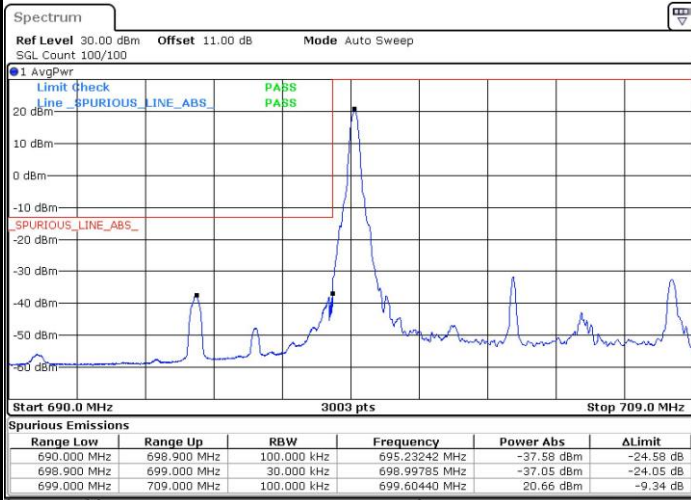




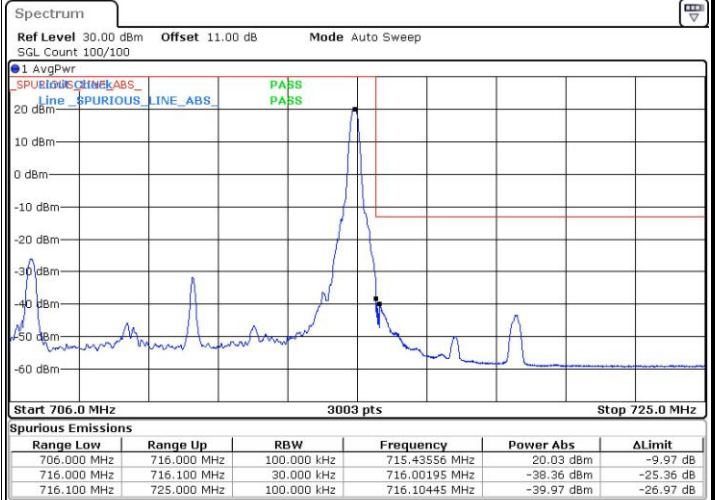
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



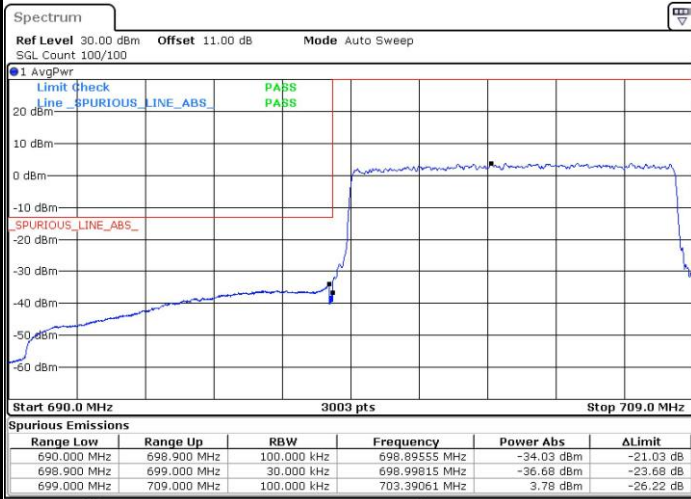
Date: 21.SEP.2018 02:45:03

Highest Band Edge / 1 RB



Date: 21.SEP.2018 02:55:07

Lowest Band Edge / Full RB



Date: 21.SEP.2018 02:41:32

Highest Band Edge / Full RB

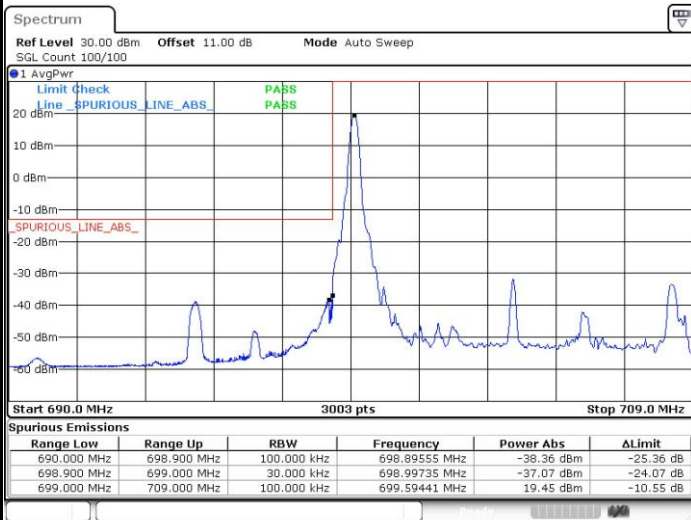


Date: 21.SEP.2018 02:51:35



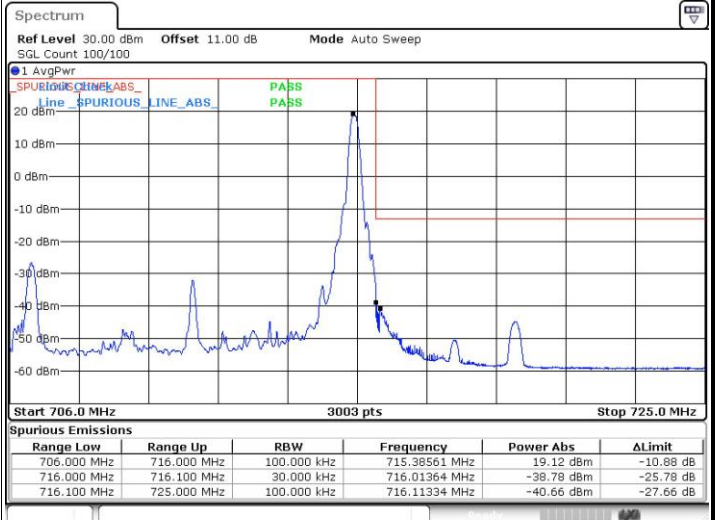
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



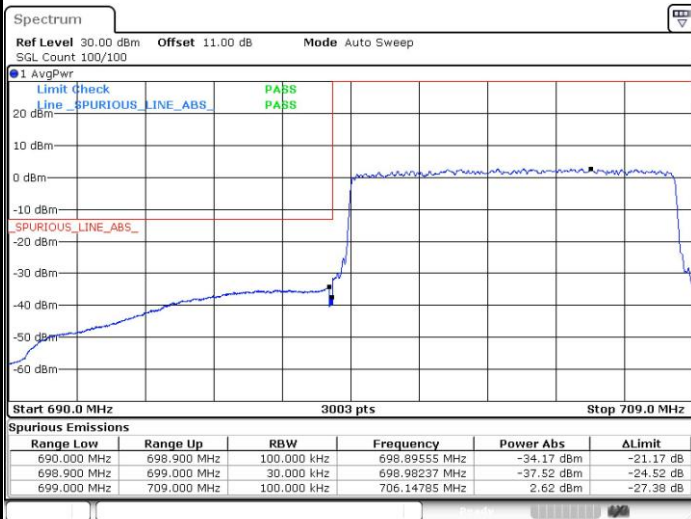
Date: 21.SEP.2018 02:43:52

Highest Band Edge / 1 RB



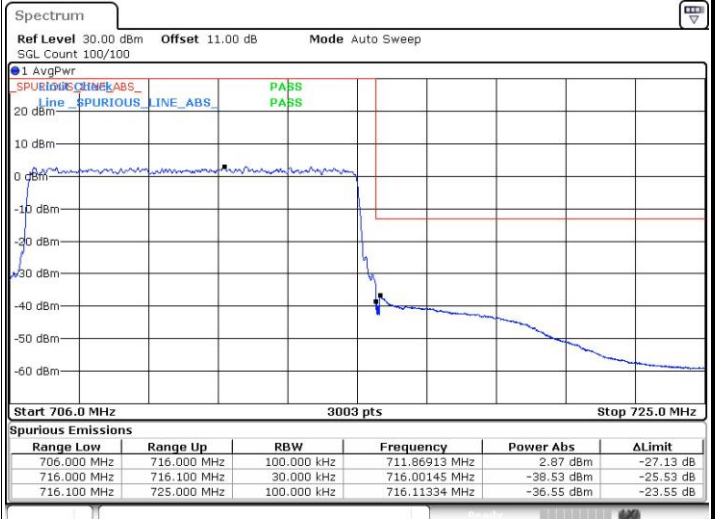
Date: 21.SEP.2018 02:53:56

Lowest Band Edge / Full RB



Date: 21.SEP.2018 02:42:42

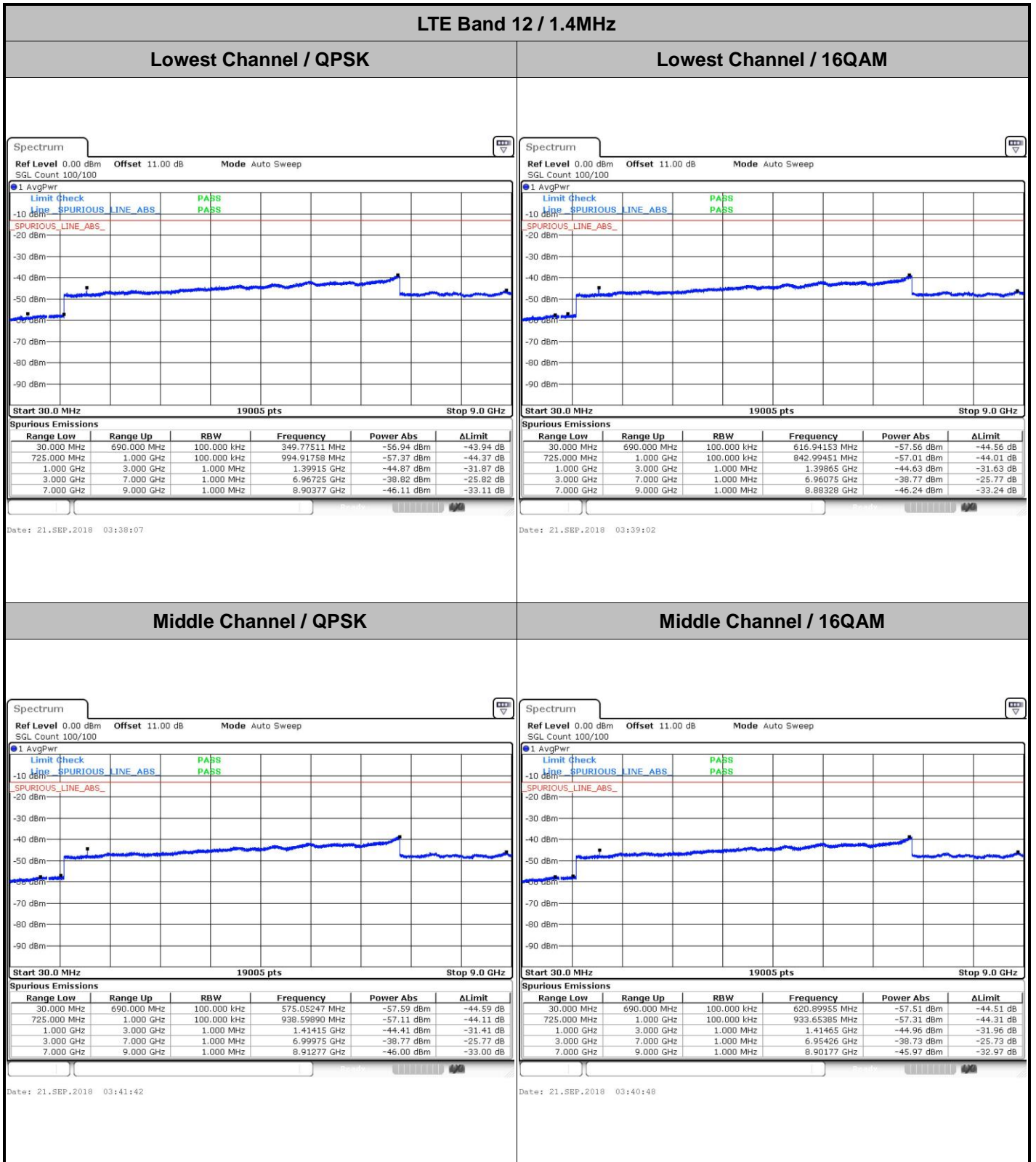
Highest Band Edge / Full RB



Date: 21.SEP.2018 02:52:45



Conducted Spurious Emission

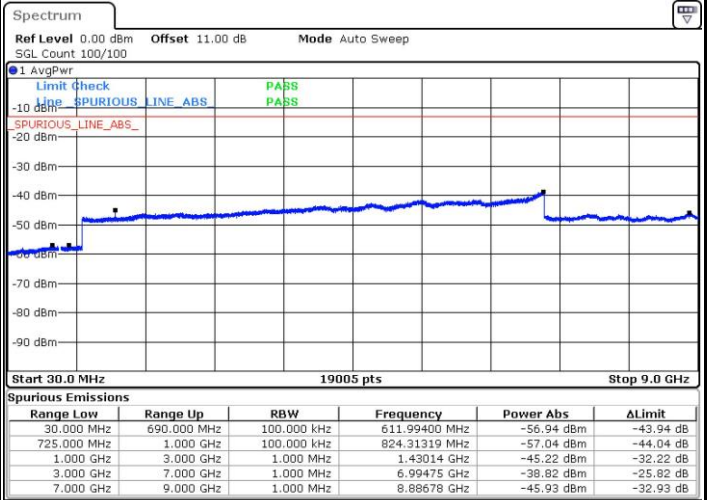
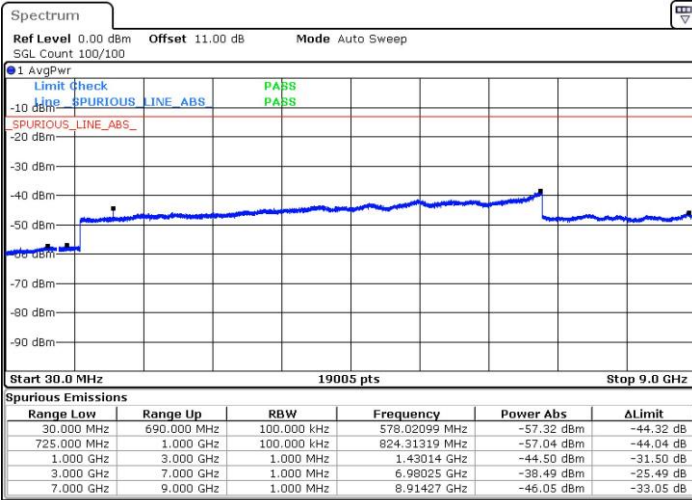




LTE Band 12 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



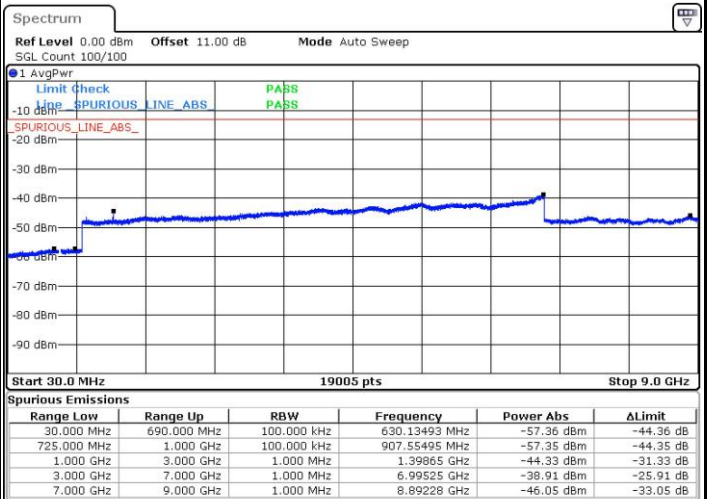
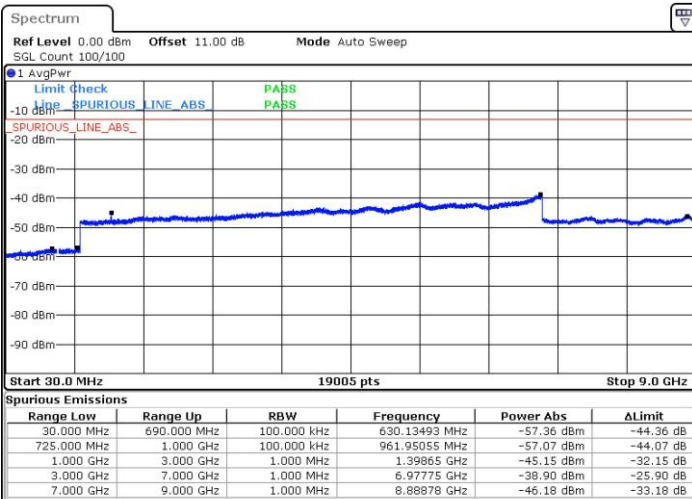
Date: 21.SEP.2018 03:48:10

Date: 21.SEP.2018 03:49:04

LTE Band 12 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 21.SEP.2018 02:11:08

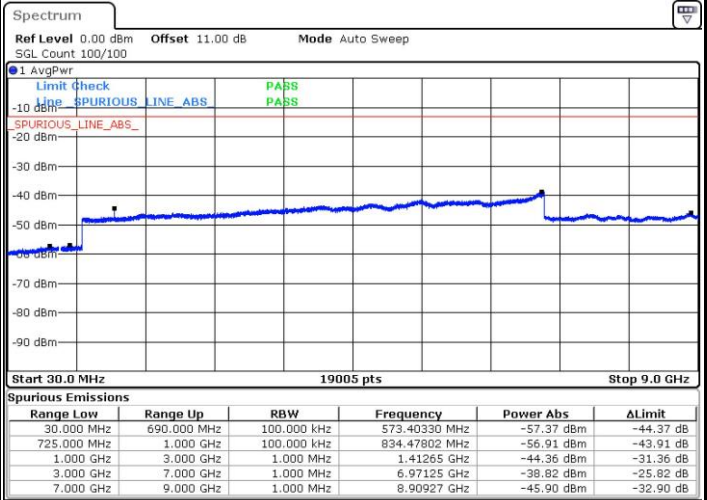
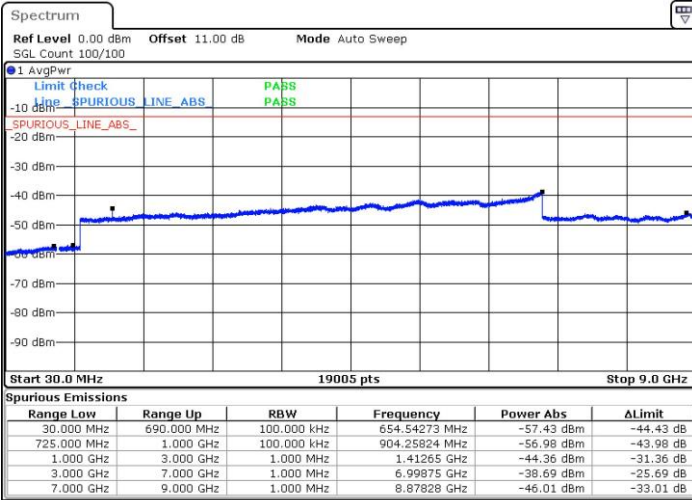
Date: 21.SEP.2018 02:12:03



LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

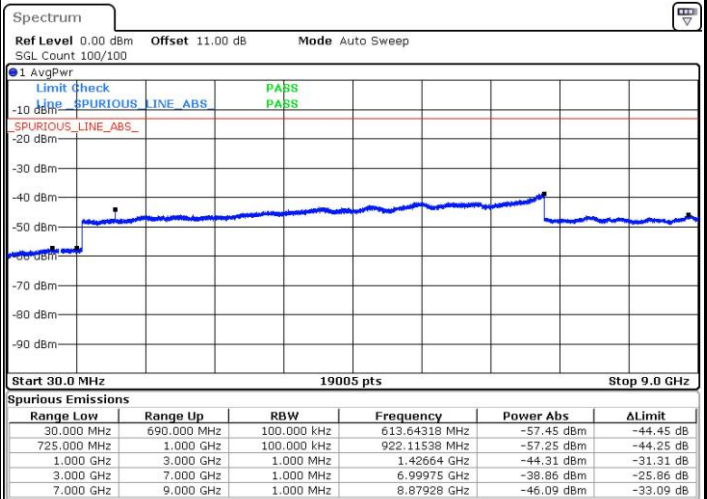
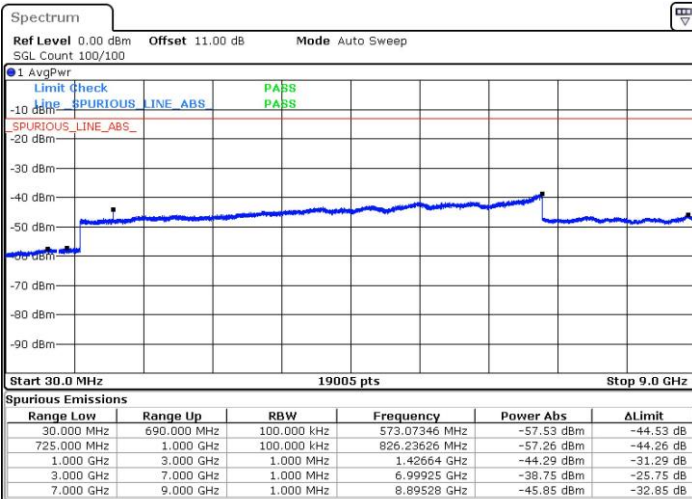


Date: 21.SEP.2018 02:14:44

Date: 21.SEP.2018 02:13:49

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 21.SEP.2018 02:21:12

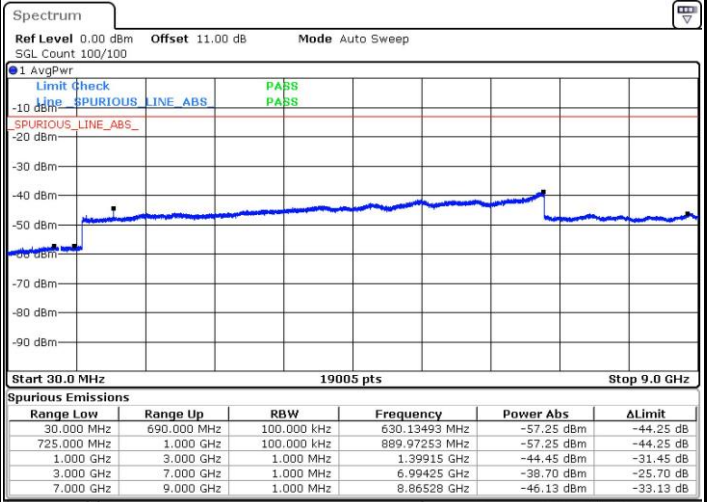
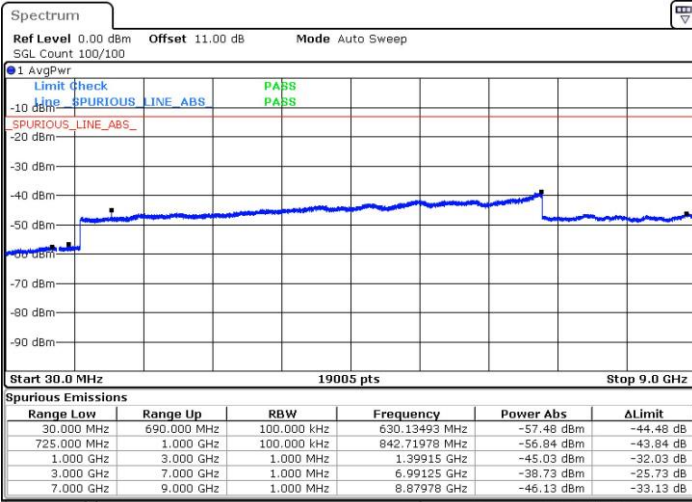
Date: 21.SEP.2018 02:22:07



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

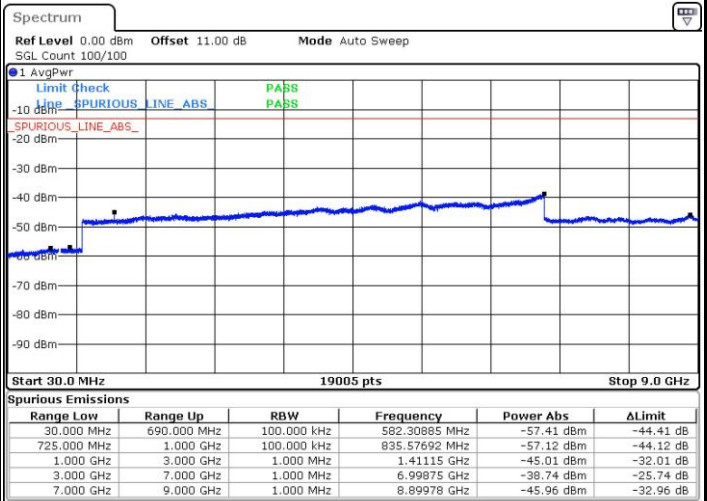
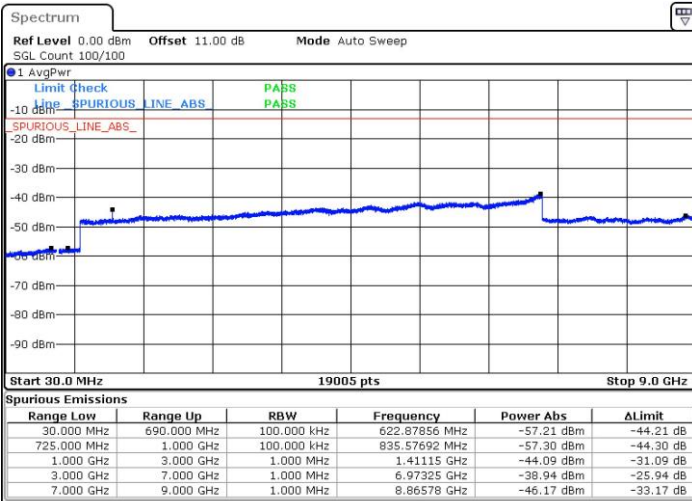


Date: 21.SEP.2018 02:28:34

Date: 21.SEP.2018 02:29:28

Middle Channel / QPSK

Middle Channel / 16QAM



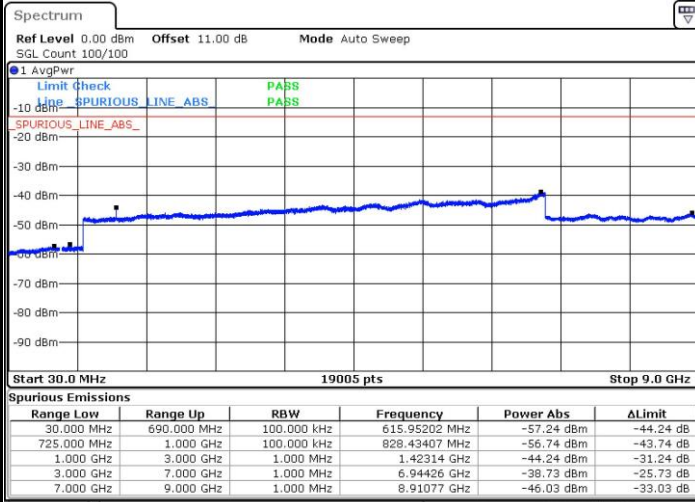
Date: 21.SEP.2018 02:32:08

Date: 21.SEP.2018 02:31:14



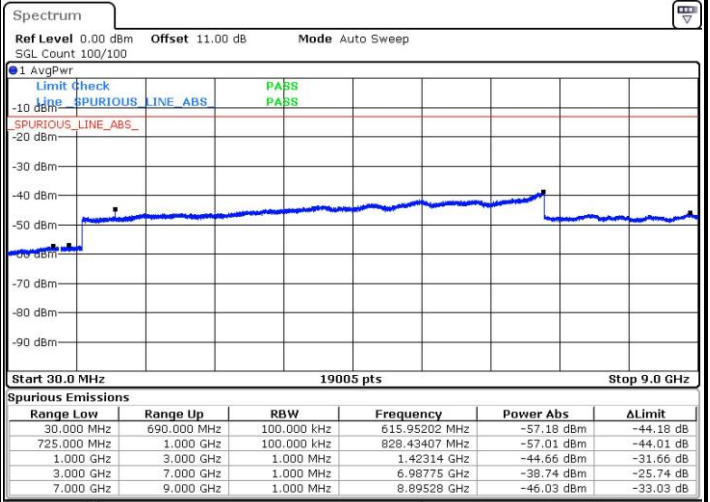
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 21.SEP.2018 02:39:29

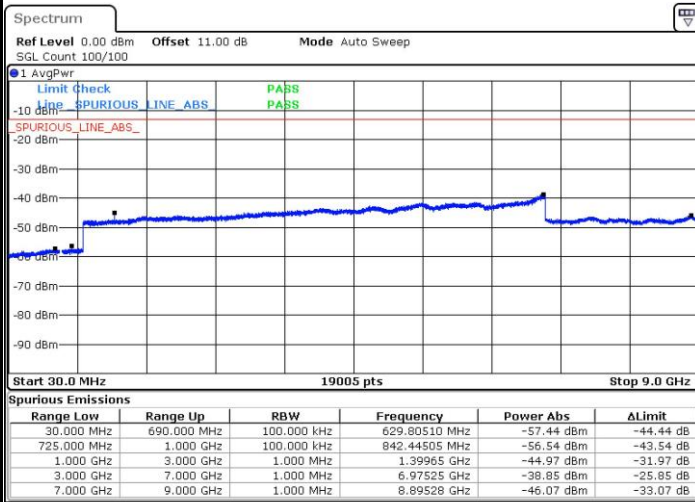
Highest Channel / 16QAM



Date: 21.SEP.2018 02:38:35

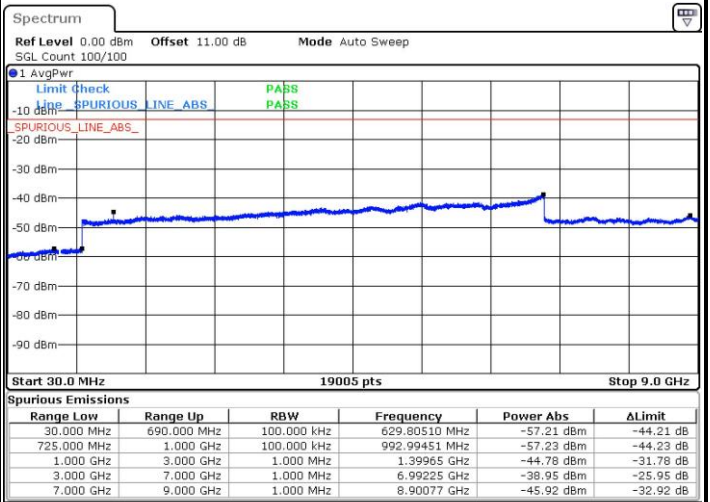
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 21.SEP.2018 02:45:57

Lowest Channel / 16QAM



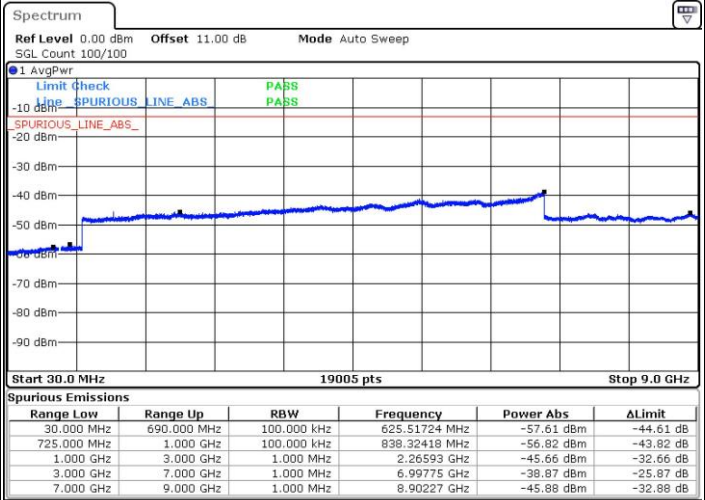
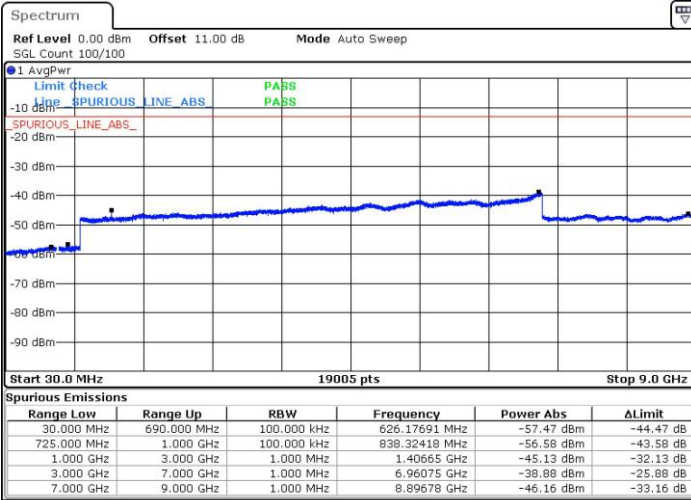
Date: 21.SEP.2018 02:46:51



LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

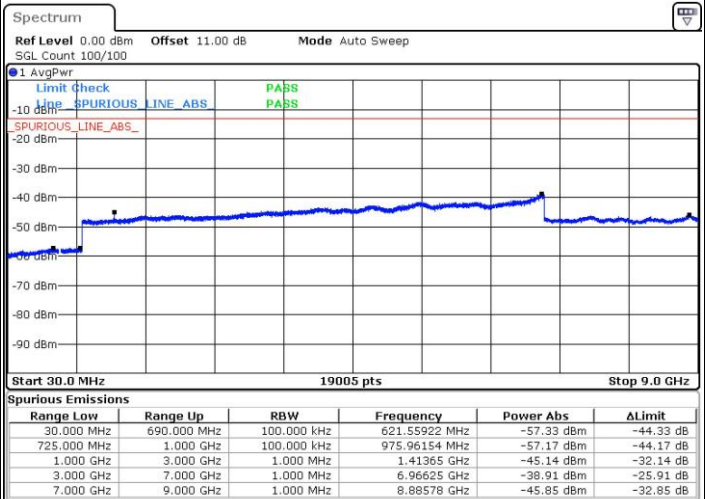
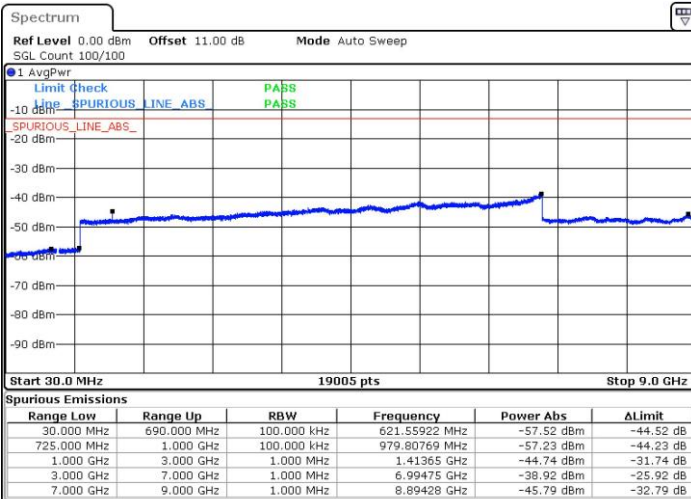


Date: 21.SEP.2018 02:49:32

Date: 21.SEP.2018 02:48:38

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 21.SEP.2018 02:56:00

Date: 21.SEP.2018 02:56:54



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	0.0141	PASS
40	Normal Voltage	0.0038	
30	Normal Voltage	0.0065	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0052	
0	Normal Voltage	0.0045	
-10	Normal Voltage	0.0040	
-20	Normal Voltage	0.0083	
-30	Normal Voltage	0.0079	
20	Maximum Voltage	0.0051	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0072	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

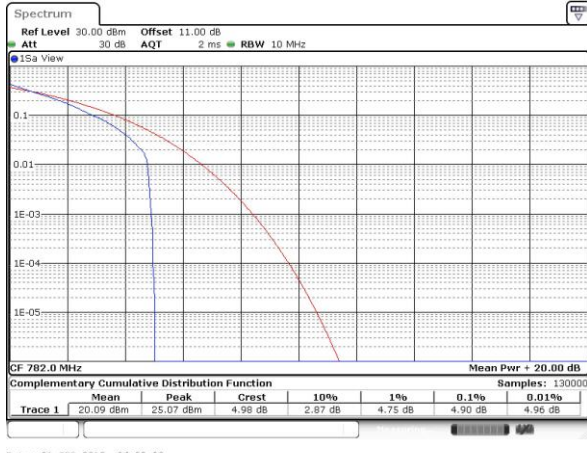
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.9	5.19	5.45	6.26	
Highest CH	-	-	-	-	



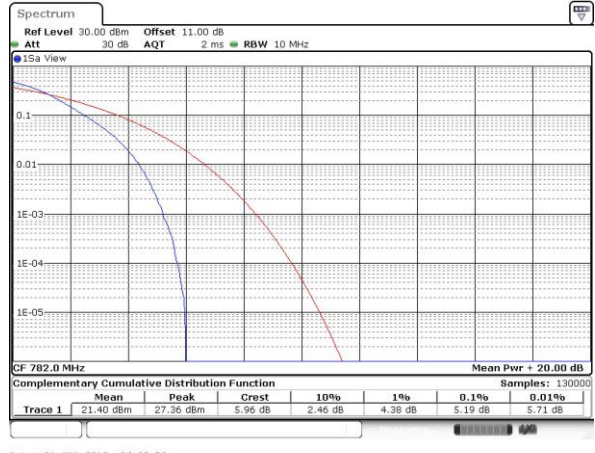
LTE Band 13 / 10MHz / QPSK

Middle Channel/ 1RB



Date: 21.SEP.2018 06:33:38

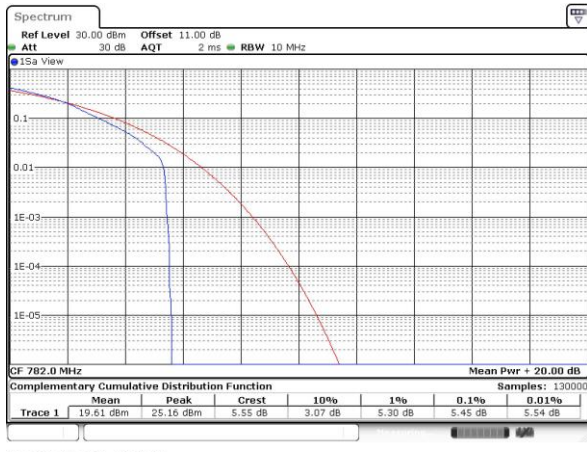
Middle Channel / Full RB



Date: 21.SEP.2018 06:33:50

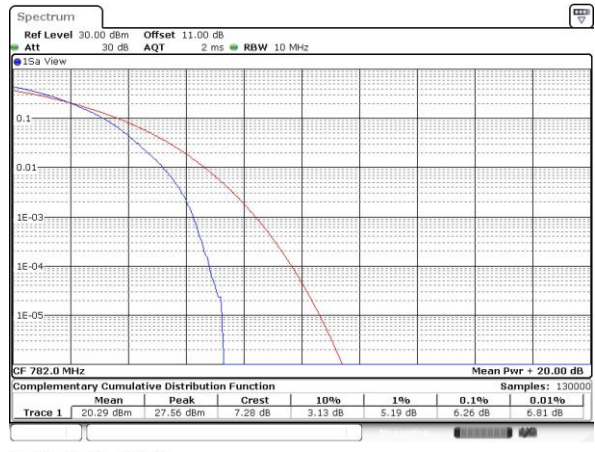
LTE Band 13 / 10MHz / 16QAM

Middle Channel/ 1RB



Date: 21.SEP.2018 06:33:14

Middle Channel / Full RB



Date: 21.SEP.2018 06:33:26



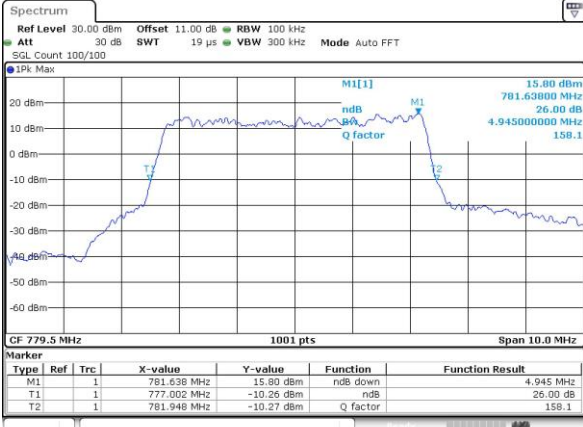
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.95	4.92	-	-	-	-	-	-
Middle CH	-	-	-	-	4.95	4.90	9.71	9.75	-	-	-	-
Highest CH	-	-	-	-	5.00	4.88	-	-	-	-	-	-



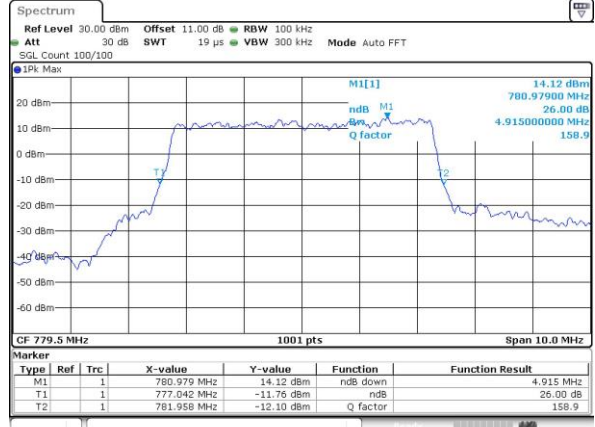
LTE Band 13

Lowest Channel / 5MHz / QPSK



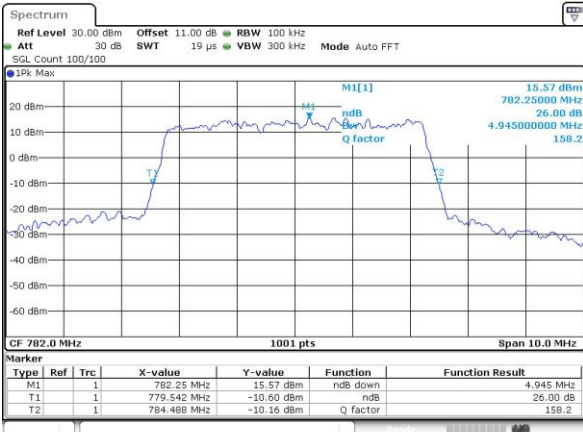
Date: 21.SEP.2018 05:58:33

Lowest Channel / 5MHz / 16QAM



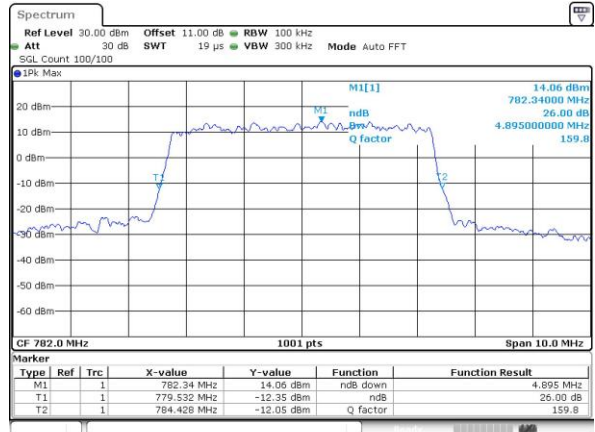
Date: 21.SEP.2018 05:58:20

Middle Channel / 5MHz / QPSK



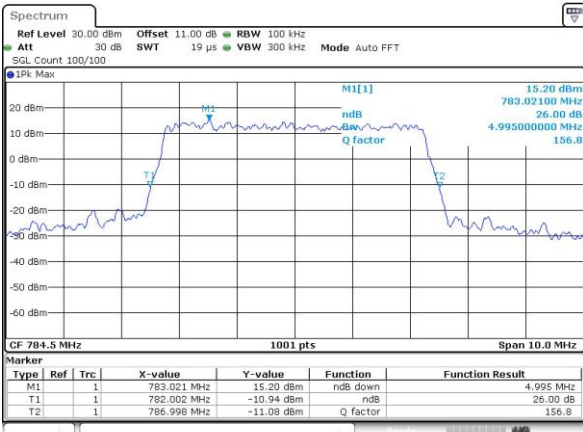
Date: 21.SEP.2018 06:09:02

Middle Channel / 5MHz / 16QAM



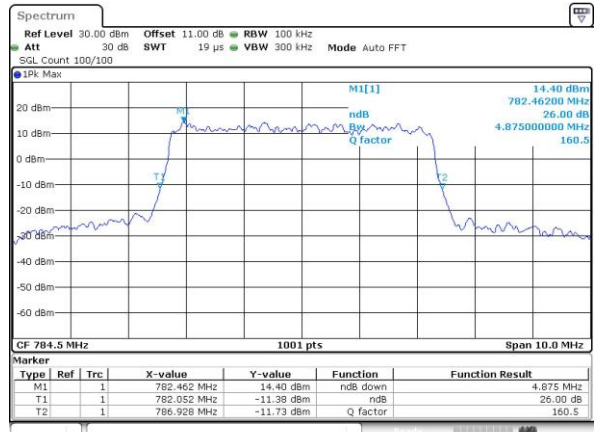
Date: 21.SEP.2018 06:09:14

Highest Channel / 5MHz / QPSK



Date: 21.SEP.2018 06:10:32

Highest Channel / 5MHz / 16QAM

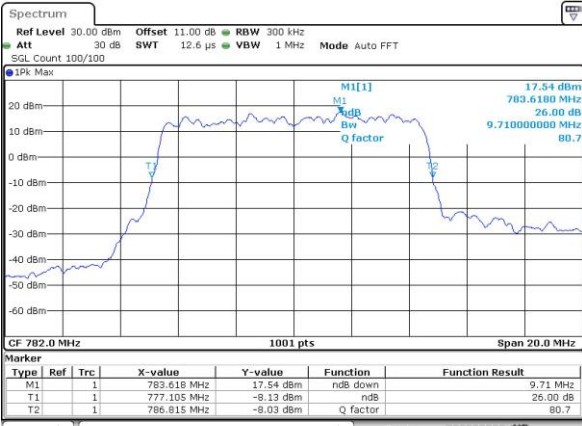


Date: 21.SEP.2018 06:10:19



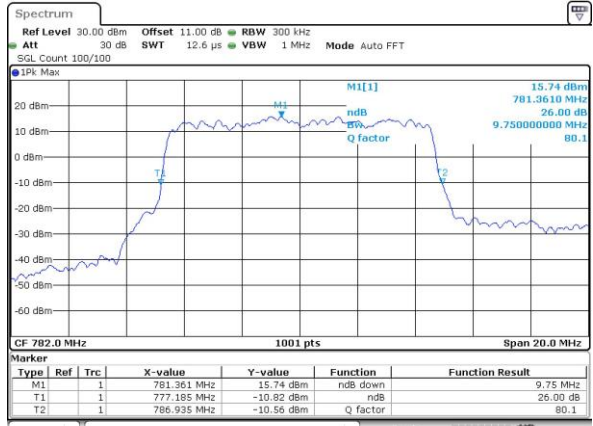
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 21.SEP.2018 06:19:52

Middle Channel / 10MHz / 16QAM



Date: 21.SEP.2018 06:19:39



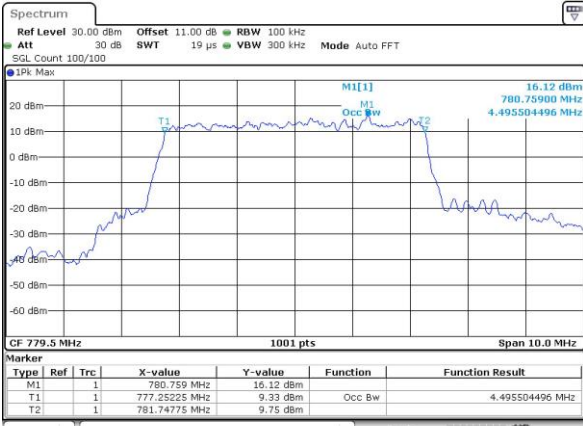
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.5	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.49	9.03	9.03	-	-	-	-
Highest CH	-	-	-	-	4.49	4.51	-	-	-	-	-	-



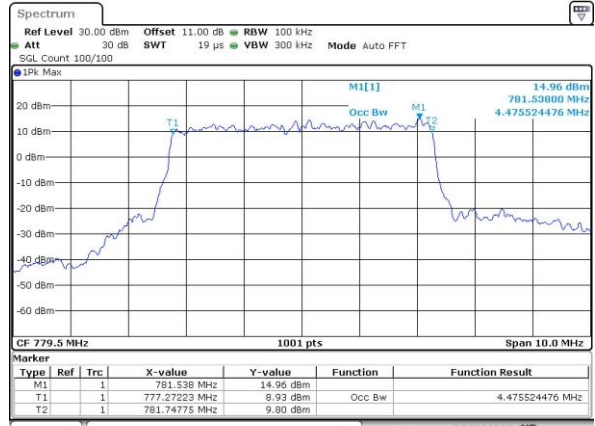
LTE Band 13

Lowest Channel / 5MHz / QPSK



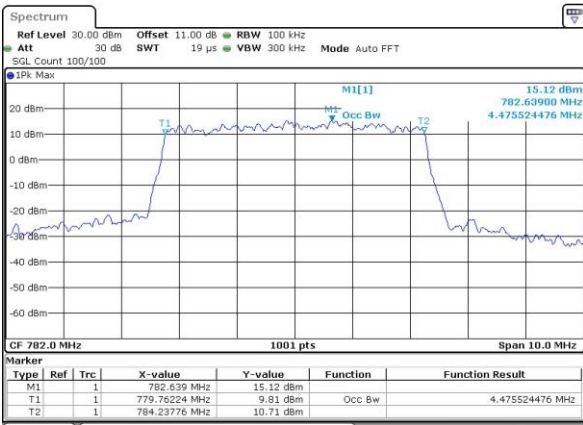
Date: 21_SEP.2018 05:57:54

Lowest Channel / 5MHz / 16QAM



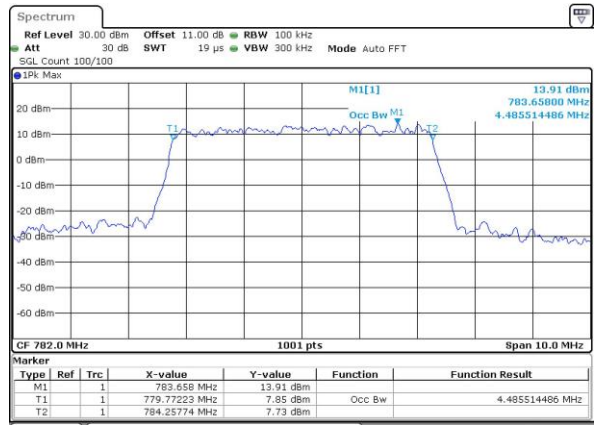
Date: 21_SEP.2018 05:58:08

Middle Channel / 5MHz / QPSK



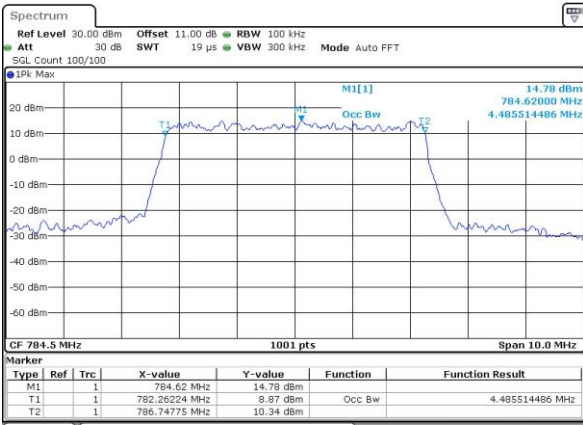
Date: 21_SEP.2018 06:09:40

Middle Channel / 5MHz / 16QAM



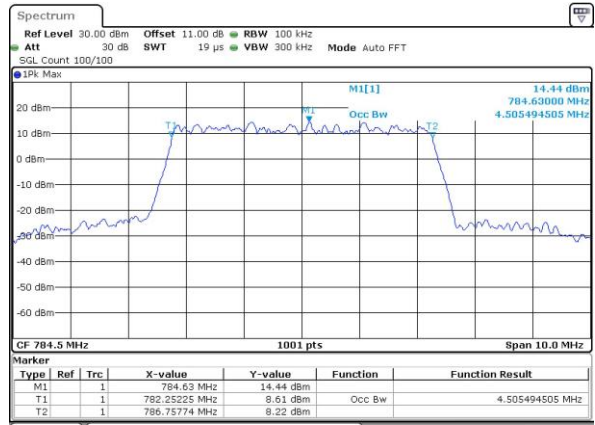
Date: 21_SEP.2018 06:09:27

Highest Channel / 5MHz / QPSK



Date: 21_SEP.2018 06:09:53

Highest Channel / 5MHz / 16QAM

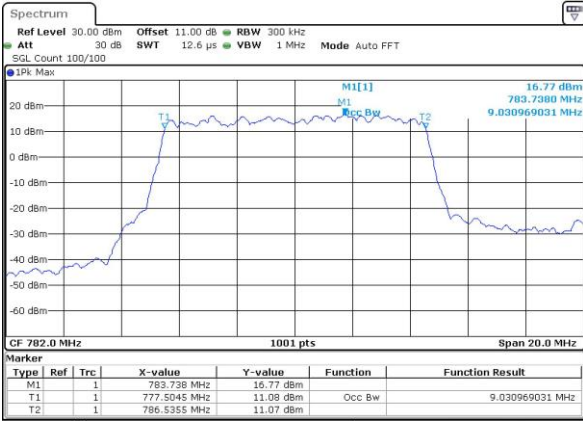


Date: 21_SEP.2018 06:10:06



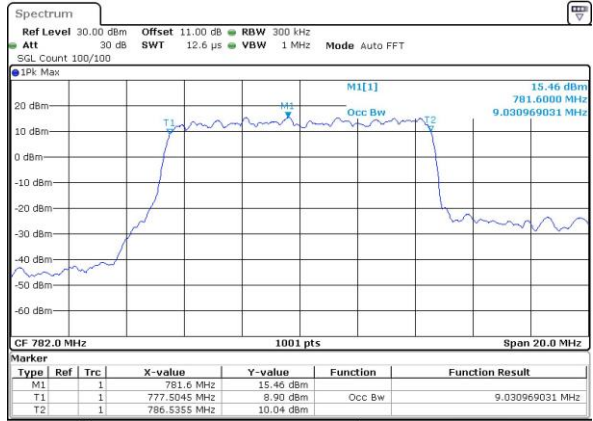
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 21_SEP.2018 06:19:14

Middle Channel / 10MHz / 16QAM



Date: 21_SEP.2018 06:19:26

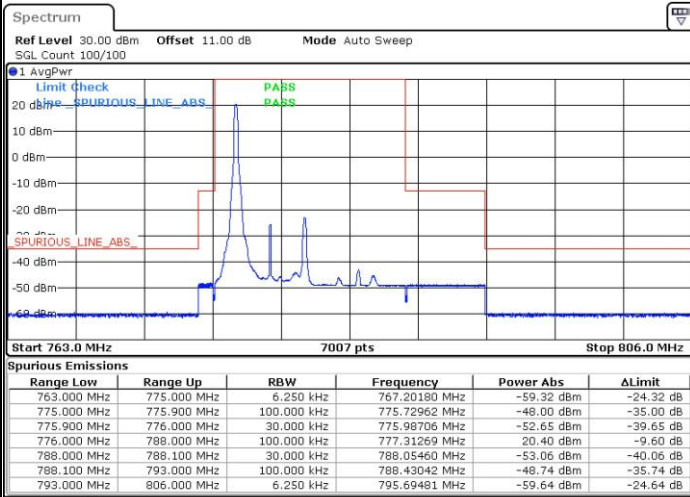


Conducted Band Edge

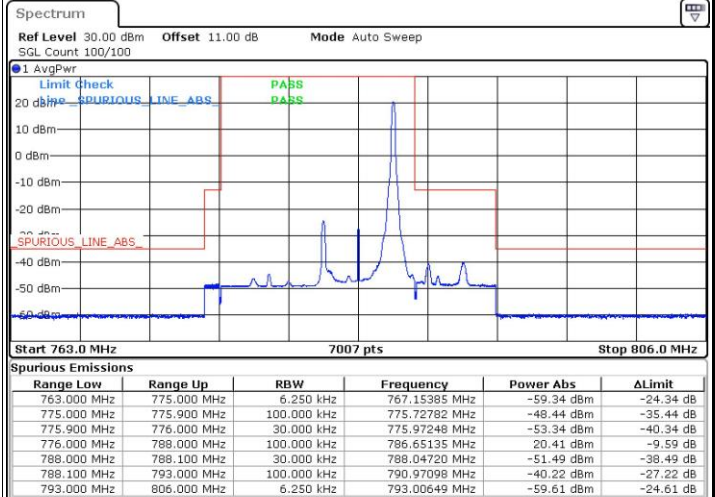
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



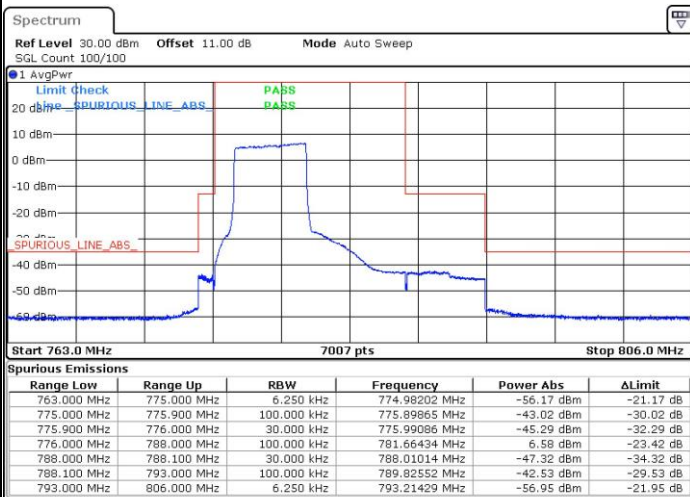
Date: 21.SEP.2018 06:05:15



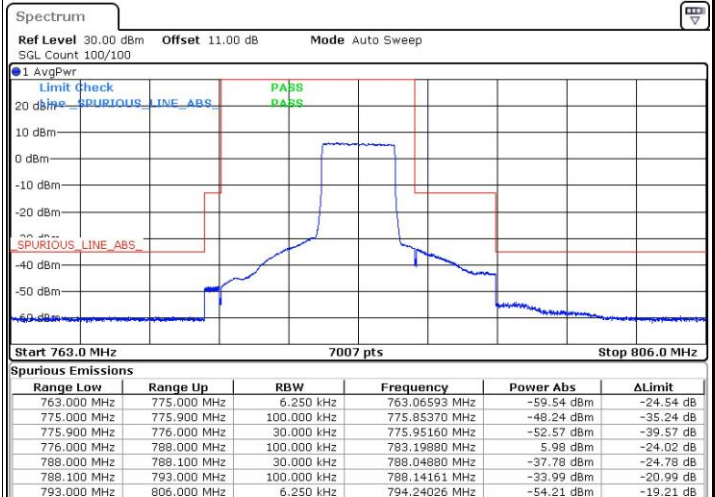
Date: 21.SEP.2018 06:17:14

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.SEP.2018 06:00:14



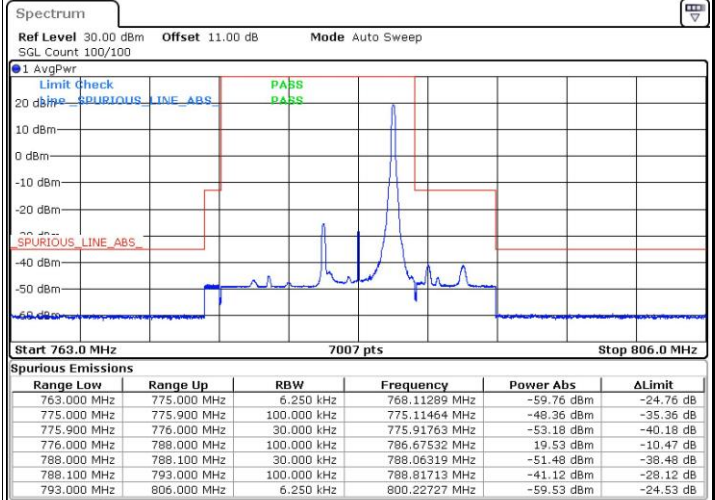
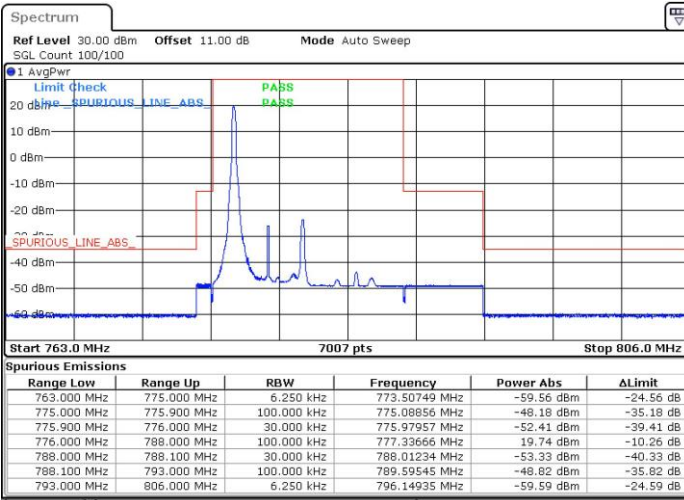
Date: 21.SEP.2018 06:12:12



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

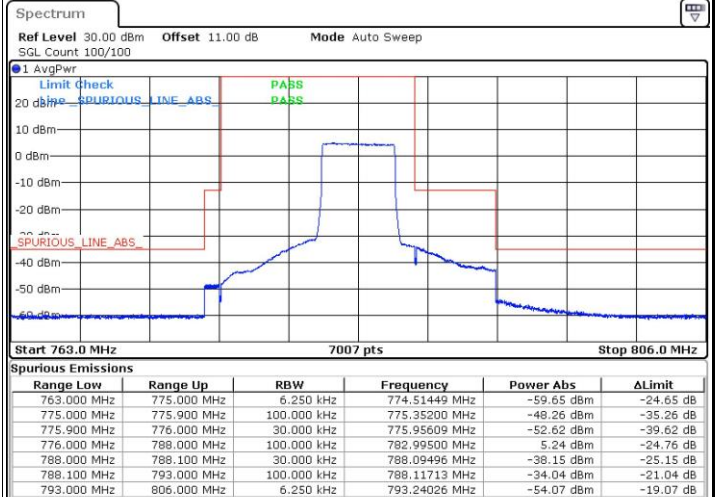
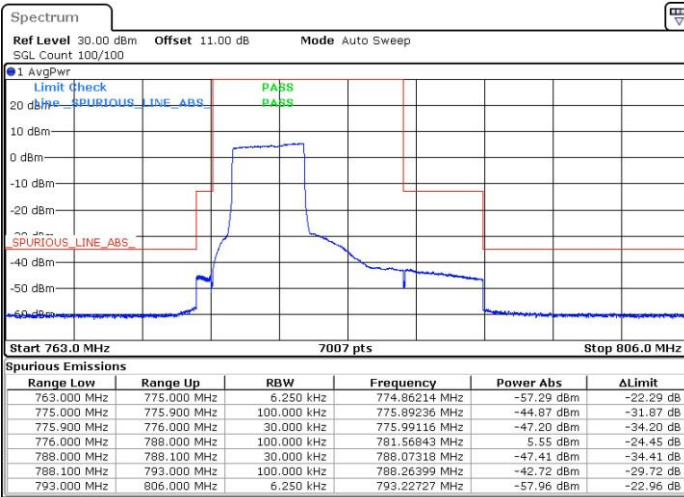


Date: 21.SEP.2018 06:03:35

Date: 21.SEP.2018 06:15:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.SEP.2018 06:01:54

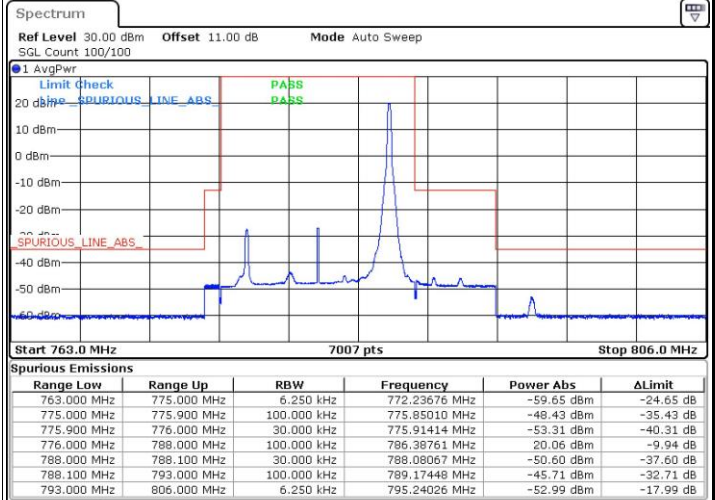
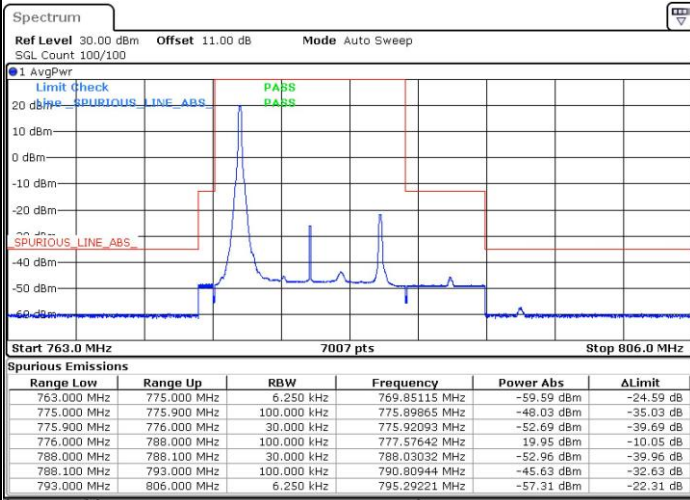
Date: 21.SEP.2018 06:13:53



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

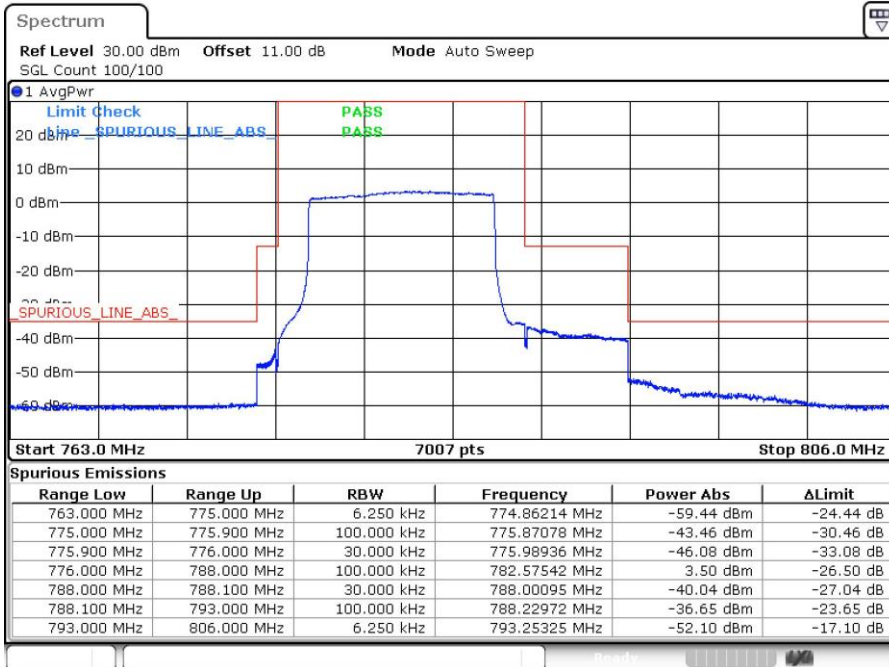
Highest Band Edge / 1 RB



Date: 21.SEP.2018 06:26:34

Date: 21.SEP.2018 06:28:15

Band Edge / Full RB

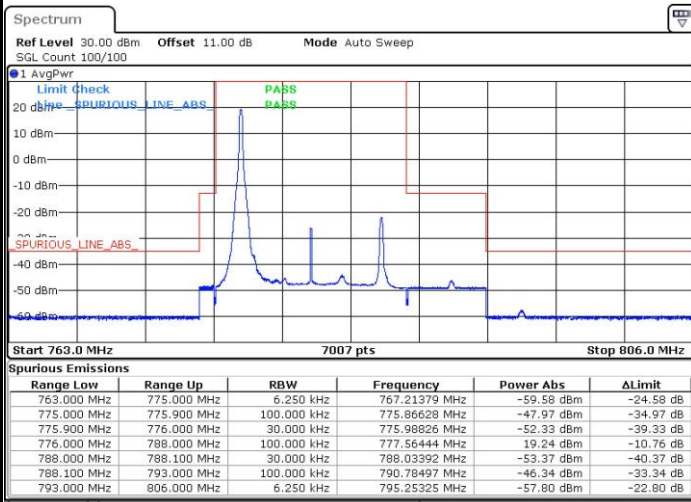


Date: 21.SEP.2018 06:21:33



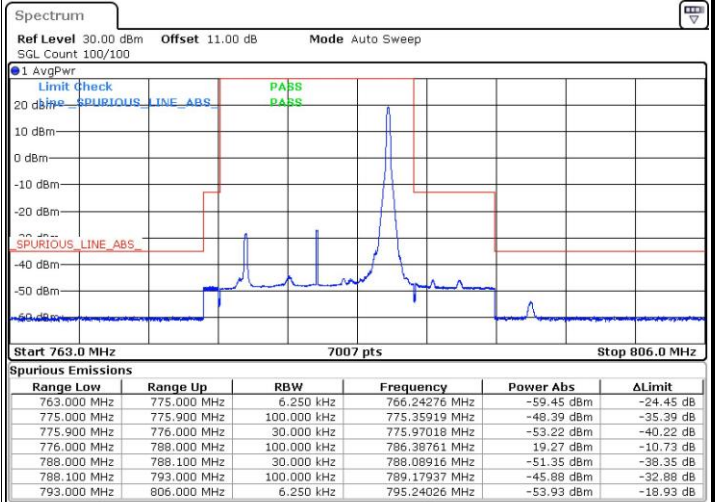
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



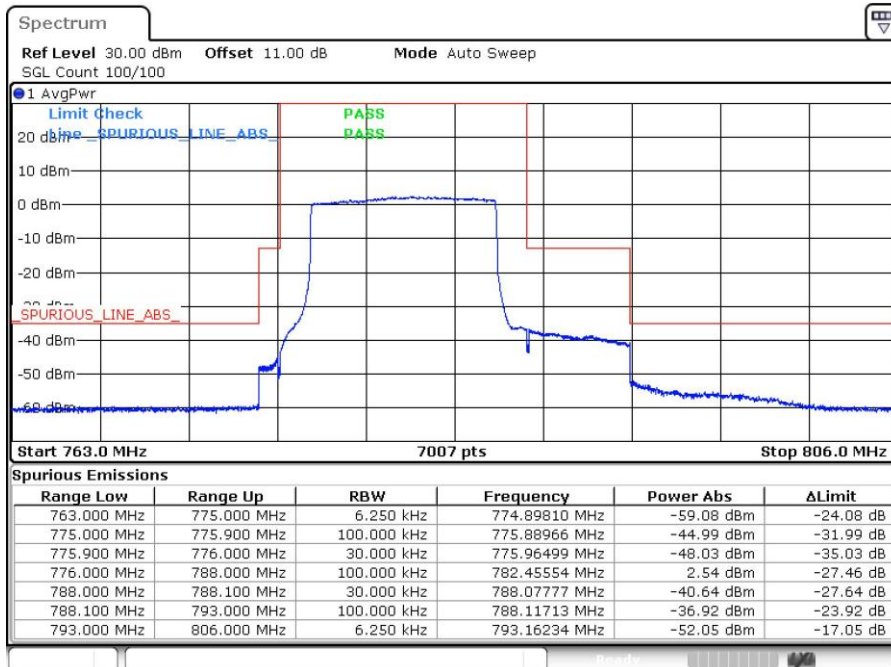
Date: 21.SEP.2018 06:24:54

Highest Band Edge / 1 RB



Date: 21.SEP.2018 06:29:55

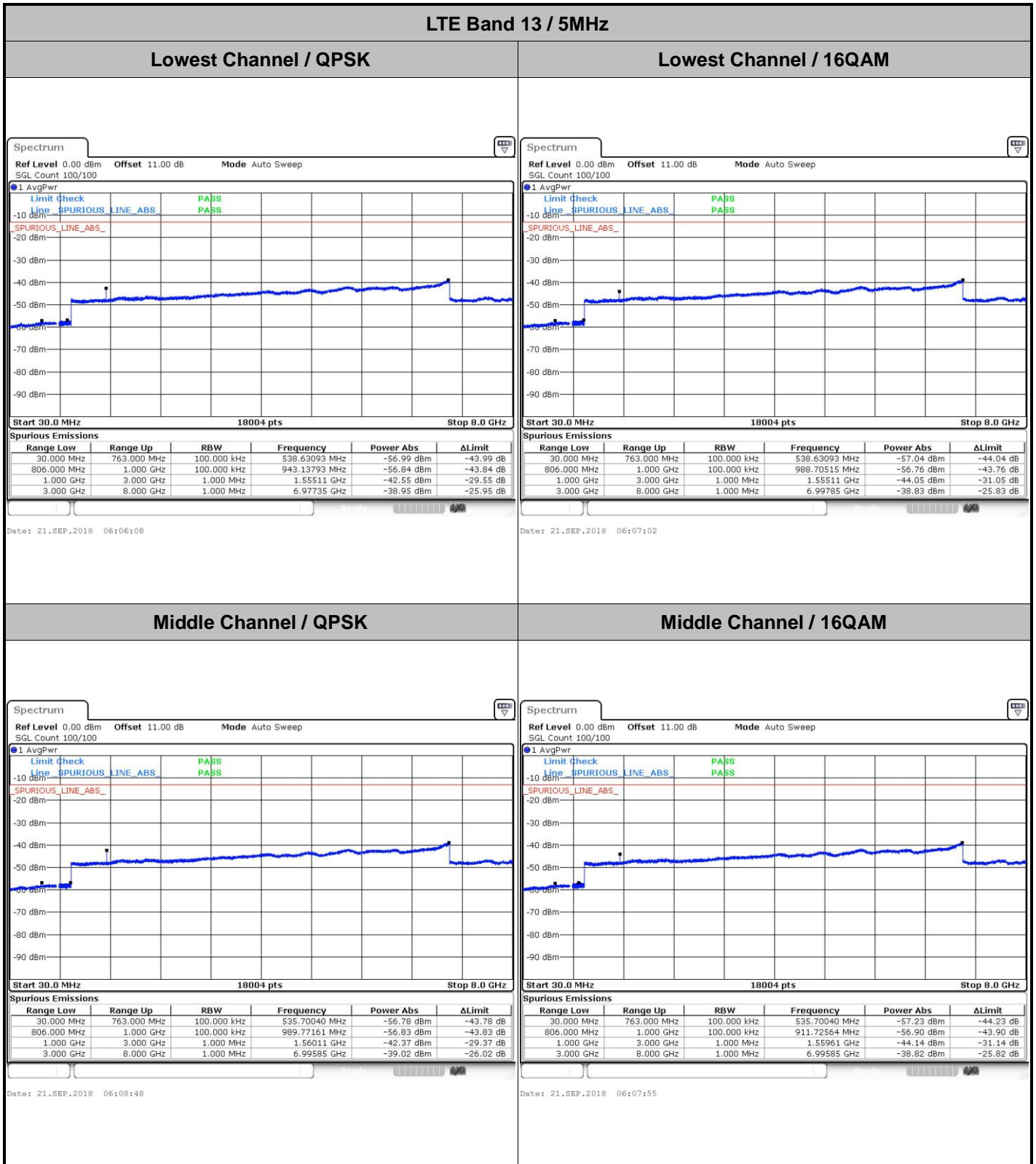
Band Edge / Full RB



Date: 21.SEP.2018 06:23:13



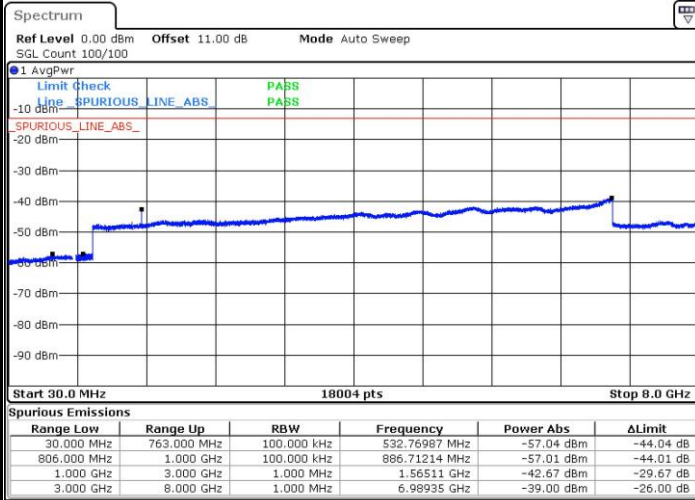
Conducted Spurious Emission





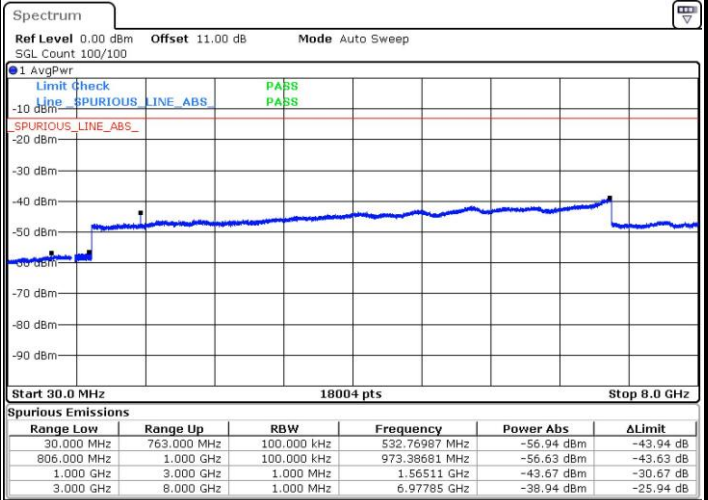
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 21.SEP.2018 06:18:07

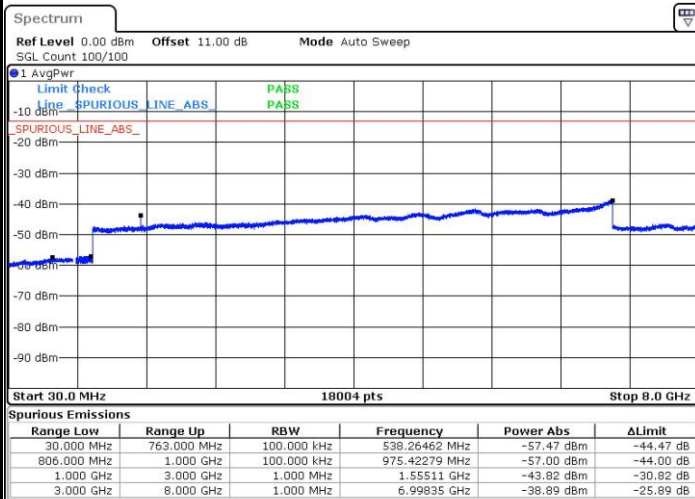
Highest Channel / 16QAM



Date: 21.SEP.2018 06:19:00

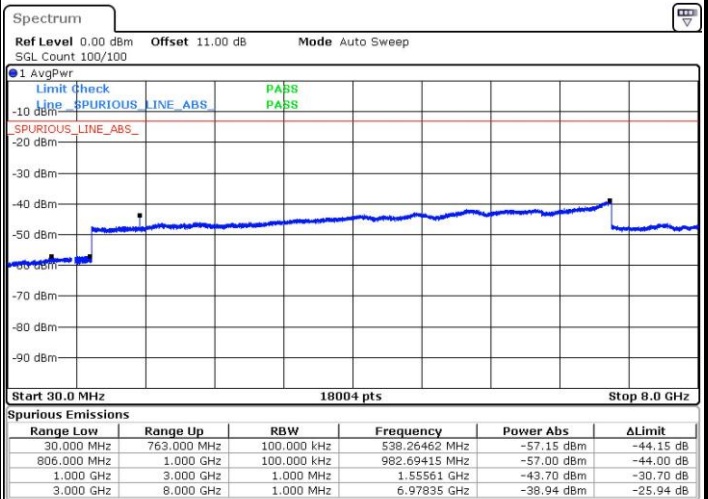
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 21.SEP.2018 06:31:41

Middle Channel / 16QAM



Date: 21.SEP.2018 06:30:48



Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0074	PASS
40	Normal Voltage	0.0095	
30	Normal Voltage	0.0119	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0050	
0	Normal Voltage	0.0095	
-10	Normal Voltage	0.0082	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0036	
20	Maximum Voltage	0.0128	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0049	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 17

Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.67	5.16	5.19	6.03	PASS
Middle CH	4.67	5.04	5.25	6.06	
Highest CH	4.58	5.01	5.65	6.09	