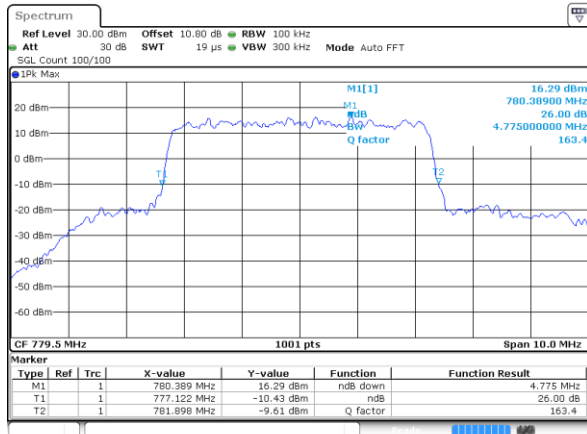


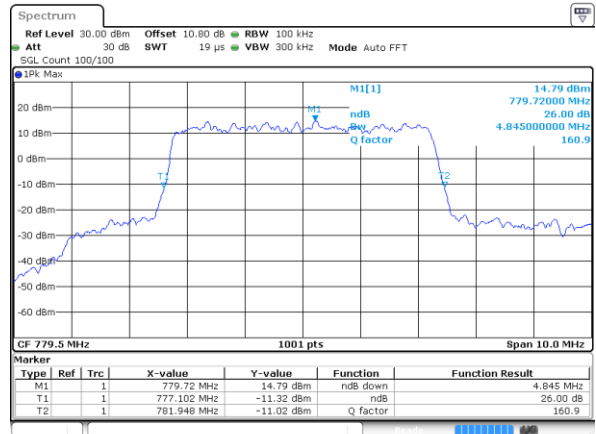


LTE Band 13

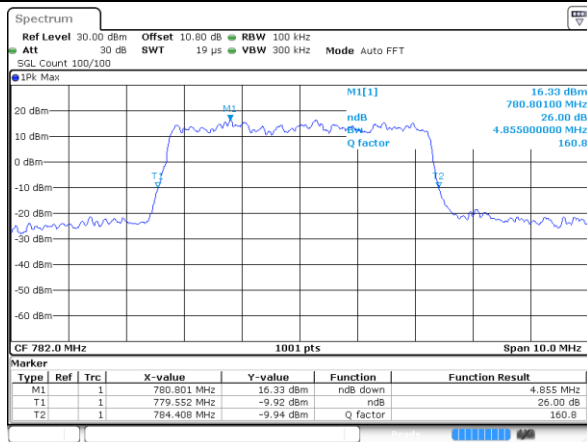
Lowest Channel / 5MHz / QPSK



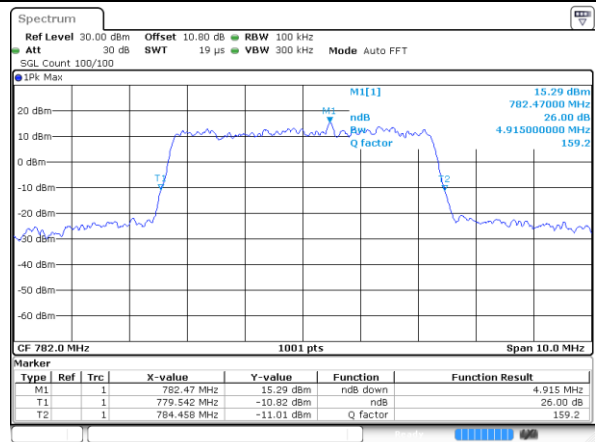
Lowest Channel / 5MHz / 16QAM



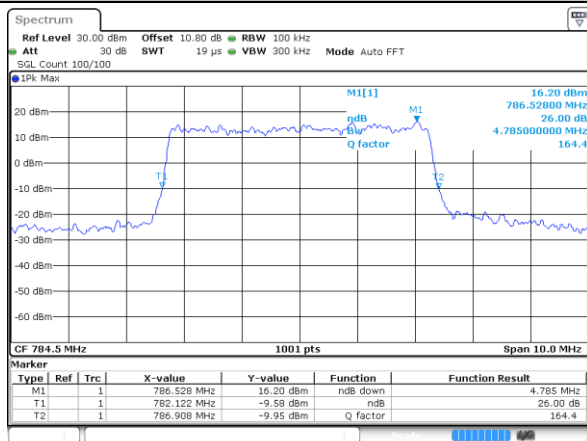
Middle Channel / 5MHz / QPSK



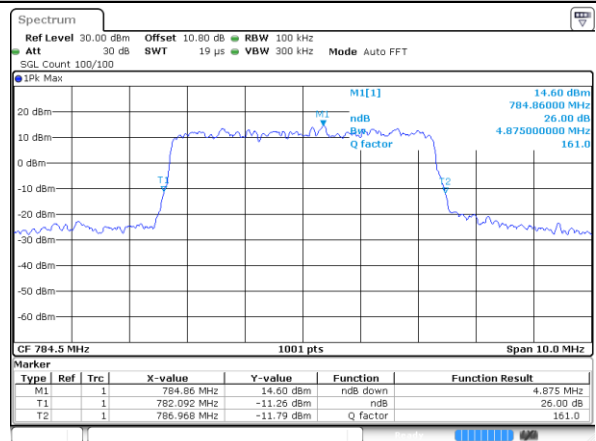
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



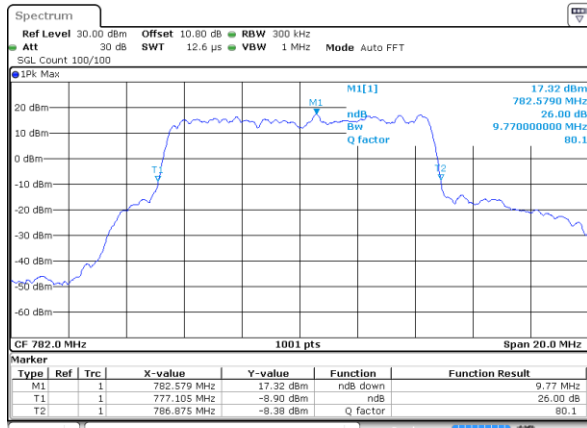
Highest Channel / 5MHz / 16QAM





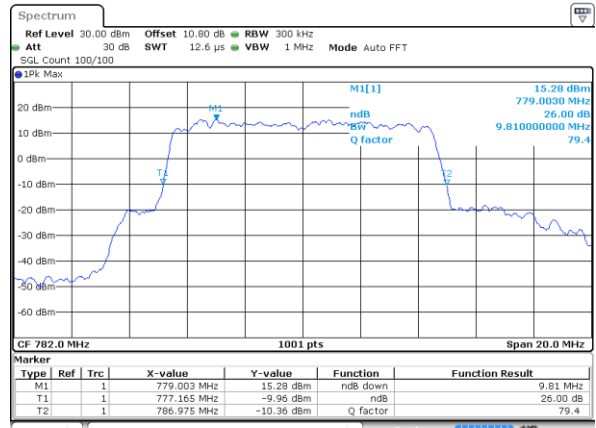
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 18.FEB.2020 06:25:25

Middle Channel / 10MHz / 16QAM

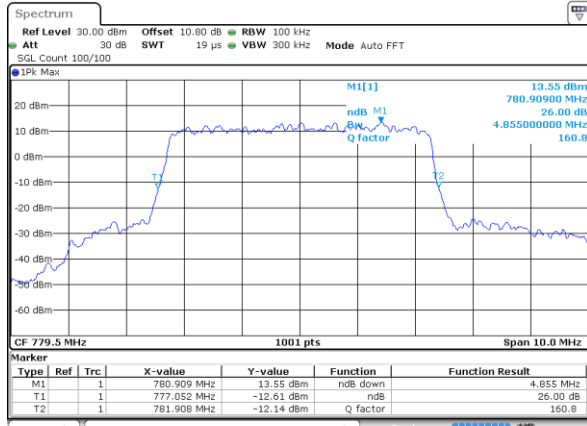


Date: 18.FEB.2020 06:25:14

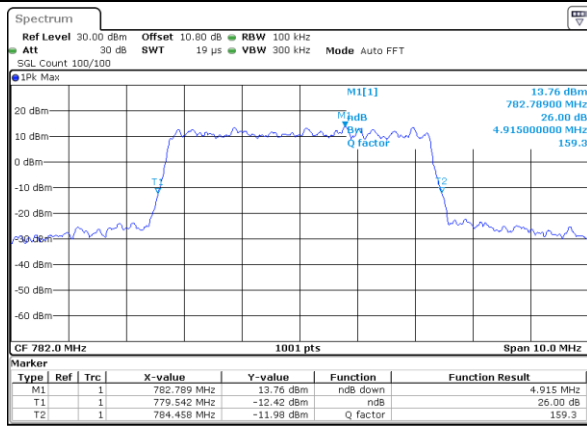


LTE Band 13

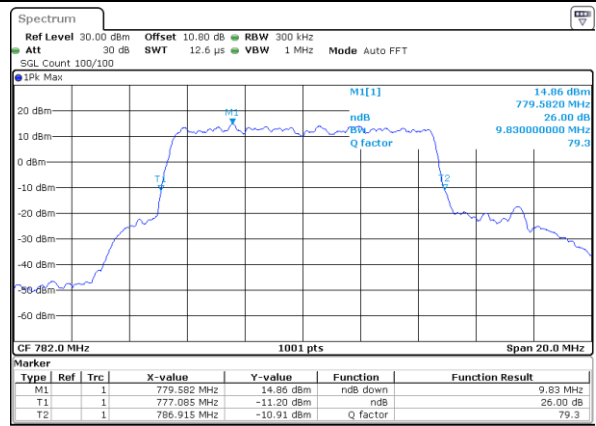
Lowest Channel / 5MHz / 64QAM



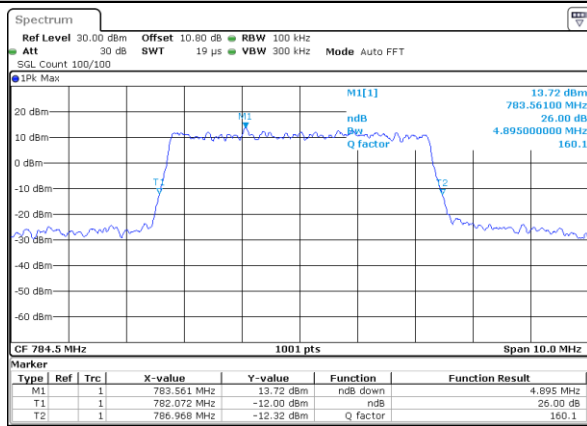
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



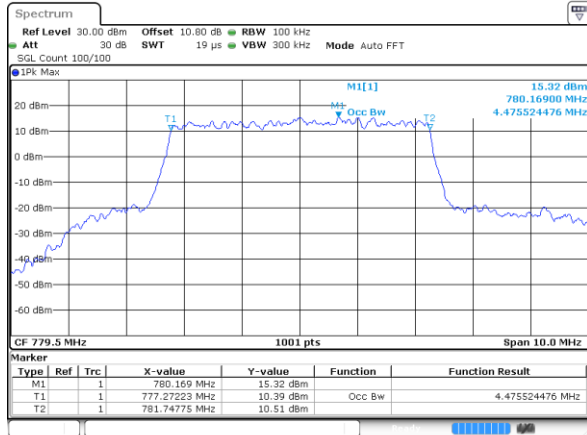
**Occupied Bandwidth**

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	-	-	-	-	4.48	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	4.49	9.09	8.99	-	-	-	-
Highest CH	-	-	-	-	4.48	4.50	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.48	-	-	-	-	-	-	-

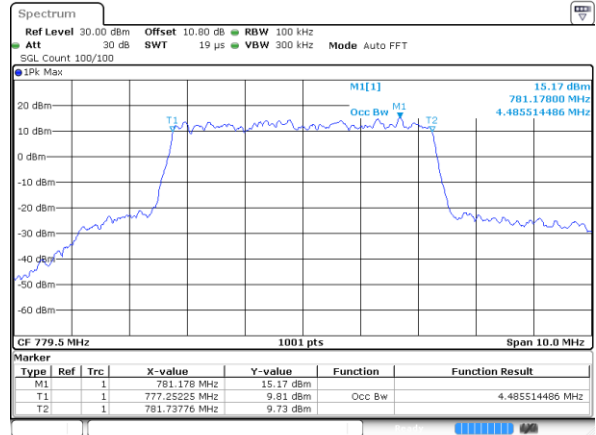


LTE Band 13

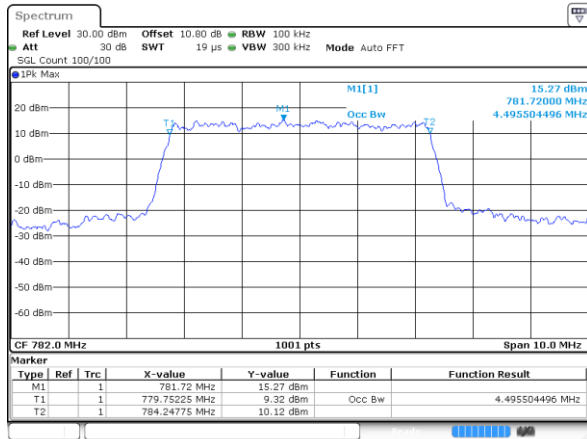
Lowest Channel / 5MHz / QPSK



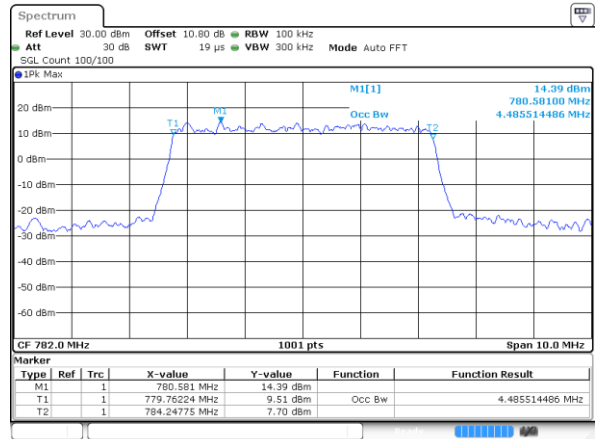
Lowest Channel / 5MHz / 16QAM



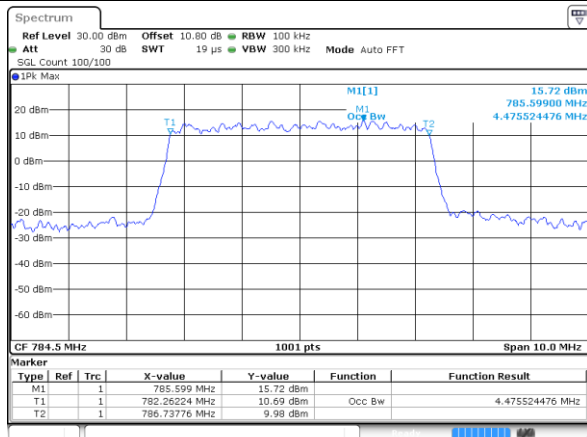
Middle Channel / 5MHz / QPSK



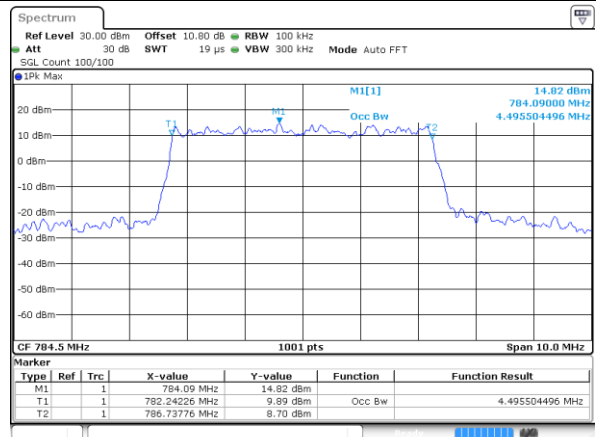
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



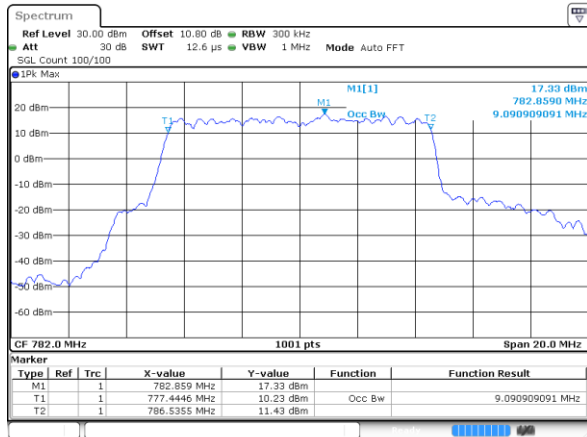
Highest Channel / 5MHz / 16QAM





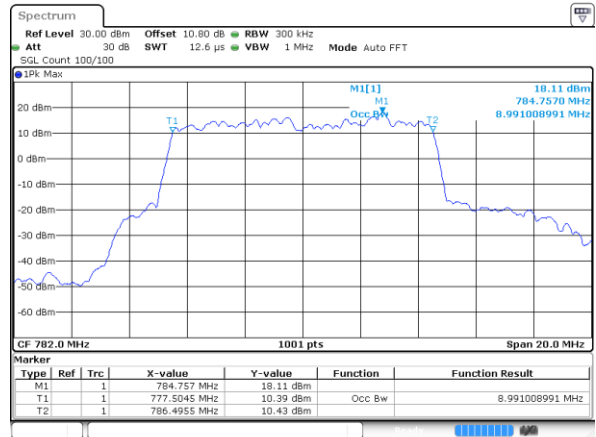
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 18.FEB.2020 06:24:51

Middle Channel / 10MHz / 16QAM

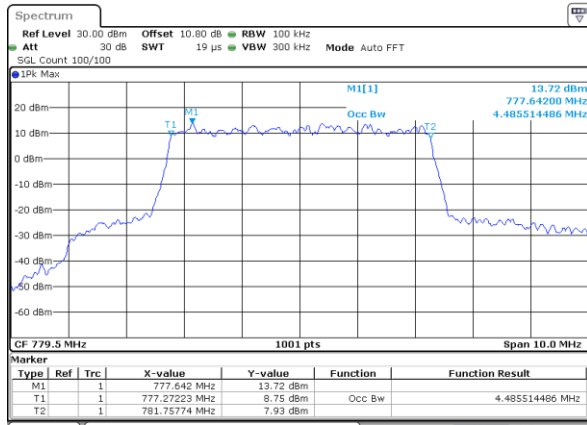


Date: 18.FEB.2020 06:25:03



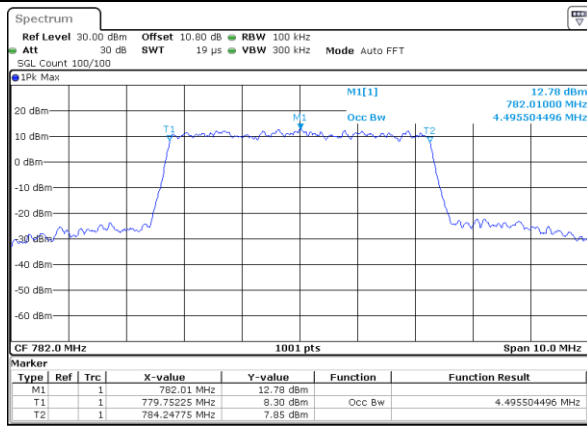
LTE Band 13

Lowest Channel / 5MHz / 64QAM



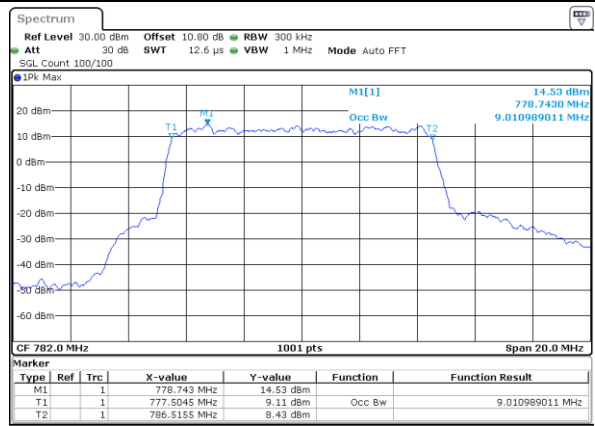
Date: 18 FEB 2020 06:14:53

Middle Channel / 5MHz / 64QAM



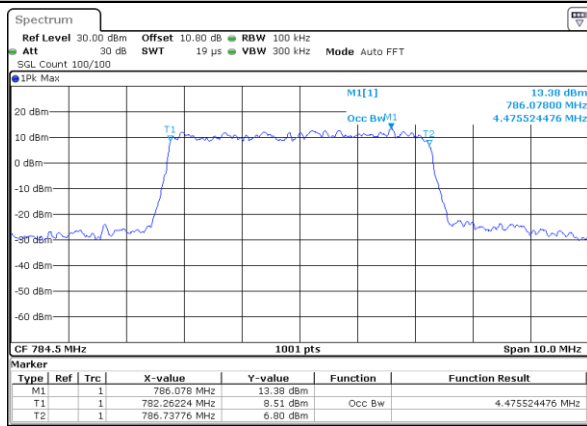
Date: 18 FEB 2020 06:20:12

Middle Channel / 10MHz / 64QAM

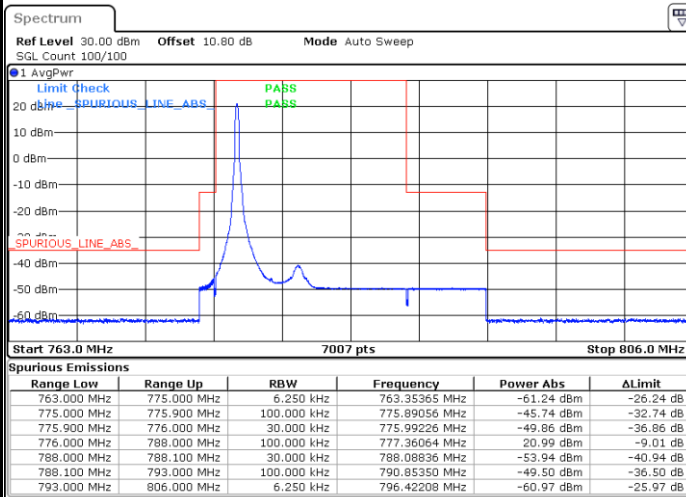


Date: 18 FEB 2020 06:36:58

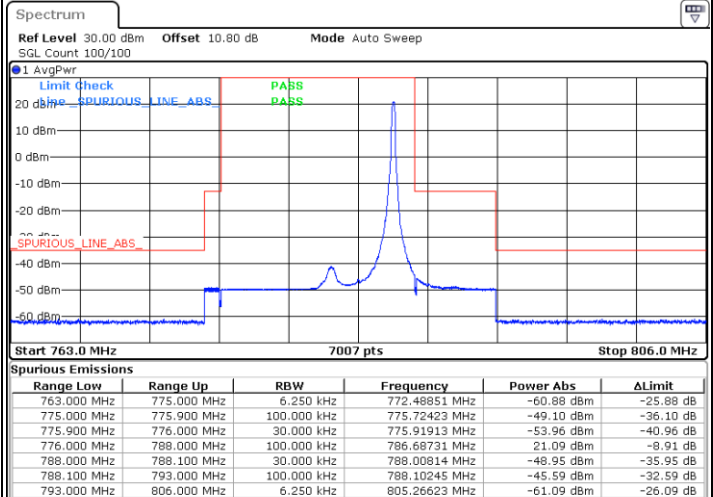
Highest Channel / 5MHz / 64QAM



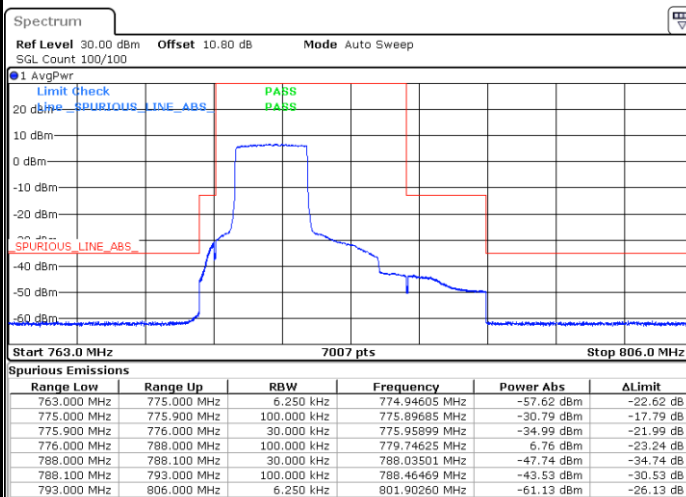
Date: 18 FEB 2020 06:20:24

**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB**

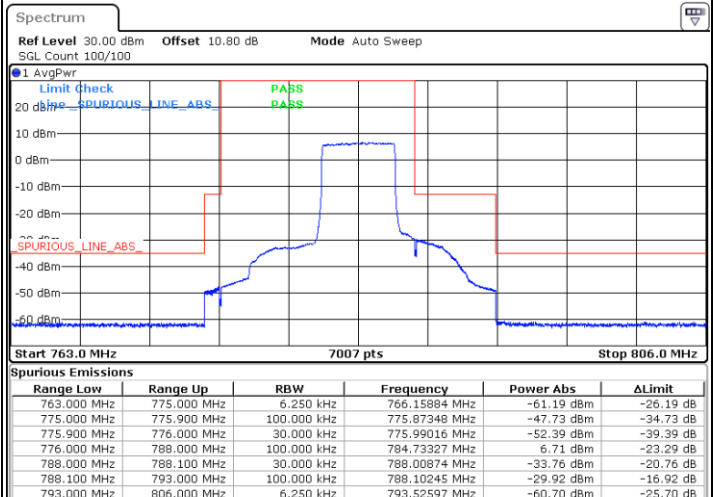
Date: 18.FEB.2020 06:02:21

Highest Band Edge / 1 RB

Date: 18.FEB.2020 06:13:20

Lowest Band Edge / Full RB

Date: 18.FEB.2020 05:57:19

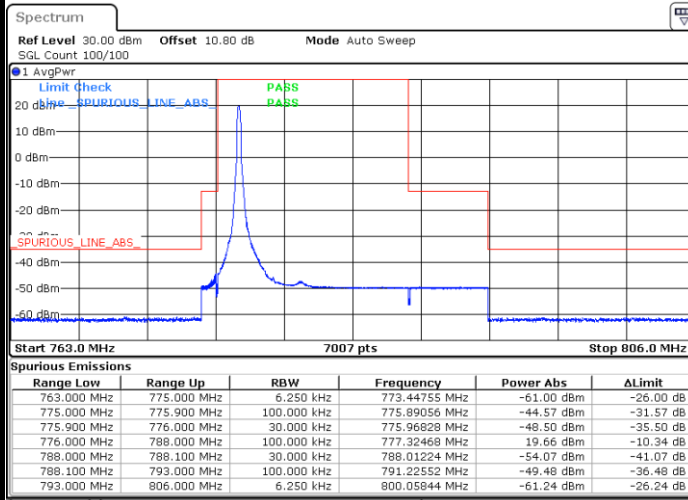
Highest Band Edge / Full RB

Date: 18.FEB.2020 06:08:18



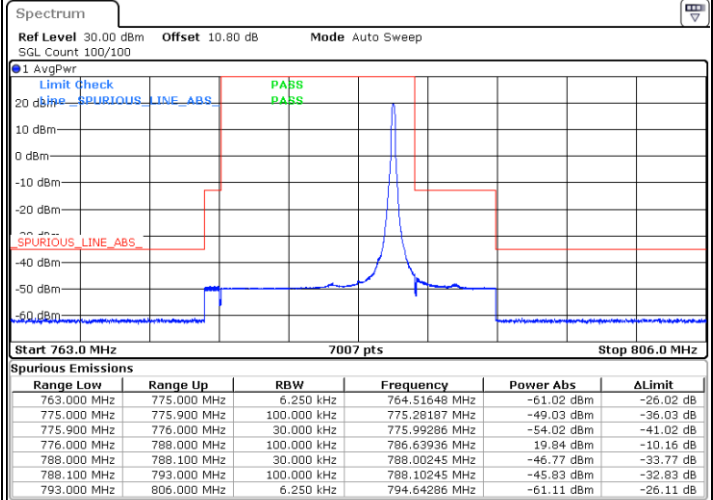
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



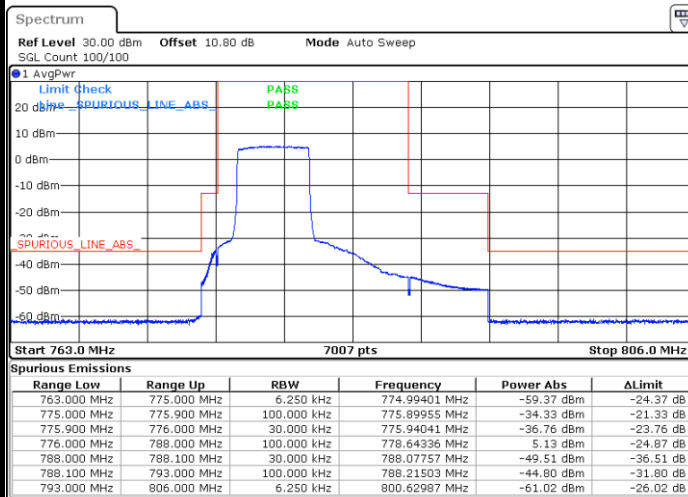
Date: 18.FEB.2020 06:00:40

Highest Band Edge / 1 RB



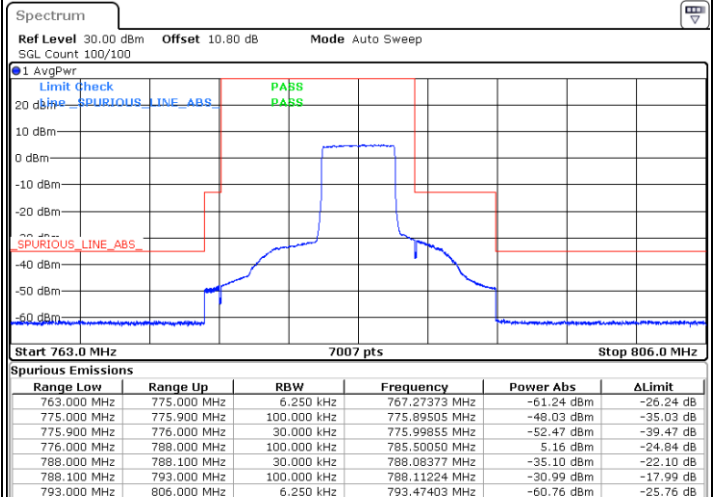
Date: 18.FEB.2020 06:11:39

Lowest Band Edge / Full RB



Date: 18.FEB.2020 05:58:59

Highest Band Edge / Full RB

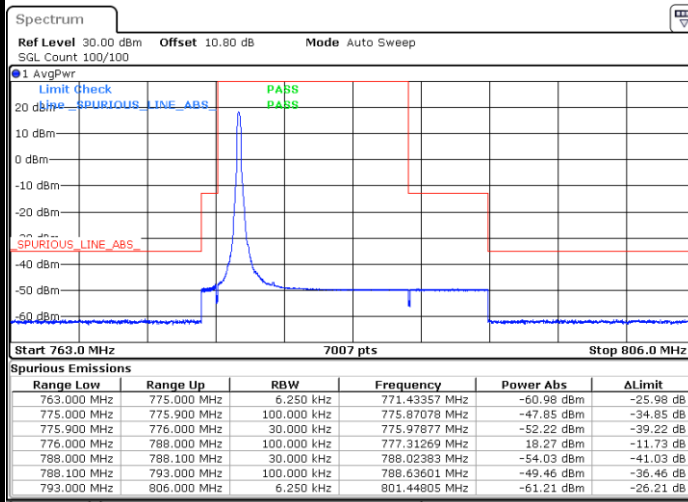


Date: 18.FEB.2020 06:09:58



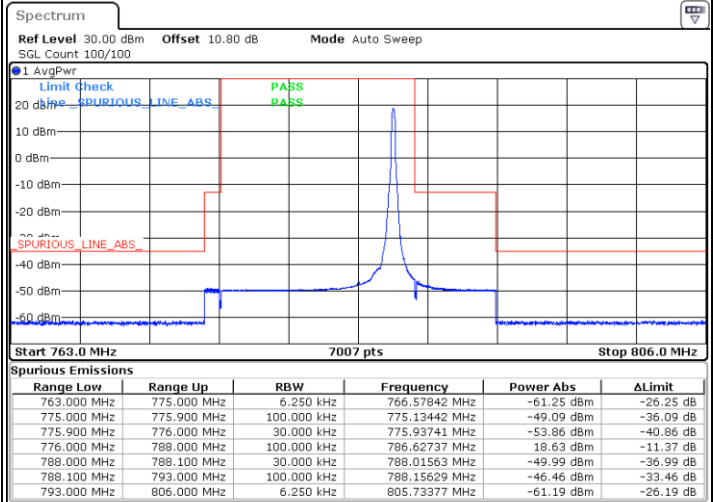
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



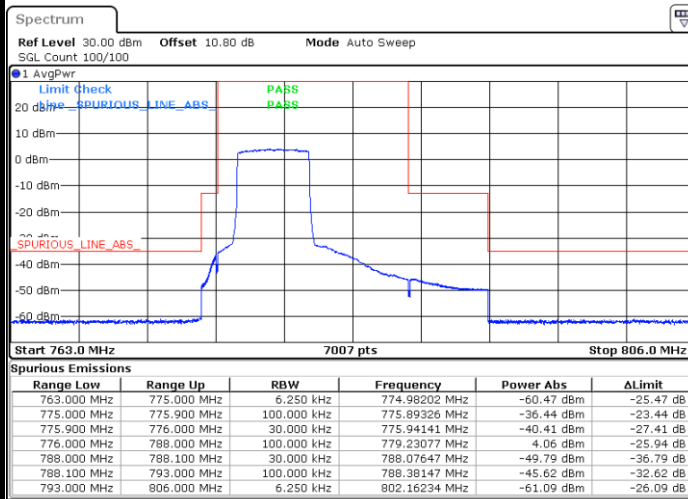
Date: 18.FEB.2020 06:18:27

Highest Band Edge / 1 RB



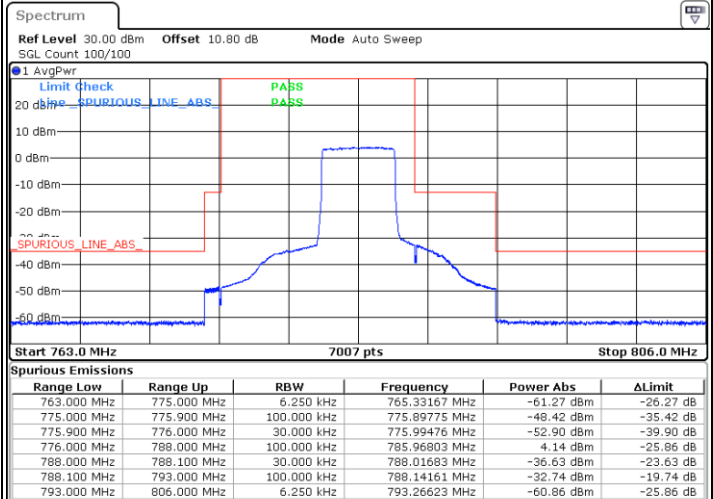
Date: 18.FEB.2020 06:23:58

Lowest Band Edge / Full RB



Date: 18.FEB.2020 06:16:46

Highest Band Edge / Full RB

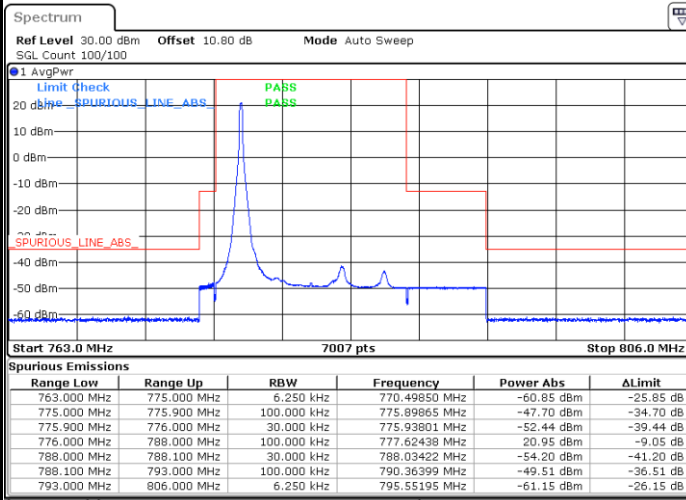


Date: 18.FEB.2020 06:22:17



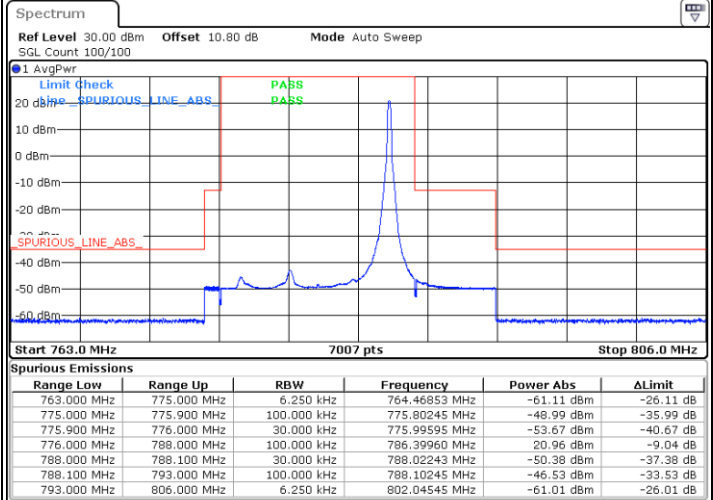
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



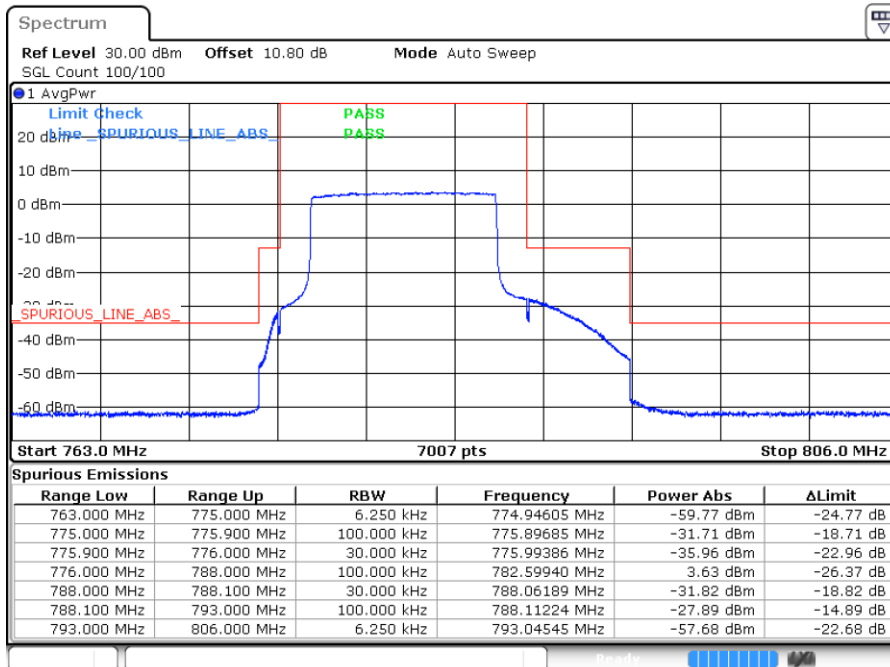
Date: 18.FEB.2020 06:32:06

Highest Band Edge / 1 RB



Date: 18.FEB.2020 06:33:46

Band Edge / Full RB

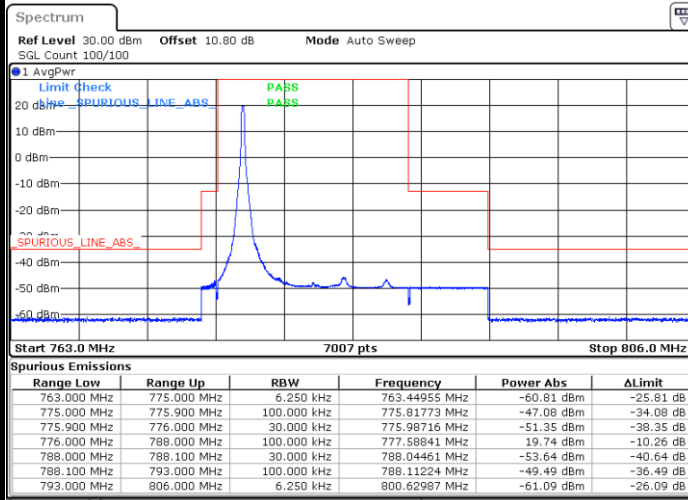


Date: 18.FEB.2020 06:27:05



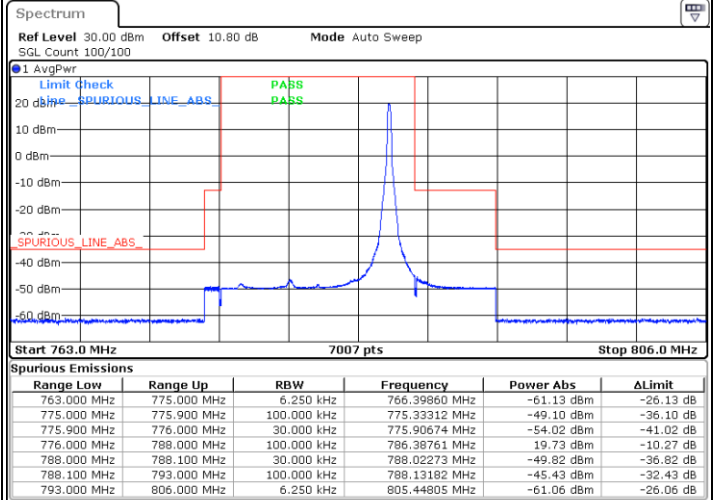
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



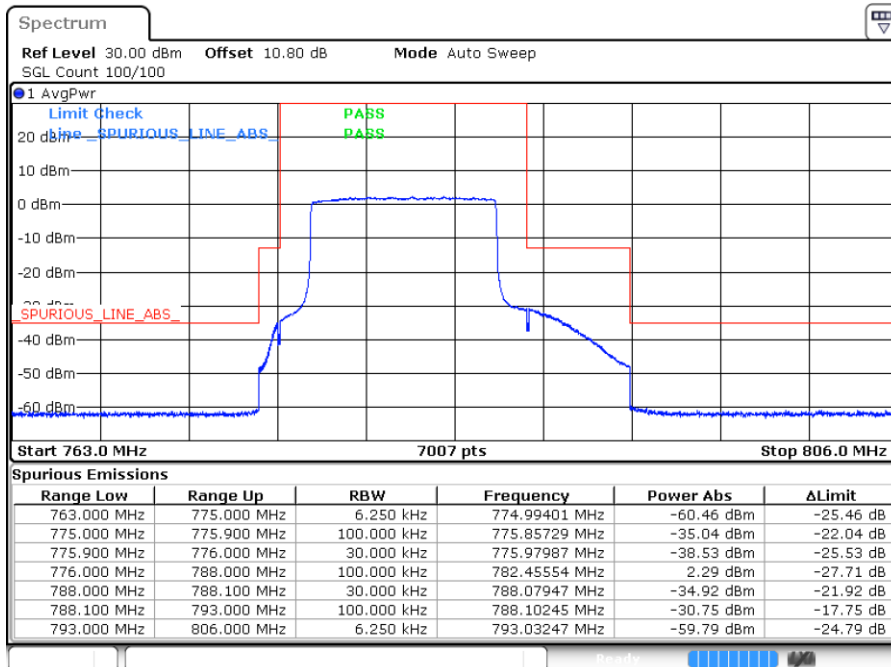
Date: 18.FEB.2020 06:30:26

Highest Band Edge / 1 RB



Date: 18.FEB.2020 06:35:26

Band Edge / Full RB

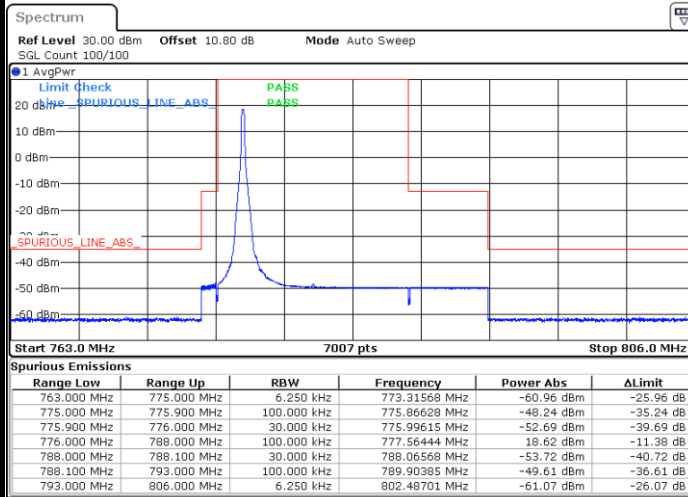


Date: 18.FEB.2020 06:28:46



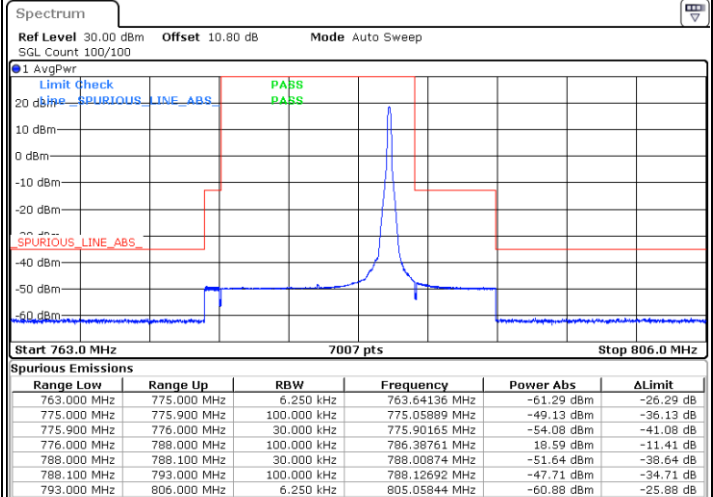
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



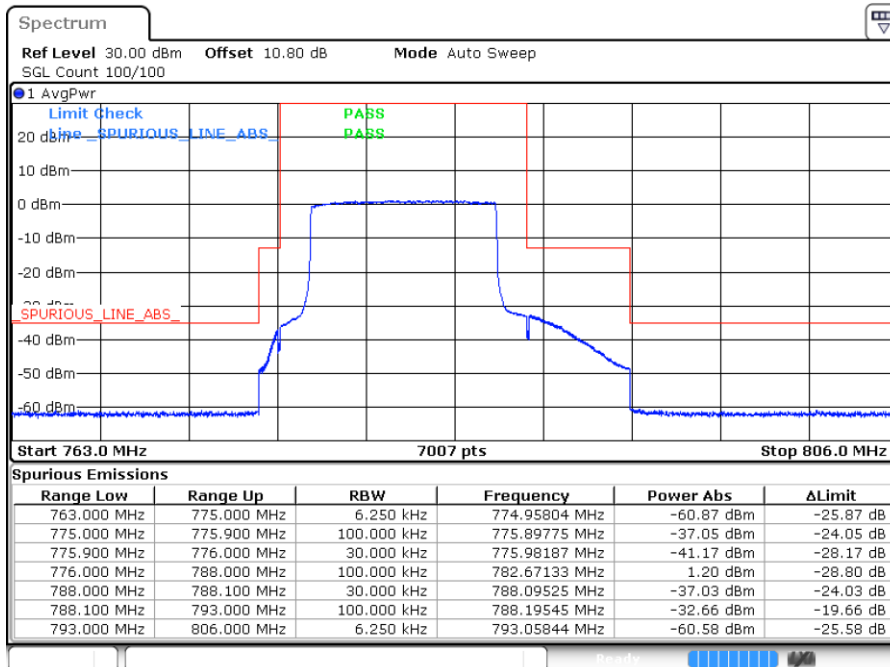
Date: 18.FEB.2020 06:40:30

Highest Band Edge / 1 RB



Date: 18.FEB.2020 06:42:10

Band Edge / Full RB



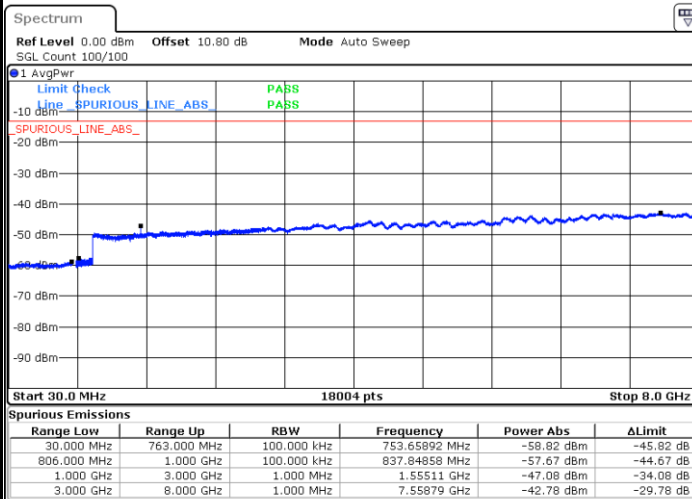
Date: 18.FEB.2020 06:38:49



Conducted Spurious Emission

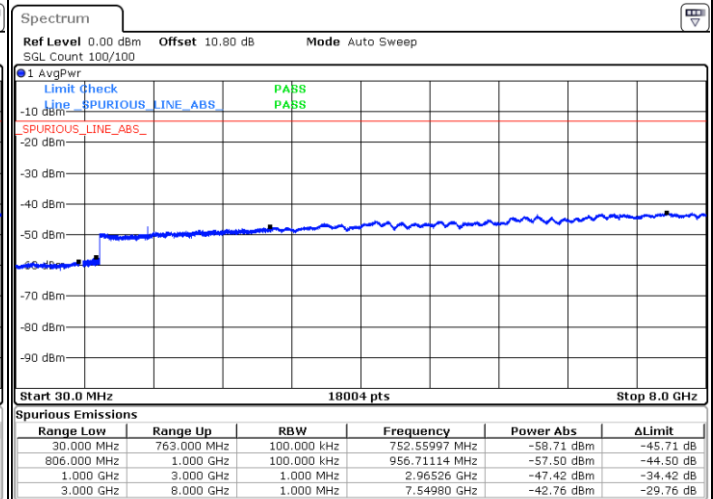
LTE Band 13 / 5MHz

Lowest Channel / QPSK



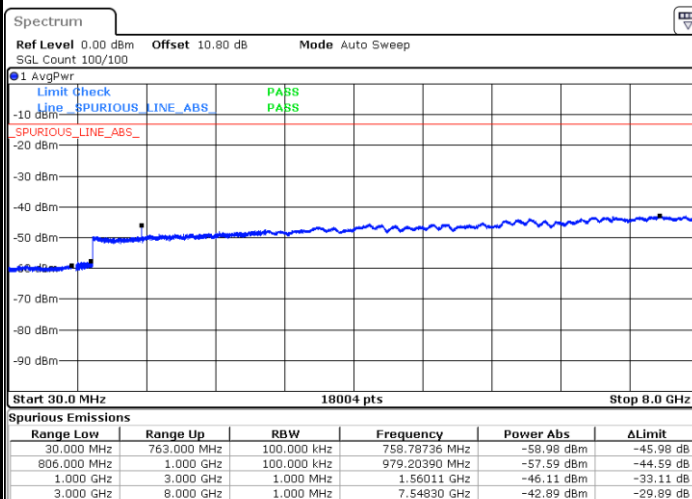
Date: 18.FEB.2020 06:03:02

Lowest Channel / 16QAM



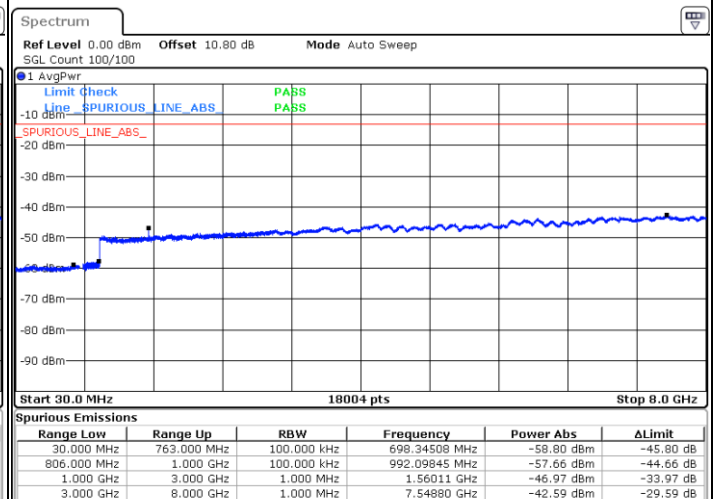
Date: 18.FEB.2020 06:03:43

Middle Channel / QPSK



Date: 18.FEB.2020 06:05:03

Middle Channel / 16QAM

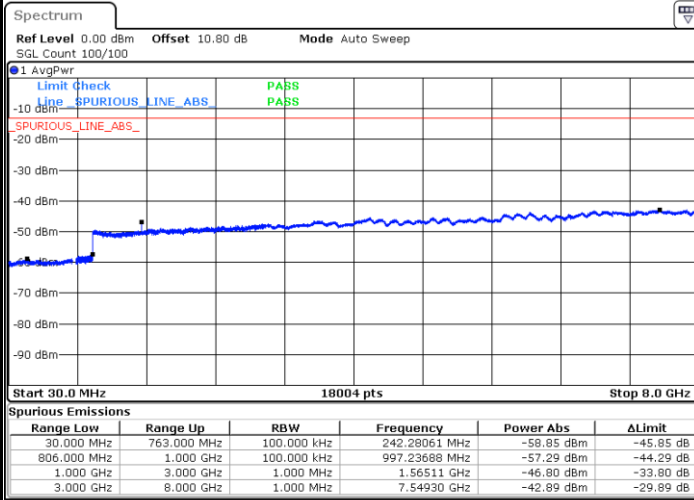


Date: 18.FEB.2020 06:04:23



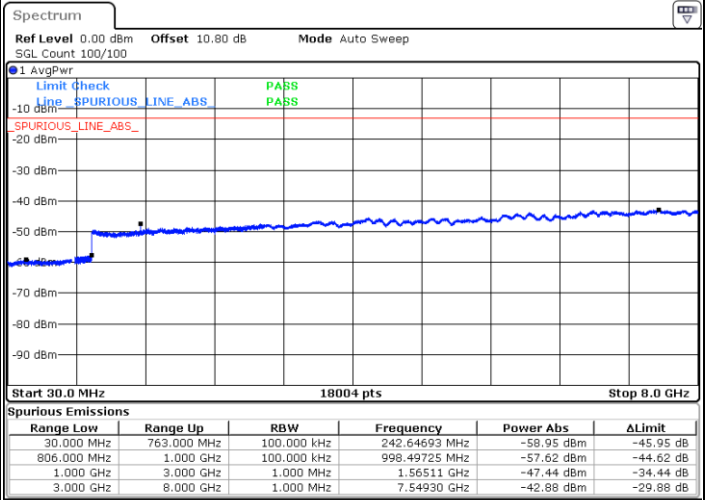
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 18.FEB.2020 06:14:01

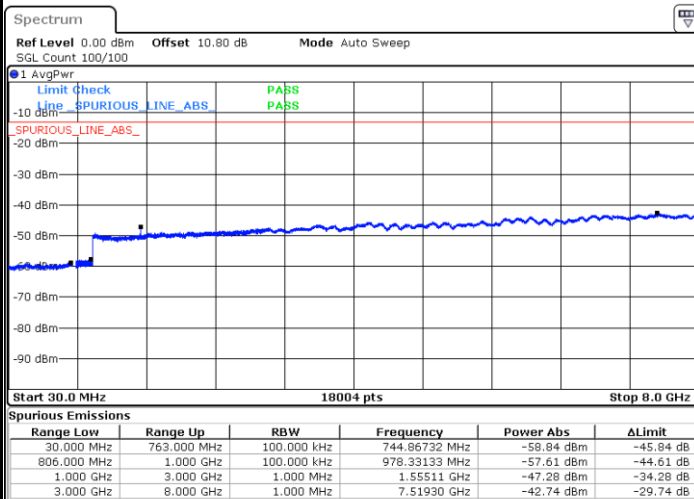
Highest Channel / 16QAM



Date: 18.FEB.2020 06:14:41

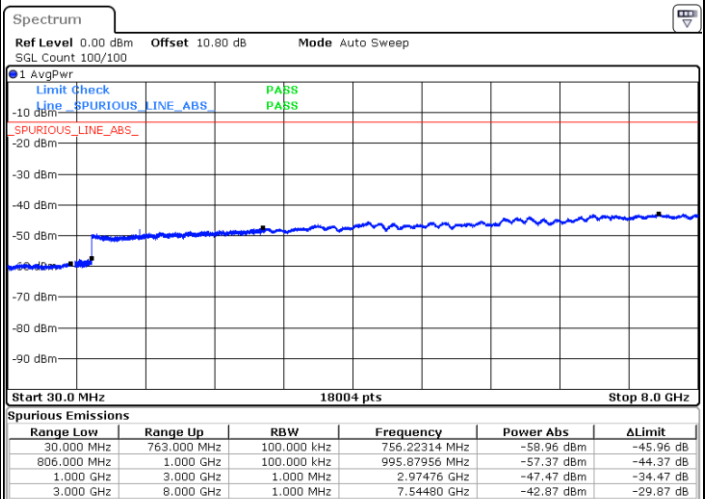
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 18.FEB.2020 06:36:47

Middle Channel / 16QAM

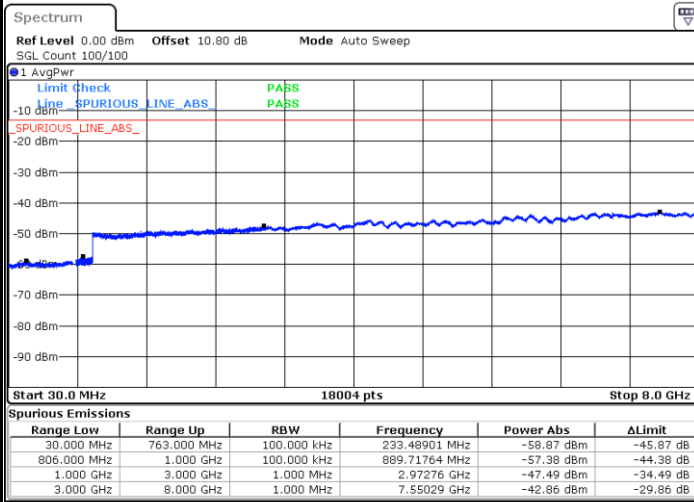


Date: 18.FEB.2020 06:36:07



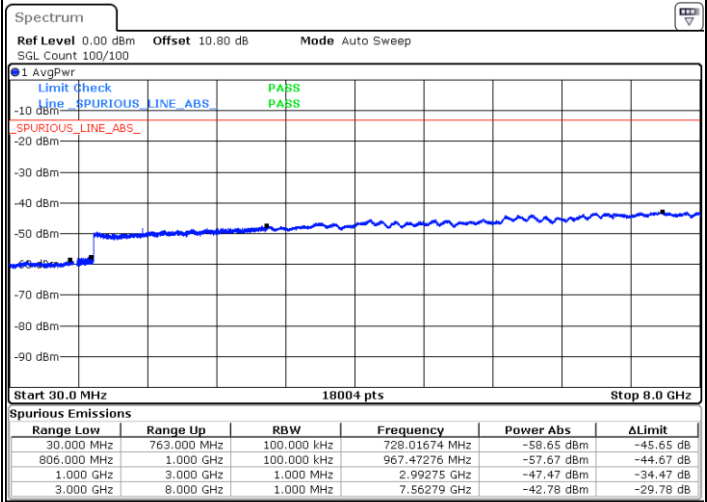
LTE Band 13 / 5MHz

Lowest Channel / 64QAM



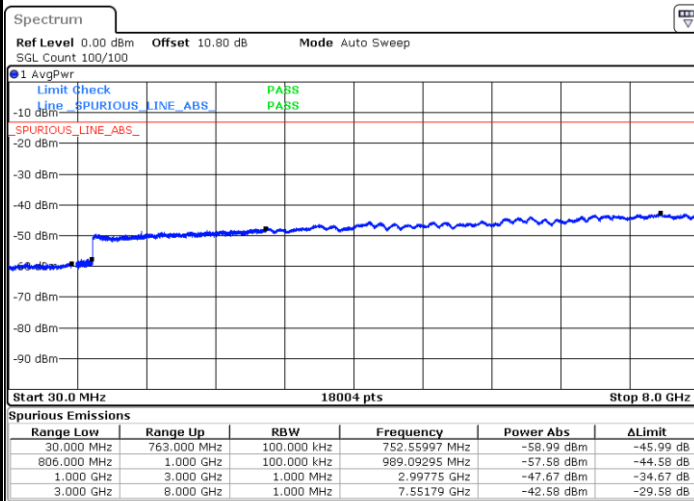
Date: 18.FEB.2020 06:19:08

Middle Channel / 64QAM



Date: 18.FEB.2020 06:19:49

Highest Channel / 64QAM

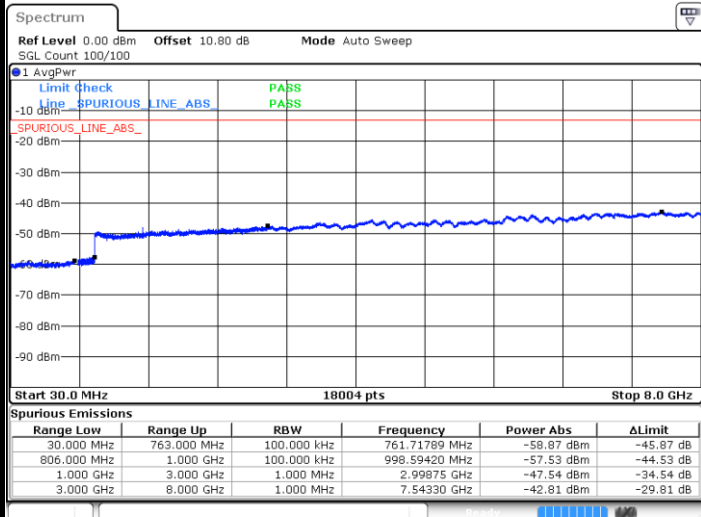


Date: 18.FEB.2020 06:24:39



LTE Band 13 / 10MHz

Middle Channel / 64QAM



Date: 18 FEB 2020 06:42:50

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	0.0018	PASS
40	Normal Voltage	0.0070	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0060	
0	Normal Voltage	0.0087	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0063	
-30	Normal Voltage	0.0060	
20	Maximum Voltage	0.0059	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0075	

Note:

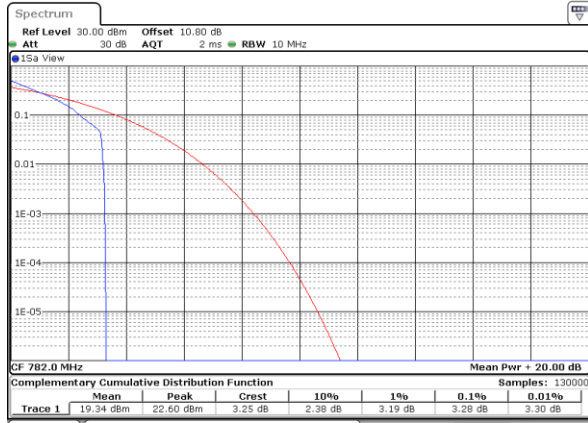
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.65 V. ; Maximum Voltage =4.25 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



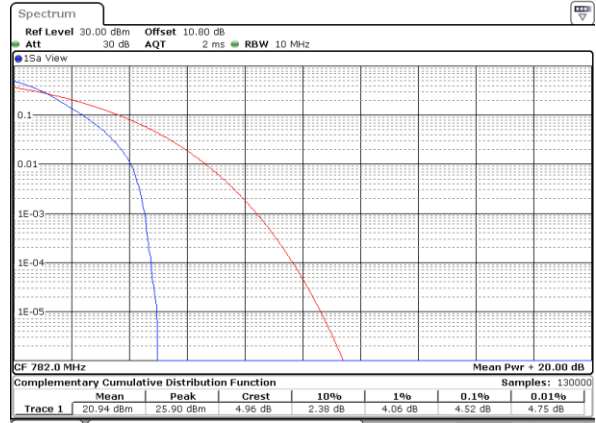
<Sub Antenna>

Peak-to-Average Ratio

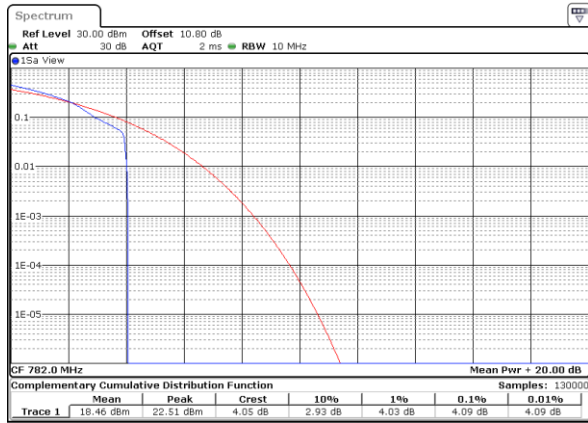
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.28	4.52	4.09	5.62	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.17	6.32	-	-	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK
Middle Channel / 1RB


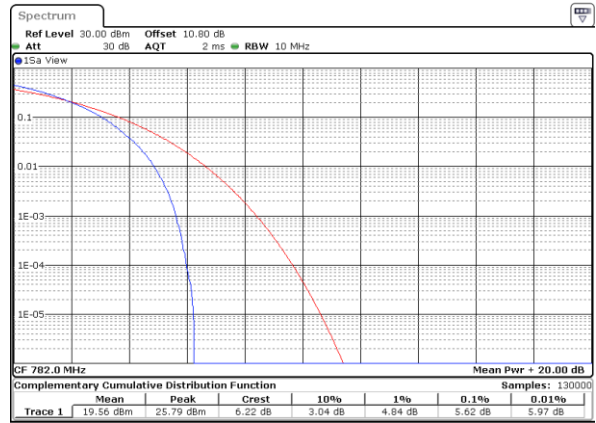
Date: 21 FEB 2020 10:47:32

Middle Channel / Full RB


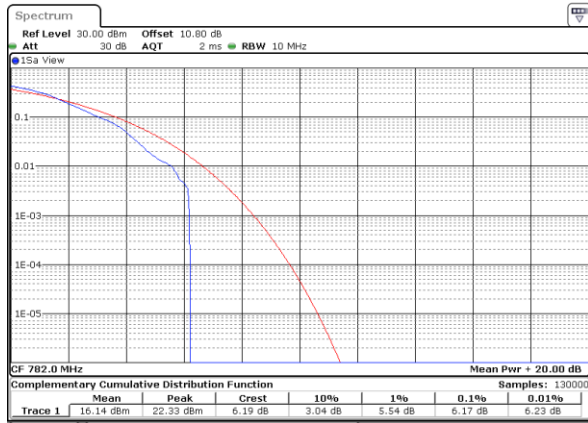
Date: 21 FEB 2020 10:47:42

LTE Band 13 / 10MHz / 16QAM
Middle Channel / 1RB


Date: 21 FEB 2020 10:47:02

Middle Channel / Full RB


Date: 21 FEB 2020 10:47:14

LTE Band 13 / 10MHz / 64QAM
Middle Channel / 1RB


Date: 21 FEB 2020 10:45:21

Middle Channel / Full RB


Date: 21 FEB 2020 10:46:49

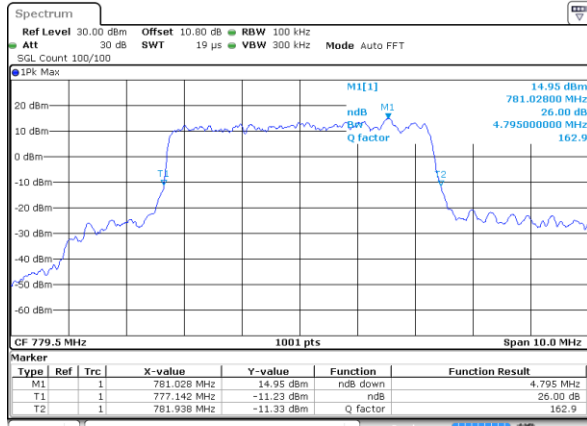
**26dB Bandwidth**

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	-	-	-	-	4.80	5.01	-	-	-	-	-	-
Middle CH	-	-	-	-	4.98	4.88	9.61	9.99	-	-	-	-
Highest CH	-	-	-	-	4.88	4.94	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.84	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.89	-	9.75	-	-	-	-	-
Highest CH	-	-	-	-	4.90	-	-	-	-	-	-	-



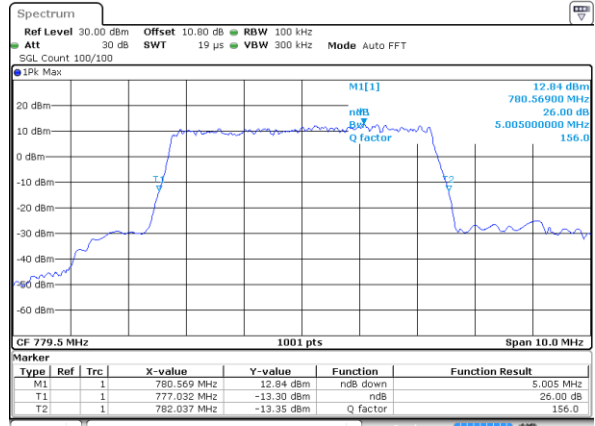
LTE Band 13

Lowest Channel / 5MHz / QPSK



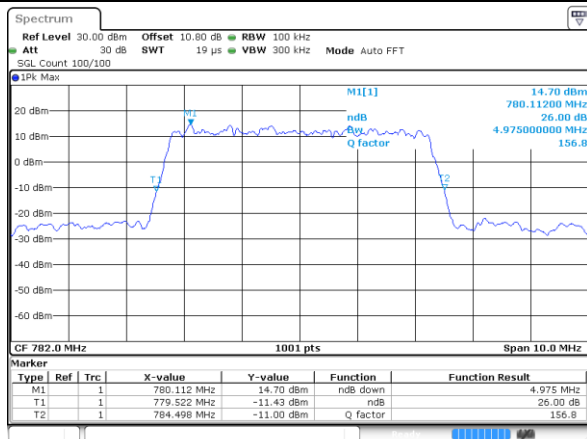
Date: 21 FEB 2020 09:21:08

Lowest Channel / 5MHz / 16QAM



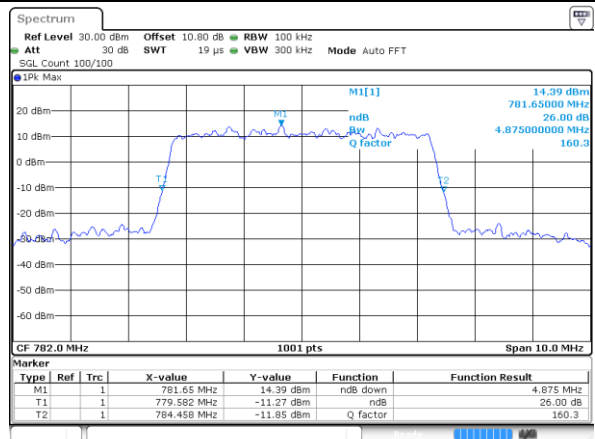
Date: 21 FEB 2020 09:20:56

Middle Channel / 5MHz / QPSK



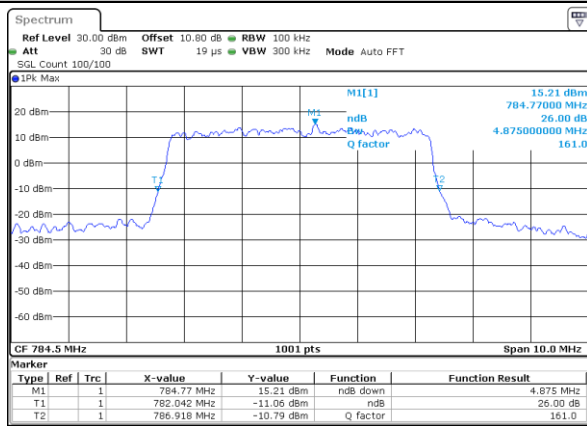
Date: 21 FEB 2020 09:30:44

Middle Channel / 5MHz / 16QAM



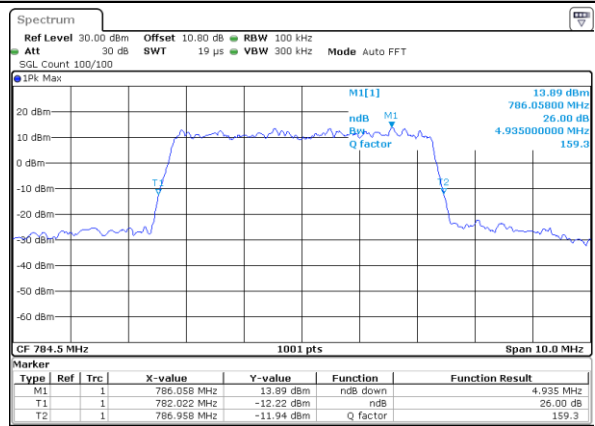
Date: 21 FEB 2020 09:30:56

Highest Channel / 5MHz / QPSK



Date: 21 FEB 2020 09:32:08

Highest Channel / 5MHz / 16QAM

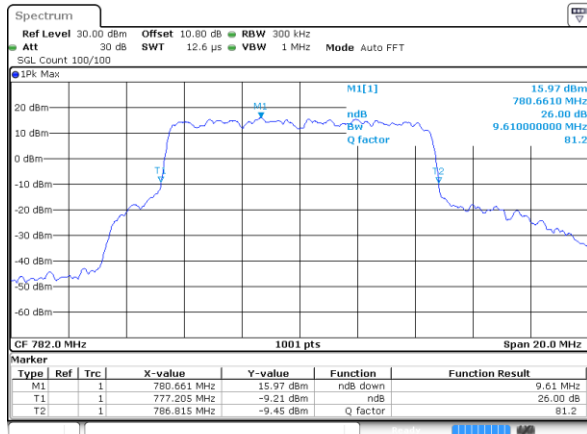


Date: 21 FEB 2020 09:31:55



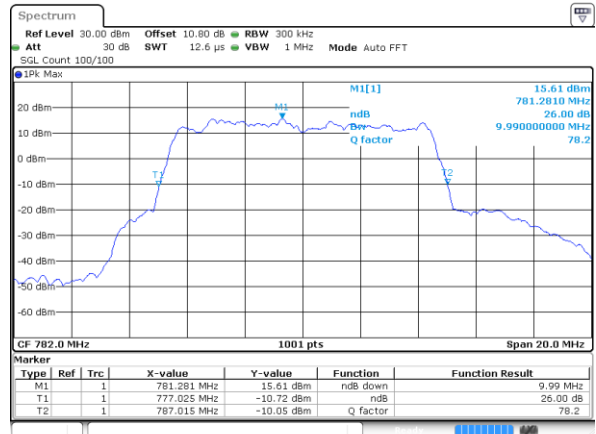
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 21.FEB.2020 09:50:55

Middle Channel / 10MHz / 16QAM

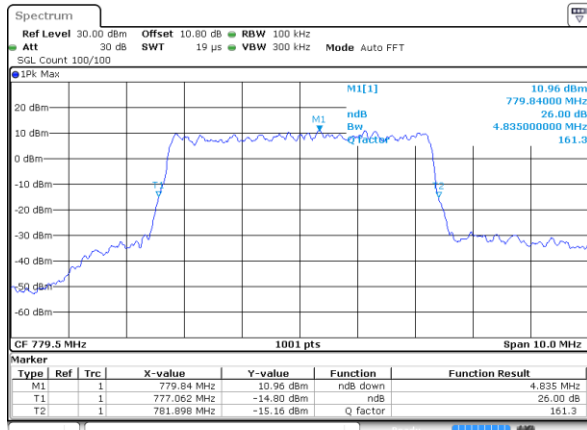


Date: 21.FEB.2020 09:50:43



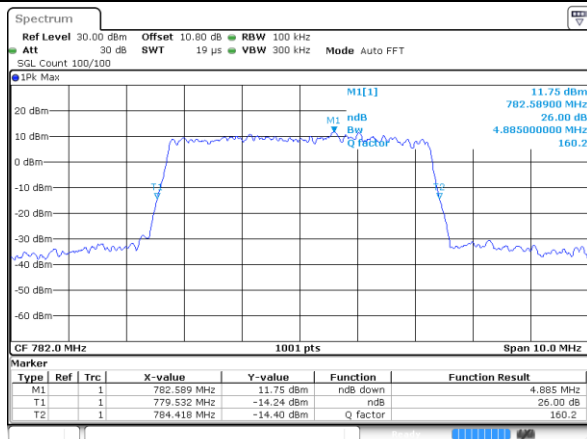
LTE Band 13

Lowest Channel / 5MHz / 64QAM



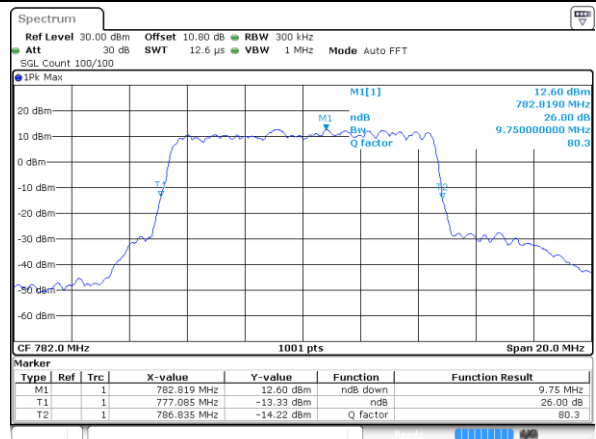
Date: 21 FEB 2020 09:40:36

Middle Channel / 5MHz / 64QAM



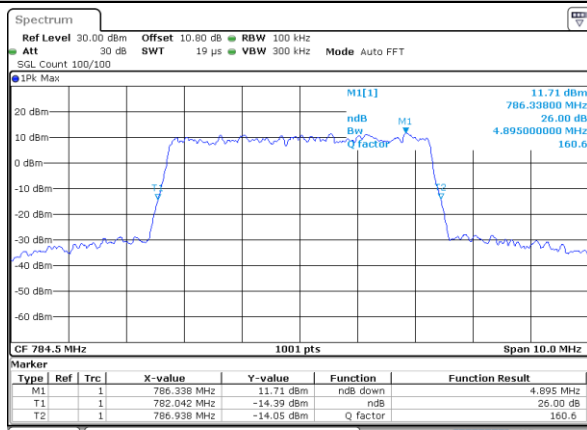
Date: 21 FEB 2020 09:45:30

Middle Channel / 10MHz / 64QAM



Date: 21 FEB 2020 10:02:38

Highest Channel / 5MHz / 64QAM



Date: 21 FEB 2020 09:46:05

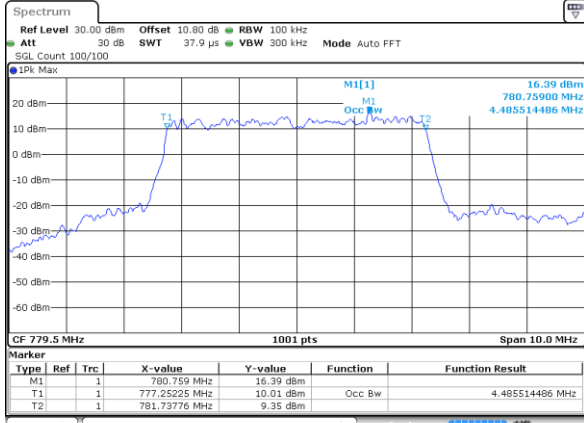
**Occupied Bandwidth**

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	-	-	-	-	4.49	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.48	9.03	9.03	-	-	-	-
Highest CH	-	-	-	-	4.51	4.50	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.48	-	-	-	-	-	-	-



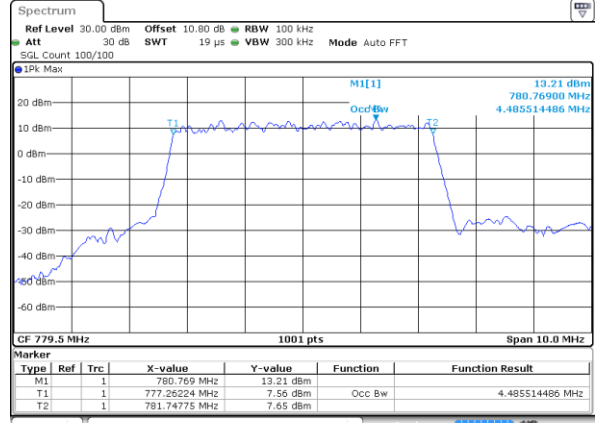
LTE Band 13

Lowest Channel / 5MHz / QPSK



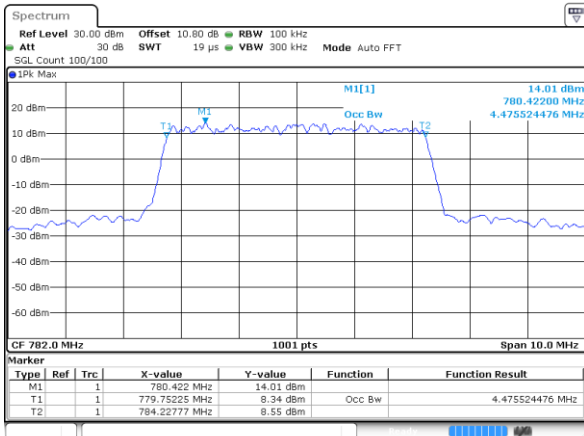
Date: 21 FEB 2020 09:20:47

Lowest Channel / 5MHz / 16QAM



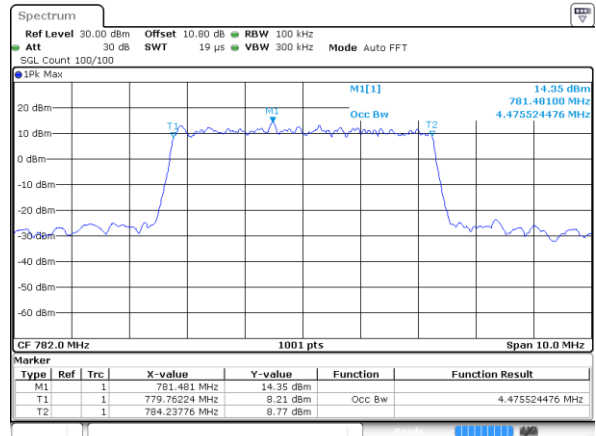
Date: 21 FEB 2020 09:20:44

Middle Channel / 5MHz / QPSK



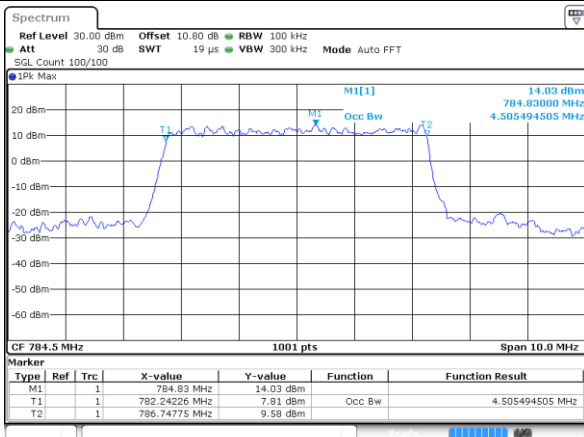
Date: 21 FEB 2020 09:31:19

Middle Channel / 5MHz / 16QAM



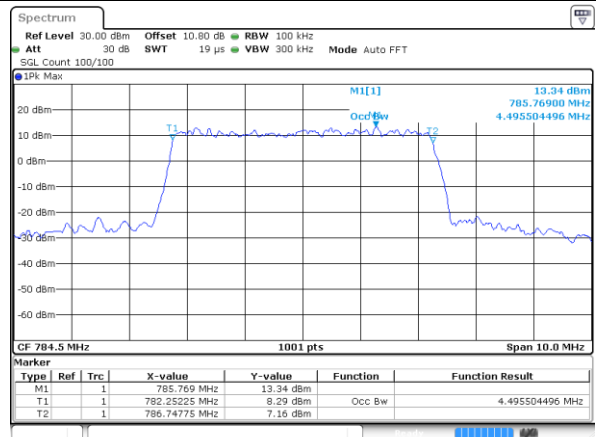
Date: 21 FEB 2020 09:31:07

Highest Channel / 5MHz / QPSK



Date: 21 FEB 2020 09:31:31

Highest Channel / 5MHz / 16QAM

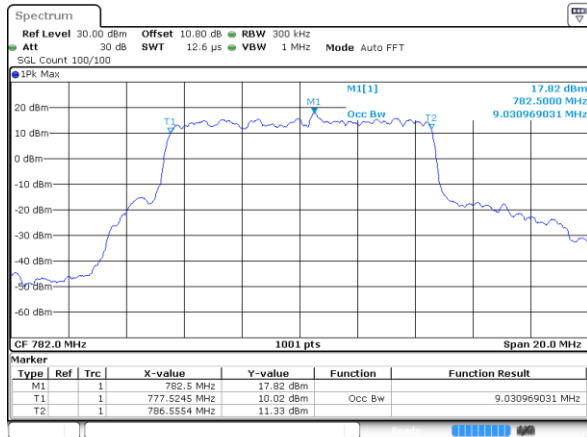


Date: 21 FEB 2020 09:31:43



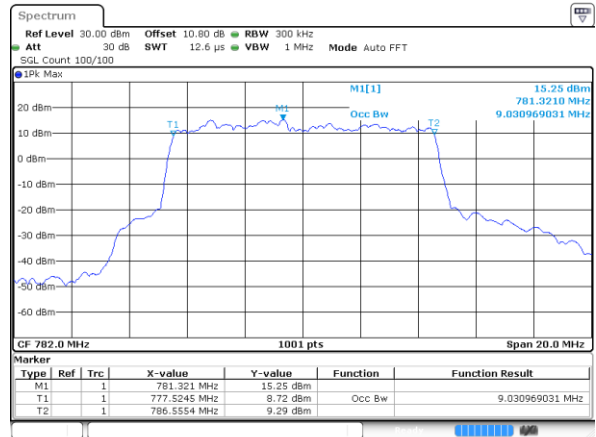
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 21.FEB.2020 09:50:20

Middle Channel / 10MHz / 16QAM

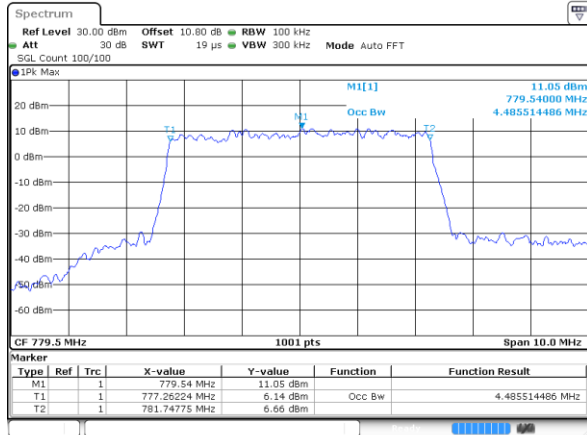


Date: 21.FEB.2020 09:50:32

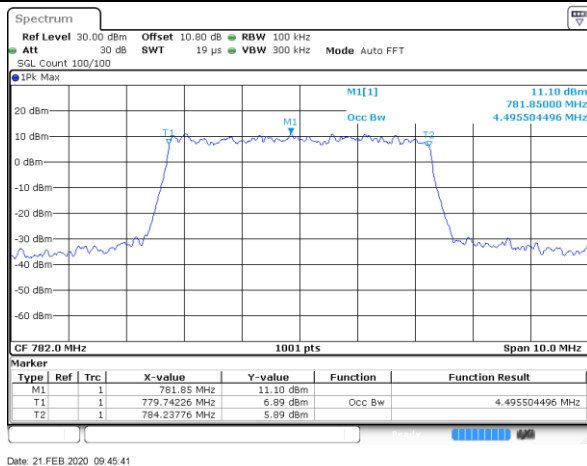


LTE Band 13

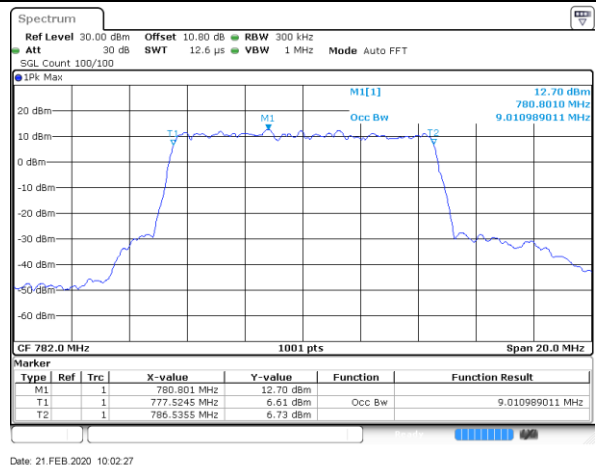
Lowest Channel / 5MHz / 64QAM



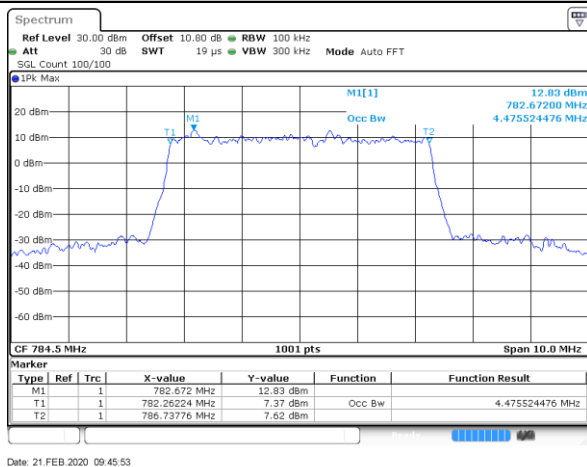
Middle Channel / 5MHz / 64QAM

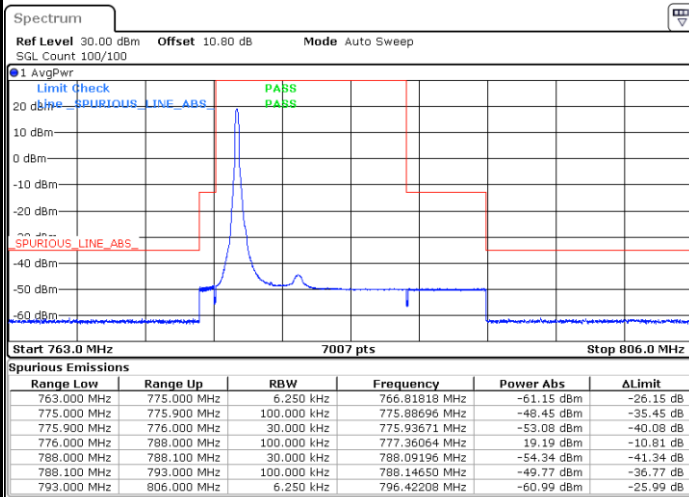


Middle Channel / 10MHz / 64QAM

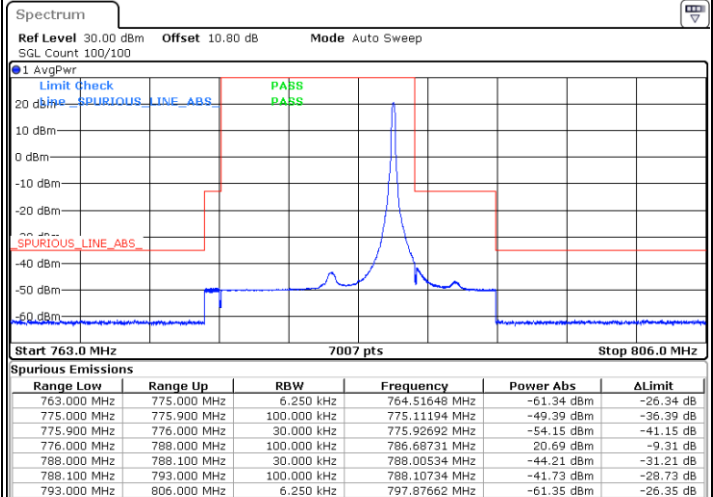


Highest Channel / 5MHz / 64QAM

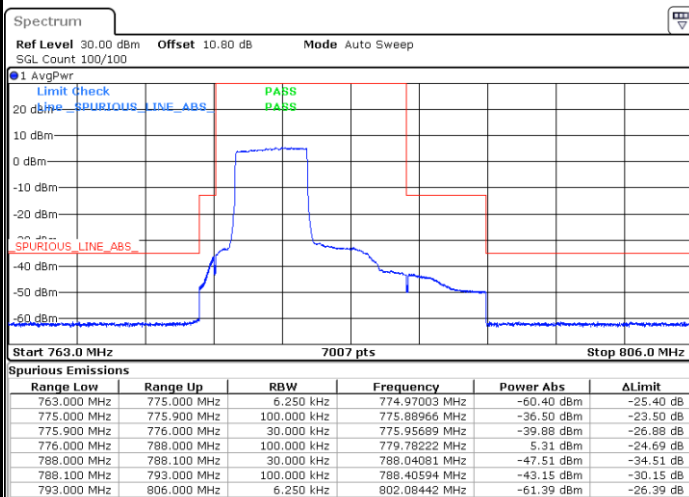


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB**

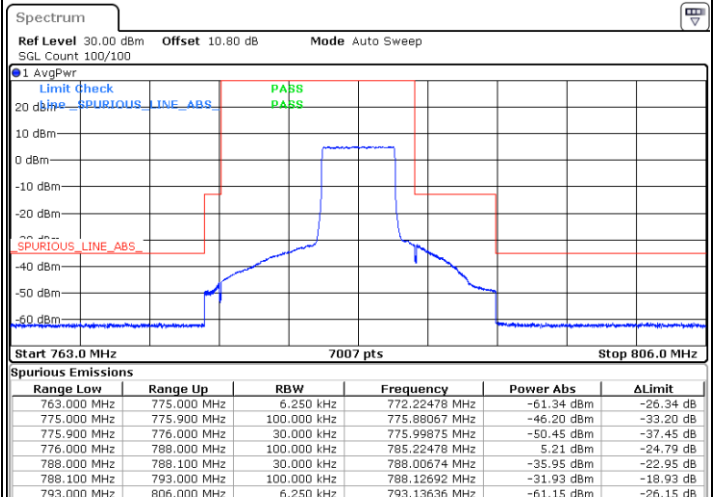
Date: 21.FEB.2020 09:27:51

Highest Band Edge / 1 RB

Date: 21.FEB.2020 09:38:50

Lowest Band Edge / Full RB

Date: 21.FEB.2020 09:22:48

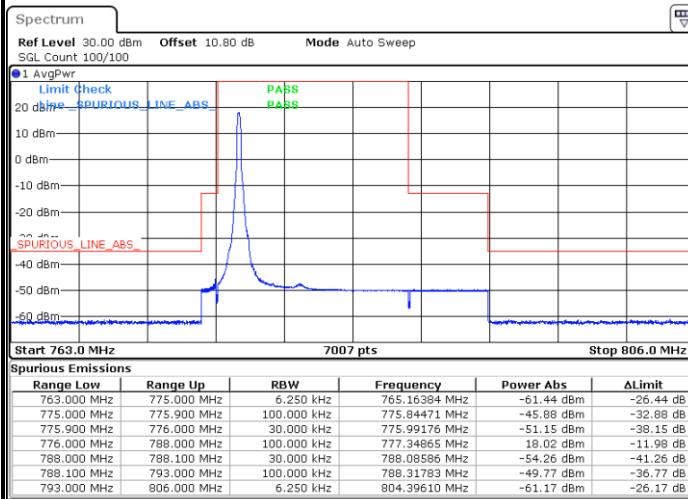
Highest Band Edge / Full RB

Date: 21.FEB.2020 09:33:48

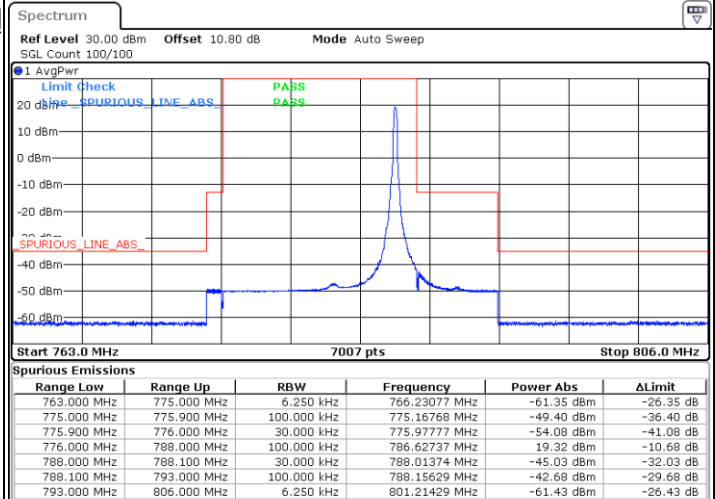


LTE Band 13 / 5MHz / 16QAM

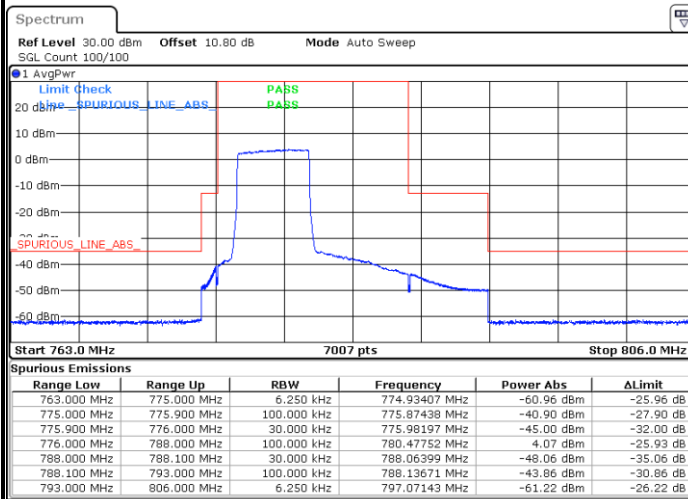
Lowest Band Edge / 1 RB



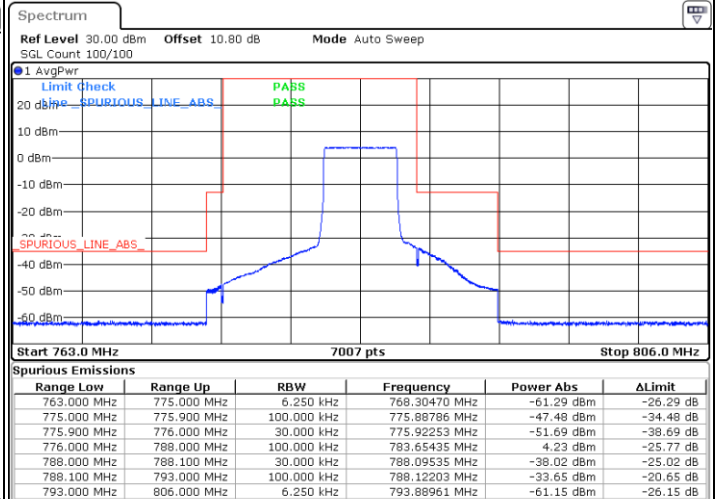
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



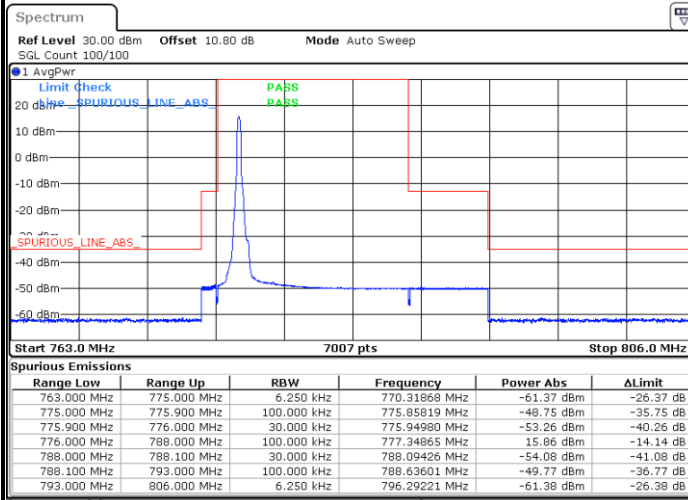
Highest Band Edge / Full RB





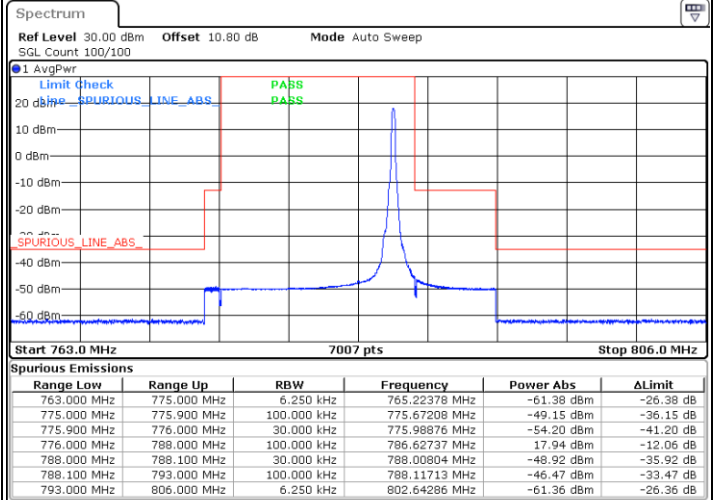
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



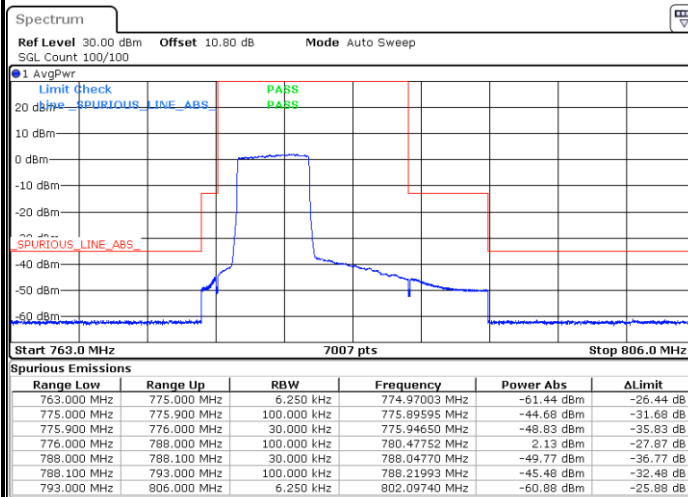
Date: 21.FEB.2020 09:43:57

Highest Band Edge / 1 RB



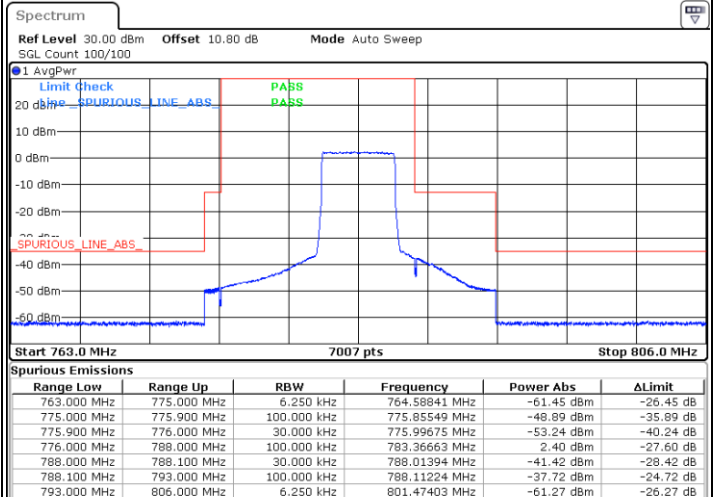
Date: 21.FEB.2020 09:49:27

Lowest Band Edge / Full RB



Date: 21.FEB.2020 09:42:16

Highest Band Edge / Full RB



Date: 21.FEB.2020 09:47:46