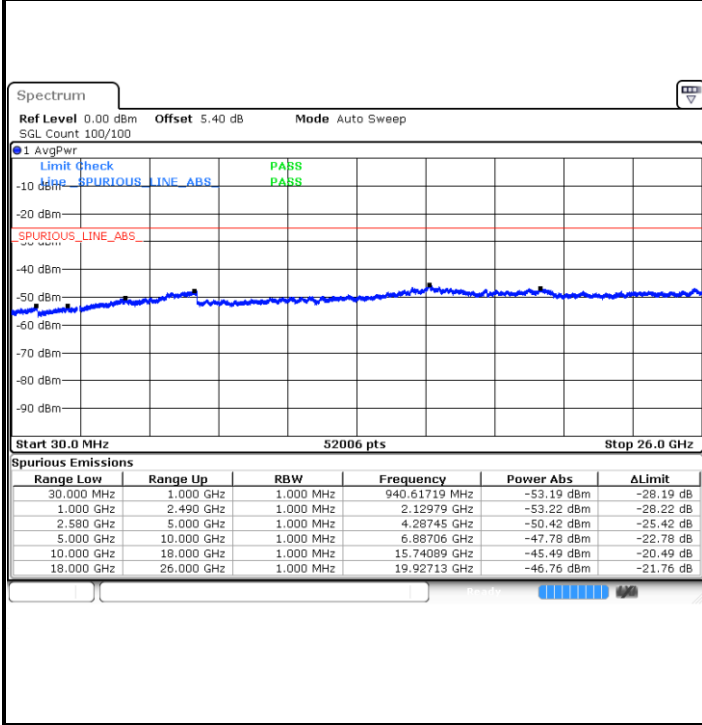


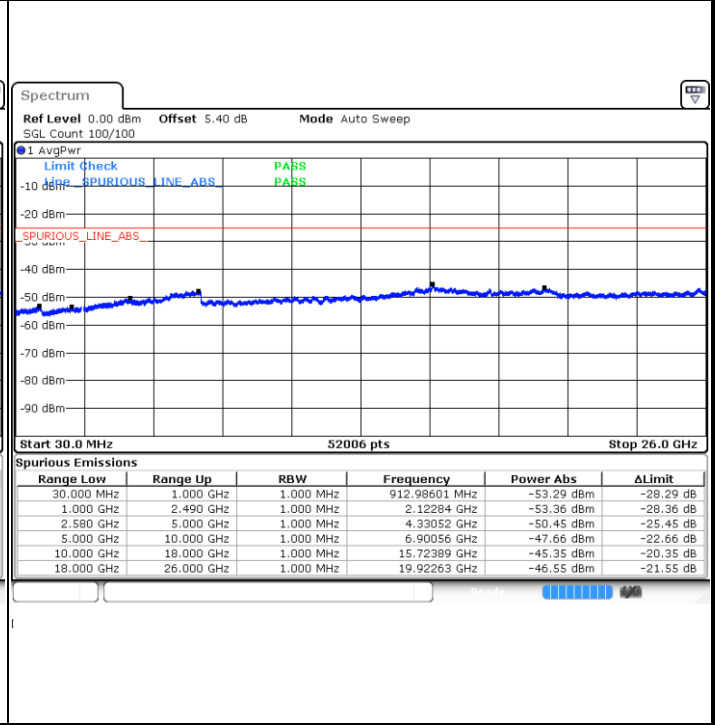


LTE Band 7 / 5MHz

Highest Channel / QPSK

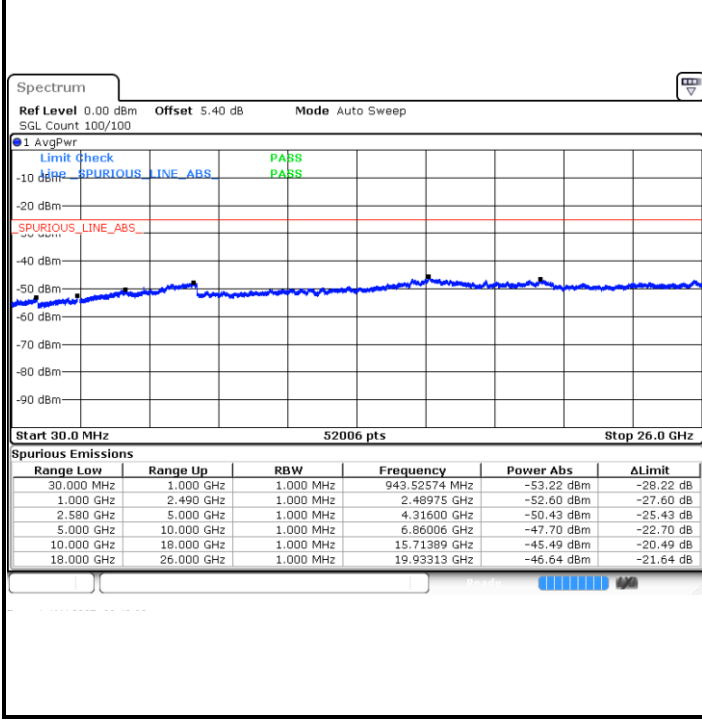


Highest Channel / 16QAM

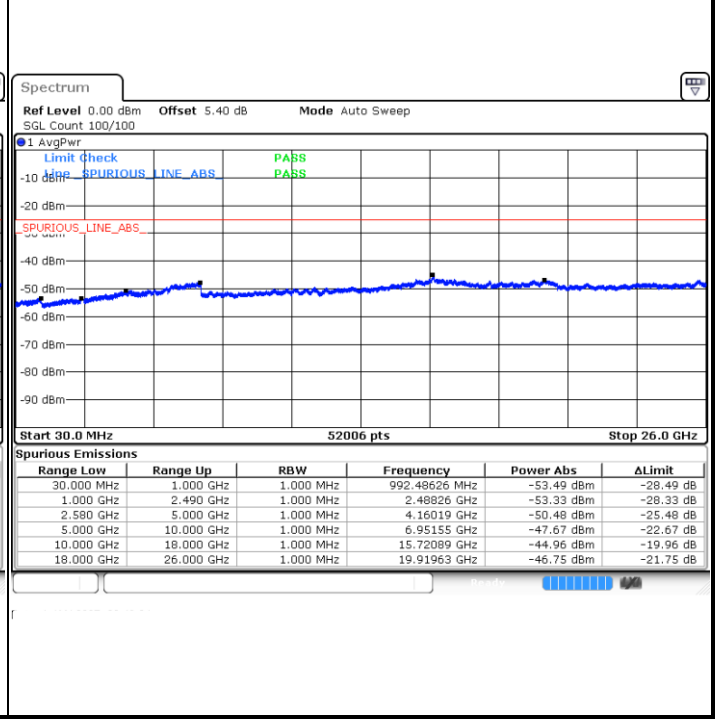


LTE Band 7 / 10MHz

Lowest Channel / QPSK



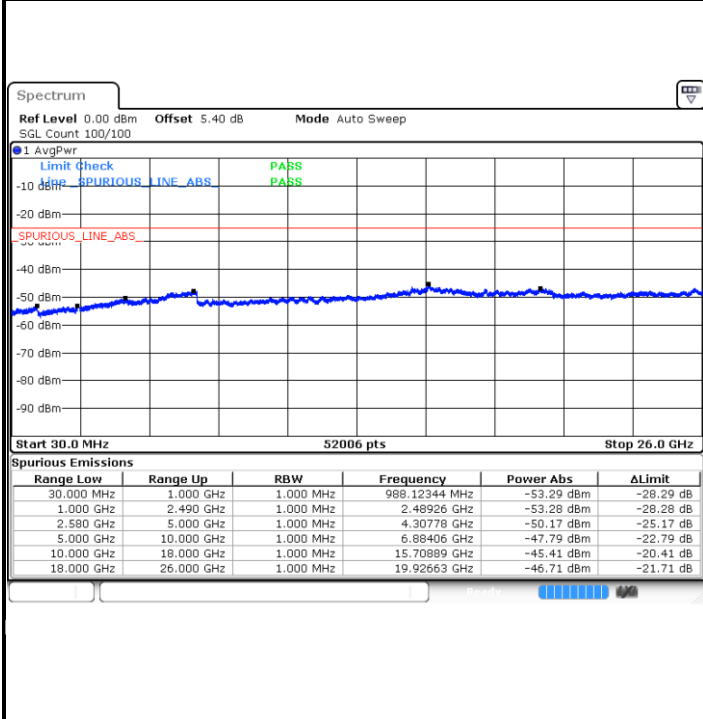
Lowest Channel / 16QAM



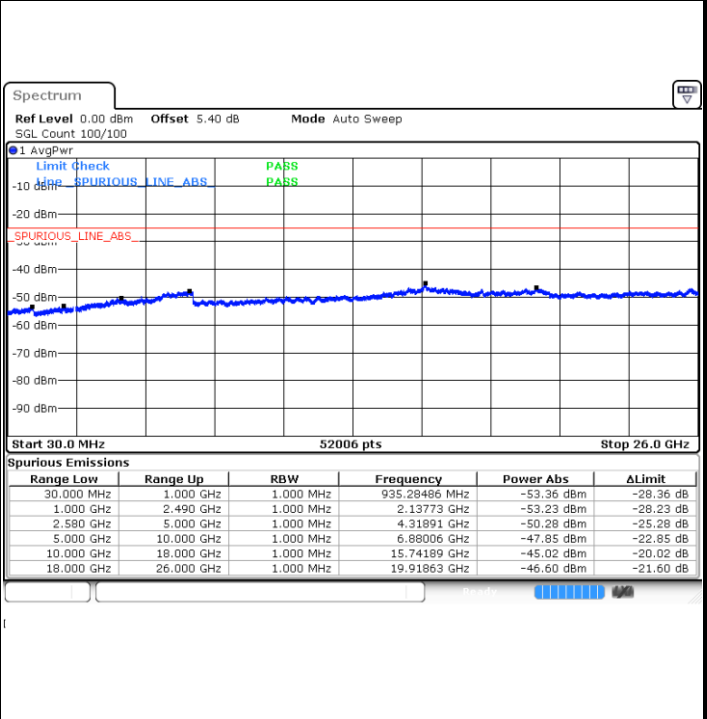


LTE Band 7 / 10MHz

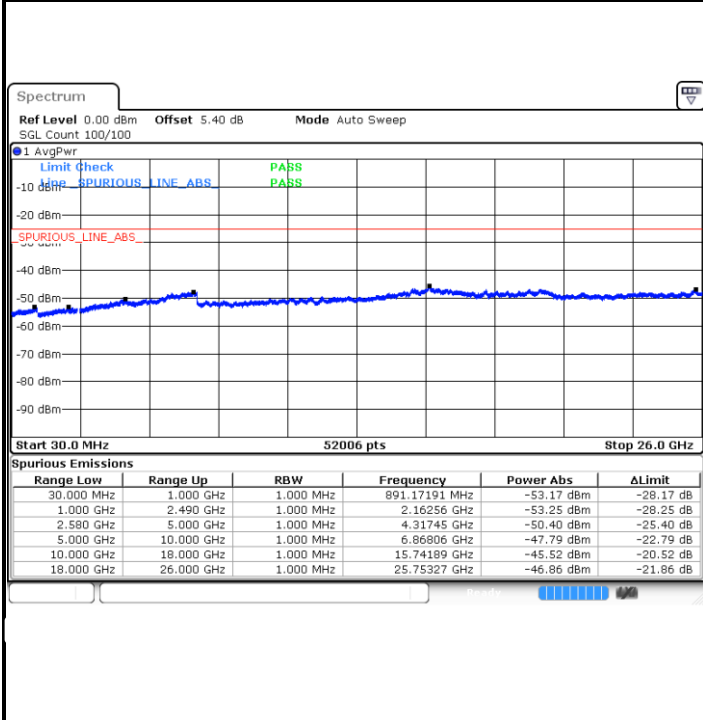
Middle Channel / QPSK



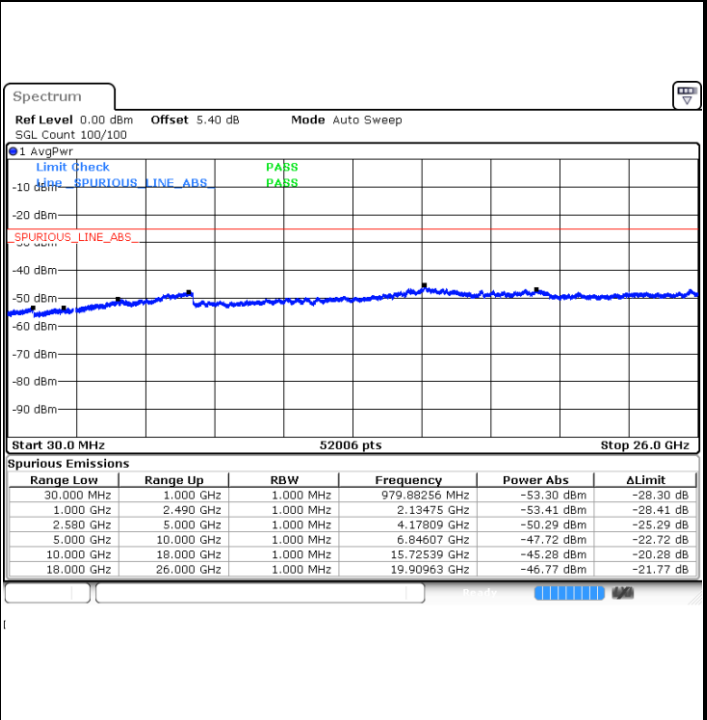
Middle Channel / 16QAM



Highest Channel / QPSK



Highest Channel / 16QAM

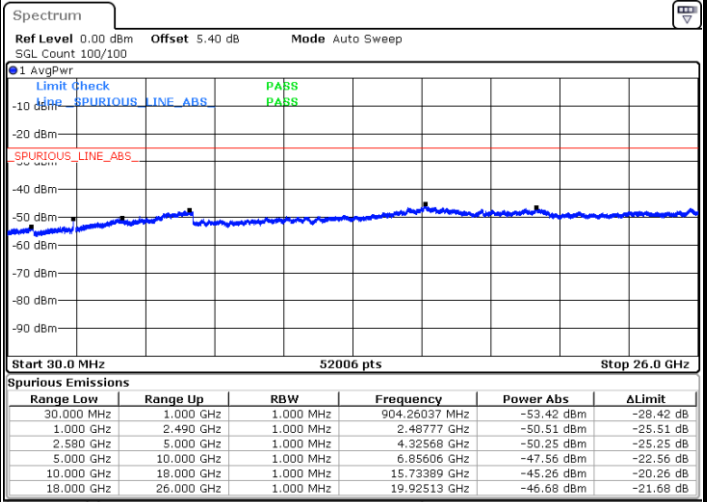
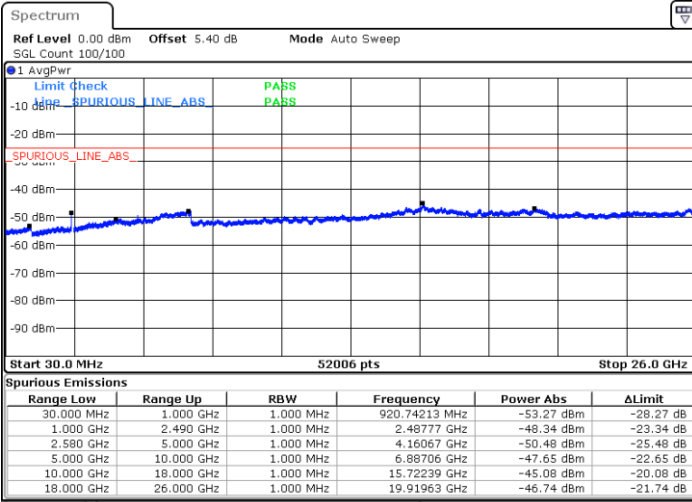




LTE Band 7 / 15MHz

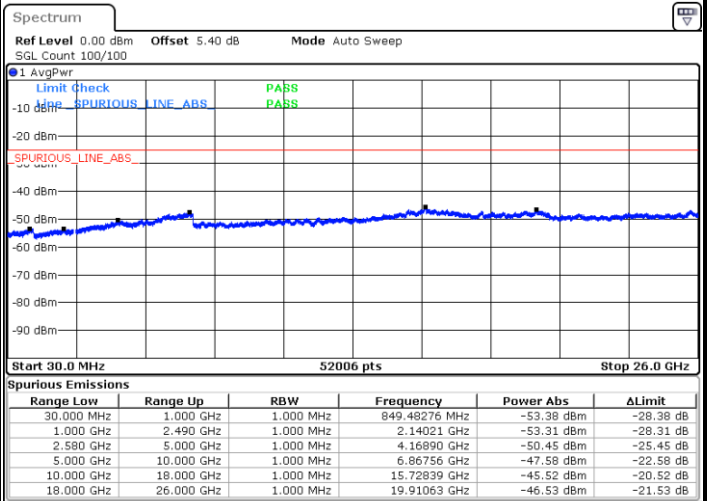
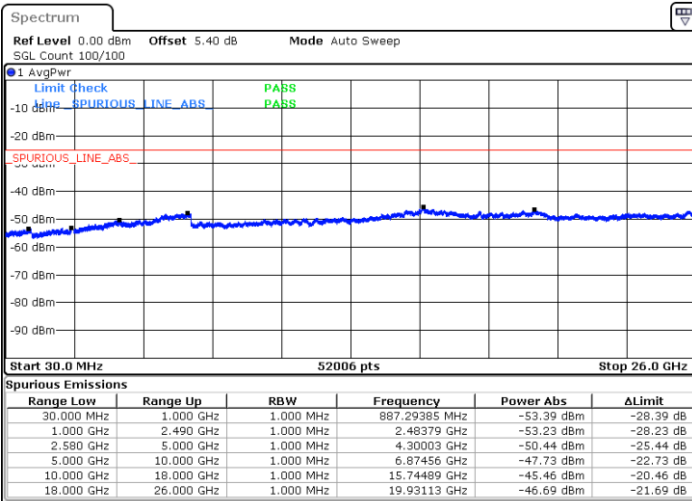
Lowest Channel / QPSK

Lowest Channel / 16QAM



Middle Channel / QPSK

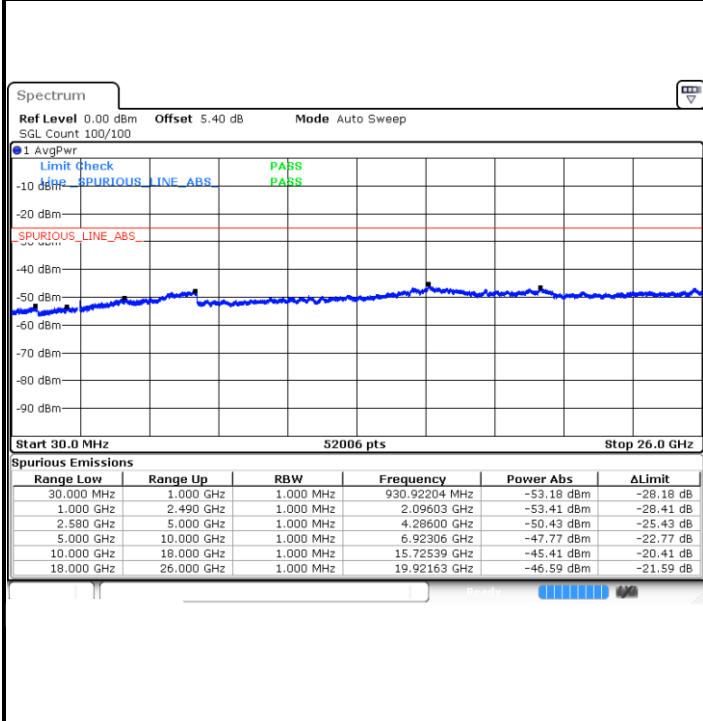
Middle Channel / 16QAM



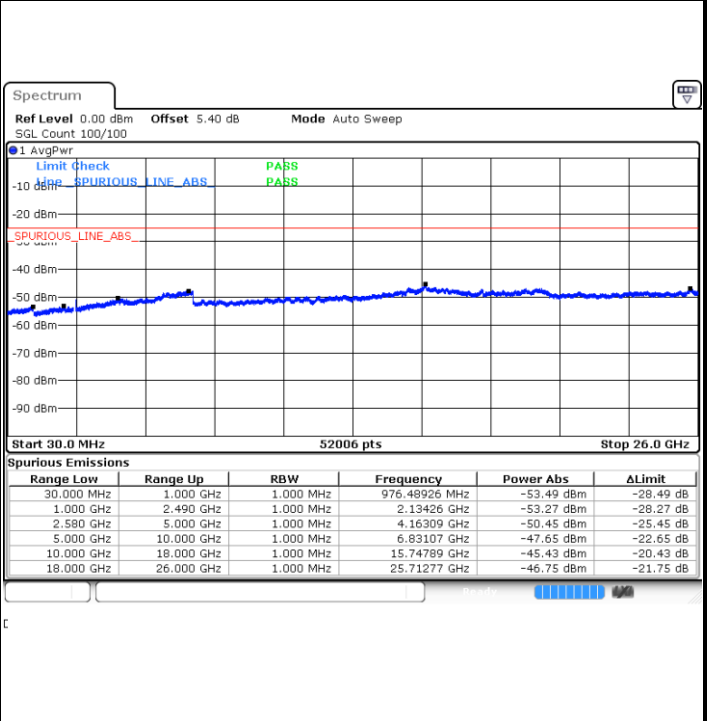


LTE Band7 / 15MHz

Highest Channel / QPSK

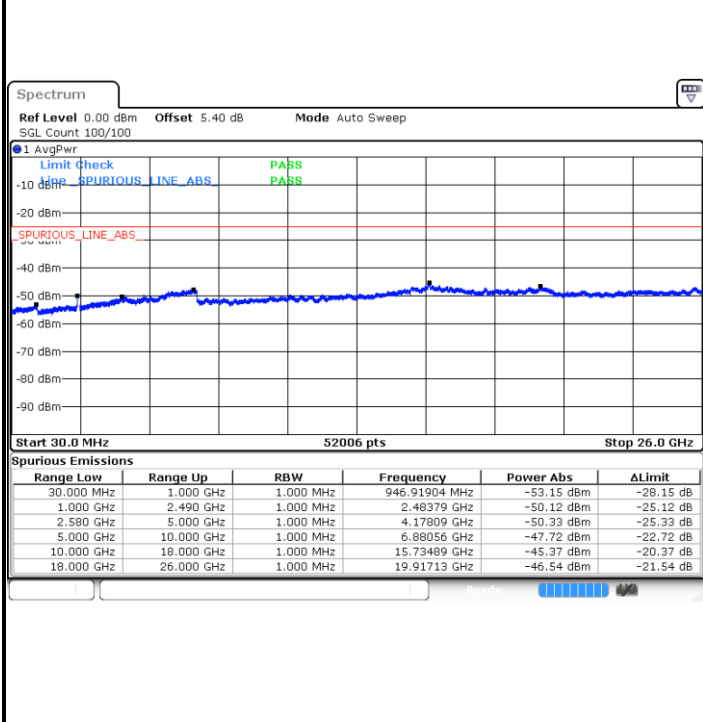


Highest Channel / 16QAM

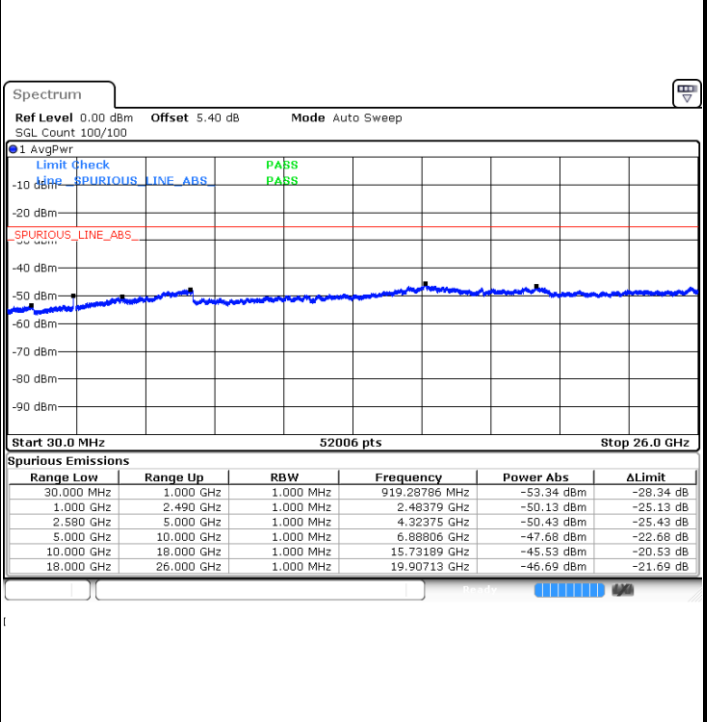


LTE Band 7 / 20MHz

Lowest Channel / QPSK



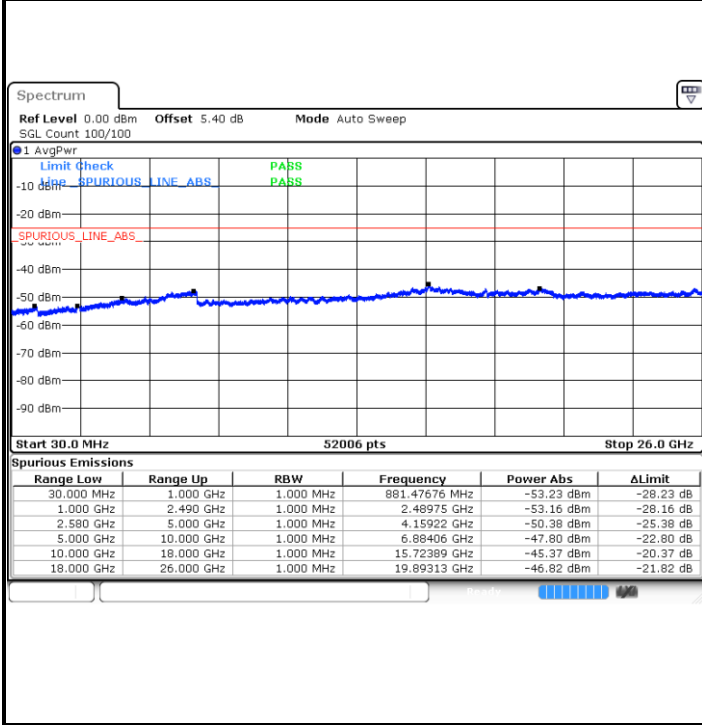
Lowest Channel / 16QAM



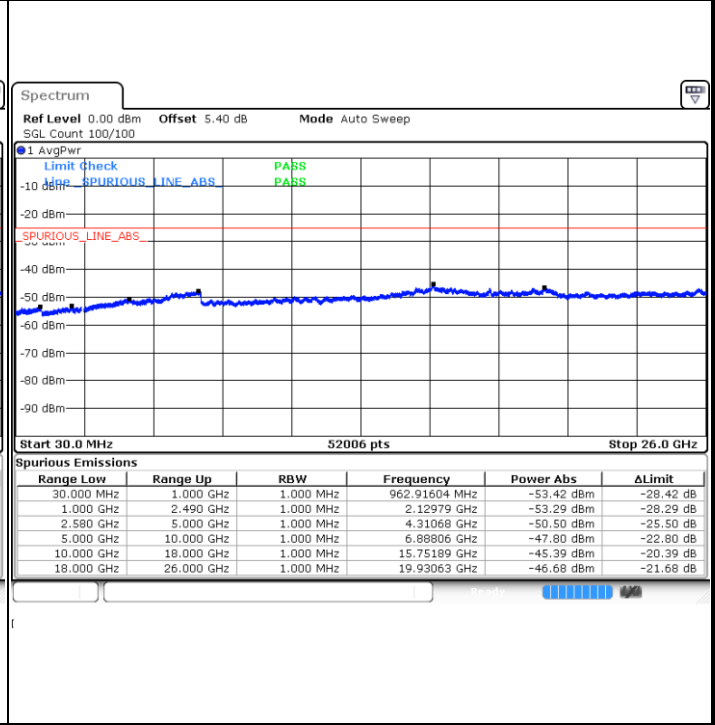


LTE Band 7 / 20MHz

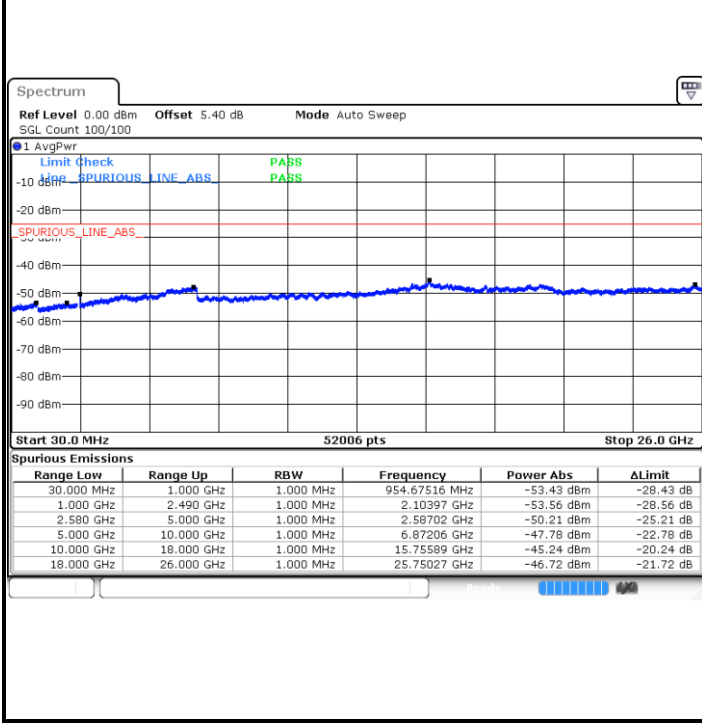
Middle Channel / QPSK



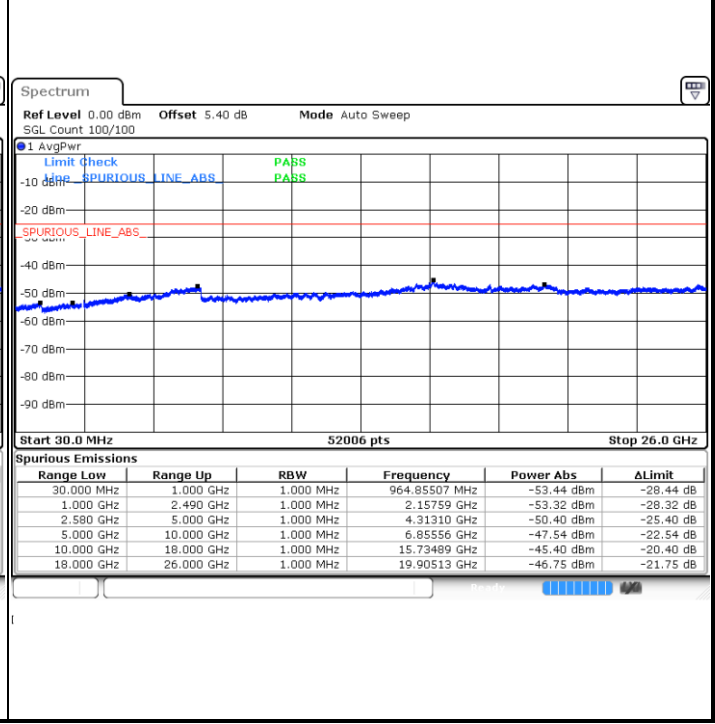
Middle Channel / 16QAM



Highest Channel / QPSK



Highest Channel / 16QAM





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	0.0028	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0001	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Note:

1. Normal Voltage =7.2 V. ; Battery End Point (BEP) =7 V. ; Maximum Voltage =8.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

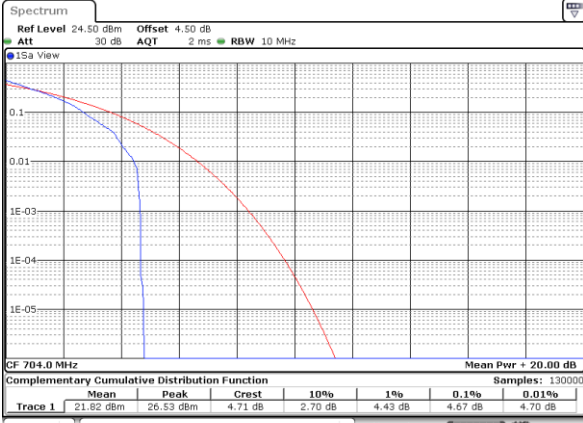
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.67	5.59	5.83	6.49	PASS
Middle CH	4.55	5.54	5.94	6.38	
Highest CH	4.84	5.30	5.62	6.23	



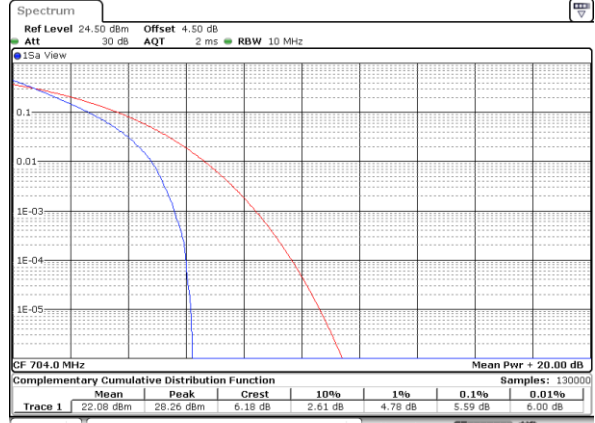
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



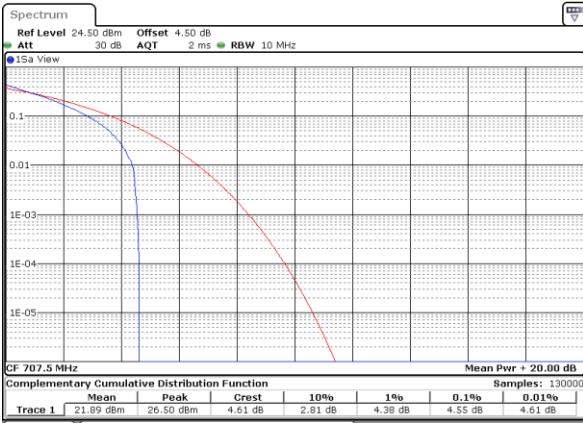
Date: 18 JAN 2020 07:03:27

Lowest Channel / Full RB



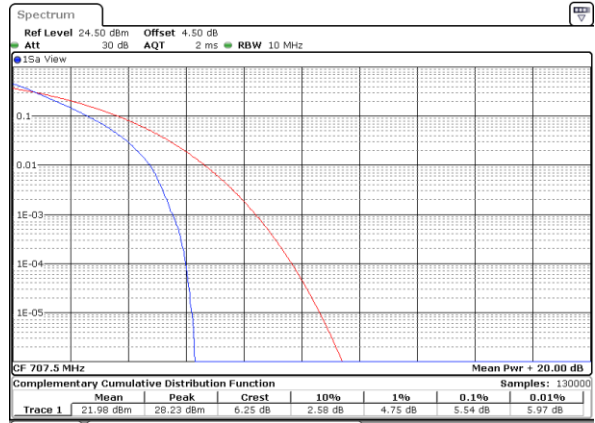
Date: 18 JAN 2020 07:03:36

Middle Channel / 1RB



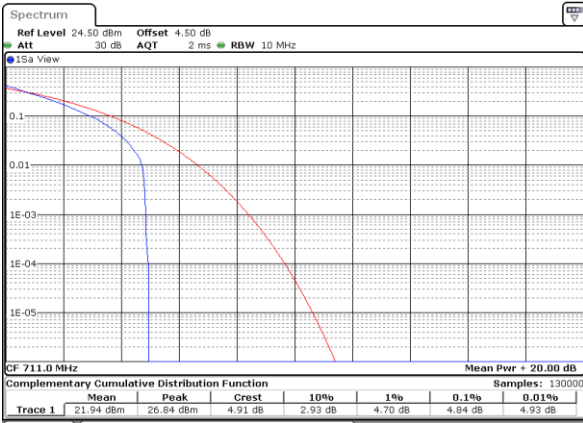
Date: 18 JAN 2020 07:04:10

Middle Channel / Full RB



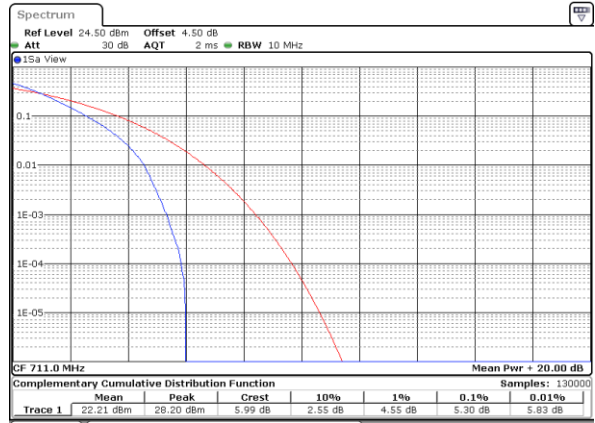
Date: 18 JAN 2020 07:04:01

Highest Channel / 1RB



Date: 18 JAN 2020 07:04:36

Highest Channel / Full RB

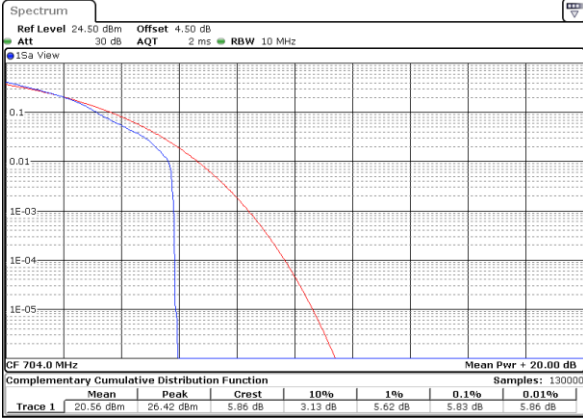


Date: 18 JAN 2020 07:04:45



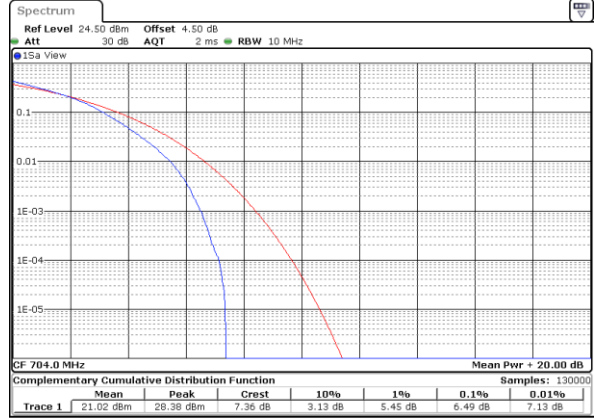
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



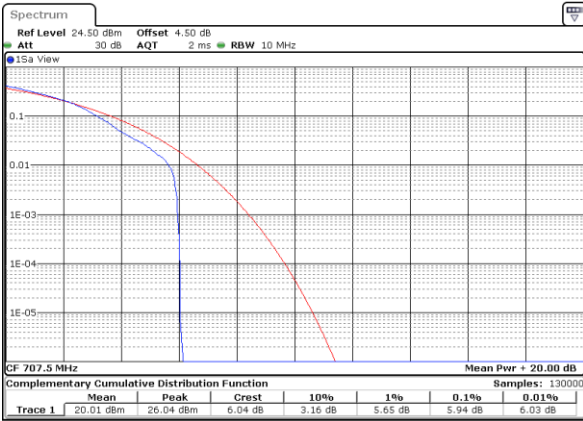
Date: 18 JAN 2020 07:03:17

Lowest Channel / Full RB



Date: 18 JAN 2020 07:03:45

Middle Channel / 1RB



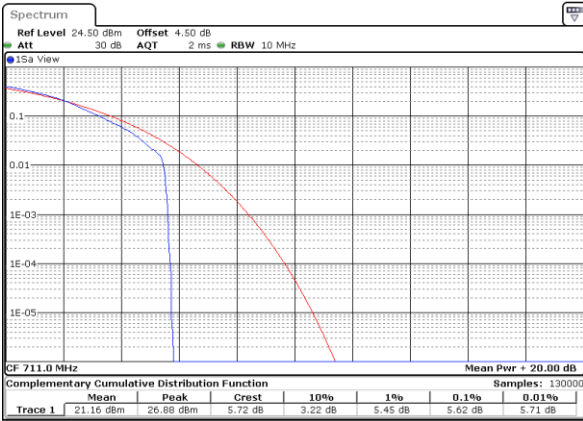
Date: 18 JAN 2020 07:04:19

Middle Channel / Full RB



Date: 18 JAN 2020 07:03:53

Highest Channel / 1RB



Date: 18 JAN 2020 07:04:27

Highest Channel / Full RB



Date: 18 JAN 2020 07:04:54



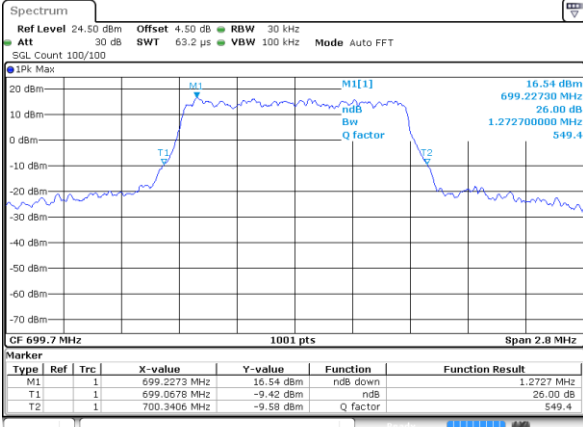
26dB Bandwidth

Mode	LTE Band 12 : 26dB BW(MHz)							
	1.4MHz		3MHz		5MHz		10MHz	
BW								
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.273	1.278	3.009	3.003	4.965	4.905	9.910	9.770
Middle CH	1.270	1.312	3.033	3.003	4.955	4.935	10.010	9.970
Highest CH	1.306	1.264	3.003	2.961	4.905	4.915	9.790	9.650



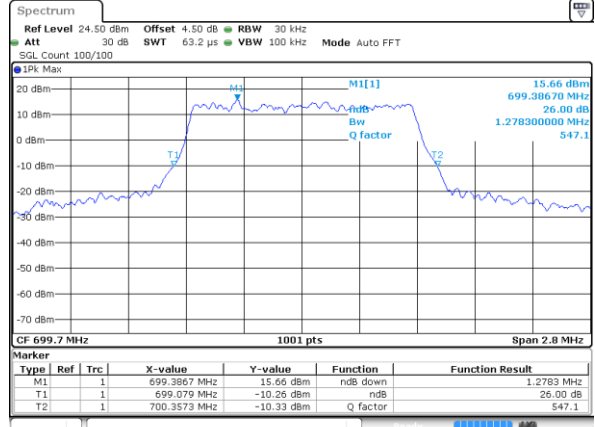
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



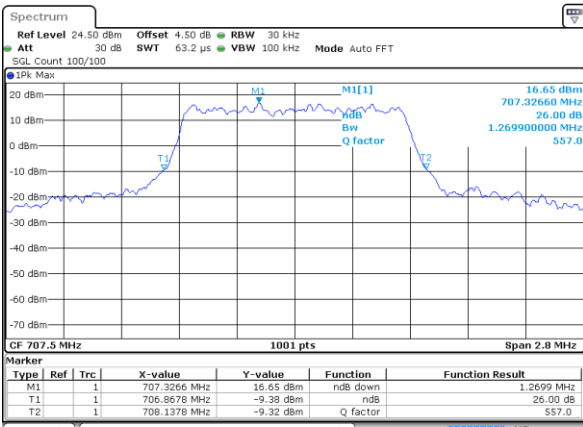
Date: 18 JAN 2020 05:27:42

Lowest Channel / 1.4MHz / 16QAM



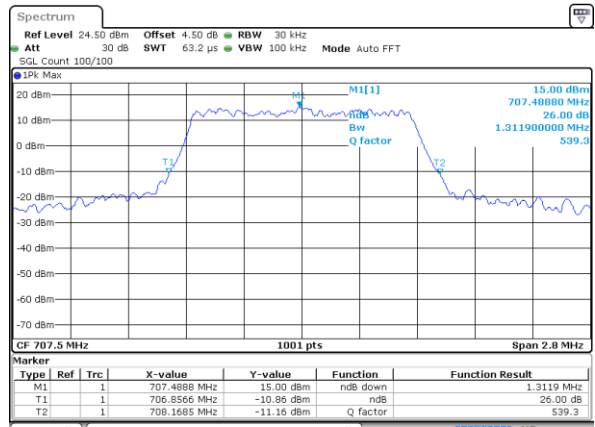
Date: 18 JAN 2020 05:27:32

Middle Channel / 1.4MHz / QPSK



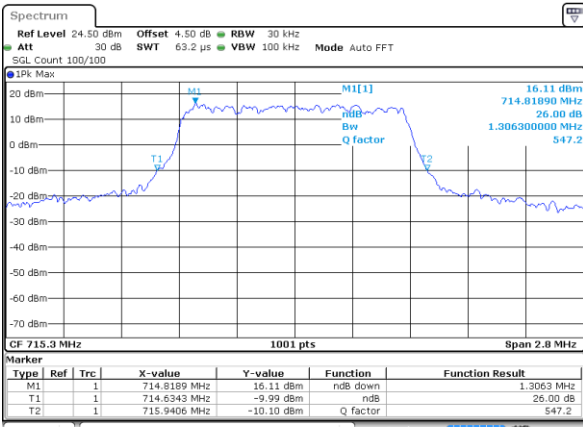
Date: 18 JAN 2020 05:27:12

Middle Channel / 1.4MHz / 16QAM



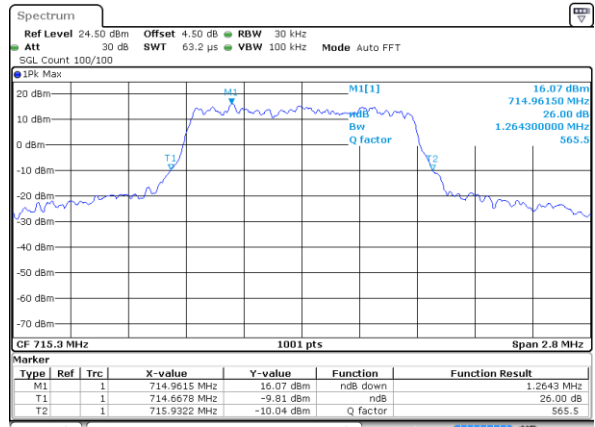
Date: 18 JAN 2020 05:27:22

Highest Channel / 1.4MHz / QPSK



Date: 18 JAN 2020 05:27:02

Highest Channel / 1.4MHz / 16QAM

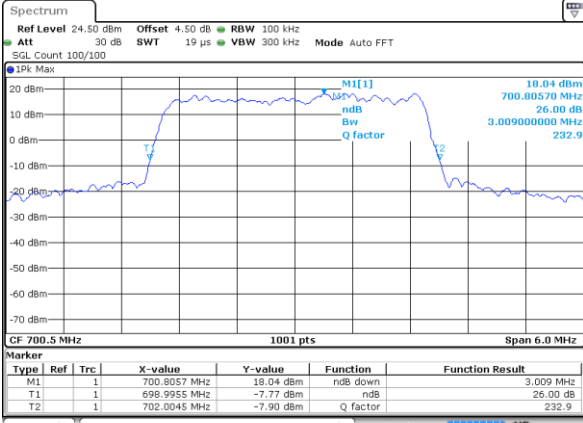


Date: 18 JAN 2020 05:26:52



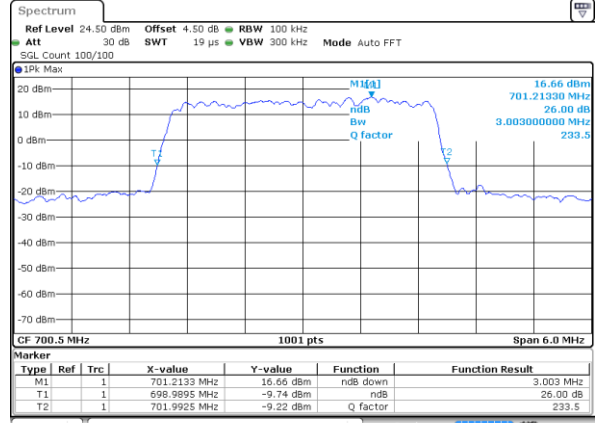
LTE Band 12

Lowest Channel / 3MHz / QPSK



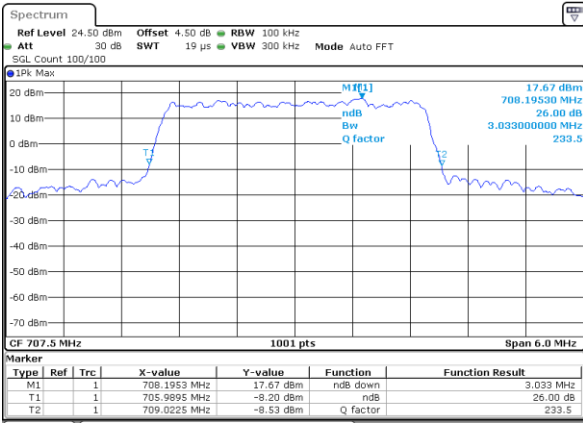
Date: 18 JAN 2020 05:44:06

Lowest Channel / 3MHz / 16QAM



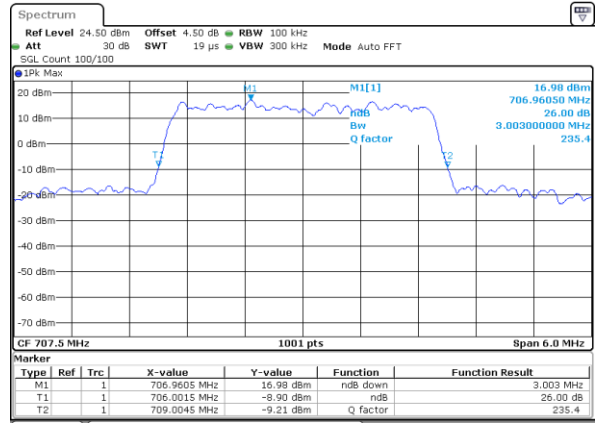
Date: 18 JAN 2020 05:43:56

Middle Channel / 3MHz / QPSK



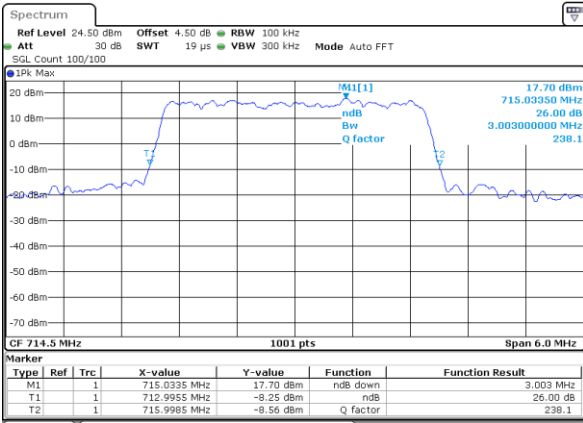
Date: 18 JAN 2020 05:43:36

Middle Channel / 3MHz / 16QAM



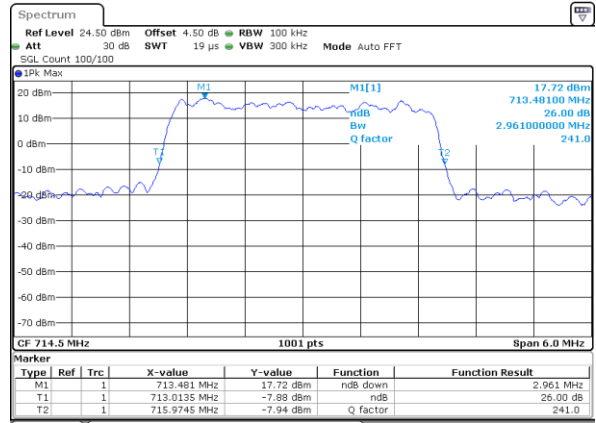
Date: 18 JAN 2020 05:43:46

Highest Channel / 3MHz / QPSK



Date: 18 JAN 2020 05:43:27

Highest Channel / 3MHz / 16QAM

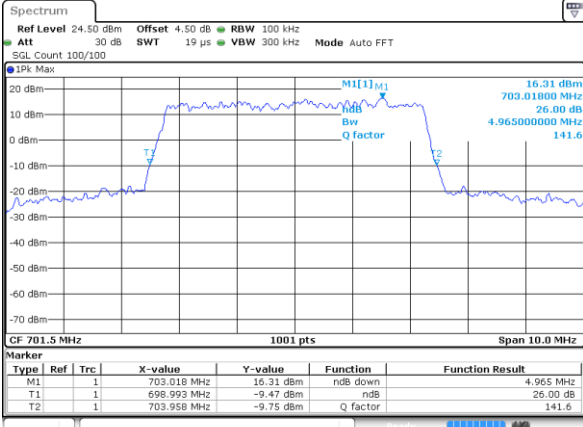


Date: 18 JAN 2020 05:43:17



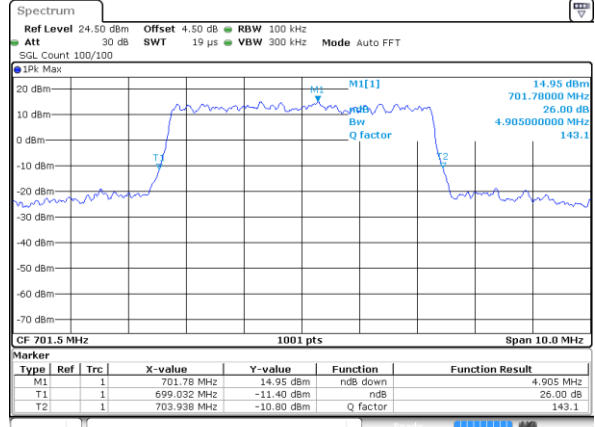
LTE Band 12

Lowest Channel / 5MHz / QPSK



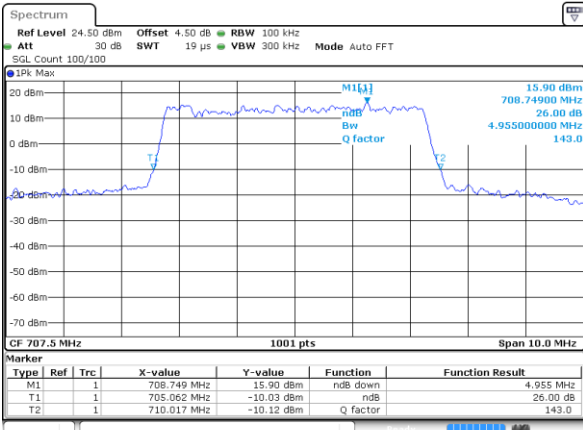
Date: 18 JAN 2020 06:00:30

Lowest Channel / 5MHz / 16QAM



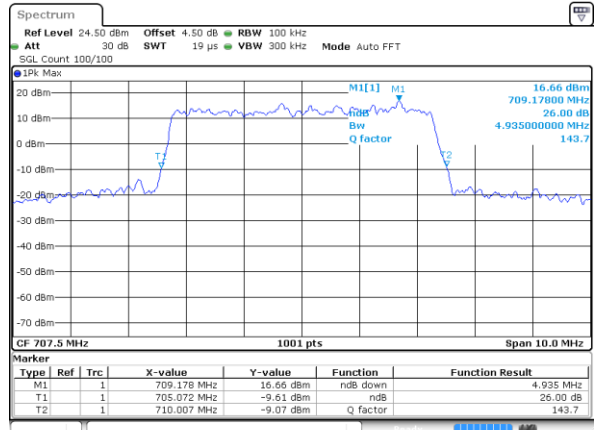
Date: 18 JAN 2020 06:00:20

Middle Channel / 5MHz / QPSK



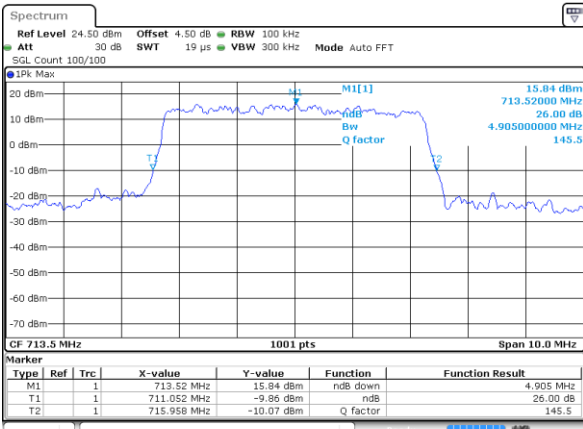
Date: 18 JAN 2020 06:00:00

Middle Channel / 5MHz / 16QAM



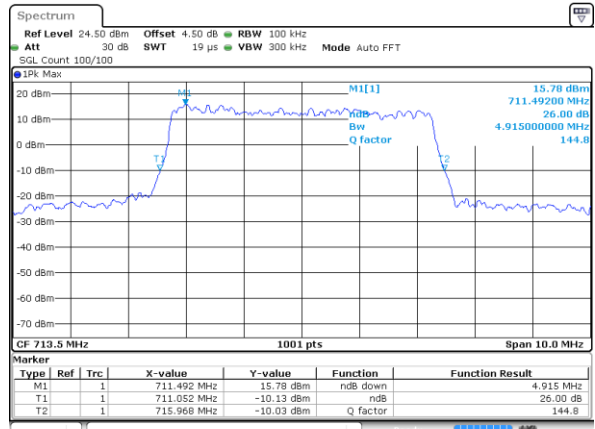
Date: 18 JAN 2020 06:00:10

Highest Channel / 5MHz / QPSK



Date: 18 JAN 2020 05:59:50

Highest Channel / 5MHz / 16QAM

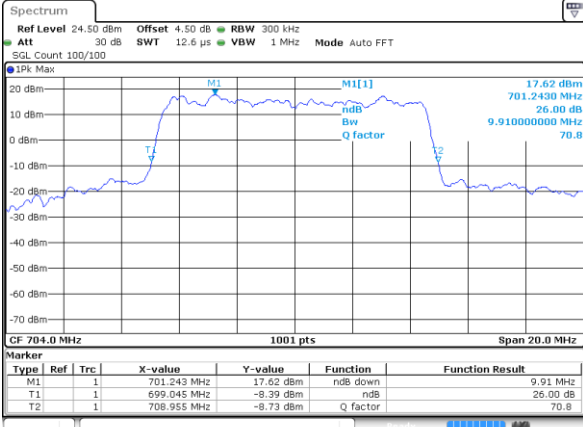


Date: 18 JAN 2020 05:59:40



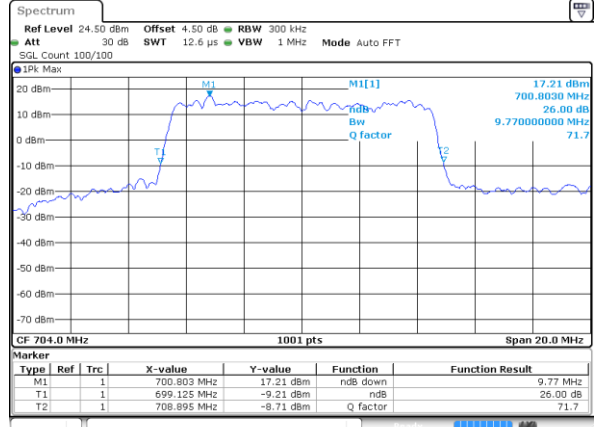
LTE Band 12

Lowest Channel / 10MHz / QPSK



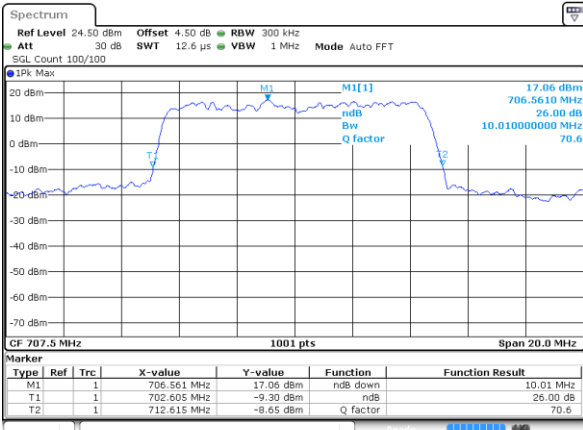
Date: 18 JAN 2020 06:27:05

Lowest Channel / 10MHz / 16QAM



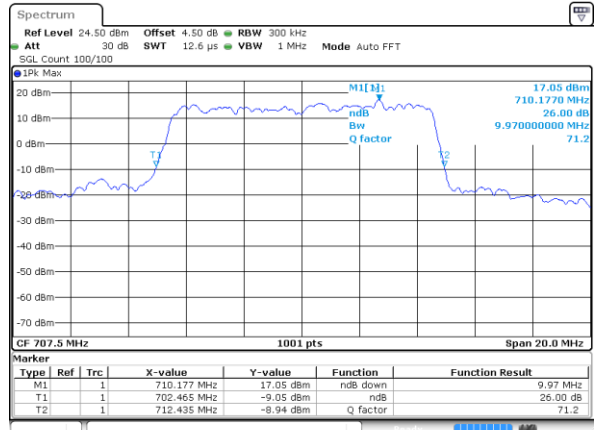
Date: 18 JAN 2020 06:26:55

Middle Channel / 10MHz / QPSK



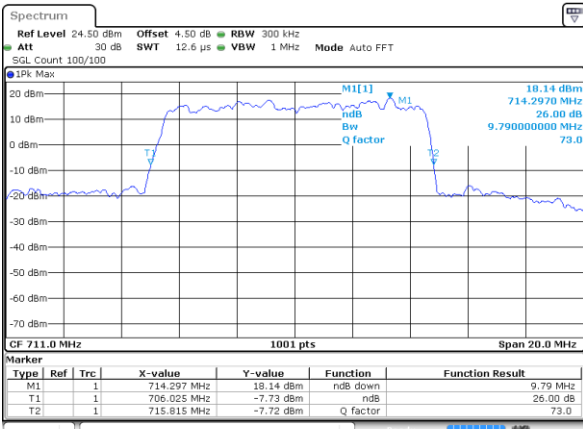
Date: 18 JAN 2020 06:26:35

Middle Channel / 10MHz / 16QAM



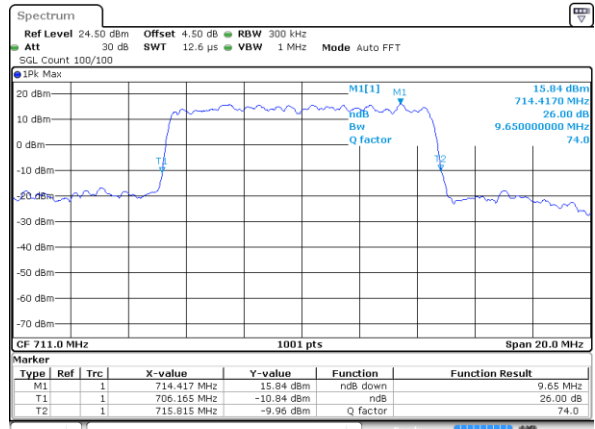
Date: 18 JAN 2020 06:26:45

Highest Channel / 10MHz / QPSK



Date: 18 JAN 2020 06:26:26

Highest Channel / 10MHz / 16QAM



Date: 18 JAN 2020 06:26:16



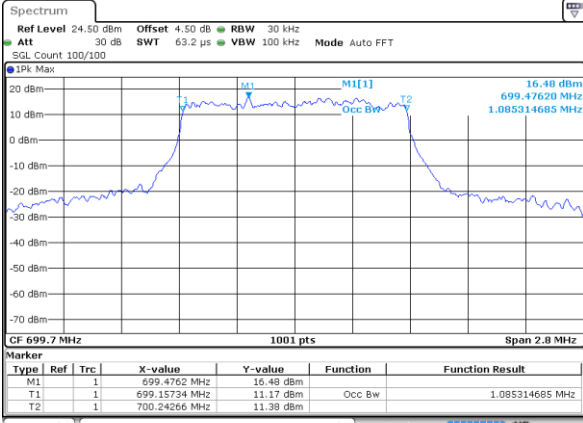
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)							
	1.4MHz		3MHz		5MHz		10MHz	
BW								
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.085	1.085	2.715	2.727	4.505	4.496	9.011	9.031
Middle CH	1.085	1.097	2.727	2.715	4.486	4.496	9.011	9.031
Highest CH	1.099	1.102	2.733	2.709	4.505	4.505	9.011	8.911



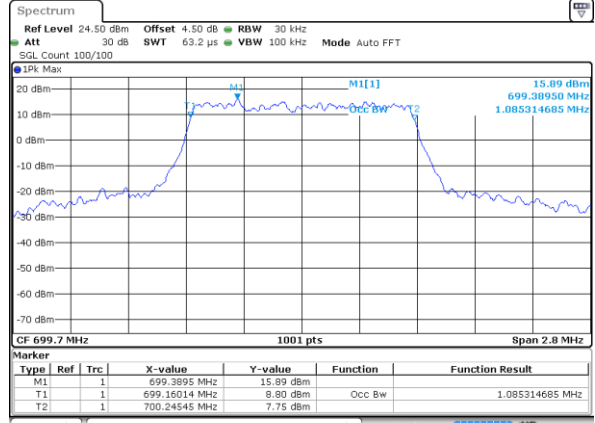
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



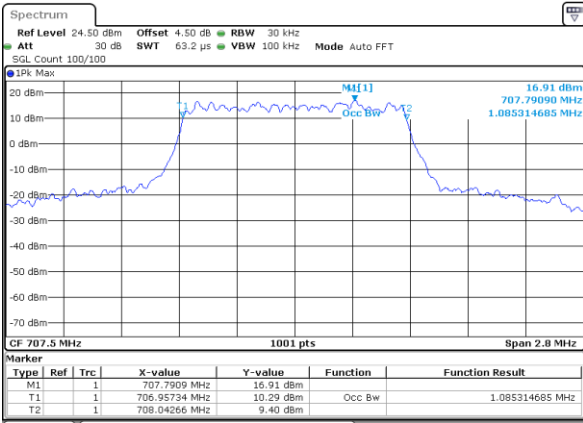
Date: 18 JAN 2020 05:25:52

Lowest Channel / 1.4MHz / 16QAM



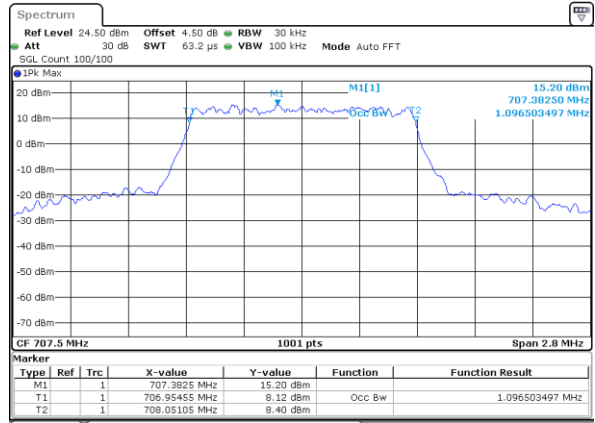
Date: 18 JAN 2020 05:26:02

Middle Channel / 1.4MHz / QPSK



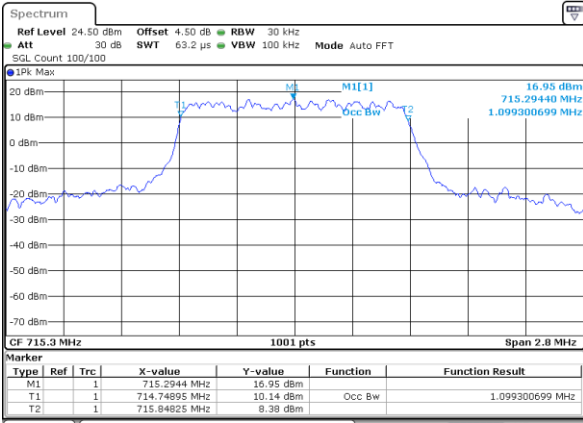
Date: 18 JAN 2020 05:26:22

Middle Channel / 1.4MHz / 16QAM



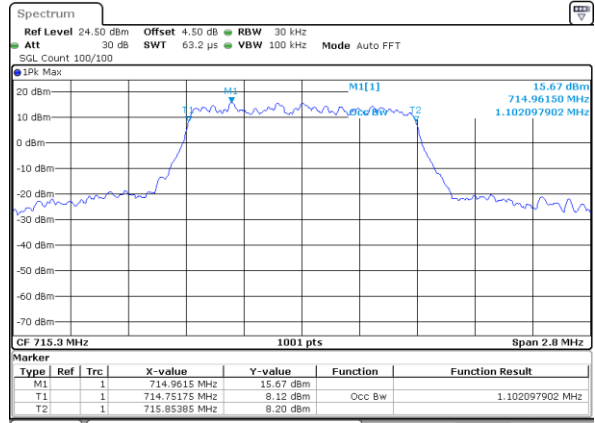
Date: 18 JAN 2020 05:26:12

Highest Channel / 1.4MHz / QPSK



Date: 18 JAN 2020 05:26:32

Highest Channel / 1.4MHz / 16QAM

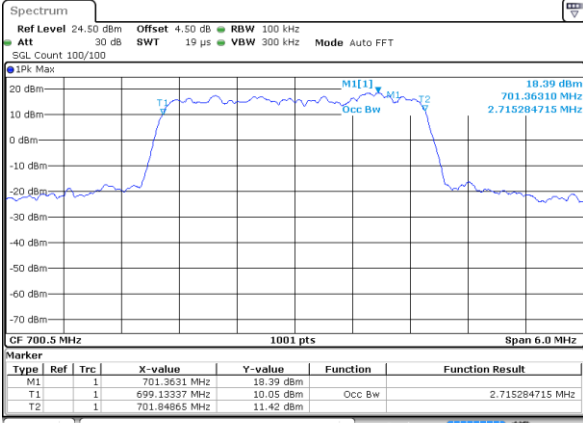


Date: 18 JAN 2020 05:26:42



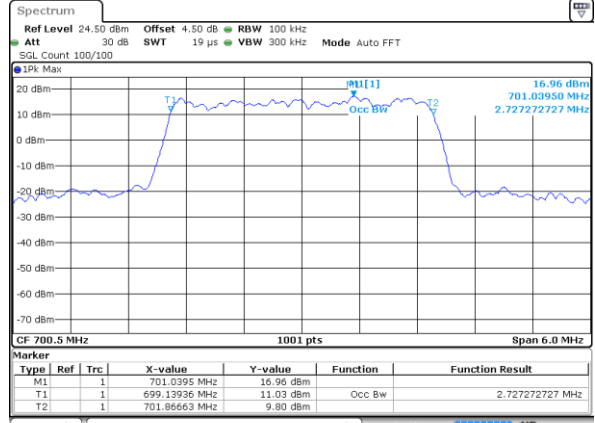
LTE Band 12

Lowest Channel / 3MHz / QPSK



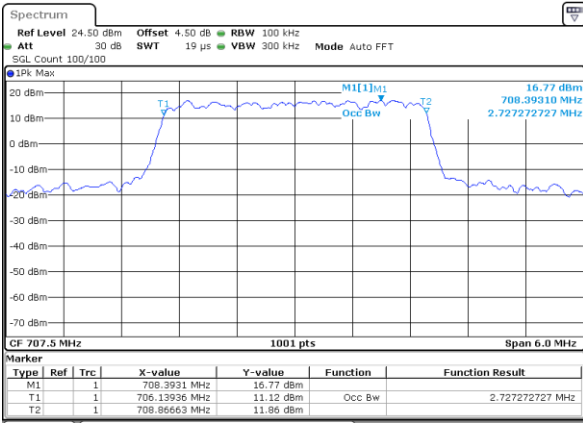
Date: 18 JAN 2020 05:42:17

Lowest Channel / 3MHz / 16QAM



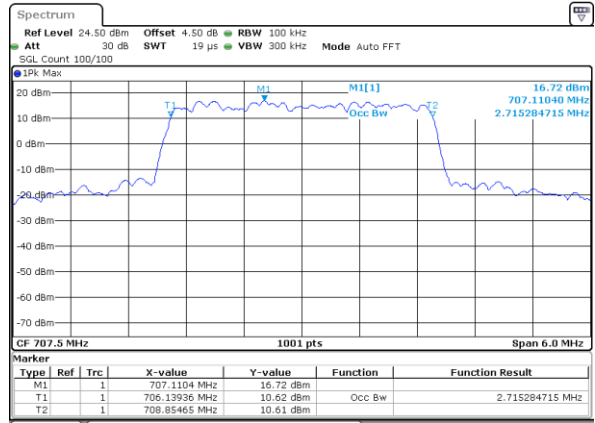
Date: 18 JAN 2020 05:42:27

Middle Channel / 3MHz / QPSK



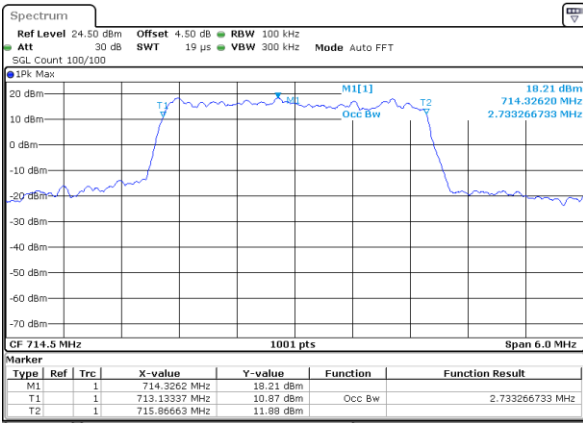
Date: 18 JAN 2020 05:42:47

Middle Channel / 3MHz / 16QAM



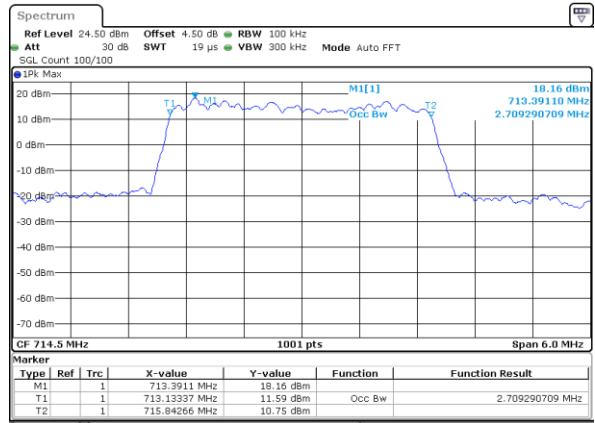
Date: 18 JAN 2020 05:42:37

Highest Channel / 3MHz / QPSK



Date: 18 JAN 2020 05:42:57

Highest Channel / 3MHz / 16QAM

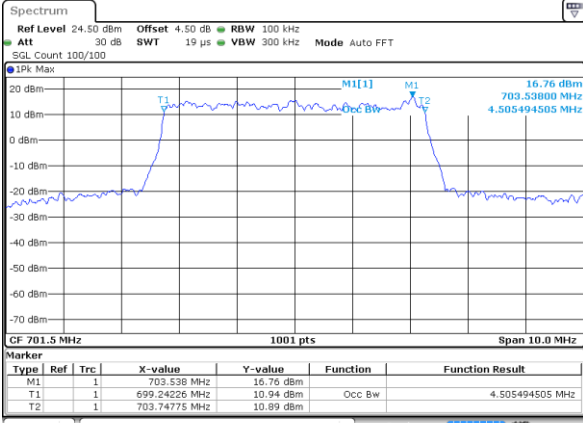


Date: 18 JAN 2020 05:43:07



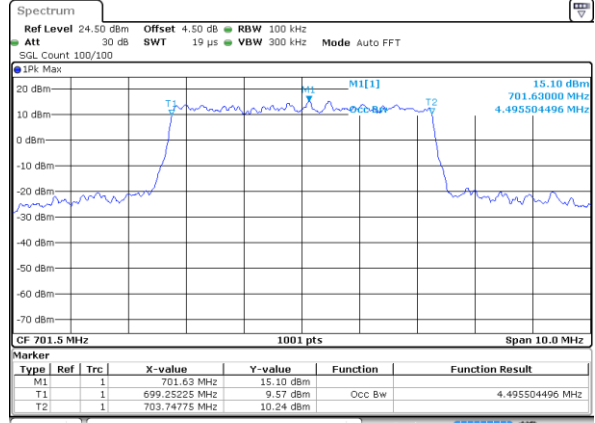
LTE Band 12

Lowest Channel / 5MHz / QPSK



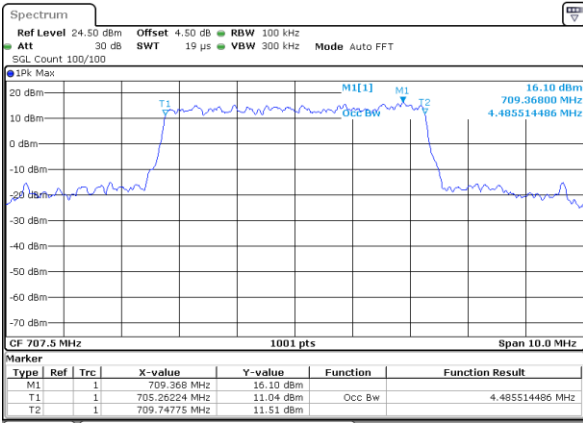
Date: 18 JAN 2020 05:58:40

Lowest Channel / 5MHz / 16QAM



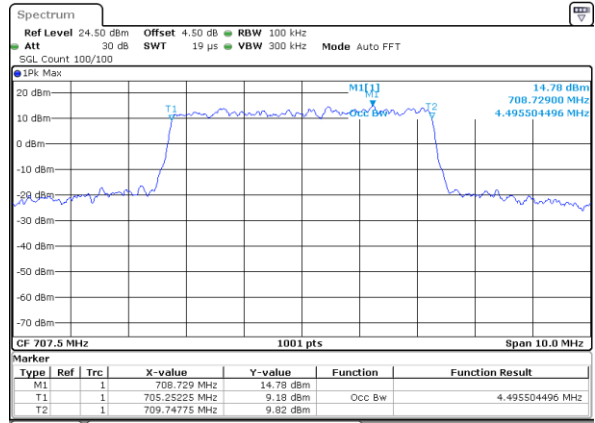
Date: 18 JAN 2020 05:58:50

Middle Channel / 5MHz / QPSK



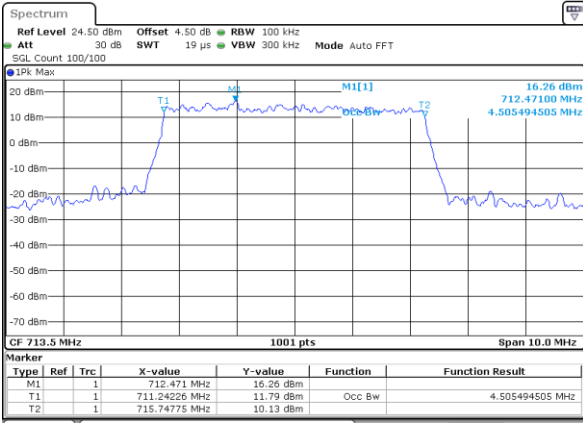
Date: 18 JAN 2020 05:59:10

Middle Channel / 5MHz / 16QAM



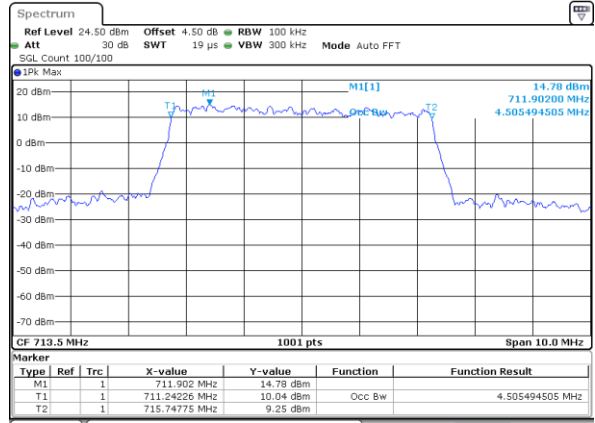
Date: 18 JAN 2020 05:59:00

Highest Channel / 5MHz / QPSK



Date: 18 JAN 2020 05:59:20

Highest Channel / 5MHz / 16QAM

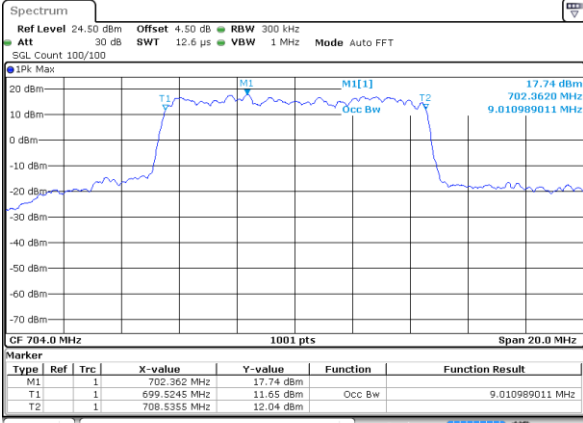


Date: 18 JAN 2020 05:59:30



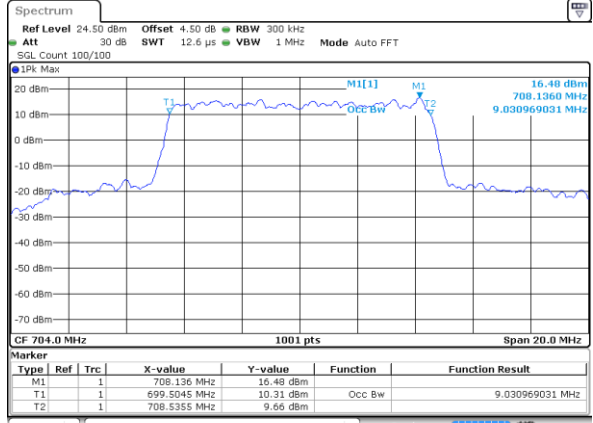
LTE Band 12

Lowest Channel / 10MHz / QPSK



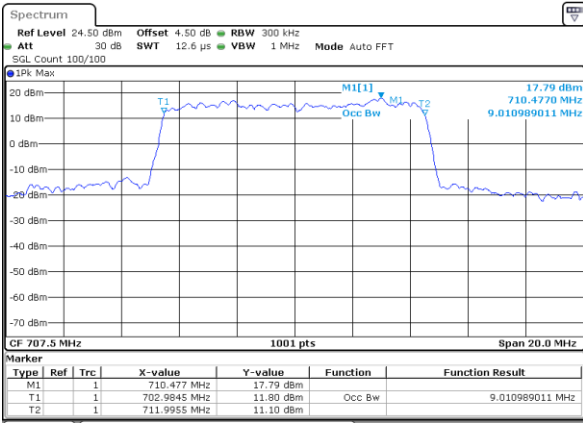
Date: 18 JAN 2020 06:15:04

Lowest Channel / 10MHz / 16QAM



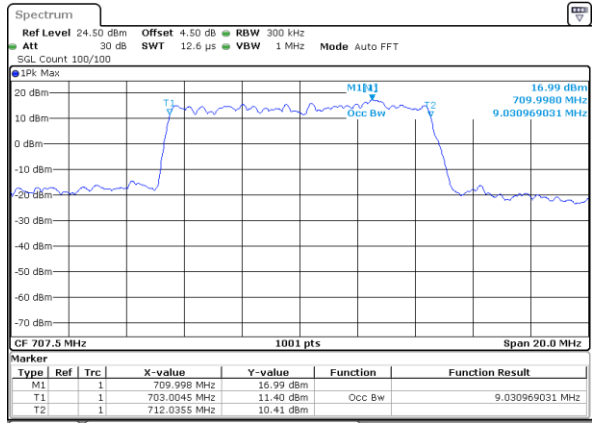
Date: 18 JAN 2020 06:15:14

Middle Channel / 10MHz / QPSK



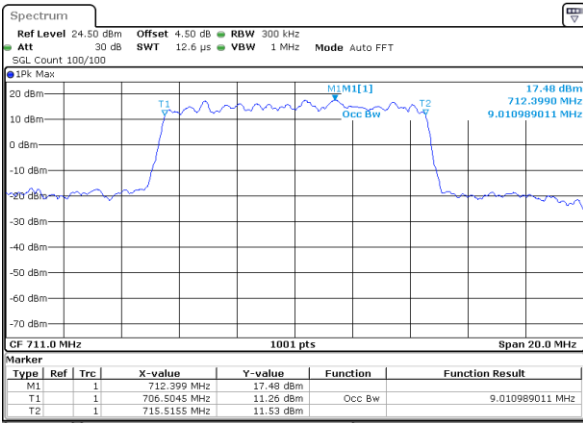
Date: 18 JAN 2020 06:15:34

Middle Channel / 10MHz / 16QAM



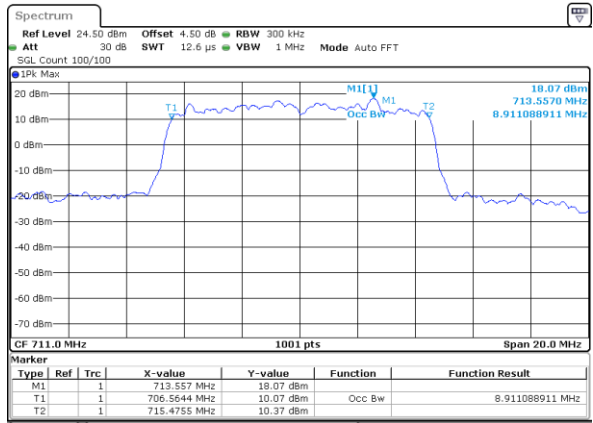
Date: 18 JAN 2020 06:15:24

Highest Channel / 10MHz / QPSK



Date: 18 JAN 2020 06:25:56

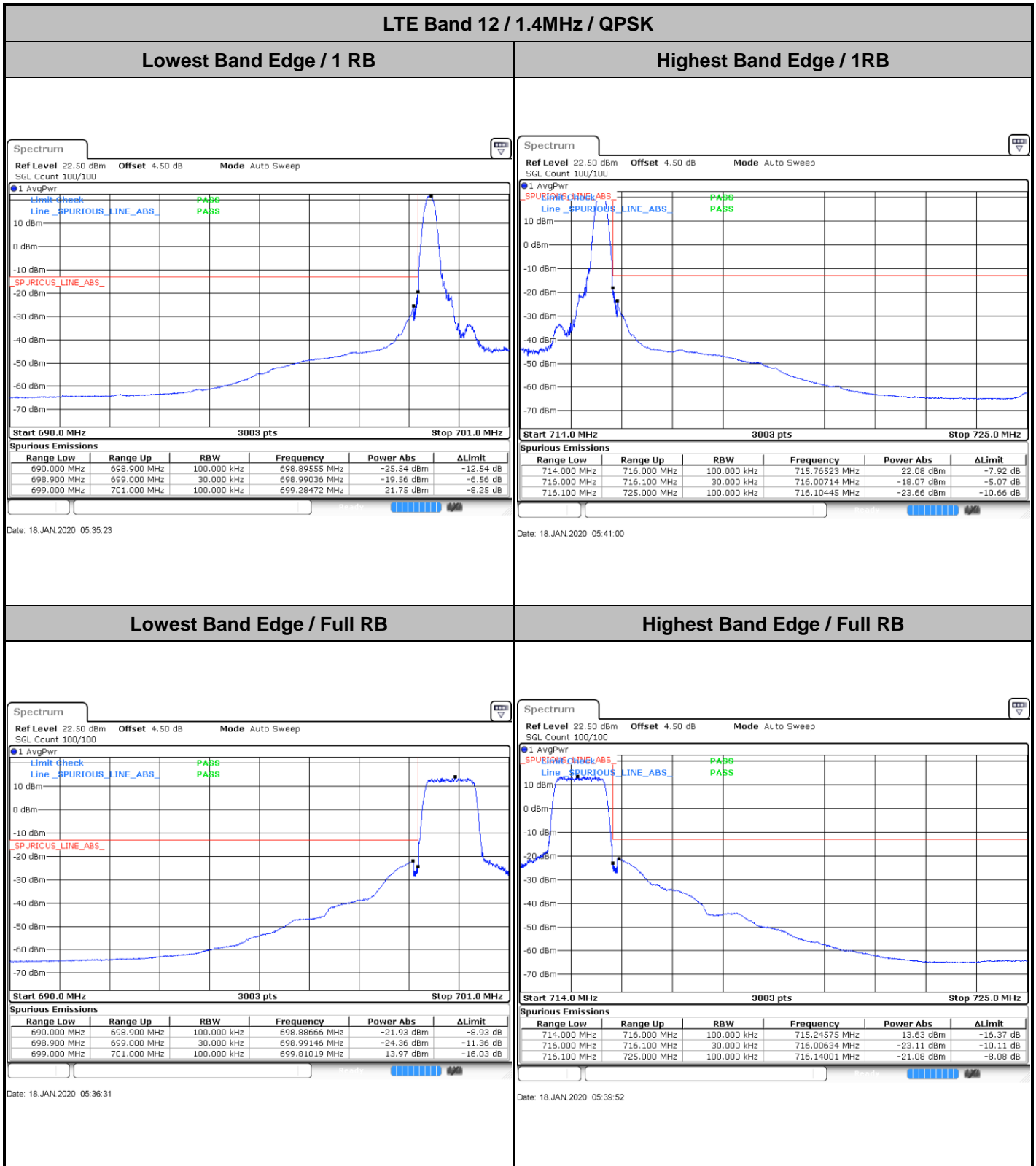
Highest Channel / 10MHz / 16QAM



Date: 18 JAN 2020 06:26:06



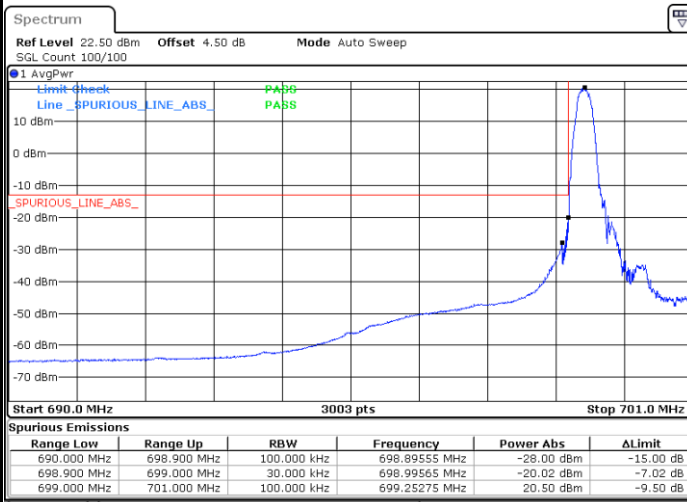
Conducted Band Edge





LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



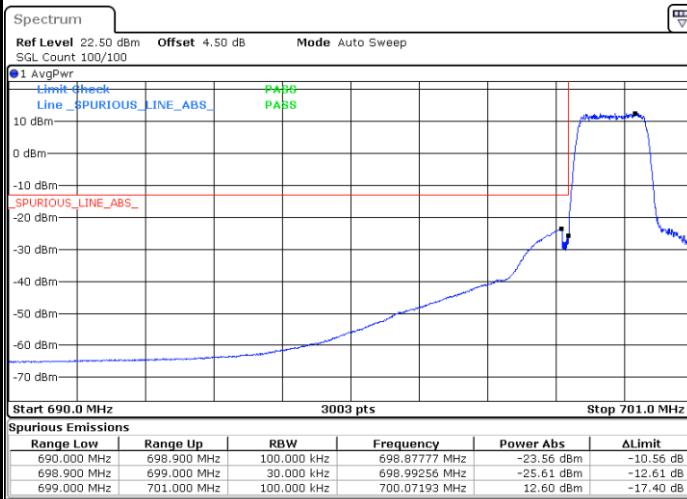
Date: 18 JAN 2020 05:34:16

Highest Band Edge / 1 RB



Date: 18 JAN 2020 05:42:07

Lowest Band Edge / Full RB



Date: 18 JAN 2020 05:37:38

Highest Band Edge / Full RB

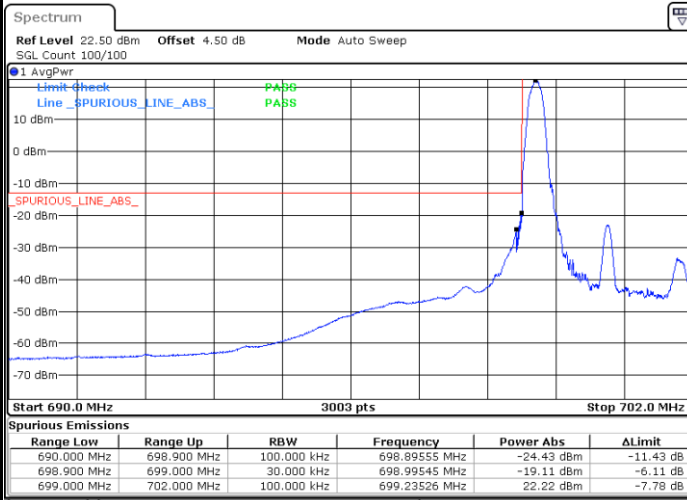


Date: 18 JAN 2020 05:38:45



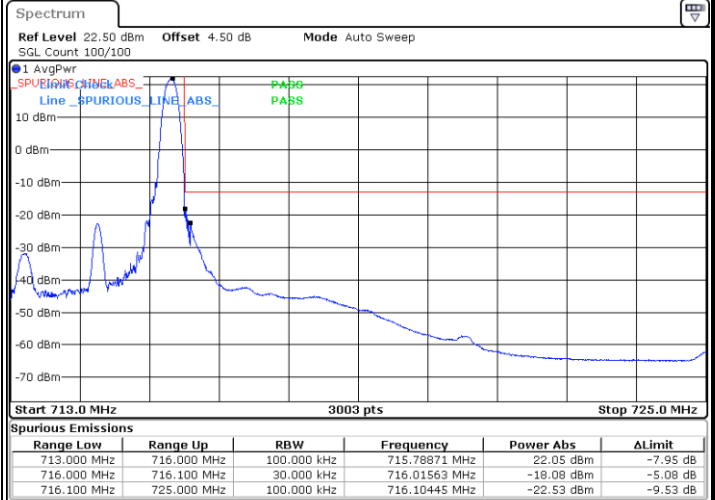
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



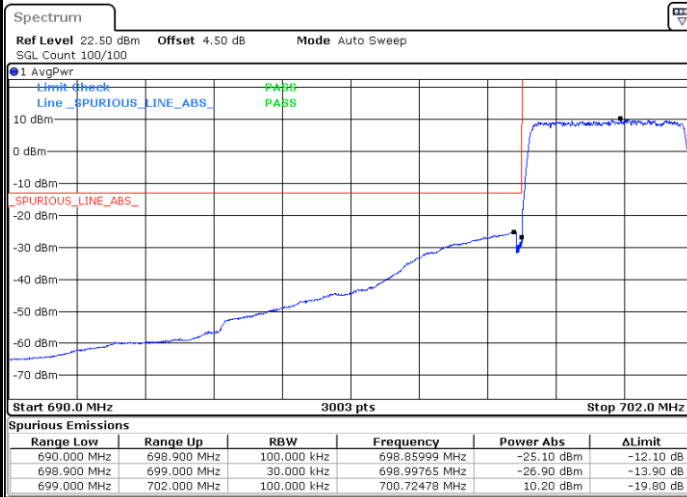
Date: 18 JAN 2020 05:51:47

Highest Band Edge / 1 RB



Date: 18 JAN 2020 05:57:23

Lowest Band Edge / Full RB



Date: 18 JAN 2020 05:52:54

Highest Band Edge / Full RB

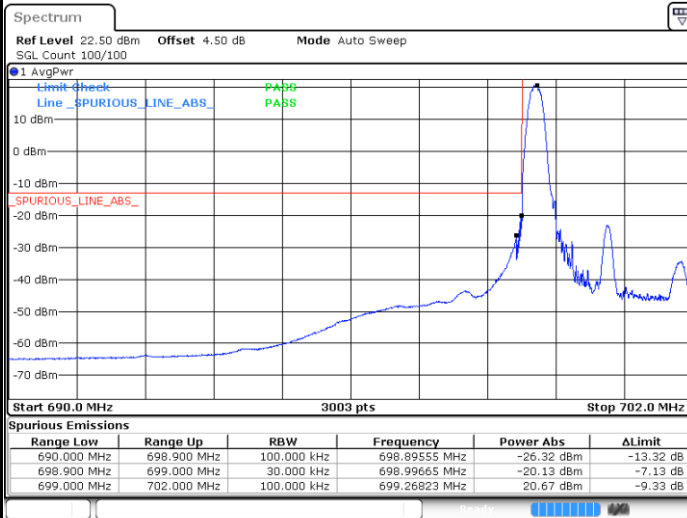


Date: 18 JAN 2020 05:56:16



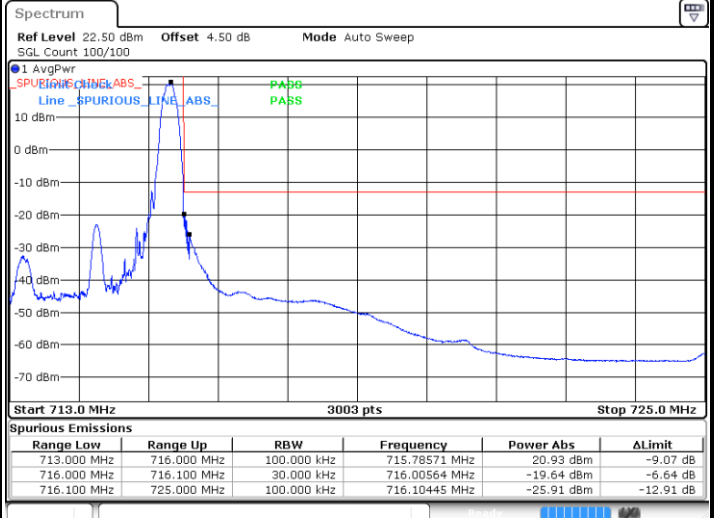
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



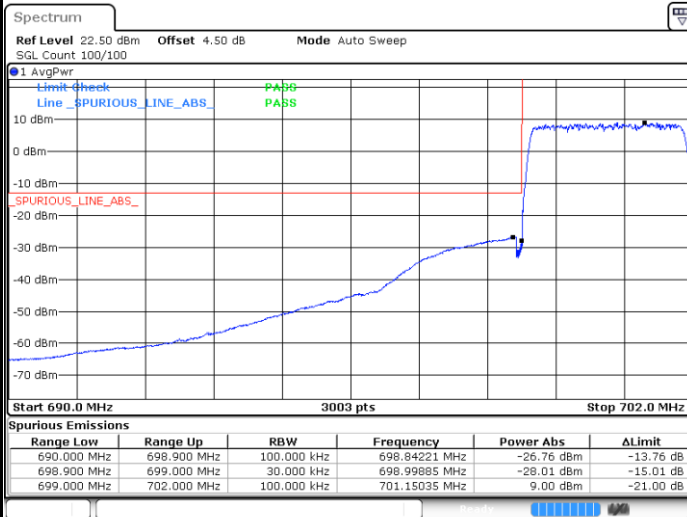
Date: 18 JAN 2020 05:50:39

Highest Band Edge / 1 RB



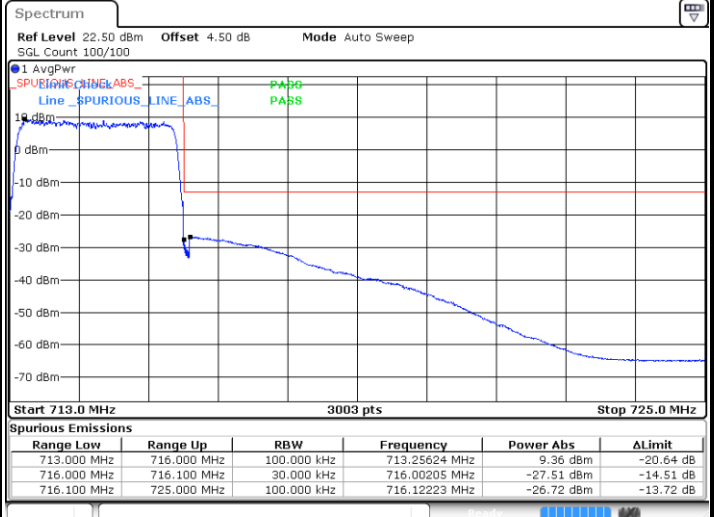
Date: 18 JAN 2020 05:58:31

Lowest Band Edge / Full RB



Date: 18 JAN 2020 05:54:01

Highest Band Edge / Full RB

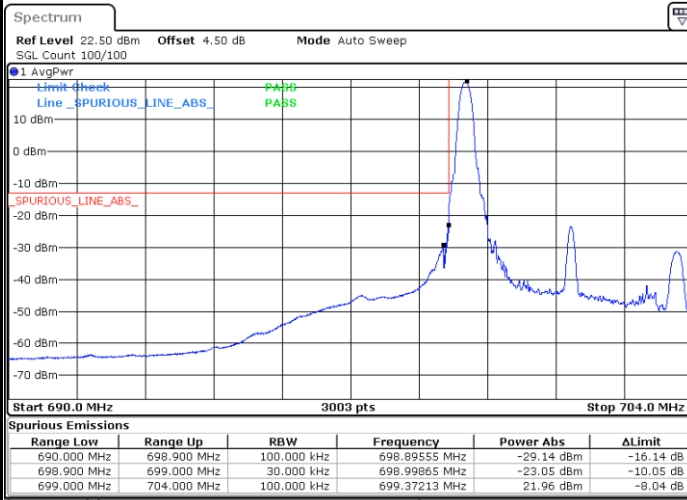


Date: 18 JAN 2020 05:55:09



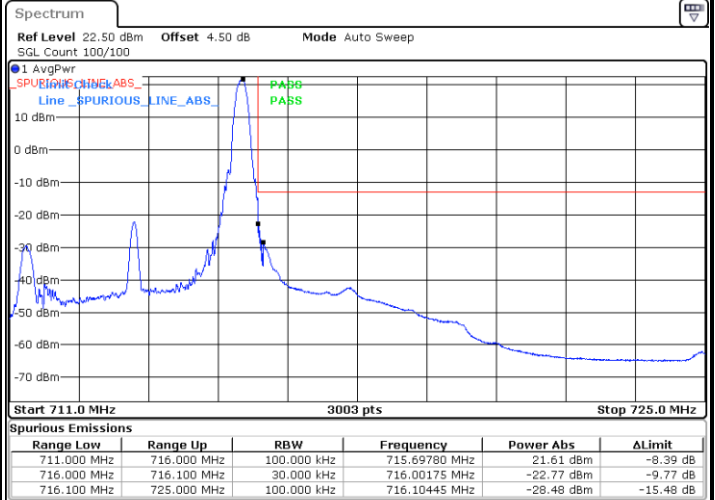
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



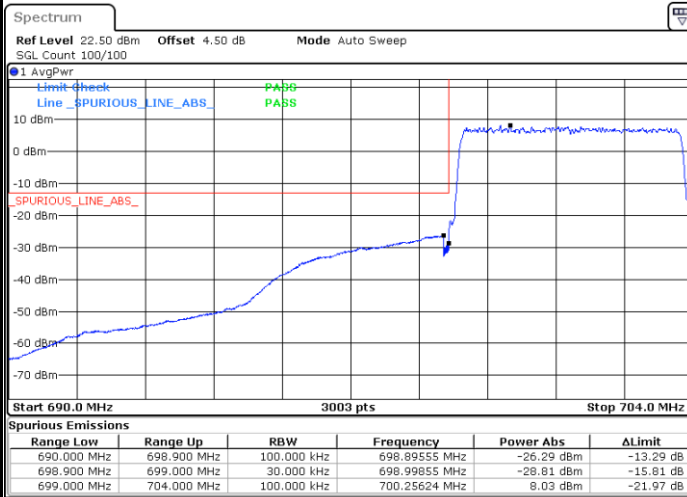
Date: 18 JAN 2020 06:08:10

Highest Band Edge / 1 RB



Date: 18 JAN 2020 06:13:47

Lowest Band Edge / Full RB



Date: 18 JAN 2020 06:09:17

Highest Band Edge / Full RB

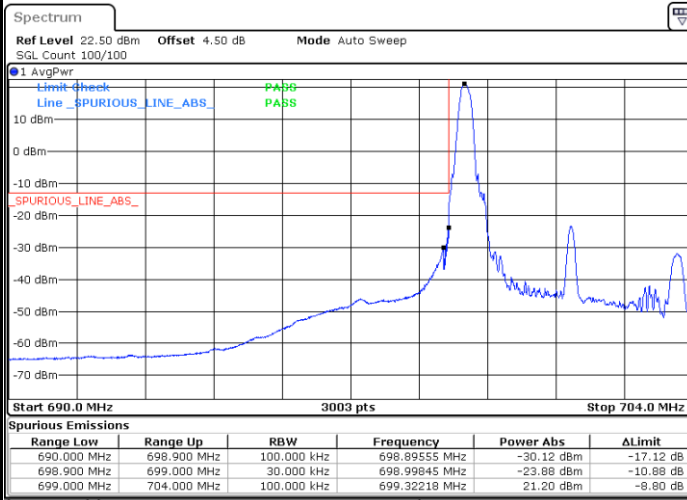


Date: 18 JAN 2020 06:12:40



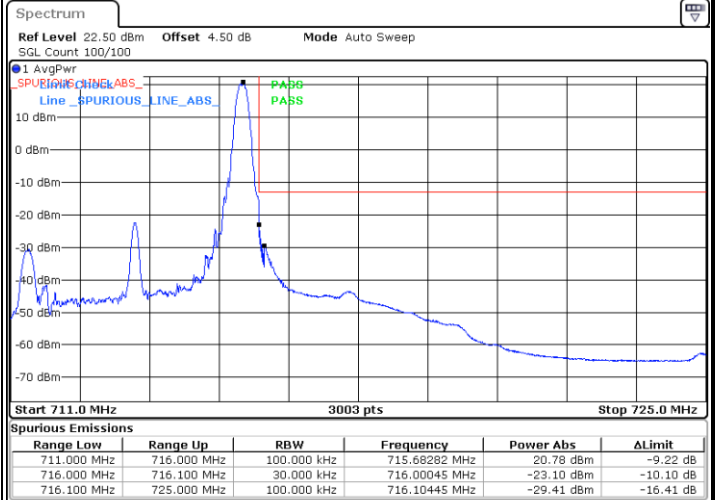
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



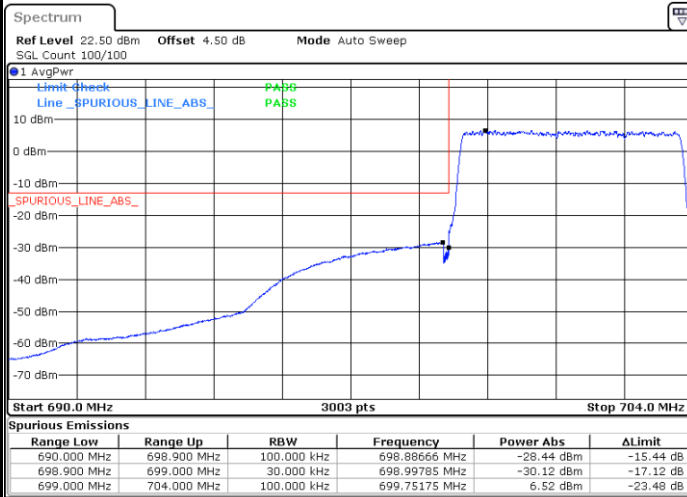
Date: 18 JAN 2020 06:07:03

Highest Band Edge / 1 RB



Date: 18 JAN 2020 06:14:54

Lowest Band Edge / Full RB



Date: 18 JAN 2020 06:10:25

Highest Band Edge / Full RB

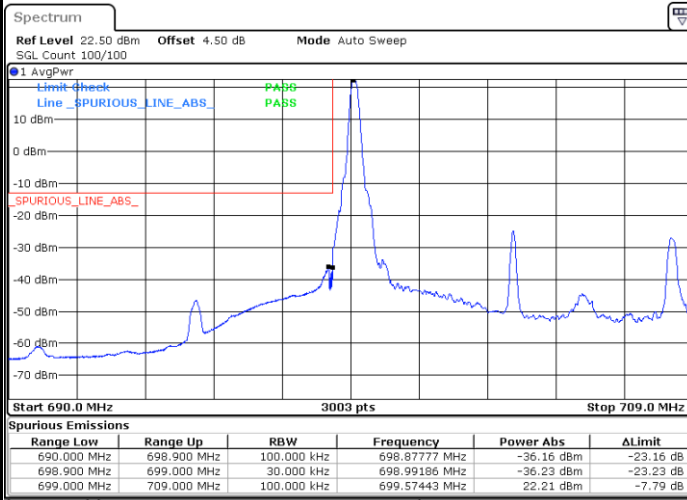


Date: 18 JAN 2020 06:11:32



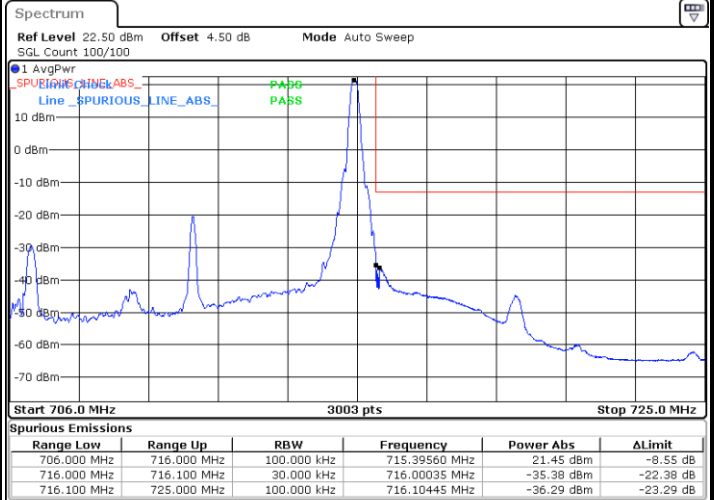
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



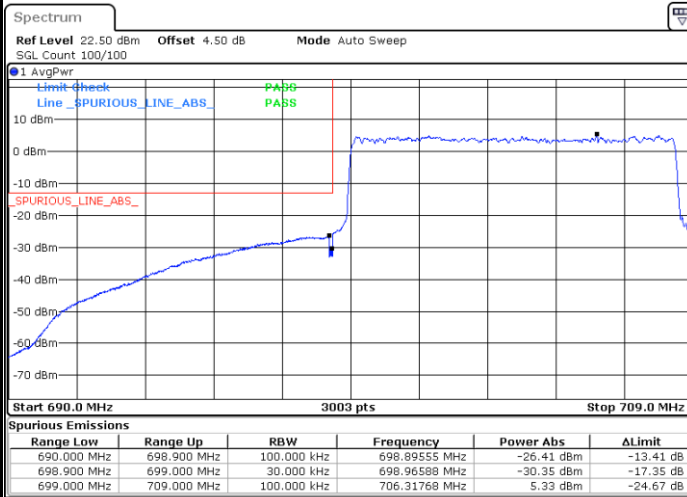
Date: 18 JAN 2020 06:34:46

Highest Band Edge / 1 RB



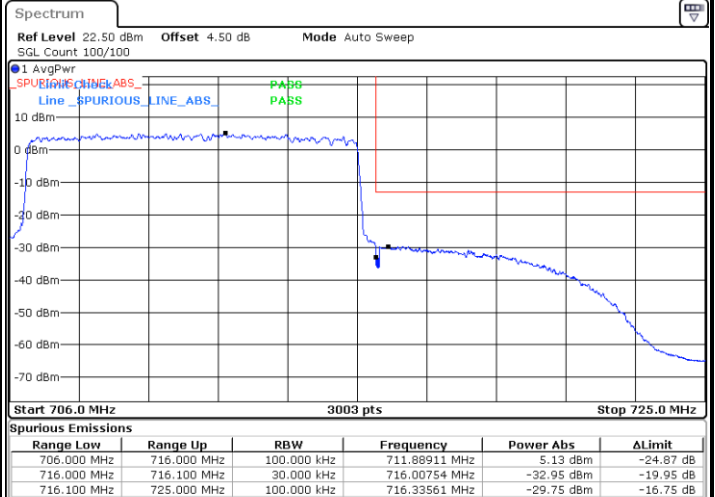
Date: 18 JAN 2020 06:40:22

Lowest Band Edge / Full RB



Date: 18 JAN 2020 06:35:53

Highest Band Edge / Full RB

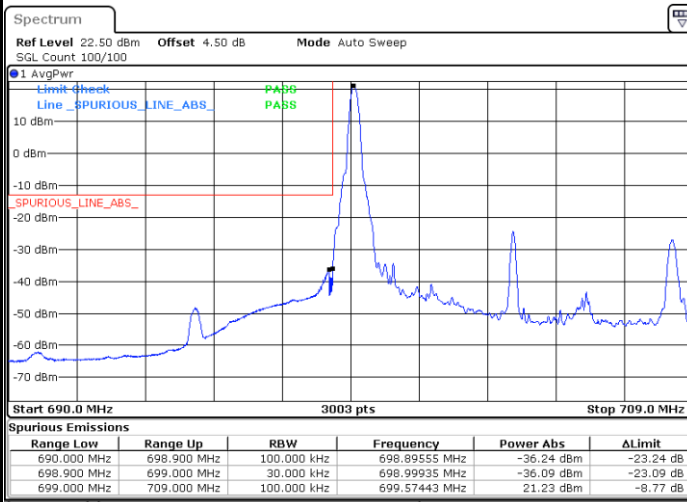


Date: 18 JAN 2020 06:39:15



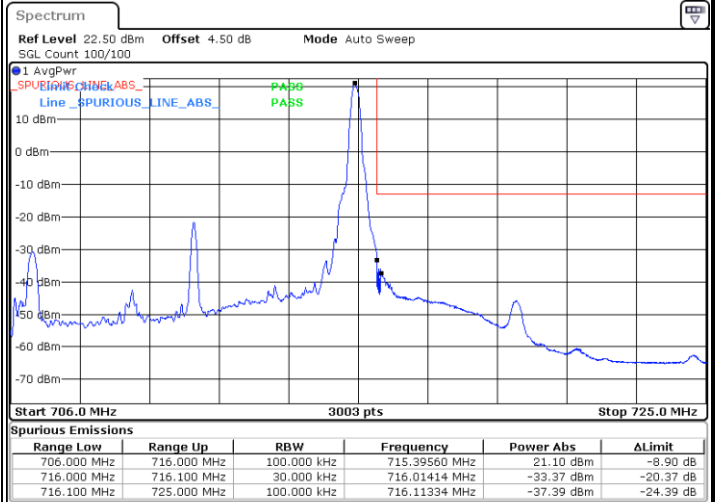
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



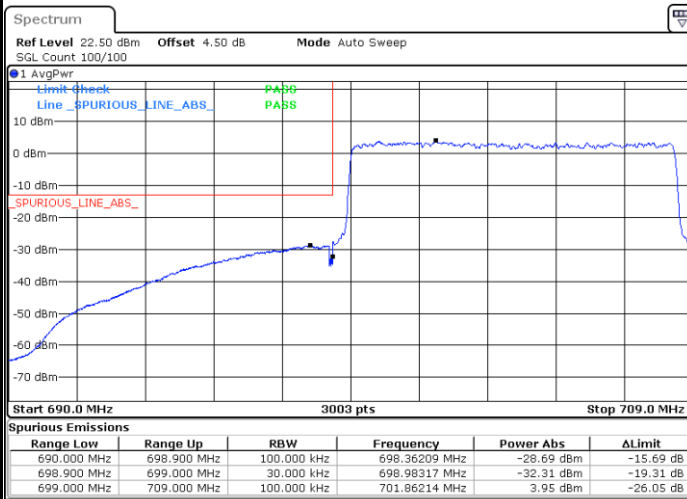
Date: 18. JAN 2020 06:33:38

Highest Band Edge / 1 RB



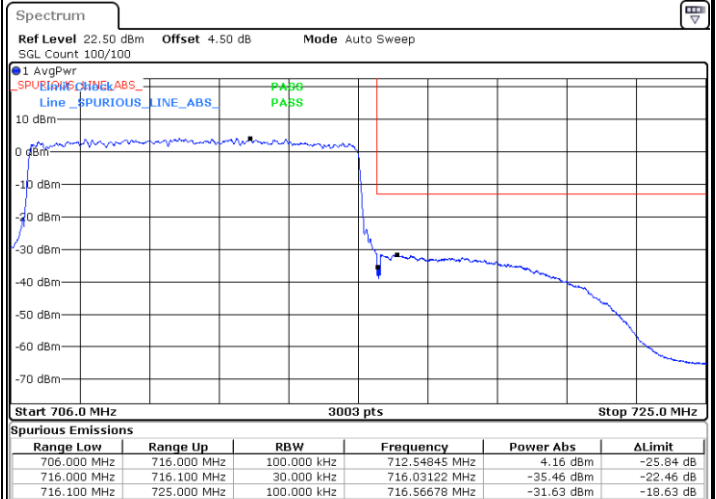
Date: 18. JAN 2020 06:41:30

Lowest Band Edge / Full RB



Date: 18. JAN 2020 06:37:00

Highest Band Edge / Full RB



Date: 18. JAN 2020 06:38:08



Conducted Spurious Emission

