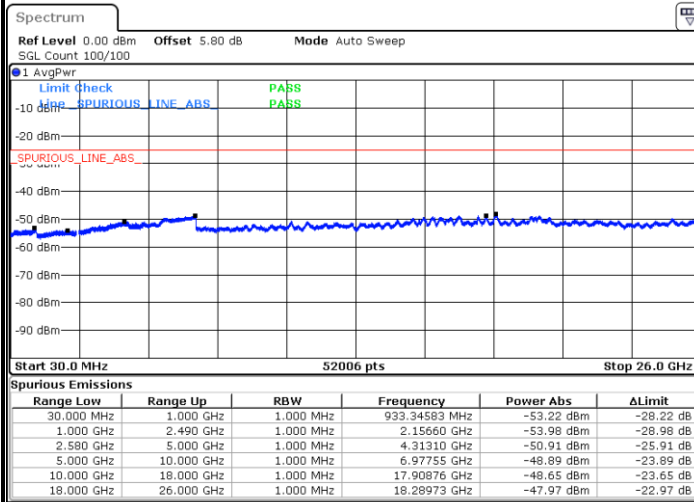




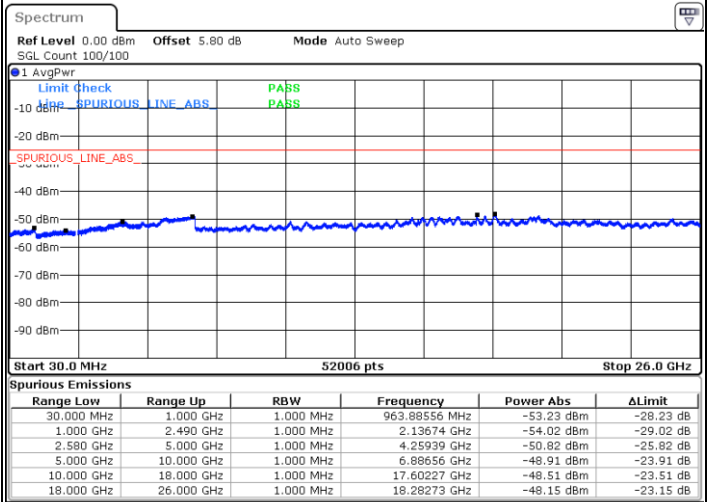
LTE Band 7 / 10MHz

Middle Channel / QPSK



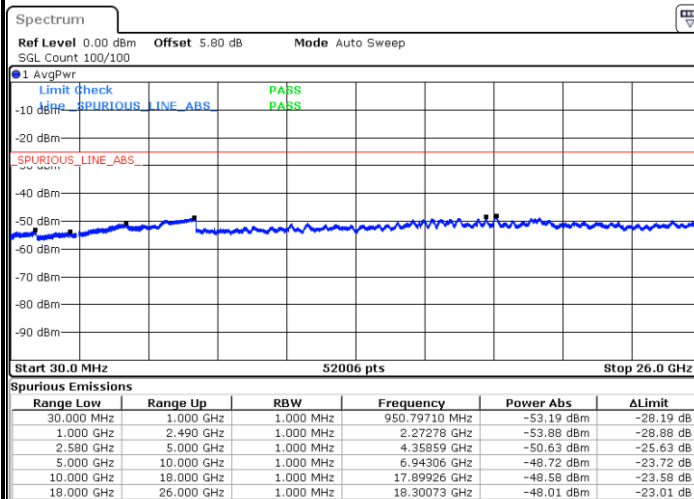
Date: 4 DEC. 2019 11:57:31

Middle Channel / 16QAM



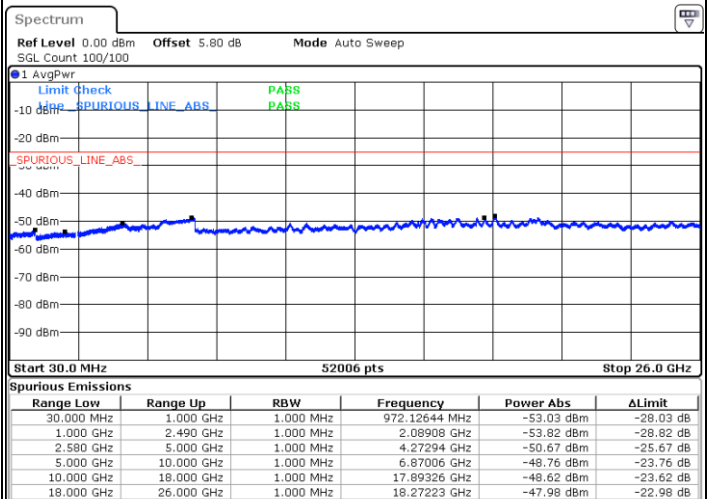
Date: 4 DEC. 2019 11:56:38

Highest Channel / QPSK



Date: 4 DEC. 2019 11:58:24

Highest Channel / 16QAM

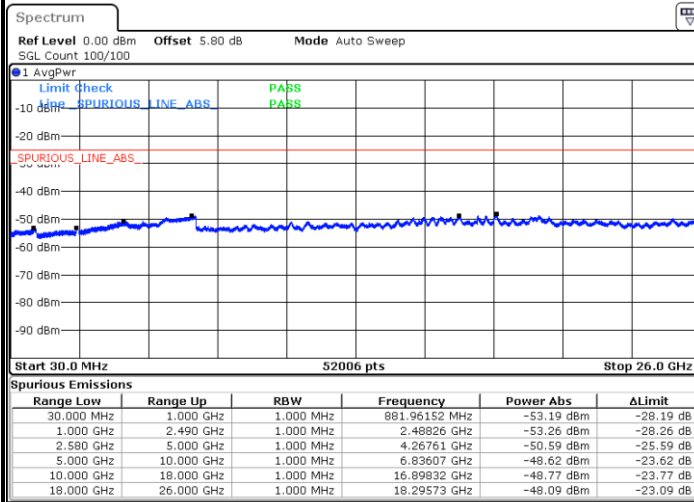


Date: 4 DEC. 2019 11:59:17



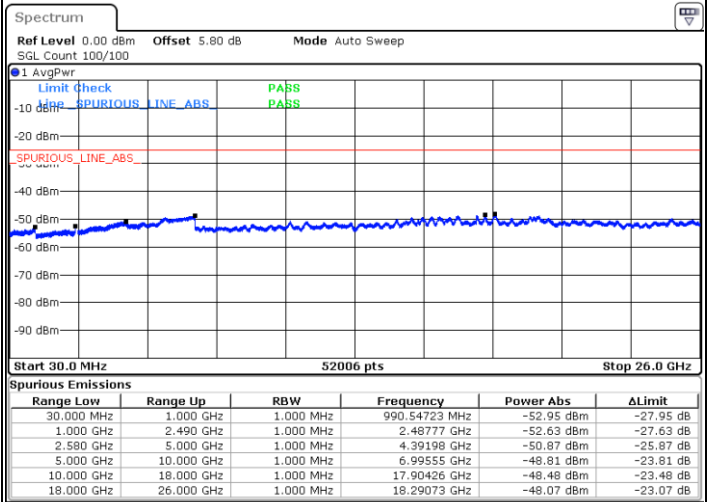
LTE Band 7 / 15MHz

Lowest Channel / QPSK



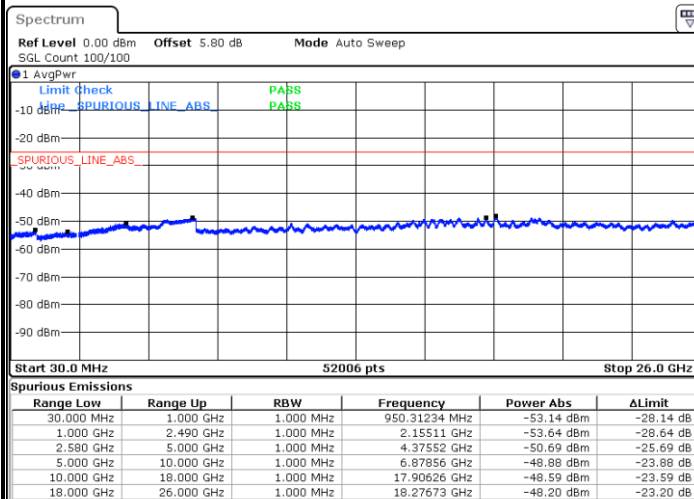
Date: 4 DEC. 2019 14:54:24

Lowest Channel / 16QAM



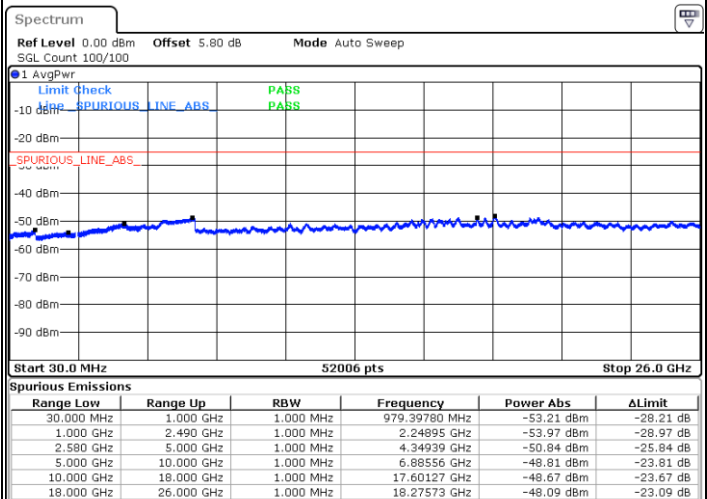
Date: 4 DEC. 2019 14:55:17

Middle Channel / QPSK



Date: 4 DEC. 2019 14:57:03

Middle Channel / 16QAM

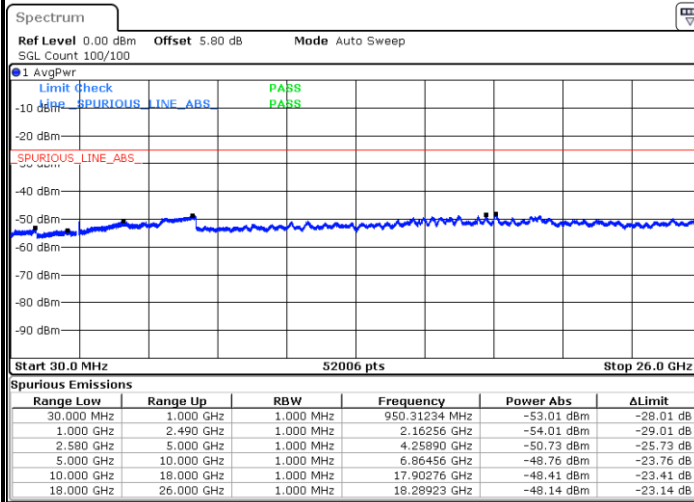


Date: 4 DEC. 2019 14:56:10



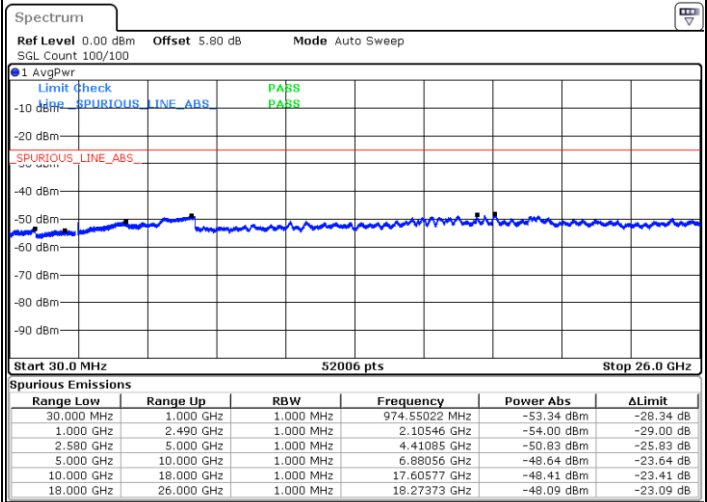
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 4 DEC. 2019 14:57:56

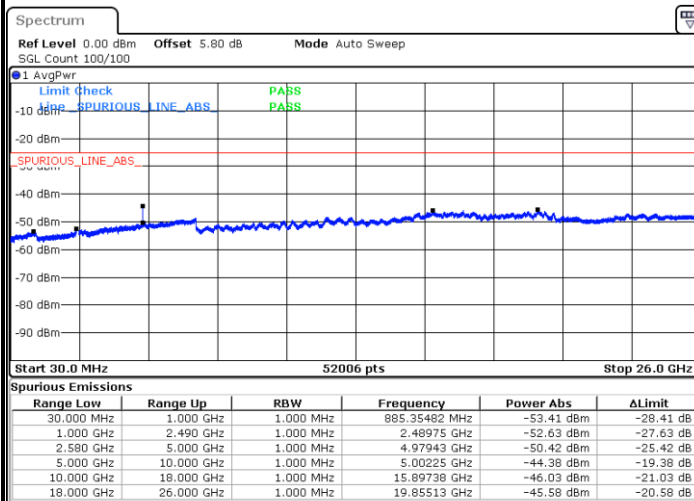
Highest Channel / 16QAM



Date: 4 DEC. 2019 14:58:49

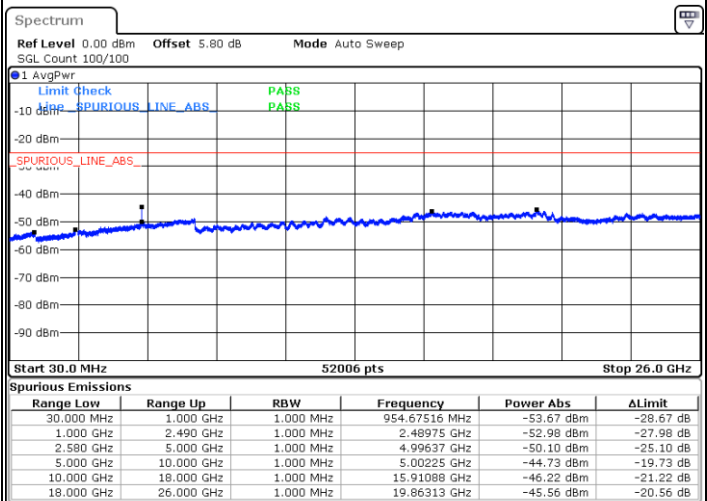
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 4 DEC. 2019 15:24:19

Lowest Channel / 16QAM

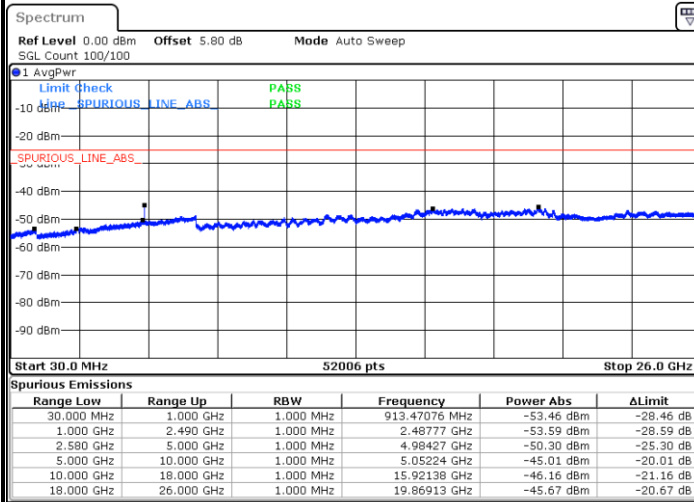


Date: 4 DEC. 2019 15:25:13



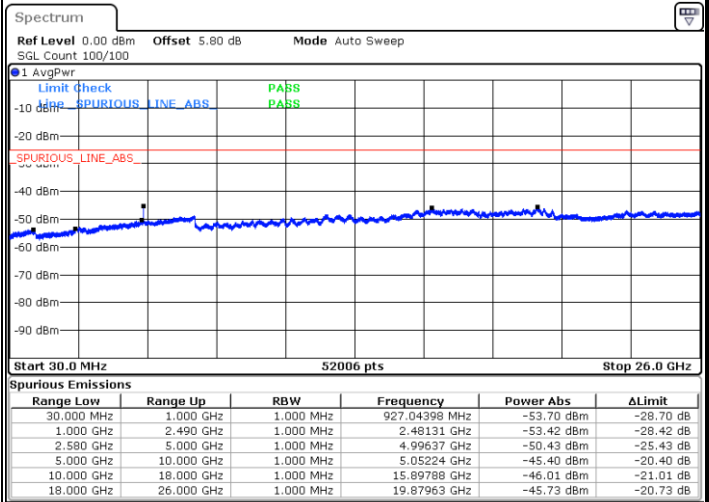
LTE Band 7 / 20MHz

Middle Channel / QPSK



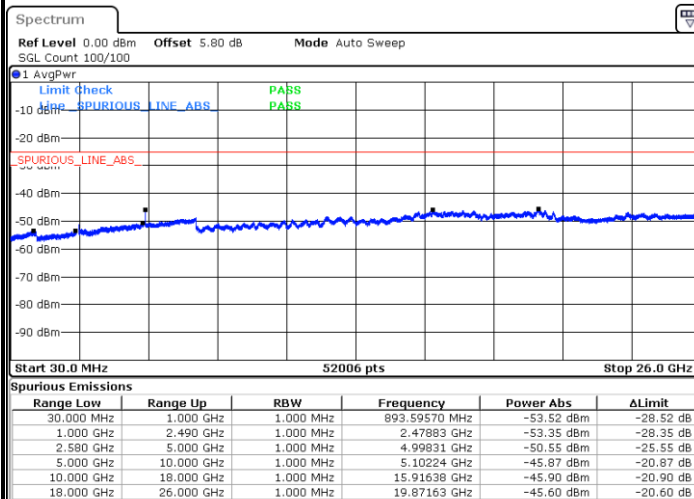
Date: 4 DEC. 2019 15:27:00

Middle Channel / 16QAM



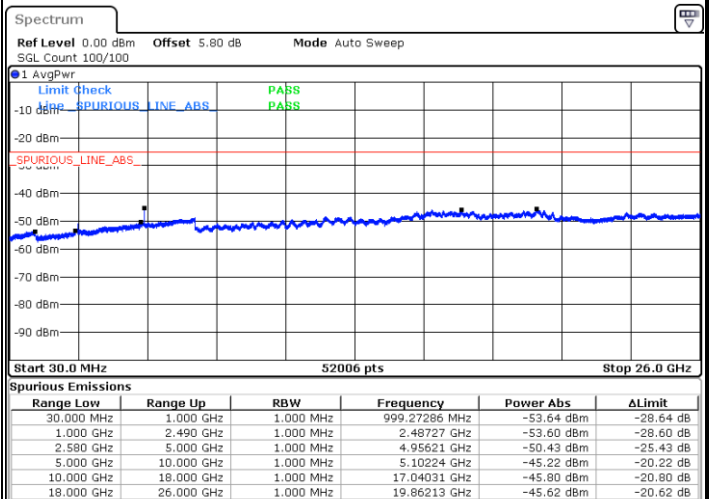
Date: 4 DEC. 2019 15:26:07

Highest Channel / QPSK



Date: 4 DEC. 2019 15:27:54

Highest Channel / 16QAM



Date: 4 DEC. 2019 15:28:48

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	0.0033	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0028	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0039	
0	Normal Voltage	0.0042	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0004	
20	Battery End Point	0.0017	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

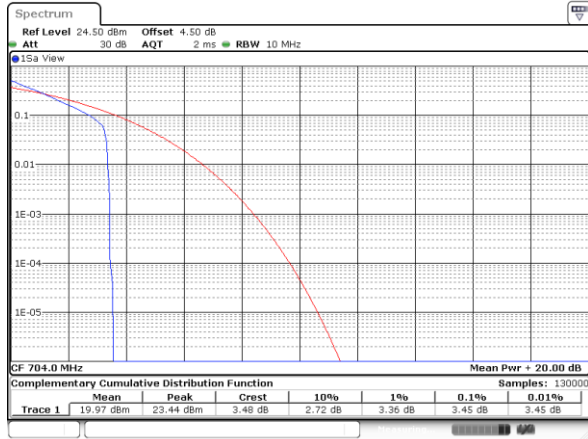
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.45	4.41	5.13	5.68	PASS
Middle CH	3.42	4.58	4.81	5.74	
Highest CH	3.48	4.58	4.81	5.71	

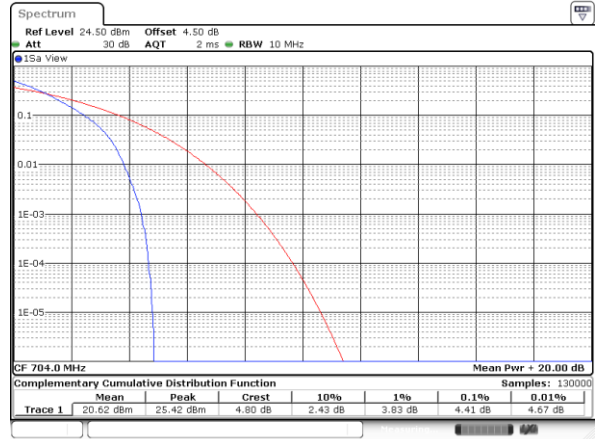


LTE Band 12 / 10MHz / QPSK

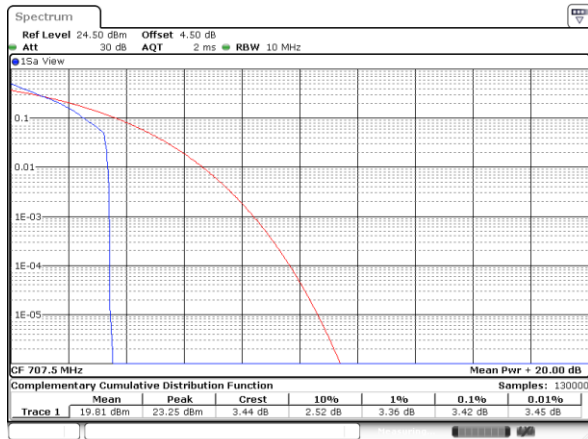
Lowest Channel / 1RB



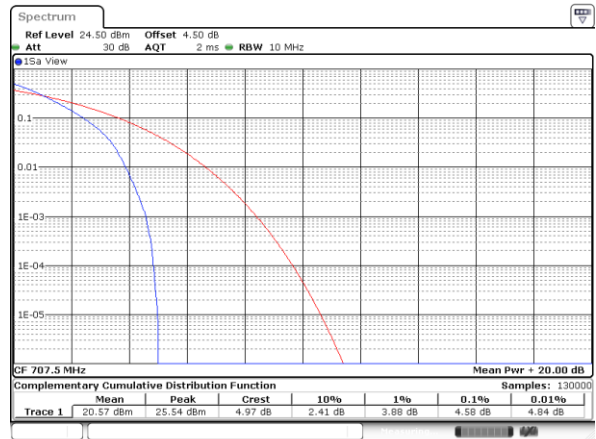
Lowest Channel / Full RB



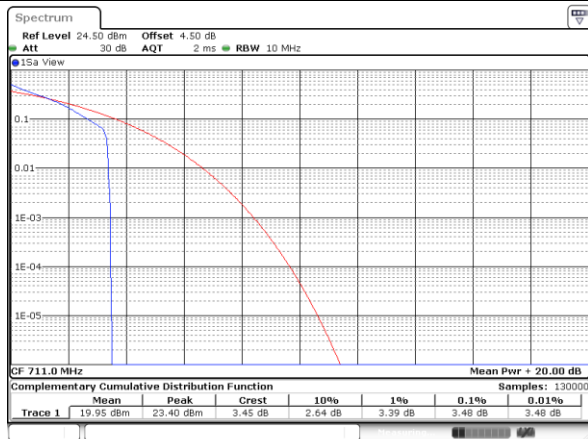
Middle Channel / 1RB



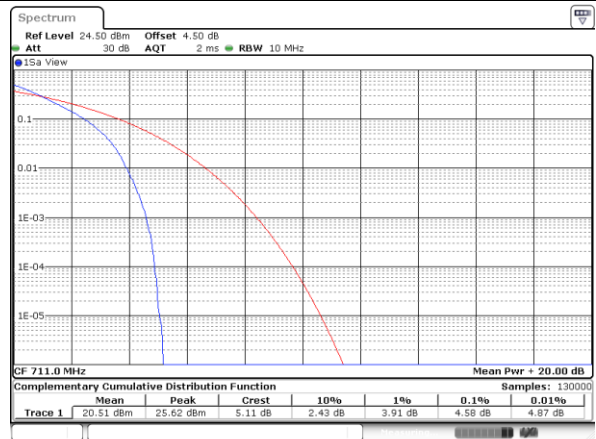
Middle Channel / Full RB



Highest Channel / 1RB

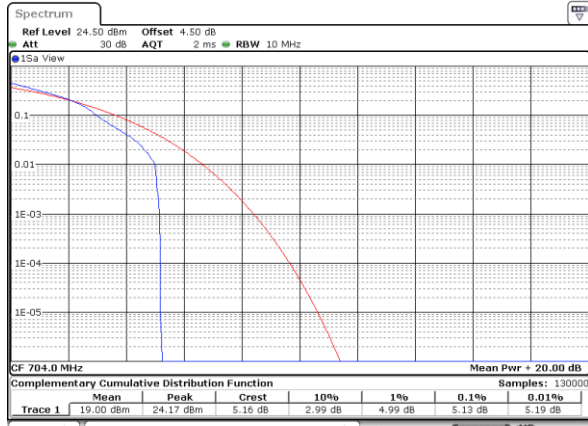


Highest Channel / Full RB



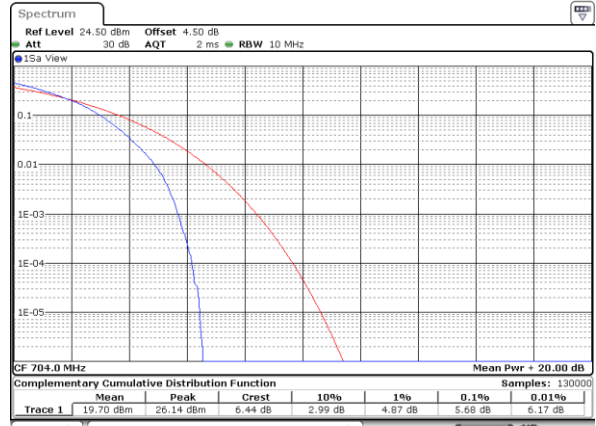
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



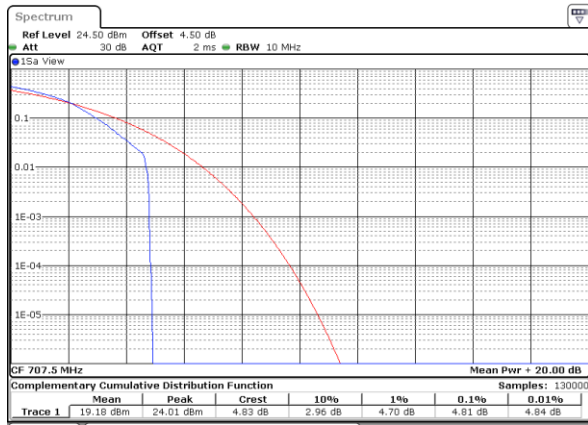
Date: 4 DEC 2019 17:15:01

Lowest Channel / Full RB



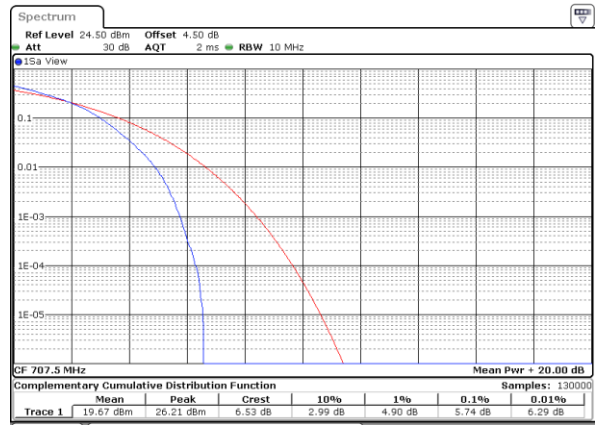
Date: 4 DEC 2019 17:15:28

Middle Channel / 1RB



Date: 4 DEC 2019 17:16:12

Middle Channel / Full RB



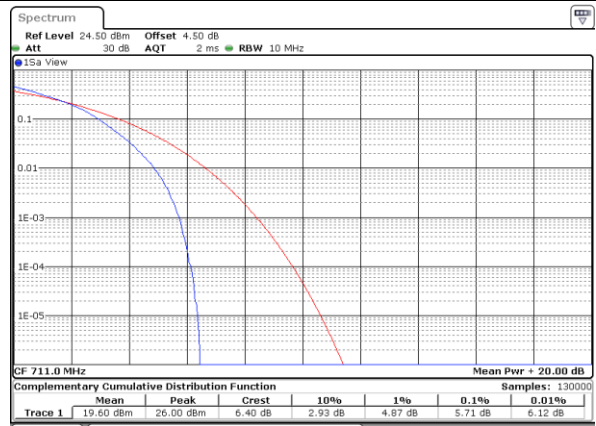
Date: 4 DEC 2019 17:15:37

Highest Channel / 1RB



Date: 4 DEC 2019 17:16:20

Highest Channel / Full RB



Date: 4 DEC 2019 17:16:47

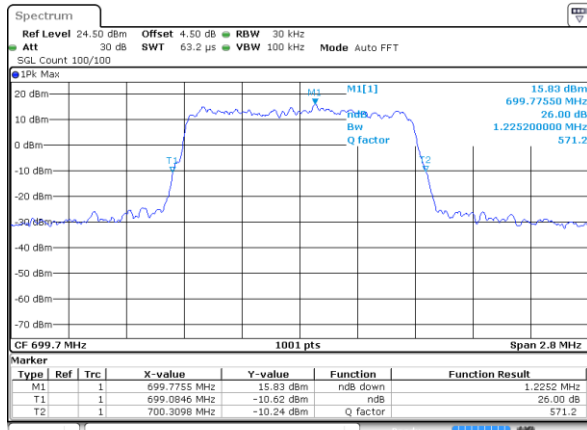
**26dB Bandwidth**

Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM				
Lowest CH	1.2252	1.2252	3.039	2.997	4.955	4.895	9.73	9.63				
Middle CH	1.2308	1.228	3.039	3.0509	4.865	4.925	9.75	9.77				
Highest CH	1.2336	1.2224	2.979	3.033	4.895	4.875	9.81	9.65				



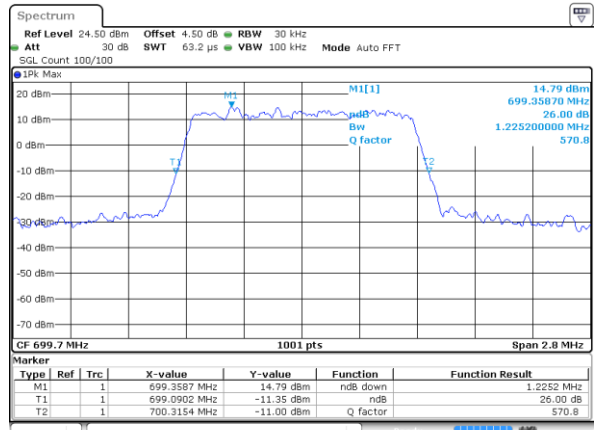
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



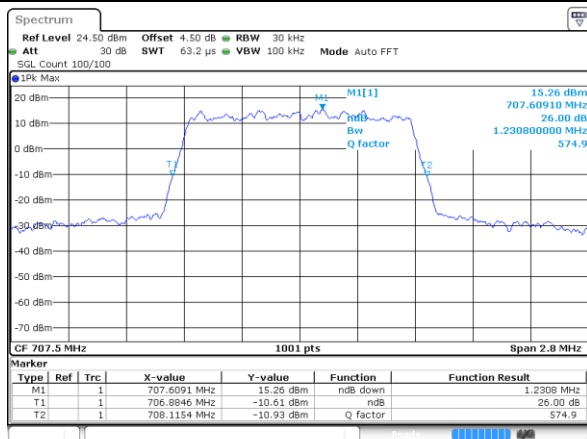
Date: 4 DEC 2019 15:38:27

Lowest Channel / 1.4MHz / 16QAM



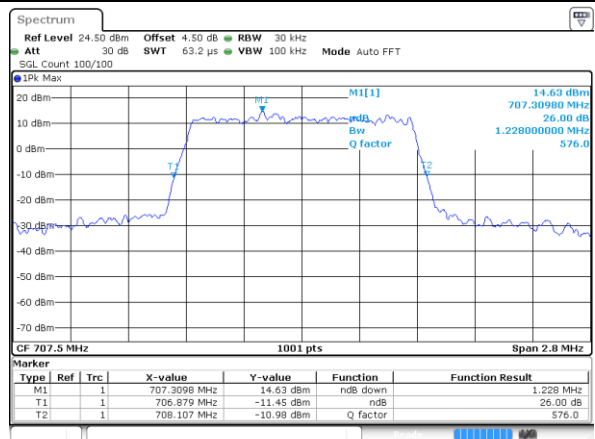
Date: 4 DEC 2019 15:38:17

Middle Channel / 1.4MHz / QPSK



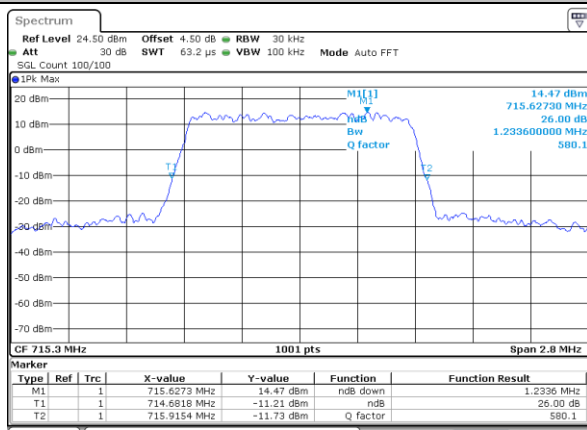
Date: 4 DEC 2019 15:37:57

Middle Channel / 1.4MHz / 16QAM



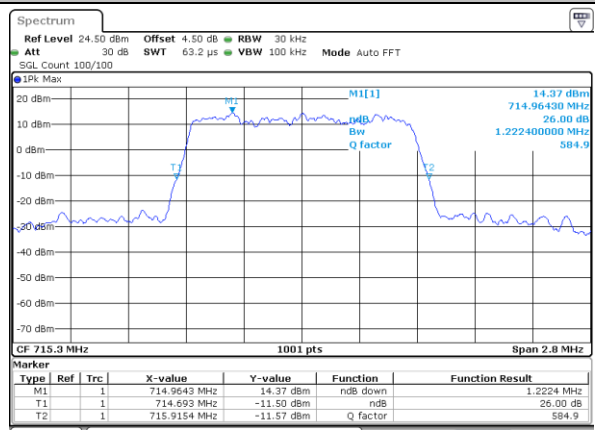
Date: 4 DEC 2019 15:38:07

Highest Channel / 1.4MHz / QPSK



Date: 4 DEC 2019 15:37:47

Highest Channel / 1.4MHz / 16QAM

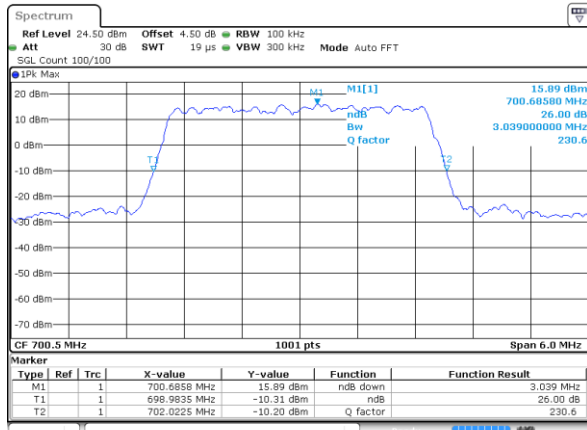


Date: 4 DEC 2019 15:37:37

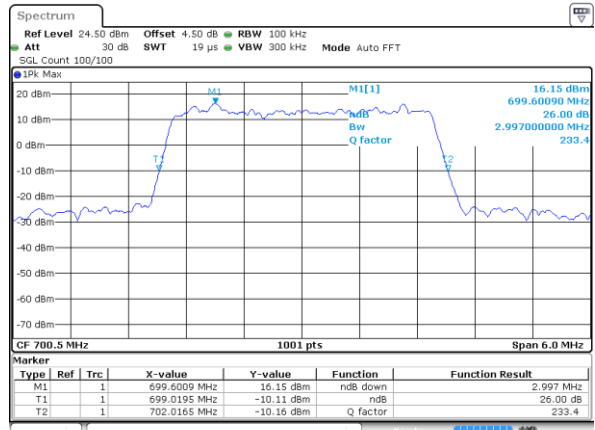


LTE Band 12

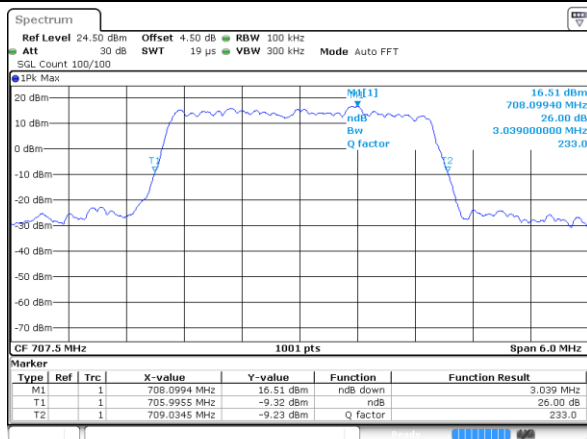
Lowest Channel / 3MHz / QPSK



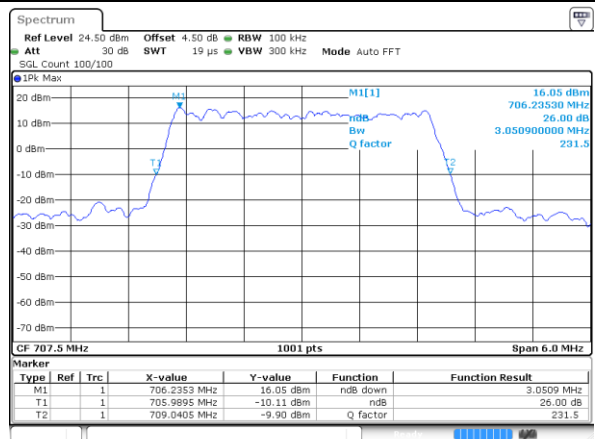
Lowest Channel / 3MHz / 16QAM



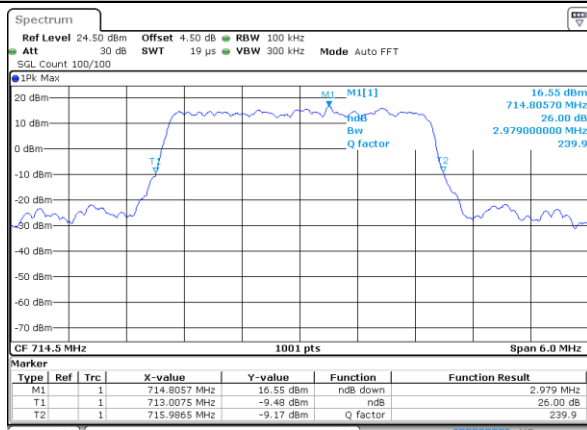
Middle Channel / 3MHz / QPSK



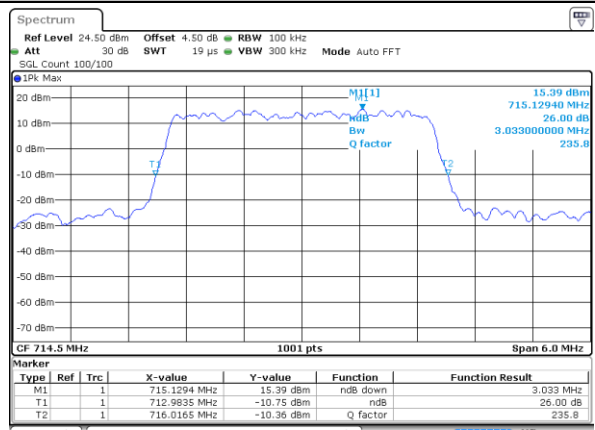
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



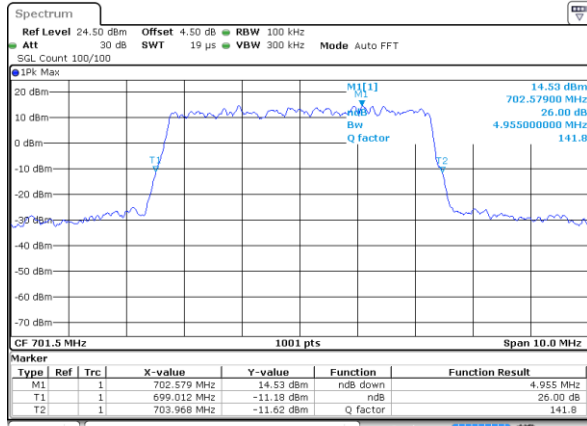
Highest Channel / 3MHz / 16QAM





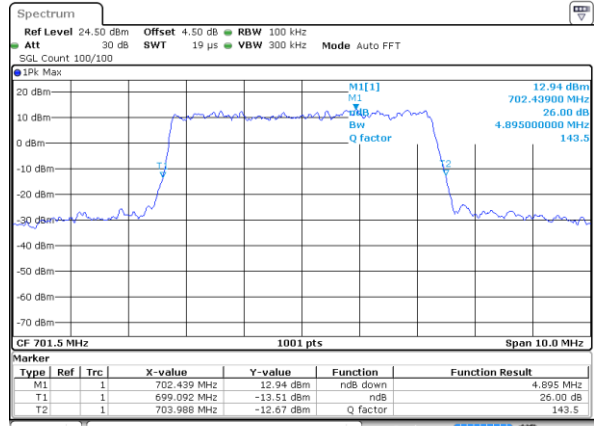
LTE Band 12

Lowest Channel / 5MHz / QPSK



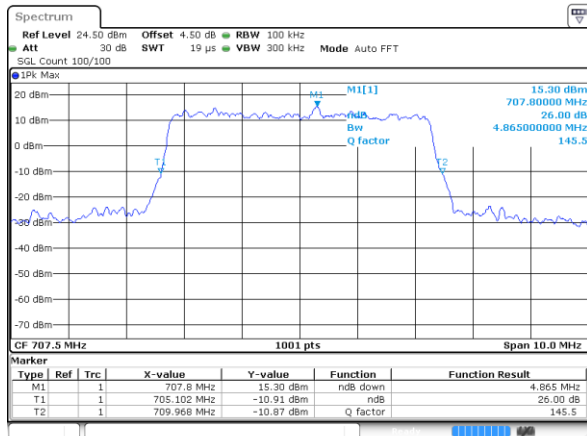
Date: 4 DEC 2019 16:10:22

Lowest Channel / 5MHz / 16QAM



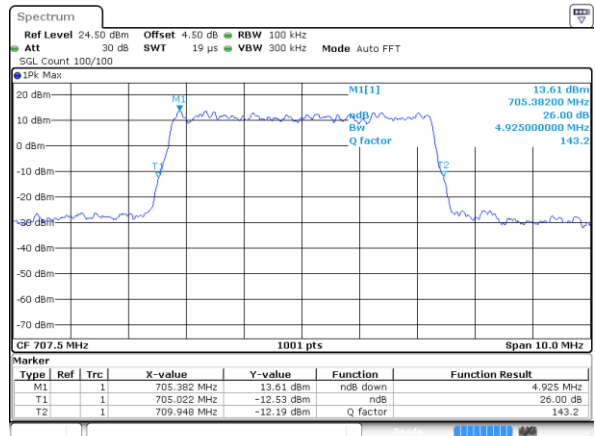
Date: 4 DEC 2019 16:10:12

Middle Channel / 5MHz / QPSK



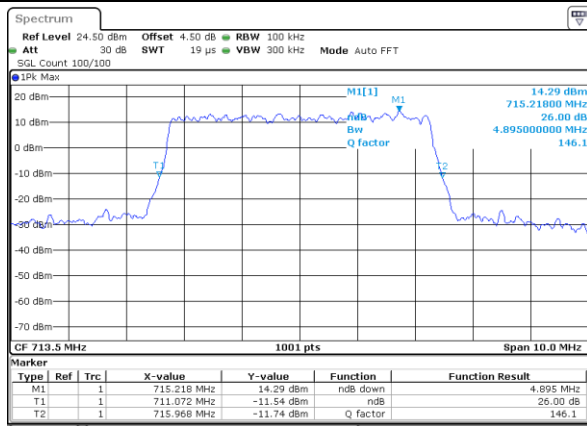
Date: 4 DEC 2019 16:09:52

Middle Channel / 5MHz / 16QAM



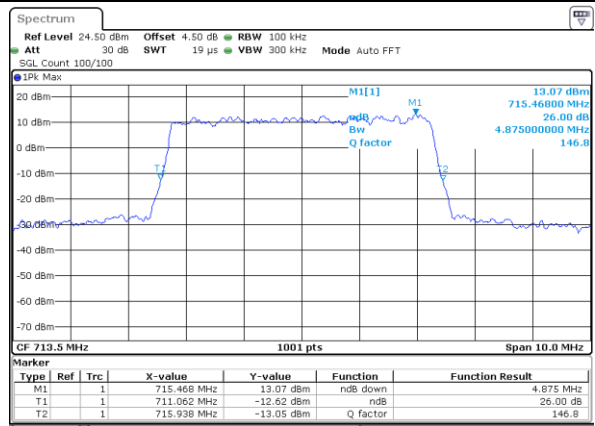
Date: 4 DEC 2019 16:10:02

Highest Channel / 5MHz / QPSK



Date: 4 DEC 2019 16:09:42

Highest Channel / 5MHz / 16QAM

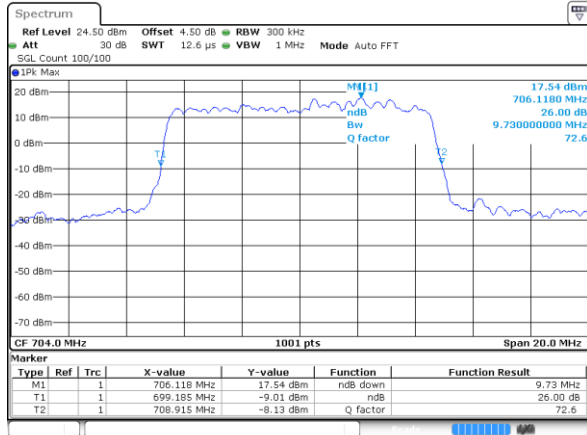


Date: 4 DEC 2019 16:09:32

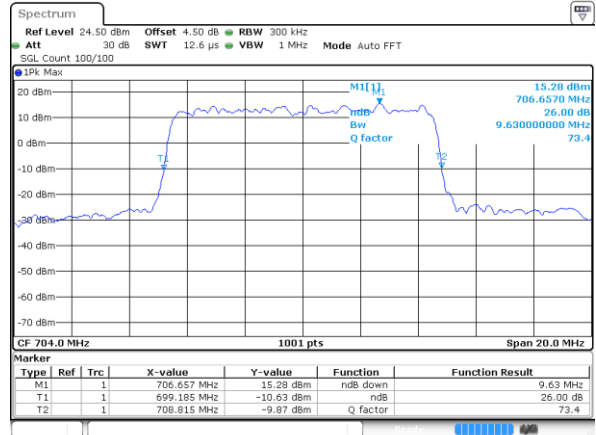


LTE Band 12

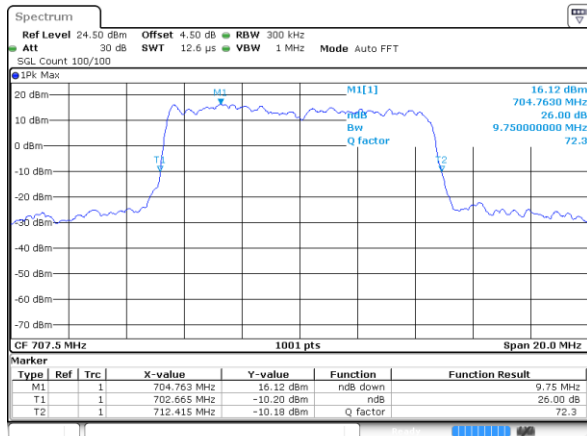
Lowest Channel / 10MHz / QPSK



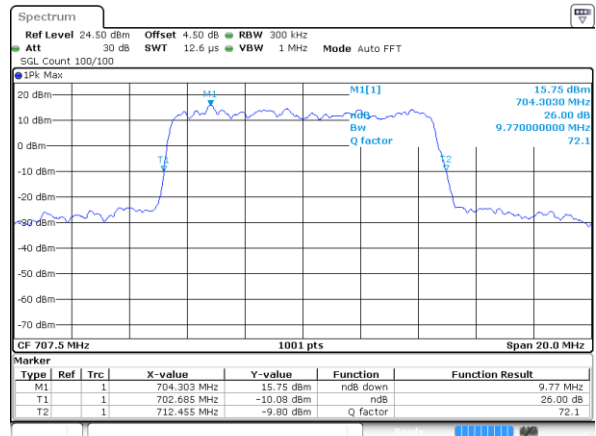
Lowest Channel / 10MHz / 16QAM



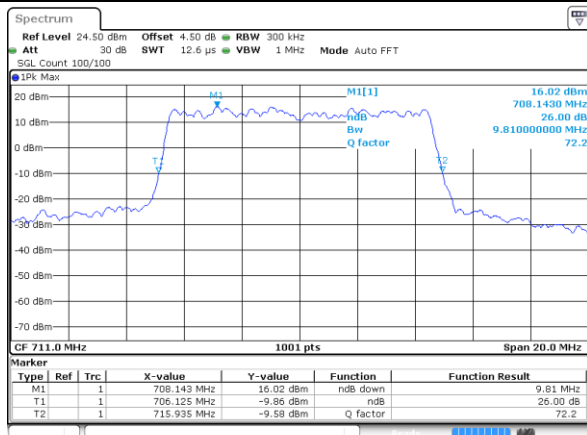
Middle Channel / 10MHz / QPSK



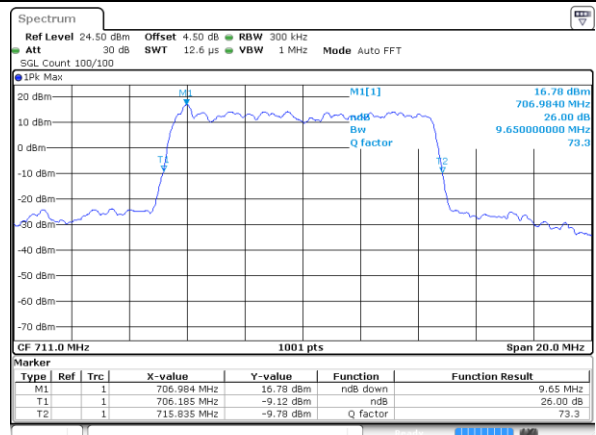
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM





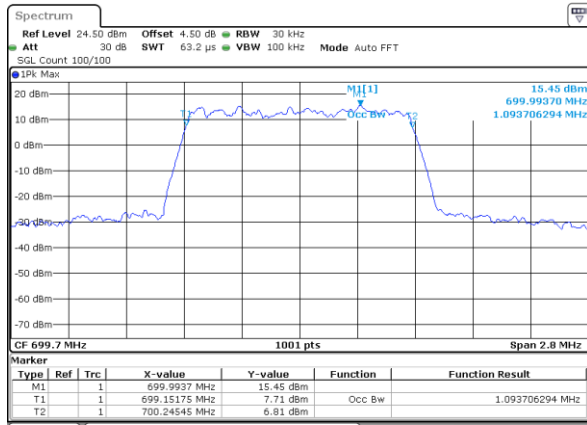
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM				
Lowest CH	1.09	1.09	2.71	2.70	4.50	4.49	9.03	9.03				
Middle CH	1.09	1.08	2.72	2.72	4.49	4.49	9.03	8.97				
Highest CH	1.09	1.09	2.72	2.70	4.48	4.49	9.05	9.05				



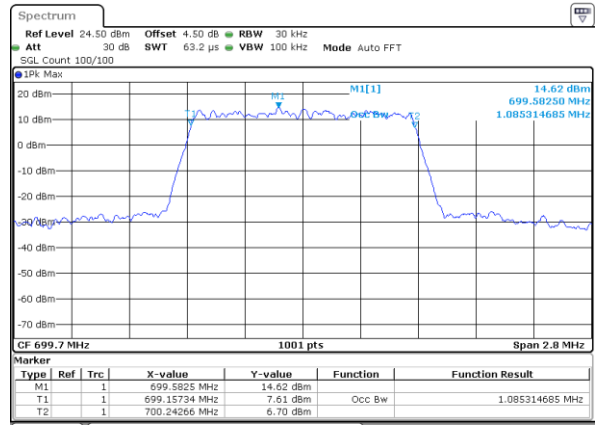
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



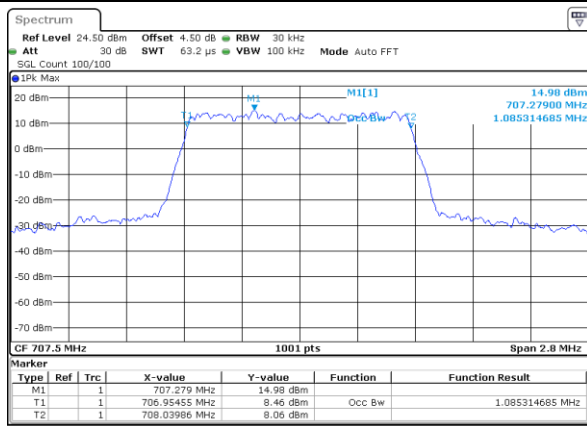
Date: 4 DEC 2019 15:36:37

Lowest Channel / 1.4MHz / 16QAM



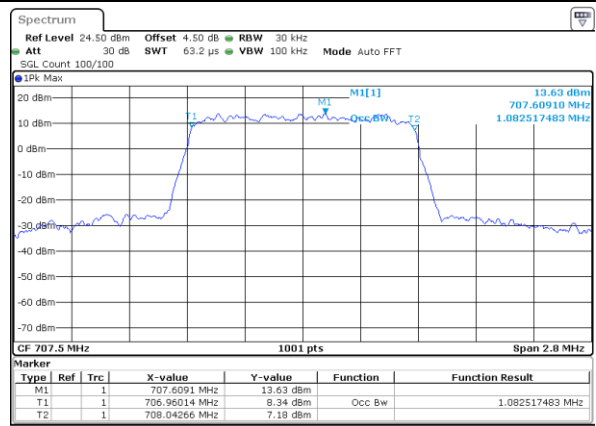
Date: 4 DEC 2019 15:36:47

Middle Channel / 1.4MHz / QPSK



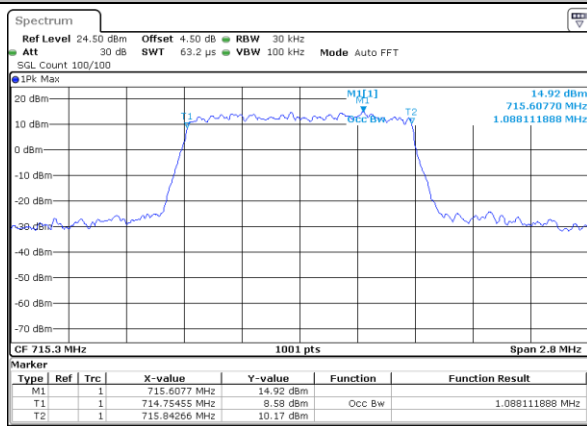
Date: 4 DEC 2019 15:37:07

Middle Channel / 1.4MHz / 16QAM



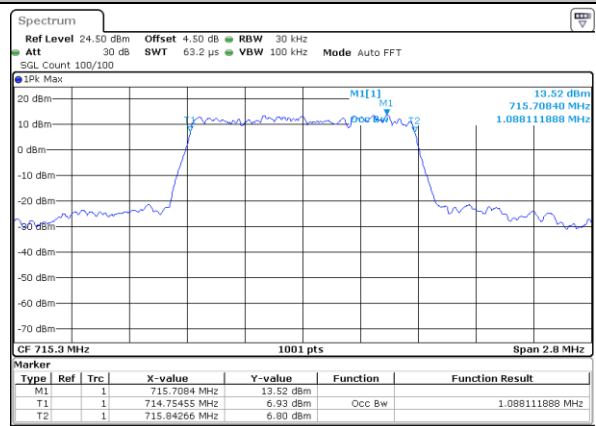
Date: 4 DEC 2019 15:36:57

Highest Channel / 1.4MHz / QPSK



Date: 4 DEC 2019 15:37:17

Highest Channel / 1.4MHz / 16QAM

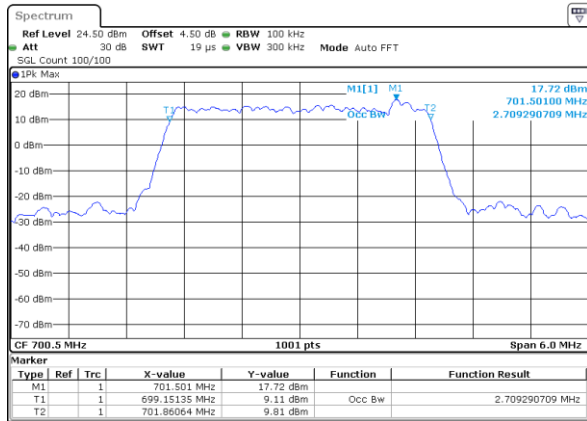


Date: 4 DEC 2019 15:37:27



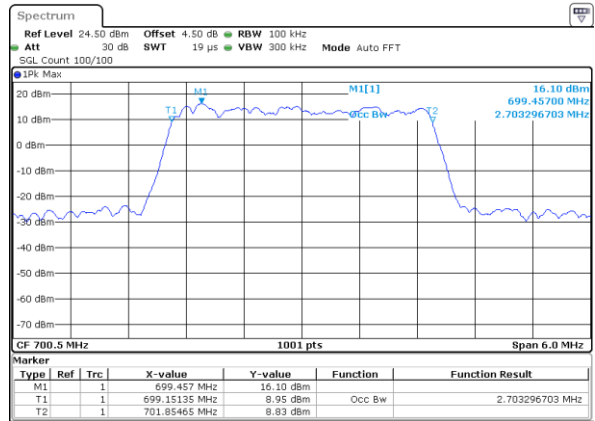
LTE Band 12

Lowest Channel / 3MHz / QPSK



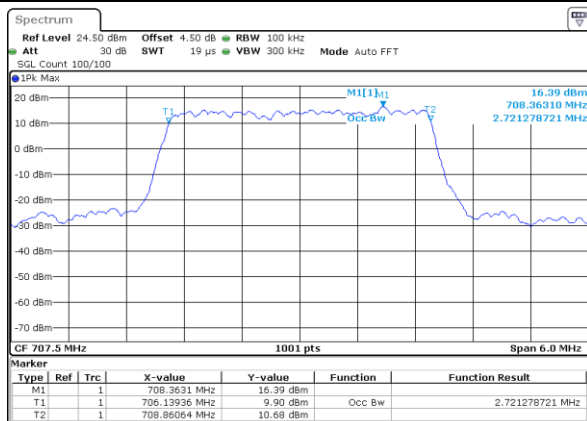
Date: 4 DEC 2019 15:52:07

Lowest Channel / 3MHz / 16QAM



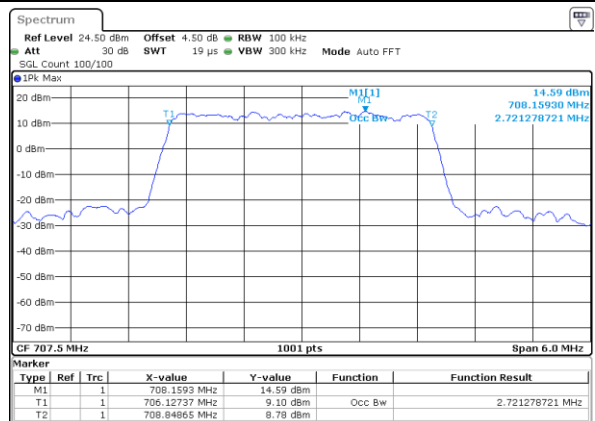
Date: 4 DEC 2019 15:52:17

Middle Channel / 3MHz / QPSK



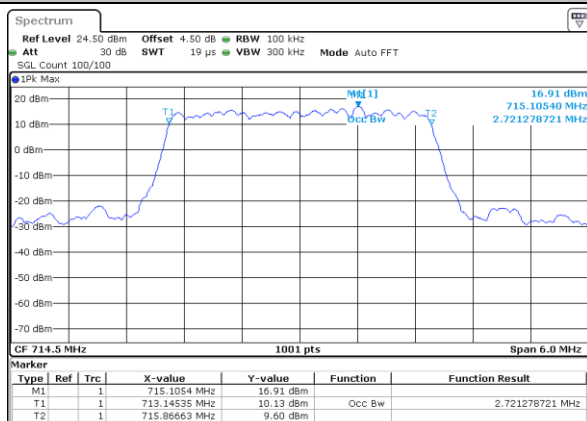
Date: 4 DEC 2019 15:52:37

Middle Channel / 3MHz / 16QAM



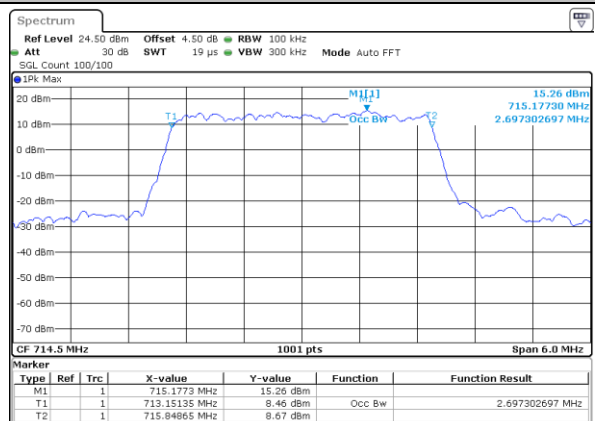
Date: 4 DEC 2019 15:52:27

Highest Channel / 3MHz / QPSK



Date: 4 DEC 2019 15:52:47

Highest Channel / 3MHz / 16QAM

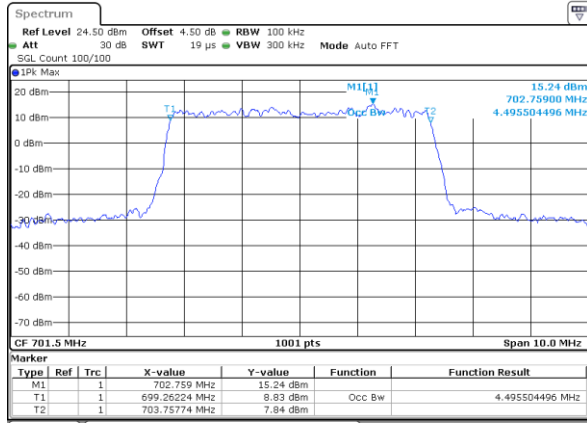


Date: 4 DEC 2019 15:52:57



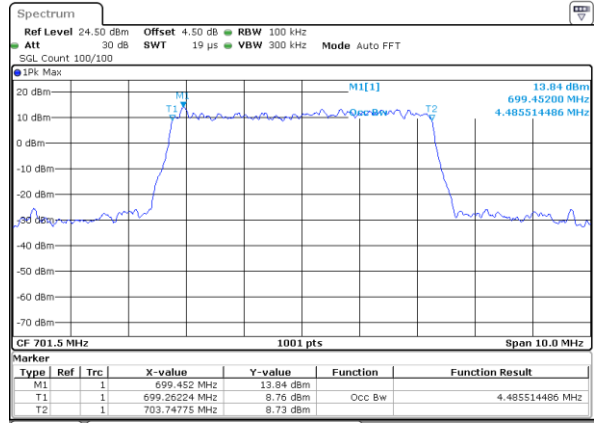
LTE Band 12

Lowest Channel / 5MHz / QPSK



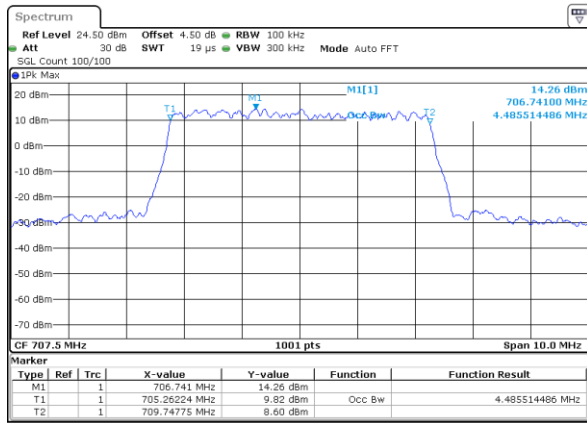
Date: 4 DEC 2019 16:08:31

Lowest Channel / 5MHz / 16QAM



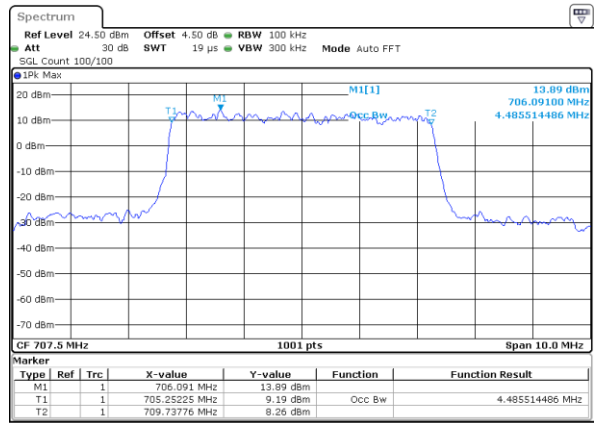
Date: 4 DEC 2019 16:08:41

Middle Channel / 5MHz / QPSK



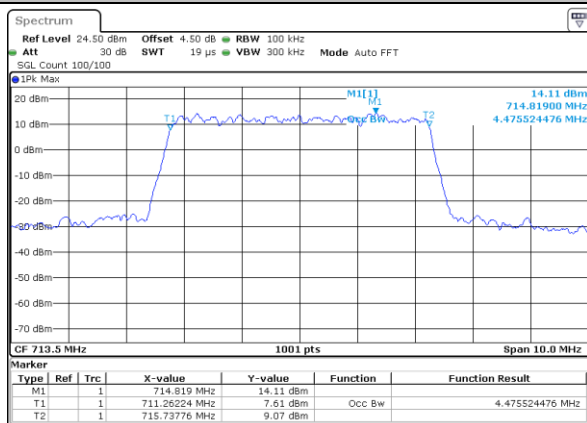
Date: 4 DEC 2019 16:09:01

Middle Channel / 5MHz / 16QAM



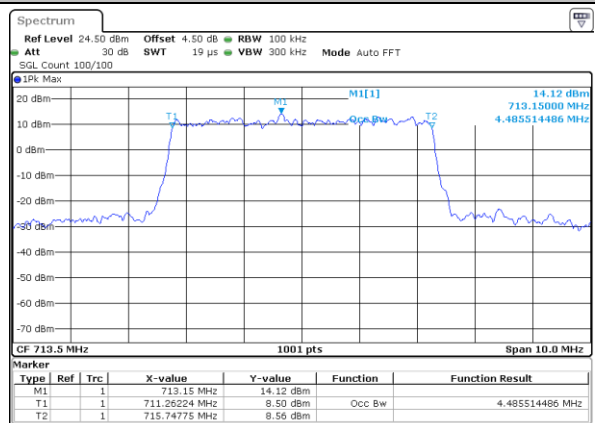
Date: 4 DEC 2019 16:08:51

Highest Channel / 5MHz / QPSK



Date: 4 DEC 2019 16:09:11

Highest Channel / 5MHz / 16QAM

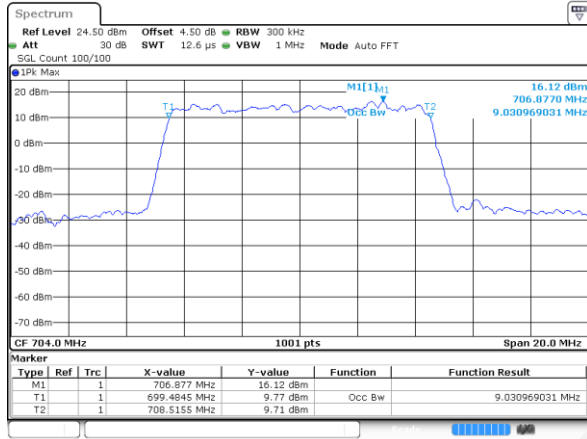


Date: 4 DEC 2019 16:09:21

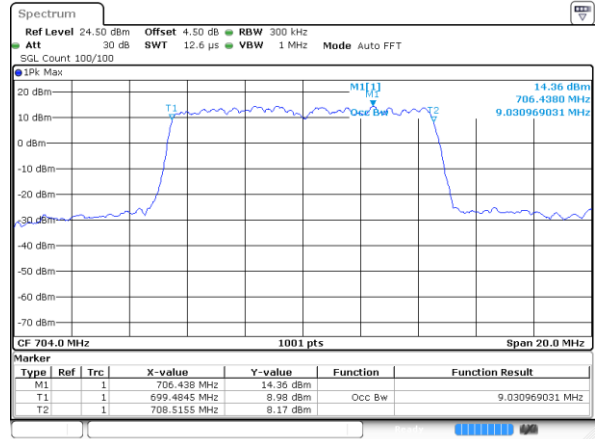


LTE Band 12

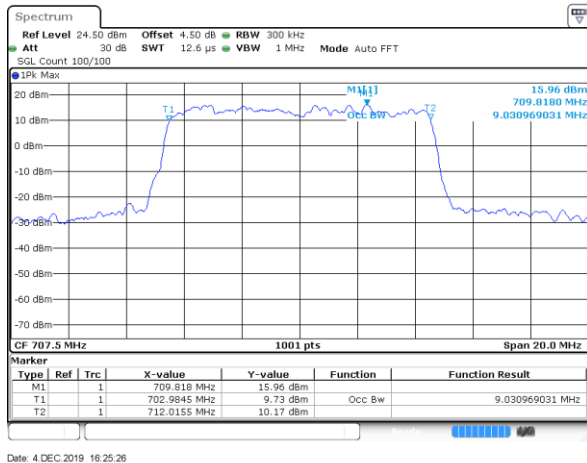
Lowest Channel / 10MHz / QPSK



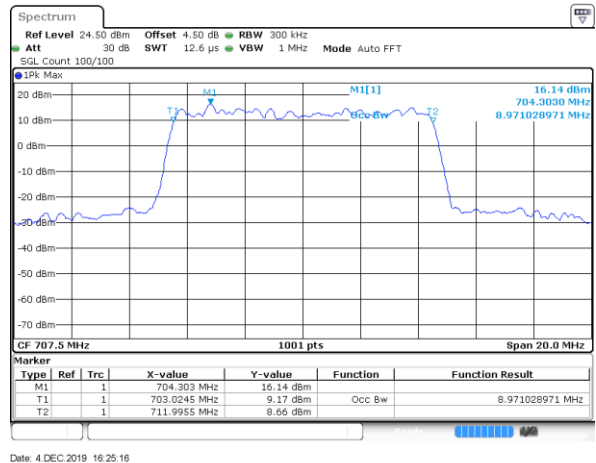
Lowest Channel / 10MHz / 16QAM



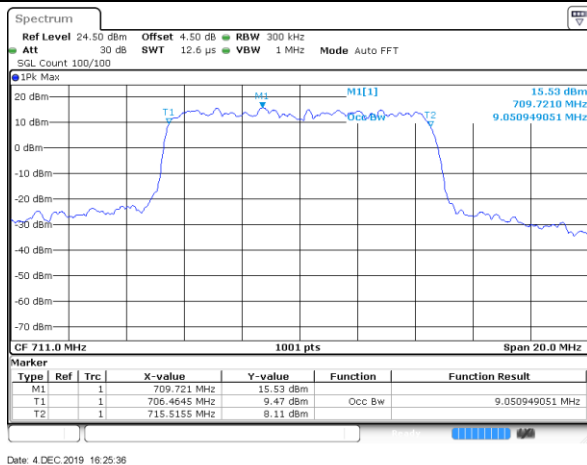
Middle Channel / 10MHz / QPSK



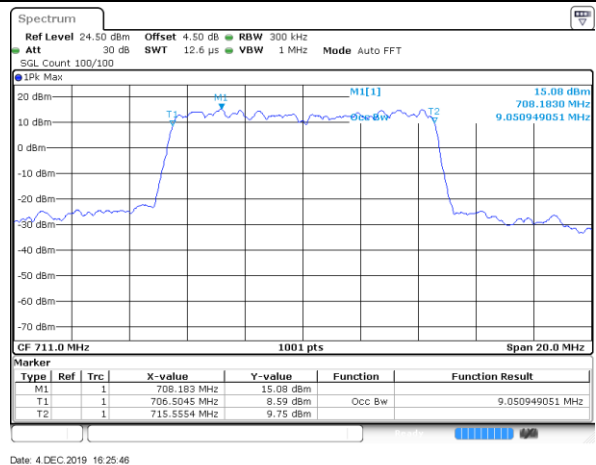
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

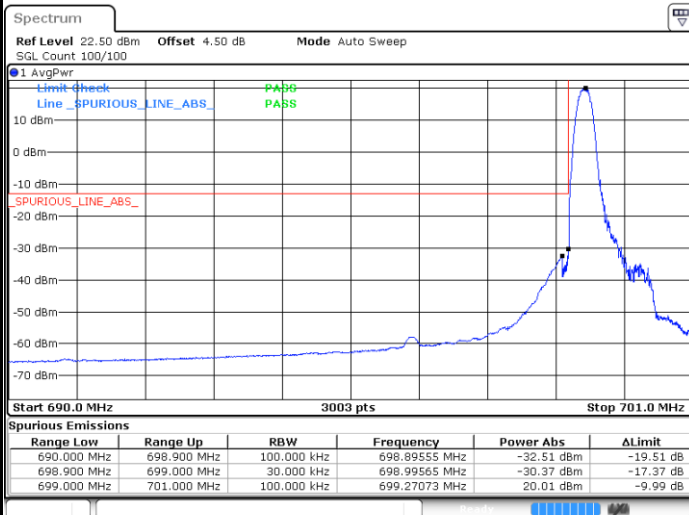




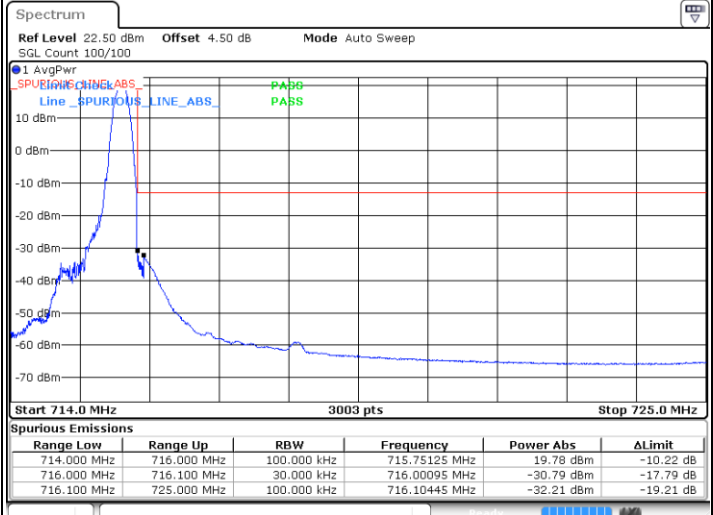
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

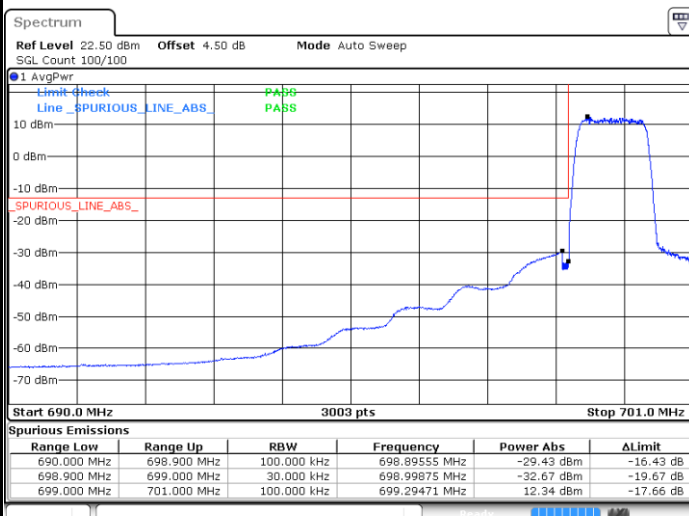
Lowest Band Edge / 1 RB



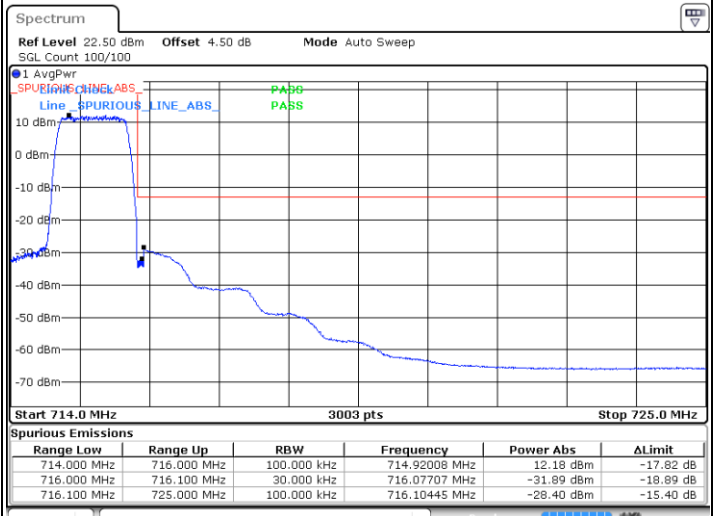
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



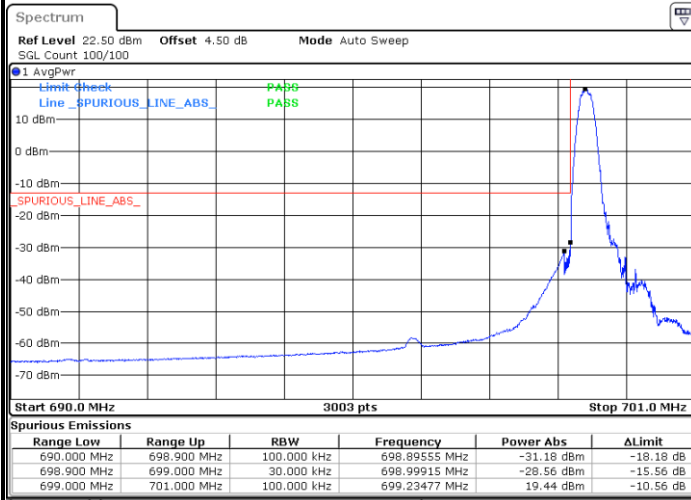
Highest Band Edge / Full RB



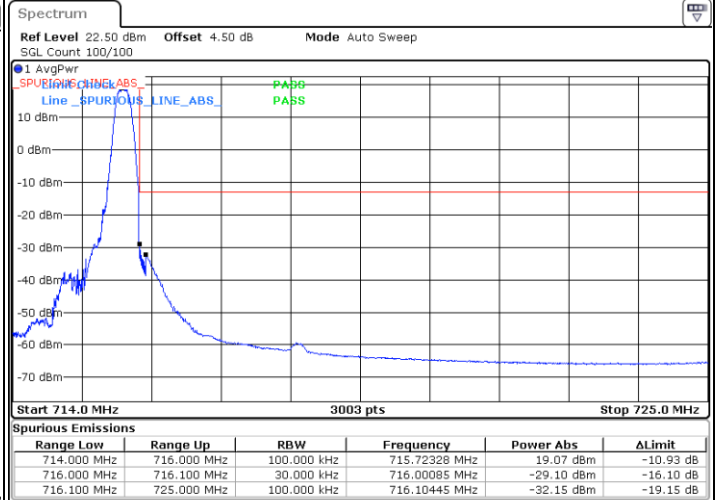


LTE Band 12 / 1.4MHz / 16QAM

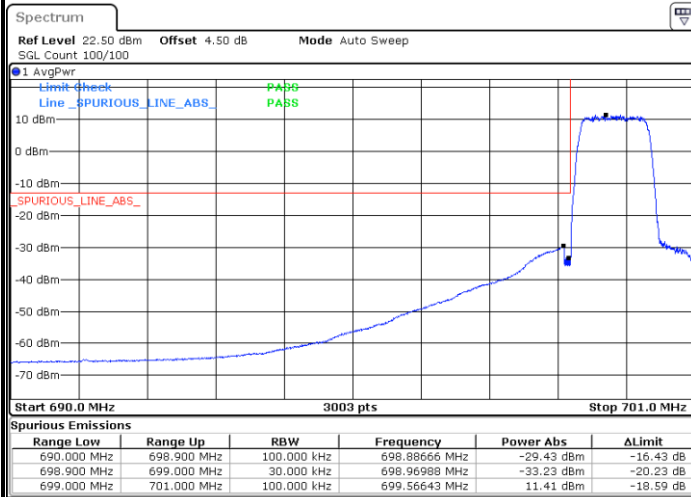
Lowest Band Edge / 1 RB



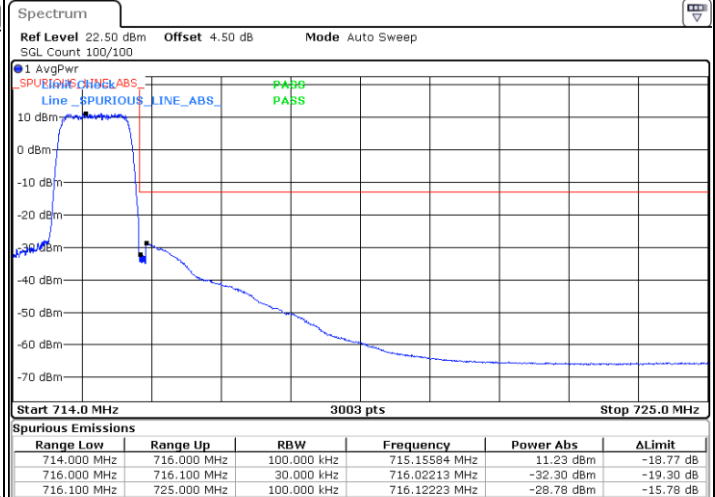
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



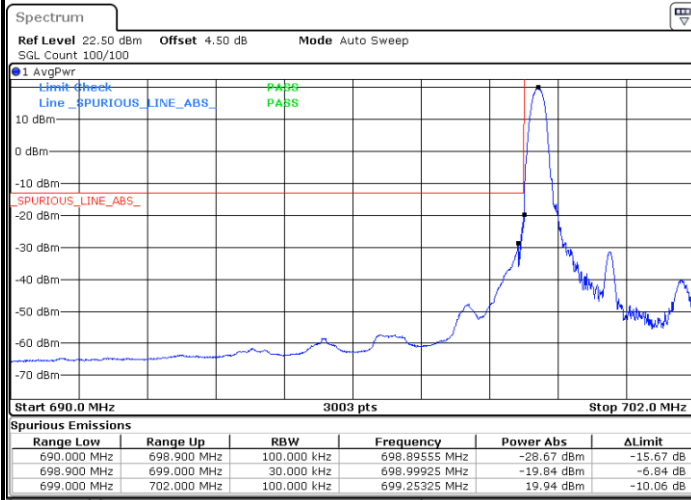
Highest Band Edge / Full RB



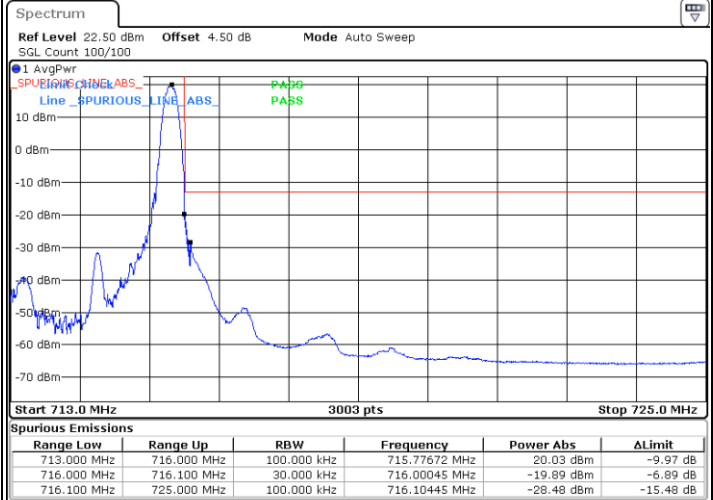


LTE Band 12 / 3MHz / QPSK

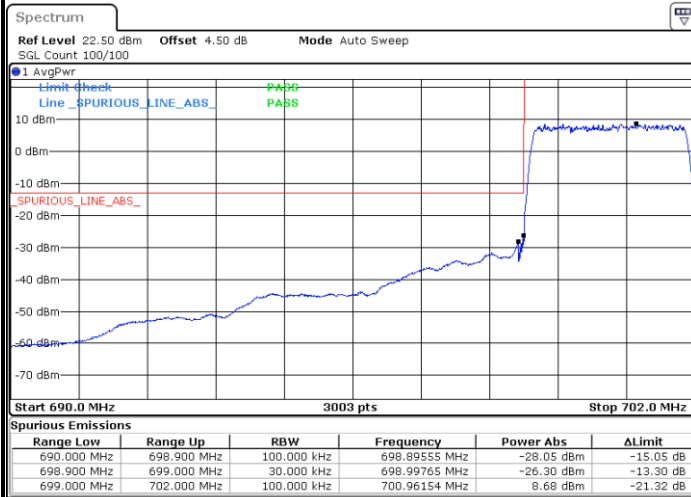
Lowest Band Edge / 1RB



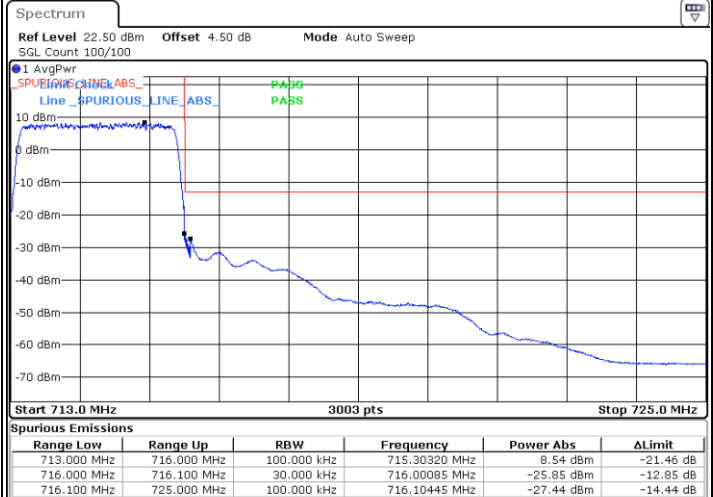
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



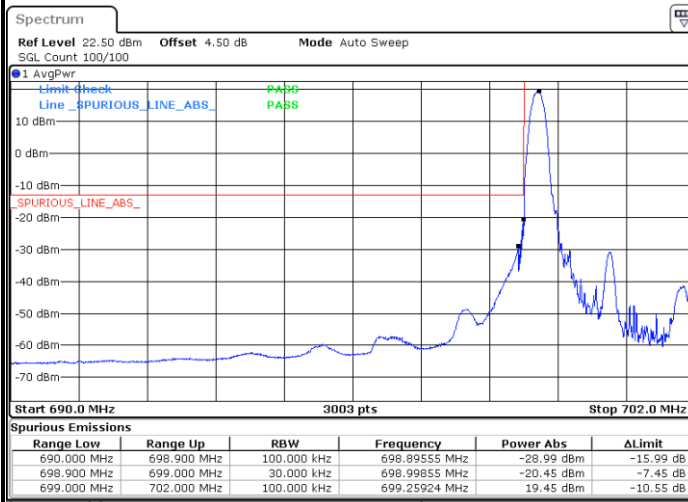
Highest Band Edge / Full RB



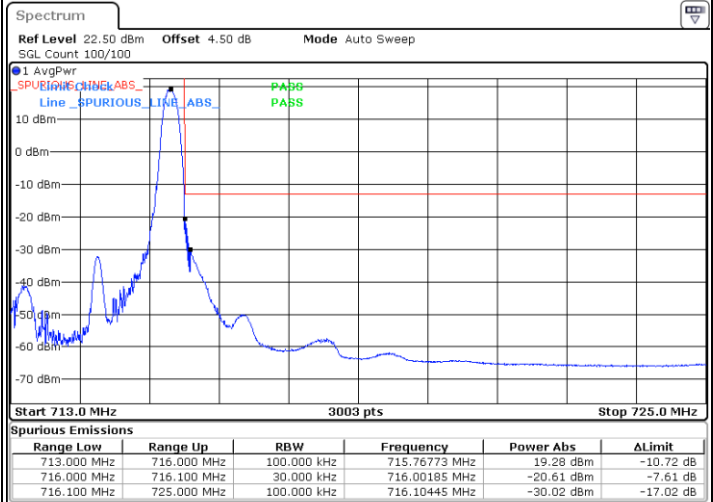


LTE Band 12 / 3MHz / 16QAM

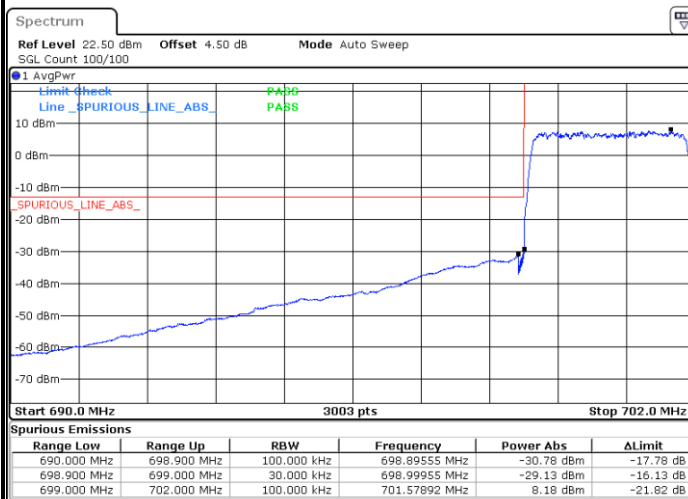
Lowest Band Edge / 1 RB



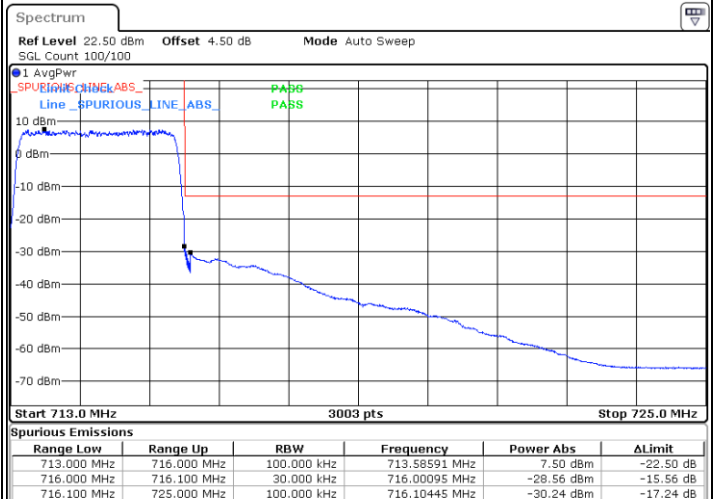
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



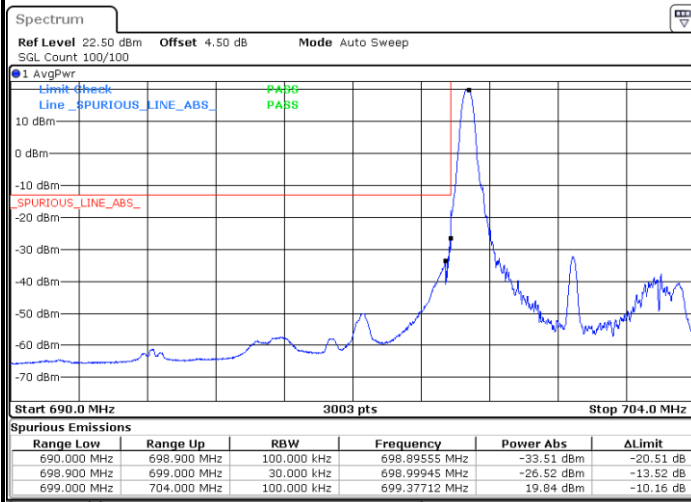
Highest Band Edge / Full RB



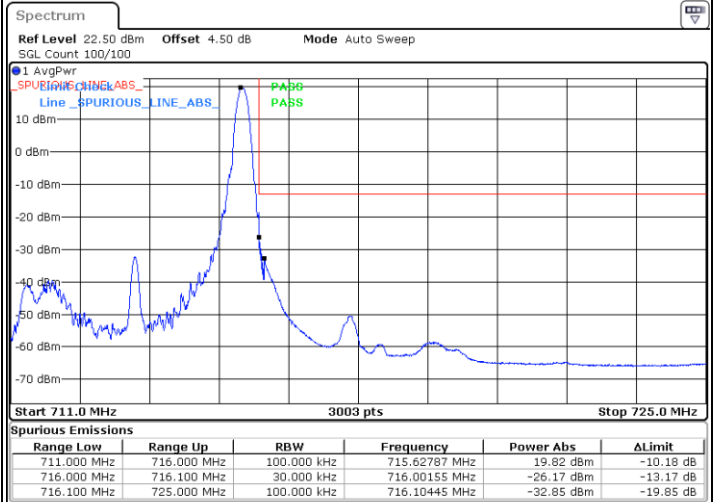


LTE Band 12 / 5MHz / QPSK

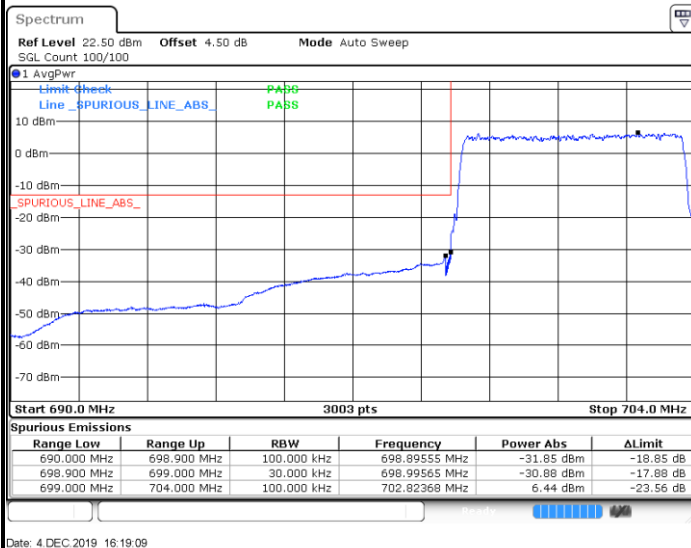
Lowest Band Edge / 1 RB



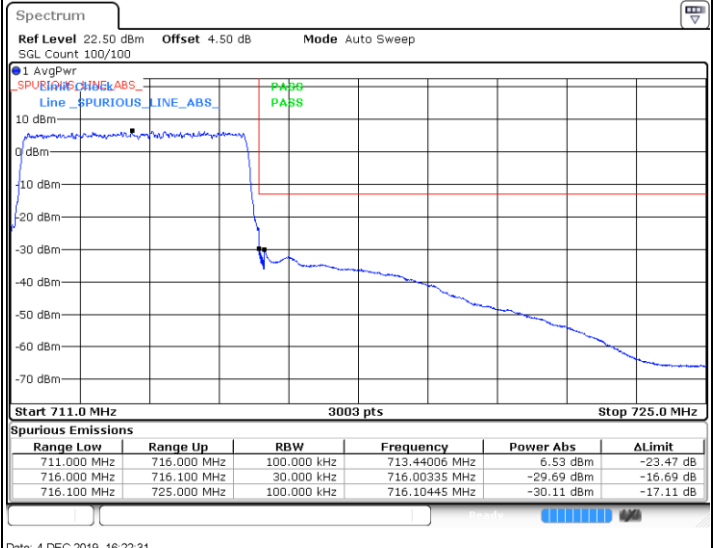
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



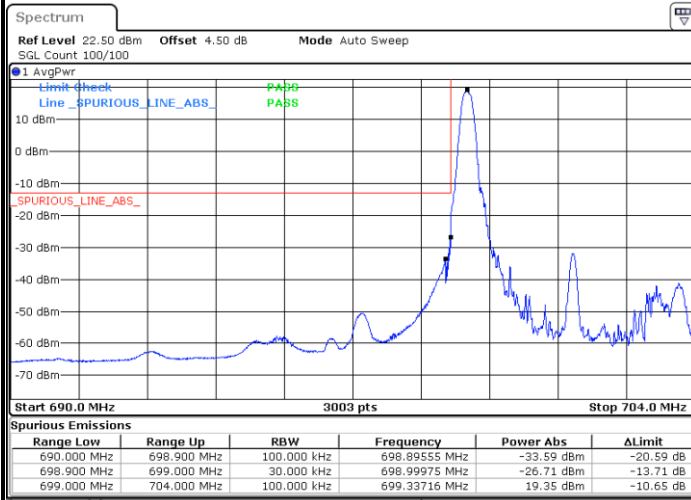
Highest Band Edge / Full RB



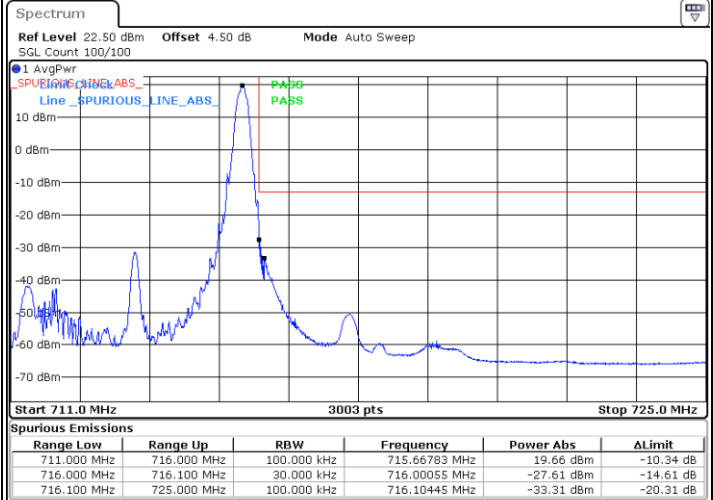


LTE Band 12 / 5MHz / 16QAM

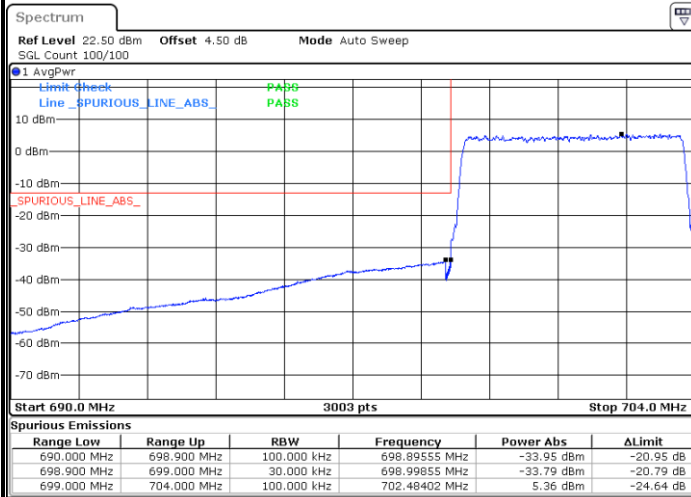
Lowest Band Edge / 1RB



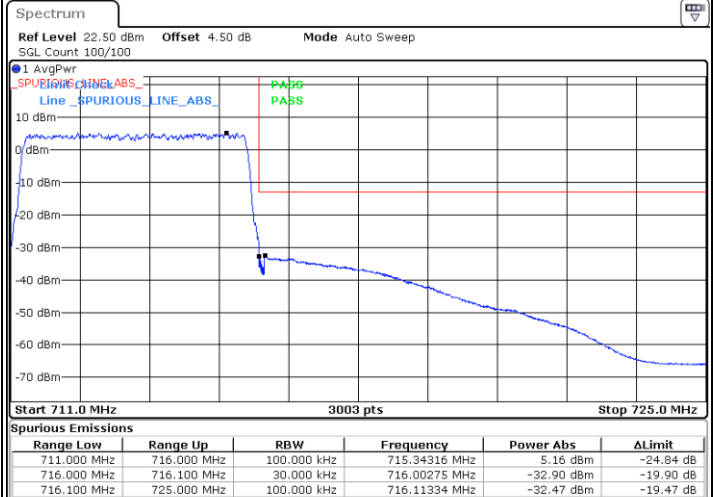
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



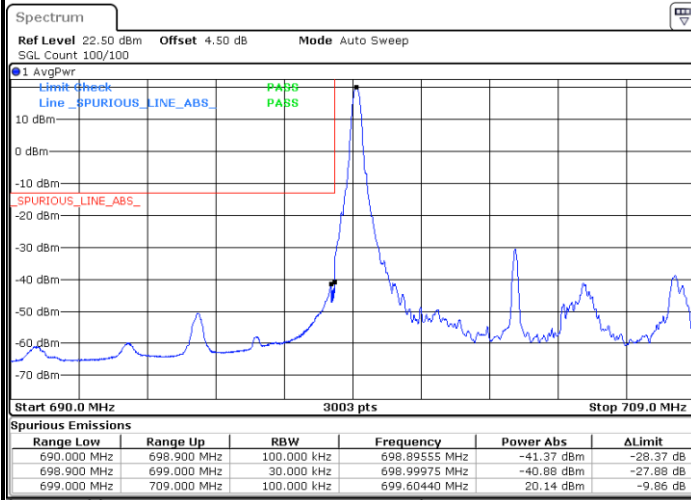
Highest Band Edge / Full RB



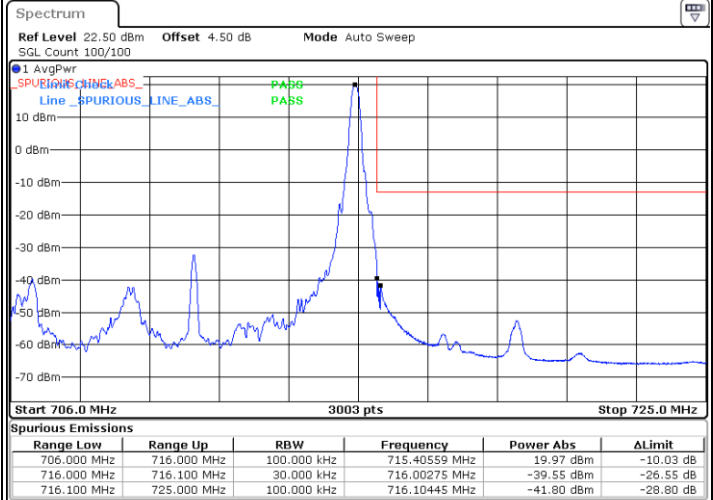


LTE Band 12 / 10MHz / QPSK

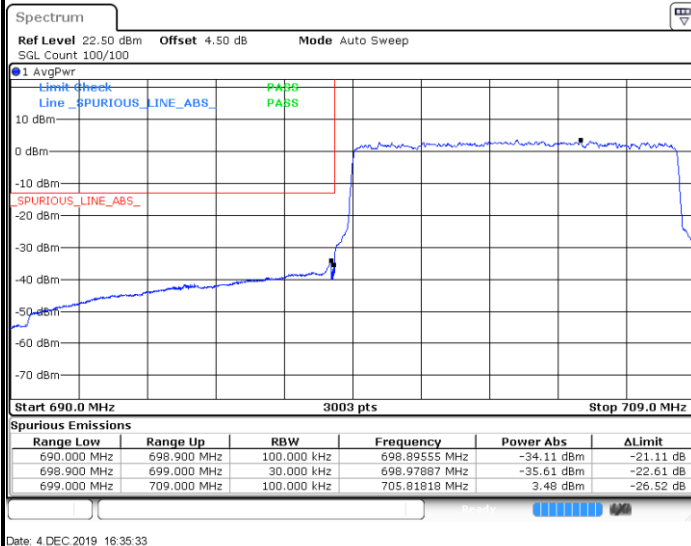
Lowest Band Edge / 1 RB



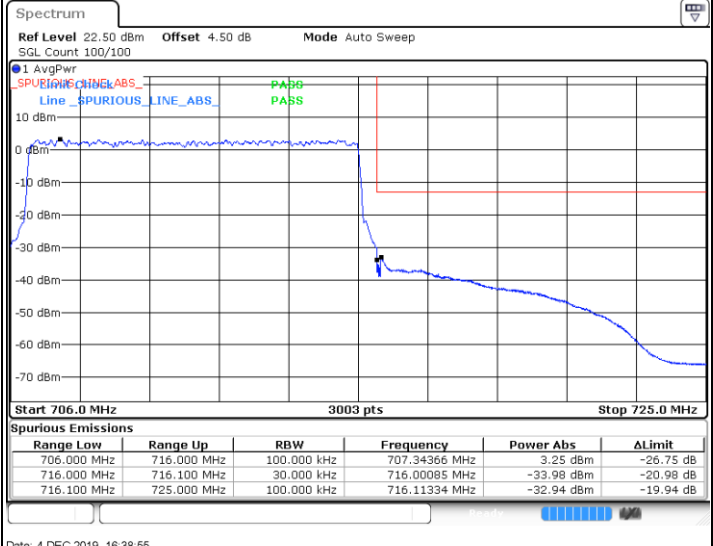
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



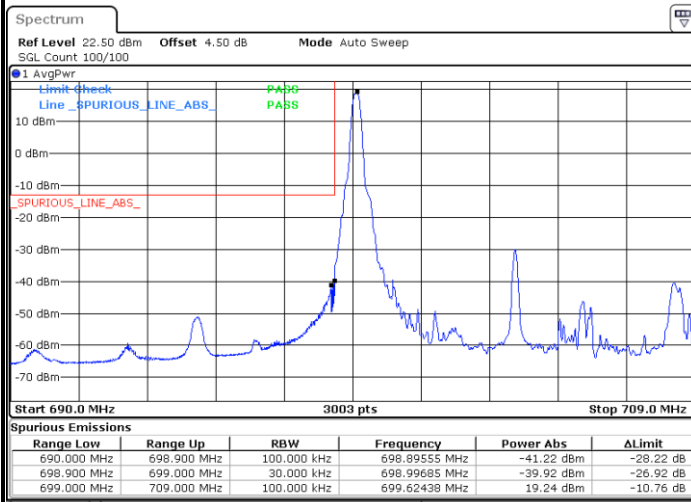
Highest Band Edge / Full RB



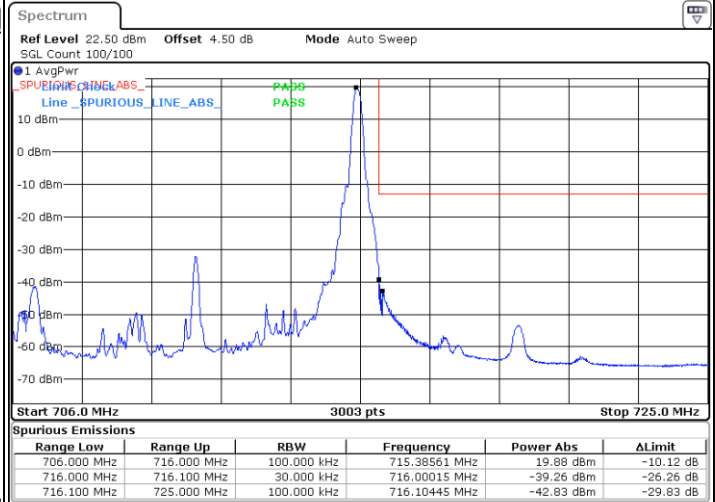


LTE Band 12 / 10MHz / 16QAM

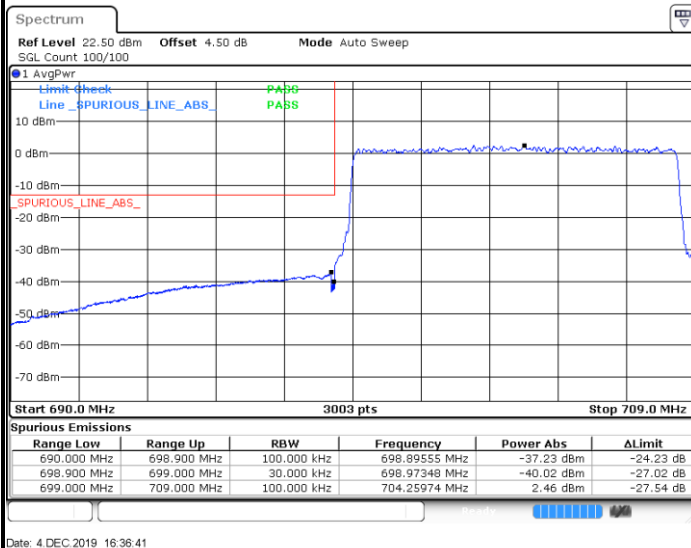
Lowest Band Edge / 1 RB



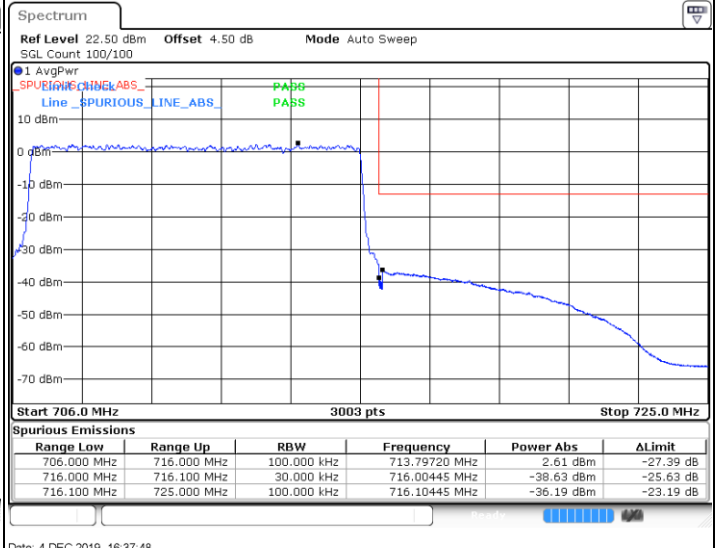
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

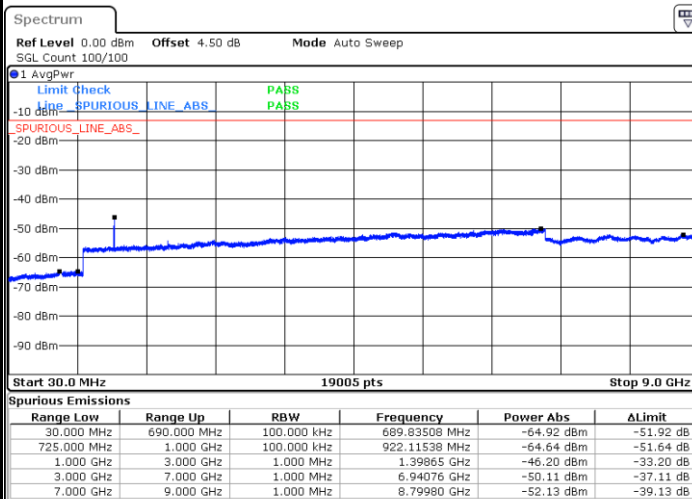




Conducted Spurious Emission

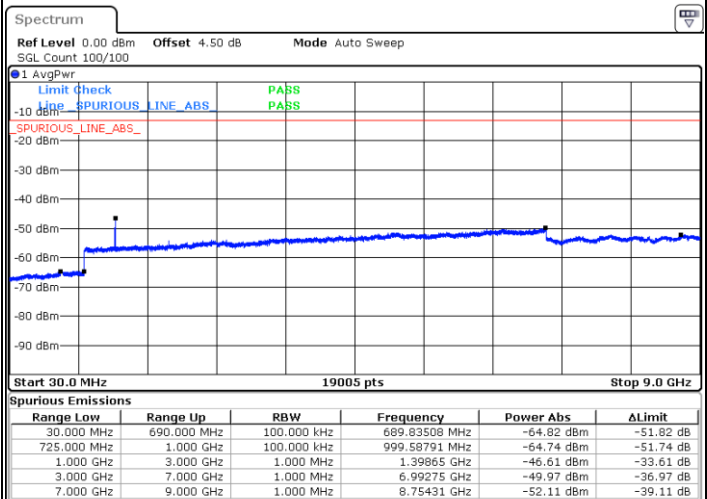
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



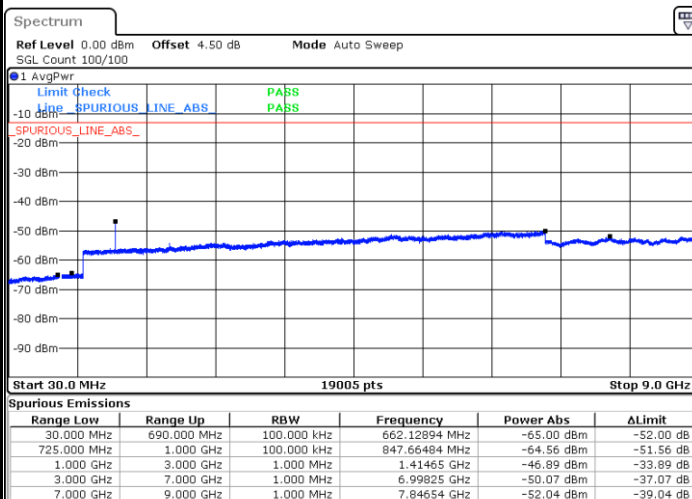
Date: 4 DEC. 2019 15:39:20

Lowest Channel / 16QAM



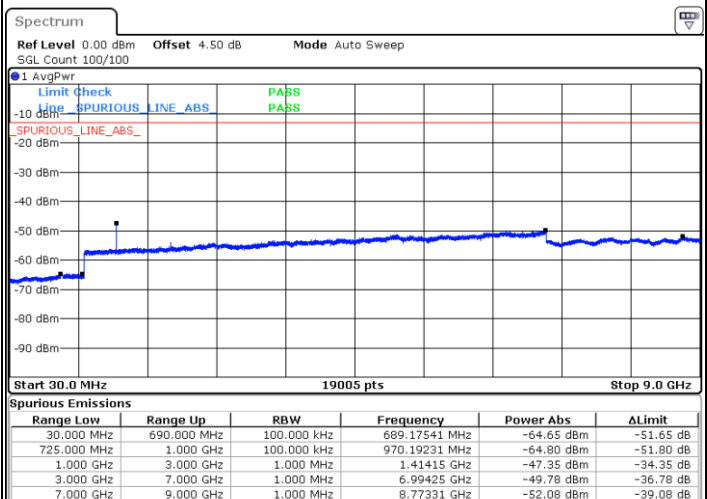
Date: 4 DEC. 2019 15:40:15

Middle Channel / QPSK



Date: 4 DEC. 2019 15:35:44

Middle Channel / 16QAM

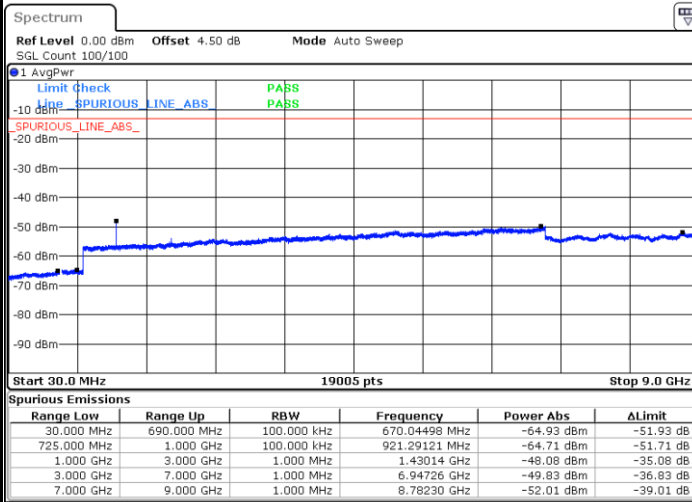


Date: 4 DEC. 2019 15:41:09



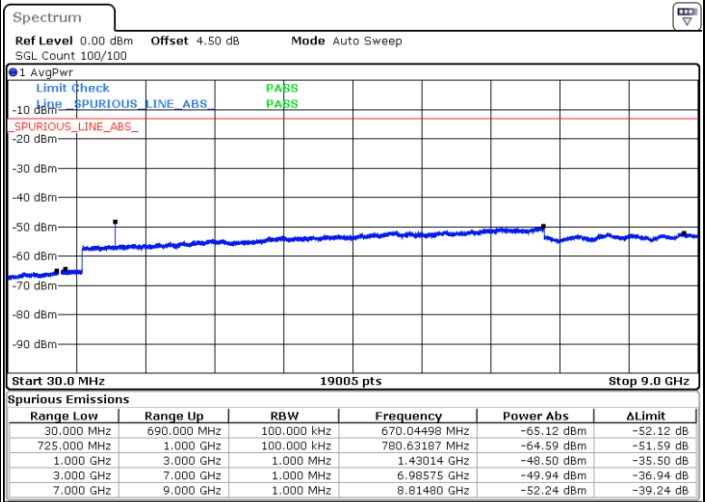
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 4 DEC. 2019 15:42:03

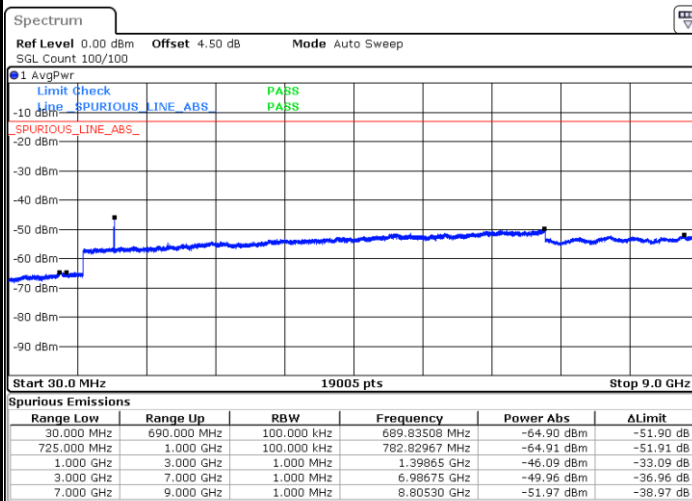
Highest Channel / 16QAM



Date: 4 DEC. 2019 15:42:57

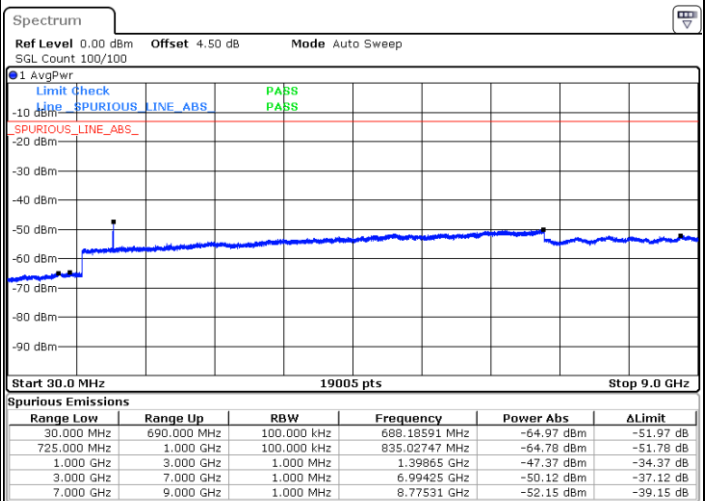
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 4 DEC. 2019 15:54:51

Lowest Channel / 16QAM



Date: 4 DEC. 2019 15:55:45