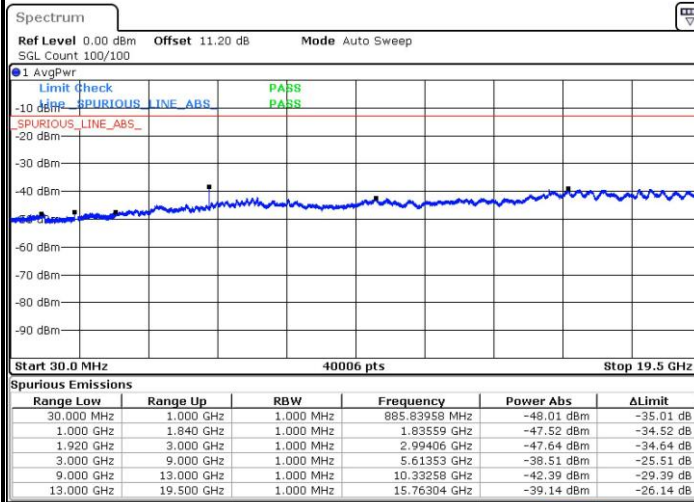




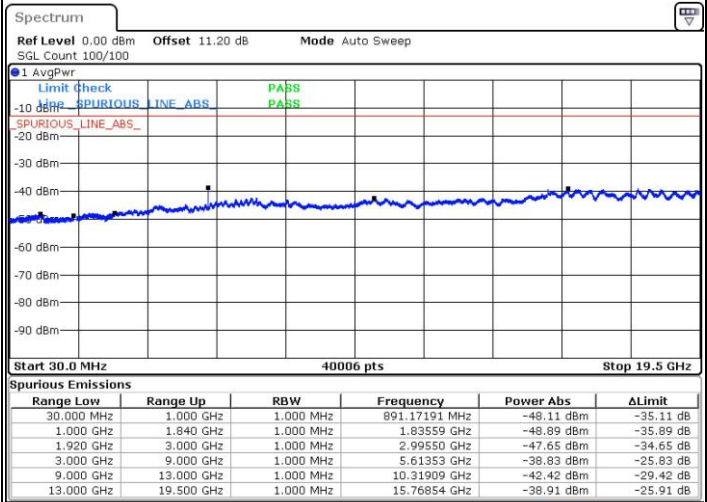
LTE Band 2 / 20MHz

Middle Channel / QPSK



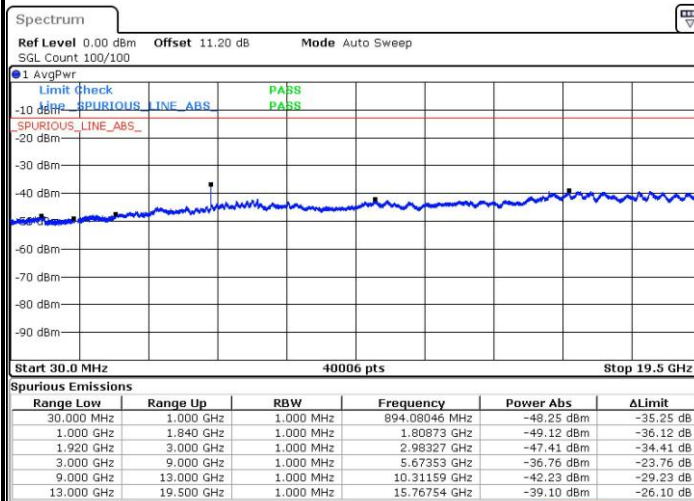
Date: 27 DEC 2016 08:35:44

Middle Channel / 16QAM



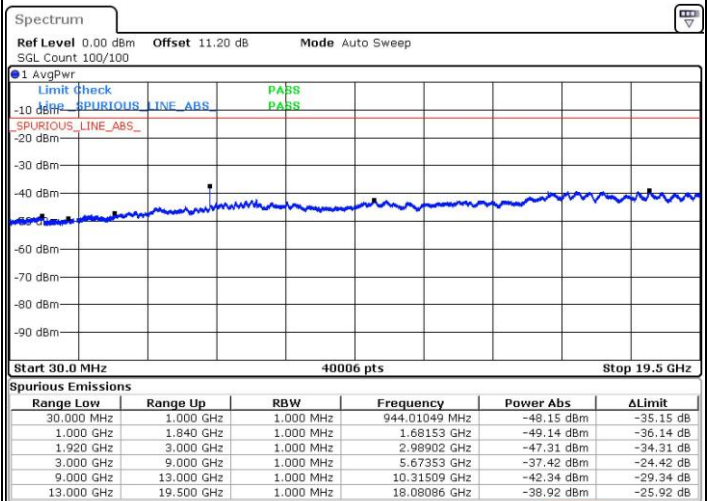
Date: 27 DEC 2016 08:36:39

Highest Channel / QPSK



Date: 27 DEC 2016 08:42:51

Highest Channel / 16QAM



Date: 27 DEC 2016 08:43:45

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	0.0148	PASS
40	Normal Voltage	0.0139	
30	Normal Voltage	0.0152	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0139	
-10	Normal Voltage	0.0146	
-20	Normal Voltage	0.0150	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0009	

Note:

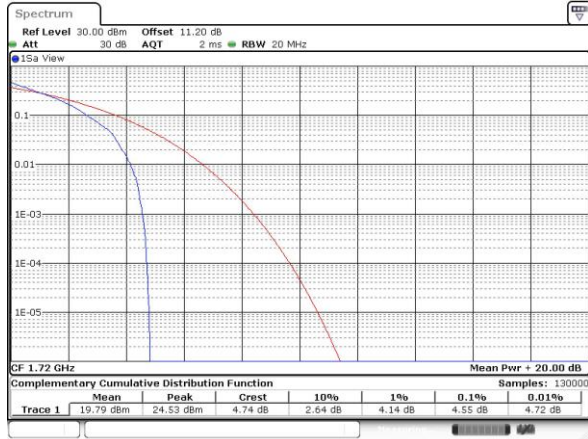
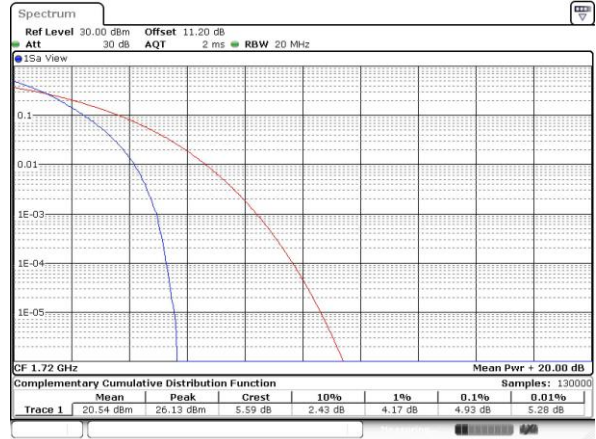
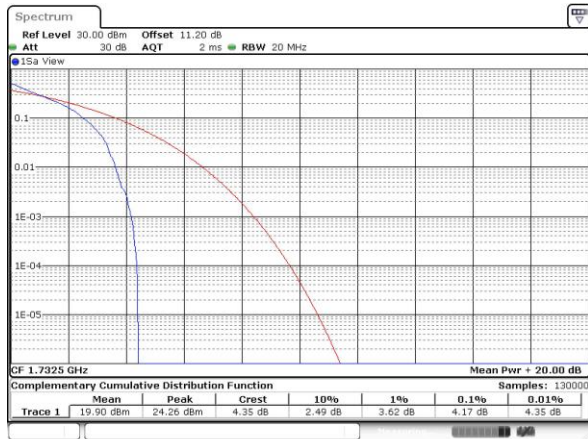
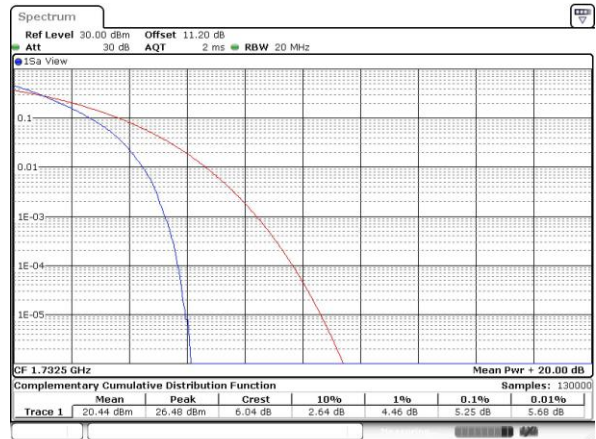
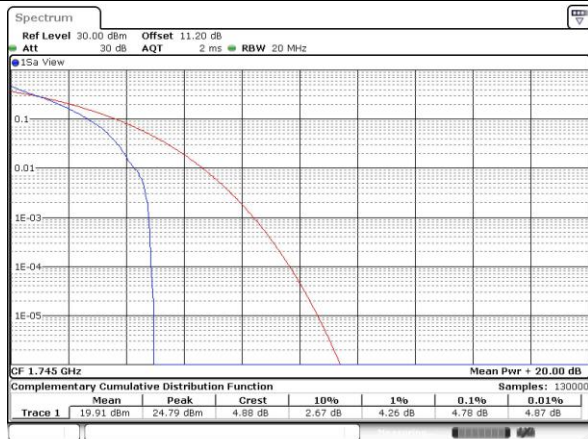
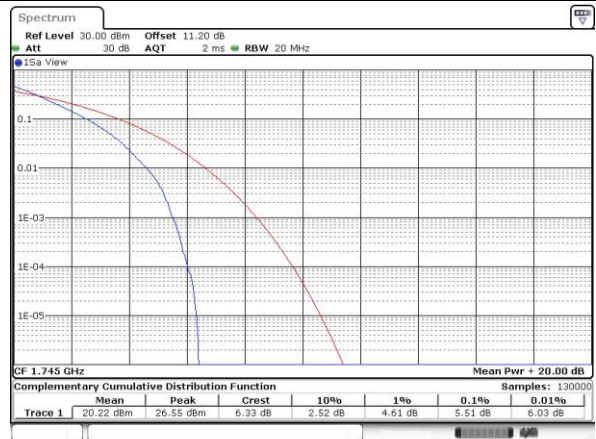
1. Normal Voltage =24.0 V. ; Battery End Point (BEP) =12.0 V. ; Maximum Voltage =48.0 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

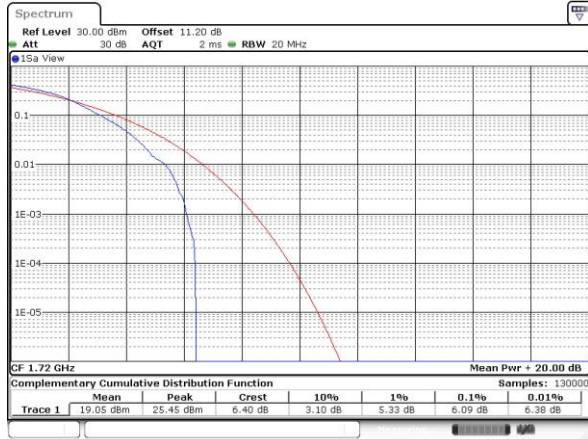
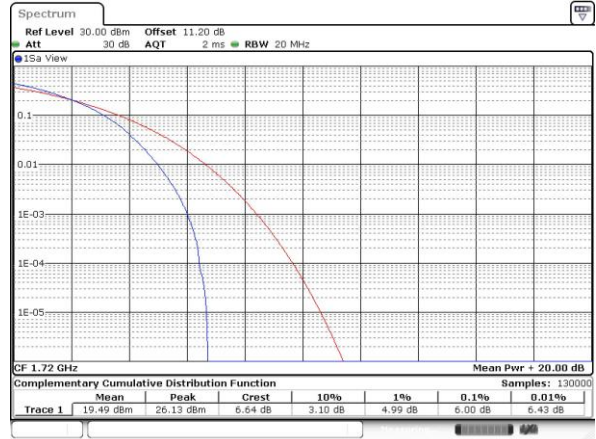
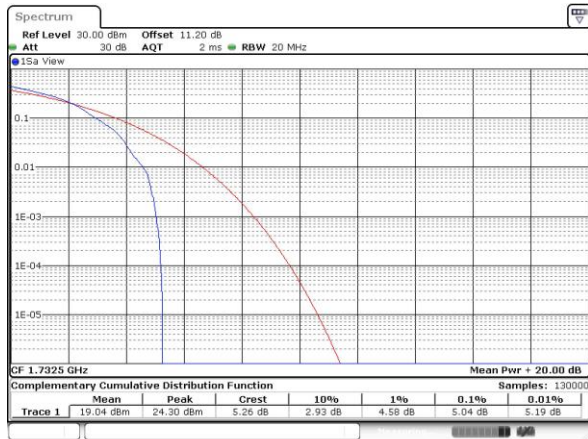


LTE Band 4

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	4.55	4.93	6.09	6	PASS
Middle CH	4.17	5.25	5.04	6.17	
Highest CH	4.78	5.51	5.83	6.41	

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



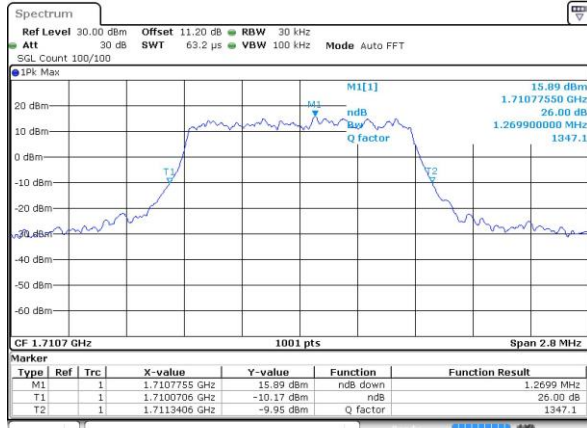

26dB Bandwidth

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	1.27	1.26	3.09	3.09	4.93	4.95	9.73	9.67	14.51	14.42	20.06	20.02
Middle CH	1.28	1.28	3.09	3.05	5.13	4.88	9.87	9.73	14.75	14.48	20.06	20.14
Highest CH	1.29	1.27	3.05	3.08	4.93	4.95	9.67	9.75	14.36	14.48	20.14	20.14



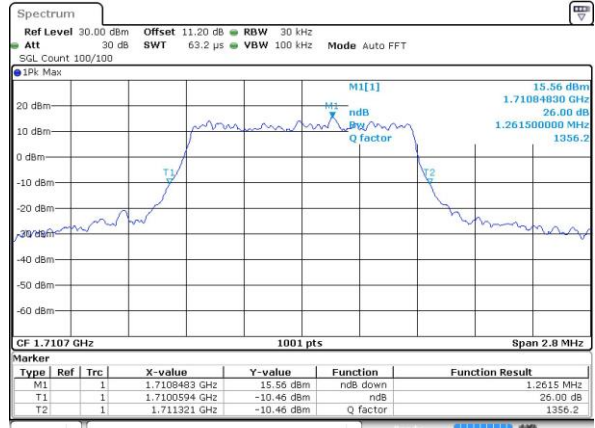
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



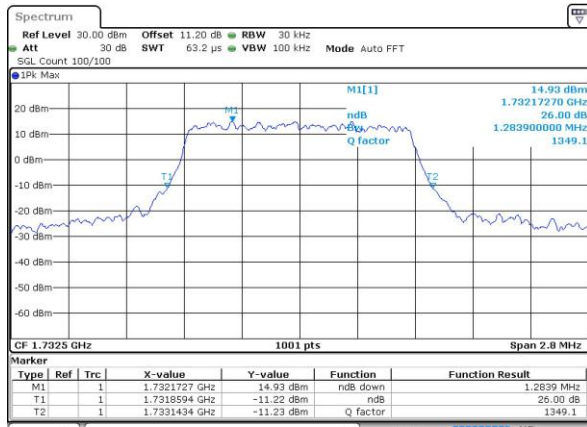
Date: 27 DEC 2016 10:46:51

Lowest Channel / 1.4MHz / 16QAM



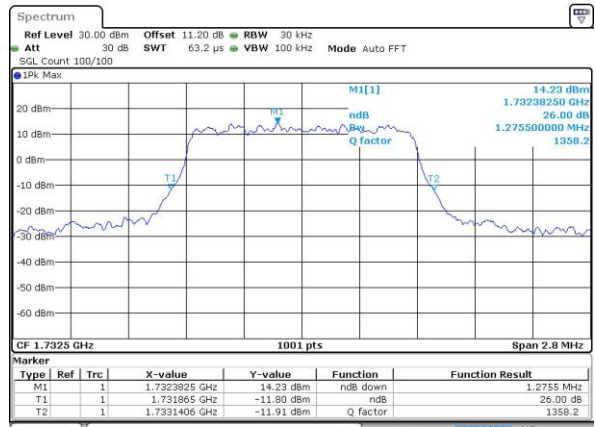
Date: 27 DEC 2016 10:47:01

Middle Channel / 1.4MHz / QPSK



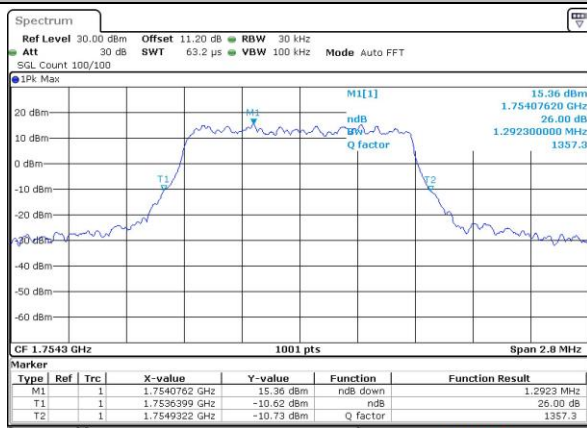
Date: 27 DEC 2016 10:53:57

Middle Channel / 1.4MHz / 16QAM



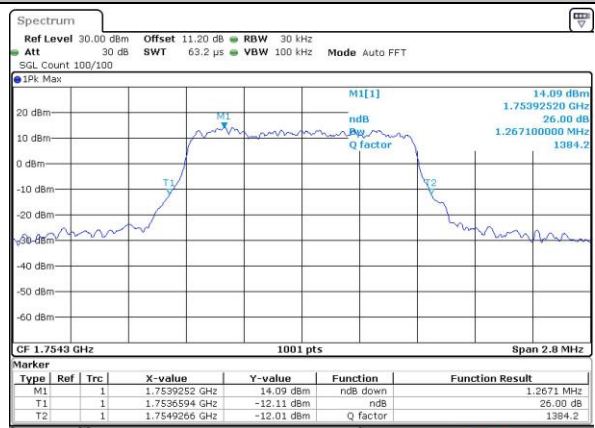
Date: 27 DEC 2016 10:54:08

Highest Channel / 1.4MHz / QPSK



Date: 27 DEC 2016 10:56:28

Highest Channel / 1.4MHz / 16QAM

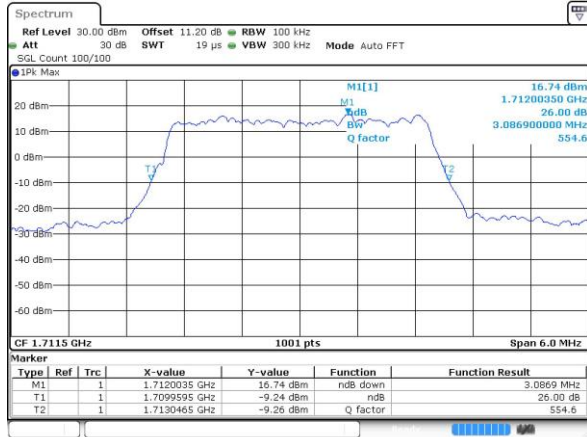


Date: 27 DEC 2016 10:56:38

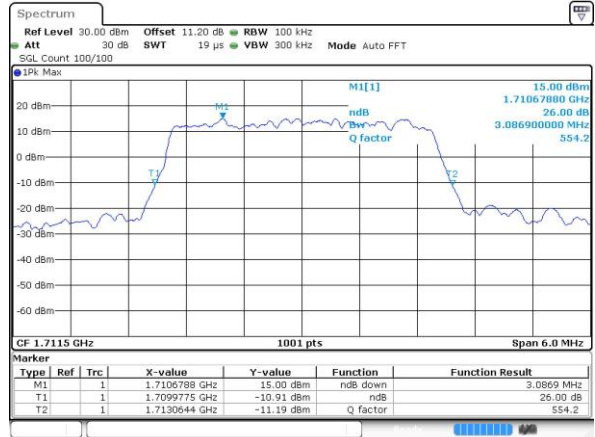


LTE Band 4

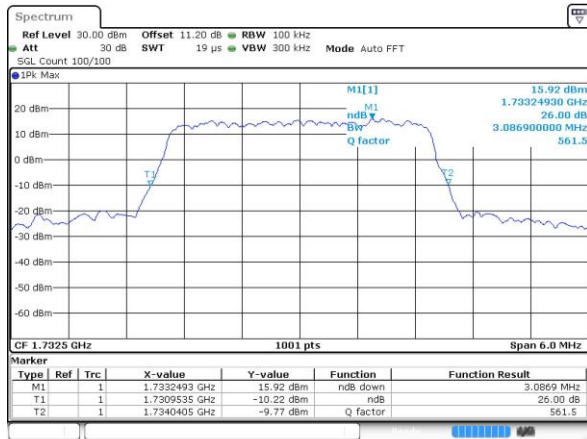
Lowest Channel / 3MHz / QPSK



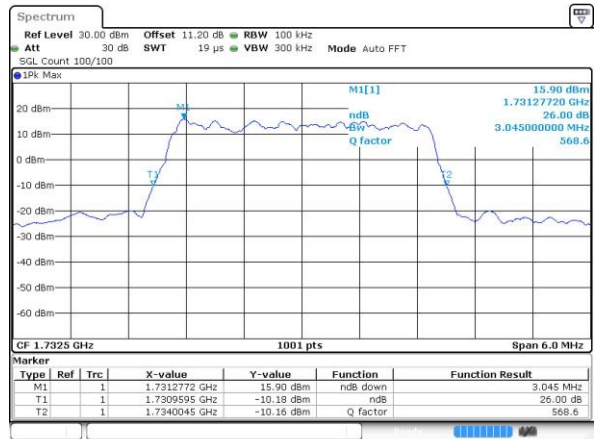
Lowest Channel / 3MHz / 16QAM



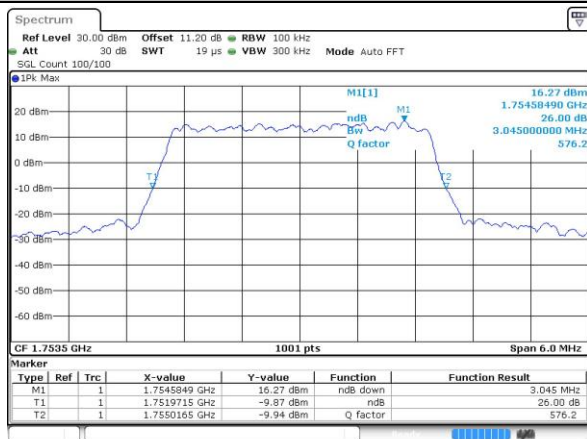
Middle Channel / 3MHz / QPSK



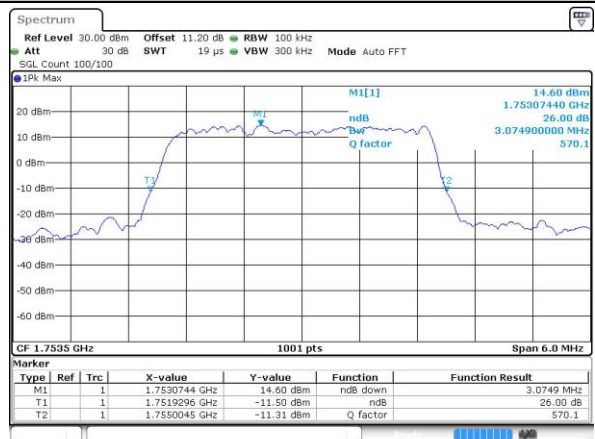
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



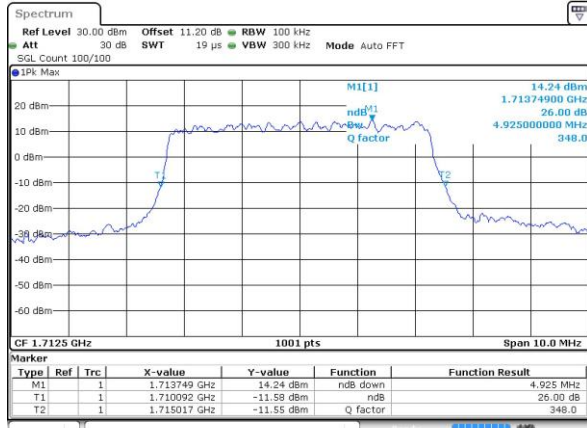
Highest Channel / 3MHz / 16QAM



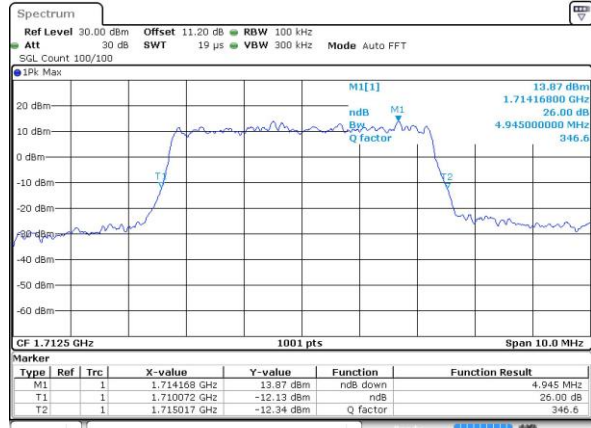


LTE Band 4

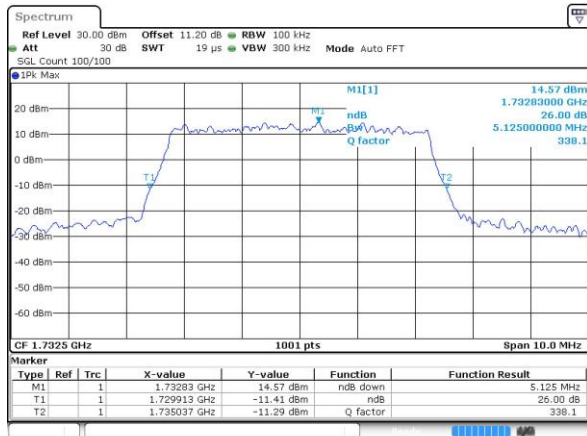
Lowest Channel / 5MHz / QPSK



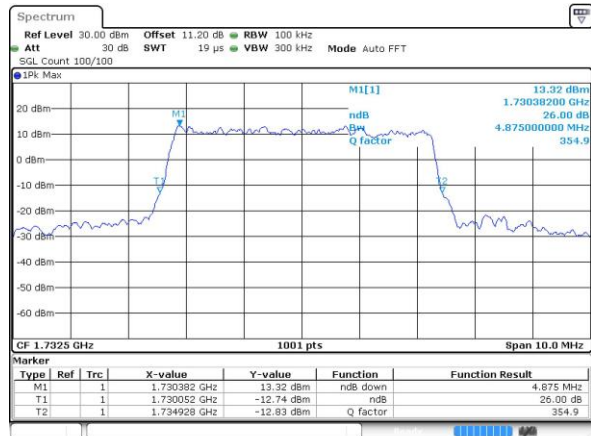
Lowest Channel / 5MHz / 16QAM



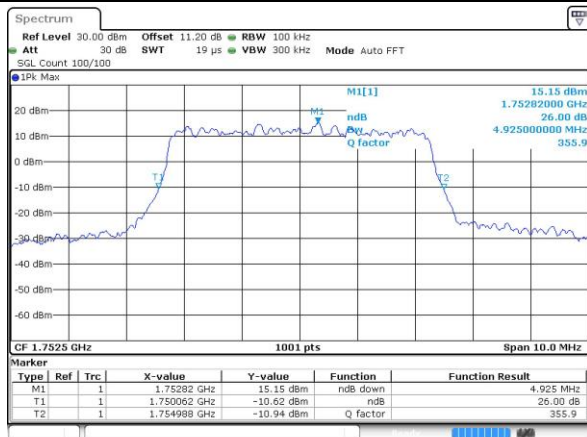
Middle Channel / 5MHz / QPSK



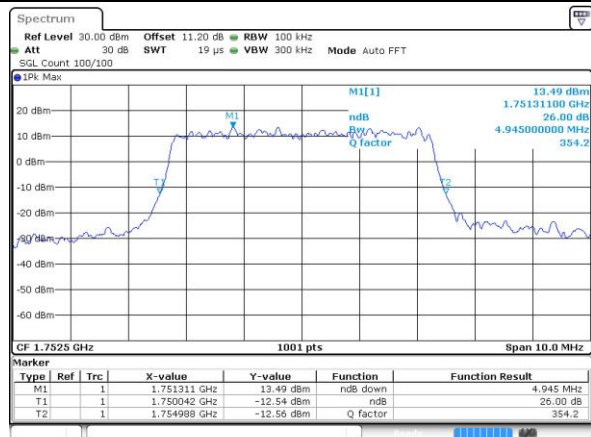
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



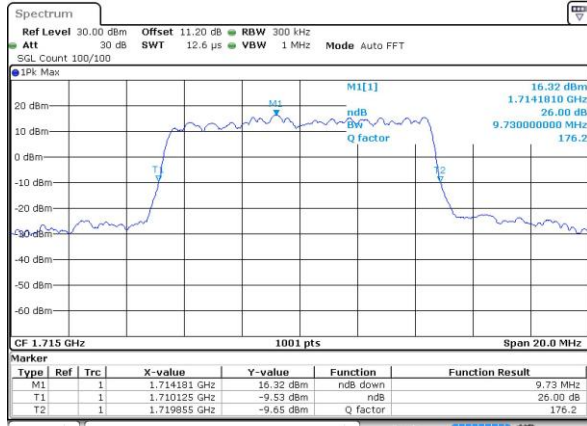
Highest Channel / 5MHz / 16QAM



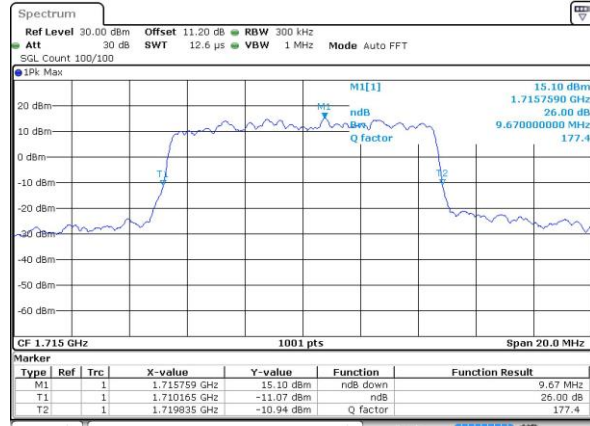


LTE Band 4

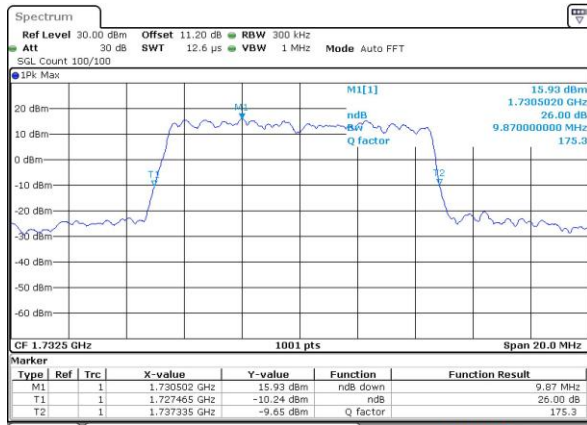
Lowest Channel / 10MHz / QPSK



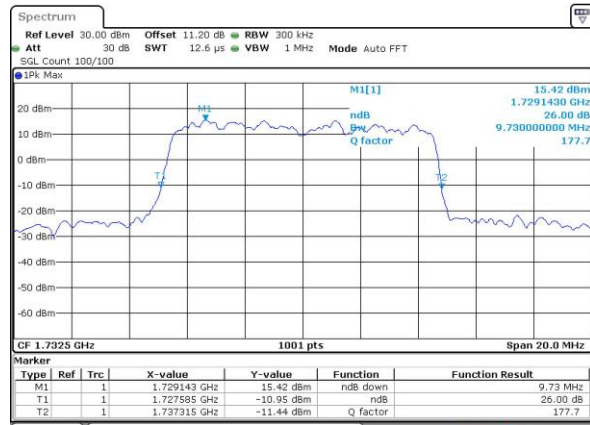
Lowest Channel / 10MHz / 16QAM



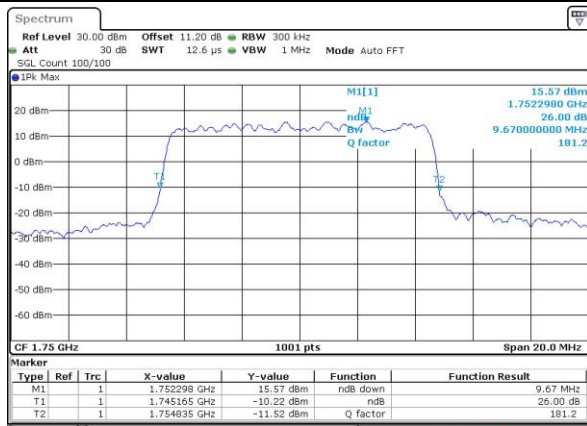
Middle Channel / 10MHz / QPSK



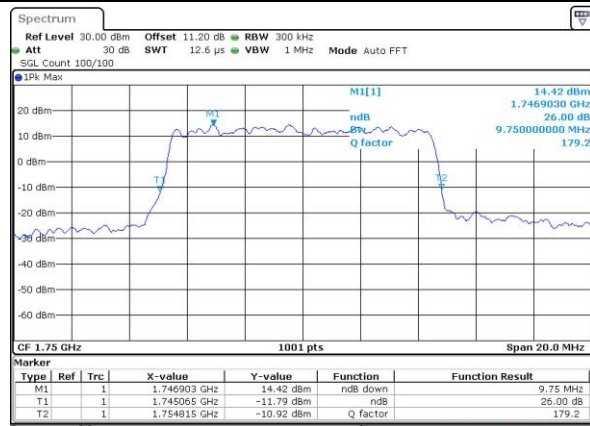
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



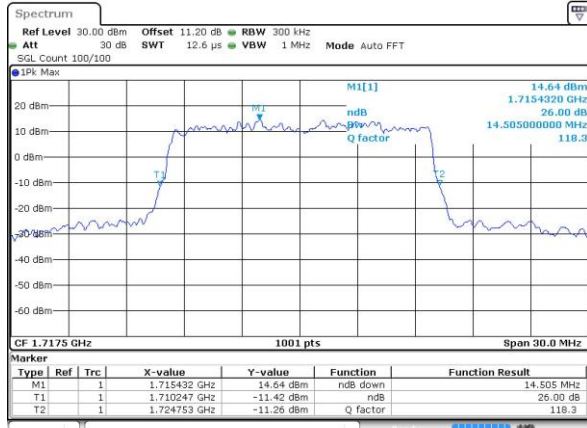
Highest Channel / 10MHz / 16QAM



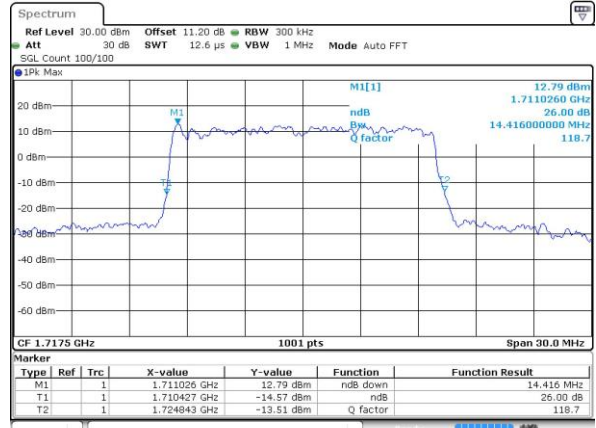


LTE Band 4

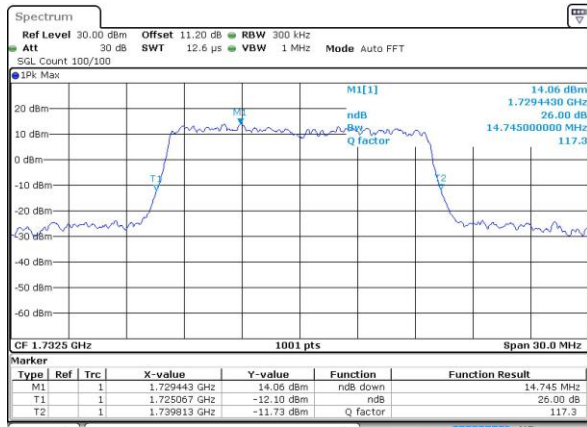
Lowest Channel / 15MHz / QPSK



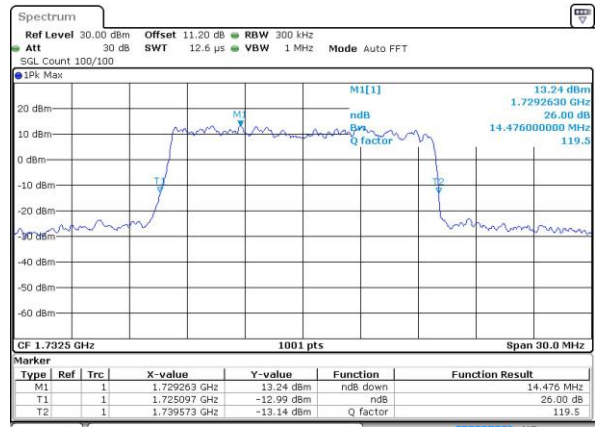
Lowest Channel / 15MHz / 16QAM



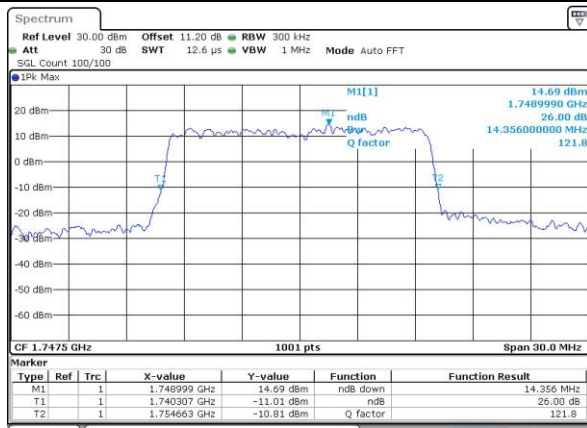
Middle Channel / 15MHz / QPSK



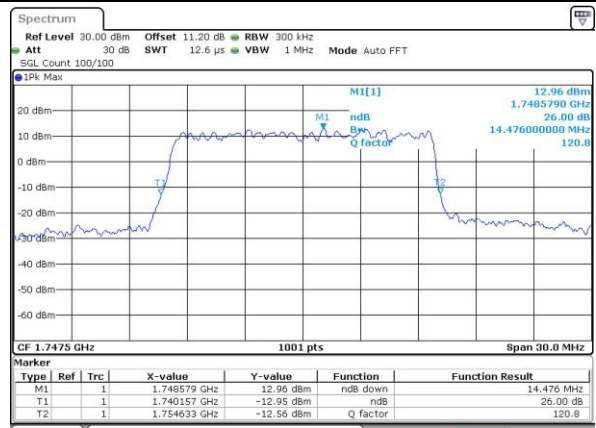
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



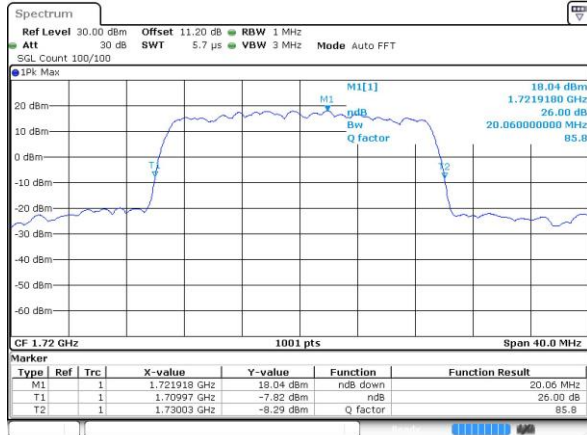
Highest Channel / 15MHz / 16QAM



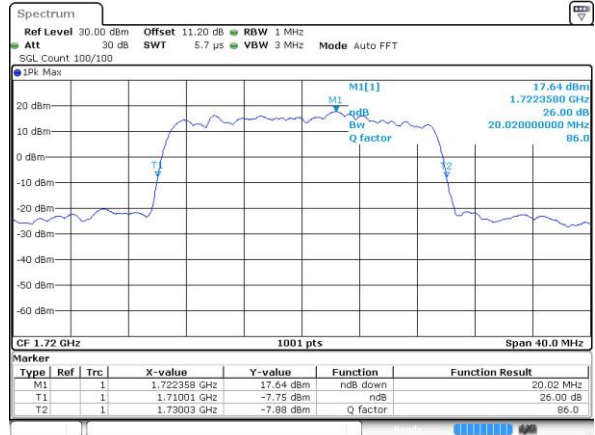


LTE Band 4

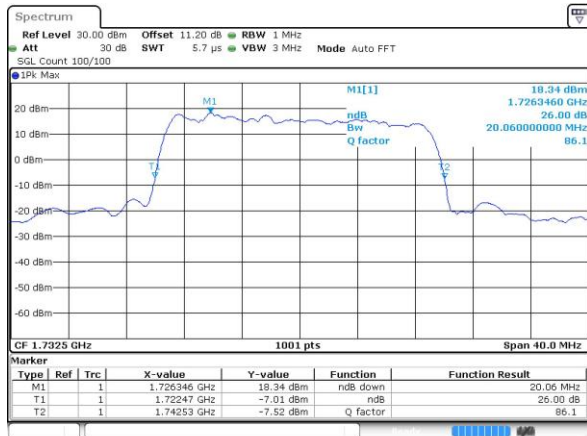
Lowest Channel / 20MHz / QPSK



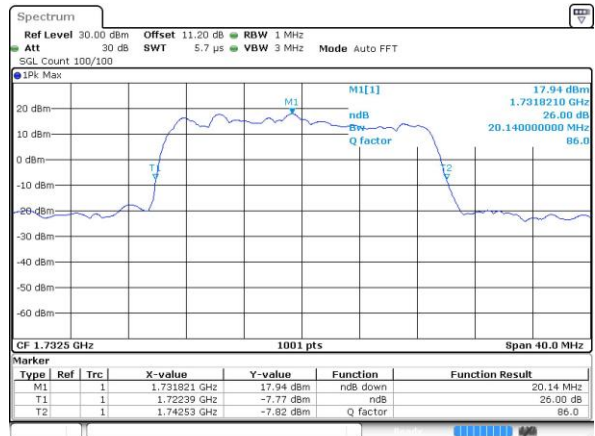
Lowest Channel / 20MHz / 16QAM



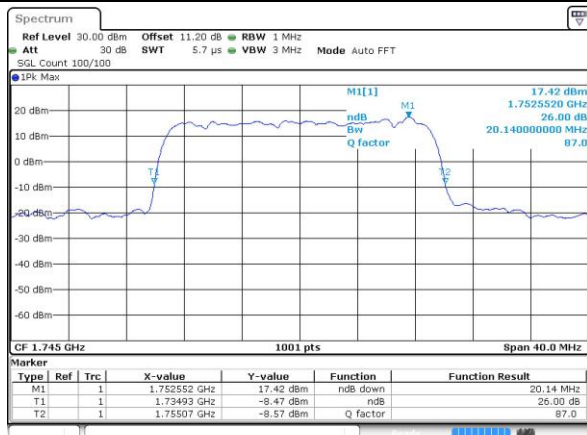
Middle Channel / 20MHz / QPSK



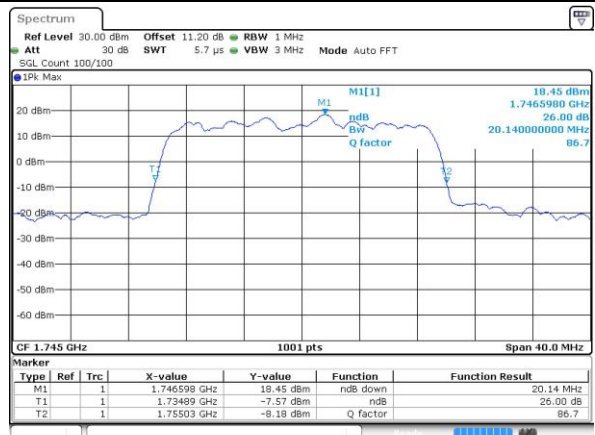
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM





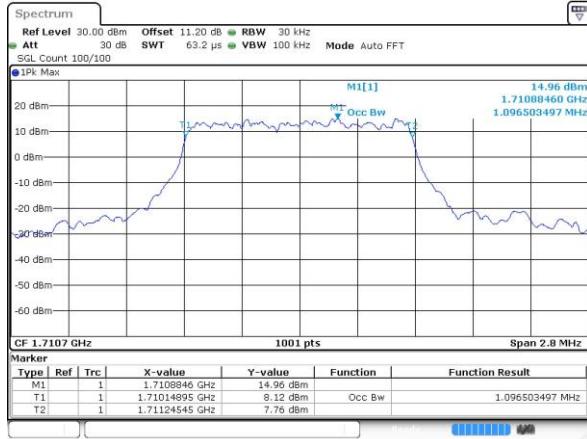
Occupied Bandwidth

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	1.1	1.09	2.71	2.72	4.48	4.49	8.99	8.95	13.43	13.4	18.42	18.1
Middle CH	1.09	1.1	2.72	2.71	4.49	4.49	9.01	9.05	13.49	13.43	18.34	18.34
Highest CH	1.09	1.09	2.7	2.72	4.48	4.51	9.05	9.09	13.43	13.49	18.46	18.3



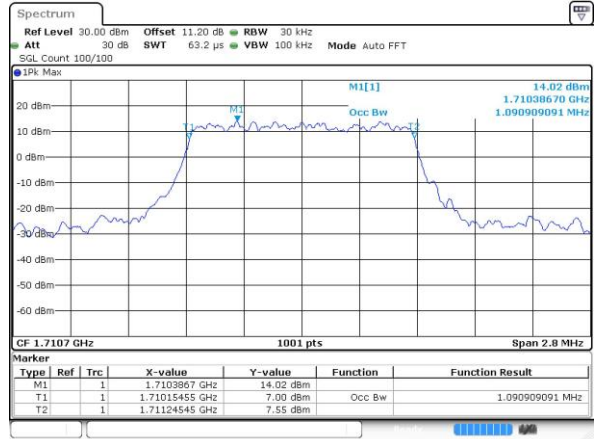
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



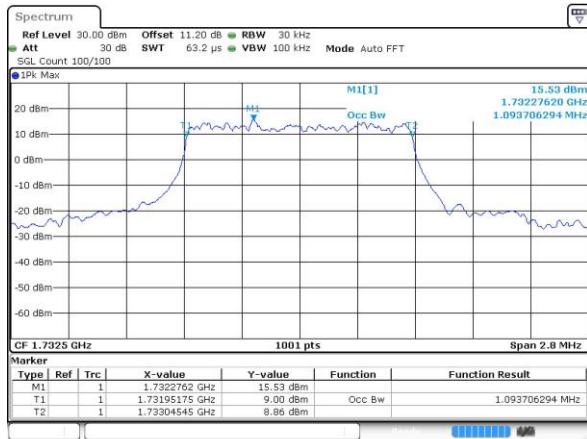
Date: 27 DEC 2016 10:46:30

Lowest Channel / 1.4MHz / 16QAM



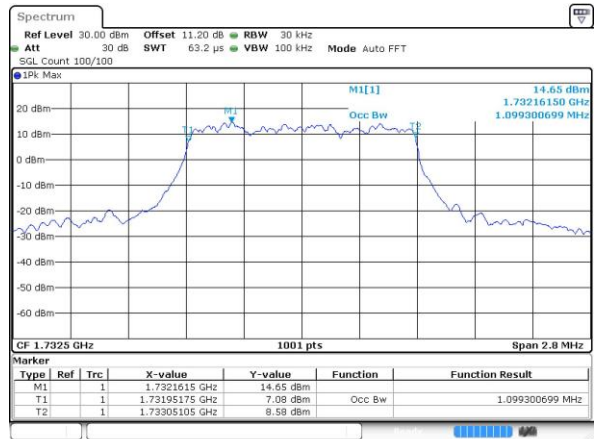
Date: 27 DEC 2016 10:46:40

Middle Channel / 1.4MHz / QPSK



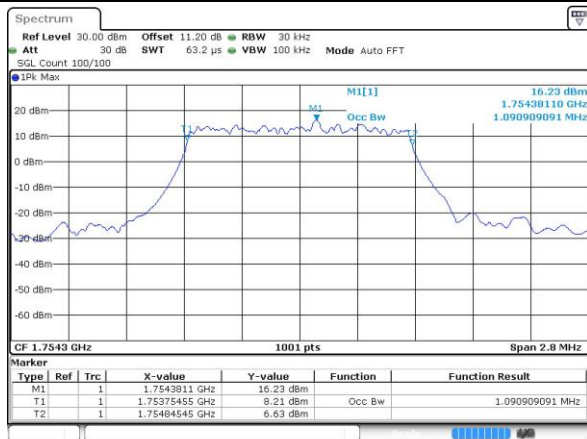
Date: 27 DEC 2016 10:53:36

Middle Channel / 1.4MHz / 16QAM



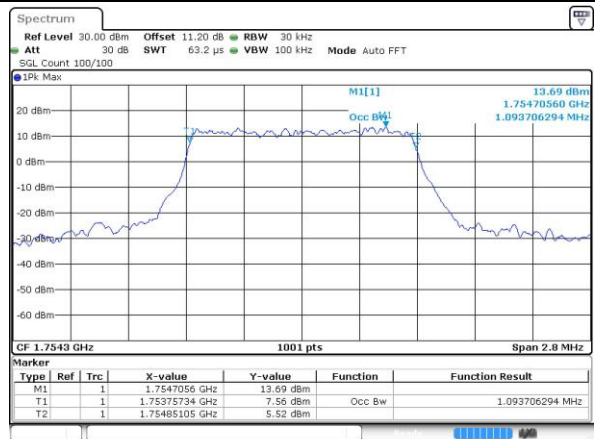
Date: 27 DEC 2016 10:53:47

Highest Channel / 1.4MHz / QPSK



Date: 27 DEC 2016 10:56:07

Highest Channel / 1.4MHz / 16QAM

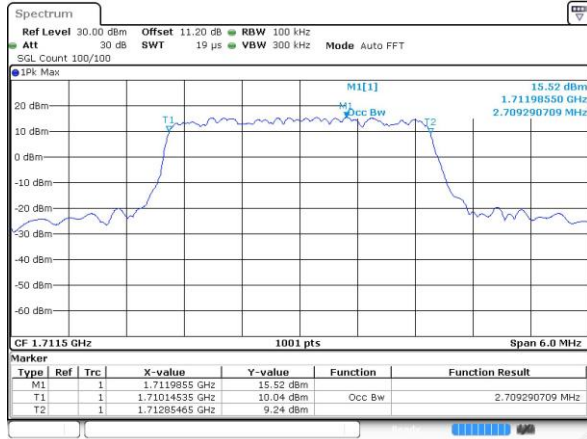


Date: 27 DEC 2016 10:56:17

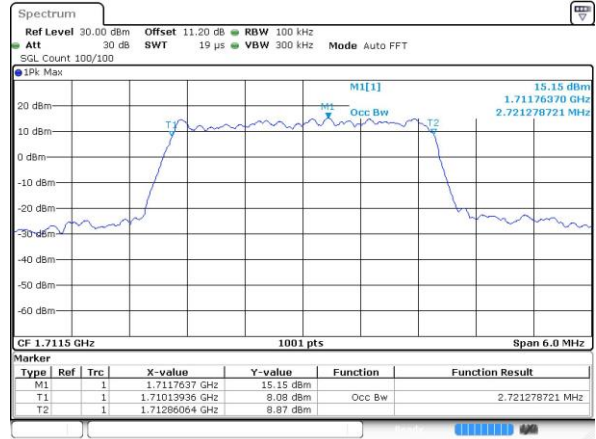


LTE Band 4

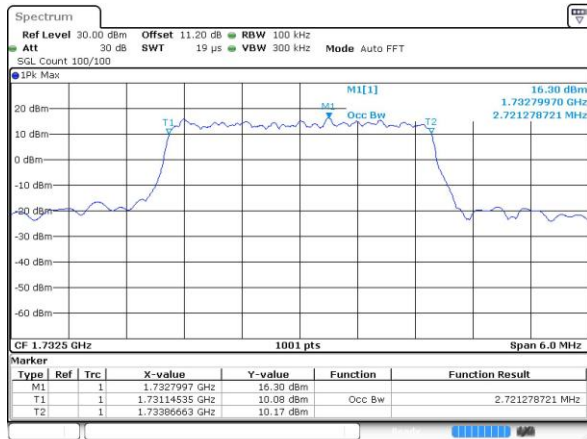
Lowest Channel / 3MHz / QPSK



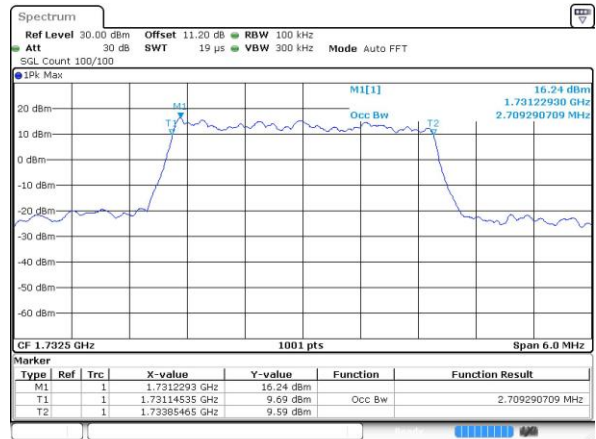
Lowest Channel / 3MHz / 16QAM



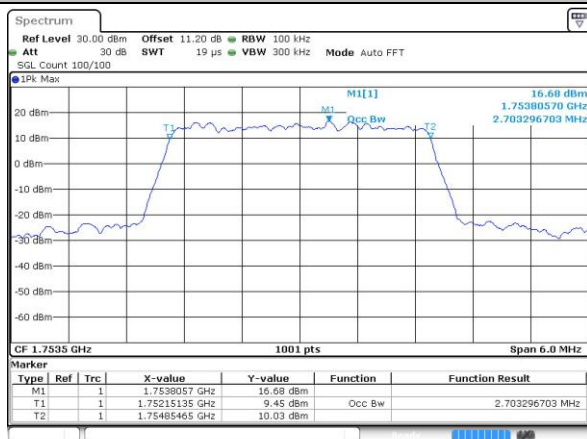
Middle Channel / 3MHz / QPSK



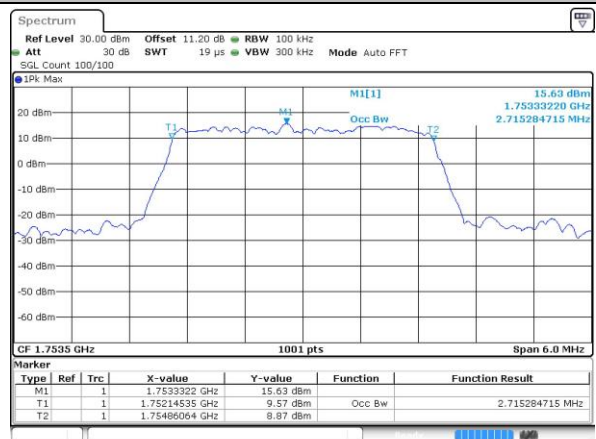
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



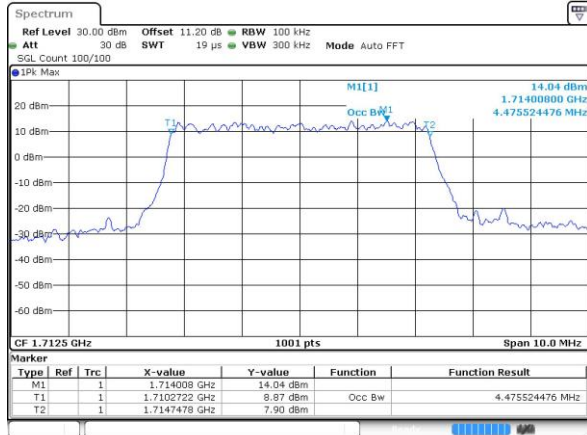
Highest Channel / 3MHz / 16QAM



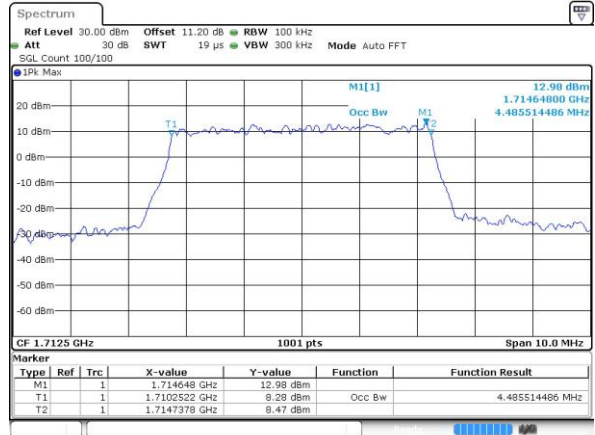


LTE Band 4

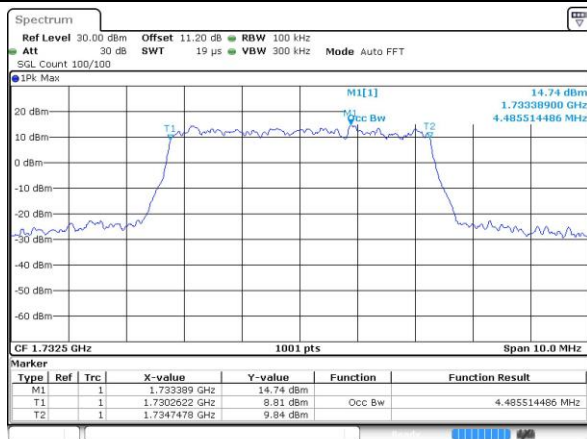
Lowest Channel / 5MHz / QPSK



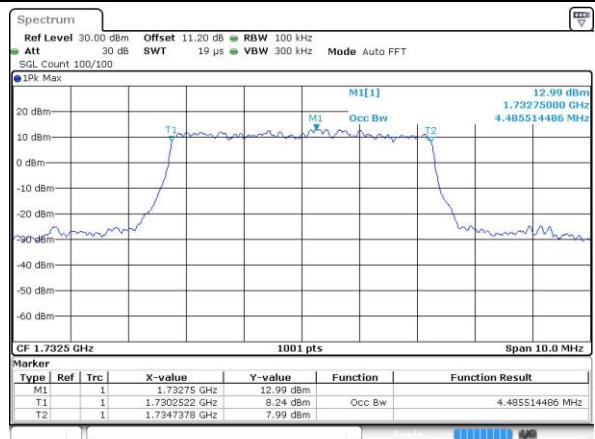
Lowest Channel / 5MHz / 16QAM



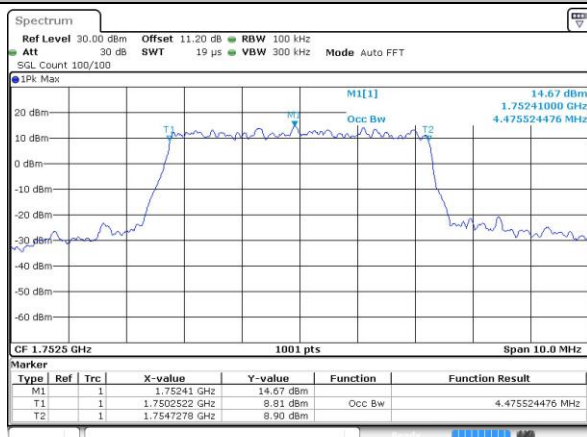
Middle Channel / 5MHz / QPSK



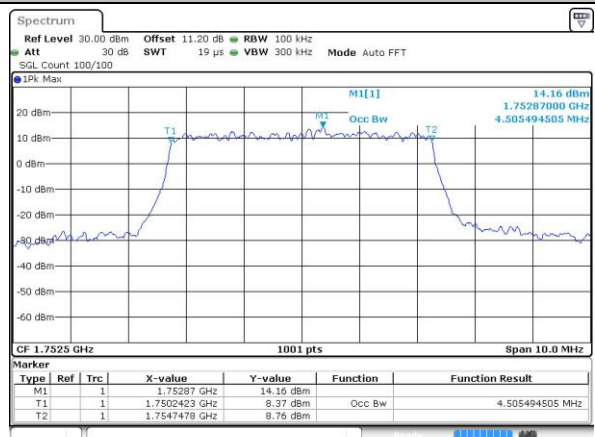
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



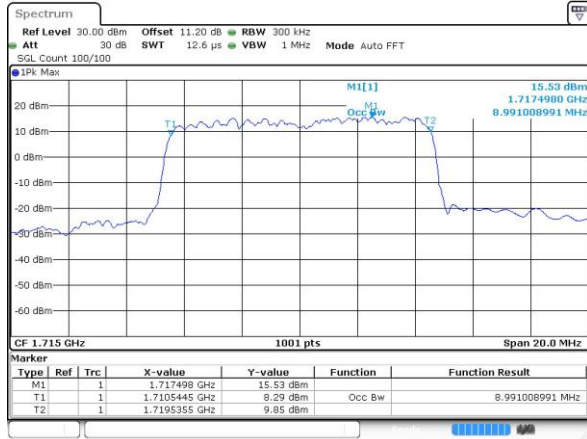
Highest Channel / 5MHz / 16QAM



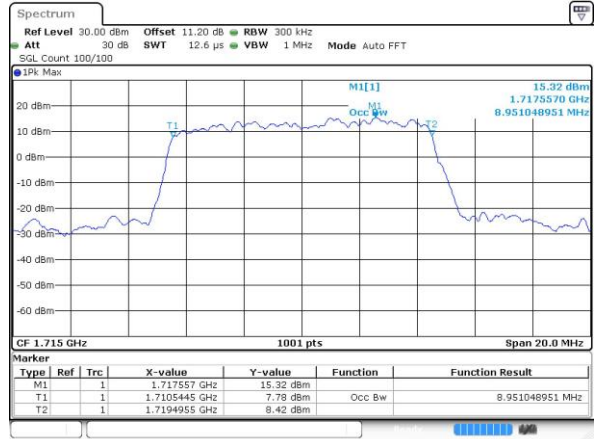


LTE Band 4

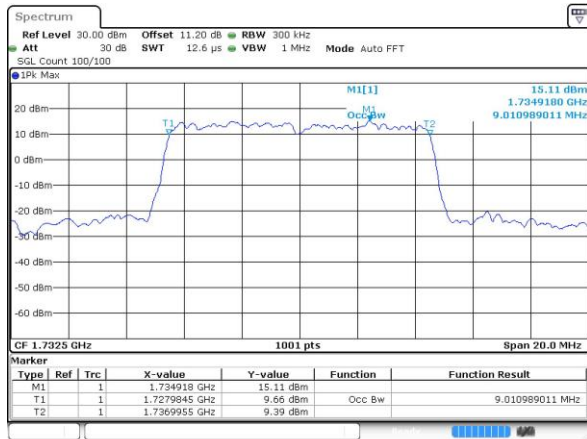
Lowest Channel / 10MHz / QPSK



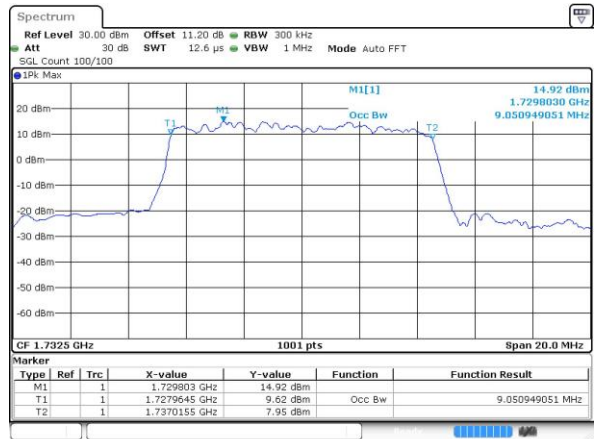
Lowest Channel / 10MHz / 16QAM



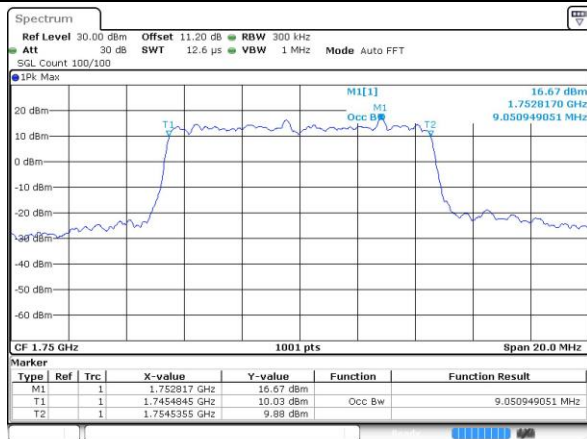
Middle Channel / 10MHz / QPSK



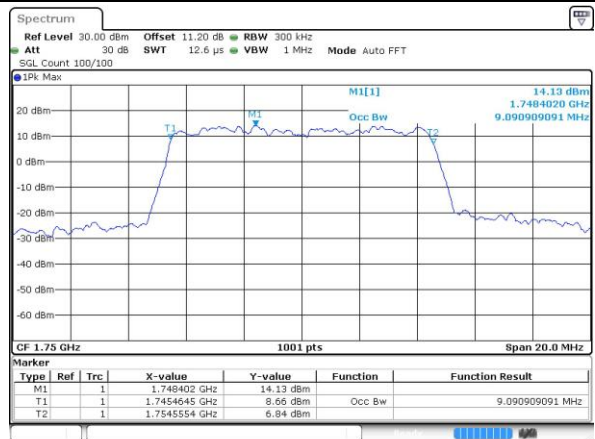
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



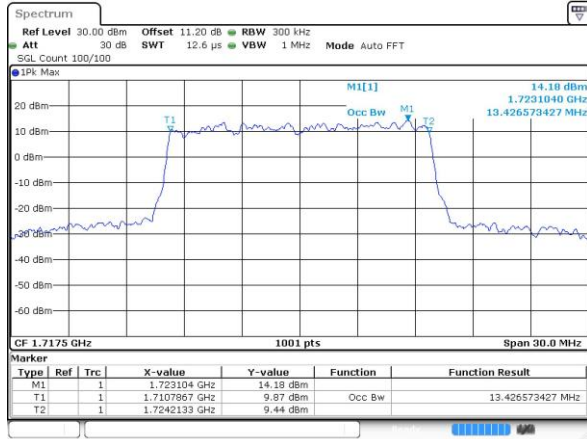
Highest Channel / 10MHz / 16QAM



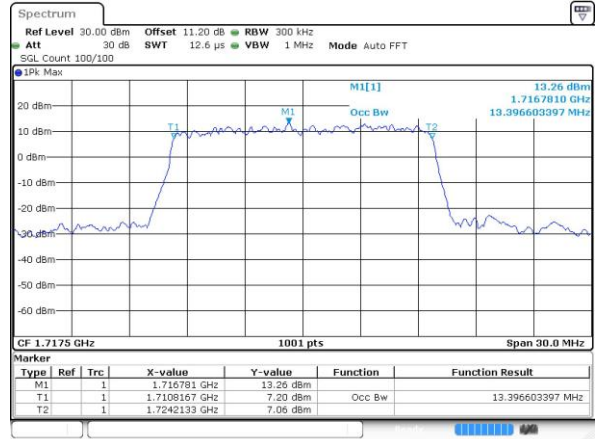


LTE Band 4

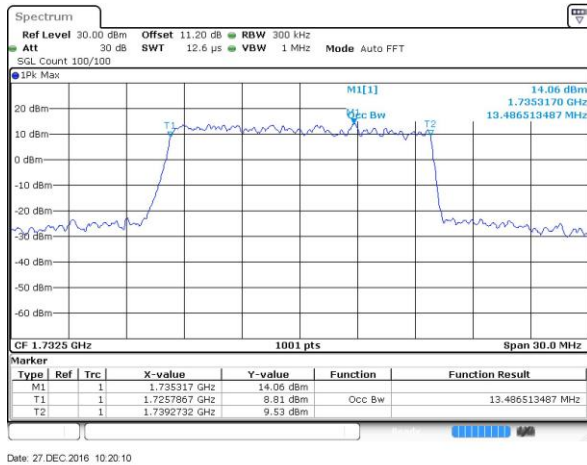
Lowest Channel / 15MHz / QPSK



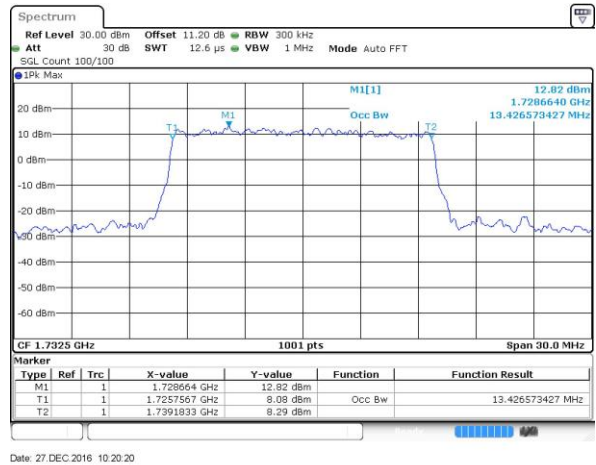
Lowest Channel / 15MHz / 16QAM



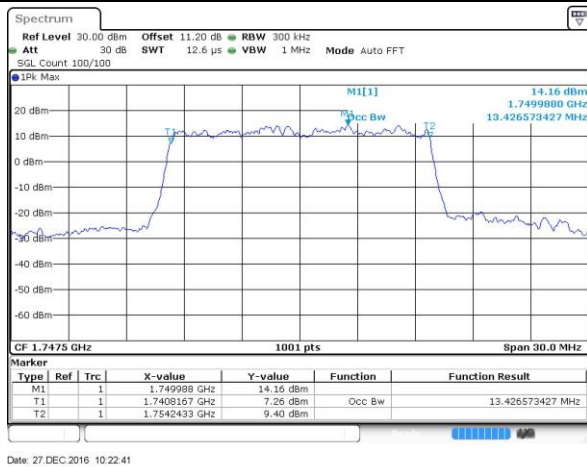
Middle Channel / 15MHz / QPSK



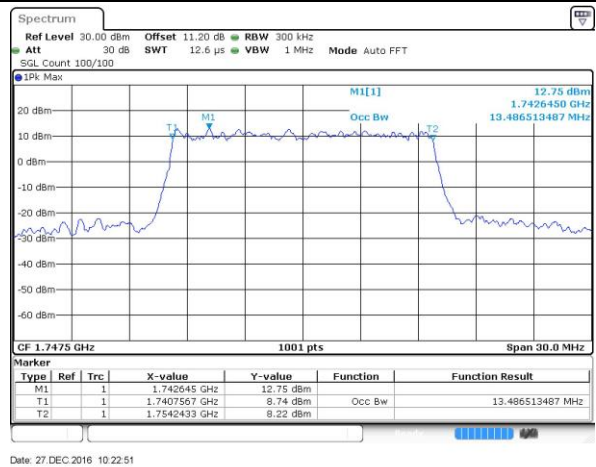
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



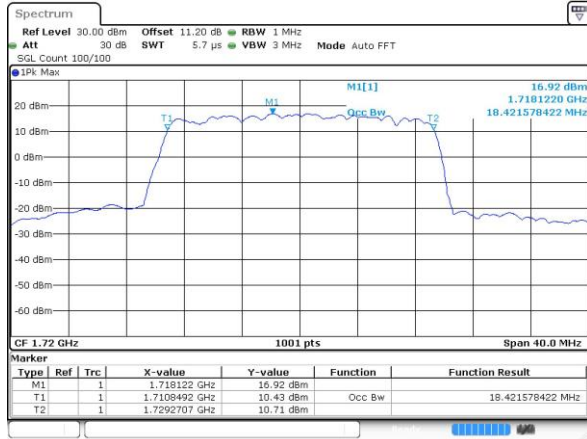
Highest Channel / 15MHz / 16QAM



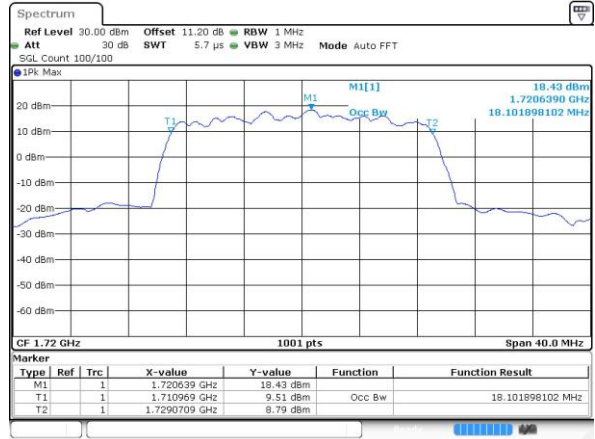


LTE Band 4

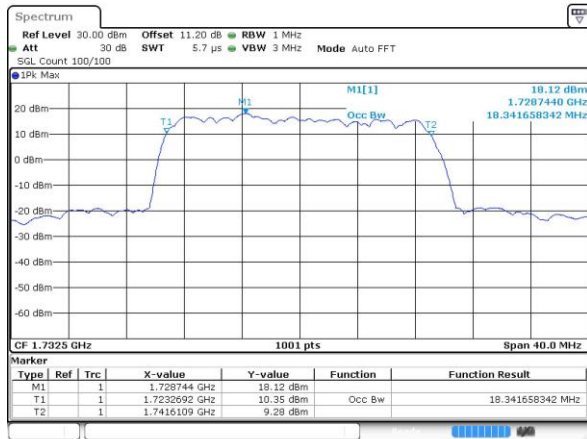
Lowest Channel / 20MHz / QPSK



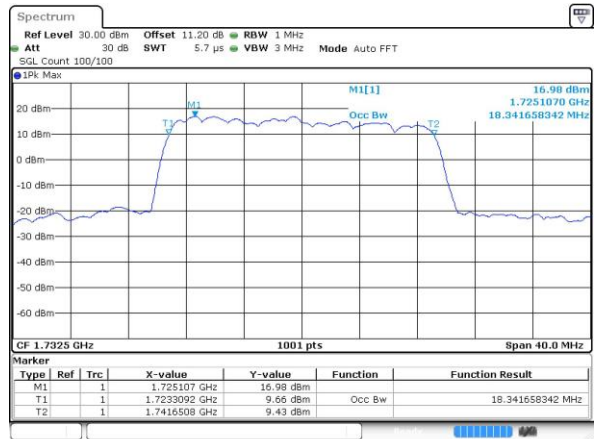
Lowest Channel / 20MHz / 16QAM



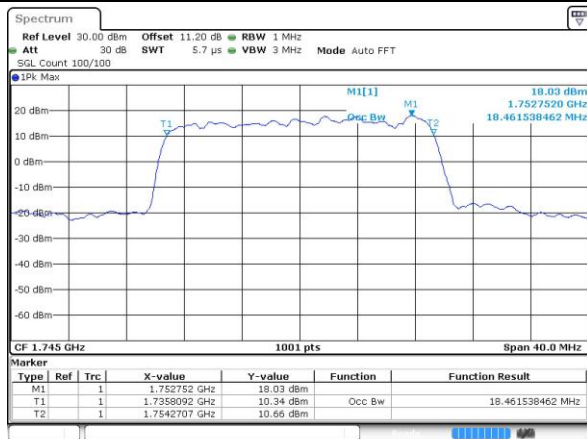
Middle Channel / 20MHz / QPSK



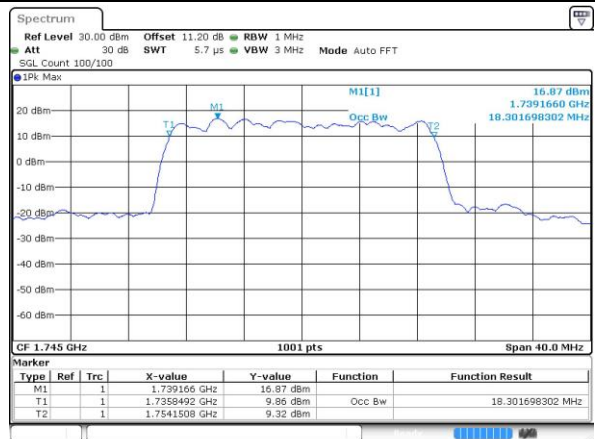
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM



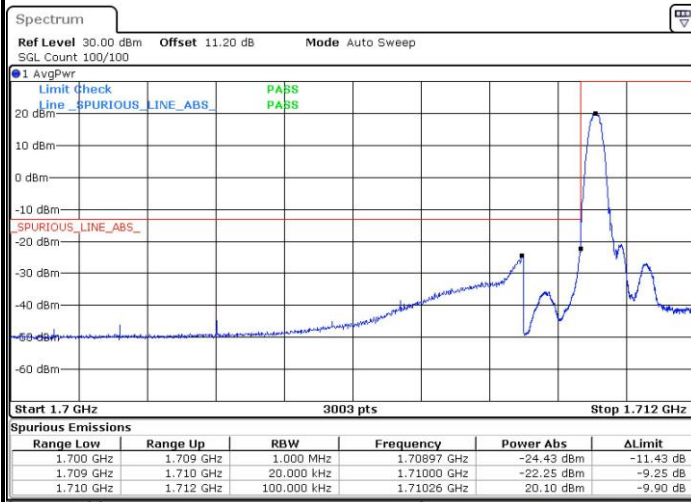


Conducted Band Edge



LTE Band 4 / 1.4MHz / QPSK

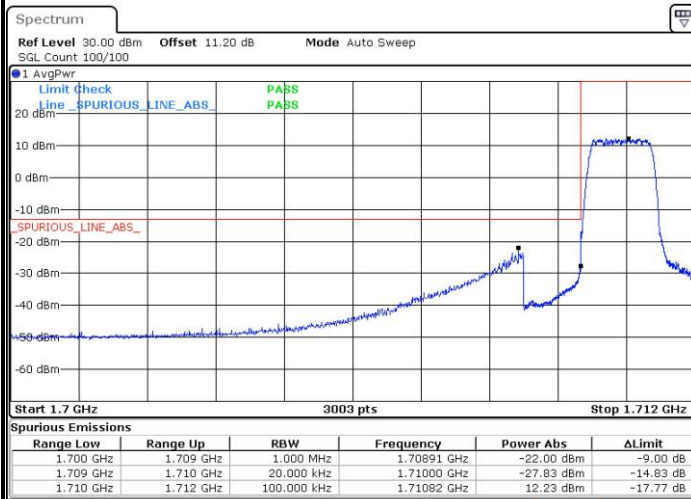
Lowest Band Edge / 1RB



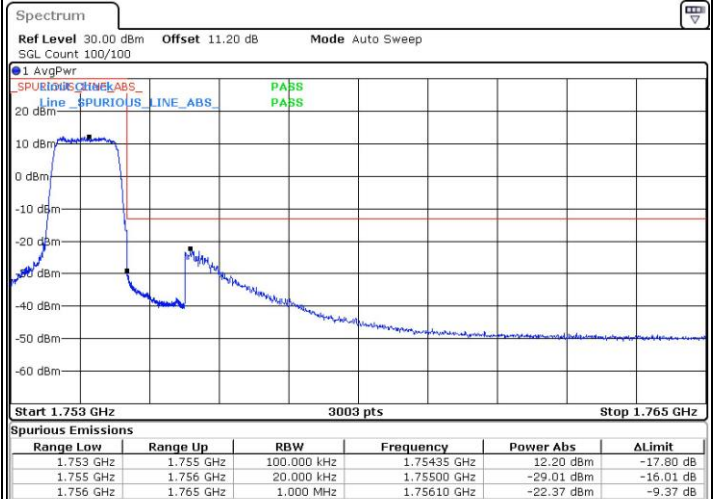
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



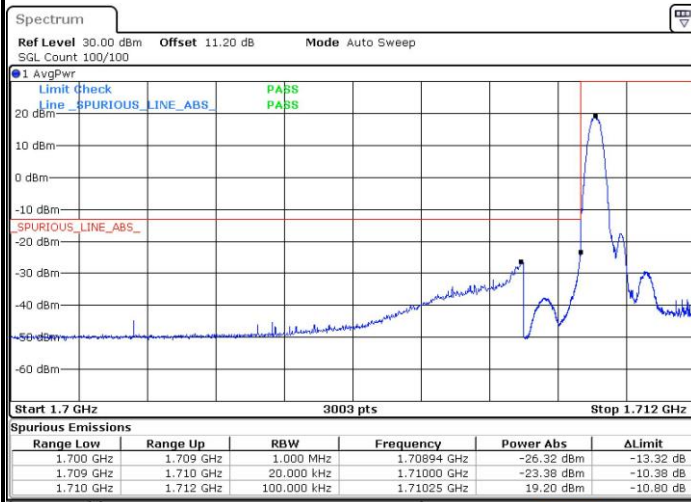
Highest Band Edge / Full RB



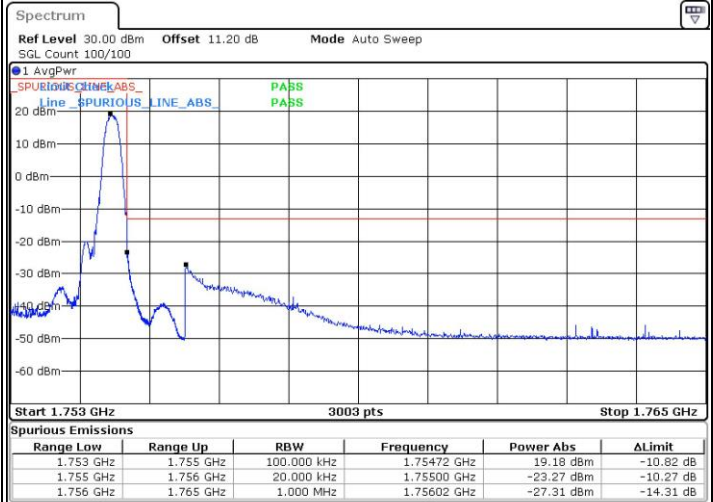


LTE Band 4 / 1.4MHz / 16QAM

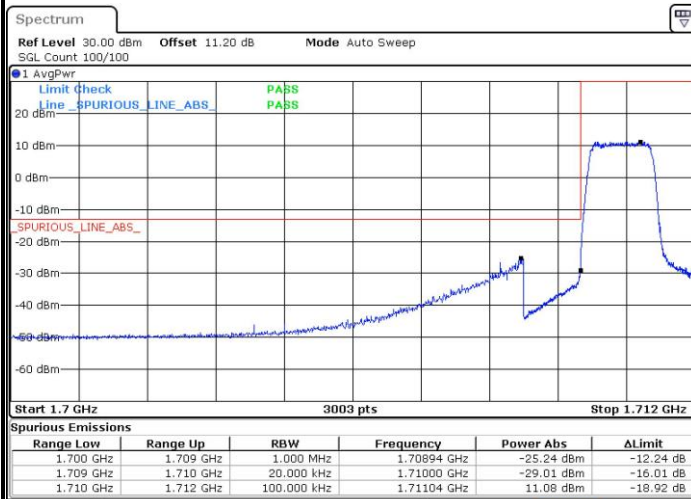
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

