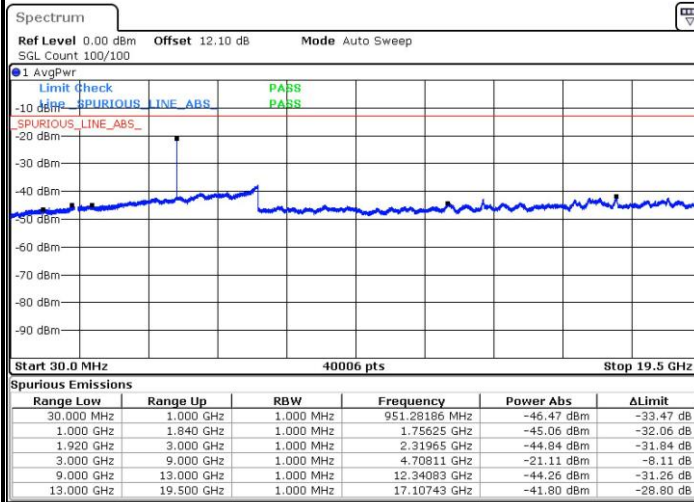




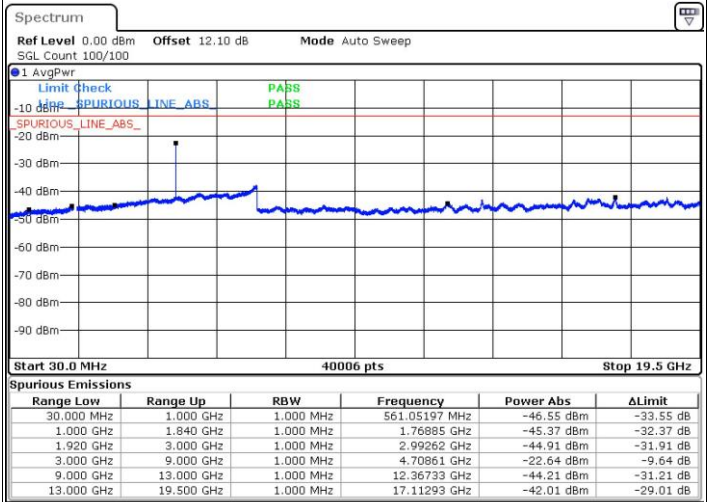
LTE Band 2 / 15MHz

Lowest Channel / QPSK



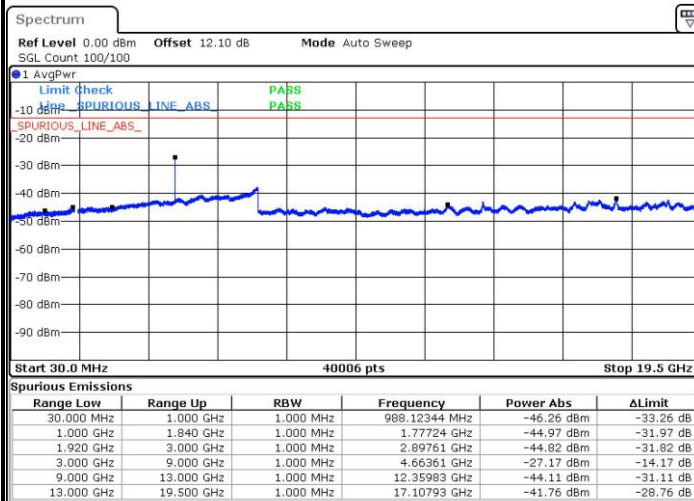
Date: 21.SEP.2018 05:01:40

Lowest Channel / 16QAM



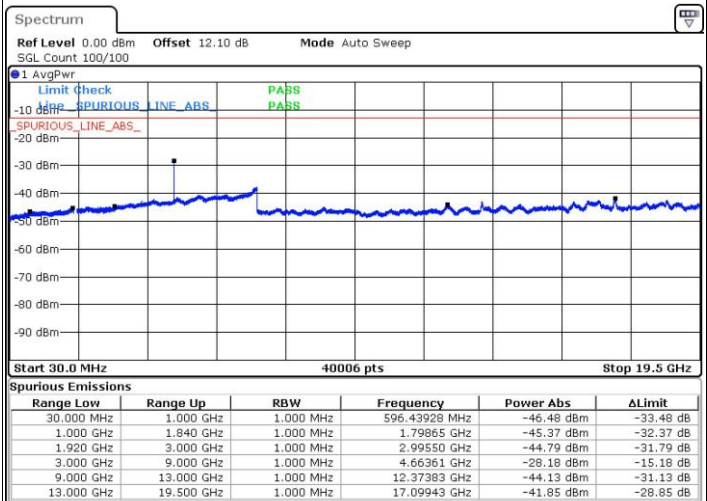
Date: 21.SEP.2018 05:02:33

Middle Channel / QPSK



Date: 21.SEP.2018 05:04:19

Middle Channel / 16QAM

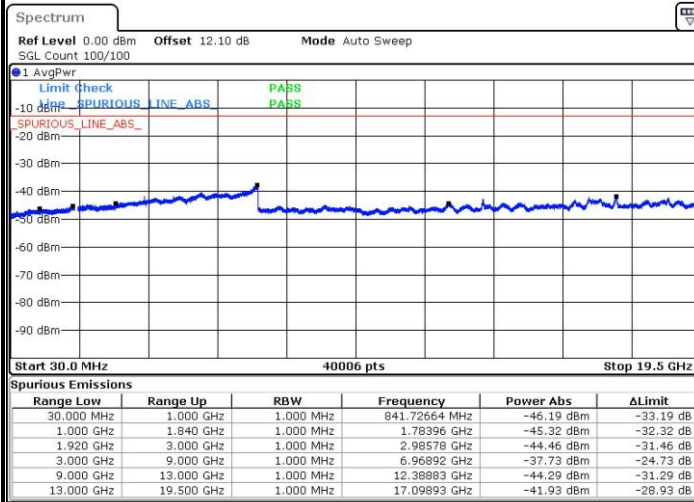


Date: 21.SEP.2018 05:05:13



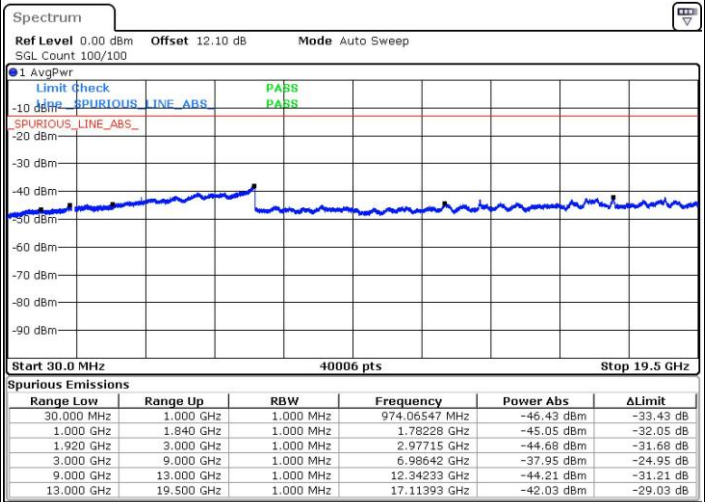
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 21.SEP.2018 05:11:41

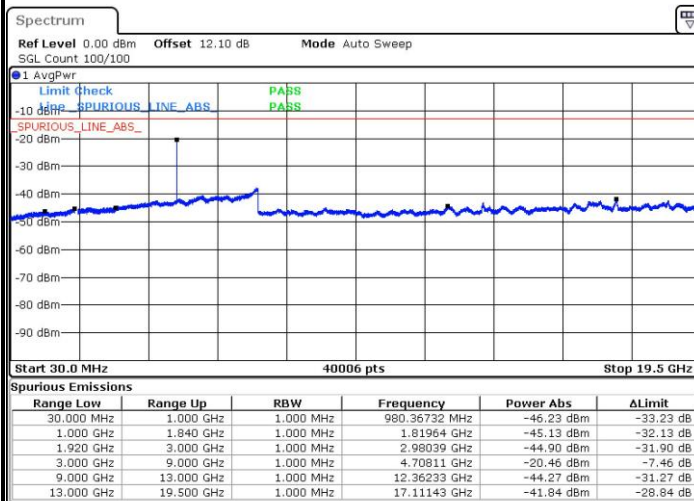
Highest Channel / 16QAM



Date: 21.SEP.2018 05:12:35

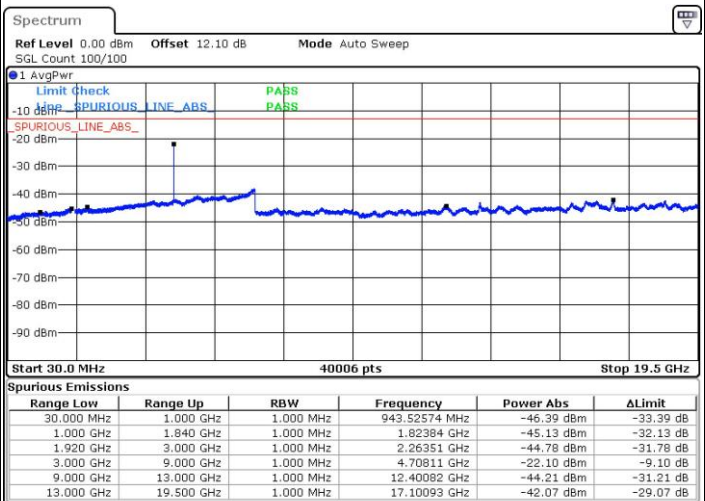
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 21.SEP.2018 05:19:02

Lowest Channel / 16QAM

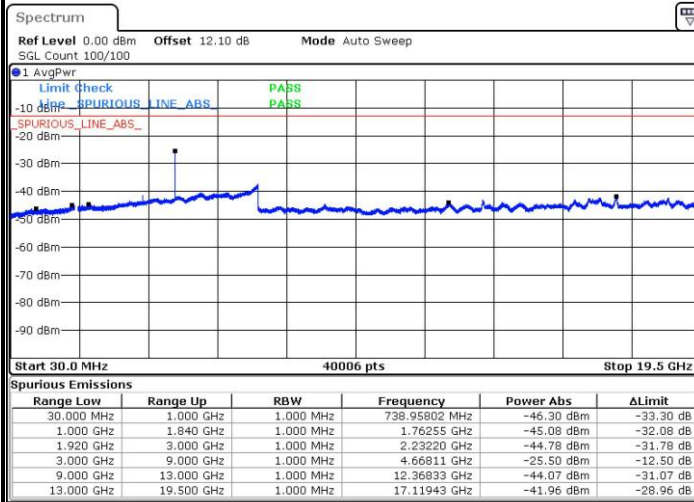


Date: 21.SEP.2018 05:19:56



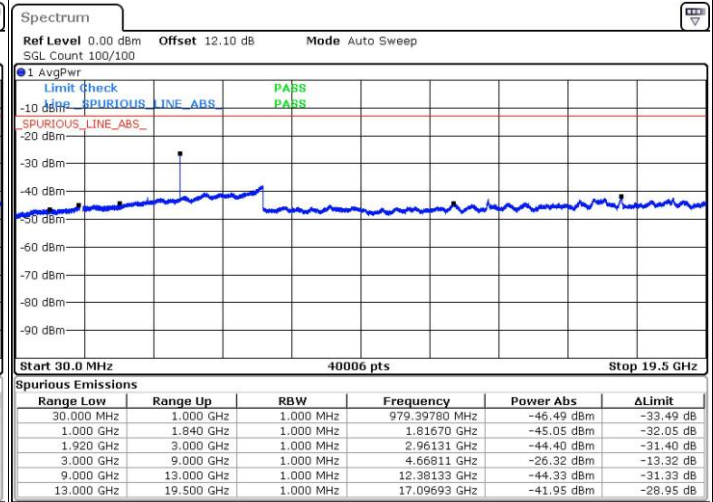
LTE Band 2 / 20MHz

Middle Channel / QPSK



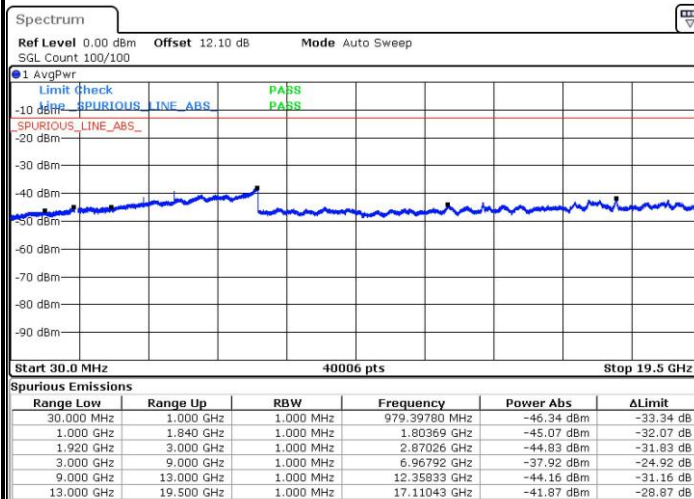
Date: 21.SEP.2018 05:21:42

Middle Channel / 16QAM



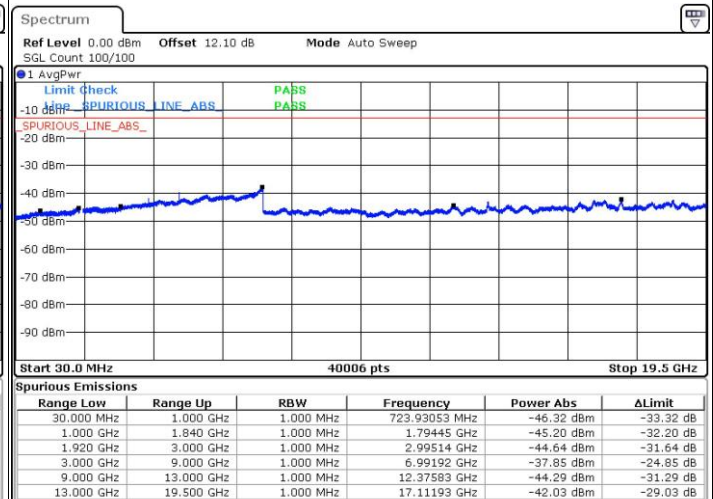
Date: 21.SEP.2018 05:22:36

Highest Channel / QPSK



Date: 21.SEP.2018 05:29:03

Highest Channel / 16QAM



Date: 21.SEP.2018 05:29:57

Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0026	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0030	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0007	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 4

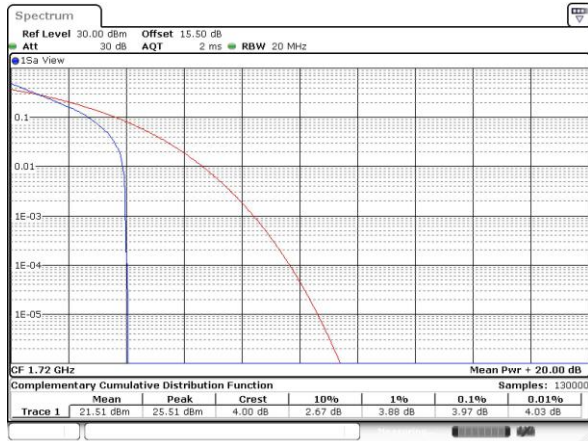
Peak-to-Average Ratio

Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.97	4.81	4.67	5.68	PASS
Middle CH	4.06	4.84	5.13	5.68	
Highest CH	4.23	4.93	4.99	5.91	

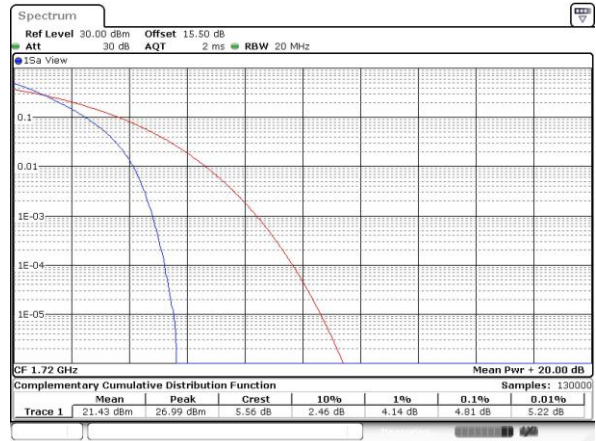


LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



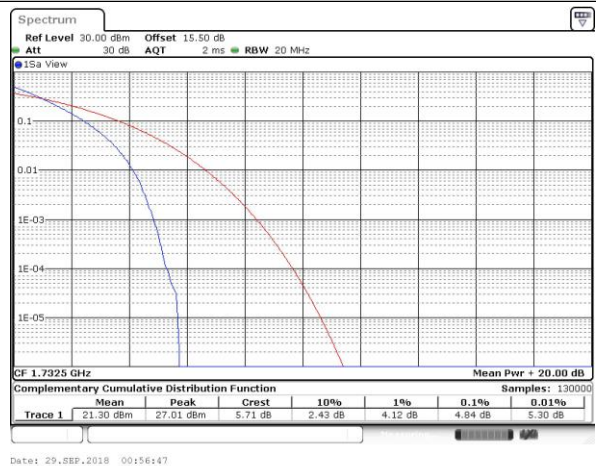
Lowest Channel / Full RB



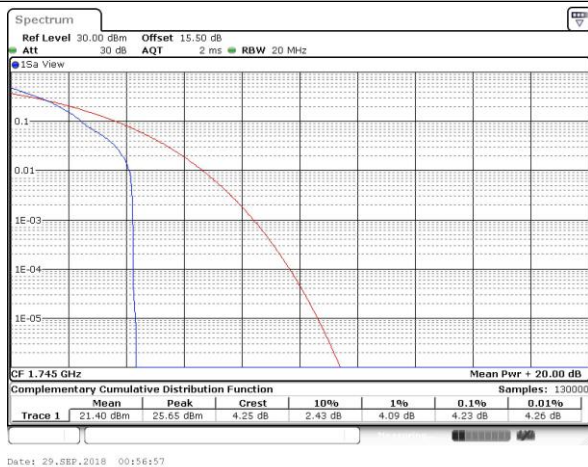
Middle Channel / 1RB



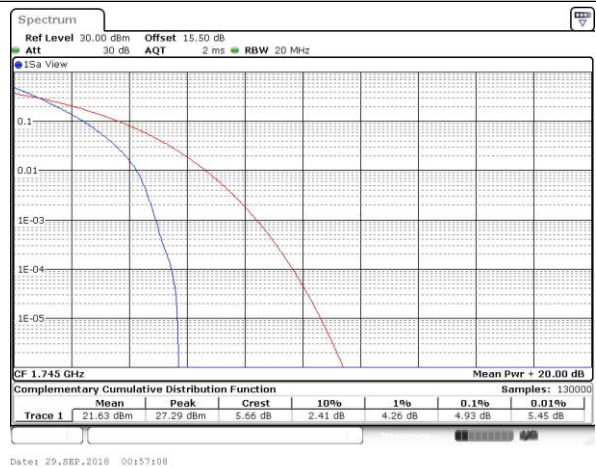
Middle Channel / Full RB



Highest Channel / 1RB



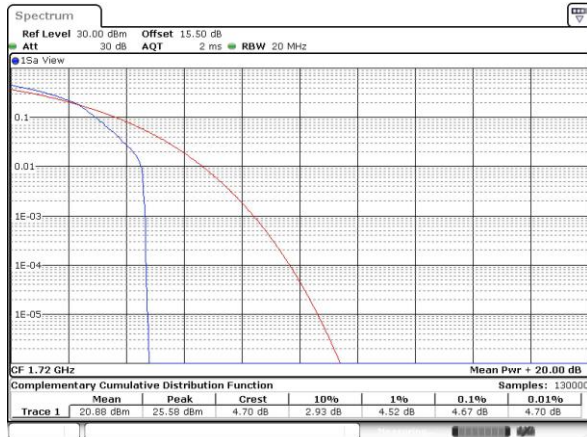
Highest Channel / Full RB



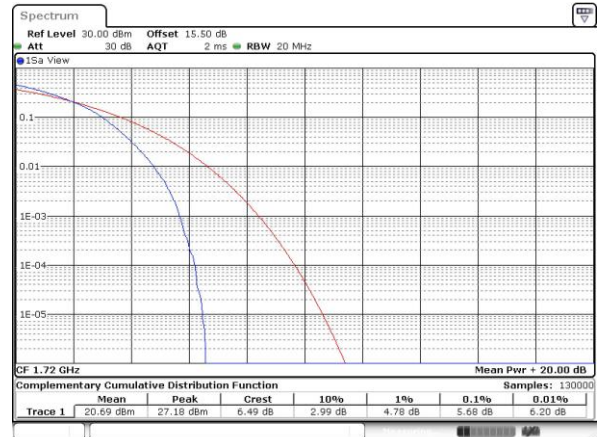


LTE Band 4 / 20MHz / 16QAM

Lowest Channel / 1RB



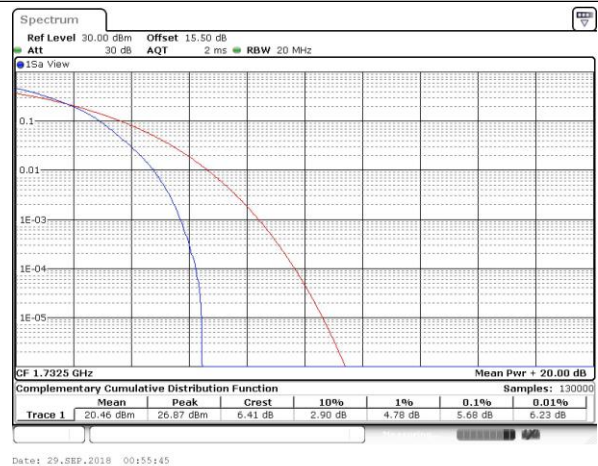
Lowest Channel / Full RB



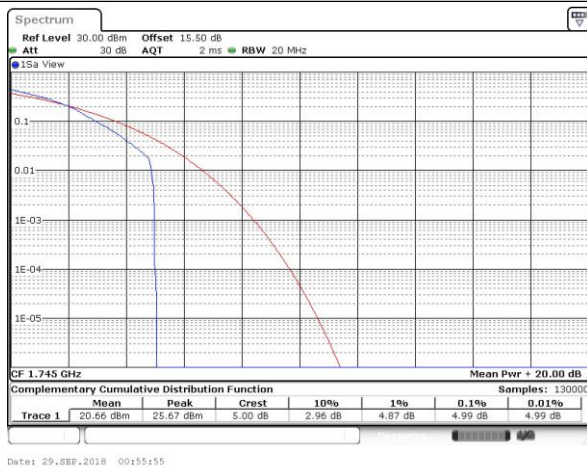
Middle Channel / 1RB



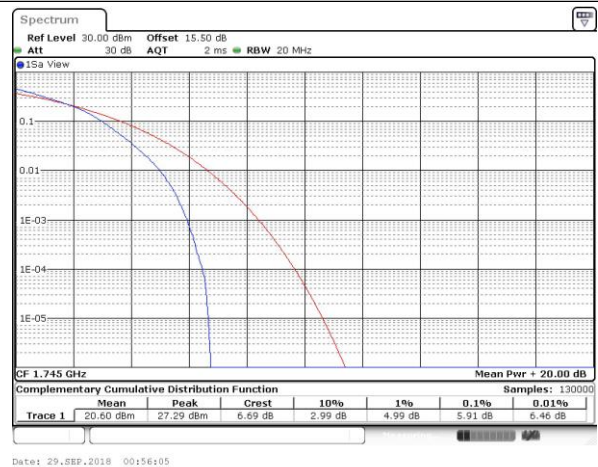
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB





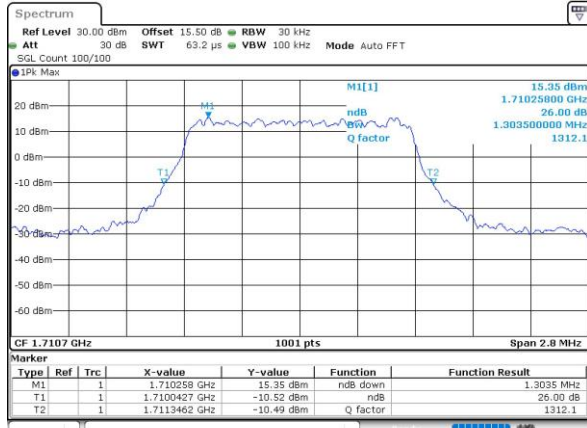
26dB Bandwidth

Mode	LTE Band 4 : 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	1.30	1.26	2.96	3.00	5.00	4.91	9.75	9.79	14.27	14.27	20.18	20.22
Middle CH	1.28	1.27	3.02	2.99	4.93	4.78	9.79	9.71	14.42	14.33	20.14	20.10
Highest CH	1.26	1.26	3.02	2.99	4.91	4.93	9.69	9.69	14.36	14.57	20.22	20.22

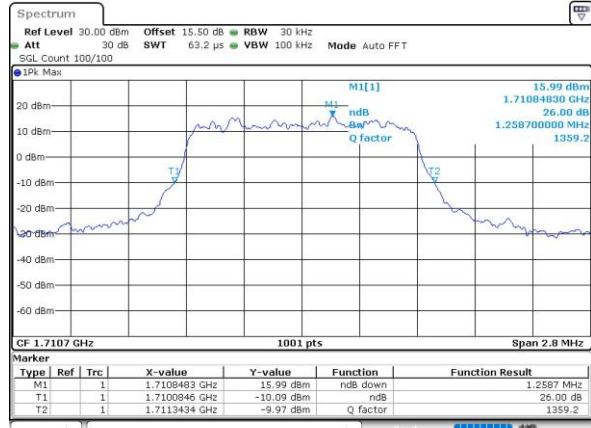


LTE Band 4

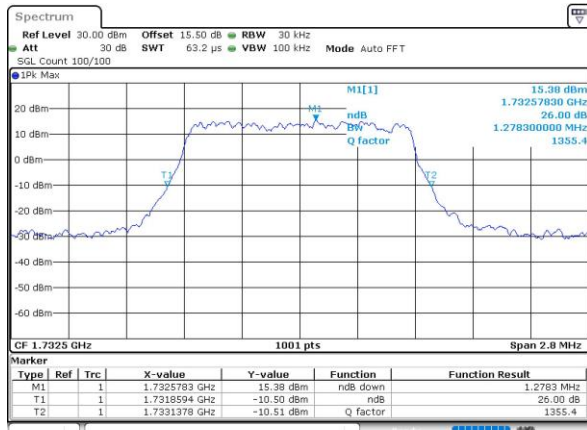
Lowest Channel / 1.4MHz / QPSK



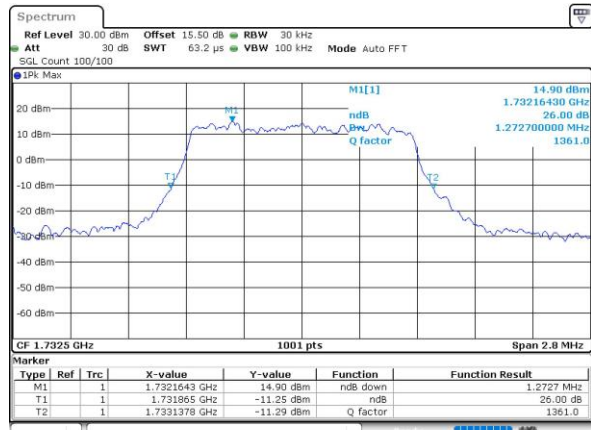
Lowest Channel / 1.4MHz / 16QAM



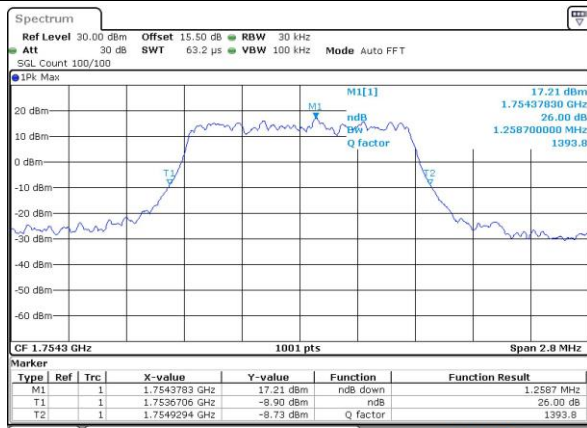
Middle Channel / 1.4MHz / QPSK



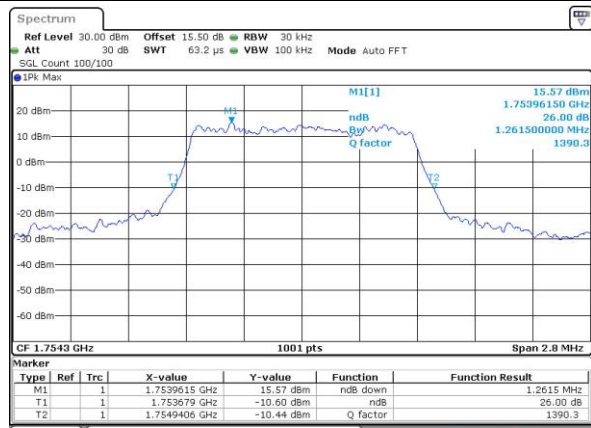
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



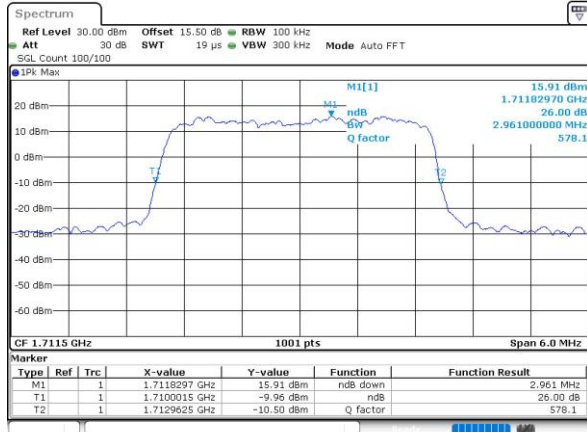
Highest Channel / 1.4MHz / 16QAM





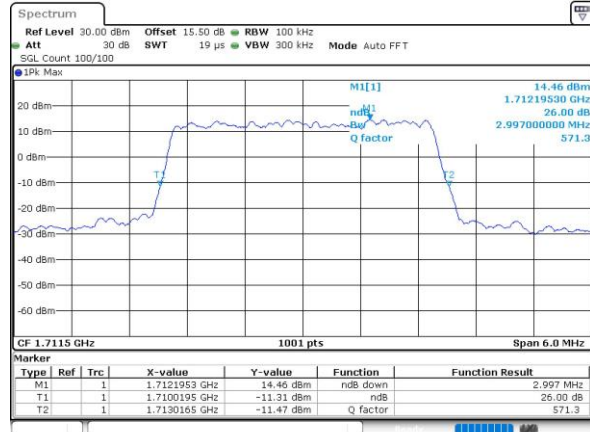
LTE Band 4

Lowest Channel / 3MHz / QPSK



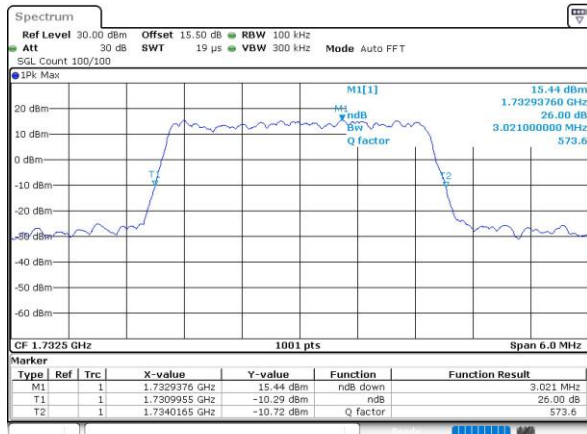
Date: 28.SEP.2018 07:36:14

Lowest Channel / 3MHz / 16QAM



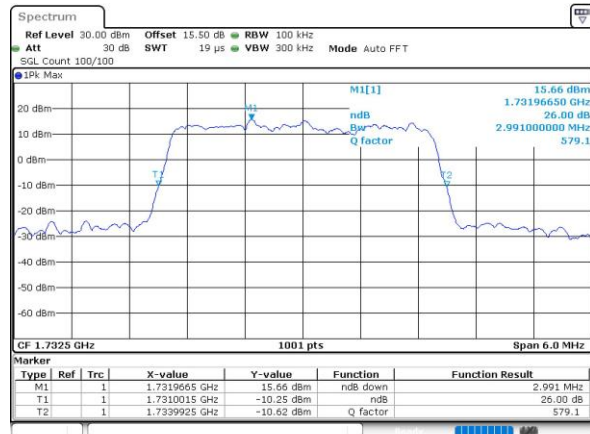
Date: 28.SEP.2018 07:36:25

Middle Channel / 3MHz / QPSK



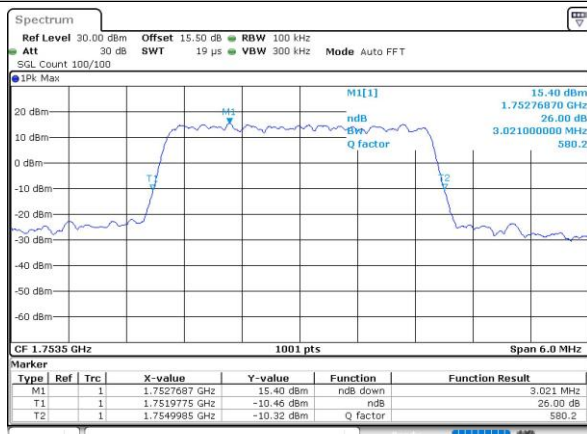
Date: 28.SEP.2018 07:42:38

Middle Channel / 3MHz / 16QAM



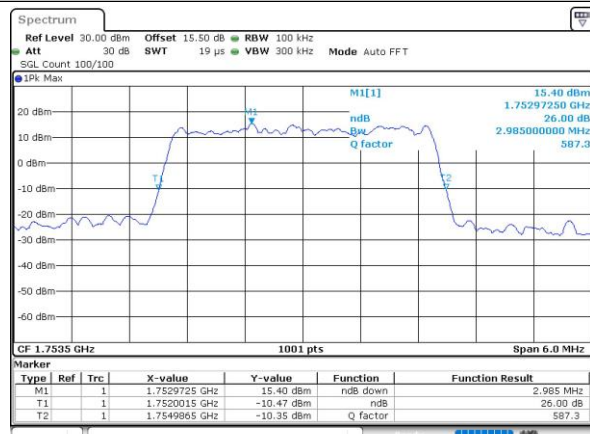
Date: 28.SEP.2018 07:42:49

Highest Channel / 3MHz / QPSK



Date: 28.SEP.2018 07:45:03

Highest Channel / 3MHz / 16QAM

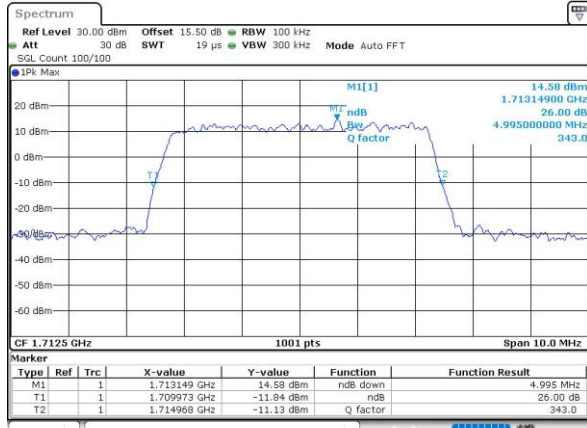


Date: 28.SEP.2018 07:45:14



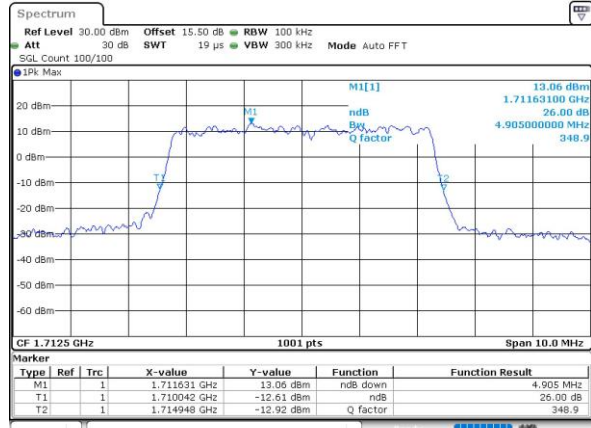
LTE Band 4

Lowest Channel / 5MHz / QPSK



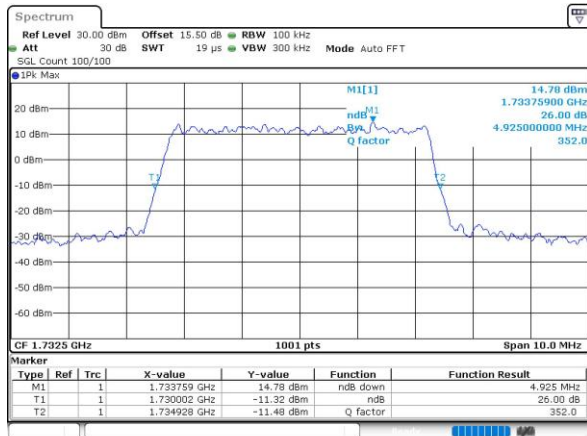
Date: 28_SEP.2018 07:51:26

Lowest Channel / 5MHz / 16QAM



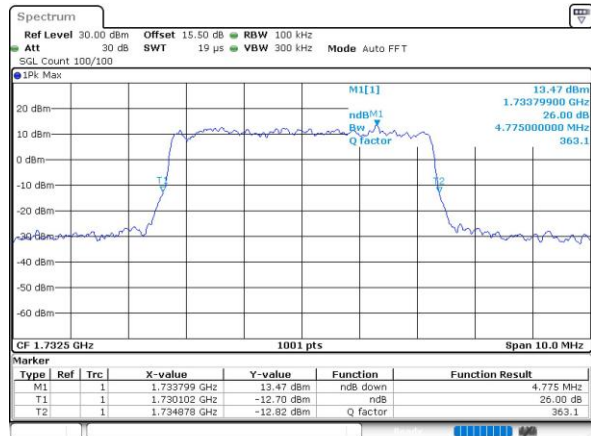
Date: 28_SEP.2018 07:51:37

Middle Channel / 5MHz / QPSK



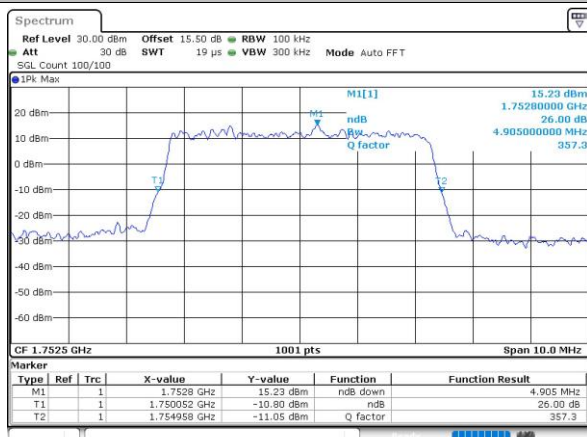
Date: 28_SEP.2018 07:57:49

Middle Channel / 5MHz / 16QAM



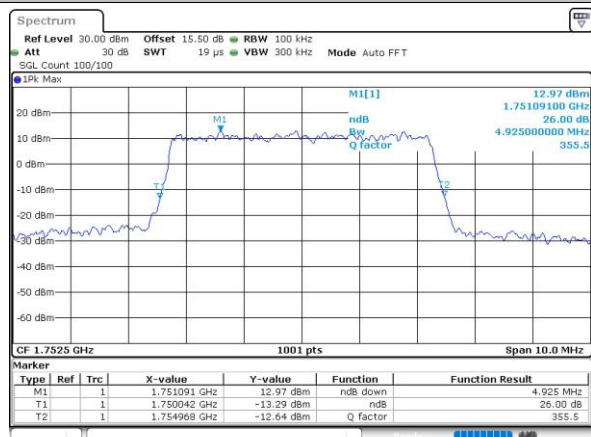
Date: 28_SEP.2018 07:58:00

Highest Channel / 5MHz / QPSK



Date: 28_SEP.2018 08:00:14

Highest Channel / 5MHz / 16QAM

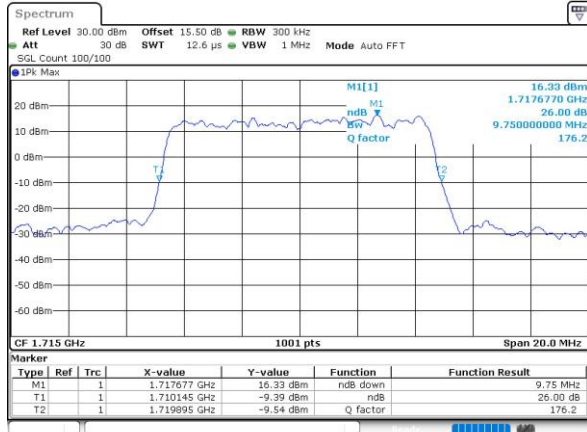


Date: 28_SEP.2018 08:00:25

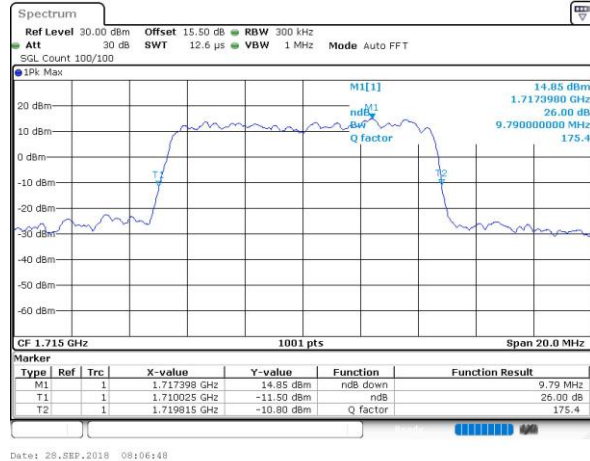


LTE Band 4

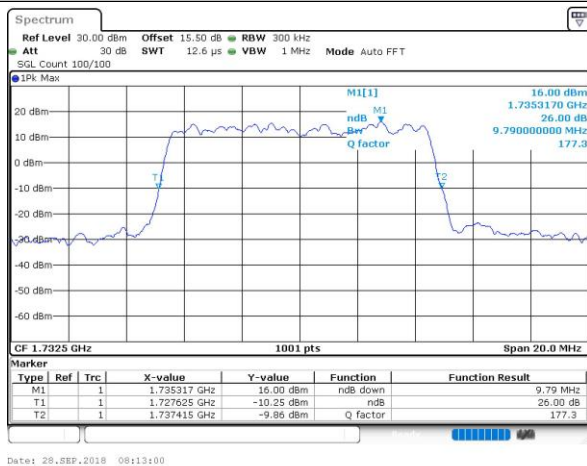
Lowest Channel / 10MHz / QPSK



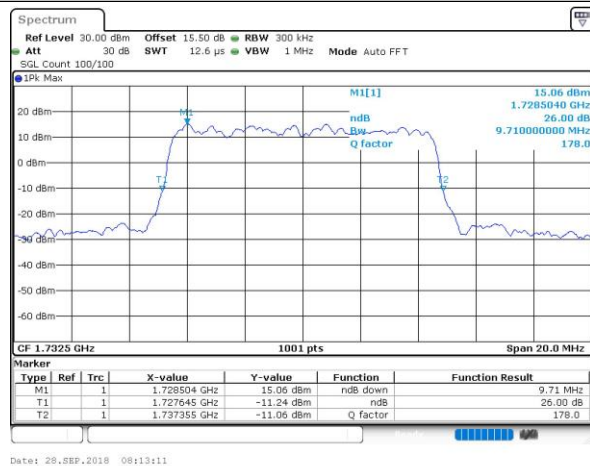
Lowest Channel / 10MHz / 16QAM



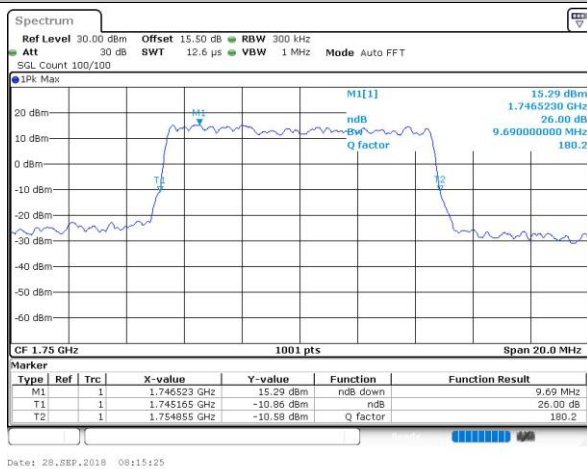
Middle Channel / 10MHz / QPSK



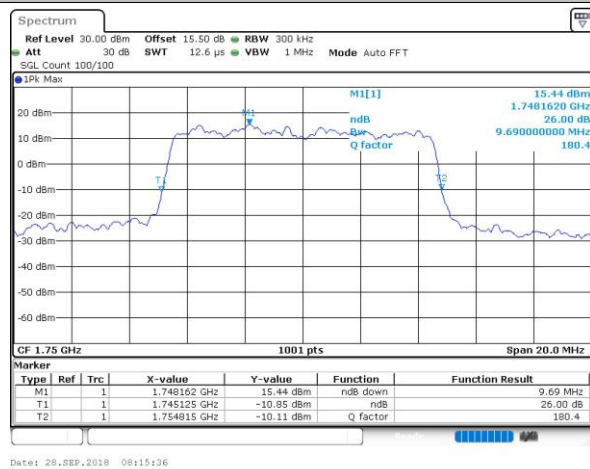
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



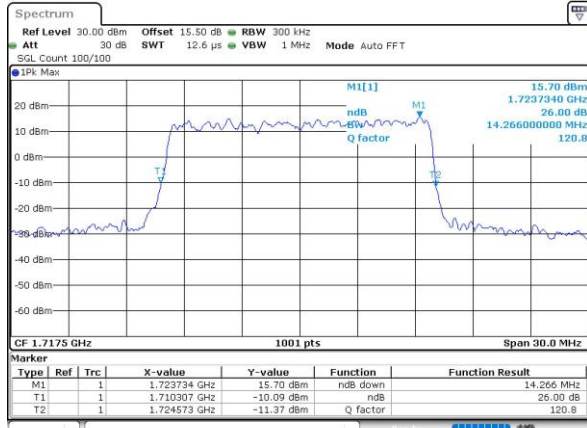
Highest Channel / 10MHz / 16QAM



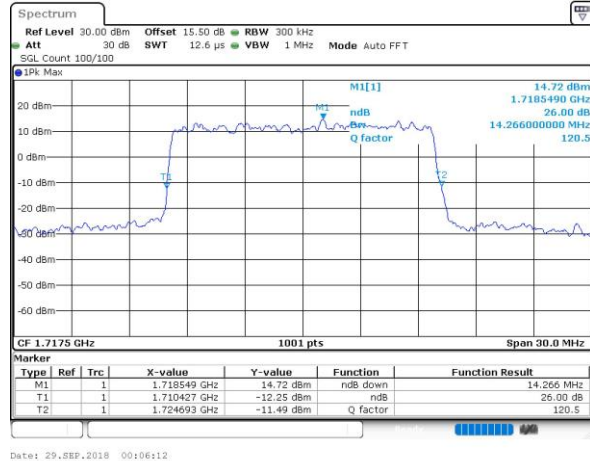


LTE Band 4

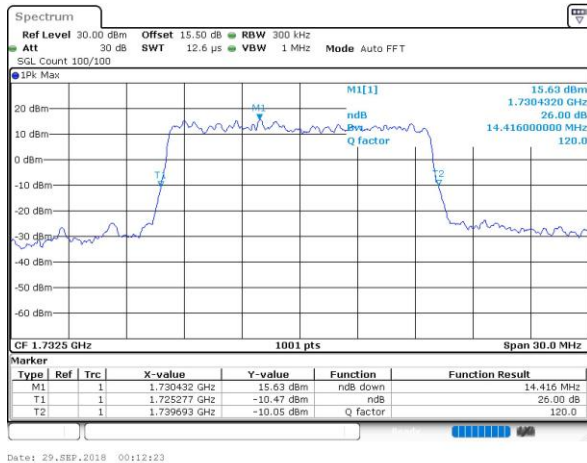
Lowest Channel / 15MHz / QPSK



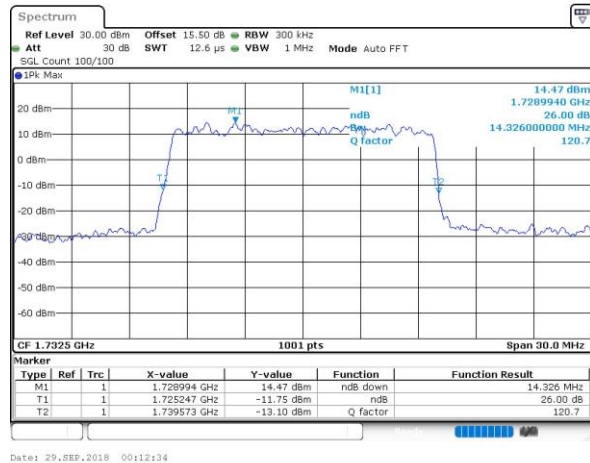
Lowest Channel / 15MHz / 16QAM



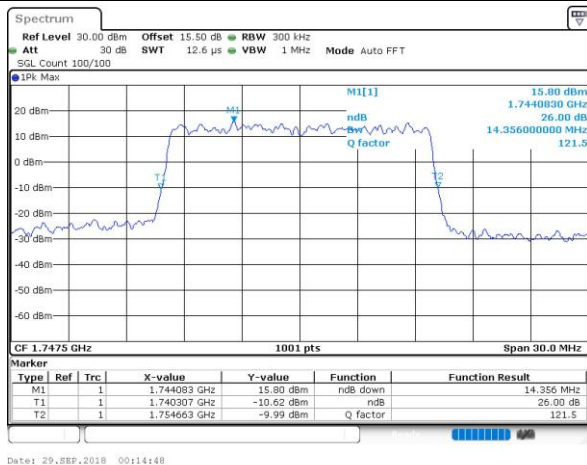
Middle Channel / 15MHz / QPSK



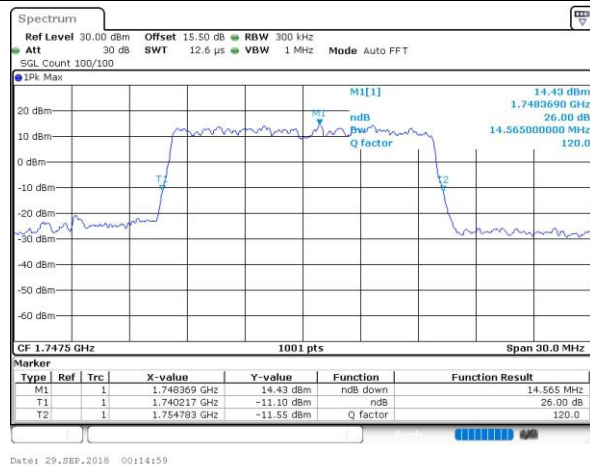
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



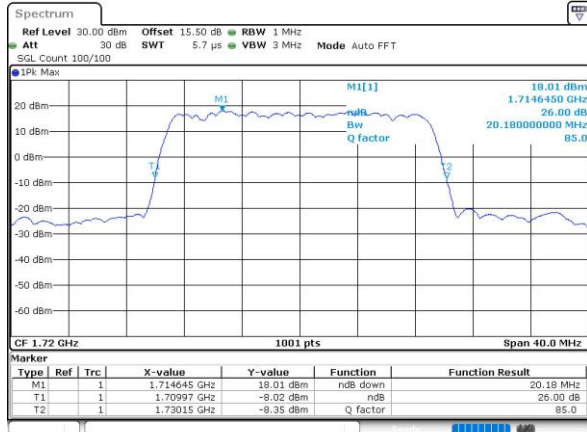
Highest Channel / 15MHz / 16QAM



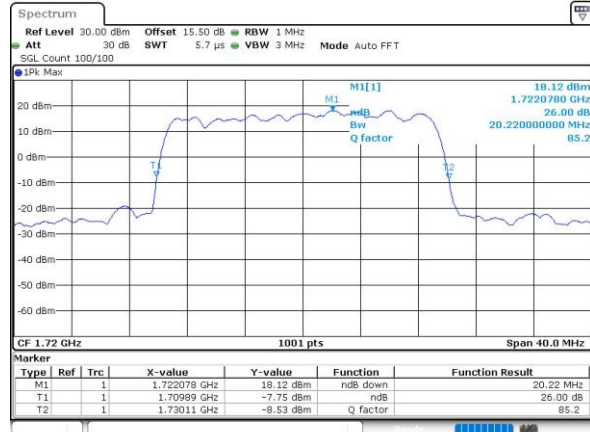


LTE Band 4

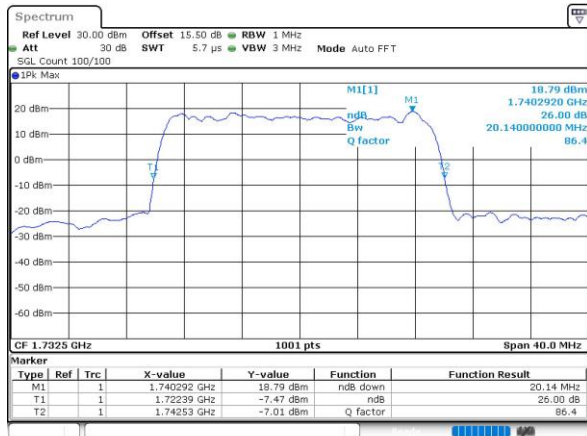
Lowest Channel / 20MHz / QPSK



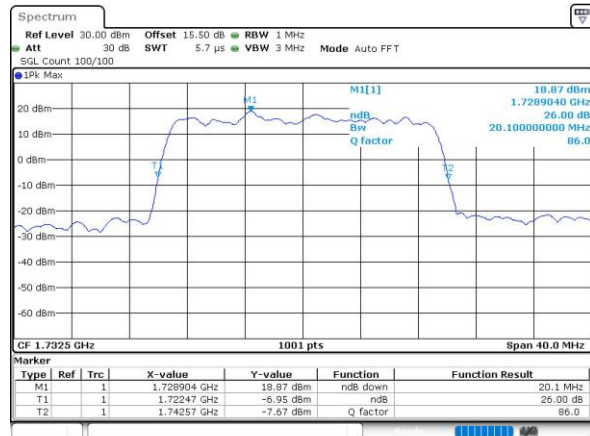
Lowest Channel / 20MHz / 16QAM



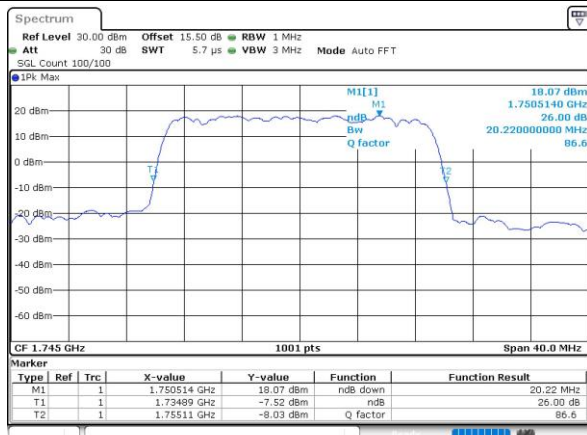
Middle Channel / 20MHz / QPSK



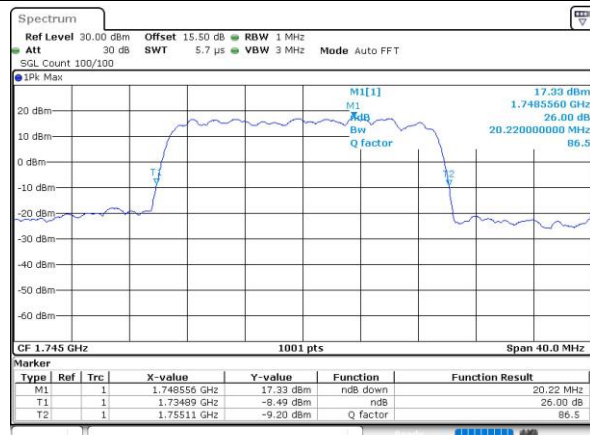
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM



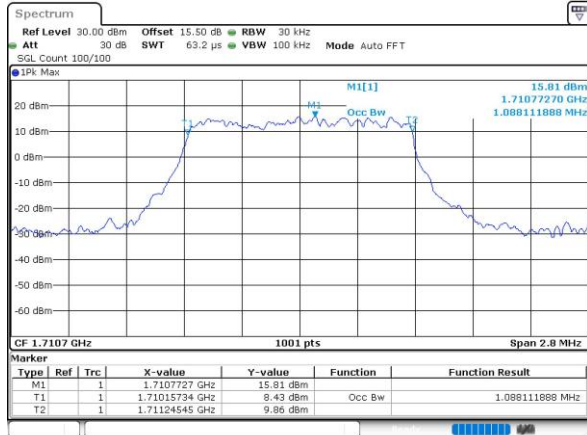
**Occupied Bandwidth**

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	1.09	1.09	2.72	2.71	4.51	4.49	9.03	9.01	13.43	13.46	18.46	18.26
Middle CH	1.09	1.09	2.73	2.72	4.50	4.50	8.99	8.99	13.43	13.43	18.18	18.42
Highest CH	1.09	1.09	2.73	2.72	4.48	4.49	8.99	9.01	13.49	13.49	18.34	18.34

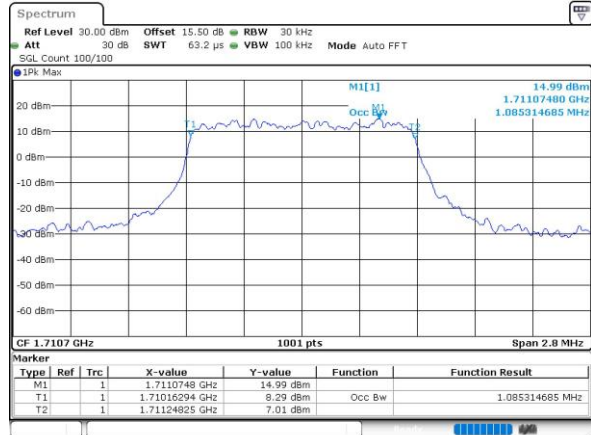


LTE Band 4

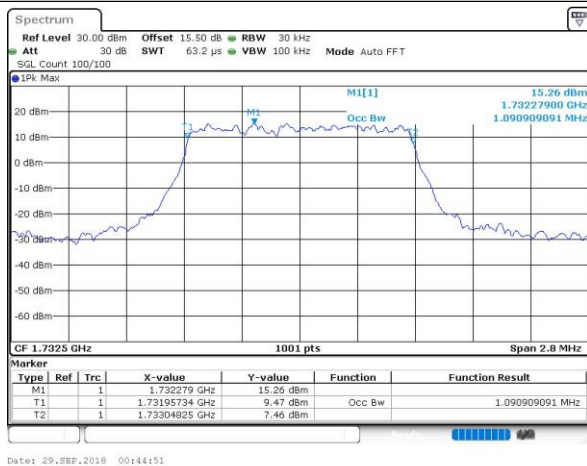
Lowest Channel / 1.4MHz / QPSK



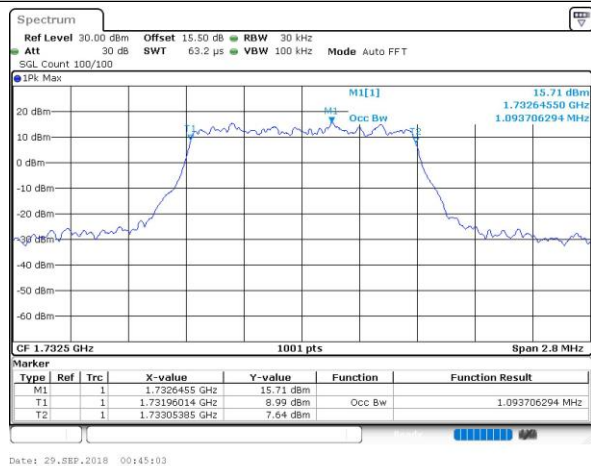
Lowest Channel / 1.4MHz / 16QAM



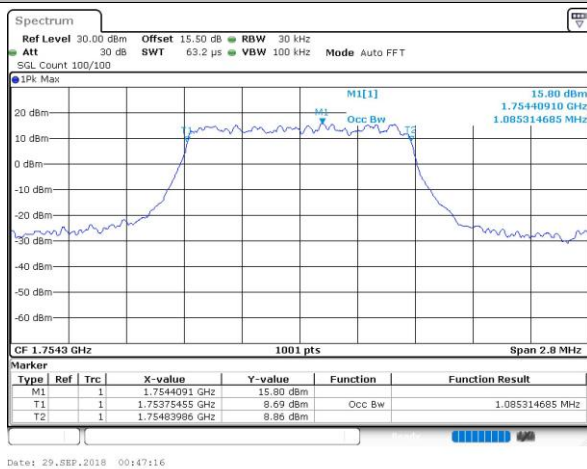
Middle Channel / 1.4MHz / QPSK



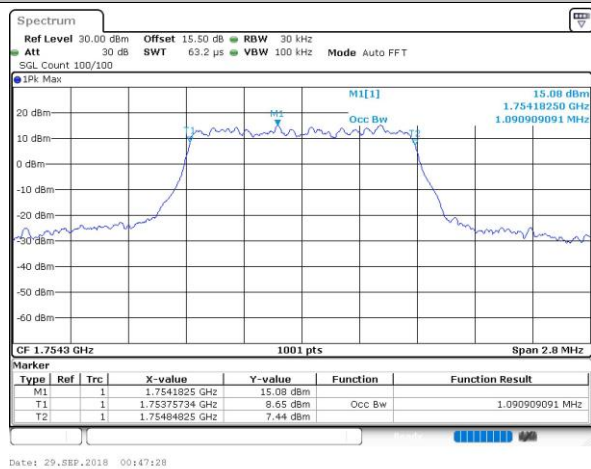
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



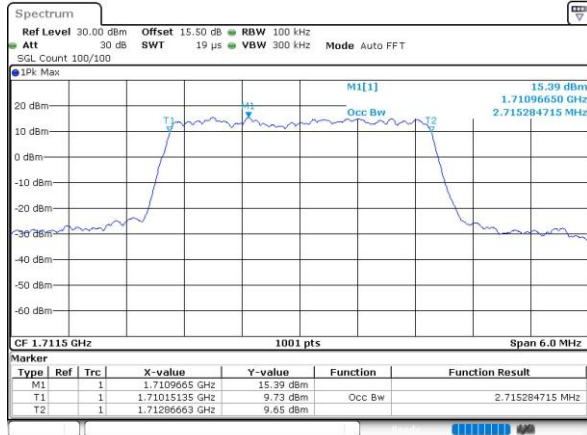
Highest Channel / 1.4MHz / 16QAM



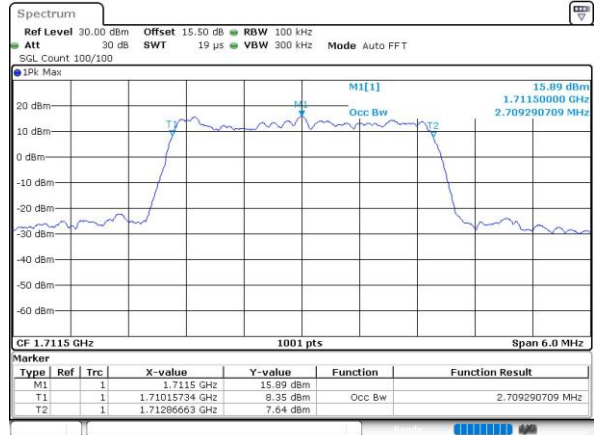


LTE Band 4

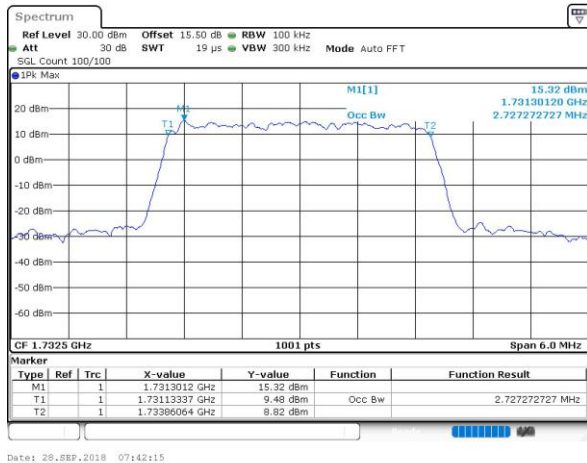
Lowest Channel / 3MHz / QPSK



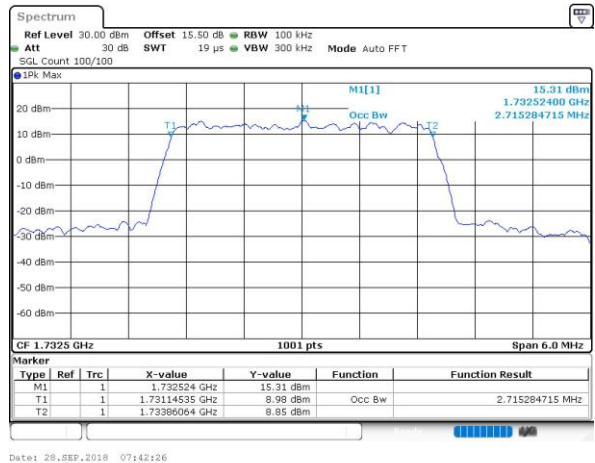
Lowest Channel / 3MHz / 16QAM



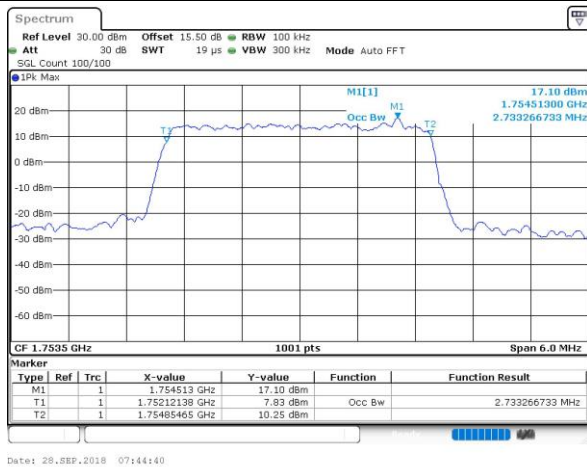
Middle Channel / 3MHz / QPSK



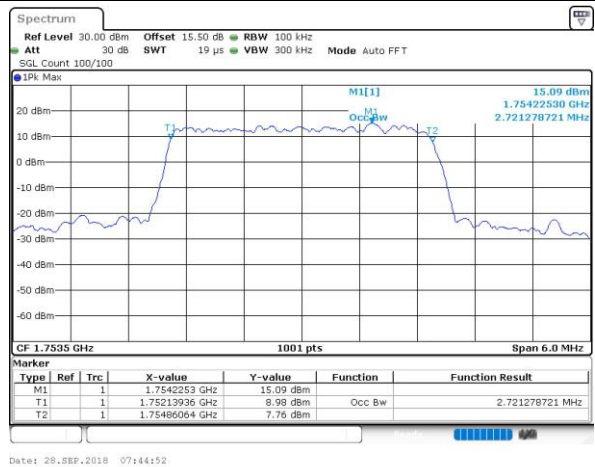
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



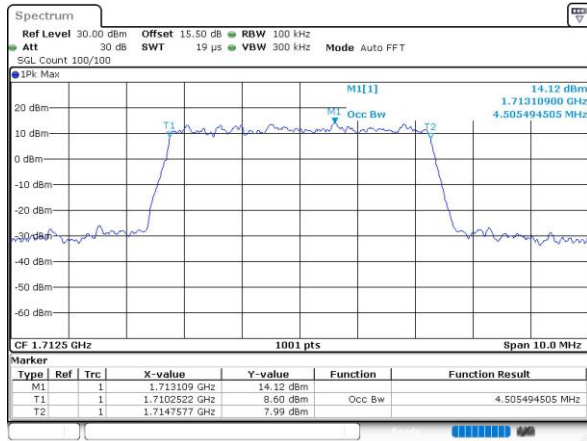
Highest Channel / 3MHz / 16QAM



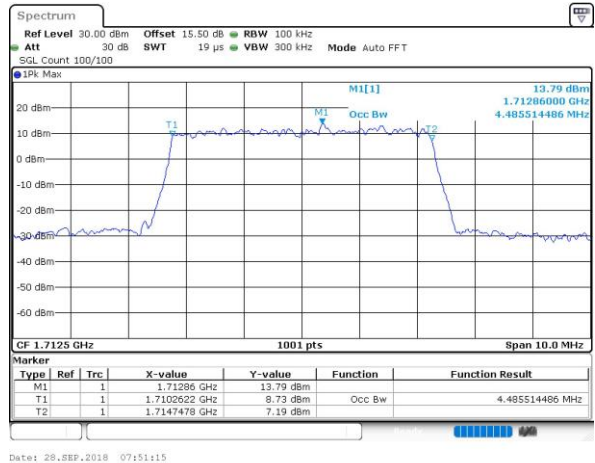


LTE Band 4

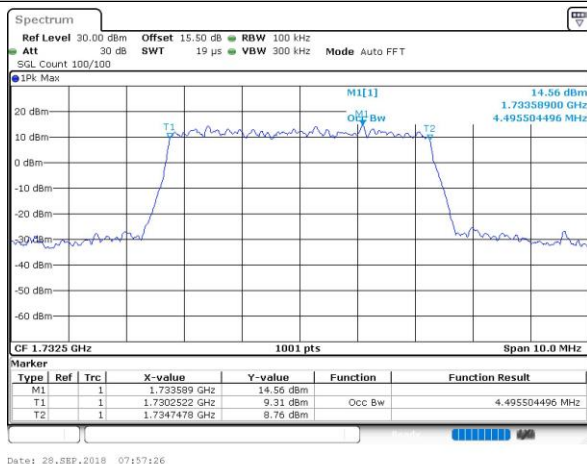
Lowest Channel / 5MHz / QPSK



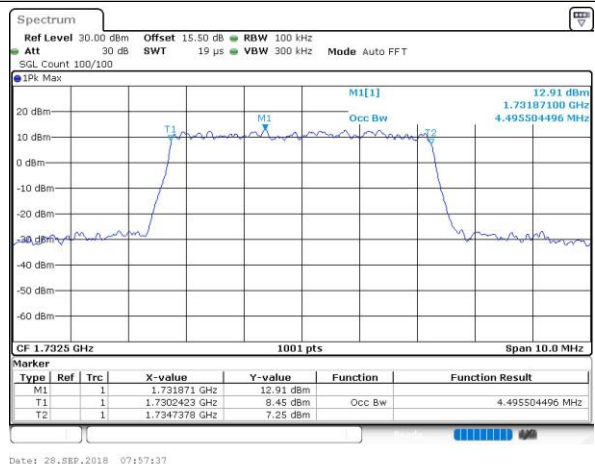
Lowest Channel / 5MHz / 16QAM



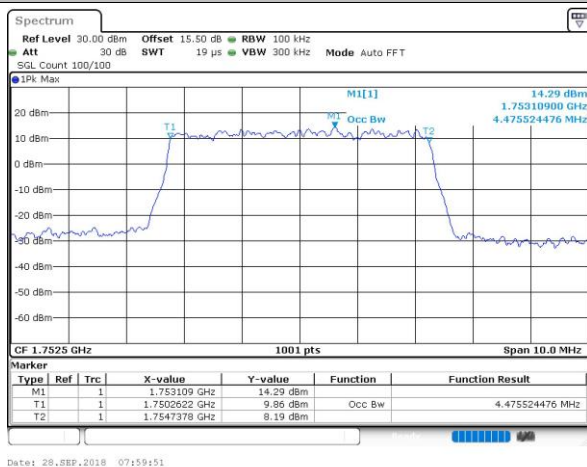
Middle Channel / 5MHz / QPSK



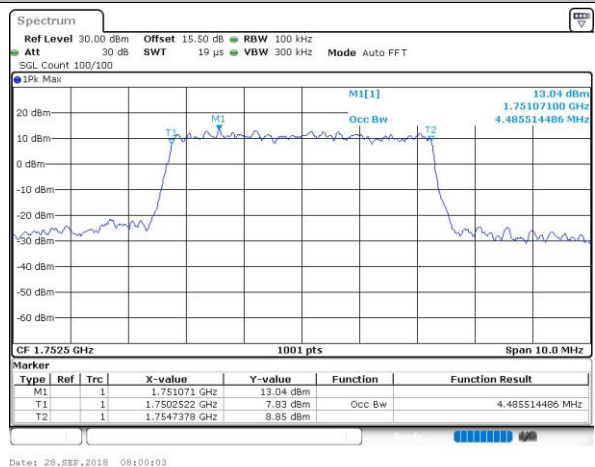
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



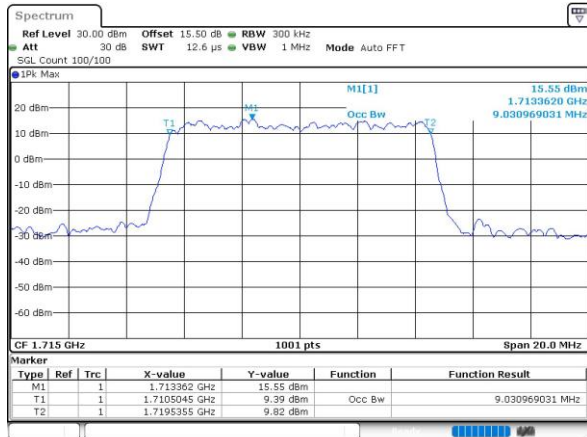
Highest Channel / 5MHz / 16QAM



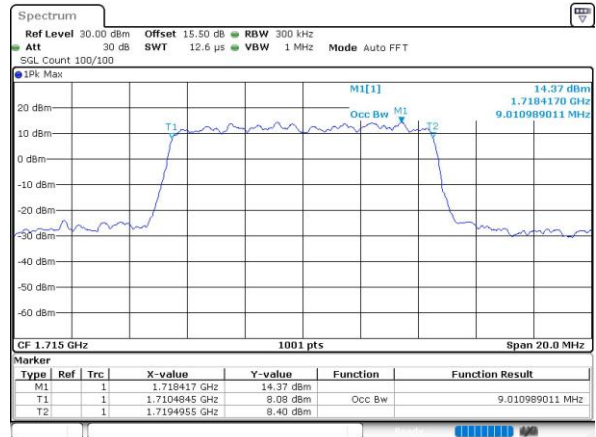


LTE Band 4

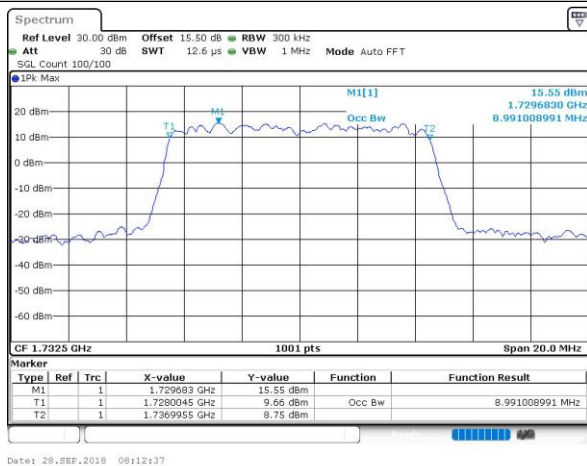
Lowest Channel / 10MHz / QPSK



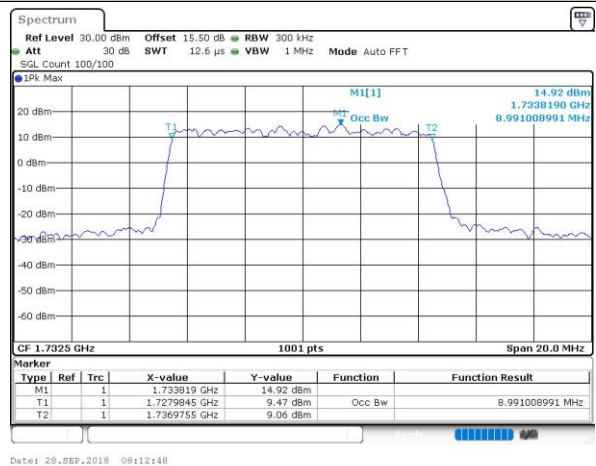
Lowest Channel / 10MHz / 16QAM



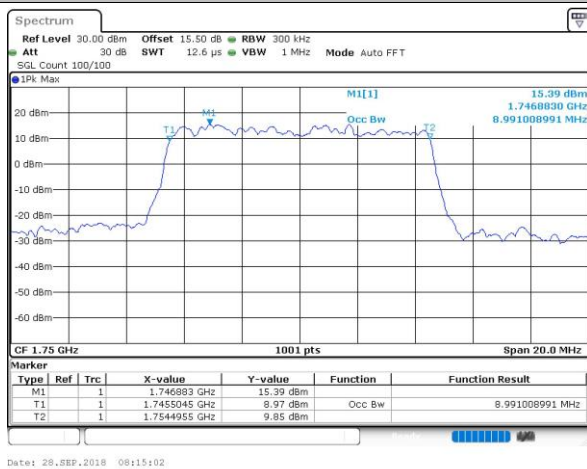
Middle Channel / 10MHz / QPSK



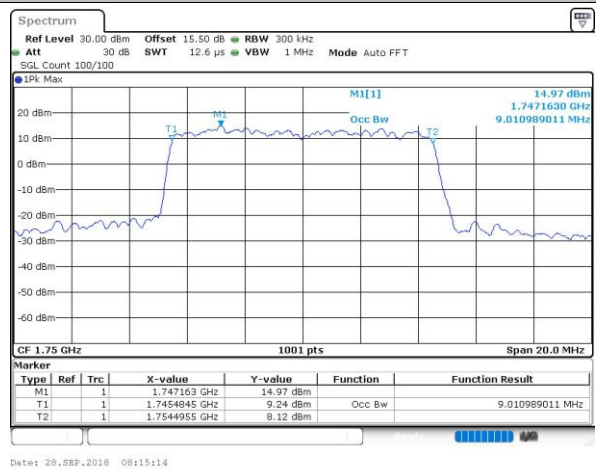
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



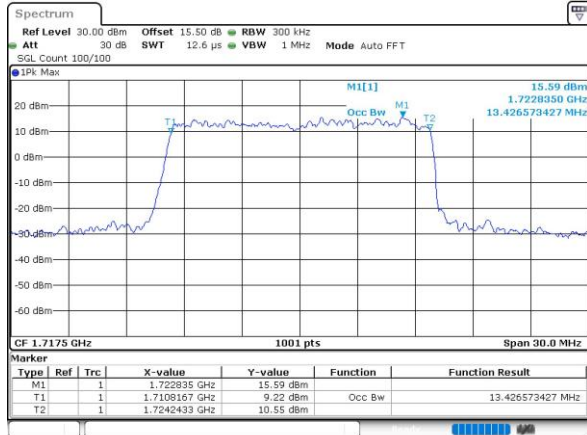
Highest Channel / 10MHz / 16QAM



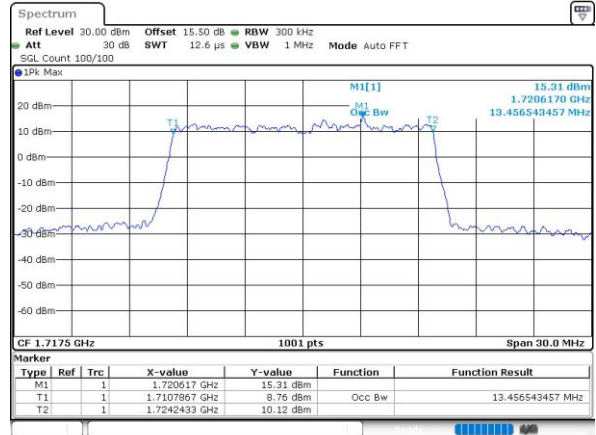


LTE Band 4

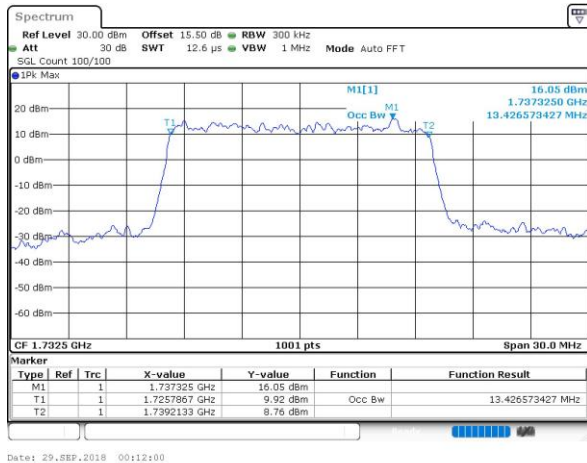
Lowest Channel / 15MHz / QPSK



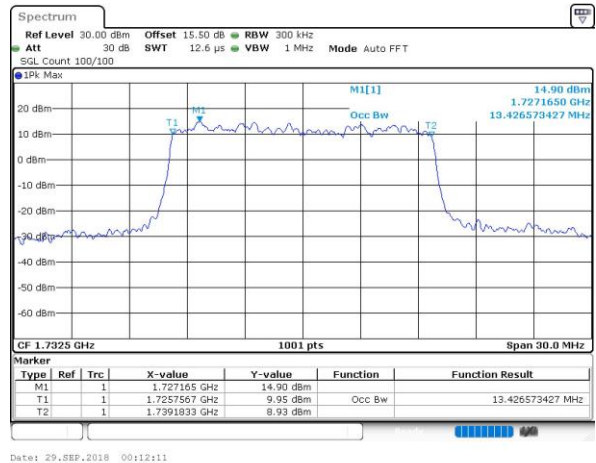
Lowest Channel / 15MHz / 16QAM



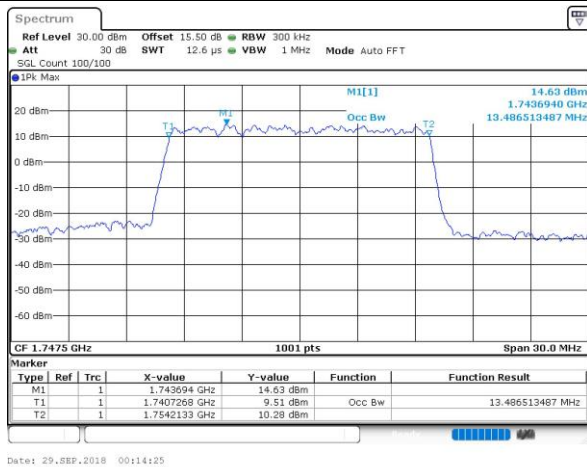
Middle Channel / 15MHz / QPSK



Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



Highest Channel / 15MHz / 16QAM

