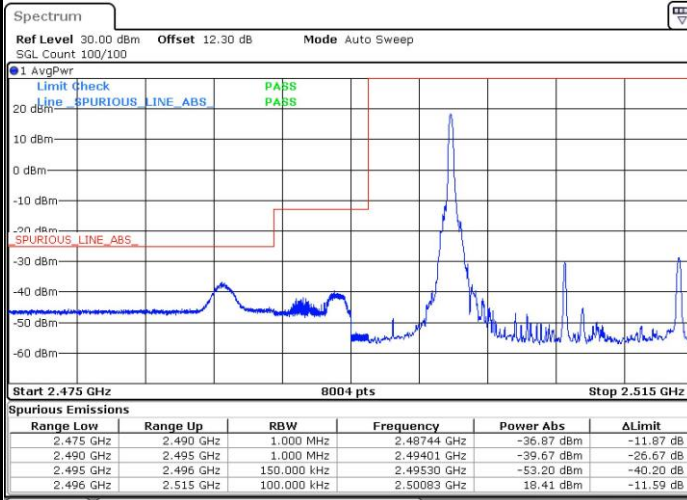




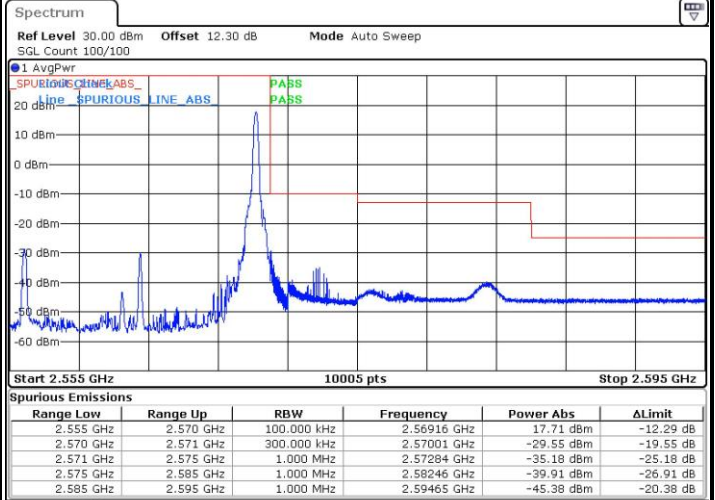
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



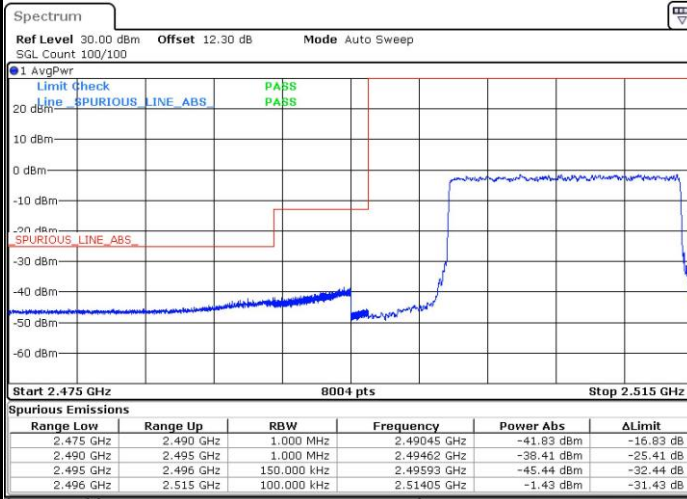
Date: 23 JUN.2019 19:49:06

Highest Band Edge / 1 RB



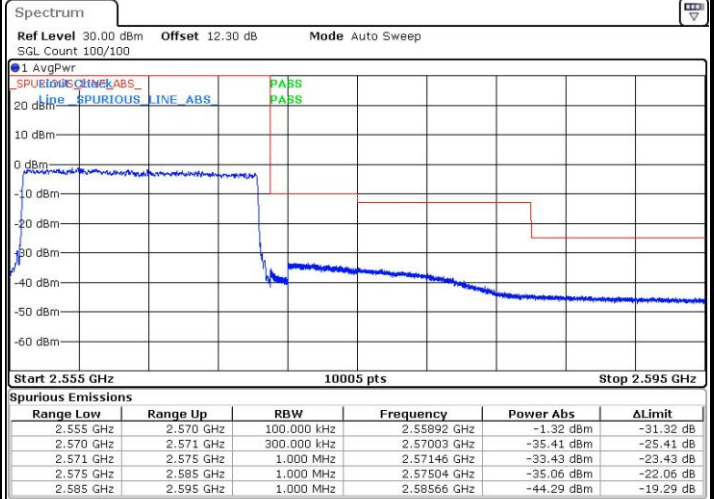
Date: 23 JUN.2019 19:58:18

Lowest Band Edge / Full RB



Date: 23 JUN.2019 19:50:55

Highest Band Edge / Full RB

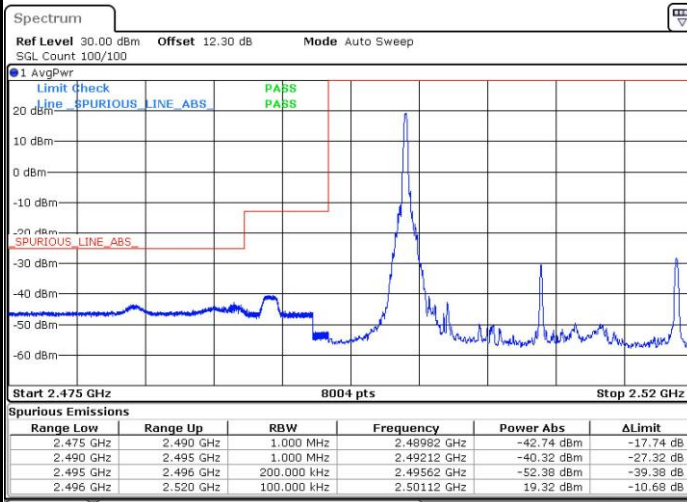


Date: 23 JUN.2019 20:00:06



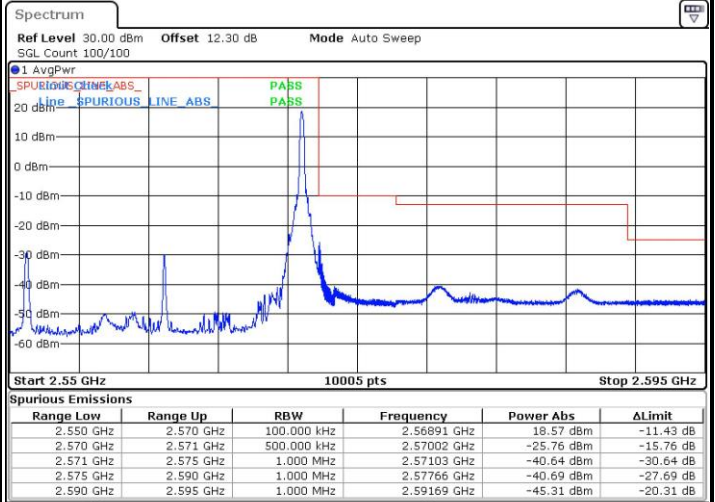
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



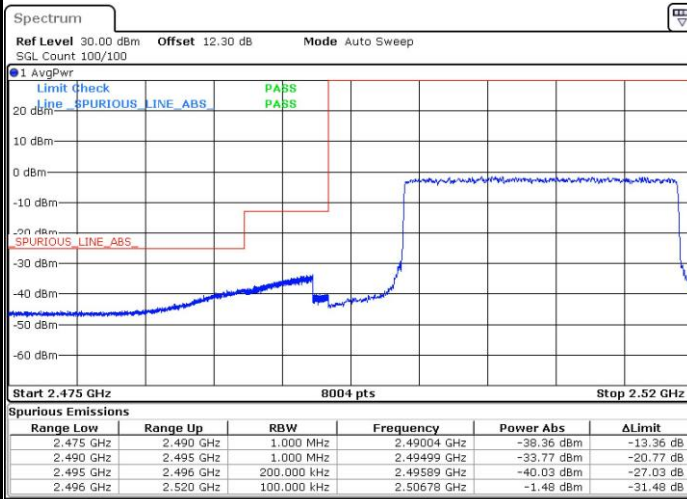
Date: 23 JUN.2019 20:03:47

Highest Band Edge / 1 RB



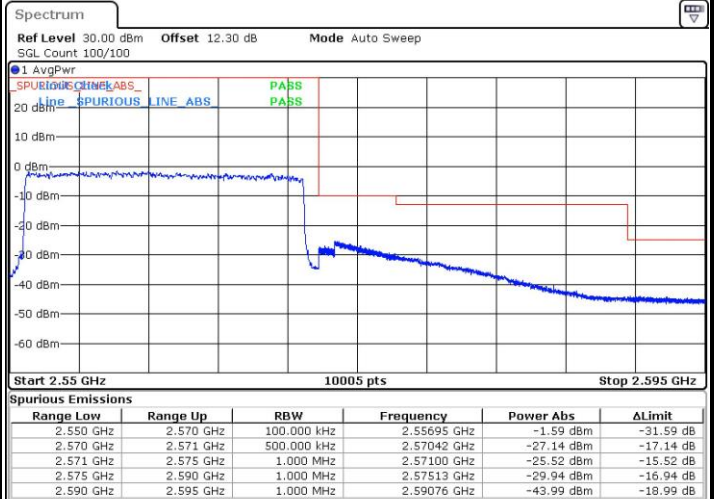
Date: 23 JUN.2019 20:12:59

Lowest Band Edge / Full RB



Date: 23 JUN.2019 20:05:36

Highest Band Edge / Full RB

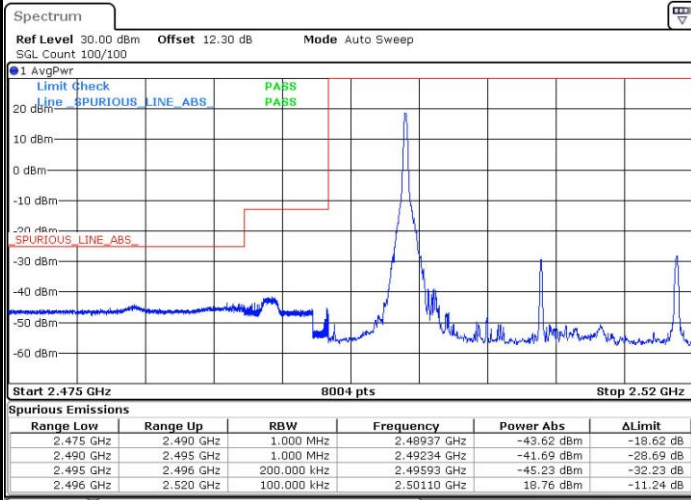


Date: 23 JUN.2019 20:15:43



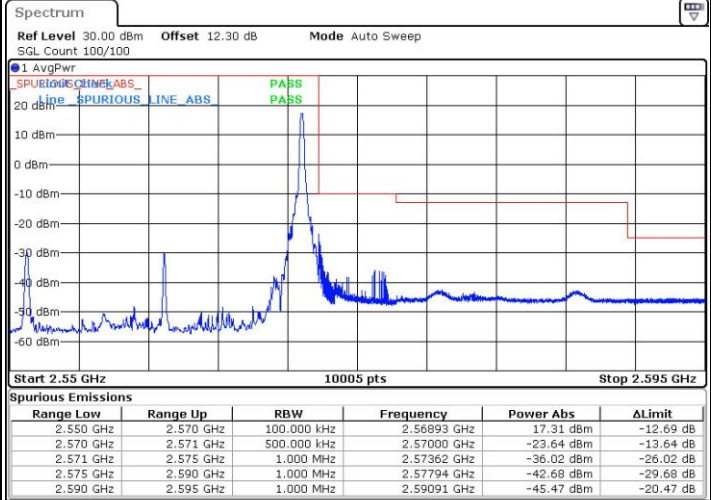
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



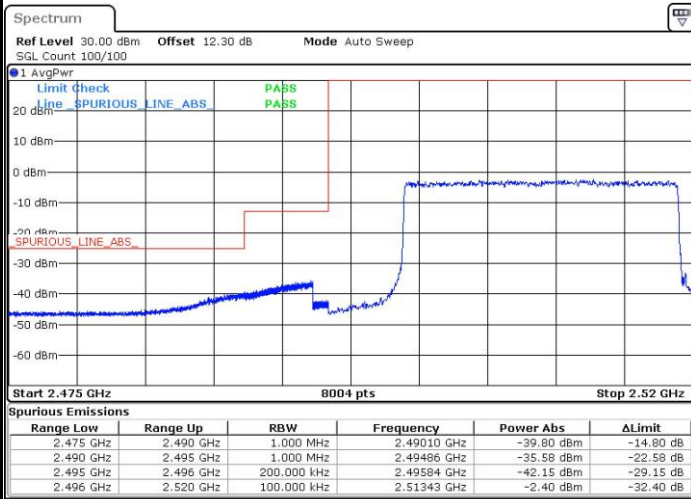
Date: 23 JUN 2019 20:04:42

Highest Band Edge / 1RB



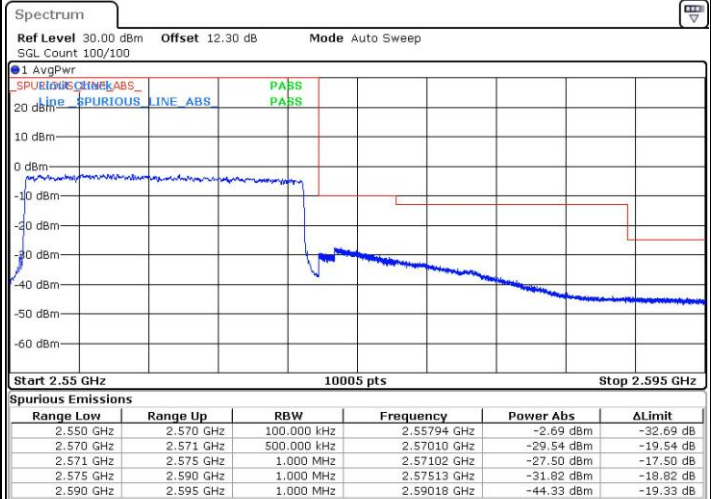
Date: 23 JUN 2019 20:13:54

Lowest Band Edge / Full RB



Date: 23 JUN 2019 20:06:30

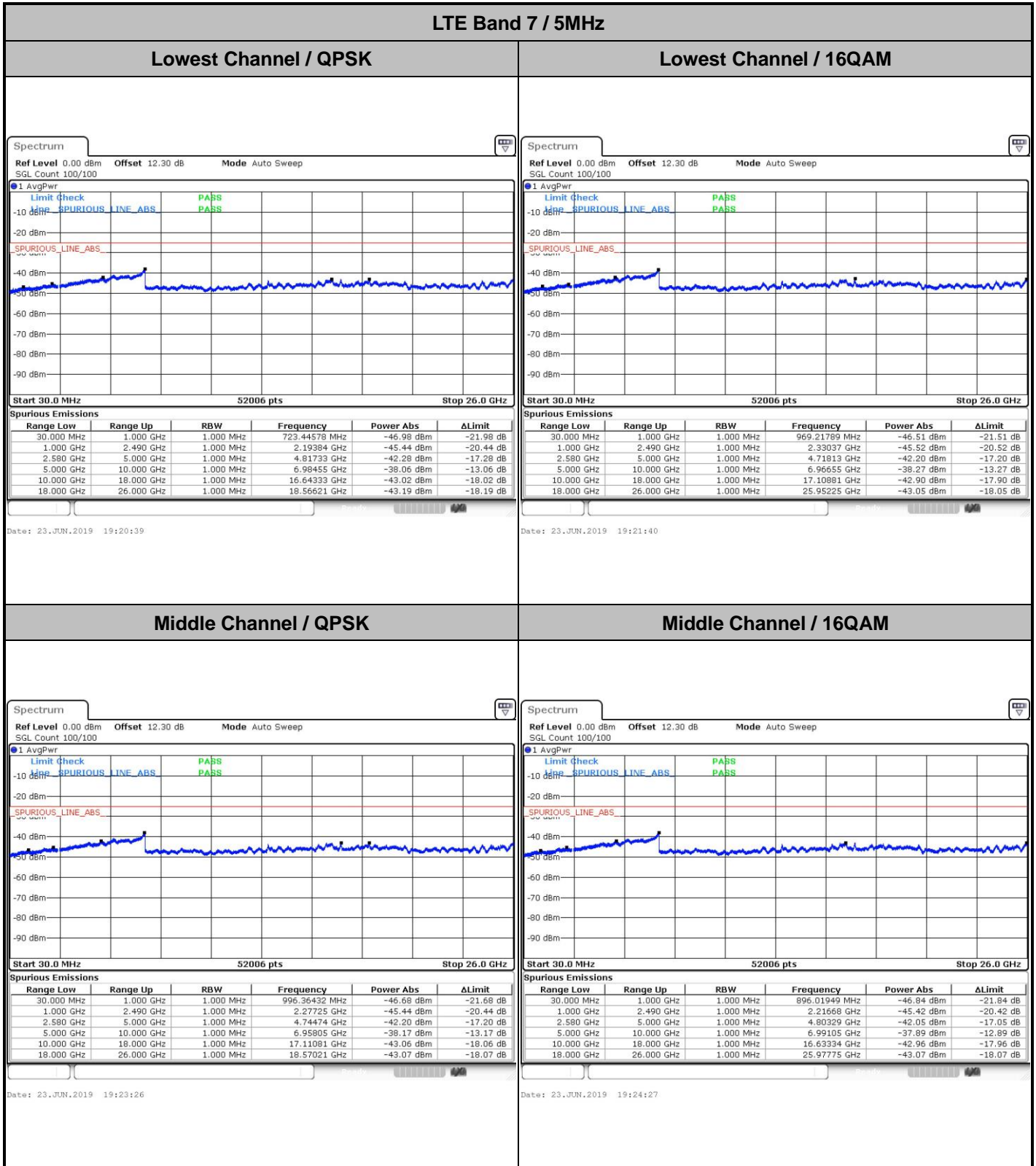
Highest Band Edge / Full RB



Date: 23 JUN 2019 20:14:48



Conducted Spurious Emission

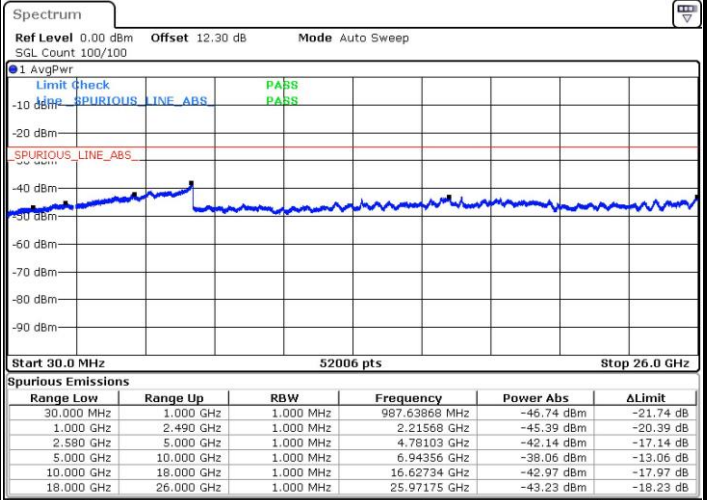
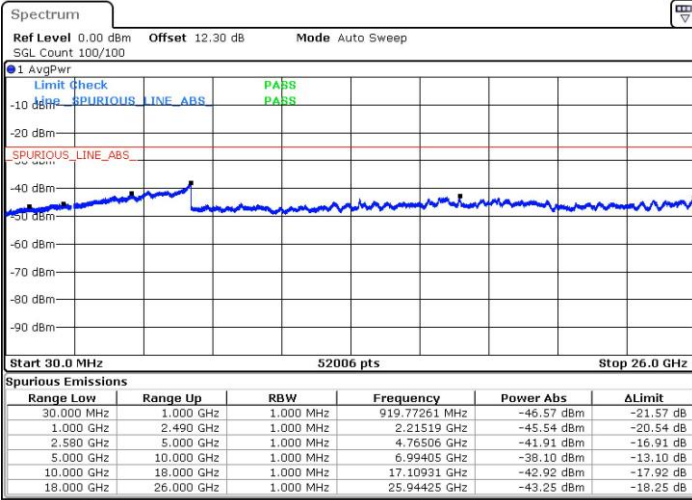




LTE Band 7 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



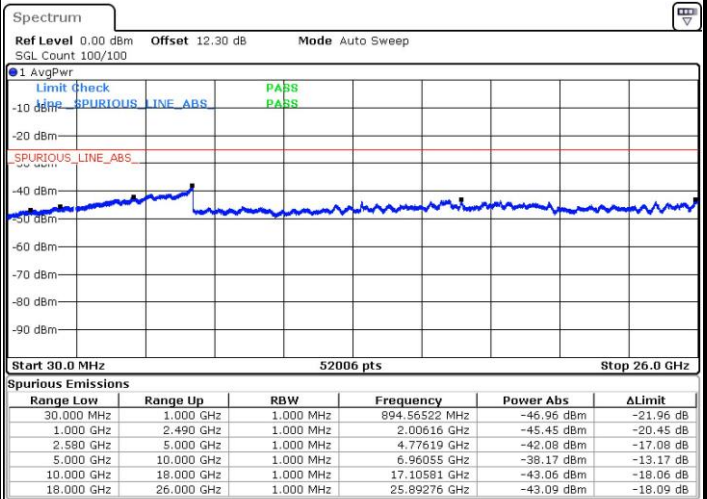
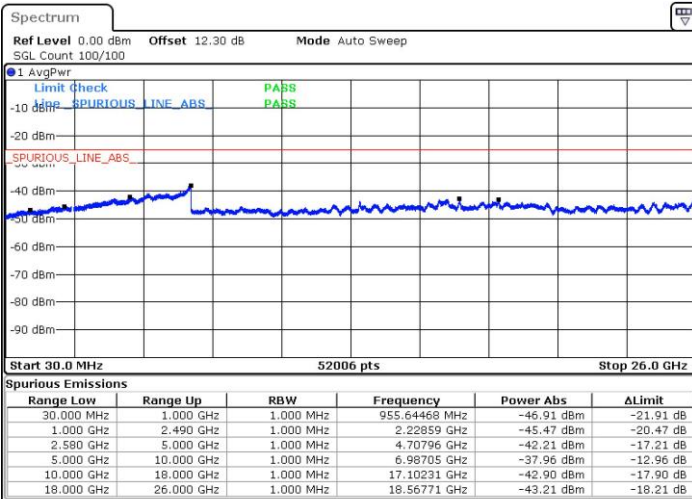
Date: 23.JUN.2019 19:29:52

Date: 23.JUN.2019 19:30:52

LTE Band 7 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 23.JUN.2019 19:36:17

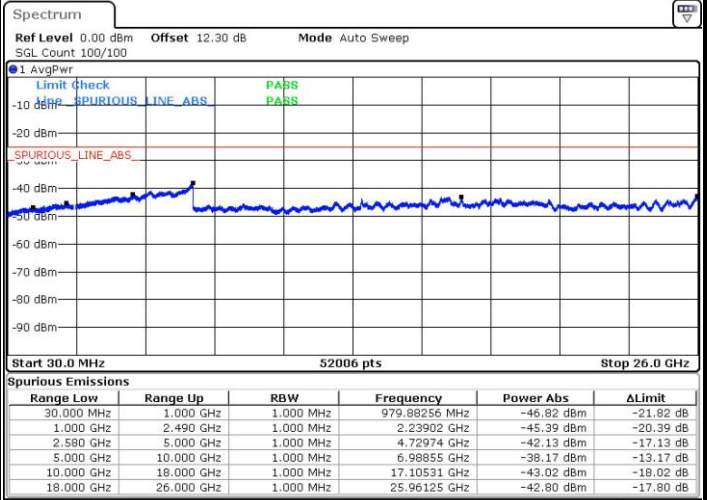
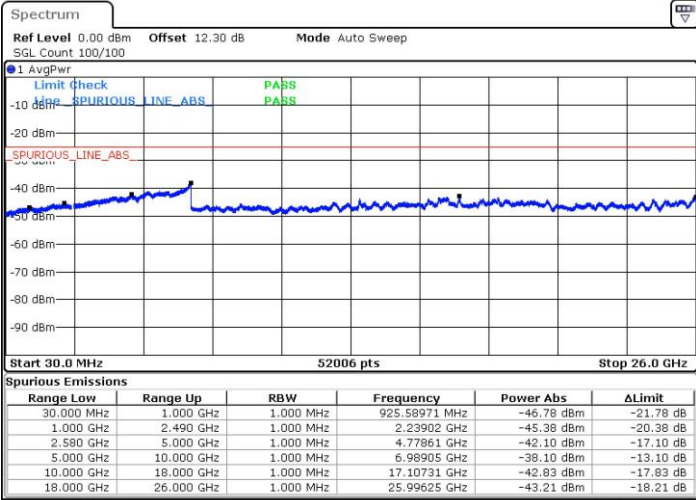
Date: 23.JUN.2019 19:37:16



LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

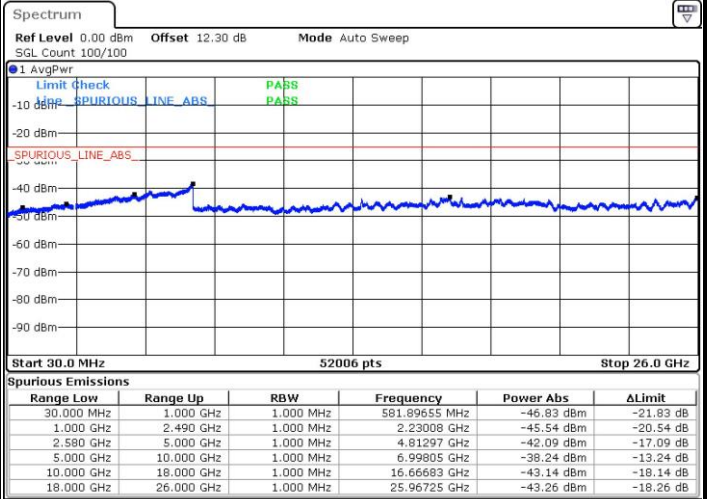
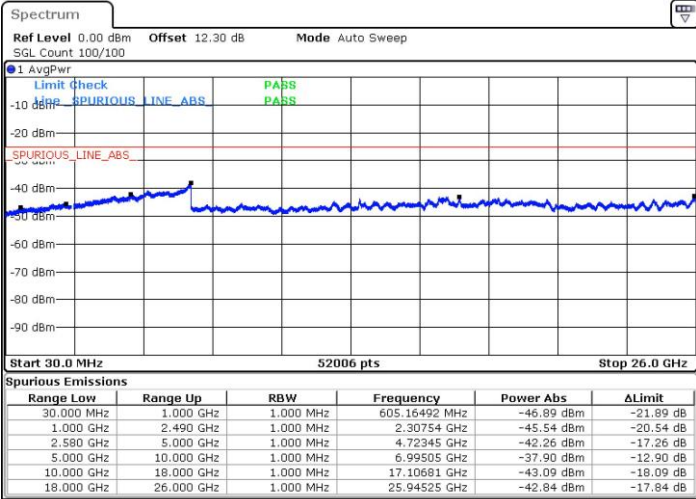


Date: 23.JUN.2019 19:39:05

Date: 23.JUN.2019 19:40:05

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 23.JUN.2019 19:45:30

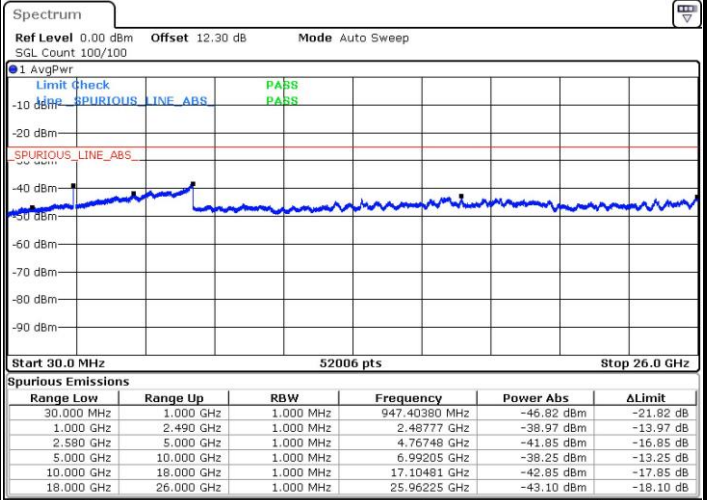
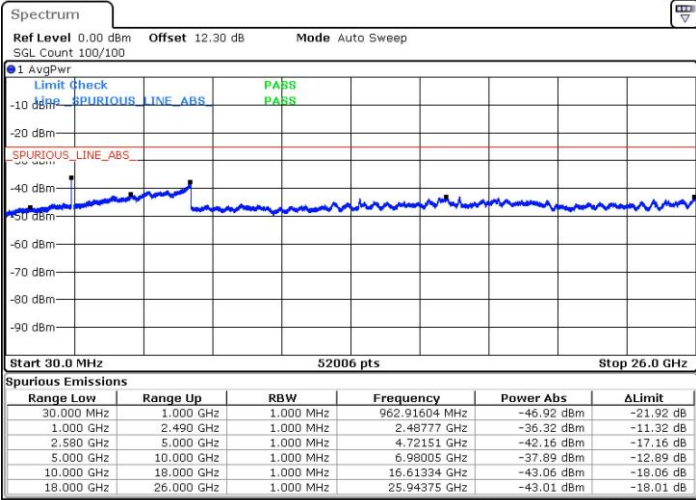
Date: 23.JUN.2019 19:46:30



LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

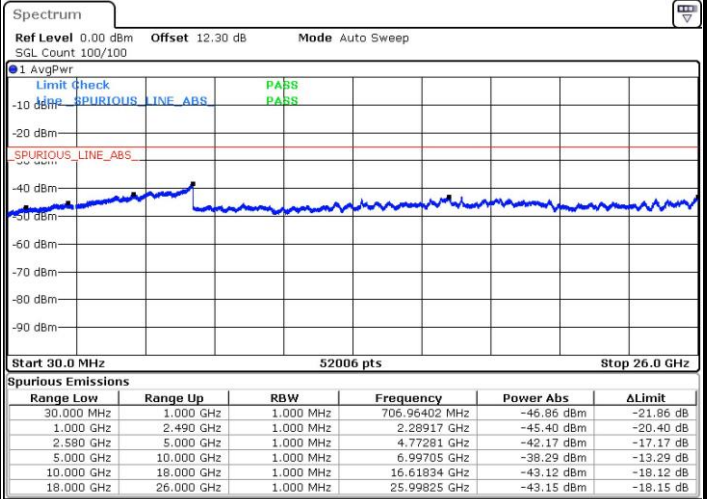
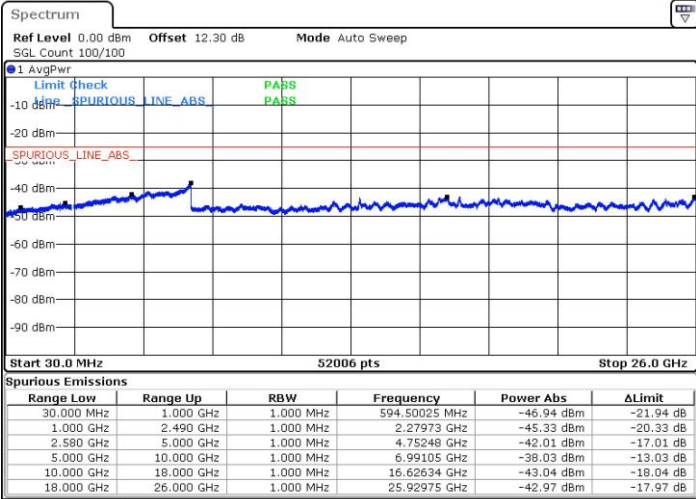


Date: 23.JUN.2019 19:51:54

Date: 23.JUN.2019 19:52:55

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 23.JUN.2019 19:54:41

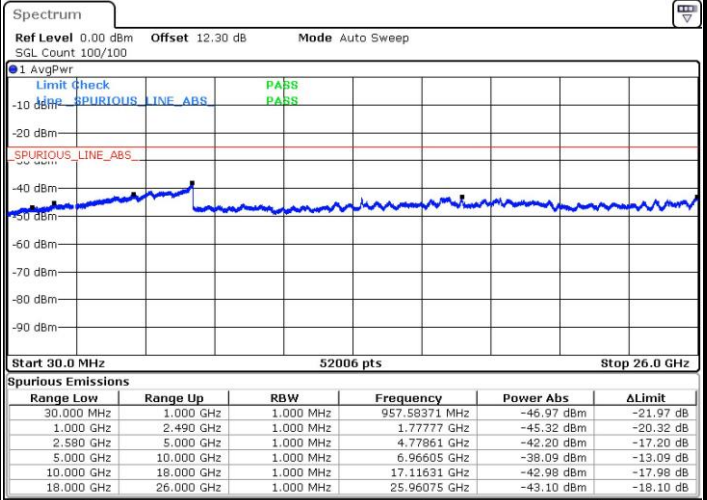
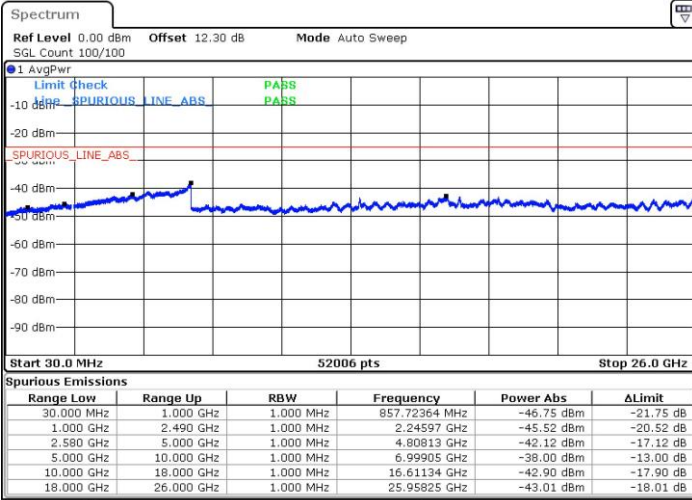
Date: 23.JUN.2019 19:55:41



LTE Band7 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



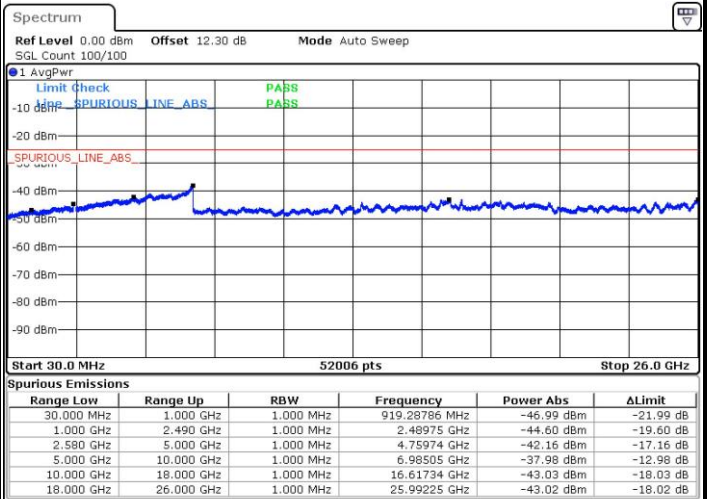
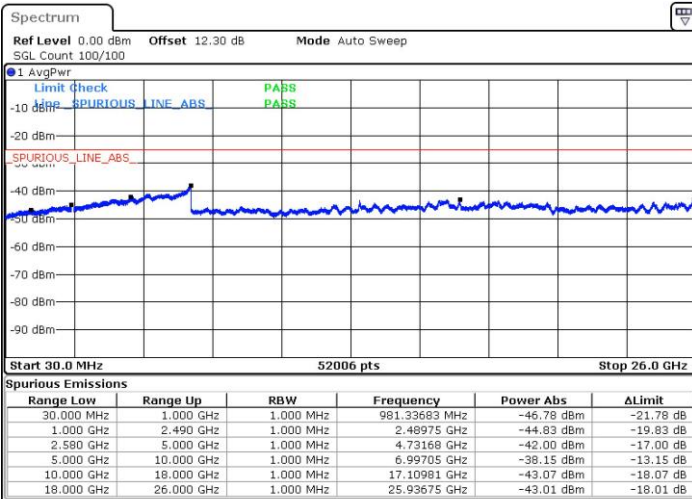
Date: 23.JUN.2019 20:01:05

Date: 23.JUN.2019 20:02:06

LTE Band 7 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 23.JUN.2019 20:07:29

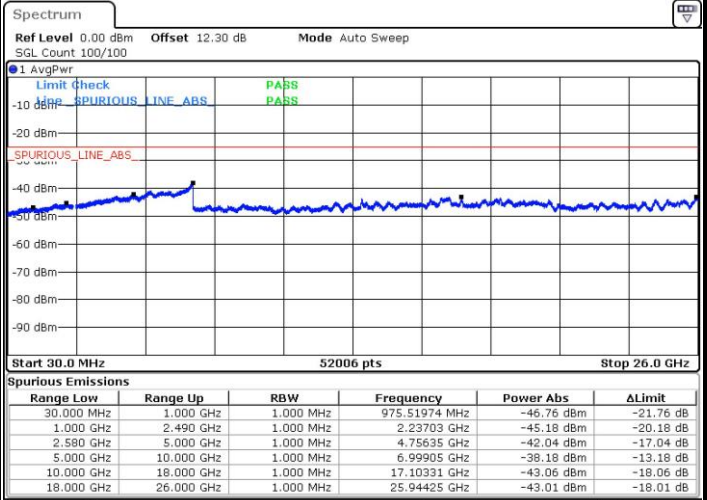
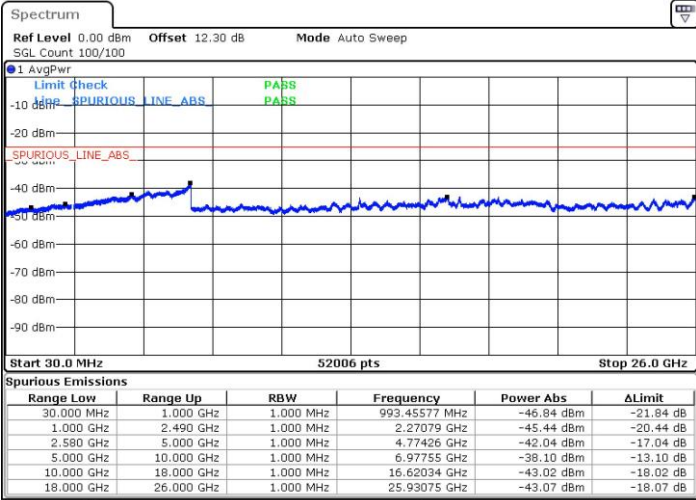
Date: 23.JUN.2019 20:08:30



LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

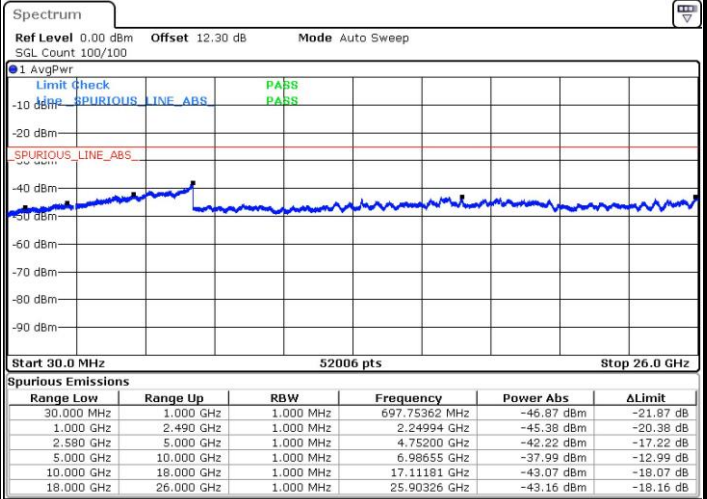
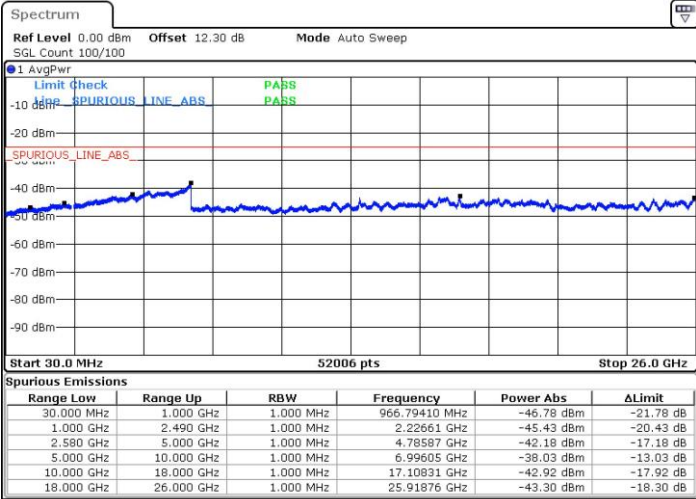


Date: 23.JUN.2019 20:10:17

Date: 23.JUN.2019 20:11:17

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 23.JUN.2019 20:16:42

Date: 23.JUN.2019 20:17:42



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	0.0003	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0015	
-30	Normal Voltage	0.0000	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage =7.7 V. ; Battery End Point (BEP) =6.8 V. ; Maximum Voltage =8.8 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

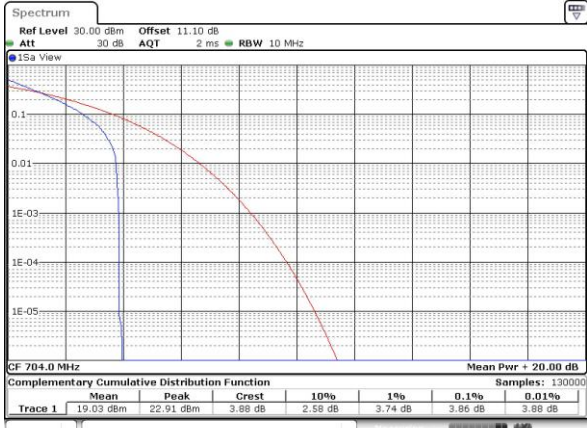
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.86	4.9	4.64	5.74	PASS
Middle CH	3.57	4.55	4.32	5.77	
Highest CH	3.36	4.9	4.26	5.62	



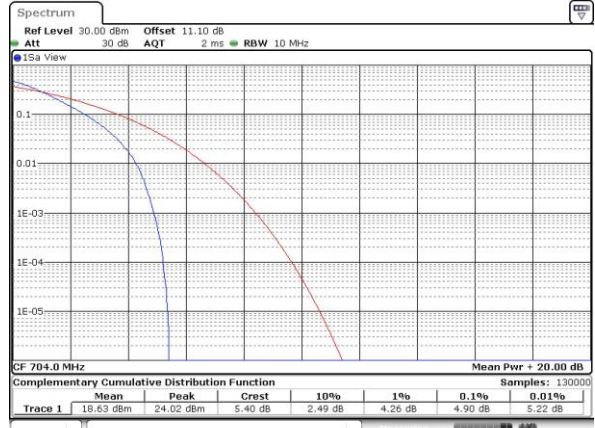
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



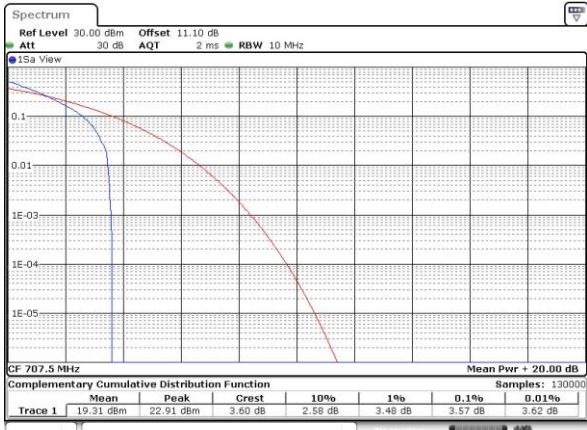
Date: 23 JUN 2019 23:07:16

Lowest Channel / Full RB



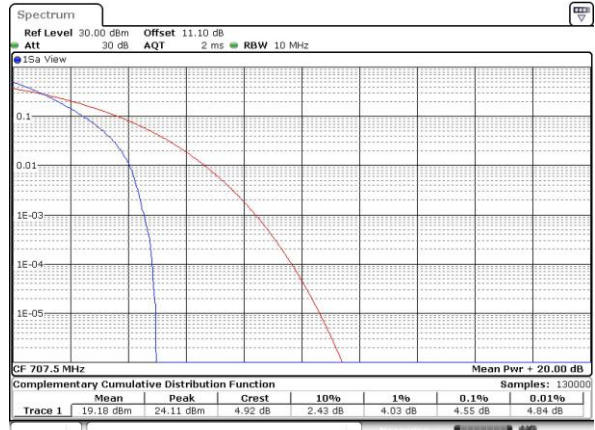
Date: 23 JUN 2019 23:07:25

Middle Channel / 1RB



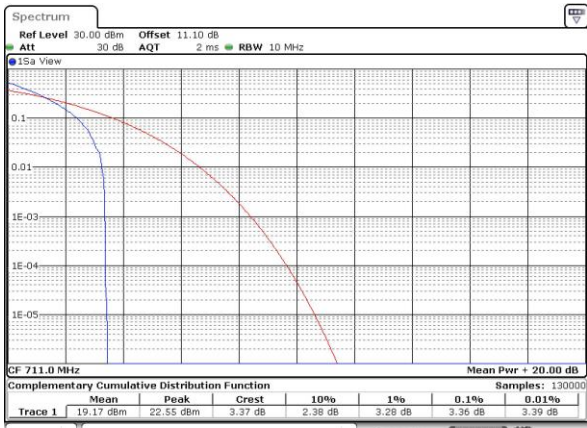
Date: 23 JUN 2019 23:07:48

Middle Channel / Full RB



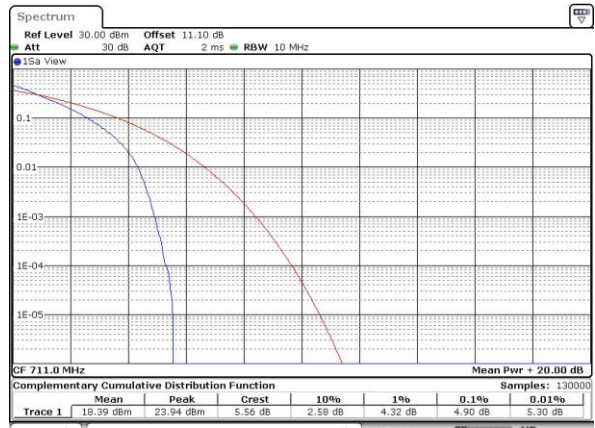
Date: 23 JUN 2019 23:08:00

Highest Channel / 1RB



Date: 23 JUN 2019 23:08:26

Highest Channel / Full RB

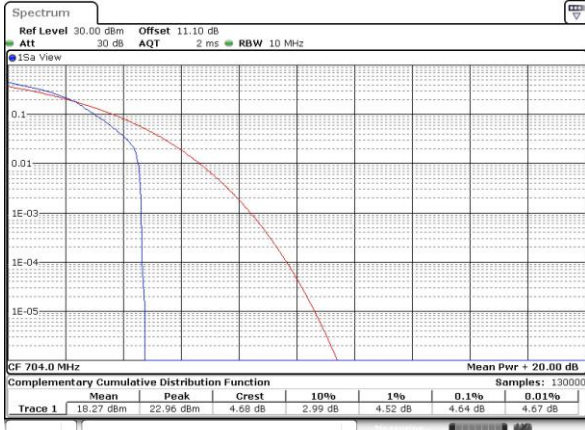


Date: 23 JUN 2019 23:08:14



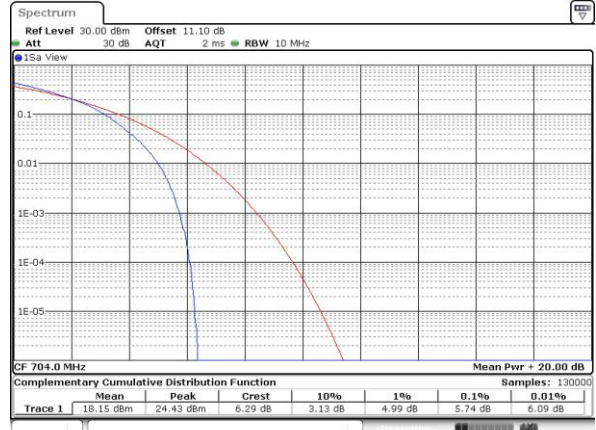
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 23 JUN 2019 23:06:35

Lowest Channel / Full RB



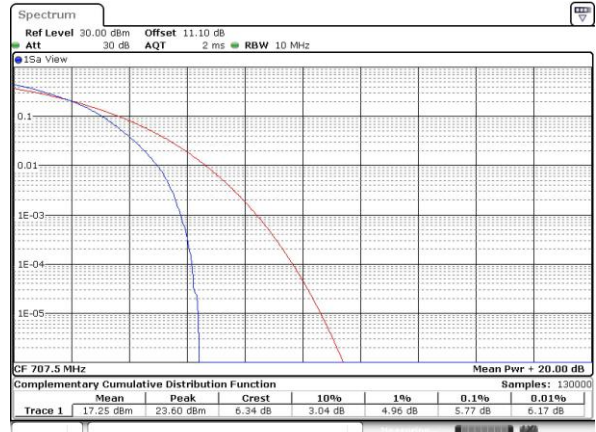
Date: 23 JUN 2019 23:06:25

Middle Channel / 1RB



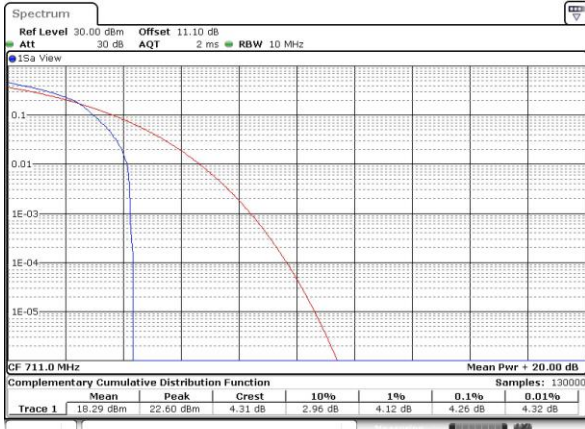
Date: 23 JUN 2019 23:06:45

Middle Channel / Full RB



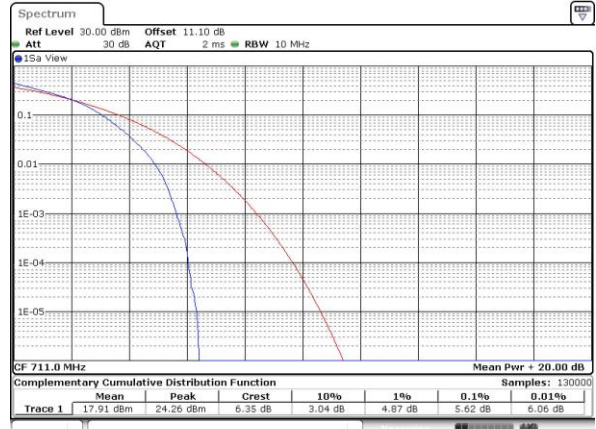
Date: 23 JUN 2019 23:06:55

Highest Channel / 1RB



Date: 23 JUN 2019 23:07:15

Highest Channel / Full RB



Date: 23 JUN 2019 23:07:05



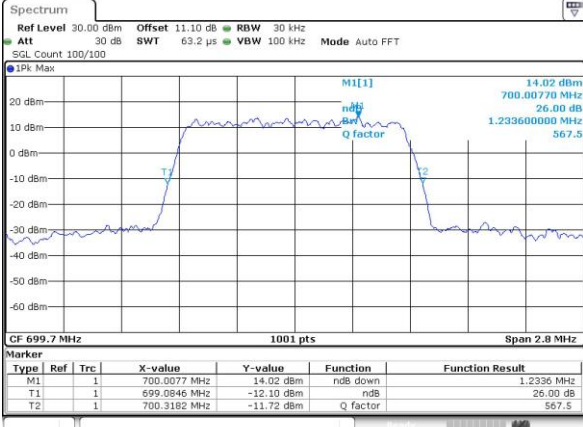
26dB Bandwidth

Mode BW Mod.	LTE Band 12 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.23	1.22	3.06	3.05	4.87	4.86	9.77	9.71	-	-	-	-
Middle CH	1.21	1.23	3.04	2.99	4.91	4.82	9.89	9.73	-	-	-	-
Highest CH	1.22	1.22	3.05	3	4.93	4.79	9.65	9.85	-	-	-	-



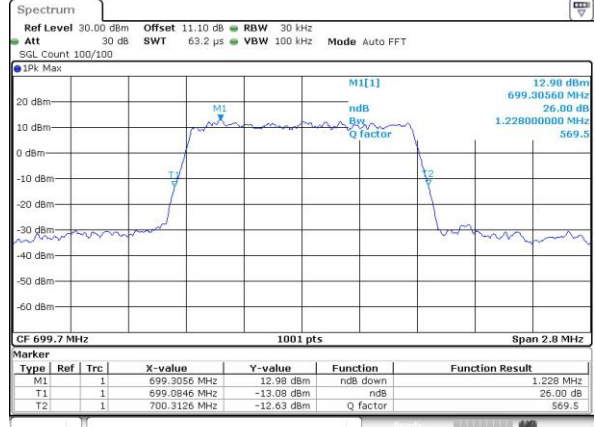
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



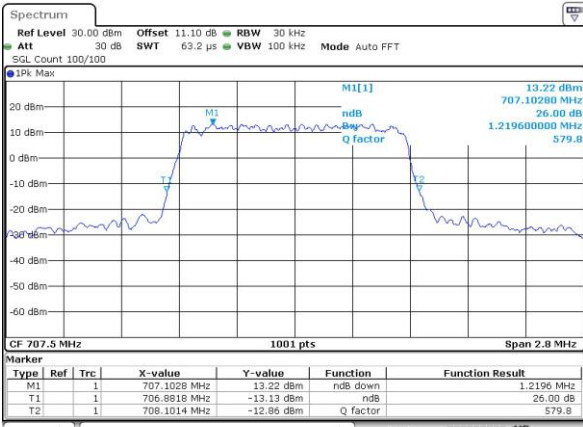
Date: 28 JUN 2019 05:41:57

Lowest Channel / 1.4MHz / 16QAM



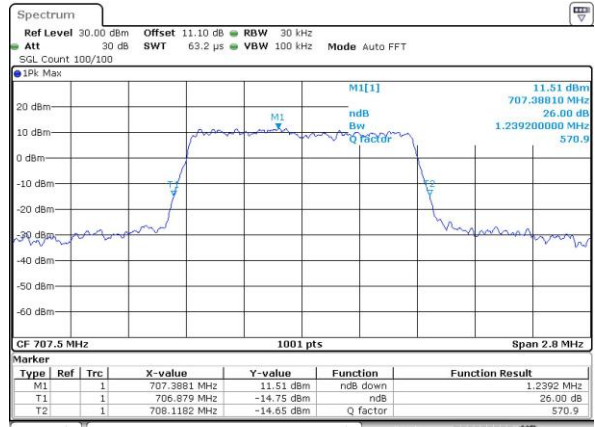
Date: 28 JUN 2019 05:42:09

Middle Channel / 1.4MHz / QPSK



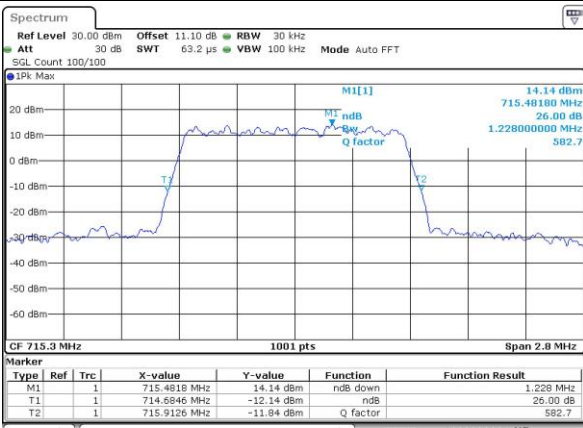
Date: 28 JUN 2019 05:42:02

Middle Channel / 1.4MHz / 16QAM



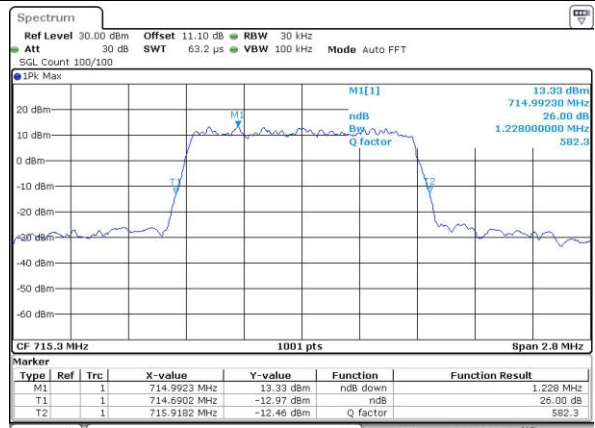
Date: 28 JUN 2019 05:42:20

Highest Channel / 1.4MHz / QPSK



Date: 28 JUN 2019 05:42:44

Highest Channel / 1.4MHz / 16QAM

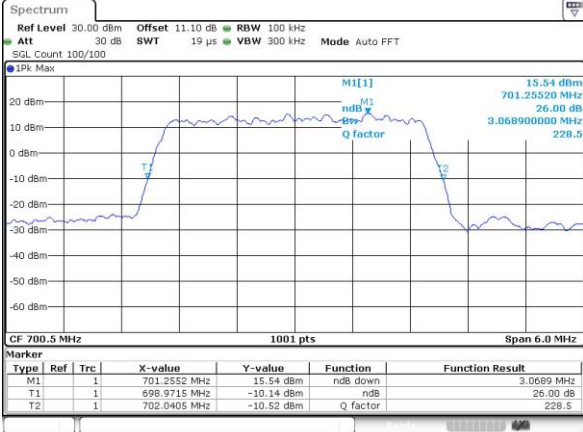


Date: 28 JUN 2019 05:42:55



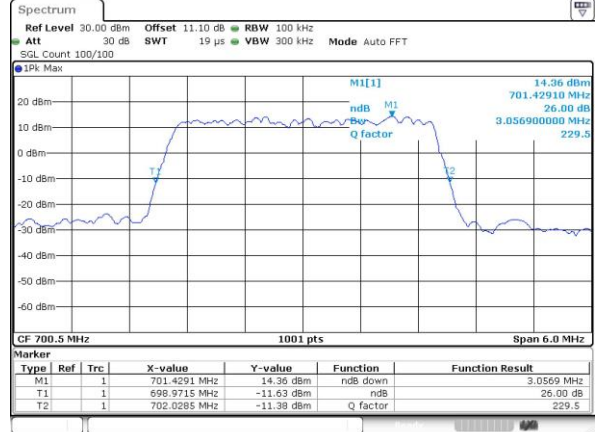
LTE Band 12

Lowest Channel / 3MHz / QPSK



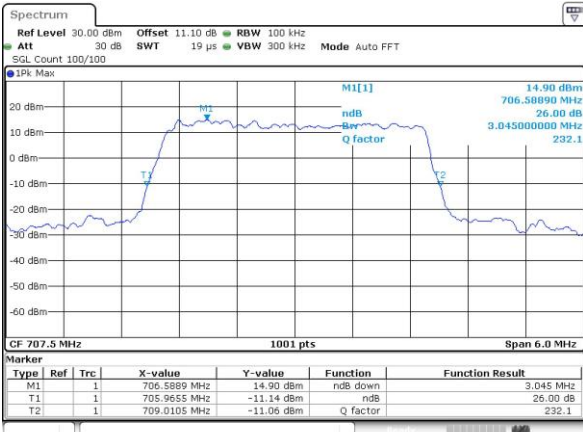
Date: 28 JUN 2019 05:43:06

Lowest Channel / 3MHz / 16QAM



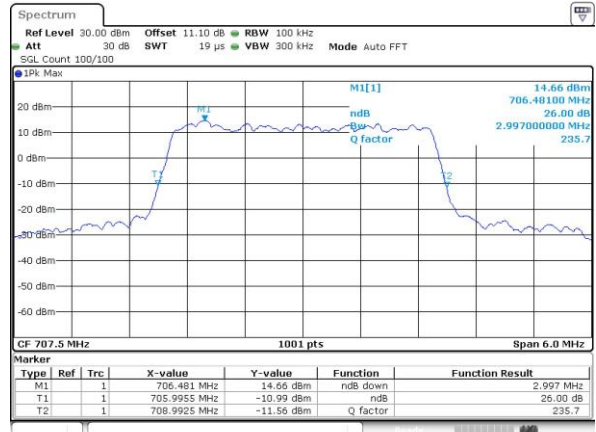
Date: 28 JUN 2019 05:43:18

Middle Channel / 3MHz / QPSK



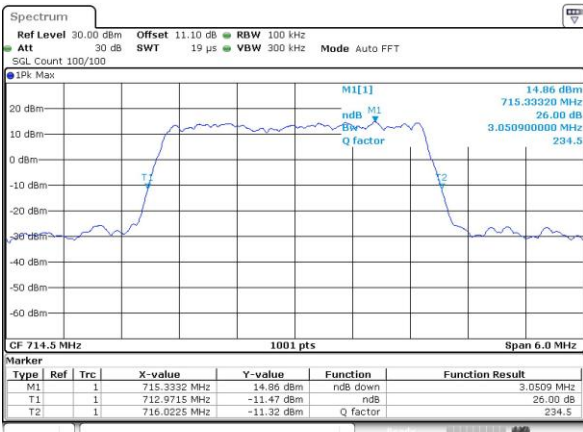
Date: 28 JUN 2019 05:43:41

Middle Channel / 3MHz / 16QAM



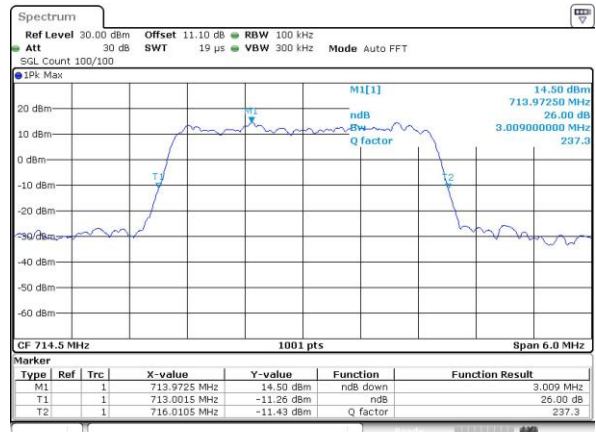
Date: 28 JUN 2019 05:43:29

Highest Channel / 3MHz / QPSK



Date: 28 JUN 2019 05:43:52

Highest Channel / 3MHz / 16QAM

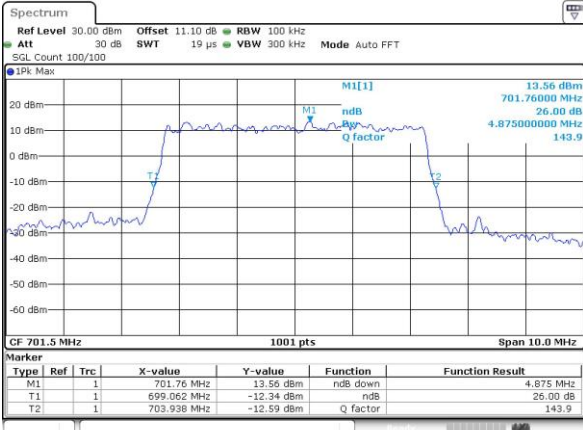


Date: 28 JUN 2019 05:44:04



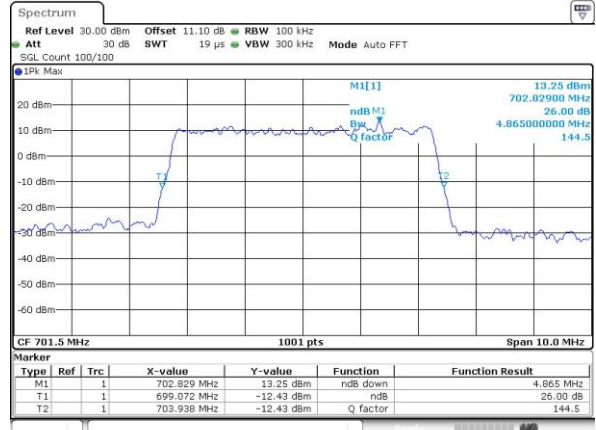
LTE Band 12

Lowest Channel / 5MHz / QPSK



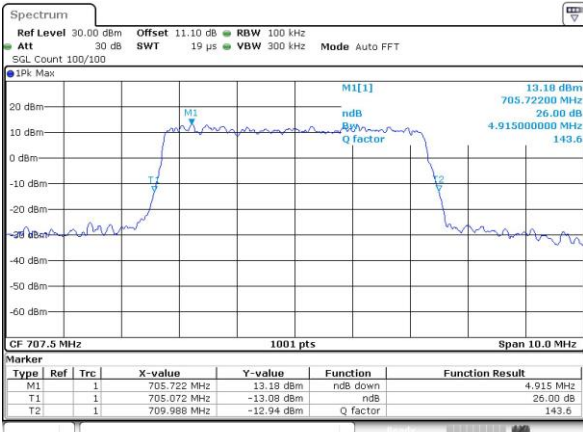
Date: 28 JUN 2019 05:44:15

Lowest Channel / 5MHz / 16QAM



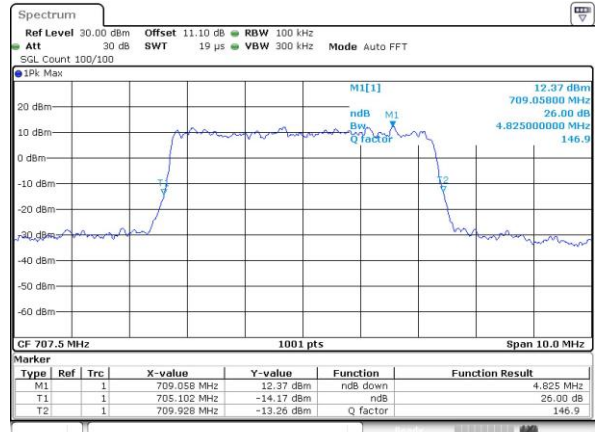
Date: 28 JUN 2019 05:44:27

Middle Channel / 5MHz / QPSK



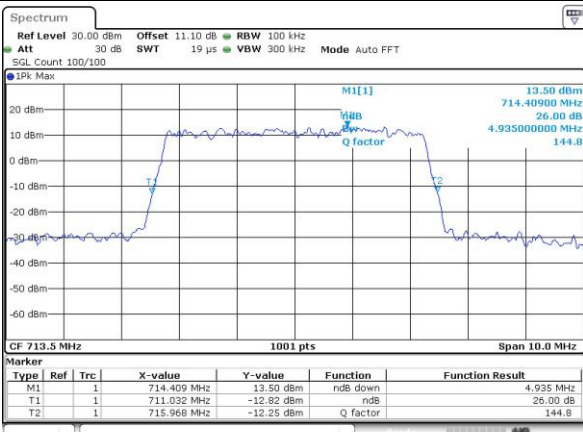
Date: 28 JUN 2019 05:44:51

Middle Channel / 5MHz / 16QAM



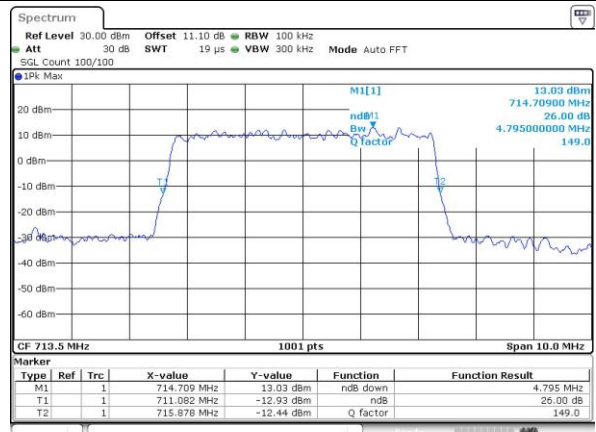
Date: 28 JUN 2019 05:44:39

Highest Channel / 5MHz / QPSK



Date: 28 JUN 2019 05:45:02

Highest Channel / 5MHz / 16QAM

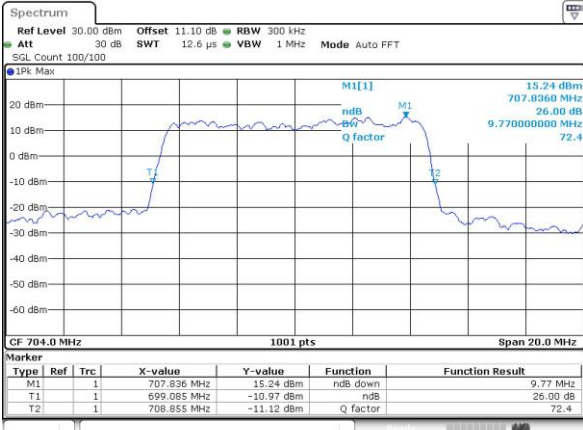


Date: 28 JUN 2019 05:45:14



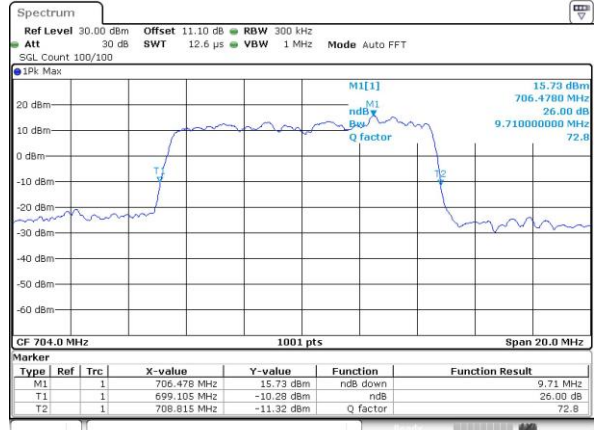
LTE Band 12

Lowest Channel / 10MHz / QPSK



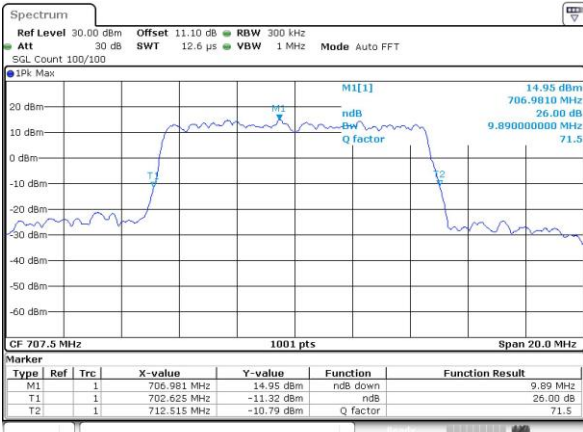
Date: 28 JUN 2019 05:45:25

Lowest Channel / 10MHz / 16QAM



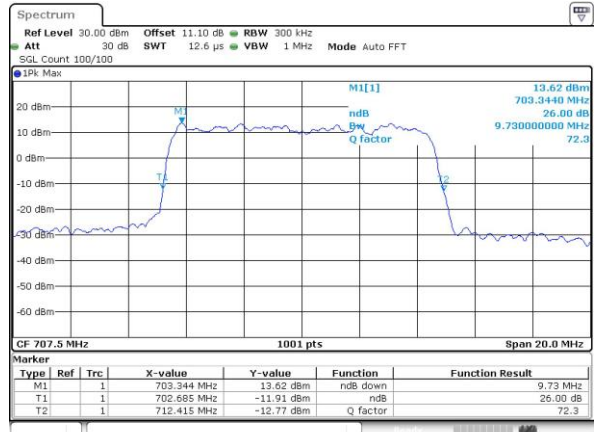
Date: 28 JUN 2019 05:45:37

Middle Channel / 10MHz / QPSK



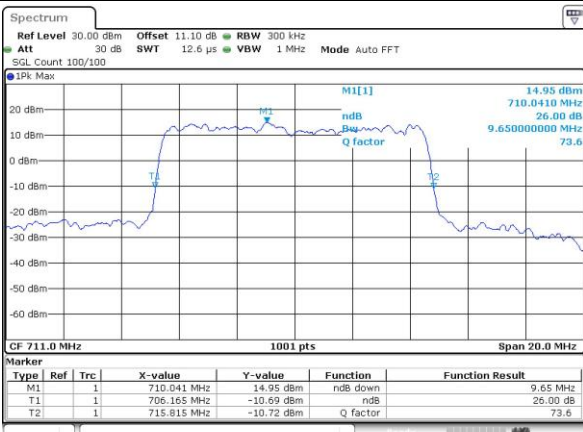
Date: 28 JUN 2019 05:46:00

Middle Channel / 10MHz / 16QAM



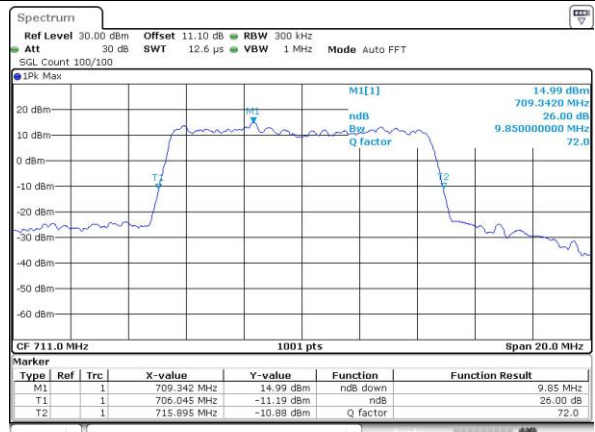
Date: 28 JUN 2019 05:45:48

Highest Channel / 10MHz / QPSK



Date: 28 JUN 2019 05:46:11

Highest Channel / 10MHz / 16QAM



Date: 28 JUN 2019 05:46:23



Occupied Bandwidth

Mode BW Mod.	LTE Band 12 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.08	1.09	2.72	2.73	4.48	4.48	9.09	9.03	-	-	-	-
Middle CH	1.08	1.09	2.72	2.72	4.48	4.48	9.01	9.01	-	-	-	-
Highest CH	1.08	1.08	2.72	2.72	4.47	4.48	9.09	9.03	-	-	-	-