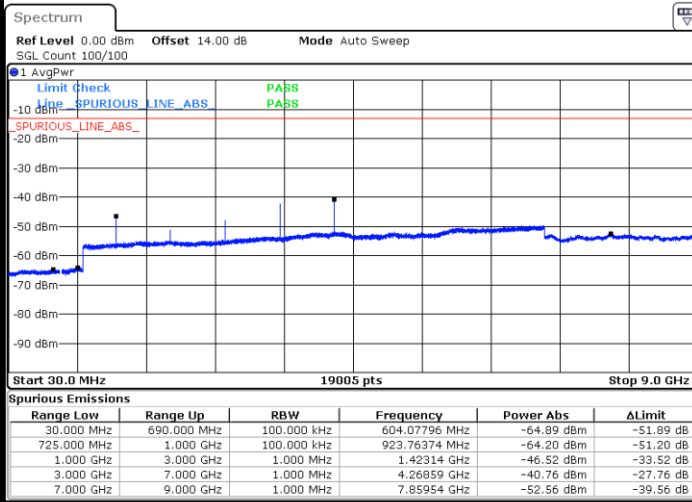




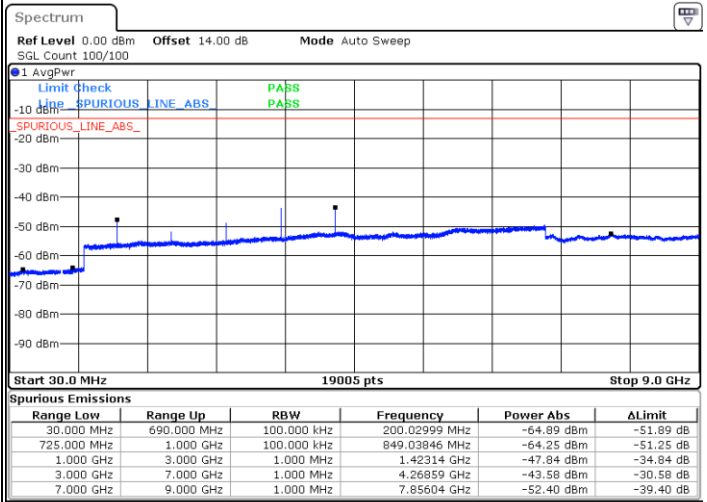
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 14 MAR 2020 22:34:38

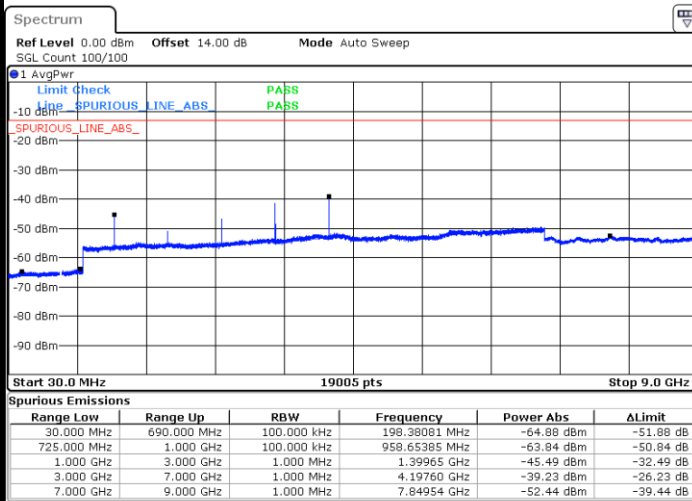
Highest Channel / 16QAM



Date: 14 MAR 2020 22:34:04

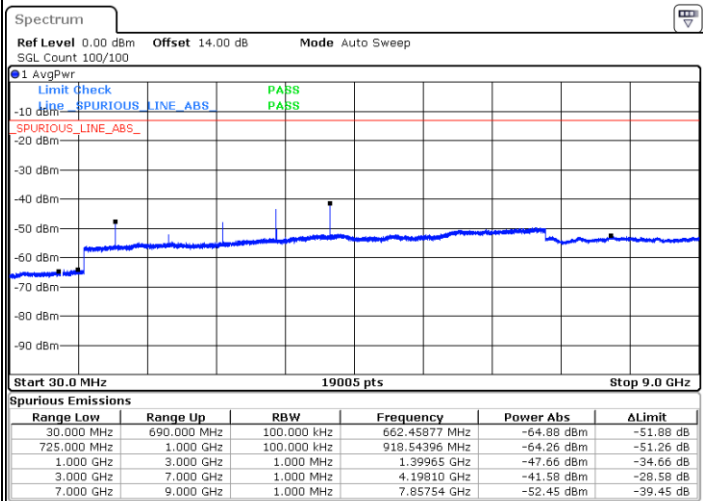
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 14 MAR 2020 22:39:52

Lowest Channel / 16QAM

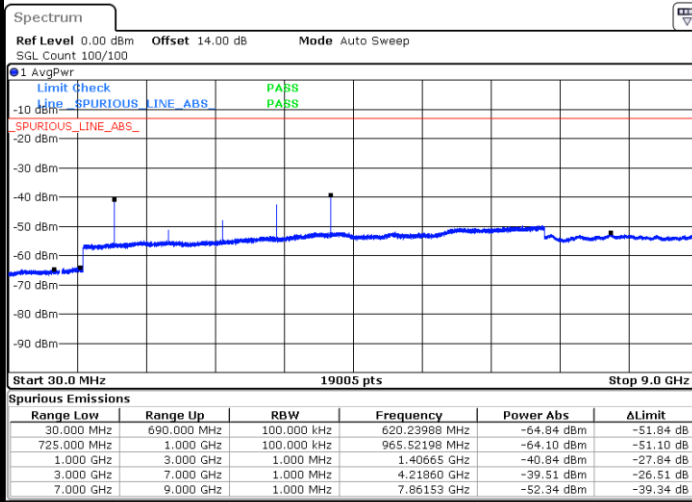


Date: 14 MAR 2020 22:40:26



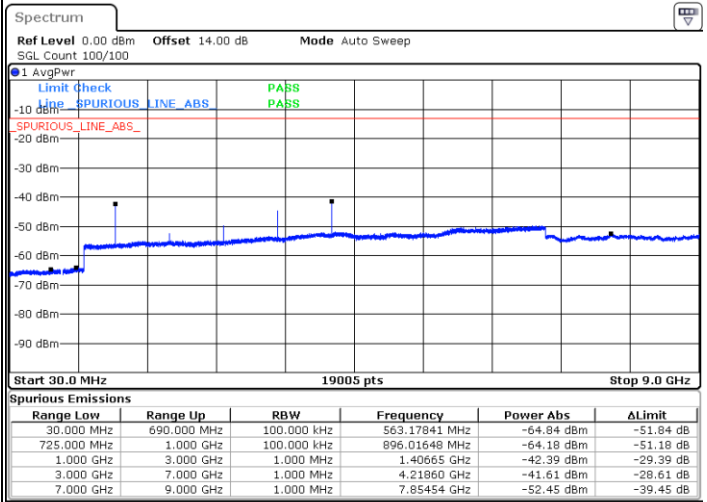
LTE Band 12 / 10MHz

Middle Channel / QPSK



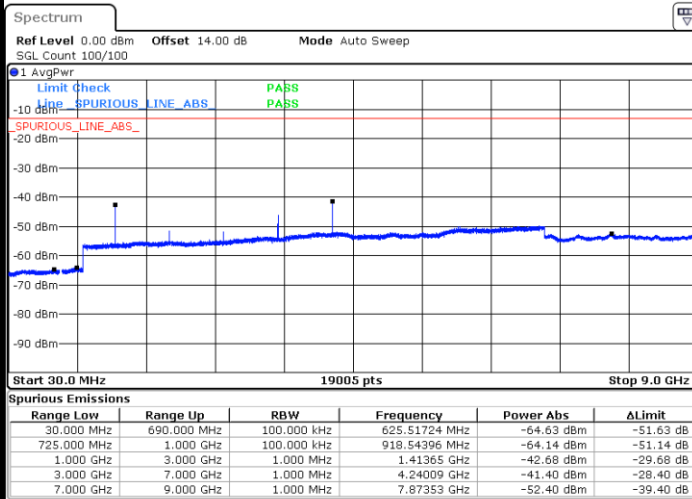
Date: 14 MAR 2020 22:42:18

Middle Channel / 16QAM



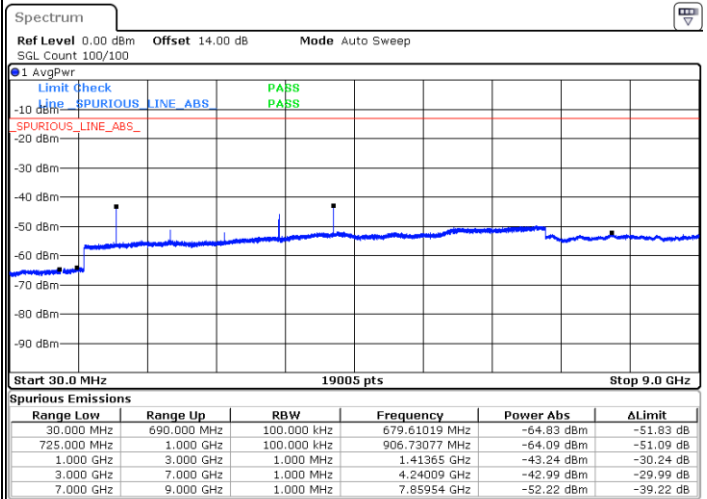
Date: 14 MAR 2020 22:41:44

Highest Channel / QPSK



Date: 14 MAR 2020 22:47:32

Highest Channel / 16QAM



Date: 14 MAR 2020 22:48:06

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	0.0008	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0004	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

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 13

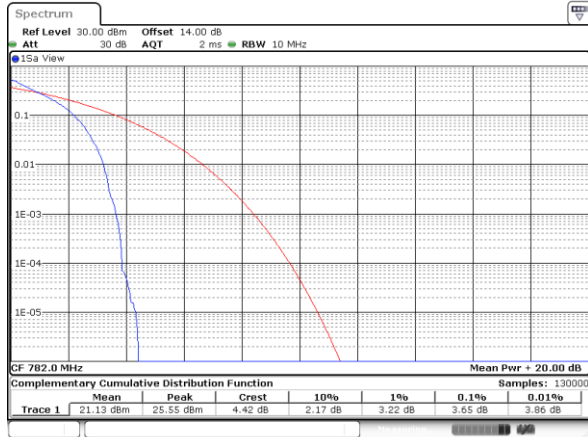
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.65	5.07	5.1	5.8	
Highest CH	-	-	-	-	

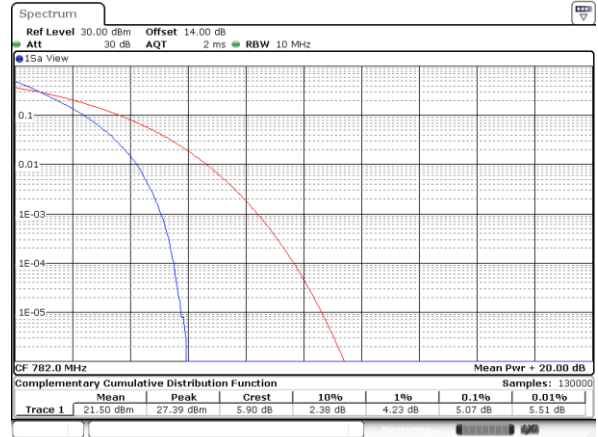


LTE Band 13 / 10MHz / QPSK

Middle Channel/ 1RB

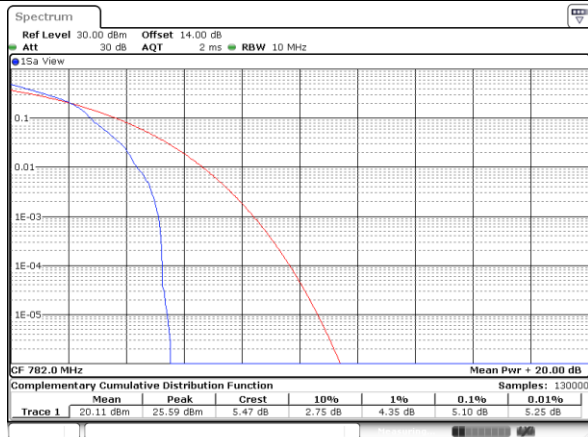


Middle Channel / Full RB

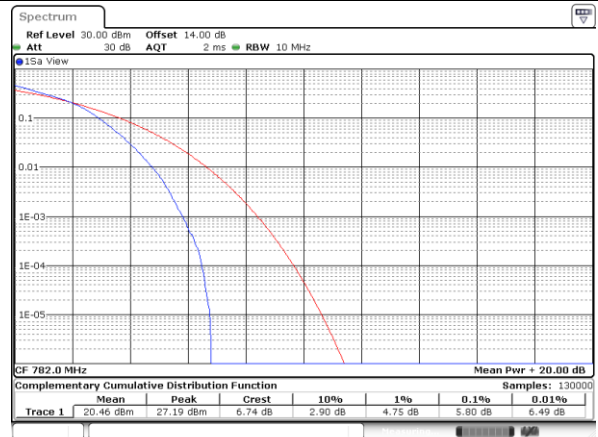


LTE Band 13 / 10MHz / 16QAM

Middle Channel/ 1RB



Middle Channel / Full RB





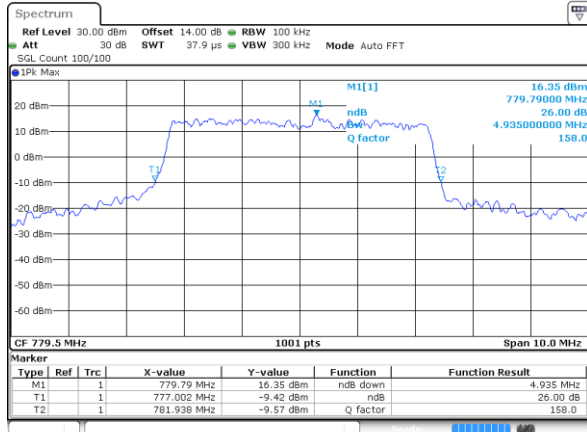
26dB Bandwidth

Mode	LTE Band 13 : 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	-	-	-	-	4.94	4.95	-	-	-	-	-	-
Middle CH	-	-	-	-	4.95	4.96	10.17	9.85	-	-	-	-
Highest CH	-	-	-	-	4.88	4.91	-	-	-	-	-	-



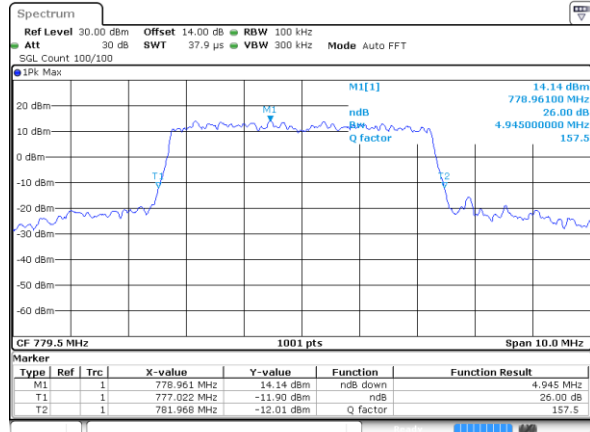
LTE Band 13

Lowest Channel / 5MHz / QPSK



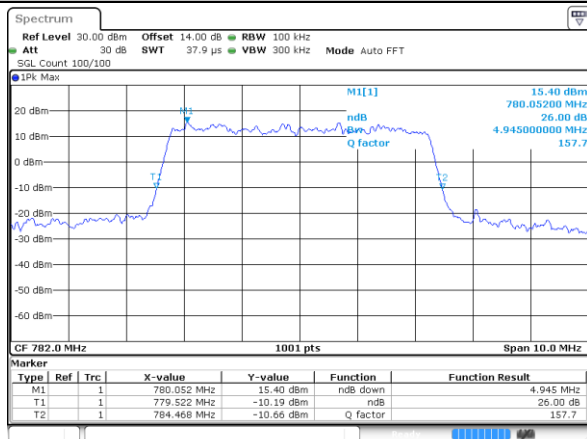
Date: 15 MAR 2020 00:39:07

Lowest Channel / 5MHz / 16QAM



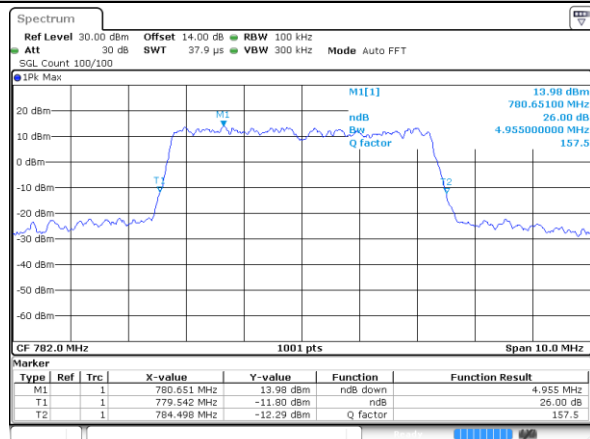
Date: 15 MAR 2020 00:38:56

Middle Channel / 5MHz / QPSK



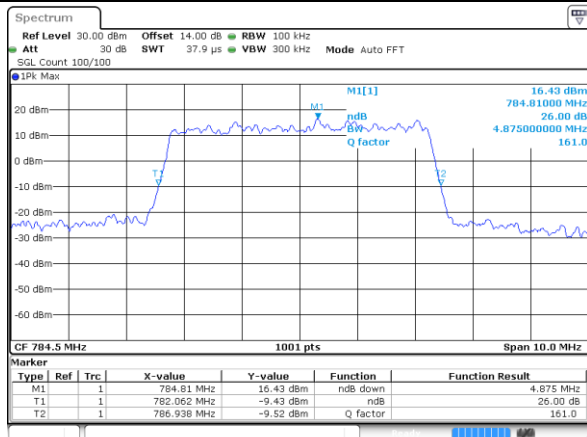
Date: 15 MAR 2020 00:48:10

Middle Channel / 5MHz / 16QAM



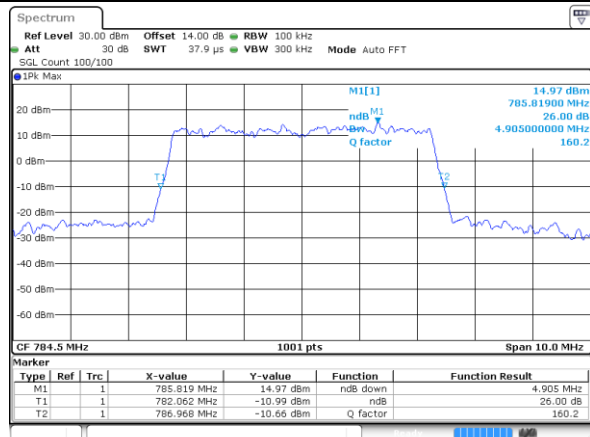
Date: 15 MAR 2020 00:48:20

Highest Channel / 5MHz / QPSK



Date: 15 MAR 2020 00:49:28

Highest Channel / 5MHz / 16QAM

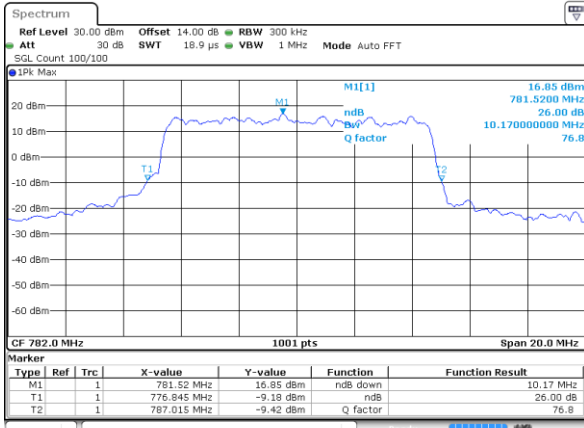


Date: 15 MAR 2020 00:49:15



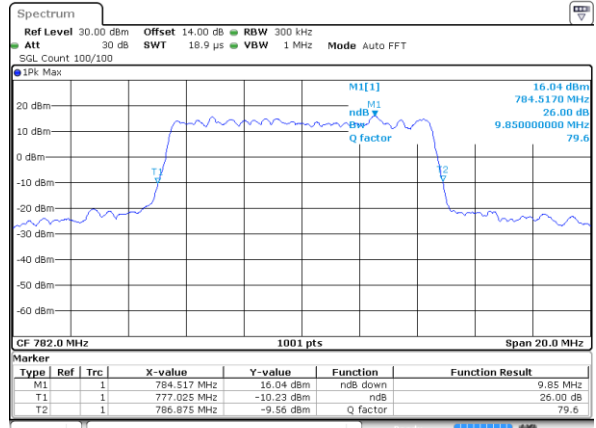
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 15 MAR 2020 00:57:53

Middle Channel / 10MHz / 16QAM



Date: 15 MAR 2020 00:57:42

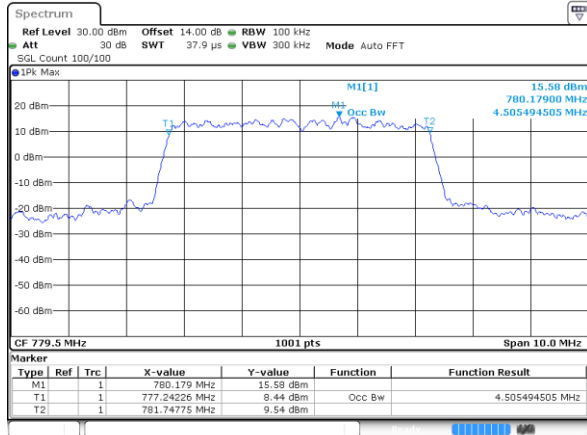
**Occupied Bandwidth**

Mode	LTE Band 13 : 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	-	-	-	-	4.51	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	4.49	9.03	9.07	-	-	-	-
Highest CH	-	-	-	-	4.50	4.50	-	-	-	-	-	-

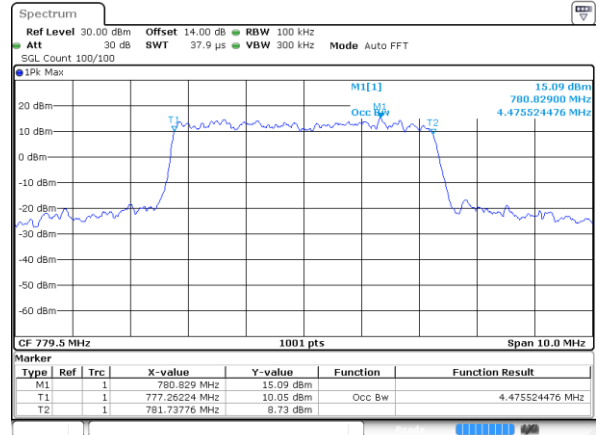


LTE Band 13

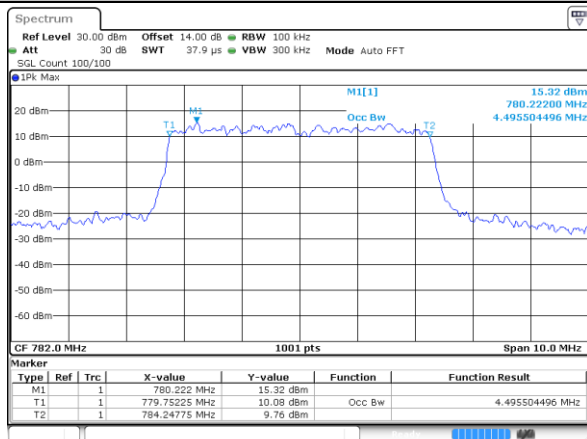
Lowest Channel / 5MHz / QPSK



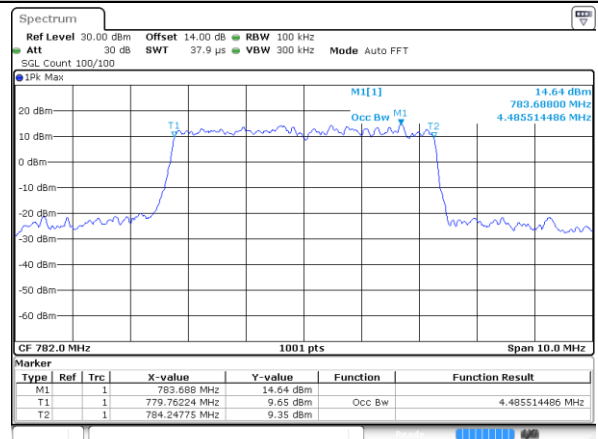
Lowest Channel / 5MHz / 16QAM



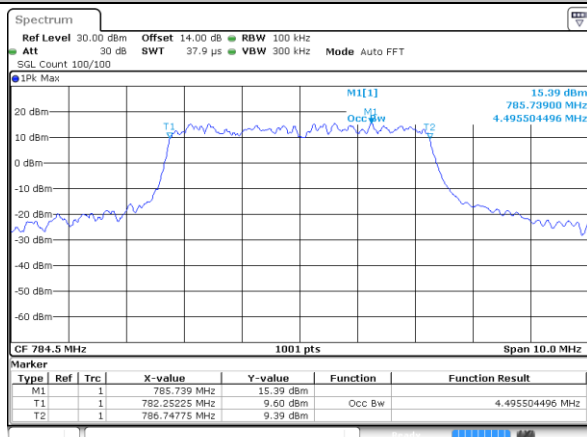
Middle Channel / 5MHz / QPSK



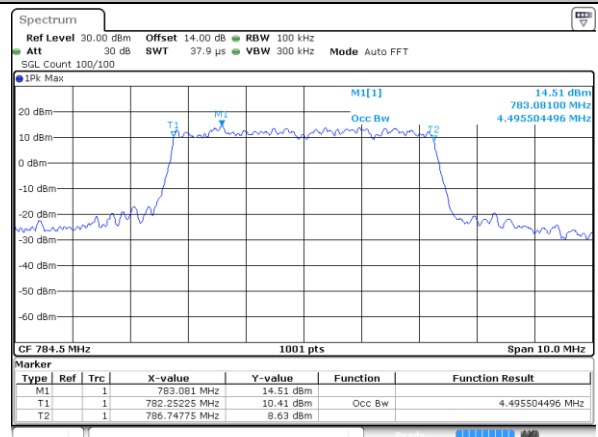
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



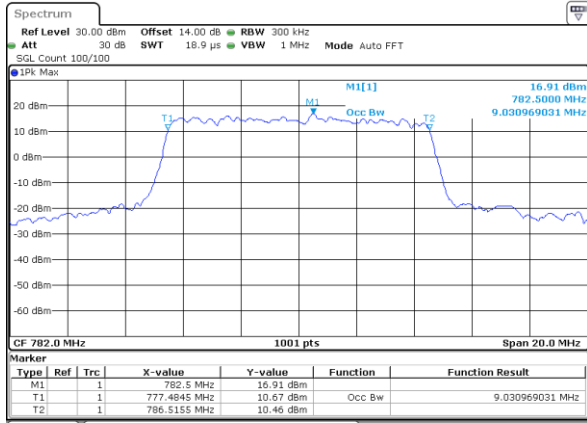
Highest Channel / 5MHz / 16QAM





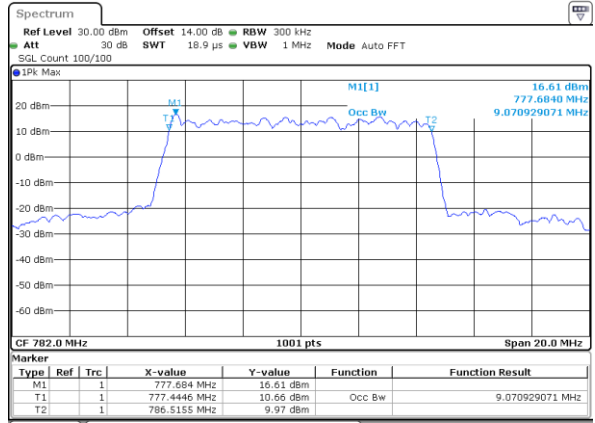
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 15 MAR 2020 00:57:21

Middle Channel / 10MHz / 16QAM



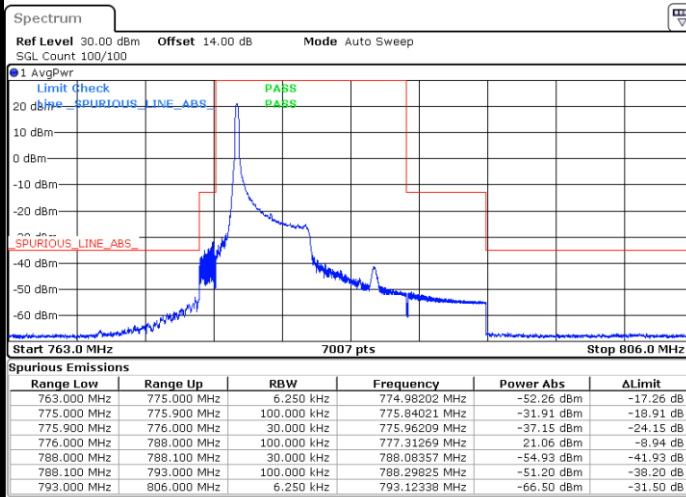
Date: 15 MAR 2020 00:57:31



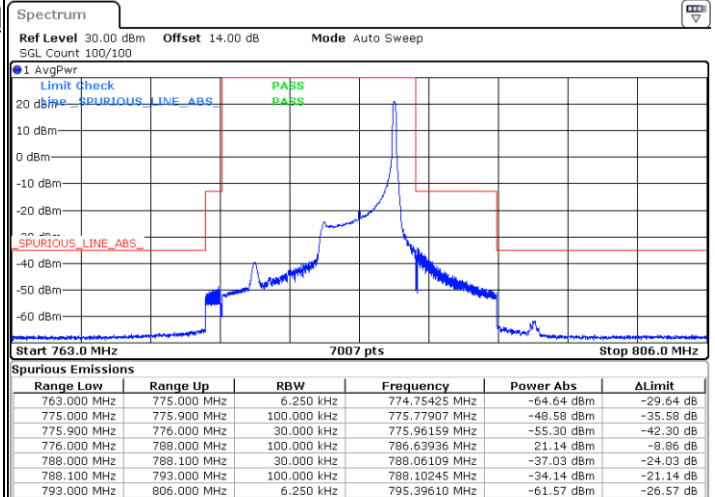
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

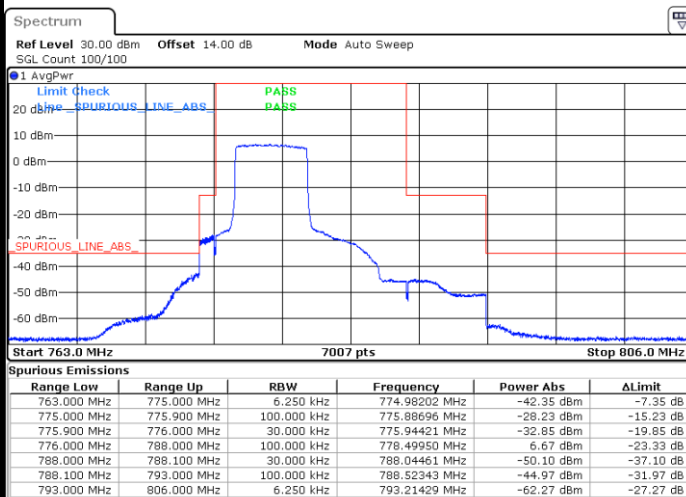
Lowest Band Edge / 1 RB



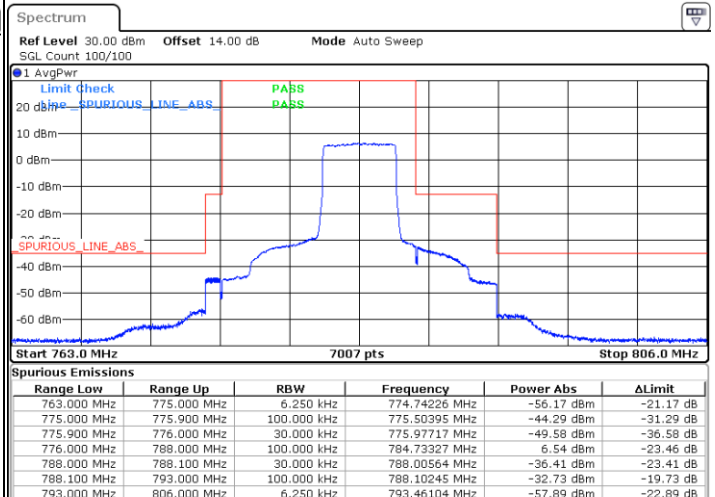
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



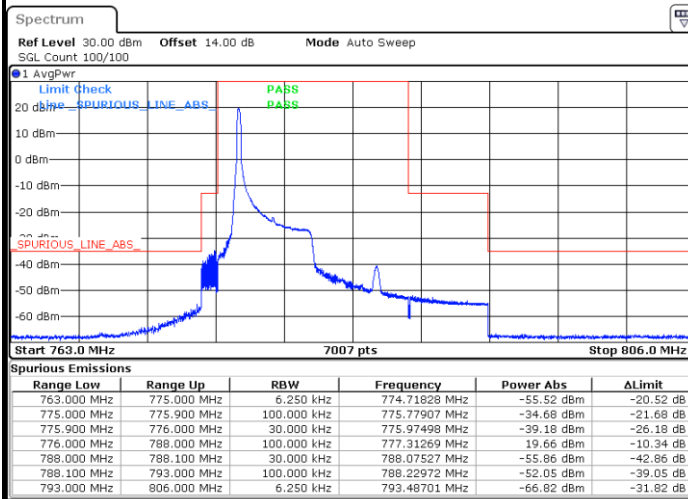
Highest Band Edge / Full RB



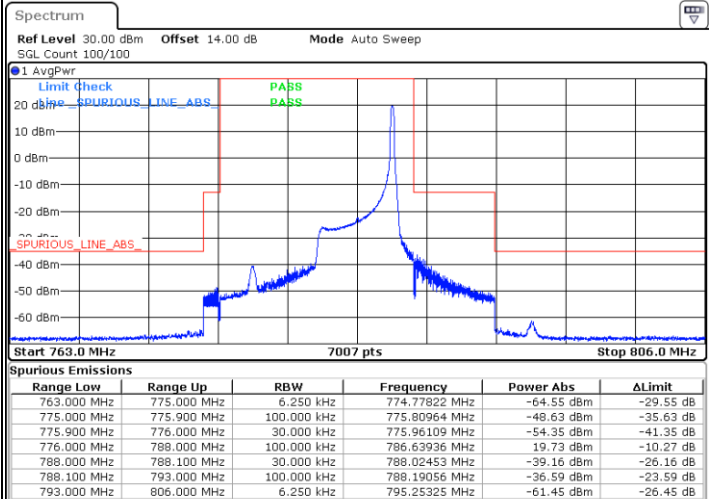


LTE Band 13 / 5MHz / 16QAM

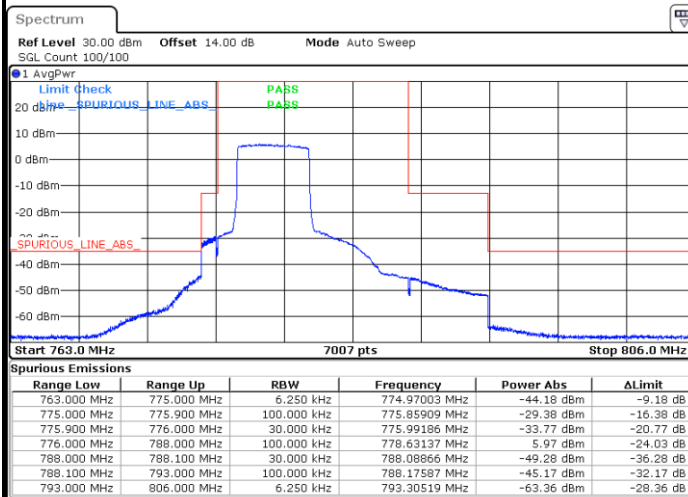
Lowest Band Edge / 1 RB



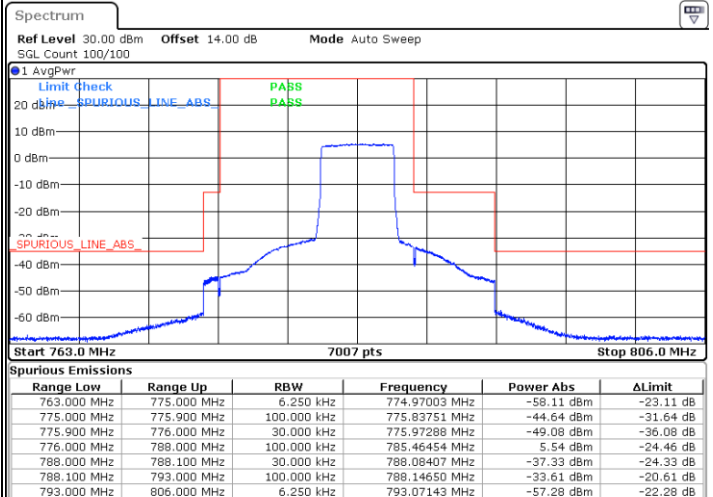
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



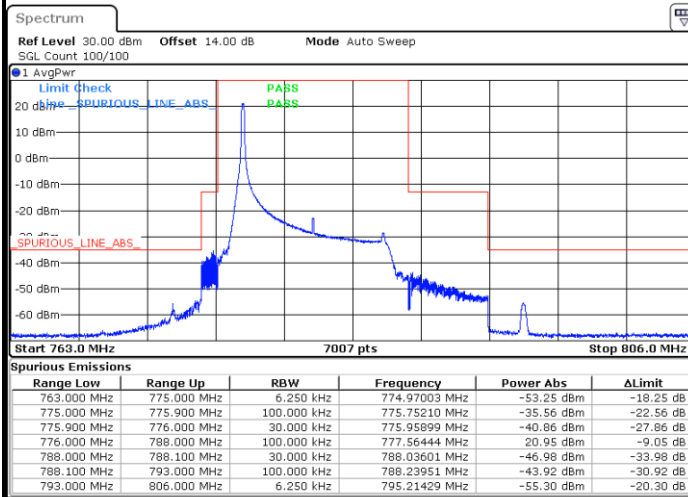
Highest Band Edge / Full RB





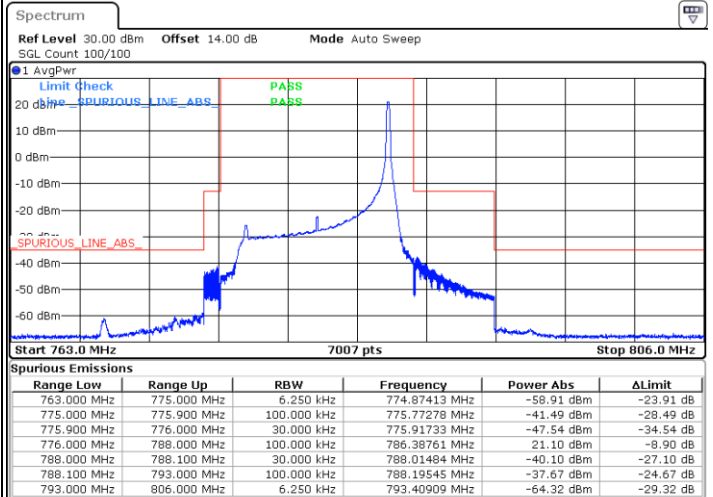
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



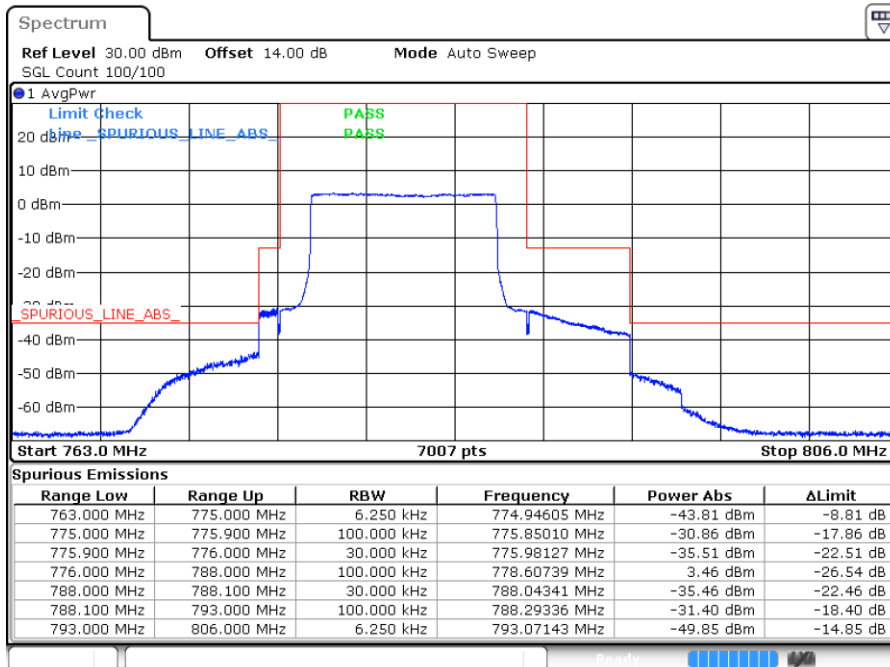
Date: 15.MAR.2020 01:04:29

Highest Band Edge / 1 RB



Date: 15.MAR.2020 01:06:08

Band Edge / Full RB

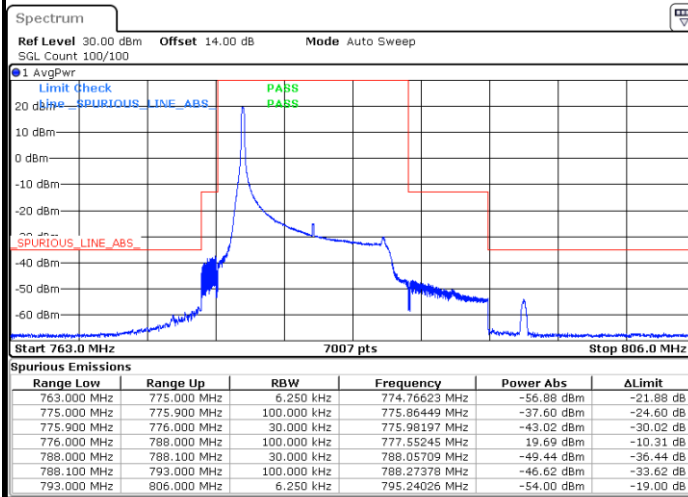


Date: 15.MAR.2020 00:59:32

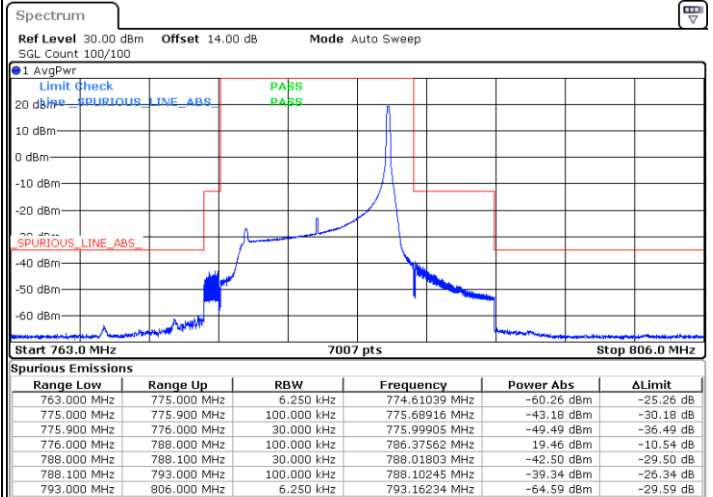


LTE Band 13 / 10MHz / 16QAM

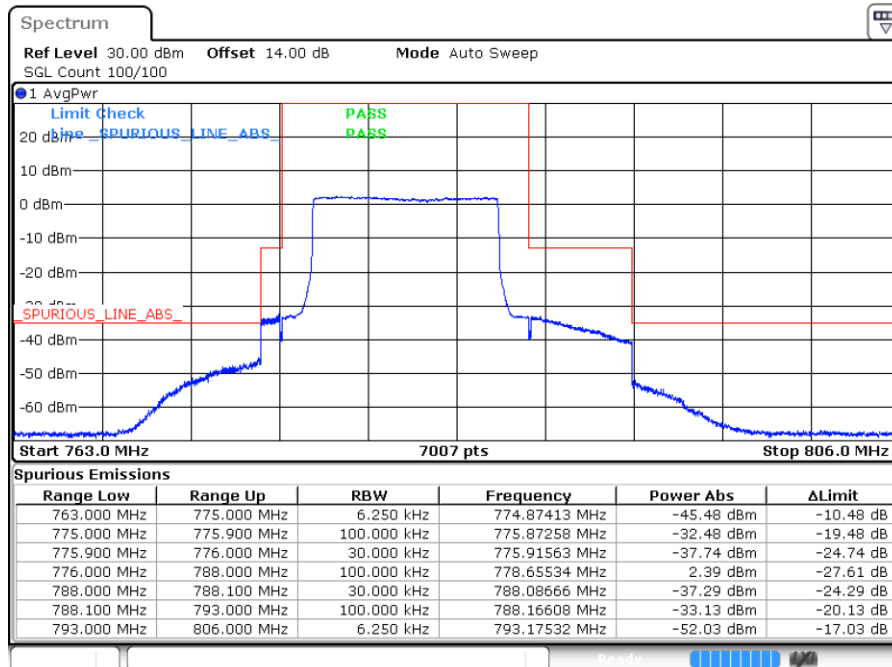
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Band Edge / Full RB

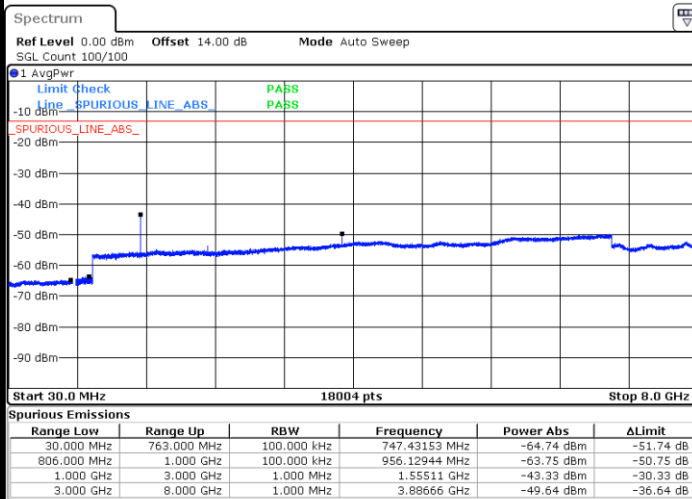




Conducted Spurious Emission

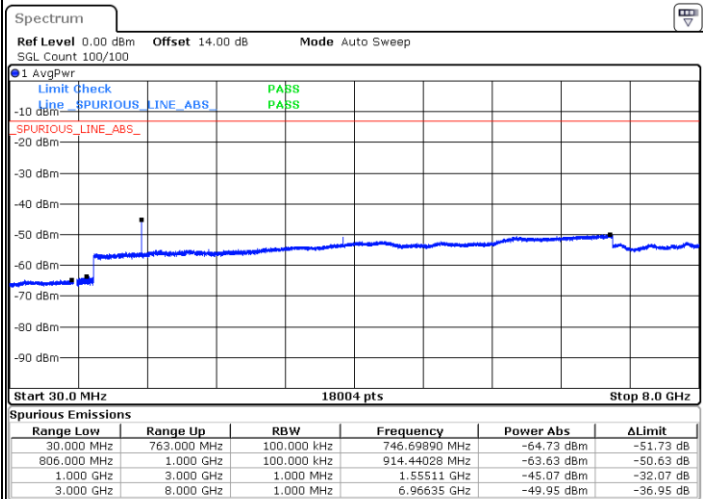
LTE Band 13 / 5MHz

Lowest Channel / QPSK



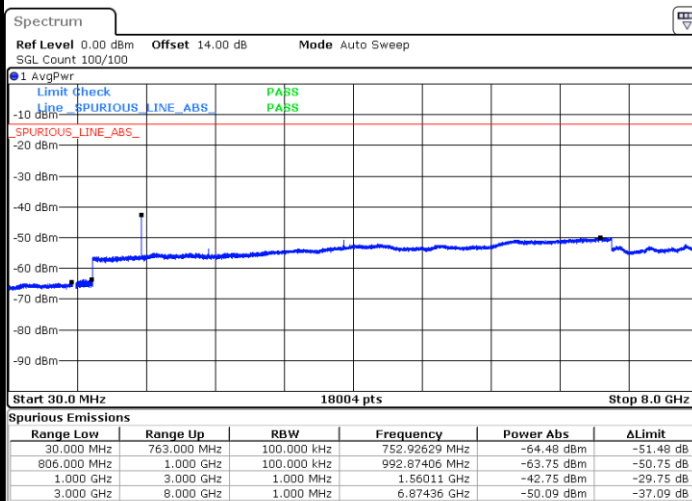
Date: 15.MAR.2020 00:46:17

Lowest Channel / 16QAM



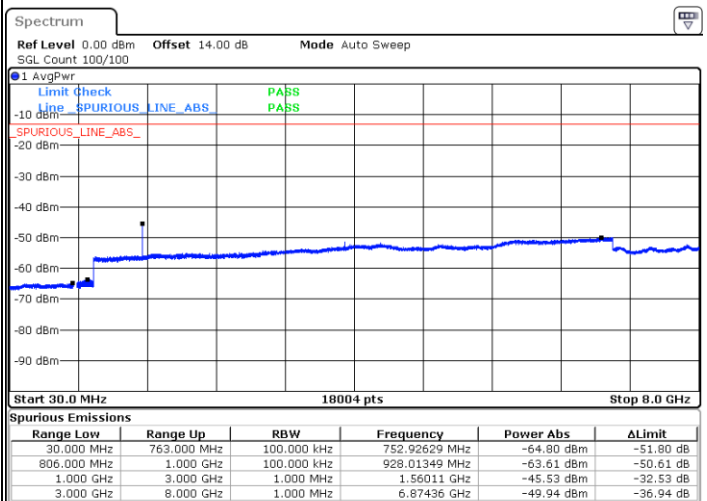
Date: 15.MAR.2020 00:46:51

Middle Channel / QPSK



Date: 15.MAR.2020 00:47:59

Middle Channel / 16QAM

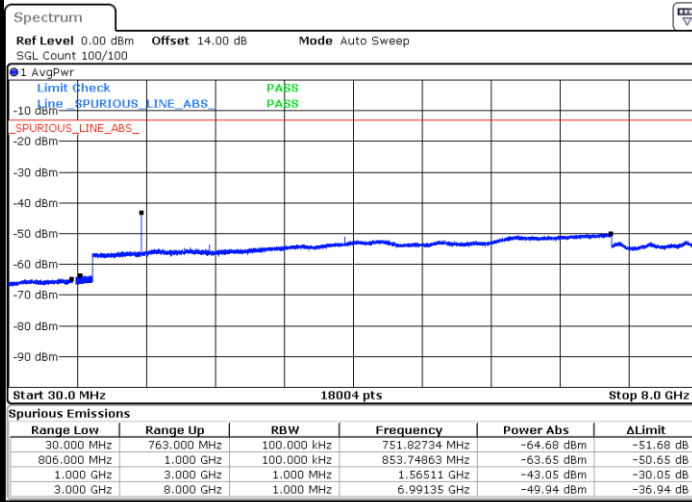


Date: 15.MAR.2020 00:47:25



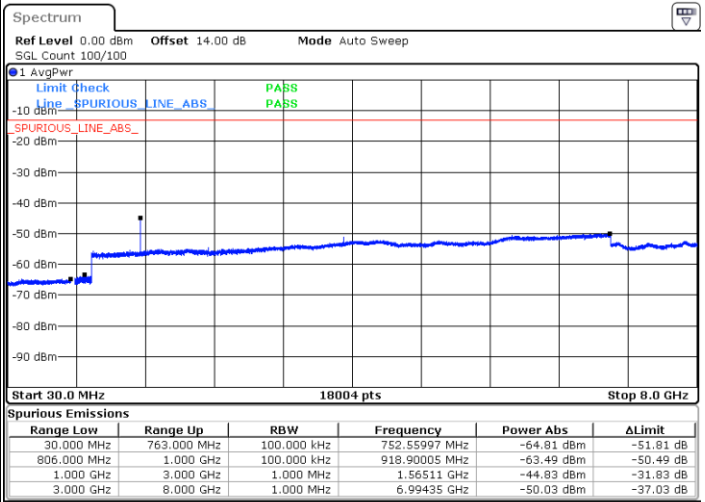
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 15 MAR 2020 00:56:36

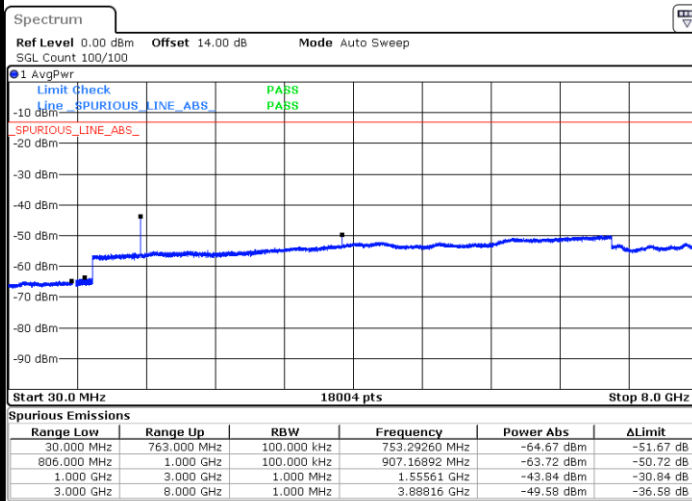
Highest Channel / 16QAM



Date: 15 MAR 2020 00:57:10

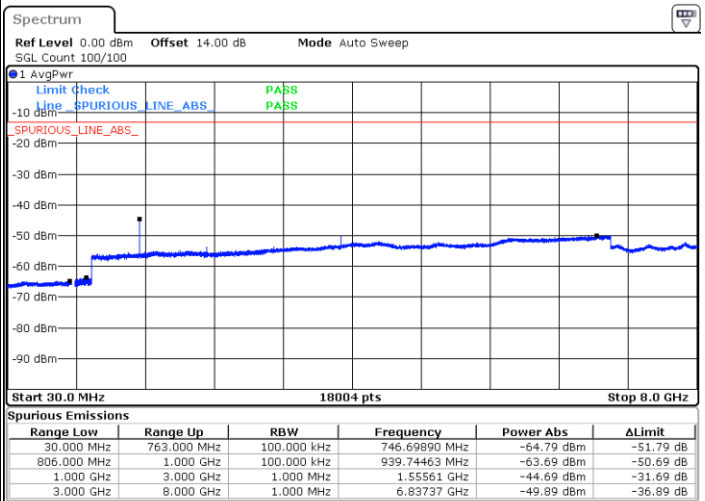
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 15 MAR 2020 01:11:40

Middle Channel / 16QAM



Date: 15 MAR 2020 01:11:06

Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0351	PASS
40	Normal Voltage	0.0461	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0042	
-10	Normal Voltage	0.0146	
-20	Normal Voltage	0.0237	
-30	Normal Voltage	0.0285	
20	Maximum Voltage	0.0366	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0426	

Note:

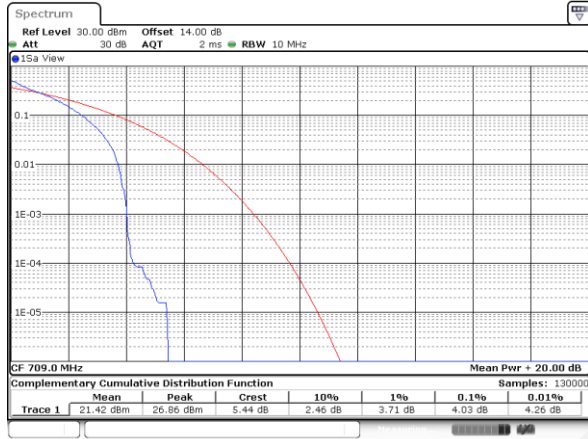
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



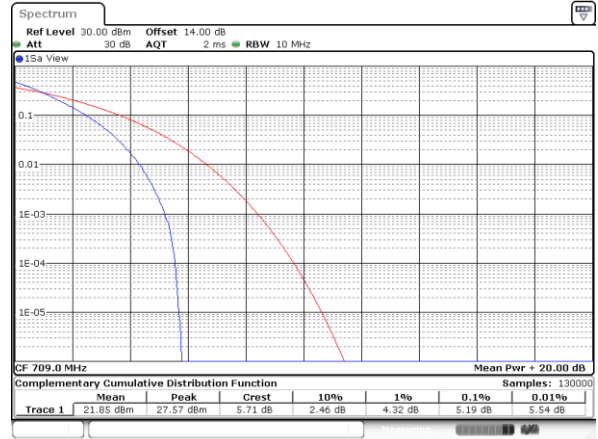
LTE Band 17

Peak-to-Average Ratio

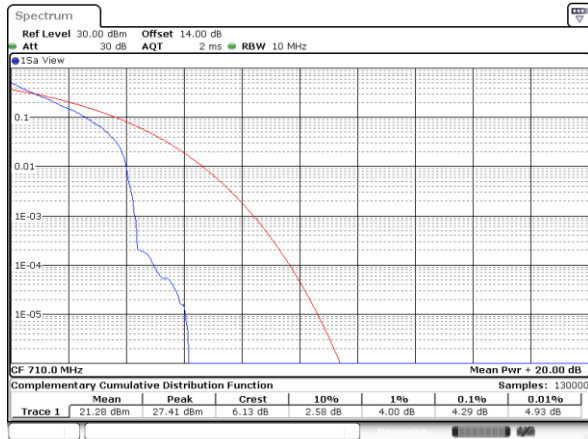
Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.03	5.19	5.39	6.00	PASS
Middle CH	4.29	5.04	5.01	5.91	
Highest CH	4.46	4.93	5.22	5.94	

LTE Band 17 / 10MHz / QPSK
Lowest Channel / 1RB


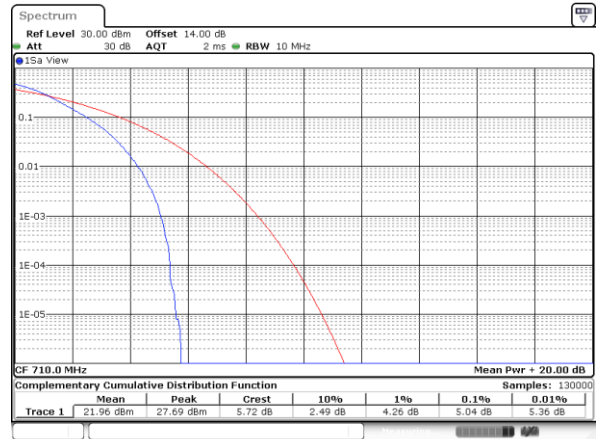
Date: 14 MAR 2020 23:59:58

Lowest Channel / Full RB


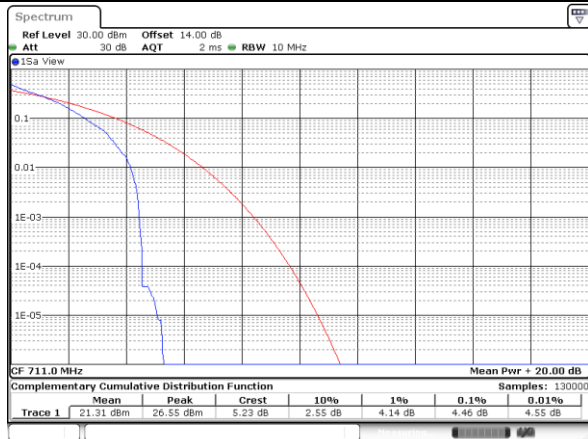
Date: 15 MAR 2020 00:00:08

Middle Channel / 1RB


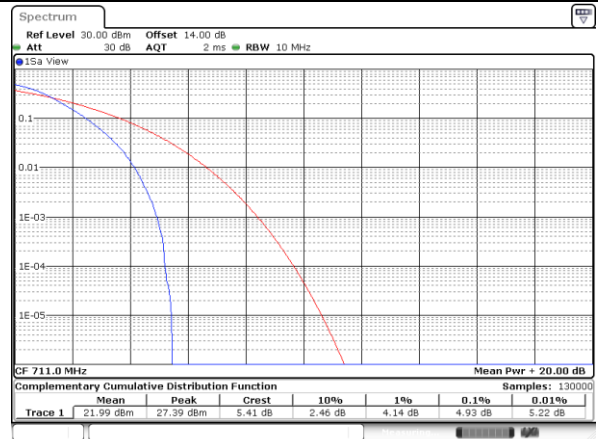
Date: 15 MAR 2020 00:00:19

Middle Channel / Full RB


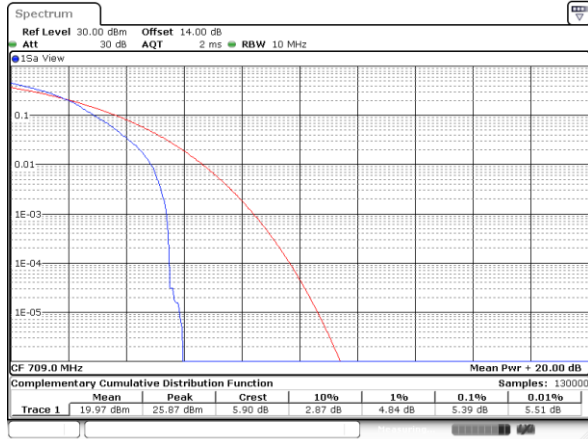
Date: 15 MAR 2020 00:00:30

Highest Channel / 1RB


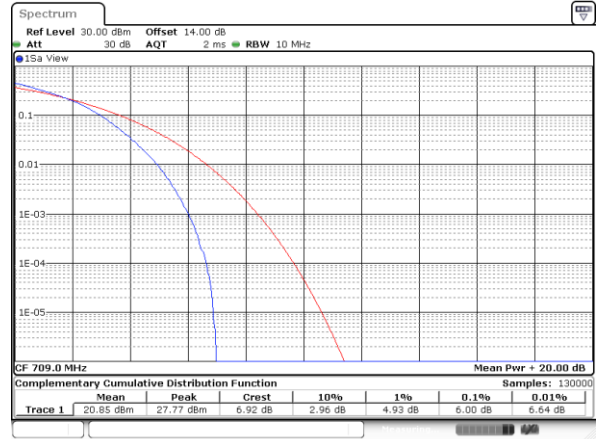
Date: 15 MAR 2020 00:00:40

Highest Channel / Full RB


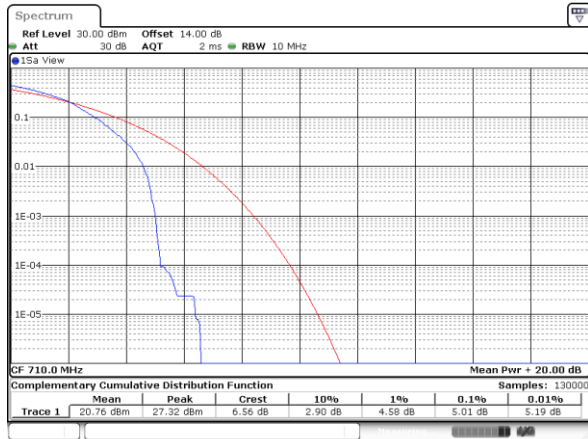
Date: 15 MAR 2020 00:01:00

LTE Band 17 / 10MHz / 16QAM
Lowest Channel / 1RB


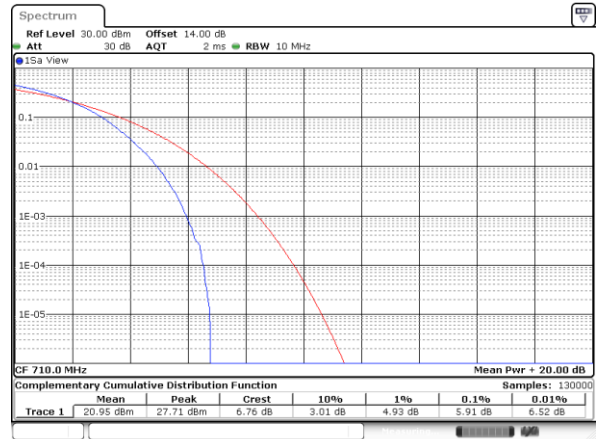
Date: 14 MAR 2020 23:58:55

Lowest Channel / Full RB


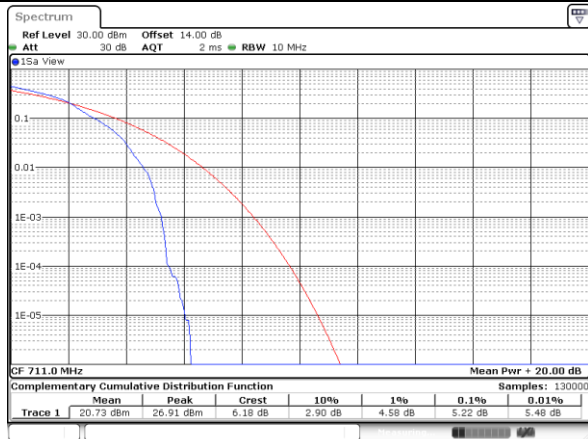
Date: 14 MAR 2020 23:59:06

Middle Channel/ 1RB


Date: 14 MAR 2020 23:59:16

Middle Channel / Full RB


Date: 14 MAR 2020 23:59:27

Highest Channel/ 1RB


Date: 14 MAR 2020 23:59:37

Highest Channel / Full RB


Date: 14 MAR 2020 23:59:47

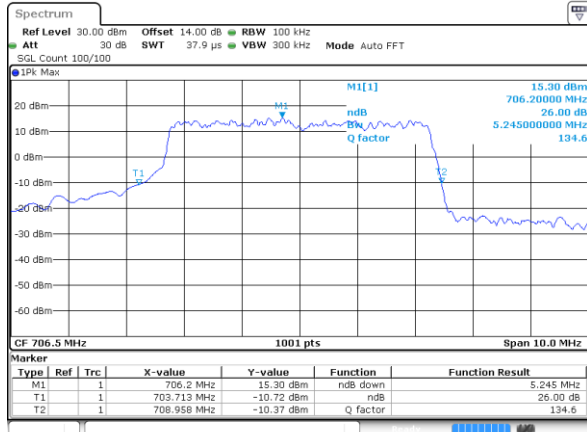
**26dB Bandwidth**

Mode	LTE Band 17 : 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	-	-	-	-	5.25	4.91	9.89	9.71	-	-	-	-
Middle CH	-	-	-	-	5.12	4.92	9.95	9.87	-	-	-	-
Highest CH	-	-	-	-	4.93	4.87	9.99	10.03	-	-	-	-



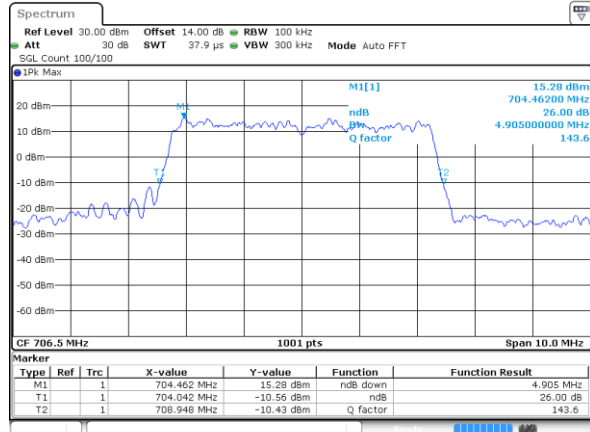
LTE Band 17

Lowest Channel / 5MHz / QPSK



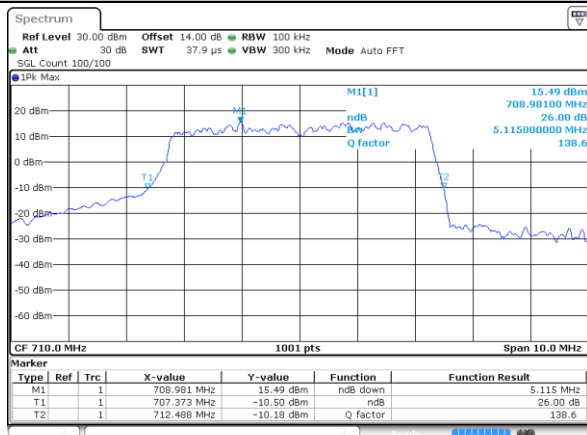
Date: 14 MAR 2020 23:25:44

Lowest Channel / 5MHz / 16QAM



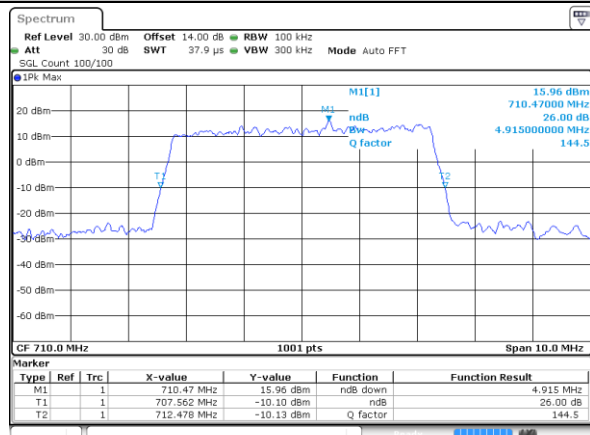
Date: 14 MAR 2020 23:25:55

Middle Channel / 5MHz / QPSK



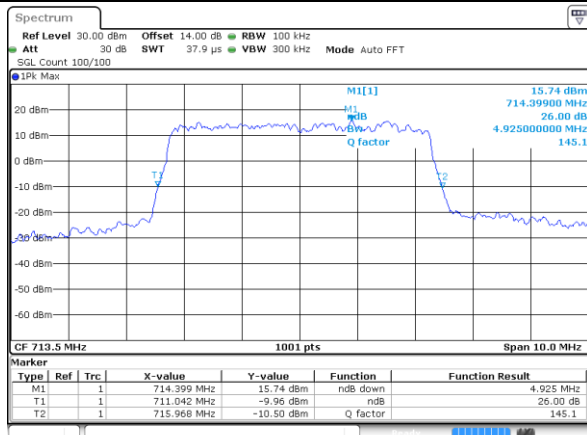
Date: 14 MAR 2020 23:31:41

Middle Channel / 5MHz / 16QAM



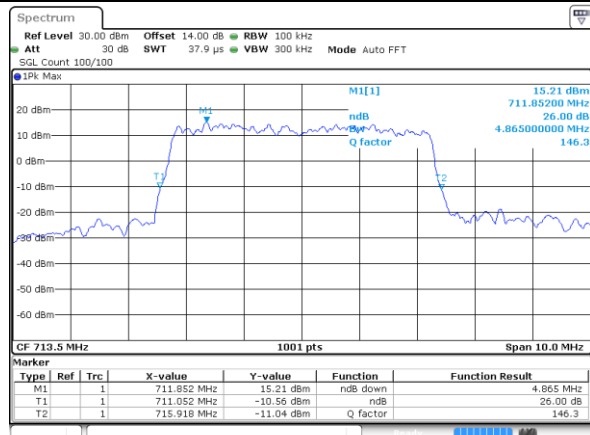
Date: 14 MAR 2020 23:31:52

Highest Channel / 5MHz / QPSK



Date: 14 MAR 2020 23:33:33

Highest Channel / 5MHz / 16QAM

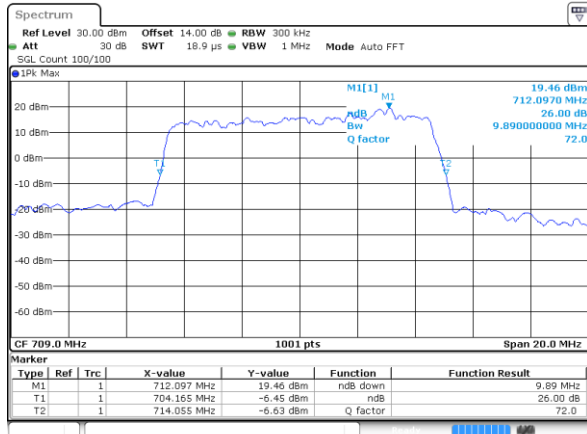


Date: 14 MAR 2020 23:33:44

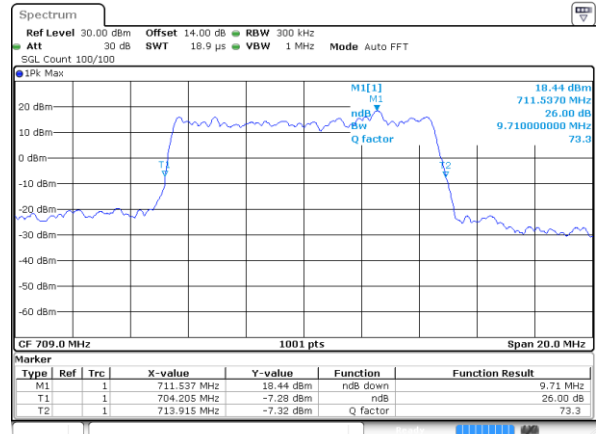


LTE Band 17

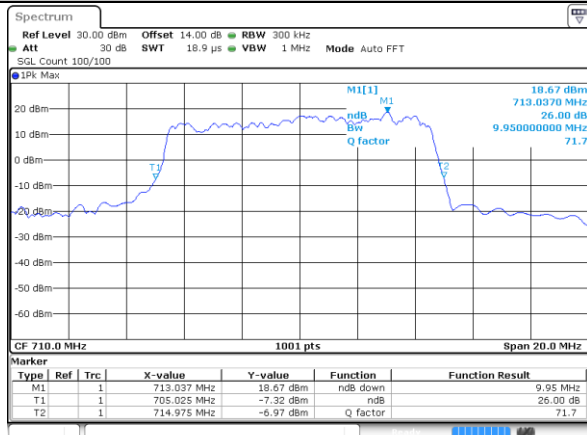
Lowest Channel / 10MHz / QPSK



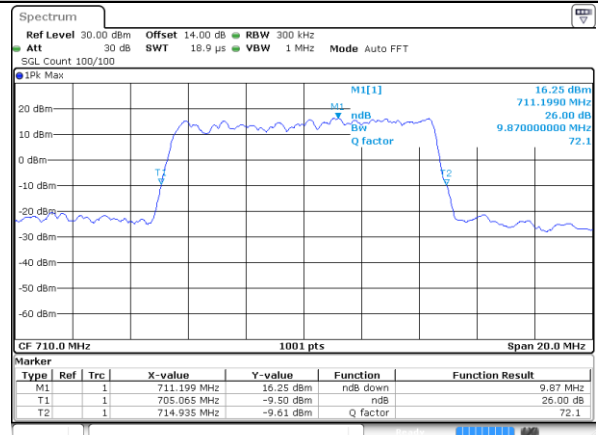
Lowest Channel / 10MHz / 16QAM



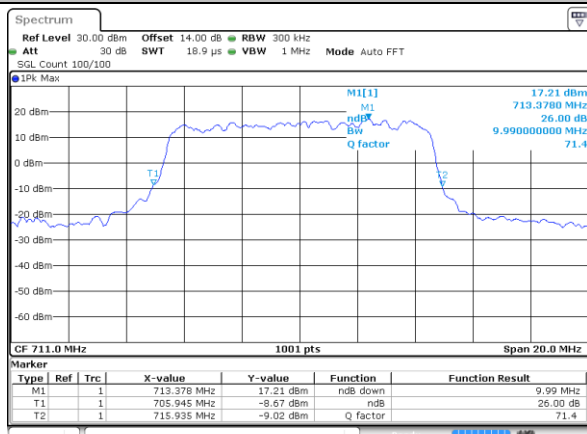
Middle Channel / 10MHz / QPSK



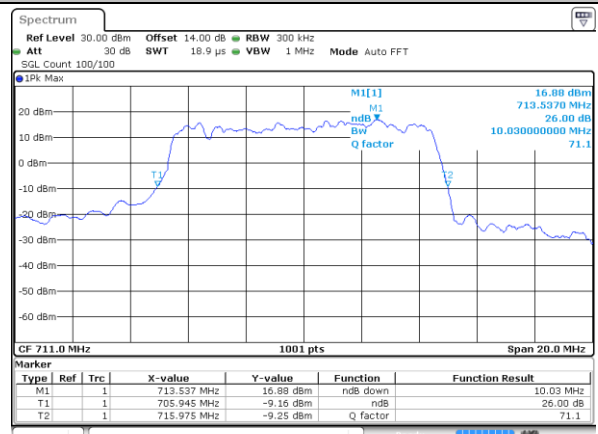
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



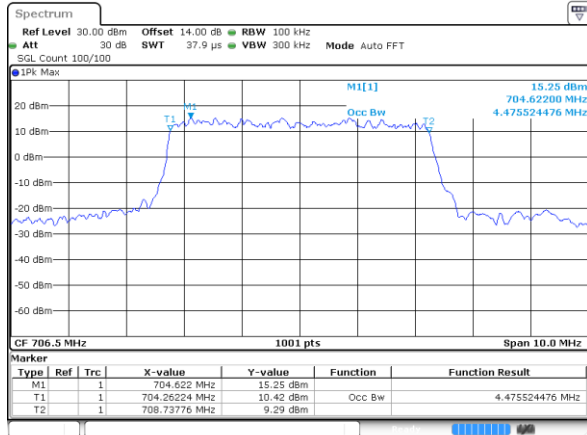
**Occupied Bandwidth**

Mode	LTE Band 17 : 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	9.17	9.07	-	-	-	-
Middle CH	-	-	-	-	4.5	4.5	9.03	8.99	-	-	-	-
Highest CH	-	-	-	-	4.48	4.47	9.01	8.97	-	-	-	-

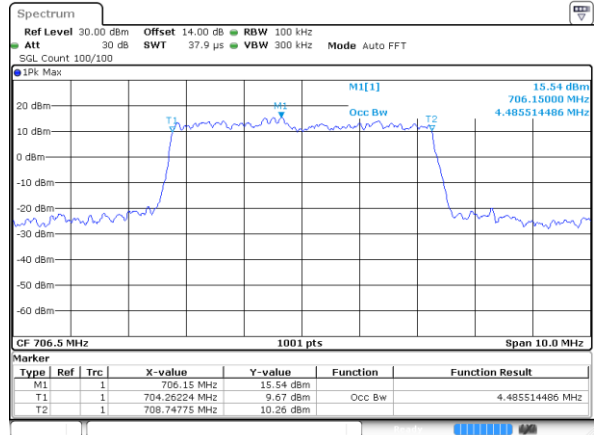


LTE Band 17

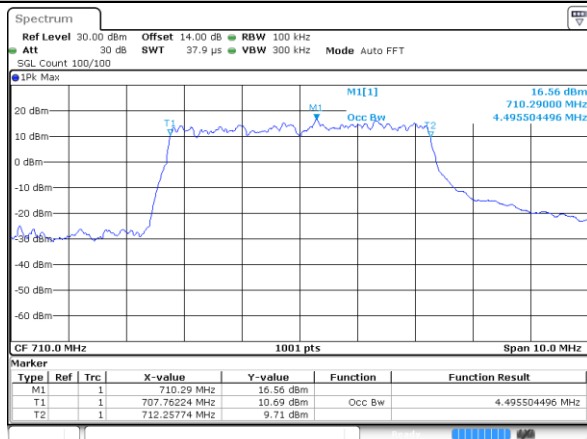
Lowest Channel / 5MHz / QPSK



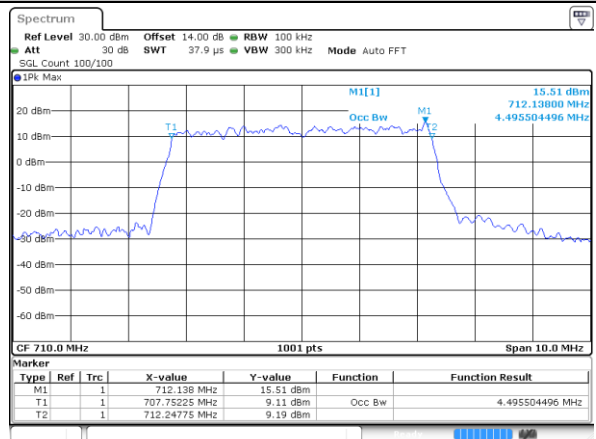
Lowest Channel / 5MHz / 16QAM



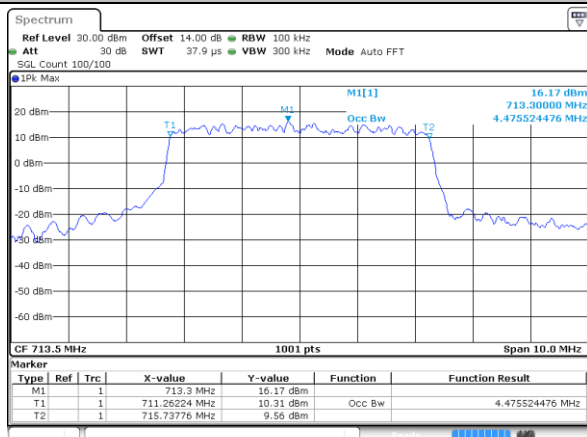
Middle Channel / 5MHz / QPSK



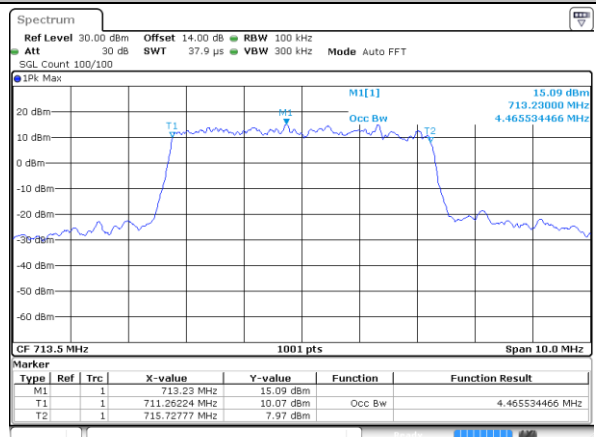
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



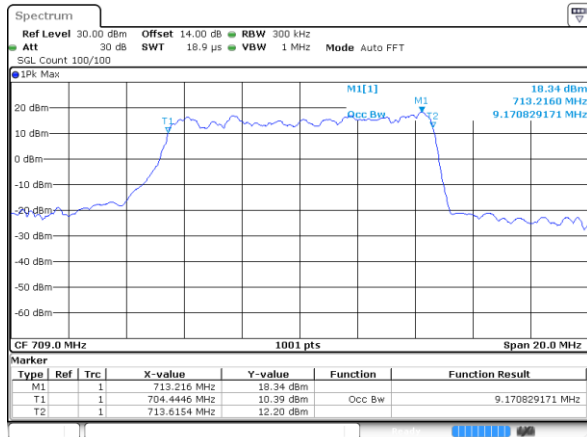
Highest Channel / 5MHz / 16QAM



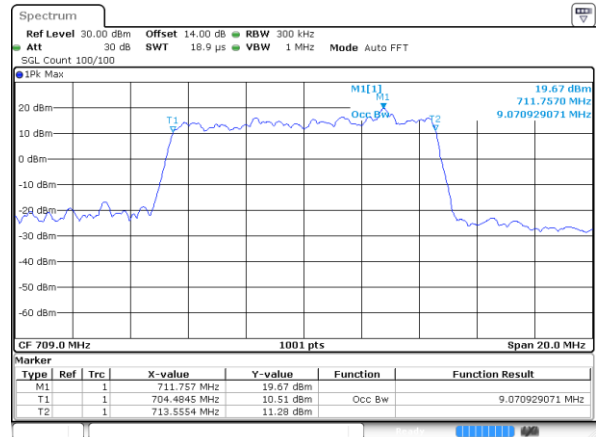


LTE Band 17

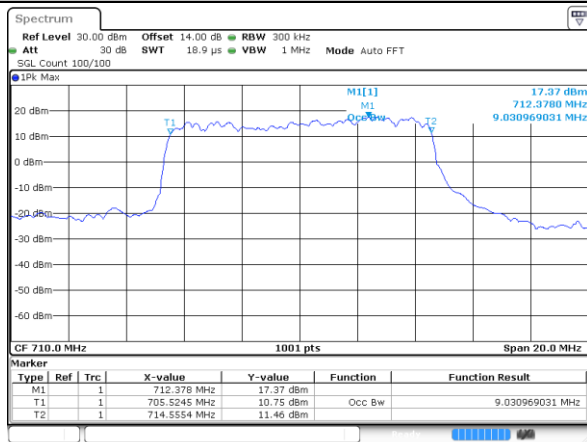
Lowest Channel / 10MHz / QPSK



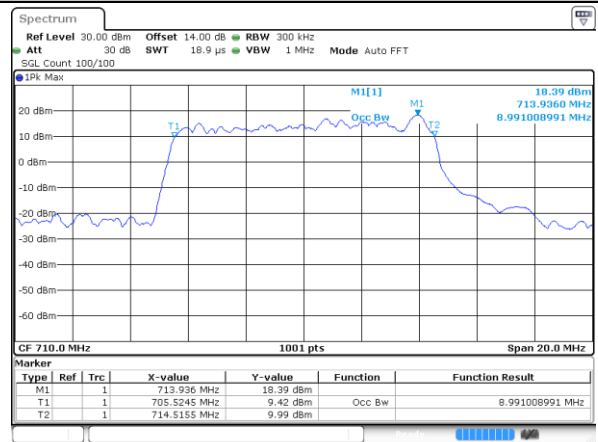
Lowest Channel / 10MHz / 16QAM



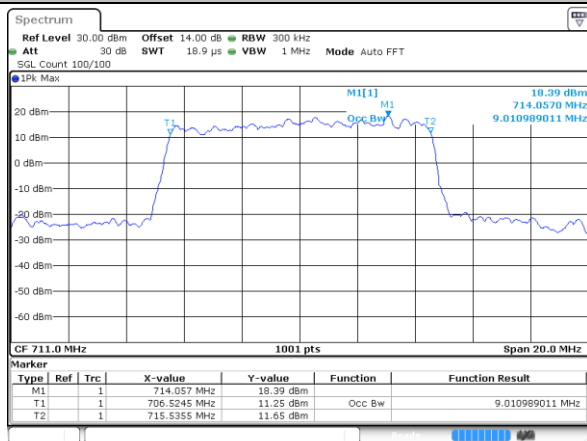
Middle Channel / 10MHz / QPSK



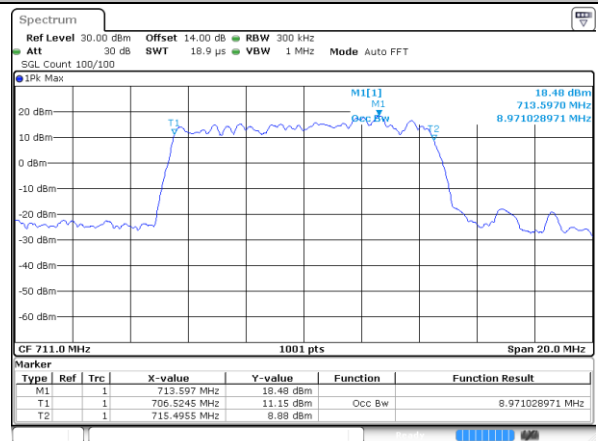
Middle Channel / 10MHz / 16QAM

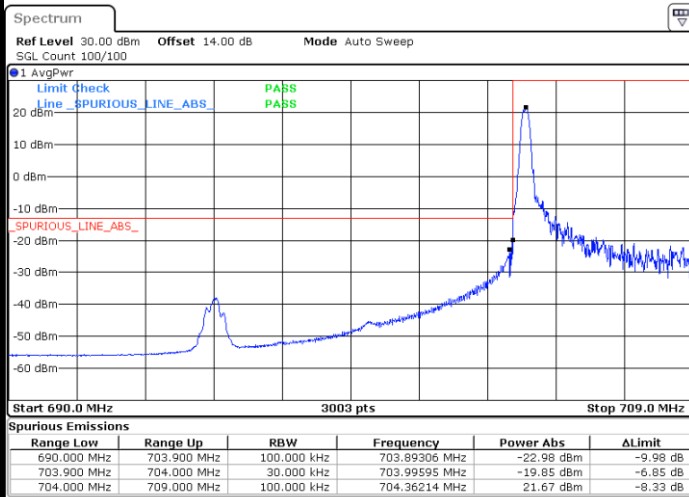
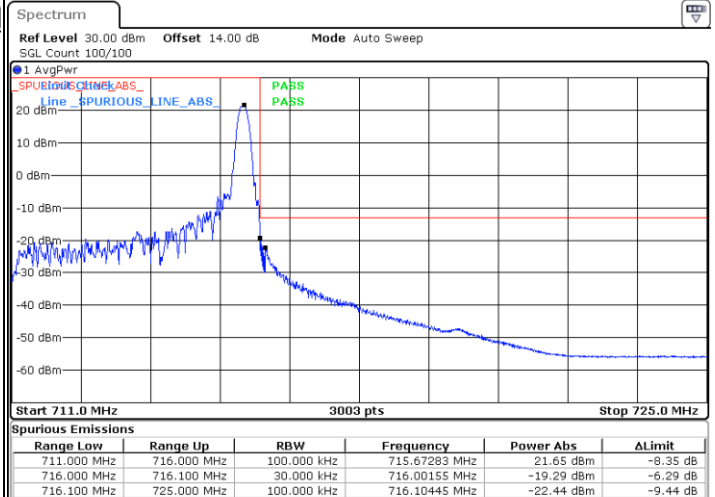
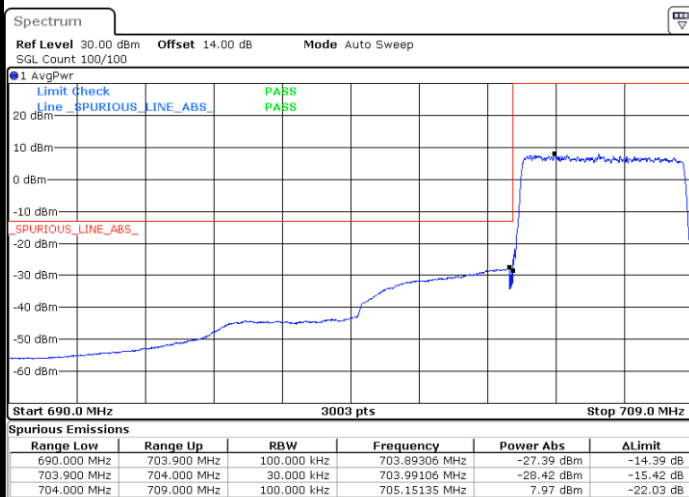
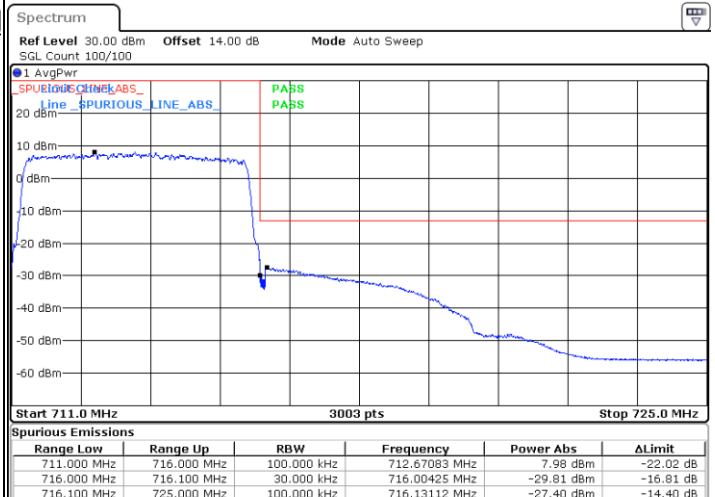


Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

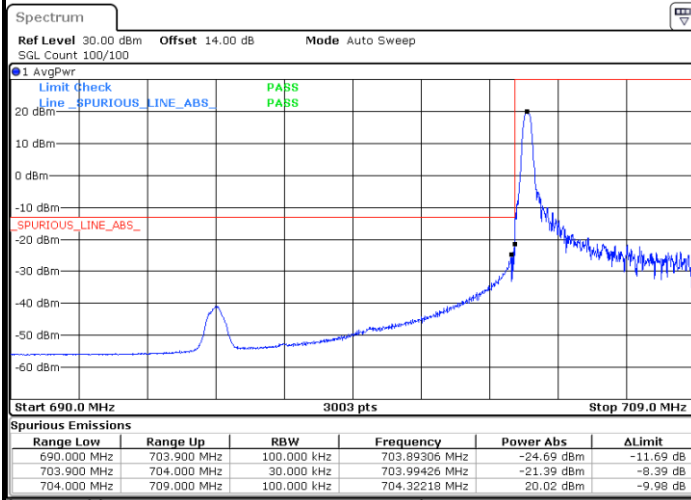


**Conducted Band Edge****LTE Band 17 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

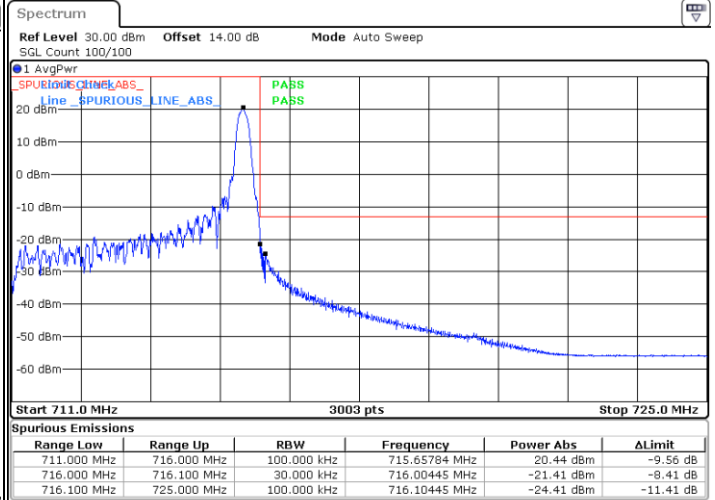


LTE Band 17 / 5MHz / 16QAM

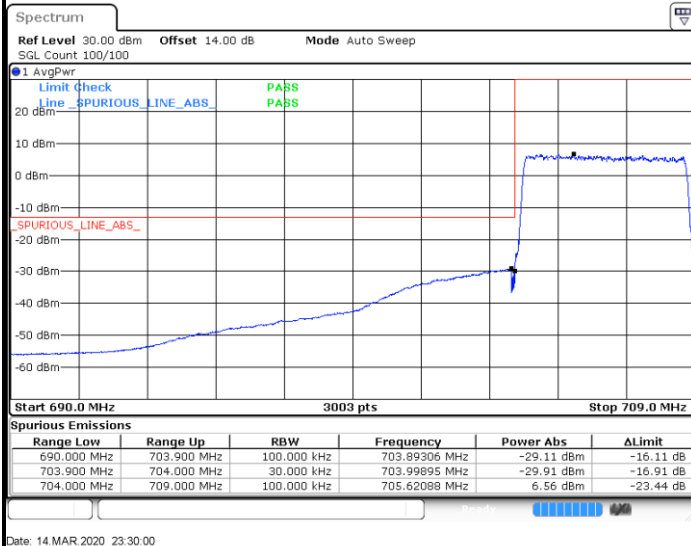
Lowest Band Edge / 1 RB



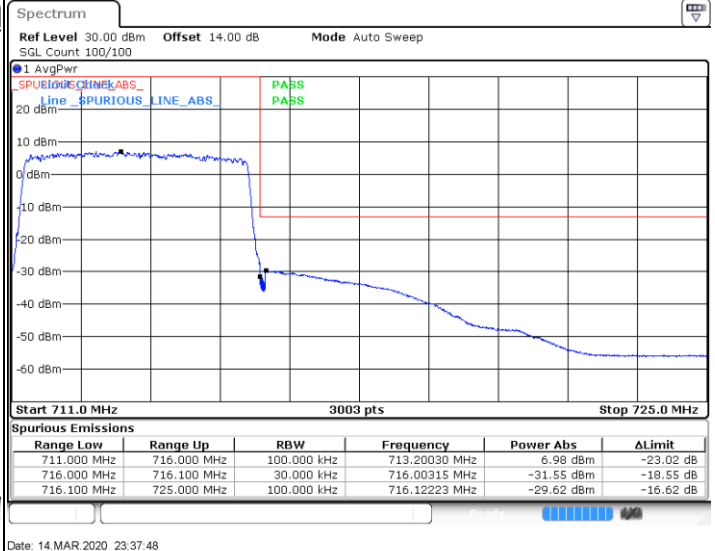
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



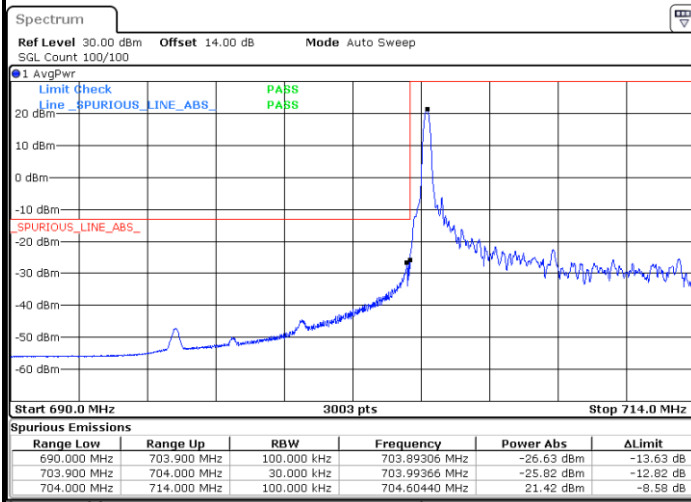
Highest Band Edge / Full RB



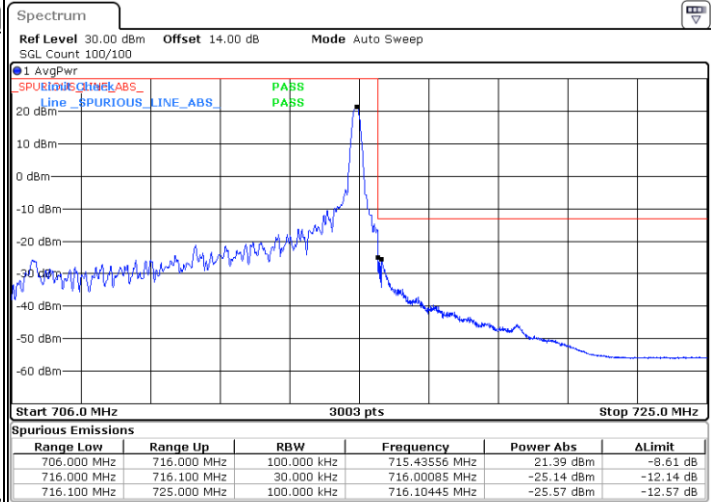


LTE Band 17 / 10MHz / QPSK

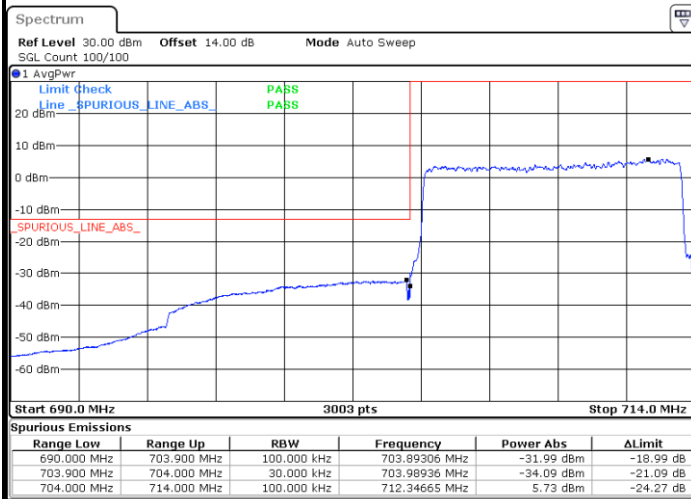
Lowest Band Edge / 1 RB



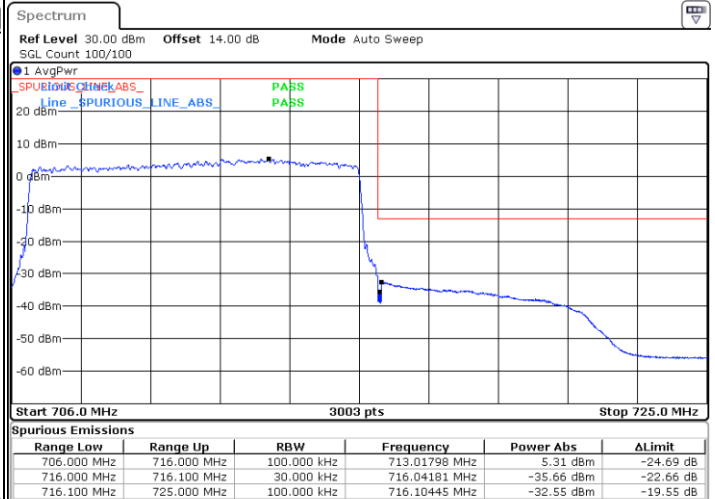
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



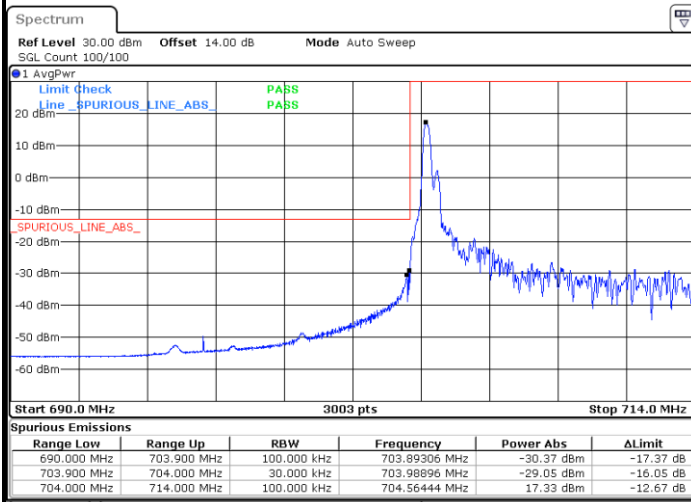
Highest Band Edge / Full RB



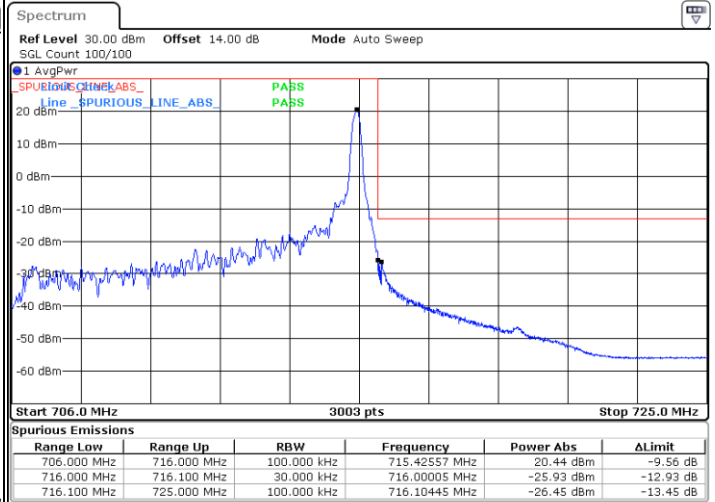


LTE Band 17 / 10MHz / 16QAM

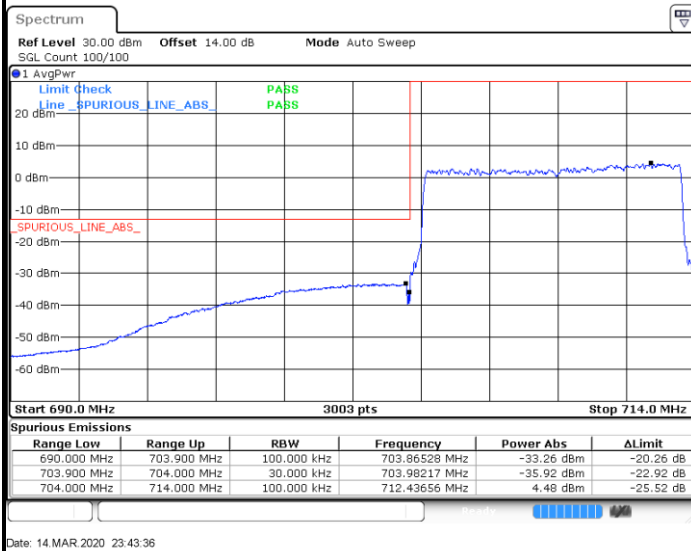
Lowest Band Edge / 1 RB



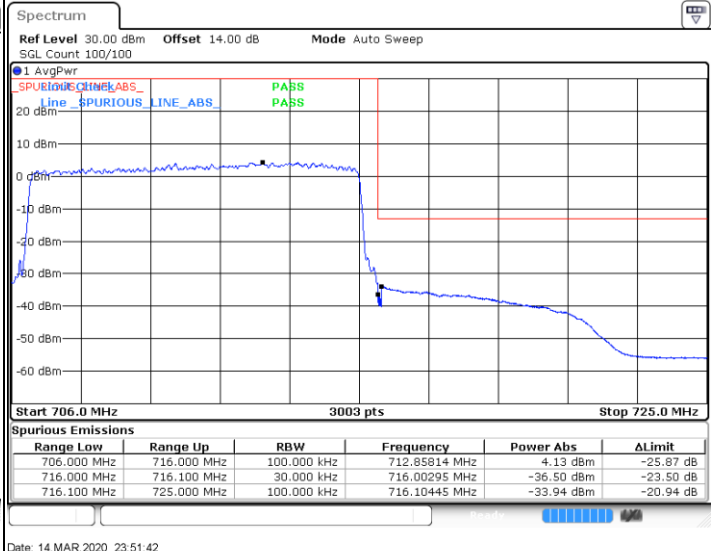
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

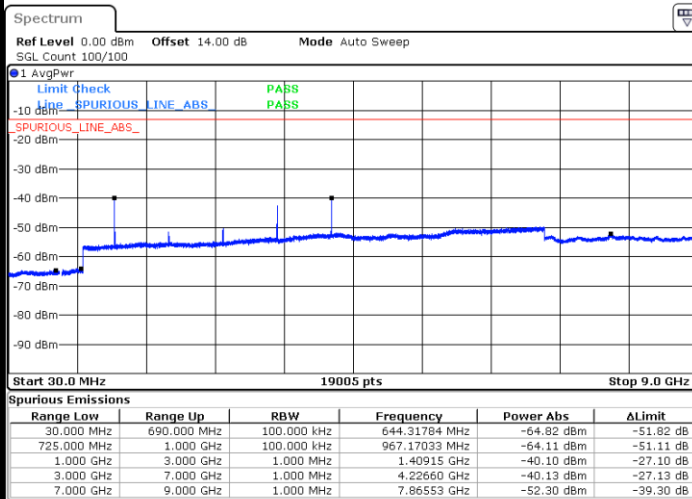




Conducted Spurious Emission

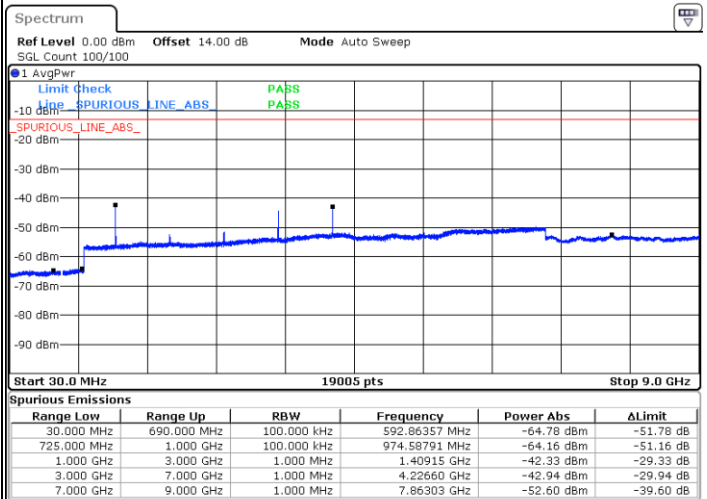
LTE Band 17 / 5MHz

Lowest Channel / QPSK



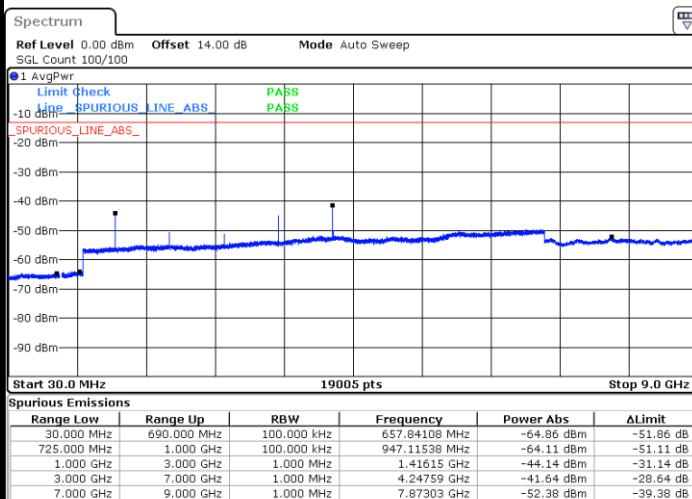
Date: 14 MAR 2020 23:30:35

Lowest Channel / 16QAM



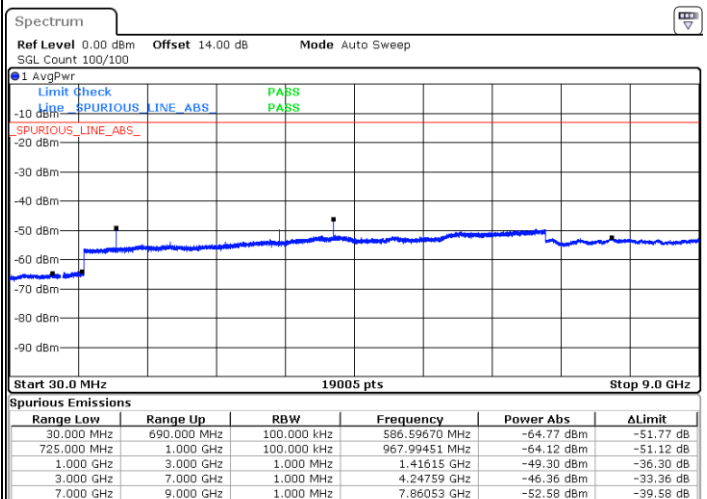
Date: 14 MAR 2020 23:31:09

Middle Channel / QPSK



Date: 14 MAR 2020 23:32:27

Middle Channel / 16QAM

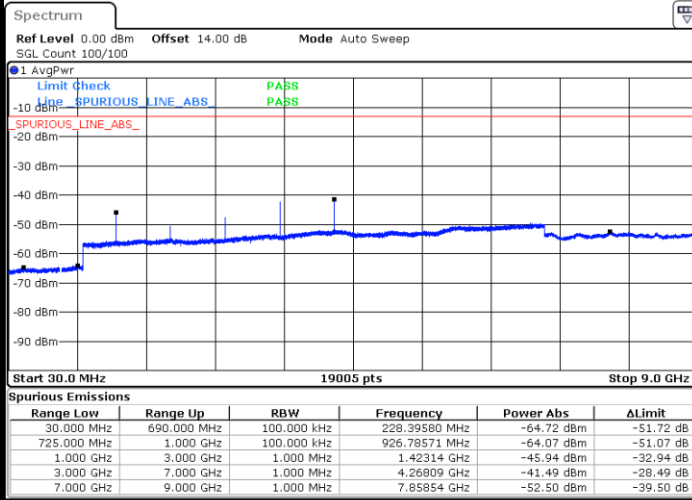


Date: 14 MAR 2020 23:33:01



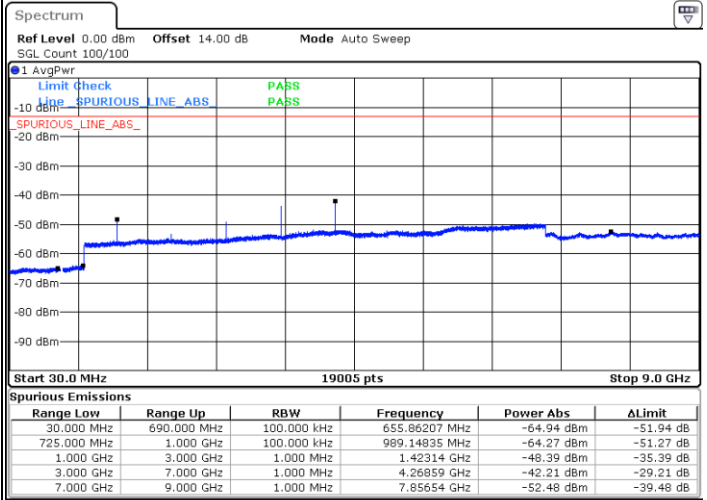
LTE Band 17 / 5MHz

Highest Channel / QPSK



Date: 14 MAR 2020 23:38:23

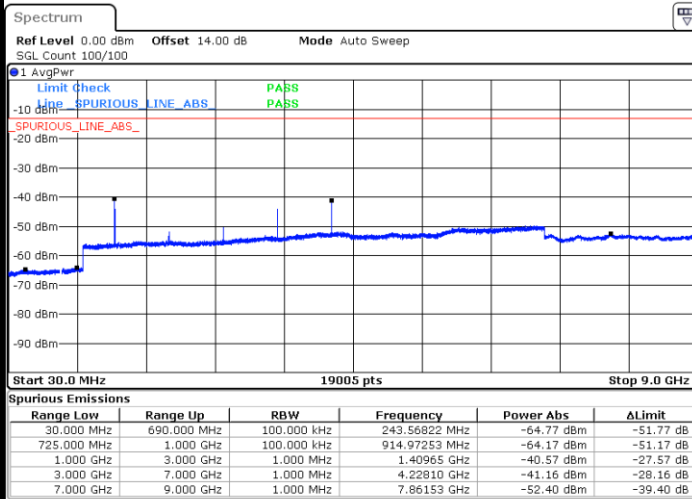
Highest Channel / 16QAM



Date: 14 MAR 2020 23:38:57

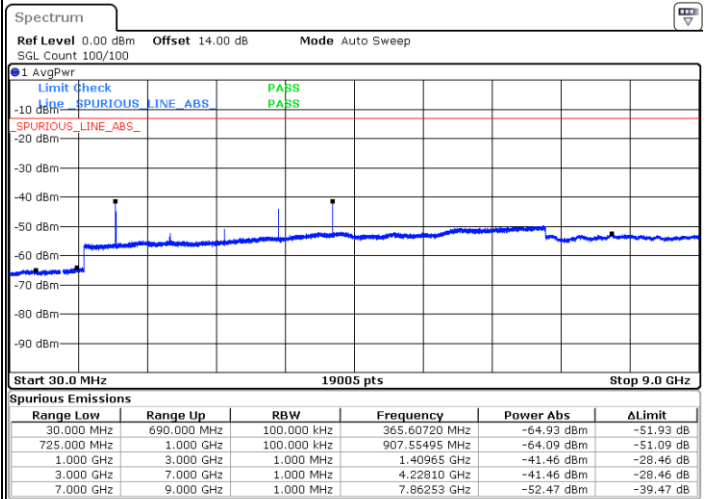
LTE Band 17 / 10MHz

Lowest Channel / QPSK



Date: 14 MAR 2020 23:44:11

Lowest Channel / 16QAM



Date: 14 MAR 2020 23:44:45