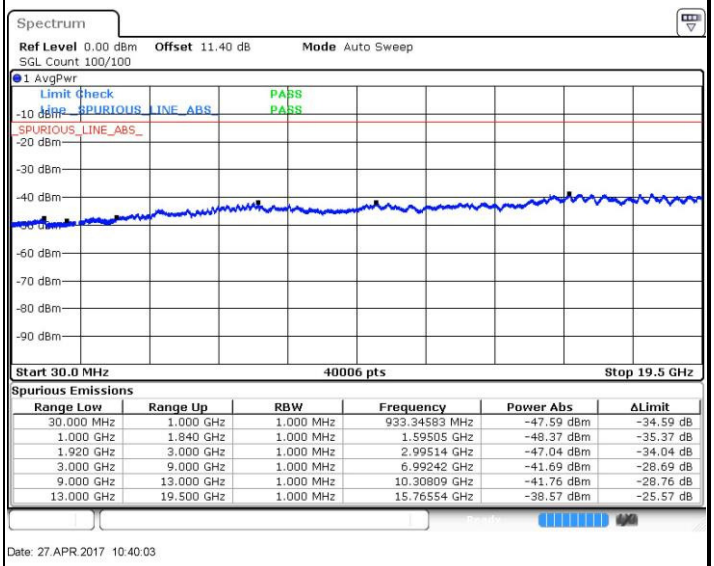
LTE Band 2 / 20MHz	
	Middle Channel / 64QAM

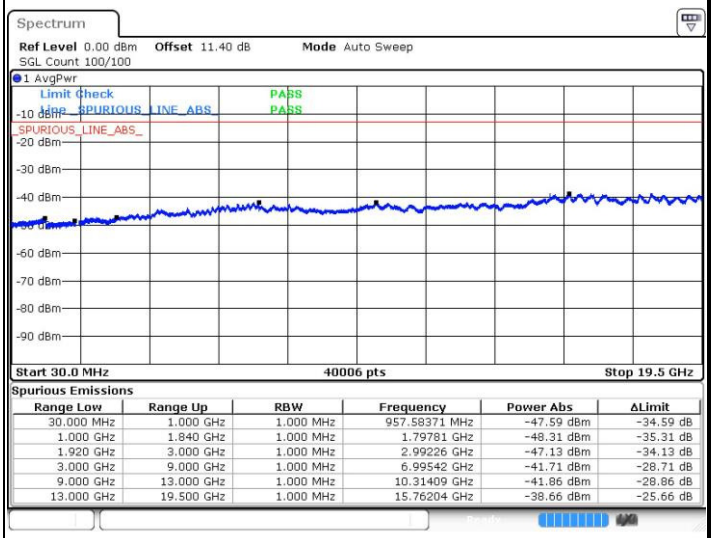


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	933.34583 MHz	-47.59 dBm	-34.59 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.59505 GHz	-48.37 dBm	-35.37 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99514 GHz	-47.04 dBm	-34.04 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99242 GHz	-41.69 dBm	-28.69 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.30809 GHz	-41.76 dBm	-28.76 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.76554 GHz	-38.57 dBm	-25.57 dB

Date: 27.APR.2017 10:40:03

	Highest Channel / 64QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	957.58371 MHz	-47.59 dBm	-34.59 dB
1.000 GHz	1.840 GHz	1.000 MHz	1.79781 GHz	-48.31 dBm	-35.31 dB
1.920 GHz	3.000 GHz	1.000 MHz	2.99226 GHz	-47.13 dBm	-34.13 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99542 GHz	-41.71 dBm	-28.71 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.31409 GHz	-41.86 dBm	-28.86 dB
13.000 GHz	19.500 GHz	1.000 MHz	15.76204 GHz	-38.66 dBm	-25.66 dB

Date: 27.APR.2017 10:43:37

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	0.0005	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0086	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0080	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0082	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

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.

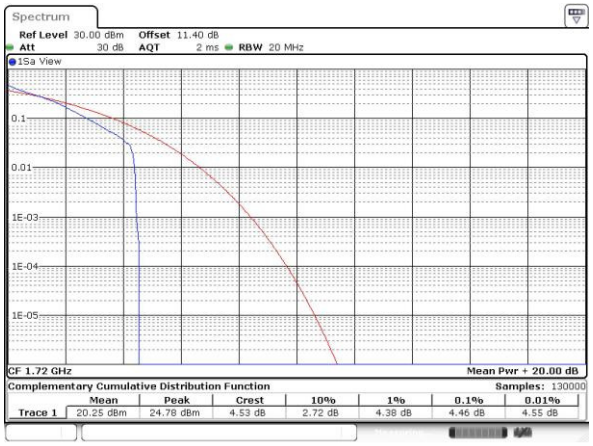
LTE Band 4

Peak-to-Average Ratio

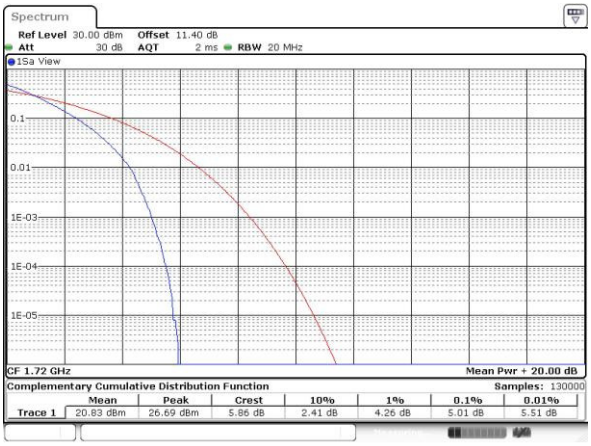
Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.46	5.01	5.45	5.83	PASS
Middle CH	4.14	4.9	5.01	6.06	
Highest CH	4.55	5.19	4.99	5.97	
Mod.	-		64QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	4.9	5.94	PASS
Middle CH	-	-	4.84	5.86	
Highest CH	-	-	4.87	6.06	

LTE Band 4 / 20MHz / QPSK

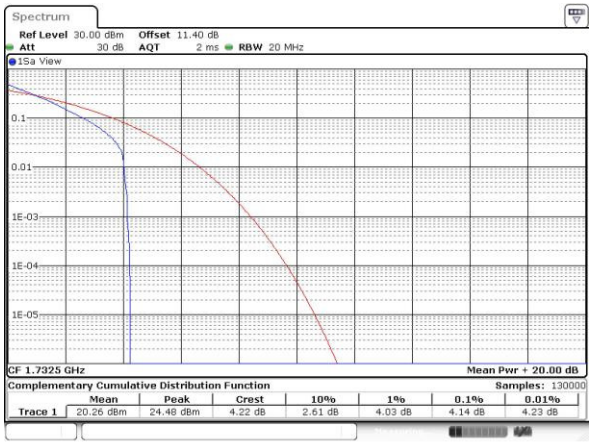
Lowest Channel / 1RB



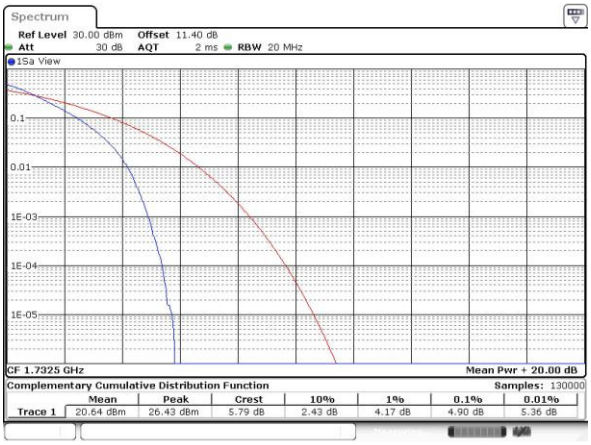
Lowest Channel / Full RB



Middle Channel / 1RB



Middle Channel / Full RB

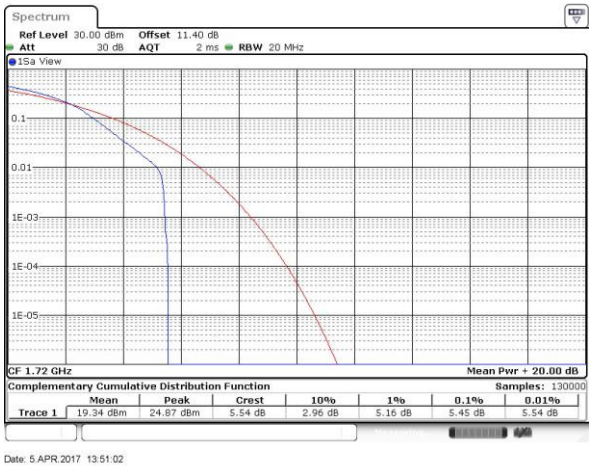


Highest Channel / 1RB

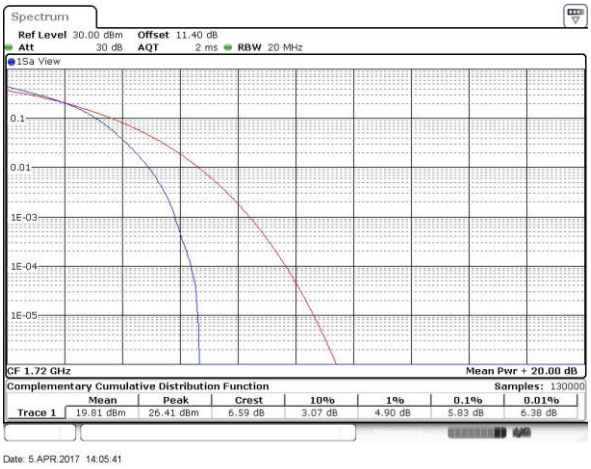
Highest Channel / Full RB

LTE Band 4 / 20MHz / 16QAM

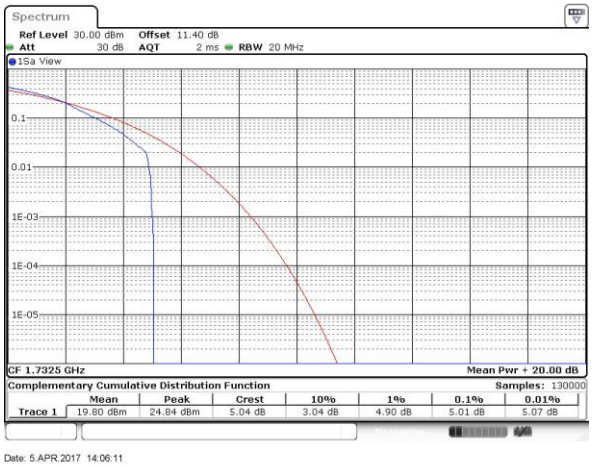
Lowest Channel / 1RB



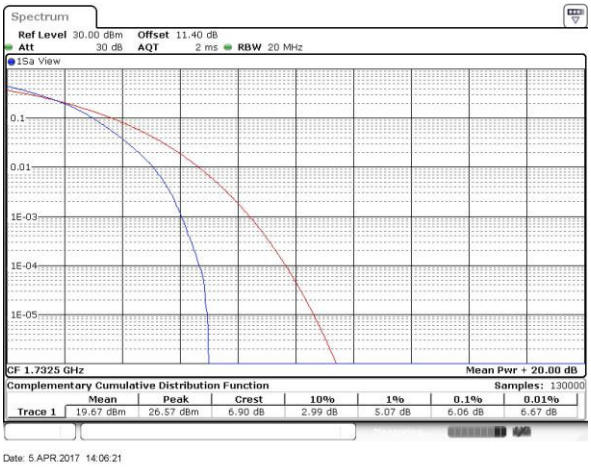
Lowest Channel / Full RB



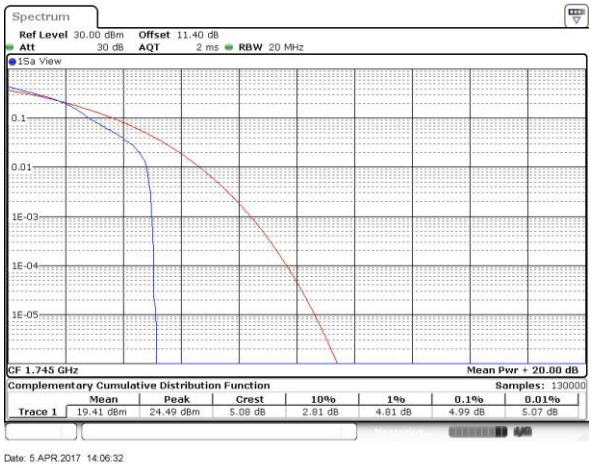
Middle Channel / 1RB



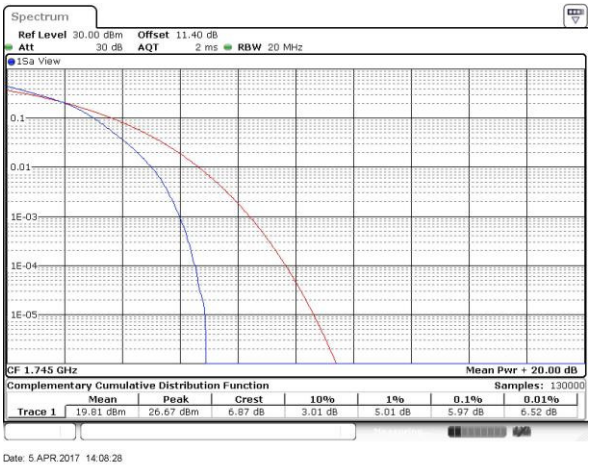
Middle Channel / Full RB



Highest Channel / 1RB

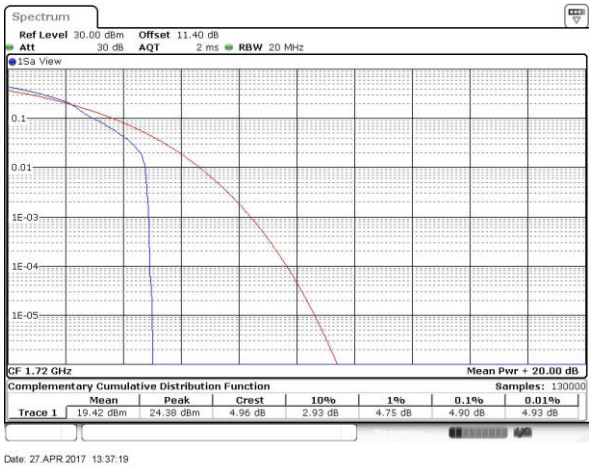


Highest Channel / Full RB

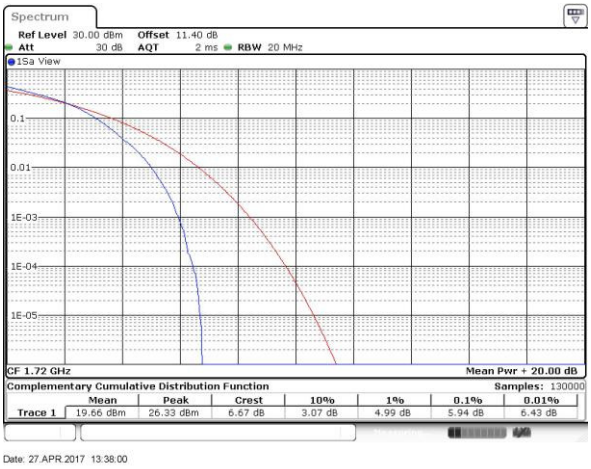


LTE Band 4 / 20MHz / 64QAM

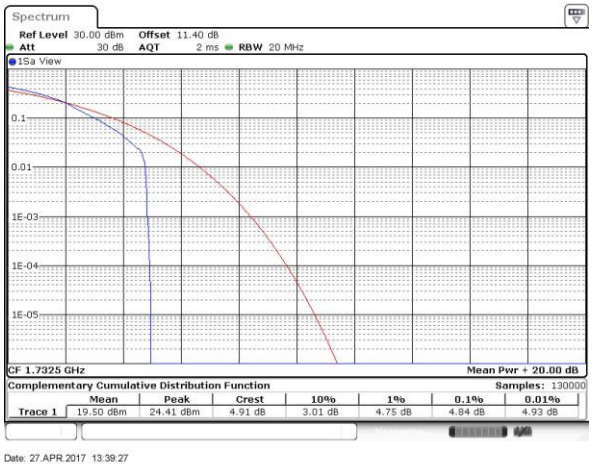
Lowest Channel / 1RB



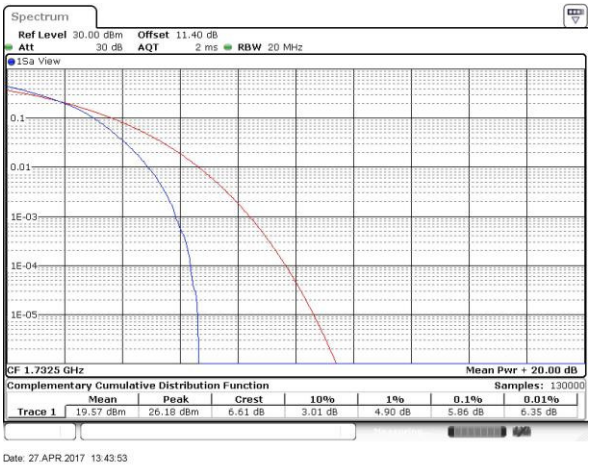
Lowest Channel / Full RB



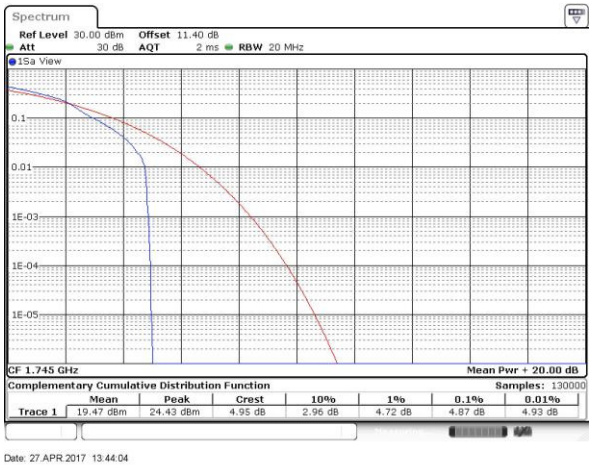
Middle Channel / 1RB



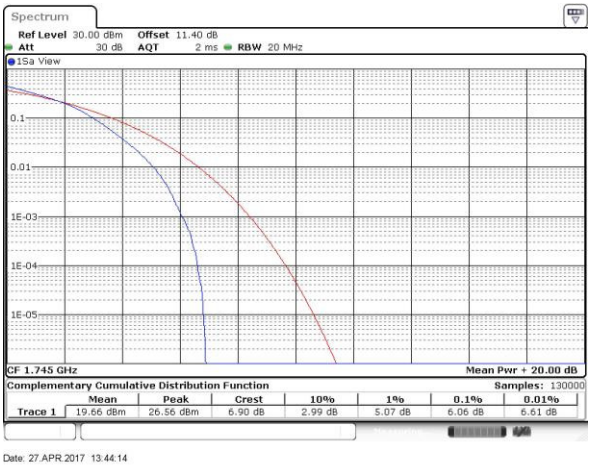
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB

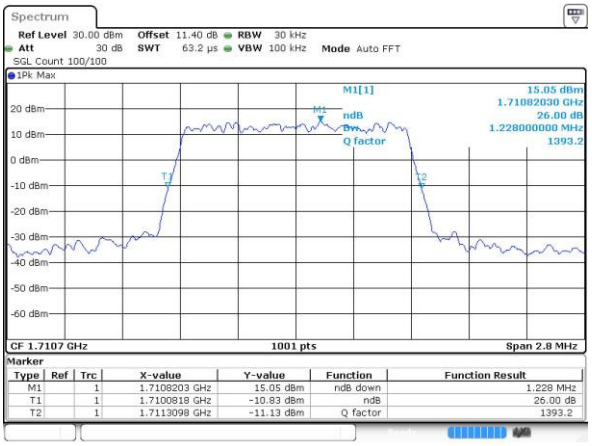


26dB Bandwidth

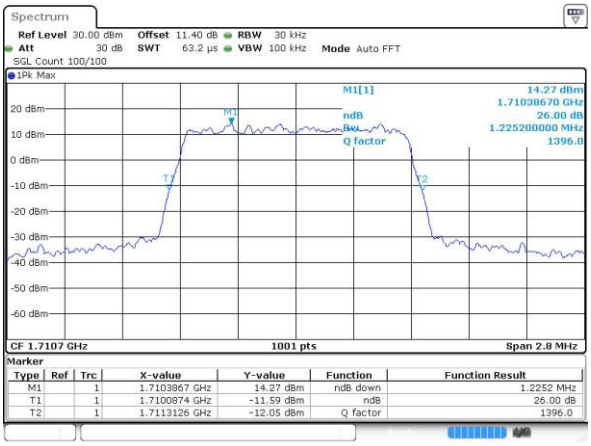
Mode	LTE Band 4 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.23	1.23	3.02	3.00	4.89	4.89	9.91	9.81	14.54	14.51	20.06	20.06
Middle CH	1.23	1.23	3.04	3.04	4.90	4.94	9.71	9.83	14.27	14.39	20.34	20.22
Highest CH	1.23	1.23	3.00	3.06	4.90	4.94	9.91	9.89	14.63	14.45	20.22	20.30
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	1.21	-	3.05	-	4.89	-	9.79	-	14.21	-	20.22
Middle CH	-	1.23	-	3.06	-	4.87	-	9.79	-	14.60	-	20.10
Highest CH	-	1.22	-	3.03	-	4.85	-	9.67	-	14.54	-	20.22

LTE Band 4

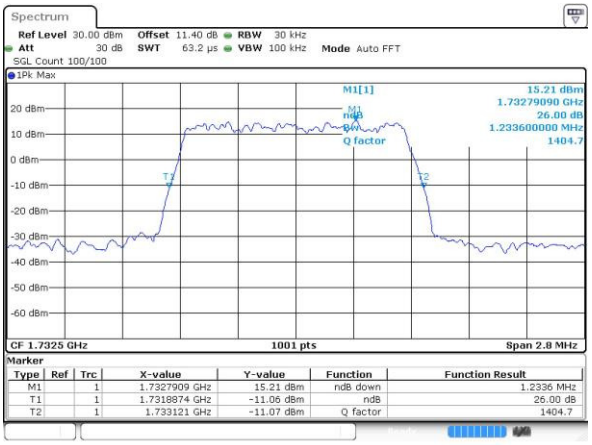
Lowest Channel / 1.4MHz / QPSK



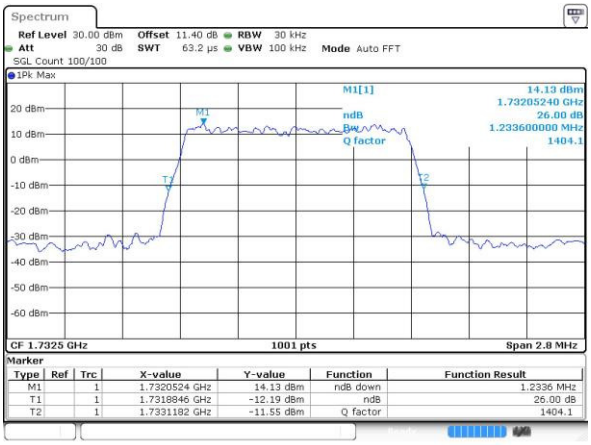
Lowest Channel / 1.4MHz / 16QAM



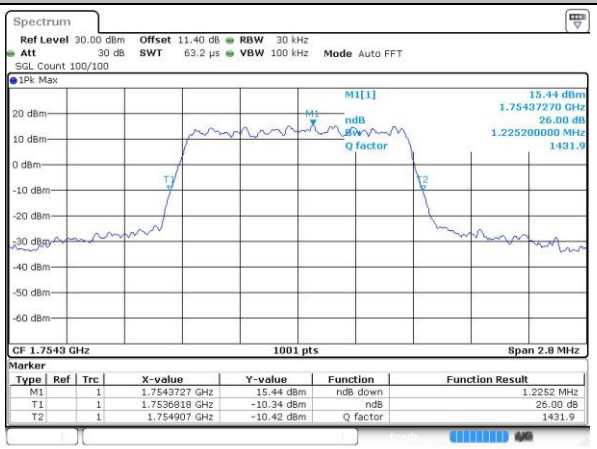
Middle Channel / 1.4MHz / QPSK



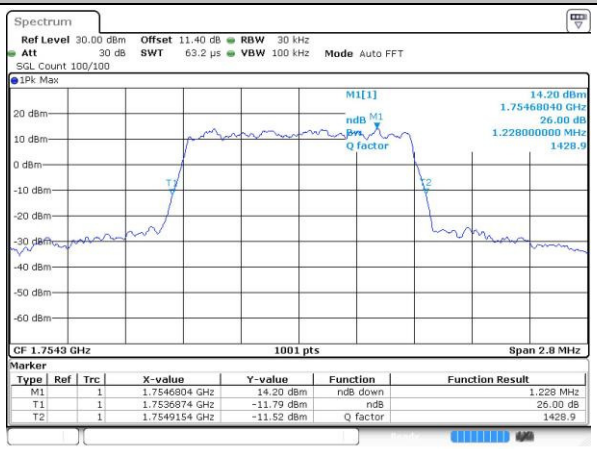
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

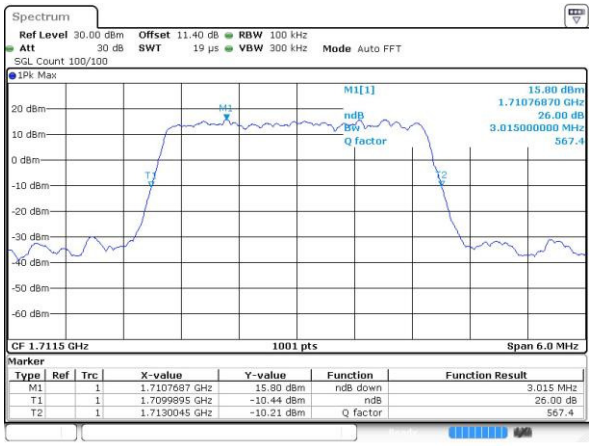


Highest Channel / 1.4MHz / 16QAM

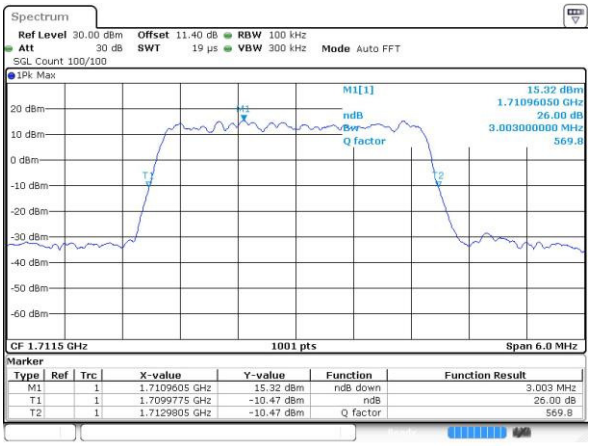


LTE Band 4

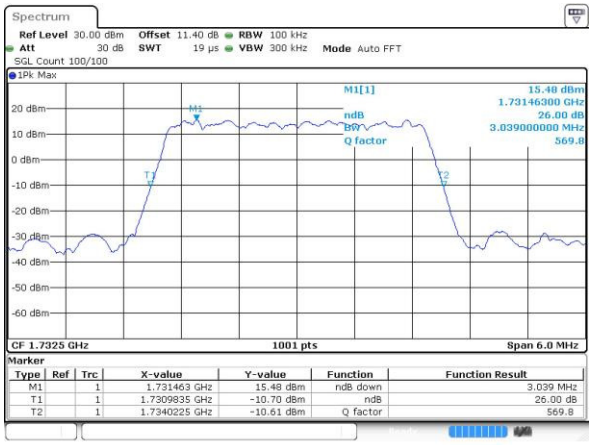
Lowest Channel / 3MHz / QPSK



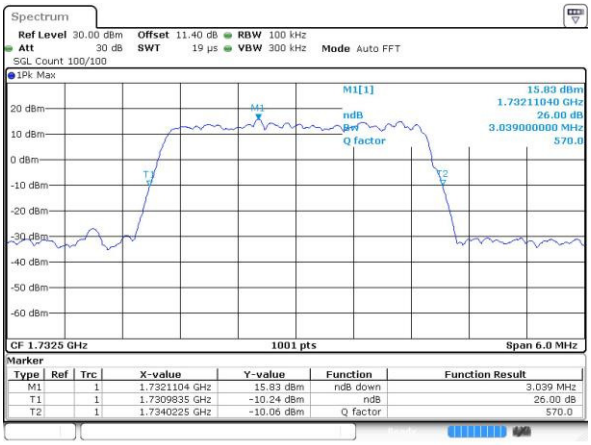
Lowest Channel / 3MHz / 16QAM



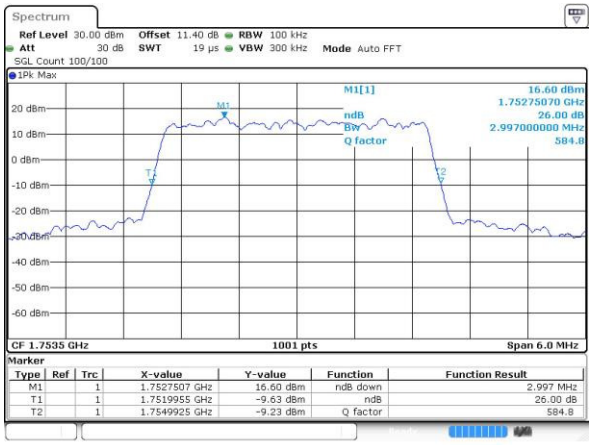
Middle Channel / 3MHz / QPSK



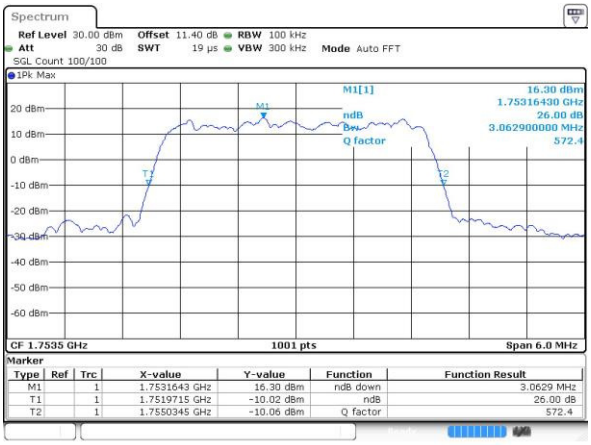
Middle Channel /3MHz / 16QAM



Highest Channel /3MHz / QPSK

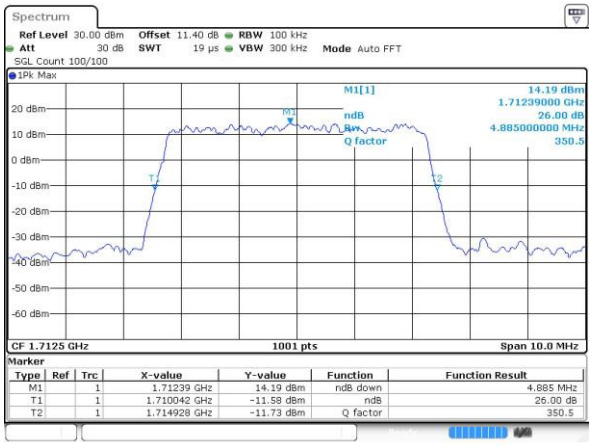


Highest Channel /3MHz / 16QAM

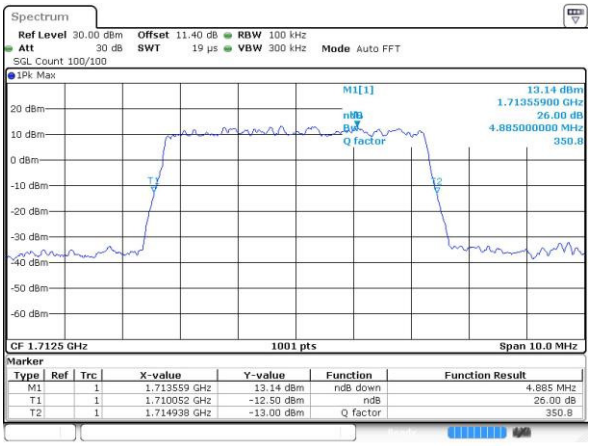


LTE Band 4

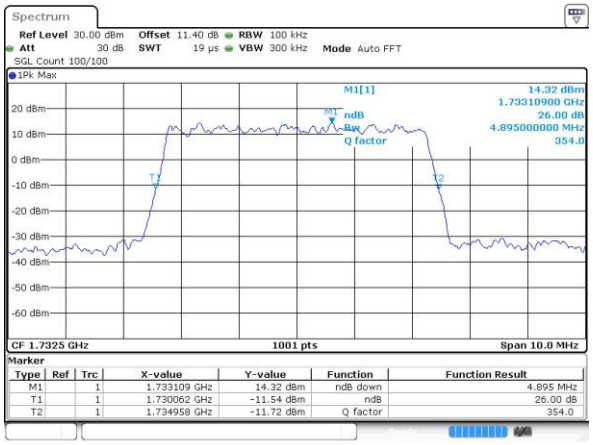
Lowest Channel / 5MHz / QPSK



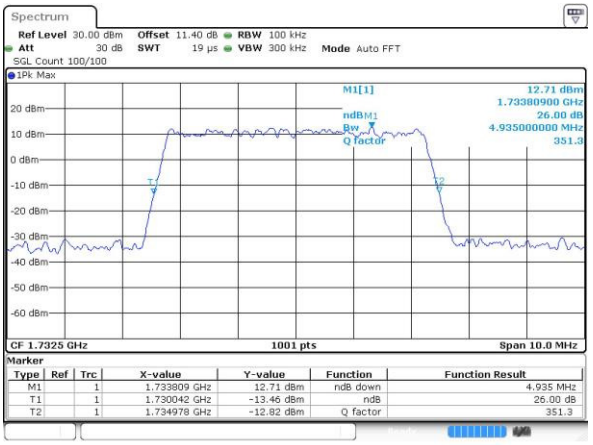
Lowest Channel / 5MHz / 16QAM



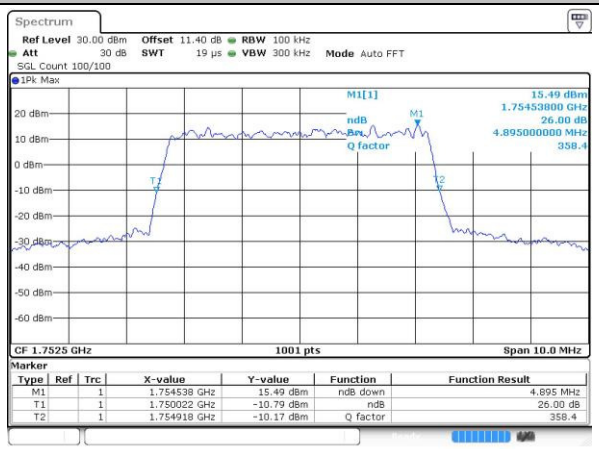
Middle Channel / 5MHz / QPSK



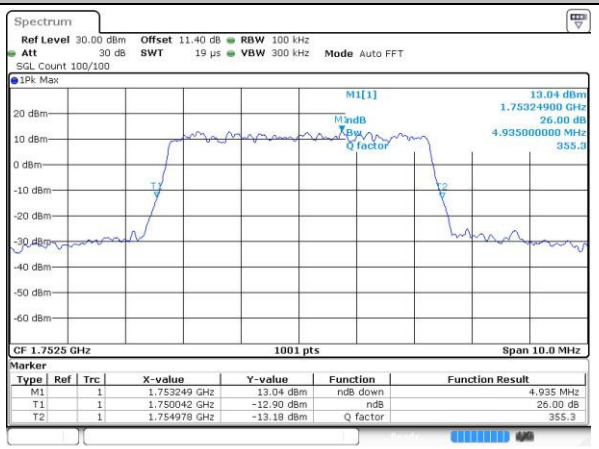
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

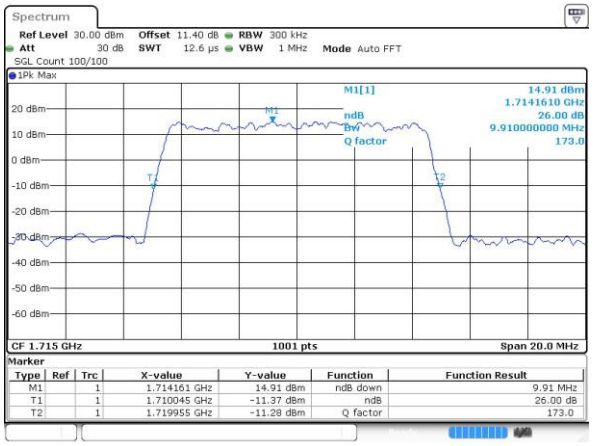


Highest Channel / 5MHz / 16QAM

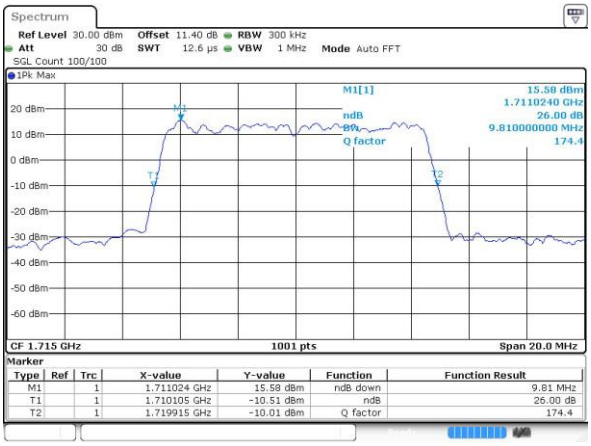


LTE Band 4

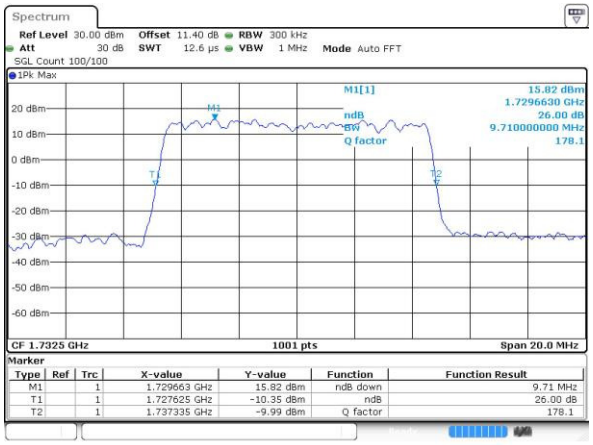
Lowest Channel / 10MHz / QPSK



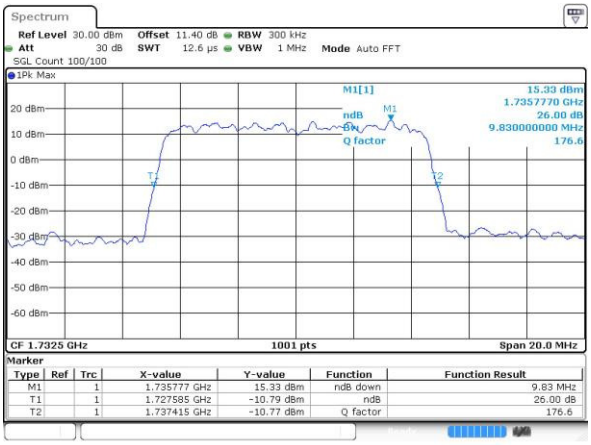
Lowest Channel / 10MHz / 16QAM



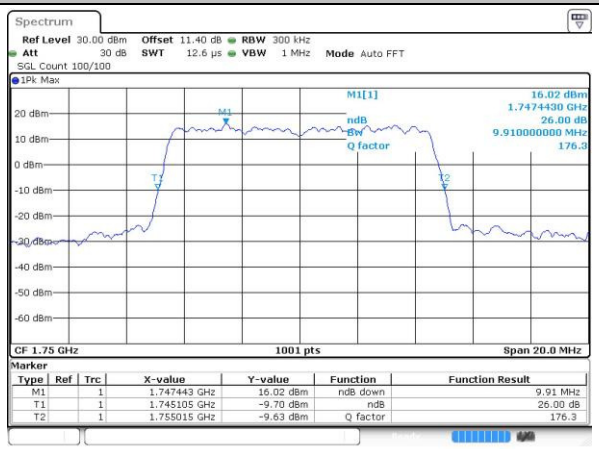
Middle Channel / 10MHz / QPSK



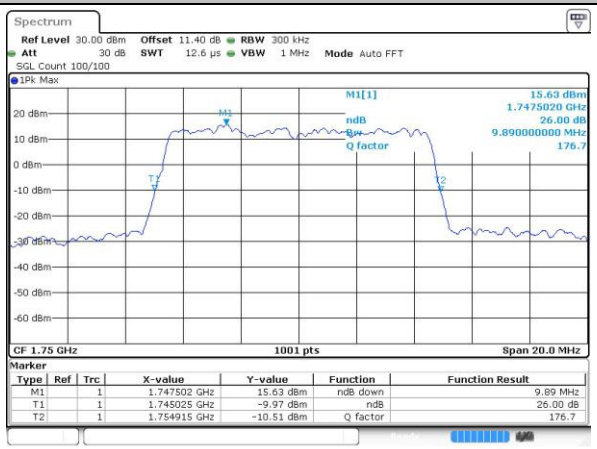
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

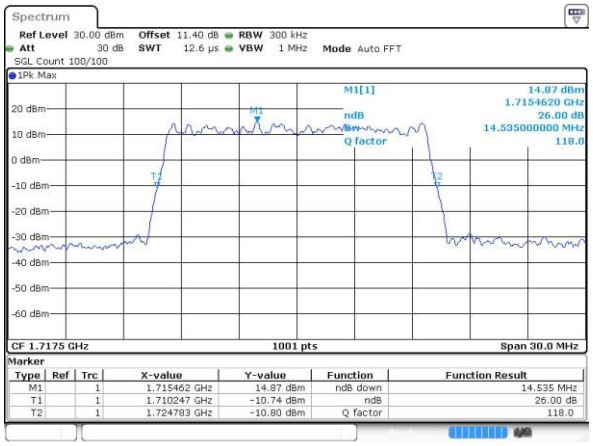


Highest Channel / 10MHz / 16QAM

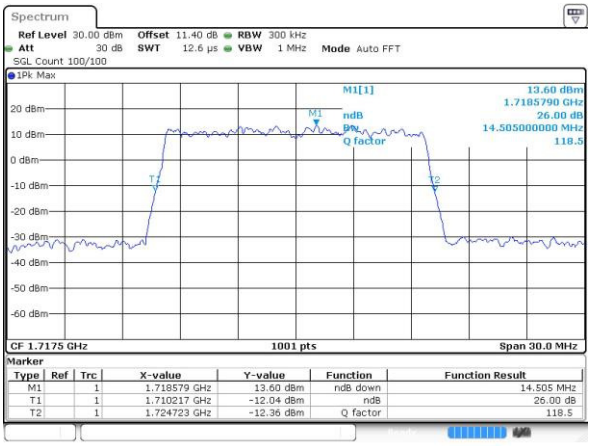


LTE Band 4

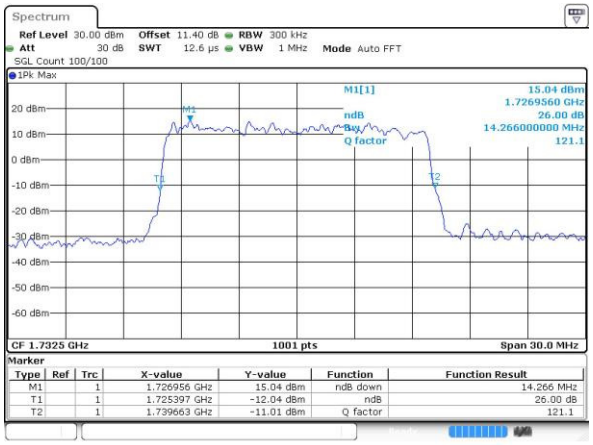
Lowest Channel / 15MHz / QPSK



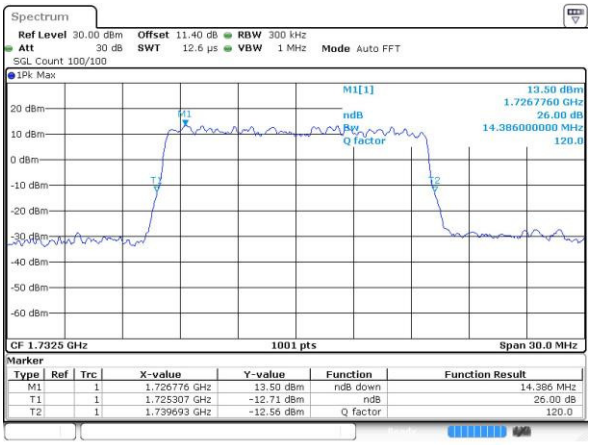
Lowest Channel / 15MHz / 16QAM



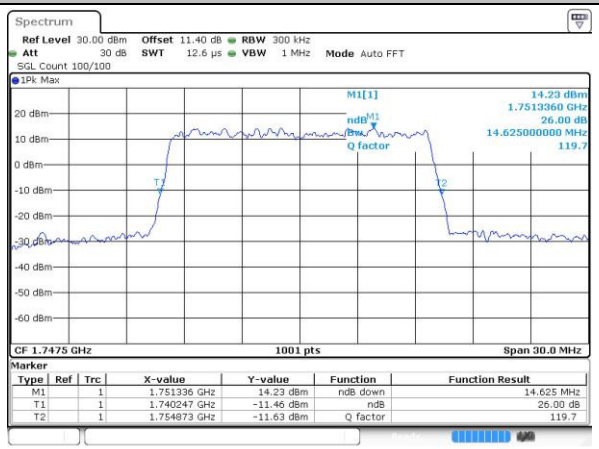
Middle Channel / 15MHz / QPSK



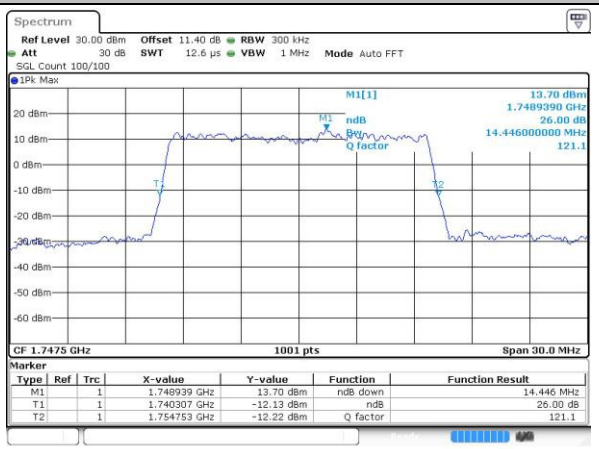
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

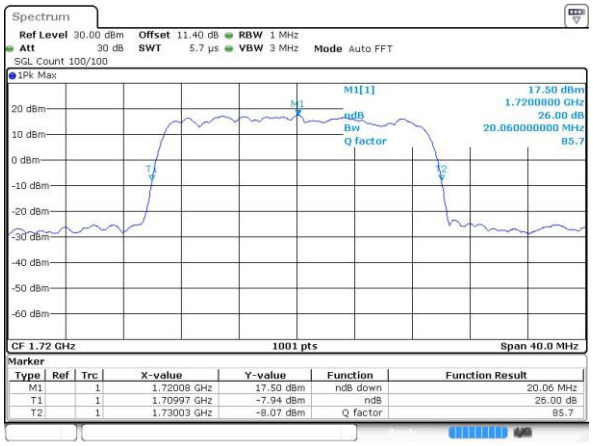


Highest Channel / 15MHz / 16QAM

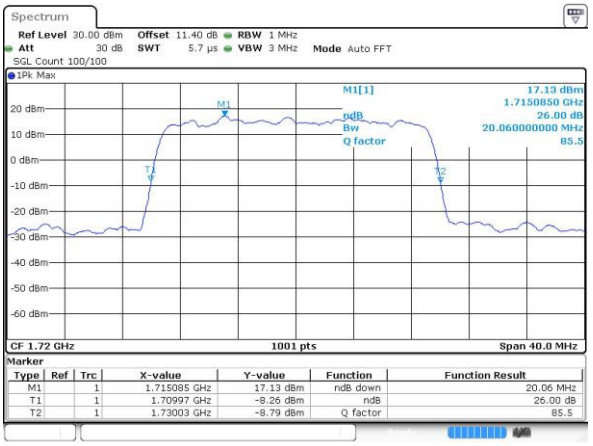


LTE Band 4

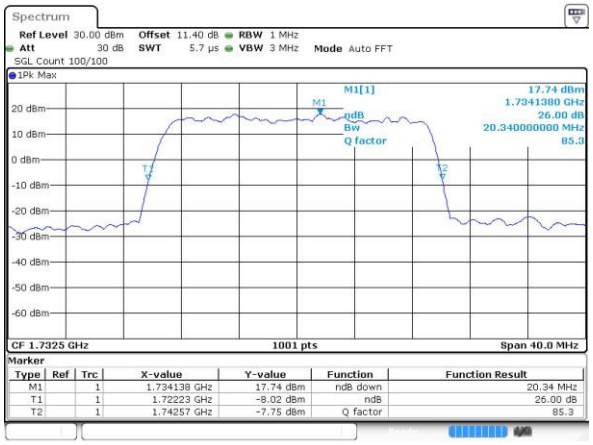
Lowest Channel / 20MHz / QPSK



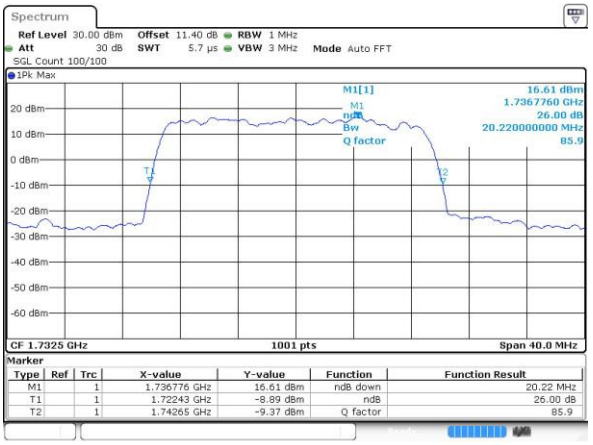
Lowest Channel / 20MHz / 16QAM



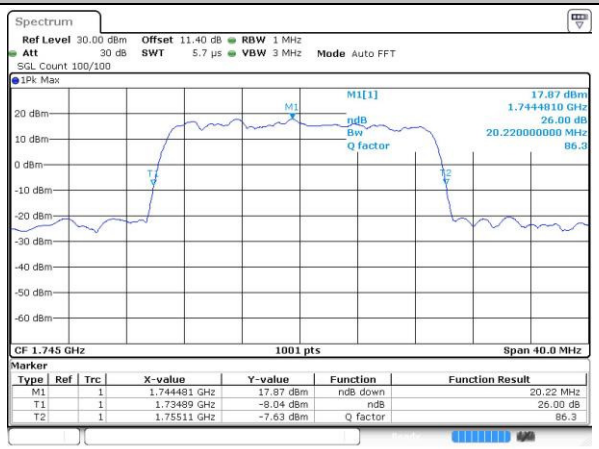
Middle Channel / 20MHz / QPSK



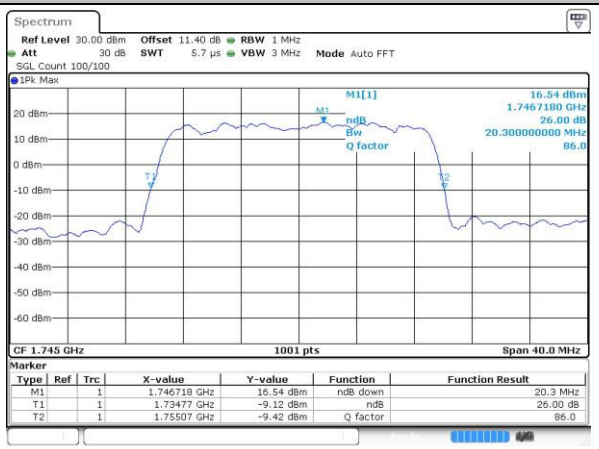
Middle Channel / 20MHz / 16QAM

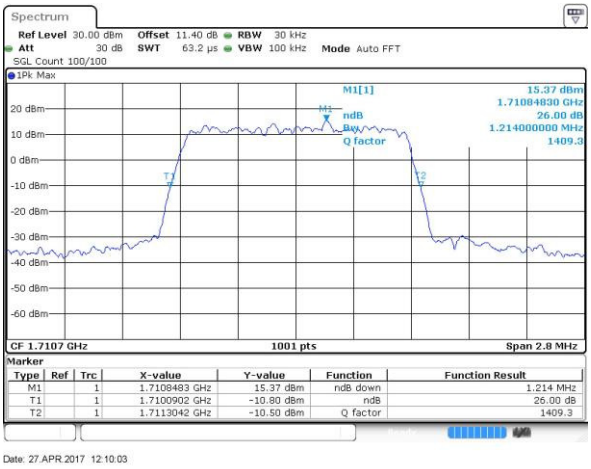
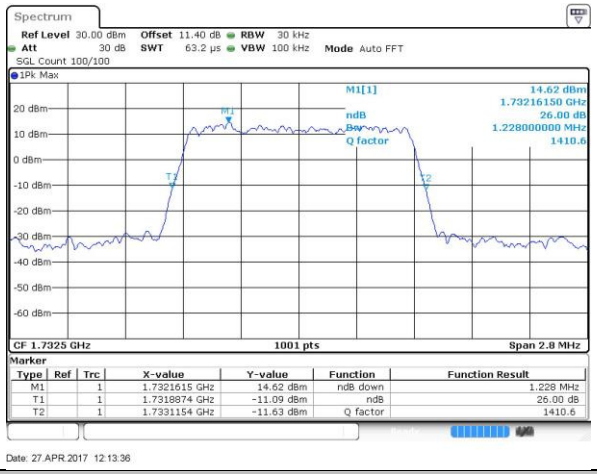
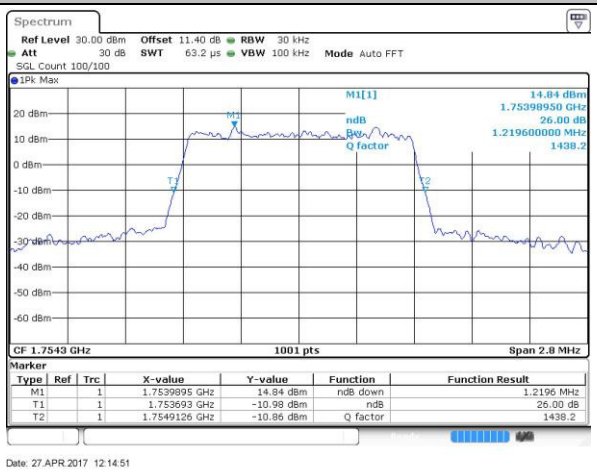


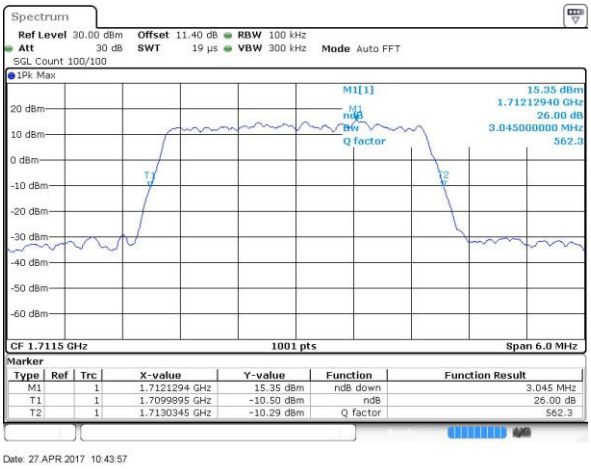
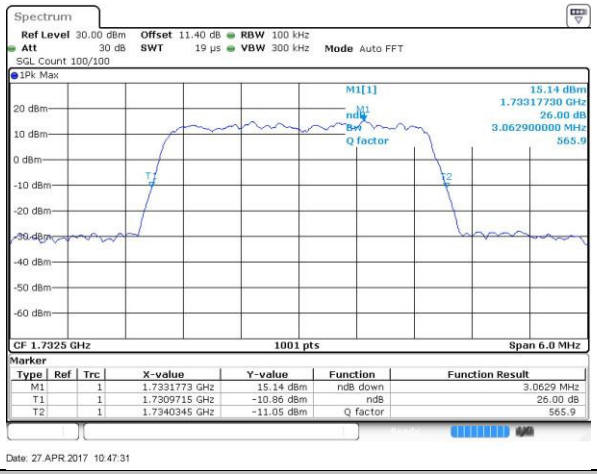
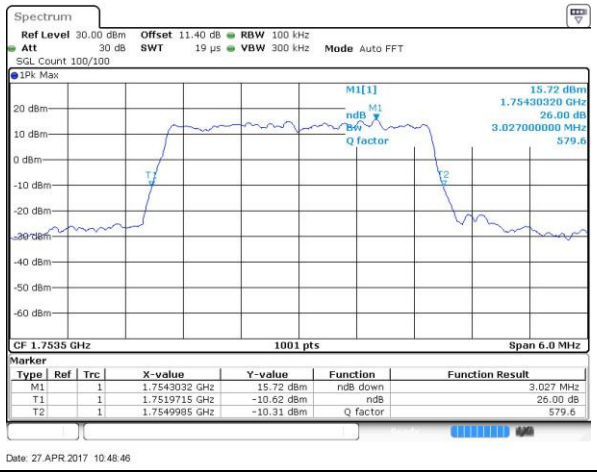
Highest Channel / 20MHz / QPSK

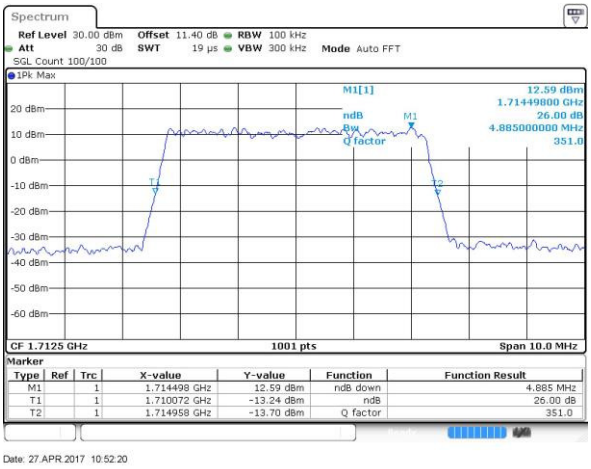
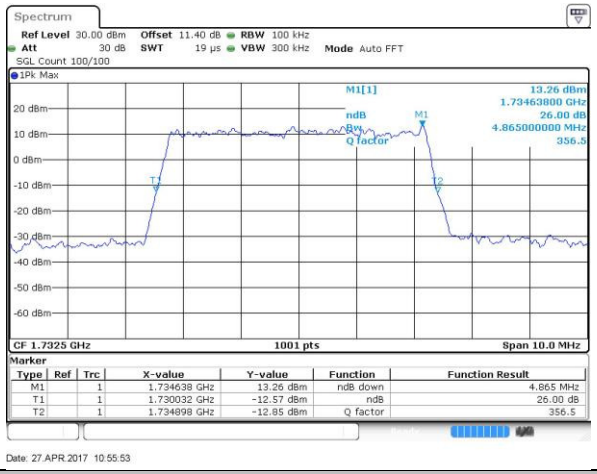
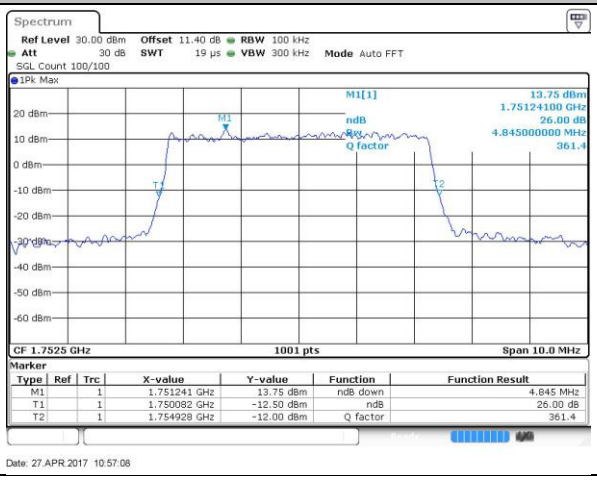


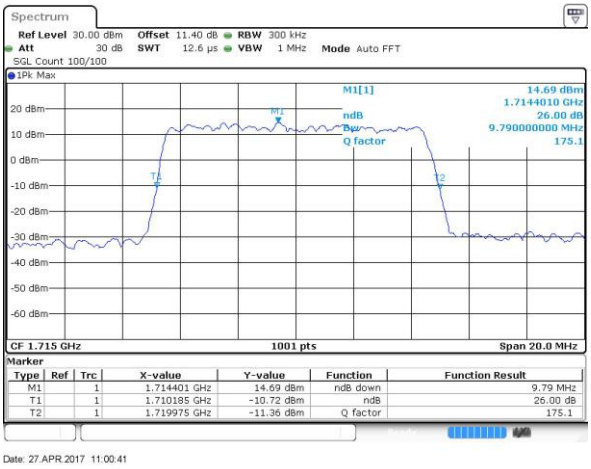
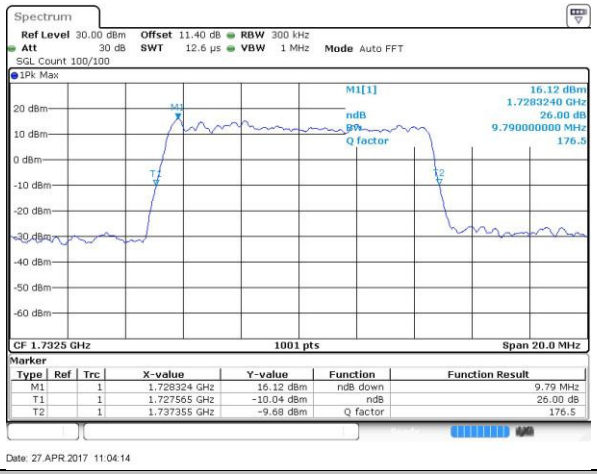
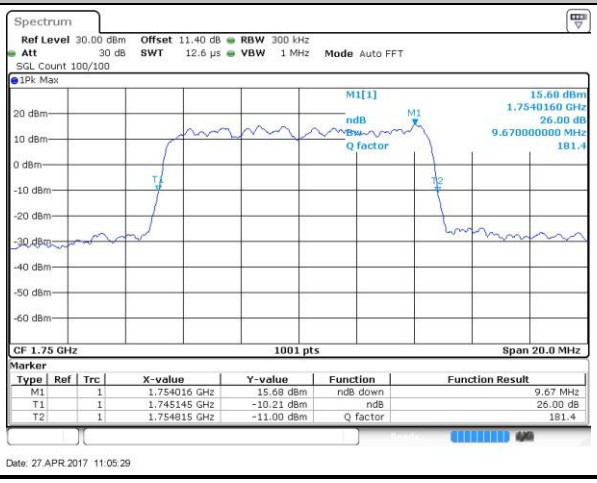
Highest Channel / 20MHz / 16QAM

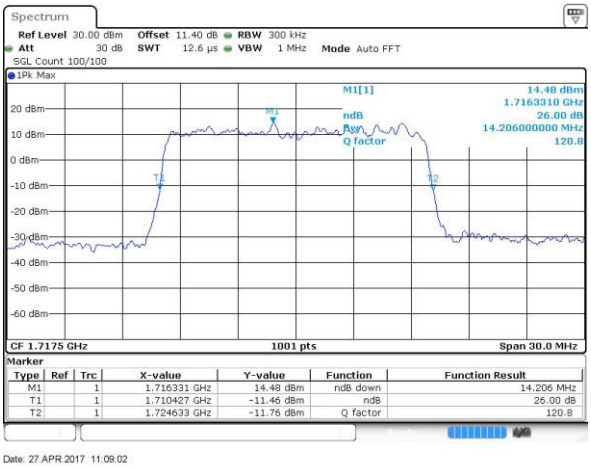
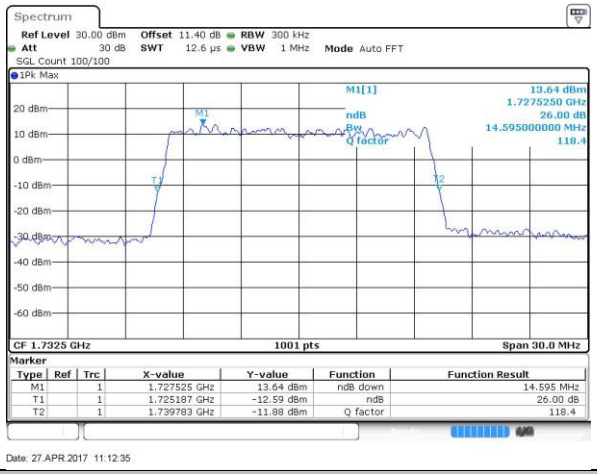
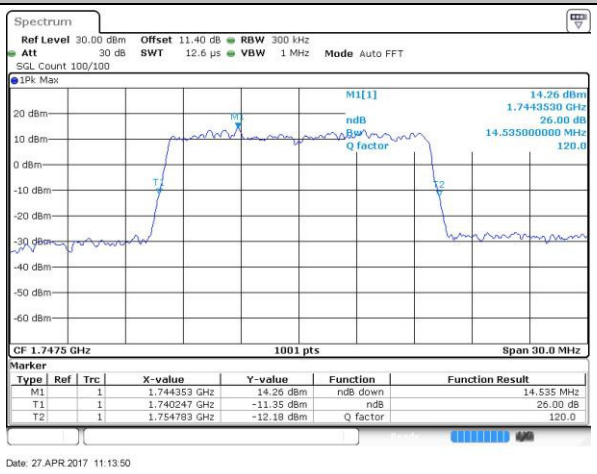


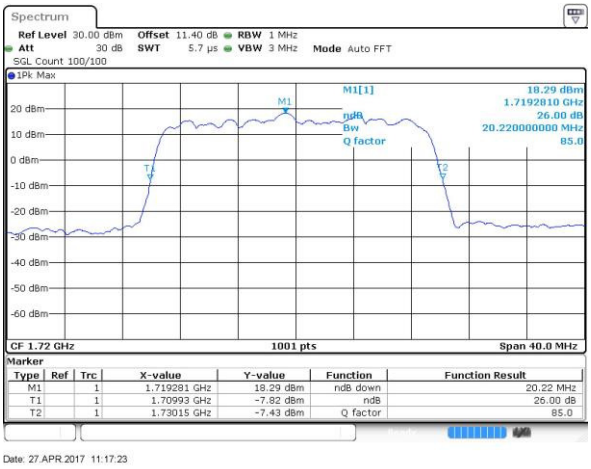
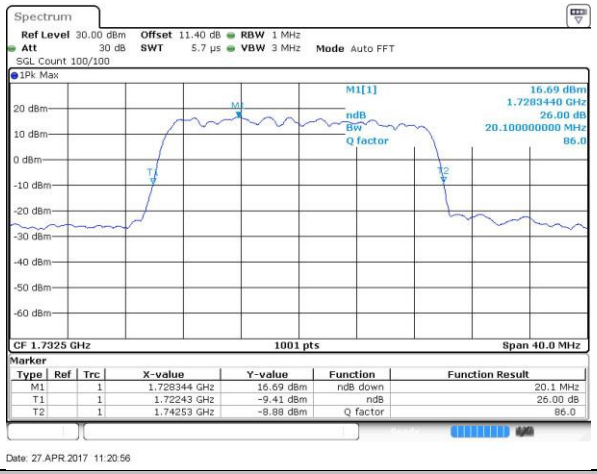
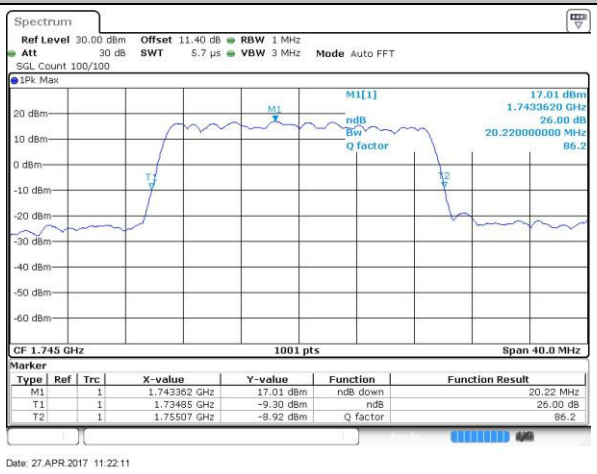
LTE Band 4	
	Lowest Channel / 1.4MHz / 64QAM
	
	Middle Channel / 1.4MHz / 64QAM
	
	Highest Channel / 1.4MHz / 64QAM
	

LTE Band 4	
	Lowest Channel / 3MHz / 64QAM
	
	Middle Channel /3MHz / 64QAM
	
	Highest Channel /3MHz / 64QAM
	

LTE Band 4	
	Lowest Channel / 5MHz / 64QAM
	
	Middle Channel / 5MHz / 64QAM
	
	Highest Channel / 5MHz / 64QAM
	

LTE Band 4	
	Lowest Channel / 10MHz / 64QAM
	
	Middle Channel / 10MHz / 64QAM
	
	Highest Channel / 10MHz / 64QAM
	

LTE Band 4	
	Lowest Channel / 15MHz / 64QAM
	
	Middle Channel / 15MHz / 64QAM
	
	Highest Channel / 15MHz / 64QAM
	

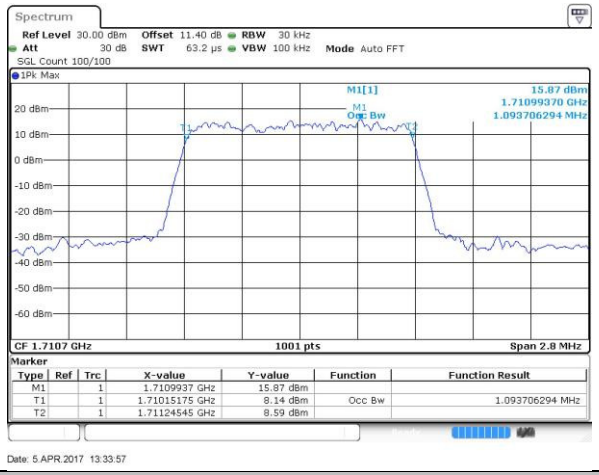
LTE Band 4	
	Lowest Channel / 20MHz / 64QAM
	
	Middle Channel / 20MHz / 64QAM
	
	Highest Channel / 20MHz / 64QAM
	

Occupied Bandwidth

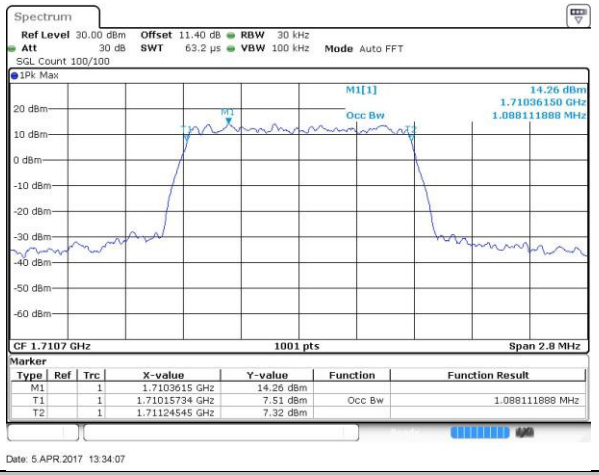
Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.72	2.71	4.48	4.49	9.07	9.07	13.37	13.4	18.26	18.38
Middle CH	1.09	1.1	2.71	2.71	4.49	4.47	9.03	9.01	13.46	13.4	18.3	18.22
Highest CH	1.1	1.1	2.72	2.7	4.48	4.49	9.05	9.05	13.52	13.43	18.34	18.34
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	1.09	-	2.71	-	4.49	-	8.95	-	13.49	-	18.42
Middle CH	-	1.09	-	2.72	-	4.48	-	8.97	-	13.46	-	18.22
Highest CH	-	1.09	-	2.72	-	4.49	-	9.07	-	13.55	-	18.3

LTE Band 4

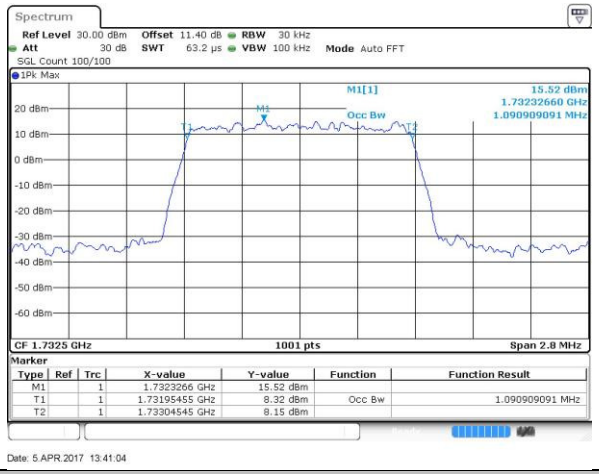
Lowest Channel / 1.4MHz / QPSK



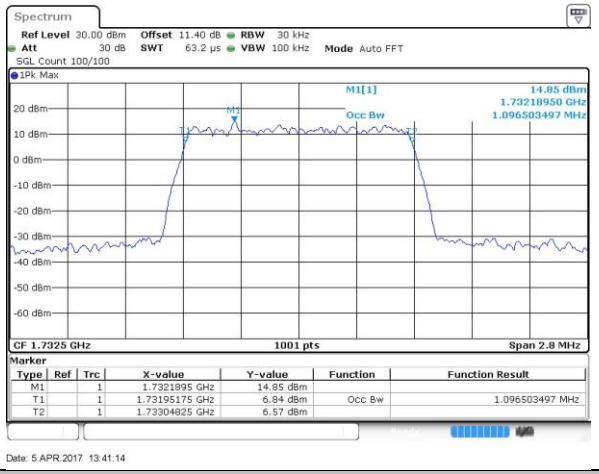
Lowest Channel / 1.4MHz / 16QAM



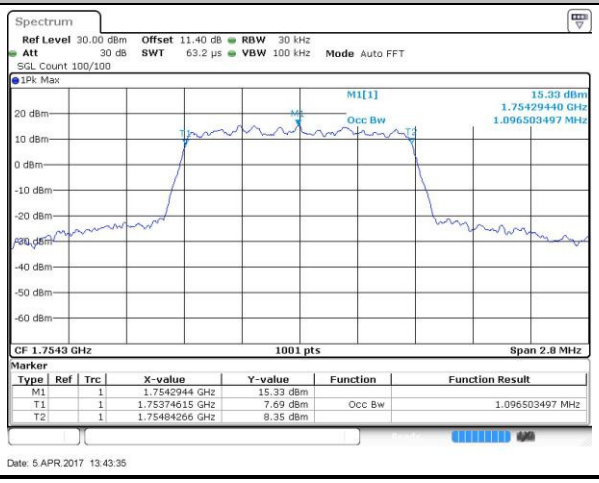
Middle Channel / 1.4MHz / QPSK



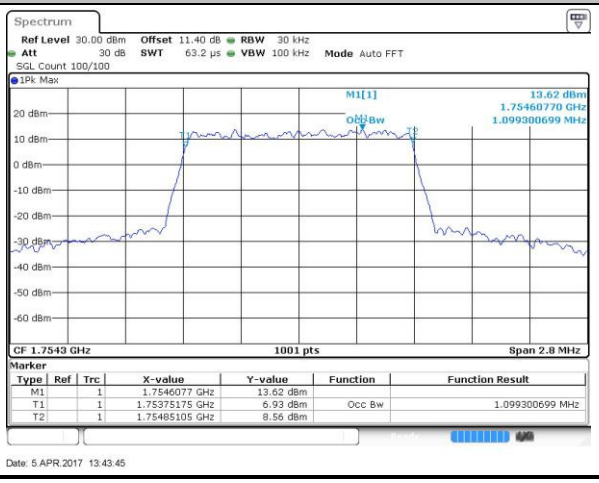
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

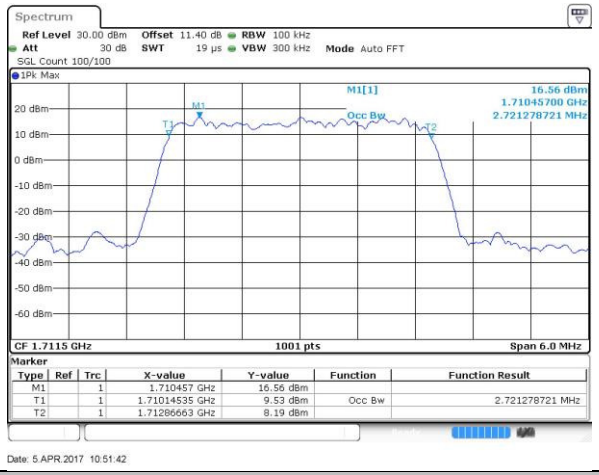


Highest Channel / 1.4MHz / 16QAM

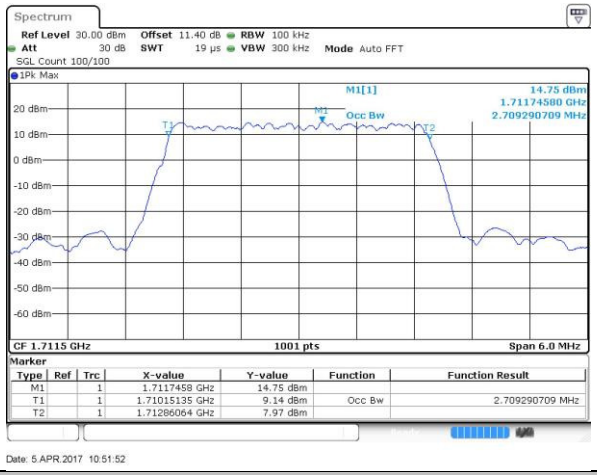


LTE Band 4

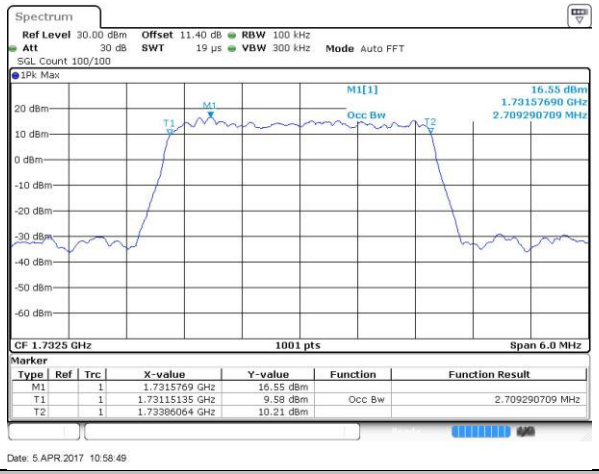
Lowest Channel / 3MHz / QPSK



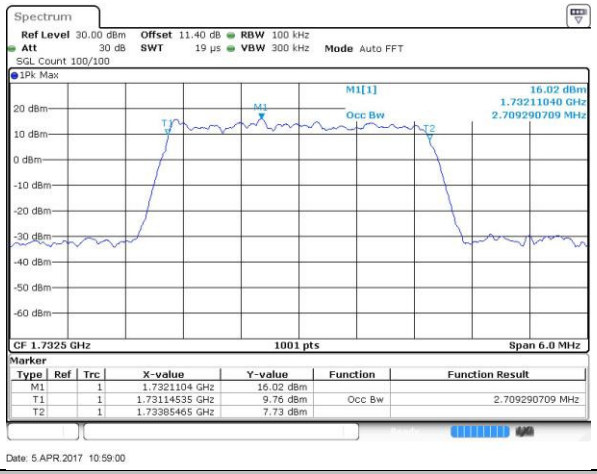
Lowest Channel / 3MHz / 16QAM



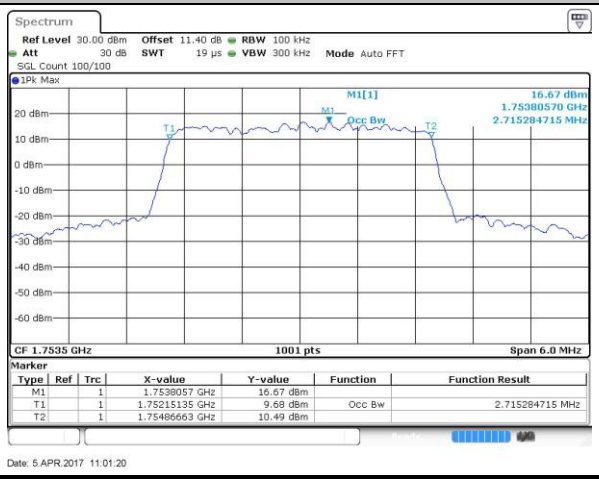
Middle Channel / 3MHz / QPSK



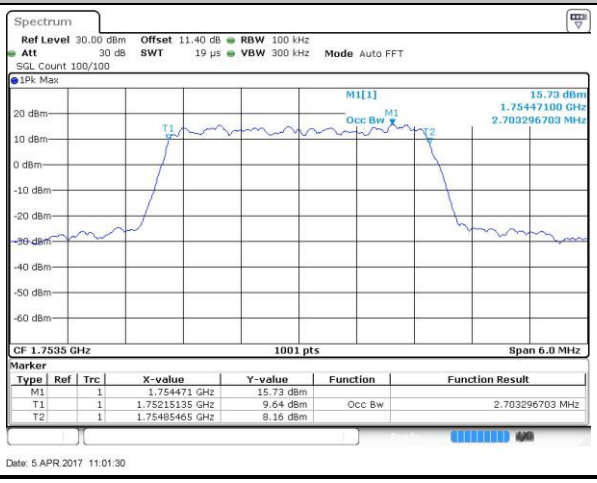
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK

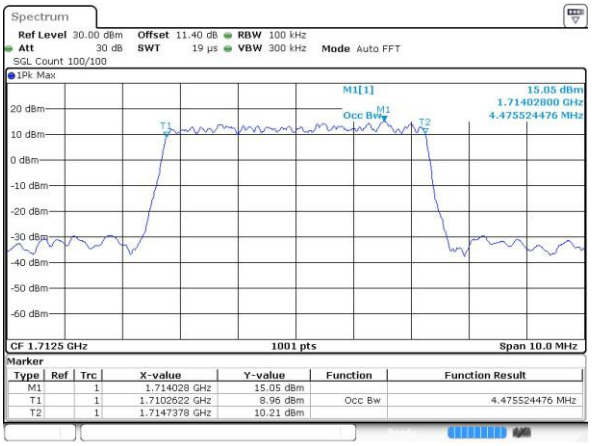


Highest Channel / 3MHz / 16QAM

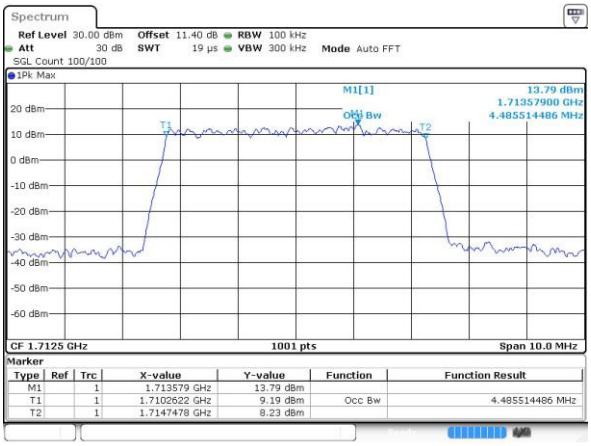


LTE Band 4

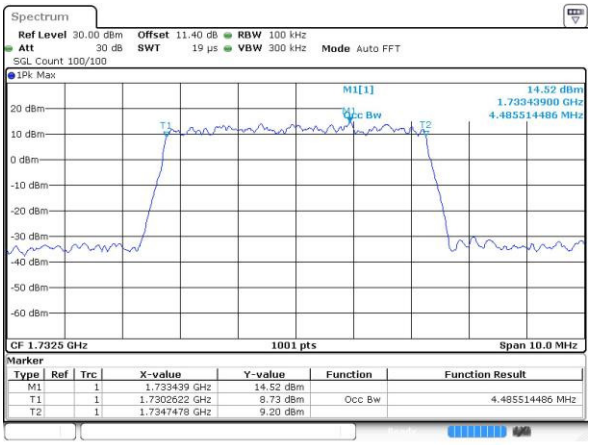
Lowest Channel / 5MHz / QPSK



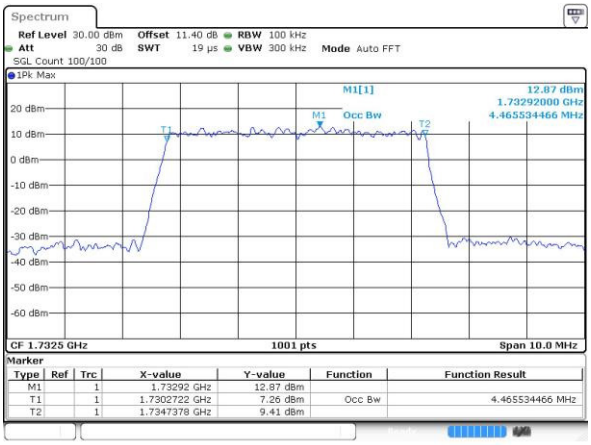
Lowest Channel / 5MHz / 16QAM



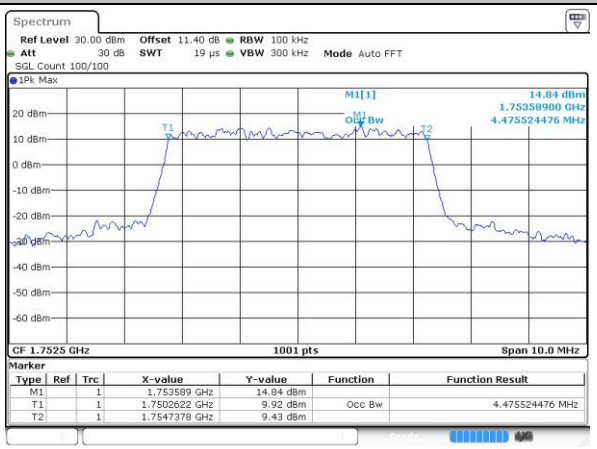
Middle Channel / 5MHz / QPSK



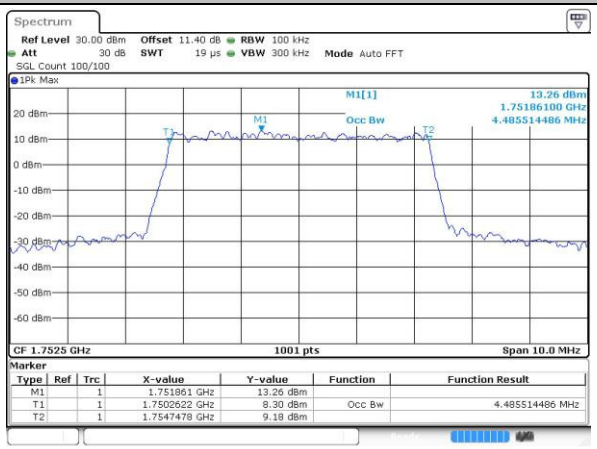
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

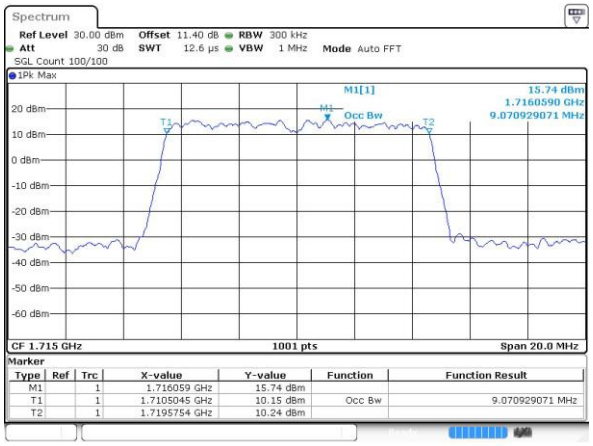


Highest Channel / 5MHz / 16QAM

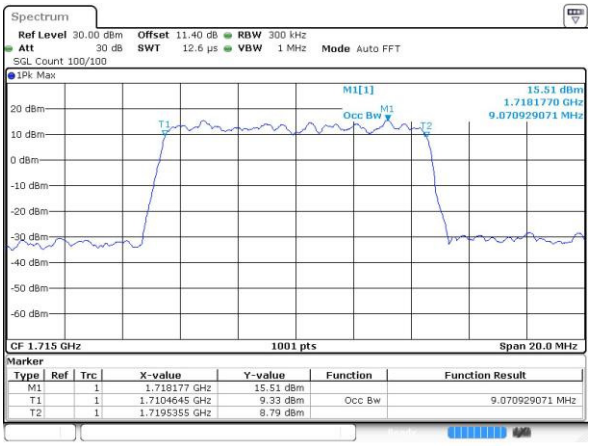


LTE Band 4

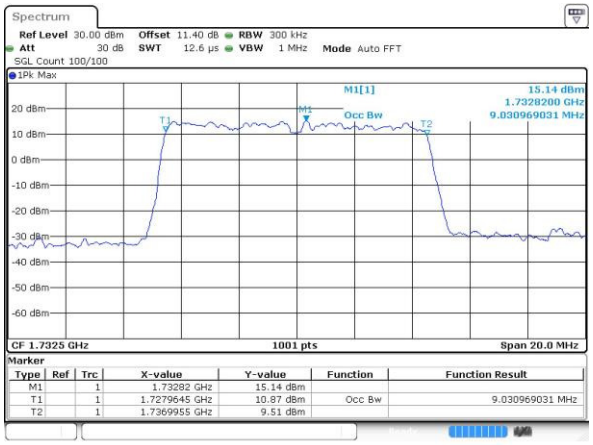
Lowest Channel / 10MHz / QPSK



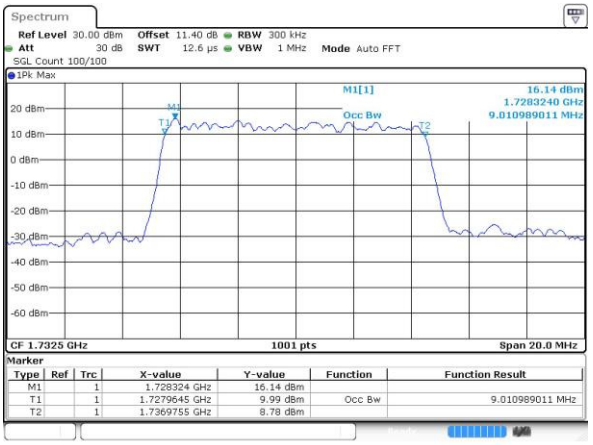
Lowest Channel / 10MHz / 16QAM



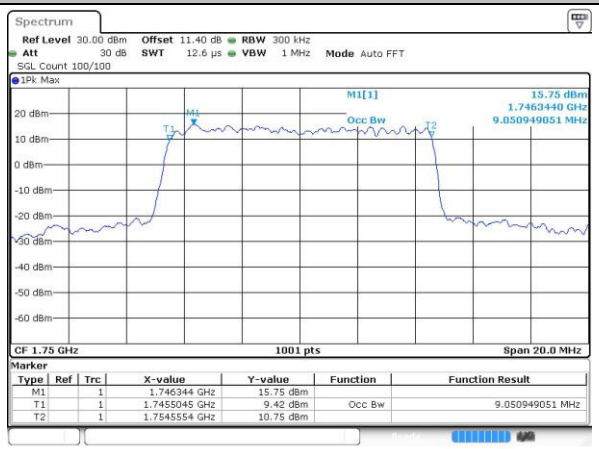
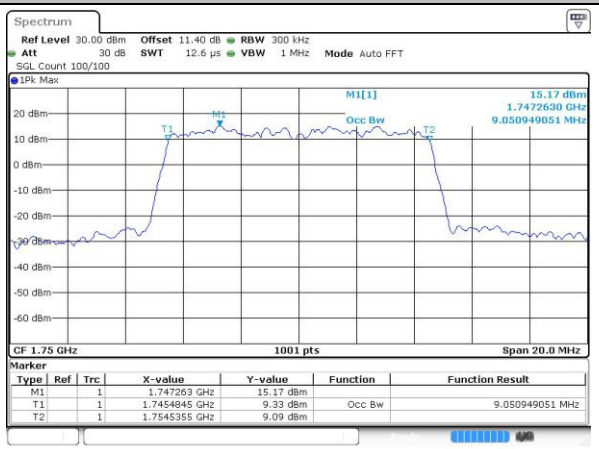
Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM