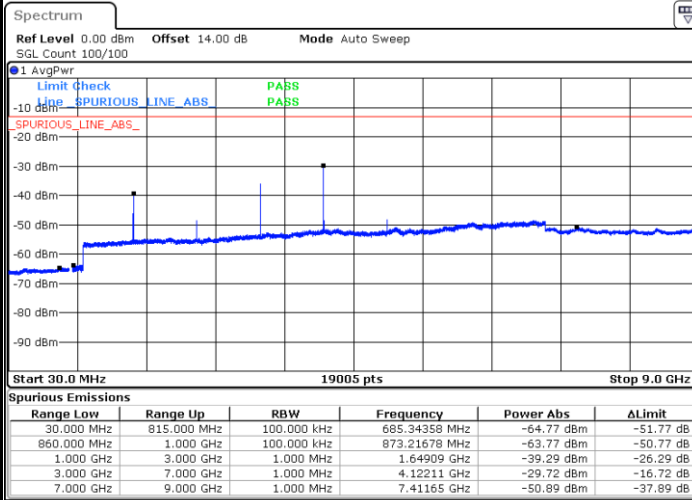




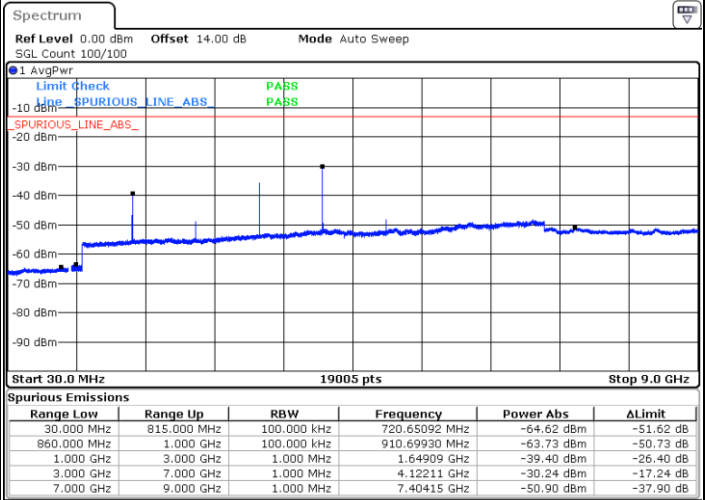
LTE Band 5 / 5MHz

Lowest Channel / QPSK



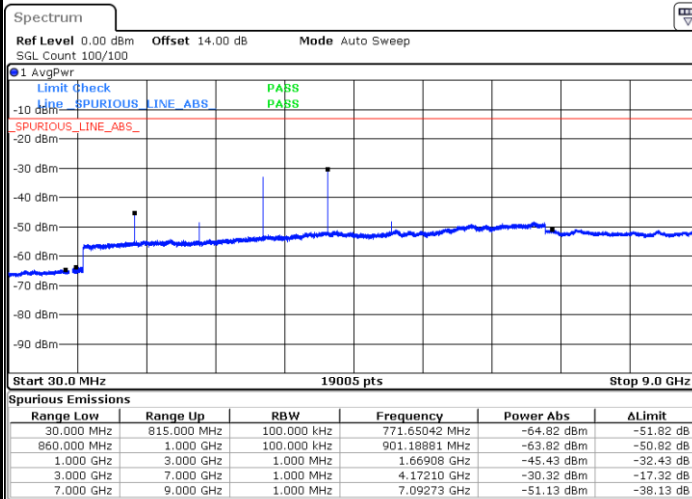
Date: 22 MAR 2020 09:17:30

Lowest Channel / 16QAM



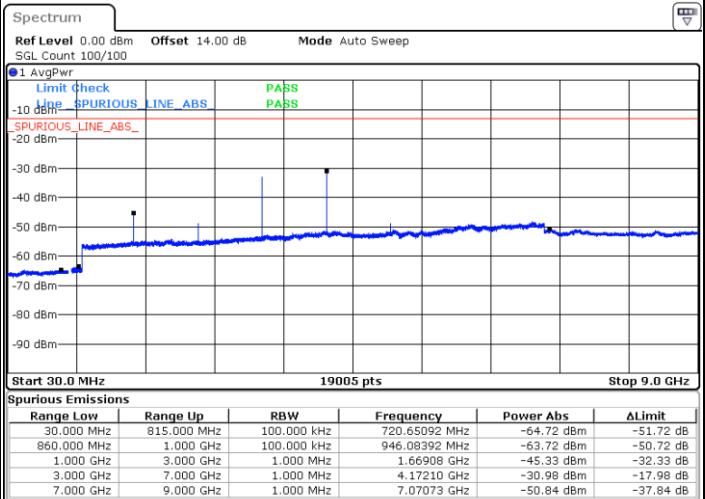
Date: 22 MAR 2020 09:18:29

Middle Channel / QPSK



Date: 22 MAR 2020 09:20:12

Middle Channel / 16QAM

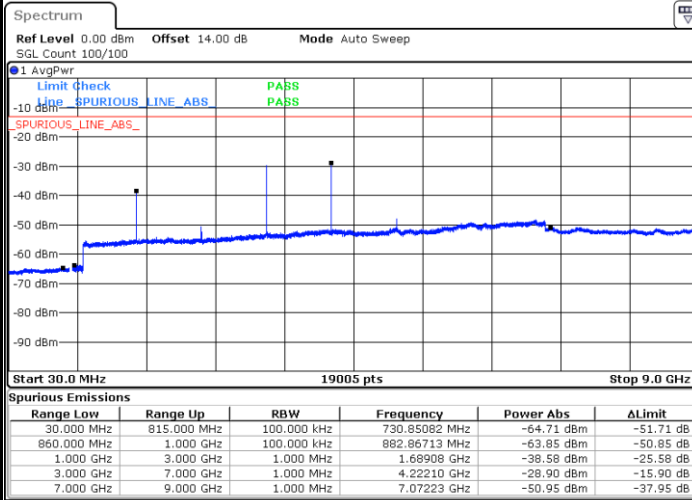


Date: 22 MAR 2020 09:21:11



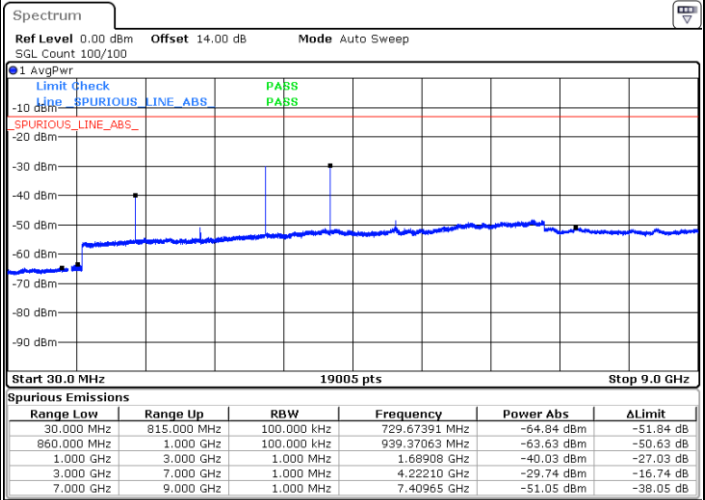
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 22 MAR 2020 09:29:30

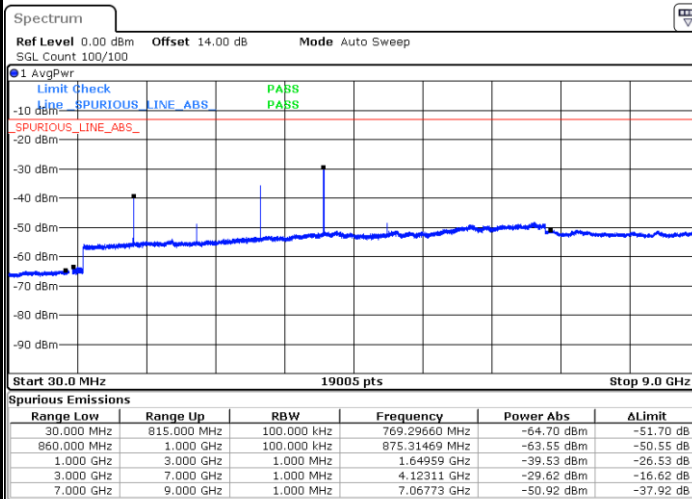
Highest Channel / 16QAM



Date: 22 MAR 2020 09:30:29

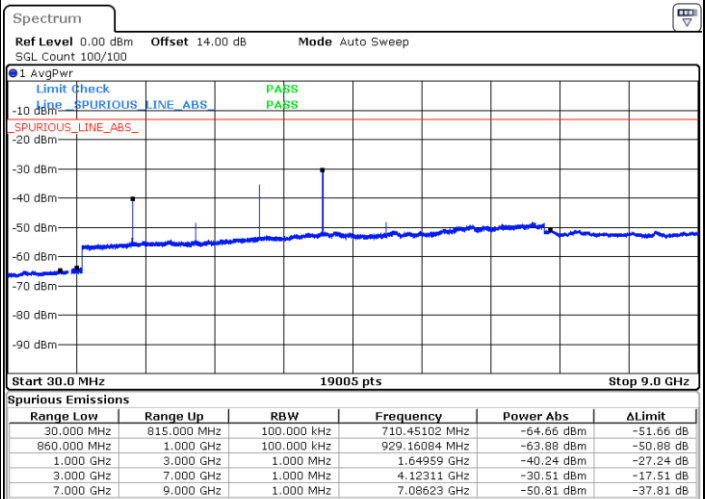
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 22 MAR 2020 09:38:47

Lowest Channel / 16QAM

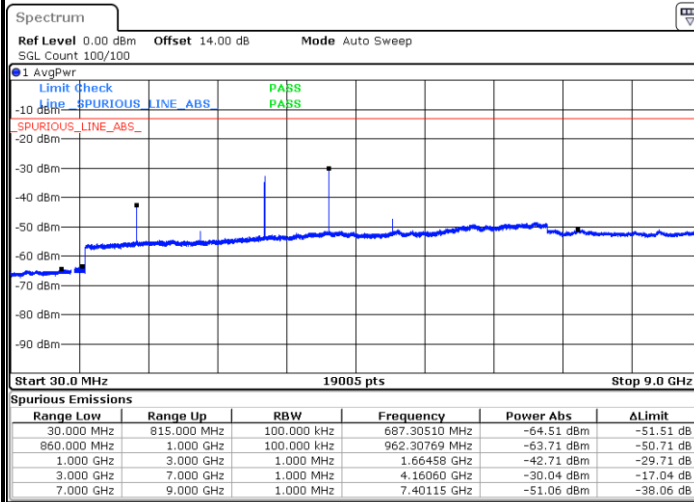


Date: 22 MAR 2020 09:39:46



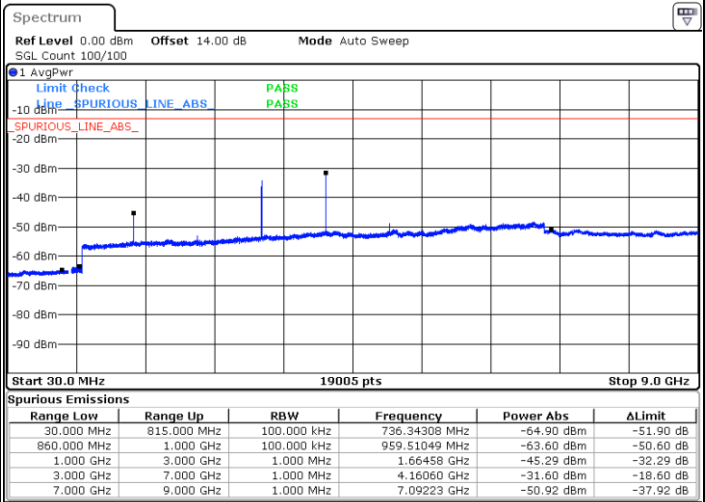
LTE Band 5 / 10MHz

Middle Channel / QPSK



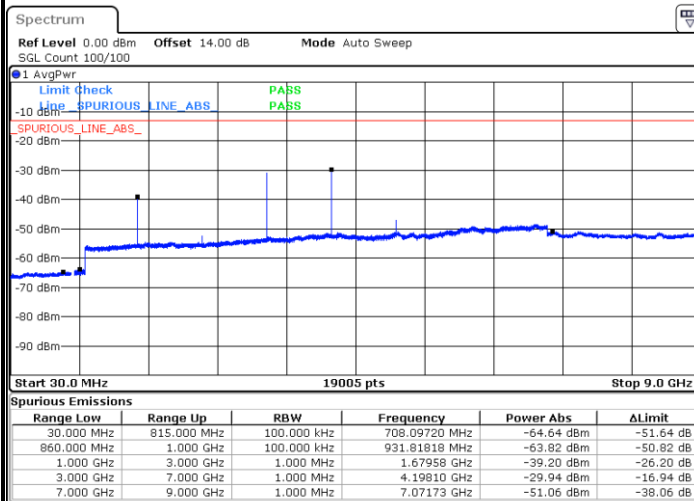
Date: 22 MAR 2020 09:41:29

Middle Channel / 16QAM



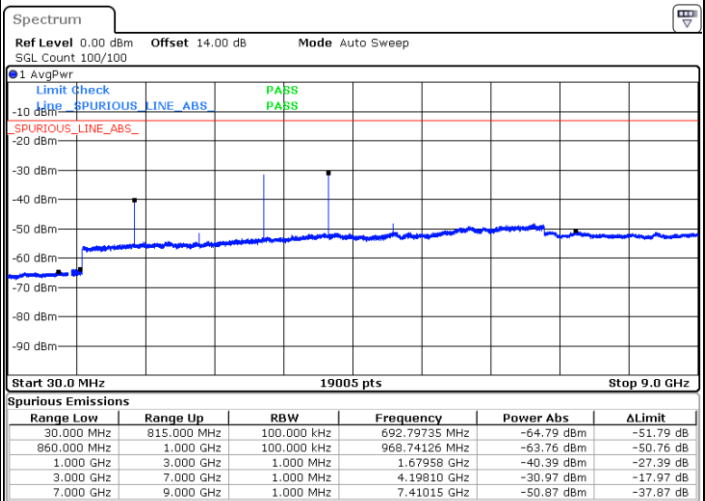
Date: 22 MAR 2020 09:42:28

Highest Channel / QPSK



Date: 22 MAR 2020 09:50:46

Highest Channel / 16QAM



Date: 22 MAR 2020 09:51:46

**Frequency Stability**

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0017	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0020	
-20	Normal Voltage	0.0018	
-30	Normal Voltage	0.0012	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

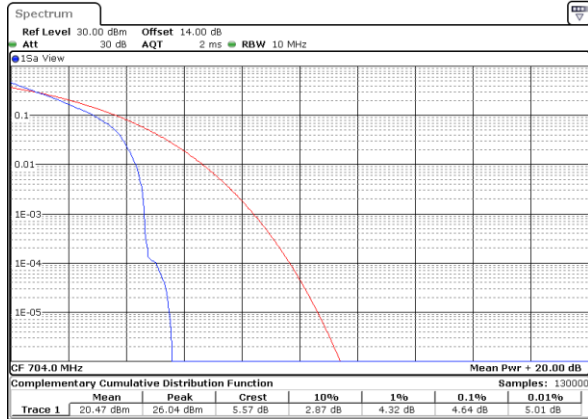
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.64	5.62	5.68	6.43	PASS
Middle CH	4.52	5.62	6.26	6.32	
Highest CH	4.99	5.36	6.23	6.23	

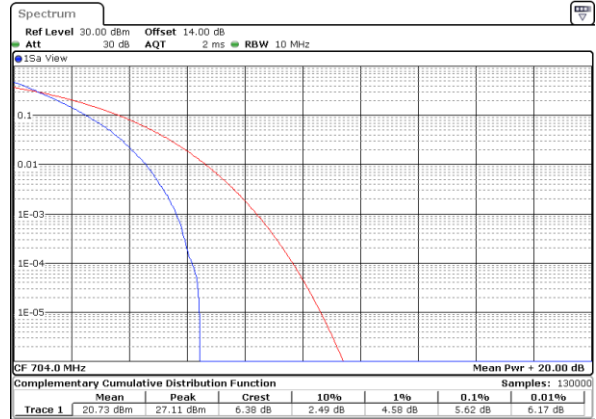


LTE Band 12 / 10MHz / QPSK

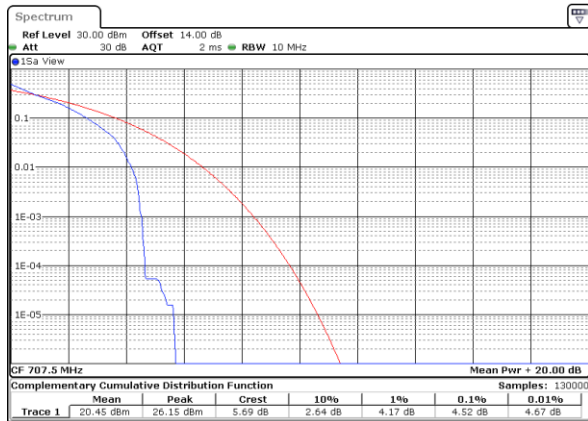
Lowest Channel / 1RB



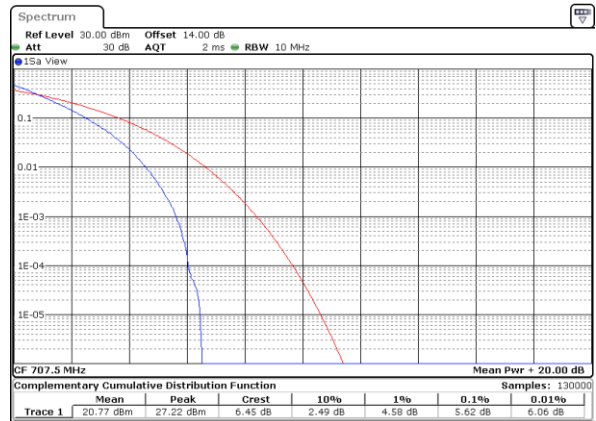
Lowest Channel / Full RB



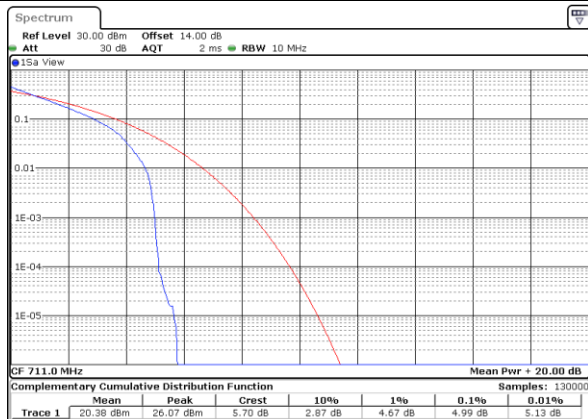
Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



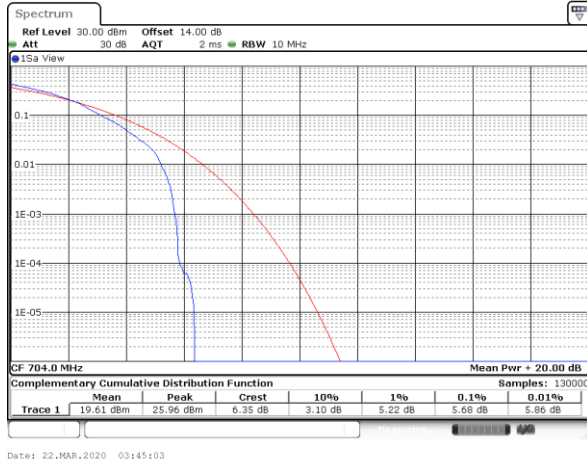
Highest Channel / Full RB



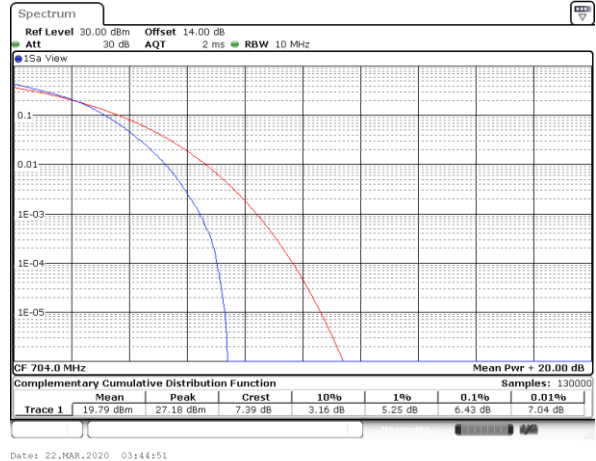


LTE Band 12 / 10MHz / 16QAM

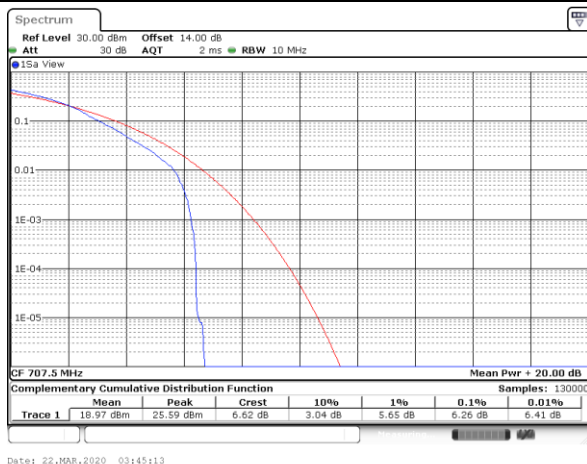
Lowest Channel / 1RB



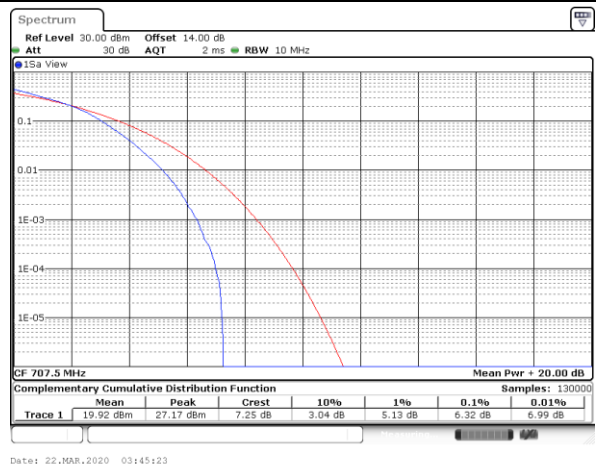
Lowest Channel / Full RB



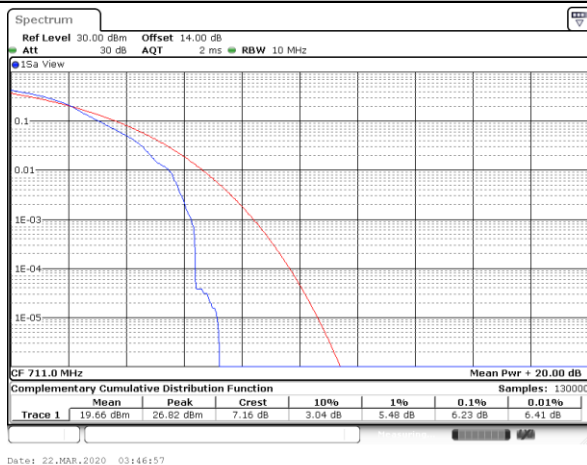
Middle Channel / 1RB



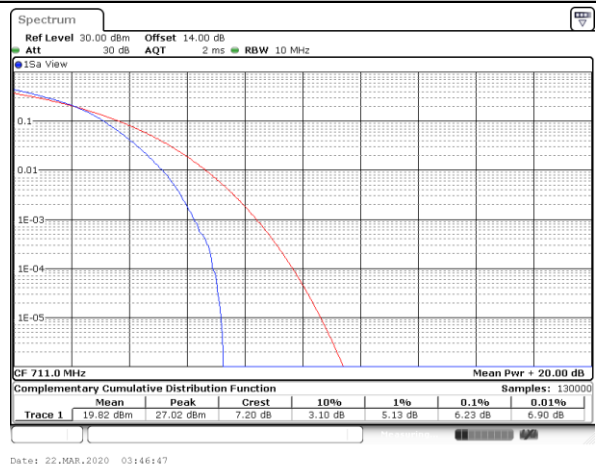
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB





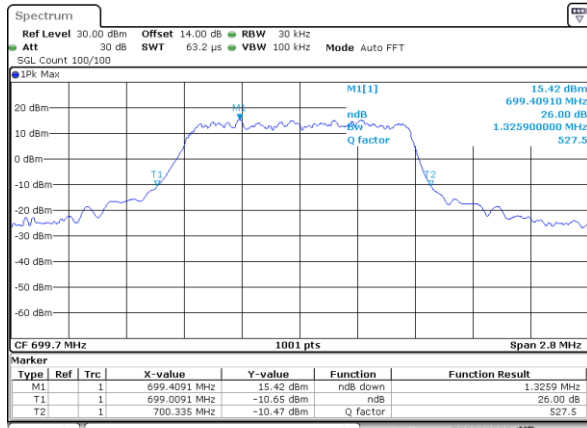
26dB Bandwidth

Mode	LTE Band 12 : 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	1.33	1.31	3.13	3.08	5	4.96	9.85	9.63	-	-	-	-
Middle CH	1.28	1.26	3.1	3.05	4.87	4.98	9.85	9.81	-	-	-	-
Highest CH	1.24	1.29	3.09	3.06	4.93	4.97	9.85	9.99	-	-	-	-



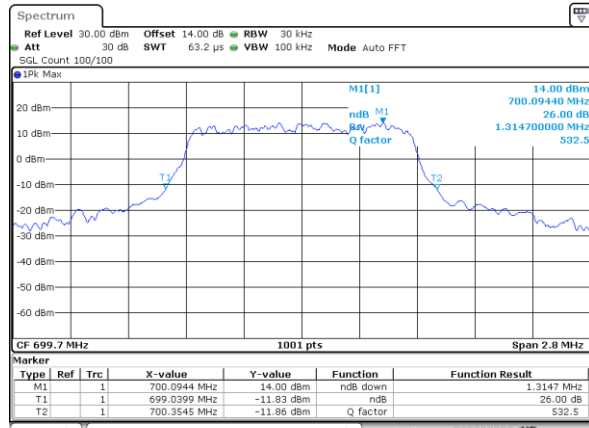
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



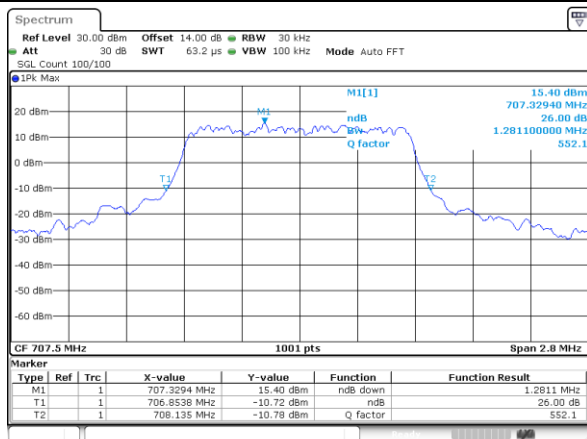
Date: 22, MAR, 2020 03:29:33

Lowest Channel / 1.4MHz / 16QAM



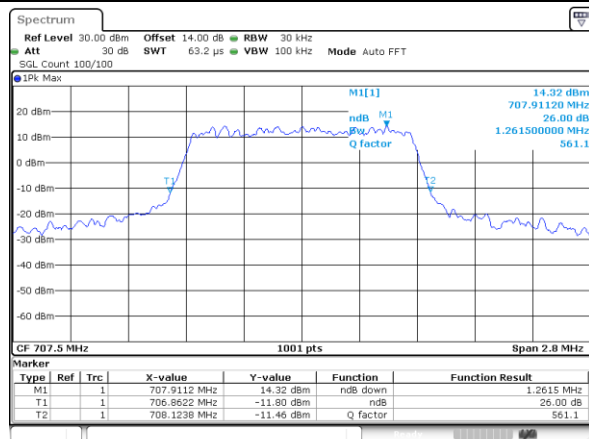
Date: 22, MAR, 2020 03:29:22

Middle Channel / 1.4MHz / QPSK



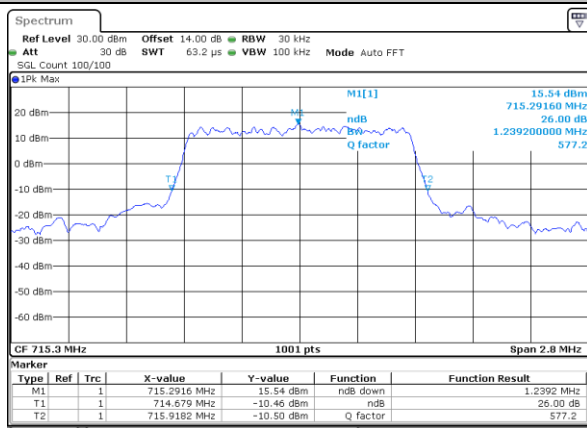
Date: 22, MAR, 2020 03:35:29

Middle Channel / 1.4MHz / 16QAM



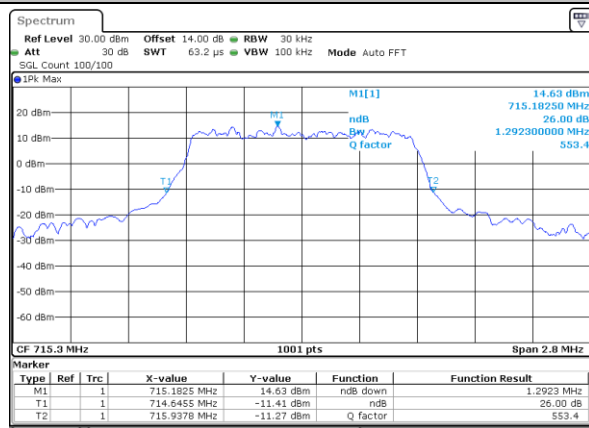
Date: 22, MAR, 2020 03:35:40

Highest Channel / 1.4MHz / QPSK



Date: 22, MAR, 2020 03:37:48

Highest Channel / 1.4MHz / 16QAM

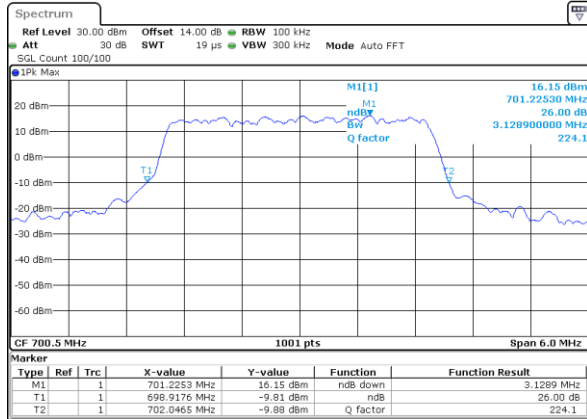


Date: 22, MAR, 2020 03:37:37

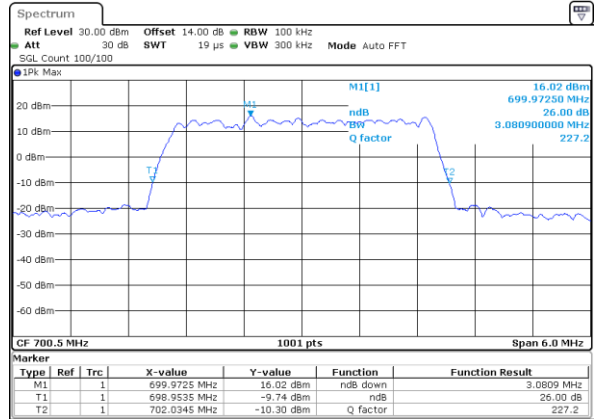


LTE Band 12

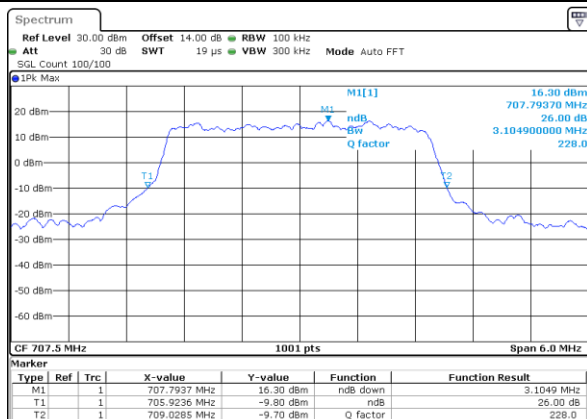
Lowest Channel / 3MHz / QPSK



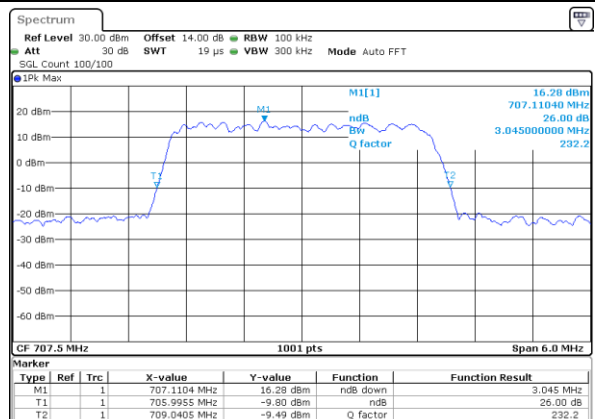
Lowest Channel / 3MHz / 16QAM



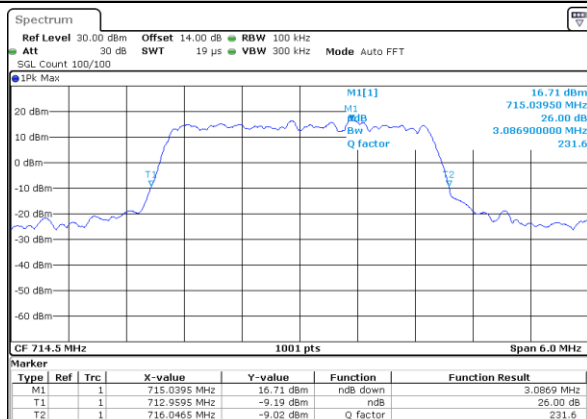
Middle Channel / 3MHz / QPSK



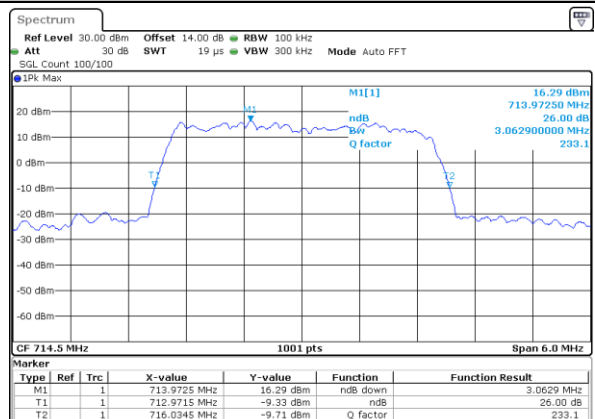
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



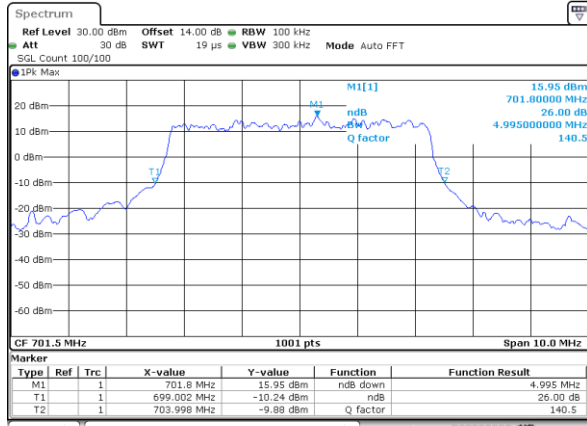
Highest Channel / 3MHz / 16QAM





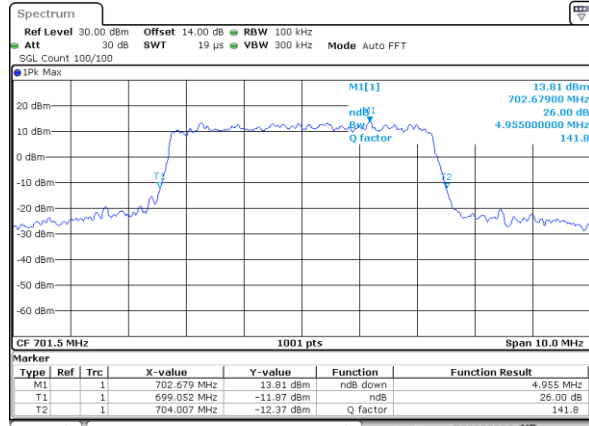
LTE Band 12

Lowest Channel / 5MHz / QPSK



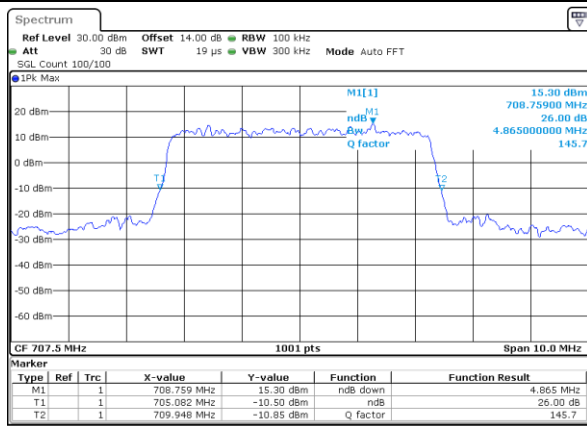
Date: 22,MAR,2020 03:00:48

Lowest Channel / 5MHz / 16QAM



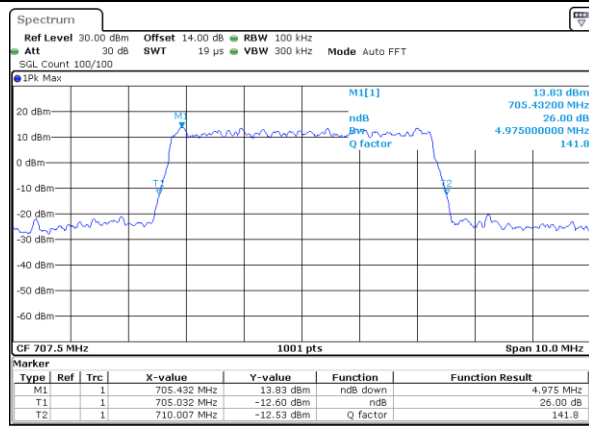
Date: 22,MAR,2020 03:00:37

Middle Channel / 5MHz / QPSK



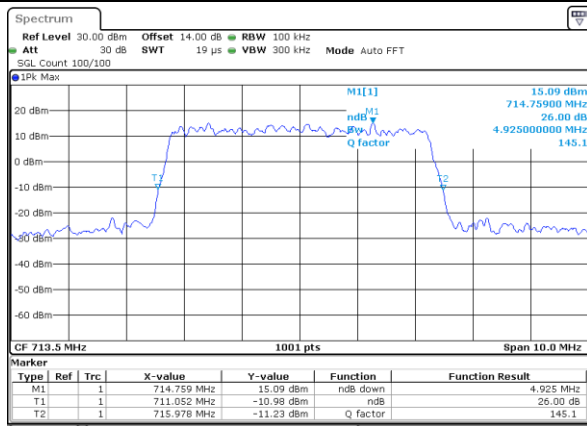
Date: 22,MAR,2020 03:06:45

Middle Channel / 5MHz / 16QAM



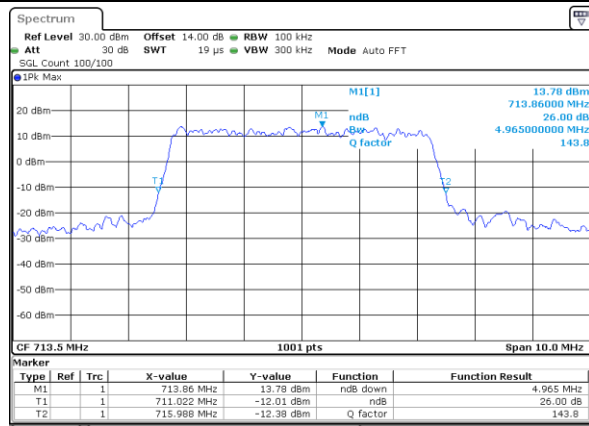
Date: 22,MAR,2020 03:06:56

Highest Channel / 5MHz / QPSK



Date: 22,MAR,2020 03:09:04

Highest Channel / 5MHz / 16QAM

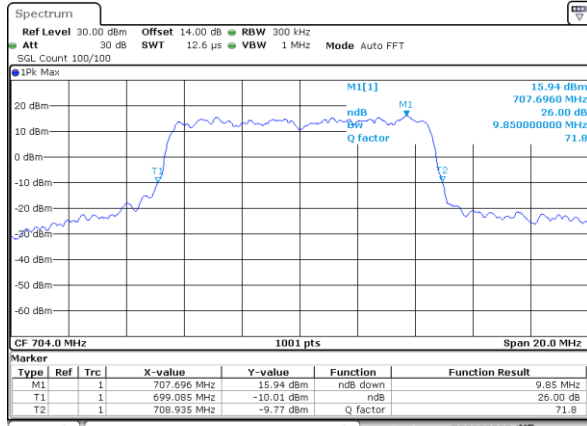


Date: 22,MAR,2020 03:08:53



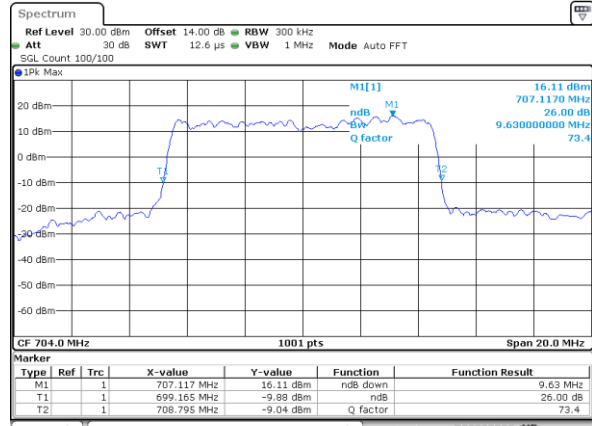
LTE Band 12

Lowest Channel / 10MHz / QPSK



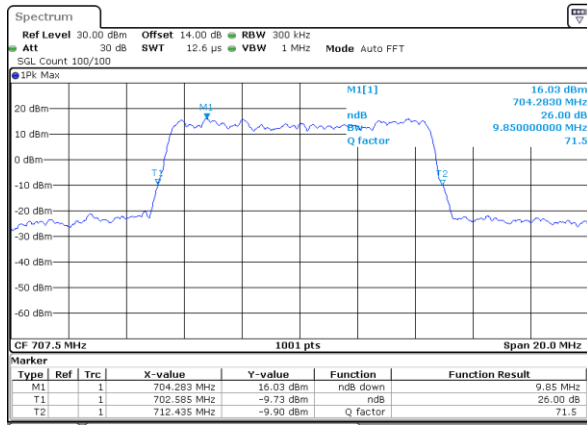
Date: 22,MAR,2020 03:15:11

Lowest Channel / 10MHz / 16QAM



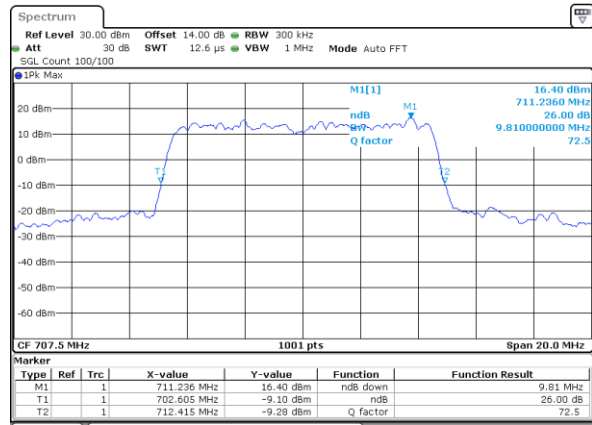
Date: 22,MAR,2020 03:15:00

Middle Channel / 10MHz / QPSK



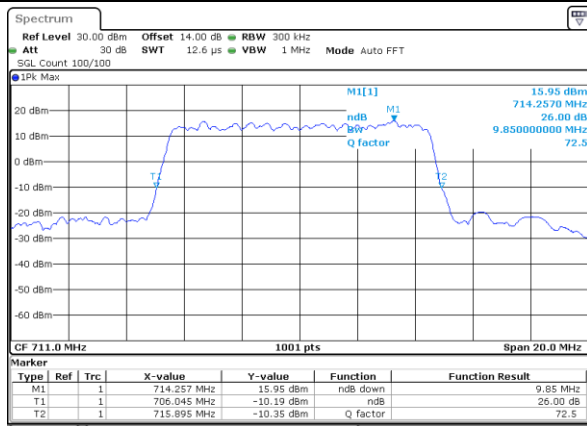
Date: 22,MAR,2020 03:21:07

Middle Channel / 10MHz / 16QAM



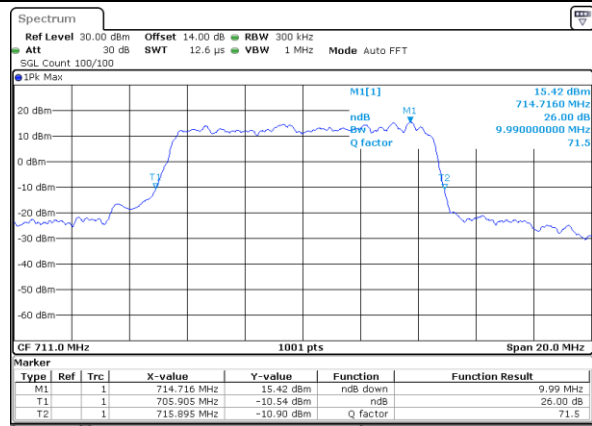
Date: 22,MAR,2020 03:21:16

Highest Channel / 10MHz / QPSK



Date: 22,MAR,2020 03:23:26

Highest Channel / 10MHz / 16QAM



Date: 22,MAR,2020 03:23:15

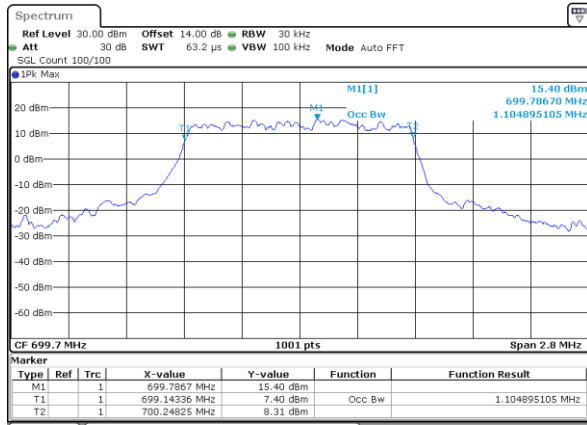
**Occupied Bandwidth**

Mode	LTE Band 12 : 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	1.1	1.09	2.73	2.72	4.51	4.49	9.03	9.05	-	-	-	-
Middle CH	1.1	1.09	2.75	2.73	4.49	4.49	9.03	9.05	-	-	-	-
Highest CH	1.1	1.09	2.73	2.73	4.48	4.49	9.07	8.99	-	-	-	-

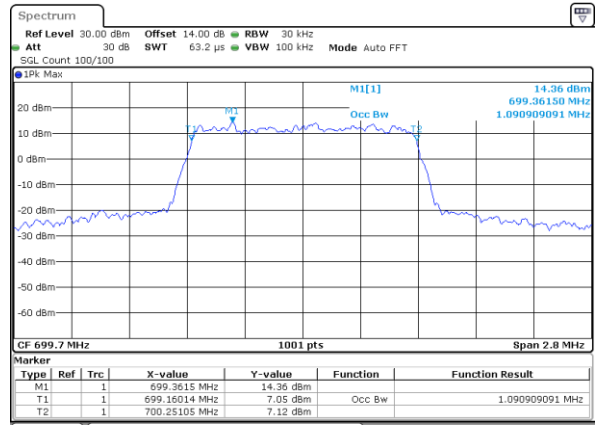


LTE Band 12

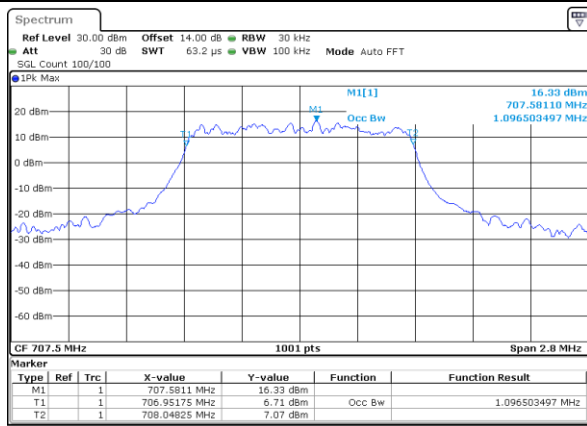
Lowest Channel / 1.4MHz / QPSK



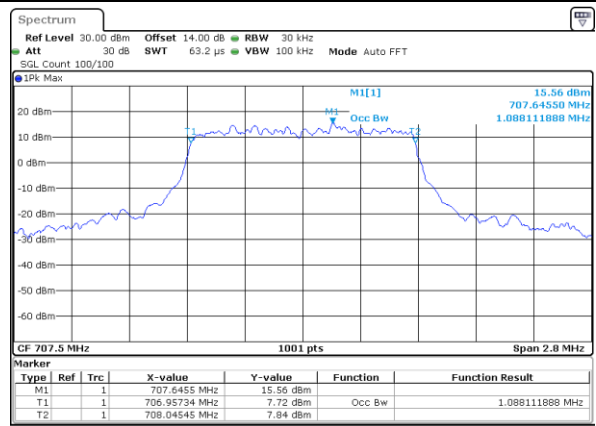
Lowest Channel / 1.4MHz / 16QAM



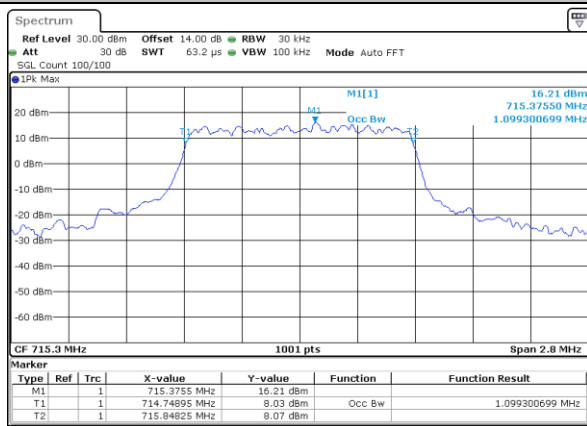
Middle Channel / 1.4MHz / QPSK



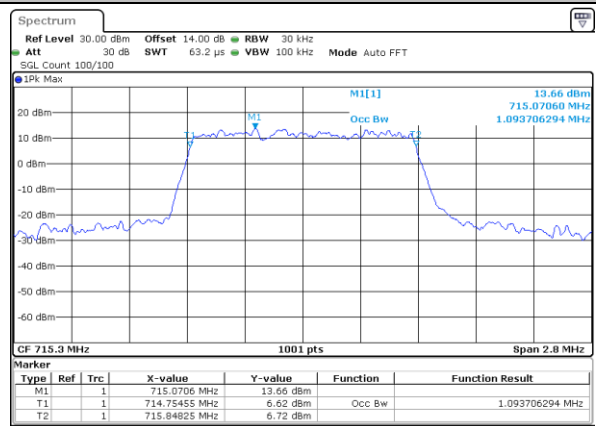
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



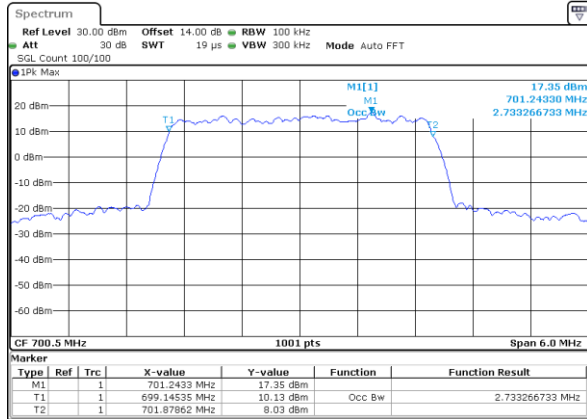
Highest Channel / 1.4MHz / 16QAM



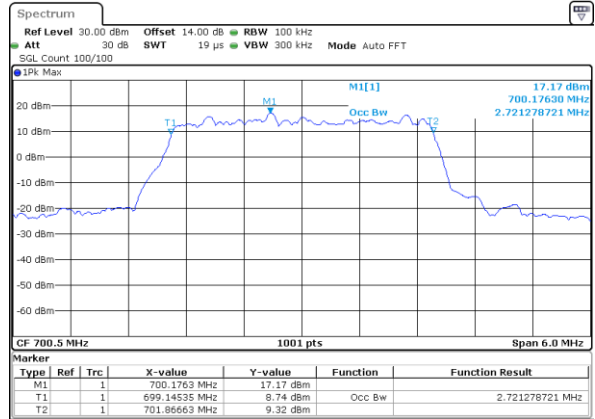


LTE Band 12

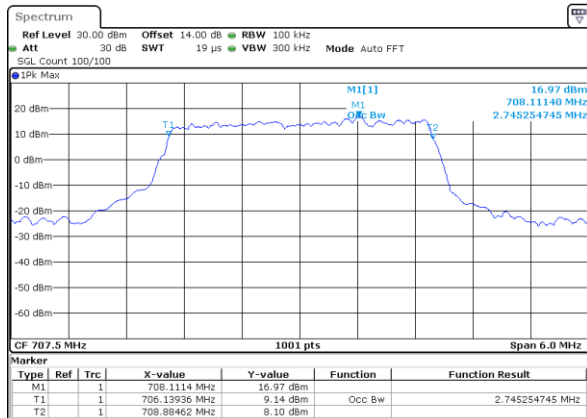
Lowest Channel / 3MHz / QPSK



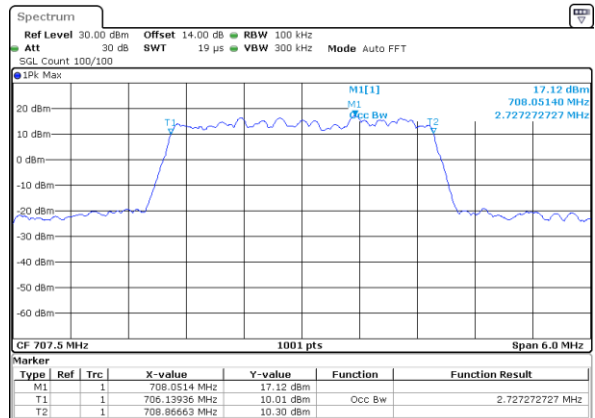
Lowest Channel / 3MHz / 16QAM



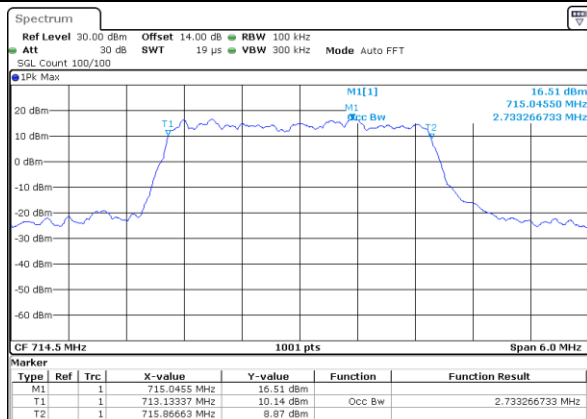
Middle Channel / 3MHz / QPSK



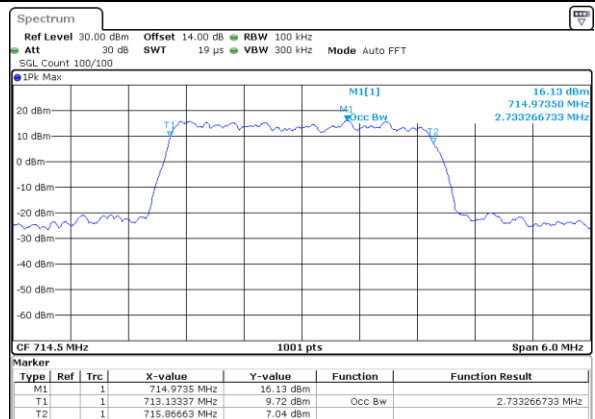
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



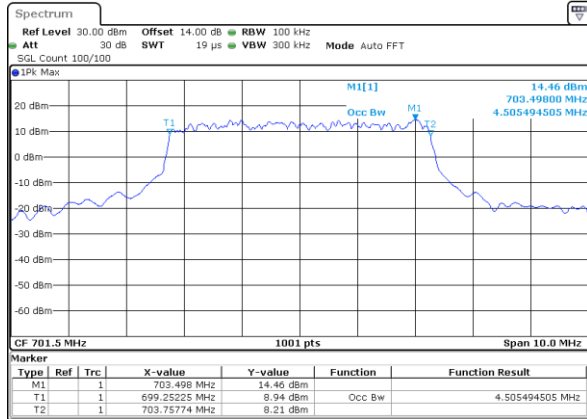
Highest Channel / 3MHz / 16QAM





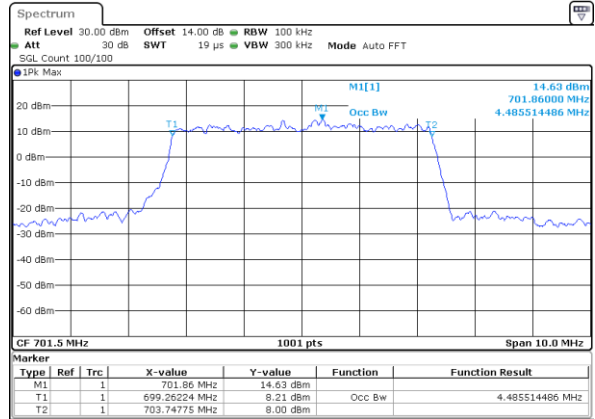
LTE Band 12

Lowest Channel / 5MHz / QPSK



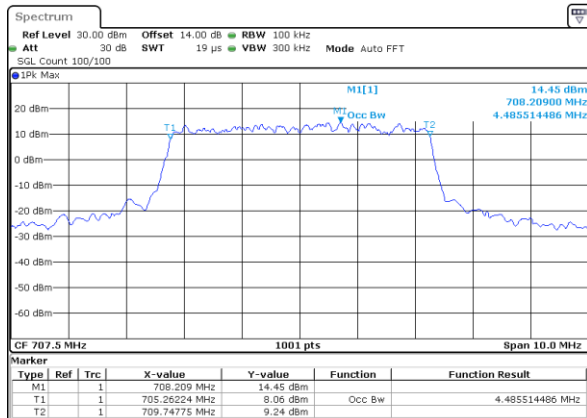
Date: 22, MAR, 2020 03:00:15

Lowest Channel / 5MHz / 16QAM



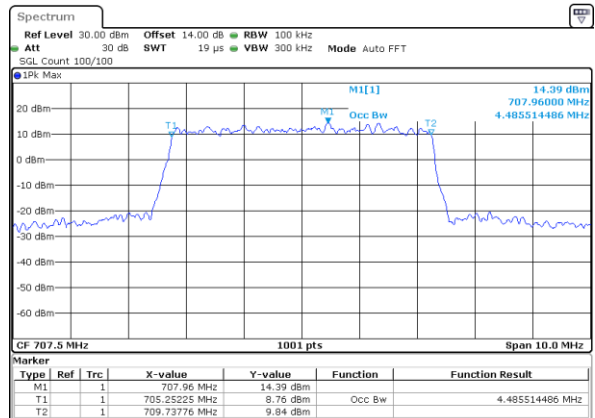
Date: 22, MAR, 2020 03:00:26

Middle Channel / 5MHz / QPSK



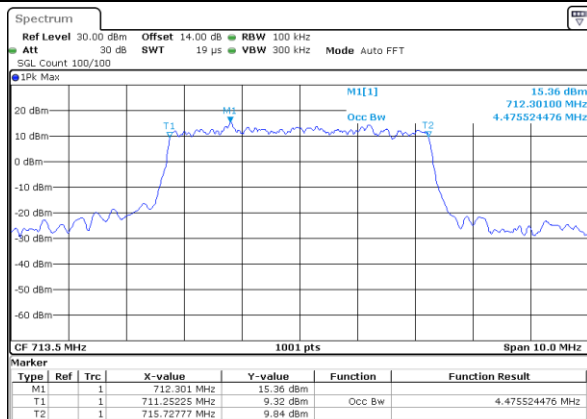
Date: 22, MAR, 2020 03:06:34

Middle Channel / 5MHz / 16QAM



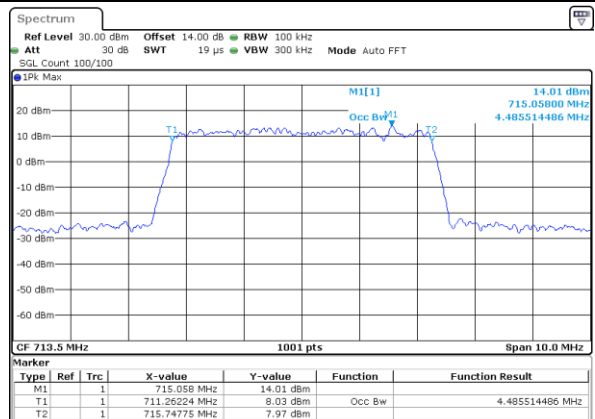
Date: 22, MAR, 2020 03:06:23

Highest Channel / 5MHz / QPSK



Date: 22, MAR, 2020 03:08:30

Highest Channel / 5MHz / 16QAM

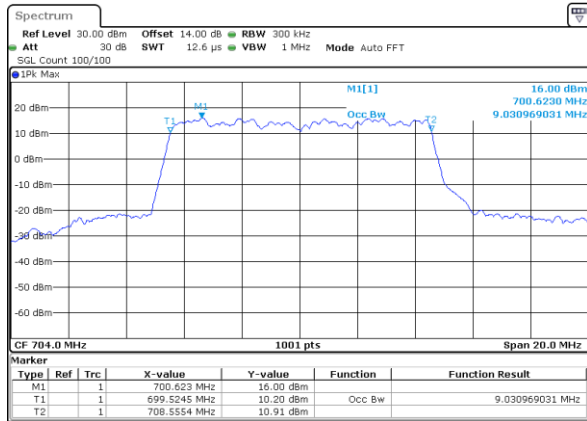


Date: 22, MAR, 2020 03:08:42



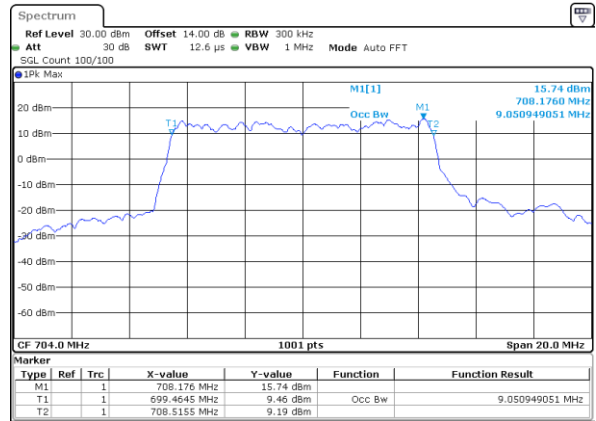
LTE Band 12

Lowest Channel / 10MHz / QPSK



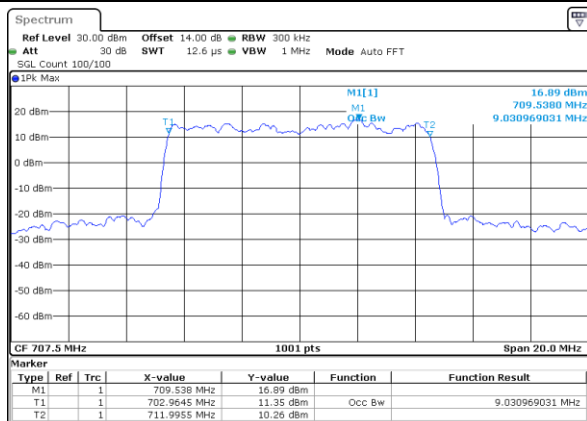
Date: 22.MAR.2020 03:14:38

Lowest Channel / 10MHz / 16QAM



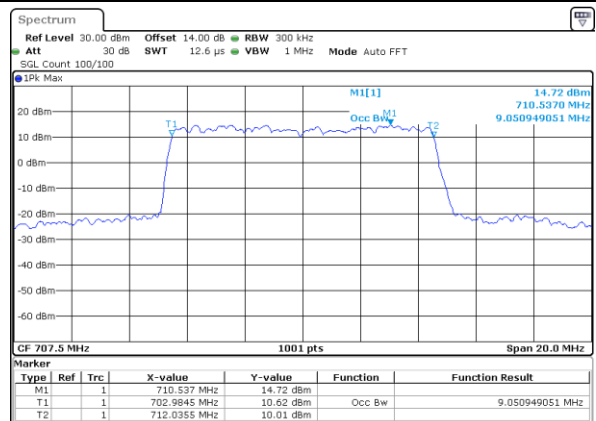
Date: 22.MAR.2020 03:14:49

Middle Channel / 10MHz / QPSK



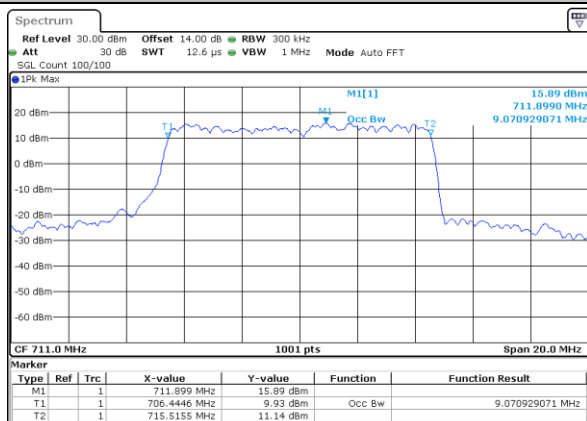
Date: 22.MAR.2020 03:20:56

Middle Channel / 10MHz / 16QAM



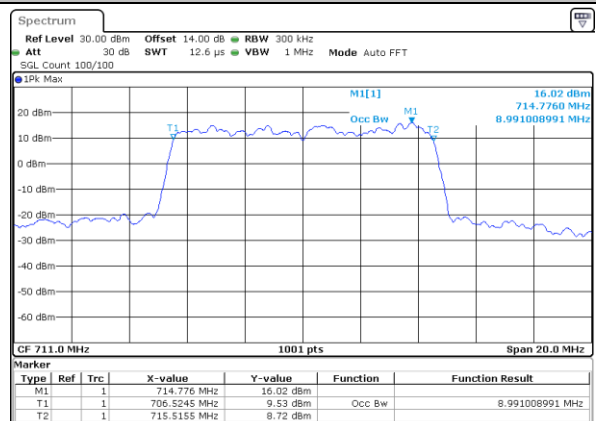
Date: 22.MAR.2020 03:20:45

Highest Channel / 10MHz / QPSK



Date: 22.MAR.2020 03:22:53

Highest Channel / 10MHz / 16QAM



Date: 22.MAR.2020 03:23:04

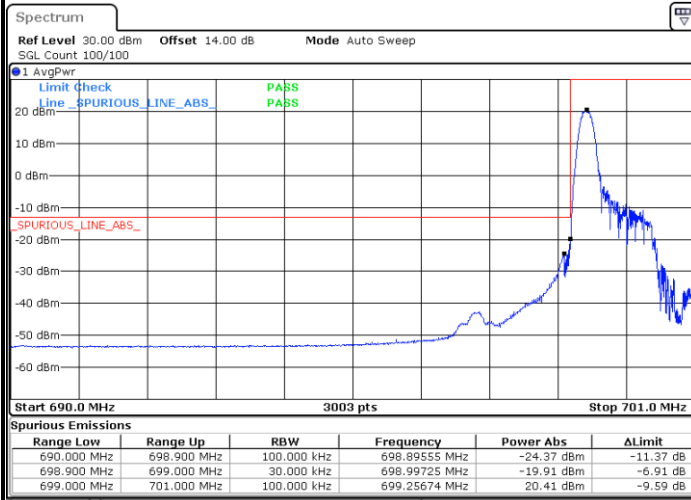


Conducted Band Edge



LTE Band 12 / 1.4MHz / QPSK

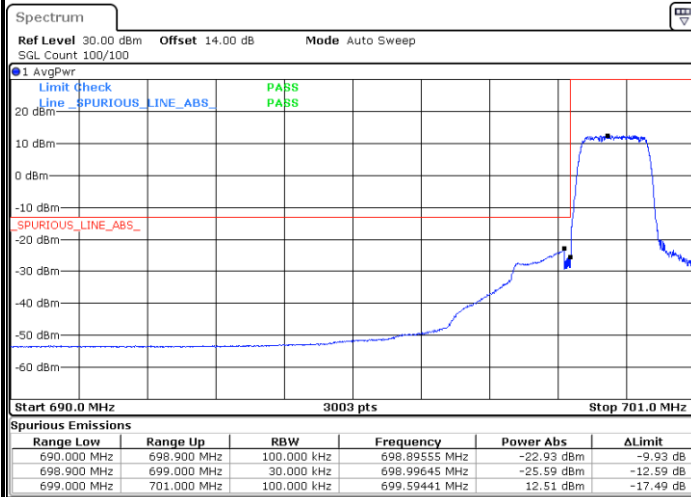
Lowest Band Edge / 1 RB



Highest Band Edge / 1RB



Lowest Band Edge / Full RB



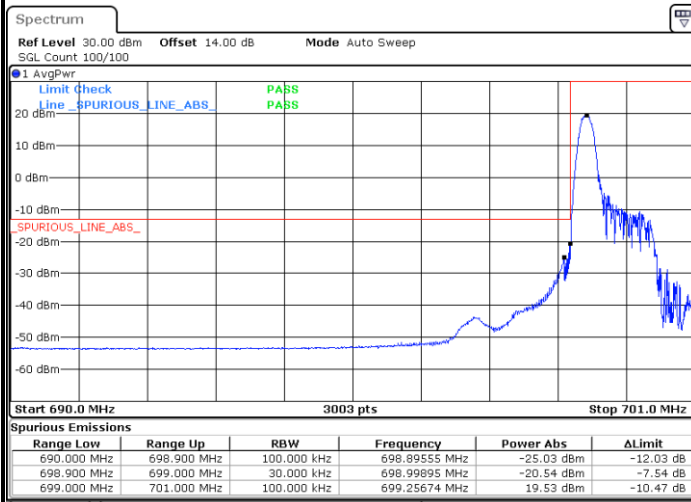
Highest Band Edge / Full RB



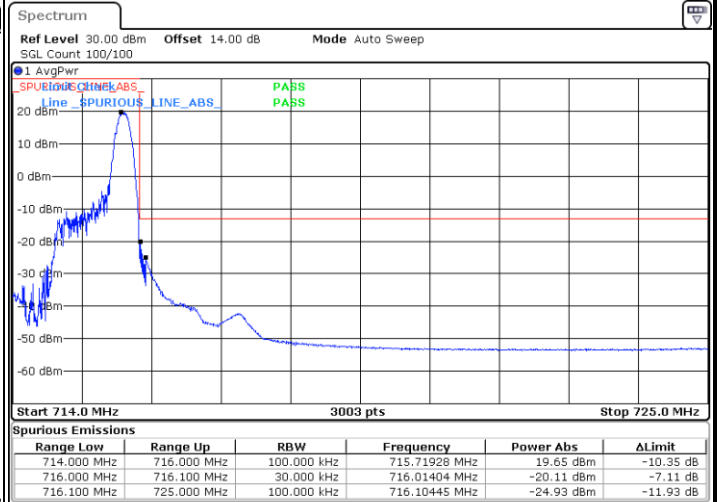


LTE Band 12 / 1.4MHz / 16QAM

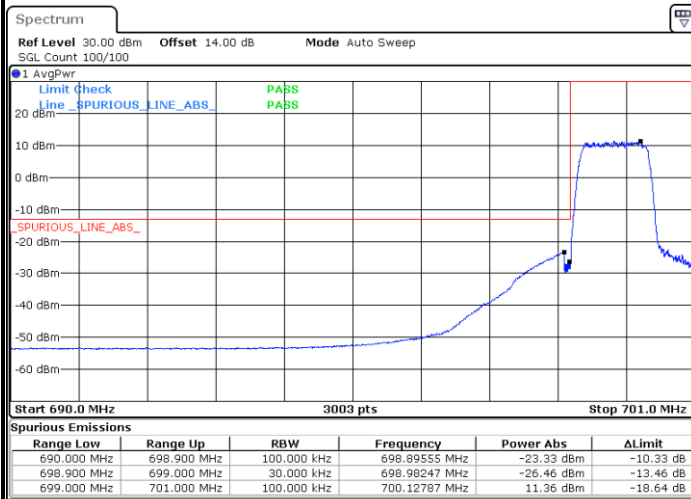
Lowest Band Edge / 1 RB



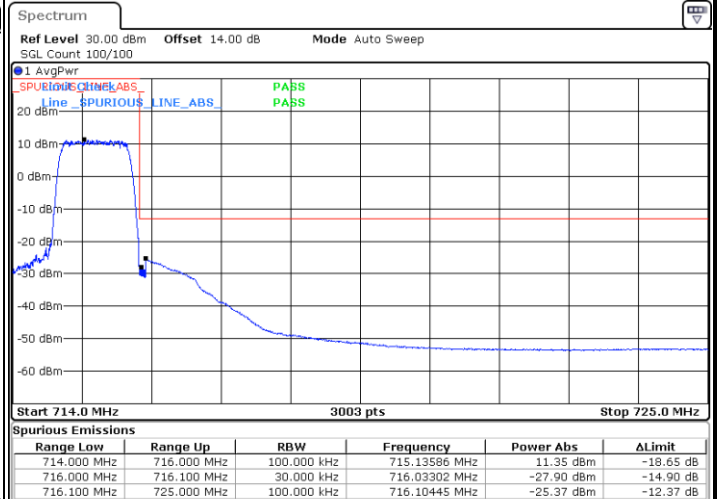
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



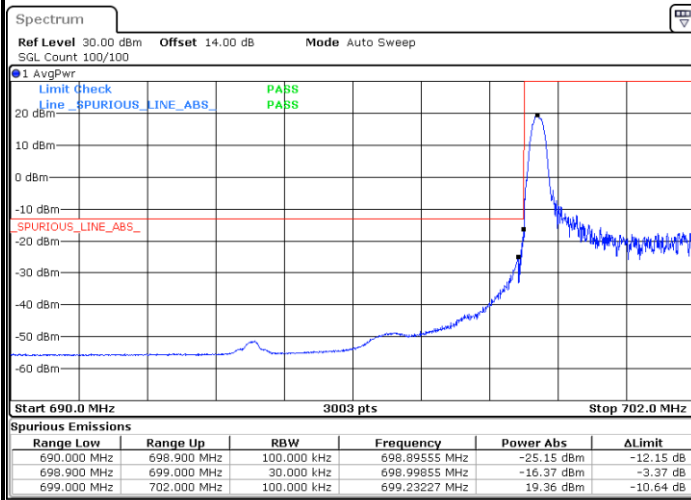
Highest Band Edge / Full RB



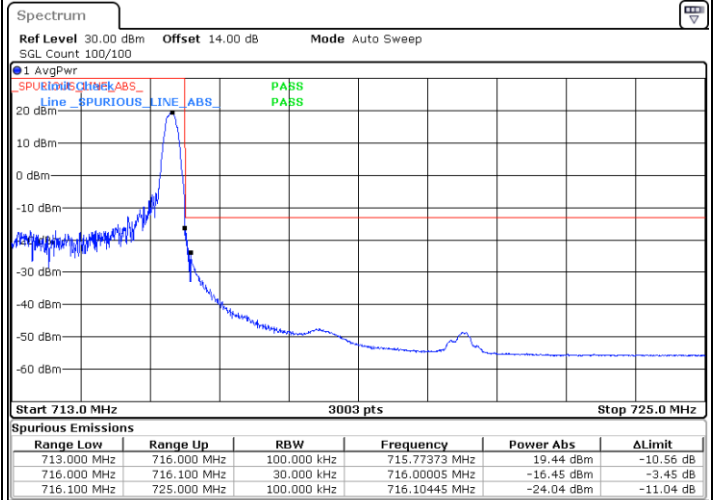


LTE Band 12 / 3MHz / QPSK

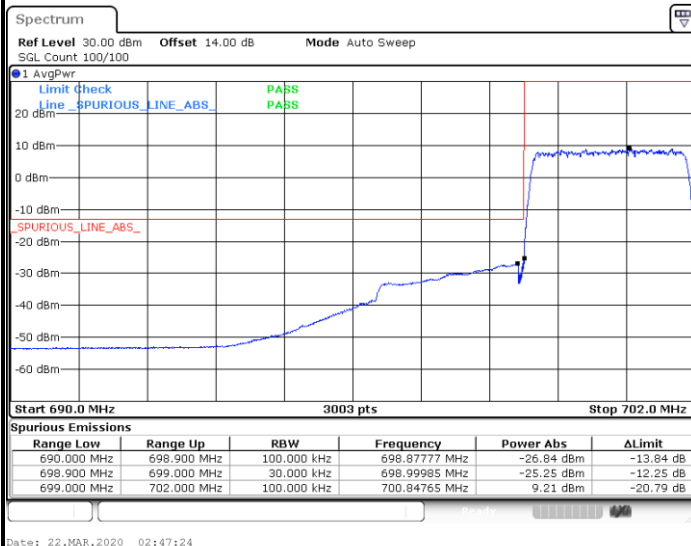
Lowest Band Edge / 1RB



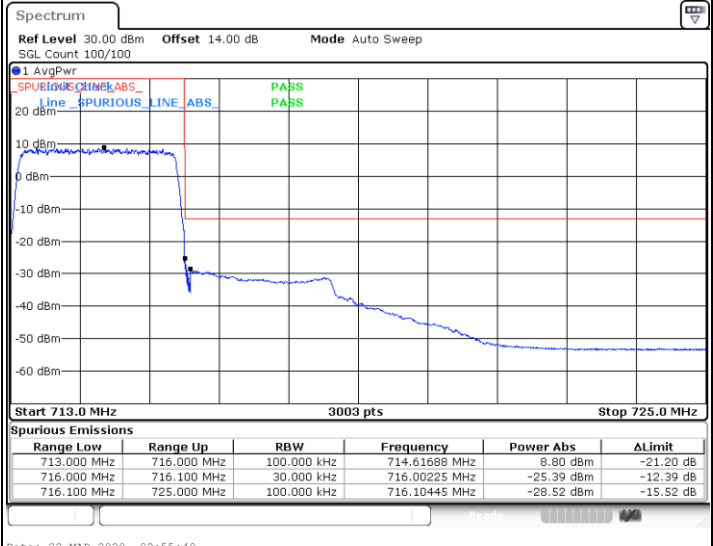
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



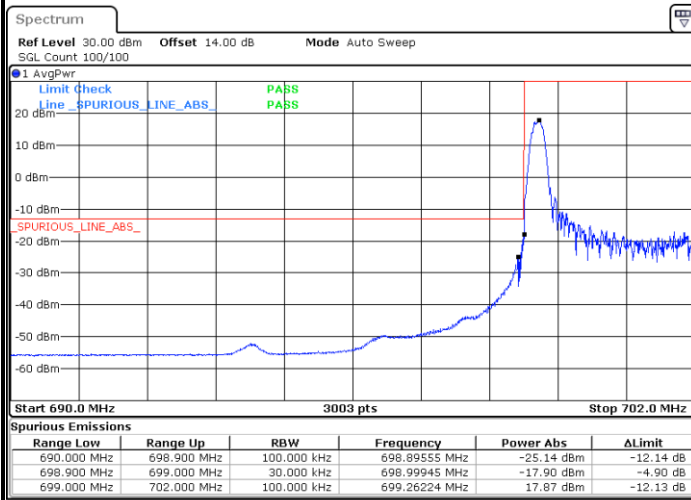
Highest Band Edge / Full RB



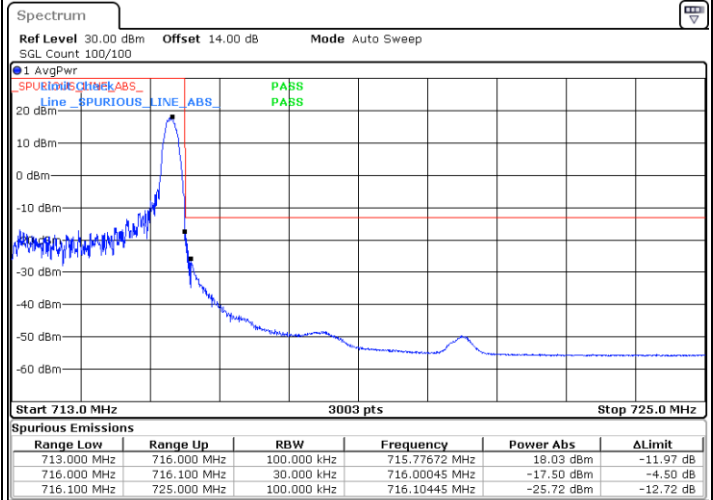


LTE Band 12 / 3MHz / 16QAM

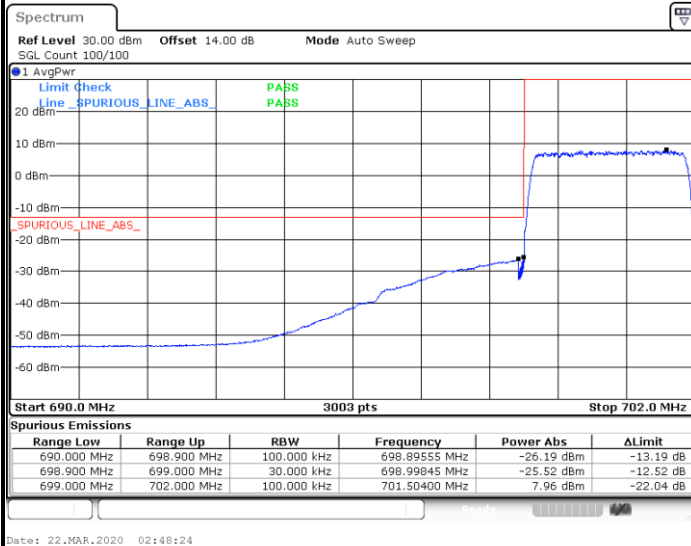
Lowest Band Edge / 1 RB



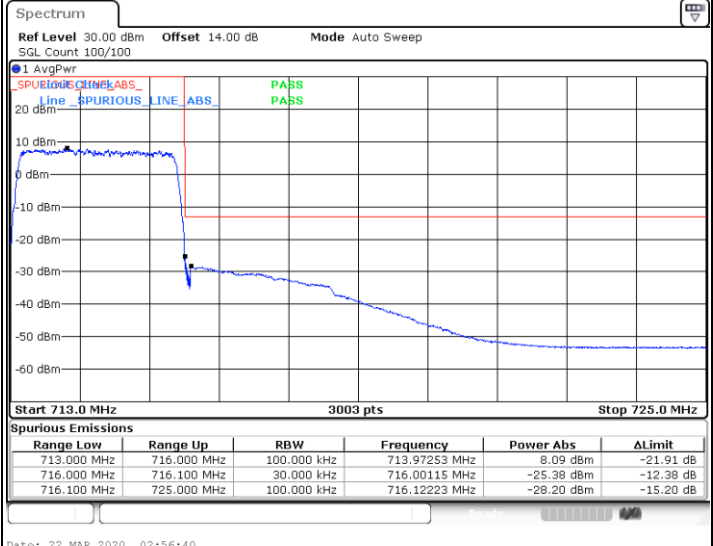
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



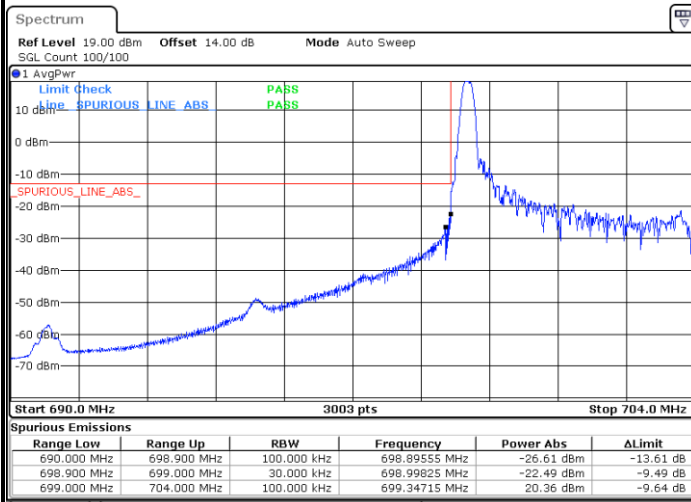
Highest Band Edge / Full RB



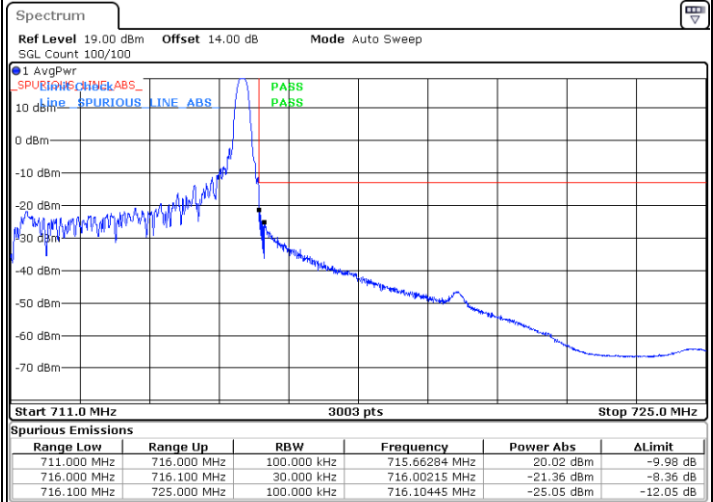


LTE Band 12 / 5MHz / QPSK

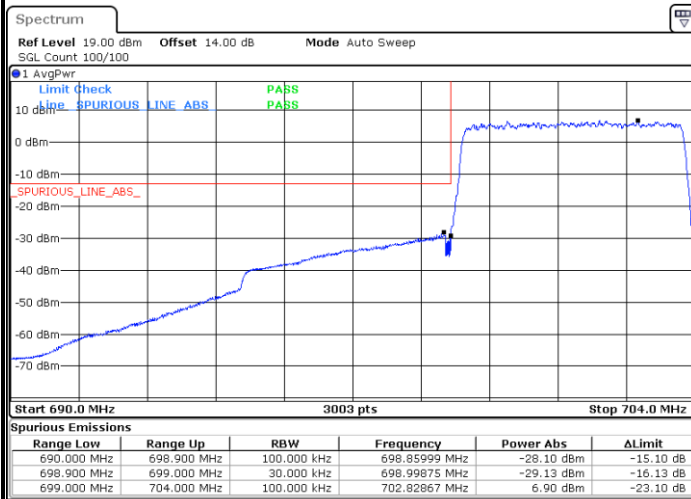
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



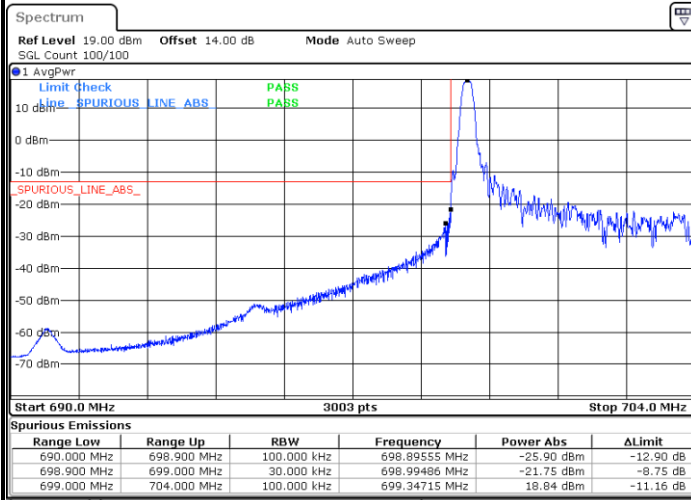
Highest Band Edge / Full RB



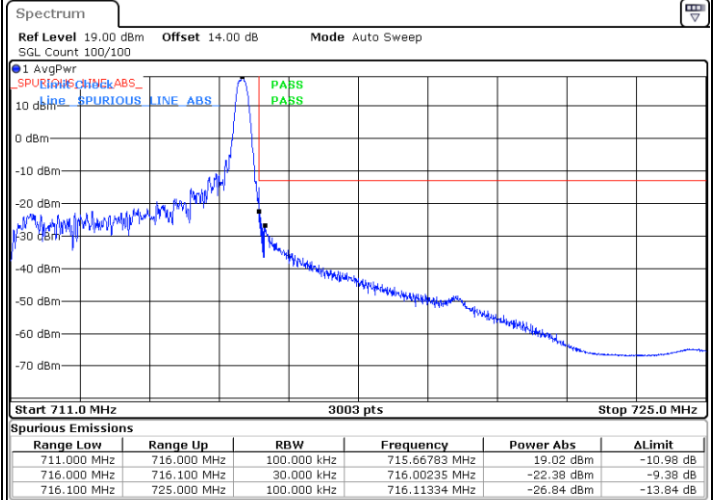


LTE Band 12 / 5MHz / 16QAM

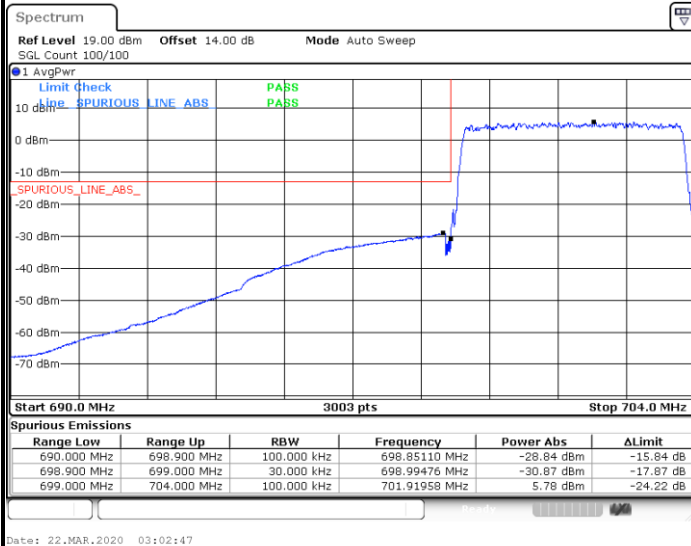
Lowest Band Edge / 1RB



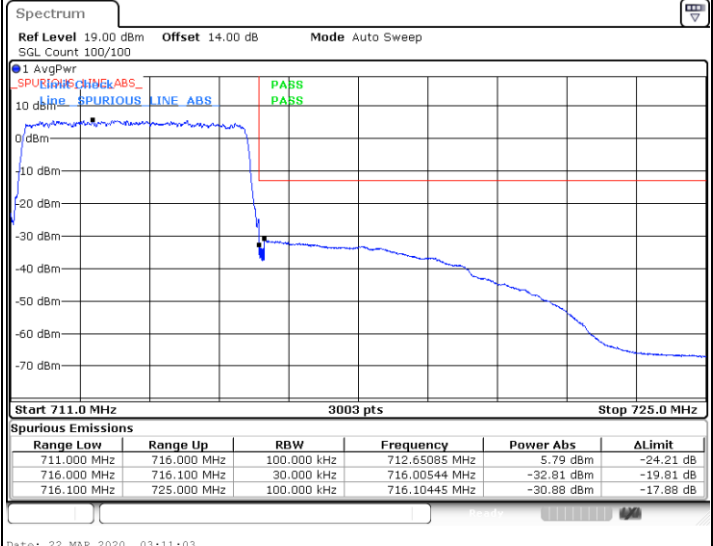
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



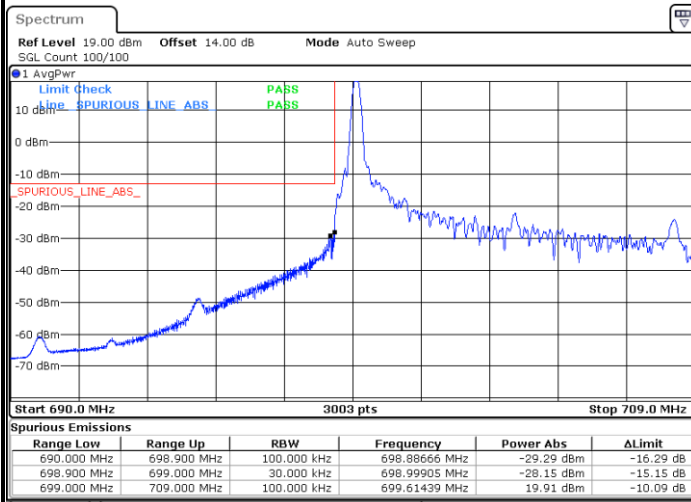
Highest Band Edge / Full RB



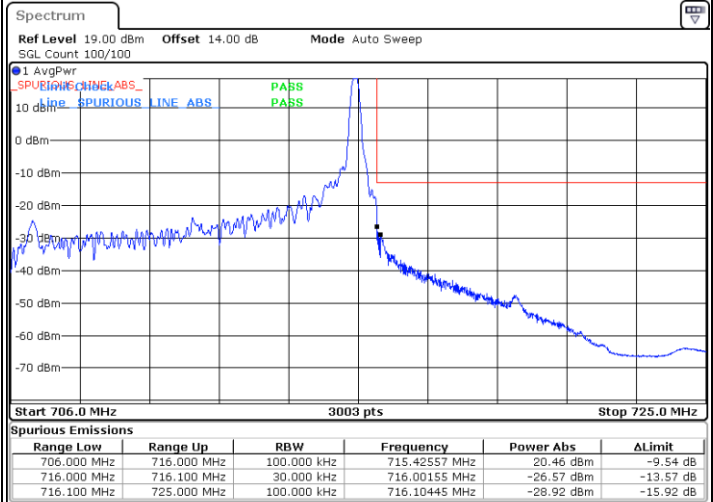


LTE Band 12 / 10MHz / QPSK

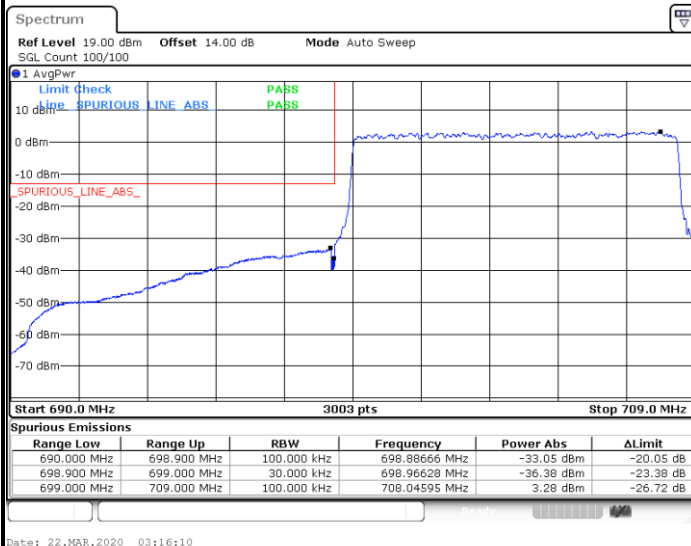
Lowest Band Edge / 1 RB



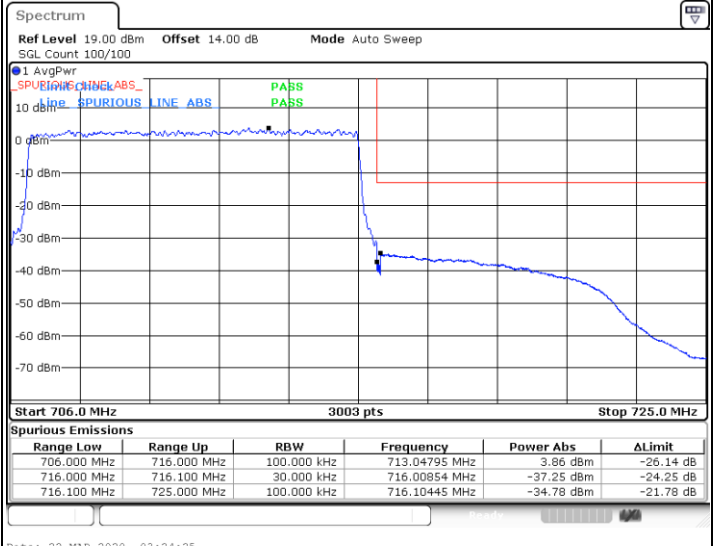
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



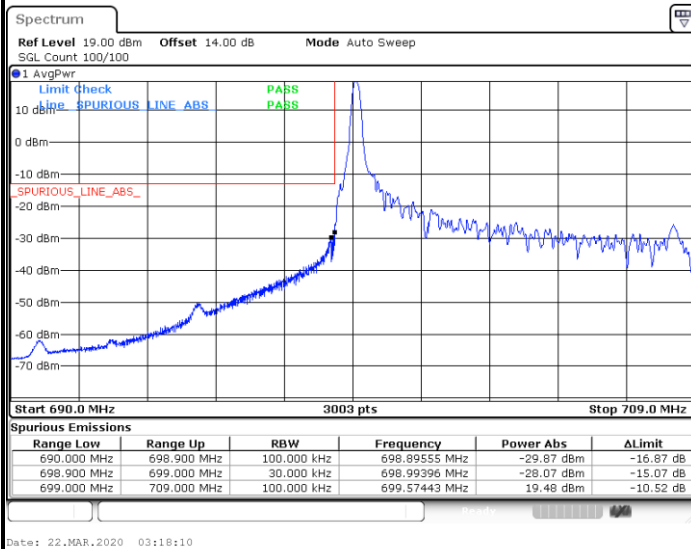
Highest Band Edge / Full RB



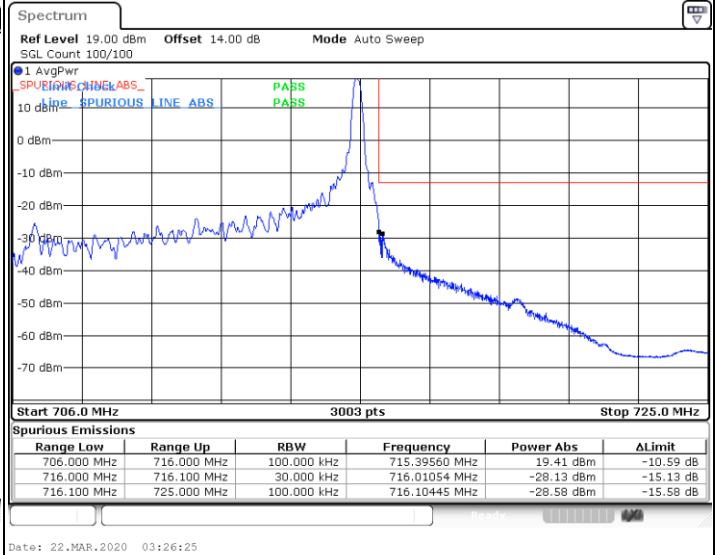


LTE Band 12 / 10MHz / 16QAM

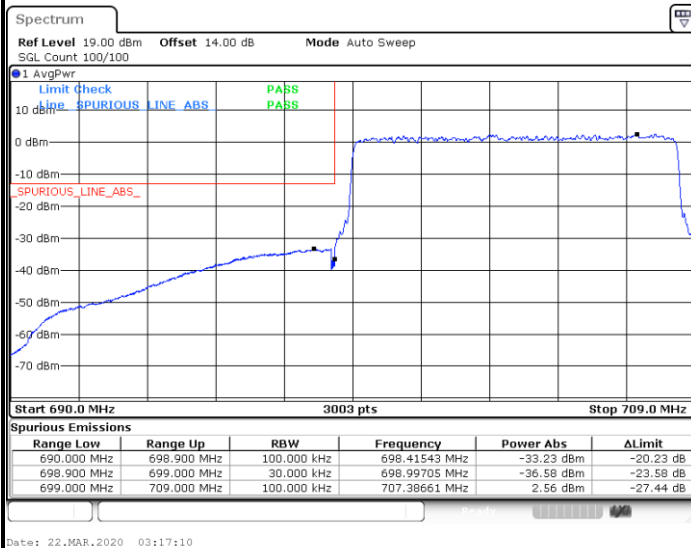
Lowest Band Edge / 1 RB



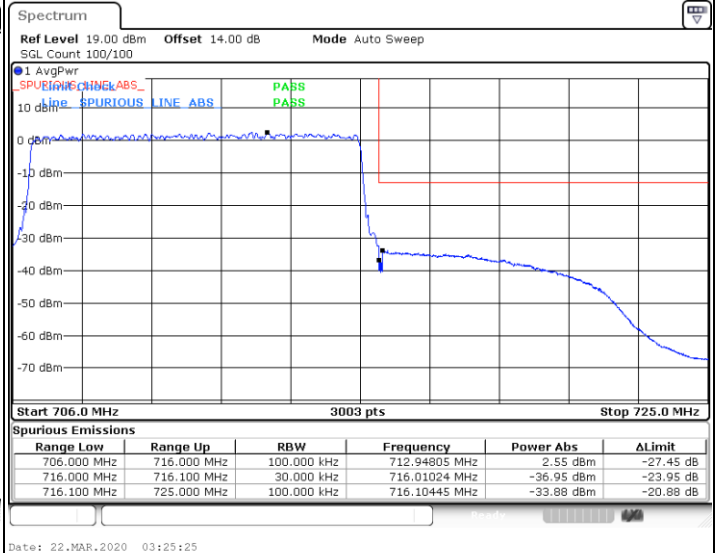
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



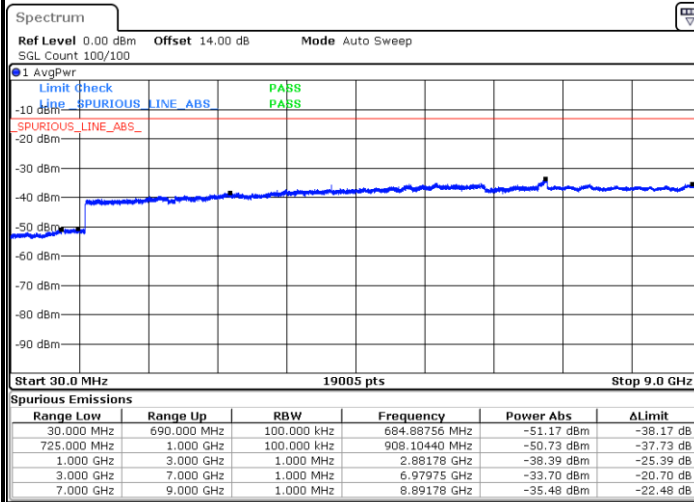


Conducted Spurious Emission



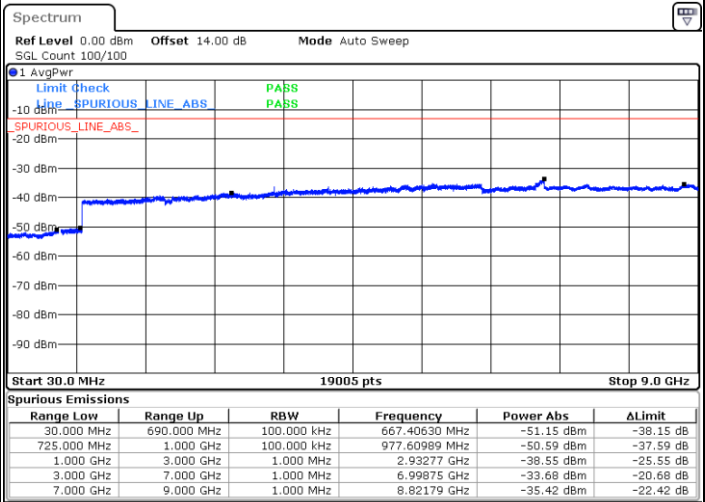
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



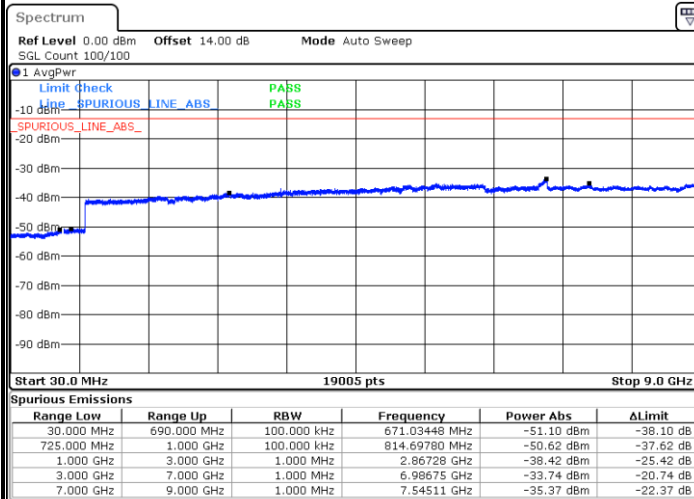
Date: 22.MAR.2020 03:34:14

Lowest Channel / 16QAM



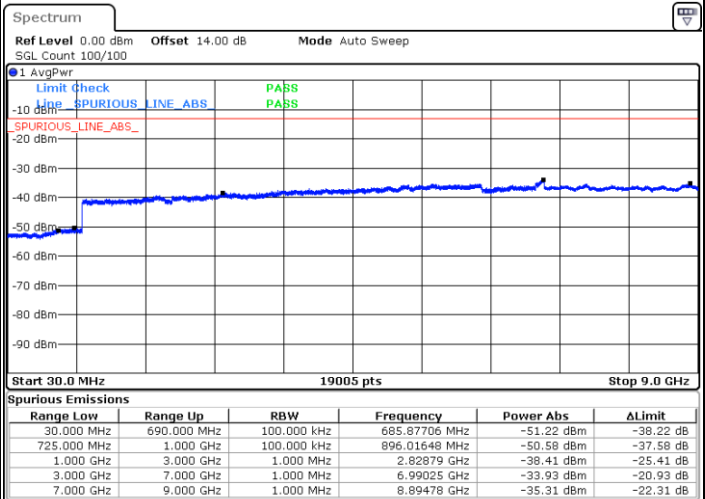
Date: 22.MAR.2020 03:34:56

Middle Channel / QPSK



Date: 22.MAR.2020 03:37:04

Middle Channel / 16QAM

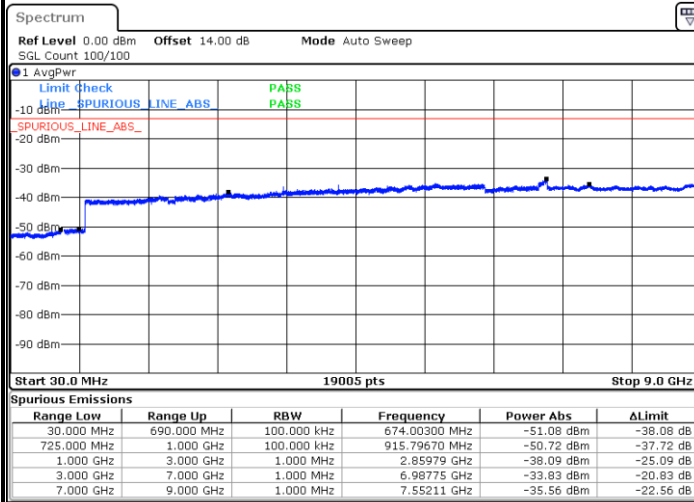


Date: 22.MAR.2020 03:36:22



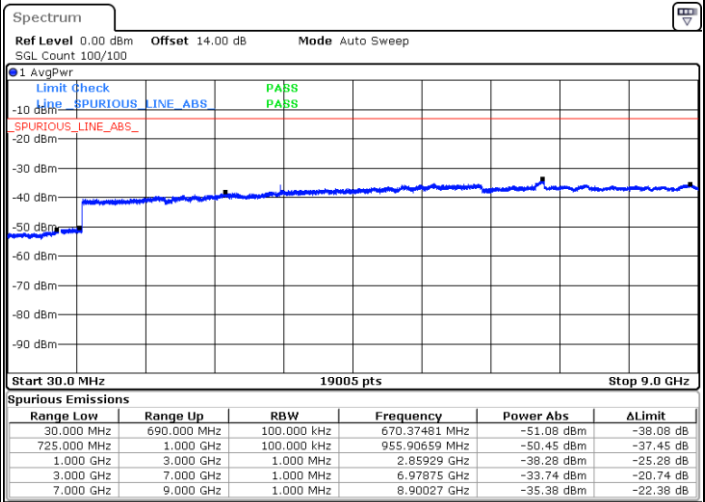
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 22.MAR.2020 03:42:30

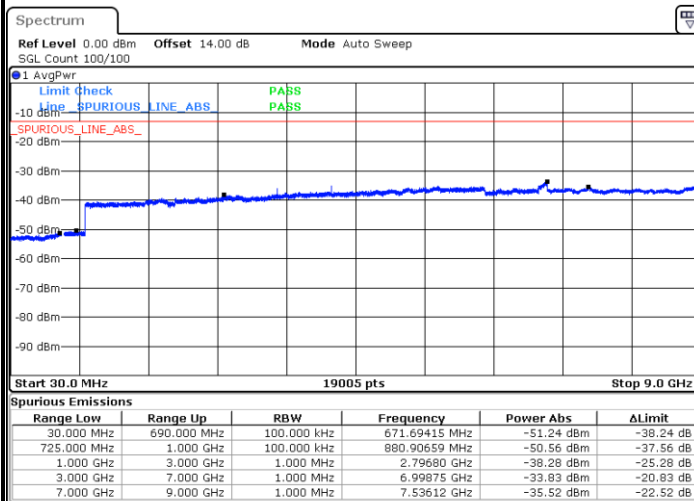
Highest Channel / 16QAM



Date: 22.MAR.2020 03:43:11

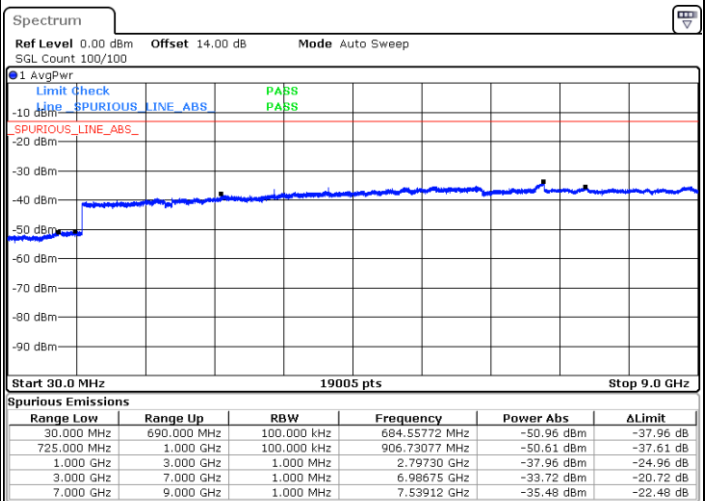
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 22.MAR.2020 02:51:06

Lowest Channel / 16QAM

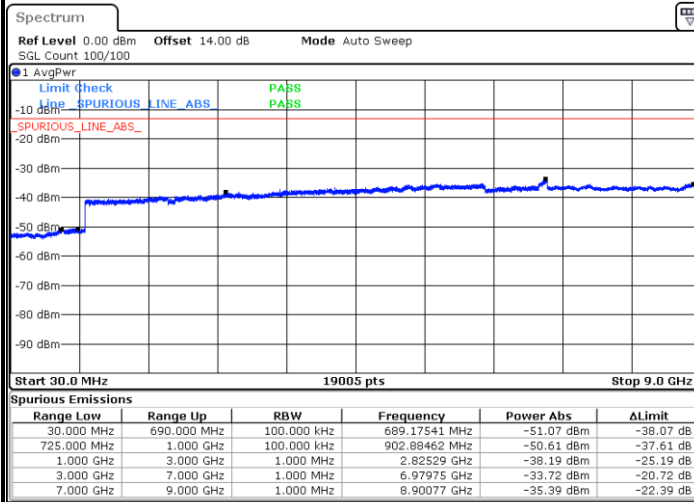


Date: 22.MAR.2020 02:51:48



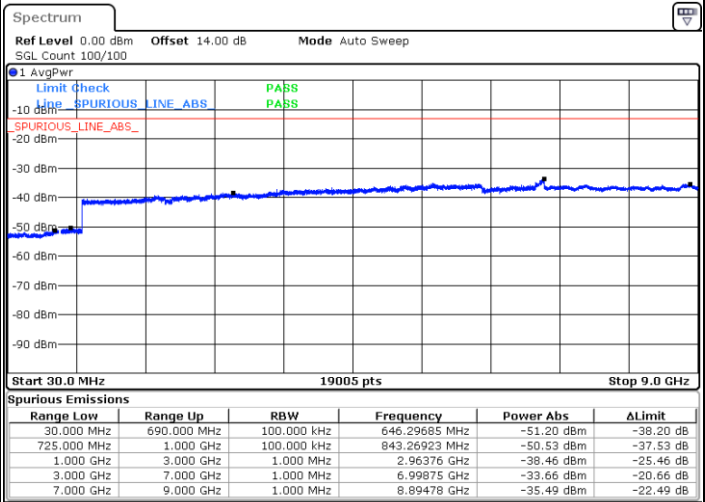
LTE Band 12 / 3MHz

Middle Channel / QPSK



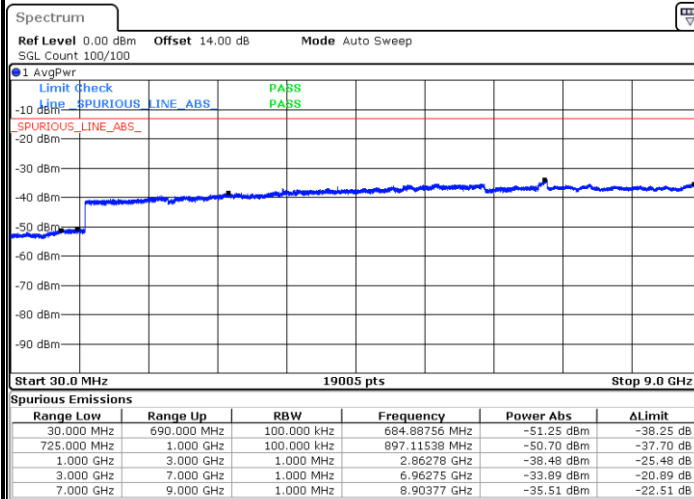
Date: 22.MAR.2020 02:53:56

Middle Channel / 16QAM



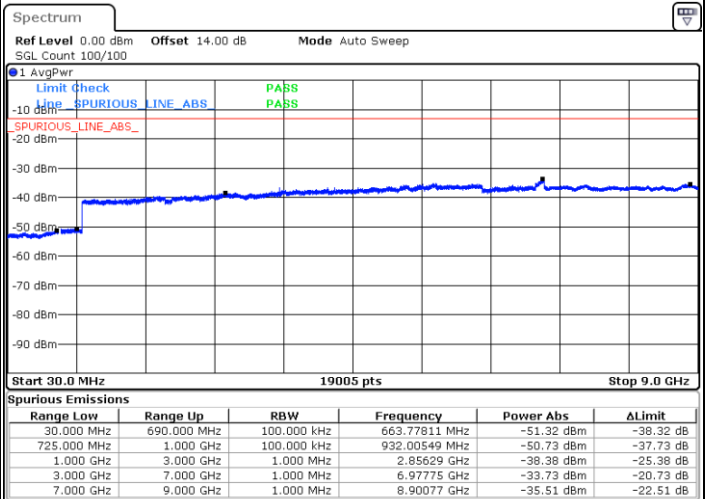
Date: 22.MAR.2020 02:53:15

Highest Channel / QPSK



Date: 22.MAR.2020 02:59:22

Highest Channel / 16QAM



Date: 22.MAR.2020 03:00:04