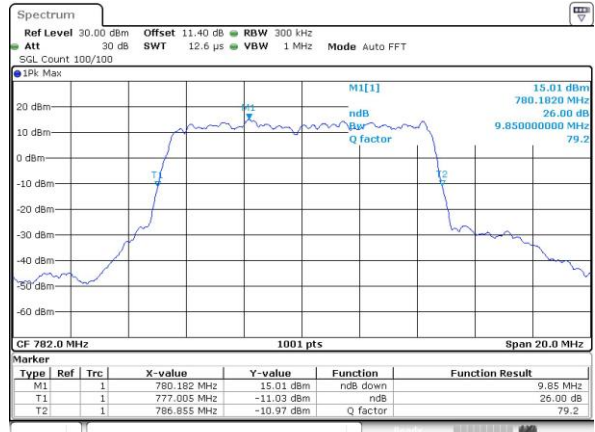
Lowest Channel / 5MHz / 64QAM



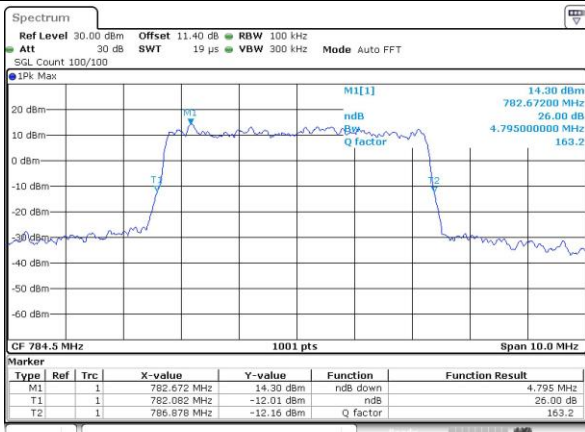
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM





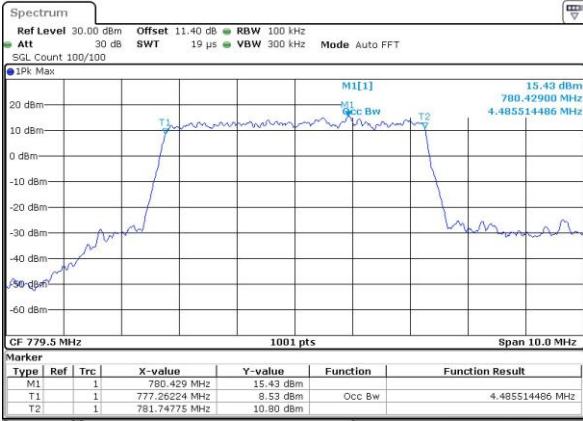
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	4.48	9.03	8.99	-	-	-	-
Highest CH	-	-	-	-	4.46	4.47	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	9.03	-	-	-	-	-
Highest CH	-	-	-	-	4.50	-	-	-	-	-	-	-



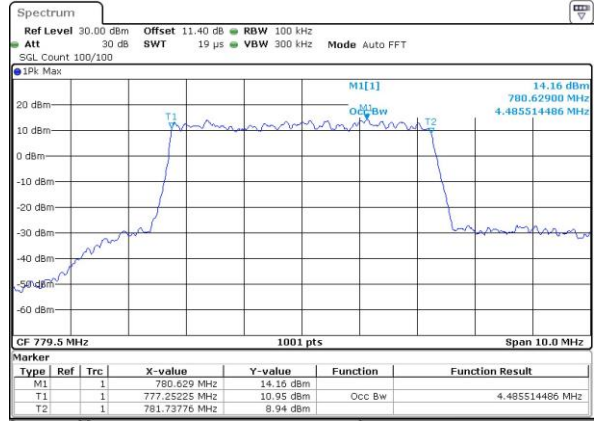
LTE Band 13

Lowest Channel / 5MHz / QPSK



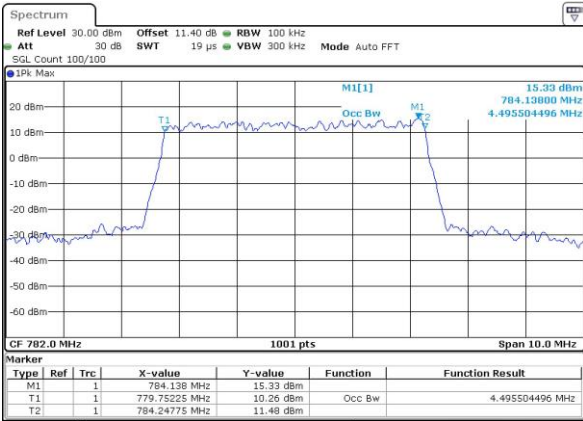
Date: 27 JUN 2019 23:40:06

Lowest Channel / 5MHz / 16QAM



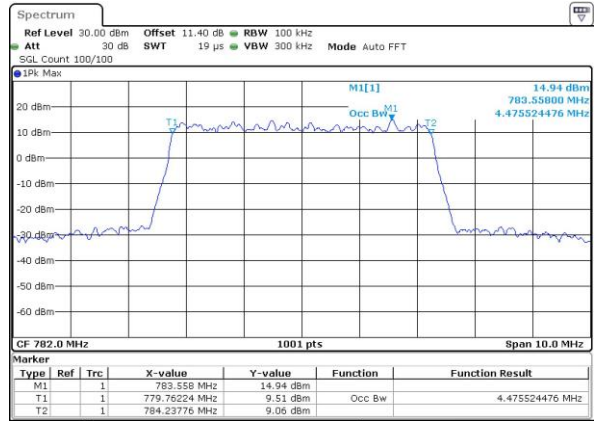
Date: 27 JUN 2019 23:40:18

Middle Channel / 5MHz / QPSK



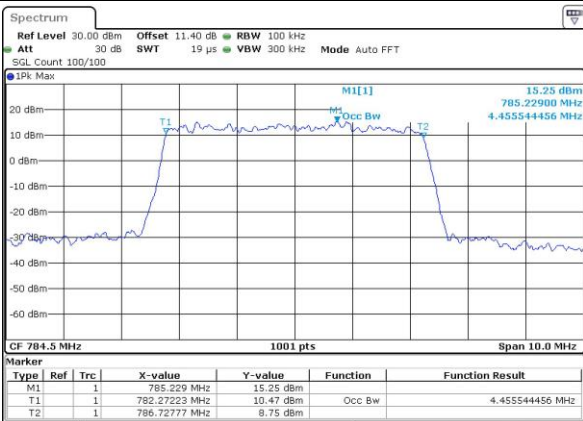
Date: 27 JUN 2019 23:52:08

Middle Channel / 5MHz / 16QAM



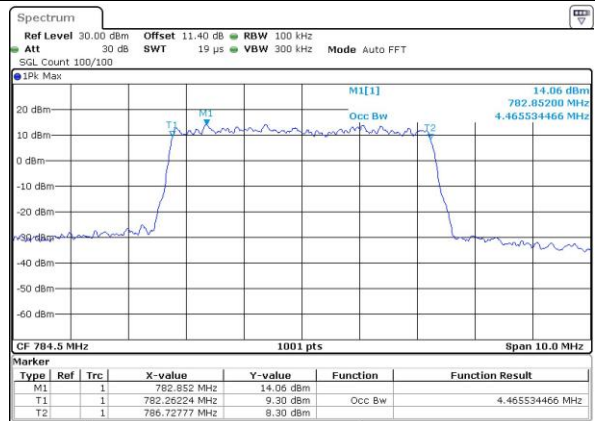
Date: 27 JUN 2019 23:52:56

Highest Channel / 5MHz / QPSK



Date: 27 JUN 2019 23:52:20

Highest Channel / 5MHz / 16QAM

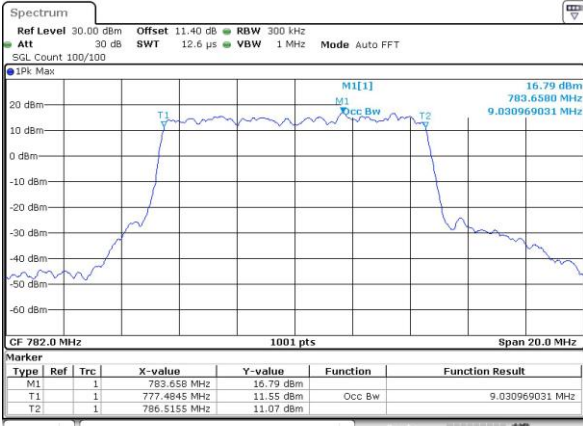


Date: 27 JUN 2019 23:52:31



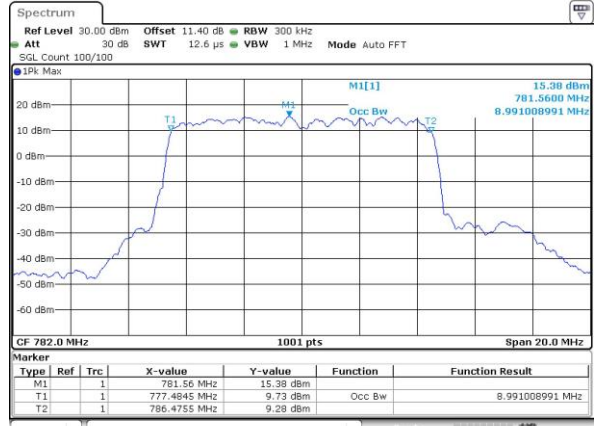
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 28 JUN 2019 00:12:35

Middle Channel / 10MHz / 16QAM

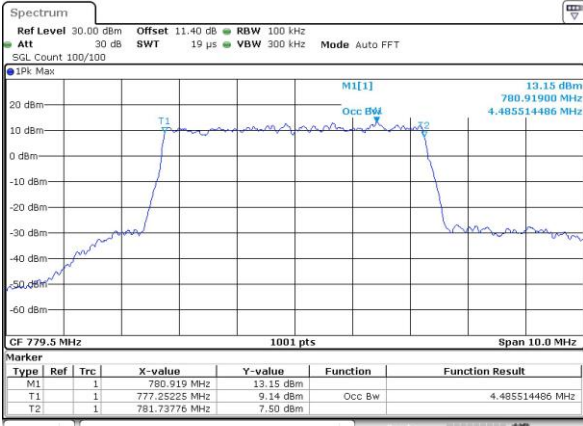


Date: 28 JUN 2019 00:12:46



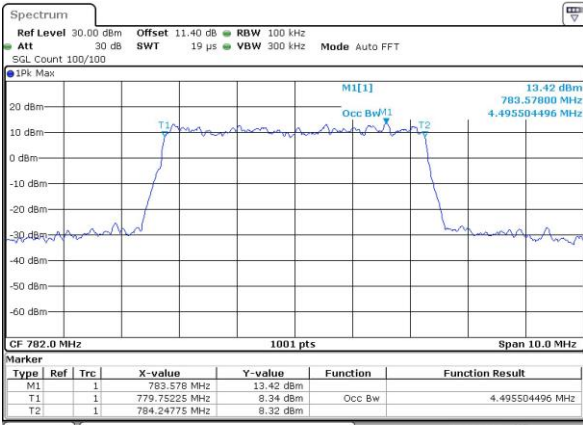
LTE Band 13

Lowest Channel / 5MHz / 64QAM



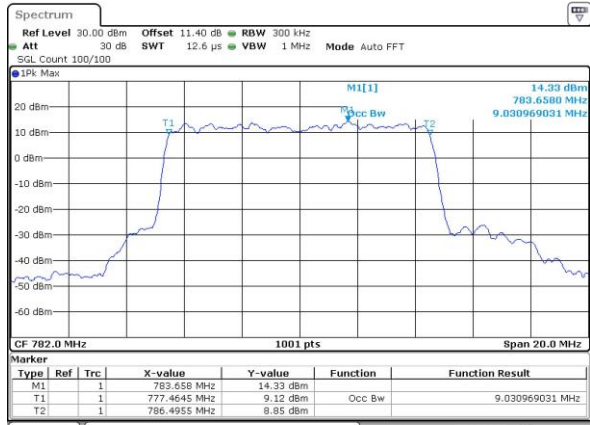
Date: 28 JUN 2019 00:01:45

Middle Channel / 5MHz / 64QAM



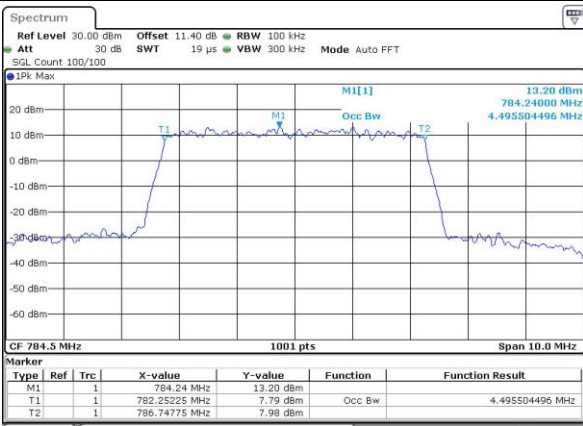
Date: 28 JUN 2019 00:07:40

Middle Channel / 10MHz / 64QAM



Date: 28 JUN 2019 00:25:19

Highest Channel / 5MHz / 64QAM



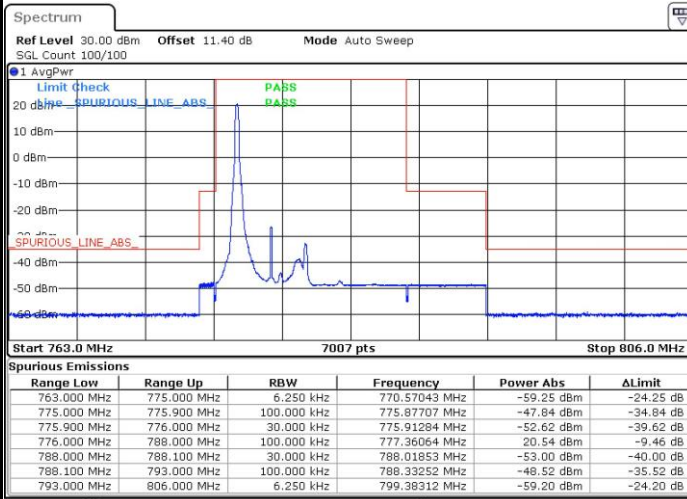
Date: 28 JUN 2019 00:07:52



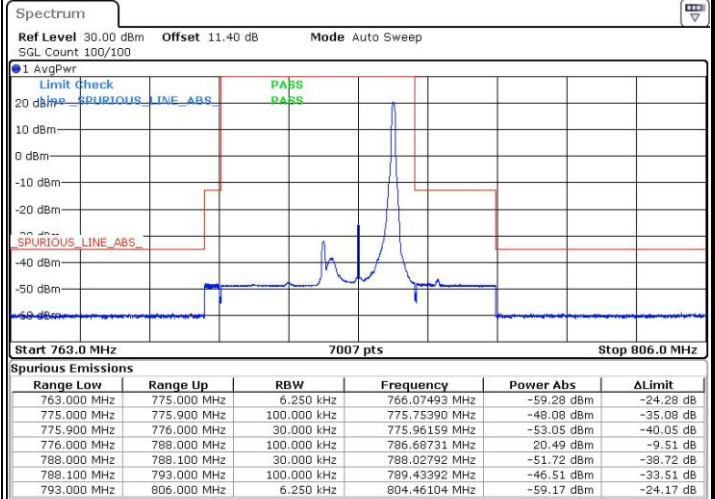
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

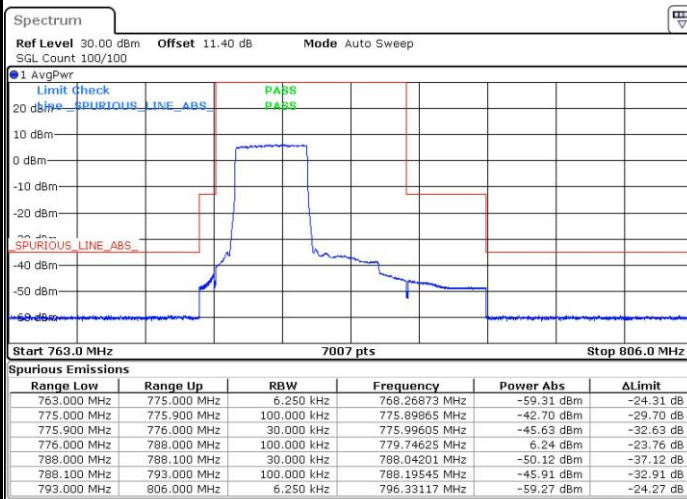
Lowest Band Edge / 1 RB



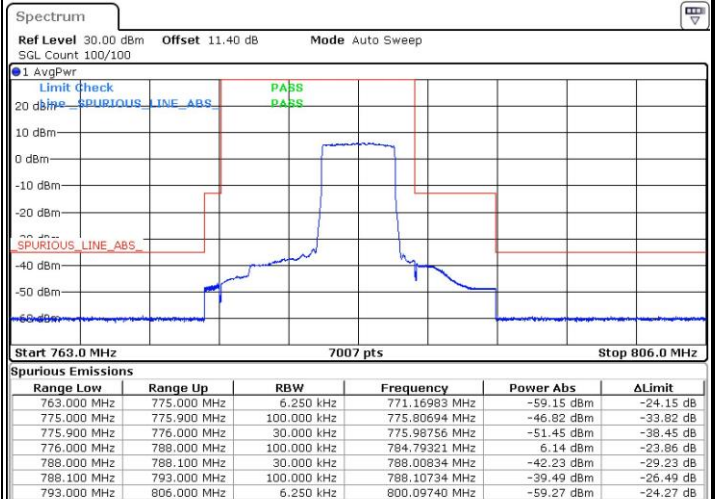
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

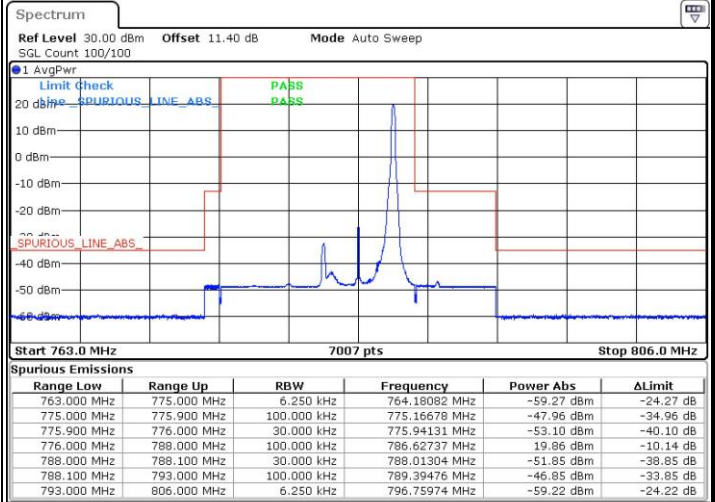
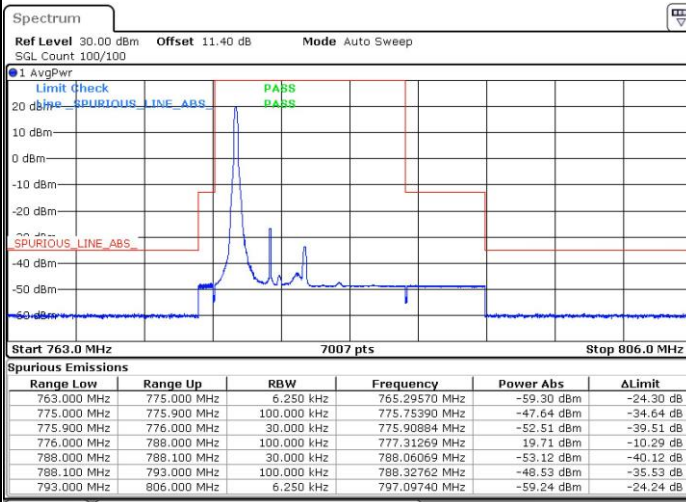




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

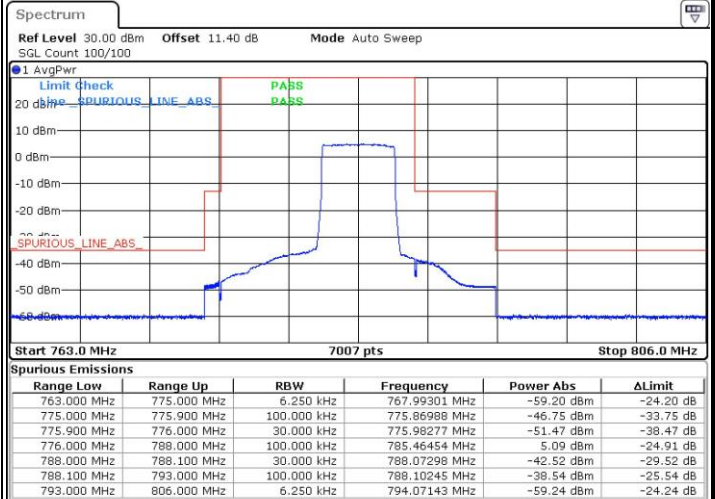
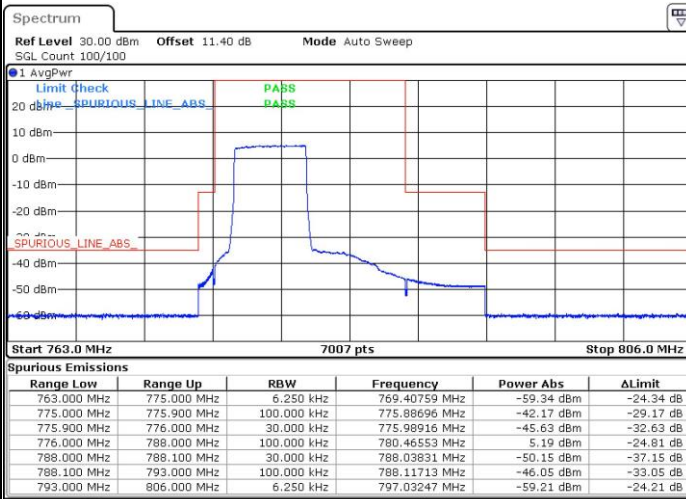


Date: 27 JUN 2019 23:45:39

Date: 27 JUN 2019 23:57:52

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27 JUN 2019 23:44:00

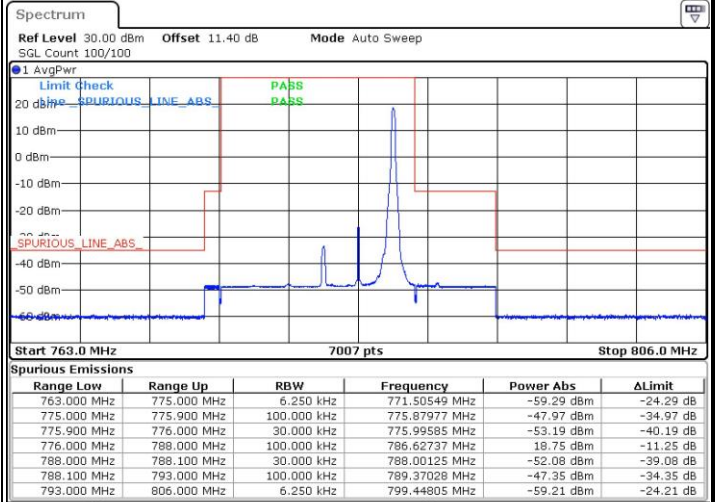
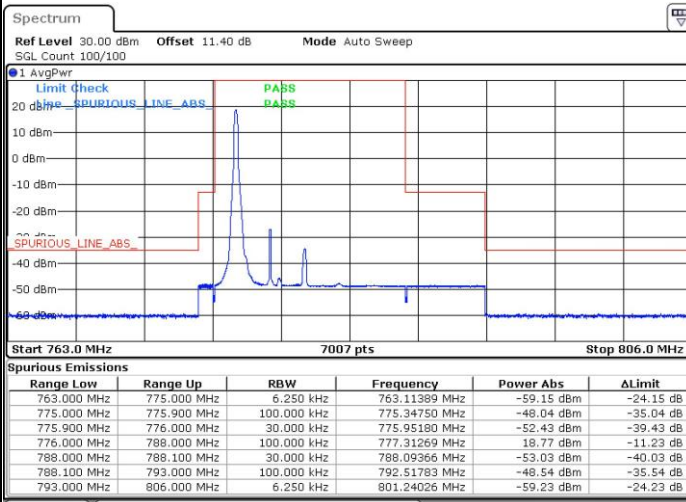
Date: 27 JUN 2019 23:56:13



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

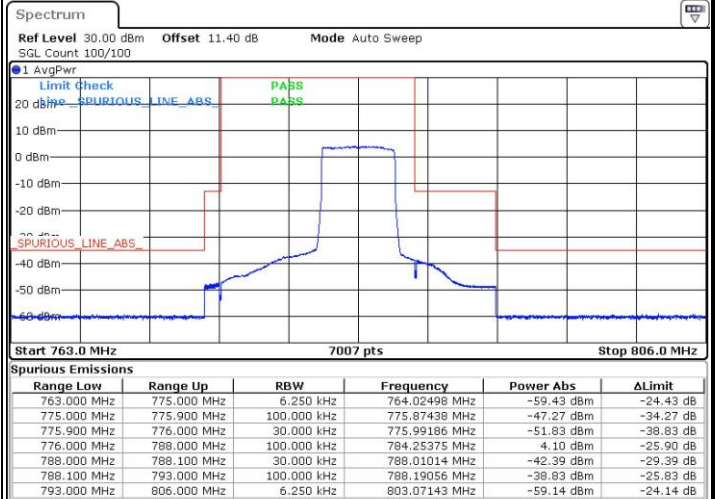
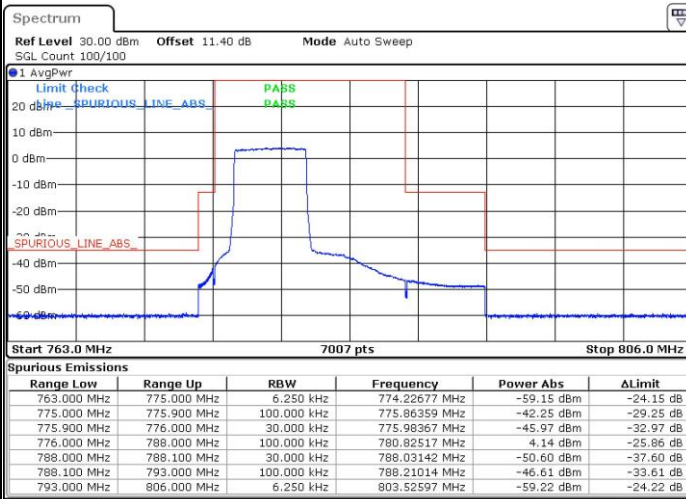


Date: 28 JUN 2019 00:05:15

Date: 28 JUN 2019 00:11:22

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 28 JUN 2019 00:03:36

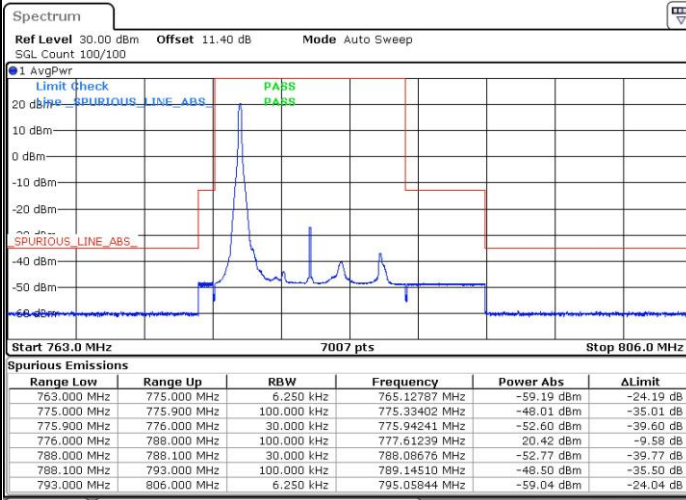
Date: 28 JUN 2019 00:09:42



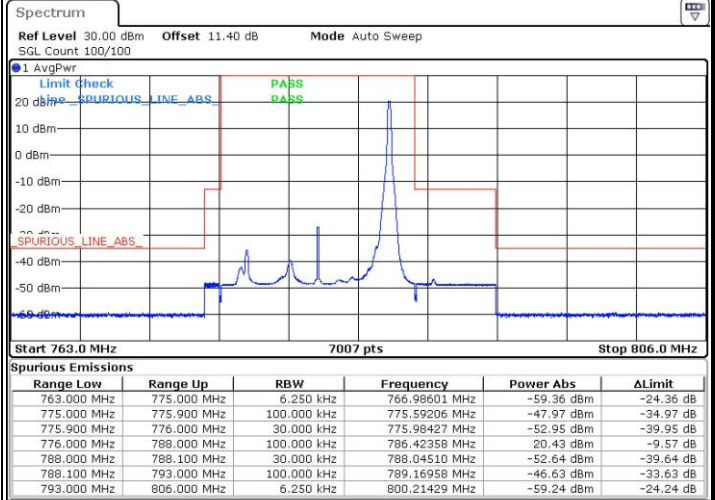
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

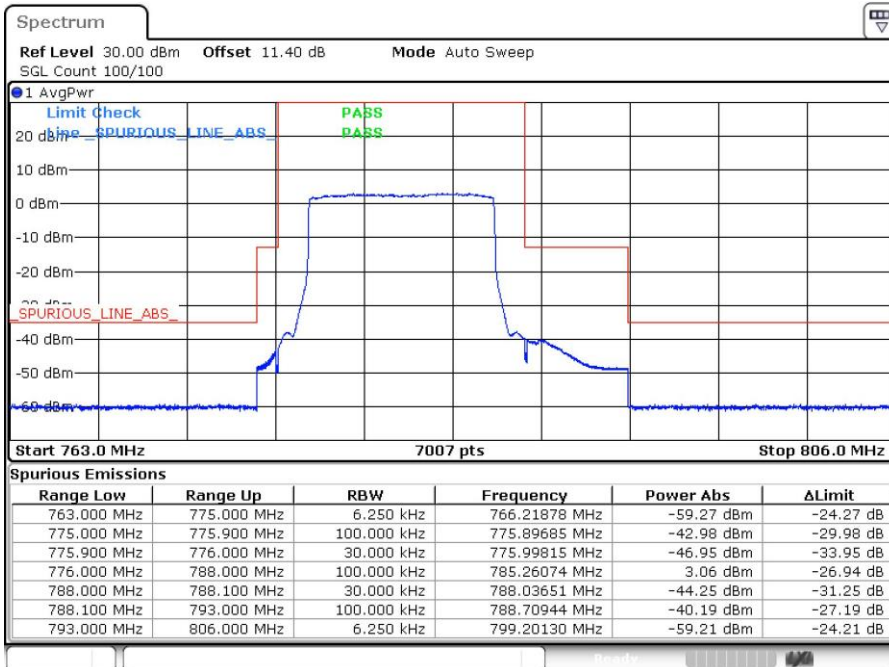


Date: 28.JUN.2019 00:19:47



Date: 28.JUN.2019 00:21:26

Band Edge / Full RB



Date: 28.JUN.2019 00:14:48