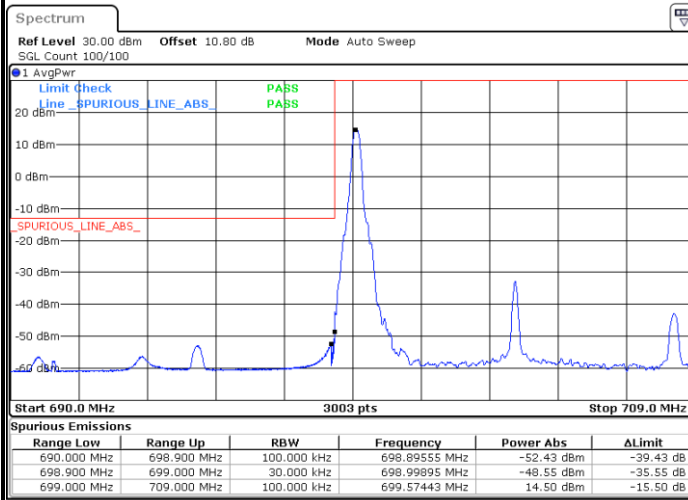


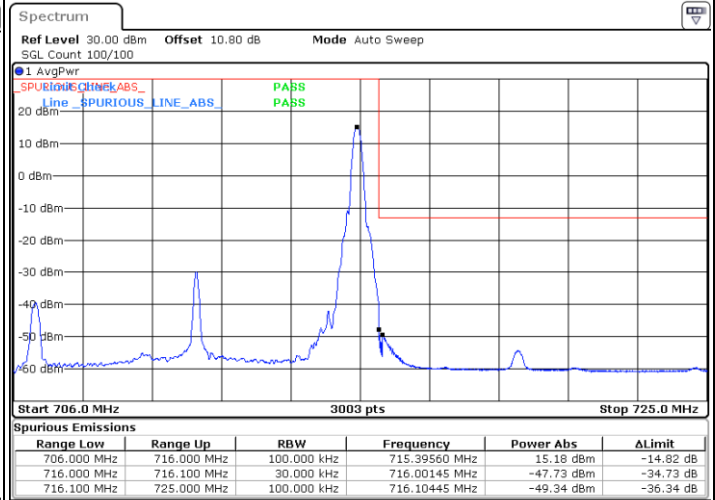


LTE Band 12 / 10MHz / 256QAM

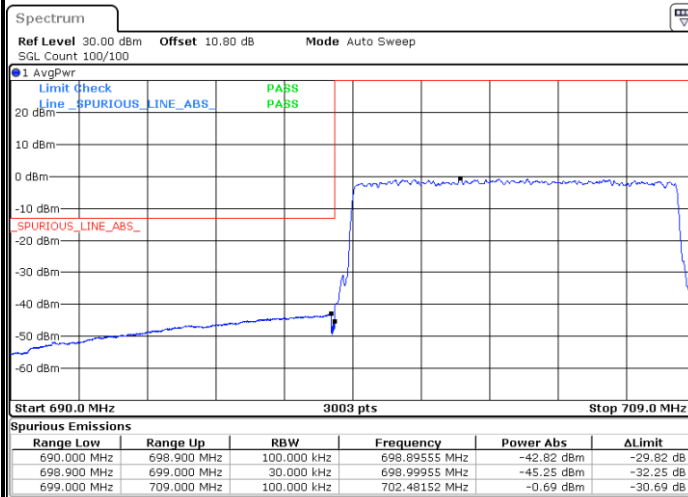
Lowest Band Edge / 1 RB



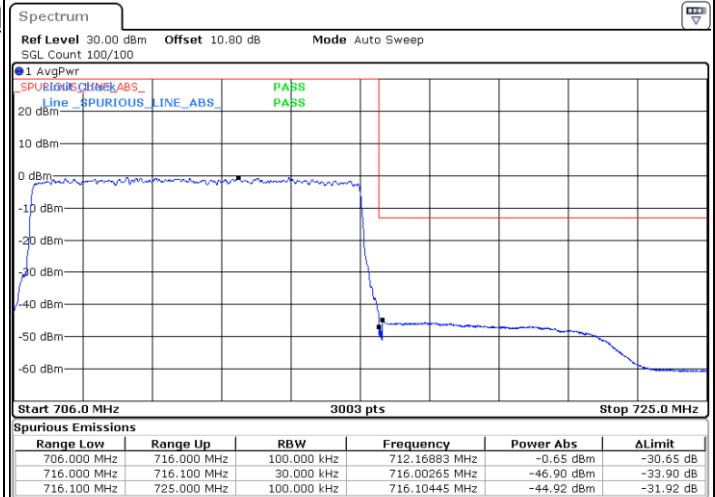
Highest Band Edge / 1 RB

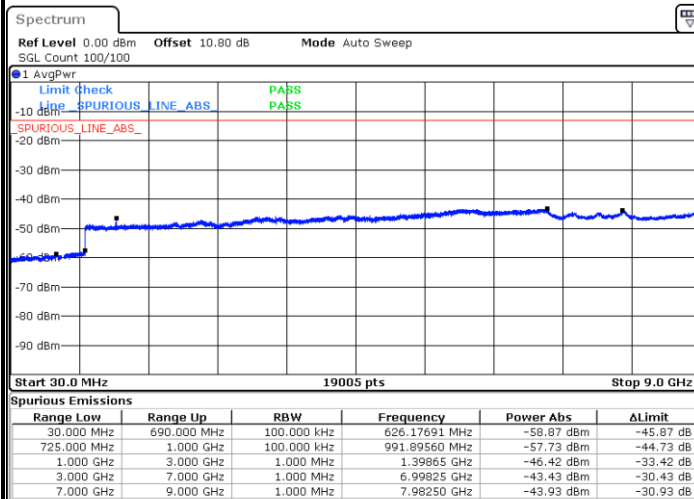
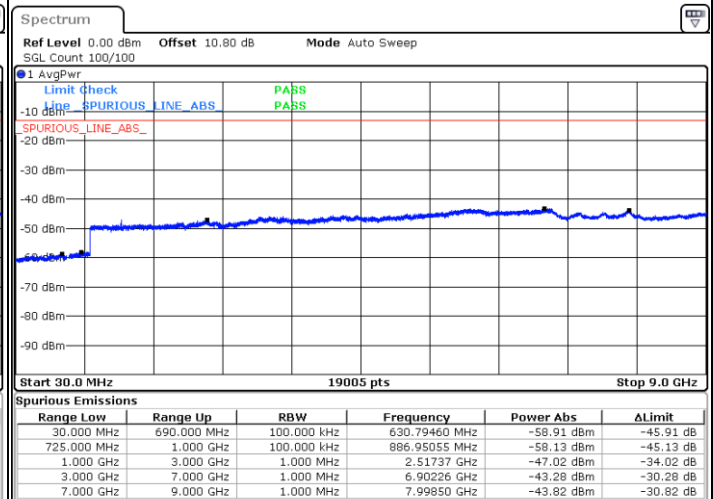
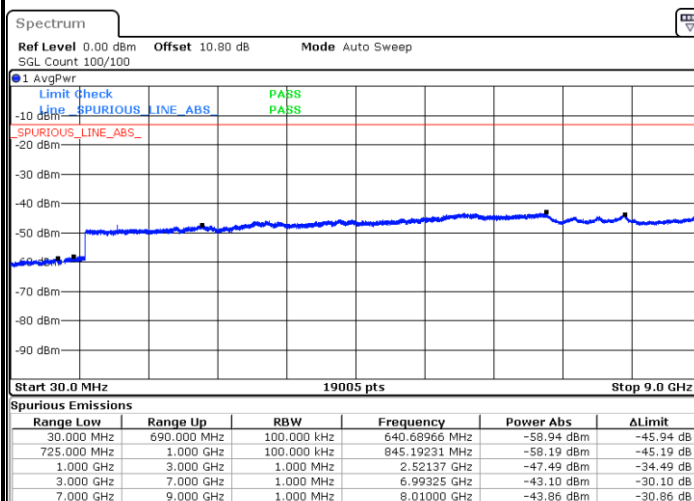
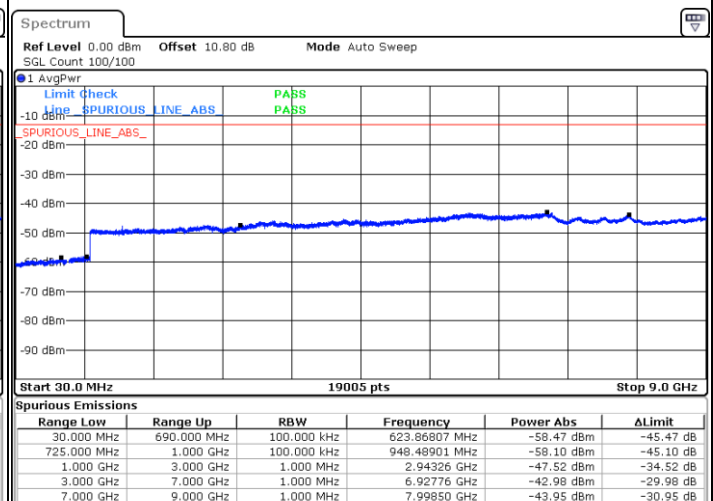


Lowest Band Edge / Full RB



Highest Band Edge / Full RB

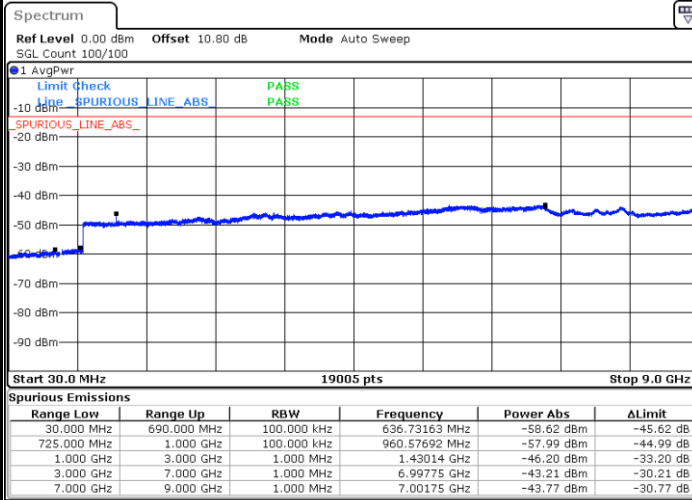


**Conducted Spurious Emission****LTE Band 12 / 1.4MHz****Lowest Channel / QPSK****Lowest Channel / 16QAM****Middle Channel / QPSK****Middle Channel / 16QAM**



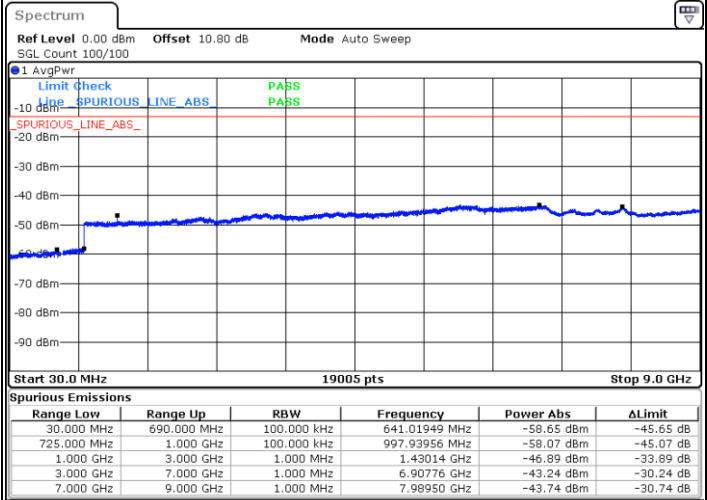
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 27.SEP.2020 08:12:32

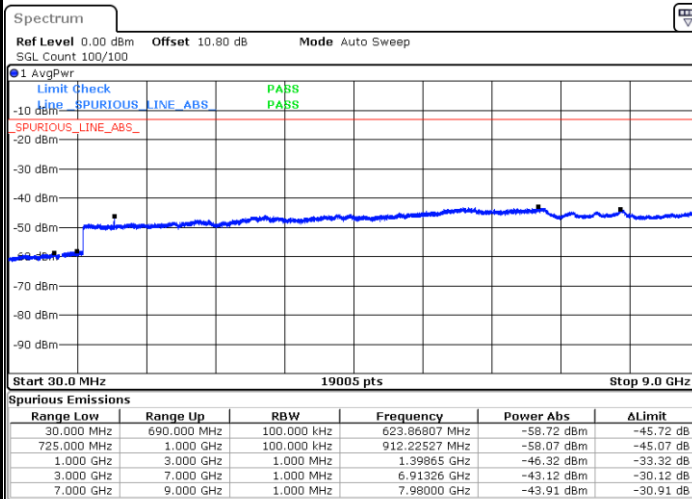
Highest Channel / 16QAM



Date: 27.SEP.2020 08:12:57

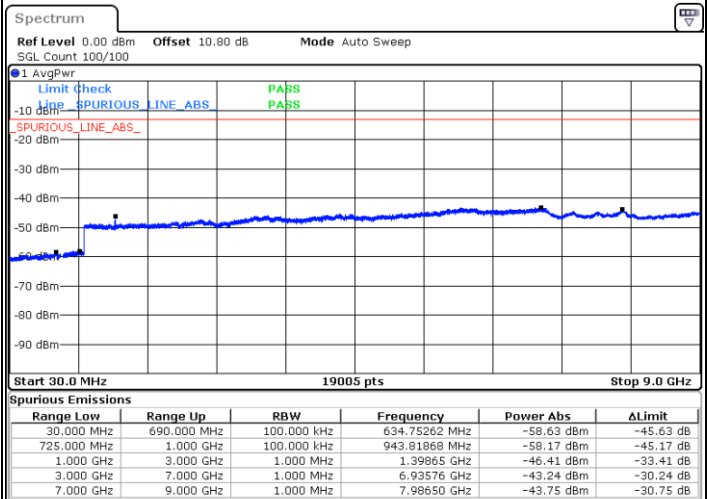
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 27.SEP.2020 08:16:35

Lowest Channel / 16QAM

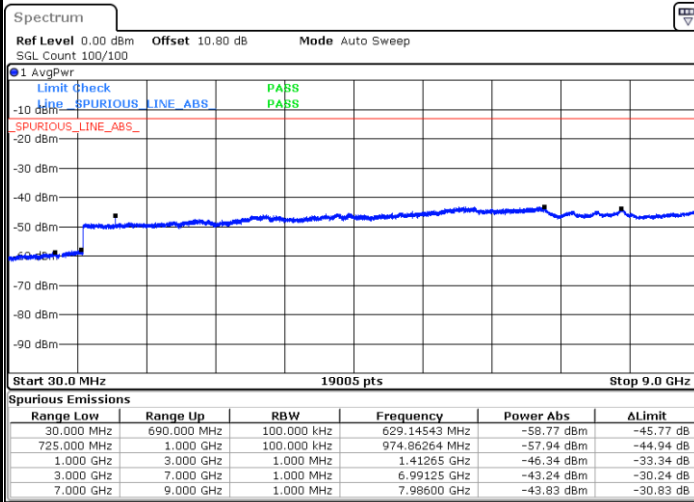


Date: 27.SEP.2020 08:17:00



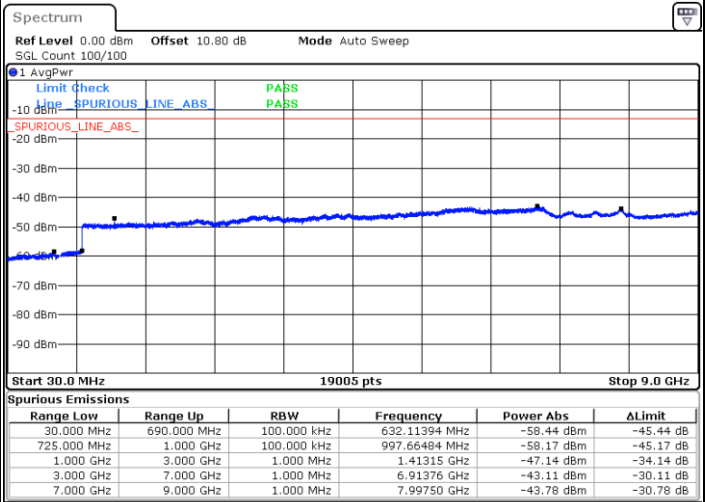
LTE Band 12 / 3MHz

Middle Channel / QPSK



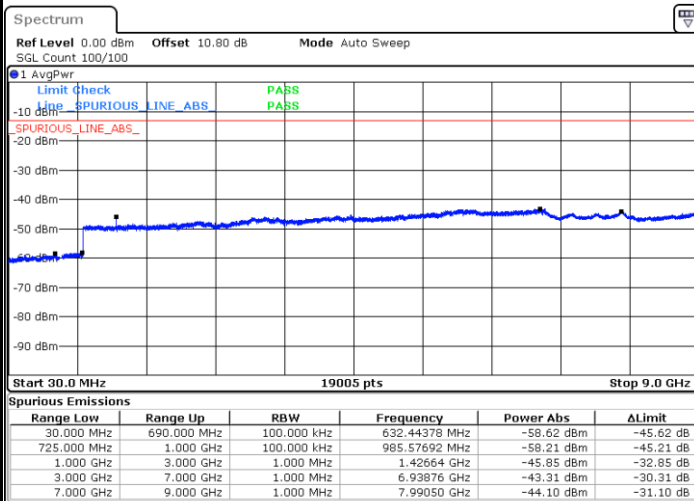
Date: 27.SEP.2020 08:18:34

Middle Channel / 16QAM



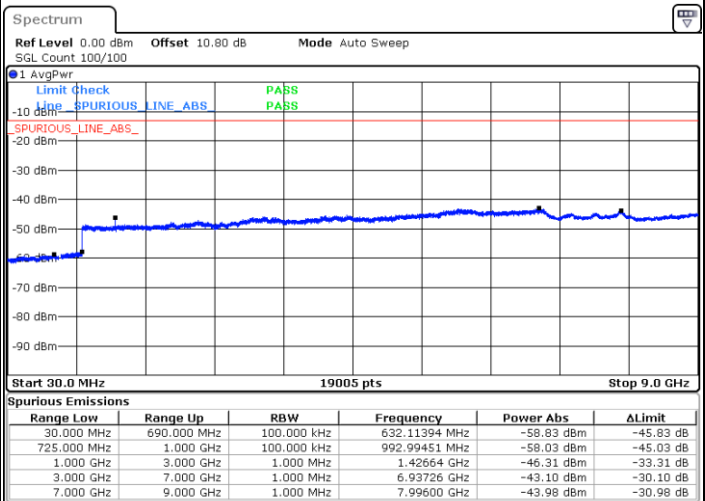
Date: 27.SEP.2020 08:18:10

Highest Channel / QPSK



Date: 27.SEP.2020 08:20:19

Highest Channel / 16QAM

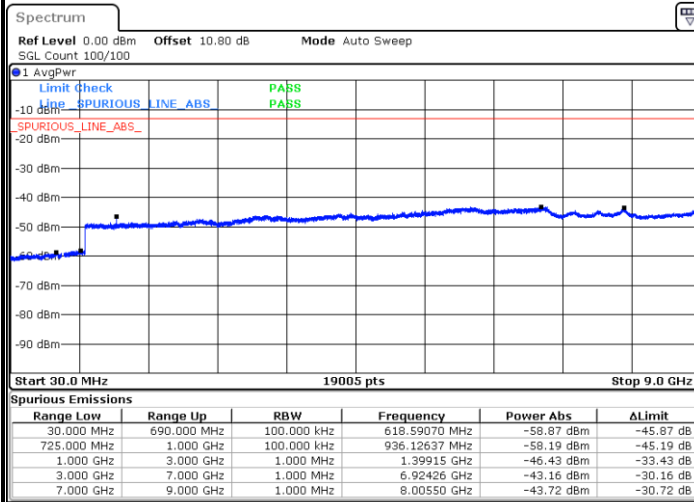


Date: 27.SEP.2020 08:20:44



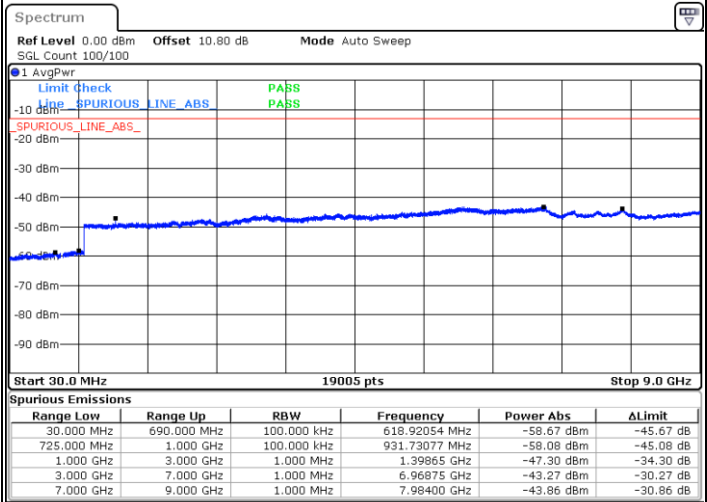
LTE Band 12 / 5MHz

Lowest Channel / QPSK



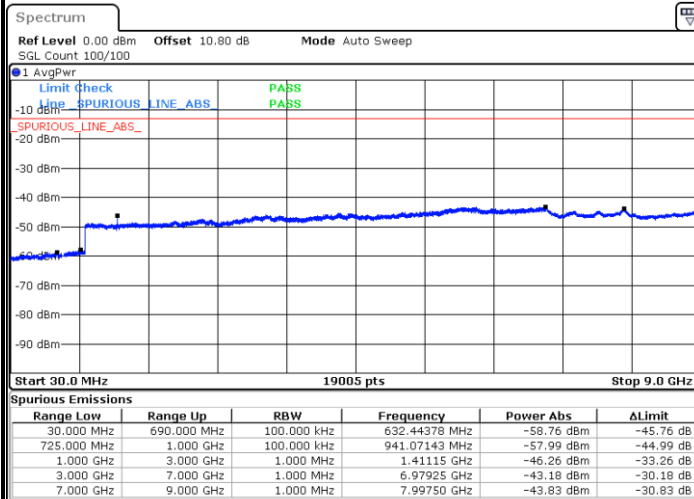
Date: 27.SEP.2020 08:33:18

Lowest Channel / 16QAM



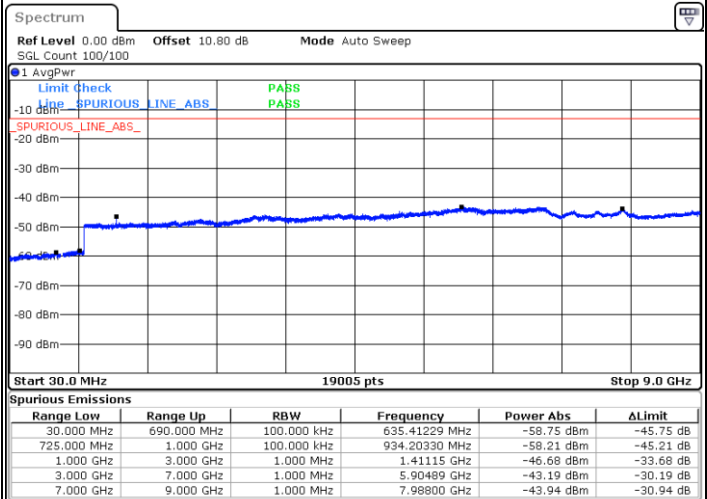
Date: 27.SEP.2020 08:33:43

Middle Channel / QPSK



Date: 27.SEP.2020 08:35:17

Middle Channel / 16QAM

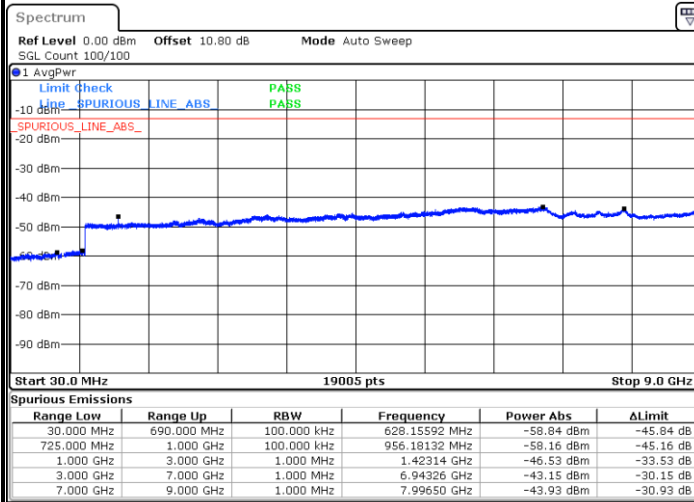


Date: 27.SEP.2020 08:34:53



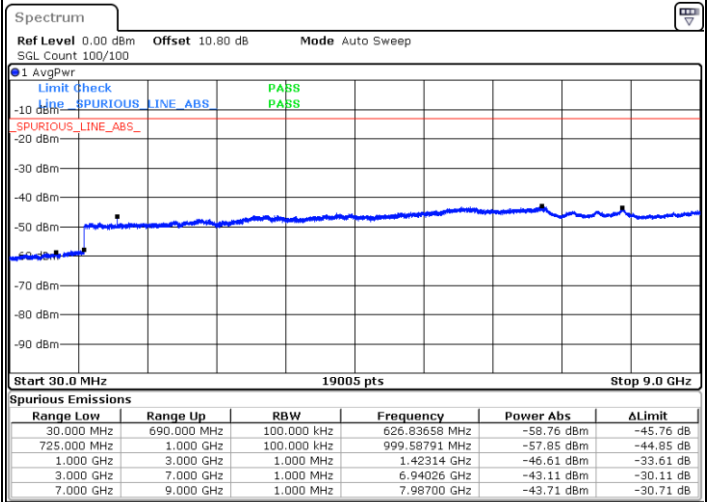
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 27.SEP.2020 08:39:05

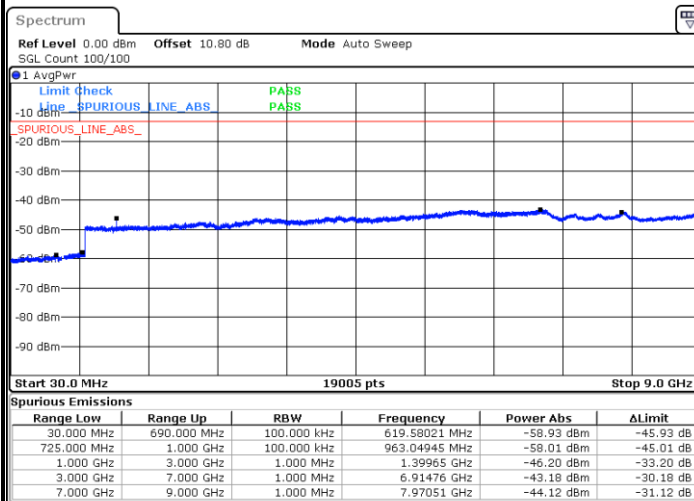
Highest Channel / 16QAM



Date: 27.SEP.2020 08:38:40

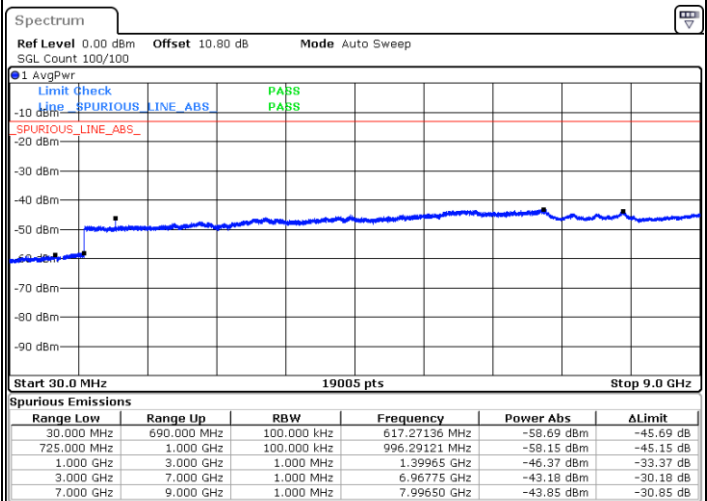
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 27.SEP.2020 08:42:30

Lowest Channel / 16QAM

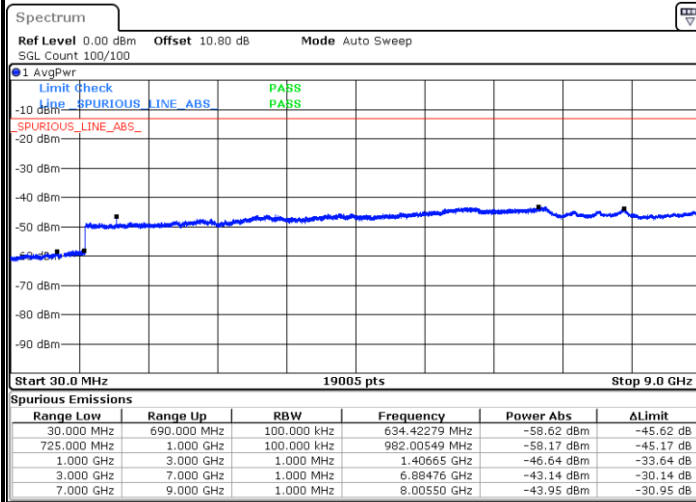


Date: 27.SEP.2020 08:42:55



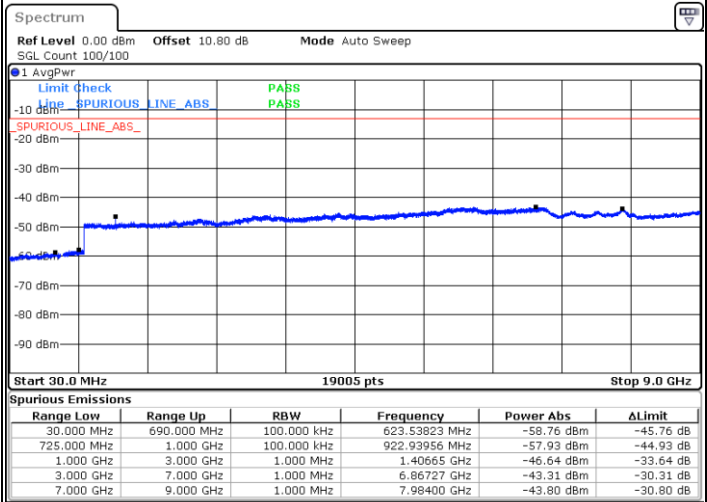
LTE Band 12 / 10MHz

Middle Channel / QPSK



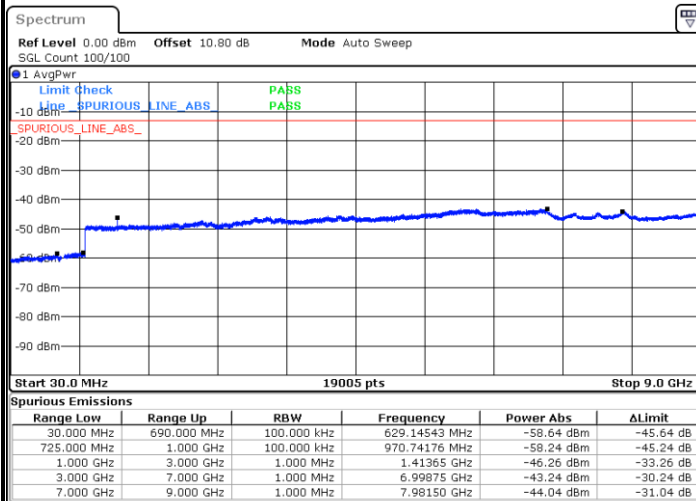
Date: 27.SEP.2020 08:44:29

Middle Channel / 16QAM



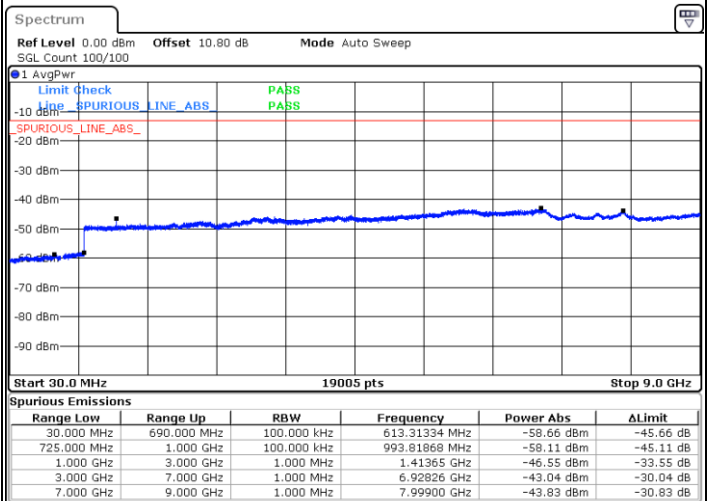
Date: 27.SEP.2020 08:44:05

Highest Channel / QPSK



Date: 27.SEP.2020 08:47:53

Highest Channel / 16QAM

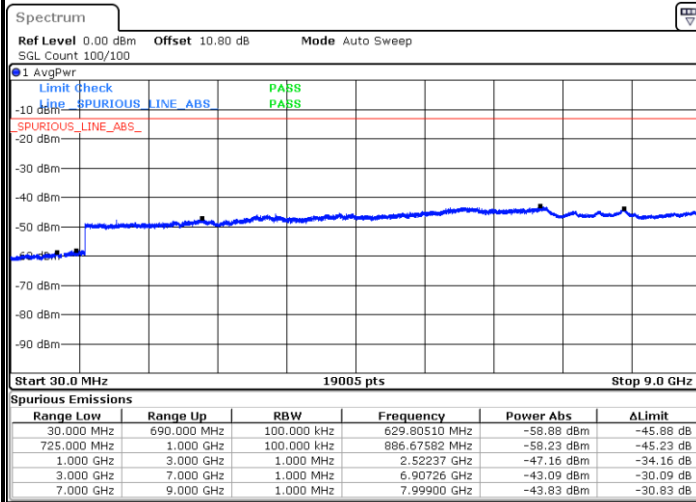


Date: 27.SEP.2020 08:48:18



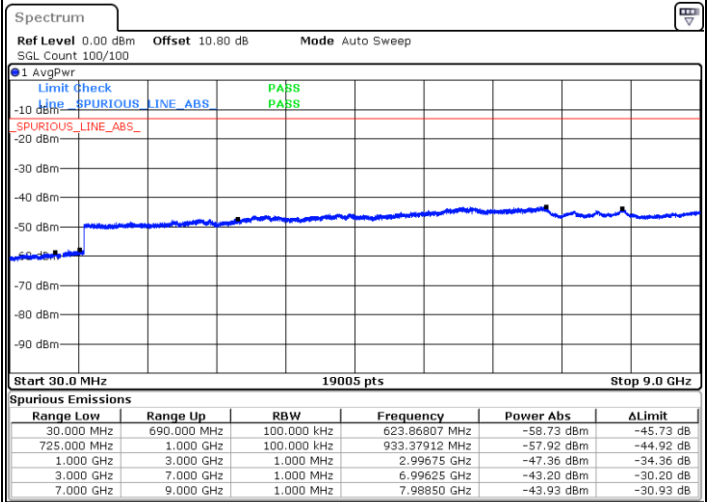
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



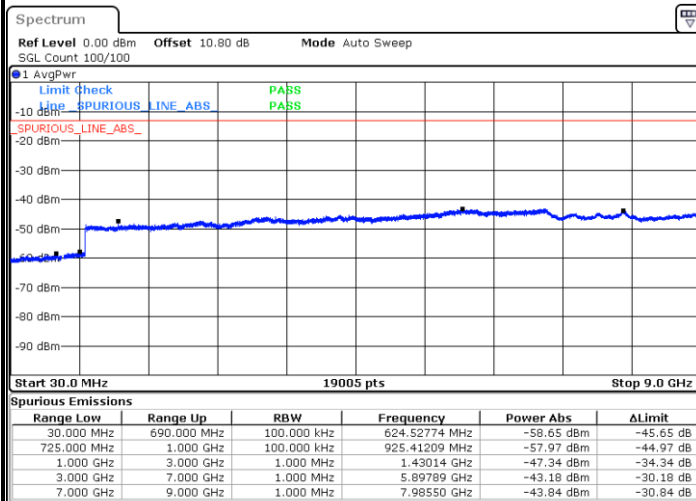
Date: 27.SEP.2020 08:13:46

Middle Channel / 64QAM



Date: 27.SEP.2020 08:14:33

Highest Channel / 64QAM

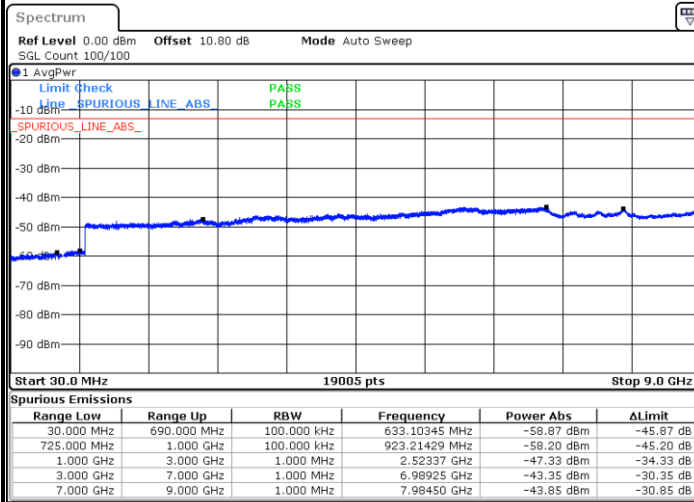


Date: 27.SEP.2020 08:15:21



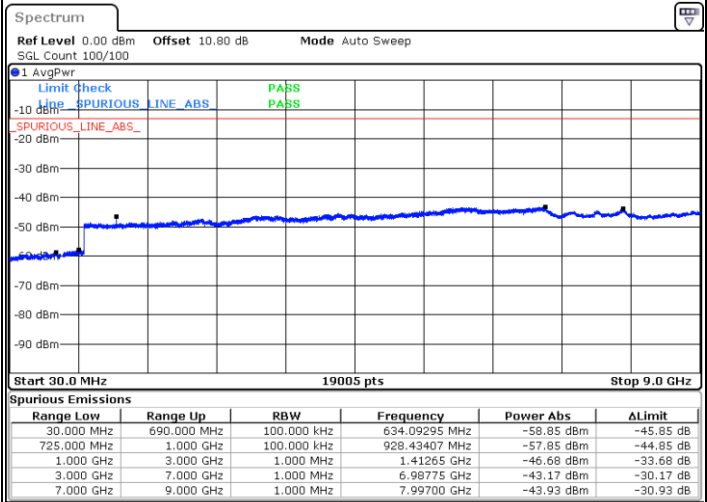
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



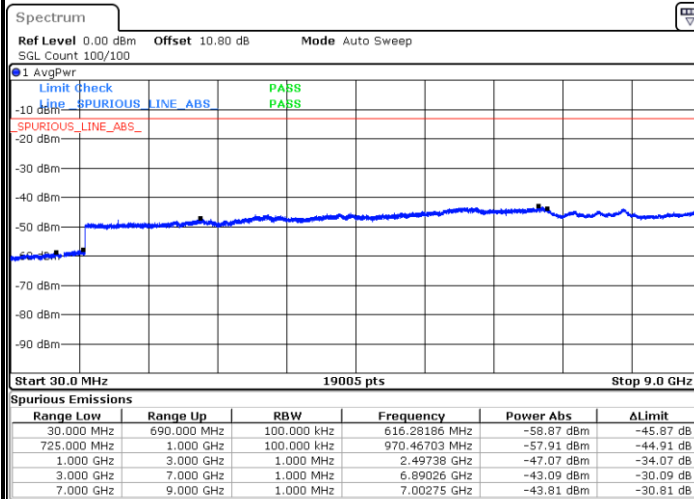
Date: 27.SEP.2020 08:22:38

Middle Channel / 64QAM



Date: 27.SEP.2020 08:23:25

Highest Channel / 64QAM

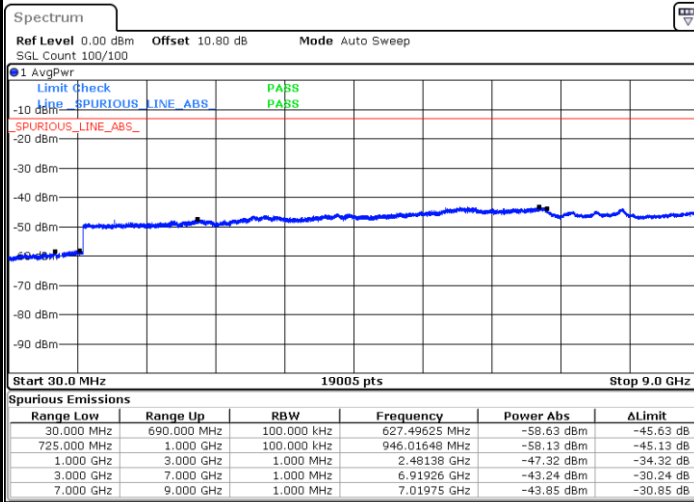


Date: 27.SEP.2020 08:25:19



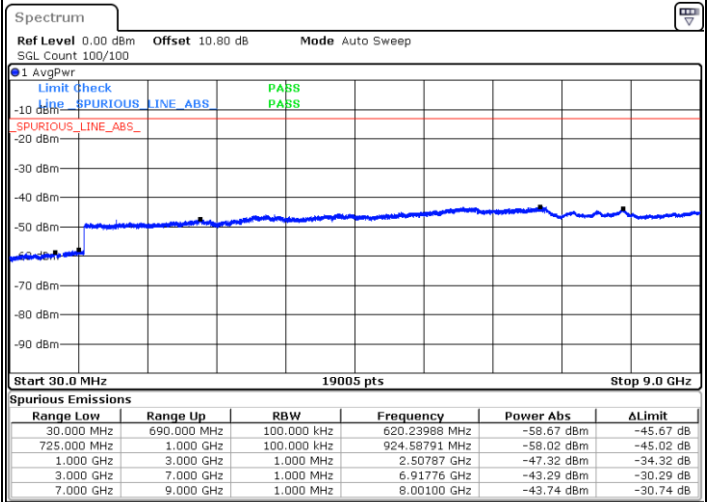
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



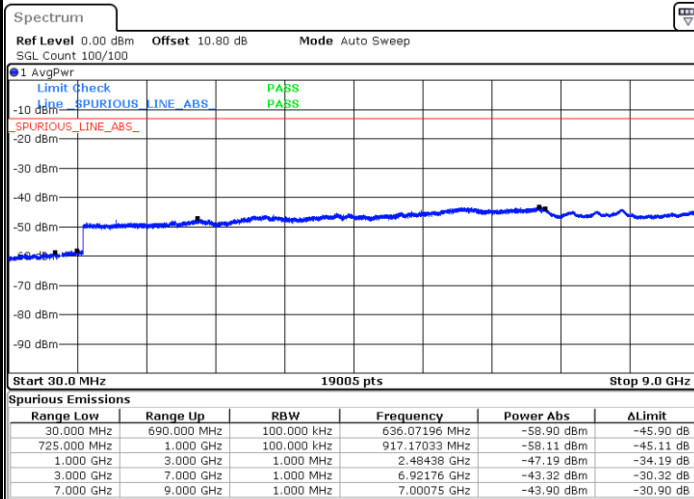
Date: 27.SEP.2020 08:27:14

Middle Channel / 64QAM



Date: 27.SEP.2020 08:28:01

Highest Channel / 64QAM

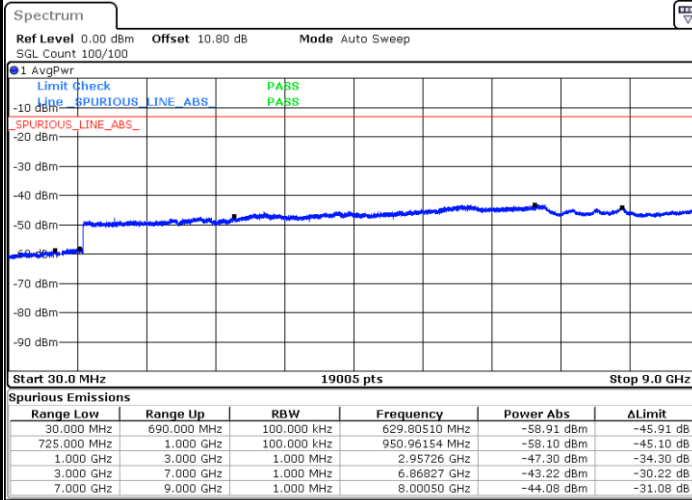


Date: 27.SEP.2020 08:29:54



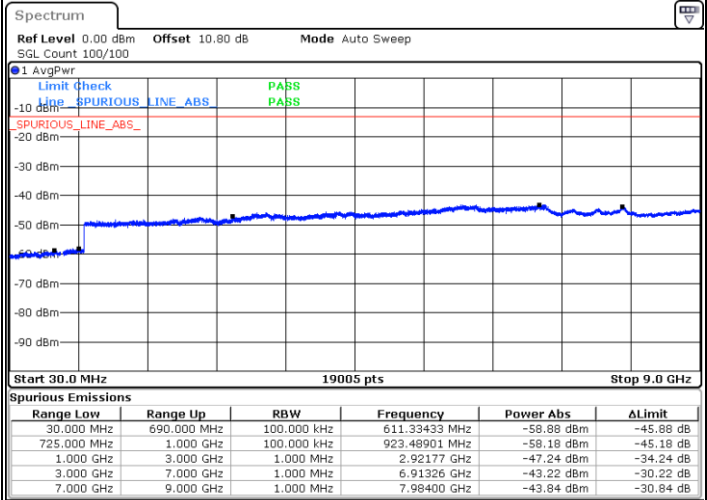
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



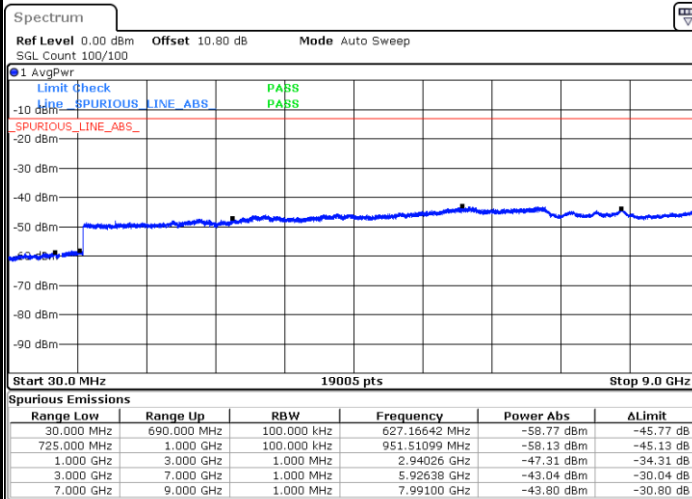
Date: 27.SEP.2020 08:50:13

Middle Channel / 64QAM



Date: 27.SEP.2020 08:51:01

Highest Channel / 64QAM

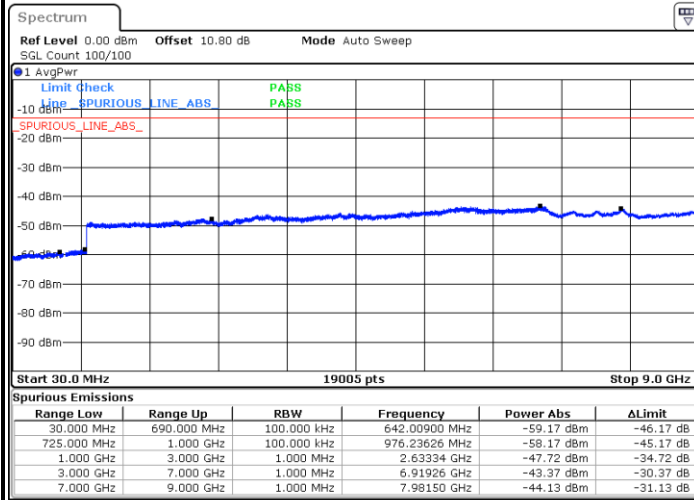


Date: 27.SEP.2020 08:52:55



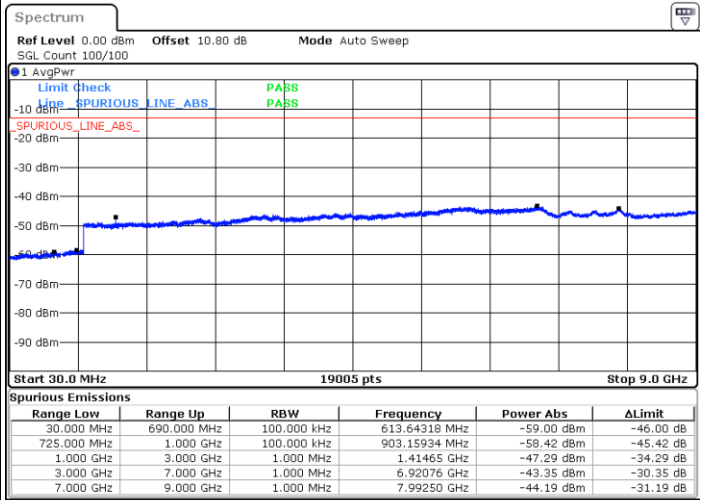
LTE Band 12 / 1.4MHz

Lowest Channel / 256QAM



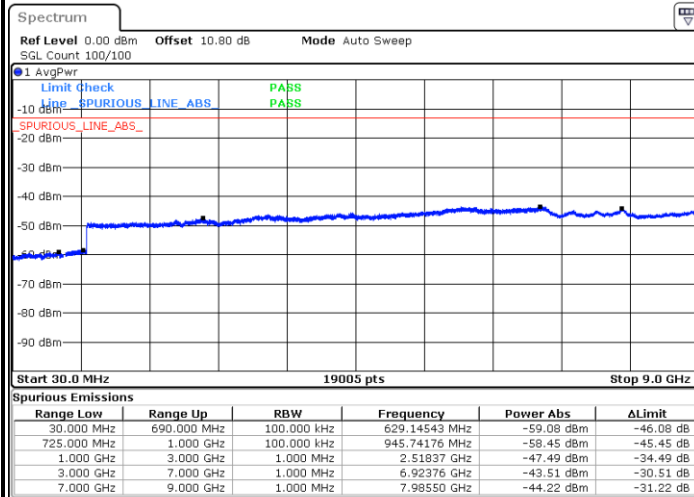
Date: 28.SEP.2020 09:19:52

Middle Channel / 256QAM



Date: 28.SEP.2020 09:17:12

Highest Channel / 256QAM

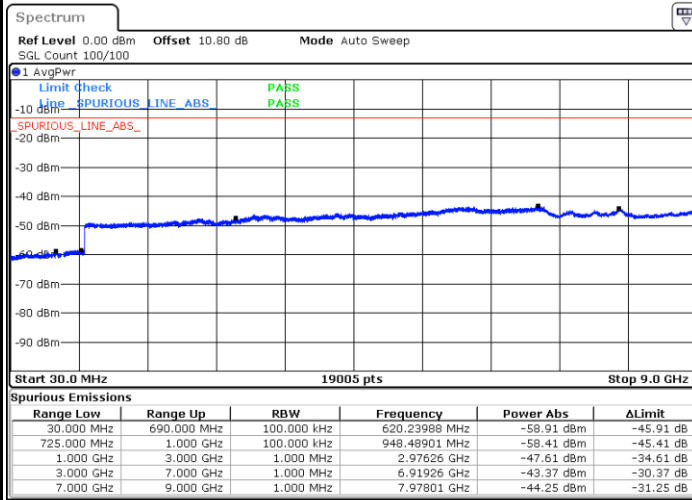


Date: 28.SEP.2020 09:21:25



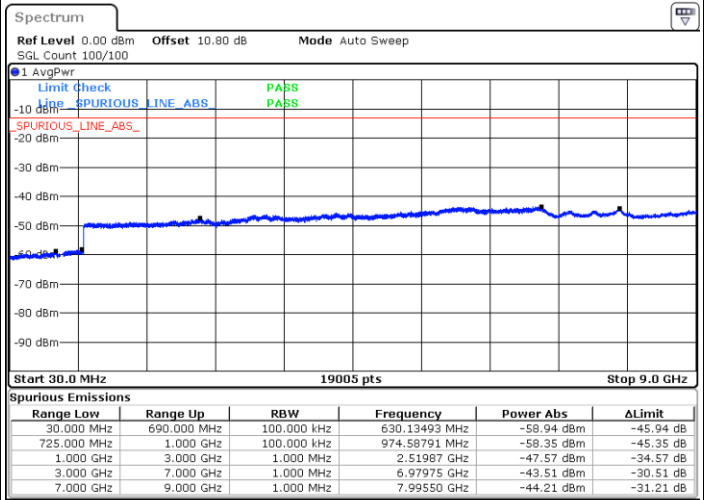
LTE Band 12 / 3MHz

Lowest Channel / 256QAM



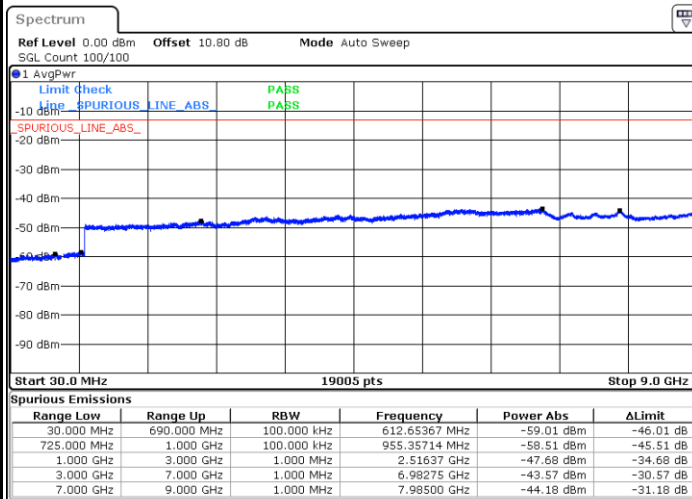
Date: 28.SEP.2020 09:25:19

Middle Channel / 256QAM



Date: 28.SEP.2020 09:23:07

Highest Channel / 256QAM

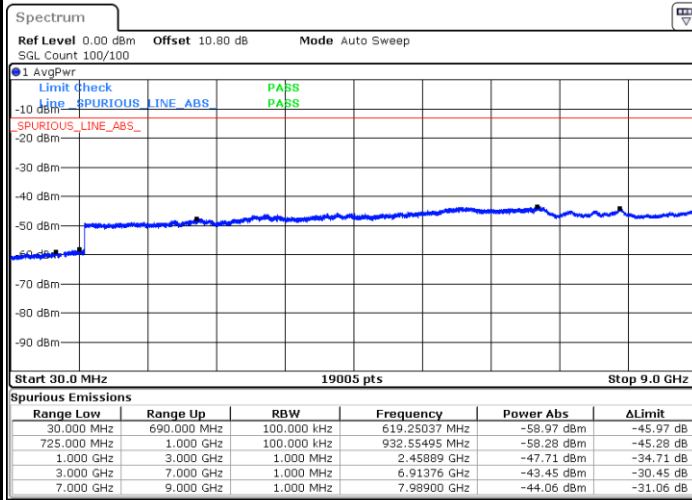


Date: 28.SEP.2020 09:27:08



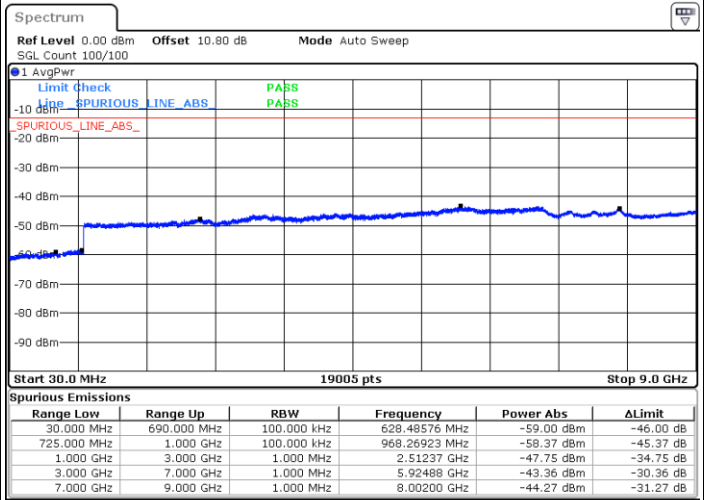
LTE Band 12 / 5MHz

Lowest Channel / 256QAM



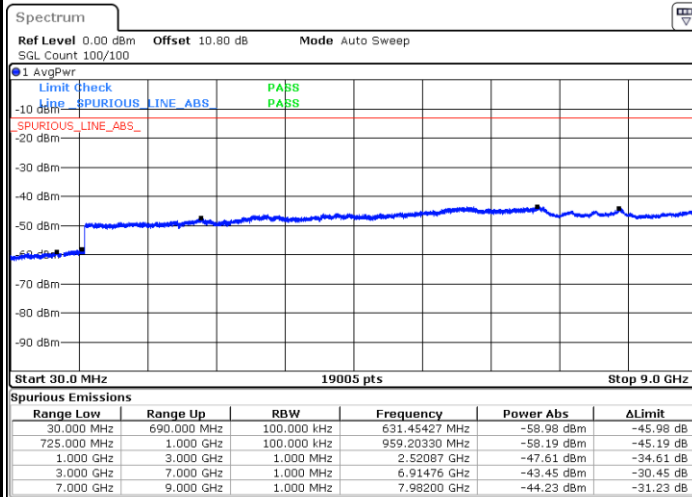
Date: 28.SEP.2020 09:30:49

Middle Channel / 256QAM



Date: 28.SEP.2020 09:28:51

Highest Channel / 256QAM

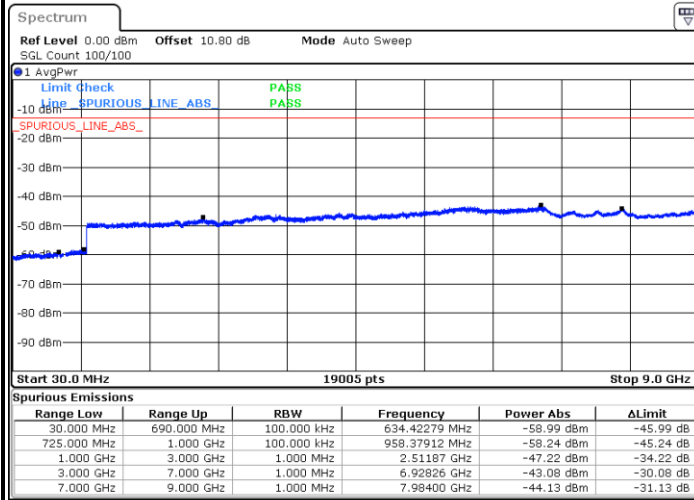


Date: 28.SEP.2020 09:32:20



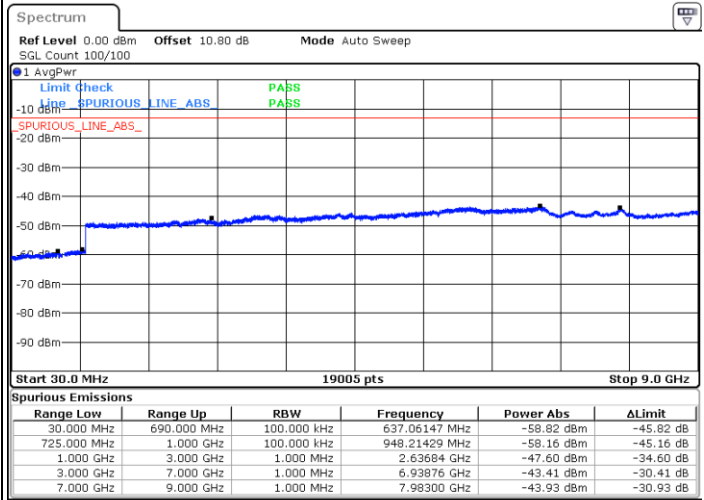
LTE Band 12 / 10MHz

Lowest Channel / 256QAM



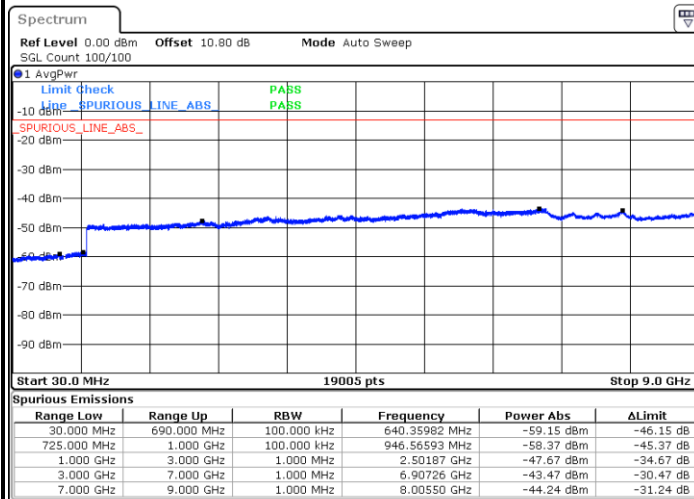
Date: 28.SEP.2020 09:35:58

Middle Channel / 256QAM



Date: 28.SEP.2020 09:34:18

Highest Channel / 256QAM



Date: 28.SEP.2020 09:38:10

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	0.0235	PASS
40	Normal Voltage	0.0167	
30	Normal Voltage	0.0212	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0218	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0228	
-20	Normal Voltage	0.0089	
-30	Normal Voltage	0.0073	
20	Maximum Voltage	0.0189	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0216	

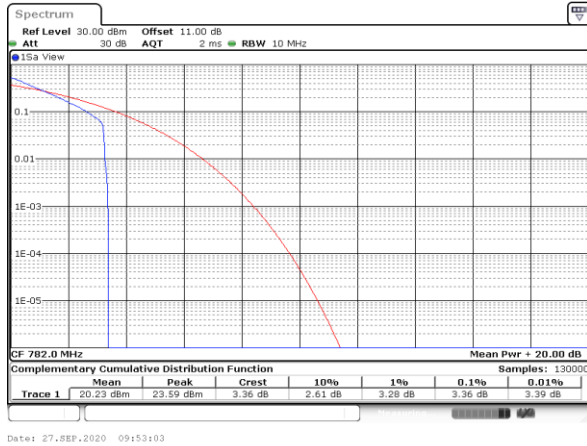
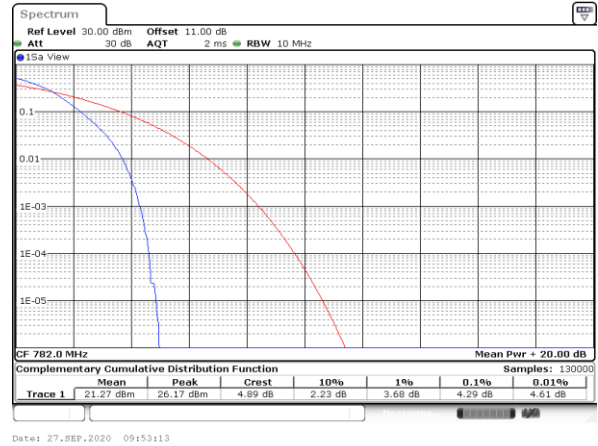
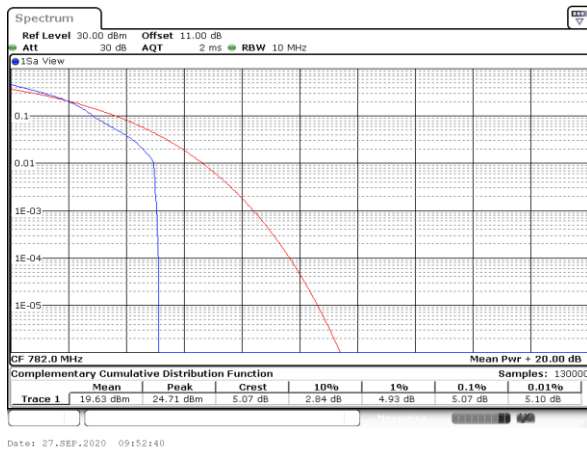
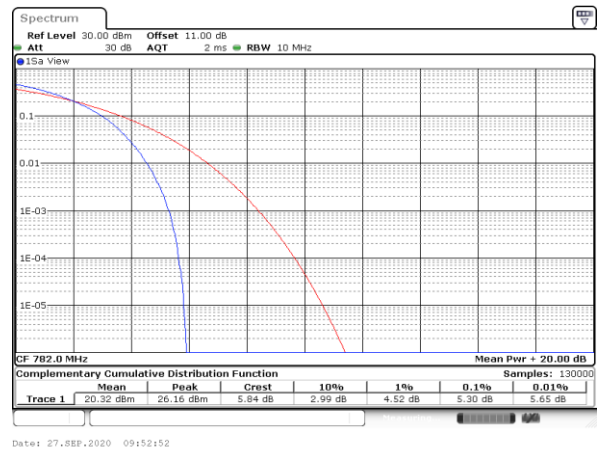
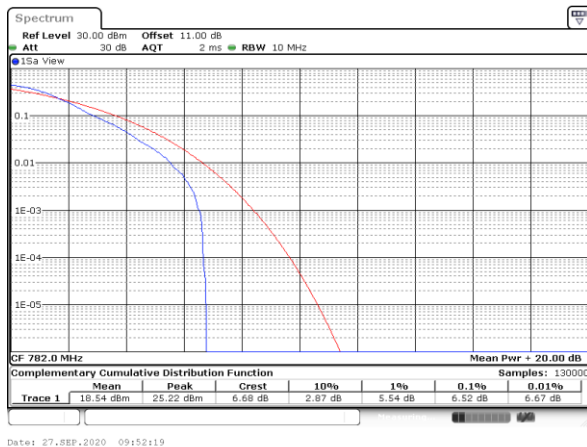
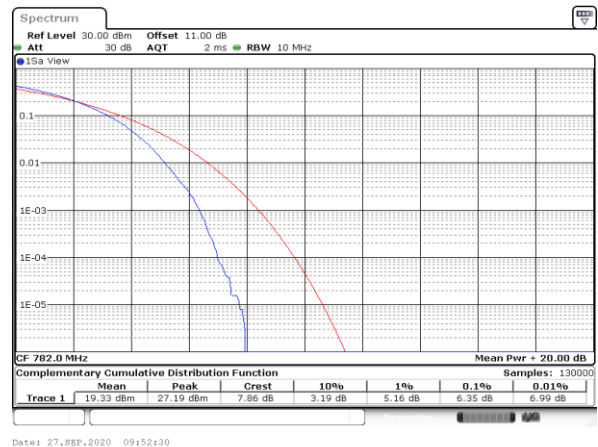
Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.25 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 13

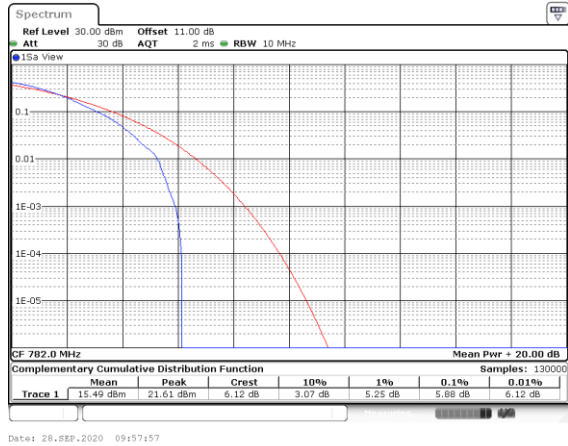
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.36	4.29	5.07	5.30	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM		256QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.52	6.35	5.88	6.29	
Highest CH	-	-	-	-	

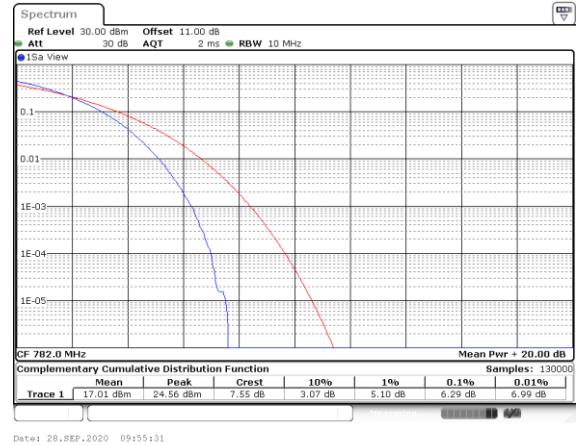
LTE Band 13 / 10MHz / QPSK
Middle Channel / 1RB

Middle Channel / Full RB

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

Middle Channel / Full RB

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

Middle Channel / Full RB


LTE Band 13 / 10MHz / 256QAM

Middle Channel / 1RB



Middle Channel / Full RB



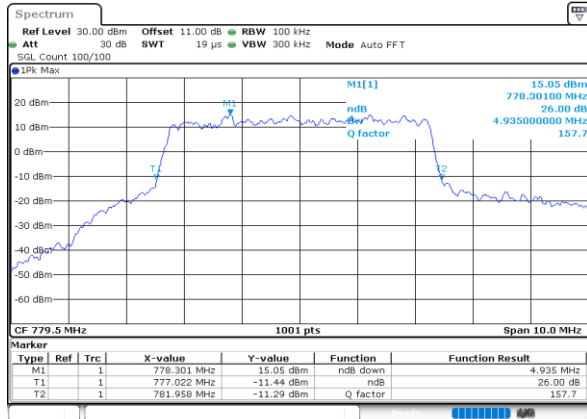
**26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	-		-		5MHz		10MHz		-		-	
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Lowest CH	-	-	-	-	4.94	4.85	-	-	-	-	-	-
Middle CH	-	-	-	-	4.88	4.96	9.67	9.87	-	-	-	-
Highest CH	-	-	-	-	4.90	4.93	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	-		-		5MHz		10MHz		-		-	
Mod.	-	-	-	-	64QAM	256 QAM	64QAM	256 QAM	-	-	-	-
Lowest CH	-	-	-	-	4.81	4.81	-	-	-	-	-	-
Middle CH	-	-	-	-	4.85	4.91	9.77	9.83	-	-	-	-
Highest CH	-	-	-	-	4.95	4.86	-	-	-	-	-	-

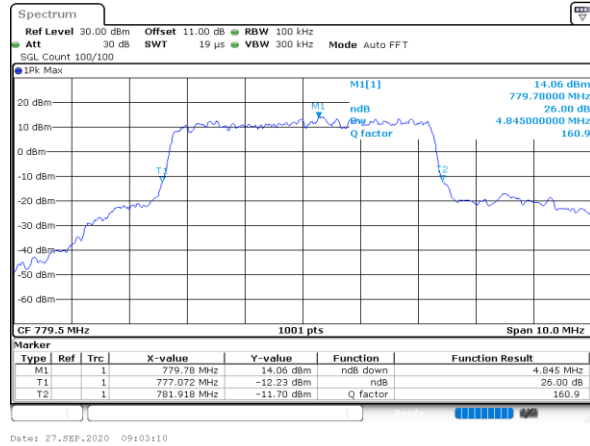


LTE Band 13

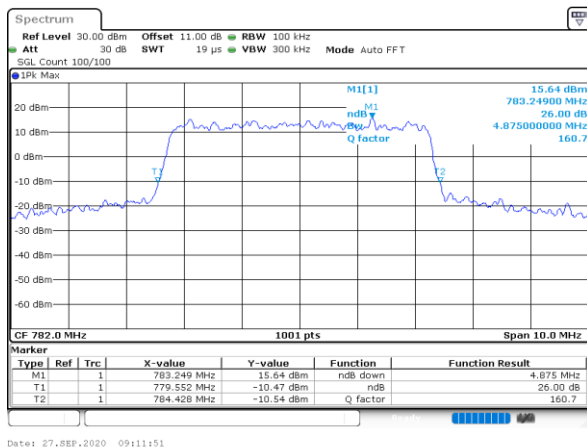
Lowest Channel / 5MHz / QPSK



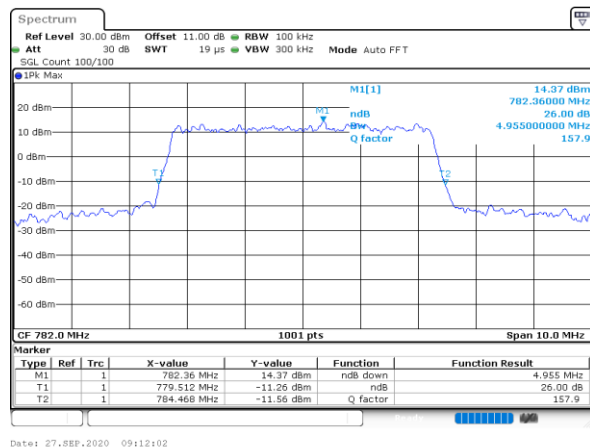
Lowest Channel / 5MHz / 16QAM



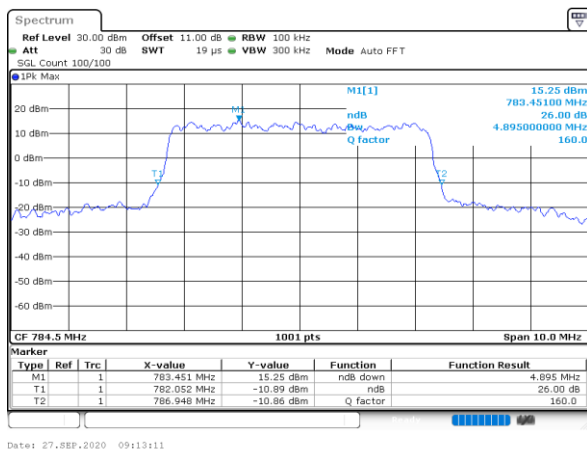
Middle Channel / 5MHz / QPSK



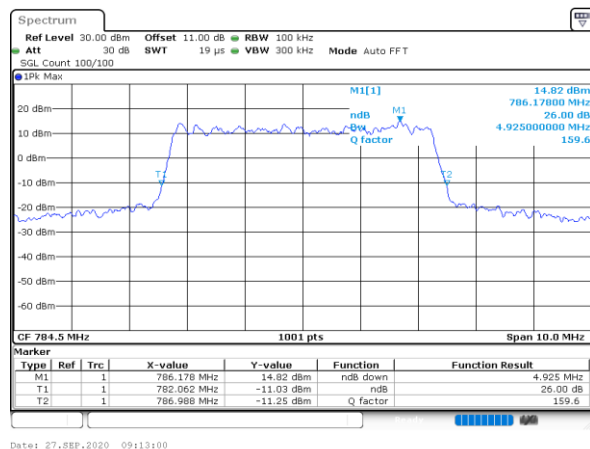
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



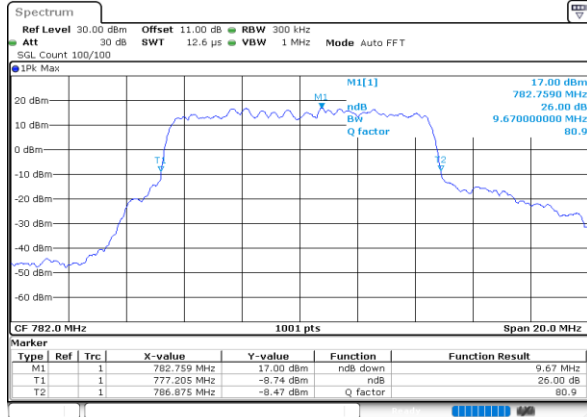
Highest Channel / 5MHz / 16QAM



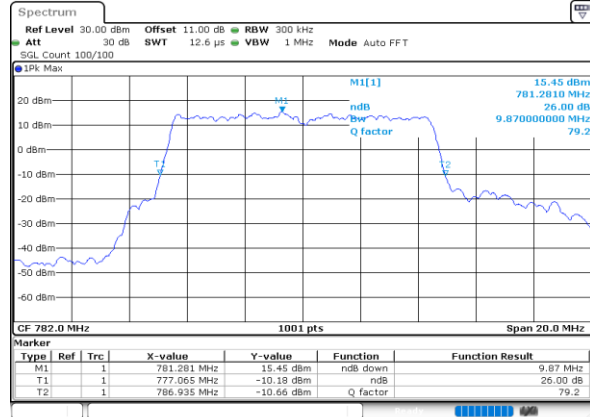


LTE Band 13

Middle Channel / 10MHz / QPSK



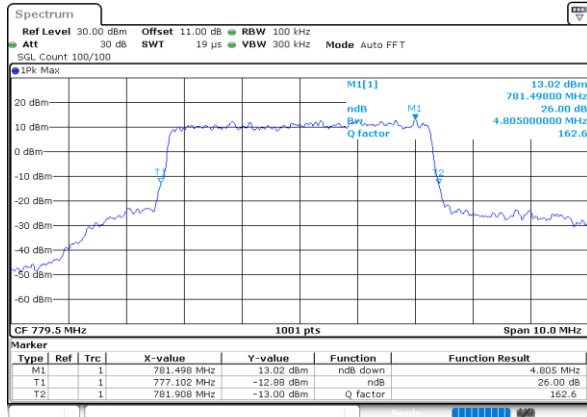
Middle Channel / 10MHz / 16QAM





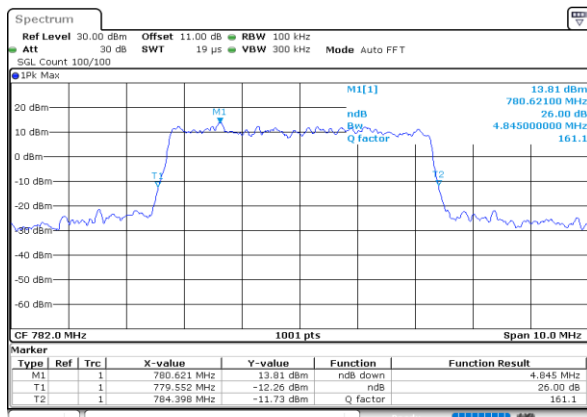
LTE Band 13

Lowest Channel / 5MHz / 64QAM



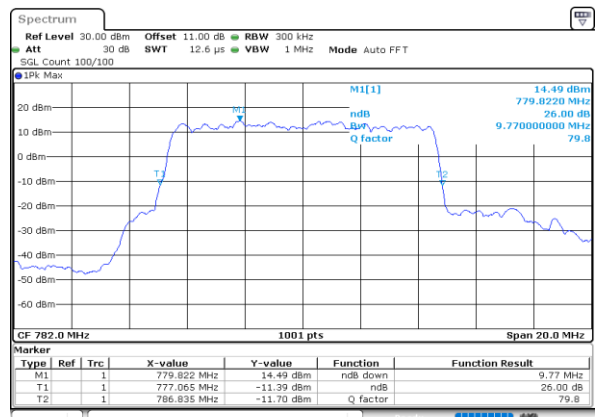
Date: 27.SEP.2020 09:21:04

Middle Channel / 5MHz / 64QAM



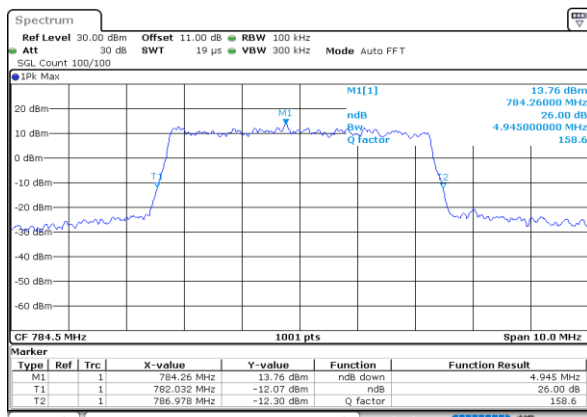
Date: 27.SEP.2020 09:25:24

Middle Channel / 10MHz / 64QAM



Date: 27.SEP.2020 09:41:36

Highest Channel / 5MHz / 64QAM

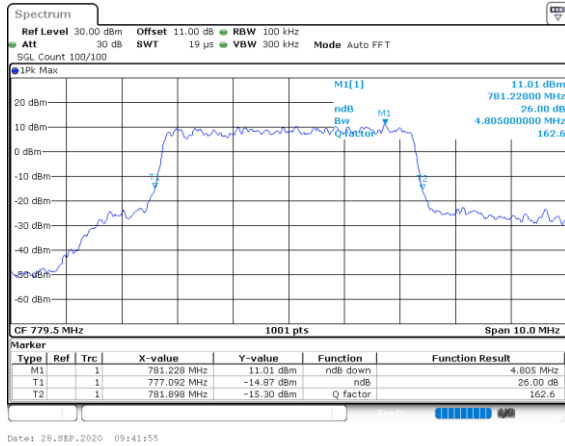


Date: 27.SEP.2020 09:25:59

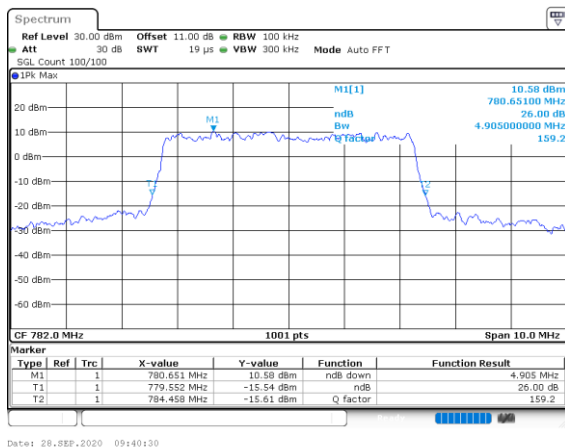


LTE Band 13

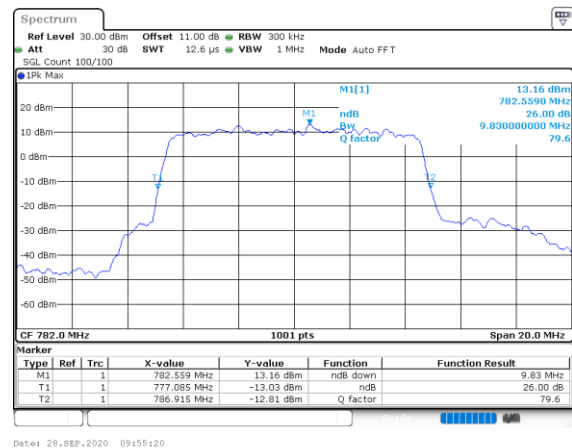
Lowest Channel / 5MHz / 256QAM



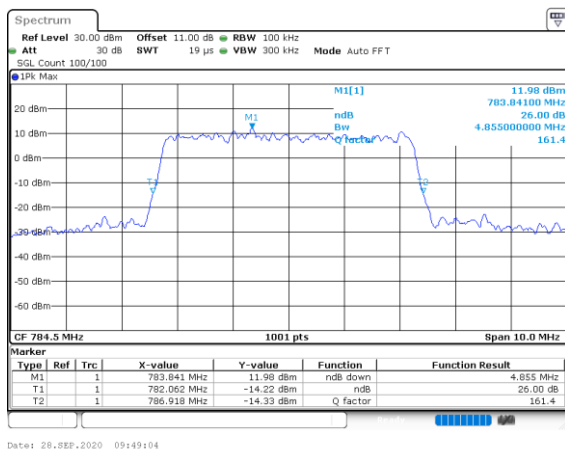
Middle Channel / 5MHz / 256QAM



Middle Channel / 10MHz / 256QAM



Highest Channel / 5MHz / 256QAM



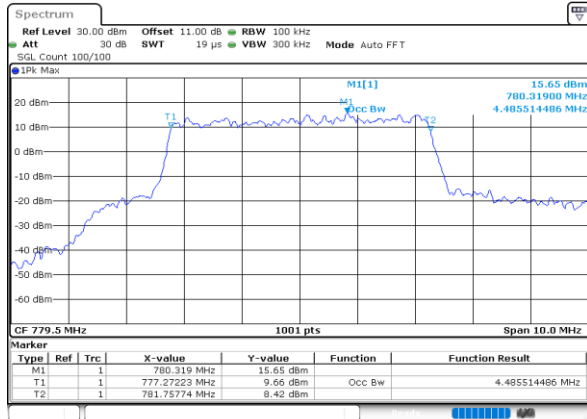
**Occupied Bandwidth**

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	-		-		5MHz		10MHz		-		-	
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Lowest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.47	4.48	8.99	8.95	-	-	-	-
Highest CH	-	-	-	-	4.49	4.50	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	-		-		5MHz		10MHz		-		-	
Mod.	-	-	-	-	64QAM	256 QAM	64QAM	256 QAM	-	-	-	-
Lowest CH	-	-	-	-	4.48	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.46	4.49	9.01	9.01	-	-	-	-
Highest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-

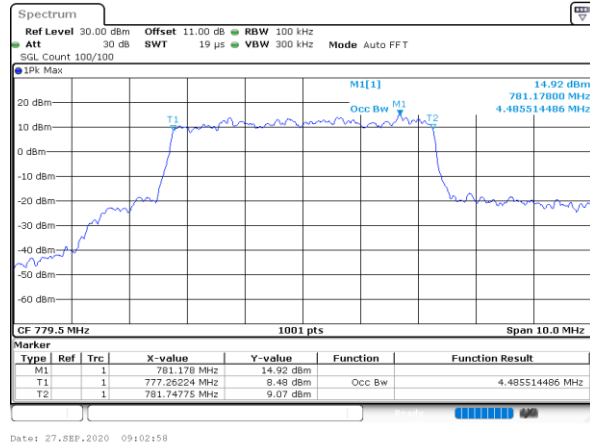


LTE Band 13

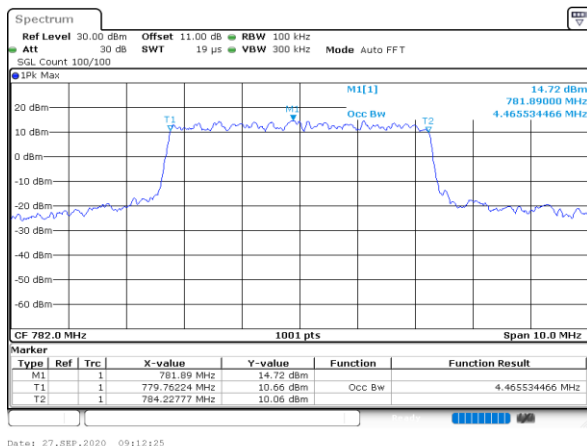
Lowest Channel / 5MHz / QPSK



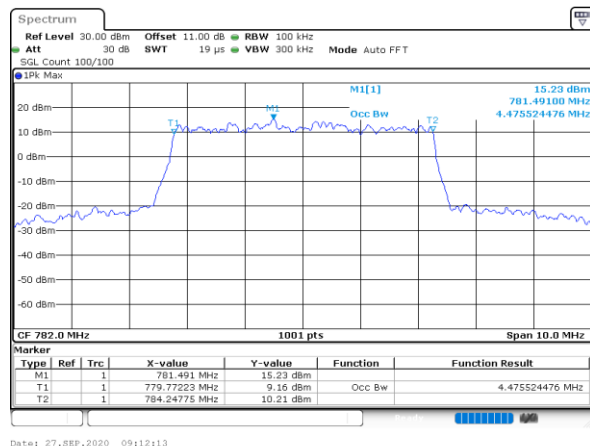
Lowest Channel / 5MHz / 16QAM



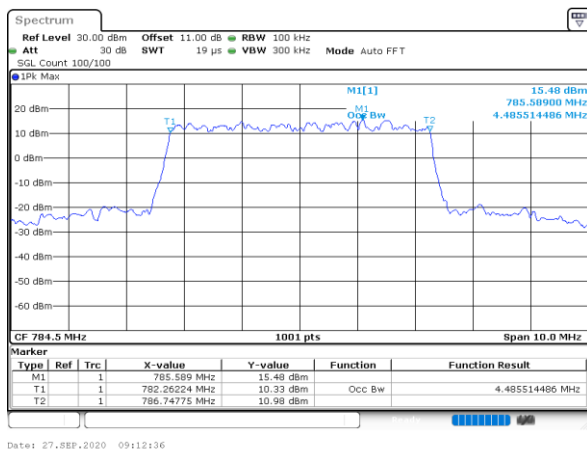
Middle Channel / 5MHz / QPSK



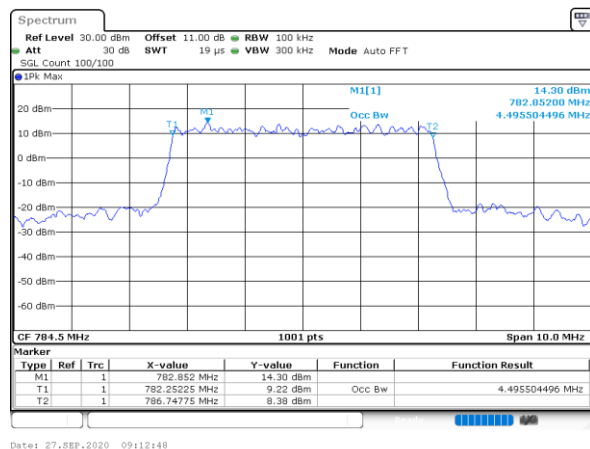
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



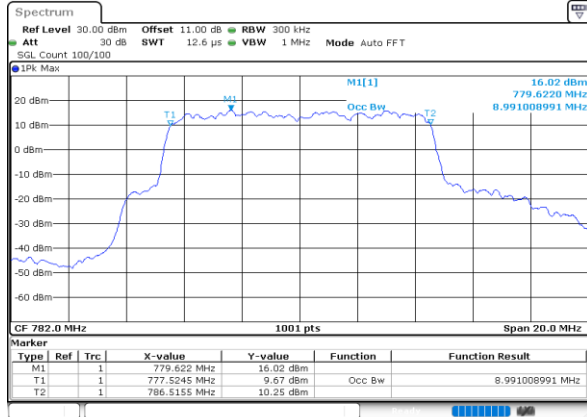
Highest Channel / 5MHz / 16QAM



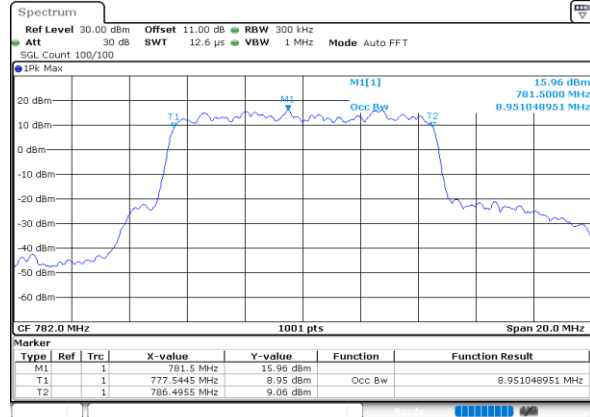


LTE Band 13

Middle Channel / 10MHz / QPSK



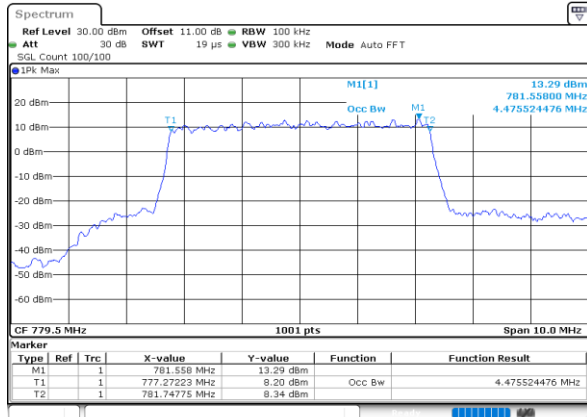
Middle Channel / 10MHz / 16QAM



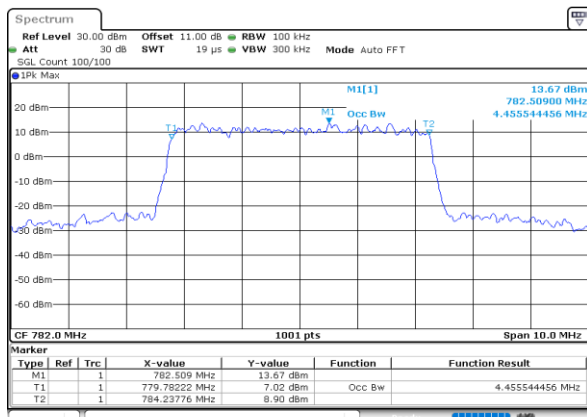


LTE Band 13

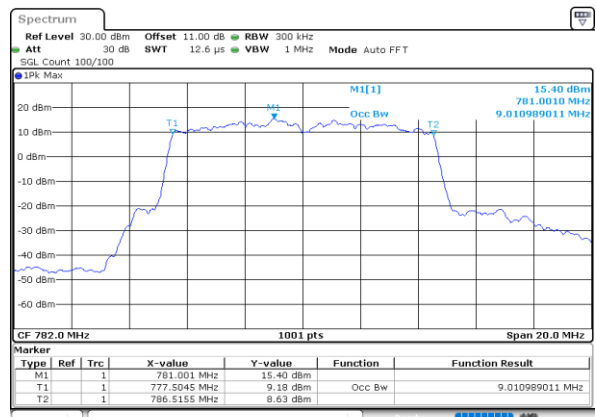
Lowest Channel / 5MHz / 64QAM



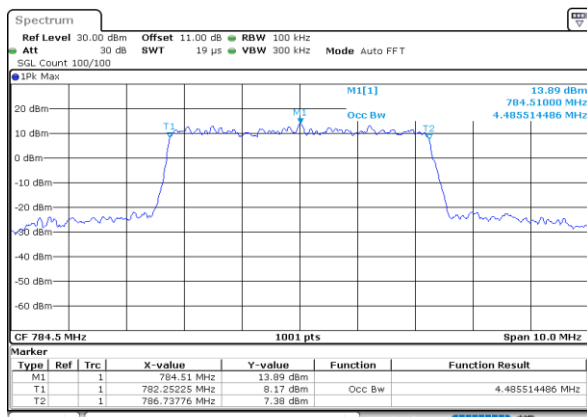
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



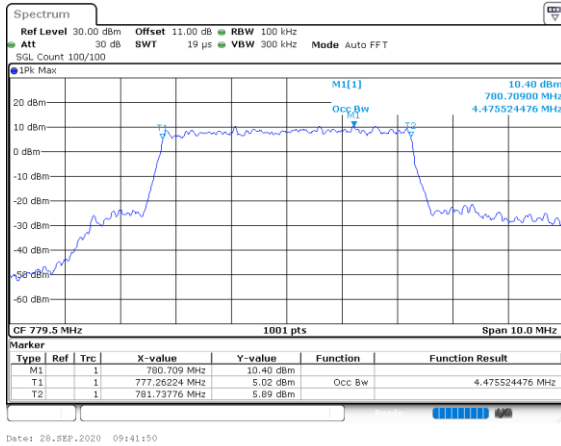
Highest Channel / 5MHz / 64QAM



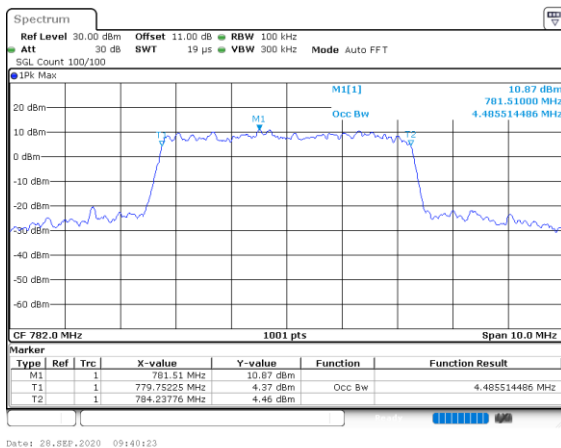


LTE Band 13

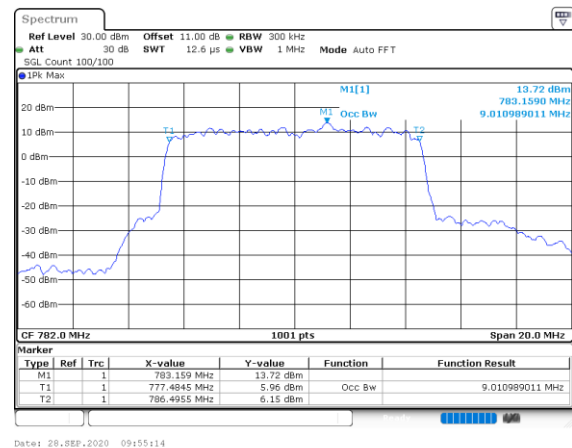
Lowest Channel / 5MHz / 256QAM



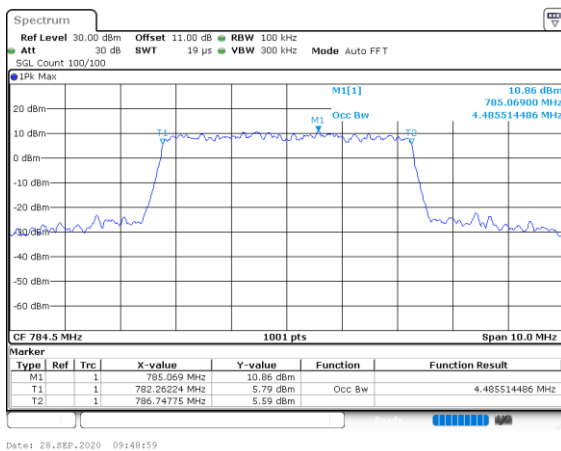
Middle Channel / 5MHz / 256QAM

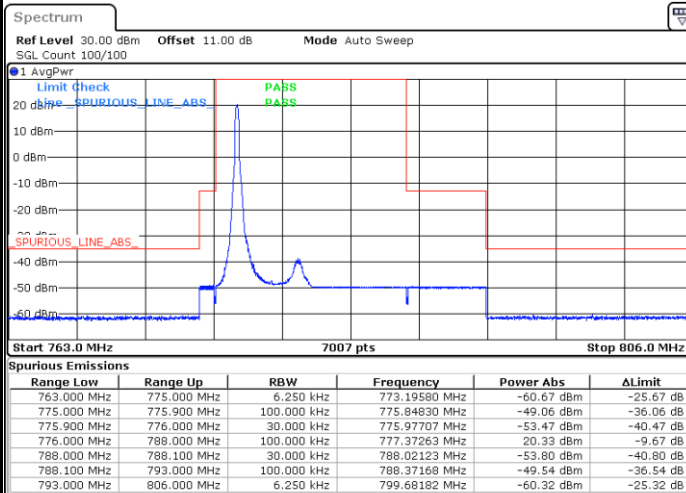
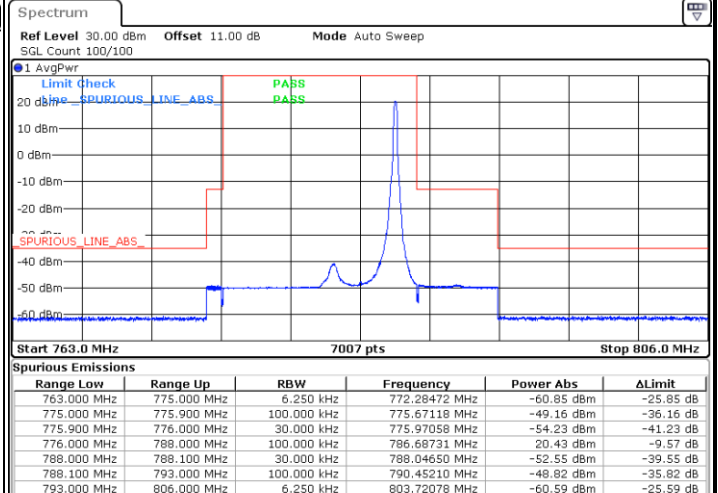
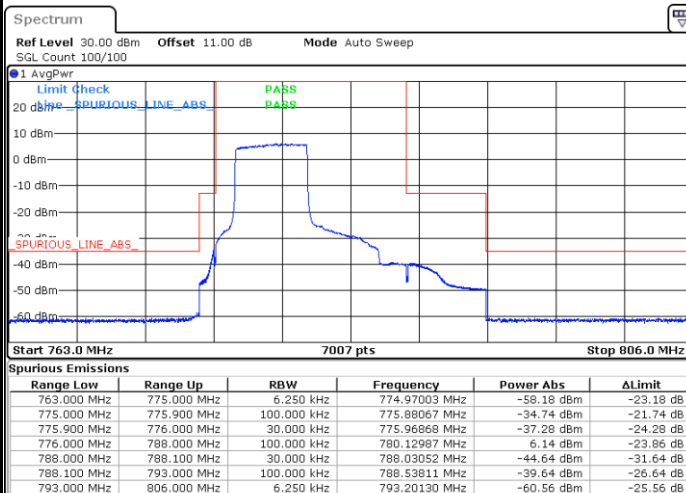
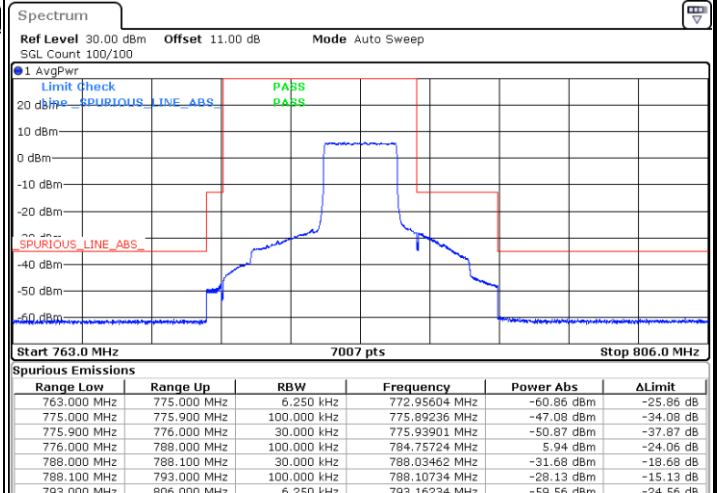


Middle Channel / 10MHz / 256QAM



Highest Channel / 5MHz / 256QAM

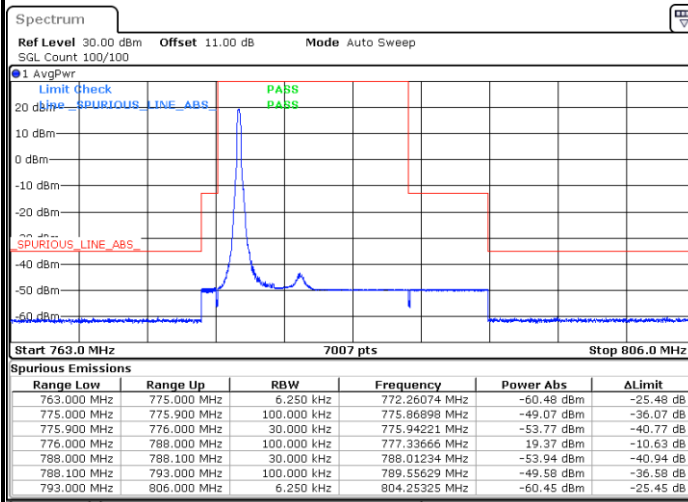


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

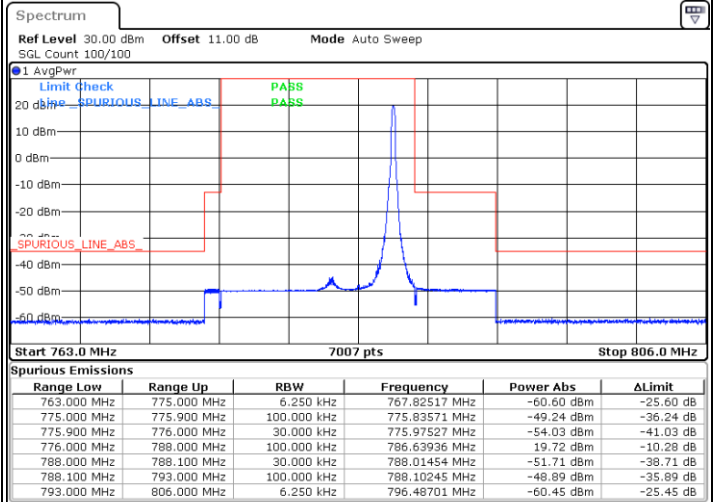


LTE Band 13 / 5MHz / 16QAM

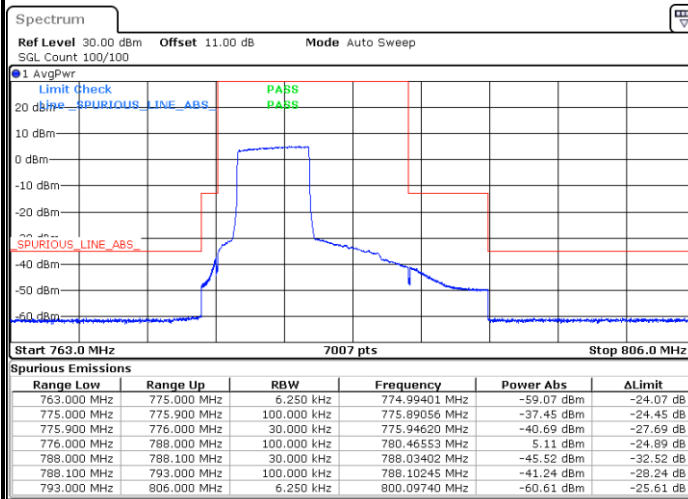
Lowest Band Edge / 1 RB



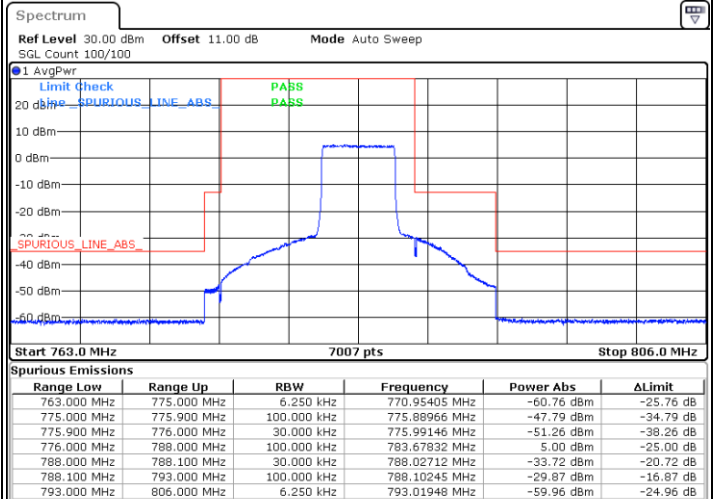
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



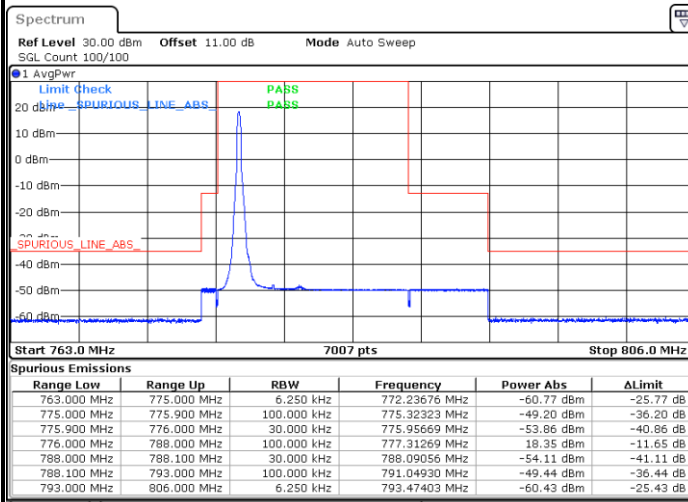
Highest Band Edge / Full RB





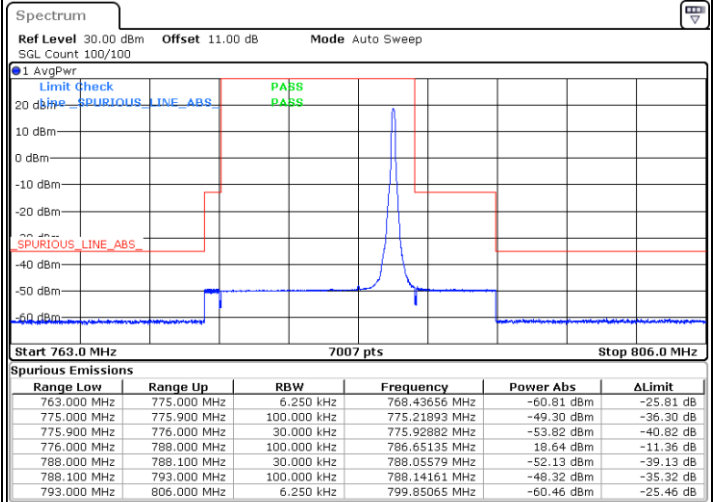
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



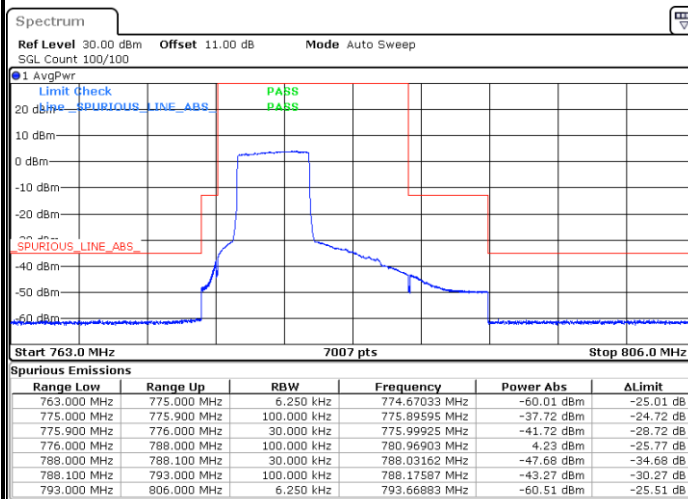
Date: 27.SEP.2020 09:24:24

Highest Band Edge / 1 RB



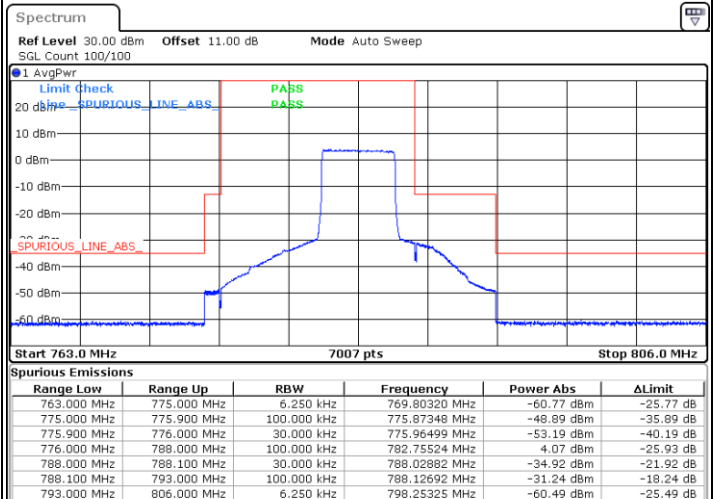
Date: 27.SEP.2020 09:29:18

Lowest Band Edge / Full RB



Date: 27.SEP.2020 09:22:44

Highest Band Edge / Full RB



Date: 27.SEP.2020 09:27:38