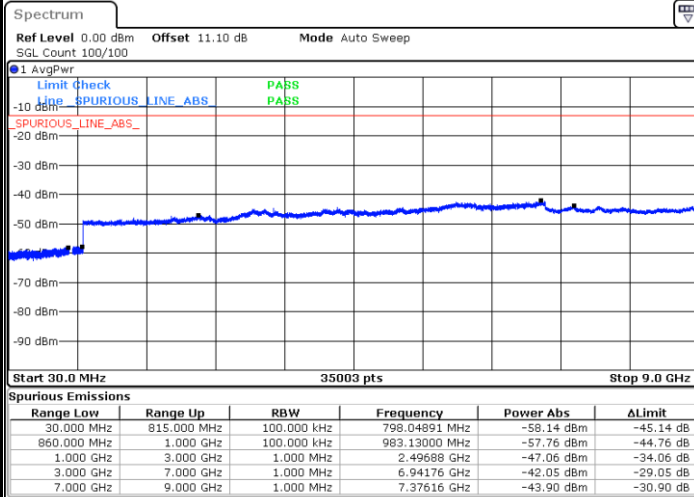




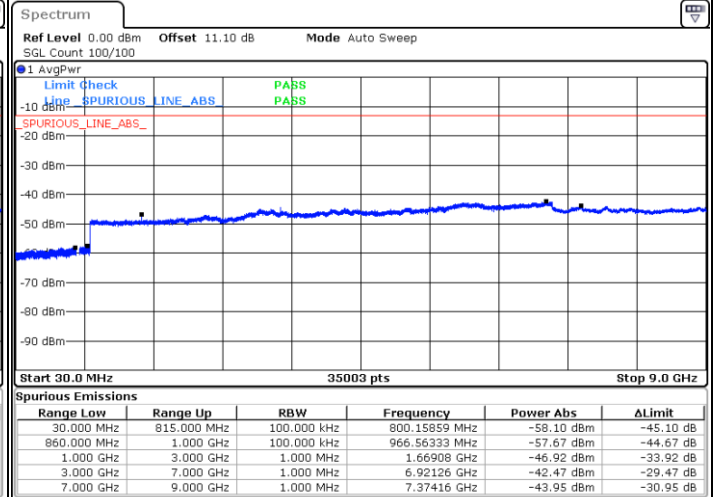
LTE Band 5 / 5MHz

Lowest Channel / QPSK



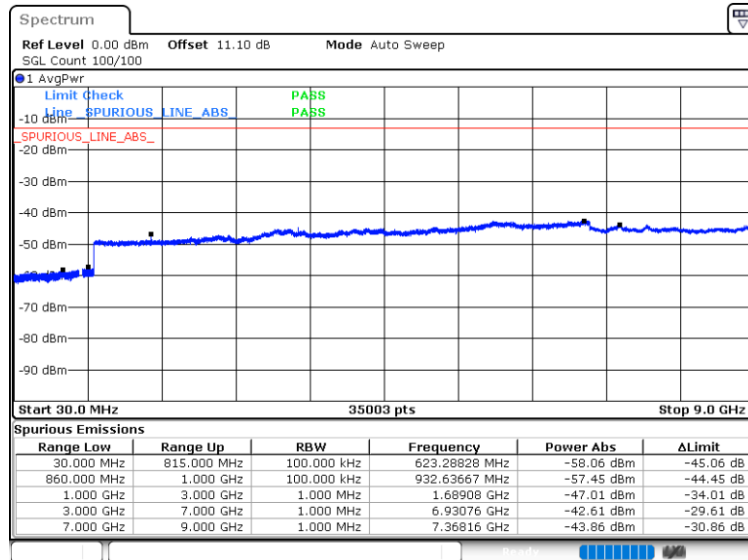
Date: 27.JUN.2021 04:09:00

Middle Channel / QPSK



Date: 27.JUN.2021 04:11:02

Highest Channel / QPSK

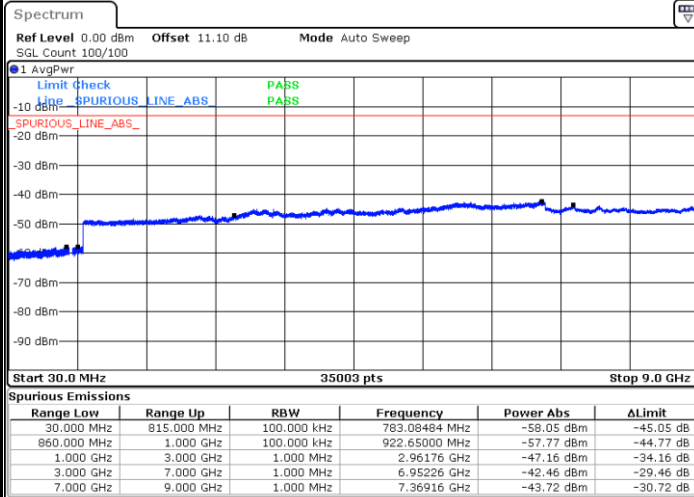


Date: 27.JUN.2021 04:19:01



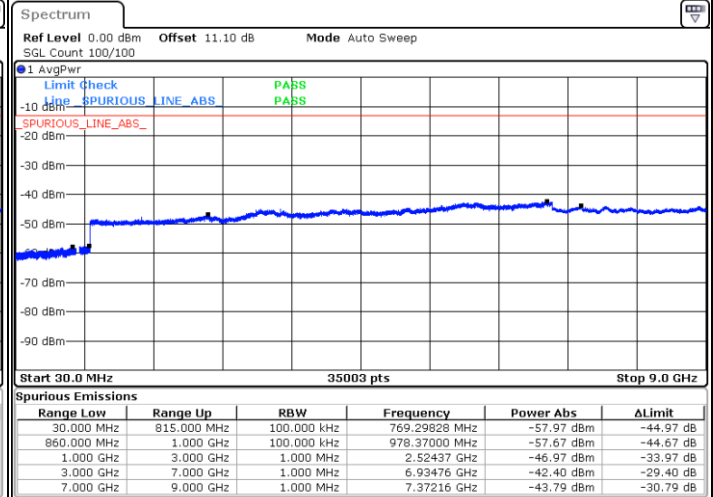
LTE Band 5 / 10MHz

Lowest Channel / QPSK



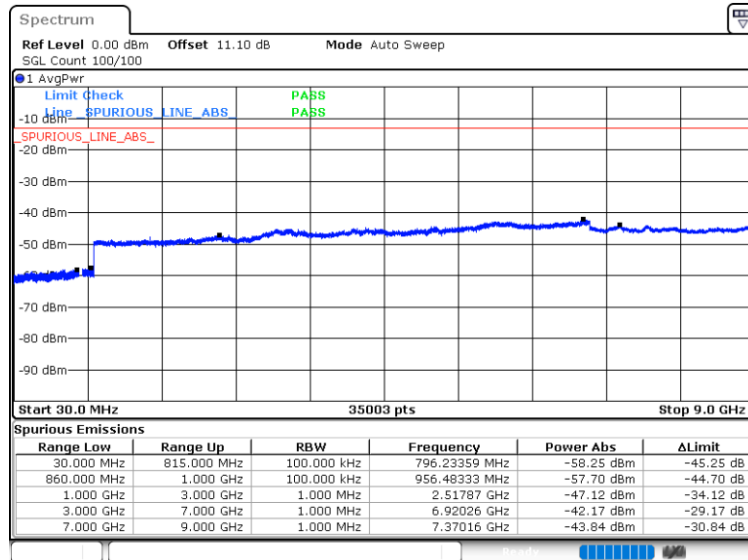
Date: 27.JUN.2021 04:35:05

Middle Channel / QPSK



Date: 27.JUN.2021 04:37:07

Highest Channel / QPSK



Date: 27.JUN.2021 04:45:05

Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0039	PASS
40	Normal Voltage	0.0038	
30	Normal Voltage	0.0135	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0121	
0	Normal Voltage	0.0142	
-10	Normal Voltage	0.0141	
-20	Normal Voltage	0.0029	
-30	Normal Voltage	0.0093	
20	Maximum Voltage	0.0037	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0037	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.67 V. ; Maximum Voltage =4.26 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7

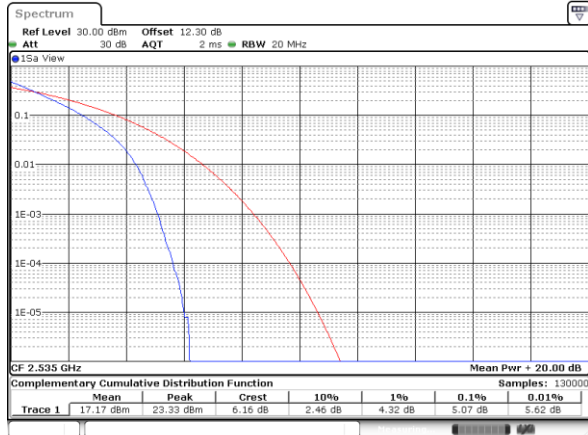
Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.07	5.91	6.43	-	PASS



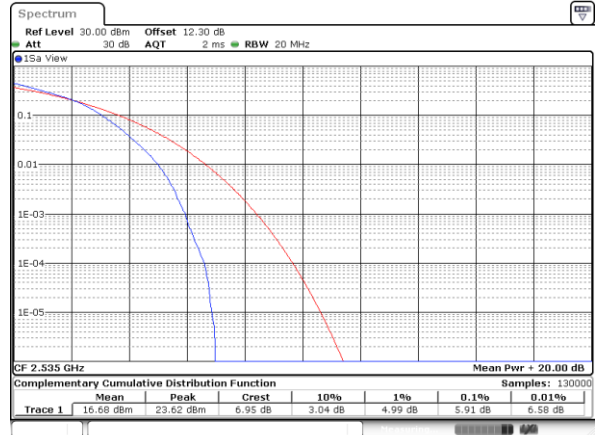
LTE Band 7 / 20MHz / QPSK

Middle Channel / Full RB



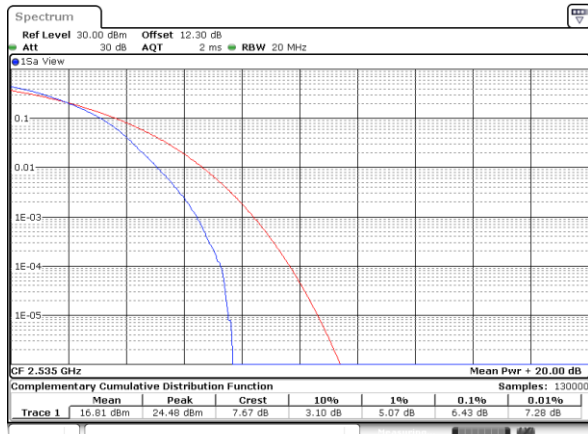
LTE Band 7 / 20MHz / 16QAM

Middle Channel / Full RB



LTE Band 7 / 20MHz / 64QAM

Middle Channel / Full RB



LTE Band 7 / 20MHz / 256QAM

Middle Channel / Full RB

-

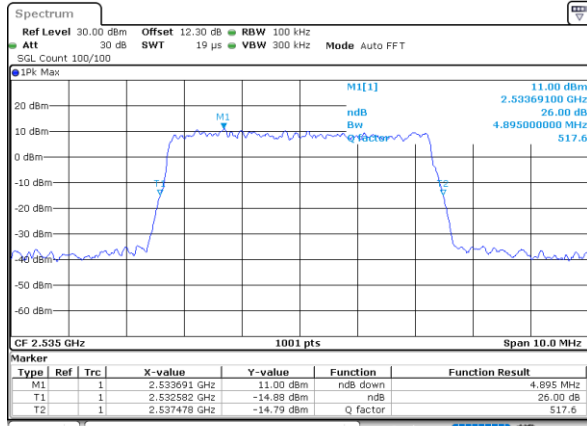
**26dB Bandwidth**

Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.90	4.91	9.77	9.79	14.51	14.42	18.82	18.74
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.95	-	9.71	-	14.48	-	18.82	-



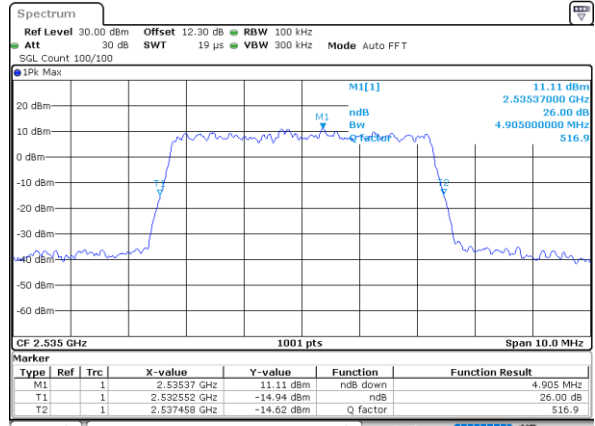
LTE Band 7

Middle Channel / 5MHz / QPSK



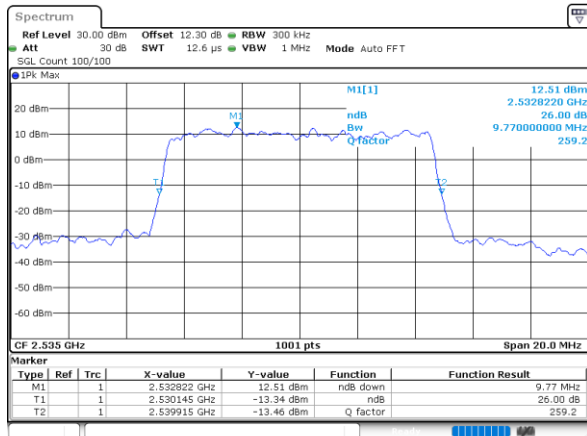
Date: 27 JUN 2021 07:27:44

Middle Channel / 5MHz / 16QAM



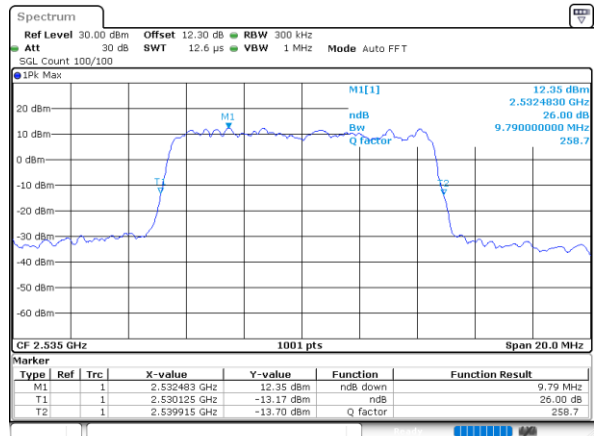
Date: 27 JUN 2021 07:28:05

Middle Channel / 10MHz / QPSK



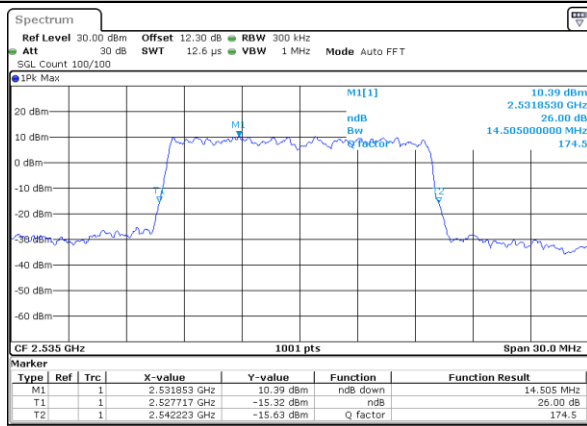
Date: 27 JUN 2021 07:38:08

Middle Channel / 10MHz / 16QAM



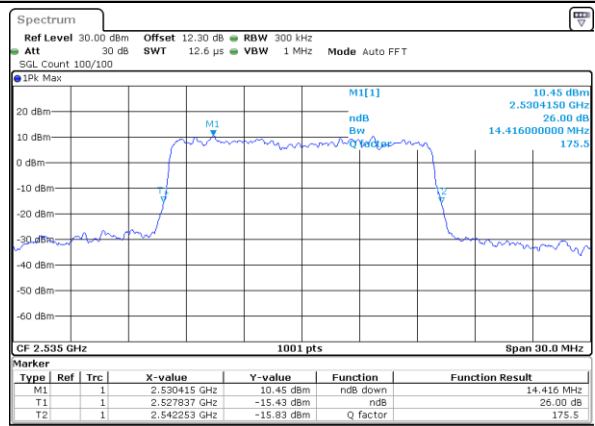
Date: 27 JUN 2021 07:38:28

Middle Channel / 15MHz / QPSK



Date: 27 JUN 2021 07:48:34

Middle Channel / 15MHz / 16QAM

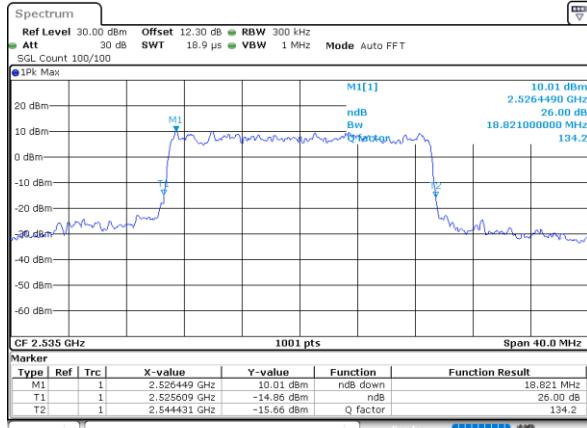


Date: 27 JUN 2021 07:48:55



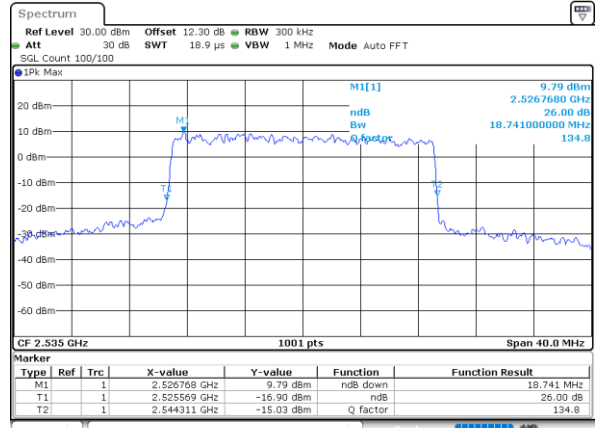
LTE Band 7

Middle Channel / 20MHz / QPSK



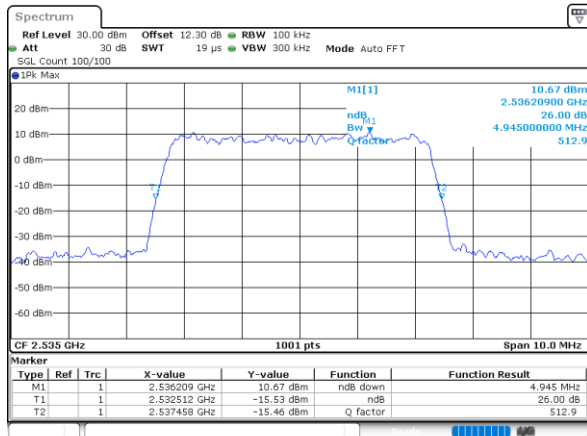
Date: 27 JUN 2021 07:59:01

Middle Channel / 20MHz / 16QAM



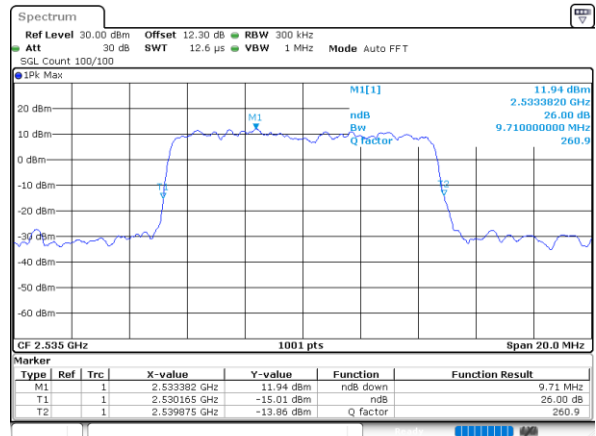
Date: 27 JUN 2021 07:59:122

Middle Channel / 5MHz / 64QAM



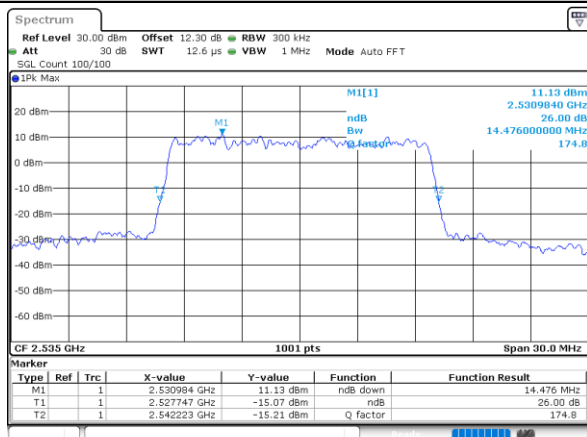
Date: 27 JUN 2021 07:33:24

Middle Channel / 10MHz / 64QAM



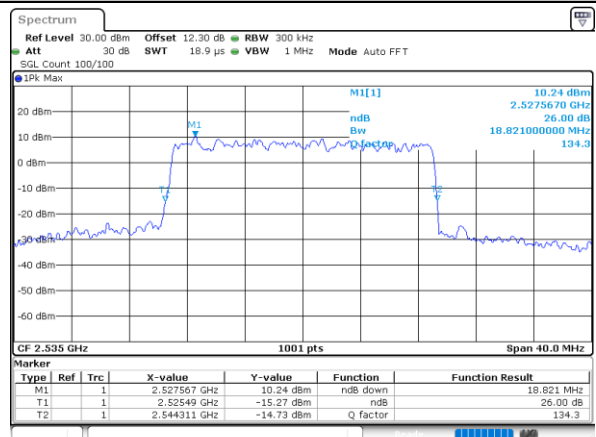
Date: 27 JUN 2021 07:43:148

Middle Channel / 15MHz / 64QAM



Date: 27 JUN 2021 07:54:15

Middle Channel / 20MHz / 64QAM



Date: 27 JUN 2021 08:04:42

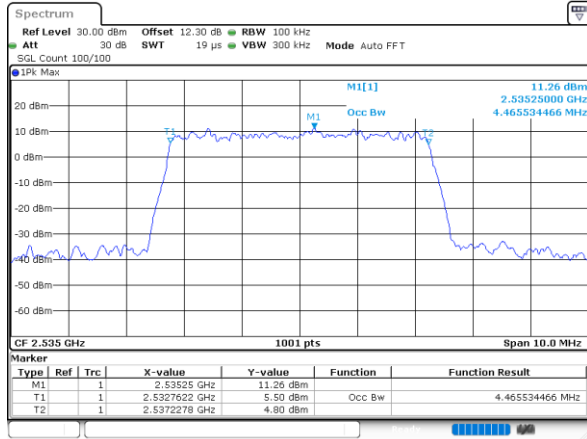
**Occupied Bandwidth**

Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.47	4.47	9.03	9.05	13.49	13.43	17.94	17.86
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.49	-	9.05	-	13.43	-	17.86	-

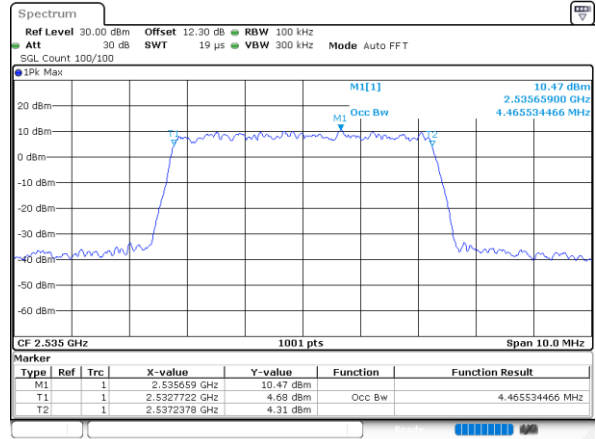


LTE Band 7

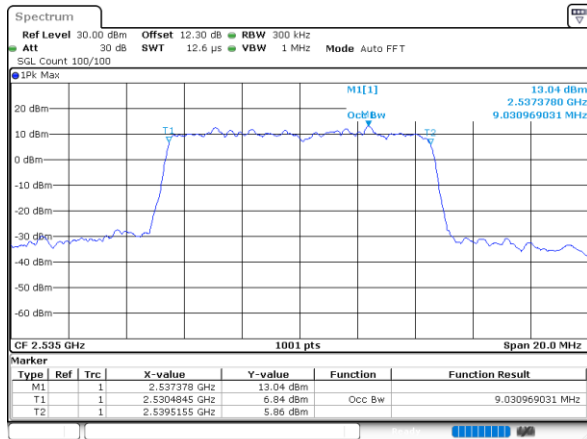
Middle Channel / 5MHz / QPSK



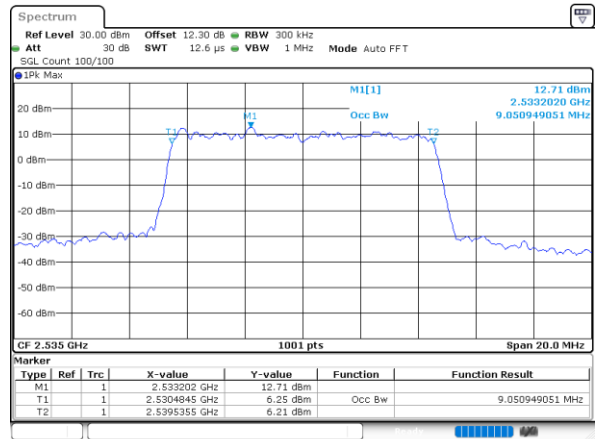
Middle Channel / 5MHz / 16QAM



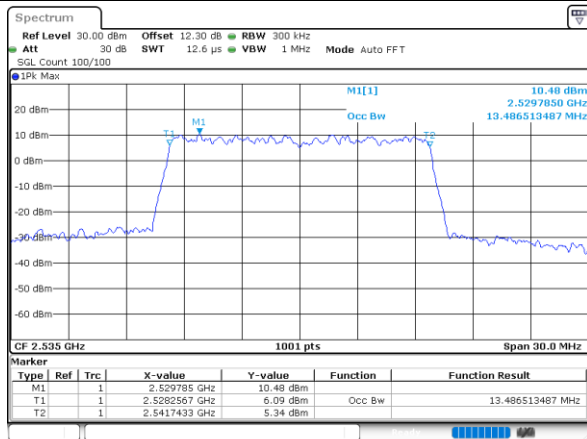
Middle Channel / 10MHz / QPSK



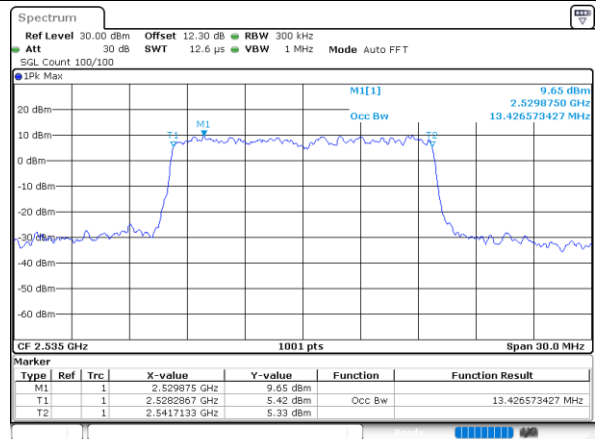
Middle Channel / 10MHz / 16QAM



Middle Channel / 15MHz / QPSK



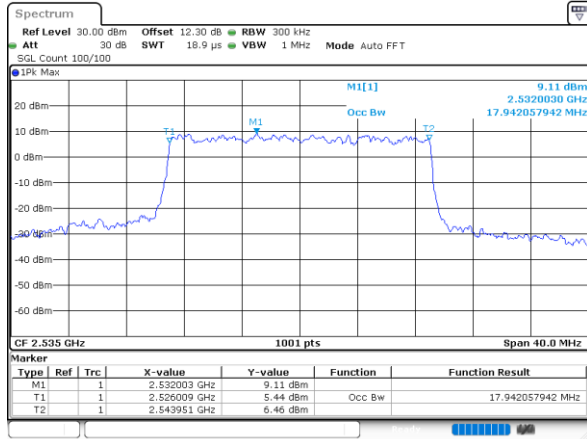
Middle Channel / 15MHz / 16QAM



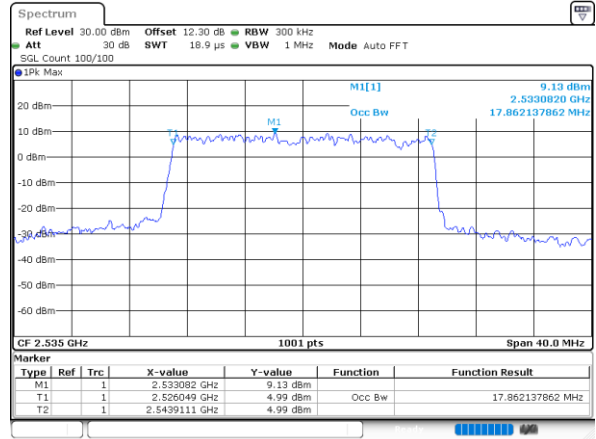


LTE Band 7

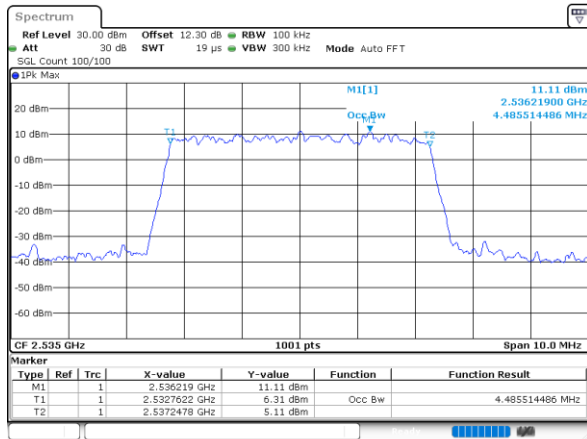
Middle Channel / 20MHz / QPSK



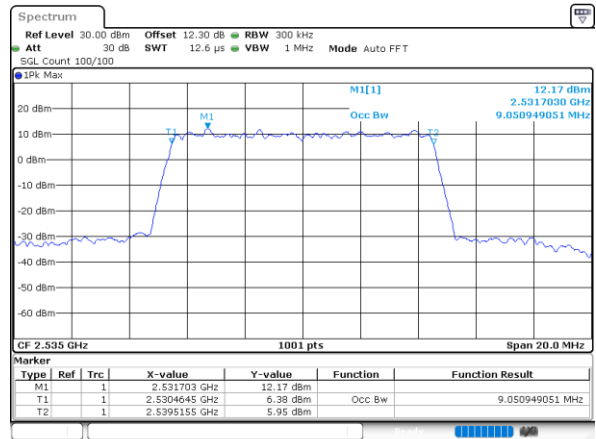
Middle Channel / 20MHz / 16QAM



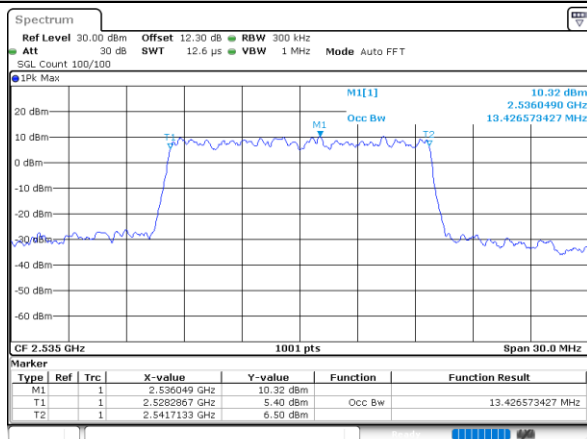
Middle Channel / 5MHz / 64QAM



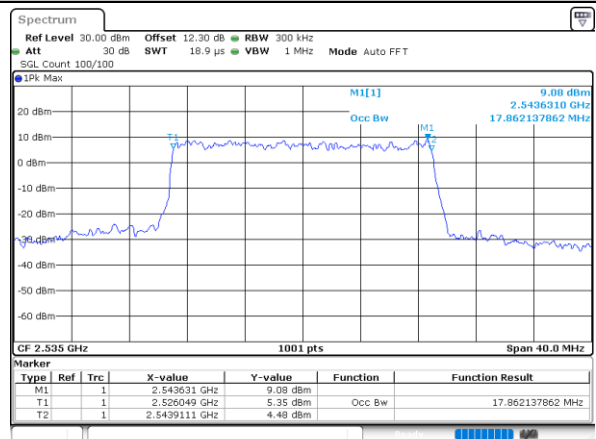
Middle Channel / 10MHz / 64QAM

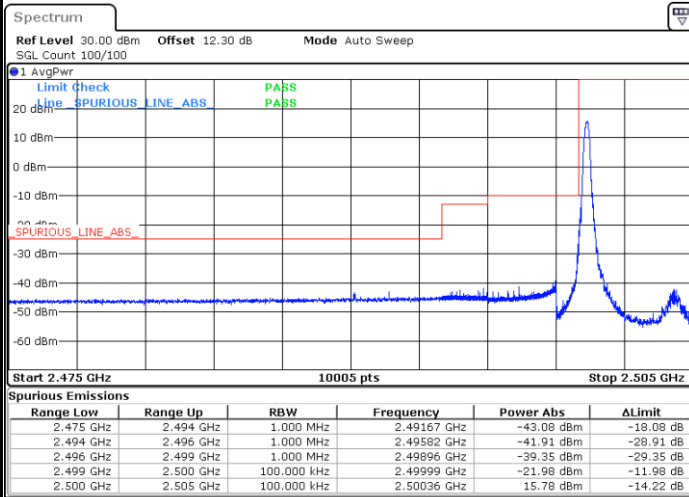
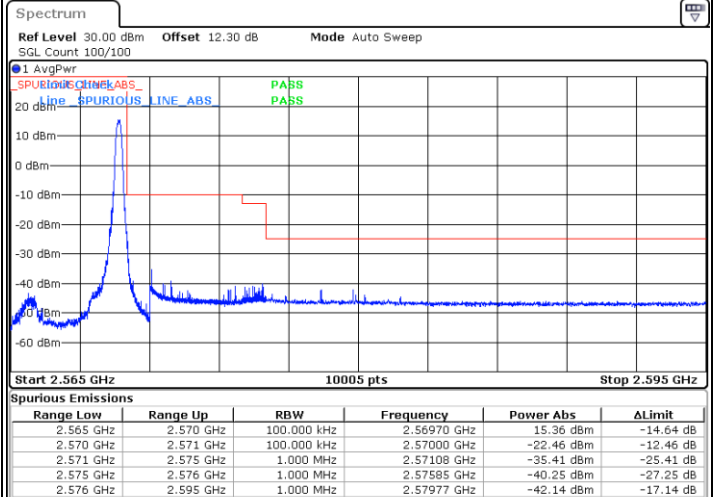
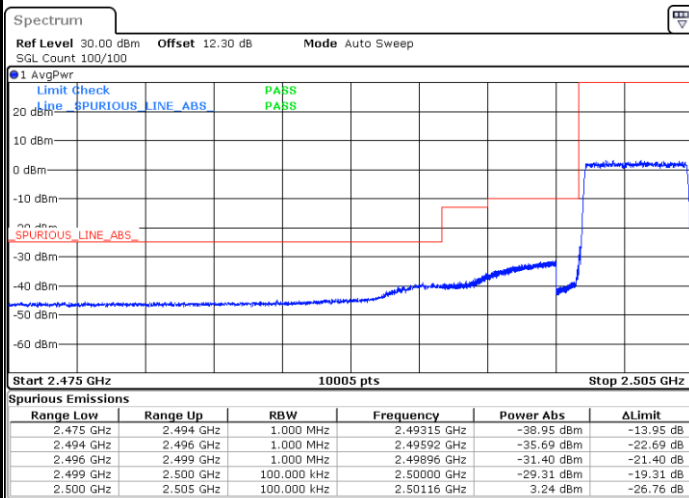
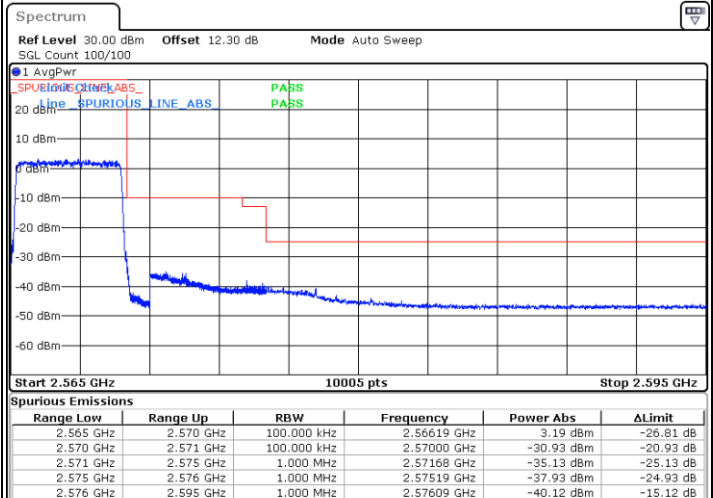


Middle Channel / 15MHz / 64QAM



Middle Channel / 20MHz / 64QAM

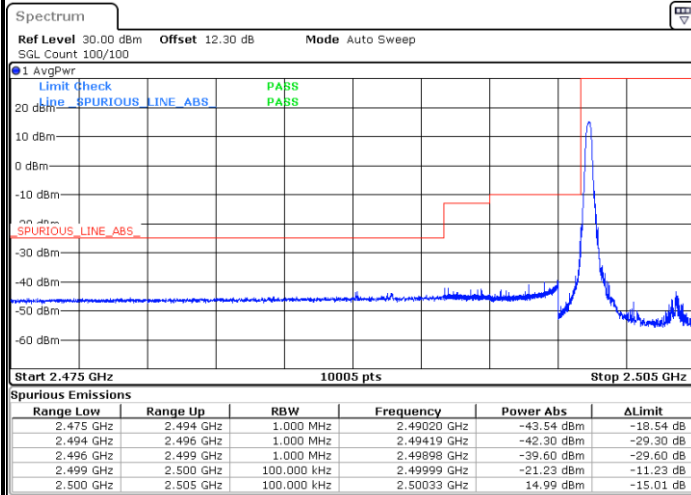


**Conducted Band Edge****LTE Band 7 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



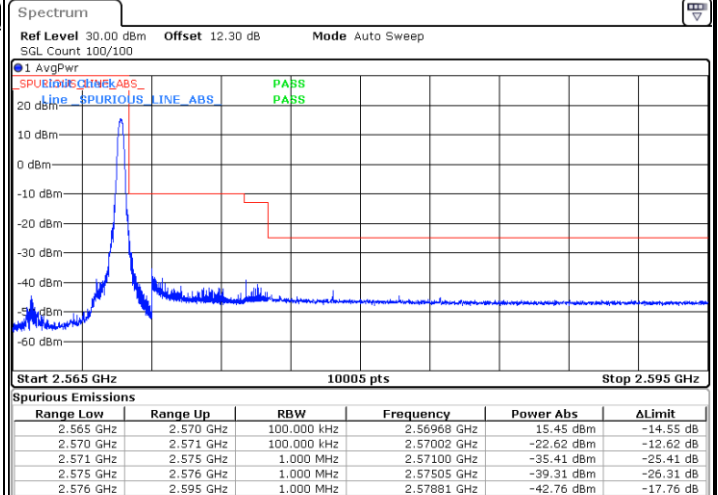
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



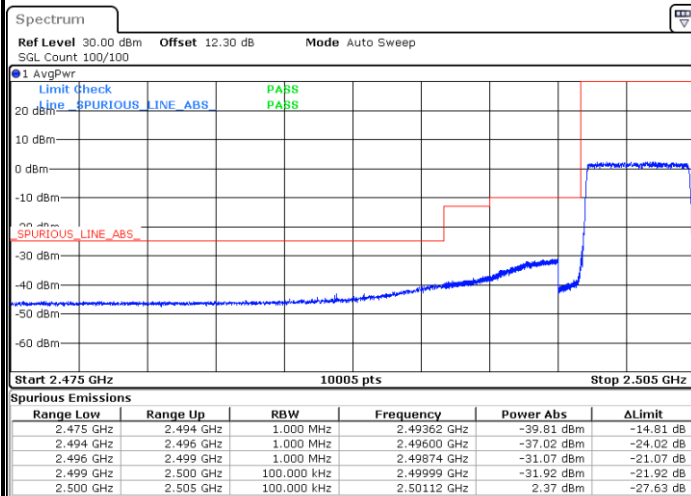
Date: 27.JUN.2021 07:24:43

Highest Band Edge / 1 RB



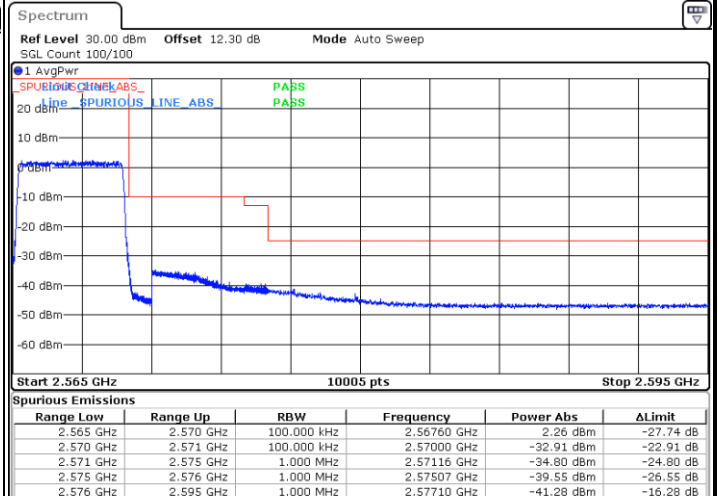
Date: 27.JUN.2021 07:29:56

Lowest Band Edge / Full RB



Date: 27.JUN.2021 07:25:37

Highest Band Edge / Full RB

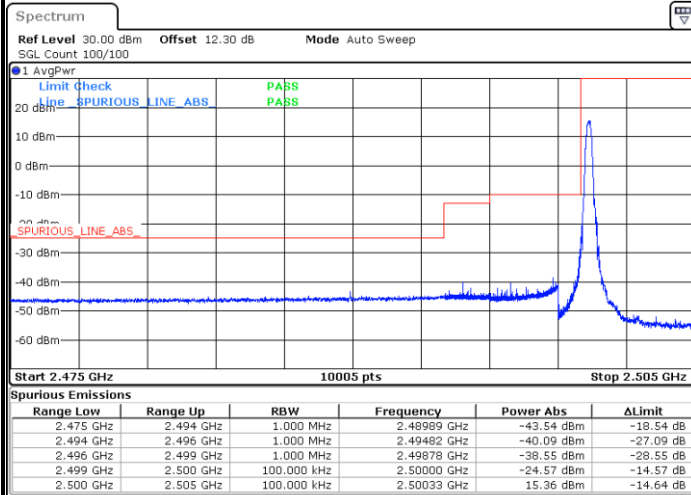


Date: 27.JUN.2021 07:30:47

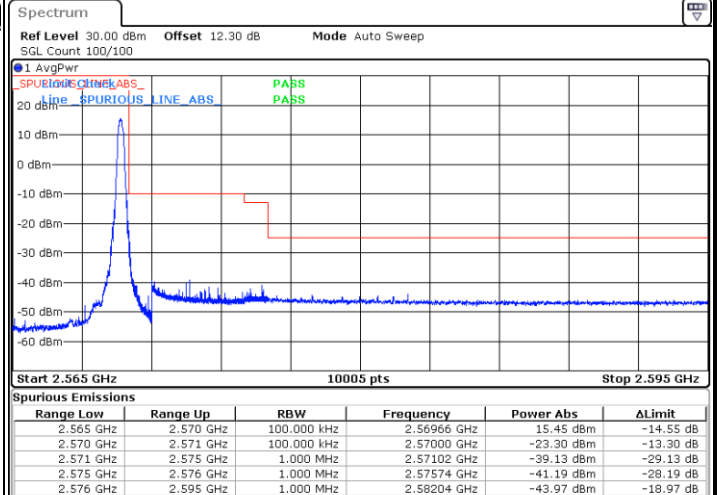


LTE Band 7 / 5MHz / 64QAM

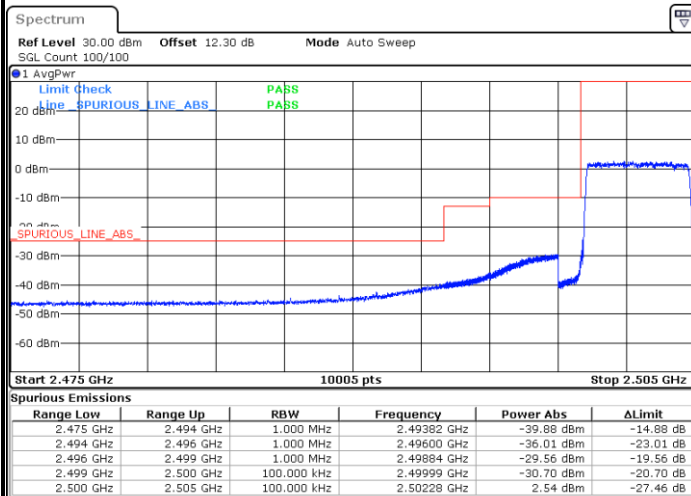
Lowest Band Edge / 1RB



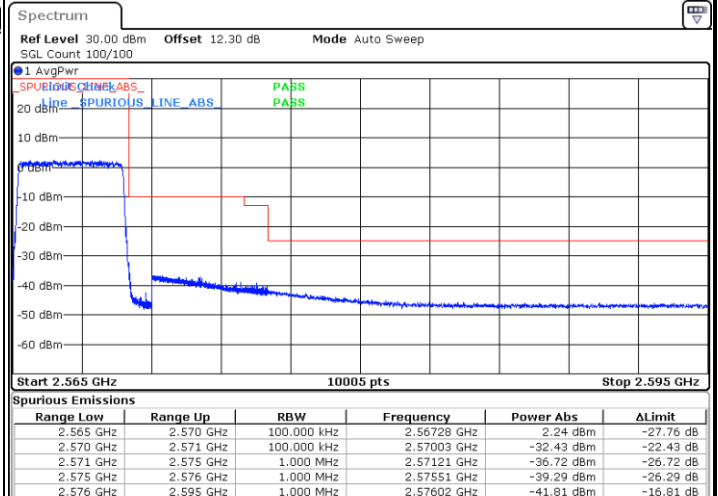
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



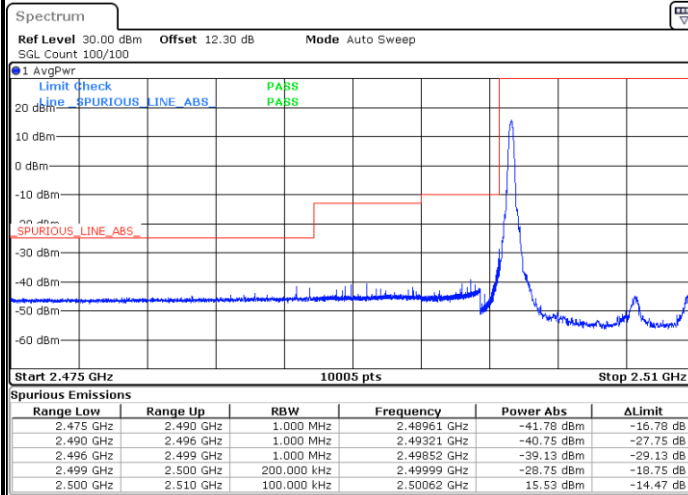
Highest Band Edge / Full RB



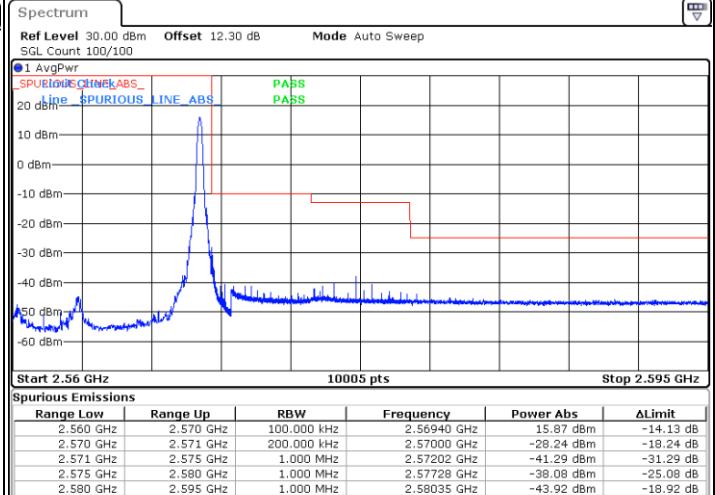


LTE Band 7 / 10MHz / QPSK

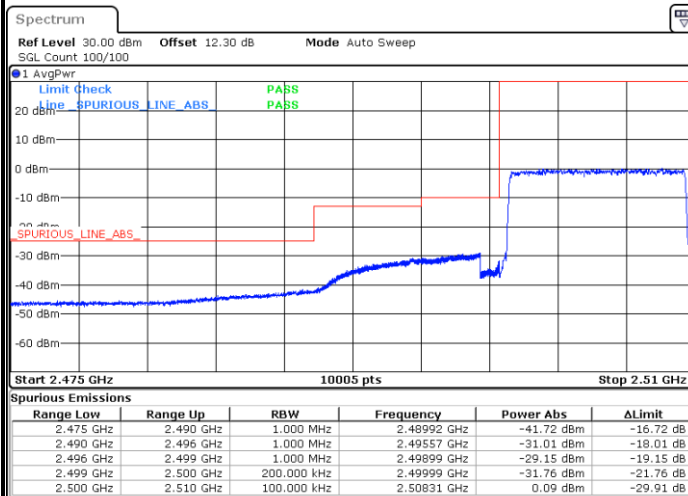
Lowest Band Edge / 1 RB



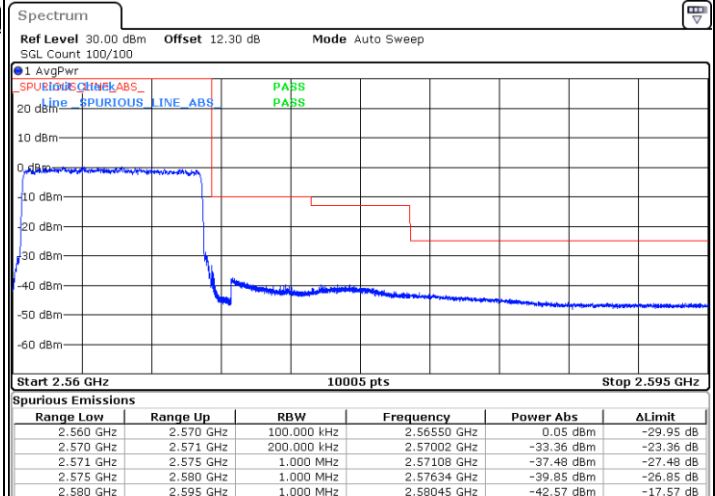
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



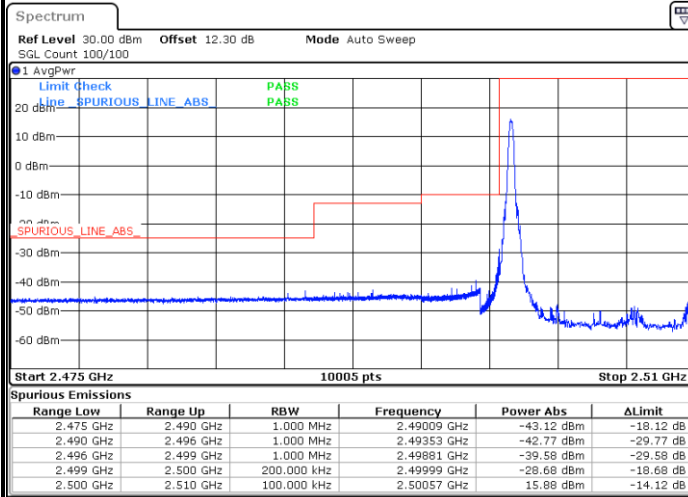
Highest Band Edge / Full RB



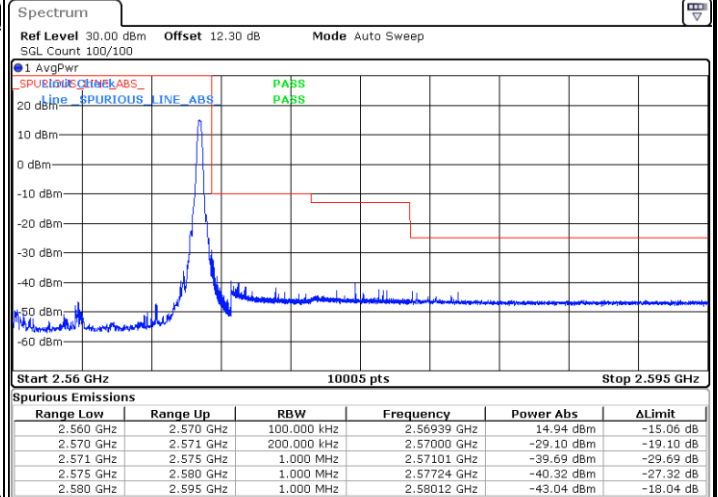


LTE Band 7 / 10MHz / 16QAM

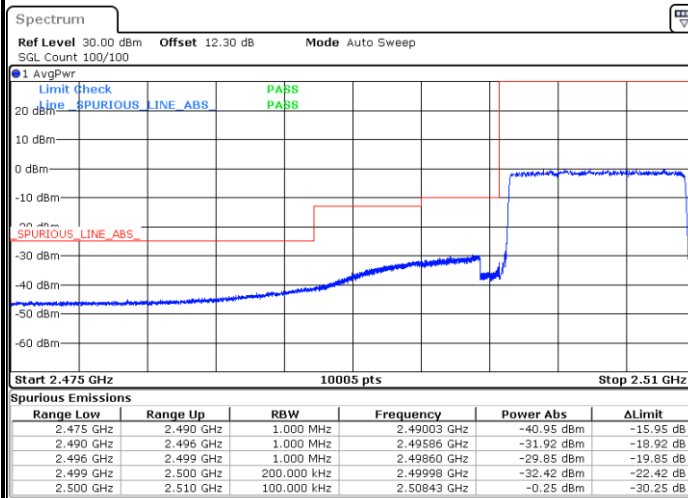
Lowest Band Edge / 1 RB



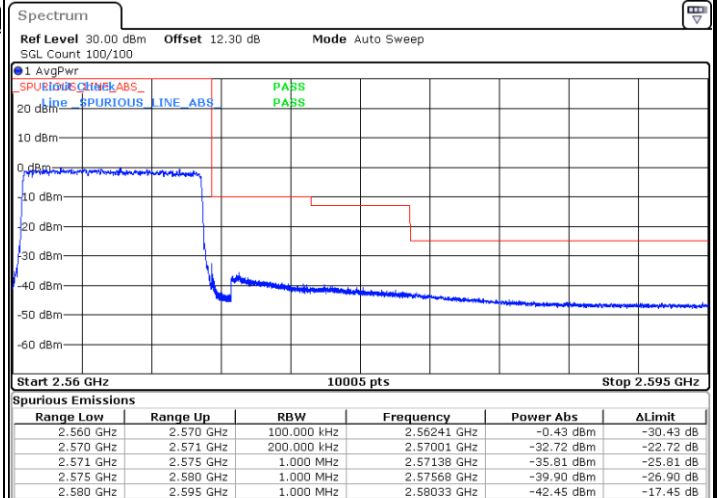
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



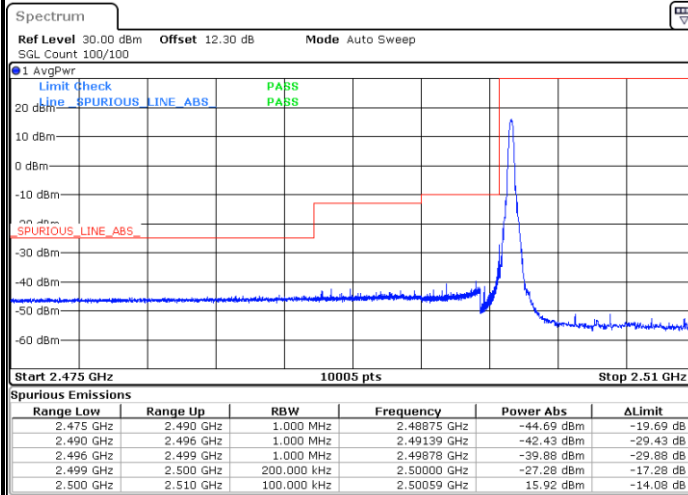
Highest Band Edge / Full RB



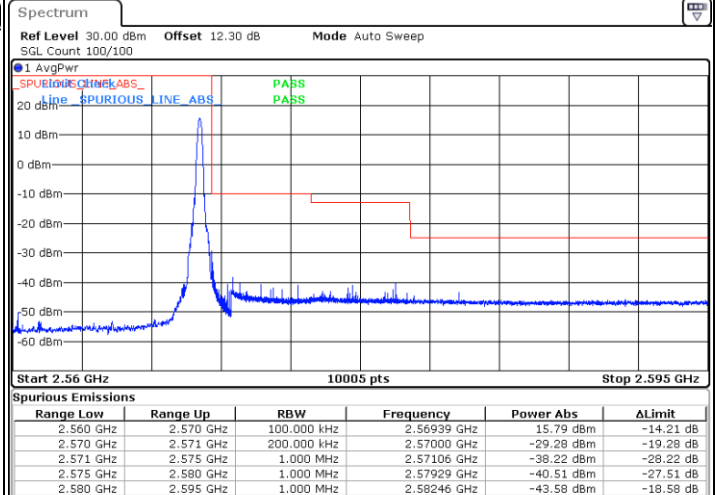


LTE Band 7 / 10MHz / 64QAM

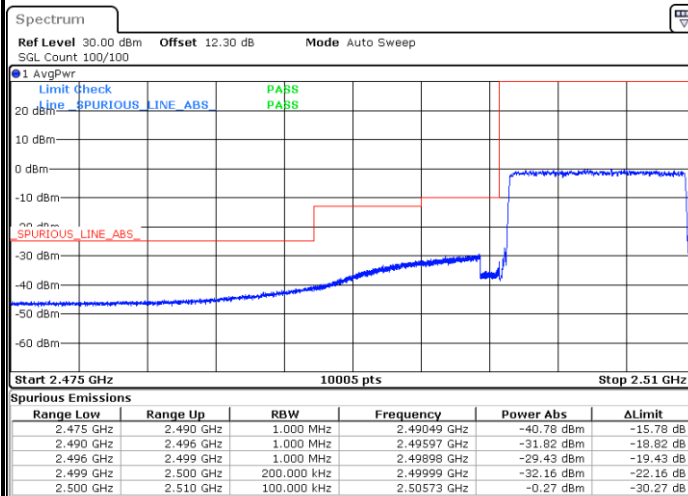
Lowest Band Edge / 1 RB



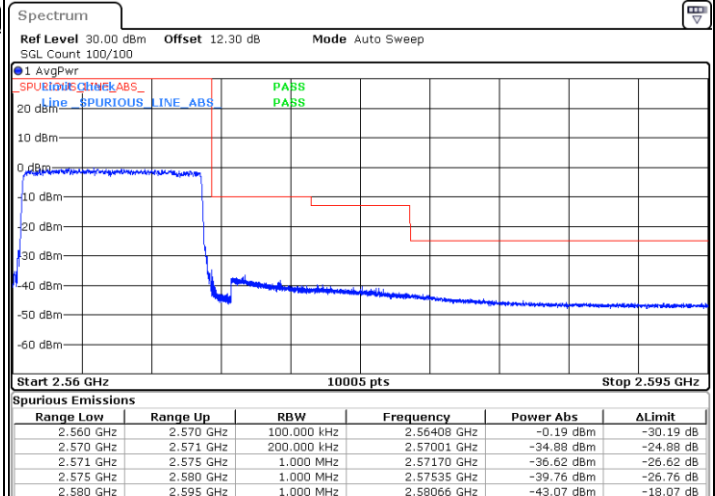
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



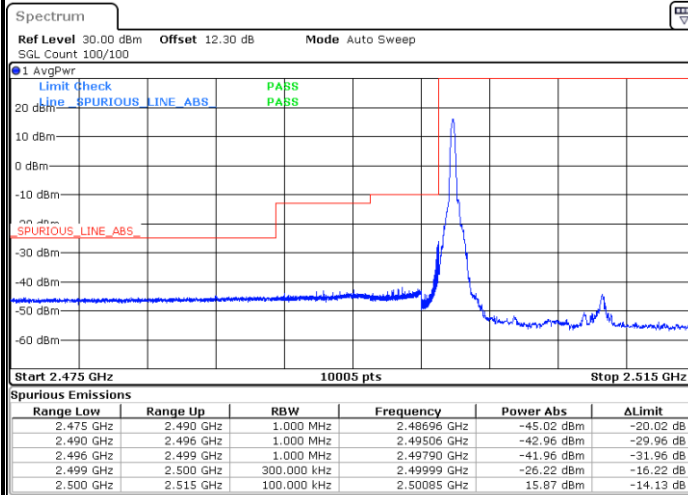
Highest Band Edge / Full RB



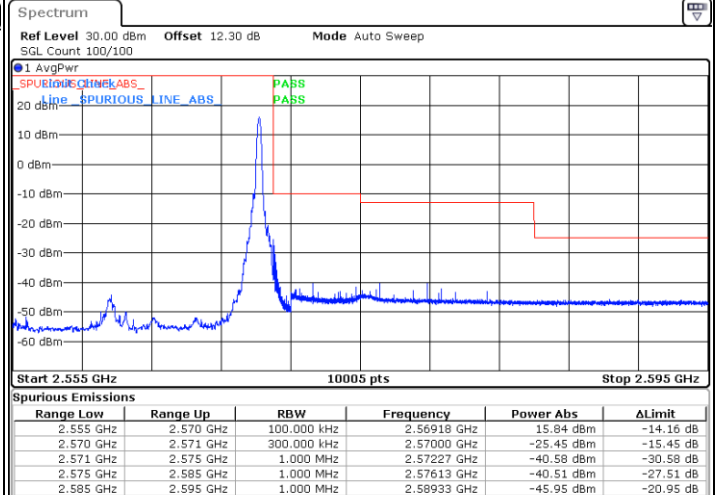


LTE Band 7 / 15MHz / QPSK

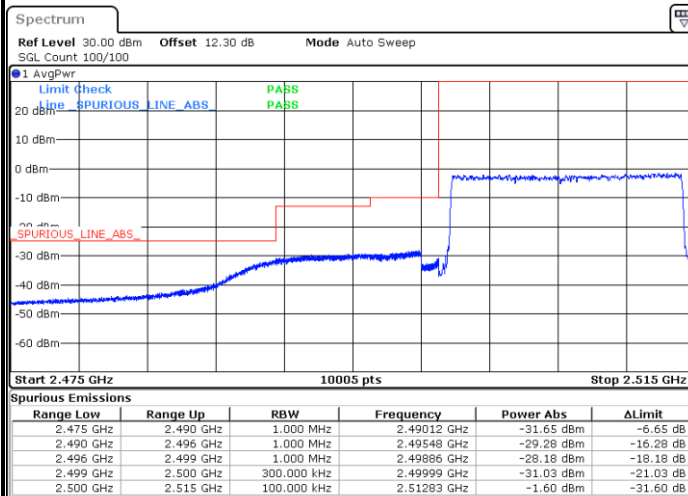
Lowest Band Edge / 1 RB



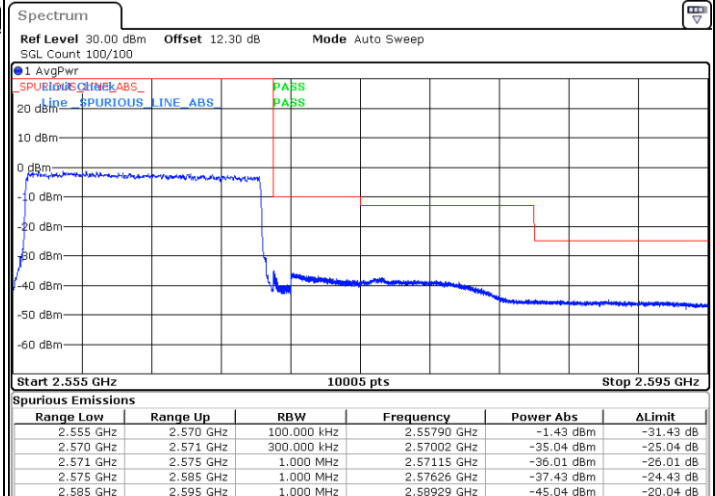
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



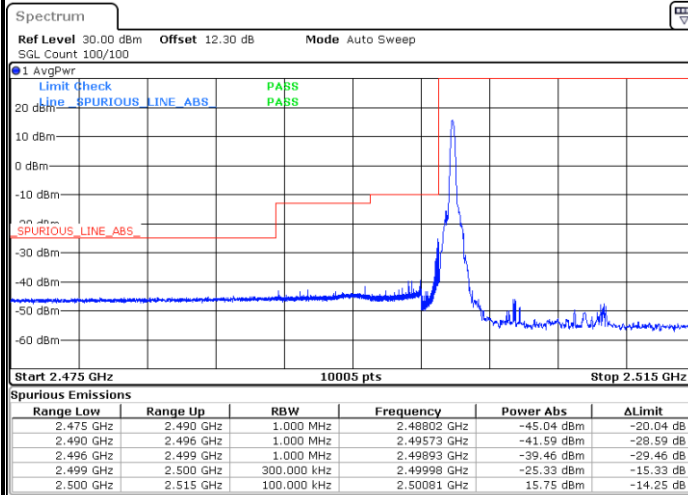
Highest Band Edge / Full RB



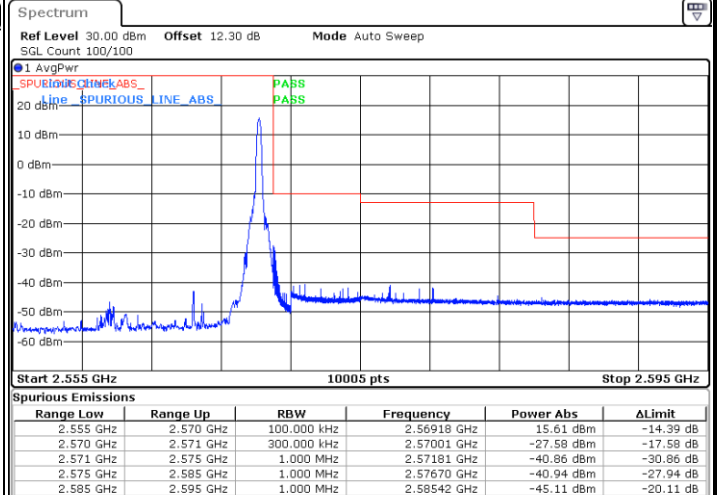


LTE Band 7 / 15MHz / 16QAM

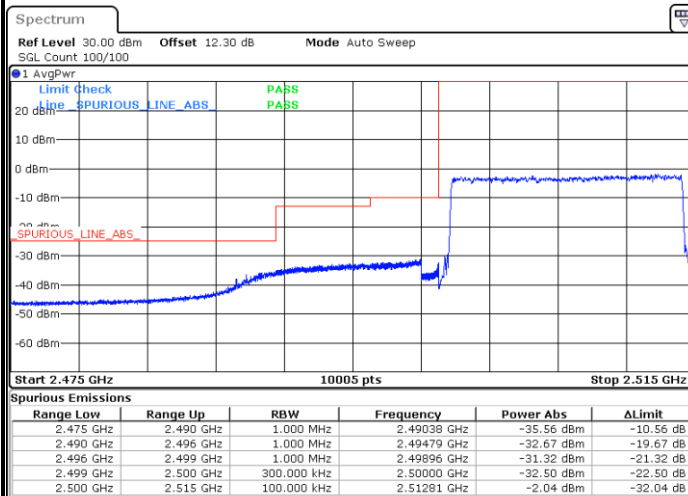
Lowest Band Edge / 1 RB



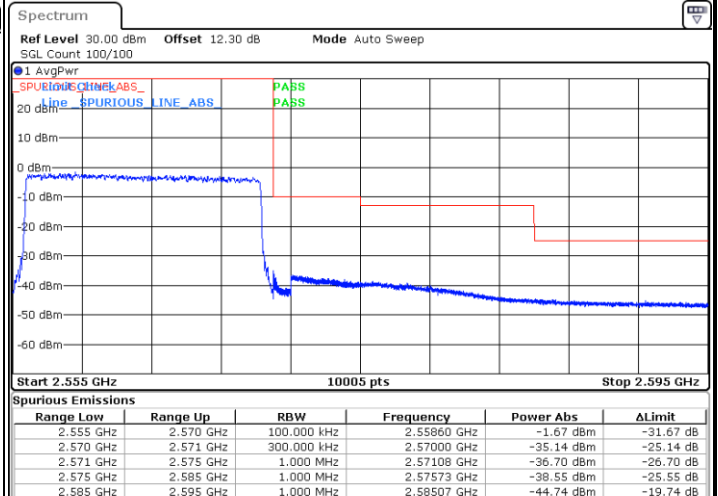
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



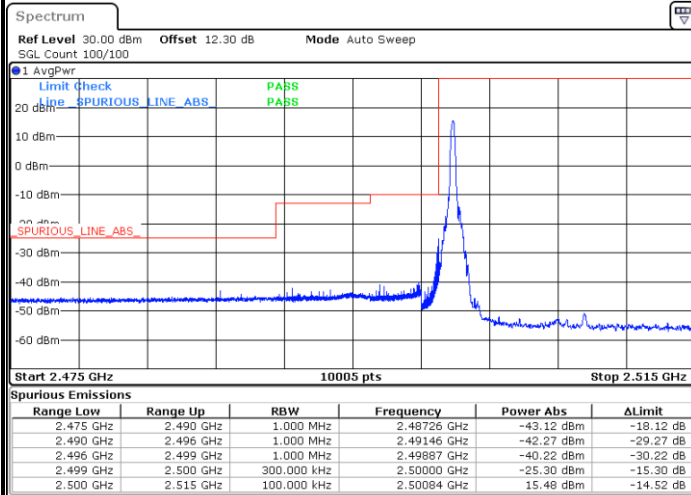
Highest Band Edge / Full RB



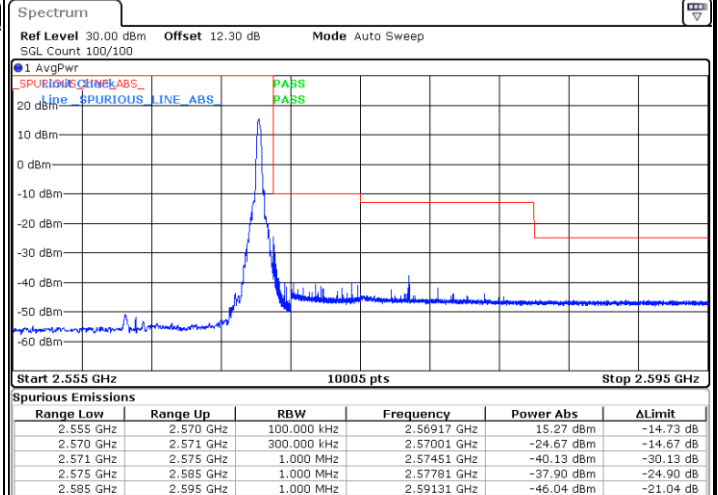


LTE Band 7 / 15MHz / 64QAM

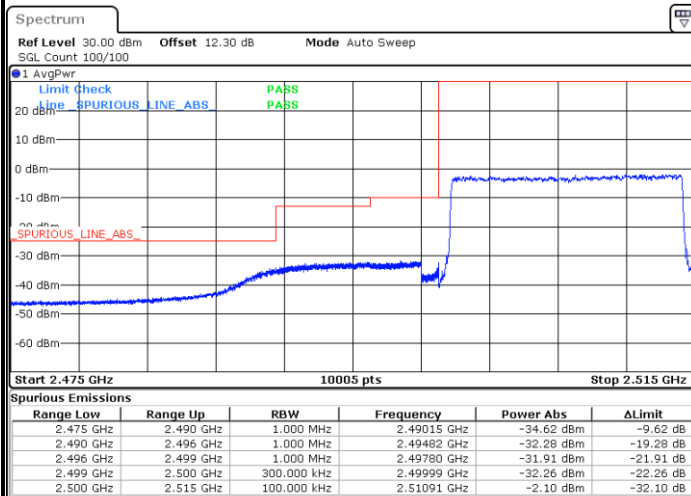
Lowest Band Edge / 1 RB



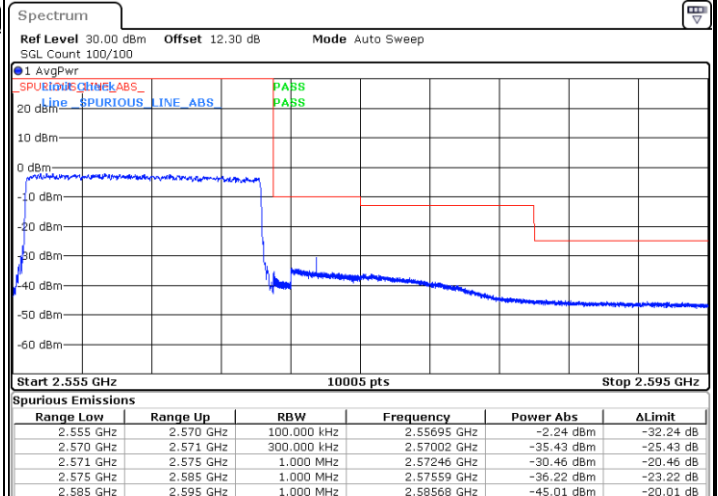
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



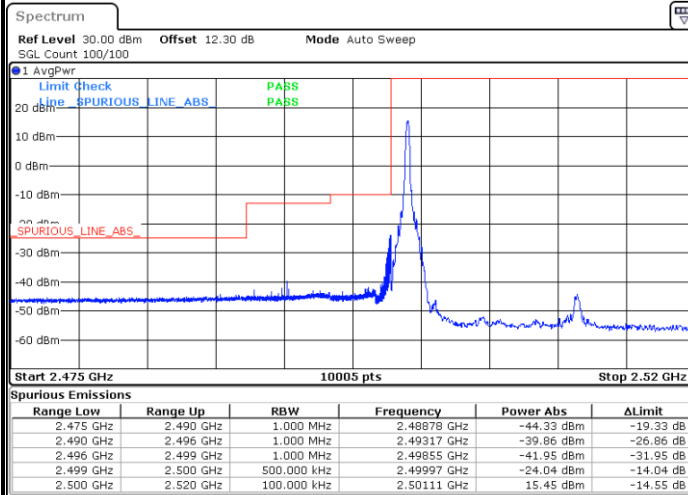
Highest Band Edge / Full RB



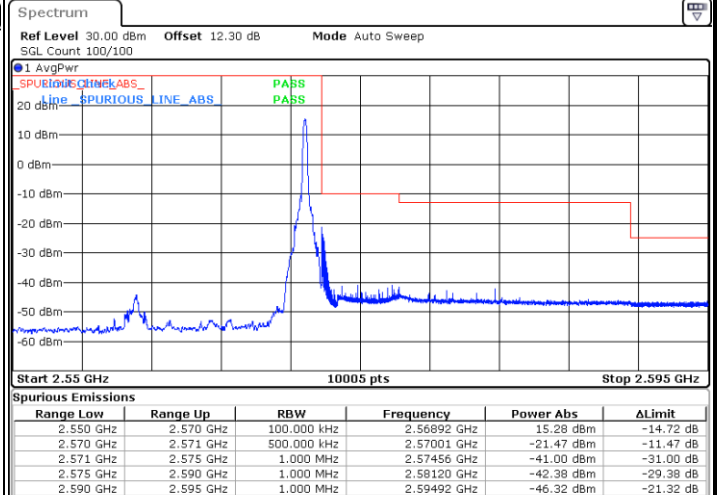


LTE Band 7 / 20MHz / QPSK

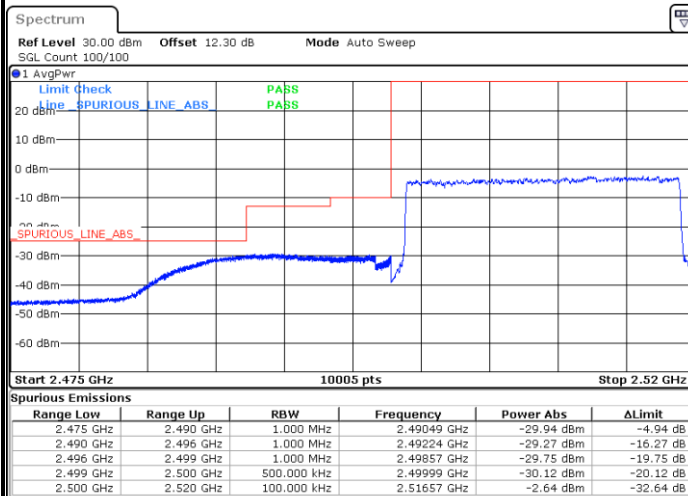
Lowest Band Edge / 1 RB



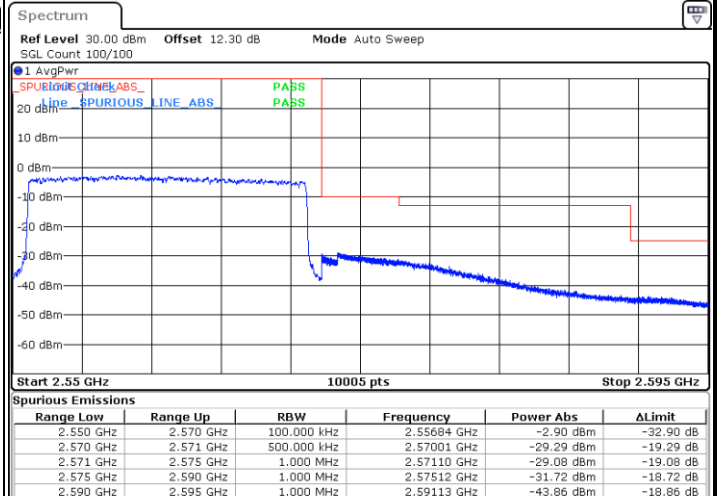
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



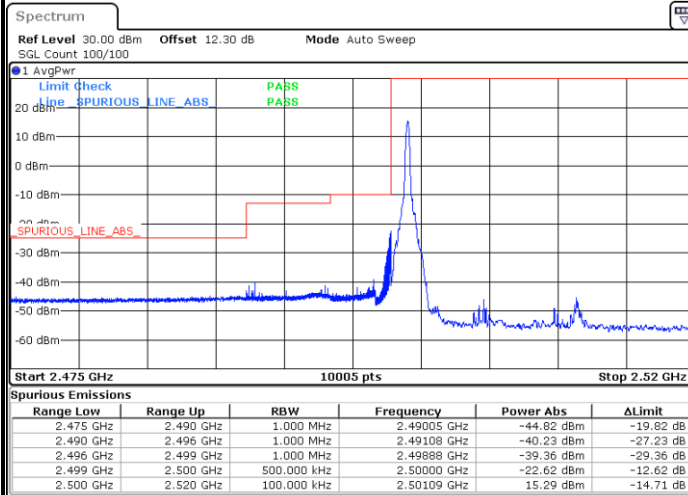
Highest Band Edge / Full RB



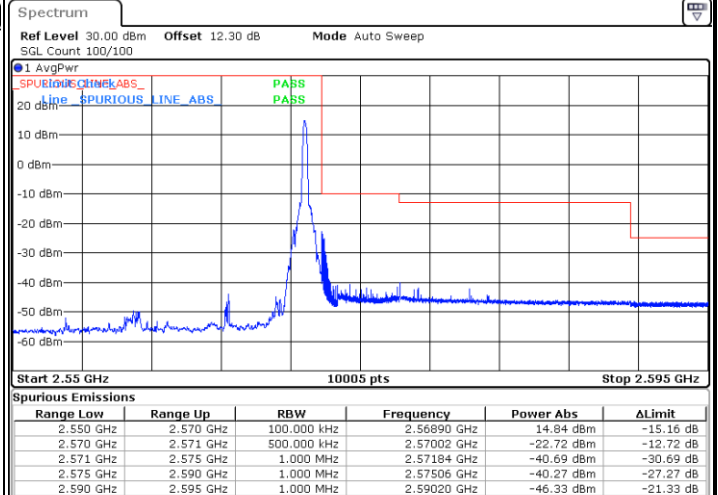


LTE Band 7 / 20MHz / 16QAM

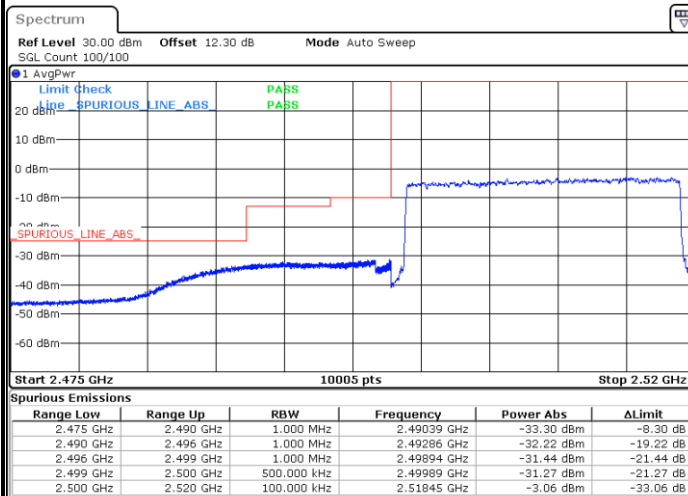
Lowest Band Edge / 1 RB



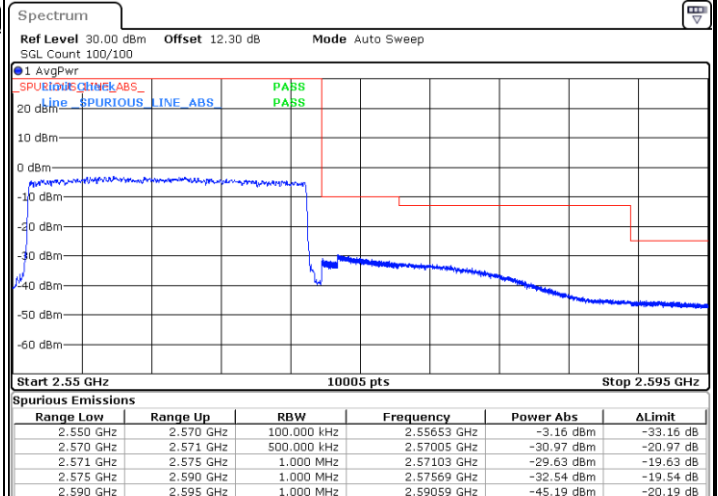
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



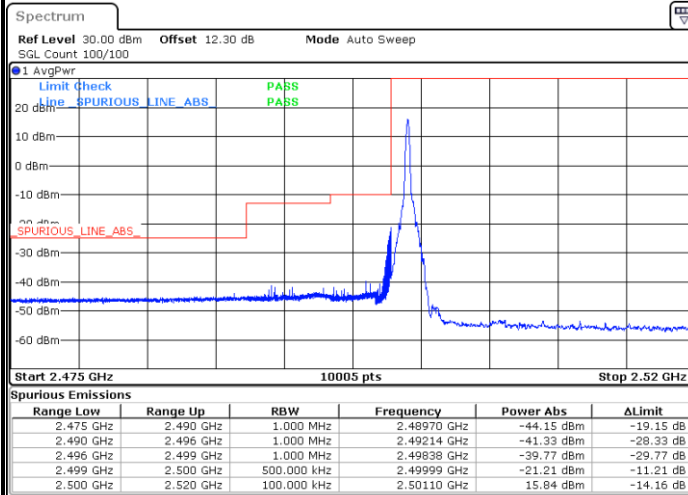
Highest Band Edge / Full RB



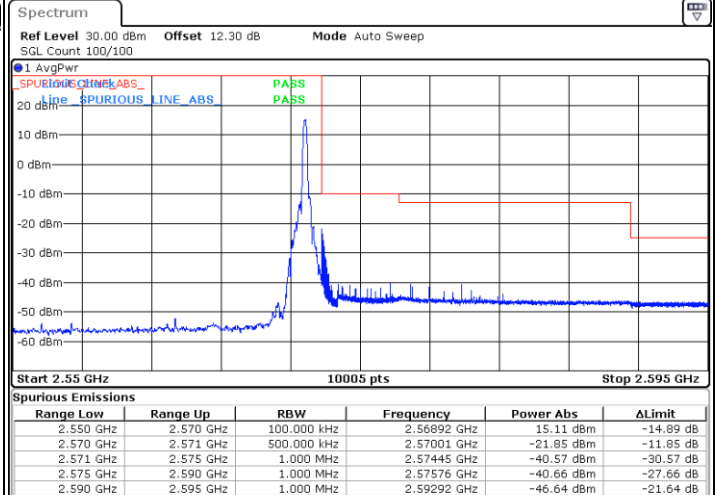


LTE Band 7 / 20MHz / 64QAM

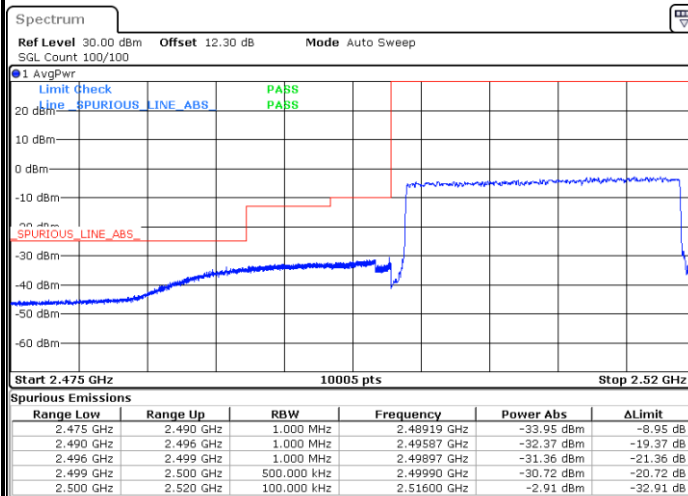
Lowest Band Edge / 1 RB



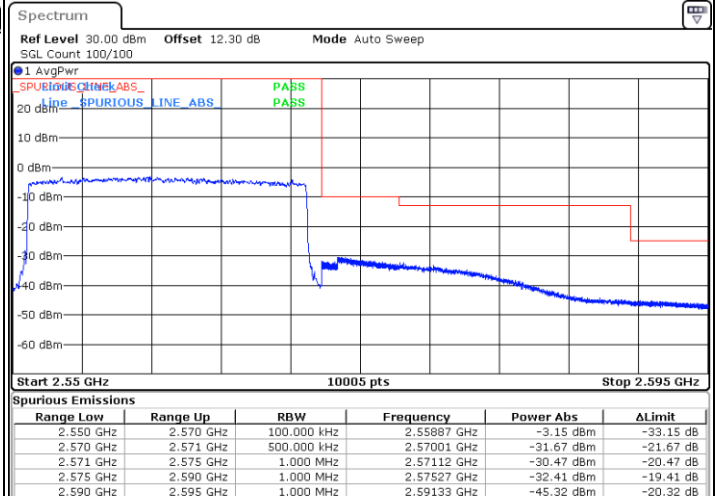
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

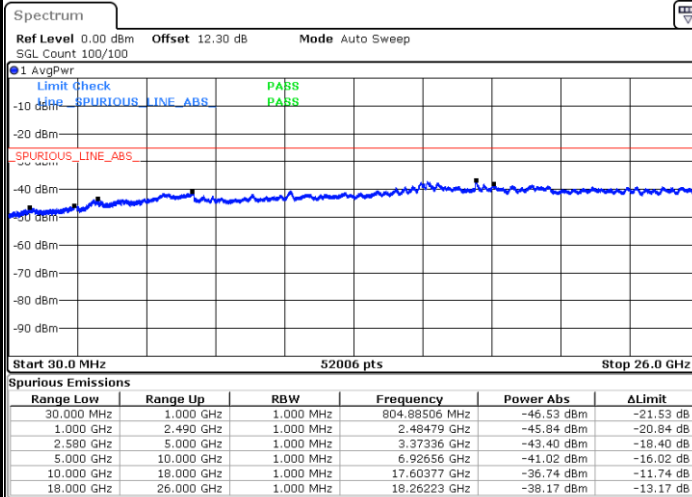




Conducted Spurious Emission

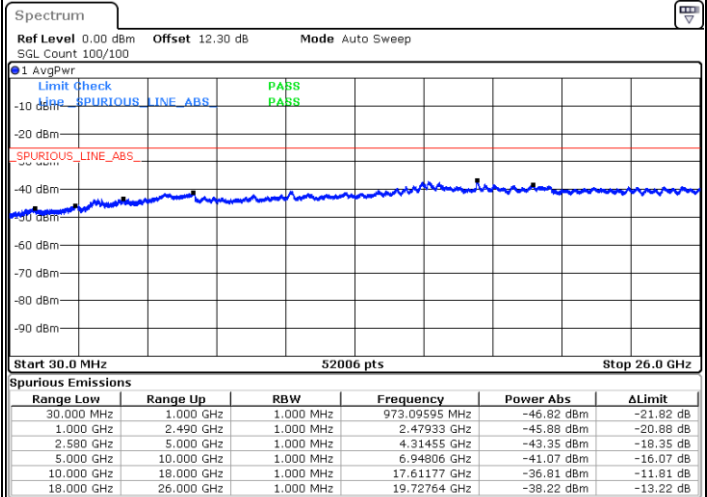
LTE Band 7 / 5MHz

Lowest Channel / QPSK



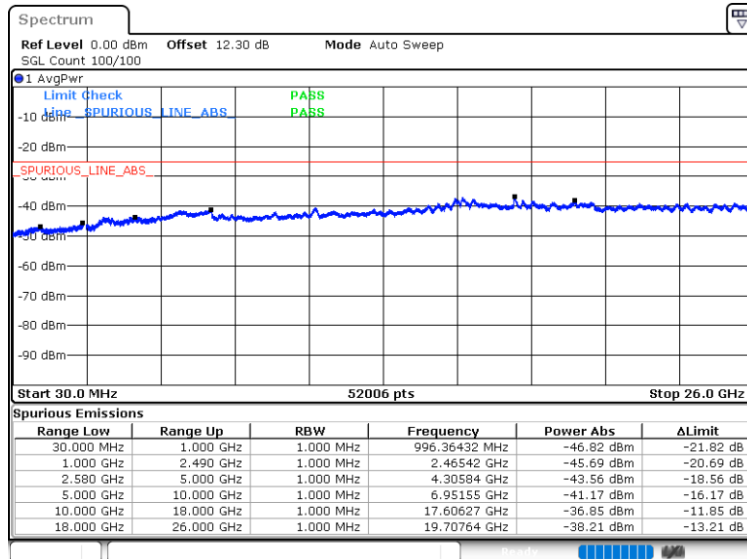
Date: 27.JUN.2021 07:26:37

Middle Channel / QPSK



Date: 27.JUN.2021 07:29:03

Highest Channel / QPSK

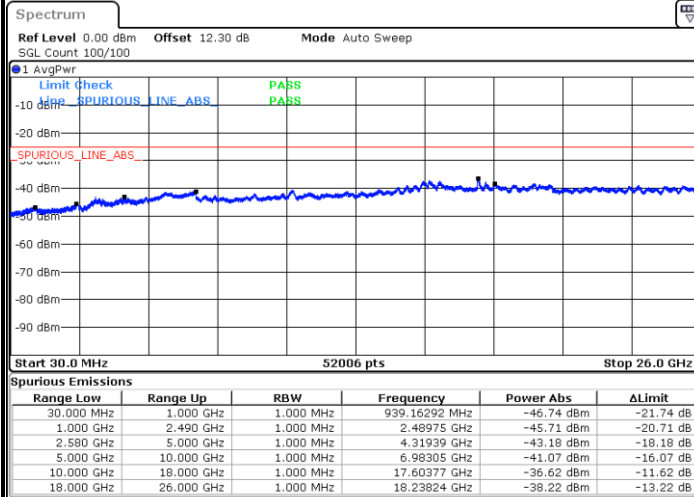


Date: 27.JUN.2021 07:31:47



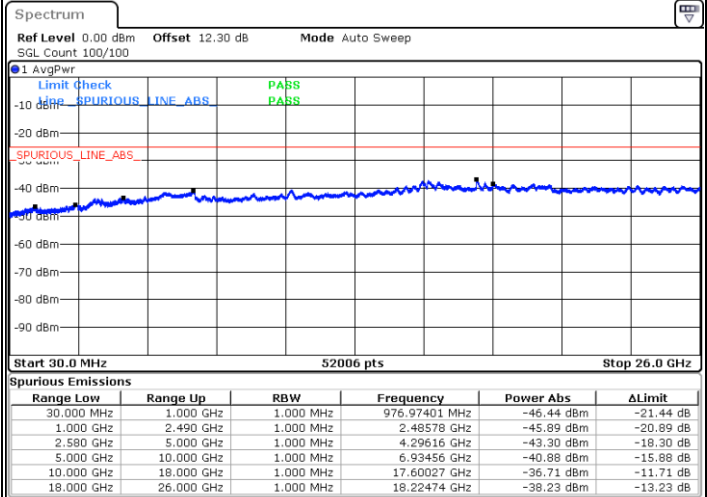
LTE Band 7 / 10MHz

Lowest Channel / QPSK



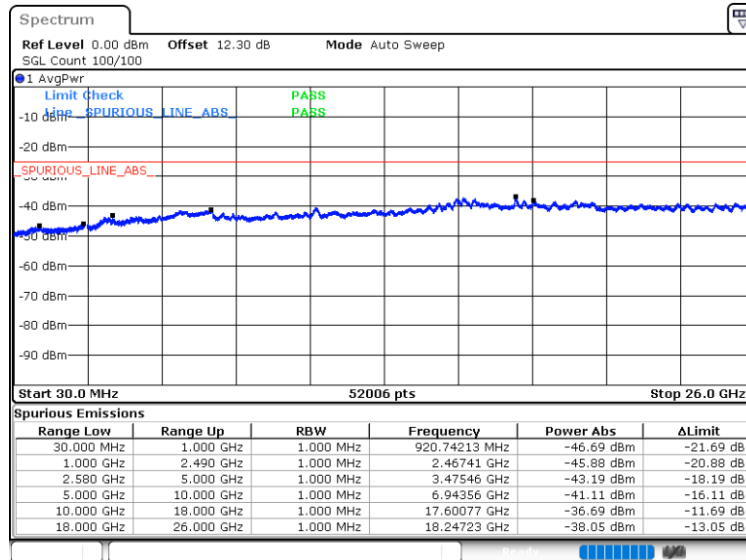
Date: 27.JUN.2021 07:37:00

Middle Channel / QPSK



Date: 27.JUN.2021 07:39:27

Highest Channel / QPSK

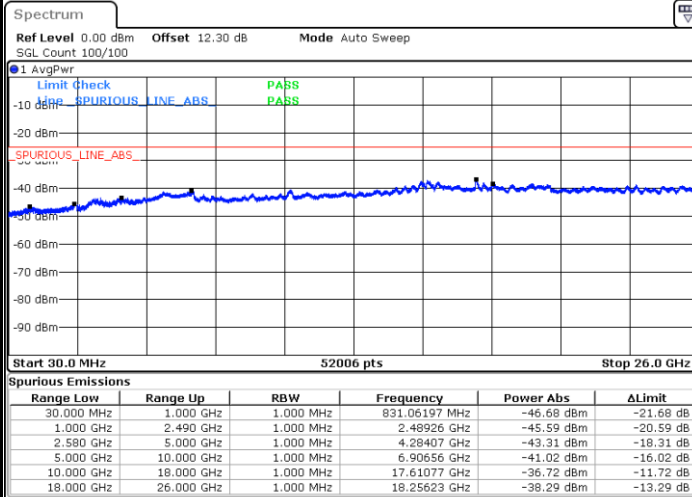


Date: 27.JUN.2021 07:42:11



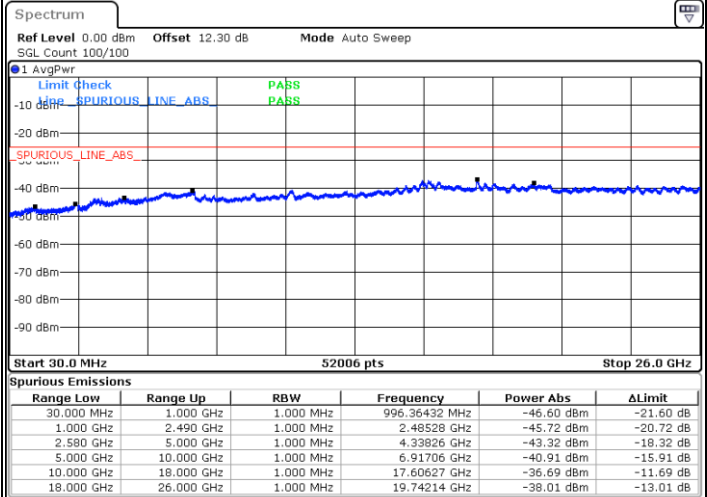
LTE Band 7 / 15MHz

Lowest Channel / QPSK



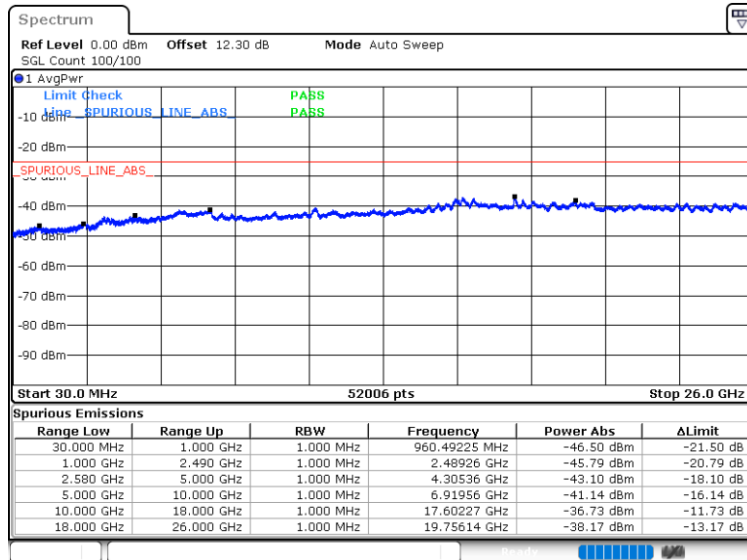
Date: 27.JUN.2021 07:47:26

Middle Channel / QPSK



Date: 27.JUN.2021 07:49:53

Highest Channel / QPSK

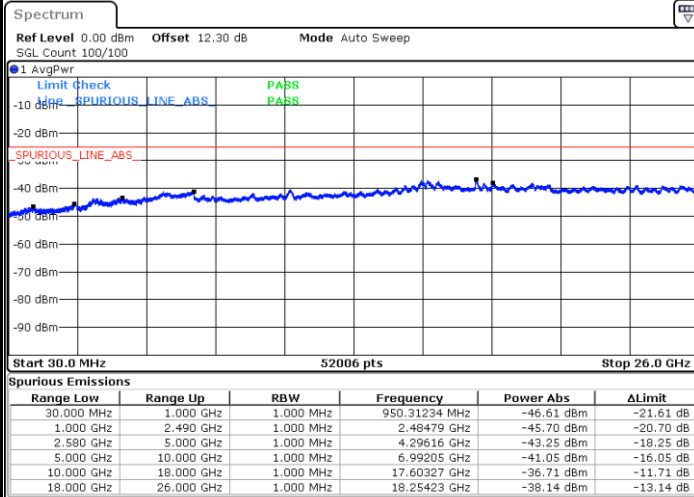


Date: 27.JUN.2021 07:52:37



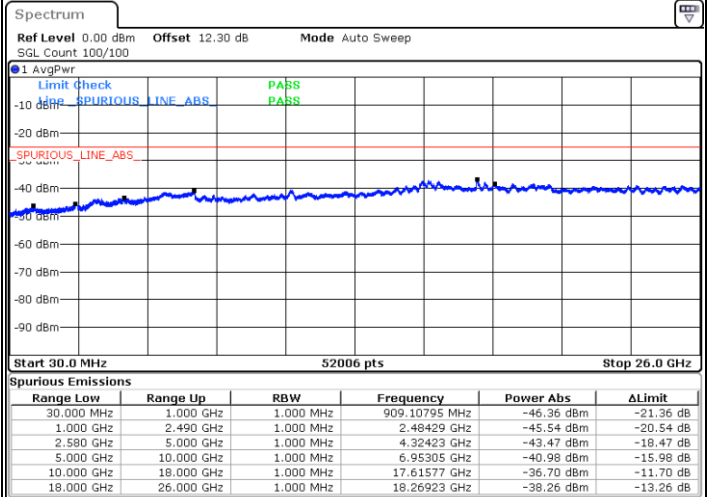
LTE Band 7 / 20MHz

Lowest Channel / QPSK



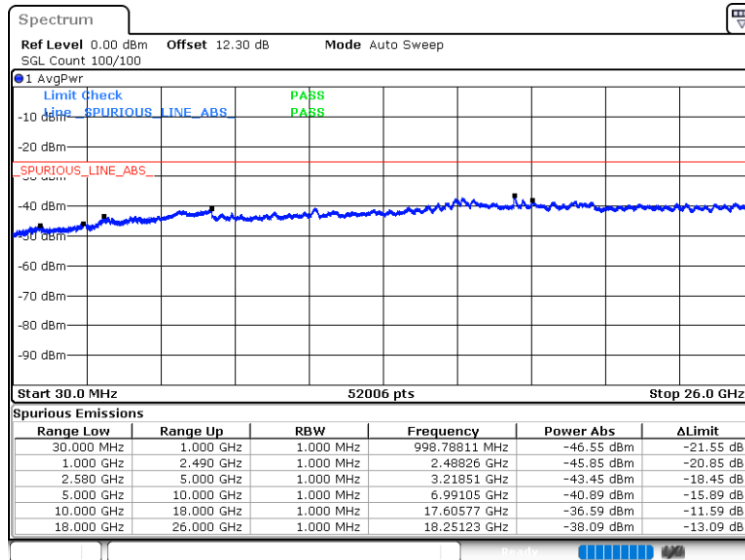
Date: 27.JUN.2021 07:57:53

Middle Channel / QPSK



Date: 27.JUN.2021 08:00:20

Highest Channel / QPSK



Date: 27.JUN.2021 08:03:03

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0080	
30	Normal Voltage	0.0079	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0067	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0079	
20	Maximum Voltage	0.0070	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0009	

Note:

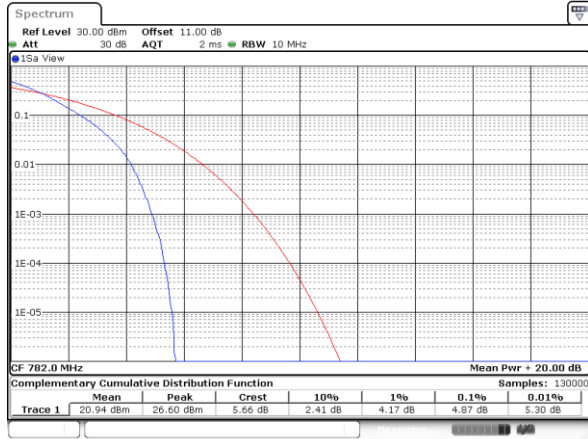
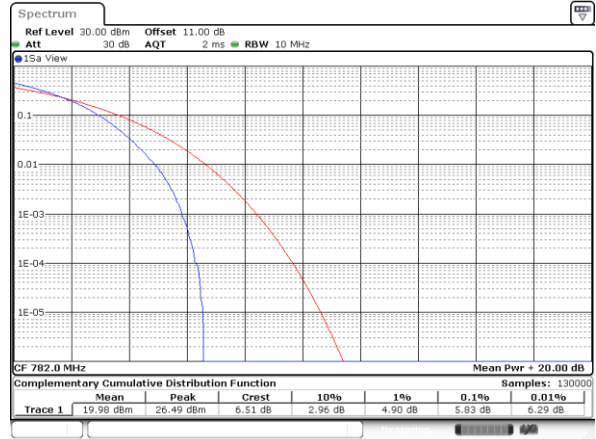
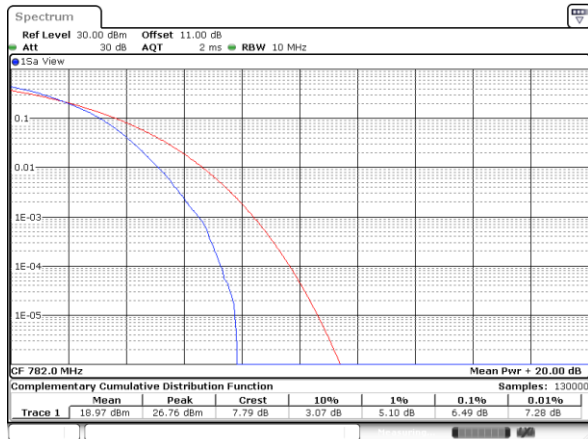
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.67 V. ; Maximum Voltage =4.26 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.87	5.83	6.49	-	PASS

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

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

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

LTE Band 13 / 10MHz / 256QAM
Middle Channel / Full RB

-

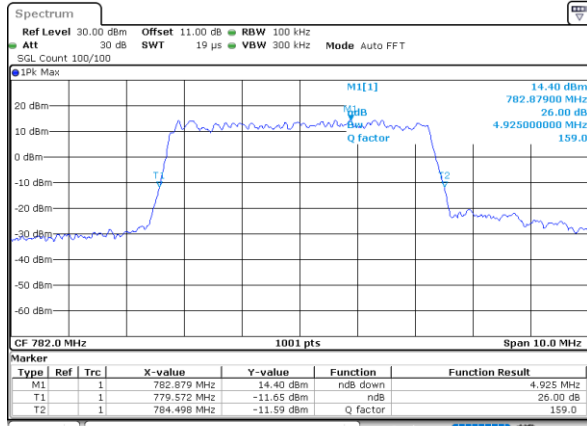
**26dB Bandwidth**

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
Middle CH	-	-	-	-	4.93	4.93	9.85	9.81	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.86	-	9.73	-	-	-	-	-



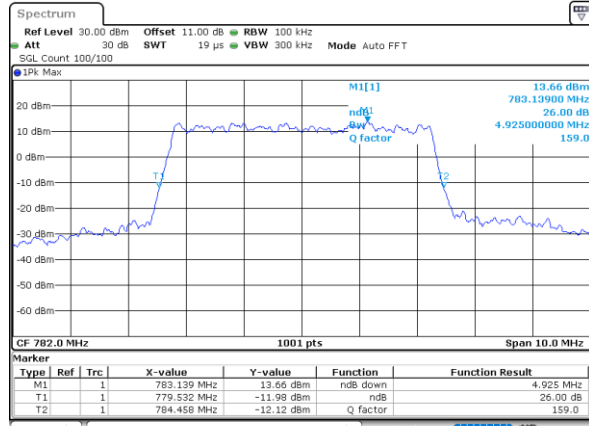
LTE Band 13

Middle Channel / 5MHz / QPSK



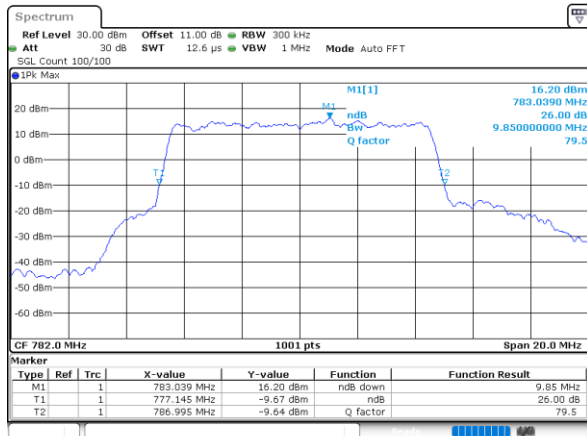
Date: 27 JUN 2021 09:19:27

Middle Channel / 5MHz / 16QAM



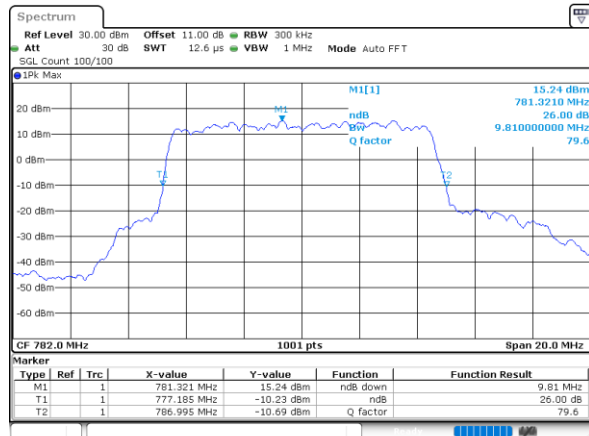
Date: 27 JUN 2021 09:19:48

Middle Channel / 10MHz / QPSK



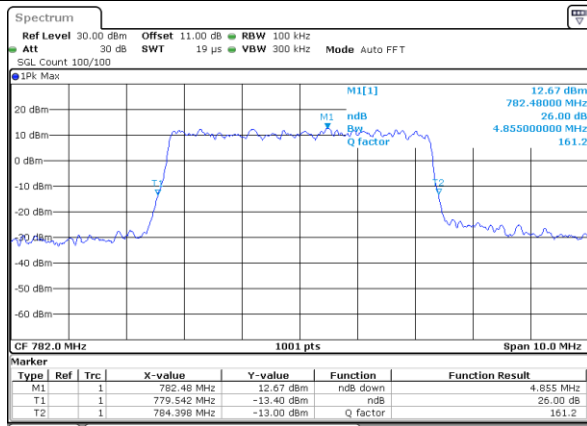
Date: 27 JUN 2021 09:38:02

Middle Channel / 10MHz / 16QAM



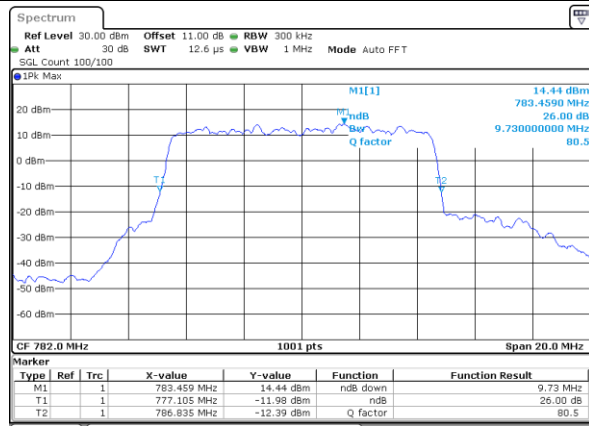
Date: 27 JUN 2021 09:37:41

Middle Channel / 5MHz / 64QAM



Date: 27 JUN 2021 09:32:32

Middle Channel / 10MHz / 64QAM



Date: 27 JUN 2021 09:50:19

**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
Middle CH	-	-	-	-	4.47	4.50	9.01	8.97	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.50	-	9.05	-	-	-	-	-