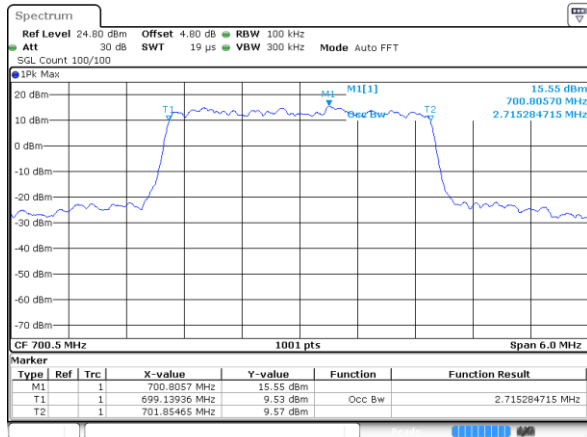


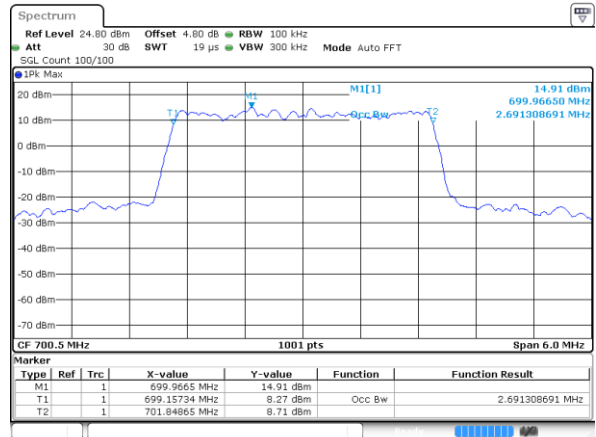


LTE Band 12

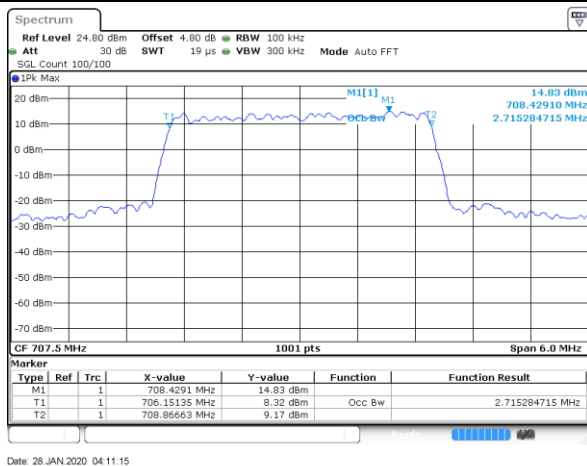
Lowest Channel / 3MHz / QPSK



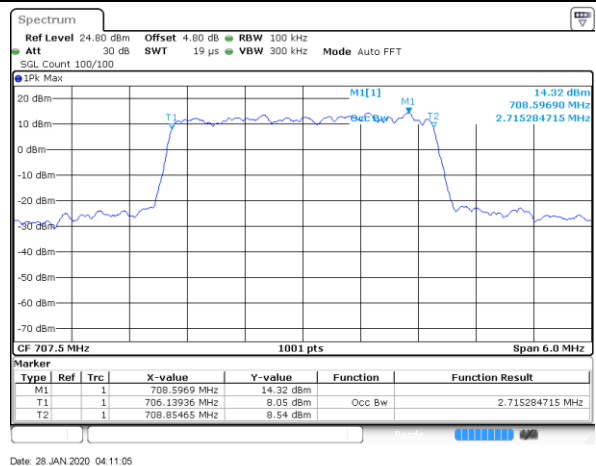
Lowest Channel / 3MHz / 16QAM



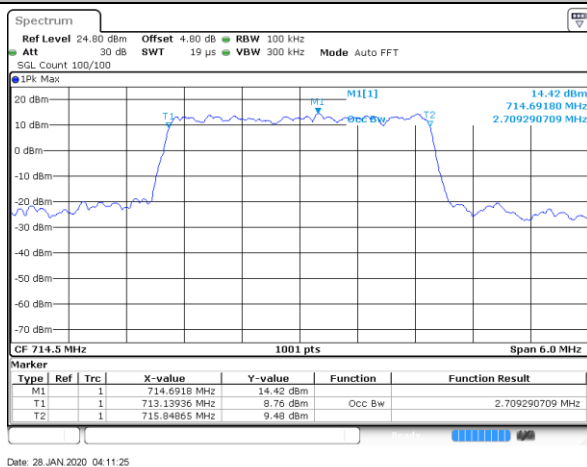
Middle Channel / 3MHz / QPSK



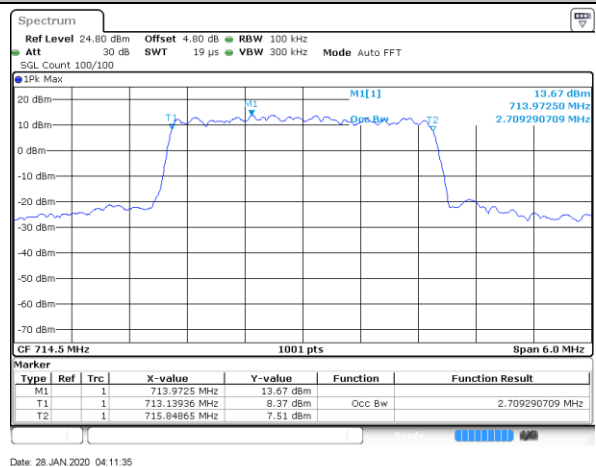
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



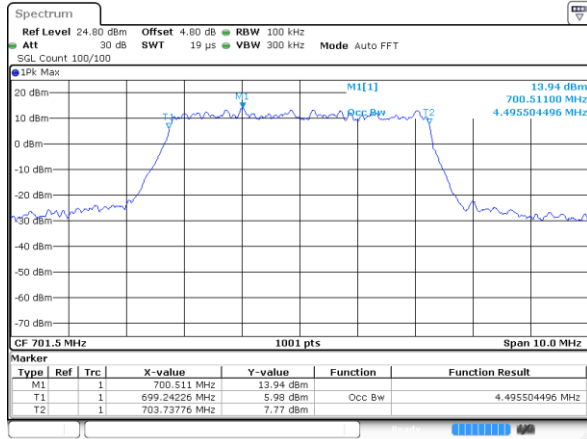
Highest Channel / 3MHz / 16QAM



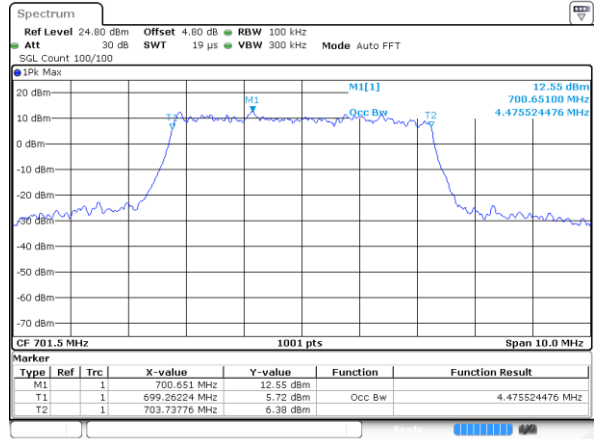


LTE Band 12

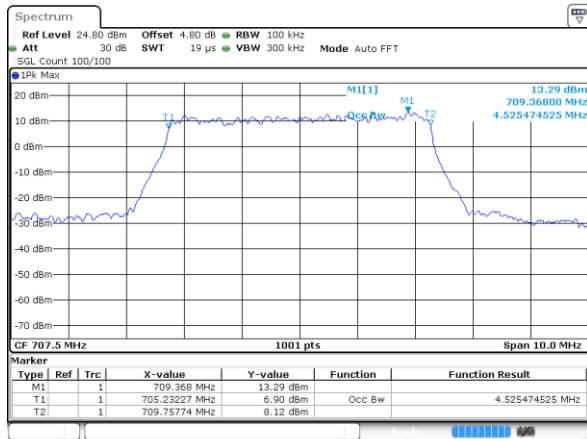
Lowest Channel / 5MHz / QPSK



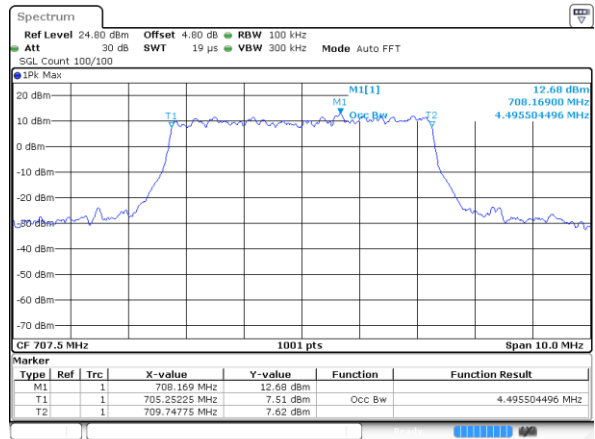
Lowest Channel / 5MHz / 16QAM



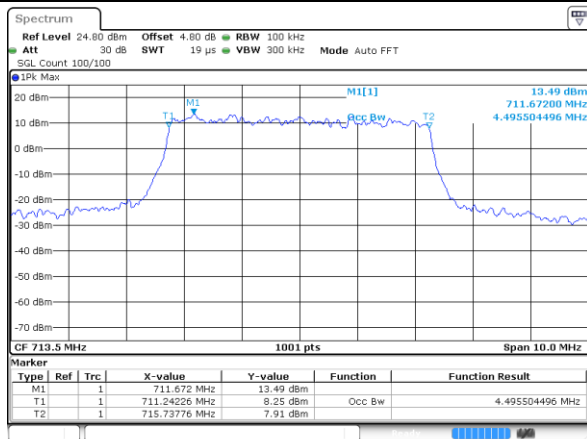
Middle Channel / 5MHz / QPSK



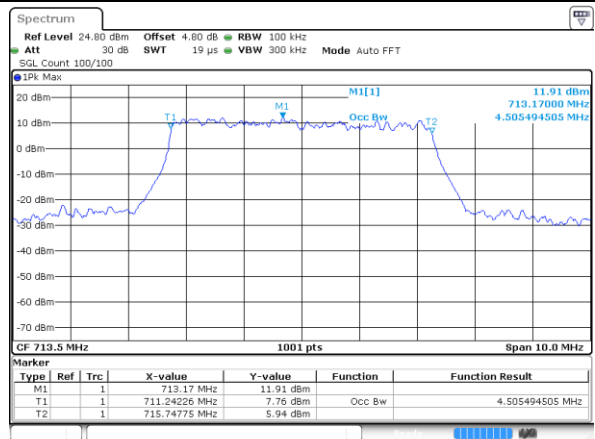
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



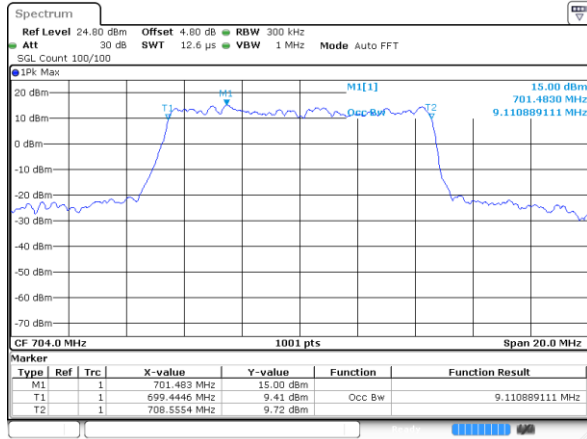
Highest Channel / 5MHz / 16QAM



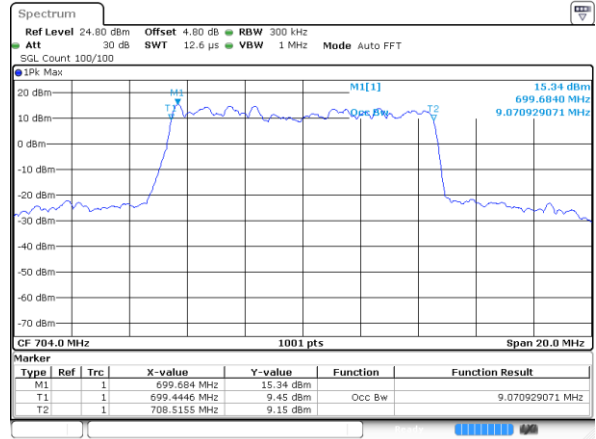


LTE Band 12

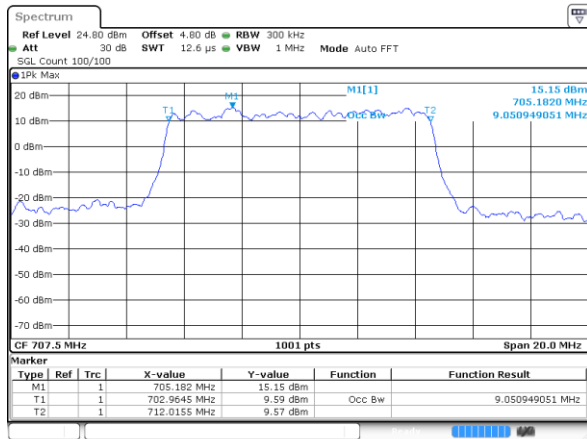
Lowest Channel / 10MHz / QPSK



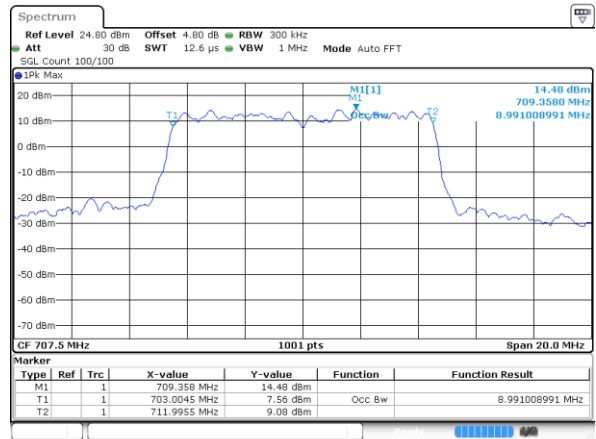
Lowest Channel / 10MHz / 16QAM



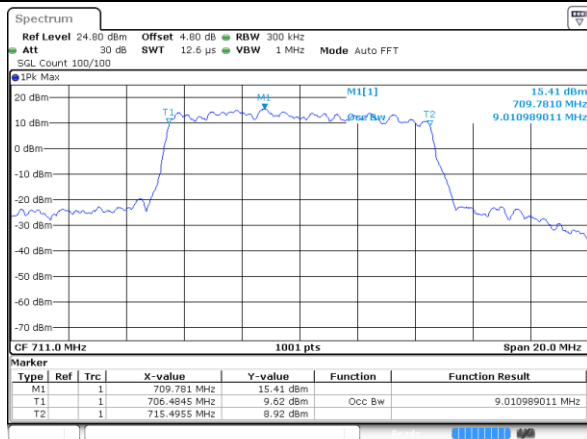
Middle Channel / 10MHz / QPSK



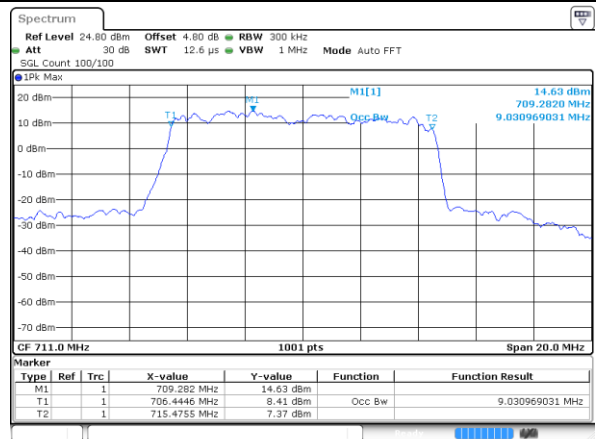
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

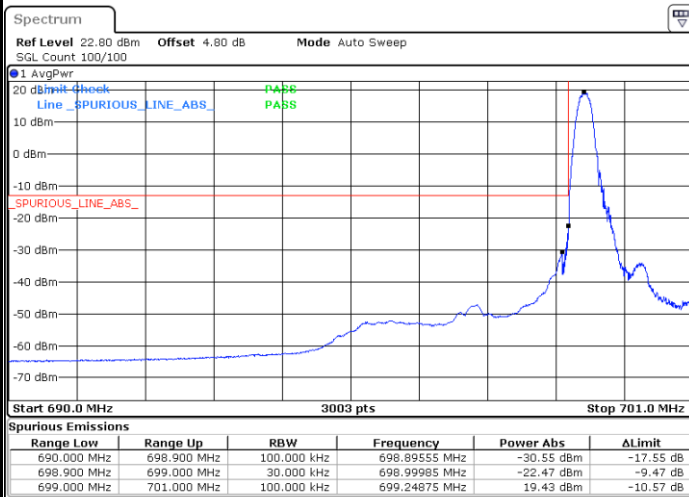




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

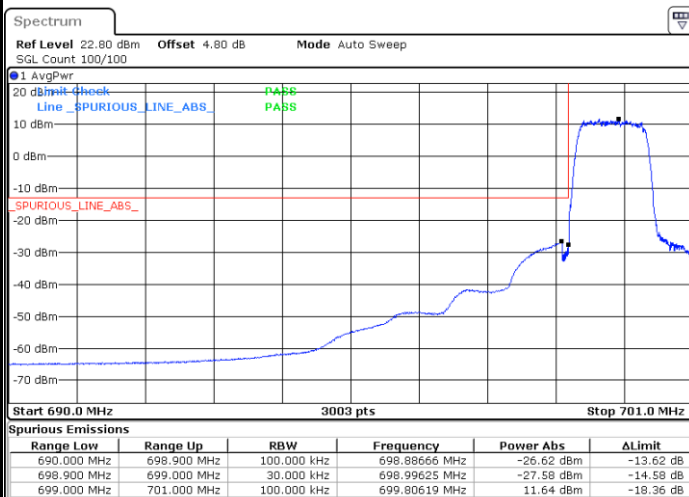
Lowest Band Edge / 1 RB



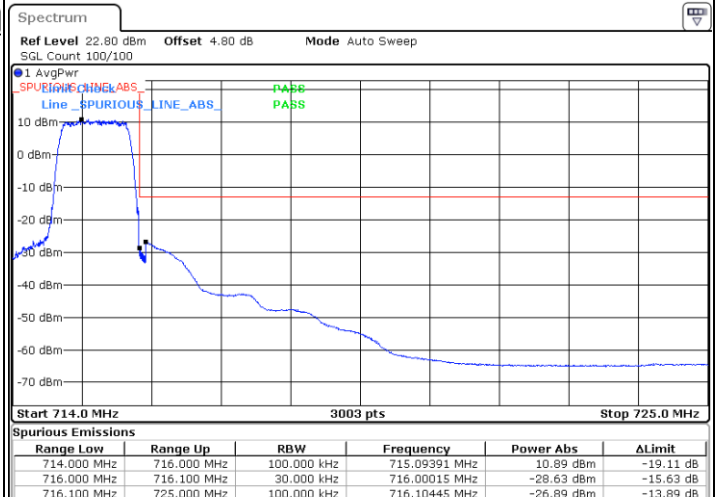
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



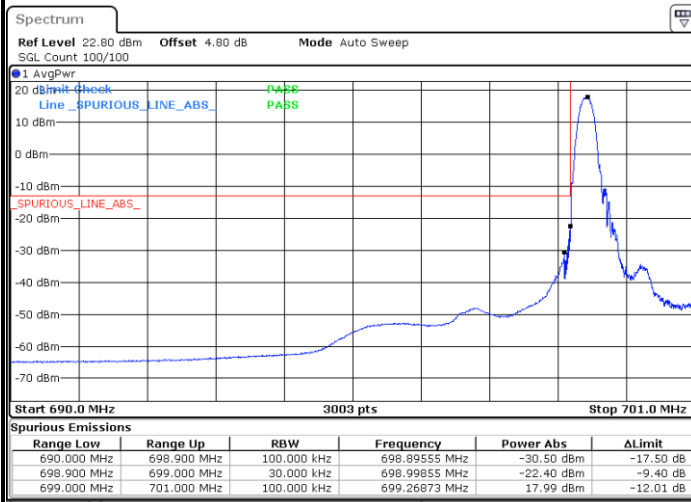
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 16QAM

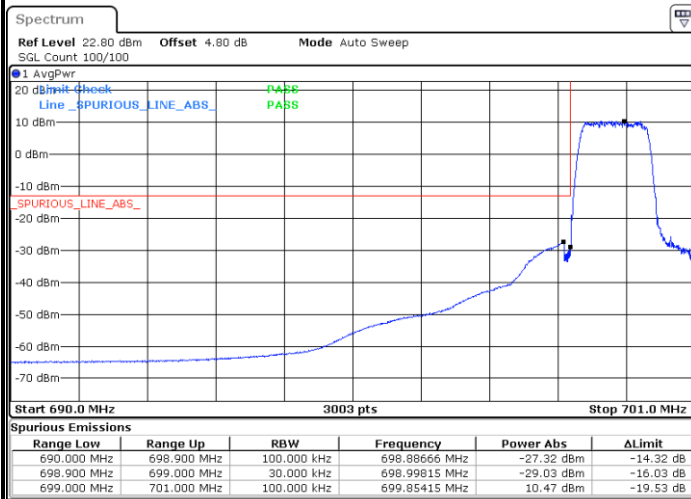
Lowest Band Edge / 1 RB



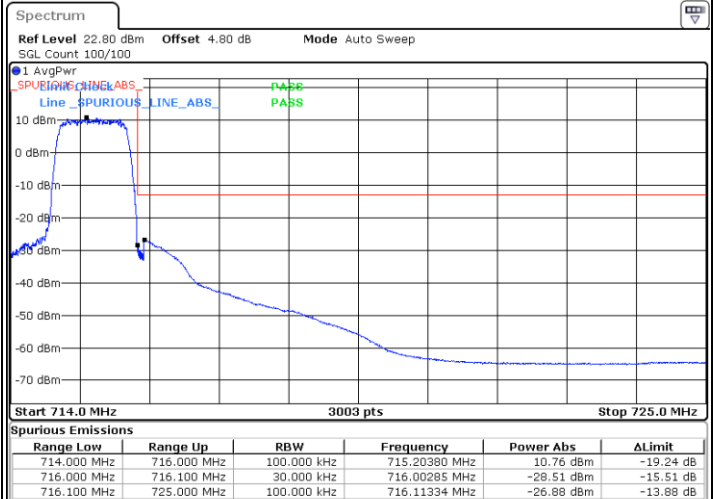
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



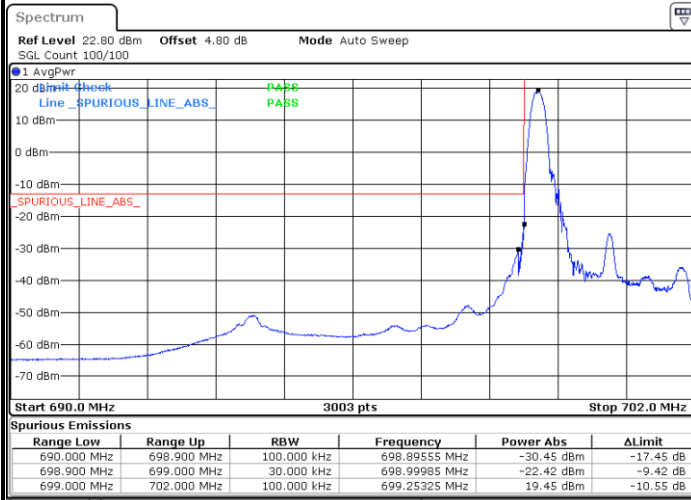
Highest Band Edge / Full RB



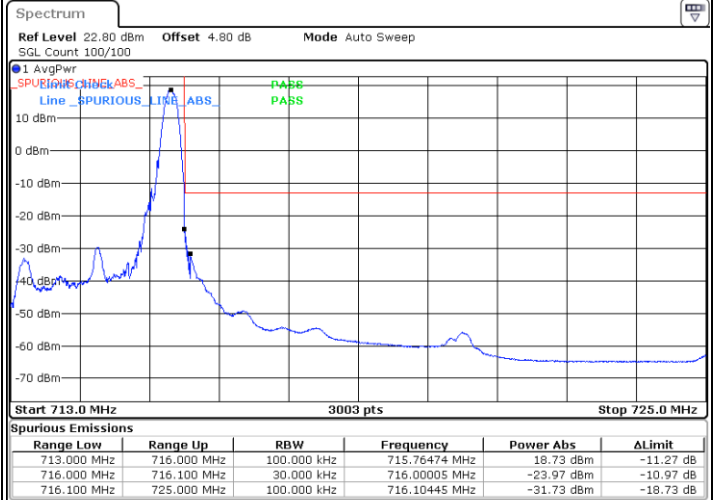


LTE Band 12 / 3MHz / QPSK

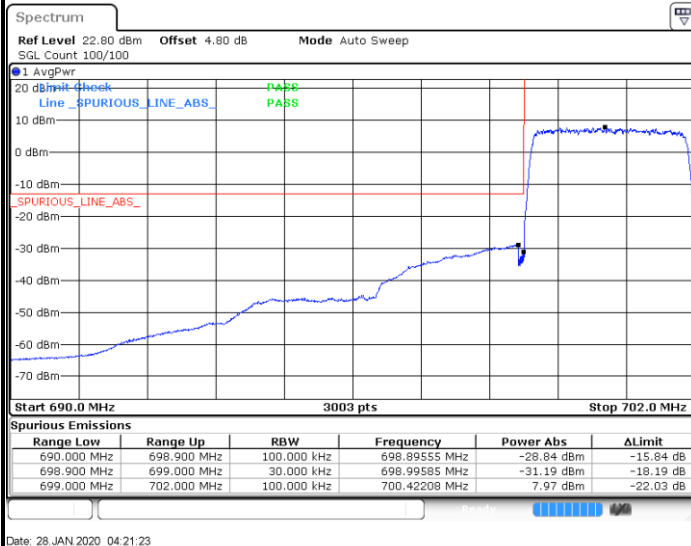
Lowest Band Edge / 1RB



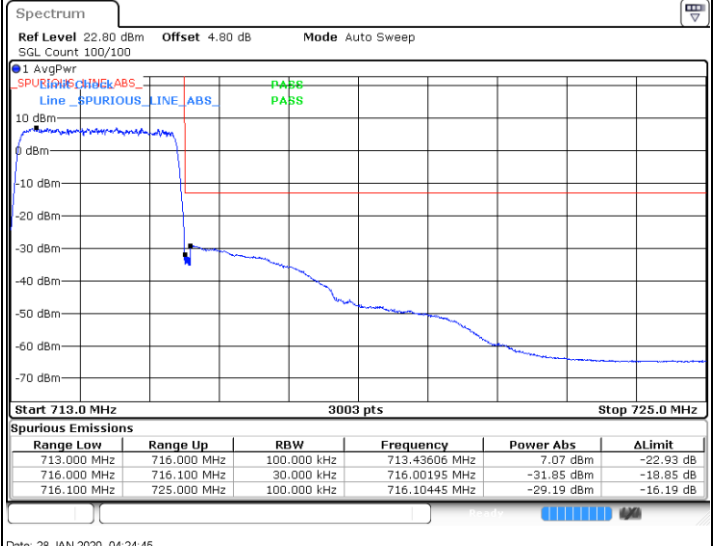
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



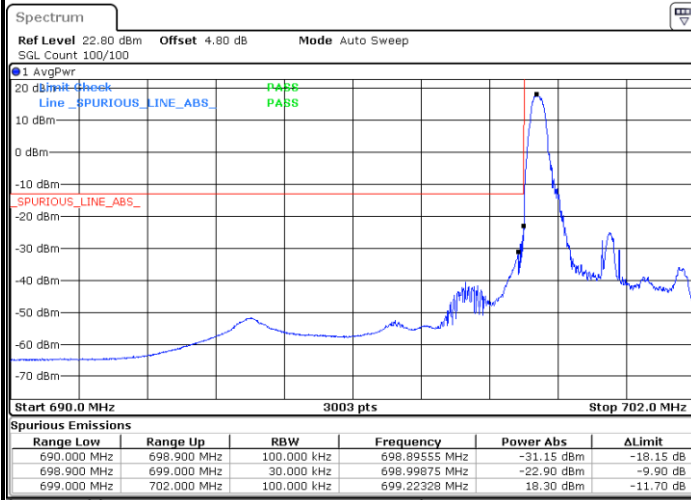
Highest Band Edge / Full RB





LTE Band 12 / 3MHz / 16QAM

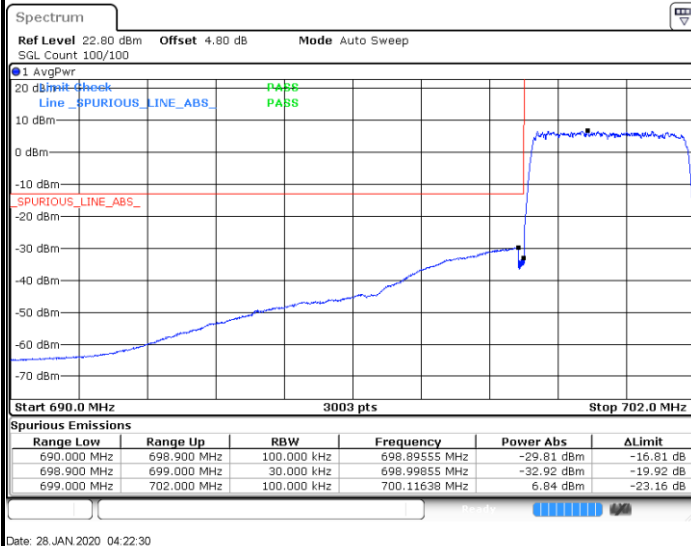
Lowest Band Edge / 1 RB



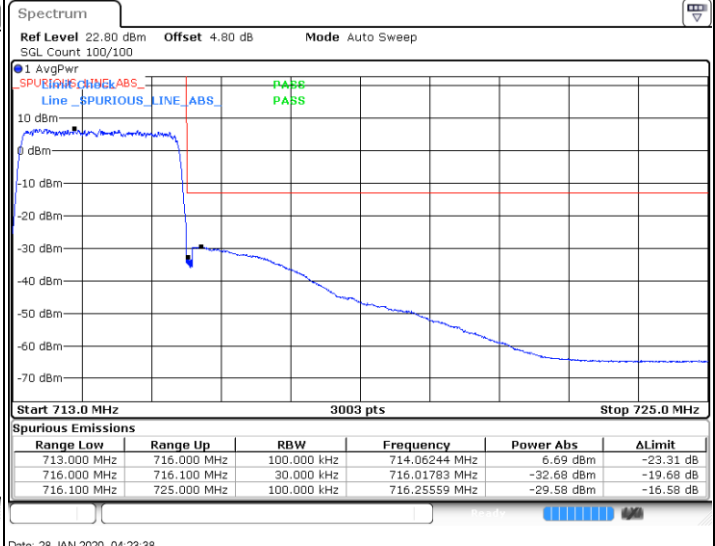
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



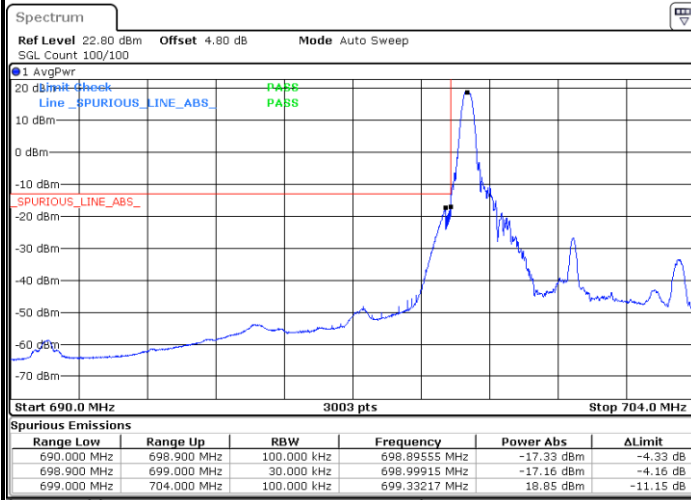
Highest Band Edge / Full RB



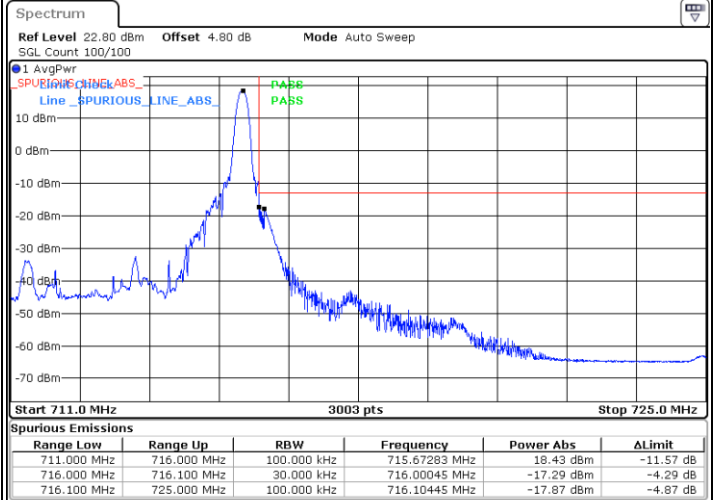


LTE Band 12 / 5MHz / QPSK

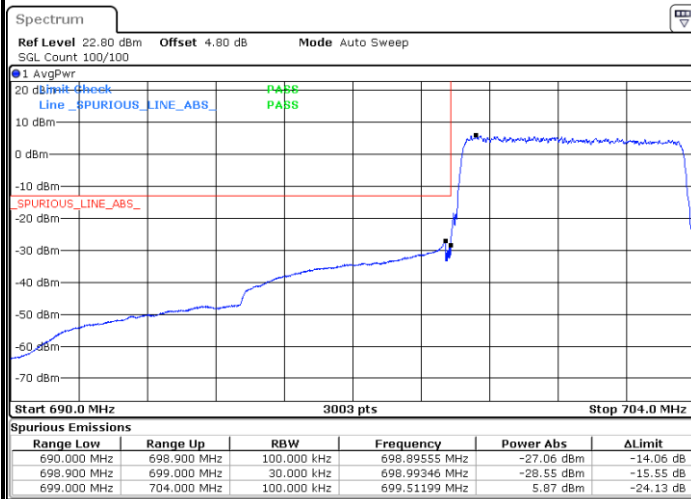
Lowest Band Edge / 1 RB



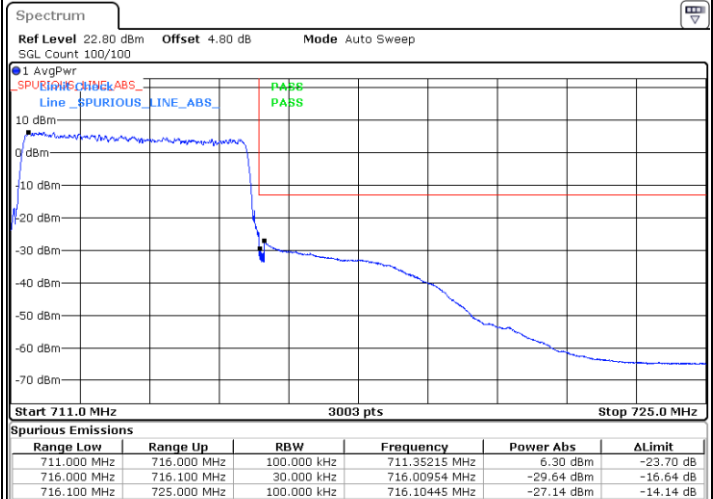
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



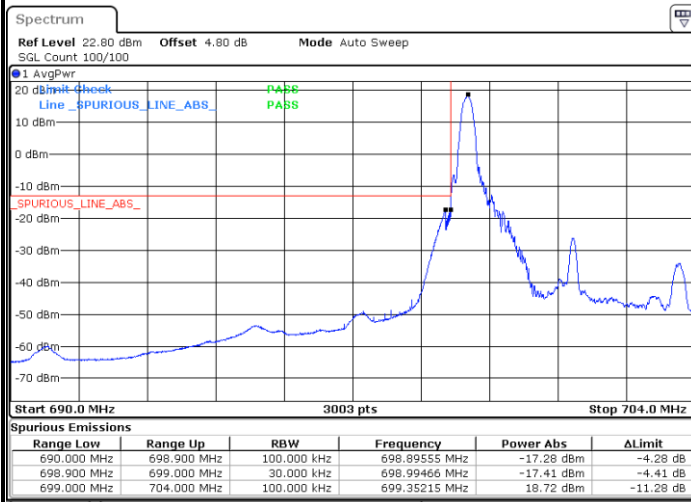
Highest Band Edge / Full RB



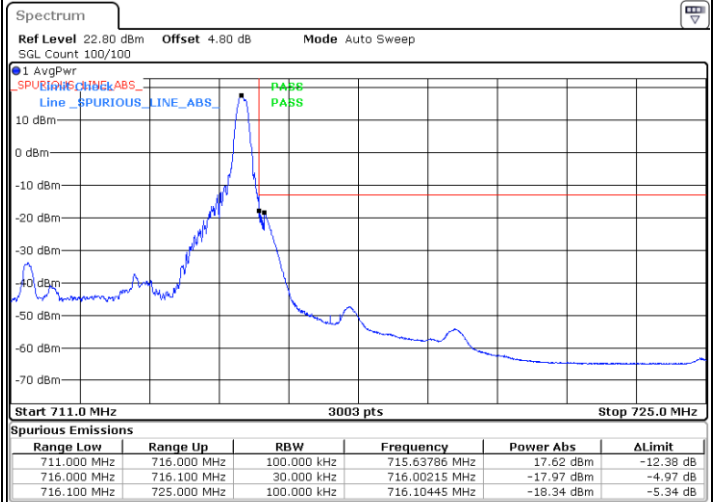


LTE Band 12 / 5MHz / 16QAM

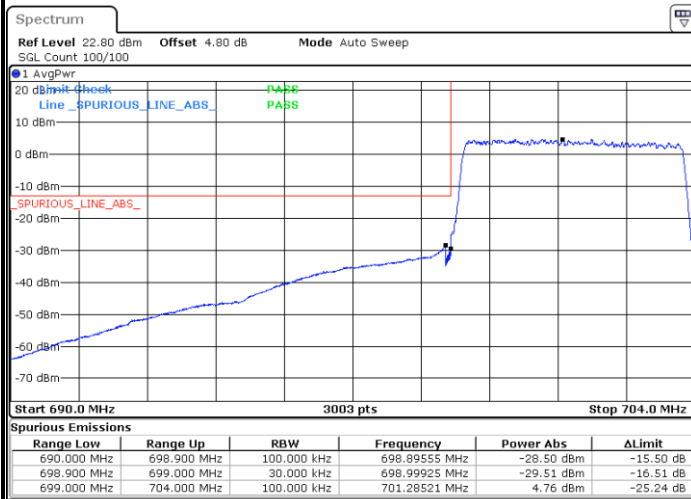
Lowest Band Edge / 1RB



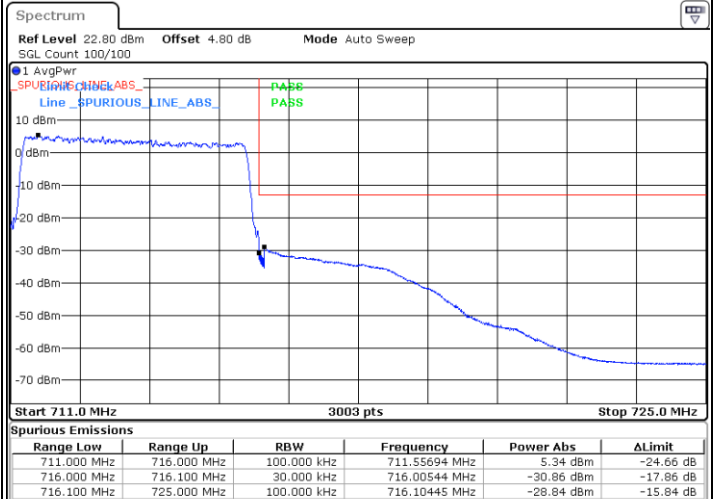
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



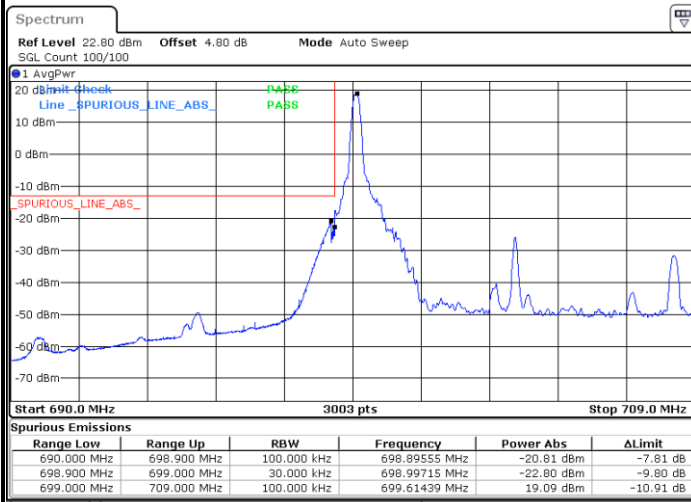
Highest Band Edge / Full RB



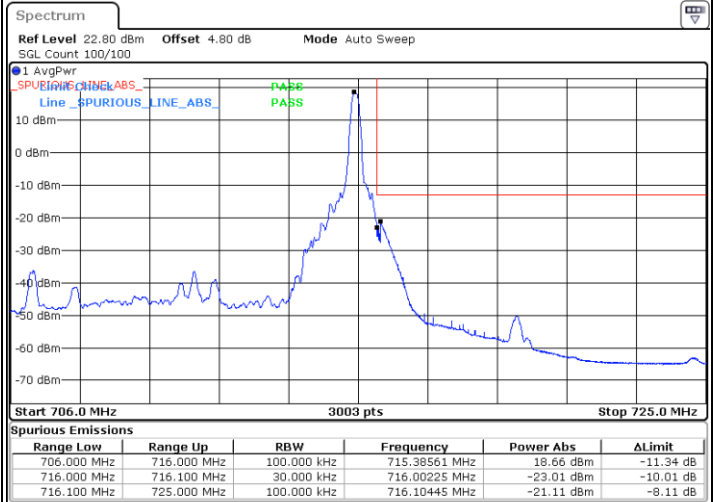


LTE Band 12 / 10MHz / QPSK

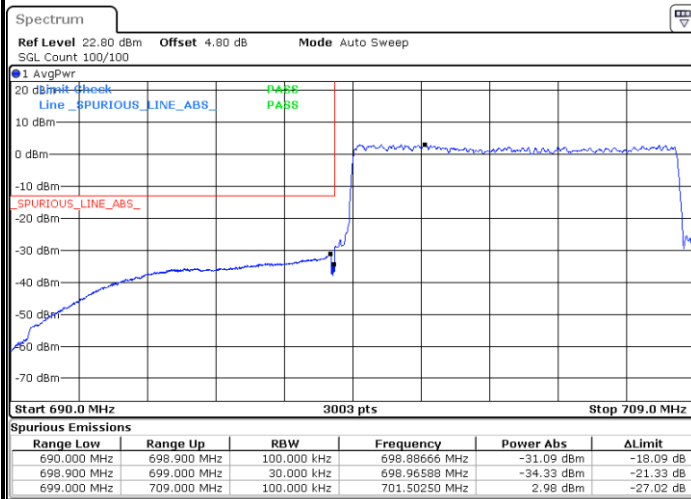
Lowest Band Edge / 1 RB



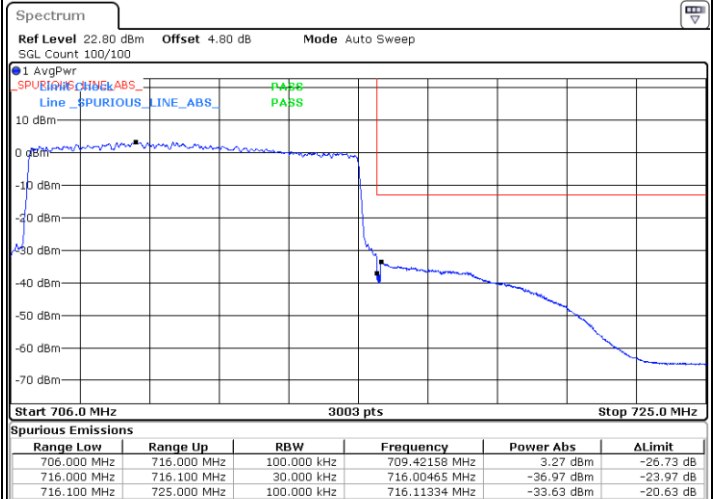
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



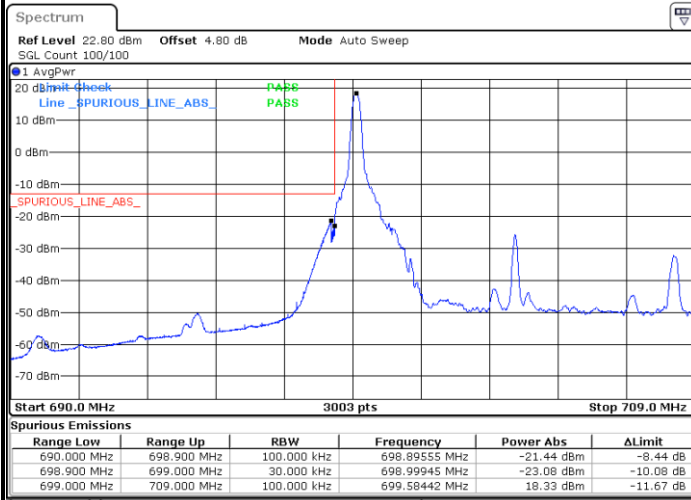
Highest Band Edge / Full RB



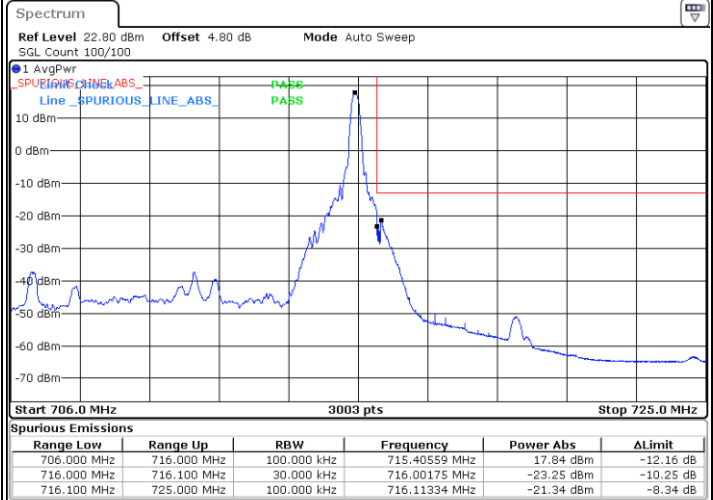


LTE Band 12 / 10MHz / 16QAM

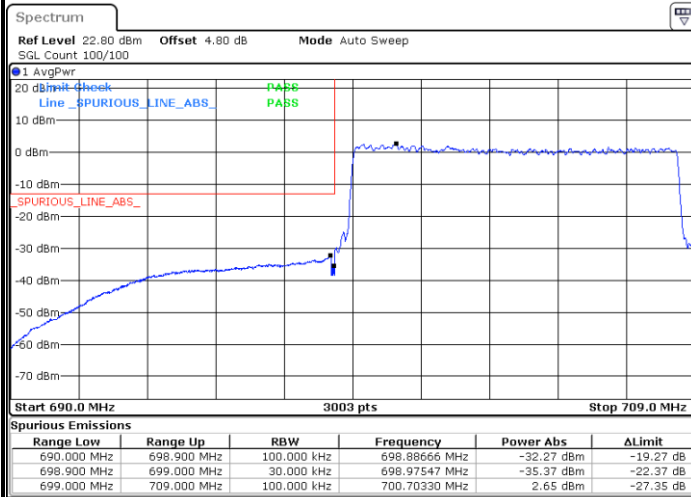
Lowest Band Edge / 1 RB



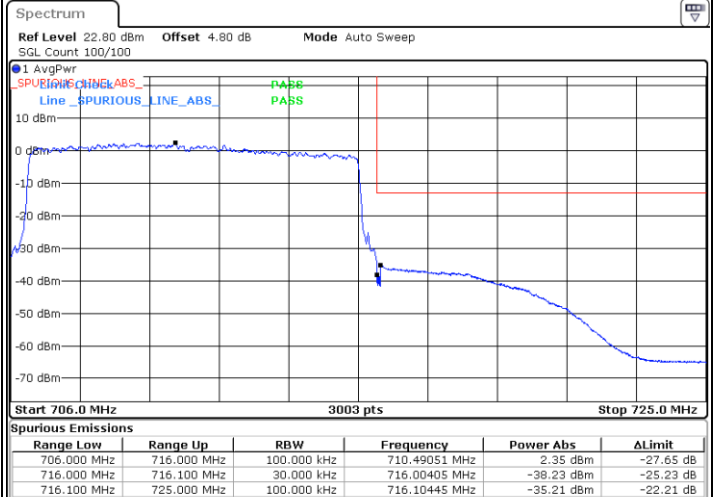
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

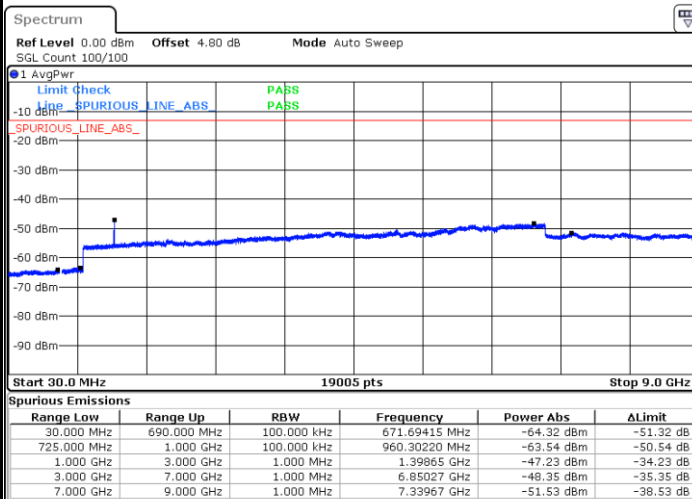




Conducted Spurious Emission

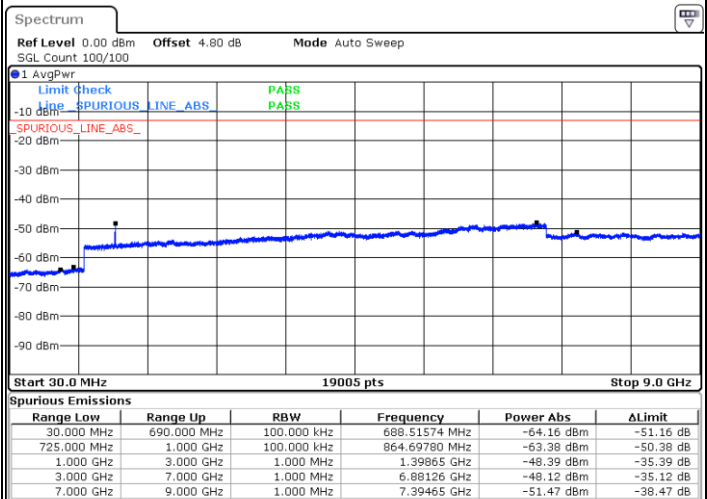
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



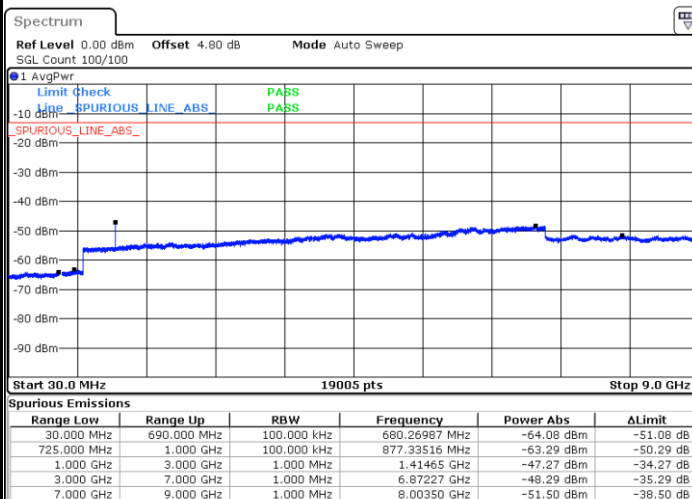
Date: 28 JAN 2020 02:56:49

Lowest Channel / 16QAM



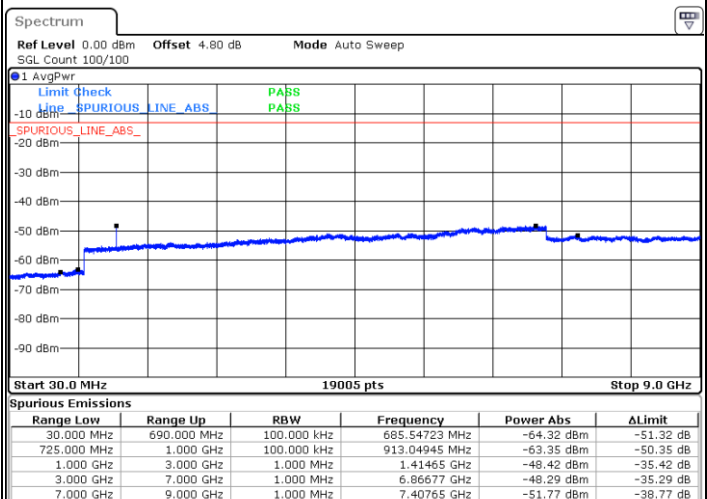
Date: 28 JAN 2020 03:57:57

Middle Channel / QPSK



Date: 28 JAN 2020 03:59:46

Middle Channel / 16QAM

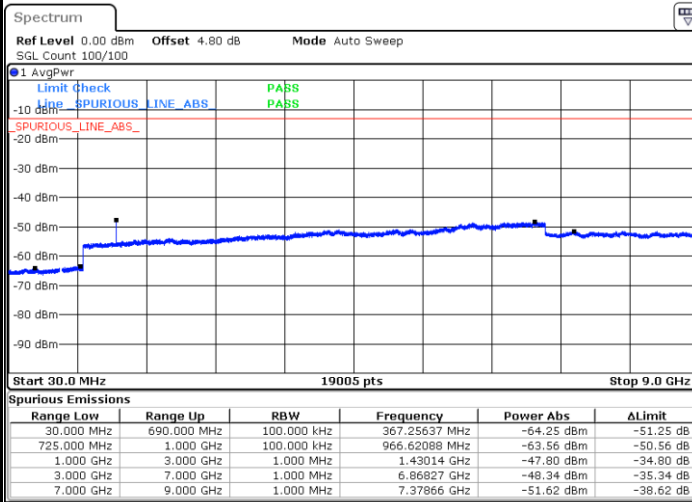


Date: 28 JAN 2020 03:58:52



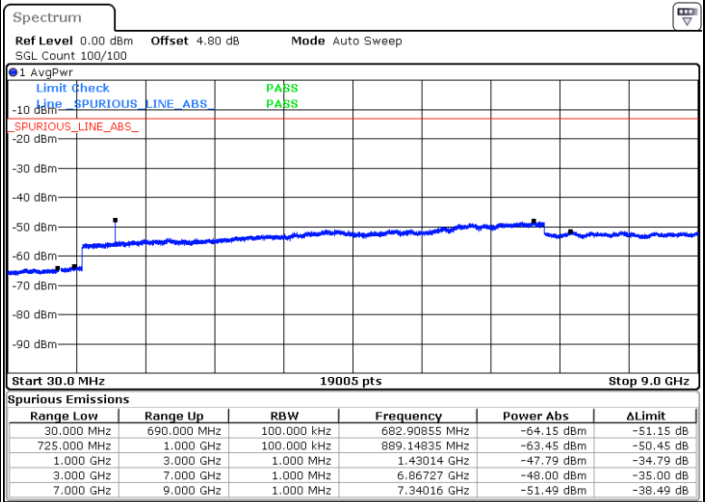
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 28 JAN 2020 04:00:40

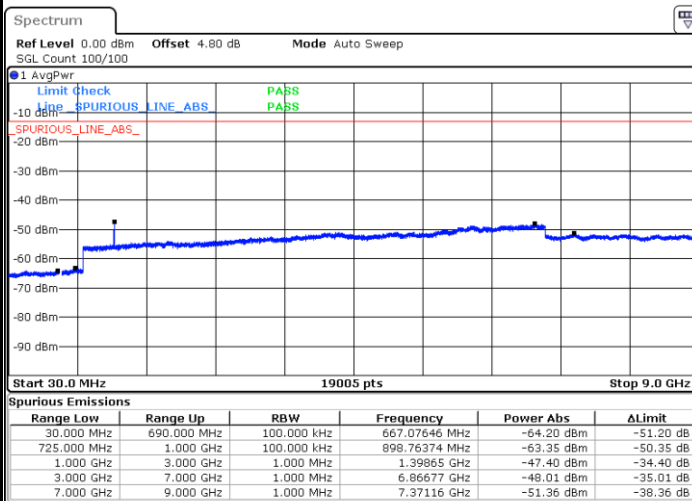
Highest Channel / 16QAM



Date: 28 JAN 2020 04:01:35

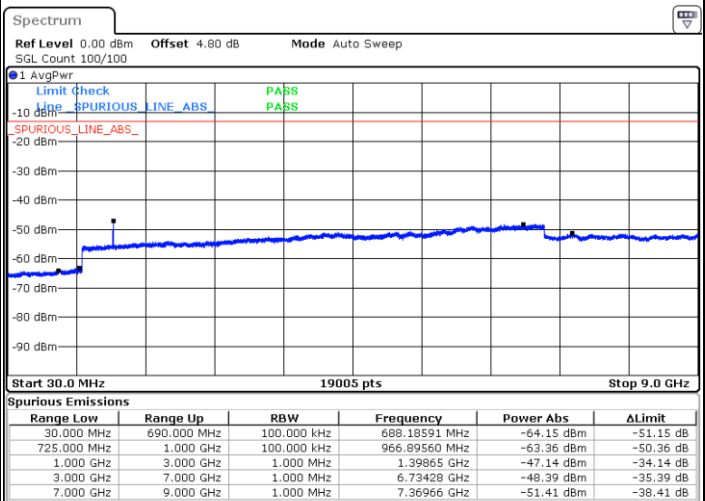
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 28 JAN 2020 04:13:28

Lowest Channel / 16QAM

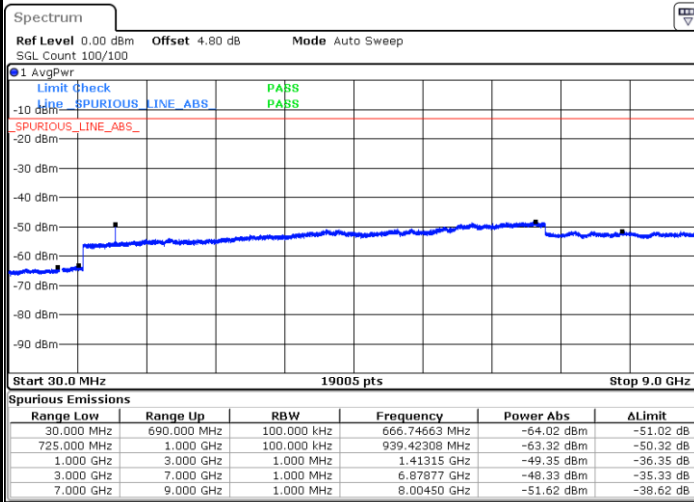


Date: 28 JAN 2020 04:14:22



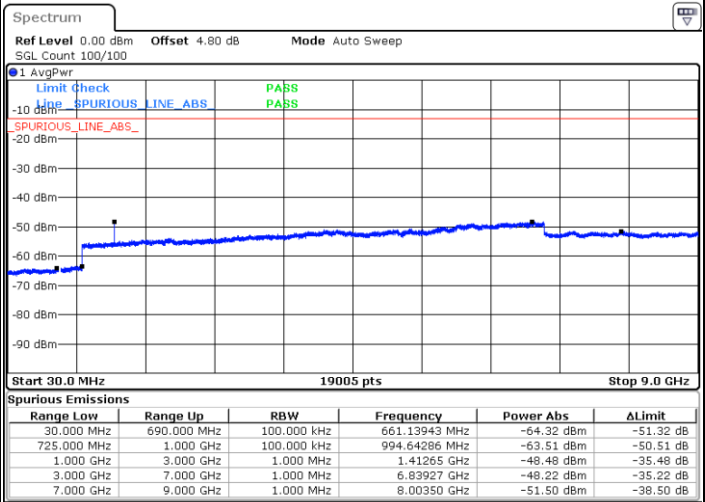
LTE Band 12 / 3MHz

Middle Channel / QPSK



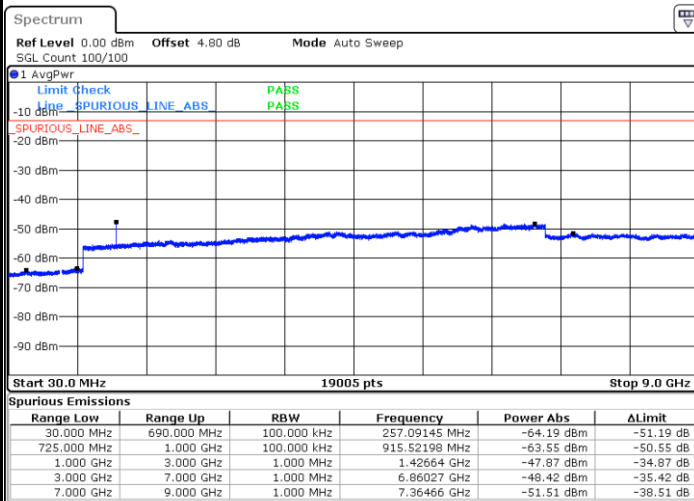
Date: 28 JAN 2020 04:16:11

Middle Channel / 16QAM



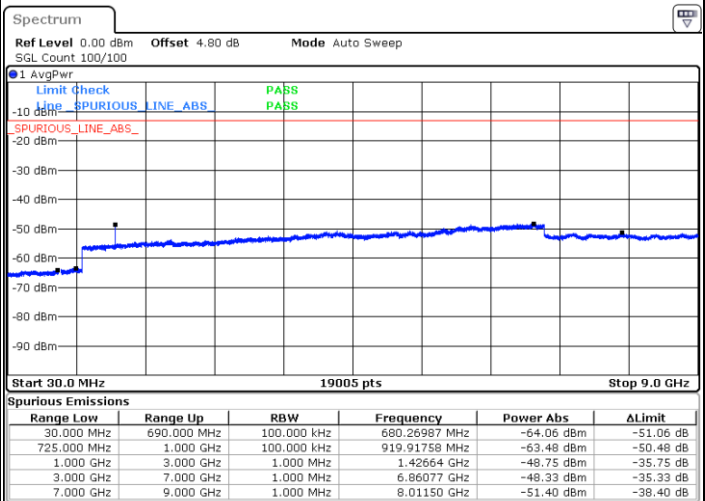
Date: 28 JAN 2020 04:15:17

Highest Channel / QPSK



Date: 28 JAN 2020 04:17:05

Highest Channel / 16QAM

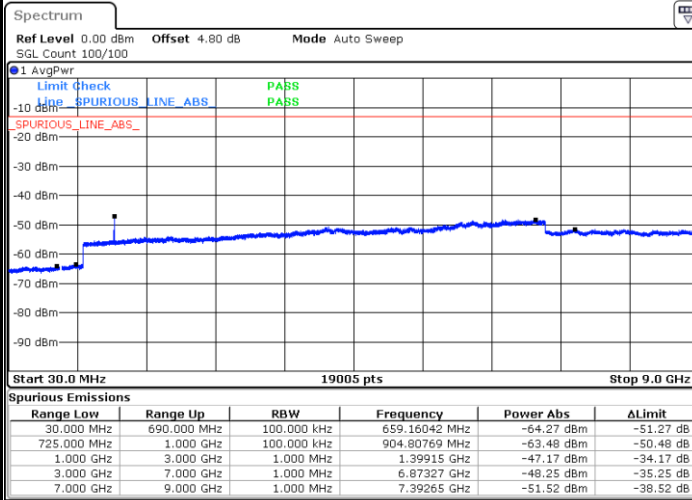


Date: 28 JAN 2020 04:18:00



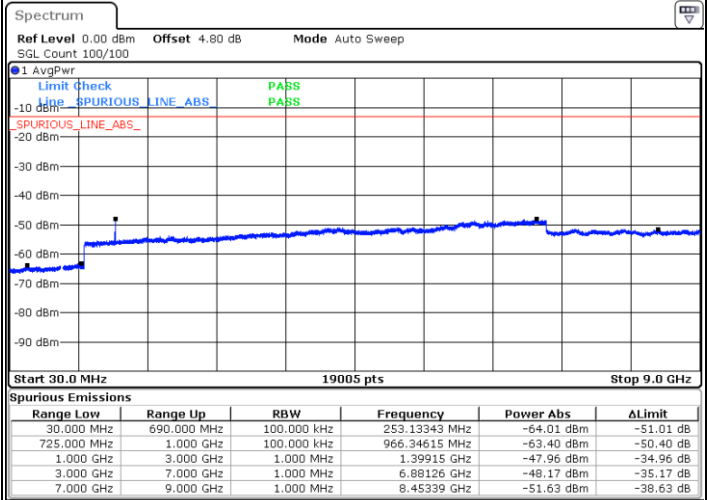
LTE Band 12 / 5MHz

Lowest Channel / QPSK



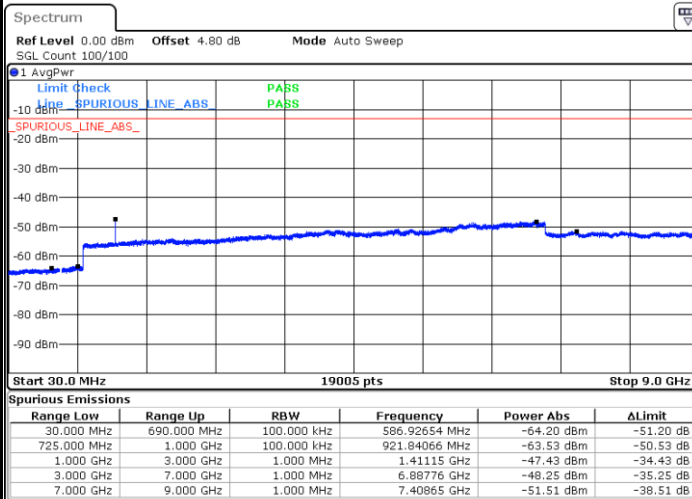
Date: 28 JAN 2020 04:29:53

Lowest Channel / 16QAM



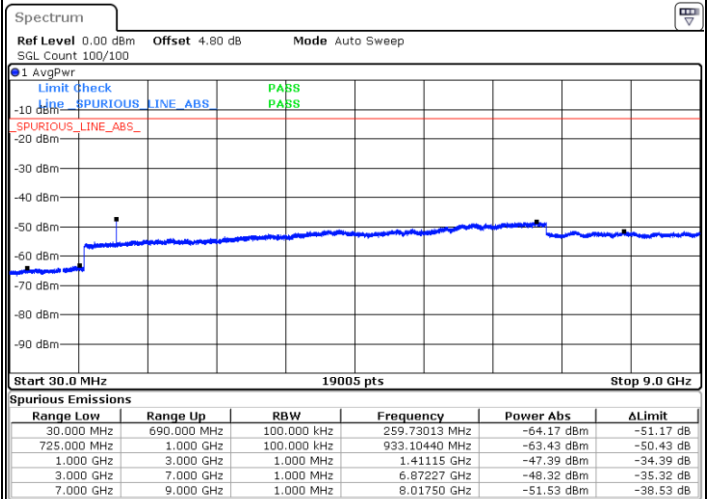
Date: 28 JAN 2020 04:30:48

Middle Channel / QPSK



Date: 28 JAN 2020 04:32:36

Middle Channel / 16QAM

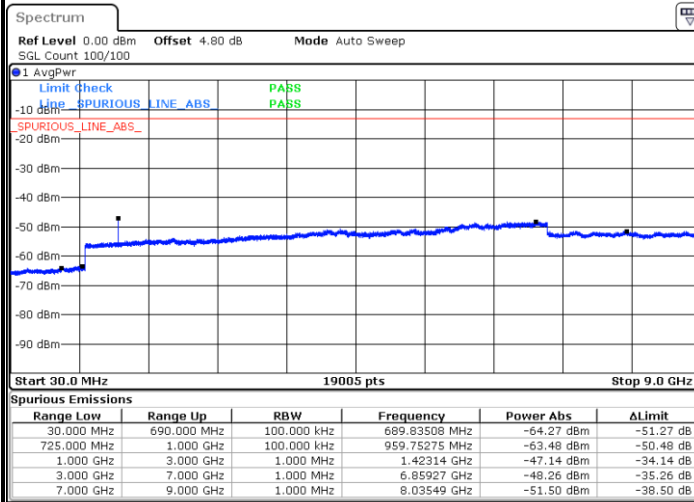


Date: 28 JAN 2020 04:31:42



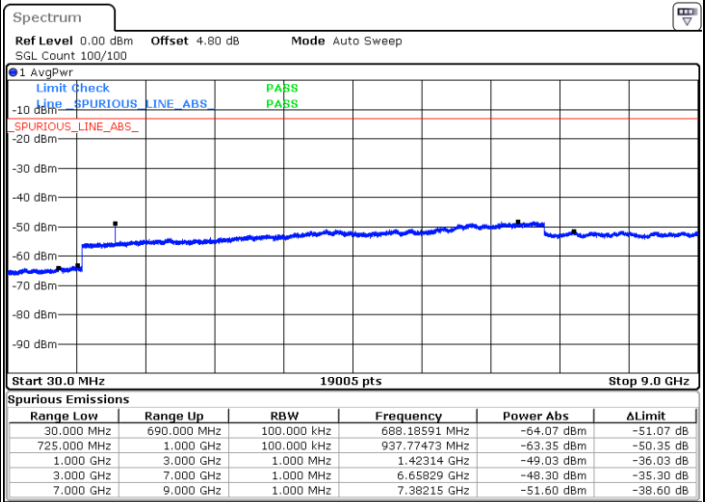
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 28 JAN 2020 04:33:31

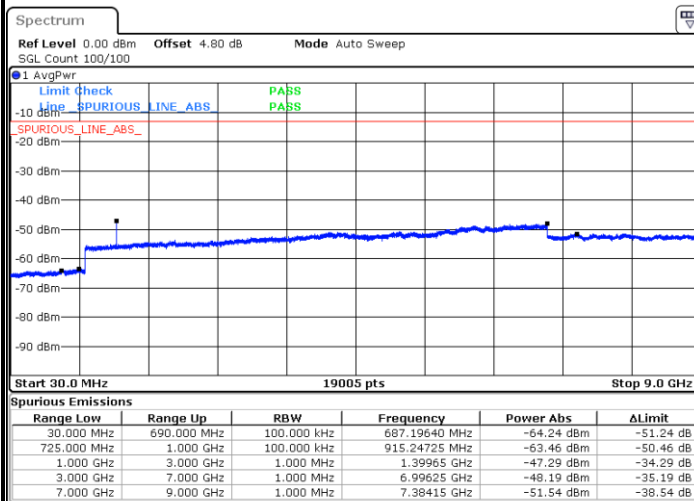
Highest Channel / 16QAM



Date: 28 JAN 2020 04:34:25

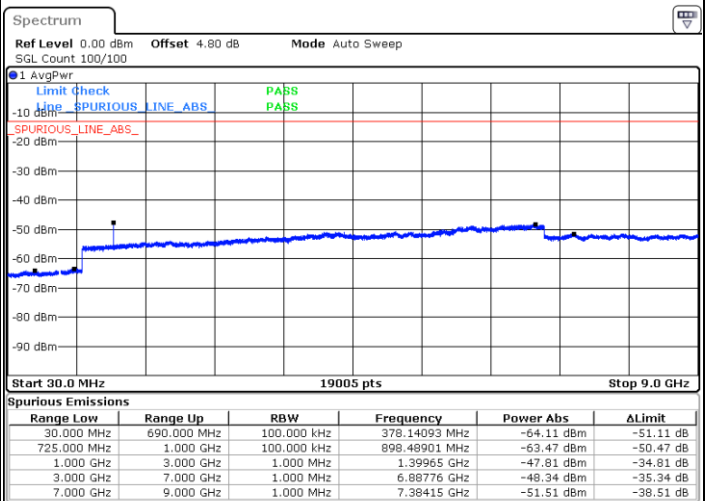
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 28 JAN 2020 04:46:19

Lowest Channel / 16QAM

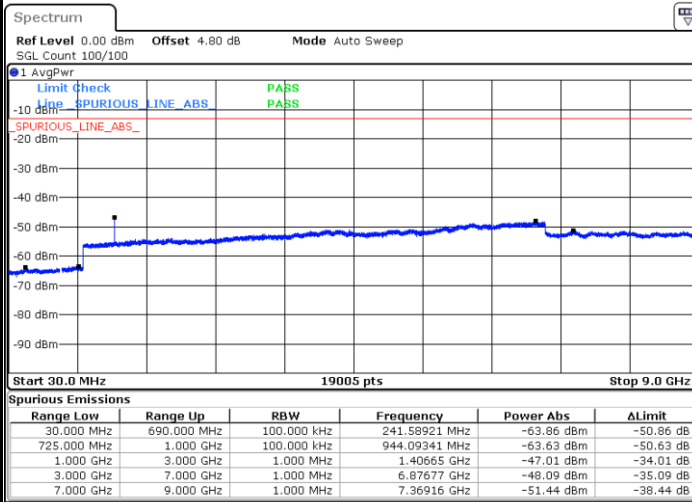


Date: 28 JAN 2020 04:47:13



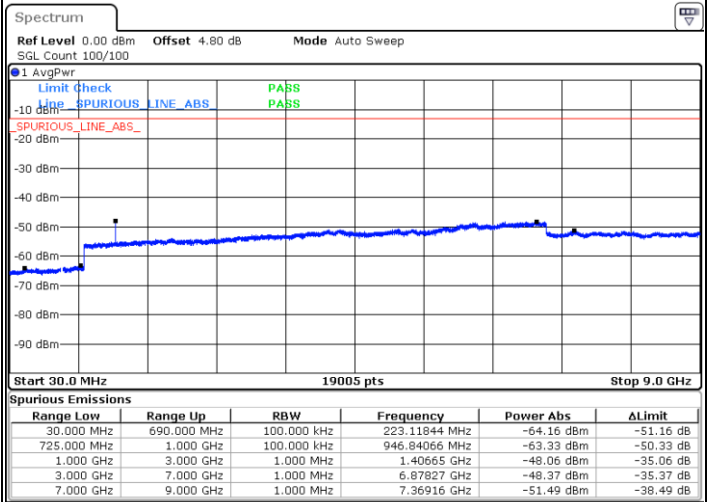
LTE Band 12 / 10MHz

Middle Channel / QPSK



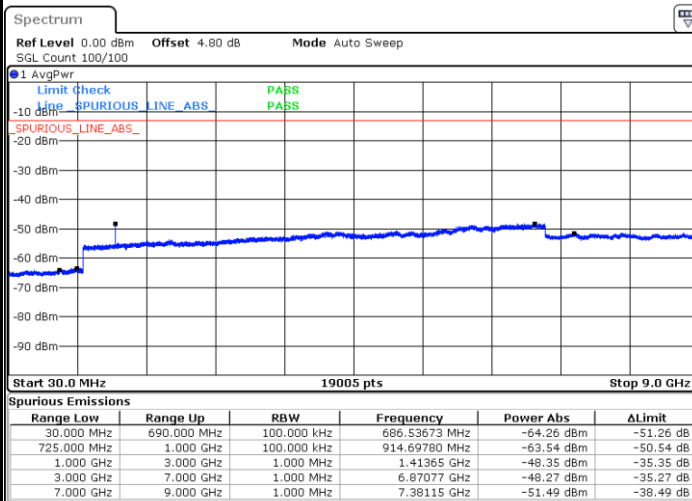
Date: 28 JAN 2020 04:49:01

Middle Channel / 16QAM



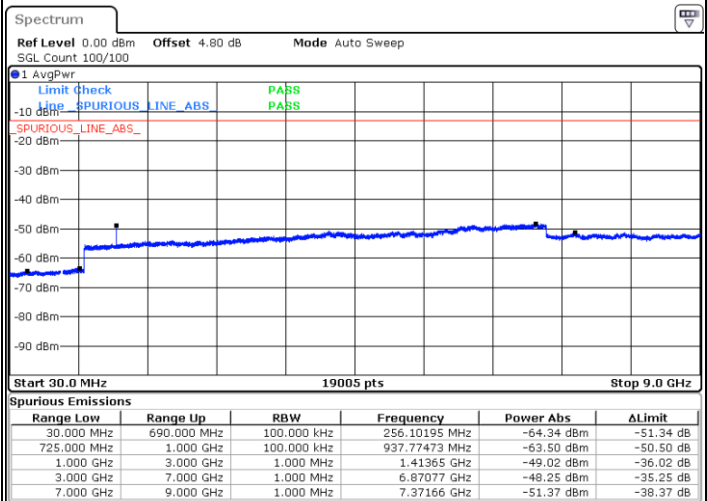
Date: 28 JAN 2020 04:48:07

Highest Channel / QPSK



Date: 28 JAN 2020 04:49:56

Highest Channel / 16QAM



Date: 28 JAN 2020 04:50:50

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0090	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0102	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0076	
-30	Normal Voltage	0.0068	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0106	

Note:

1. Normal Voltage =3.7 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 41

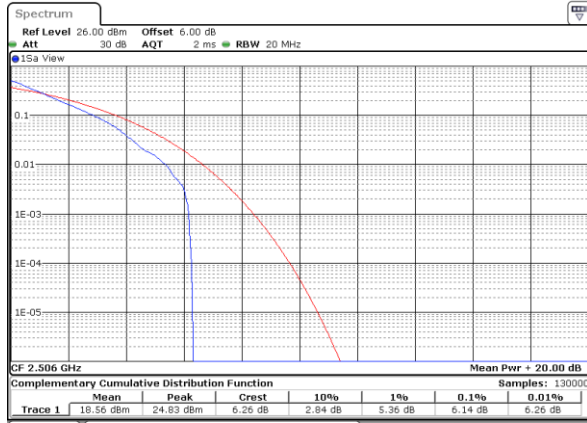
Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	6.14	6.12	6.78	6.81	PASS
Middle CH	6.14	5.91	6.70	6.64	
Highest CH	5.91	6.70	7.88	6.78	



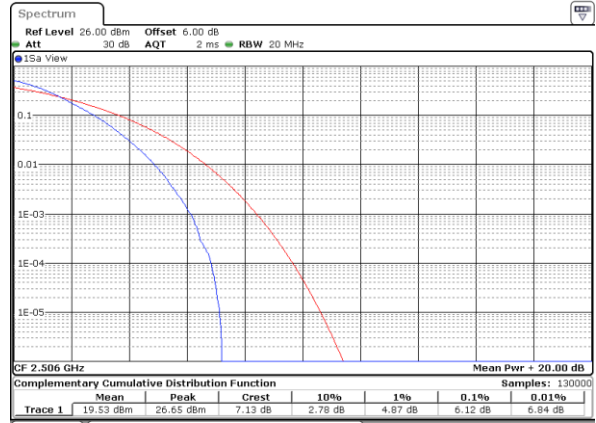
LTE Band 41 / 20MHz / QPSK

Lowest Channel / 1RB



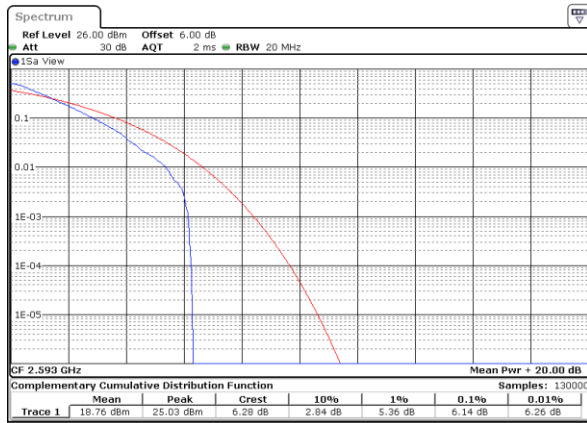
Date: 6 MAR 2020 13:19:08

Lowest Channel / Full RB



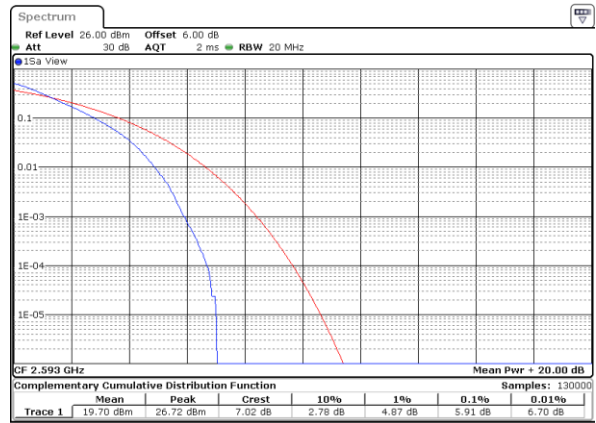
Date: 6 MAR 2020 13:23:11

Middle Channel / 1RB



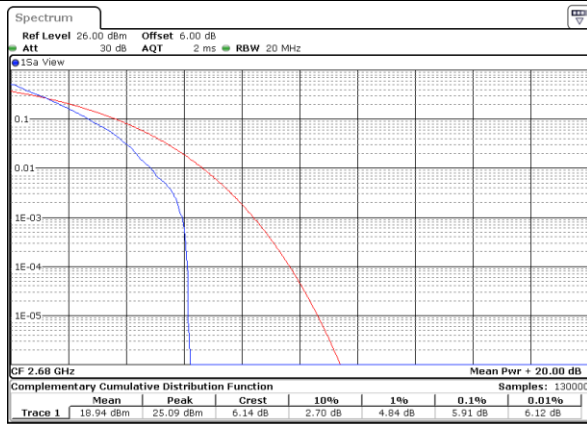
Date: 6 MAR 2020 13:19:57

Middle Channel / Full RB



Date: 6 MAR 2020 13:17:57

Highest Channel / 1RB



Date: 6 MAR 2020 13:20:29

Highest Channel / Full RB

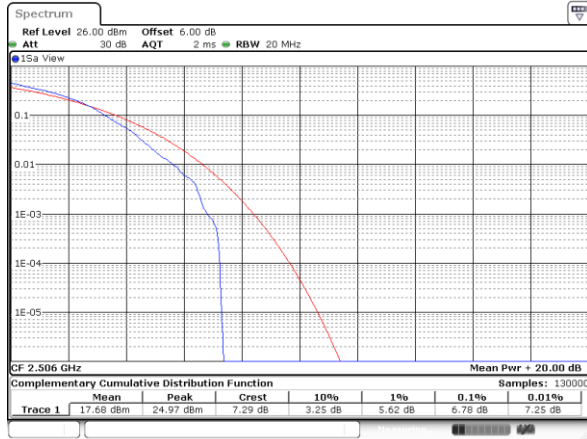


Date: 6 MAR 2020 13:18:49

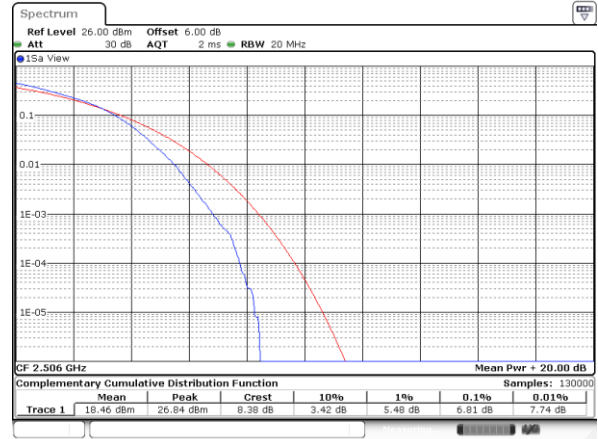


LTE Band 41 / 20MHz / 16QAM

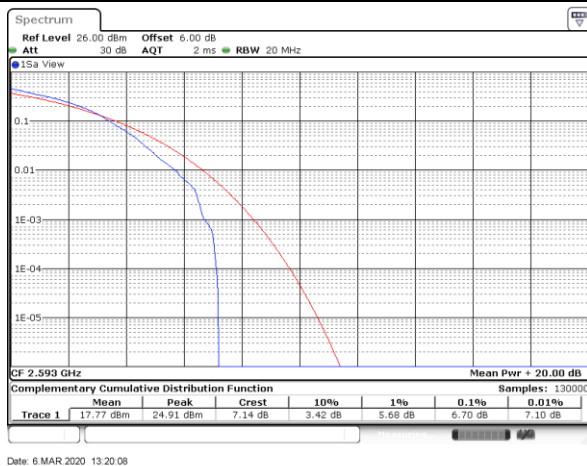
Lowest Channel / 1RB



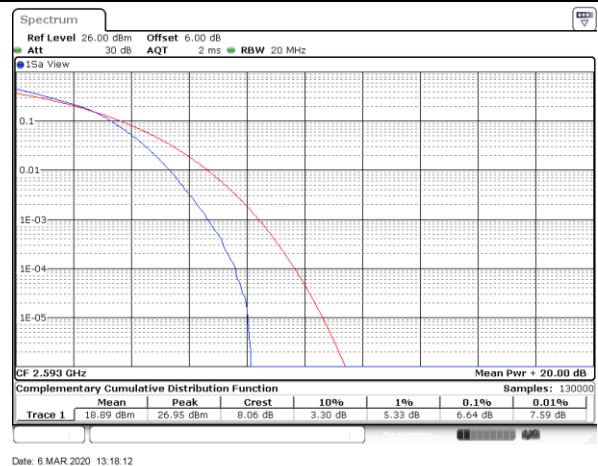
Lowest Channel / Full RB



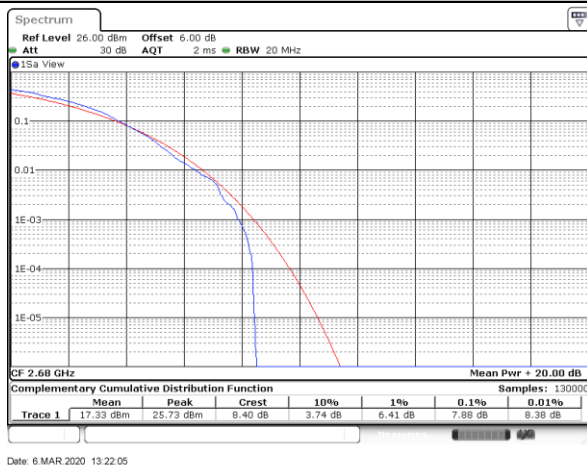
Middle Channel / 1RB



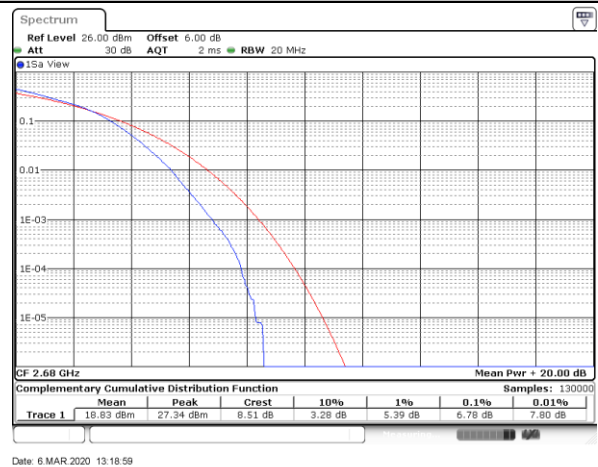
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



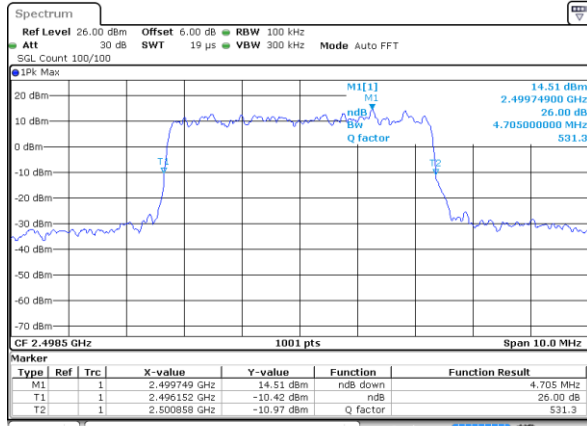
**26dB Bandwidth**

Mode	LTE Band 41 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.705	4.815	9.61	9.69	14.176	14.176	20.06	20.14
Middle CH	-	-	-	-	4.835	4.735	9.65	9.93	14.266	14.206	20.22	20.18
Highest CH	-	-	-	-	4.835	4.755	9.63	9.71	14.296	14.116	20.06	20.22



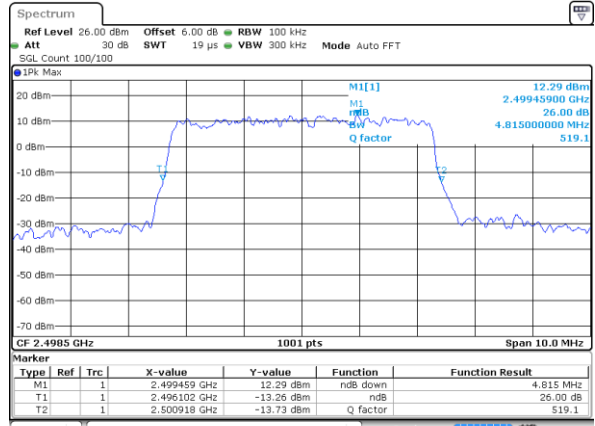
LTE Band 41

Lowest Channel / 5MHz / QPSK



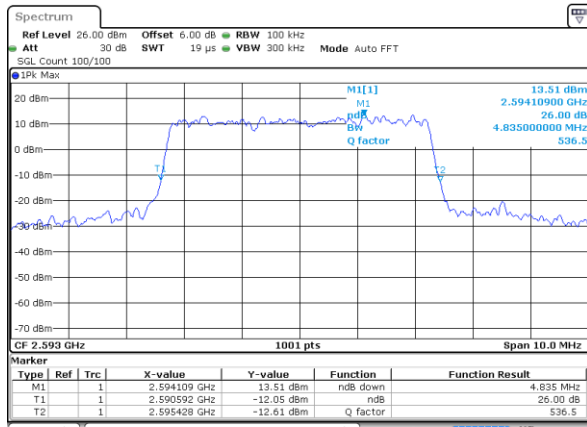
Date: 6 MAR 2020 12:04:26

Lowest Channel / 5MHz / 16QAM



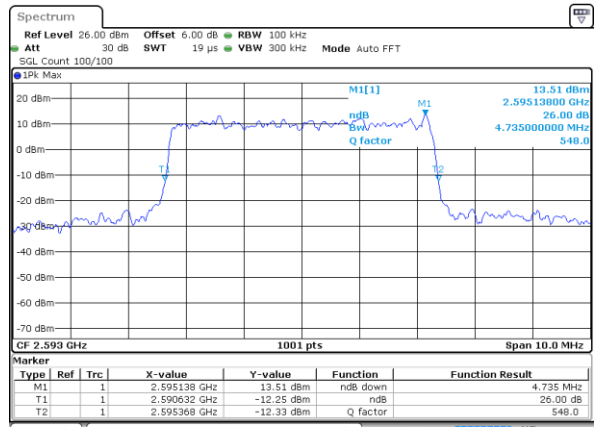
Date: 6 MAR 2020 12:04:46

Middle Channel / 5MHz / QPSK



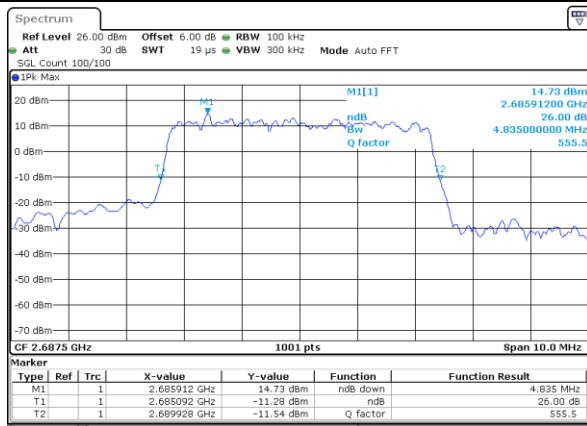
Date: 6 MAR 2020 12:05:06

Middle Channel / 5MHz / 16QAM



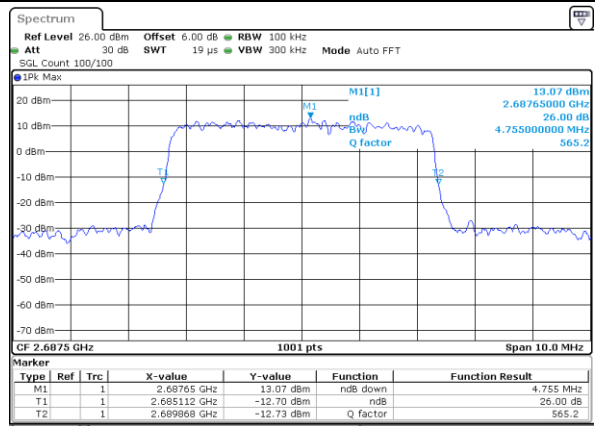
Date: 6 MAR 2020 12:05:26

Highest Channel / 5MHz / QPSK



Date: 6 MAR 2020 12:05:46

Highest Channel / 5MHz / 16QAM

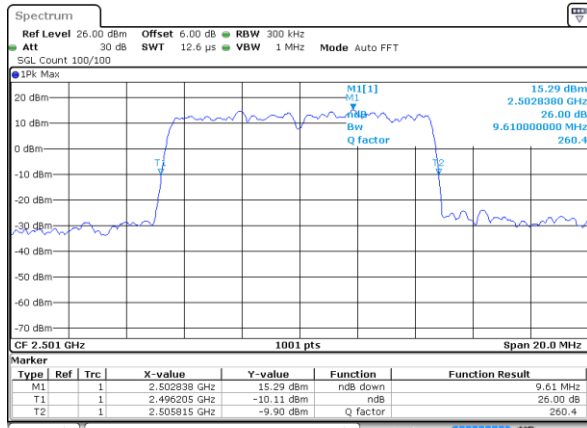


Date: 6 MAR 2020 12:06:06



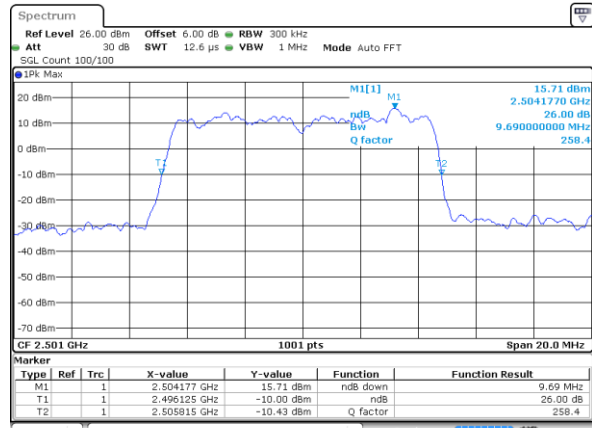
LTE Band 41

Lowest Channel / 10MHz / QPSK



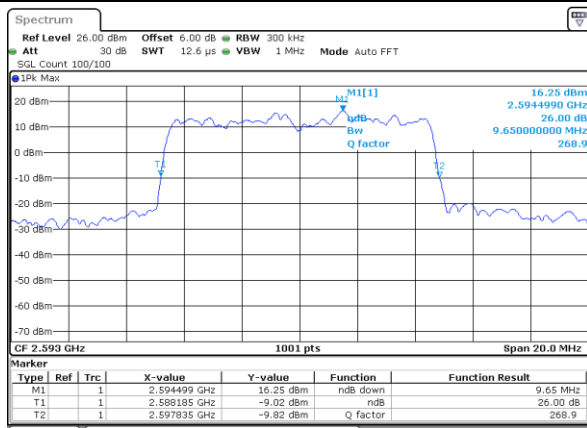
Date: 6 MAR 2020 12:06:26

Lowest Channel / 10MHz / 16QAM



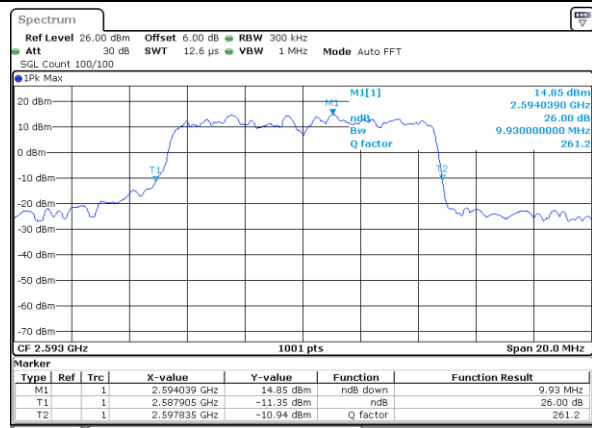
Date: 6 MAR 2020 12:06:46

Middle Channel / 10MHz / QPSK



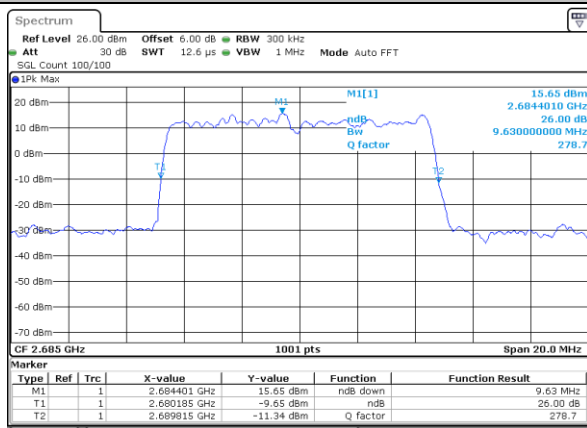
Date: 6 MAR 2020 12:07:06

Middle Channel / 10MHz / 16QAM



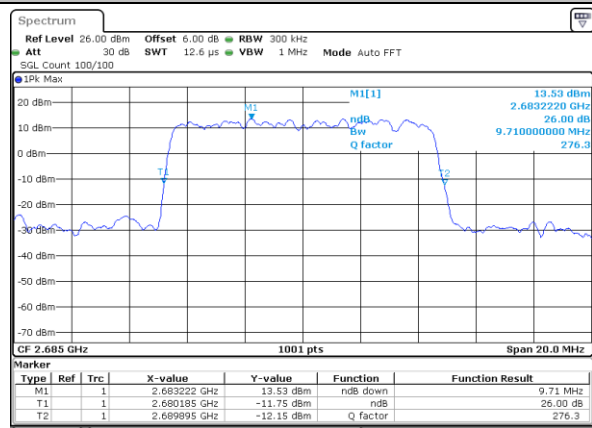
Date: 6 MAR 2020 12:07:26

Highest Channel / 10MHz / QPSK



Date: 6 MAR 2020 12:07:46

Highest Channel / 10MHz / 16QAM

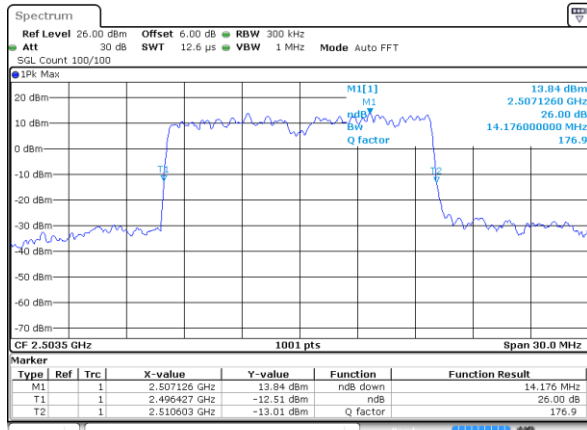


Date: 6 MAR 2020 12:08:06

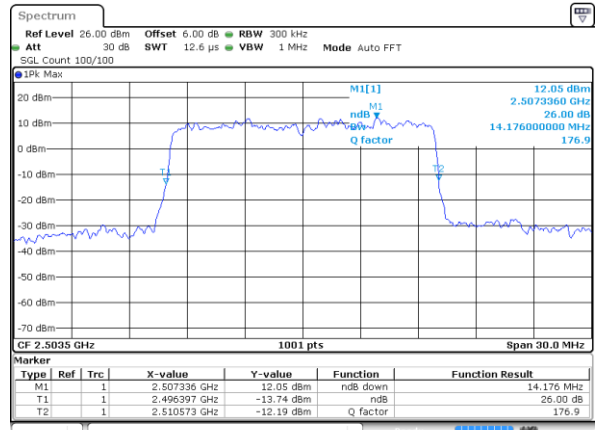


LTE Band 41

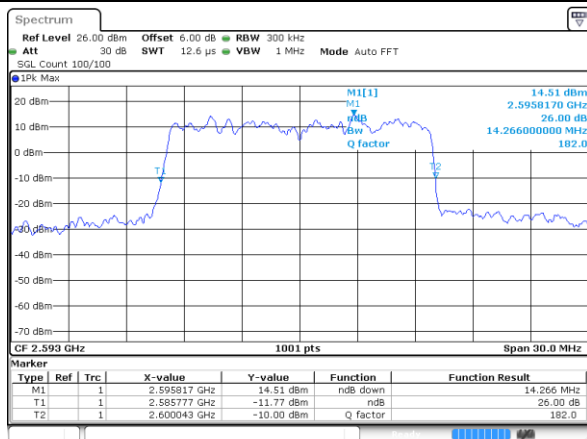
Lowest Channel / 15MHz / QPSK



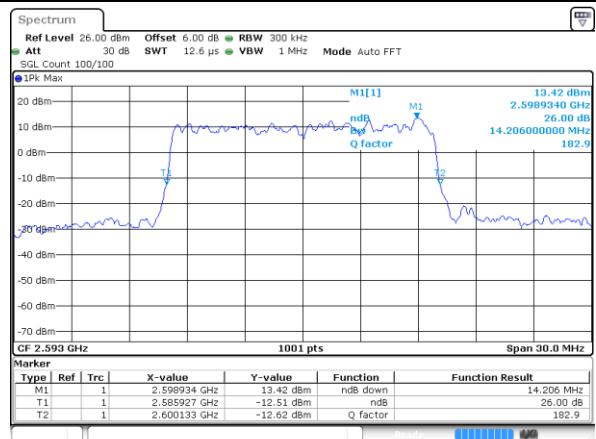
Lowest Channel / 15MHz / 16QAM



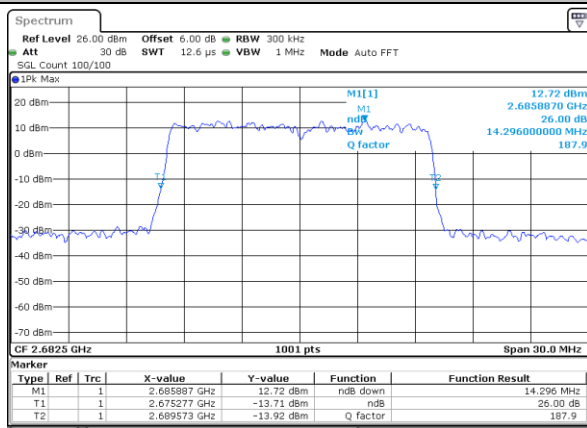
Middle Channel / 15MHz / QPSK



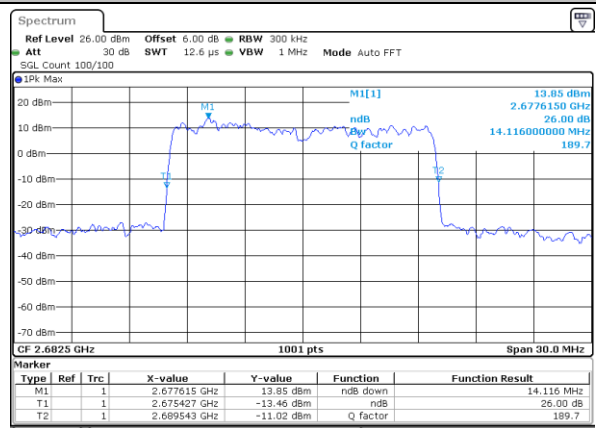
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



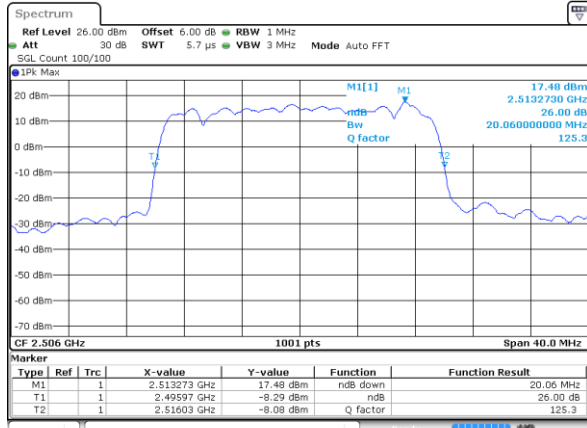
Highest Channel / 15MHz / 16QAM



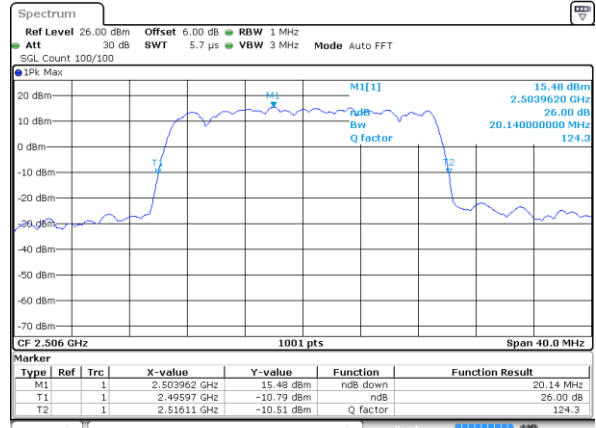


LTE Band 41

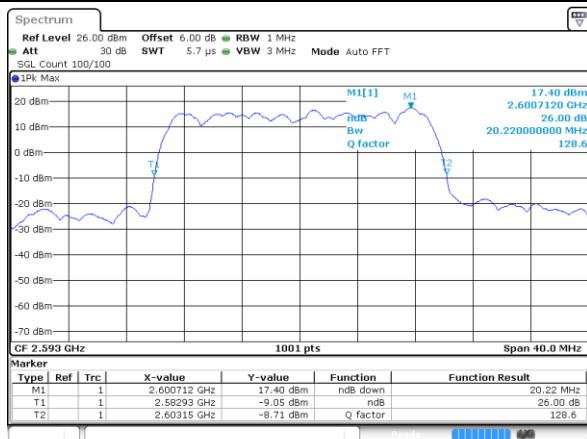
Lowest Channel / 20MHz / QPSK



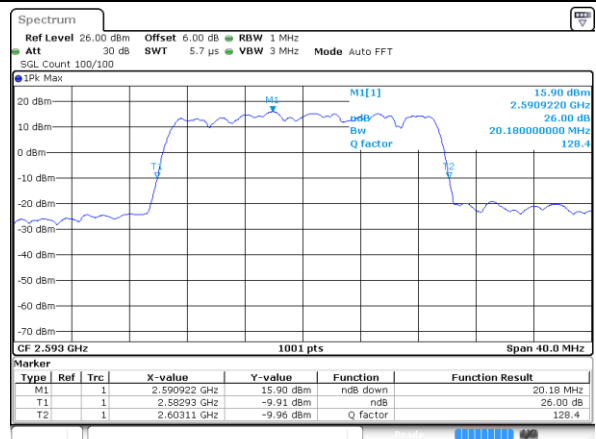
Lowest Channel / 20MHz / 16QAM



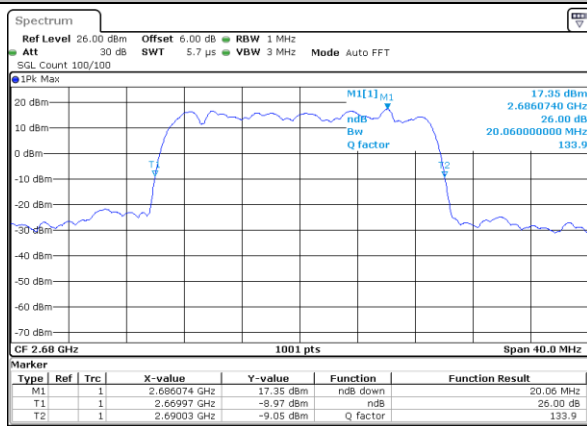
Middle Channel / 20MHz / QPSK



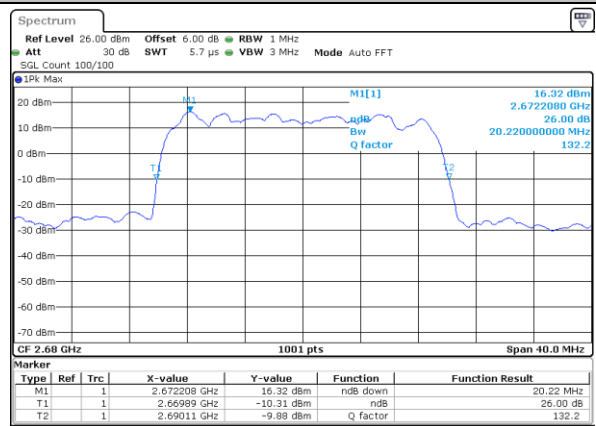
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM





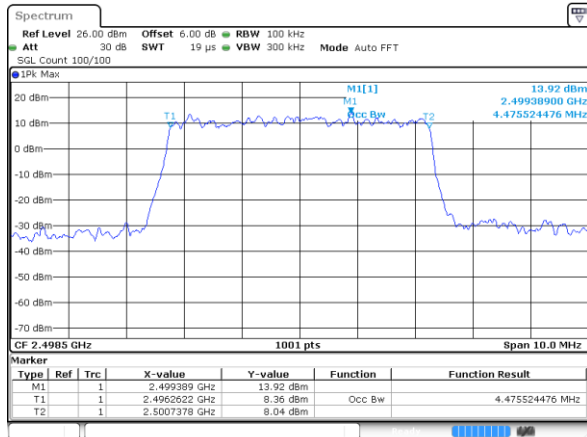
Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.48	4.49	9.07	8.99	13.49	13.43	18.30	18.22
Middle CH	-	-	-	-	4.49	4.47	8.99	9.03	13.40	13.40	18.34	18.26
Highest CH	-	-	-	-	4.47	4.48	9.01	9.03	13.46	13.49	18.58	18.34



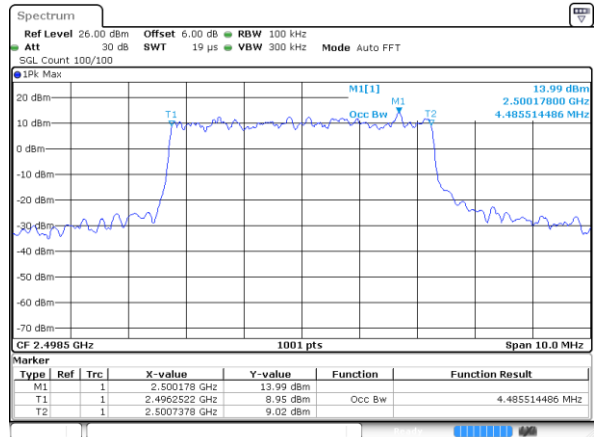
LTE Band 41

Lowest Channel / 5MHz / QPSK



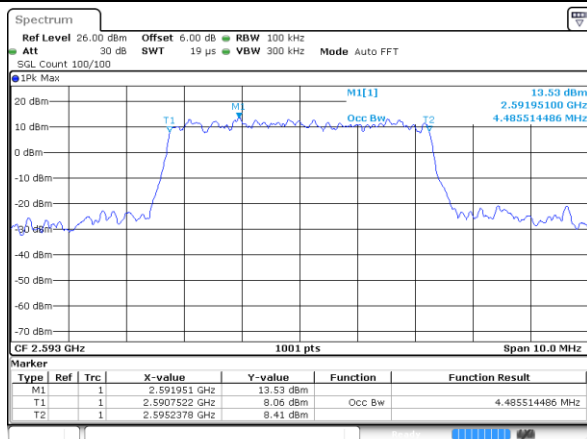
Date: 6 MAR 2020 12:04:16

Lowest Channel / 5MHz / 16QAM



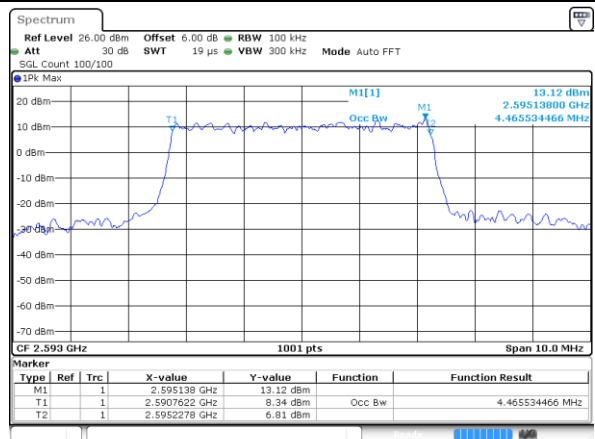
Date: 6 MAR 2020 12:04:36

Middle Channel / 5MHz / QPSK



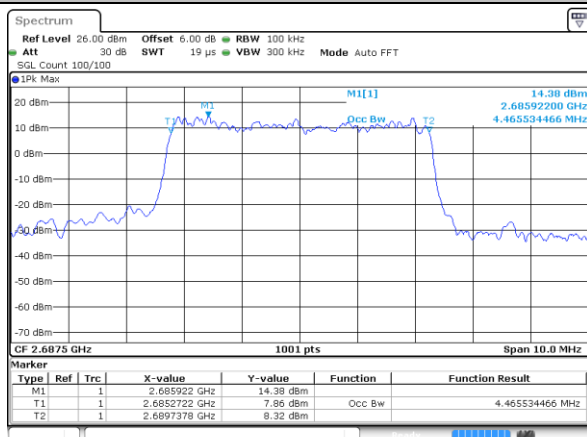
Date: 6 MAR 2020 12:04:56

Middle Channel / 5MHz / 16QAM



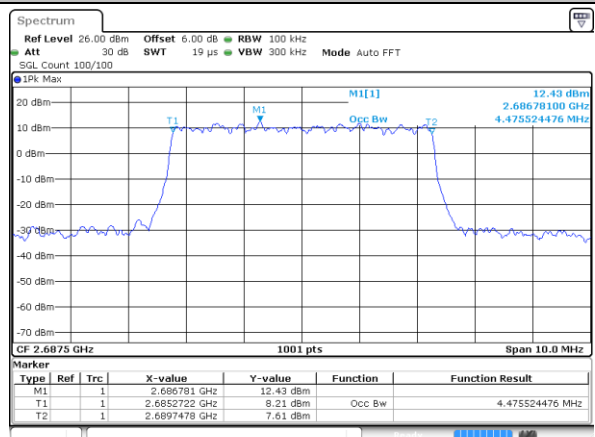
Date: 6 MAR 2020 12:05:16

Highest Channel / 5MHz / QPSK



Date: 6 MAR 2020 12:05:36

Highest Channel / 5MHz / 16QAM



Date: 6 MAR 2020 12:05:56