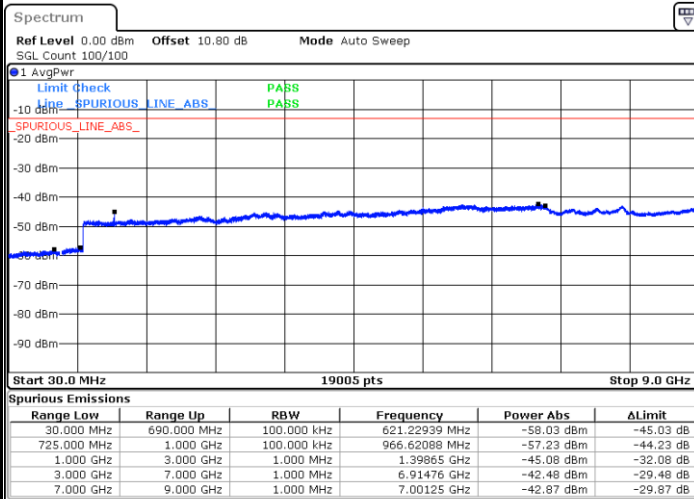
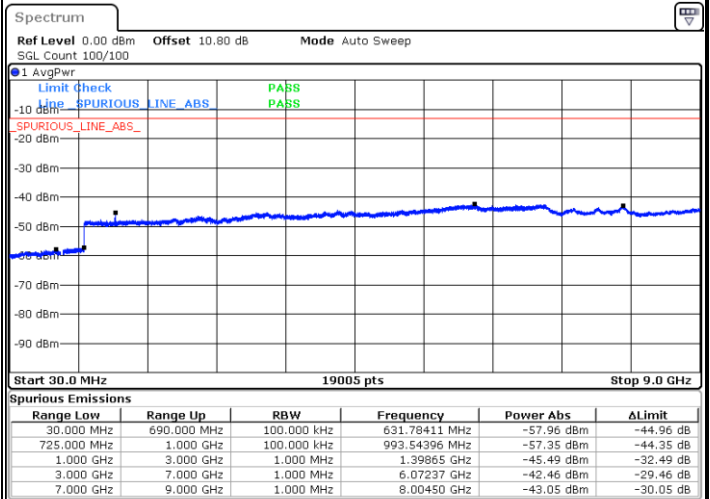
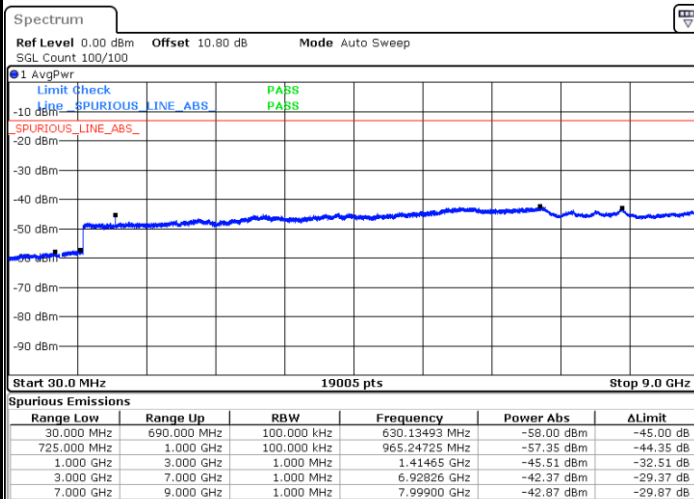
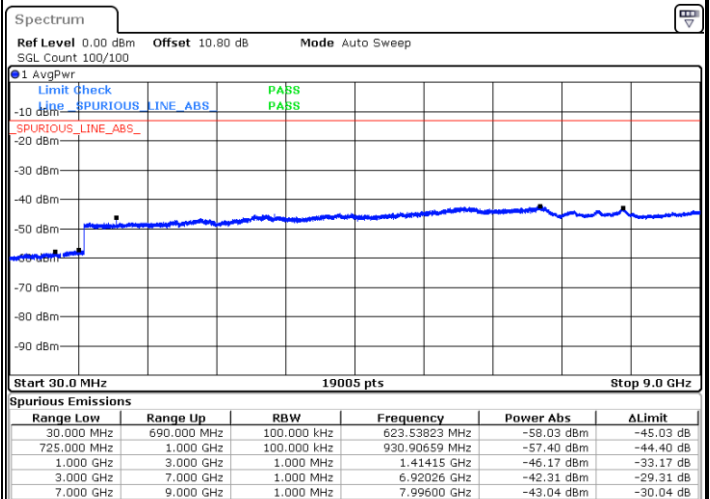
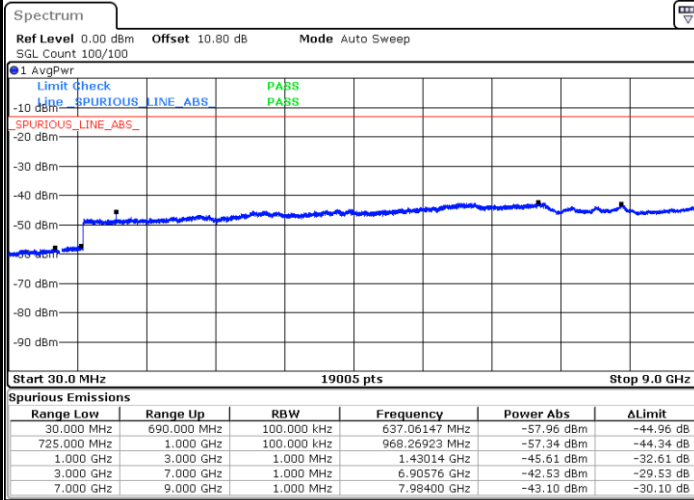


**Conducted Spurious Emission****LTE Band 12 / 1.4MHz****Lowest Channel / QPSK****Lowest Channel / 16QAM****Middle Channel / QPSK****Middle Channel / 16QAM**



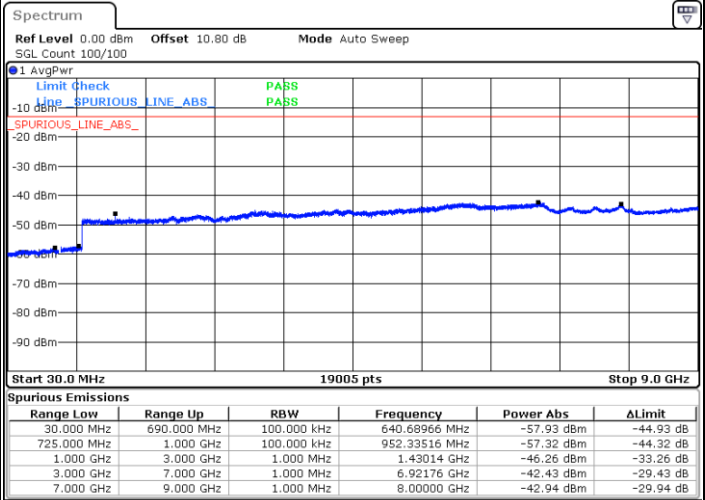
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 6.AUG.2020 23:26:49

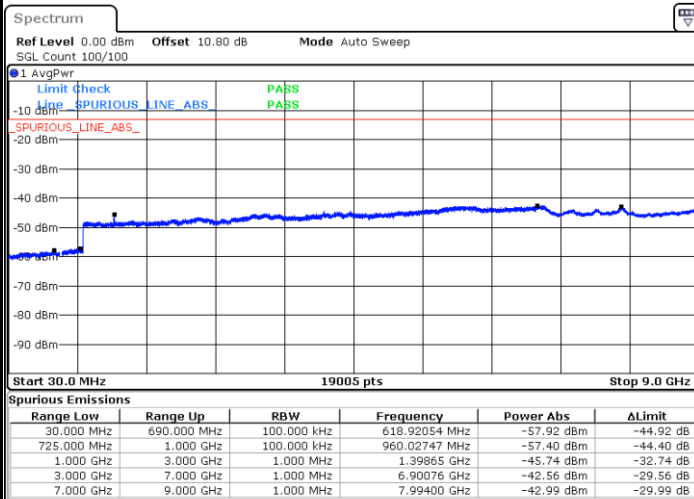
Highest Channel / 16QAM



Date: 6.AUG.2020 23:27:29

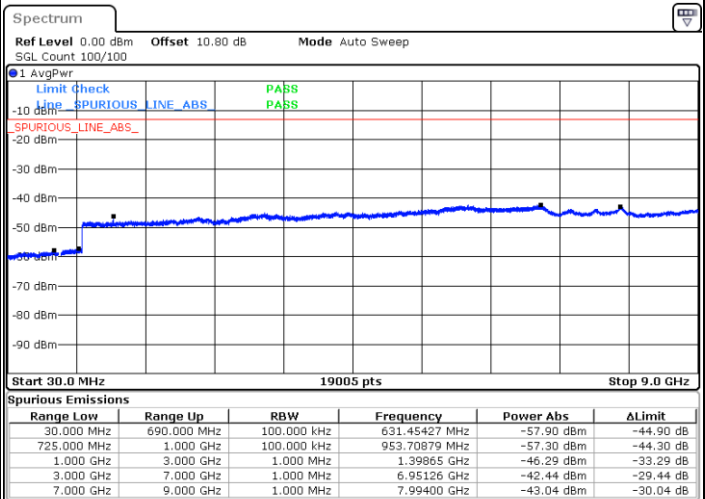
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 6.AUG.2020 23:32:57

Lowest Channel / 16QAM

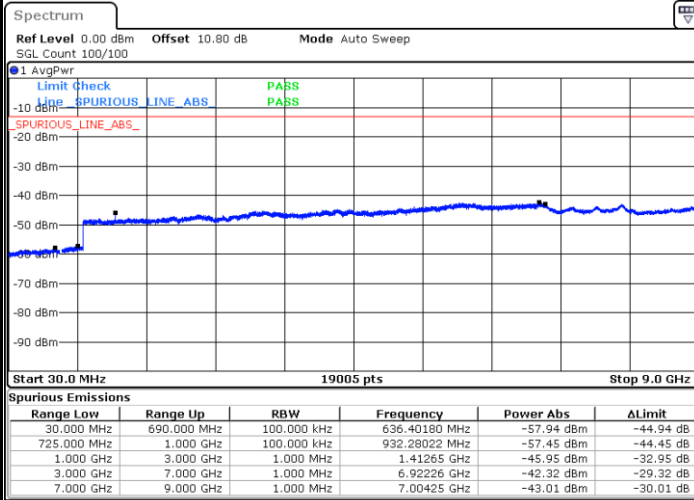


Date: 6.AUG.2020 23:33:37



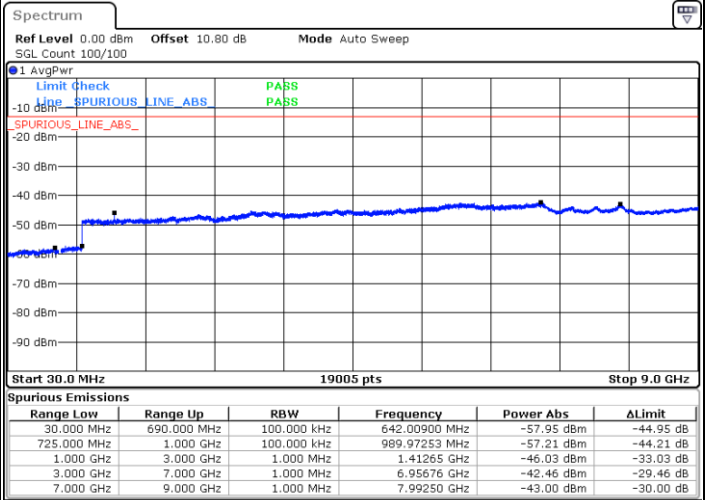
LTE Band 12 / 3MHz

Middle Channel / QPSK



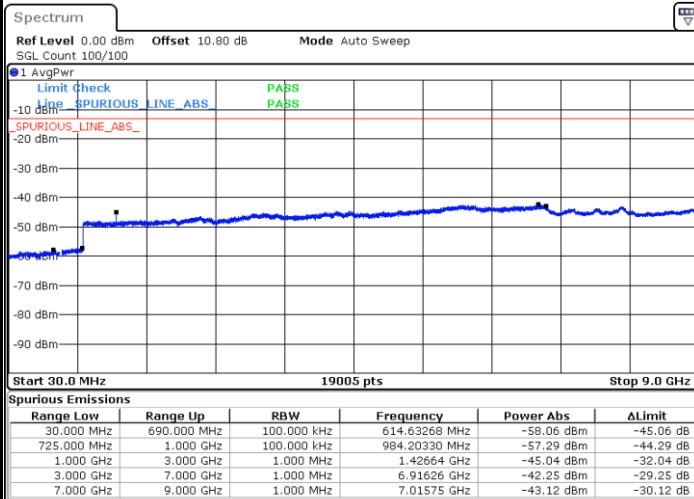
Date: 6.AUG.2020 23:35:41

Middle Channel / 16QAM



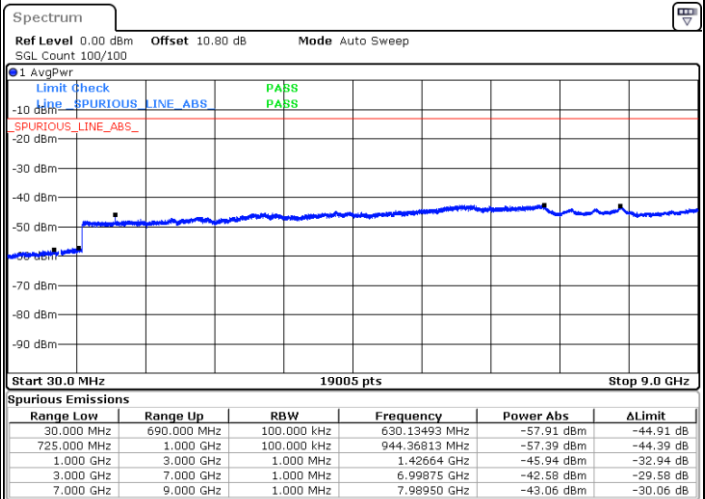
Date: 6.AUG.2020 23:35:02

Highest Channel / QPSK



Date: 6.AUG.2020 23:41:08

Highest Channel / 16QAM

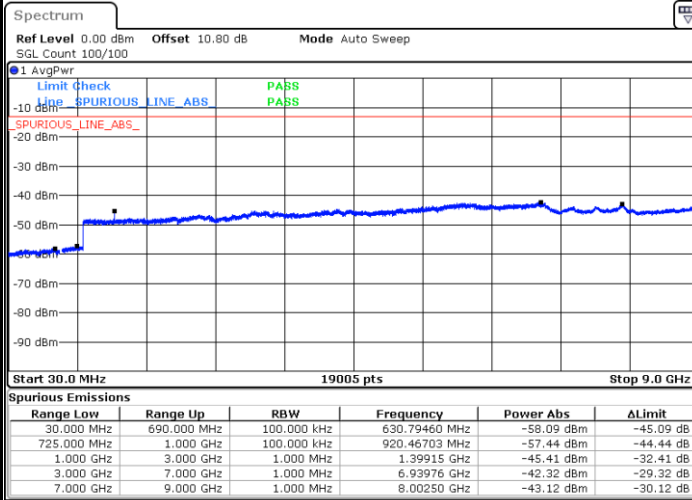


Date: 6.AUG.2020 23:41:49



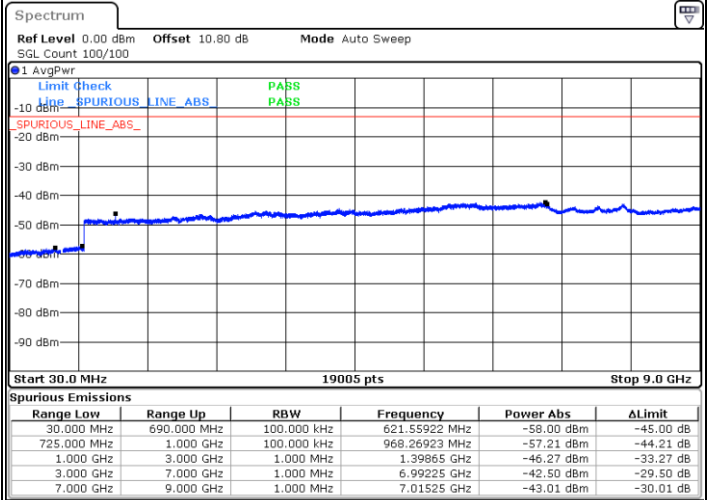
LTE Band 12 / 5MHz

Lowest Channel / QPSK



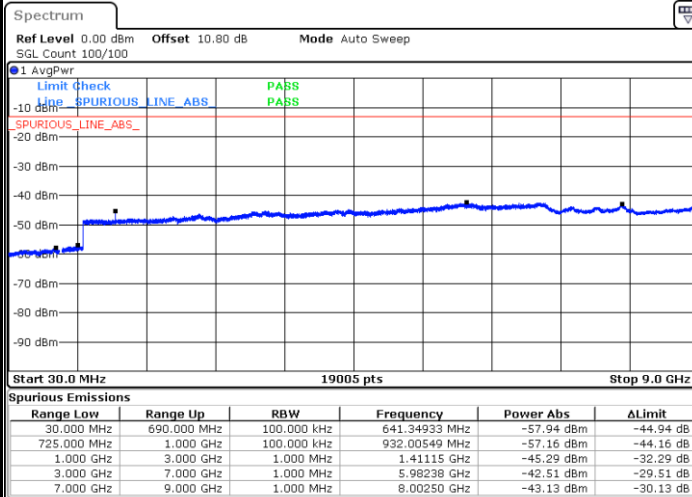
Date: 6.AUG.2020 23:47:16

Lowest Channel / 16QAM



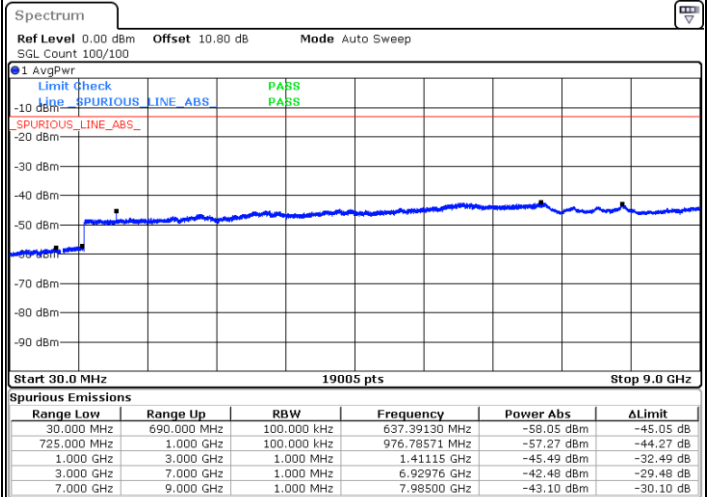
Date: 6.AUG.2020 23:47:56

Middle Channel / QPSK



Date: 6.AUG.2020 23:50:01

Middle Channel / 16QAM

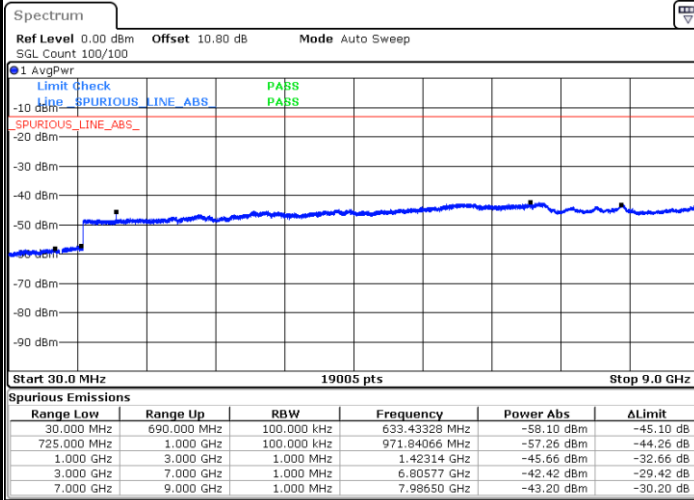


Date: 6.AUG.2020 23:49:21



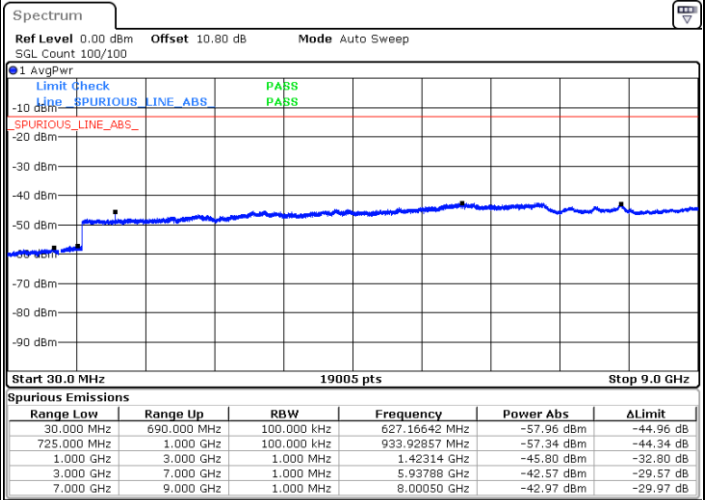
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 6.AUG.2020 23:56:08

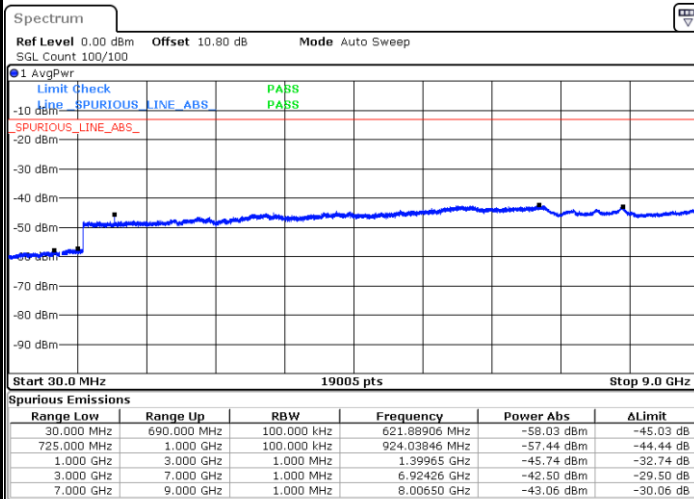
Highest Channel / 16QAM



Date: 6.AUG.2020 23:55:28

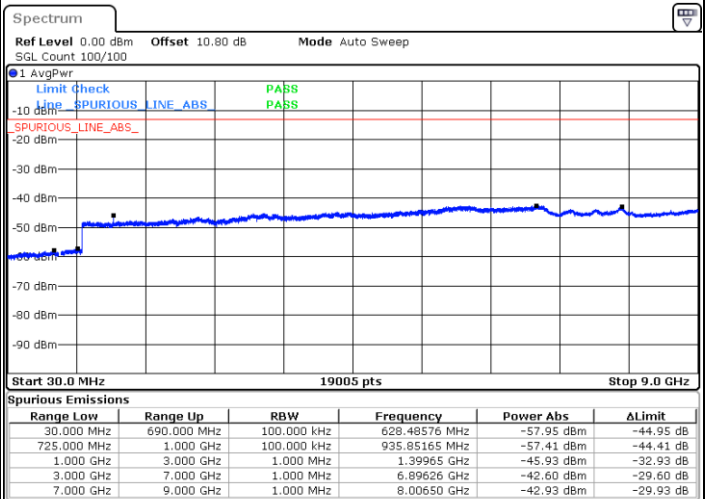
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 7.AUG.2020 00:01:35

Lowest Channel / 16QAM

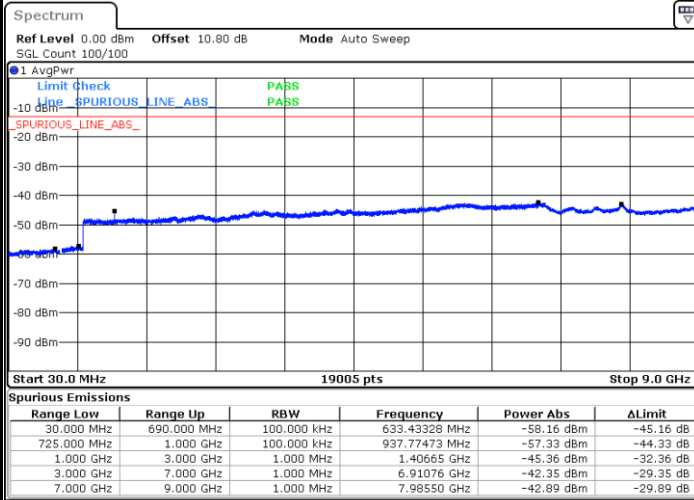


Date: 7.AUG.2020 00:02:16



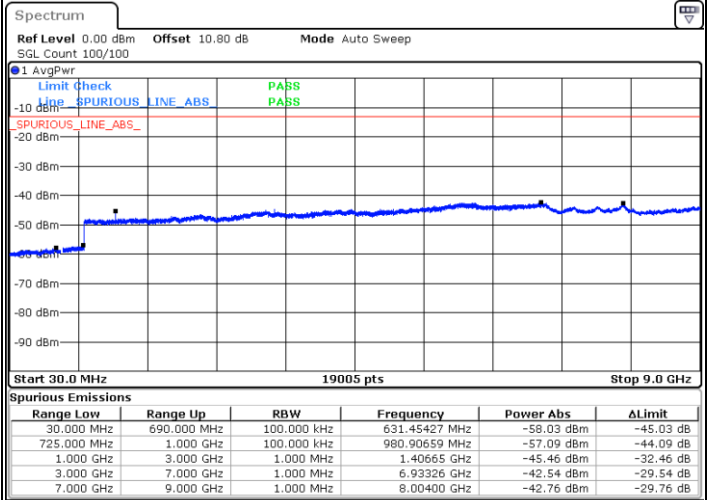
LTE Band 12 / 10MHz

Middle Channel / QPSK



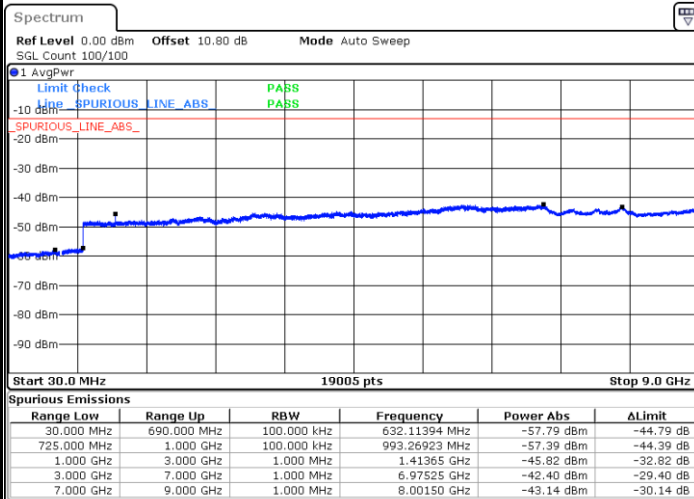
Date: 7.AUG.2020 00:04:20

Middle Channel / 16QAM



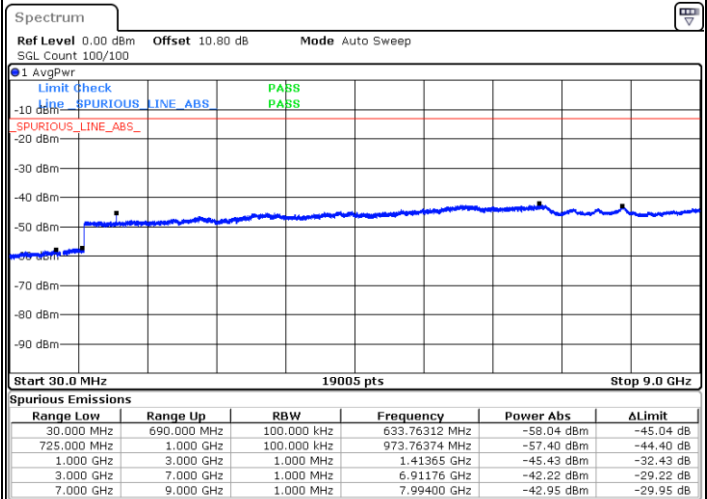
Date: 7.AUG.2020 00:03:41

Highest Channel / QPSK



Date: 7.AUG.2020 00:09:47

Highest Channel / 16QAM

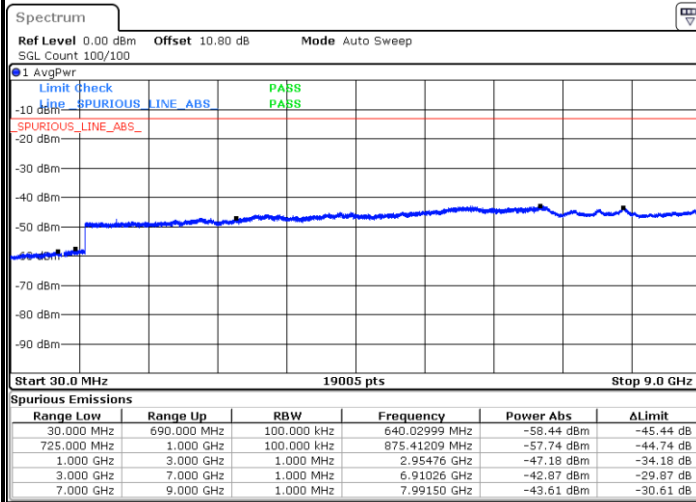


Date: 7.AUG.2020 00:10:27



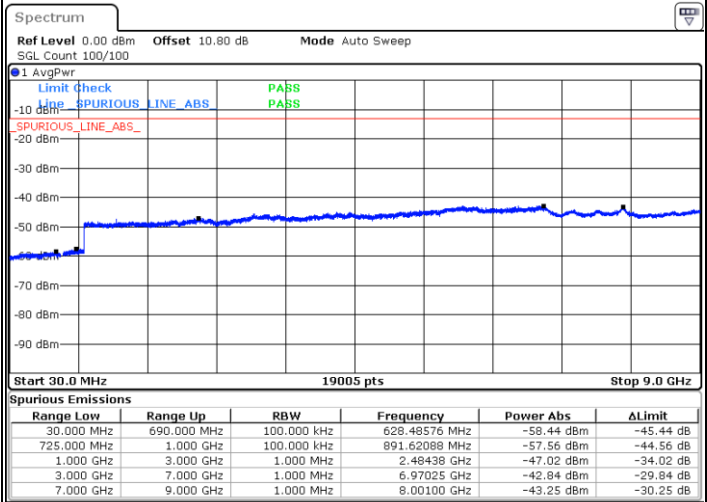
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



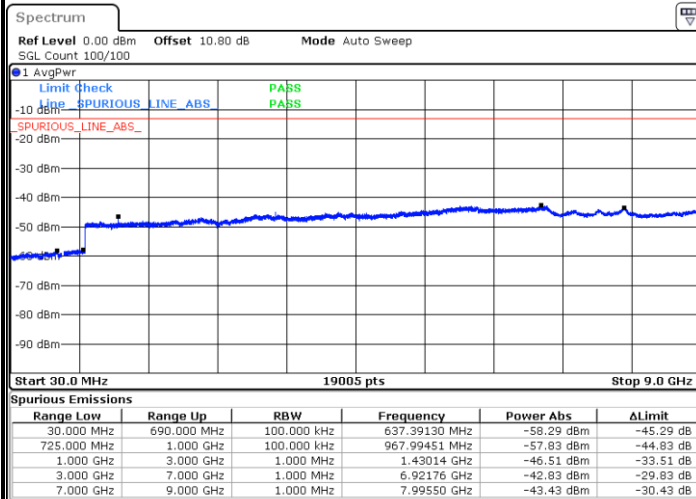
Date: 3.SEP.2020 22:01:51

Middle Channel / 64QAM



Date: 3.SEP.2020 22:02:59

Highest Channel / 64QAM

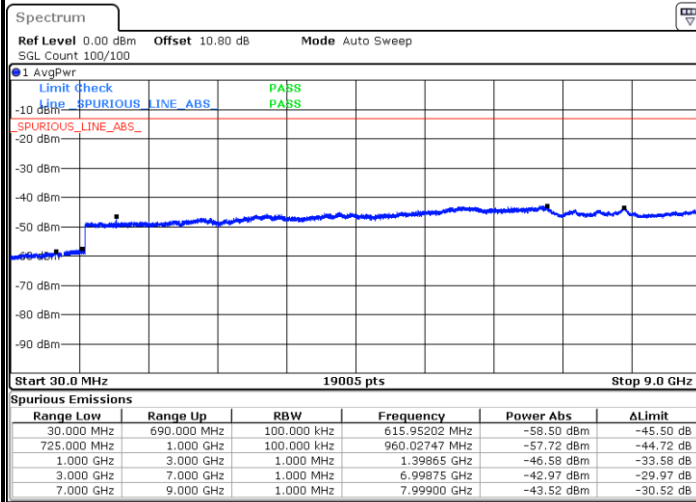


Date: 3.SEP.2020 22:05:12



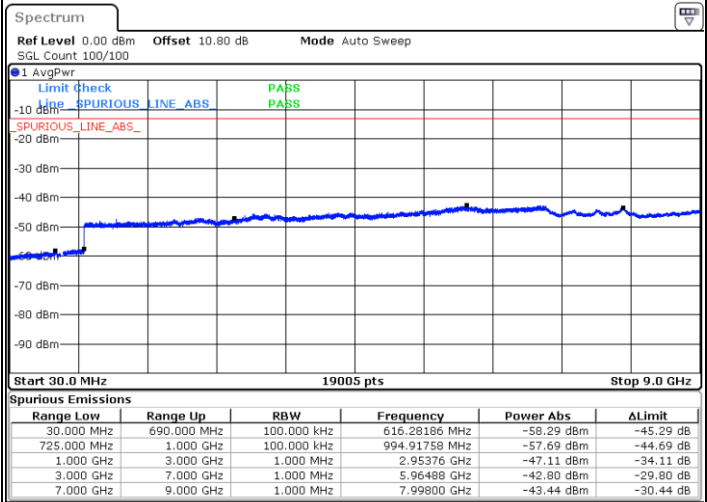
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



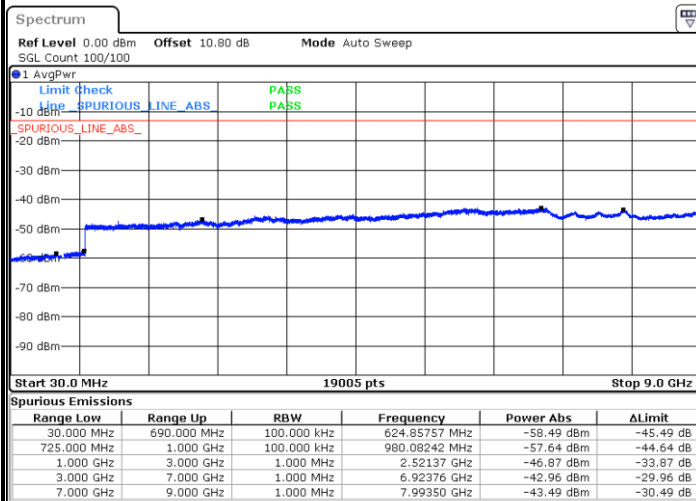
Date: 3.SEP.2020 21:32:06

Middle Channel / 64QAM



Date: 3.SEP.2020 21:33:13

Highest Channel / 64QAM

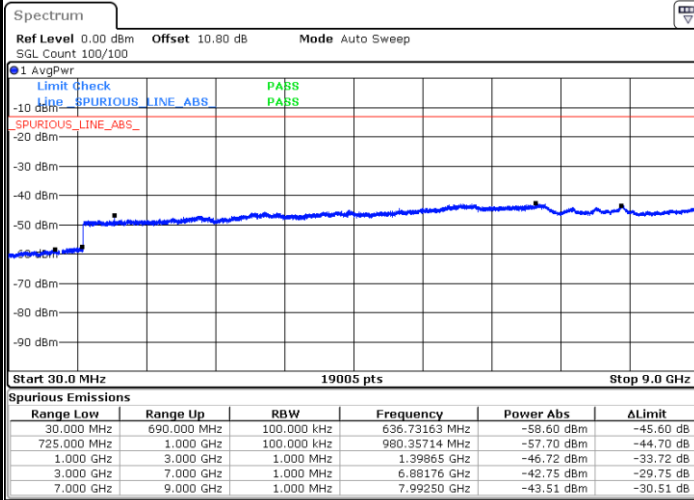


Date: 3.SEP.2020 21:35:26



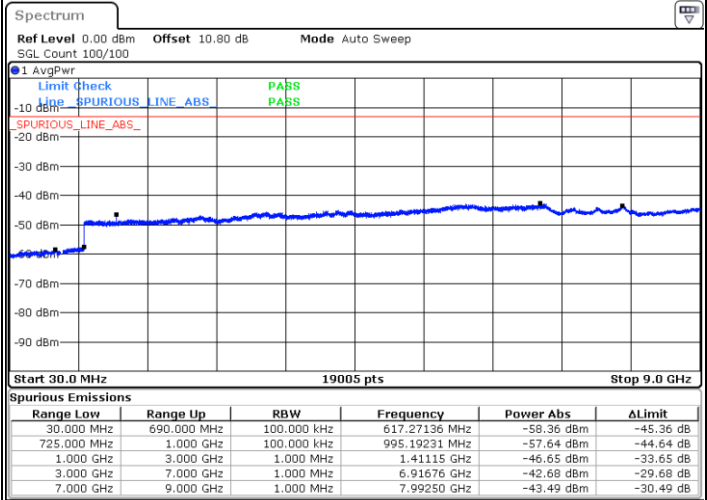
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



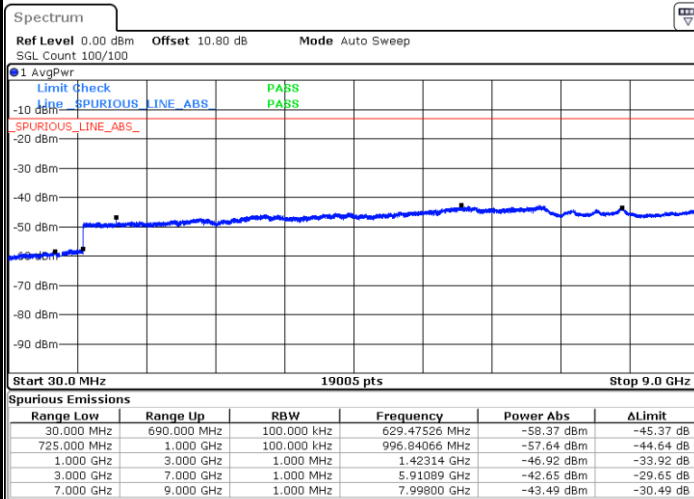
Date: 3.SEP.2020 21:37:41

Middle Channel / 64QAM



Date: 3.SEP.2020 21:38:48

Highest Channel / 64QAM

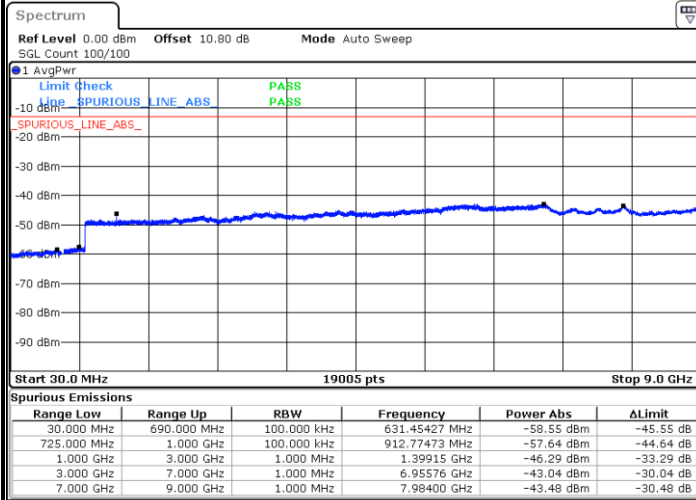


Date: 3.SEP.2020 21:41:01



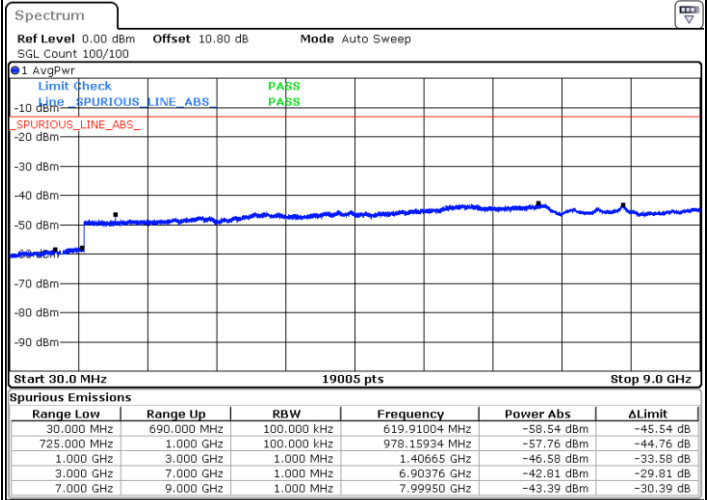
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



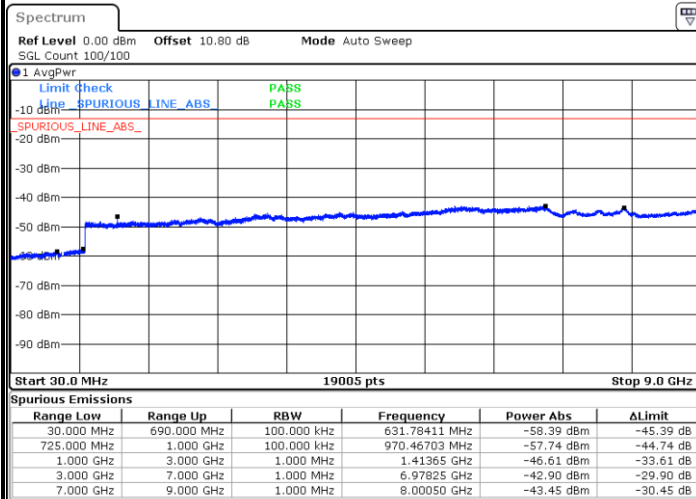
Date: 3.SEP.2020 21:43:17

Middle Channel / 64QAM



Date: 3.SEP.2020 21:44:24

Highest Channel / 64QAM



Date: 3.SEP.2020 21:46:38

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	0.0144	PASS
40	Normal Voltage	0.0098	
30	Normal Voltage	0.0106	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0078	
0	Normal Voltage	0.0252	
-10	Normal Voltage	0.0147	
-20	Normal Voltage	0.0230	
-30	Normal Voltage	0.0196	
20	Maximum Voltage	0.0204	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0049	

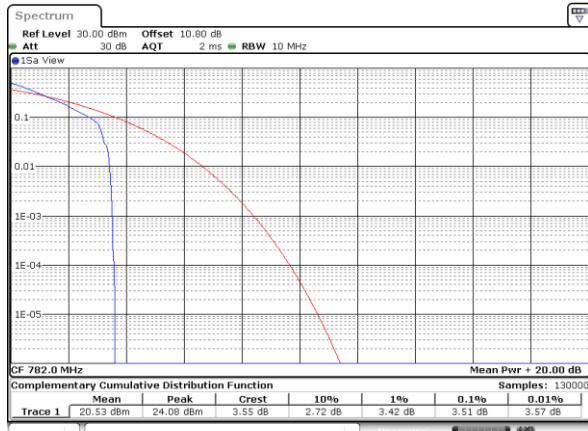
Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

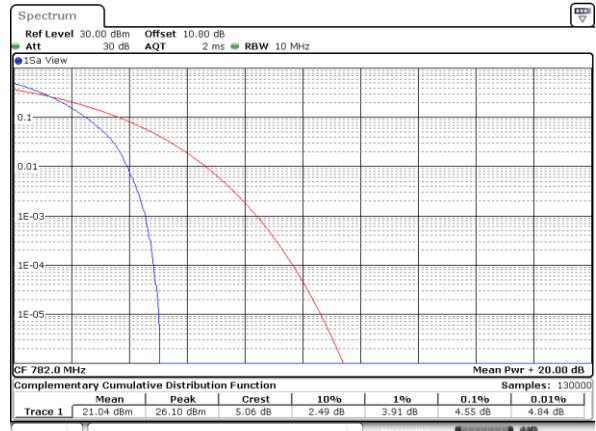
LTE Band 13

Peak-to-Average Ratio

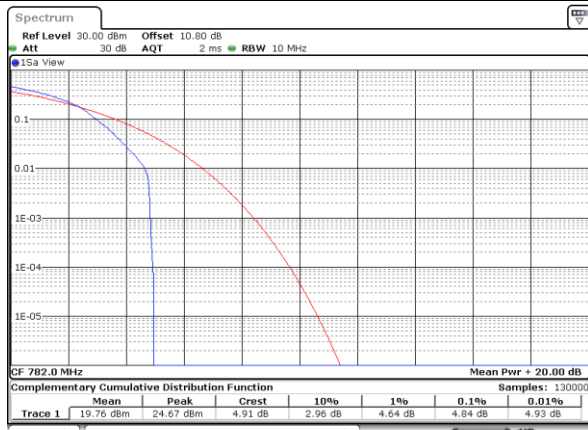
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.51	4.55	4.84	5.77	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.09	6.49	-	-	
Highest CH	-	-	-	-	

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


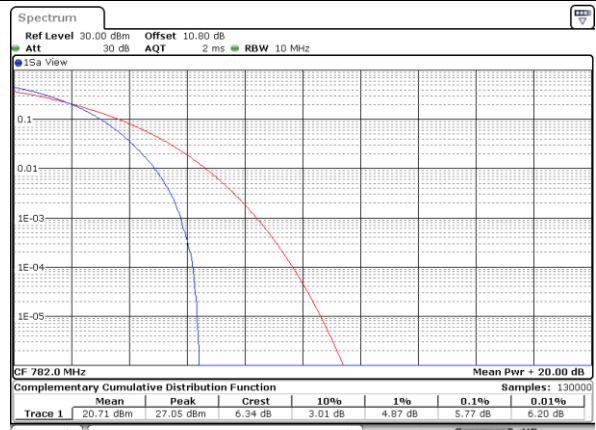
Date: 7.AUG.2020 01:09:35

Middle Channel / Full RB


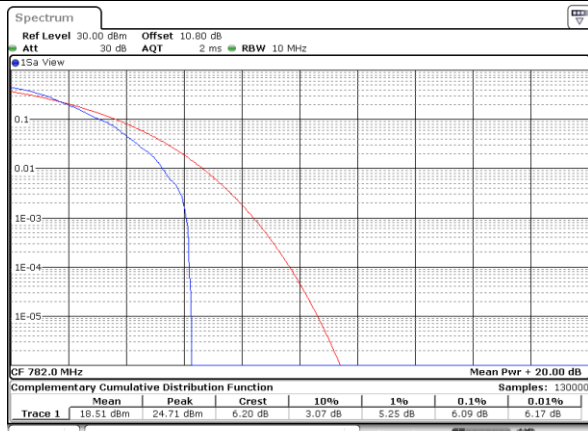
Date: 7.AUG.2020 01:09:44

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


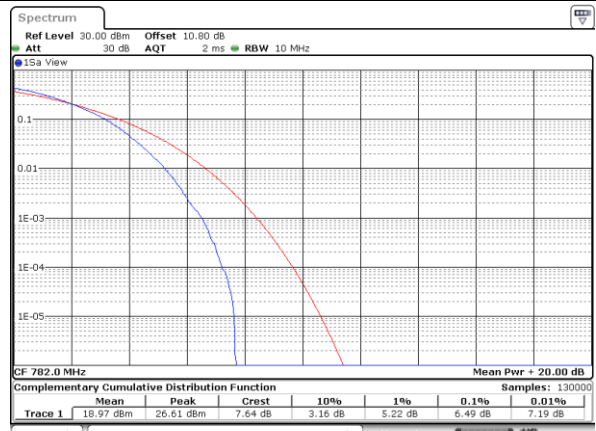
Date: 7.AUG.2020 01:09:16

Middle Channel / Full RB


Date: 7.AUG.2020 01:09:25

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


Date: 3.SEP.2020 22:49:49

Middle Channel / Full RB


Date: 3.SEP.2020 22:51:20

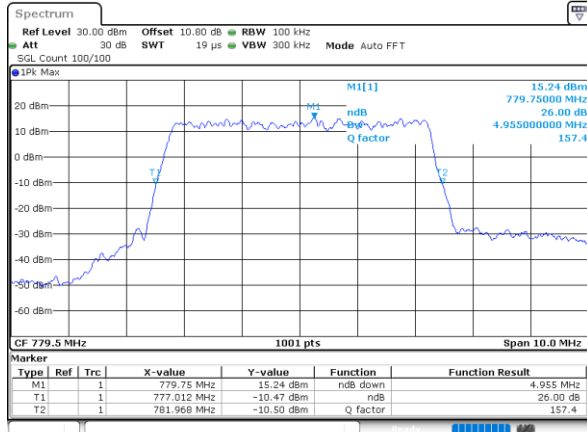
**26dB Bandwidth**

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	-	-	-	-	4.96	4.91	-	-	-	-	-	-
Middle CH	-	-	-	-	4.96	4.87	9.69	9.59	-	-	-	-
Highest CH	-	-	-	-	4.90	4.89	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.89	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.88	-	9.63	-	-	-	-	-
Highest CH	-	-	-	-	4.89	-	-	-	-	-	-	-

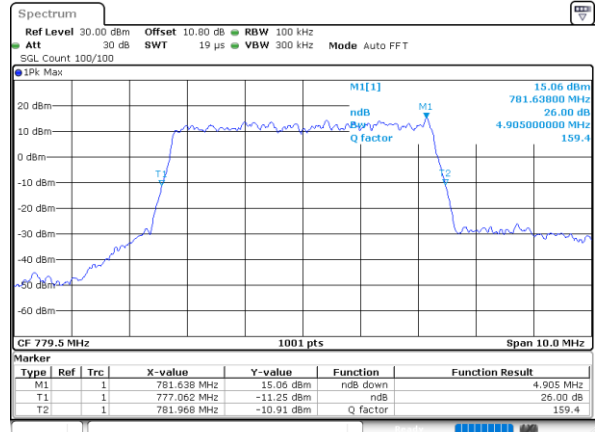


LTE Band 13

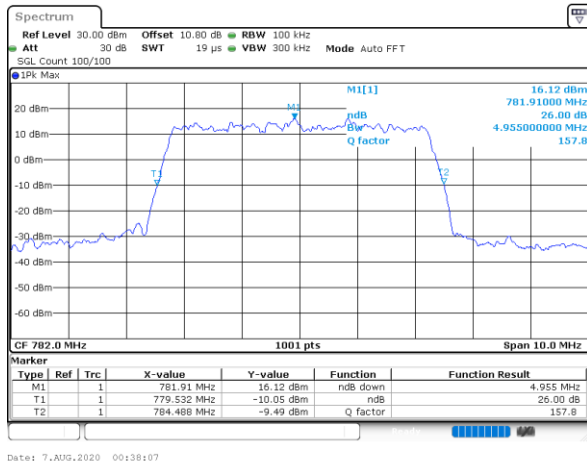
Lowest Channel / 5MHz / QPSK



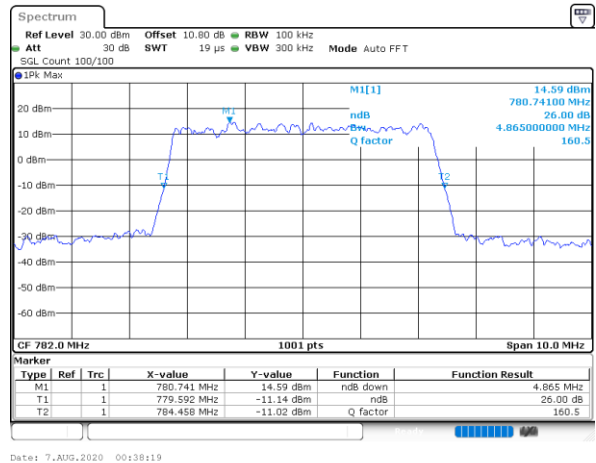
Lowest Channel / 5MHz / 16QAM



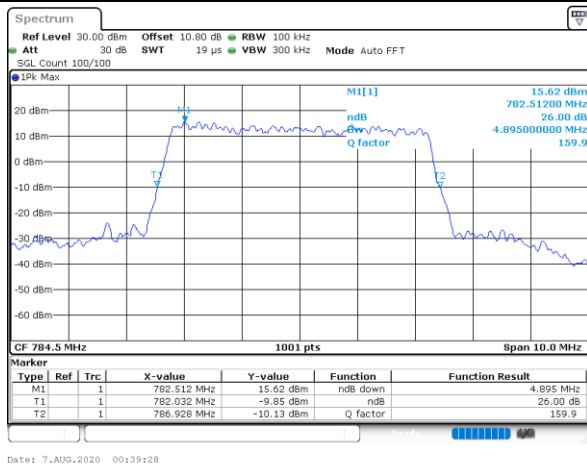
Middle Channel / 5MHz / QPSK



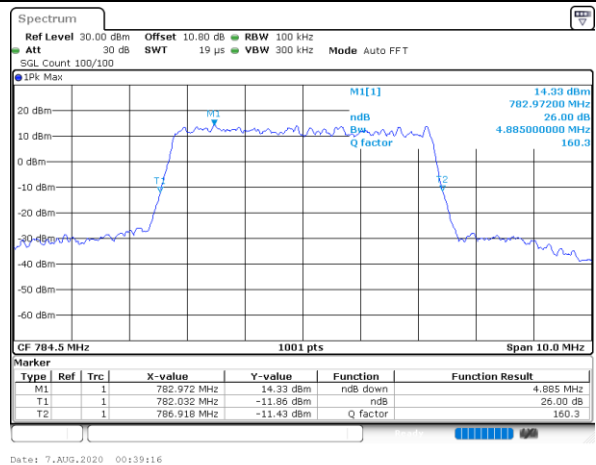
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



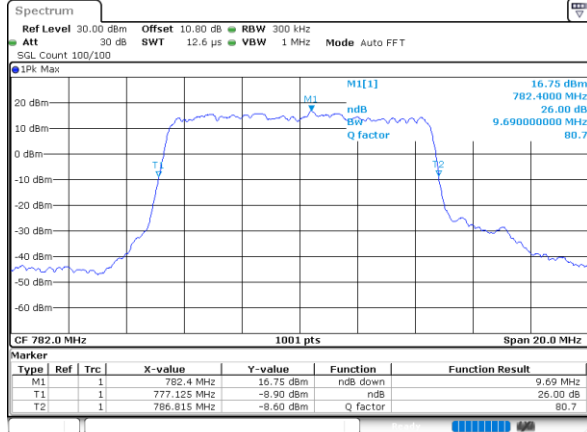
Highest Channel / 5MHz / 16QAM





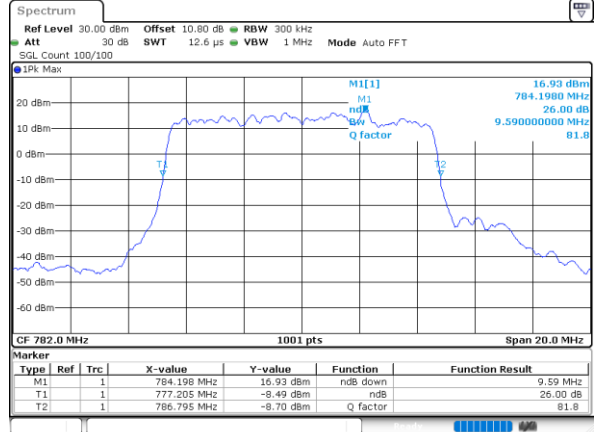
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 7.AUG.2020 00:48:23

Middle Channel / 10MHz / 16QAM

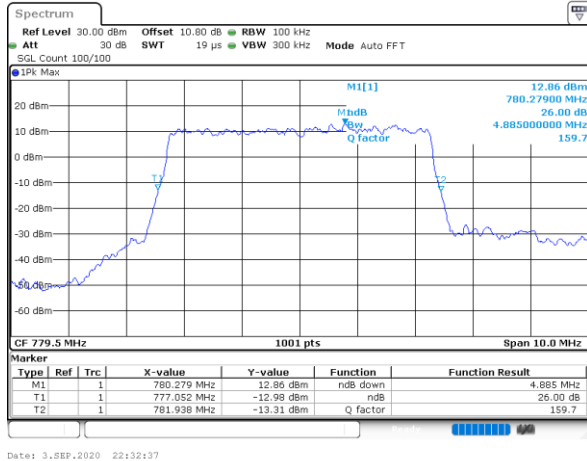


Date: 7.AUG.2020 00:48:12

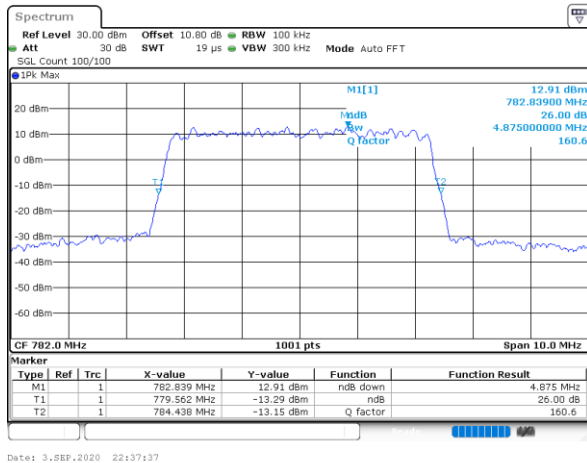


LTE Band 13

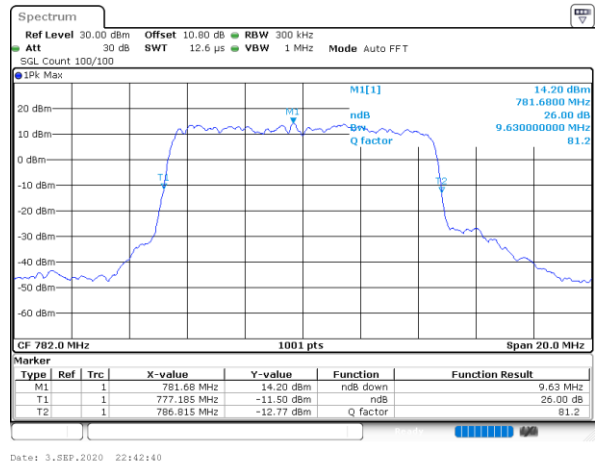
Lowest Channel / 5MHz / 64QAM



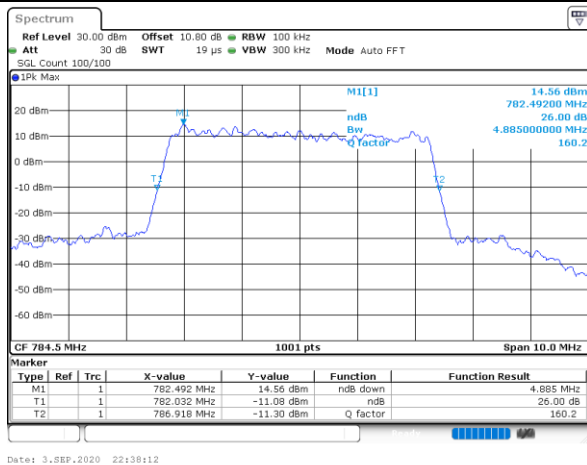
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



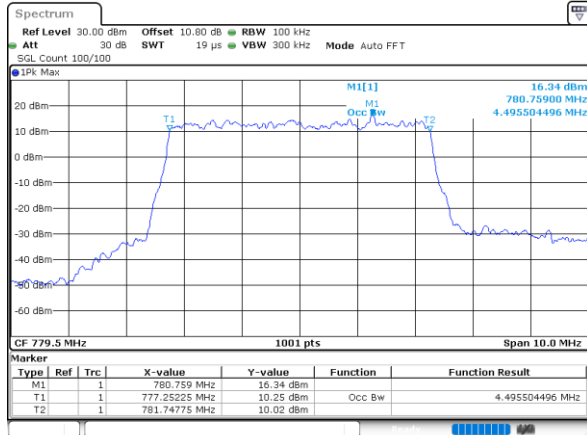
**Occupied Bandwidth**

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	-	-	-	-	4.50	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.51	8.99	8.95	-	-	-	-
Highest CH	-	-	-	-	4.50	4.49	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.49	-	-	-	-	-	-	-



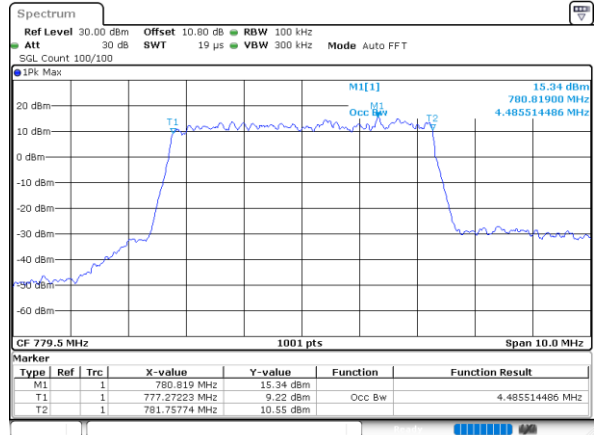
LTE Band 13

Lowest Channel / 5MHz / QPSK



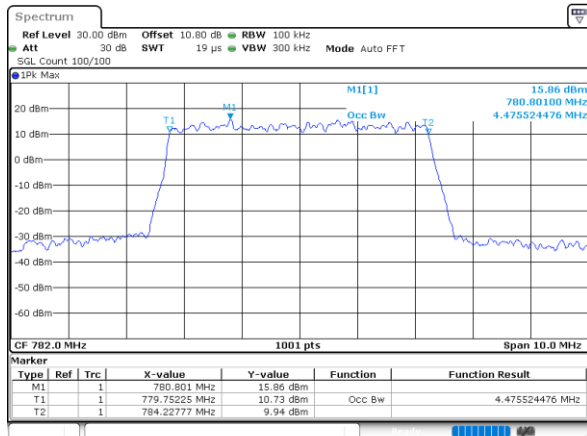
Date: 7,AUG,2020 00:27:42

Lowest Channel / 5MHz / 16QAM



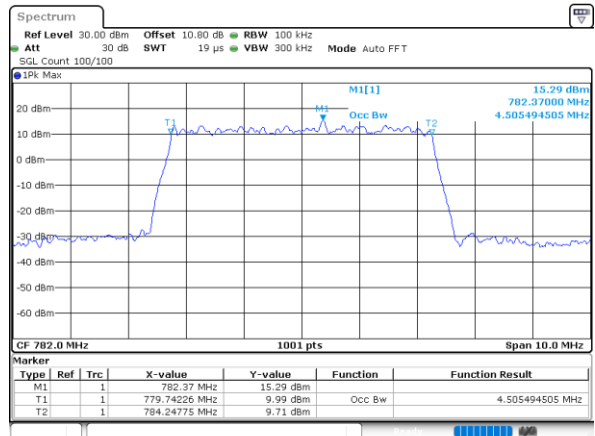
Date: 7,AUG,2020 00:27:54

Middle Channel / 5MHz / QPSK



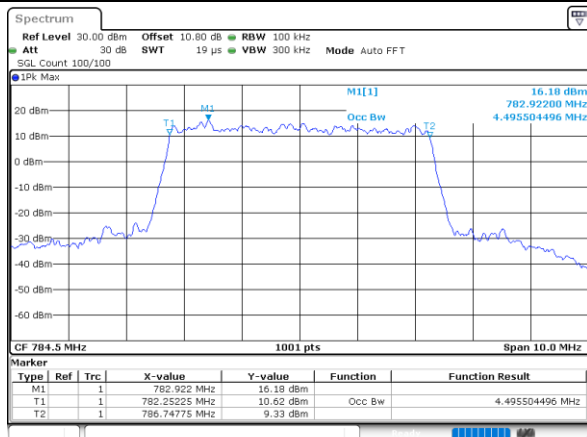
Date: 7,AUG,2020 00:38:41

Middle Channel / 5MHz / 16QAM



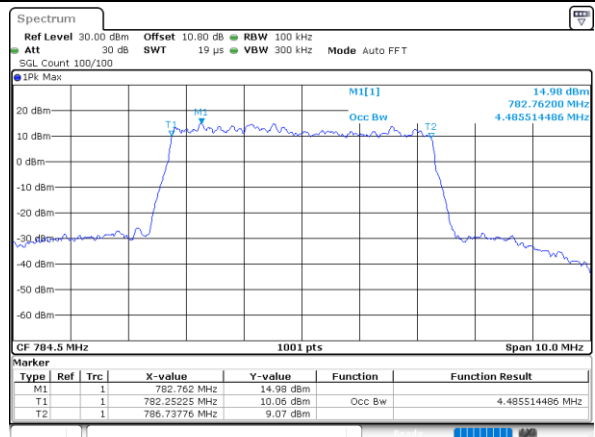
Date: 7,AUG,2020 00:38:50

Highest Channel / 5MHz / QPSK



Date: 7,AUG,2020 00:38:53

Highest Channel / 5MHz / 16QAM

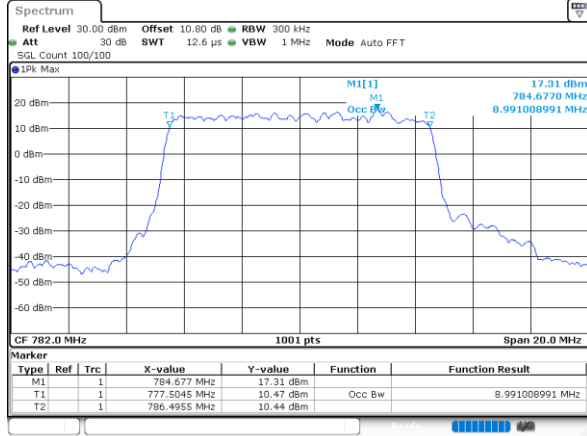


Date: 7,AUG,2020 00:39:04



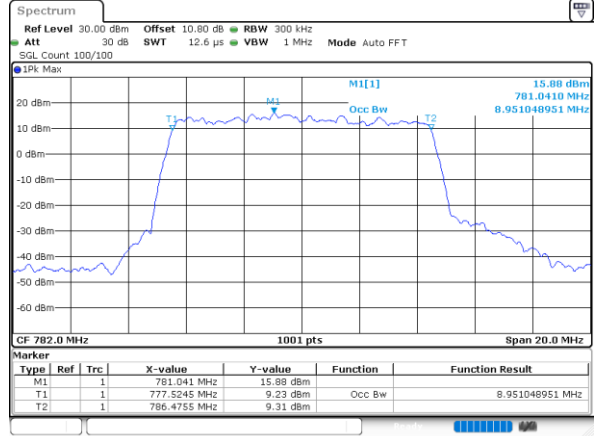
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 7.AUG.2020 00:47:50

Middle Channel / 10MHz / 16QAM

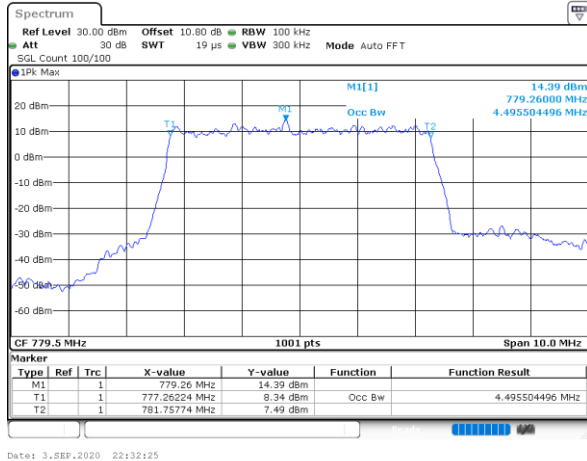


Date: 7.AUG.2020 00:48:01

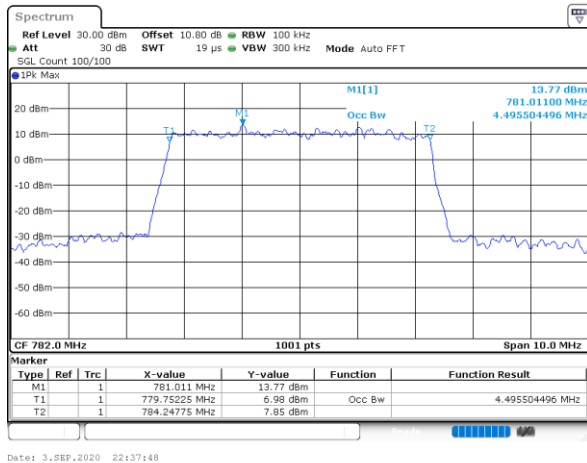


LTE Band 13

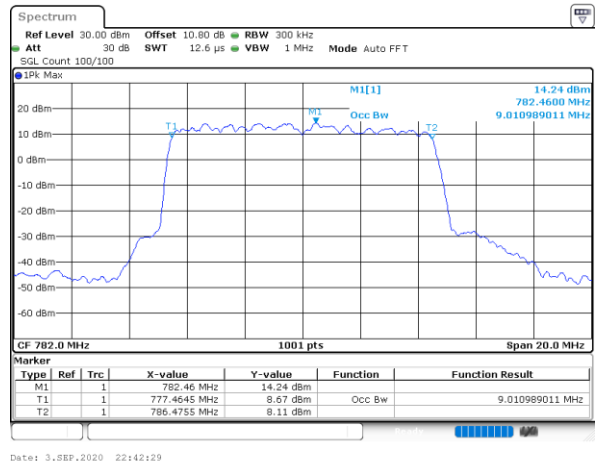
Lowest Channel / 5MHz / 64QAM



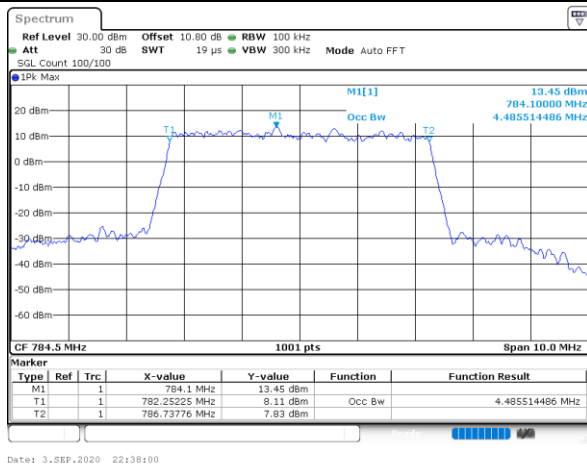
Middle Channel / 5MHz / 64QAM

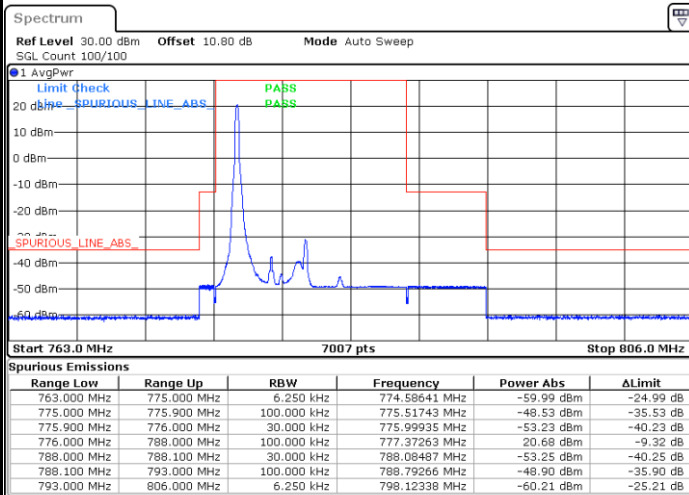
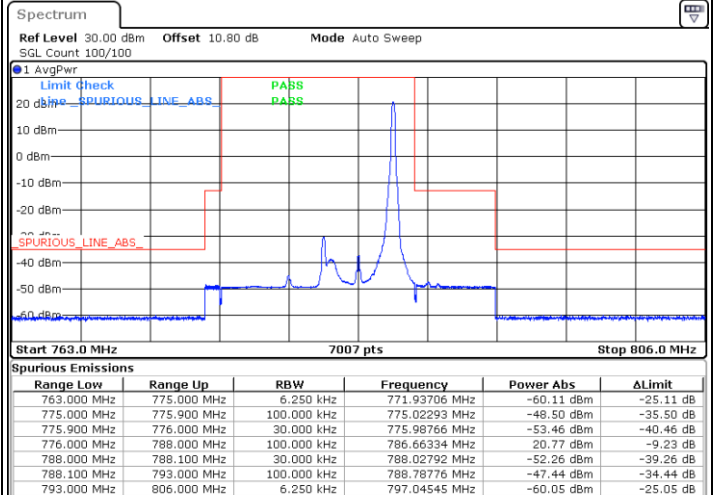
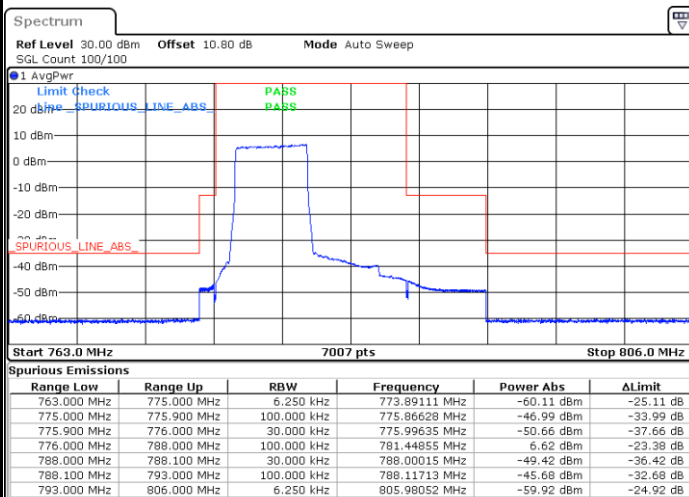
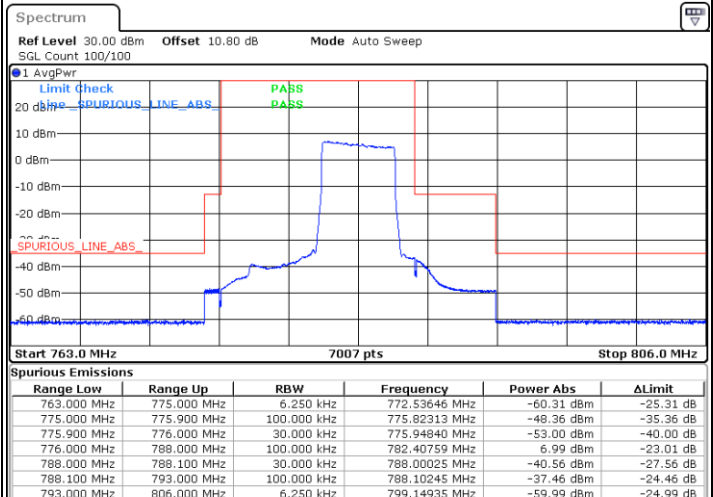


Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

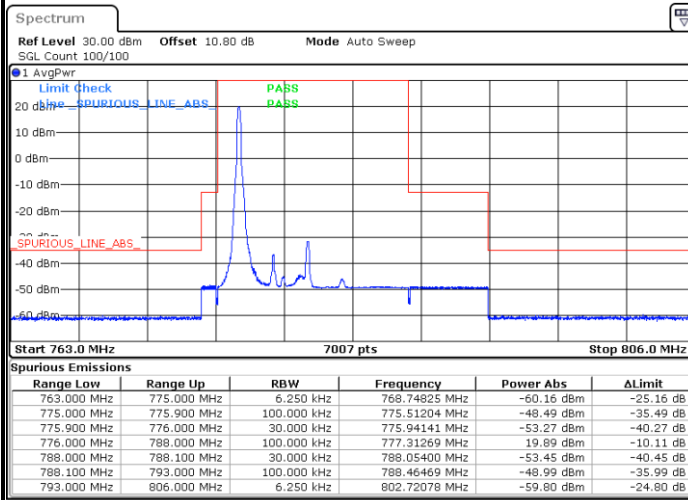


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

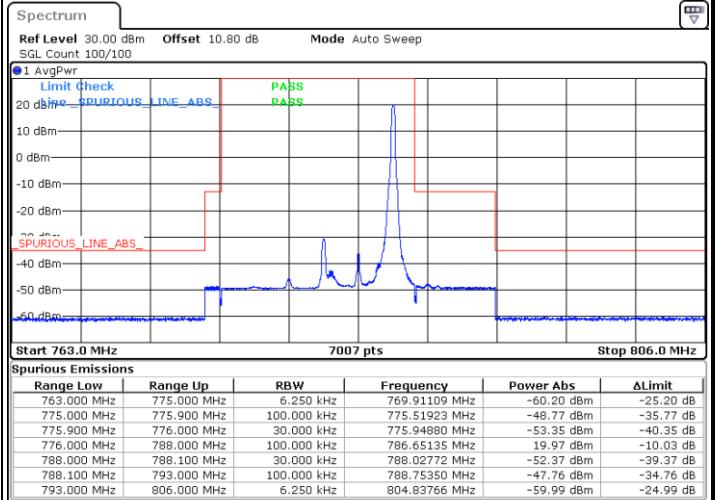


LTE Band 13 / 5MHz / 16QAM

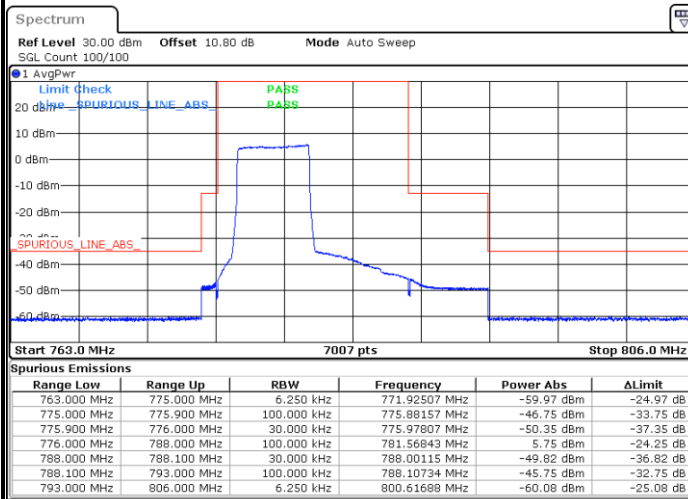
Lowest Band Edge / 1 RB



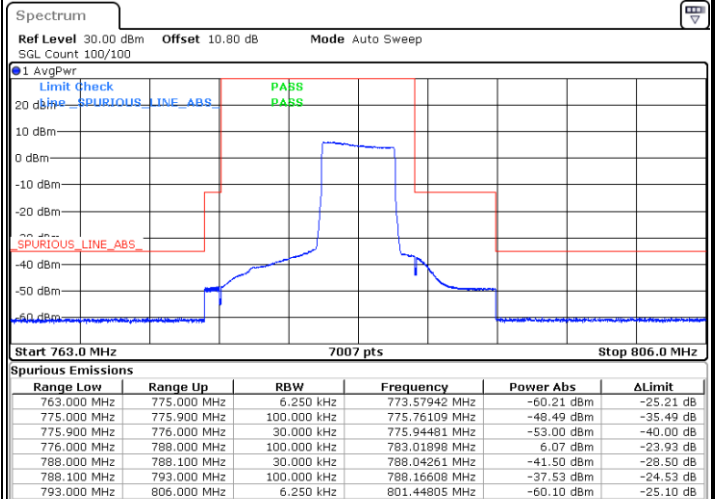
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



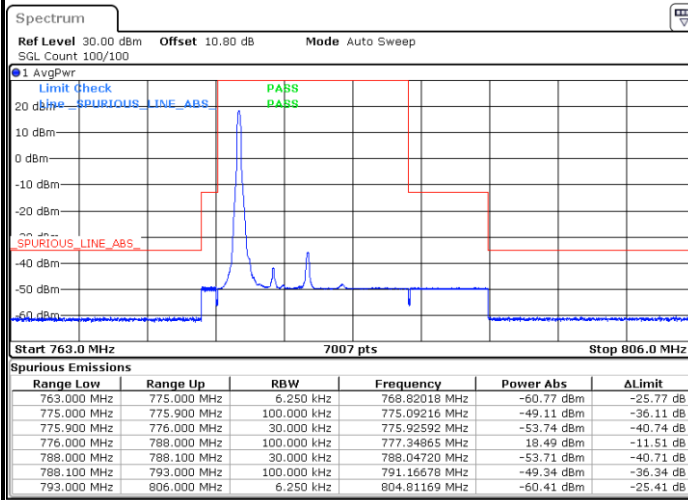
Highest Band Edge / Full RB



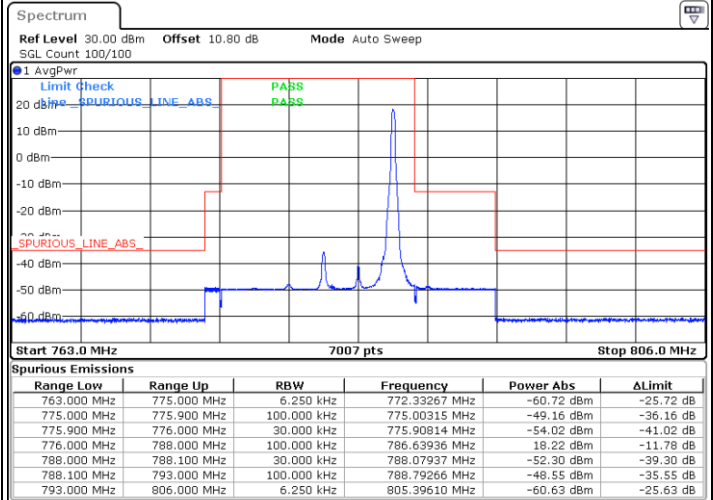


LTE Band 13 / 5MHz / 64QAM

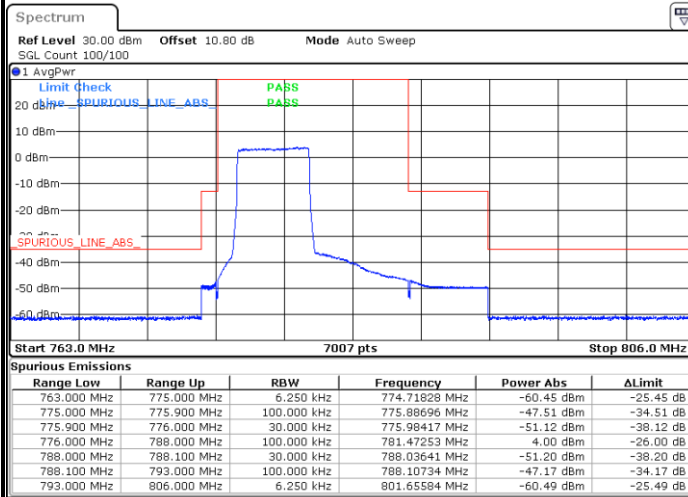
Lowest Band Edge / 1 RB



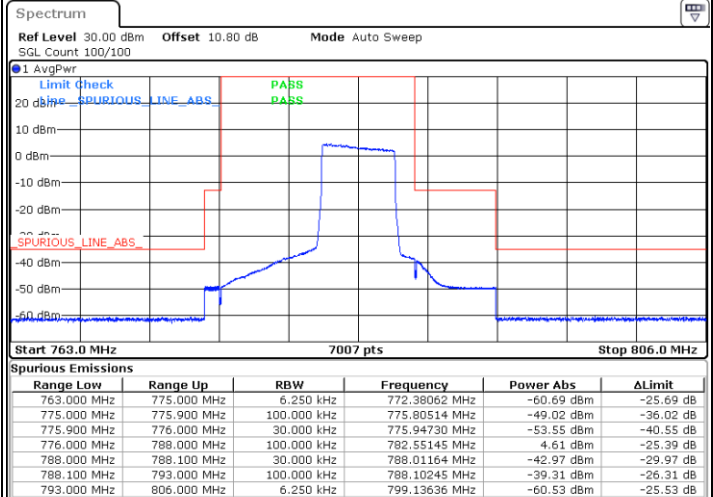
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



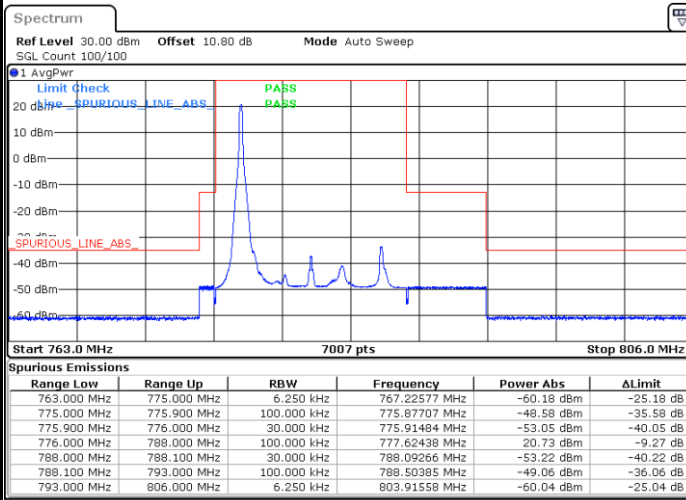
Highest Band Edge / Full RB



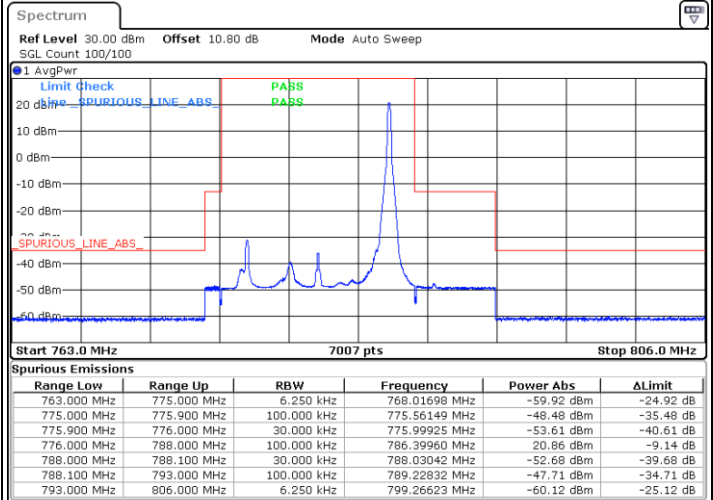


LTE Band 13 / 10MHz / QPSK

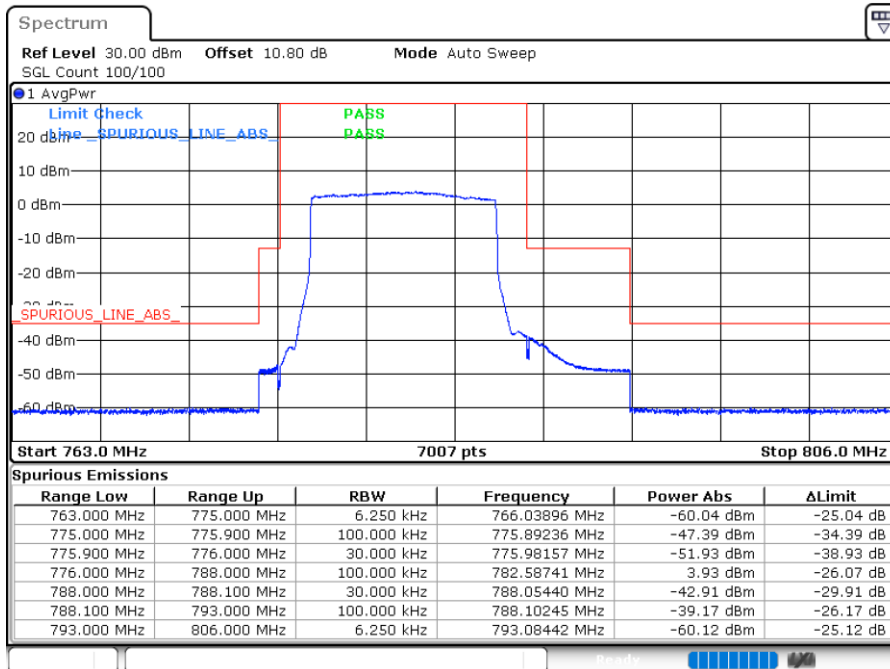
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



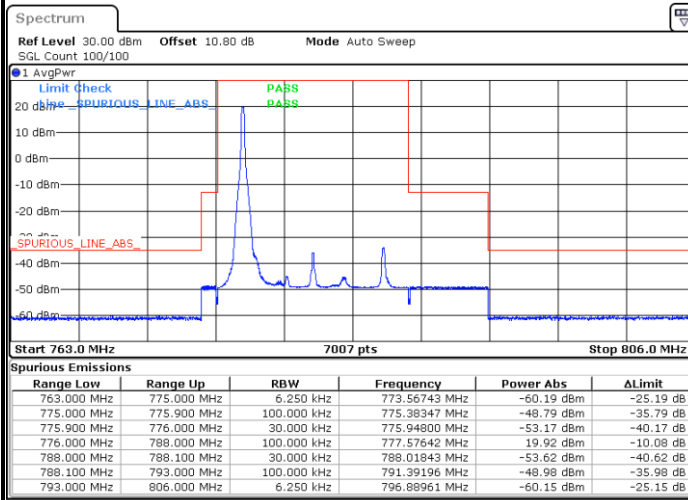
Band Edge / Full RB



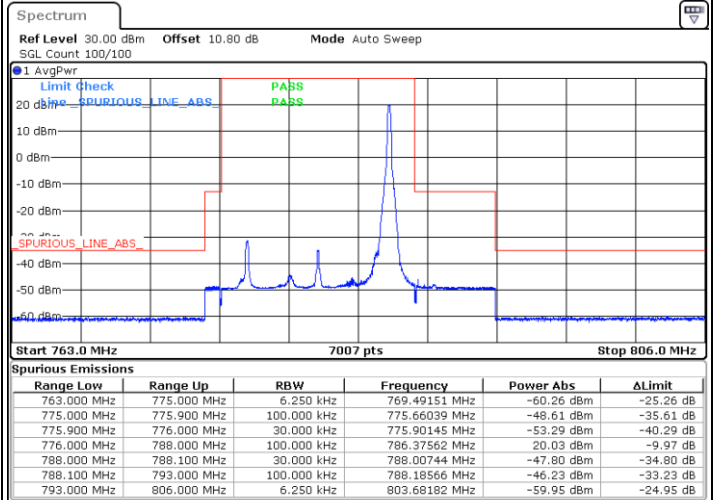


LTE Band 13 / 10MHz / 16QAM

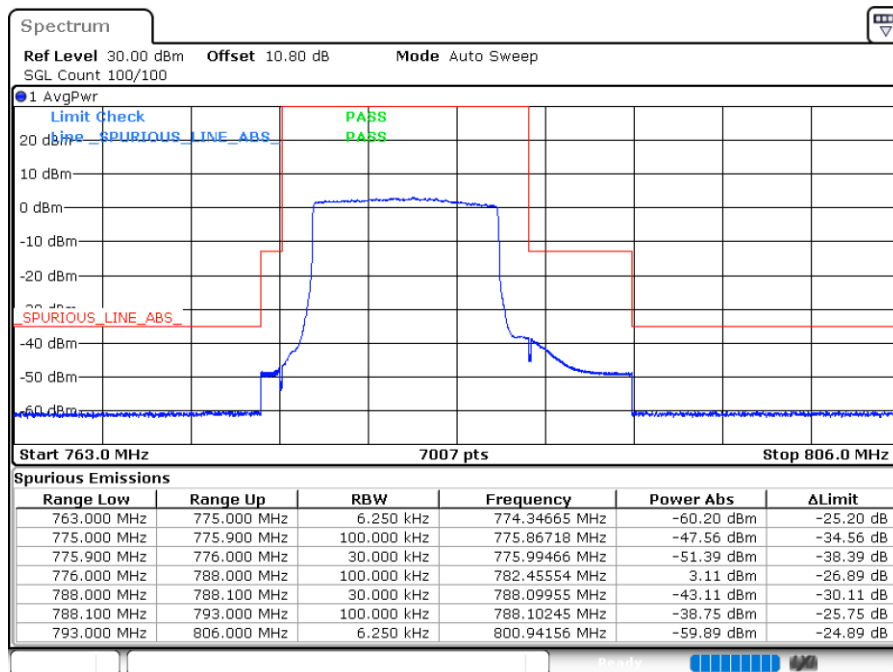
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



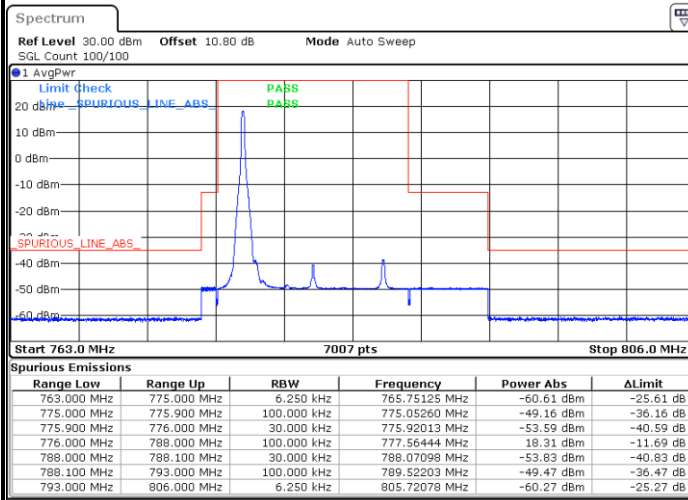
Band Edge / Full RB





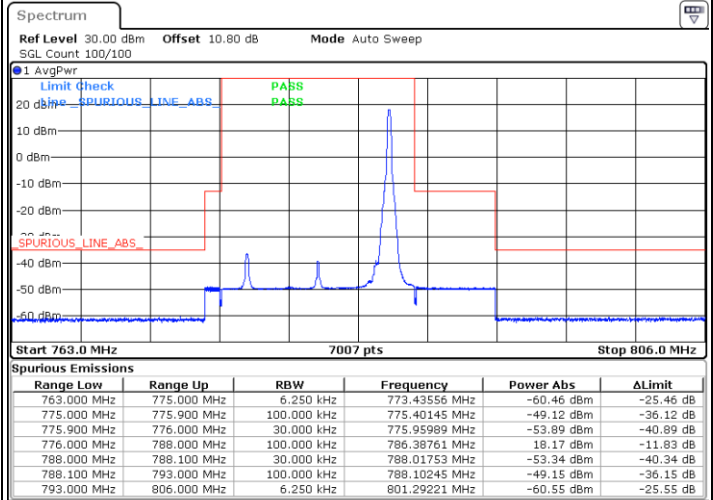
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



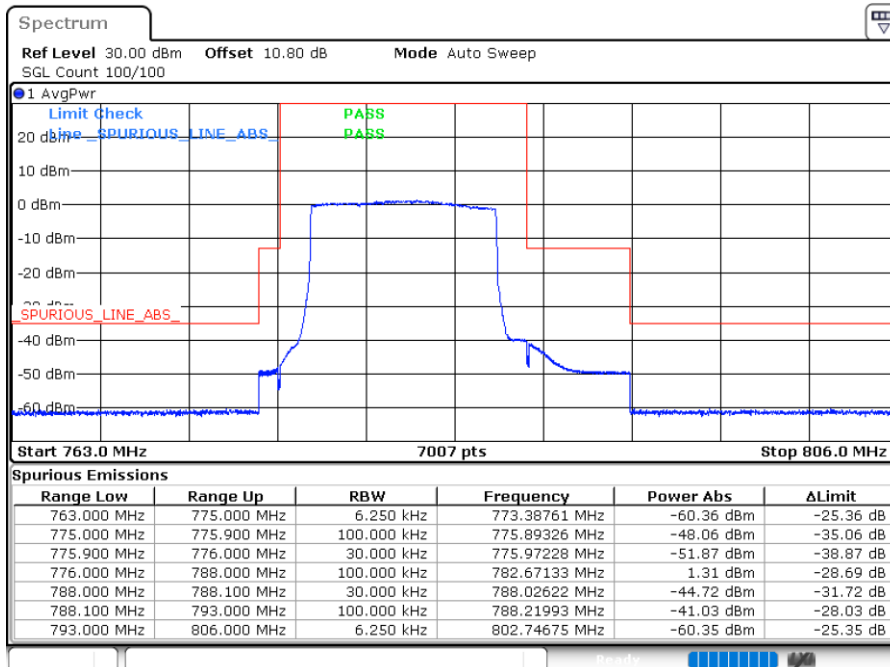
Date: 3.SEP.2020 22:45:58

Highest Band Edge / 1 RB



Date: 3.SEP.2020 22:47:37

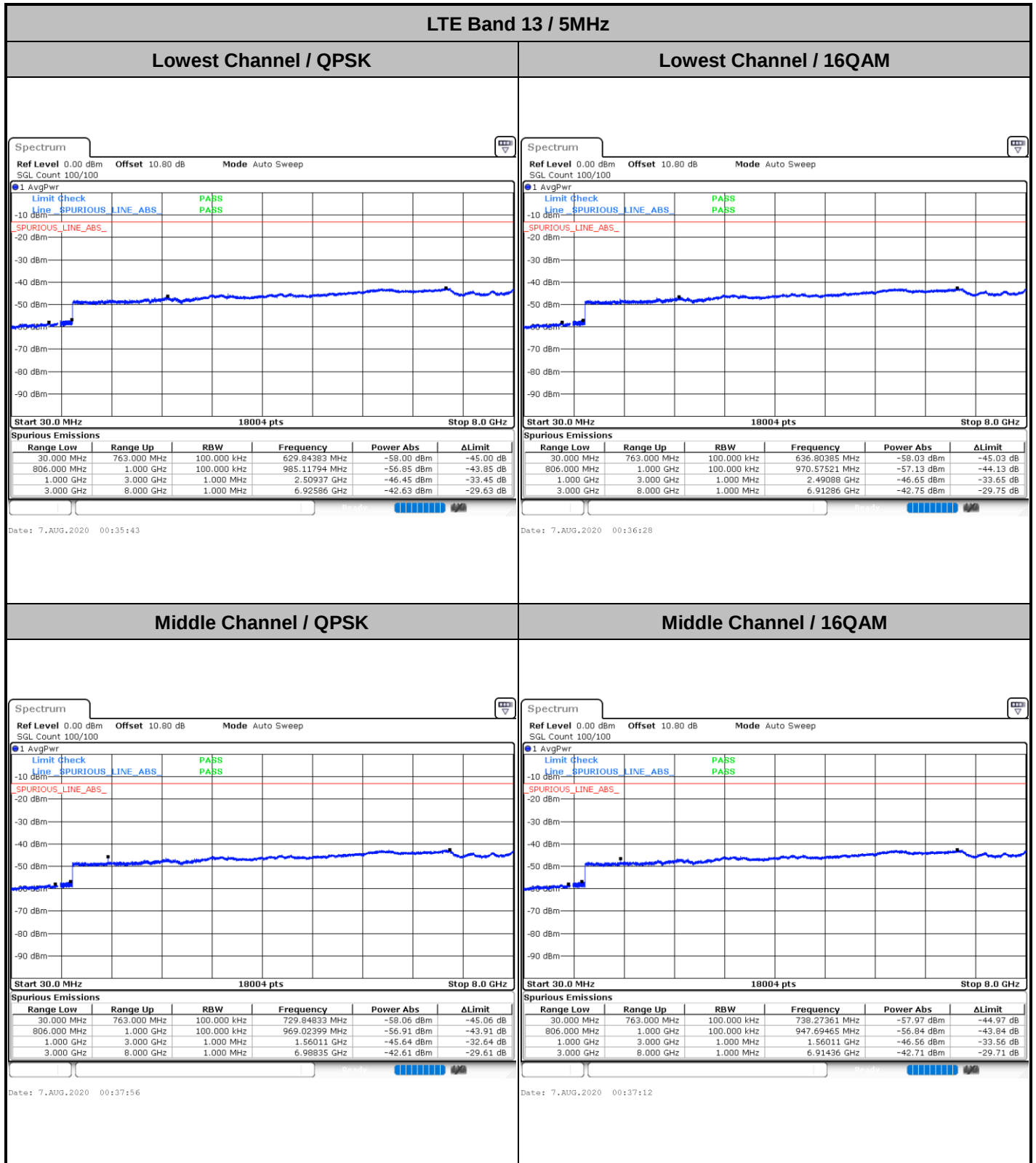
Band Edge / Full RB



Date: 3.SEP.2020 22:44:19



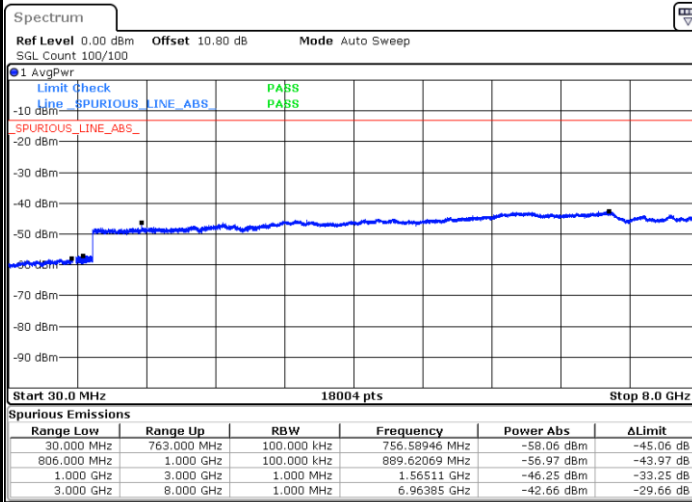
Conducted Spurious Emission





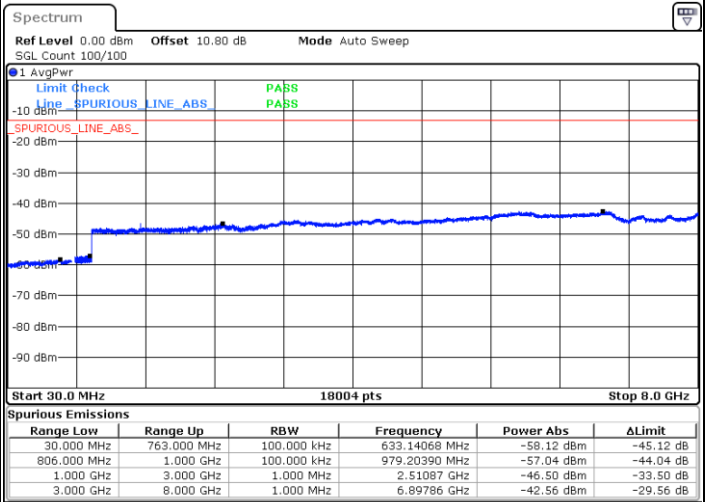
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 7.AUG.2020 00:46:53

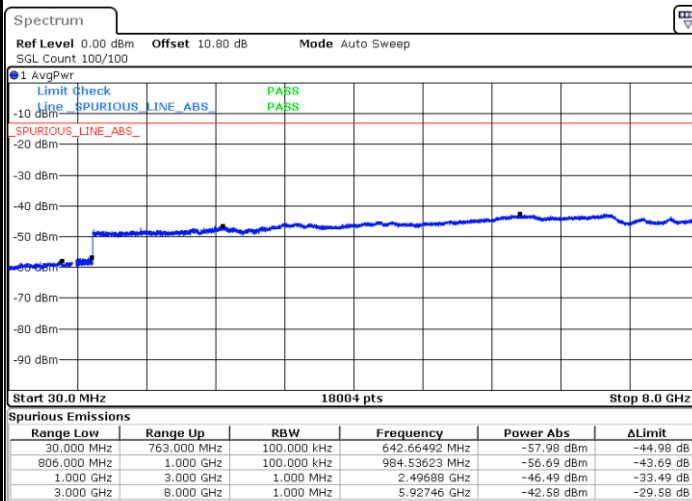
Highest Channel / 16QAM



Date: 7.AUG.2020 00:47:38

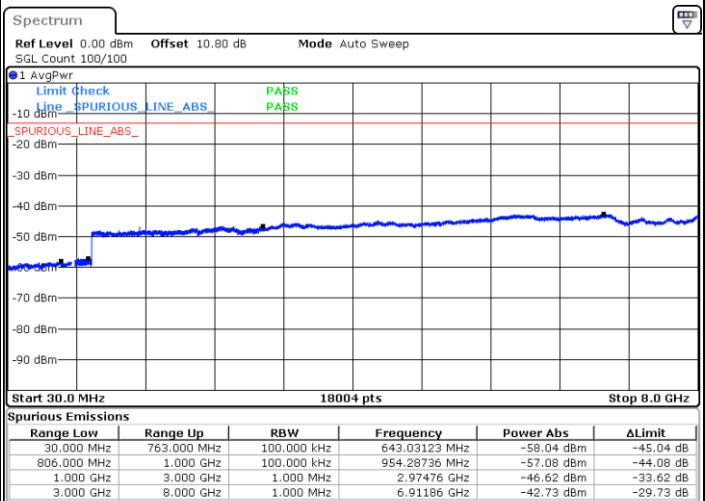
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 7.AUG.2020 00:59:49

Middle Channel / 16QAM

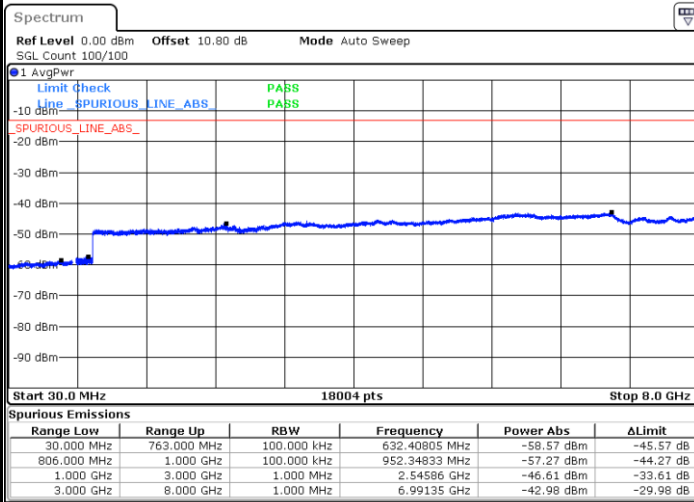


Date: 7.AUG.2020 00:59:05



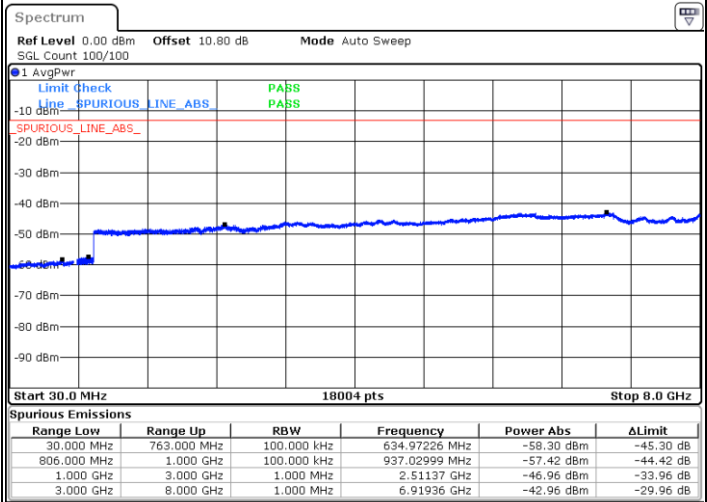
LTE Band 13 / 5MHz

Lowest Channel / 64QAM



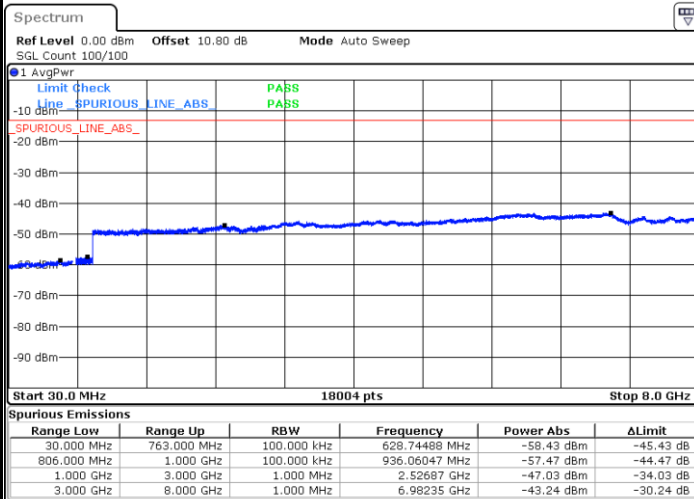
Date: 3.SEP.2020 22:36:42

Middle Channel / 64QAM



Date: 3.SEP.2020 22:37:26

Highest Channel / 64QAM

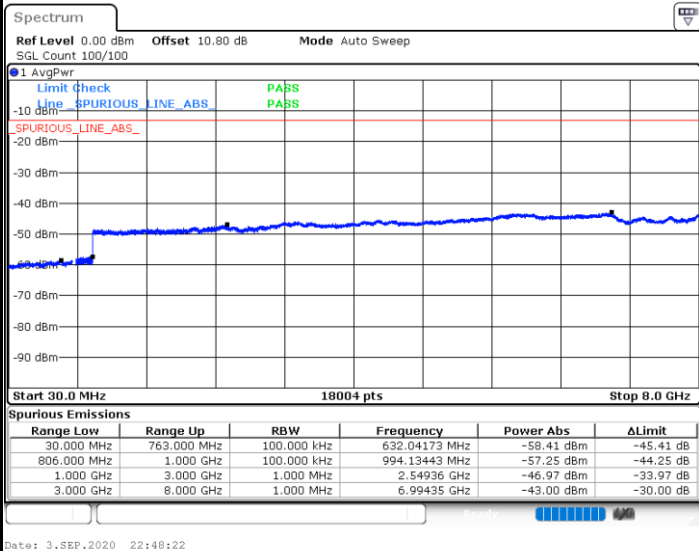


Date: 3.SEP.2020 22:42:17



LTE Band 13 / 10MHz

Middle Channel / 64QAM



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	0.0026	PASS
40	Normal Voltage	0.0055	
30	Normal Voltage	0.0047	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0069	
0	Normal Voltage	0.0114	
-10	Normal Voltage	0.0081	
-20	Normal Voltage	0.0077	
-30	Normal Voltage	0.0081	
20	Maximum Voltage	0.0078	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0014	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. 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	3.80	4.75	5.59	6.03	PASS
Middle CH	3.77	4.72	5.45	6.09	
Highest CH	3.83	4.70	5.30	6.06	
Mode	LTE Band 17 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.78	6.75	-	-	PASS
Middle CH	6.93	6.61	-	-	
Highest CH	6.78	6.70	-	-	