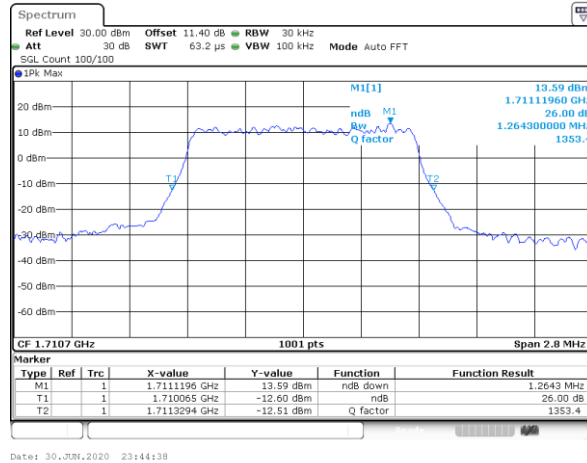


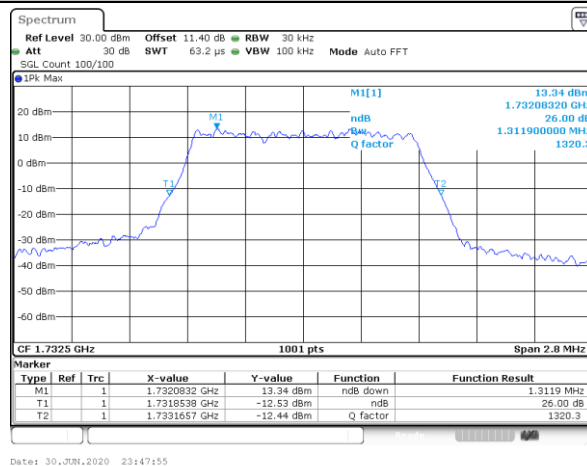


LTE Band 4

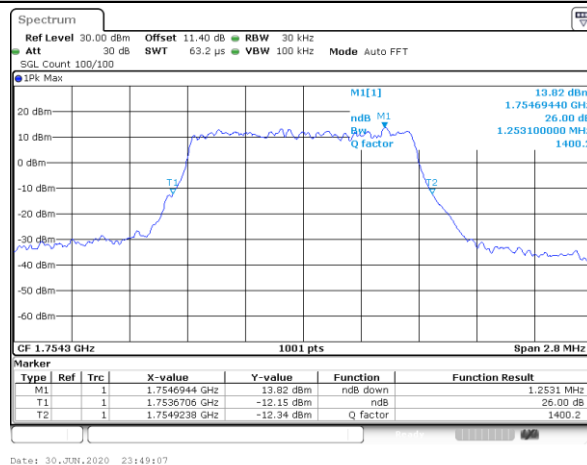
Lowest Channel / 1.4MHz / 16QAM



Middle Channel / 1.4MHz / 16QAM



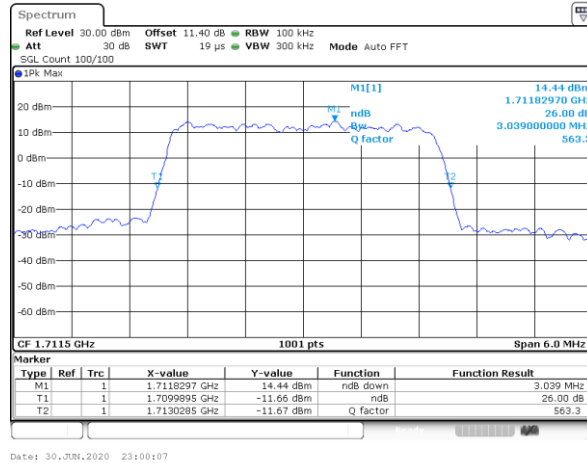
Highest Channel / 1.4MHz / 16QAM



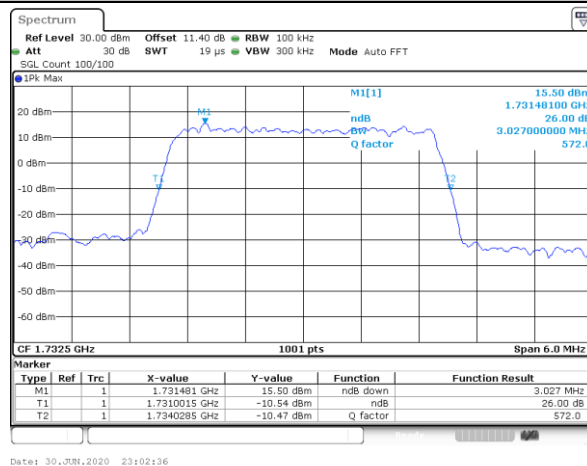


LTE Band 4

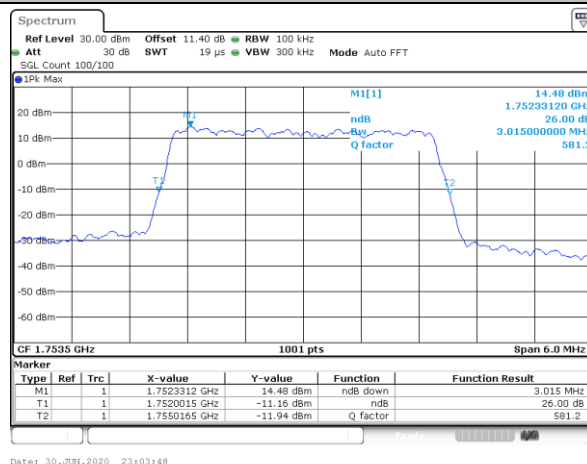
Lowest Channel / 3MHz / 16QAM



Middle Channel / 3MHz / 16QAM



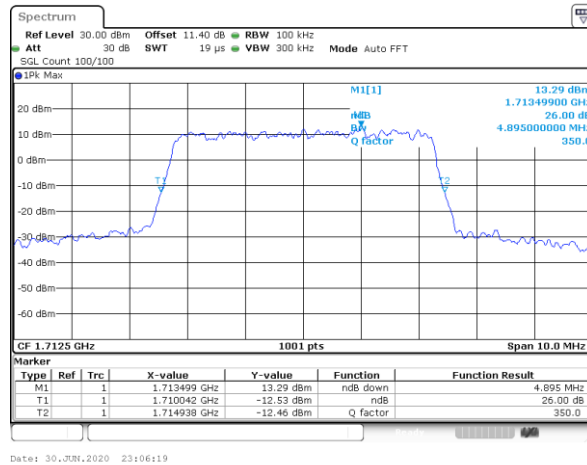
Highest Channel / 3MHz / 16QAM





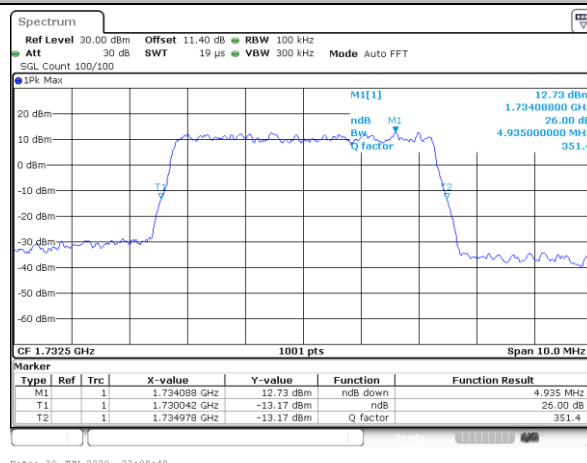
LTE Band 4

Lowest Channel / 5MHz / 16QAM



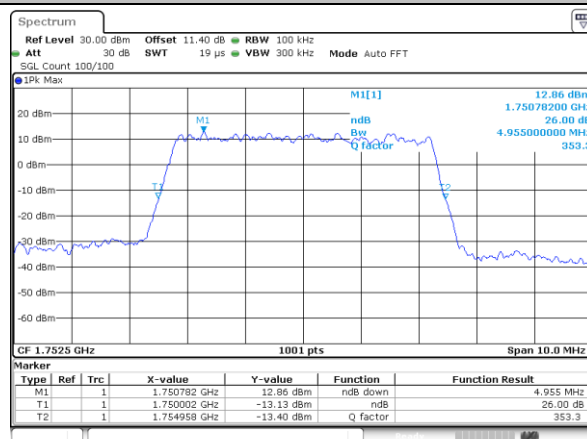
Date: 30.JUN.2020 23:06:19

Middle Channel / 5MHz / 16QAM



Date: 30.JUN.2020 23:08:49

Highest Channel / 5MHz / 16QAM

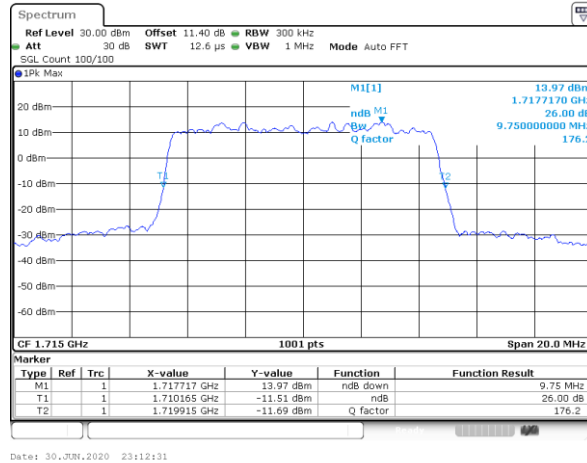


Date: 30 JUN 2020 23:10:01

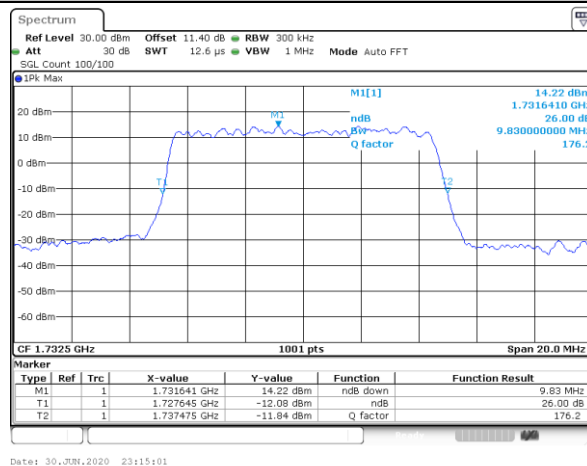


LTE Band 4

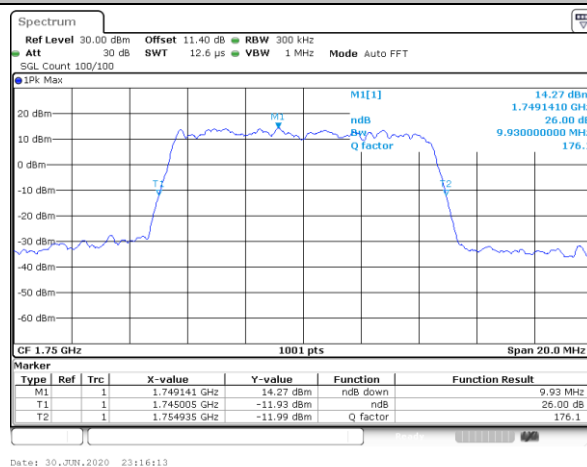
Lowest Channel / 10MHz / 16QAM



Middle Channel / 10MHz / 16QAM



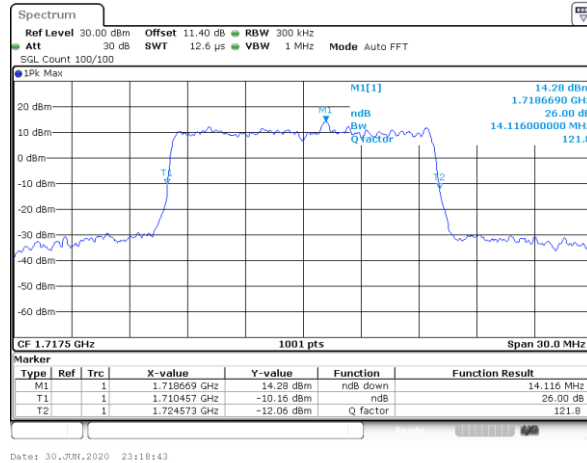
Highest Channel / 10MHz / 16QAM



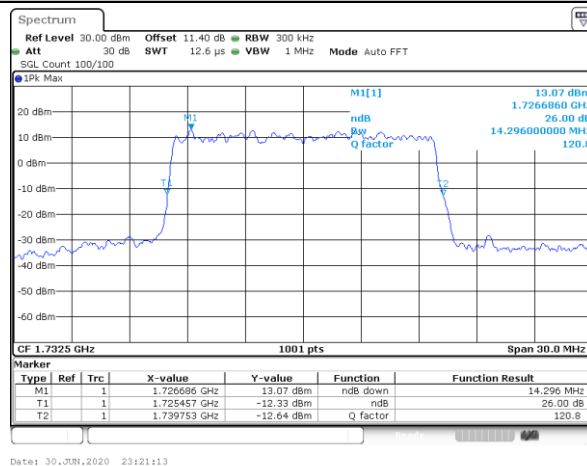


LTE Band 4

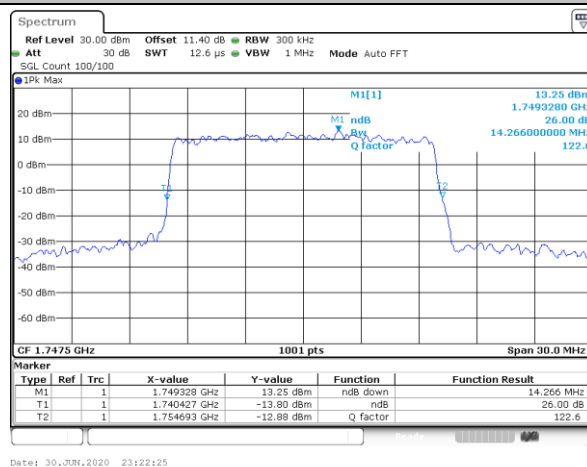
Lowest Channel / 15MHz / 16QAM



Middle Channel / 15MHz / 16QAM



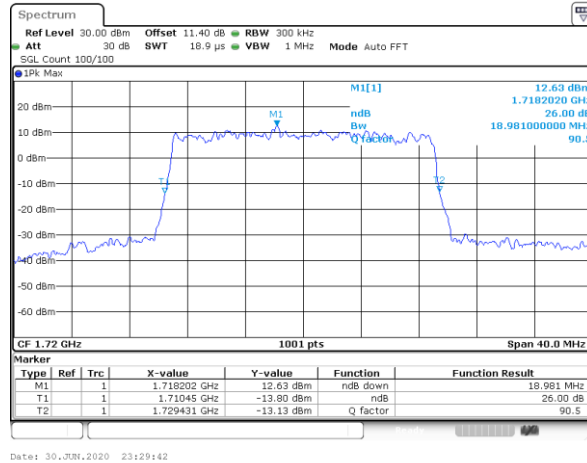
Highest Channel / 15MHz / 16QAM



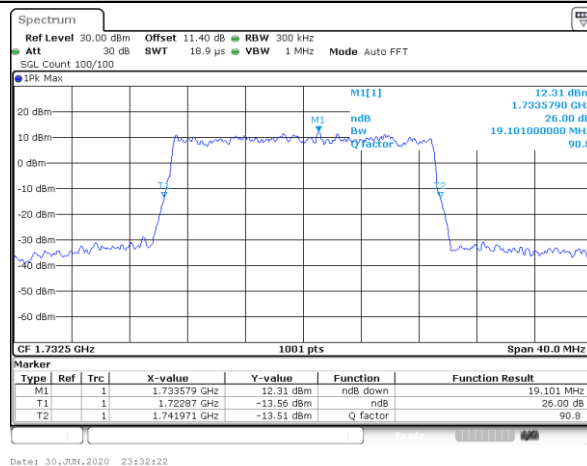


LTE Band 4

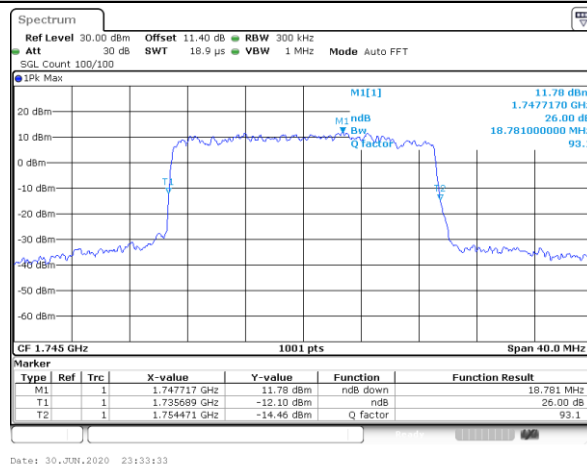
Lowest Channel / 20MHz / 16QAM



Middle Channel / 20MHz / 16QAM

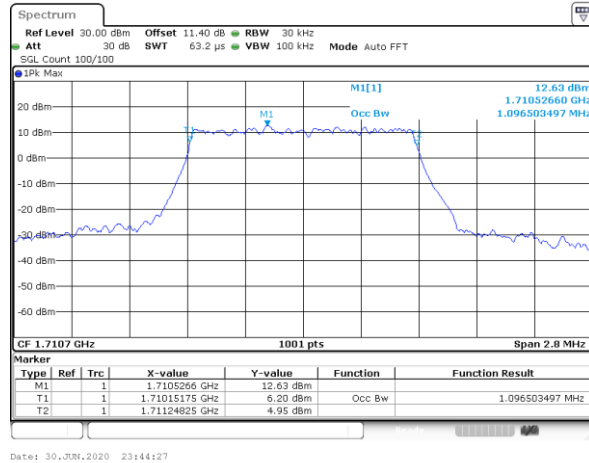
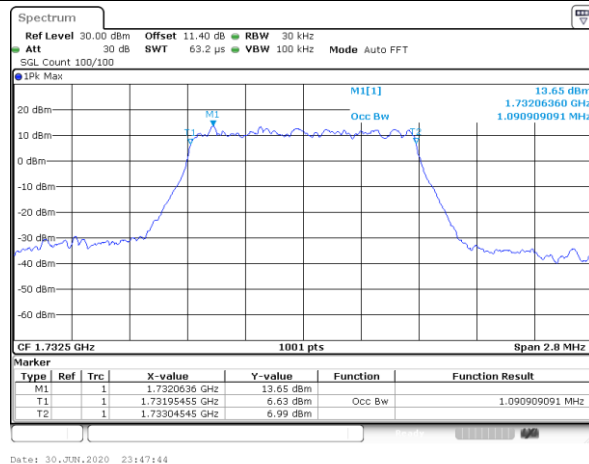
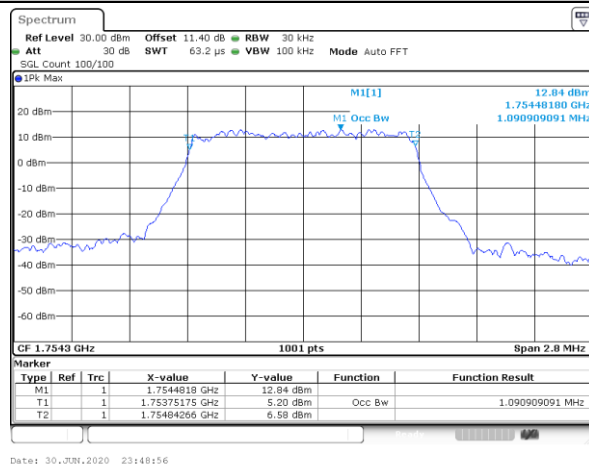


Highest Channel / 20MHz / 16QAM



**Occupied Bandwidth**

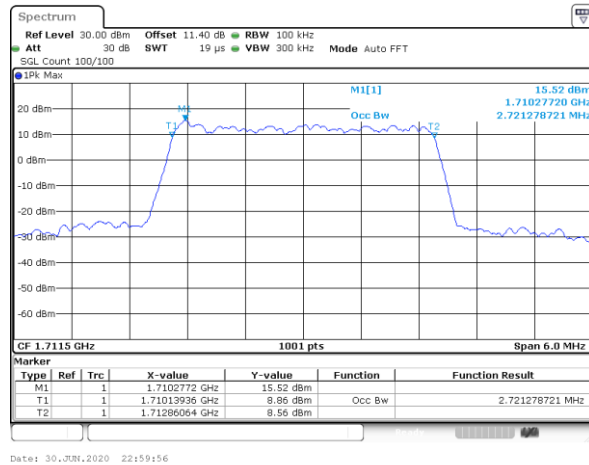
Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	1.10	-	2.72	-	4.49	-	8.97	-	13.37	-	17.86
Middle CH	-	1.09	-	2.73	-	4.49	-	9.01	-	13.49	-	17.82
Highest CH	-	1.09	-	2.73	-	4.51	-	8.99	-	13.40	-	17.78

**LTE Band 4****Lowest Channel / 1.4MHz / 16QAM****Middle Channel / 1.4MHz / 16QAM****Highest Channel / 1.4MHz / 16QAM**

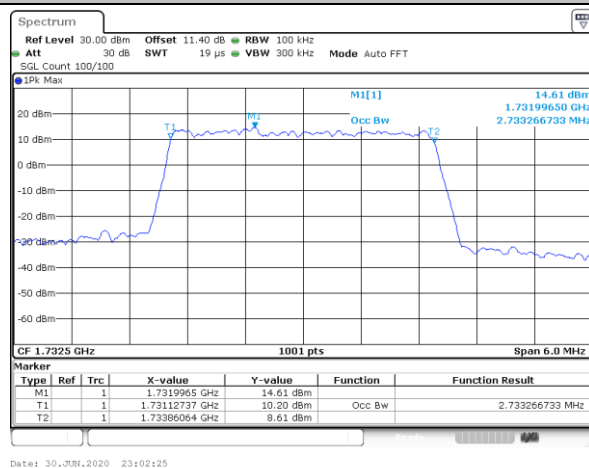


LTE Band 4

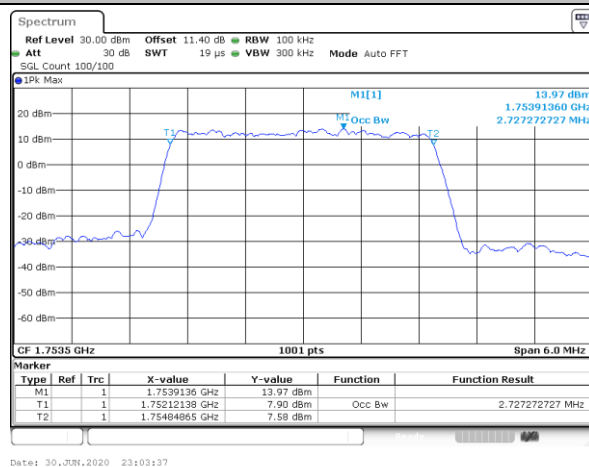
Lowest Channel / 3MHz / 16QAM



Middle Channel / 3MHz / 16QAM



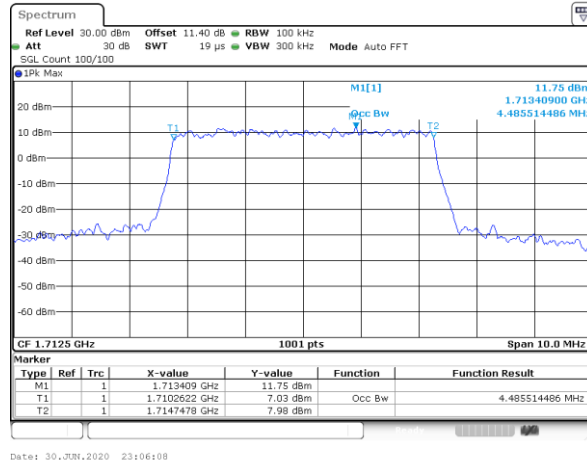
Highest Channel / 3MHz / 16QAM



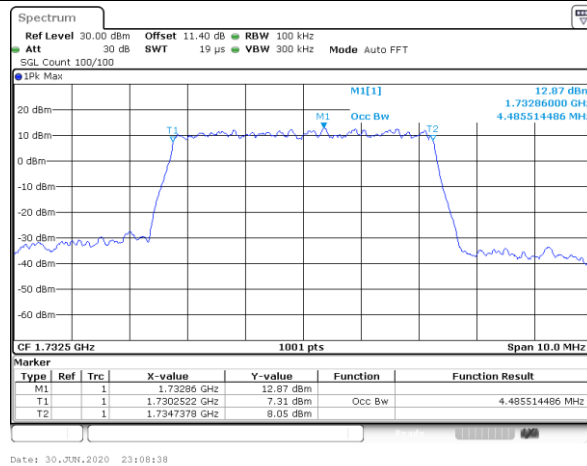


LTE Band 4

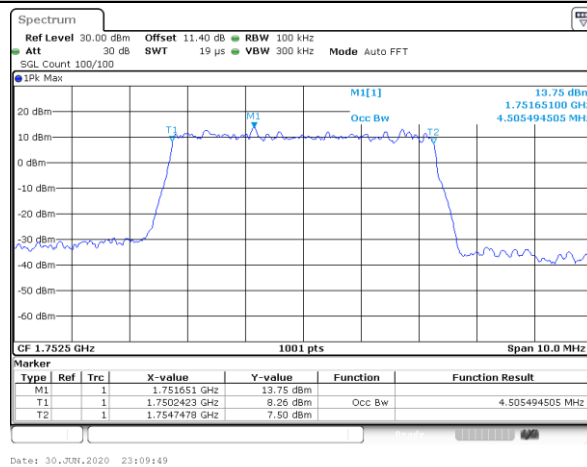
Lowest Channel / 5MHz / 16QAM



Middle Channel / 5MHz / 16QAM



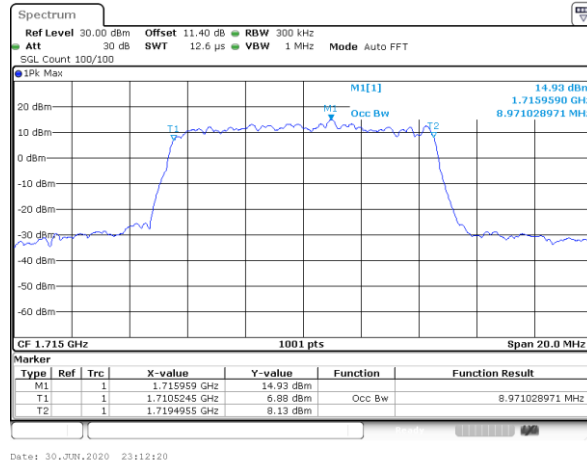
Highest Channel / 5MHz / 16QAM



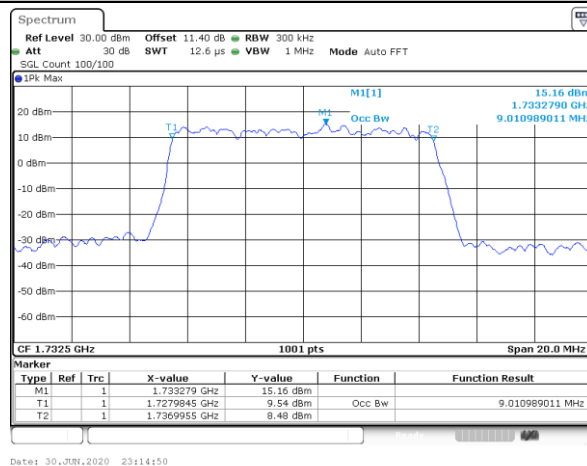


LTE Band 4

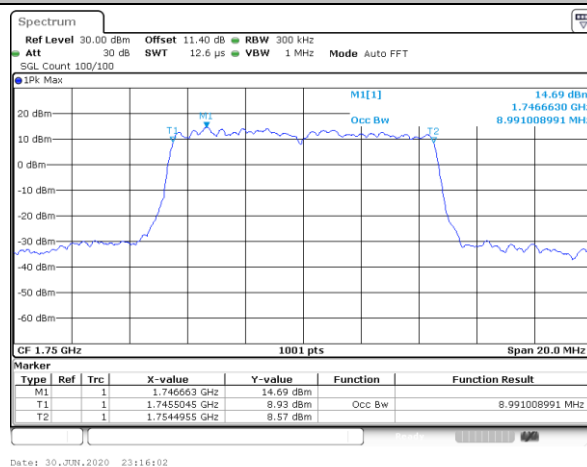
Lowest Channel / 10MHz / 16QAM



Middle Channel / 10MHz / 16QAM



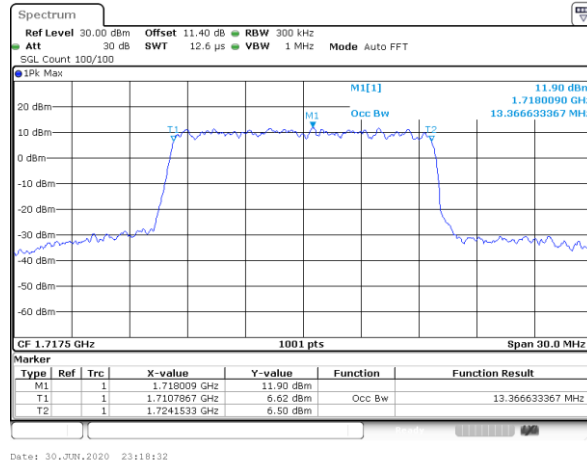
Highest Channel / 10MHz / 16QAM



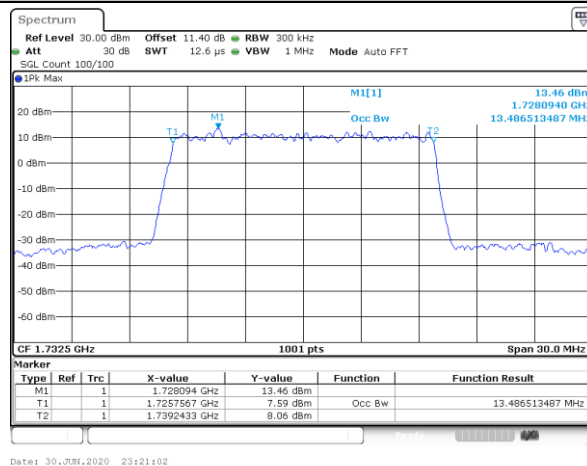


LTE Band 4

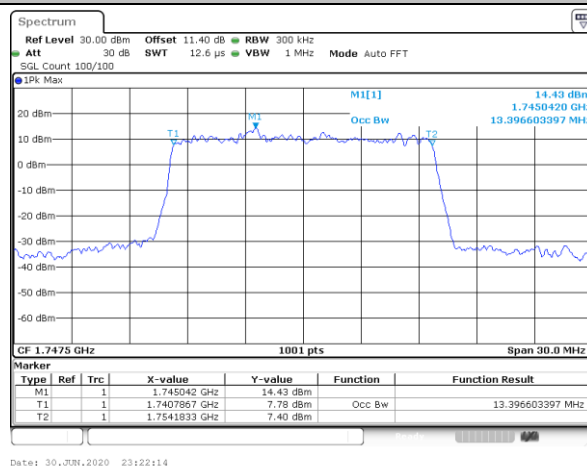
Lowest Channel / 15MHz / 16QAM



Middle Channel / 15MHz / 16QAM



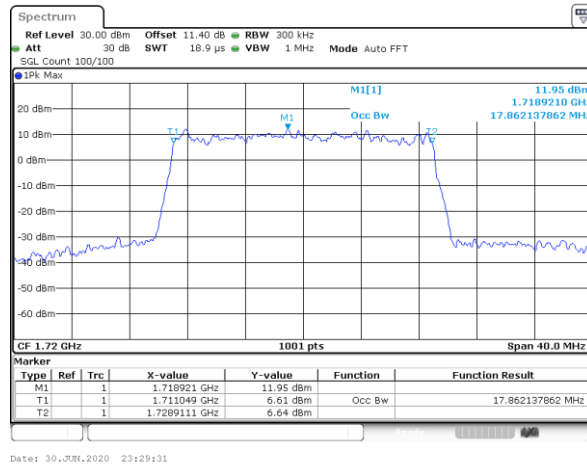
Highest Channel / 15MHz / 16QAM



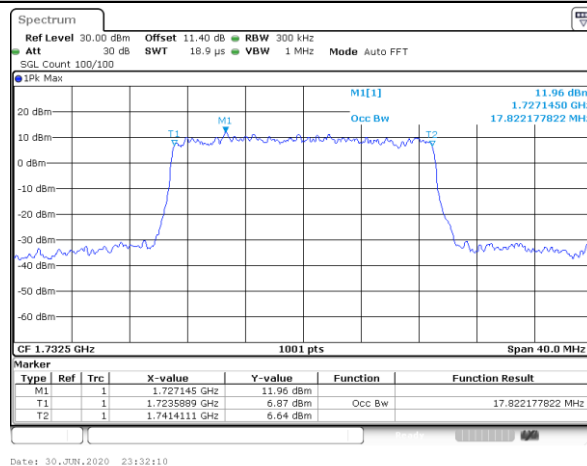


LTE Band 4

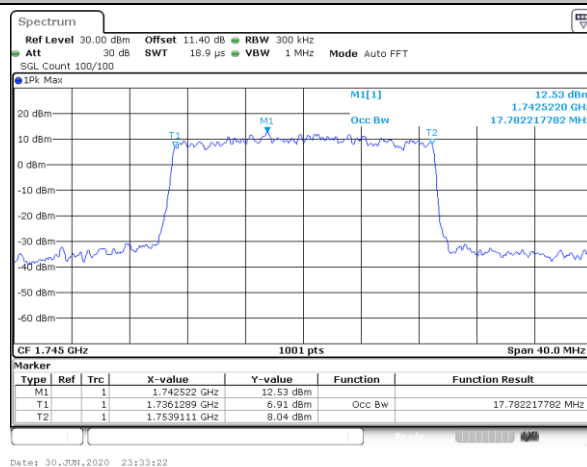
Lowest Channel / 20MHz / 16QAM



Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / 16QAM

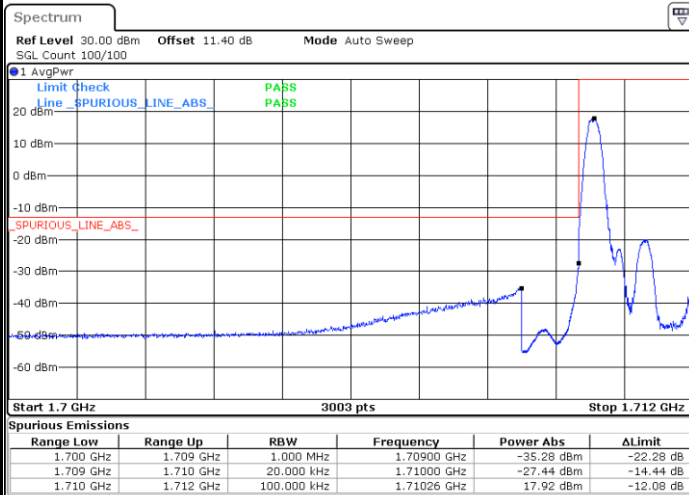




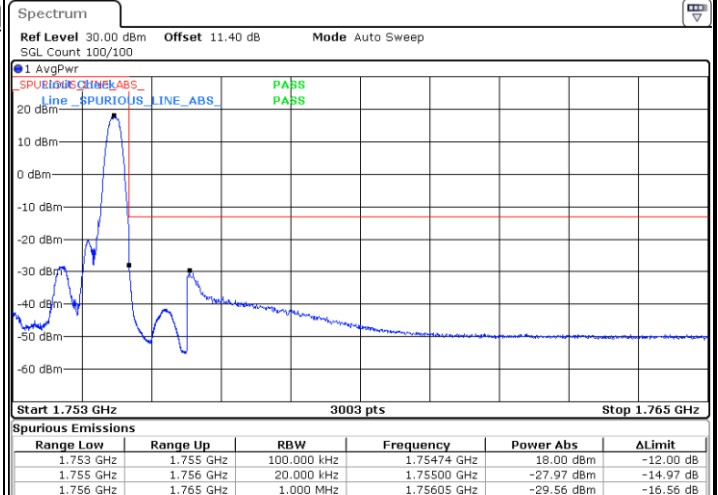
Conducted Band Edge

LTE Band 4 / 1.4MHz / 16QAM

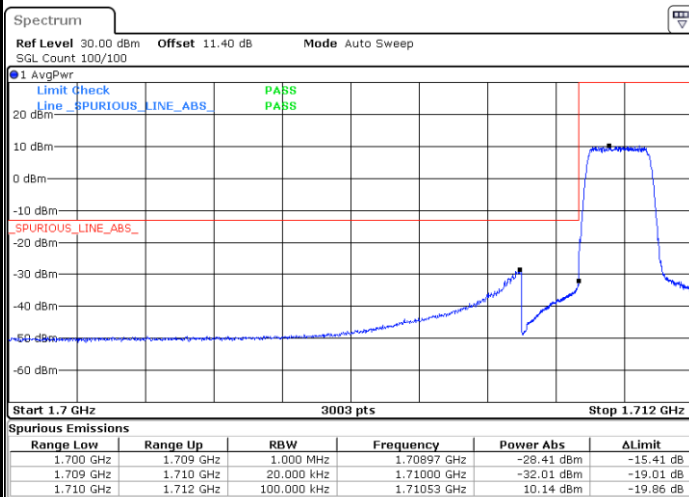
Lowest Band Edge / 1 RB



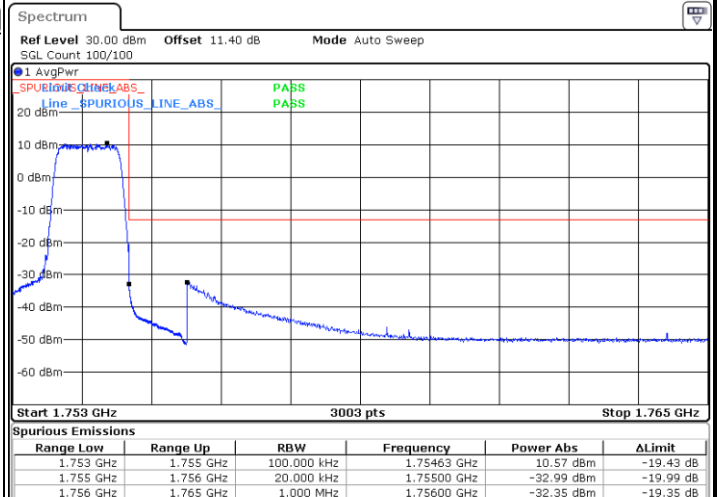
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



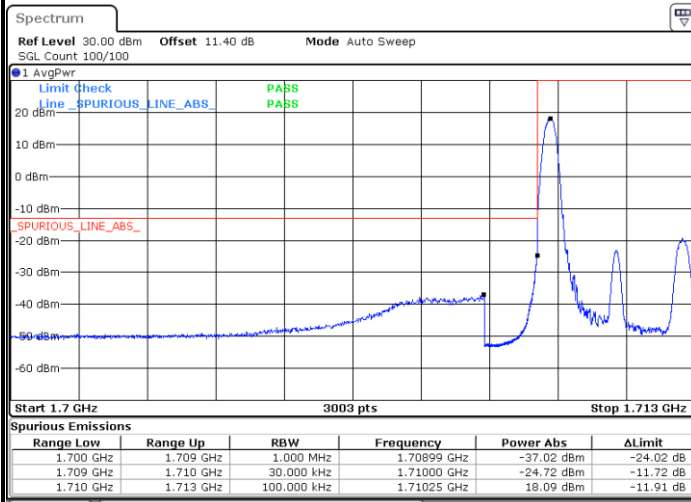
Highest Band Edge / Full RB



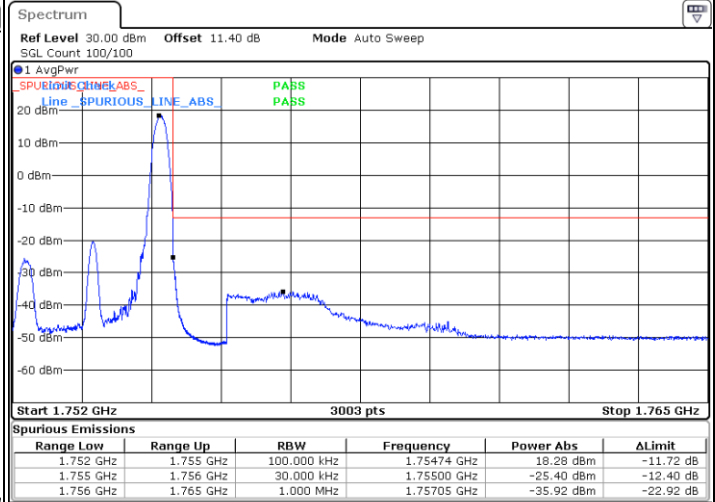


LTE Band 4 / 3MHz / 16QAM

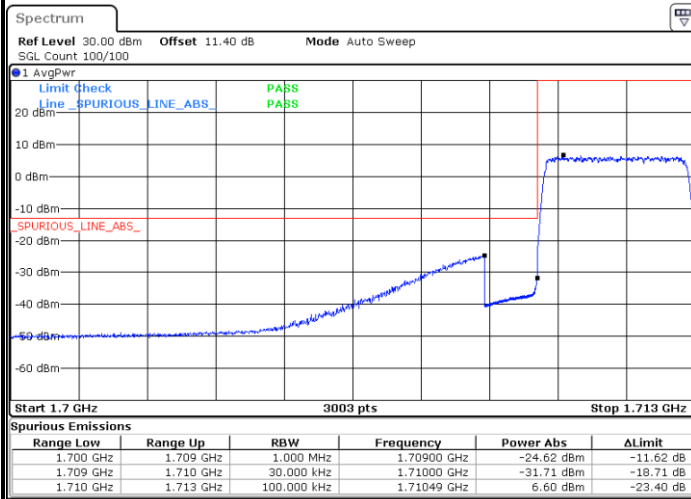
Lowest Band Edge / 1 RB



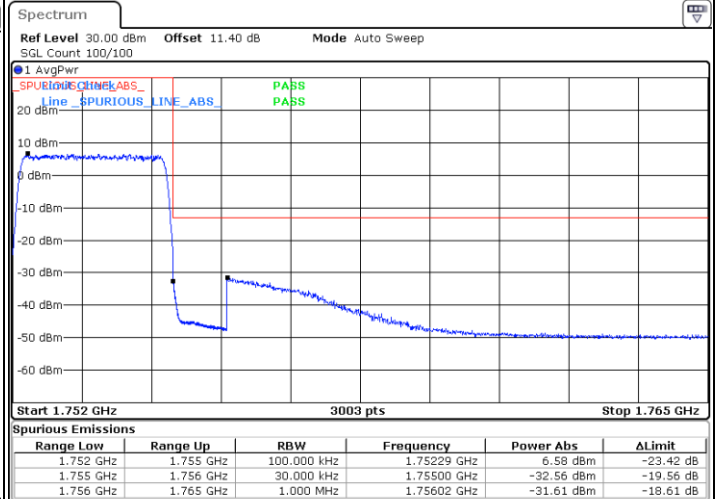
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



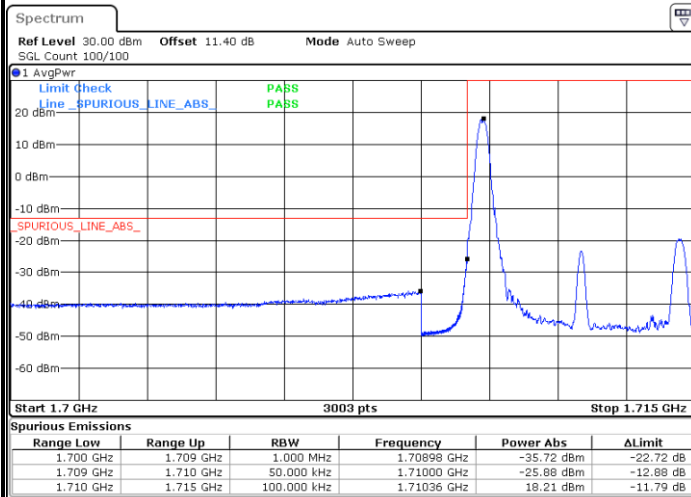
Highest Band Edge / Full RB



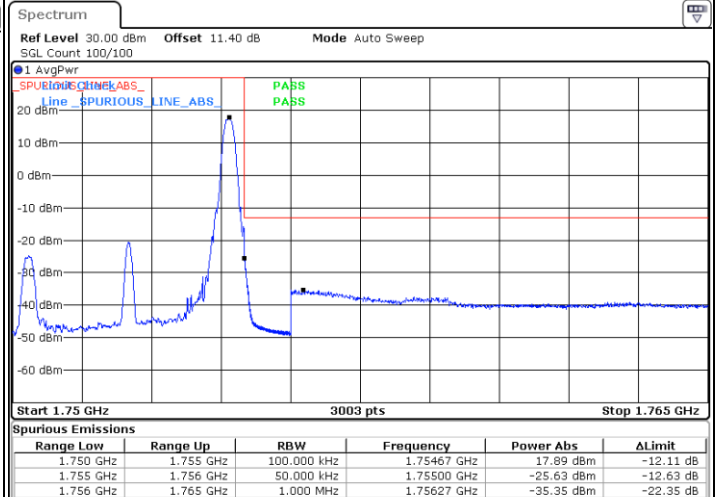


LTE Band 4 / 5MHz / 16QAM

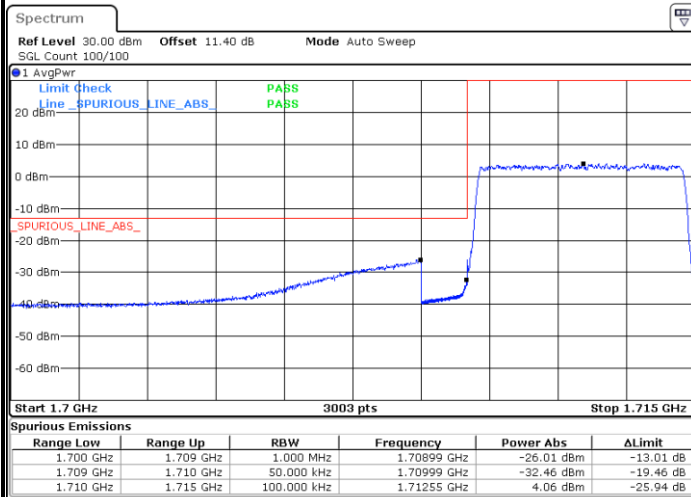
Lowest Band Edge / 1RB



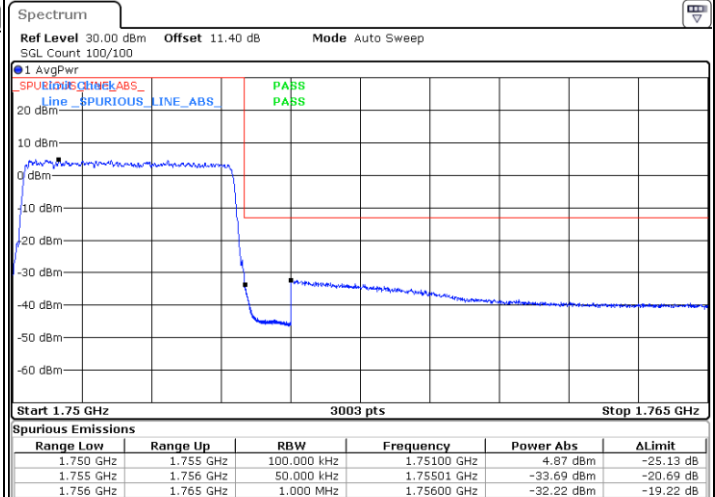
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



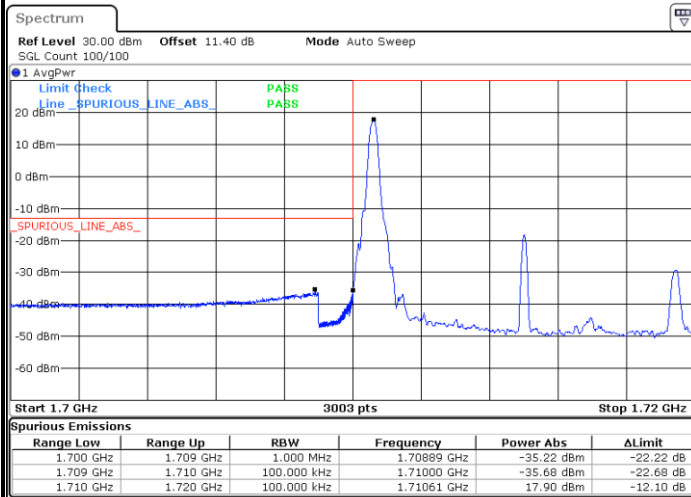
Highest Band Edge / Full RB



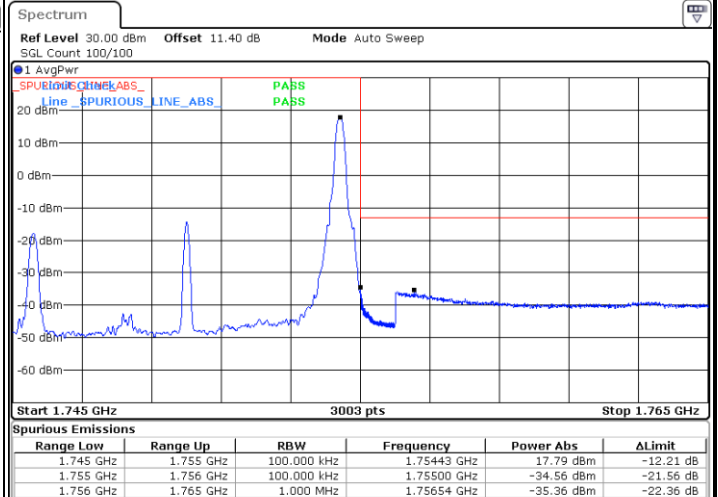


LTE Band 4 / 10MHz / 16QAM

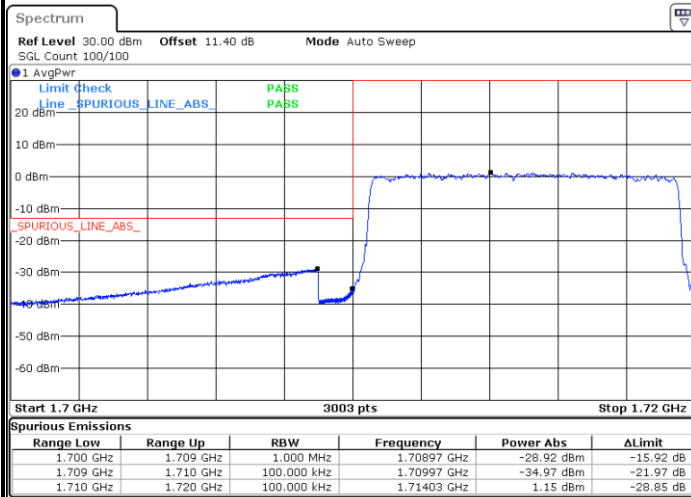
Lowest Band Edge / 1 RB



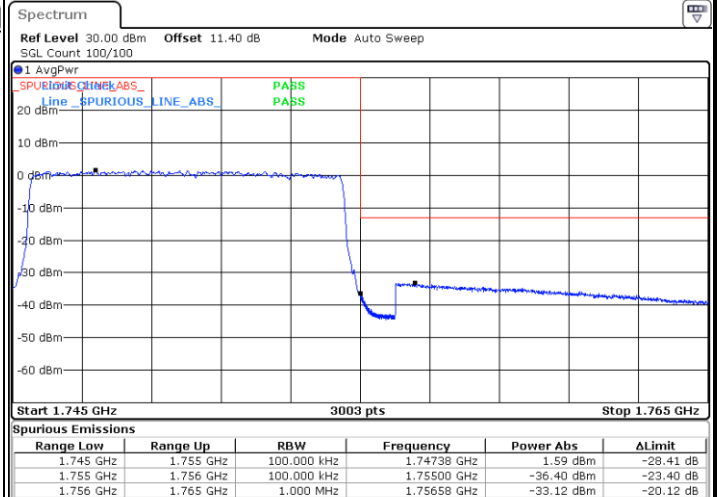
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



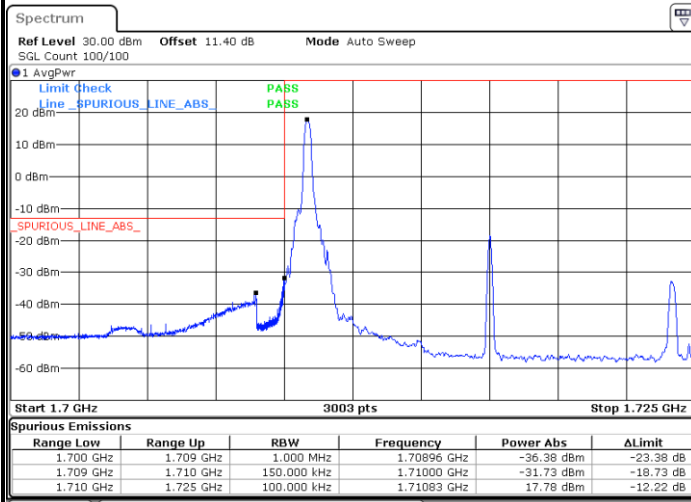
Highest Band Edge / Full RB



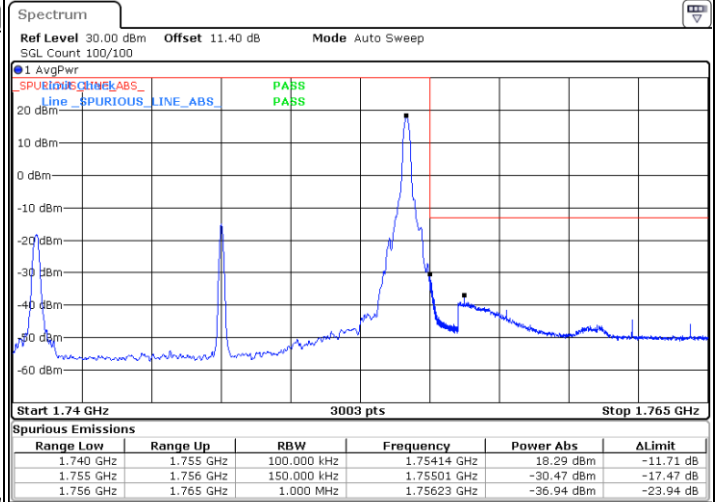


LTE Band 4 / 15MHz / 16QAM

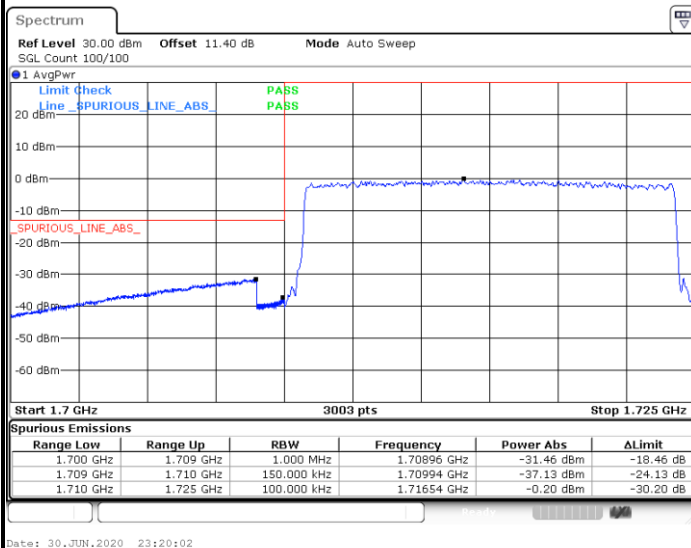
Lowest Band Edge / 1 RB



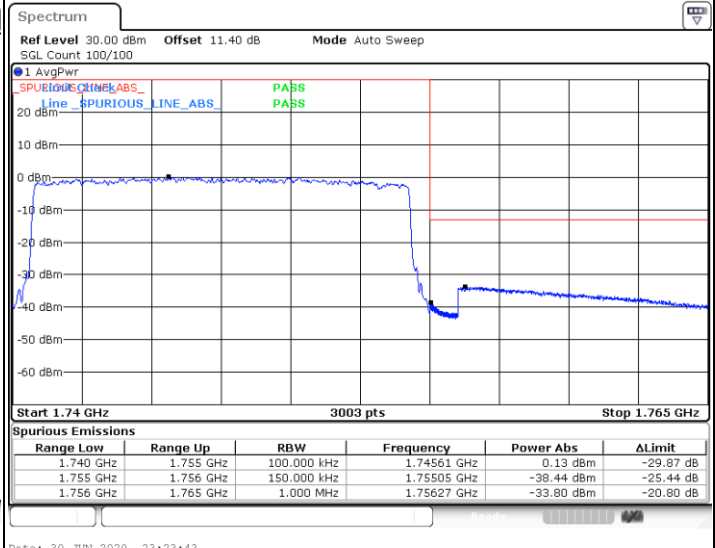
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



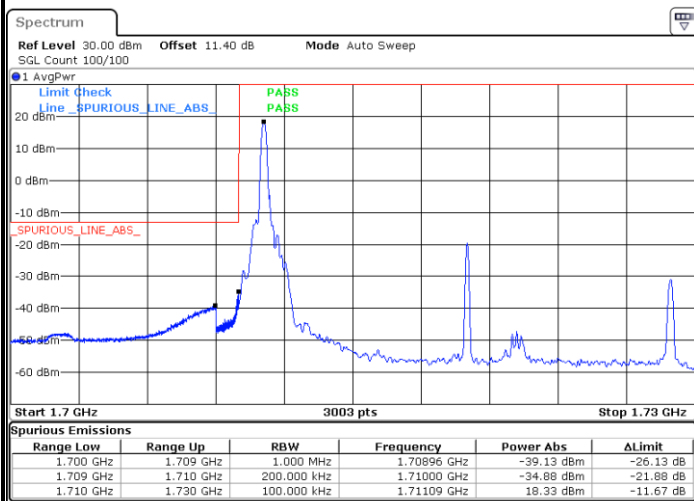
Highest Band Edge / Full RB



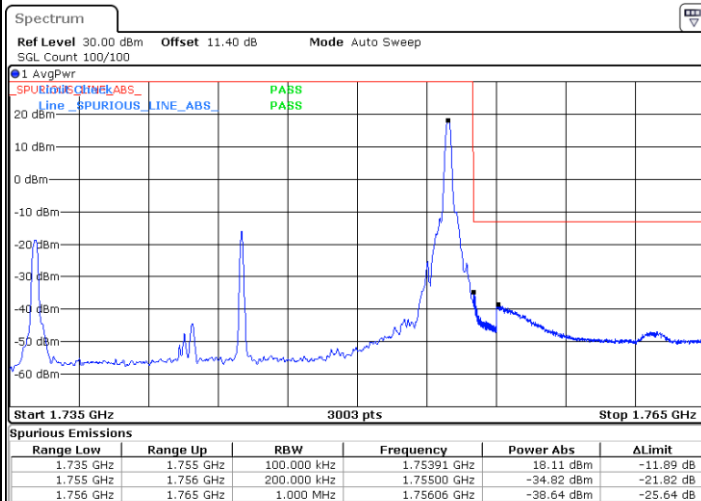


LTE Band 4 / 20MHz / 16QAM

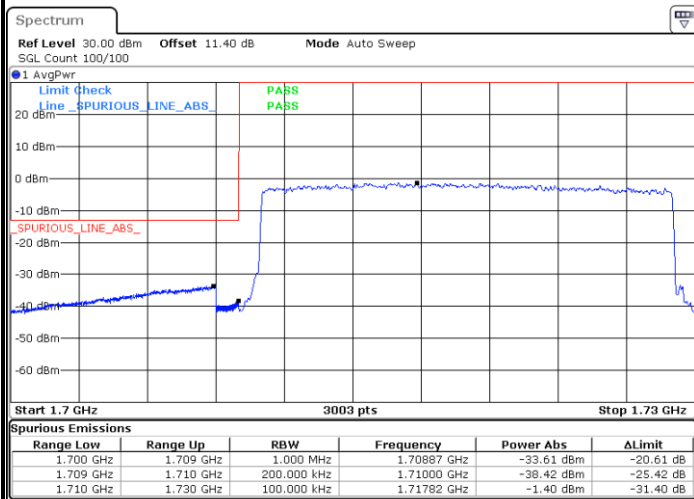
Lowest Band Edge / 1 RB



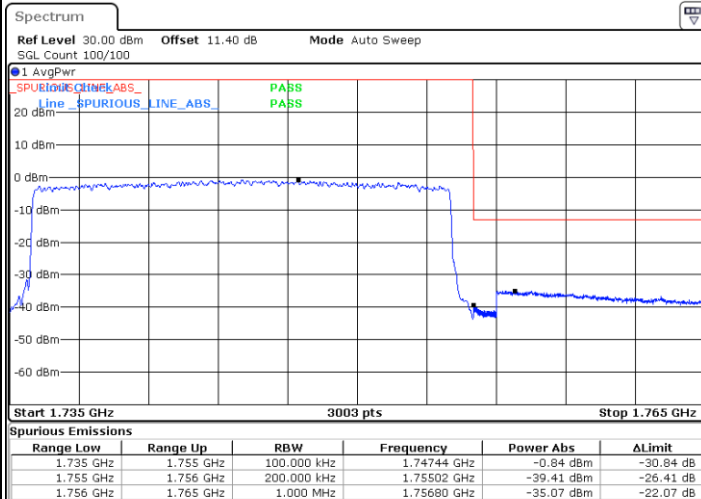
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

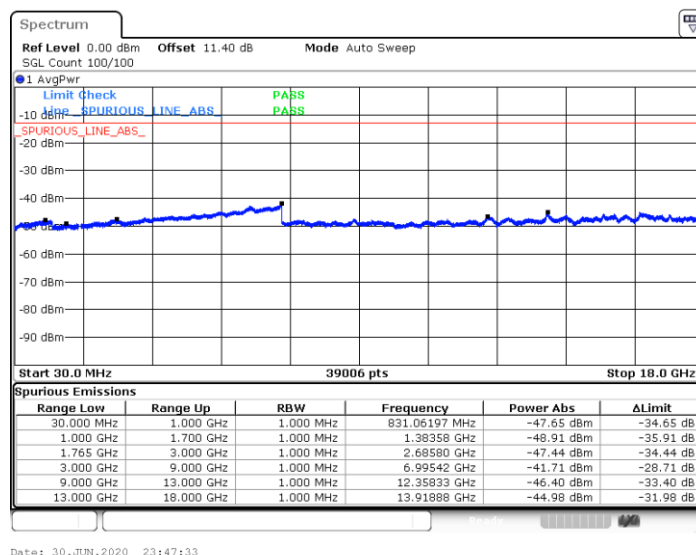




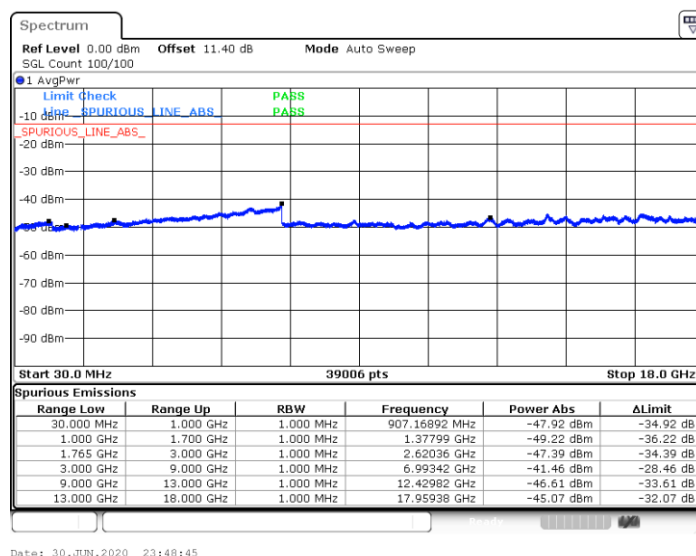
Conducted Spurious Emission

LTE Band 4 / 1.4MHz

Lowest Channel / 16QAM



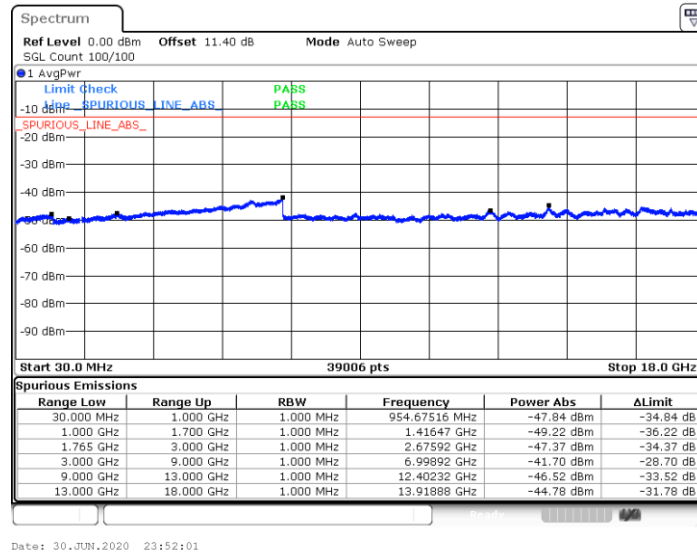
Middle Channel / 16QAM





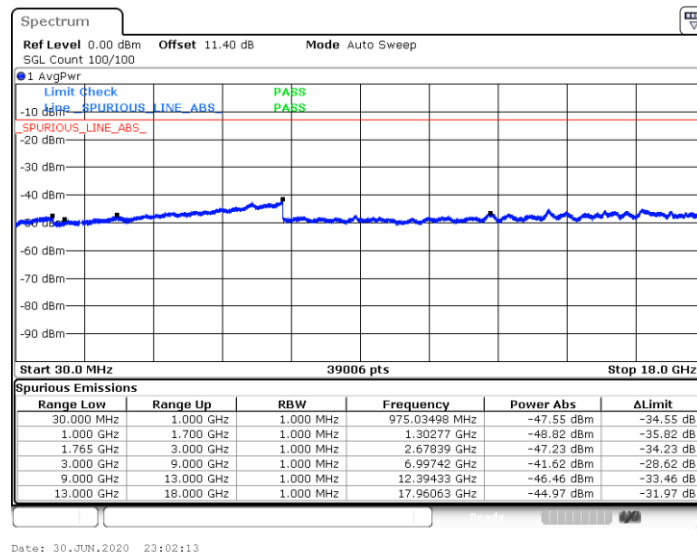
LTE Band 4 / 1.4MHz

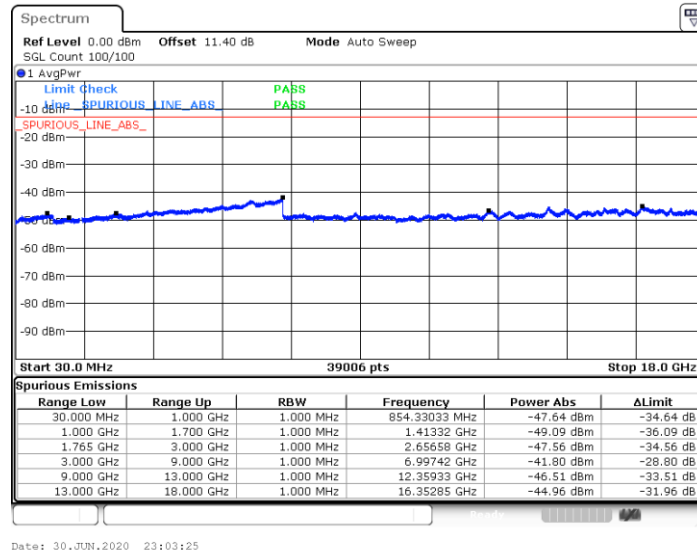
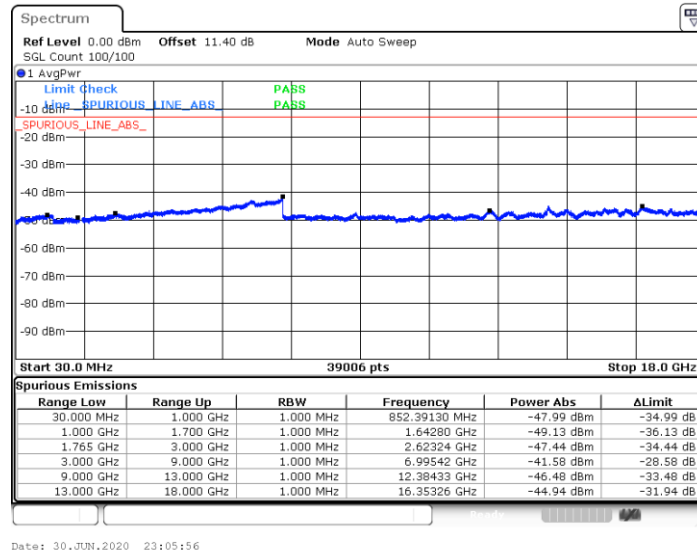
Highest Channel / 16QAM



LTE Band 4 / 3MHz

Lowest Channel / 16QAM

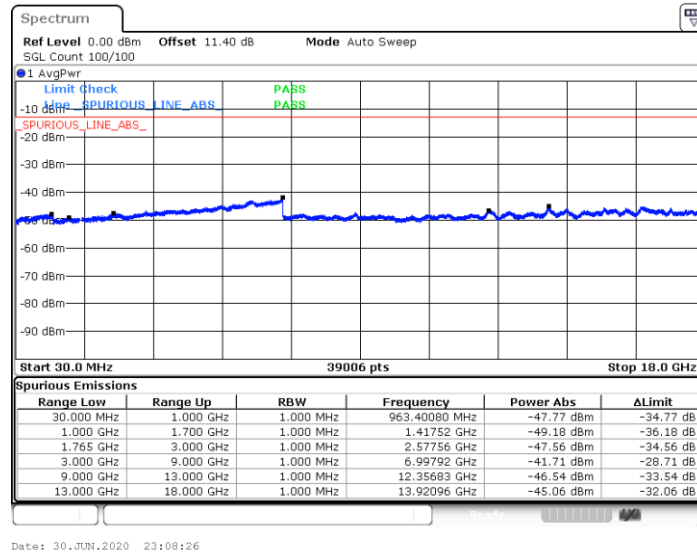


**LTE Band 4 / 3MHz****Middle Channel / 16QAM****Highest Channel / 16QAM**

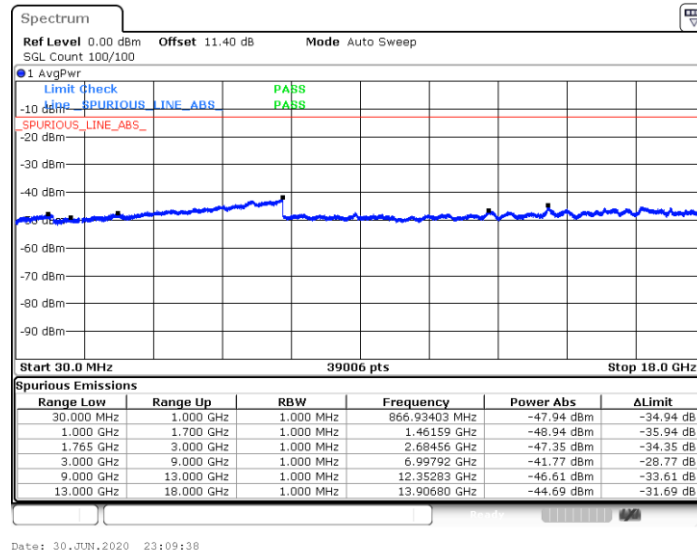


LTE Band 4 / 5MHz

Lowest Channel / 16QAM



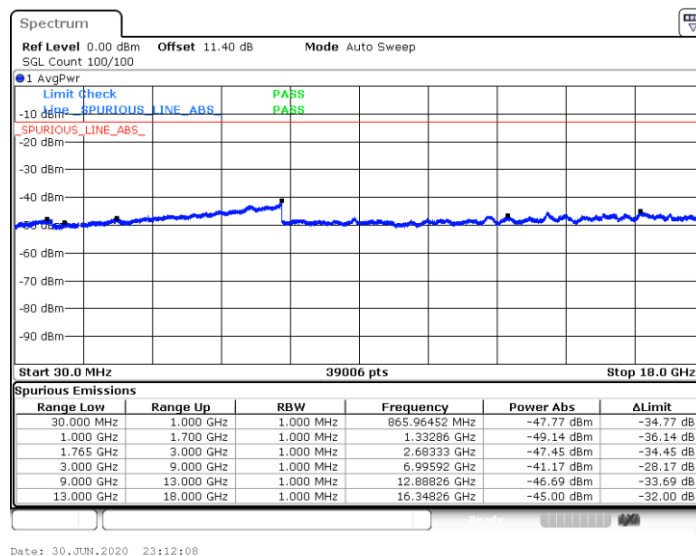
Middle Channel / 16QAM





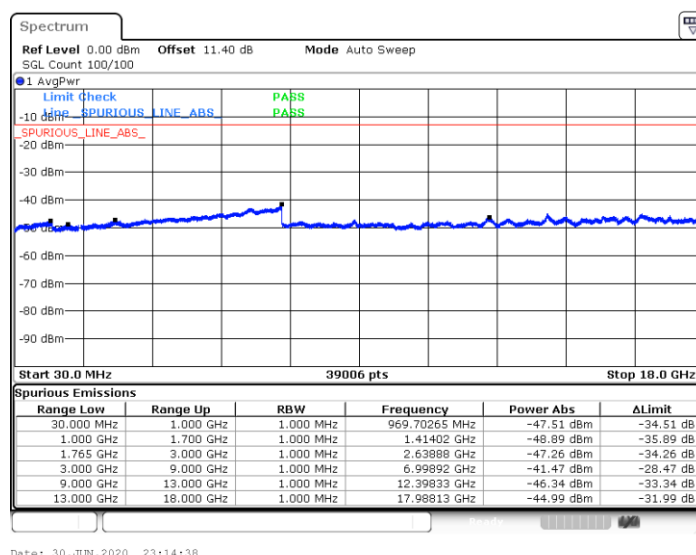
LTE Band 4 / 5MHz

Highest Channel / 16QAM



LTE Band 4 / 10MHz

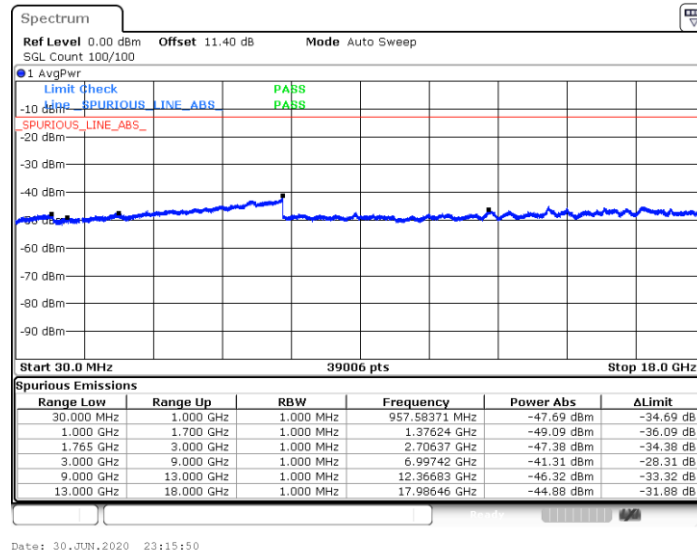
Lowest Channel / 16QAM



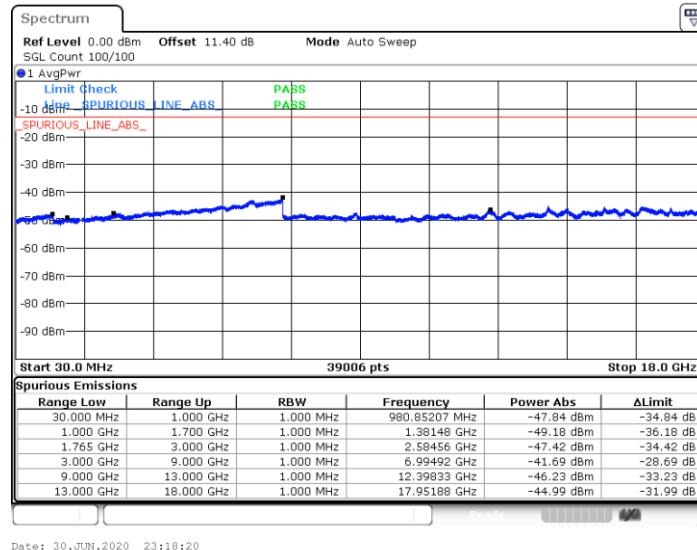


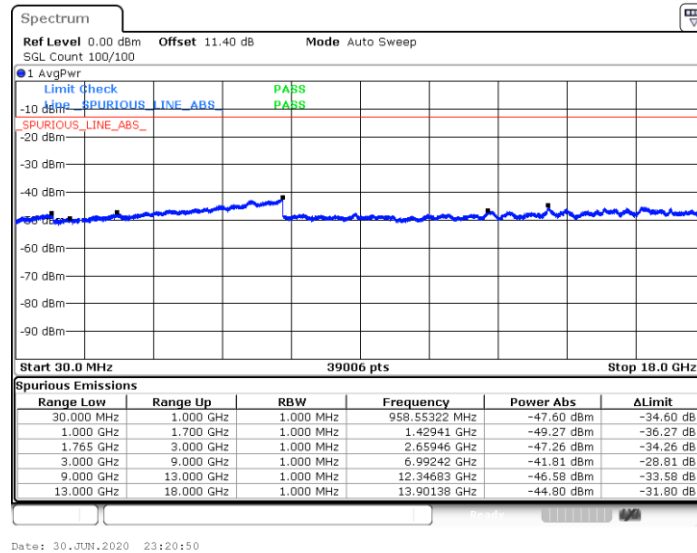
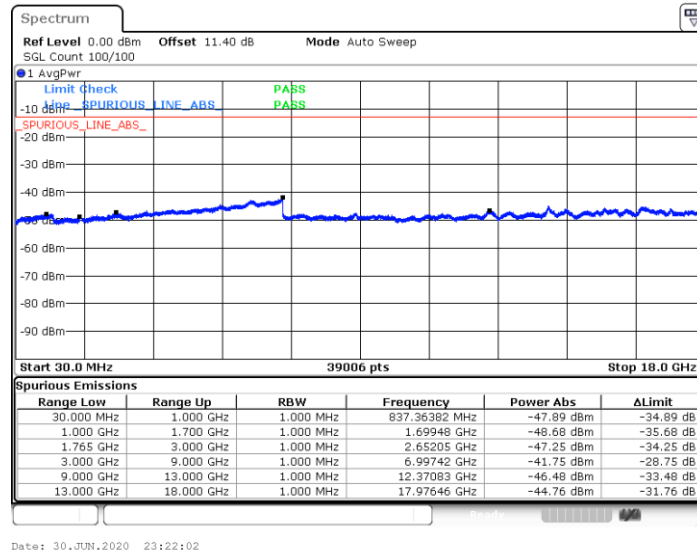
LTE Band 4 / 10MHz

Middle Channel / 16QAM



Highest Channel / 16QAM

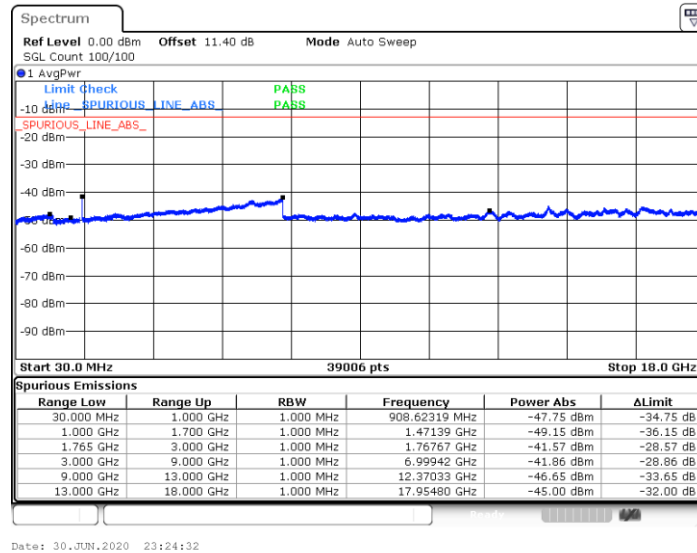


**LTE Band 4 / 15MHz****Lowest Channel / 16QAM****Middle Channel / 16QAM**



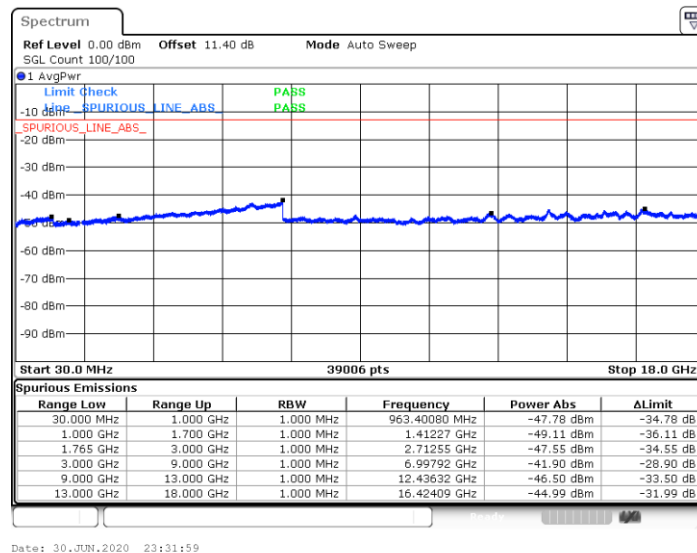
LTE Band 4 / 15MHz

Highest Channel / 16QAM



LTE Band 4 / 20MHz

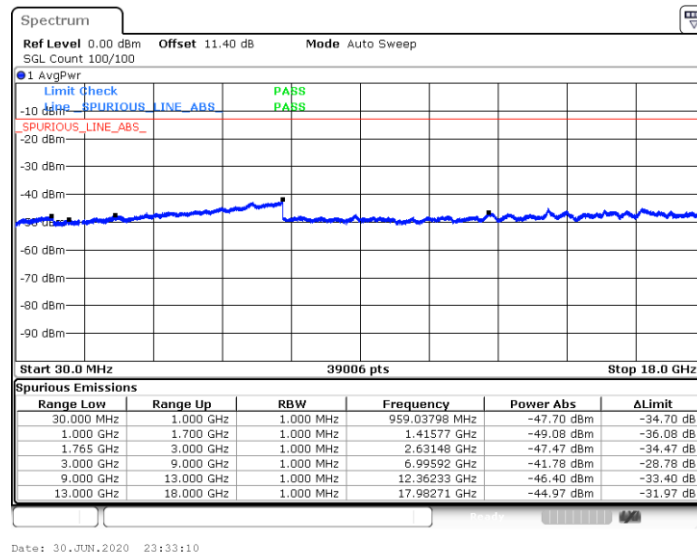
Lowest Channel / 16QAM



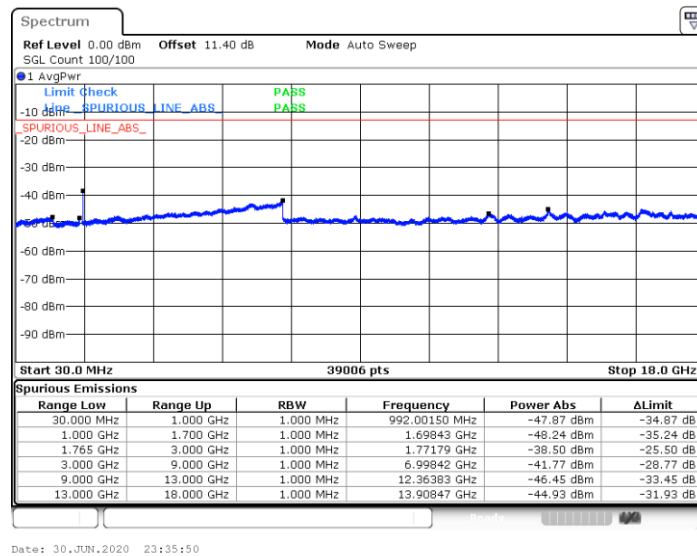


LTE Band 4 / 20MHz

Middle Channel / 16QAM



Highest Channel / 16QAM



Frequency Stability

Test Conditions		LTE Band 4 (16AQM) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0048	PASS
40	Normal Voltage	0.0045	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0048	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0051	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0025	
20	Maximum Voltage	0.0023	
20	Normal Voltage	0.0048	
20	Battery End Point	0.0019	

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 5

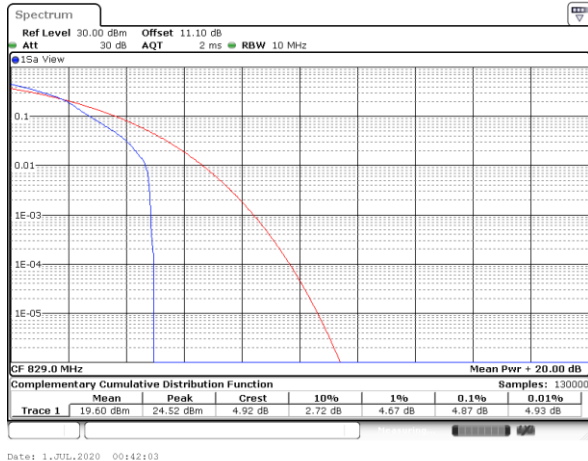
Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	4.87	5.54	PASS
Middle CH	-	-	4.81	5.68	
Highest CH	-	-	5.07	5.71	

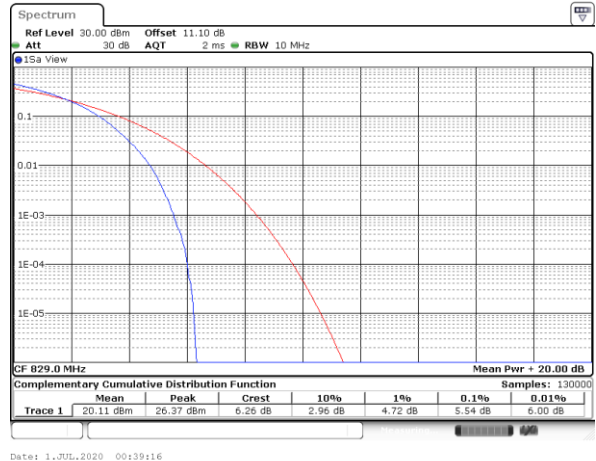


LTE Band 5 / 10MHz / 16QAM

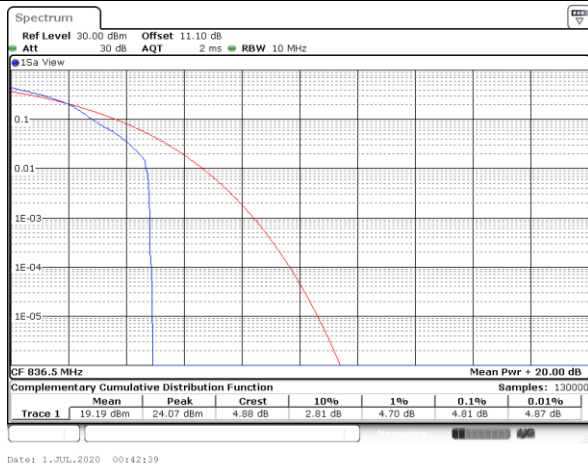
Lowest Channel / 1RB



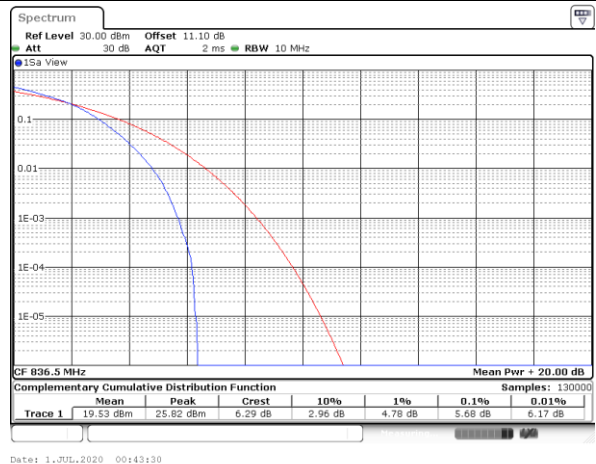
Lowest Channel / Full RB



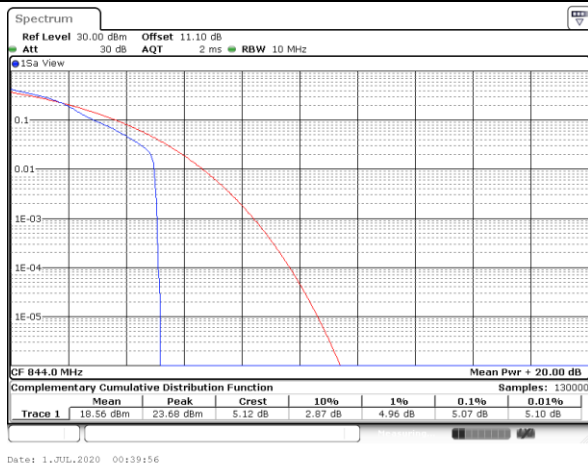
Middle Channel / 1RB



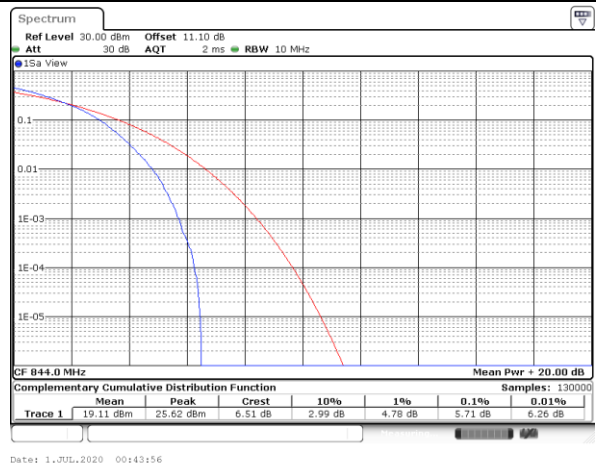
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



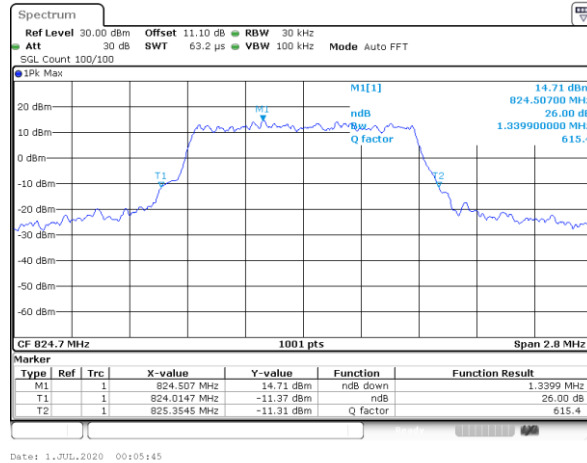
**26dB Bandwidth**

Mode	LTE Band 5 : 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	-	1.34	-	3.04	-	4.91	-	9.79	-	-	-	-
Middle CH	-	1.28	-	3.05	-	4.82	-	9.75	-	-	-	-
Highest CH	-	1.28	-	2.99	-	4.93	-	9.81	-	-	-	-

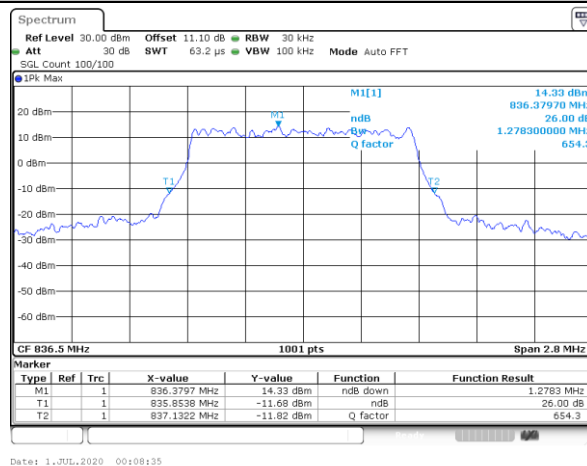


LTE Band 5

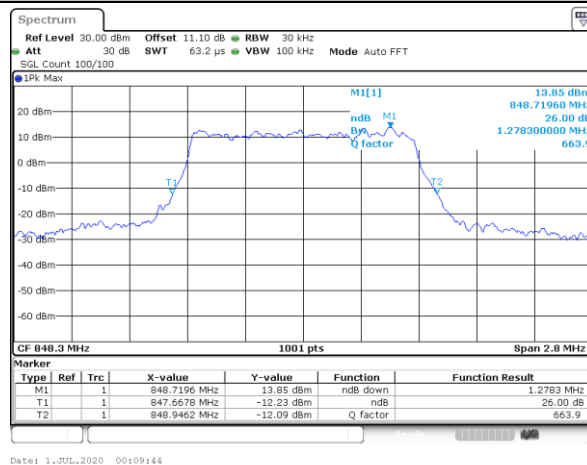
Lowest Channel / 1.4MHz / 16QAM

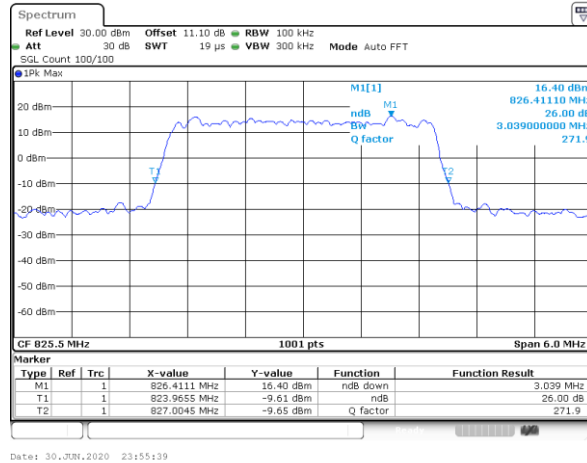
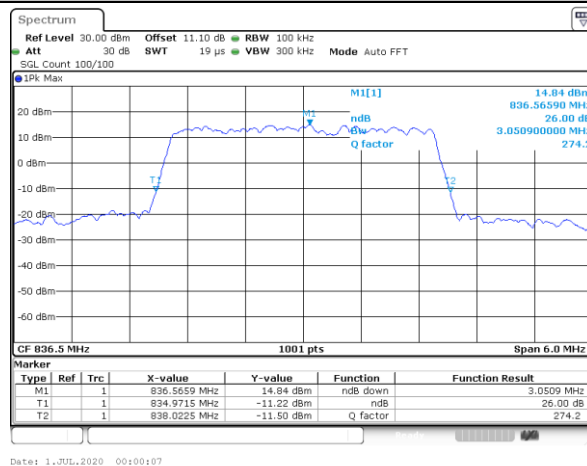
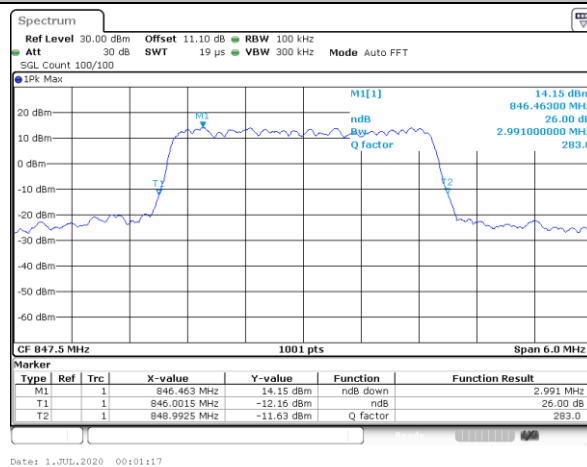


Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / 16QAM

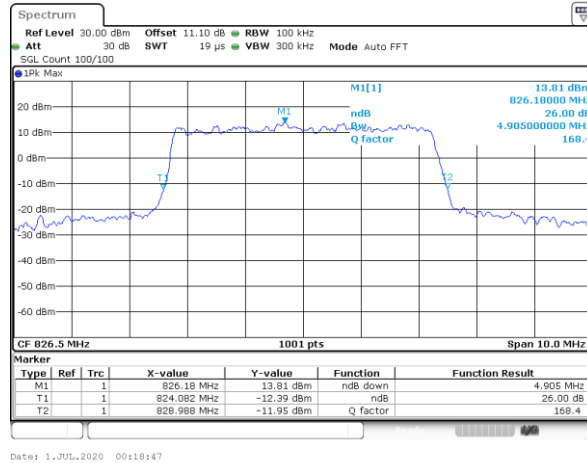


**LTE Band 5****Lowest Channel / 3MHz / 16QAM****Middle Channel / 3MHz / 16QAM****Highest Channel / 3MHz / 16QAM**

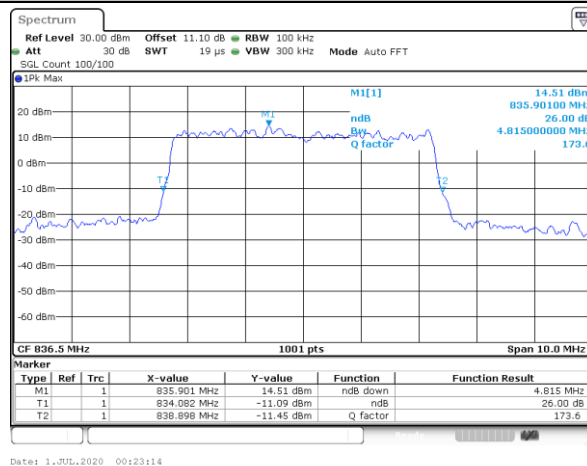


LTE Band 5

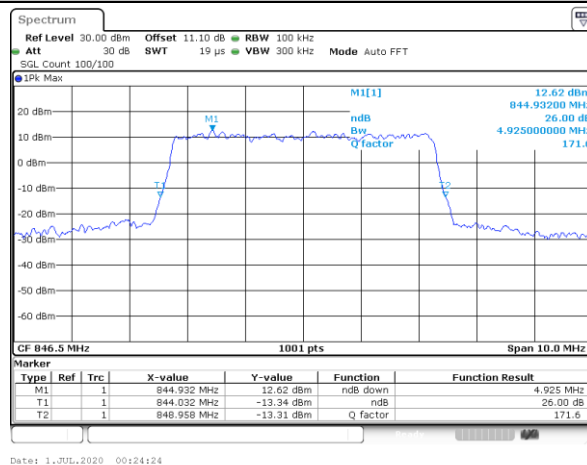
Lowest Channel / 5MHz / 16QAM



Middle Channel / 5MHz / 16QAM



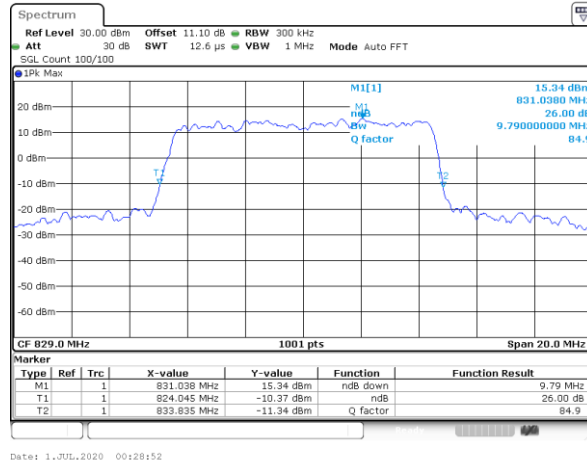
Highest Channel / 5MHz / 16QAM



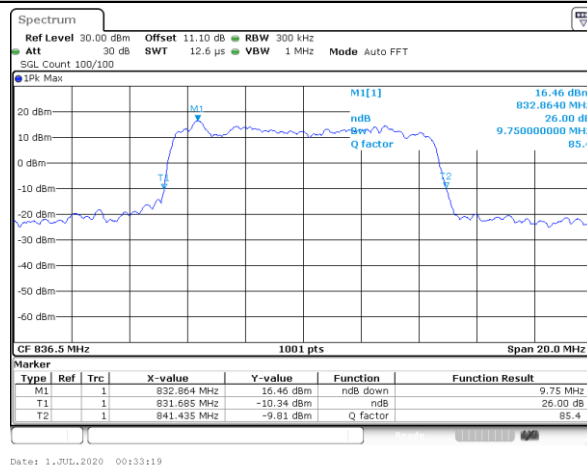


LTE Band 5

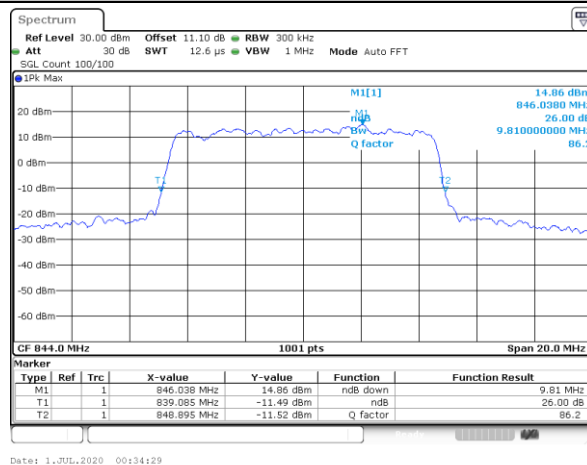
Lowest Channel / 10MHz / 16QAM



Middle Channel / 10MHz / 16QAM

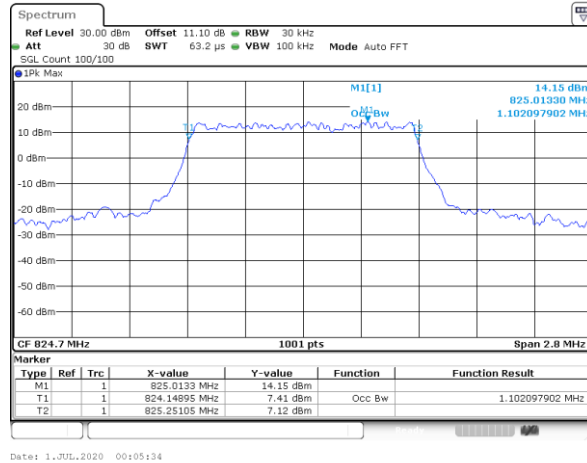
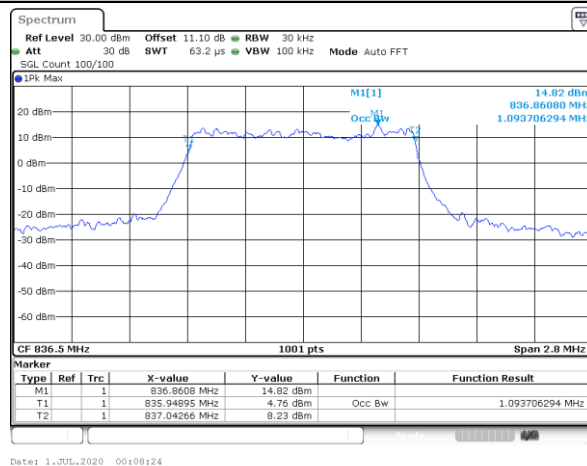
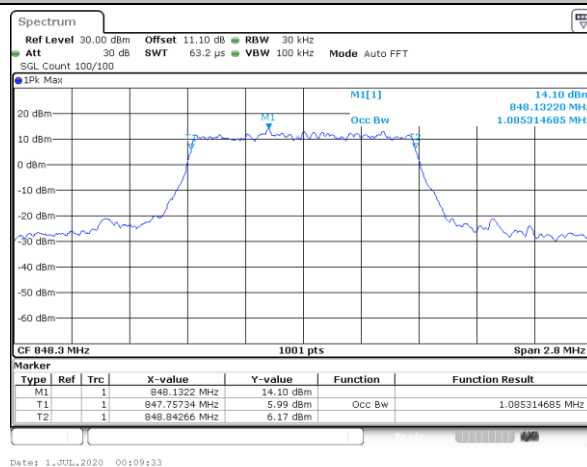


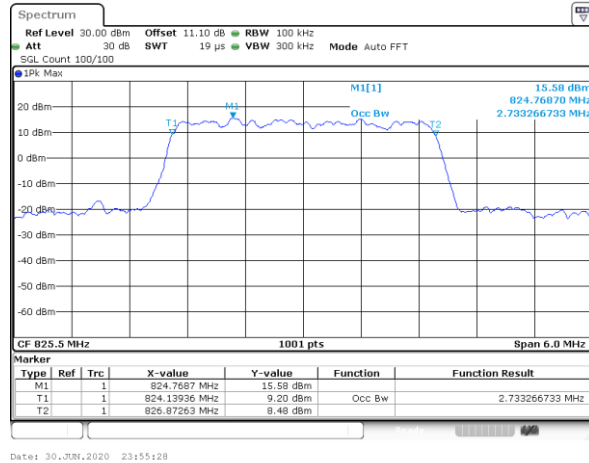
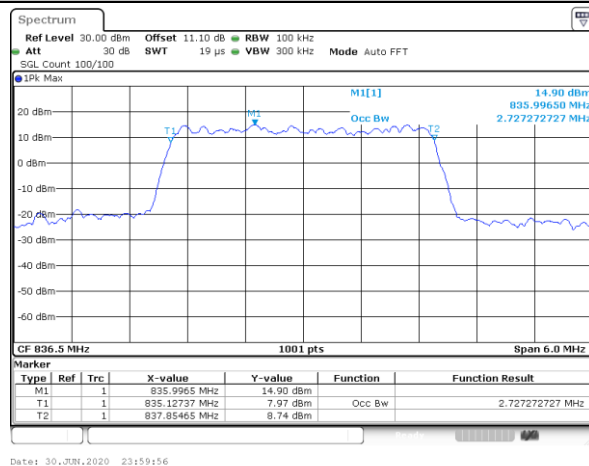
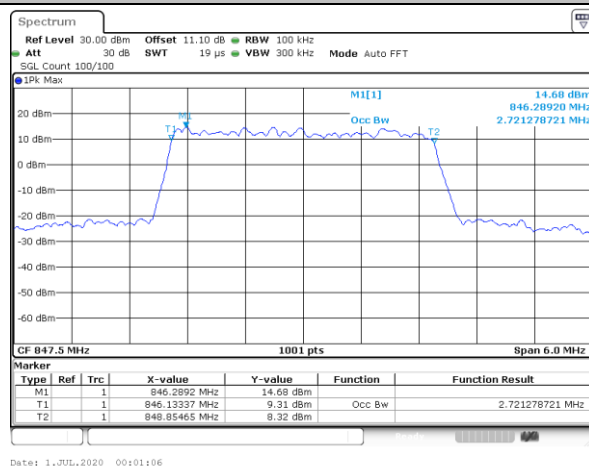
Highest Channel / 10MHz / 16QAM

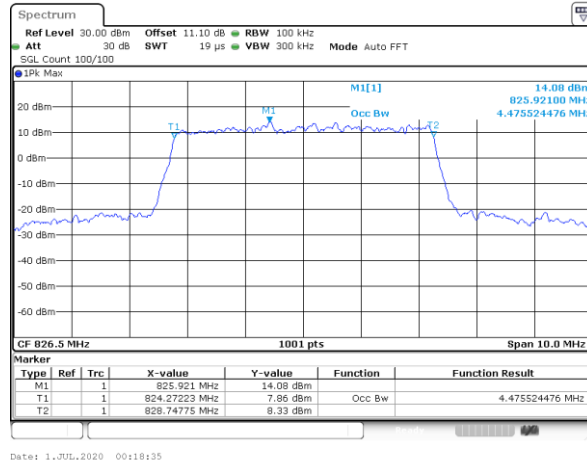
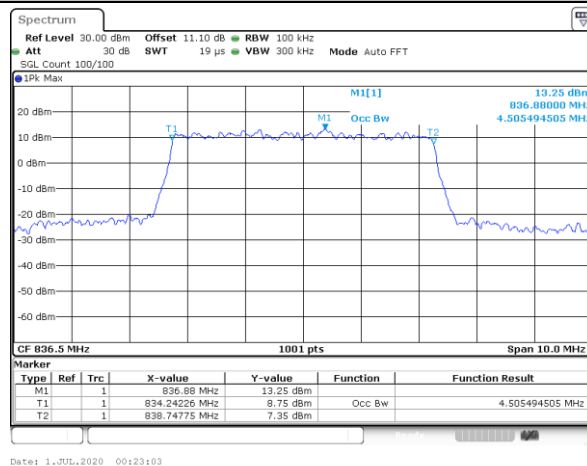


**Occupied Bandwidth**

Mode	LTE Band 5 : 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	-	1.10	-	2.73	-	4.48	-	8.97	-	-	-	-
Middle CH	-	1.09	-	2.73	-	4.51	-	9.03	-	-	-	-
Highest CH	-	1.09	-	2.72	-	4.48	-	9.01	-	-	-	-

**LTE Band 5****Lowest Channel / 1.4MHz / 16QAM****Middle Channel / 1.4MHz / 16QAM****Highest Channel / 1.4MHz / 16QAM**

**LTE Band 5****Lowest Channel / 3MHz / 16QAM****Middle Channel / 3MHz / 16QAM****Highest Channel / 3MHz / 16QAM**

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