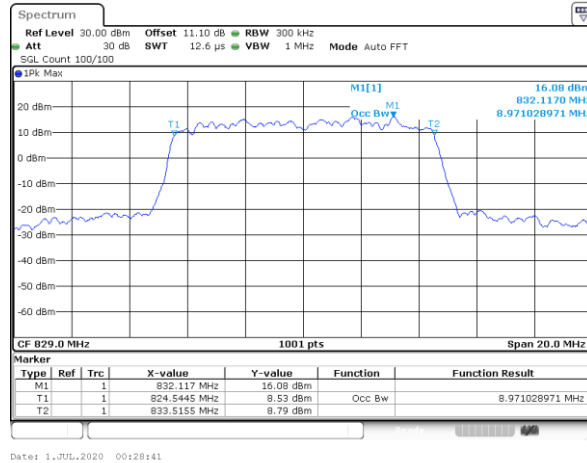
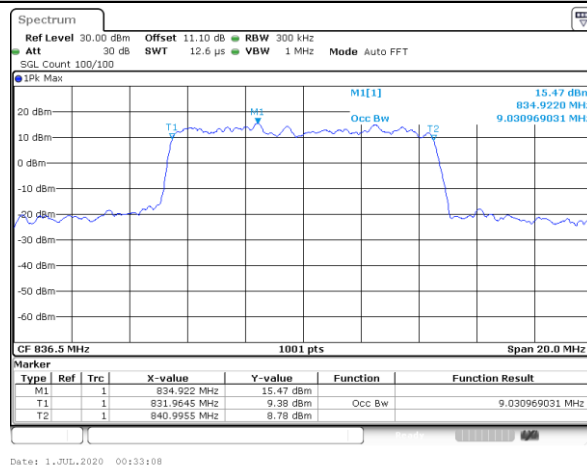
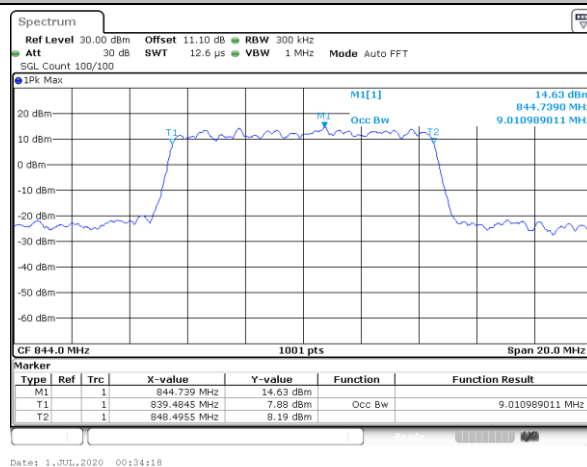


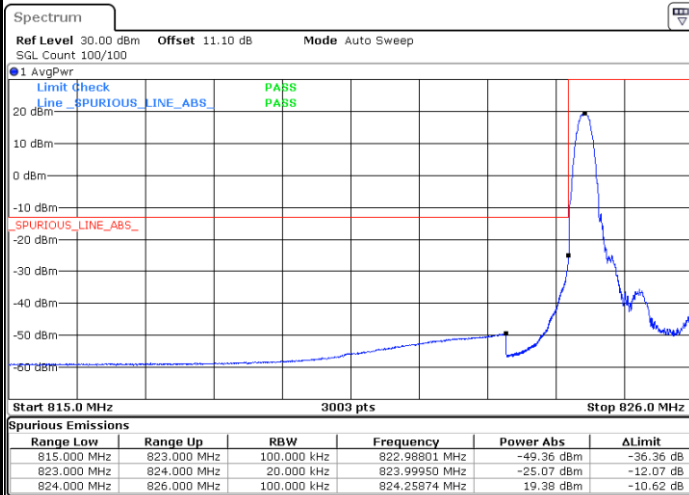
**LTE Band 5****Lowest Channel / 10MHz / 16QAM****Middle Channel / 10MHz / 16QAM****Highest Channel / 10MHz / 16QAM**



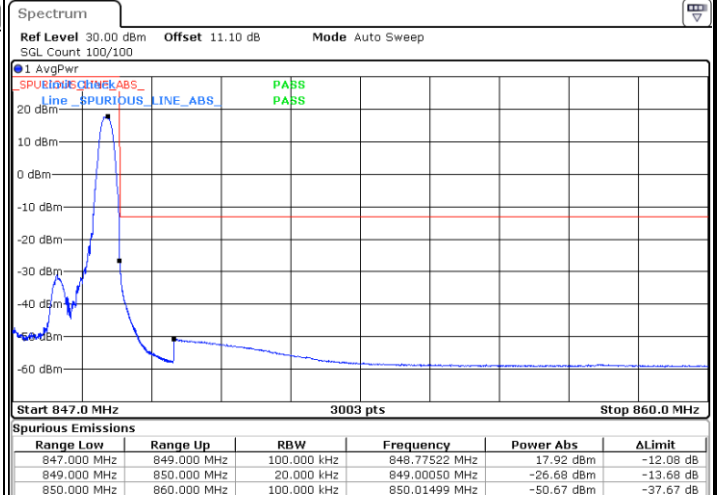
Conducted Band Edge

LTE Band 5 / 1.4MHz / 16QAM

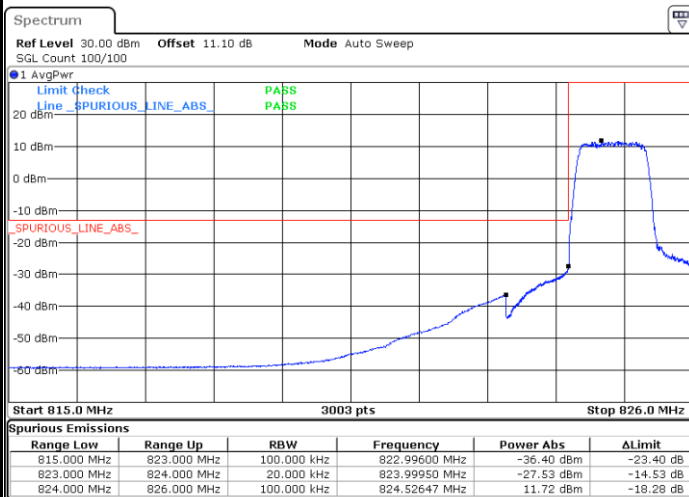
Lowest Band Edge / 1 RB



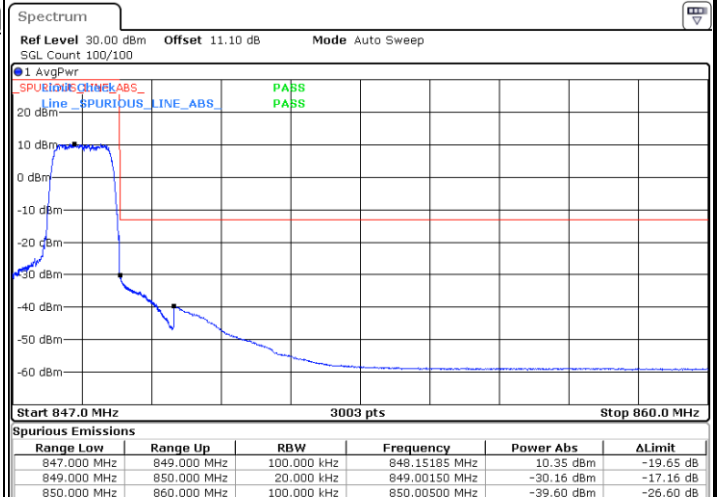
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



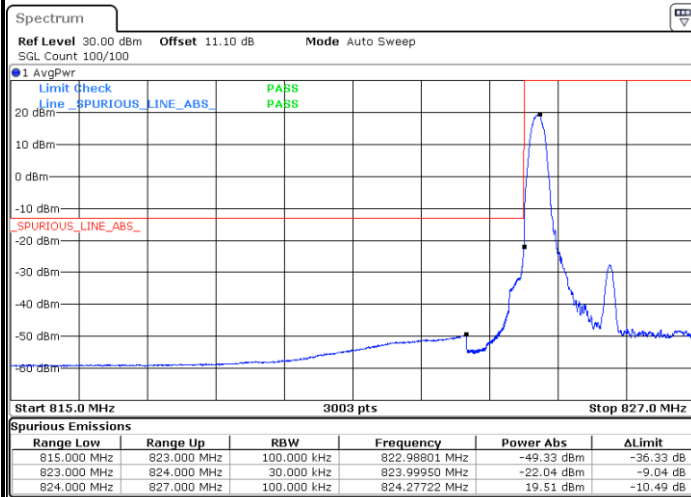
Highest Band Edge / Full RB



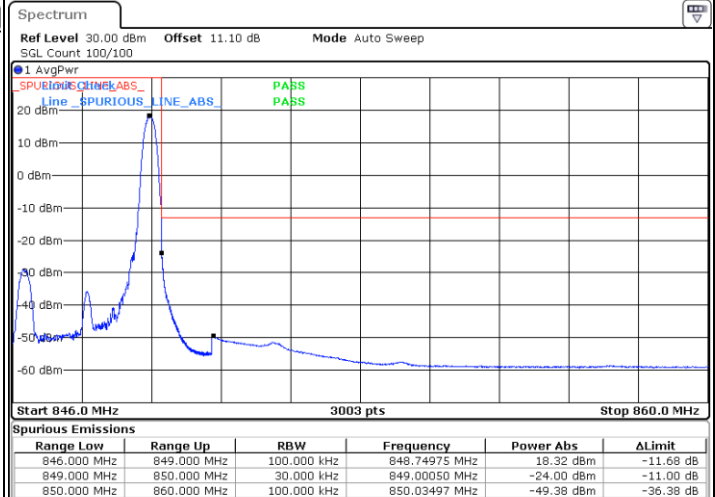


LTE Band 5 / 3MHz / 16QAM

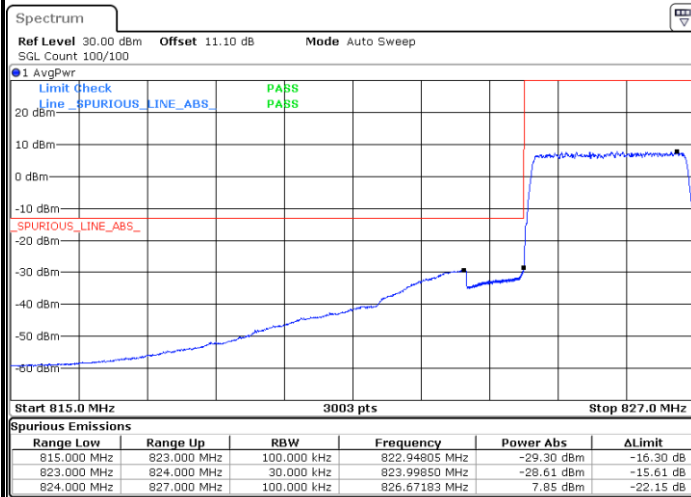
Lowest Band Edge / 1 RB



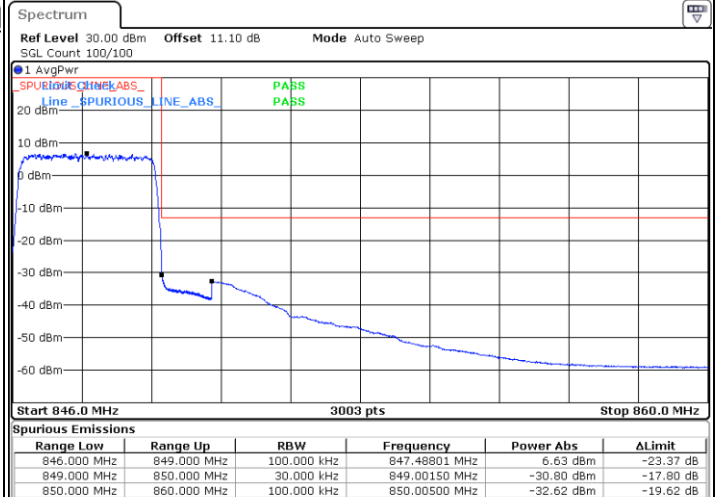
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



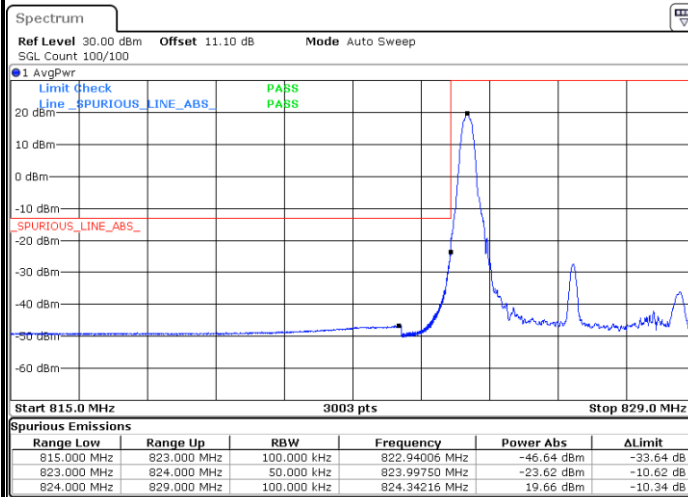
Highest Band Edge / Full RB



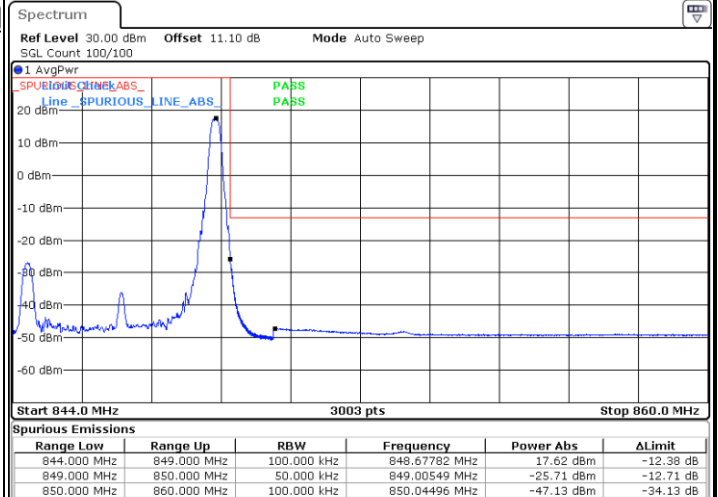


LTE Band 5 / 5MHz / 16QAM

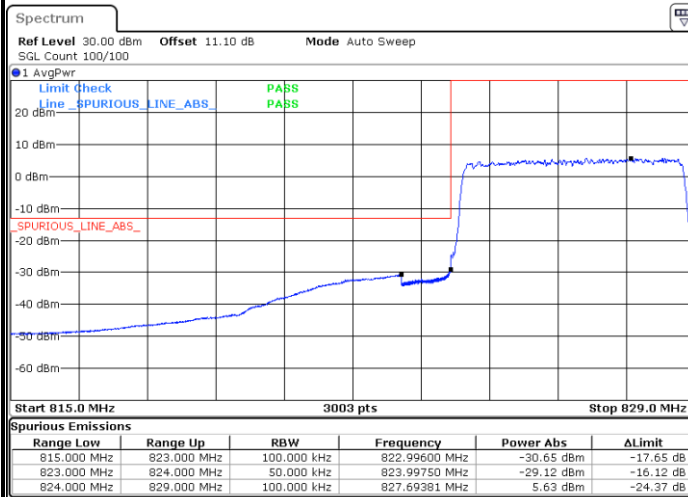
Lowest Band Edge / 1RB



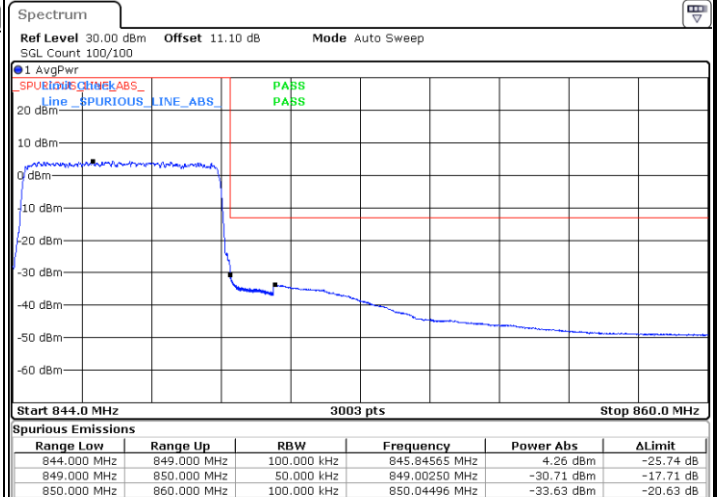
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



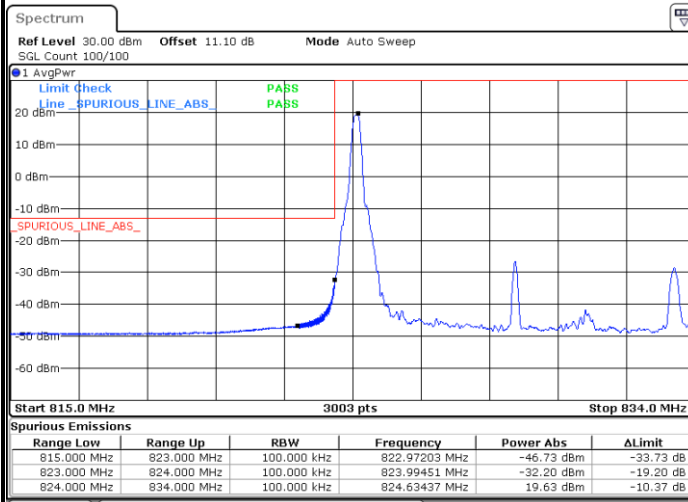
Highest Band Edge / Full RB



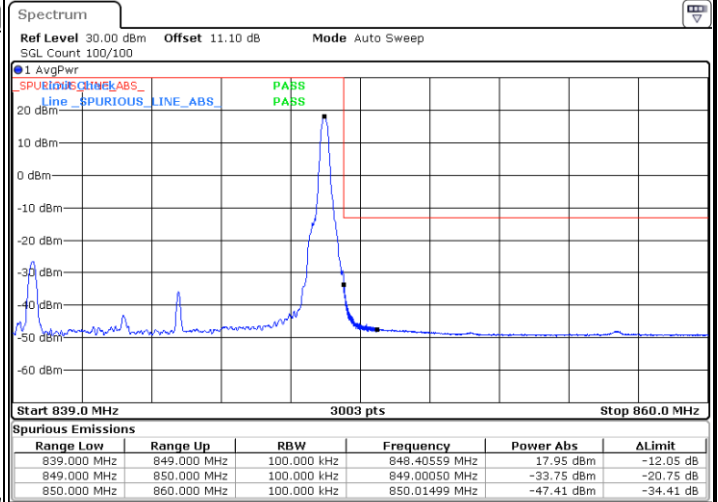


LTE Band 5 / 10MHz / 16QAM

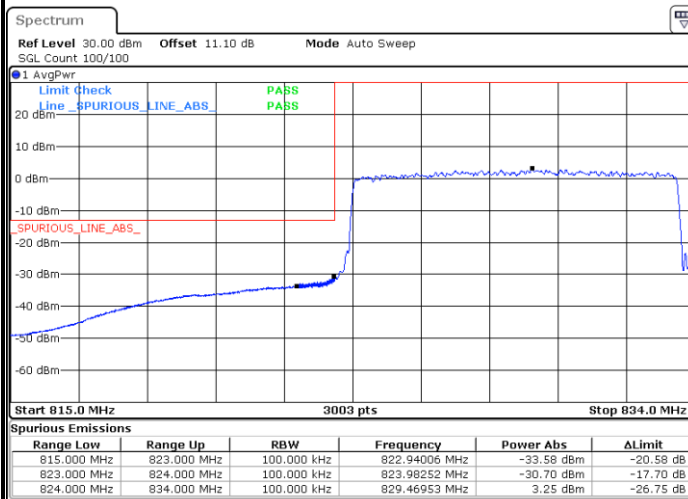
Lowest Band Edge / 1 RB



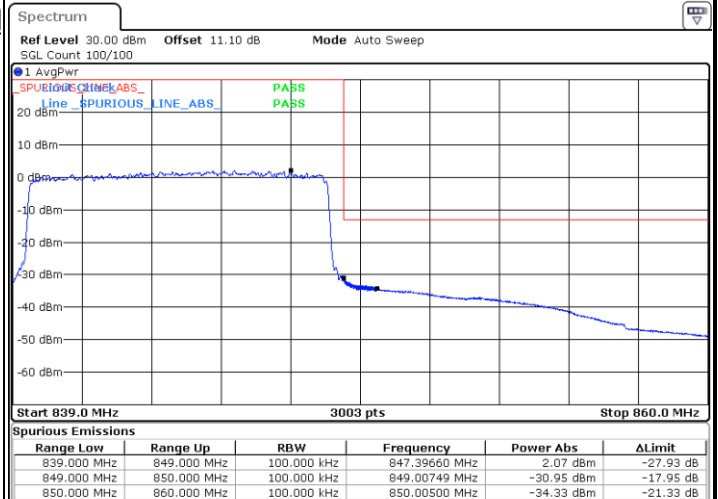
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

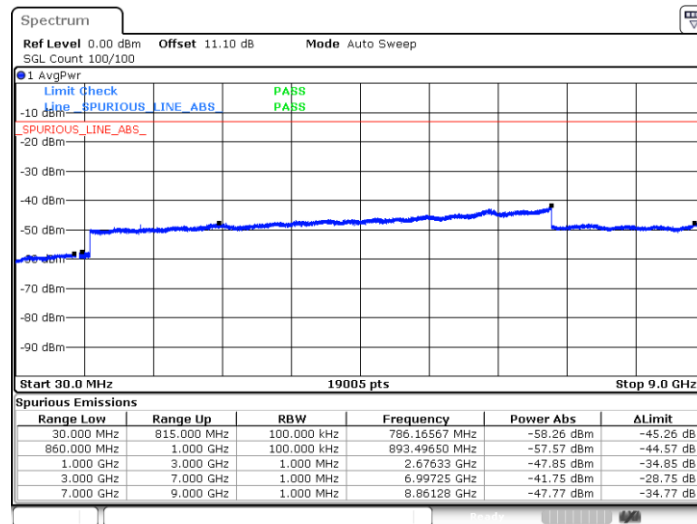




Conducted Spurious Emission

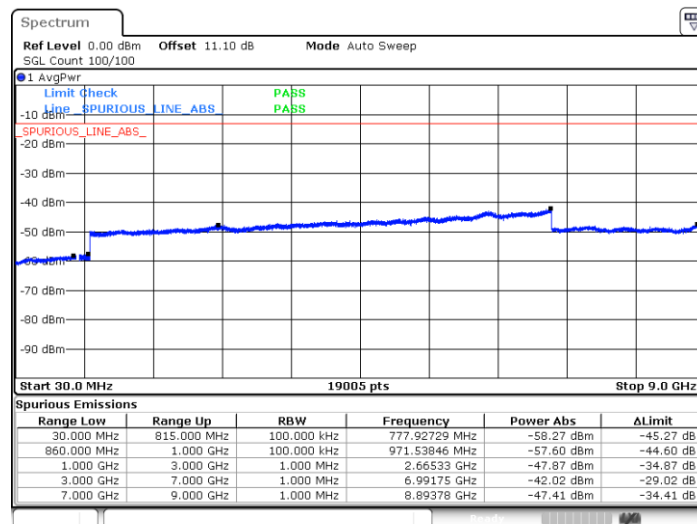
LTE Band 5 / 1.4MHz

Lowest Channel / 16QAM



Date: 1.JUL.2020 00:08:12

Middle Channel / 16QAM

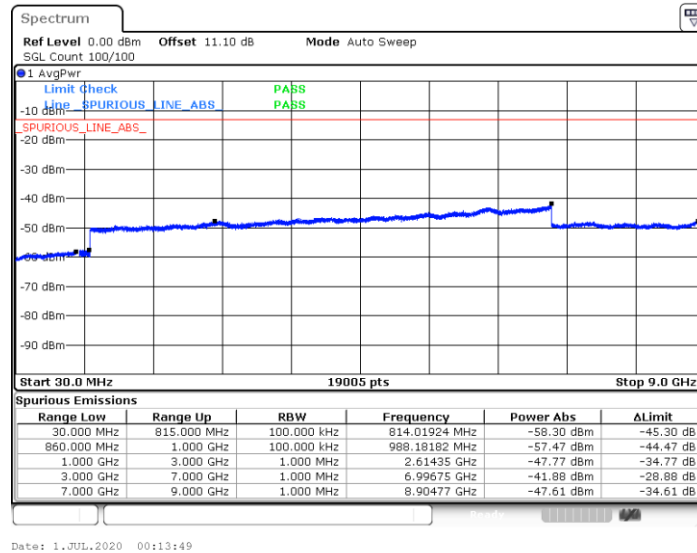


Date: 1.JUL.2020 00:09:22



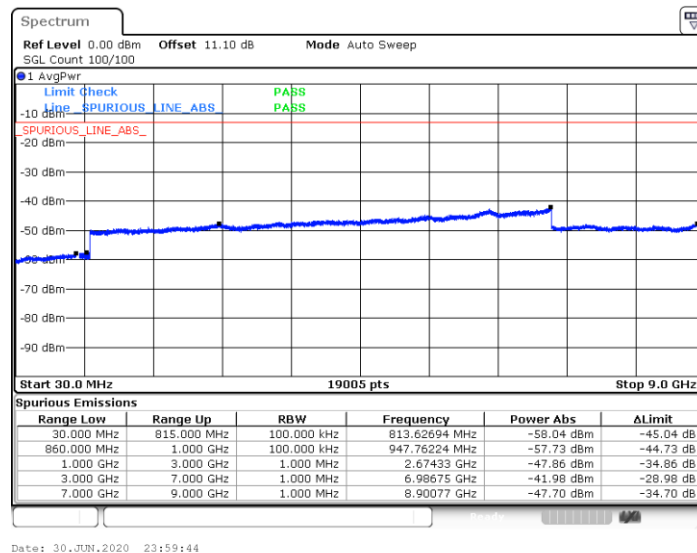
LTE Band 5 / 1.4MHz

Highest Channel / 16QAM



LTE Band 5 / 3MHz

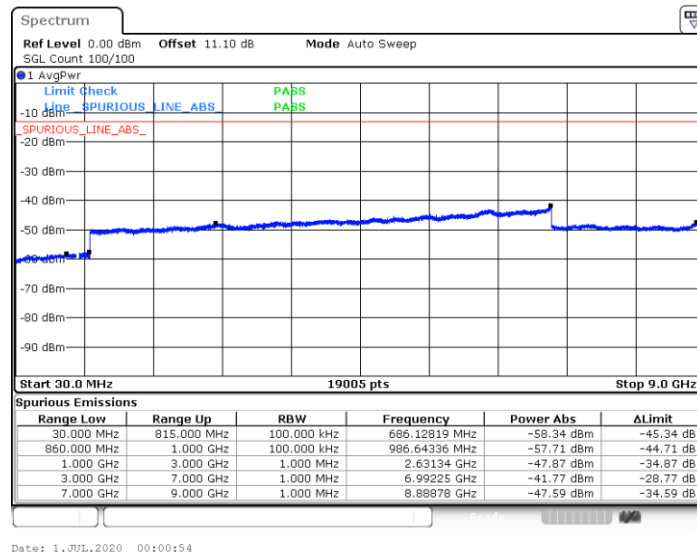
Lowest Channel / 16QAM



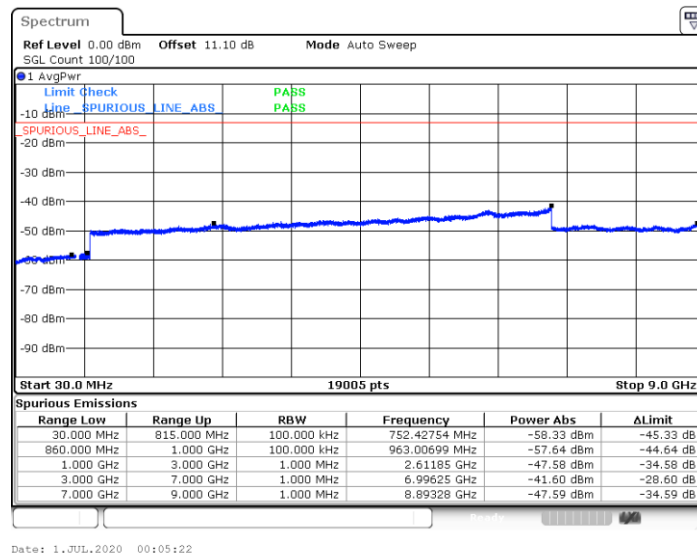


LTE Band 5 / 3MHz

Middle Channel / 16QAM



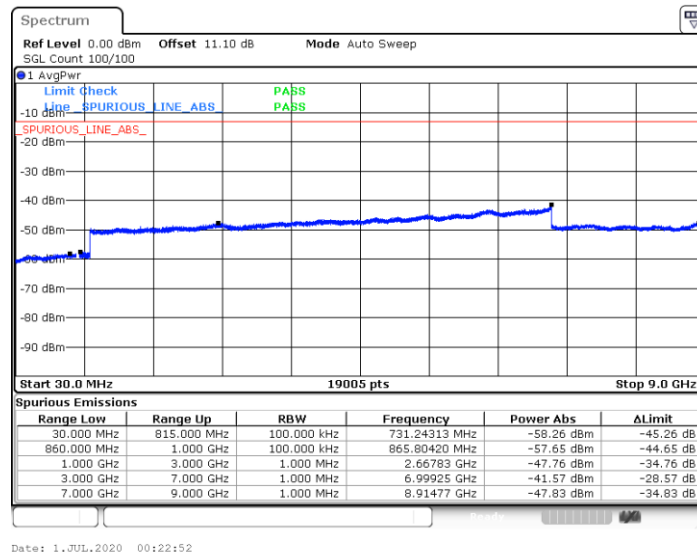
Highest Channel / 16QAM



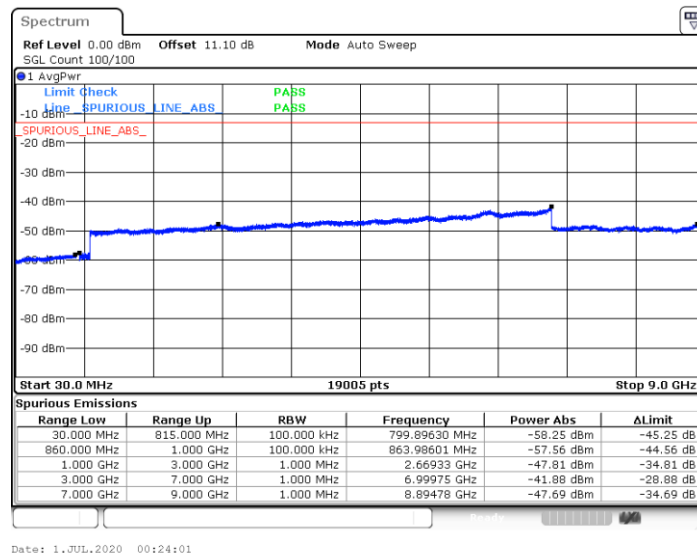


LTE Band 5 / 5MHz

Lowest Channel / 16QAM



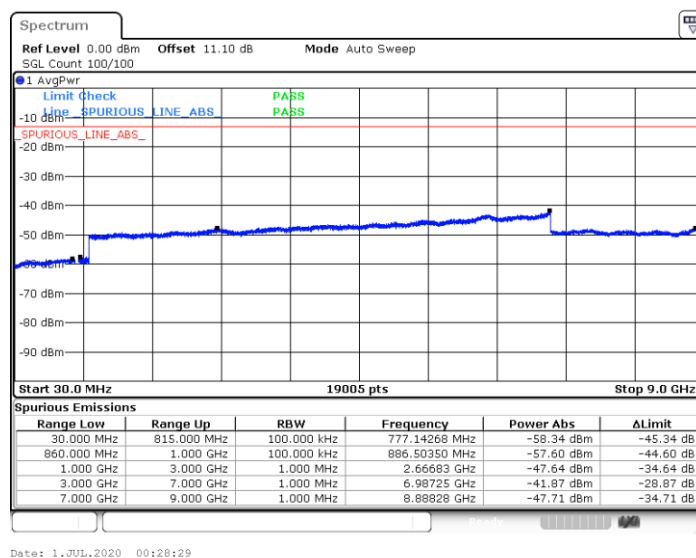
Middle Channel / 16QAM





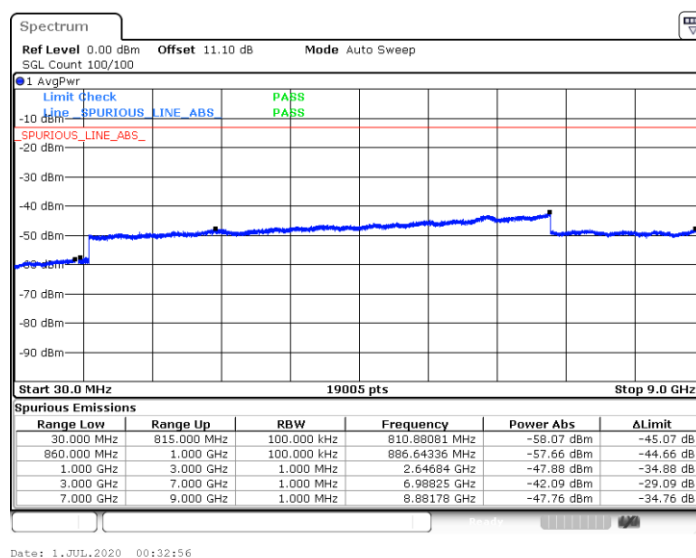
LTE Band 5 / 5MHz

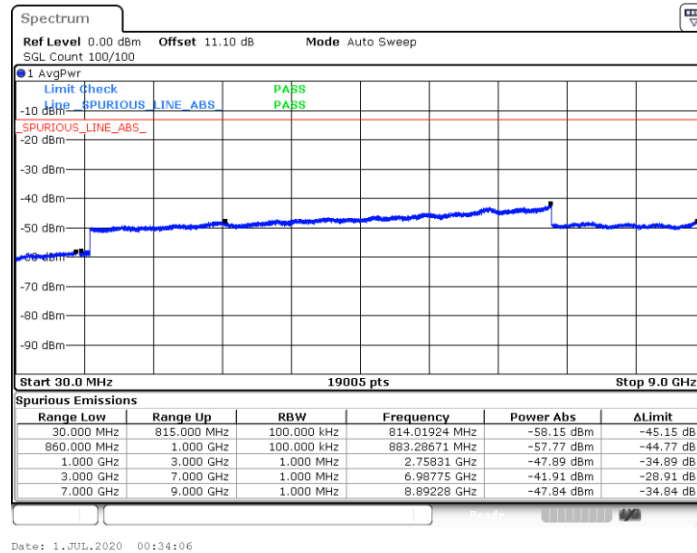
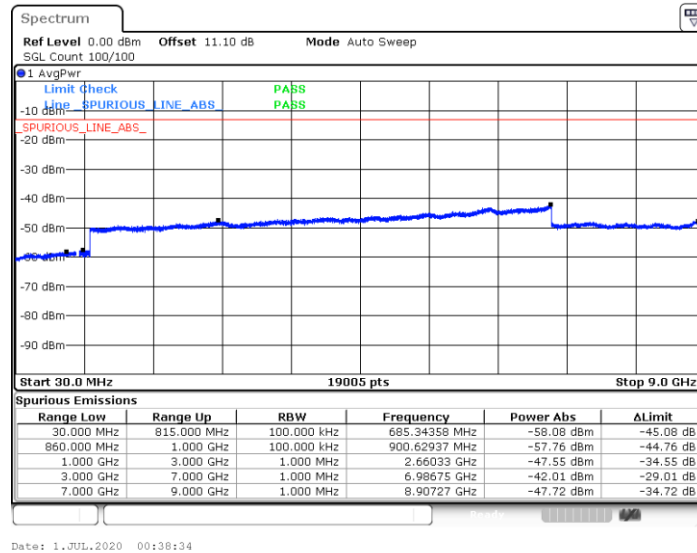
Highest Channel / 16QAM



LTE Band 5 / 10MHz

Lowest Channel / 16QAM



**LTE Band 5 / 10MHz****Middle Channel / 16QAM****Highest Channel / 16QAM**

Frequency Stability

Test Conditions		LTE Band 5 (16QAM) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0029	PASS
40	Normal Voltage	0.0074	
30	Normal Voltage	0.0099	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0072	
-10	Normal Voltage	0.0053	
-20	Normal Voltage	0.0066	
-30	Normal Voltage	0.0047	
20	Maximum Voltage	0.0073	
20	Normal Voltage	0.0029	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =12 V. ; Battery End Point (BEP) =10.2 V. ; Maximum Voltage =13.8 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7

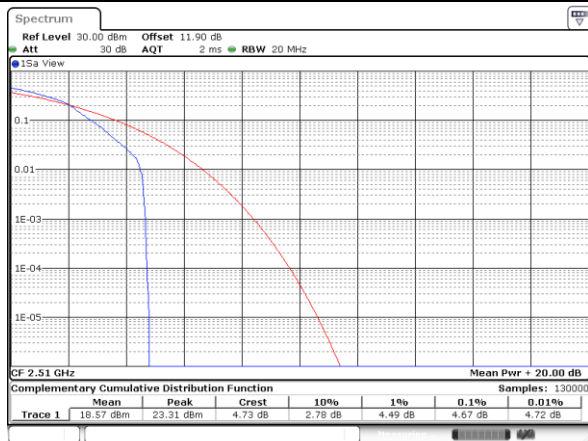
Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	4.67	5.74	PASS
Middle CH	-	-	5.07	5.57	
Highest CH	-	-	5.25	6.03	

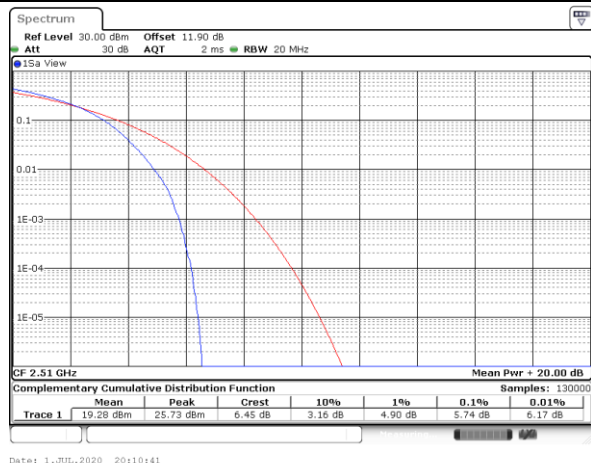


LTE Band 7 / 20MHz / 16QAM

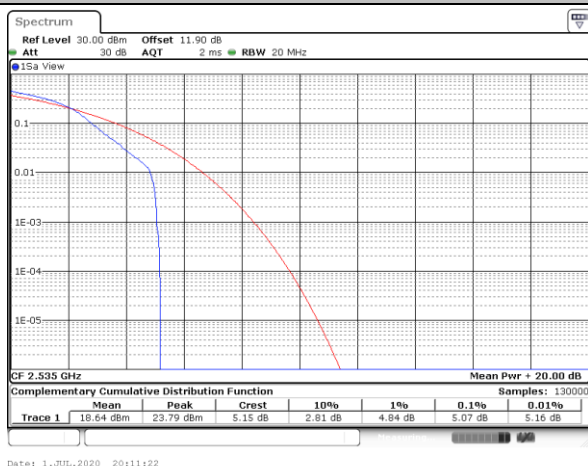
Lowest Channel / 1RB



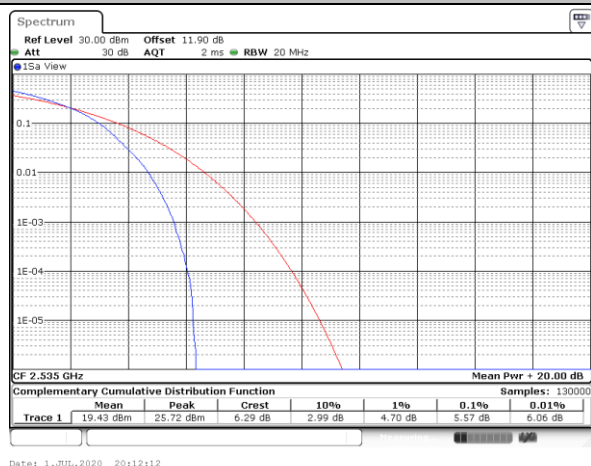
Lowest Channel / Full RB



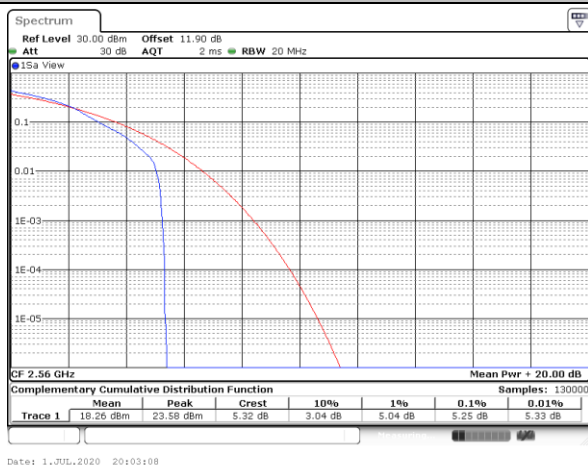
Middle Channel / 1RB



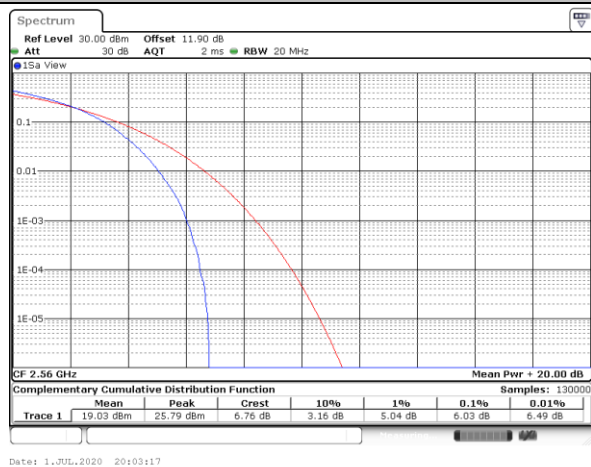
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



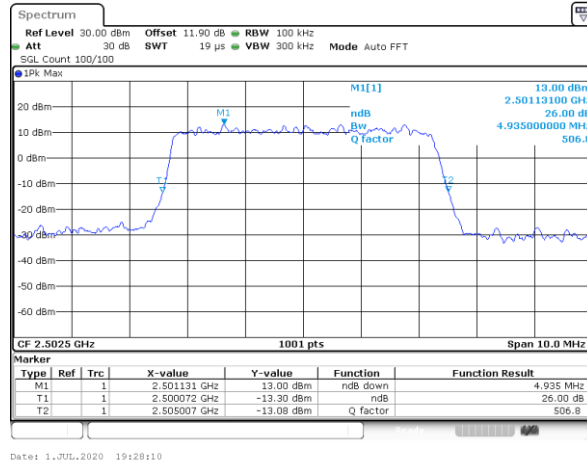
**26dB Bandwidth**

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
Lowest CH	-	-	-	-	-	4.94	-	9.83	-	14.18	-	19.10
Middle CH	-	-	-	-	-	4.88	-	9.77	-	14.60	-	19.14
Highest CH	-	-	-	-	-	4.98	-	9.75	-	14.33	-	18.78

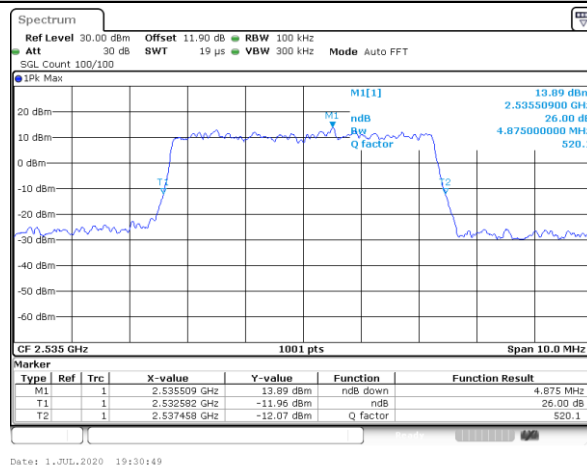


LTE Band 7

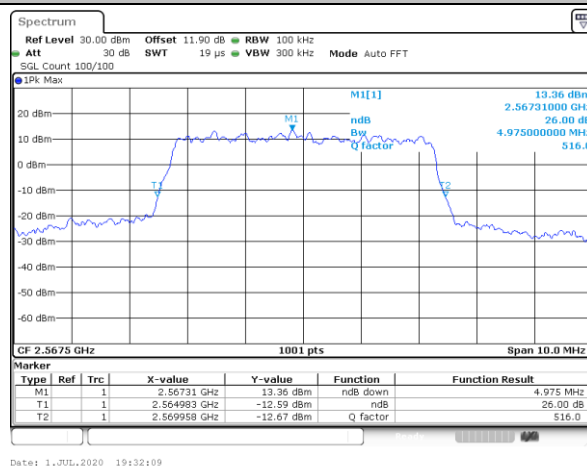
Lowest Channel / 5MHz / 16QAM

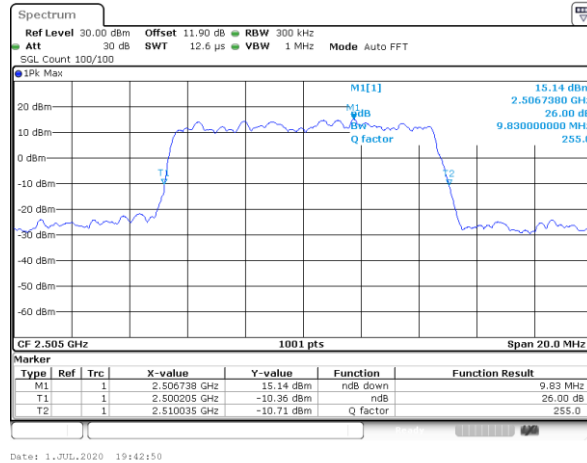
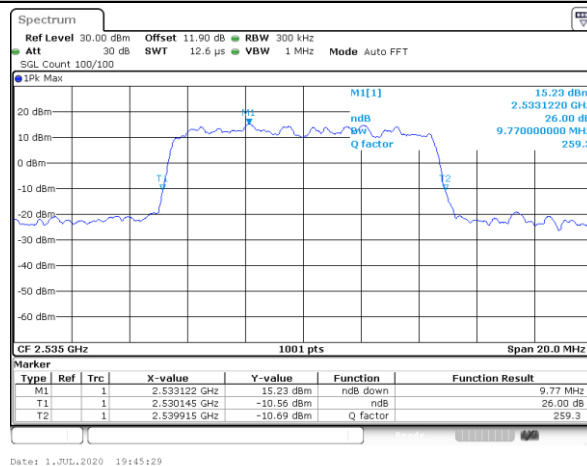
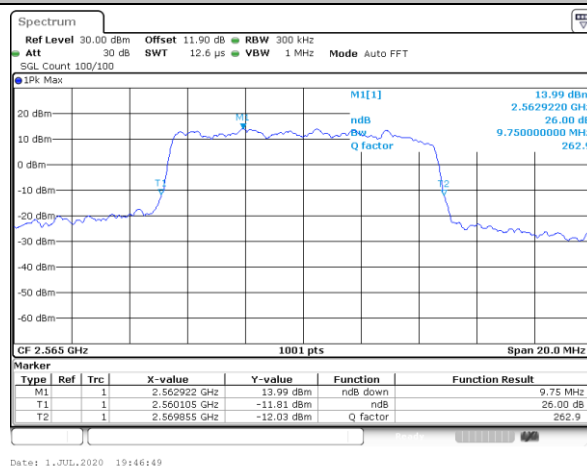


Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / 16QAM

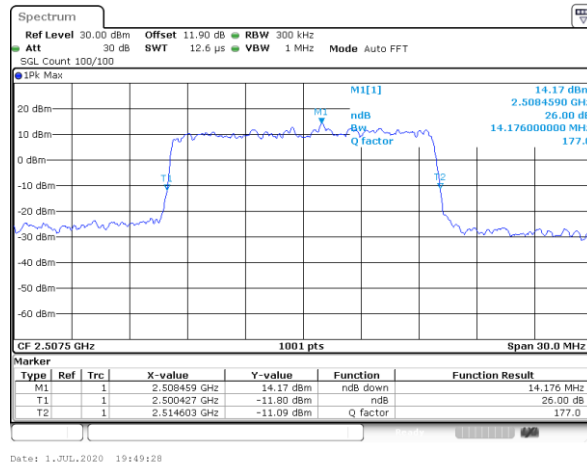


**LTE Band 7****Lowest Channel / 10MHz / 16QAM****Middle Channel / 10MHz / 16QAM****Highest Channel / 10MHz / 16QAM**

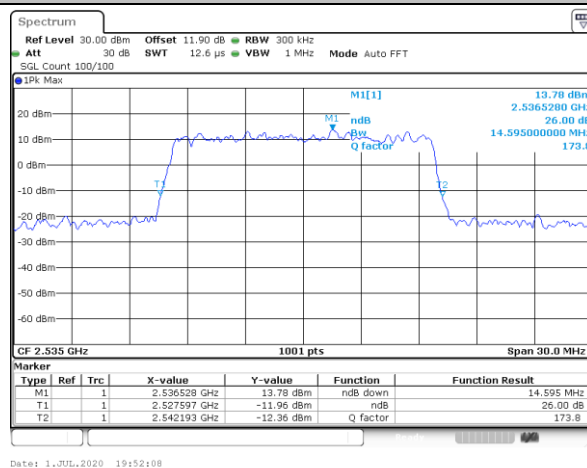


LTE Band 7

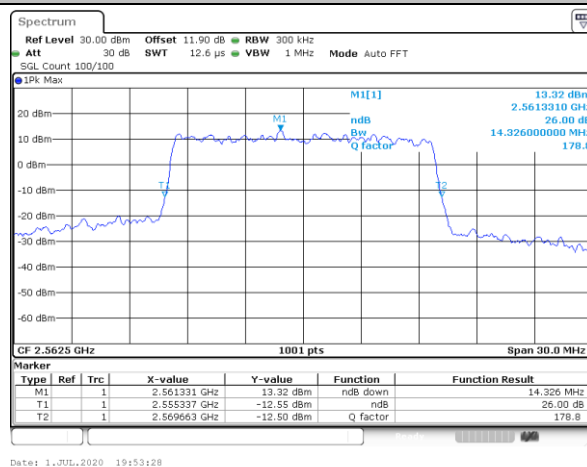
Lowest Channel / 15MHz / 16QAM



Middle Channel / 15MHz / 16QAM



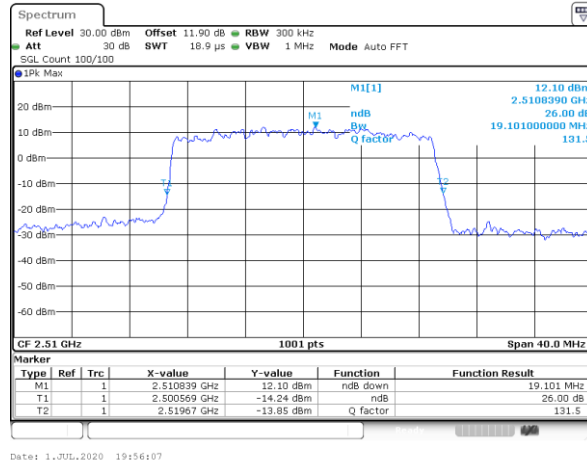
Highest Channel / 15MHz / 16QAM



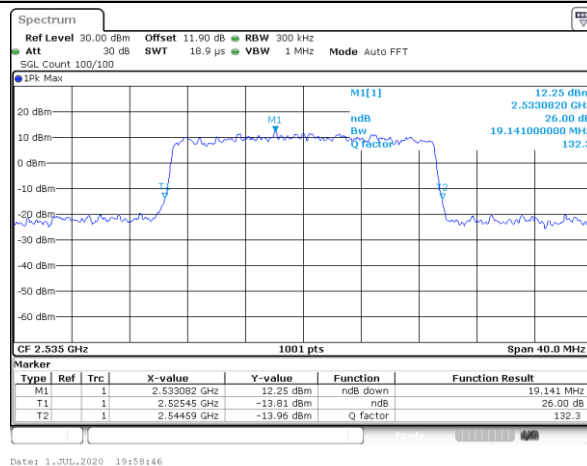


LTE Band 7

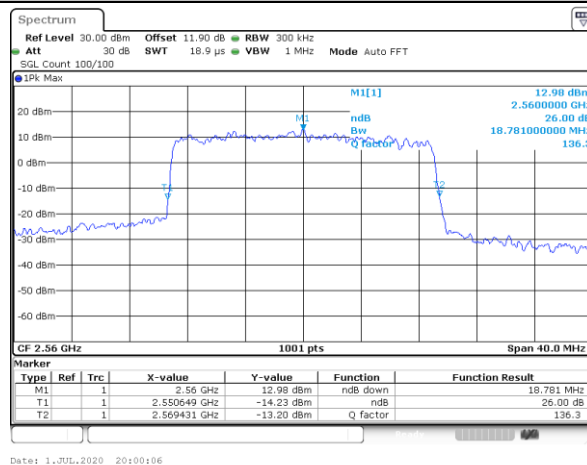
Lowest Channel / 20MHz / 16QAM



Middle Channel / 20MHz / 16QAM

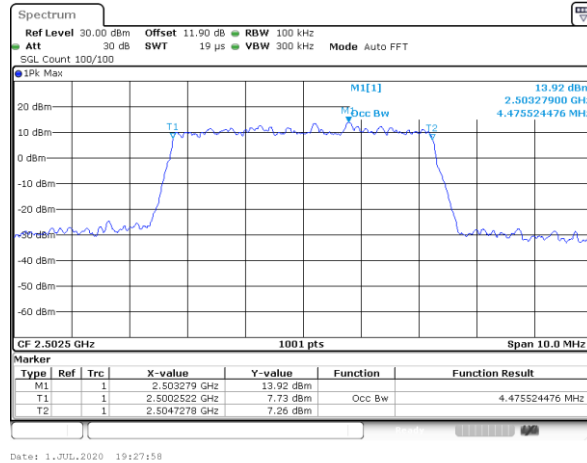
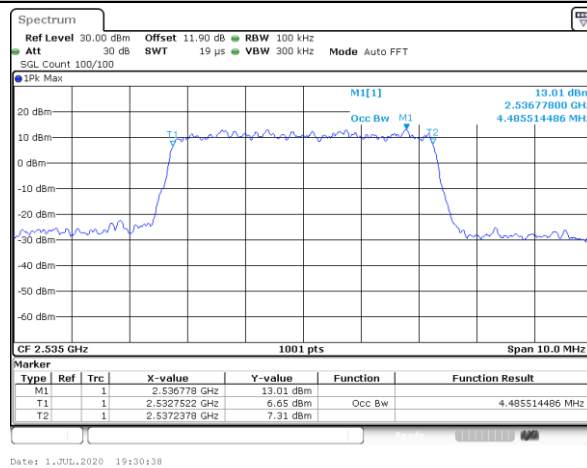
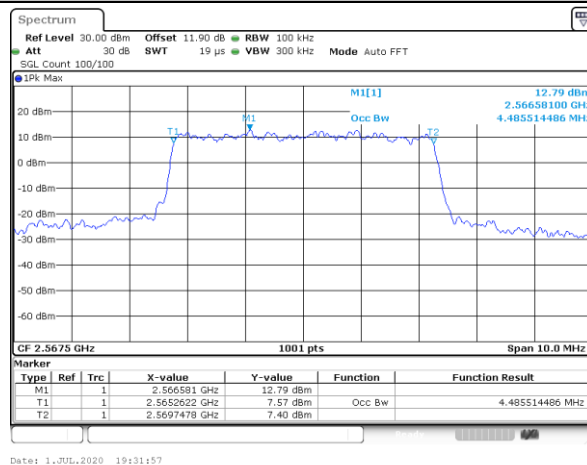


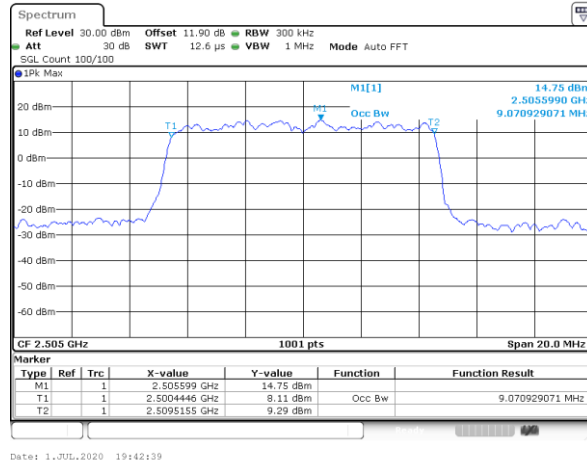
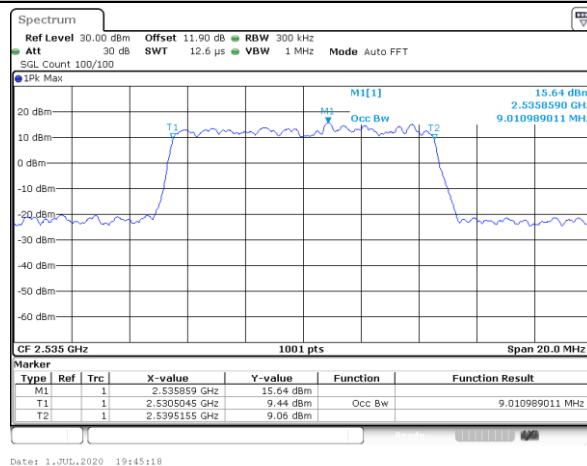
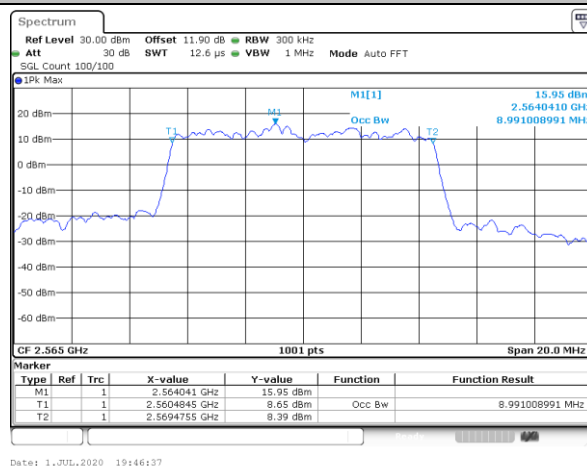
Highest Channel / 20MHz / 16QAM

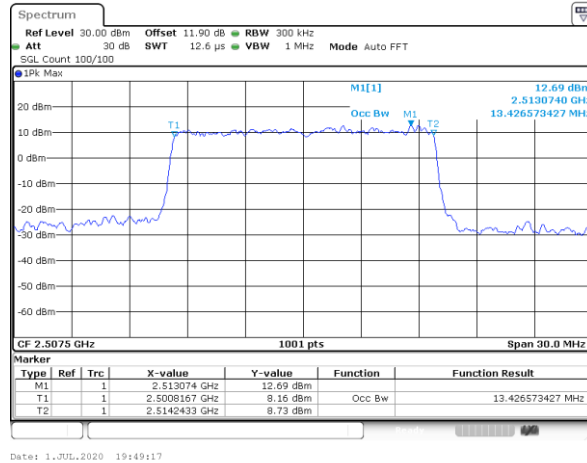
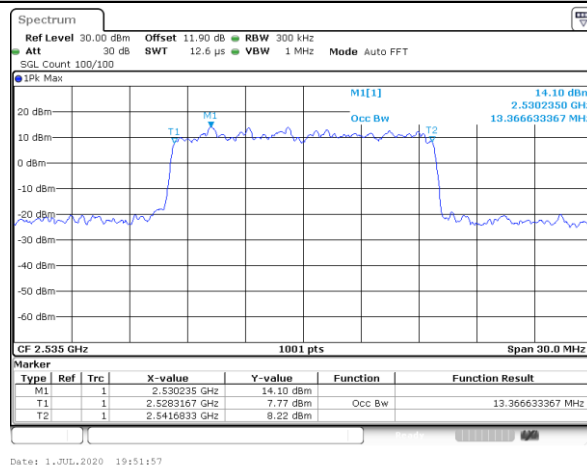
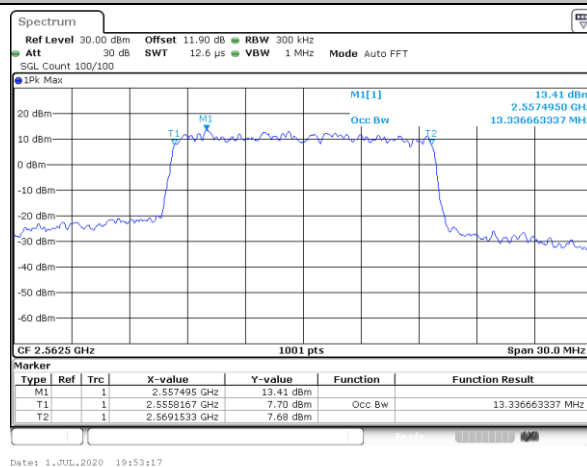


**Occupied Bandwidth**

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
Lowest CH	-	-	-	-	-	4.48	-	9.07	-	13.43	-	17.90
Middle CH	-	-	-	-	-	4.49	-	9.01	-	13.37	-	17.82
Highest CH	-	-	-	-	-	4.49	-	8.99	-	13.34	-	17.78

**LTE Band 7****Lowest Channel / 5MHz / 16QAM****Middle Channel / 5MHz / 16QAM****Highest Channel / 5MHz / 16QAM**

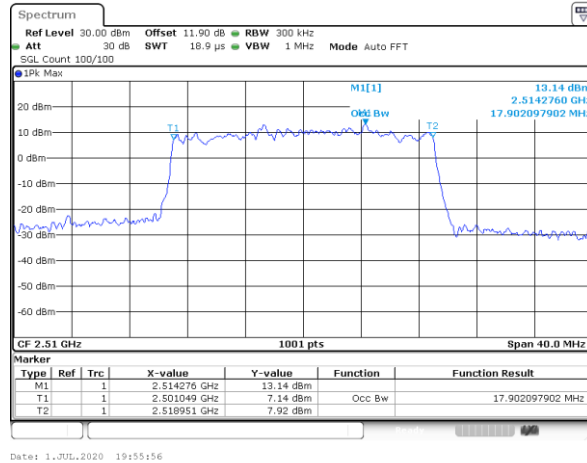
**LTE Band 7****Lowest Channel / 10MHz / 16QAM****Middle Channel / 10MHz / 16QAM****Highest Channel / 10MHz / 16QAM**

**LTE Band 7****Lowest Channel / 15MHz / 16QAM****Middle Channel / 15MHz / 16QAM****Highest Channel / 15MHz / 16QAM**

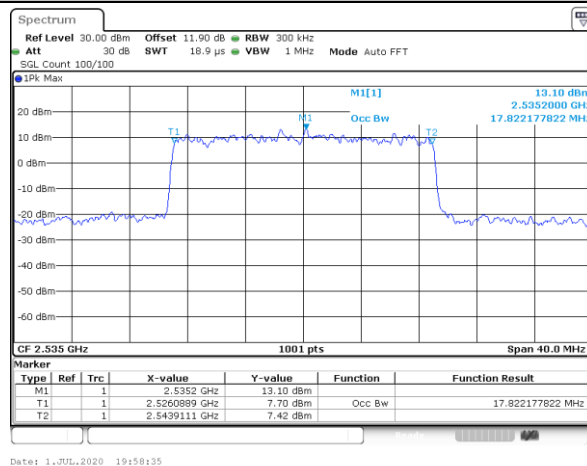


LTE Band 7

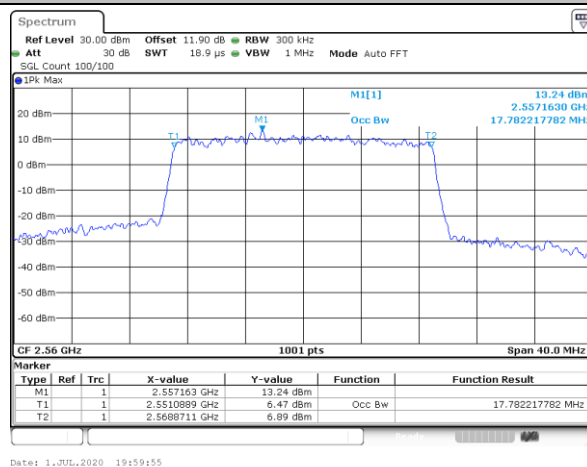
Lowest Channel / 20MHz / 16QAM

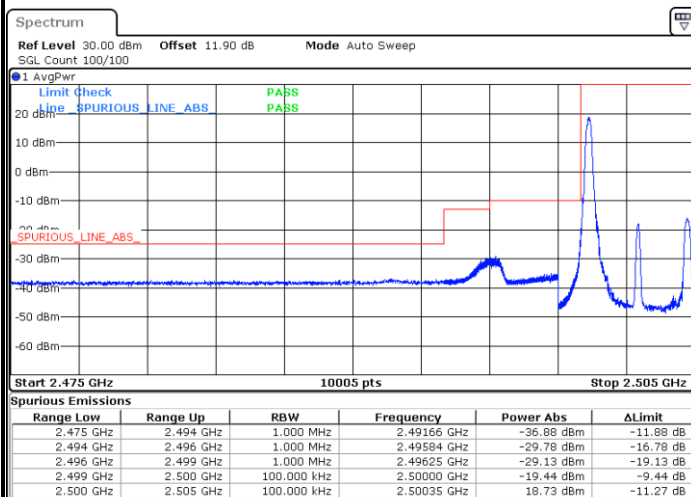
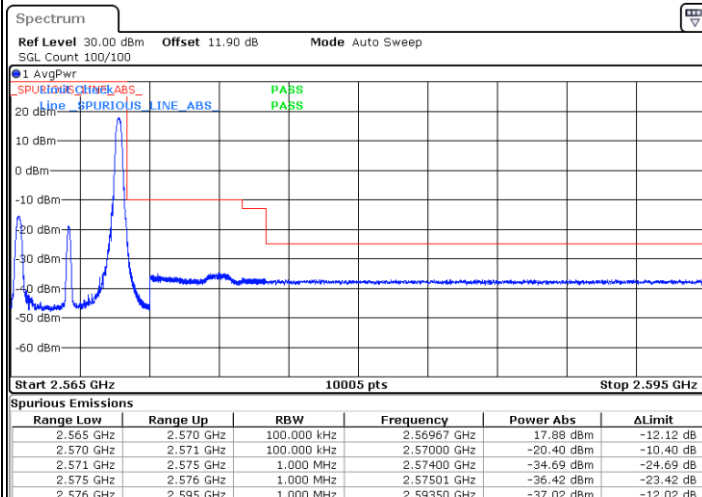
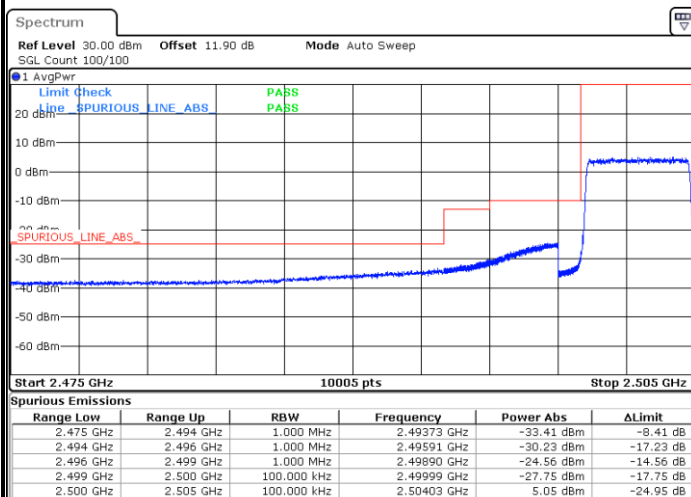
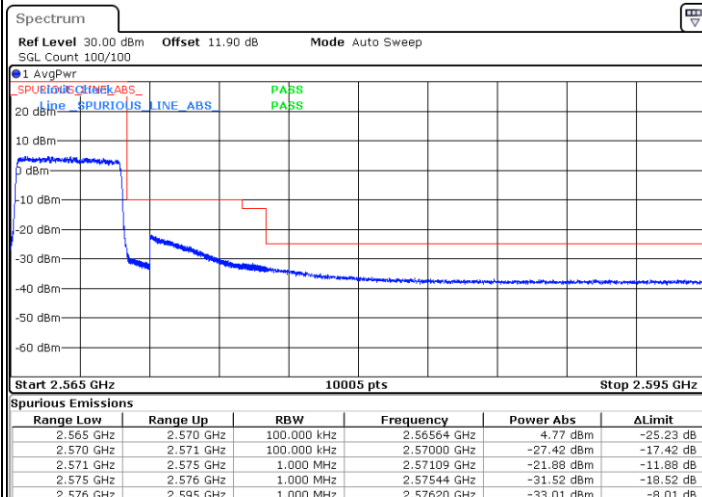


Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / 16QAM

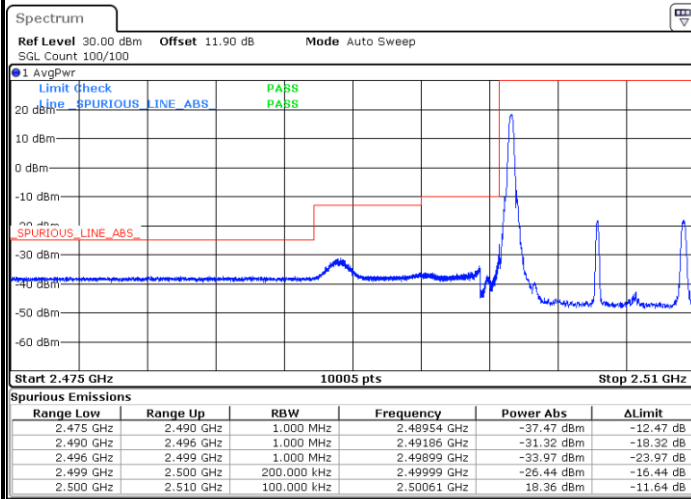


**Conducted Band Edge****LTE Band 7 / 5MHz / 16QAM****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

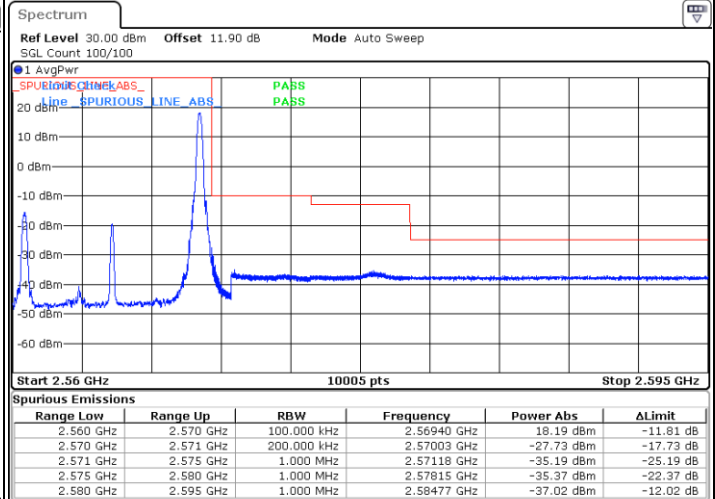


LTE Band 7 / 10MHz / 16QAM

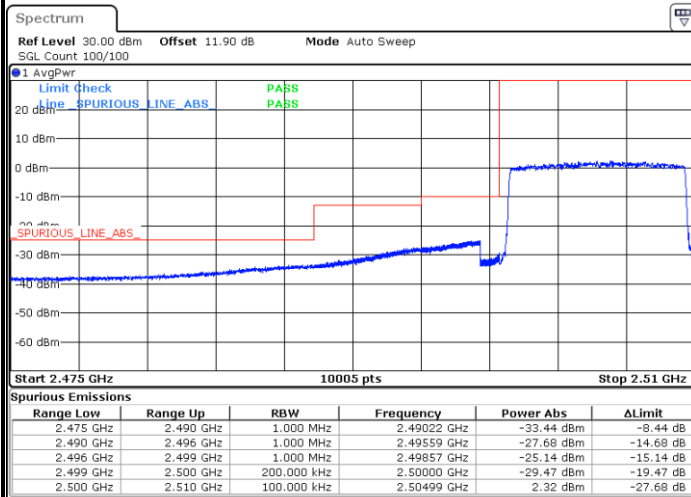
Lowest Band Edge / 1 RB



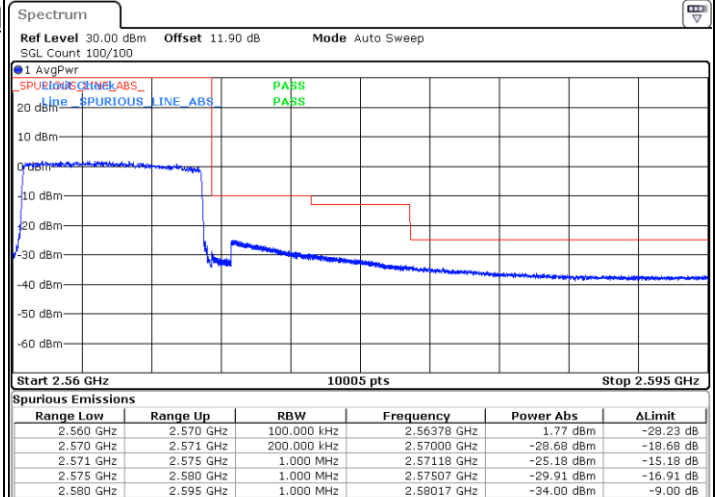
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



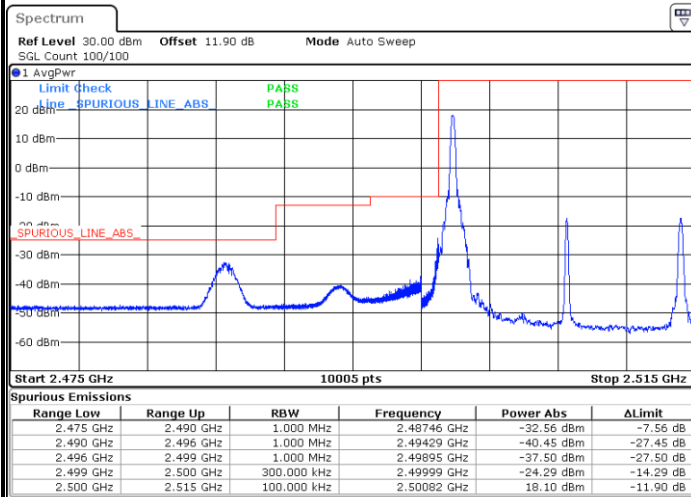
Highest Band Edge / Full RB



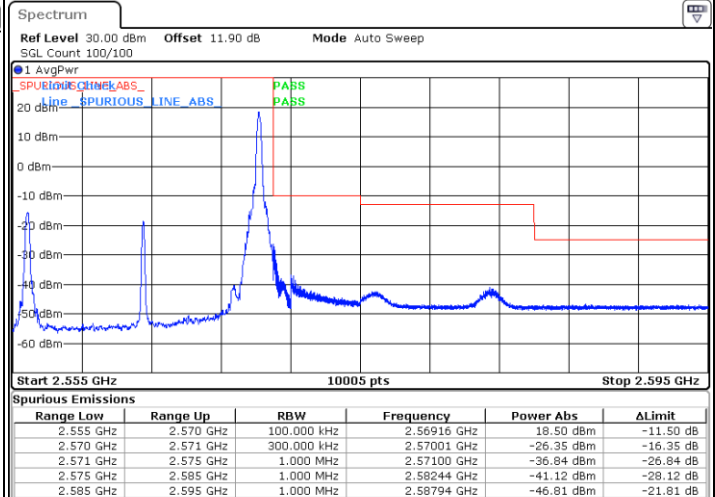


LTE Band 7 / 15MHz / 16QAM

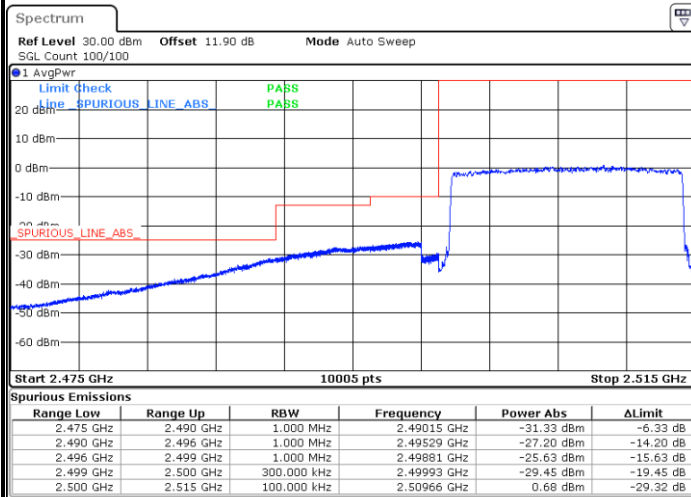
Lowest Band Edge / 1 RB



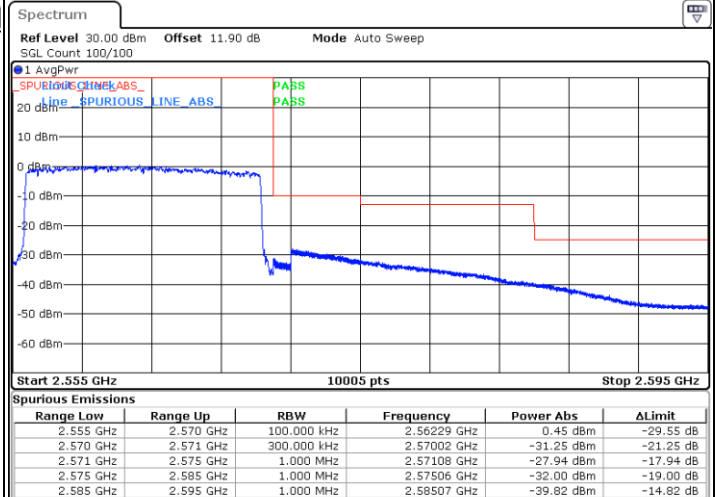
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



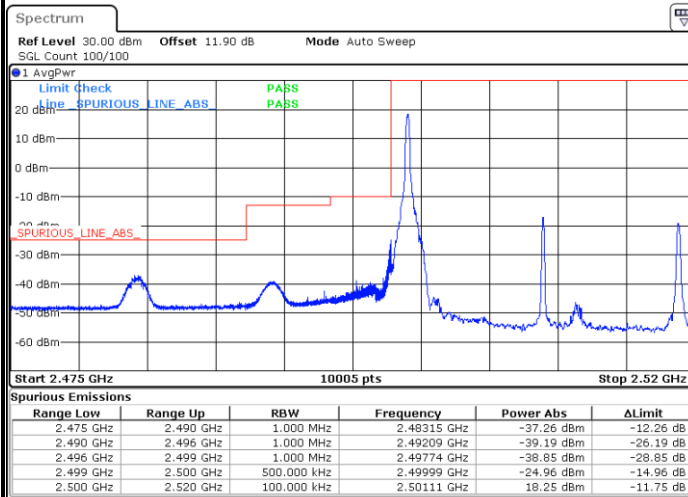
Highest Band Edge / Full RB



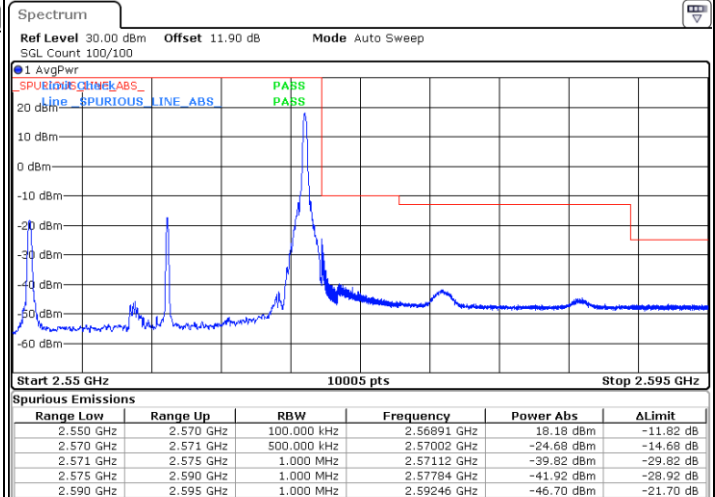


LTE Band 7 / 20MHz / 16QAM

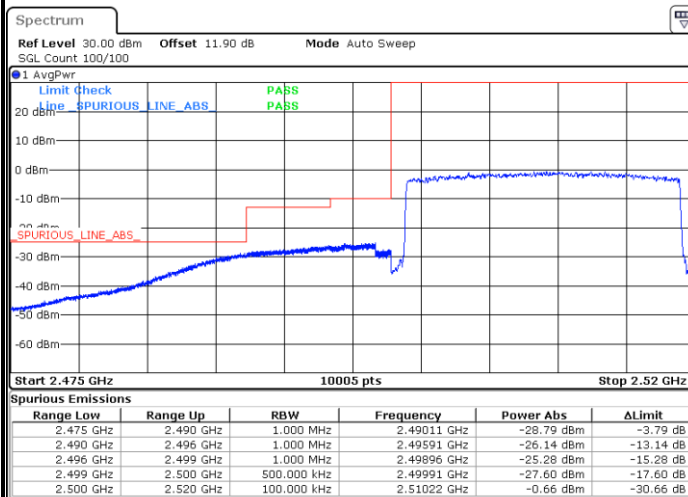
Lowest Band Edge / 1 RB



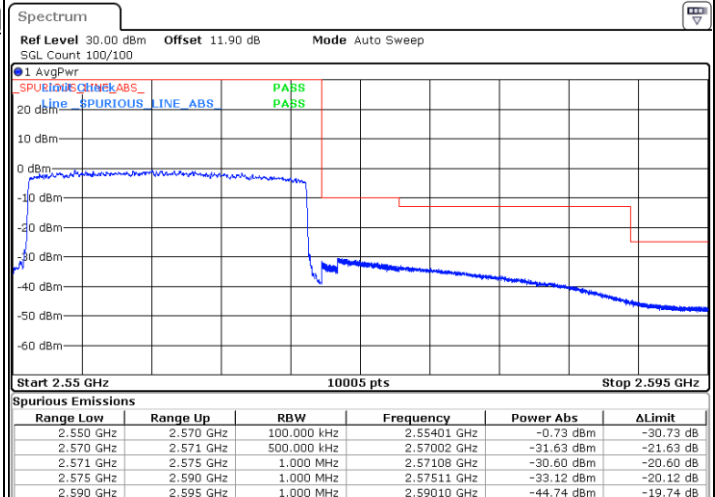
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

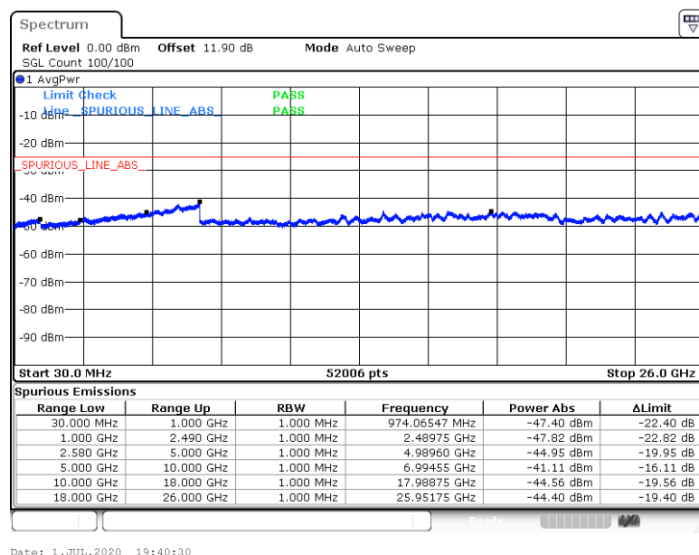




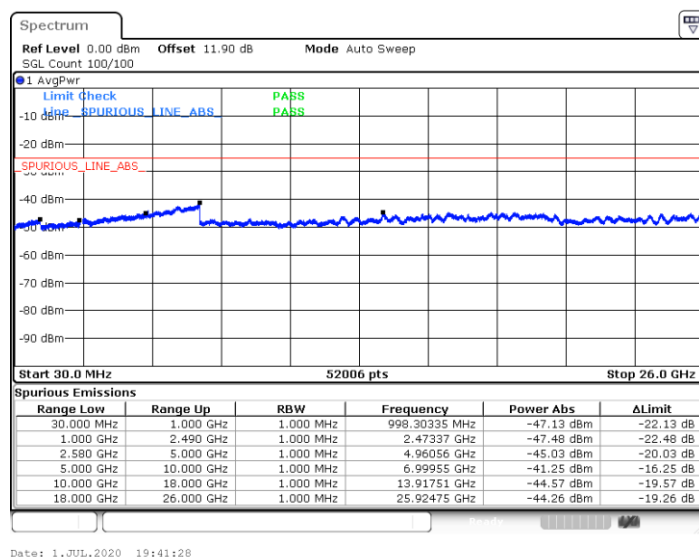
Conducted Spurious Emission

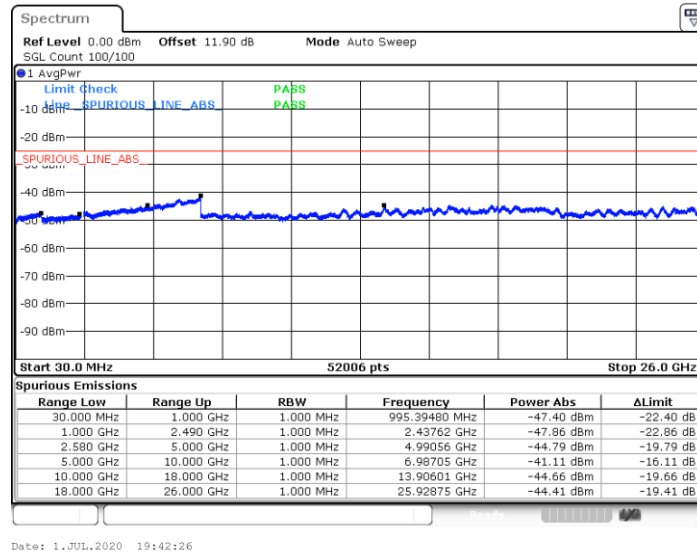
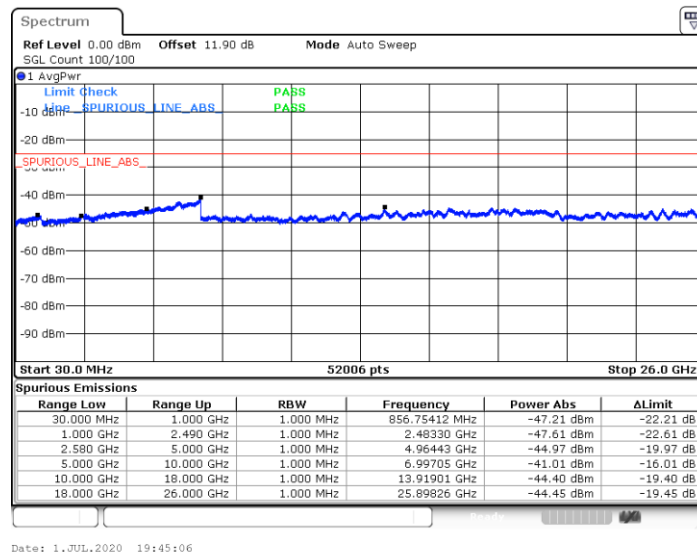
LTE Band 7 / 5MHz

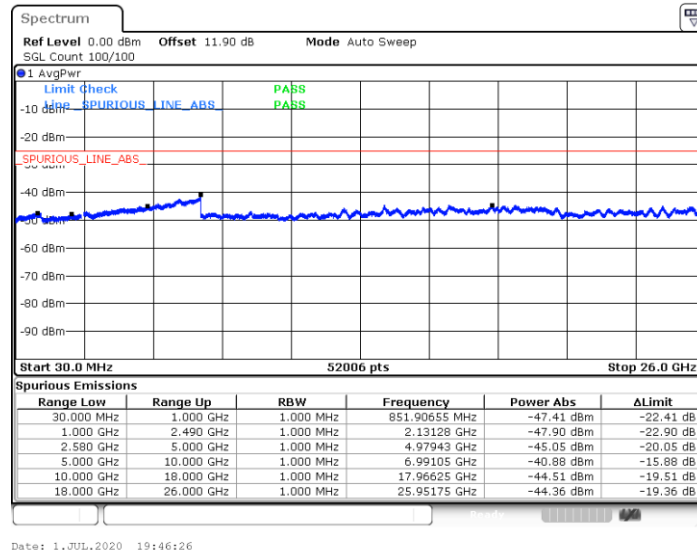
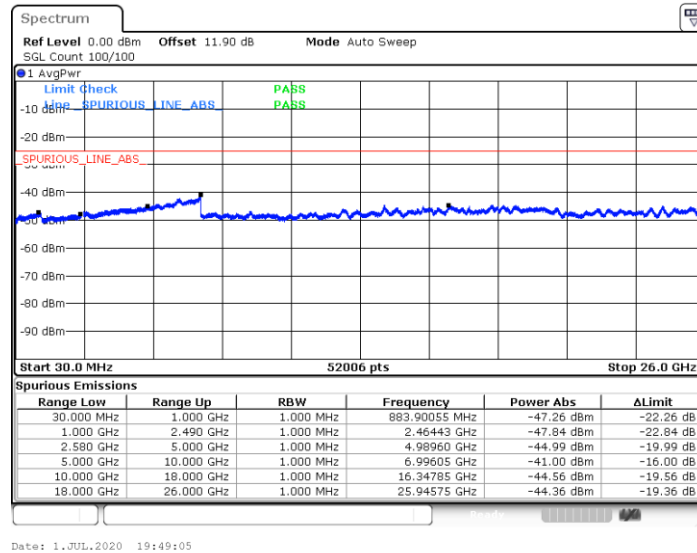
Lowest Channel / 16QAM

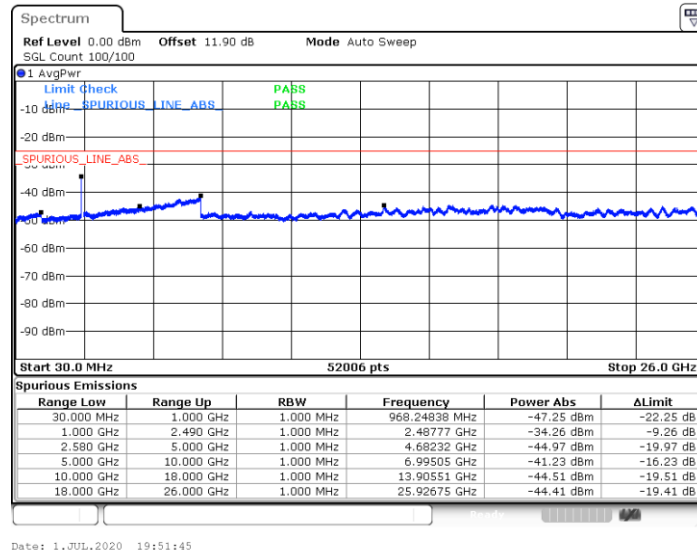
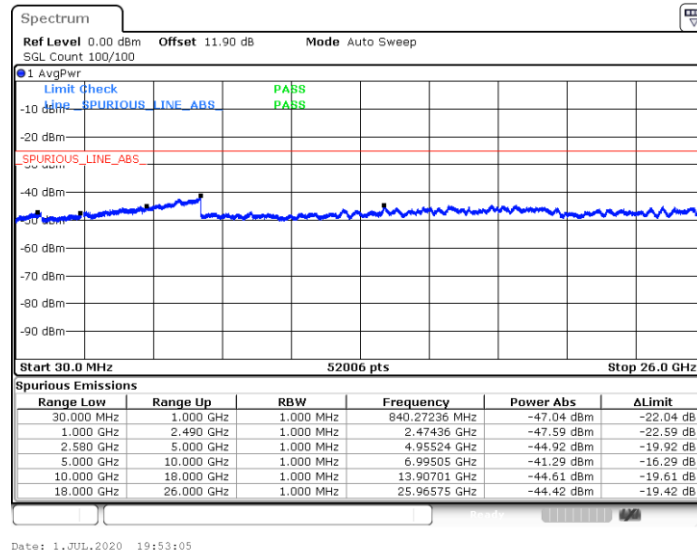


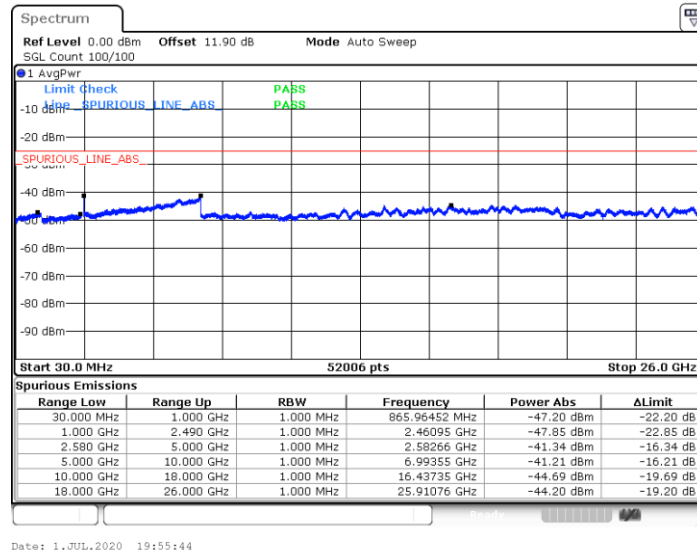
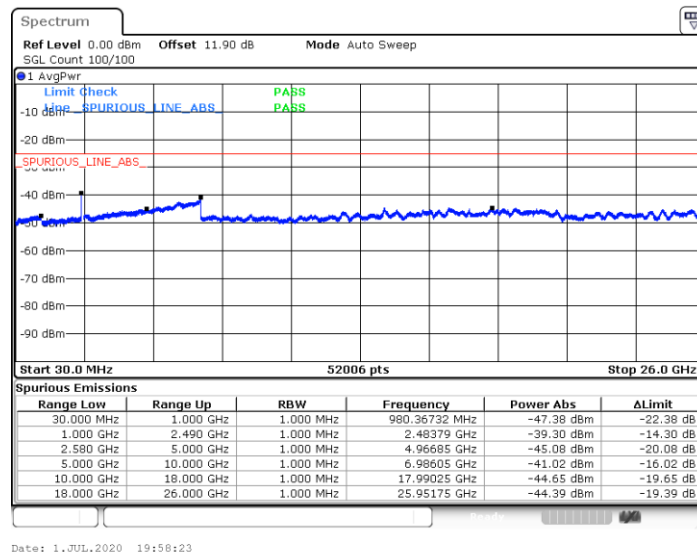
Middle Channel / 16QAM



**LTE Band 7 / 5MHz****Highest Channel / 16QAM****LTE Band 7 / 10MHz****Lowest Channel / 16QAM**

**LTE Band 7 / 10MHz****Middle Channel / 16QAM****Highest Channel / 16QAM**

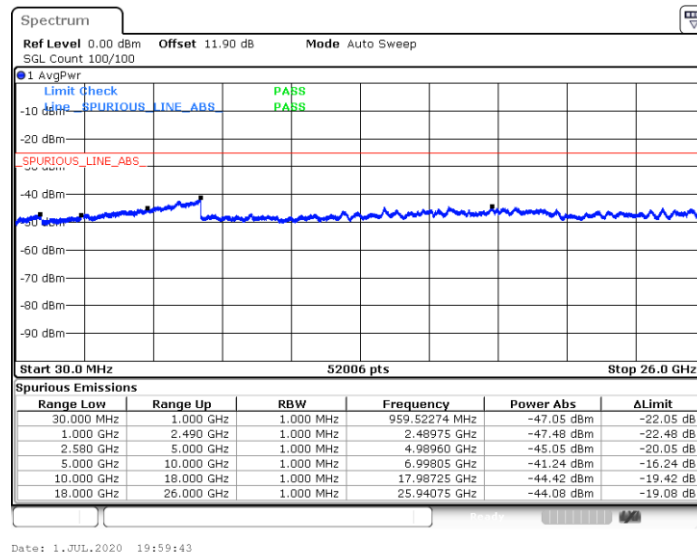
**LTE Band 7 / 15MHz****Lowest Channel / 16QAM****Middle Channel / 16QAM**

**LTE Band7 / 15MHz****Highest Channel / 16QAM****LTE Band 7 / 20MHz****Lowest Channel / 16QAM**

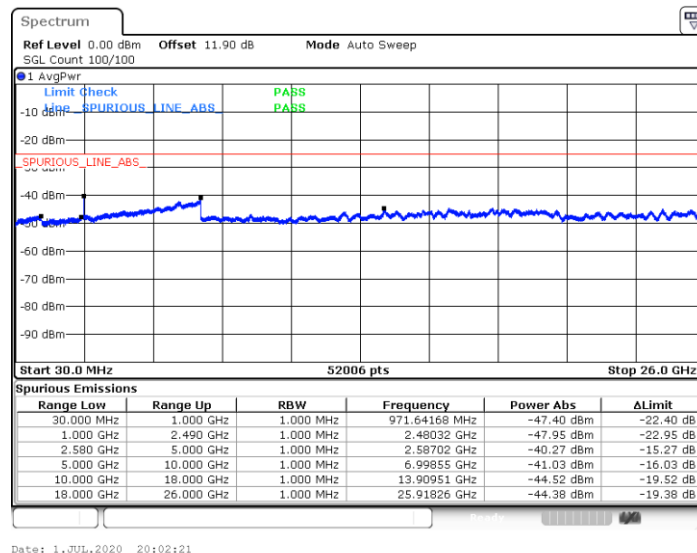


LTE Band 7 / 20MHz

Middle Channel / 16QAM



Highest Channel / 16QAM



Frequency Stability

Test Conditions		LTE Band 7 (16QAM) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0077	PASS
40	Normal Voltage	0.0054	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0077	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0030	
-30	Normal Voltage	0.0062	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0077	
20	Battery End Point	0.0020	

Note:

1. Normal Voltage =12 V. ; Battery End Point (BEP) =10.2 V. ; Maximum Voltage =13.8 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

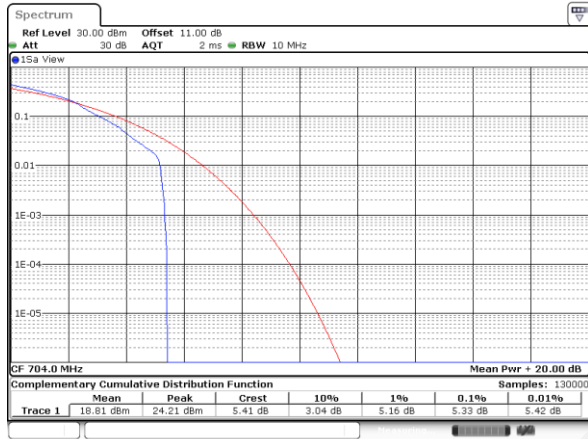
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	5.33	5.83	PASS
Middle CH	-	-	5.13	5.65	
Highest CH	-	-	5.10	5.65	

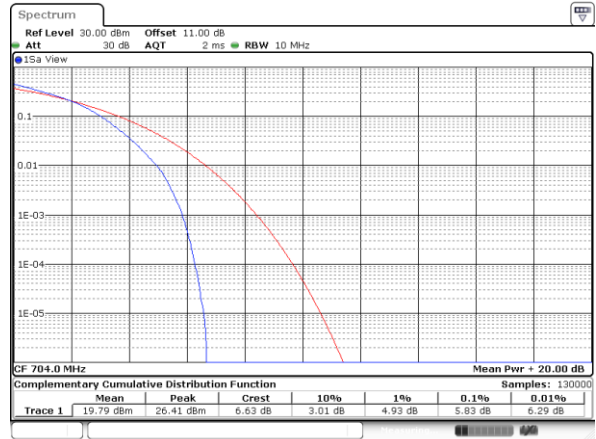


LTE Band 12 / 10MHz / 16QAM

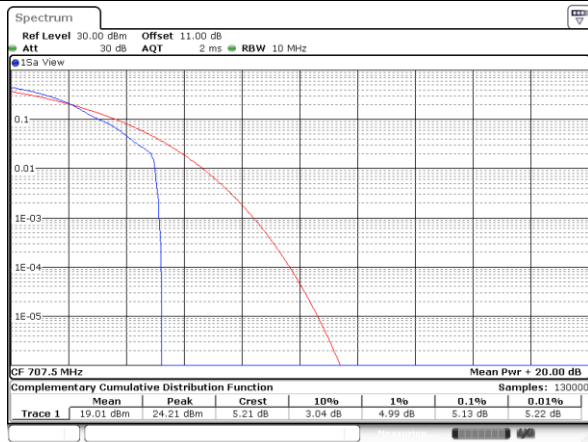
Lowest Channel / 1RB



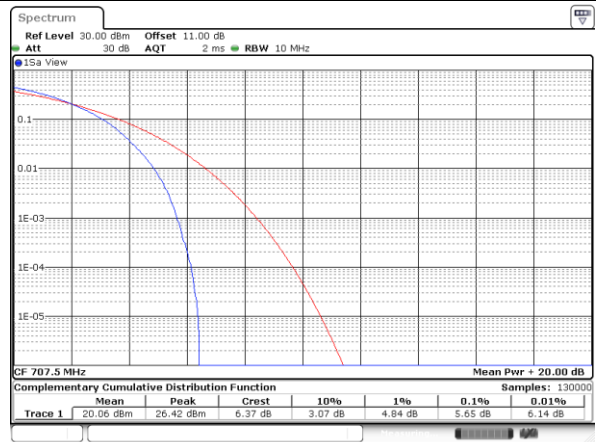
Lowest Channel / Full RB



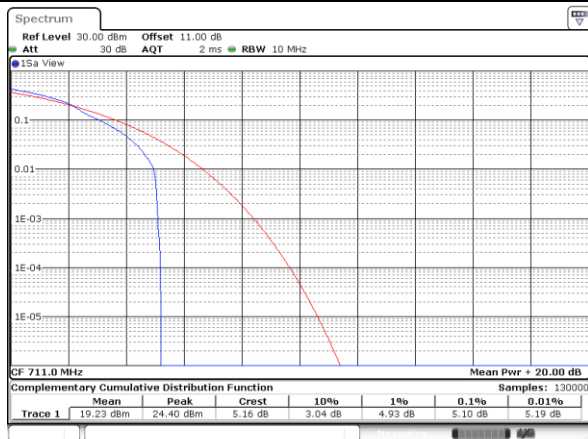
Middle Channel / 1RB



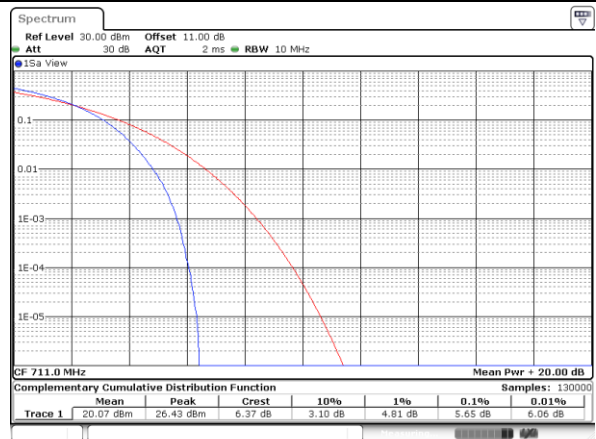
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



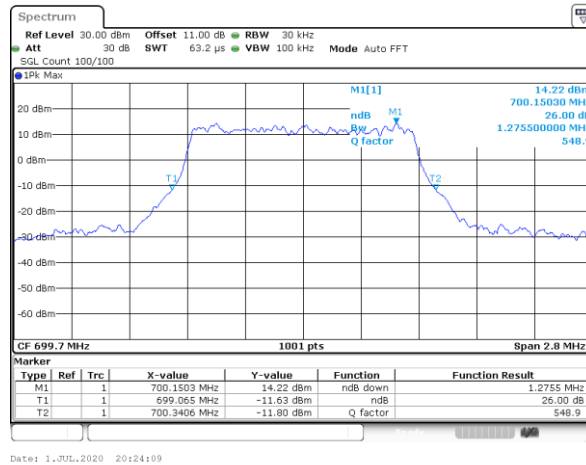
**26dB Bandwidth**

Mode	LTE Band 12 : 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	-	1.28	-	3.00	-	4.95	-	9.99	-	-	-	-
Middle CH	-	1.29	-	3.00	-	4.99	-	9.67	-	-	-	-
Highest CH	-	1.30	-	2.94	-	5.03	-	9.91	-	-	-	-

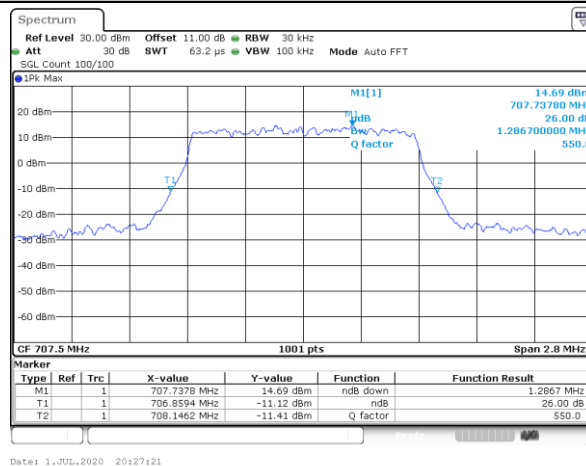


LTE Band 12

Lowest Channel / 1.4MHz / 16QAM



Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / 16QAM

